ภาคผนวก

หมวดที่ 1 รายละเอียดการคำนวณหาพื้นที่ช่องเปิดทางทฤษฎี จากข้อมูลภูมิอากาศ 6 ปีย้อนหลัง

(ค.ศ. 1996 – 2001)

CALCULATING WINDOW AREAS OF NATURALLY VENTILATED HOUSE

1. Building Conditioned Floor Area = 3.5 x 10 sq.m. = 376.74 sq.ft.

2. Average Ceiling Height = 2.6 m.

3. House Volume = 3.5 x 10 x 2.6 cu.m. = 3213.6347 cu.ft.

4. Design Air Change Rate / Hour = 4 ACH.

5. Required Airflow Rate (cfm.) = 3213.347 x 4 / 60 = 214.2423

6. Design 36 months (3 Years)

7. Determine Wind speed (WS) and Direction (WD) for the Design Month

8. From Prevailing Direction, Determine the Incidence Angle

on the Windward Wall having the largest Area of Window .

(^{0} degree = Perpendicular to Wall)

9. From Table 26 ; Determine Inlet - to- site 10 Meters Wind Speed Ratio

10. Determine Wind speed Correction Factors

a. For House Location and Ventilation Strategy; Determine Terrain Correction Factor (Table 27)

Center of Large City = 0.47

b. For Neighboring Buildings, Assume Neighborhood Convection Factor = 0.77

11. Calculate Wind speed Correction Factor = 0.47 x 0.77 = 0.361

ตารางแสดงการคำนวณหาค่าความเร็วลมที่กลางหน้าต่างของแต่ละชั้น ของแฟลตที่เป็นกรณีศึกษา

Prevailing Wind Speed (V)

The Year 1996	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
33.10M. V(Knot)	2.6	3.4	3.8	3.3	2.6	2.5	2.6	2.5	2.1	2	2.3	2.6
Direction	S	S	S	S	S	S	S	S	S	N	N	N
Incidence Angle	32	32	32	32	32	32	32	32	32	32	32	32
13.35 M., V(Mps)	0.93	1.216	1.359	1.18	0.93	0.894	0.93	0.896	0.751	0.715	0.822	0.93
10.5 M., V(Mps)	0.844	1.104	1.234	1.072	0.844	0.812	0.844	0.812	0.682	0.649	0.747	0.844
7.65M., V(Mps)	0.744	0.973	1.087	0.944	0.744	0.715	0.744	0.715	0.601	0.572	0.658	0.744
4.8 M., V(Mps)	0.618	0.808	0.903	0.784	0.618	0.594	0.618	0.594	0.499	0.475	0.546	0.618

The Year 1997	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
33.10M. V(Knot)	2.5	3.4	3.7	2.4	2.9	2.8	2.8	2.8	1.6	1	1.3	1.4
Direction	S	S	S	S	S	W	W	W	W	N	N	S
Incidence Angle	32	32	32	32	32	58	58	58	58	32	32	32
13.35 M., V(Mps)	0.894	1.216	1.323	0.858	1.037	1.001	1.001	1.001	0.572	0.358	0.465	0.501
10.5 M., V(Mps)	0.812	1.104	1.201	0.779	0.942	0.909	0.909	0.909	0.52	0.325	0.422	0.453
7.65M., V(Mps)	0.715	0.973	1.059	0.687	0.83	0.801	0.801	0.801	0.458	0.286	0.372	0.401
4.8 M., V(Mps)	0.594	0.808	0.879	0.57	0.689	0.665	0.665	0.665	0.38	0.238	0.309	0.333

The Year 1998	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
33.10M. V(Knot)	1.48	2.59	2.7	2.34	2.13	2.7	2.14	2.16	1.94	1.99	2.01	1.81
Direction	S	S	S	S	S	S	S	W	W	E	N	N
Incidence Angle	32	32	32	32	32	32	32	58	58	58	32	32
13.35 M., V(Mps)	0.529	0.926	0.965	0.837	0.761	0.965	0.765	0.772	0.694	0.711	0.719	0.647
10.5 M., V(Mps)	0.481	0.841	0.877	0.76	0.692	0.877	0.695	0.701	0.63	0.646	0.653	0.588
7.65M., V(Mps)	0.423	0.741	0.773	0.67	0.609	0.773	0.612	0.618	0.555	0.569	0.575	0.518
4.8 M., V(Mps)	0.352	0.615	0.641	0.556	0.506	0.641	0.508	0.513	0.461	0.473	0.477	0.43

The Year 1999	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
33.10M. V(Knot)	1.8	2.18	3.19	2.3	2	2.33	2.95	2.25	1.89	2.11	1.71	1.9
Direction	E	E	S	S	S	SW	SW	SW	W	E	NE	NE
Incidence Angle	58	58	32	32	32	13	13	13	58	58	13	13
13.35 M., V(Mps)	0.643	0.779	1.14	0.822	0.715	0.833	1.055	0.804	0.676	0.754	0.611	0.679
10.5 M., V(Mps)	0.585	0.708	1.036	0.747	0.649	0.757	0.958	0.731	0.614	0.685	0.555	0.617
7.65M., V(Mps)	0.515	0.624	0.913	0.658	0.572	0.667	0.844	0.644	0.541	0.604	0.489	0.547
4.8 M., V(Mps)	0.428	0.518	0.758	0.546	0.475	0.553	0.701	0.534	0.449	0.501	0.406	0.451

Prevailing Wind Speed (V)

The Year 2000	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
33.10M. V(Knot)	2.34	2.18	2.93	2.54	2.15	2.08	2.45	2.43	1.91	1.29	1.64	1.48
Direction	S	S	S	S	S	S	SW	SW	SW	S	N	NE
Incidence Angle	32	32	32	32	32	32	13	13	13	32	32	13
13.35 M., V(Mps)	0.837	0.779	1.047	0.908	0.769	0.744	0.876	0.869	0.683	0.461	0.586	0.529
10.5 M., V(Mps)	0.76	0.708	0.951	0.825	0.698	0.675	0.796	0.789	0.62	0.419	0.533	0.481
7.65M., V(Mps)	0.67	0.624	0.838	0.727	0.615	0.595	0.701	0.695	0.547	0.369	0.469	0.423
4.8 M., V(Mps)	0.556	0.518	0.696	0.603	0.511	0.494	0.578	0.577	0.454	0.306	0.39	0.352

The Year 2001	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
33.10M. V(Knot)	2.1	2.3	2.2	2.6	2.6	2.9	2.8	2.9	1.7	1.1	1.4	1.5
Direction	S	S	S	S	S	W	S	W	W	E	NE	NE
Incidence Angle	32	32	32	32	32	58	32	58	58	58	13	13
13.35 M., V(Mps)	0.751	0.822	0.787	0.93	0.93	1.037	1.001	1.037	0.608	0.393	0.501	0.536
10.5 M., V(Mps)	0.682	0.747	0.714	0.844	0.844	0.942	0.909	0.942	0.552	0.357	0.455	0.487
7.65M., V(Mps)	0.601	0.658	0.629	0.744	0.744	0.83	0.801	0.83	0.486	0.315	0.401	0.429
4.8 M., V(Mps)	0.499	0.546	0.523	0.618	0.618	0.689	0.665	0.689	0.404	0.261	0.333	0.356

การคำนวณหาความเร็วลมในพื้นที่ศึกษา

Calculate Site Wind Speed (Fpm.)

Site Wind Speed (Fpm.) = Wind Speed Correction Factors(WSCF.) x V(Mps.) x 196.85

Wind Speed Correction Factors (WSCF.) = 0.3619

The Year 1996	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35 M.,V(Mps)	0.93	1.216	1.359	1.18	0.93	0.894	0.93	0.894	0.751	0.715	0.822	0.93
V(Fpm.)	66.25	86.63	96.82	84.06	66.25	63.69	66.25	63.69	53.5	50.94	58.56	66.25
10.5 M., V(Mps)	0.844	1.104	1.234	1.072	0.844	0.812	0.844	0.812	0.682	0.649	0.747	0.844
V(Fpm.)	60.13	78.65	87.91	76.37	60.13	57.85	60.13	57.85	48.59	46.23	53.22	60.13
7.65M., V(Mps)	0.744	0.973	1.087	0.944	0.744	0.715	0.744	0.715	0.601	0.572	0.658	0.744
V(Fpm.)	53	69.32	77.44	67.25	53	50.94	53	50.94	42.82	40.75	46.88	53
4.8 M., V(Mps)	0.618	0.808	0.903	0.784	0.618	0.594	0.618	0.594	0.499	0.475	0.546	0.618
V(Fpm.)	44.03	57.56	64.33	55.85	44.03	42.32	44.03	42.32	35.55	33.84	38.9	44.03

Calculate Window Inlet Air Speed (Fpm.) = V(Fpm.) x Wind Speed Ratio (WSR.)

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
WSR.	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35

Inlet Air Speed

13.35M.,V(Fpm.)	23.19	30.32	33.89	29.42	23.19	22.29	23.19	22.29	18.73	17.83	20.5	23.19
10.50M.,V(Fpm.)	21.04	27.53	30.77	26.73	21.04	20.25	21.04	20.25	17.01	16.18	18.63	21.04
7.65 M., V(Fpm.)	18.55	24.26	27.1	23.54	18.55	17.83	18.55	17.83	14.99	14.26	16.41	18.55
4.80M., V(Fpm.)	15.41	20.15	22.52	19.55	15.41	14.81	15.41	14.81	12.44	11.84	13.61	15.41

The Year 1997	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35 M., V(Mps)	0.894	1.216	1.323	0.858	1.037	1.001	1.001	1.001	0.572	0.358	0.465	0.501
V(Fpm.)	63.69	86.63	94.25	61.12	73.88	71.31	71.31	71.31	40.75	25.5	33.13	35.69
10.5 M., V(Mps)	0.812	1.104	1.201	0.779	0.942	0.909	0.909	0.909	0.52	0.325	0.422	0.455
V(Fpm.)	57.85	78.65	85.56	55.5	67.11	64.76	64.76	64.76	37.04	23.15	30.06	32.41
7.65M., V(Mps)	0.715	0.973	1.059	0.687	0.83	0.801	0.801	0.801	0.458	0.286	0.372	0.401
V(Fpm.)	50.94	69.32	75.44	48.94	59.13	57.06	57.06	57.06	32.63	20.37	26.5	28.57
4.8 M., V(Mps)	0.594	0.808	0.879	0.57	0.689	0.665	0.665	0.665	0.38	0.238	0.309	0.333
V(Fpm.)	42.32	57.56	62.62	40.61	49.08	47.37	47.37	47.37	27.07	16.96	22.01	23.72

Calculate Window Inlet Air Speed (Fpm.) = V(Fpm.) x Wind Speed Ratio (WSR.)

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
WSR.	0.35	0.35	0.35	0.35	0.35	0.26	0.26	0.26	0.26	0.35	0.35	0.35

Inlet Air Speed

13.35M.,V(Fpm.)	22.29	30.32	32.99	21.39	25.86	18.54	18.54	18.54	10.59	8.93	11.59	12.49
10.50M.,V(Fpm.)	20.25	27.53	29.95	19.42	23.49	16.84	16.84	16.84	9.63	8.1	10.52	11.34
7.65 M., V(Fpm.)	17.83	24.26	26.41	17.13	20.7	14.84	14.84	14.84	8.48	7.13	9.28	10
4.80M., V(Fpm.)	14.81	20.15	21.92	14.21	17.18	12.32	12.32	12.32	7.04	5.93	7.7	8.3

The Year 1998	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35 M., V(Mps)	0.529	0.926	0.965	0.837	0.761	0.965	0.765	0.772	0.694	0.711	0.719	0.647
V(Fpm.)	37.69	65.97	68.75	59.63	54.21	68.75	54.5	55	49.44	50.65	51.22	46.09
10.5 M., V(Mps)	0.481	0.841	0.877	0.76	0.692	0.877	0.695	0.701	0.63	0.646	0.653	0.588
V(Fpm.)	34.27	59.91	62.48	54.14	49.3	62.48	49.51	49.94	44.88	46.02	46.52	41.89
7.65M., V(Mps)	0.423	0.741	0.773	0.67	0.609	0.773	0.612	0.618	0.555	0.569	0.575	0.518
V(Fpm.)	30.13	52.79	55.07	47.73	43.39	55.07	43.6	44.03	39.54	40.54	40.96	36.9
4.8 M., V(Mps)	0.352	0.615	0.641	0.556	0.506	0.641	0.508	0.513	0.461	0.473	0.477	0.43
V(Fpm.)	25.08	43.81	45.66	39.61	36.05	45.66	36.19	36.55	32.84	33.7	33.98	30.63

Calculate Window Inlet Air Speed (Fpm.) = V(Fpm.) x Wind Speed Ratio (WSR.)

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
WSR.	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.26	0.26	0.26	0.35	0.35

Inlet Air Speed

13.35M.,V(Fpm.)	13.19	23.09	24.06	20.87	18.97	24.06	19.08	14.3	12.85	13.17	17.93	16.13
10.50M.,V(Fpm.)	11.99	20.97	21.87	18.95	17.26	21.87	17.33	12.98	11.67	11.97	16.28	14.66
7.65 M., V(Fpm.)	10.55	18.48	19.27	16.71	15.19	19.27	15.26	11.45	10.28	10.54	14.34	12.92
4.80M., V(Fpm.)	8.78	15.33	15.98	13.86	12.62	15.98	12.67	9.503	8.54	8.76	11.89	10.72

The Year 1999	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35 M., V(Mps)	0.643	0.779	1.14	0.822	0.715	0.833	1.055	0.804	0.676	0.754	0.611	0.679
V(Fpm.)	45.81	55.5	81.21	58.56	50.94	59.34	75.16	57.28	48.16	53.71	43.53	48.37
10.5 M., V(Mps)	0.585	0.708	1.036	0.747	0.649	0.757	0.958	0.731	0.614	0.685	0.555	0.617
V(Fpm.)	41.68	50.44	73.8	53.22	46.23	53.93	68.25	52.08	43.74	48.8	39.54	43.96
7.65M., V(Mps)	0.515	0.624	0.913	0.658	0.572	0.667	0.844	0.644	0.541	0.604	0.489	0.544
V(Fpm.)	36.69	44.45	65.04	46.88	40.75	47.52	60.13	45.88	38.54	43.03	34.84	38.75
4.8 M., V(Mps)	0.428	0.518	0.758	0.546	0.475	0.553	0.701	0.534	0.449	0.501	0.406	0.451
V(Fpm.)	30.49	36.9	54	38.9	33.84	39.4	49.94	38.04	31.99	35.69	28.92	32.13

Calculate Window Inlet Air Speed (Fpm.) = V(Fpm.) x Wind Speed Ratio (WSR.)

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
WSR.	0.26	0.26	0.35	0.35	0.35	0.35	0.35	0.35	0.26	0.26	0.35	0.35
Inlet Air Speed												
13.35M.,V(Fpm.)	11.91	14.43	28.42	20.5	17.83	20.77	26.31	20.05	12.52	13.97	15.24	16.93
10.50M.,V(Fpm.)	10.84	13.11	25.83	18.63	16.18	18.89	23.89	18.23	11.37	12.69	13.84	15.39
7.65 M., V(Fpm.)	9.54	11.56	22.76	16.41	14.26	16.63	21.05	16.06	10.02	11.19	12.19	13.56
4.80M., V(Fpm.)	7.95	9.59	18.9	13.61	11.84	13.79	17.48	13.31	8.32	9.28	10.12	11.25

The Year 2000	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35 M., V(Mps)	0.837	0.779	1.047	0.908	0.769	0.744	0.876	0.869	0.683	0.461	0.586	0.529
V(Fpm.)	59.63	55.5	74.59	64.69	54.78	53	62.41	61.91	48.66	32.84	41.75	37.69
10.5 M., V(Mps)	0.76	0.708	0.951	0.825	0.698	0.675	0.796	0.789	0.62	0.419	0.533	0.481
V(Fpm.)	54.14	50.44	67.75	58.77	49.73	48.09	56.71	56.21	44.17	29.85	37.97	34.27
7.65M., V(Mps)	0.67	0.624	0.838	0.727	0.615	0.595	0.701	0.695	0.547	0.369	0.469	0.423
V(Fpm.)	47.73	44.45	59.7	51.79	43.81	42.39	49.94	49.51	38.97	26.29	33.41	30.13
4.8 M., V(Mps)	0.556	0.518	0.696	0.603	0.511	0.494	0.578	0.577	0.454	0.306	0.39	0.352
V(Fpm.)	39.61	36.9	49.58	42.96	36.4	35.19	41.18	41.11	32.34	21.83	27.78	25.08

Calculate Window Inlet Air Speed (Fpm.) = V(Fpm.) x Wind Speed Ratio (WSR.)

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
WSR.	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35

Inlet Air Speed

13.35M.,V(Fpm.)	20.87	19.42	26.11	22.64	19.17	18.55	21.84	21.67	17.03	11.49	14.61	13.19
10.50M.,V(Fpm.)	18.95	17.65	23.71	20.57	17.4	16.83	19.85	19.67	15.46	10.45	13.29	11.99
7.65 M., V(Fpm.)	16.71	15.56	20.89	18.13	15.33	14.84	17.48	17.33	13.64	9.2	11.69	10.55
4.80M., V(Fpm.)	13.86	12.92	17.35	15.04	12.74	12.32	14.41	14.39	11.32	7.64	9.72	8.78

The Year 2001	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35 M., V(Mps)	0.751	0.822	0.787	0.93	0.93	1.037	1.001	1.037	0.608	0.393	0.501	0.536
V(Fpm.)	53.5	58.56	56.07	66.25	66.25	73.88	71.31	73.88	43.31	28	35.69	38.18
10.5 M., V(Mps)	0.682	0.747	0.714	0.844	0.844	0.942	0.909	0.942	0.552	0.357	0.455	0.487
V(Fpm.)	48.59	53.22	50.87	60.13	60.13	67.11	64.76	67.11	39.32	25.43	32.41	34.69
7.65M., V(Mps)	0.601	0.658	0.629	0.744	0.744	0.83	0.801	0.83	0.486	0.315	0.401	0.429
V(Fpm.)	42.82	46.88	44.81	53	53	59.13	57.06	59.13	34.62	22.44	28.57	30.56
4.8 M., V(Mps)	0.499	0.546	0.523	0.618	0.618	0.689	0.665	0.689	0.404	0.261	0.333	0.356
V(Fpm.)	35.55	38.9	37.26	44.03	44.03	49.08	47.37	49.08	28.78	18.59	23.72	25.36

Calculate Window Inlet Air Speed (Fpm.) = V(Fpm.) x Wind Speed Ratio (WSR.)

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
WSR.	0.35	0.35	0.35	0.35	0.35	0.26	0.35	0.26	0.26	0.26	0.35	0.35

Inlet Air Speed

13.35M.,V(Fpm.)	18.73	20.5	19.62	23.19	23.19	19.21	24.96	19.21	11.26	7.28	12.49	13.36
10.50M.,V(Fpm.)	17	18.63	17.8	21.04	21.04	17.45	22.67	17.45	10.22	6.61	11.34	12.14
7.65 M., V(Fpm.)	14.99	16.41	15.68	18.55	18.55	15.37	19.97	15.37	9	5.83	10	10.7
4.80M., V(Fpm.)	12.44	13.61	13.04	15.41	15.41	12.76	16.58	12.76	7.48	4.83	8.3	8.88

การคำนวณหาพื้นที่ช่องเปิดทางทฤษฎี

Calculate Net Aperture Inlet Area = Required Airflow Rate (Cfm.) / Window Inlet Air Speed (Fpm.)

Determine Total Effective Inlet & Outlet Area = 3.33 x Net Aperture Inlet Area (Sq.ft.)

Determine Total Effective Area as % of Floor Area = Total Effective Inlet & Outlet Area x 100 / Floor Area (Sq.ft.)

Required Airflow Rate (Cfm.) = 214.2423

Floor Area = 376.74 Sq.ft.

The Year 1996	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35 M.,												
Inlet Air Speed	23.19	30.32	33.89	29.42	23.19	22.29	23.19	22.29	18.73	17.83	20.5	23.19
Aperture Area	9.24	7.07	6.32	7.28	9.24	9.61	9.24	9.61	11.44	12.02	10.45	9.24
Effective Area	30.76	23.53	21.05	24.25	30.76	32.01	30.76	32.01	38.09	40.01	34.8	30.76
% of Floor Area	8.16	6.24	5.59	6.44	8.16	8.49	8.16	8.49	10.11	10.62	9.24	8.16
10.50 M.,												
Inlet Air Speed	21.04	27.53	30.77	26.73	21.04	20.25	21.04	20.25	17.01	16.18	18.63	21.04
Aperture Area	10.18	7.78	6.96	8.02	10.18	10.58	10.18	10.58	12.6	13.24	11.5	10.18
Effective Area	33.91	25.91	23.19	26.69	33.91	35.23	33.91	35.23	41.94	44.09	38.29	33.91
% of Floor Area	9	6.88	6.15	7.08	9	9.35	9	9.35	11.13	11.7	10.16	9
7.65 M.,												
Inlet Air Speed	18.55	24.26	27.1	23.54	18.55	17.83	18.55	17.83	14.99	14.26	16.41	18.55
Aperture Area	11.55	8.83	7.91	9.1	11.55	12.02	11.55	12.02	14.29	15.02	13.06	11.55
Effective Area	38.46	29.41	26.33	30.31	38.46	40.01	38.46	40.01	47.59	50.03	43.48	38.46
% of Floor Area	10.21	7.8	6.99	8.04	10.21	10.62	10.21	10.62	12.63	13.28	11.54	10.21
4.80 M.,												
Inlet Air Speed	15.41	20.15	22.52	19.55	15.41	14.81	15.41	14.81	12.44	11.84	13.61	15.41
Aperture Area	13.9	10.63	9.51	10.96	13.9	14.47	13.9	14.47	17.22	18.09	15.74	13.9
Effective Area	46.3	35.41	31.68	36.49	46.3	48.17	46.3	48.17	57.35	60.26	52.42	46.3

% of Floor Area	12.29	9.4	8.41	9.69	12.29	12.79	12.29	12.79	15.22	15.99	13.91	12.29

The Year 1997	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35 M.,												
Inlet Air Speed	22.29	30.32	32.99	21.39	25.86	18.54	18.54	18.54	10.59	8.93	11.59	12.49
Aperture Area	9.61	7.07	6.49	10.02	8.28	11.56	11.56	11.54	20.23	23.99	18.49	17.15
Effective Area	32.01	23.53	21.63	33.35	27.59	38.48	38.48	38.42	67.37	79.89	61.56	57.12
% of Floor Area	8.49	6.24	5.74	8.85	7.32	10.21	10.21	10.2	17.88	21.2	16.34	15.16
10.50 M.,												
Inlet Air Speed	20.25	27.53	29.95	19.42	23.49	16.84	16.84	16.84	9.63	8.1	10.52	11.34
Aperture Area	10.58	7.78	7.15	11.03	9.12	12.72	12.72	12.72	22.25	26.45	20.37	18.89
Effective Area	35.23	25.91	23.82	36.74	30.37	42.37	42.37	42.37	74.08	88.08	67.82	62.91
% of Floor Area	9.35	6.88	6.32	9.75	8.06	11.24	11.24	11.24	19.66	23.38	18	16.7
7.65 M.,												
Inlet Air Speed	17.83	24.26	26.41	17.13	20.7	14.84	14.84	14.84	8.48	7.13	9.23	10
Aperture Area	12.02	8.83	8.11	12.51	10.35	14.44	14.44	14.44	25.26	30.05	23.21	21.42
Effective Area	40.01	29.41	27.01	41.65	34.47	48.07	48.07	48.07	84.13	100.1	77.29	71.34
% of Floor Area	10.62	7.8	7.17	11.05	9.15	12.76	12.76	12.76	22.33	26.56	20.51	18.93
4.80 M.,												
Inlet Air Speed	14.81	20.15	21.92	14.21	17.18	12.32	12.32	12.32	7.04	5.93	7.7	8.3
Aperture Area	14.47	10.63	9.77	15.08	12.47	17.39	17.39	17.39	30.43	36.13	27.82	25.81
Effective Area	48.17	35.41	32.55	50.21	41.53	57.91	57.91	57.91	101.3	120.3	92.65	85.96
% of Floor Area	12.78	9.4	8.64	13.32	11.02	15.37	15.37	15.37	26.9	31.93	24.59	22.81

The Year 1998	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35 M.,												
Inlet Air Speed	13.19	23.09	24.06	20.87	18.97	24.06	19.08	14.3	12.85	13.17	17.93	16.13
Aperture Area	16.24	9.28	8.9	10.27	11.29	8.9	11.23	14.98	16.67	16.27	11.95	13.28
Effective Area	54.09	30.9	29.65	34.18	37.61	29.65	37.39	49.89	55.52	54.17	39.79	44.23

% of Floor Area	14.36	8.2	7.87	9.07	9.98	7.87	9.92	13.24	14.73	14.38	10.56	11.74

The Year 1998	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
10.50 M.,												
Inlet Air Speed	11.99	20.97	21.87	18.95	19.26	21.87	17.33	12.98	11.67	11.97	16.28	14.66
Aperture Area	17.87	10.22	9.8	11.31	11.12	9.8	12.36	16.51	18.36	17.9	13.16	14.61
Effective Area	59.5	34.02	32.62	37.65	37.04	32.62	41.17	54.96	61.13	59.6	43.82	48.66
% of Floor Area	15.79	9.03	8.66	9.99	9.83	8.66	10.93	14.59	16.22	15.82	11.63	12.92
7.65 M.,												
Inlet Air Speed	10.55	18.48	19.27	16.71	15.19	19.27	15.26	11.45	10.28	10.54	14.34	12.92
Aperture Area	20.31	11.59	11.12	12.82	14.1	11.12	14.04	18.71	20.84	20.33	14.94	16.58
Effective Area	67.62	38.61	37.02	42.69	46.97	37.02	46.75	62.31	69.4	67.69	49.75	55.22
% of Floor Area	17.95	10.25	9.83	11.33	12.47	9.83	12.41	16.54	18.42	17.96	13.2	14.66
4.80 M.,												
Inlet Air Speed	8.78	15.33	15.98	13.86	12.62	15.98	12.67	9.503	8.54	8.76	11.89	10.72
Aperture Area	24.4	13.98	13.41	15.46	16.98	13.41	16.91	22.54	25.09	24.46	18.02	19.99
Effective Area	81.26	46.54	44.64	51.47	56.53	44.64	56.31	75.07	83.54	81.44	60	66.55
% of Floor Area	21.57	12.35	11.85	13.66	15	11.85	14.94	19.92	22.17	21.61	15.92	17.66

The Year 1999	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35 M.,												
Inlet Air Speed	11.91	14.43	28.42	20.5	17.83	20.77	26.31	20.05	12.52	13.97	15.24	16.93
Aperture Area	17.99	14.85	7.54	10.45	12.02	10.31	8.14	10.69	17.11	15.34	14.06	12.65
Effective Area	59.9	49.44	25.1	34.8	40.01	34.35	27.12	35.58	56.98	51.07	46.81	42.14
% of Floor Area	15.9	13.12	6.66	9.24	10.62	9.12	7.2	9.44	15.12	13.55	12.42	11.18
10.50 M.,												
Inlet Air Speed	10.84	13.11	25.83	18.63	16.18	18.89	23.89	18.23	11.37	12.69	13.84	15.39
Aperture Area	19.76	16.34	8.29	11.5	13.24	11.34	8.97	11.75	18.84	16.88	15.48	13.92
Effective Area	65.81	54.42	27.62	38.3	44.09	37.77	29.86	39.13	62.75	56.22	51.55	46.36
% of Floor Area	17.47	14.44	7.33	10.16	11.7	10.02	7.93	10.39	16.65	14.92	13.68	12.3

The Year 1999	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
7.65 M.,												
Inlet Air Speed	9.54	11.56	22.76	16.41	14.26	16.63	21.05	16.06	10.02	11.19	12.19	13.56
Aperture Area	22.46	18.53	9.41	13.06	15.02	12.88	10.18	13.34	21.38	19.15	17.58	15.8
Effective Area	74.78	61.72	31.35	43.48	50.03	42.9	33.89	44.42	71.2	63.76	58.53	52.61
% of Floor Area	19.85	16.38	8.32	11.54	13.28	11.39	8.99	11.79	18.9	16.92	15.53	13.96
4.80 M.,												
Inlet Air Speed	7.93	9.59	18.9	13.61	11.84	13.79	17.48	13.31	8.32	9.28	10.12	11.25
Aperture Area	27.02	22.34	11.34	15.74	18.09	15.54	12.26	16.1	25.75	23.09	21.17	19.04
Effective Area	89.97	74.39	37.75	52.42	60.26	51.74	40.81	53.6	85.75	76.88	70.5	63.42
% of Floor Area	23.88	19.74	10.02	13.91	15.99	13.73	10.83	14.23	22.76	20.4	18.71	16.83

The Year 2000	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35 M.,												
Inlet Air Speed	20.87	19.42	26.11	22.64	19.17	18.55	21.84	21.67	17.03	11.49	14.61	13.19
Aperture Area	10.27	11.03	8.21	9.46	11.18	11.55	9.81	9.89	12.58	18.65	14.66	16.24
Effective Area	34.18	36.74	27.32	31.51	37.22	38.46	32.67	32.92	41.89	62.09	48.83	54.09
% of Floor Area	9.07	9.75	7.25	8.36	9.88	10.21	8.67	8.74	11.12	16.48	12.96	14.36
10.50 M.,												
Inlet Air Speed	18.95	17.65	23.71	20.57	17.4	16.83	19.85	19.67	15.46	10.45	13.29	11.99
Aperture Area	11.31	12.14	9.04	10.42	12.31	12.73	10.79	10.89	13.86	20.5	16.12	17.87
Effective Area	37.65	40.42	30.09	34.68	41	42.39	35.94	36.27	46.15	68.27	53.68	59.5
% of Floor Area	9.99	10.73	7.99	9.2	10.88	11.25	9.54	9.63	12.25	18.12	14.25	15.79
7.65 M.,												
Inlet Air Speed	16.71	15.56	20.89	18.13	15.33	14.84	17.48	17.33	13.64	9.2	11.69	10.55
Aperture Area	12.82	13.77	10.26	11.82	13.98	14.44	12.26	12.36	15.71	23.29	18.33	20.31
Effective Area	42.69	45.85	34.15	39.35	46.54	48.07	40.81	41.17	52.3	77.55	61.03	67.62

% of Floor Area	11.33	12.17	9.06	10.44	12.35	12.76	10.83	10.93	13.88	20.58	16.2	17.95
The Year 2000	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
4.80 M.,												
Inlet Air Speed	13.86	12.98	17.35	15.04	12.74	12.32	14.41	14.39	11.32	7.64	9.72	8.78
Aperture Area	15.46	16.51	12.35	14.24	16.82	17.39	14.87	14.89	18.93	28.04	22.04	24.4
Effective Area	51.47	54.96	41.12	47.44	56	57.91	49.51	49.58	63.02	93.38	73.4	81.26
% of Floor Area	13.66	14.59	10.91	12.59	14.86	15.37	13.14	13.16	16.73	24.78	19.48	21.57

The Year 2001	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35 M.,												
Inlet Air Speed	18.73	20.5	19.62	23.19	23.19	19.21	24.96	19.21	11.26	7.28	12.49	13.36
Aperture Area	11.44	10.45	10.92	9.24	9.24	11.15	8.58	11.15	19.03	29.43	17.15	16.04
Effective Area	38.09	34.8	36.36	30.76	30.76	37.14	28.58	37.14	63.36	98	57.12	53.4
% of Floor Area	10.11	9.24	9.65	8.16	8.16	9.86	7.59	9.86	16.82	26.01	15.16	14.17
10.50 M.,												
Inlet Air Speed	17	18.63	17.8	21.04	21.04	17.45	22.67	17.45	10.22	6.61	11.34	12.14
Aperture Area	12.6	11.5	12.04	10.18	10.18	12.28	9.45	12.28	20.96	32.41	18.89	17.65
Effective Area	41.97	38.29	40.08	33.91	33.91	40.88	31.47	40.88	69.81	107.9	62.91	58.77
% of Floor Area	11.14	10.16	10.64	9	9	10.85	8.35	10.85	18.53	28.65	16.7	15.6
7.65 M.,												
Inlet Air Speed	14.99	16.41	15.68	18.55	18.55	15.37	19.97	15.37	9	5.83	10	10.7
Aperture Area	14.29	13.06	13.66	11.55	11.55	13.94	10.73	13.94	23.8	36.75	21.42	20.02
Effective Area	47.59	43.48	45.5	38.46	38.46	46.42	35.72	46.42	79.27	122.4	71.34	66.68
% of Floor Area	12.63	11.54	12.08	10.21	10.21	12.32	9.48	12.32	21.04	32.48	18.93	17.7
4.80 M.,												
Inlet Air Speed	12.44	13.61	13.04	15.41	15.41	12.76	16.58	12.76	7.48	4.83	8.3	8.88
Aperture Area	17.22	15.74	16.43	13.9	13.9	16.79	12.92	16.79	28.64	44.36	25.81	24.13
Effective Area	57.35	52.42	54.71	46.3	46.3	55.91	43.03	55.91	95.38	147.7	85.96	80.34
% of Floor Area	15.22	13.91	14.52	12.29	12.29	14.84	11.42	14.84	25.31	39.2	22.81	21.32

หมวดที่ 2 รายละเอียดการคำนวณหาขอบเขตสภาวะความสบายแบบ CET

จากข้อมูลภูมิอากาศ 4 ปีย้อนหลัง (ค.ศ. 1998 – 2001)

Corrected Effective Temperature Index (CET.)

Climatic Data (Station : Bangkok Metropolis) the Year **1998**

DBT. ; Mean Max & Mean Min Temperature = 35.9^{0} - 23.4^{0} C

Annual Mean Temperature (AMT.) = 0.5 (35.9^{0} + 23.4^{0}) = 29.65^{0} C

AMT. > 10^{0} C. ; Center of Comfort Zone = 24.61 ^{0} C(CET)

Annual Mean Range (AMR.) = 35.9^{0} - 23.4^{0} = 12.5^{0}

AMR. = 13^{0} - 15^{0} ; Comfort Zone Range (CET) = 3^{0}

Upper and Lower Limit of Comfort Zone = 26.11^{0} - 23.11^{0} C (CET)

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
DBT. MAX TEMP.	33.9	34.1	35.3	35.7	35.9	34.5	34.2	33.3	32.6	33.4	32.6	31.8
RH(%) MIN.	50	59	54	54	55	58	60	61	68	62	58	55
WBT.	25.3	27.4	29.6	27.6	27.8	27.4	27.8	27.1	27.4	27.3	25.8	24.5
ET. (MAX)	28.6	29.7	31.3	30.2	30.3	29.8	30	29.3	29.2	29.4	28.3	27.4
DBT. MIN TEMP.	25.4	26.7	27.4	28.1	27.3	26.8	26.3	25.7	25.2	25.8	24.6	23.4
RH(%) MAX.	86	89	85	86	88	87	90	91	95	91	87	81
WBT.	23.7	25.2	25.5	26.3	25.8	24.9	25	25	24.7	24.8	22.7	21.1
ET.(MIN)	24.5	26	26.3	27.1	26.4	25.8	25.6	25.3	25	25.2	23.7	22.5

Corrected Effective Temperature Index (CET.)

Climatic Data (Station : Bangkok Metropolis) the Year **1998**

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
24.00 PM.	25.4	26.9	27.4	27.9	27.2	26.7	26.6	26.2	26	26.2	24.8	22.5
02.00 AM.	25.1	26.5	27	27.7	27	26.3	26.2	26	25.7	25.9	24.3	23.2
04.00 AM.	24.8	26.2	26.7	27.3	26.7	26	25.9	25.7	25.3	25.6	24	22.9
06.00 AM.	24.5	26	26.3	27.1	26.4	25.8	25.6	25.3	25	25.2	23.7	22.5
08.00 AM.	25	26.4	26.9	27.5	26.9	26.2	26	25.8	25.5	25.8	24.2	23
10.00 AM.	26.9	28.1	29.3	29	28.8	28.1	28.2	27.7	27.5	27.7	26.4	25.4
12.00 AM.	28	29.1	30.7	29.8	29.8	29.2	29.4	28.8	28.7	28.8	27.6	26.8
14.00 PM.	28.6	29.7	31.3	30.2	30.3	29.8	30	29.3	29.2	29.4	28.3	27.4
16.00 PM.	28.3	29.4	31	30	30	29.4	29.7	29	29	29.1	27.9	27
18.00 PM.	27.3	28.5	29.9	29.3	29.2	28.6	28.7	28	28	28.1	26.9	25.9
20.00 PM.	26.3	27.6	28.6	28.6	28.1	27.5	27.5	27	26.9	27.1	25.8	24.7
22.00 PM.	25.8	27.1	28	28.1	27.8	27	27	26.6	26.4	26.6	25.2	24
24.00 PM.	25.4	26.9	27.4	27.9	27.2	26.7	26.6	26.2	26	26.2	24.8	22.5

Corrected Effective Temperature Index (CET.)

Climatic Data (Station : Bangkok Metropolis) the Year **1999**

DBT. ; Mean Max & Mean Min Temperature = 35.4^{0} - 20.4^{0} C

Annual Mean Temperature (AMT.) = 0.5 (35.4^{0} + 20.8^{0}) = 27.9^{0} C

AMT. > 10^{0}C. ; Center of Comfort Zone = 24.18^{0} C (CET)

Annual Mean Range (AMR.) = 35.4^{0} - 20.4^{0} = 15^{0}

AMR. = 13^{0} - 15^{0} ; Comfort Zone Range (CET.) = 3^{0}

Upper and Lower Limit of Comfort Zone = 25.68^{0} - 22.68^{0} C (CET)

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
DBT. MAX TEMP.	33	33.1	35.4	33.9	32.7	32.9	33.3	32.6	33	32.3	32	29.3
RH(%) MIN.	58	60	48	61	66	62	59	61	62	63	56	47
WBT.	26.1	26.8	26.1	27.3	27.2	26.7	26.8	26.2	26.9	26.4	25	20.9
ET. (MAX)	28.7	29	29.3	29.6	29.1	28.8	29.1	28.6	29	28.5	27.8	25.1
DBT. MIN TEMP.	23.7	24.5	26.5	26.2	25.4	26.3	26.6	25.7	25.5	25	24.4	20.4
RH(%) MAX.	83	90	87	91	93	90	84	89	91	92	85	70
WBT.	21.5	23.3	24.7	25	24.8	25	24.3	24.1	24.6	24.1	22.6	17
ET.(MIN)	22.8	23.9	25.6	25.4	25.2	25.7	25.4	25	25.1	24.6	23.6	19.2

Corrected Effective Temperature Index (CET.)

Climatic Data (Station : Bangkok Metropolis) the Year **1999**

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
24.00 PM.	24	25	26.4	26.2	26.1	26.2	26.2	25.9	26	25.5	24.6	20.6
02.00 AM.	23.6	24.6	26.1	26	25.9	26.1	26	25.6	25.7	25.1	24.2	20.1
04.00 AM.	23.1	24.1	25.9	25.6	25.6	25.9	25.7	25.2	25.4	24.9	23.9	19.6
06.00 AM.	22.8	23.9	25.6	25.4	25.2	25.7	25.4	25	25.1	24.6	23.6	19.2
08.00 AM.	23.3	24.3	26	25.9	25.8	26	25.9	25.4	25.6	25	24.1	19.9
10.00 AM.	26.2	26.9	27.8	27.8	27.6	27.4	27.6	27.1	27.3	26.9	26.1	22.8
12.00 AM.	27.9	28.1	28.8	29	28.7	28.2	28.8	28	28.3	27.9	27.2	24.3
14.00 PM.	28.7	29	29.3	29.6	29.1	28.8	29.1	28.6	29	28.5	27.8	25.1
16.00 PM.	28.2	28.6	29	29.3	28.9	28.5	28.9	28.2	28.7	28.1	27.4	24.7
18.00 PM.	26.9	27.3	28.1	28.2	28	27.7	28	27.5	27.8	27.3	26.5	23.4
20.00 PM.	25.3	26	27.2	27.1	27	27	27	26.7	26.9	26.3	25.5	21.8
22.00 PM.	24.7	25.4	26.8	26.7	26.6	26.6	26.7	26.1	26.3	25.9	25	21.1
24.00 PM.	24	25	26.4	26.2	26.1	26.2	26.2	25.9	26	25.5	24.6	20.6

Corrected Effective Temperature Index (CET.)

Climatological Data (Station ; Bangkok Matropolis) the Year 2000

DBT. ; Mean Max & Mean Min Temperature = 34.3^{0} - 23.7^{0} C

Annual Mean Temperature (AMT.) = 0.5 (34.3^{0} + 23.7^{0}) = 29^{0} C

AMT.> 10^{0} C.; Center of Comfort Zone = 24.45^{0} C(CET.)

Annual Mean Range (AMR.) = 34.3^{0} - 23.7^{0} = 10.6^{0}

AMR. < 12^{0} C. ; Comfort Zone Range (CET.) = 2.5^{0}

Upper and Lower Limit of Comfort Zone = 25.7^{0} - 22.68^{0} C(CET)

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
DBT. MAX TEMP.	33	33.5	34.3	33.5	34	32.6	32.5	32.6	32.8	32.6	32.6	33.4
RH(%) MIN.	49	47	50	63	60	63	60	61	60	63	49	47
WBT.	24.2	23.8	25.3	27.3	27.2	26.5	25.7	26.7	25.9	26.4	23.7	23.8
ET. (MAX)	27.8	27.8	28.7	29.5	29.6	28.8	28.2	28.8	28.4	28.7	27.4	27.7
DBT. MIN TEMP.	24.1	23.7	26	26.2	26.3	25.9	26	25.6	25.4	25.3	23.8	24.3
RH(%) MAX.	82	84	85	90	89	91	89	88	89	93	78	78
WBT.	21.6	21.8	23.8	24.6	24.8	24.5	24.4	23.8	24	24.4	21	21.5
ET.(MIN)	23	22.8	24.9	25.3	25.5	25.2	25.1	24.6	24.7	24.8	22.6	23.1

Corrected Effective Temperature Index (CET.)

Climatological Data (Station ; Bangkok Matropolis) the Year 2000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
24.00 PM.	23.9	23.8	25.7	26.3	26.4	26	25.8	25.4	25.4	25.5	23.6	24.1
02.00 AM.	23.6	23.5	25.4	26	26.1	25.8	25.5	25.1	25.1	25.2	23.1	23.8
04.00 AM.	23.2	23.1	25.1	25.6	25.8	25.5	25.3	24.8	24.9	25	22.8	23.4
06.00 AM.	23	22.8	24.9	25.3	25.5	25.2	25.1	24.6	24.7	24.8	22.6	23.1
08.00 AM.	23.5	23.3	25.3	25.8	26	25.8	25.6	24	25	25.1	23	23.6
10.00 AM.	25.8	25.7	27.1	27.8	27.8	27.2	27	27	26.9	27	25.3	25.8
12.00 AM.	27	27	28.1	28.9	29	28.1	27.8	28.1	27.9	28	26.7	27
14.00 PM.	27.8	27.8	28.7	29.5	29.6	28.8	28.2	28.8	28.4	28.7	27.4	27.7
16.00 PM.	27.3	27.4	28.3	29.2	29.2	28.4	28	28.3	28.1	28.3	27	27.2
18.00 PM.	26.3	26.2	27.5	28.2	28.2	27.7	27.2	27.5	27.2	27.4	25.9	26.2
20.00 PM.	25	24.9	26.5	27.2	27.3	26.8	26.5	26.4	26.3	26.5	24.6	25
22.00 PM.	24.4	24.3	26	26.7	26.8	26.3	26.1	25.9	25.8	25.9	24	24.5
24.00 PM.	23.9	23.8	25.7	26.3	26.4	26	25.8	25.4	25.4	25.5	23.6	24.1

Corrected Effective Temperature Index (CET.)

Climatological Data (Station ; Bangkok Matropolis) the Year 2001

DBT. ; Mean Max & Mean Min Temperature $= 35.7^{0} - 22.9^{0} C = 12.8^{0}$

Annual Mean Temperature (AMT.) $= 0.5 (35.7^{0} + 22.9^{0}) = 29.3^{0} C$

AMT.> 10^{0} C.; Center of Comfort Zone $= 0.25(29.3) + 17.2 = 24.53^{0} C$(CET.)

Annual Mean Range (AMR.) $= 35.7^{0} - 22.9^{0} = 12.8^{0}$

AMR. = 12-13 ^{0} C. ; Comfort Zone Range (CET.) $= 3.0^{0}$

Upper and Lower Limit of Comfort Zone $= 26.03^{0} - 23.03^{0} C$ (CET)

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
DBT. MAX TEMP.	33.3	33.8	33.1	35.7	33.4	33.2	33.1	32.7	33.5	32.6	31.7	32.1
RH(%) MIN.	52	50	59	55	62	60	59	60	61	65	50	50
WBT.	25.2	24.9	26.4	27.6	27.2	26.7	26.4	27	27.1	26.9	23.3	23.1
ET. (MAX)	28.4	28.3	29	30.2	29.3	29.2	29	29.3	29.1	29	26.8	27.3
DBT. MIN TEMP.	25.1	25.4	25.8	28.3	25.9	26.3	26.8	26.4	25.7	25.3	22.9	23.3
RH(%) MAX.	84	85	90	85	90	87	84	84	92	94	79	78
WBT.	23.1	22.8	24.5	26.4	24.6	24.7	24.6	24.3	24.8	24.5	20.3	20.8
ET.(MIN)	24.1	23.5	25.1	27.1	25.2	25.5	25.6	25.2	25.2	25	21.9	22.3

Corrected Effective Temperature Index (CET.)

Climatological Data (Station ; Bangkok Matropolis) the Year **2001**

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
24.00 PM.	25.1	24.5	26	27.9	26.2	26.3	26.4	26.4	26.1	26	22.8	23.4
02.00 AM.	24.8	24.2	25.8	27.6	25.9	26	26.1	26.1	25.9	25.7	22.5	23
04.00 AM.	24.5	23.8	25.5	27.4	25.6	25.8	25.9	25.8	25.5	25.3	22.1	22.7
06.00 AM.	24.1	23.5	25.1	27.1	25.2	25.5	25.6	25.6	25.2	25	21.9	22.3
08.00 AM.	24.8	24	25.6	27.5	25.8	26	26	26	25.8	25.5	22.3	22.9
10.00 AM.	26.7	26.4	27.4	29	27.7	27.7	27.6	27.8	27.6	27.3	24.6	25.2
12.00 AM.	27.8	27.7	28.5	29.9	28.8	28.8	28.6	28.8	28.7	28.5	26	26.7
14.00 PM.	28.4	28.3	29	30.2	29.3	29.2	29	29.3	29.1	29	26.8	27.3
16.00 PM.	28	27.9	28.7	30	29.1	29	28.8	29.1	28.9	28.8	26.3	27
18.00 PM.	27.2	26.9	27.8	29.3	28.1	28.1	28	28.1	27.9	27.8	25.1	25.8
20.00 PM.	25.1	25.6	26.9	28.5	27.1	27.2	27.1	27.3	27	26.9	23.9	24.5
22.00 PM.	25.6	25	26.4	28.1	26.7	26.7	26.8	26.8	26.5	26.3	23.2	23.9
24.00 PM.	25.1	24.5	26	27.9	26.2	26.3	26.4	26.4	26.1	26	22.8	23.4

หมวดที่ 3 รายละเอียดการคำนวณหาค่าปริมาณความร้อน ตามทฤษฎี ITS. และการคำนวณหาปริมาตรต่อคน โดยทฤษฎีการระบายความร้อนด้วยอากาศ จากข้อมูลภูมิอากาศ 6 ปีย้อนหลัง (ค.ศ.1996 – 2001) โดยแปรตามชั้นของหน่วยพักอาศัยในอาคารที่เป็นกรณีศึกษา

Calculating sensible perspiration scale (SP.Scale) and volume of space of each month

Between the year 1996 - 2001 every levels of floor, using mean max values.

Mean Wind Velocity

The Year 1996	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AUG	NOV	DEC
33.10M.{Knots}	2.6	3.4	3.8	3.3	2.6	2.5	2.6	2.5	2.1	2	2.3	2.6
13.35M.{Mps.}	0.93	1.216	1.359	1.18	0.93	0.894	0.93	0.894	0.751	0.715	0.822	0.93
10.50M.{Mps.}	0.844	1.104	1.234	1.072	0.844	0.812	0.844	0.812	0.682	0.649	0.747	0.844
7.65M.{Mps.}	0.744	0.973	1.087	0.944	0.744	0.715	0.744	0.715	0.601	0.572	0.658	0.744
4.80M.{Mps.}	0.618	0.808	0.903	0.784	0.618	0.594	0.618	0.594	0.499	0.475	0.546	0.618

Mean Wind Velocity

The Year 1997	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AUG	NOV	DEC
33.10M.{Knots}	2.5	3.4	3.7	2.4	2.9	2.8	2.8	2.8	1.6	1	1.3	1.4
13.35M.{Mps.}	0.894	1.216	1.323	0.858	1.037	1.001	1.001	1.001	0.572	0.358	0.465	0.501
10.50M.{Mps.}	0.812	1.104	1.201	0.779	0.942	0.909	0.909	0.909	0.52	0.325	0.422	0.455
7.65M.{Mps.}	0.715	0.973	1.059	0.687	0.83	0.801	0.801	0.801	0.458	0.286	0.372	0.401
4.80M.{Mps.}	0.594	0.808	0.879	0.57	0.689	0.665	0.665	0.665	0.38	0.238	0.309	0.333

Mean Wind Velocity

The Year 1998	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	AUG	NOV	DEC
33.10M.{Knots}	1.48	2.59	2.7	2.34	2.13	2.7	2.14	2.16	1.94	1.99	2.01	1.81
13.35M.{Mps.}	0.529	0.926	0.965	0.837	0.761	0.965	0.765	0.772	0.694	0.711	0.719	0.647
10.50M.{Mps.}	0.481	0.841	0.877	0.76	0.692	0.877	0.695	0.701	0.63	0.646	0.653	0.588
7.65M.{Mps.}	0.423	0.741	0.773	0.67	0.609	0.773	0.612	0.618	0.555	0.569	0.575	0.518
4.80M.{Mps.}	0.352	0.615	0.641	0.556	0.506	0.641	0.508	0.513	0.461	0.473	0.477	0.43

Mean Wind Velocity

The Year 1999	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
33.10M.{Mps.}	1.8	2.18	3.19	2.3	2	2.33	2.95	2.25	1.89	2.11	1.71	1.9
13.35M.{Mps.}	0.643	0.779	1.14	0.822	0.715	0.833	1.055	0.804	0.676	0.754	0.611	0.679
10.50M.{Mps.}	0.585	0.708	1.036	0.747	0.649	0.757	0.958	0.731	0.614	0.685	0.555	0.617
7.65M.{Mps.}	0.515	0.624	0.913	0.658	0.572	0.667	0.844	0.644	0.541	0.604	0.489	0.544
4.80M.{Mps.}	0.428	0.518	0.758	0.546	0.475	0.553	0.701	0.534	0.449	0.501	0.406	0.451

Mean Wind Velocity

The Year 2000	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
33.10M.{Knots}	2.34	2.18	2.93	2.54	2.15	2.08	2.45	2.43	1.91	1.29	1.64	1.48
13.35M.{Mps.}	0.837	0.779	1.047	0.908	0.769	0.744	0.876	0.869	0.683	0.461	0.586	0.529
10.5M.{Mps.}	0.76	0.708	0.951	0.825	0.698	0.675	0.796	0.789	0.62	0.419	0.533	0.481
7.65M.{Mps.}	0.67	0.624	0.838	0.727	0.615	0.595	0.701	0.695	0.547	0.369	0.469	0.423
4.80M.{Mps.}	0.556	0.518	0.696	0.603	0.511	0.494	0.578	0.577	0.454	0.306	0.39	0.352

Mean Wind Velocity

The Year 2001	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
33.10M.{Knots}	2.1	2.3	2.2	2.6	2.6	2.9	2.8	2.9	1.7	1.1	1.4	1.5
13.35M.{Mps.}	0.751	0.822	0.787	0.93	0.93	1.037	1.001	1.037	0.608	0.393	0.501	0.536
10.5M.{Mps.}	0.682	0.747	0.714	0.844	0.844	0.942	0.909	0.942	0.552	0.357	0.455	0.487
7.65M.{Mps.}	0.601	0.658	0.629	0.744	0.744	0.83	0.801	0.83	0.486	0.315	0.401	0.429
4.80M.{Mps.}	0.499	0.546	0.523	0.618	0.618	0.689	0.665	0.689	0.404	0.261	0.333	0.356

Remark : 1 Knot = 0.514 Mps.

65% of Mean Wind Velocity = Indoor Air Speed

The Year 1996	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M.{Mps.}	0.605	0.79	0.883	0.767	0.605	0.581	0.605	0.581	0.488	0.465	0.534	0.605
10.50M.{Mps.}	0.549	0.718	0.802	0.697	0.549	0.528	0.549	0.528	0.443	0.422	0.486	0.549
7.65M.{Mps.}	0.484	0.633	0.707	0.614	0.484	0.465	0.484	0.465	0.391	0.372	0.428	0.484
4.80M.{Mps.}	0.402	0.525	0.587	0.51	0.402	0.386	0.402	0.386	0.324	0.309	0.355	0.402

The Year 1997	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M.{Mps.}	0.581	0.79	0.86	0.558	0.674	0.651	0.651	0.651	0.372	0.233	0.302	0.326
10.50M.{Mps.}	0.528	0.718	0.781	0.506	0.612	0.591	0.591	0.591	0.338	0.211	0.274	0.296
7.65M.{Mps.}	0.465	0.633	0.688	0.447	0.54	0.521	0.521	0.521	0.298	0.186	0.242	0.261
4.80M.{Mps.}	0.386	0.525	0.571	0.371	0.448	0.432	0.432	0.432	0.247	0.155	0.201	0.217

The Year 1998	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M.{Mps.}	0.344	0.602	0.627	0.544	0.495	0.627	0.497	0.502	0.451	0.462	0.467	0.421
10.50M.{Mps.}	0.313	0.547	0.57	0.494	0.45	0.57	0.452	0.456	0.41	0.42	0.425	0.382
7.65M.{Mps.}	0.275	0.482	0.503	0.436	0.396	0.503	0.398	0.402	0.361	0.37	0.374	0.337
4.80M.{Mps.}	0.229	0.4	0.417	0.361	0.329	0.417	0.33	0.334	0.3	0.308	0.31	0.28

The Year 1999	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M.{Mps.}	0.418	0.506	0.741	0.534	0.465	0.542	0.686	0.523	0.439	0.49	0.397	0.441
10.50M.{Mps.}	0.38	0.46	0.673	0.486	0.422	0.492	0.623	0.475	0.399	0.445	0.361	0.401
7.65M.{Mps.}	0.335	0.406	0.594	0.428	0.372	0.434	0.549	0.419	0.352	0.393	0.318	0.354
4.80 M.{Mps.}	0.278	0.337	0.493	0.355	0.309	0.36	0.456	0.347	0.292	0.326	0.264	0.293

The Year 2000	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M.{Mps.}	0.544	0.506	0.681	0.59	0.5	0.484	0.569	0.565	0.444	0.3	0.381	0.344
10.50M.{Mps.}	0.494	0.46	0.618	0.536	0.454	0.439	0.517	0.513	0.403	0.272	0.347	0.313
7.65M.{Mps.}	0.436	0.406	0.545	0.473	0.4	0.387	0.456	0.452	0.356	0.24	0.305	0.275
4.80M.{Mps.}	0.361	0.337	0.452	0.392	0.332	0.321	0.376	0.375	0.295	0.199	0.254	0.229

The Year 2001	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M.{Mps.}	0.488	0.534	0.512	0.605	0.605	0.674	0.651	0.674	0.395	0.255	0.326	0.348
10.50M.{Mps.}	0.443	0.486	0.464	0.549	0.549	0.612	0.591	0.612	0.359	0.232	0.296	0.317
7.65M.{Mps.}	0.391	0.428	0.409	0.484	0.484	0.54	0.521	0.54	0.316	0.205	0.261	0.279
4.80M.{Mps.}	0.324	0.355	0.34	0.402	0.402	0.448	0.432	0.448	0.263	0.17	0.216	0.231

The Power 0.3 of 65% Mean Wind Velocity (Indoor Air Speed) ; $(0.65\ Vi)^{0.3}$

The Year 1996	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M.{Mps.}	0.86	0.932	0.963	0.924	0.86	0.85	0.86	0.85	0.806	0.795	0.828	0.86
10.50M.{Mps.}	0.835	0.905	0.936	0.897	0.835	0.826	0.835	0.826	0.783	0.772	0.805	0.835
7.65M.{Mps.}	0.804	0.872	0.901	0.863	0.804	0.795	0.804	0.795	0.755	0.743	0.775	0.804
4.80M.{Mps.}	0.761	0.824	0.852	0.817	0.761	0.752	0.761	0.752	0.713	0.703	0.733	0.761

The Year 1997	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M.{Mps.}	0.85	0.932	0.956	0.839	0.888	0.879	0.879	0.879	0.743	0.646	0.698	0.714
10.50M.{Mps.}	0.826	0.905	0.929	0.815	0.863	0.854	0.854	0.854	0.722	0.627	0.678	0.694
7.65M.{Mps.}	0.795	0.872	0.894	0.785	0.831	0.822	0.822	0.822	0.695	0.604	0.653	0.668
4.80M.{Mps.}	0.752	0.824	0.845	0.743	0.786	0.777	0.777	0.777	0.657	0.572	0.618	0.632

The Year 1998	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M.{Mps.}	0.726	0.859	0.869	0.833	0.81	0.869	0.811	0.813	0.788	0.793	0.796	0.771
10.50M.{Mps.}	0.706	0.834	0.845	0.809	0.787	0.845	0.788	0.79	0.765	0.771	0.774	0.749
7.65M.{Mps.}	0.679	0.803	0.814	0.78	0.757	0.814	0.759	0.761	0.737	0.742	0.745	0.722
4.80M.{Mps.}	0.643	0.76	0.769	0.737	0.716	0.769	0.717	0.72	0.697	0.702	0.704	0.683

The Year 1999	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M.{Mps.}	0.77	0.815	0.914	0.828	0.795	0.832	0.893	0.823	0.781	0.807	0.758	0.782
10.50M.{Mps.}	0.748	0.792	0.888	0.805	0.772	0.808	0.868	0.8	0.759	0.784	0.737	0.76
7.65M.{Mps.}	0.72	0.763	0.855	0.775	0.743	0.779	0.835	0.77	0.731	0.756	0.709	0.732
4.80M.{Mps.}	0.681	0.722	0.809	0.733	0.703	0.736	0.79	0.728	0.691	0.714	0.671	0.692

The Year 2000	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M.{Mps.}	0.833	0.815	0.891	0.854	0.812	0.804	0.844	0.843	0.784	0.697	0.749	0.726
10.50M.{Mps.}	0.809	0.792	0.866	0.829	0.789	0.781	0.82	0.819	0.761	0.677	0.728	0.706
7.65M.{Mps.}	0.78	0.763	0.834	0.799	0.76	0.752	0.79	0.788	0.734	0.652	0.7	0.679
4.80M.{Mps.}	0.737	0.722	0.788	0.755	0.718	0.711	0.746	0.745	0.693	0.616	0.663	0.643

The Year 2001	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M.{Mps.}	0.806	0.828	0.818	0.86	0.86	0.888	0.879	0.888	0.757	0.664	0.714	0.729
10.50M.{Mps.}	0.783	0.805	0.794	0.835	0.835	0.863	0.854	0.863	0.735	0.645	0.694	0.708
7.65M.{Mps.}	0.754	0.775	0.765	0.804	0.804	0.831	0.822	0.831	0.708	0.622	0.668	0.682
4.80M.{Mps.}	0.713	0.733	0.724	0.761	0.761	0.786	0.777	0.786	0.67	0.588	0.631	0.644

Vapour Pressure (Vpa), mm.Hg.

Mean Max Temperature (Ta) , ^{0} C

Relative Humidity (RH), %

The Year 1996	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Ta	32.4	32.4	34.3	35.3	34.3	33.6	32.4	33	32	32.6	32.3	31
RH	47	46	52	52	57	59	62	59	64	58	56	46
Vpa	17.2	17	21.5	22.1	23.3	23	22.9	22.2	23.1	20.9	20.5	154

The Year 1997	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Ta	32	33.8	34.5	35.2	35.6	35.2	33.3	33.2	33.2	33.4	33.4	33.9
RH	47	47	52	49	51	50	57	58	59	58	53	47
Vpa	16.9	18.6	21.1	20.9	22.1	21.3	22.1	22.4	22.9	22.8	20.9	18.6

The Year 1998	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Ta	33.9	34.1	35.3	35.9	35.9	34.5	34.2	33.3	32.6	33.4	32.6	31.8
RH	50	59	54	54	55	58	60	61	68	62	58	55
Vpa	20	24.2	23.4	24	24.3	23.9	24.8	23.9	25	24.3	21.4	19.2

The Year 1999	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Ta	33	33.1	35.4	33.9	32.7	32.9	33.3	32.6	33	32.3	32	29.3
RH	58	60	48	61	66	62	59	61	62	63	56	47
Vpa	22	23	20.9	24.4	24.5	23.5	23	22.8	23.7	23.2	20	14.5

The Year 2000	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Ta	33	33.5	34.3	33.5	34	32.6	32.5	32.6	32.8	32.6	32.6	33.4
RH	49	47	50	63	60	63	60	61	60	63	49	47
Vpa	18.1	17.9	20.5	24.8	24.3	23.4	22.1	22.9	22.5	23.2	18	18.2

The Year 2001	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Ta	33.3	33.8	33.1	35.7	33.4	33.2	33.1	32.7	33.5	32.6	31.7	32.1
RH	52	50	59	55	62	60	59	60	61	65	50	50
Vpa	20	19.6	22.8	24.1	24.8	23.2	22.6	22.5	24.1	23.9	17.3	18

$C = \propto \times Vi^{0.3} \times (Ta - 35^{0})$

C = The Convection Heat Exchange (±)

$\propto$ = Coefficient Depending on Clothing ; Light Summer Clothing = 13.00

Ta = Air Temperature (Ta) ; ^{0}C

$35^{0}C$ = Skin Temperature

The Year 1996	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Ta	32.4	32.4	34.3	35.3	34.3	33.6	32.4	33	32	32.6	32.3	31
Ta - 35^{0}	-2.6	-2.6	-0.7	0.3	-0.7	-1.4	-2.6	-2	-3	-2.4	-2.7	-4

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35 M.; V $i^{0.3}$	0.86	0.932	0.963	0.924	0.86	0.85	0.86	0.85	0.806	0.795	0.828	0.86
C	-29.07	-31.5	-8.76	3.6	-7.83	-15.47	-29.07	-28.1	-31.43	-24.8	-29.06	-44.72
10.50 M.; V $i^{0.3}$	0.835	0.905	0.936	0.897	0.835	0.826	0.835	0.826	0.783	0.772	0.805	0.835
C	-28.22	-30.59	-8.52	3.5	-7.6	-15.03	-28.22	-21.48	-30.54	-24.09	-28.26	-43.42
7.65 M.; V $i^{0.3}$	0.804	0.872	0.901	0.863	0.804	0.795	0.804	0.795	0.755	0.743	0.775	0.804
C	-27.18	-29.47	-8.2	3.37	-7.32	-14.47	-27.18	-20.67	-29.45	-23.18	-27.2	-41.81
4.80 M.; V $i^{0.3}$	0.761	0.824	0.852	0.817	0.761	0.752	0.761	0.752	0.713	0.703	0.733	0.761
C	-25.72	-27.85	-7.75	3.19	-6.93	-13.69	-25.72	-19.55	-27.81	-21.93	-25.73	-39.57

The Year 1997	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Ta	32	33.8	34.5	35.2	35.6	35.2	33.3	33.2	33.2	33.4	33.4	33.9
Ta - 35^{0}	-3	-1.2	-0.5	0.2	0.6	0.2	-1.7	-1.8	-1.8	-1.6	-1.6	-1.1

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35 M.; V $i^{0.3}$	0.85	0.932	0.956	0.839	0.888	0.879	0.879	0.879	0.743	0.646	0.698	0.714
C	-33.5	-14.54	-6.21	2.18	6.93	2.29	-19.43	-20.57	-17.39	-13.44	-14.52	-10.21
10.50 M.; V $i^{0.3}$	0.826	0.905	0.929	0.815	0.863	0.854	0.854	0.854	0.722	0.627	0.678	0.694

C	-32.21	-14.12	-6.04	2.12	6.73	2.22	-18.87	-19.98	-16.9	-13.04	-14.1	-9.92
7.65 M.; V $i^{0.3}$	0.795	0.872	0.894	0.785	0.831	0.822	0.822	0.822	0.695	0.604	0.653	0.668
C	-31.01	-13.6	-5.81	2.04	6.48	2.14	-18.17	-19.24	-16.26	-12.56	-13.58	-9.55
4.80 M.; V $i^{0.3}$	0.752	0.824	0.845	0.743	0.786	0.777	0.777	0.777	0.657	0.572	0.618	0.632
C	-29.33	-12.85	-5.49	1.93	6.13	2.02	-17.17	-18.18	-15.37	-11.9	-12.85	-9.04

The Year 1998	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Ta	33.9	34.1	35.3	35.7	35.9	34.5	34.2	33.3	32.6	33.4	32.6	31.8
Ta - 35^0	-1.1	-0.9	0.3	0.7	0.9	-0.5	-0.8	-1.7	-2.4	-1.6	-2.4	-3.2

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35 M.; V $i^{0.3}$	0.726	0.859	0.869	0.833	0.81	0.869	0.811	0.813	0.788	0.793	0.796	0.771
C	-10.38	-10.05	3.39	7.58	9.48	-5.65	-8.43	-17.97	-24.59	-16.49	-24.84	-32.07
10.50 M.; V $i^{0.3}$	0.706	0.834	0.845	0.809	0.787	0.845	0.788	0.79	0.765	0.771	0.774	0.749
C	-10.1	-9.76	3.3	7.36	9.21	-5.49	-8.2	-17.46	-23.87	-16.04	-24.15	-31.16
7.65 M.; V $i^{0.3}$	0.679	0.803	0.814	0.78	0.757	0.814	0.759	0.761	0.737	0.742	0.745	0.722
C	-9.71	-9.4	3.18	7.1	8.86	-5.29	-7.89	-16.82	-22.99	-15.43	-23.24	-30.04
4.80 M.; V $i^{0.3}$	0.643	0.76	0.769	0.737	0.716	0.769	0.717	0.72	0.697	0.702	0.702	0.683
C	-9.2	-8.89	3	6.71	8.38	-5	-7.46	-15.91	-21.75	-14.6	-21.9	-28.4

The Year 1999	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Ta	33	33.1	35.4	33.9	32.7	32.9	33.3	32.6	33	32.3	32	29.3
Ta - 35^0	-2	-1.9	0.4	-1.1	-2.3	-2.1	-1.7	-2.4	-2	-2.7	-3	-5.7

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35 M.; V $i^{0.3}$	0.77	0.815	0.914	0.828	0.795	0.832	0.893	0.823	0.781	0.807	0.758	0.782
C	-20.02	-20.13	4.75	-11.84	-23.77	-22.71	-19.74	-25.68	-20.31	-28.33	-29.56	-57.95
10.50 M.; V $i^{0.3}$	0.748	0.792	0.888	0.805	0.772	0.808	0.868	0.8	0.759	0.784	0.737	0.76

C	-19.45	-19.56	4.62	-11.51	-23.08	-22.06	-19.18	-24.96	-19.73	-27.52	-28.74	-56.32
7.65 M.; V $i^{0.3}$	0.72	0.763	0.855	0.775	0.743	0.779	0.835	0.77	0.731	0.756	0.709	0.732
C	-18.72	-18.85	4.45	-11.08	-22.22	-21.27	-18.45	-24.02	-19.01	-26.54	-27.65	-54.24
4.80 M.; V $i^{0.3}$	0.681	0.722	0.809	0.733	0.703	0.736	0.79	0.728	0.691	0.714	0.671	0.692
C	-17.71	-17.83	4.21	-10.48	-21.02	-20.09	-17.46	-22.71	-17.97	-25.06	-26.17	-51.28

The Year 2000	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Ta	33	33.5	34.3	33.5	34	32.6	32.5	32.6	32.8	32.6	32.6	33.4
Ta - 35^0	-2	-1.5	-0.7	-1.5	-1	-2.4	-2.5	-2.4	-2.2	-2.4	-2.4	-1.6

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35 M.; V $i^{0.3}$	0.833	0.815	0.891	0.854	0.812	0.804	0.844	0.843	0.784	0.697	0.749	0.726
C	-21.66	-15.89	-8.11	-16.65	-10.56	-25.08	-27.43	-26.3	-22.42	-21.75	-23.37	-15.1
10.50 M.; V $i^{0.3}$	0.809	0.792	0.866	0.829	0.789	0.781	0.82	0.819	0.761	0.677	0.728	0.706
C	-21.03	-15.44	-7.88	-16.17	-10.26	-24.37	-26.65	-25.55	-21.77	-21.12	-22.17	-14.69
7.65 M.; V $i^{0.3}$	0.78	0.763	0.834	0.799	0.76	0.752	0.79	0.788	0.734	0.652	0.7	0.679
C	-20.28	-14.88	-7.59	-15.58	-9.88	-23.46	-25.68	-24.59	-20.99	-20.34	-21.84	-14.12
4.80 M.; V $i^{0.3}$	0.737	0.722	0.788	0.755	0.718	0.711	0.746	0.745	0.693	0.616	0.663	0.643
C	-19.16	-14.08	-7.17	-14.72	-9.33	-22.18	-24.25	-23.24	-19.82	-19.22	-20.69	-13.37

The Year 2001	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Ta	33.3	33.8	33.1	35.7	33.4	33.2	33.1	32.7	33.5	32.6	31.7	32.1
Ta - 35^0	-1.7	-1.2	-1.9	0.7	-1.6	-1.8	-1.9	-2.3	-1.5	-2.4	-3.3	-2.9

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35 M.; Vi $^{0.3}$	0.806	0.828	0.818	0.86	0.86	0.888	0.879	0.888	0.757	0.664	0.714	0.729
C	-17.81	-12.92	-20.2	7.826	-17.89	-20.78	-21.71	-26.55	-14.76	-20.72	-30.63	-27.48
10.50 M.; Vi $^{0.3}$	0.783	0.805	0.794	0.835	0.835	0.863	0.854	0.863	0.735	0.645	0.694	0.708
C	-17.3	-12.56	-19.61	7.6	-17.37	-20.19	-21.09	-25.8	-14.33	-20.12	-29.77	-26.69

7.65 M.; Vi $^{0.3}$	0.754	0.775	0.765	0.804	0.804	0.831	0.822	0.831	0.708	0.622	0.668	0.682
C	-16.66	-12.09	-18.9	7.32	-16.72	-19.45	-20.3	-24.85	-13.81	-19.41	-28.66	-25.71
4.80 M.; Vi $^{0.3}$	0.713	0.733	724	0.761	0.761	0.786	0.777	0.786	0.67	0.588	0.631	0.644
C	-15.76	-11.43	-17.88	6.93	-15.83	-18.39	-19.19	-23.5	-13.07	-18.35	-27.07	-24.28

E = (M-W) ±C

E = The Required Evaporative Cooling

M = Activity : Basal Metabolism , Metabolic Level = 70 Kcal/h.sq.m.

W = Metabolic Energy Transformed into Mechanic Work

C = The Convection Heat Exchange

The Year 1996	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; E	46.93	44.5	67.24	79.6	68.17	60.53	46.53	53.9	44.57	51.2	46.94	31.28
10.50M. ; E	47.78	45.41	67.48	79.5	68.4	60.97	47.78	54.52	45.46	51.91	47.74	32.58
7.65M. ; E	48.82	46.53	67.8	79.37	68.68	61.53	48.82	55.33	46.55	52.82	48.8	34.19
4.80M. ; E	50.28	48.15	68.25	79.19	69.07	62.31	50.28	56.45	48.19	54.07	50.27	36.43

The Year 1997	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; E	42.85	61.46	69.79	78.18	82.93	78.29	56.57	55.43	58.61	62.56	61.48	65.79
10.50M. ; E	43.79	61.88	69.96	78.12	82.73	78.22	57.13	56.02	59.1	62.96	61.9	66.08
7.65M. ; E	44.99	62.4	70.19	78.04	82.48	78.14	57.83	56.76	59.74	63.44	62.42	66.45
4.80M. ; E	46.67	63.15	70.51	77.93	82.13	78.02	58.83	57.82	60.63	64.1	63.15	66.96

The Year 1998	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; E	65.62	65.95	79.39	83.58	85.48	70.35	67.57	58.03	51.41	59.51	51.16	43.93
10.50M. ; E	65.9	66.24	79.3	83.36	85.21	70.51	67.8	58.54	52.13	59.96	51.85	44.84
7.65M. ; E	66.29	66.6	79.18	83.1	84.6	70.71	68.11	59.18	53.1	60.57	52.76	45.96
4.80M. ; E	66.8	67.11	79	82.71	84.38	71	68.54	60.69	54.25	61.4	54.1	47.59

The Year 1999	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; E	79.98	79.87	104.8	88.16	76.23	77.29	80.26	74.32	79.69	71.67	70.44	42.05
10.50M. ; E	80.55	80.44	104.6	88.49	76.92	77.94	80.82	75.04	80.27	72.48	71.26	43.68
7.65M. ; E	81.28	81.51	104.5	88.92	77.78	78.73	81.55	75.98	80.99	73.46	72.35	45.76
4.80M. ; E	82.29	82.17	104.2	89.52	78.98	79.91	82.54	77.29	82.03	74.94	73.83	48.72

The Year 2000	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; E	78.34	84.11	91.89	83.35	89.44	74.92	72.57	73.7	77.58	78.25	76.63	84.9
10.50M. ; E	78.97	84.56	92.12	83.83	89.74	75.63	73.35	74.45	78.23	78.88	77.29	85.31
7.65M. ; E	79.72	85.12	92.44	84.42	90.12	76.54	74.32	75.41	79.01	79.66	78.16	85.88
4.80M. ; E	80.84	85.92	92.83	85.28	90.67	77.82	75.75	76.76	80.18	80.78	79.31	86.63

The Year 2001	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; E	82.19	87.08	79.8	107.8	82.11	79.22	78.29	73.45	85.24	79.28	69.37	72.52
10.50M. ; E	82.7	87.44	80.39	107.6	82.63	79.81	78.91	74.2	85.67	79.88	70.23	73.31
7.65M. ; E	83.34	87.91	81.1	107.3	83.28	80.55	79.7	75.15	86.19	80.59	71.34	74.29
4.80M.; E	84.24	88.57	82.12	106.9	84.17	81.61	80.81	76.5	86.93	81.65	72.93	75.72

$E = (M-W) \pm C$

E = The Required Evaporative Cooling (E)

M = Activity : Sedentary Activity ,Metabolic Level = 120 Kcal/h.sq.m.

W = Metabolic Energy Transformed into Mechanic Work

C = The Convection Heat Exchange

The Year 1996	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; E	86.93	84.5	107.2	119.6	108.2	100.5	86.93	93.9	84.57	91.2	86.94	71.28
10.50M. ; E	87.78	85.41	107.5	119.5	108.4	101	87.78	94.54	85.46	91.91	87.74	72.58
7.65M. ; E	88.82	86.53	107.8	119.4	108.7	101.5	88.82	95.33	86.55	92.82	88.8	74.19
4.80M. ; E	90.28	88.15	108.3	119.2	109.1	102.3	90.28	96.45	88.19	94.07	90.27	76.43

The Year 1997	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; E	82.85	101.5	109.8	118.2	122.9	118.3	96.57	95.43	98.61	102.6	101.5	105.8
10.50M. ; E	83.8	101.9	110	118.1	122.7	118.2	97.13	96.02	99.1	103	101.9	106.1
7.65M. ; E	84.99	102.4	110.2	118	122.5	118.1	97.83	96.76	99.74	103.4	102.4	106.5
4.80M. ; E	86.67	103.2	110.5	117.9	122.1	118	98.83	97.82	100.6	104.1	103.2	107

The Year 1998	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; E	105.6	106	119.4	123.6	125.5	110.4	107.6	98.03	91.41	99.51	91.16	83.93
10.50M. ; E	105.9	106.2	119.3	123.4	125.2	110.5	107.8	98.54	92.13	99.96	91.85	84.84
7.65M. ; E	106.3	106.6	119.2	123.1	124.9	110.7	108.1	99.18	93.01	100.6	92.76	85.96
4.80M. ; E	106.8	107.1	119	122.7	124.4	111	108.5	100.1	94.25	101.4	94.1	87.59

The Year 1999	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; E	95.98	95.87	120.8	104.2	92.23	93.29	96.26	90.32	95.69	87.67	86.44	50.05
10.50M. ; E	96.55	96.44	120.6	104.5	92.92	93.94	96.82	91.04	96.27	88.48	88.26	59.68
7.65M. ; E	97.28	97.15	120.5	104.9	93.78	94.73	97.55	91.98	96.99	89.46	88.35	61.76
4.80M. ; E	98.29	98.17	120.2	105.5	94.98	95.91	98.54	93.29	98.03	90.94	89.83	64.72

The Year 2000	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; E	94.34	100.1	107.9	99.35	105.4	90.92	88.57	89.7	93.58	94.25	92.63	100.9
10.50M. ; E	94.97	100.6	108.1	99.83	105.7	91.63	89.35	90.45	94.23	94.88	93.29	101.3
7.65M. ; E	95.72	101.1	108.4	100.4	106.1	92.54	90.32	91.41	95.01	95.66	94.16	101.9
4.80M. ; E	96.84	101.9	108.8	101.3	106.7	93.82	91.75	92.76	96.18	96.78	95.31	102.6

The Year 2001	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; E	98.19	103.1	95.8	123.8	98.11	95.22	94.29	89.45	101.2	95.28	85.37	88.52
10.50M. ; E	98.7	103.4	96.4	123.6	98.63	95.81	94.91	90.2	101.7	95.88	86.23	89.31
7.65M. ; E	99.34	103.9	97.1	123.3	99.28	96.55	95.7	91.15	102.2	96.59	87.34	90.29
4.80M. ; E	100.2	104.6	98.12	122.9	100.2	97.61	96.81	92.5	102.9	97.65	88.93	91.72

E_{max} = $Vi^{0.3}$ x p x (42-Vpa)

E_{max} = The Maximum Evaporative Capacity of the Air , Kcal/h/man

p = Clothing Coefficient ; Light Summer Clothing = 20.5

Vi = In-door Wind Speed , 0.65 of Out-door Wind Velocity , Mps.

Vpa = Vapour Pressure , mm.Hg.

The Year 1996	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35 M.; $Vi^{0.3}$	0.86	0.932	0.963	0.924	0.86	0.85	0.86	0.85	0.806	0.795	0.828	0.86
p x $V i^{0.3}$	17.63	19.11	19.74	18.94	17.63	17.43	17.63	17.43	16.52	16.3	16.97	17.63
Vpa	17.2	17	21.5	22.1	23.3	23	22.9	22.2	23.1	20.9	20.5	15.4
42-Vpa	24.8	25	20.5	19.9	18.7	19	19.1	19.8	18.9	21.1	21.5	26.6
E_{max}	437.2	477.8	404.7	376.9	329.7	331.2	336.7	345.1	312.2	343.9	364.9	469
10.50 M.; $Vi^{0.3}$	0.835	0.905	0.936	0.897	0.835	0.826	0.835	0.826	0.783	0.772	0.805	0.835
p x $V i^{0.3}$	17.12	18.55	19.19	18.39	17.12	16.93	17.12	16.93	16.05	15.83	16.5	17.12
42-Vpa	24.8	25	20.5	19.9	18.7	19	19.1	19.8	18.9	21.1	21.5	26.6
E_{max}	424.6	463.8	393.4	366	320.1	321.7	327	335.2	303.4	334	354.8	455.4
7.65 M.; $Vi^{0.3}$	0.804	0.872	0.901	0.863	0.804	0.795	0.804	0.795	0.755	0.743	0.775	0.804
p x $Vi^{0.3}$	16.48	17.88	18.47	17.69	16.48	16.3	16.48	16.3	15.48	15.23	15.89	16.48
42-Vpa	24.8	25	20.5	19.9	18.7	19	19.1	19.8	18.9	21.1	21.5	26.6
E_{max}	408.7	447	378.6	352	308.2	309.7	314.8	322.7	292.6	321.4	341.6	438.4
4.80 M.; $Vi^{0.3}$	0.761	0.824	0.852	0.817	0.761	0.752	0.761	0.752	0.713	0.703	0.733	0.761
p x $Vi^{0.3}$	15.6	16.89	17.47	16.75	15.6	15.42	15.6	15.42	14.62	14.41	15.03	15.6
42-Vpa	24.8	25	20.5	19.9	18.7	19	19.1	19.8	18.9	21.1	21.5	26.6
E_{max}	386.9	422.3	358.1	333.3	291.7	293	298	305.3	276.3	304.1	323.2	415

The Year 1997	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35 M.; Vi $^{0.3}$	0.85	0.932	0.956	0.839	0.888	0.879	0.879	0.879	0.743	0.646	0.698	0.714
p x V i$^{0.3}$	17.43	19.11	19.6	17.2	18.2	18.02	18.02	18.02	15.23	13.24	14.31	14.64
Vpa	16.9	18.6	21.1	20.9	22.1	21.3	22.1	22.4	22.9	22.8	20.9	18.6
42-Vpa	25.1	23.4	20.9	21.1	19.9	20.7	19.9	19.6	19.1	19.2	21.1	23.4
E_{max}	437.5	447.2	409.6	362.9	362.2	373	358.6	353.2	290.9	254.2	301.9	342.6

10.50 M.; Vi $^{0.3}$	0.826	0.905	0.929	0.815	0.863	0.854	0.854	0.854	0.722	0.627	0.678	0.694
p x V i$^{0.3}$	16.93	18.55	19.05	16.71	17.69	17.51	17.51	17.51	14.8	12.85	13.9	14.23
42-Vpa	25.1	23.4	20.9	21.1	19.9	20.7	19.9	19.6	19.1	19.2	21.1	23.4
E_{max}	424.9	434.1	398.2	352.6	352	362.5	348.5	343.2	282.7	246.7	293.3	333

7.65 M.; Vi $^{0.3}$	0.795	0.872	0.894	0.785	0.831	0.822	0.822	0.822	0.695	0.604	0.653	0.668
p x Vi $^{0.3}$	16.3	17.88	18.33	16.09	17.04	16.85	16.85	16.85	14.25	12.38	13.39	13.69
42-Vpa	25.1	23.4	20.9	21.1	19.9	20.7	19.9	19.6	19.1	19.2	21.1	23.4
E_{max}	409.1	418.4	383.1	339.5	339.1	348.8	335.3	330.3	272.2	237.7	282.5	320.4

4.80 M.; Vi $^{0.3}$	0.752	0.824	0.845	0.743	0.786	0.777	0.777	0.777	0.657	0.572	0.618	0.632
p x Vi $^{0.3}$	15.42	16.89	17.32	15.23	16.11	15.93	15.93	15.93	13.47	11.73	12.67	12.96
42-Vpa	25.1	23.4	20.9	21.1	19.9	20.7	19.9	19.6	19.1	19.2	21.1	23.4
E_{max}	387	395.2	362	321.4	320.6	329.8	317	312.2	257.3	225.2	267.3	303.3

The Year 1998	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35 M.; Vi $^{0.3}$	0.726	0.859	0.869	0.833	0.81	0.869	0.811	0.813	0.788	0.793	0.796	0.771
p x V i$^{0.3}$	14.88	17.61	17.82	17.08	16.61	17.82	16.63	16.67	16.15	16.26	16.32	15.81
Vpa	20	24.2	23.4	24	24.3	23.9	24.8	23.9	25	24.3	21.4	19.2
42-Vpa	22	17.8	18.6	18	17.7	18.1	17.2	18.1	17	17.7	20.6	22.8
E_{max}	327.4	313.5	331.5	307.4	294	322.5	286	301.7	274.6	287.8	336.2	360.5

10.50 M.; Vi $^{0.3}$	0.706	0.834	0.845	0.809	0.787	0.845	0.788	0.79	0.765	0.771	0.774	0.749
p x V i$^{0.3}$	14.47	17.1	17.32	16.59	16.13	17.32	16.15	16.2	15.68	15.81	15.87	15.36
42-Vpa	22	17.8	18.6	18	17.7	18.1	17.2	18.1	17	17.7	20.6	22.8
E $_{max}$	318.3	304.4	322.2	298.6	285.5	313.5	277.8	293.2	266.6	279.8	326.9	350.2

7.65 M.; Vi $^{0.3}$	0.679	0.803	0.814	0.78	0.757	0.814	0.759	0.761	0.737	0.742	0.745	0.722
p x Vi $^{0.3}$	13.92	16.46	16.69	15.99	15.52	16.69	15.56	15.6	15.11	15.21	15.27	14.8
42-Vpa	22	17.8	18.6	18	17.7	18.1	17.2	18.1	17	17.7	20.6	22.8
E $_{max}$	306.2	293	310.4	287.8	274.7	302.1	267.6	282.4	256.9	269.2	314.6	337.4

4.80 M.; Vi $^{0.3}$	0.643	0.76	0.769	0.737	0.716	0.769	0.717	0.72	0.697	0.702	0.704	0.683
p x Vi $^{0.3}$	13.18	15.58	15.77	15.11	14.68	15.77	14.7	14.76	14.29	14.39	14.43	14
42-Vpa	22	17.8	18.6	18	17.7	18.1	17.2	18.1	17	17.7	20.6	22.8
E $_{max}$	290	277.3	293.3	272	259.8	285.4	252.8	267.2	242.9	254.7	297.3	319.2

The Year 1999	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35 M.; Vi $^{0.3}$	0.77	0.815	0.914	0.828	0.795	0.832	0.893	0.823	0.781	0.807	0.758	0.782
p x V i$^{0.3}$	15.79	16.71	18.74	16.97	16.3	17.06	18.31	16.87	16.01	16.54	15.54	16.03
Vpa	22	23	20.9	24.4	24.5	23.5	23	22.8	23.7	23.2	20	14.5
42-Vpa	20	19	21.1	17.6	17.5	18.5	19	19.2	18.3	18.8	22	27.5
E $_{max}$	315.8	317.5	395.4	298.7	285.3	315.6	347.9	323.9	293	311	341.9	440.8

10.50 M.; Vi $^{0.3}$	0.748	0.792	0.888	0.805	0.772	0.808	0.868	0.8	0.759	0.784	0.737	0.76
p x V i$^{0.3}$	15.33	16.24	18.2	16.5	15.83	16.56	17.79	16.4	15.56	16.07	15.11	15.58
42-Vpa	20	19	21.1	17.6	17.5	18.5	19	19.2	18.3	18.8	22	27.5
E $_{max}$	306.6	308.6	384	290.4	277	306.4	338	314.9	284.8	302.1	332.4	428.5

7.65 M.; Vi $^{0.3}$	0.72	0.763	0.855	0.775	0.743	0.779	0.835	0.77	0.731	0.756	0.709	0.732
p x Vi $^{0.3}$	14.76	15.64	17.53	15.89	15.23	15.97	17.12	15.79	14.99	15.5	14.54	15.01
42-Vpa	20	19	21.1	17.6	17.5	18.5	19	19.2	18.3	18.8	22	27.5
E_{max}	295.2	297.2	369.9	279.7	266.5	295.5	325.3	303.2	274.3	291.4	319.9	412.8

4.80 M.; Vi $^{0.3}$	0.681	0.722	0.809	0.733	0.703	0.736	0.79	0.728	0.691	0.714	0.671	0.692
p x Vi $^{0.3}$	13.96	14.8	16.59	15.03	14.41	15.09	16.2	14.92	14.17	14.64	13.76	14.19
42-Vpa	20	19	21.1	17.6	17.5	18.5	19	19.2	18.3	18.8	22	27.5
E_{max}	279.2	281.2	350.1	264.5	252.2	279.2	307.8	286.5	259.3	275.2	302.7	390.2

The Year 2000	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35 M.; Vi $^{0.3}$	0.833	0.815	0.891	0.854	0.812	0.804	0.844	0.843	0.784	0.697	0.749	0.726
p x V i$^{0.3}$	17.08	16.71	18.27	17.51	16.65	16.48	17.3	17.28	16.07	14.29	15.36	14.88
Vpa	18.1	17.9	20.5	24.8	24.3	23.4	22.1	22.9	22.5	23.2	18	18.2
42-Vpa	23.9	24.1	21.5	17.2	17.7	18.6	19.9	19.1	19.5	18.8	24	23.8
E_{max}	408.2	402.7	392.8	301.2	294.7	306.5	344.3	330.1	313.4	268.7	368.6	354.1

10.50 M.; Vi $^{0.3}$	0.809	0.792	0.866	0.829	0.789	0.781	0.82	0.819	0.761	0.677	0.728	0.706
p x V i$^{0.3}$	16.59	16.24	17.75	16.99	16.18	16.01	16.81	16.79	15.6	13.88	14.92	14.47
42-Vpa	23.9	24.1	21.5	17.2	17.7	18.6	19.9	19.1	19.5	18.8	24	23.8
E_{max}	396.5	391.4	381.6	292.2	286.4	297.8	334.5	320.7	304.2	260.9	358.1	344.4

7.65 M.; Vi $^{0.3}$	0.78	0.763	0.834	0.799	0.76	0.752	0.79	0.788	0.734	0.652	0.7	0.679
p x Vi $^{0.3}$	15.99	15.64	17.1	16.38	15.58	15.42	16.2	16.15	15.05	13.37	14.35	13.92
42-Vpa	23.9	24.1	21.5	17.2	17.7	18.6	19.9	19.1	19.5	18.8	24	23.8
E_{max}	382.2	376.9	367.7	281.7	275.8	286.8	322.4	308.5	293.5	251.4	344.4	331.3

4.80 M.; Vi $^{0.3}$	0.737	0.722	0.788	0.755	0.718	0.711	0.746	0.745	0.693	0.616	0.663	0.643
p x Vi $^{0.3}$	15.11	14.8	16.15	15.48	14.72	14.58	15.29	15.27	14.21	12.63	13.59	13.18
42-Vpa	23.9	24.1	21.5	17.2	17.7	18.6	19.9	19.1	19.5	18.8	24	23.8
E_{max}	361.1	356.7	347.2	266.3	260.5	271.2	304.3	291.7	277.1	237.4	326.2	313.7

The Year 2001	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35 M.; Vi $^{0.3}$	0.806	0.828	0.818	0.86	0.86	0.888	0.879	0.888	0.757	0.664	0.714	0.729
p x V i$^{0.3}$	16.52	16.97	16.77	17.63	17.63	18.2	18.02	18.2	15.52	13.61	14.64	14.94
Vpa	20	19.6	22.8	24.1	24.8	23.2	22.6	22.5	24.1	23.9	17.3	18
42-Vpa	22	22.4	19.2	17.9	17.2	18.8	19.4	19.5	17.9	18.1	24.7	24
E_{max}	363.4	380.1	322	315.6	303.2	342.2	349.6	354.9	277.8	246.3	361.6	358.6

10.50 M.; Vi $^{0.3}$	0.783	0.805	0.794	0.835	0.835	0.863	0.854	0.863	0.735	0.645	0.694	0.708
p x V i$^{0.3}$	16.05	16.5	16.28	17.12	17.12	17.69	17.51	17.69	15.07	13.22	14.23	14.51
42-Vpa	22	22.4	19.2	17.9	17.2	18.8	19.4	19.5	17.9	18.1	24.7	24
E_{max}	353.1	369.6	312.6	306.5	294.5	332.6	339.7	345	269.8	239.3	351.5	348.2

7.65 M.; Vi $^{0.3}$	0.754	0.775	0.765	0.804	0.804	0.831	0.822	0.831	0.708	0.622	0.668	0.682
p x Vi $^{0.3}$	15.46	15.89	15.68	16.48	16.48	17.04	16.85	17.04	14.51	12.75	13.69	13.98
42-Vpa	22	22.4	19.2	17.9	17.2	18.8	19.4	19.5	17.9	18.1	24.7	24
E_{max}	340.1	355.9	301.1	295	283.5	320.4	326.9	332.3	259.7	230.8	338.1	335.5

4.80 M.; Vi $^{0.3}$	0.713	0.733	0.724	0.761	0.761	0.786	0.777	0.786	0.67	0.588	0.631	0.644
p x Vi $^{0.3}$	14.62	15.03	14.84	15.6	15.6	16.11	15.93	16.11	13.74	12.05	12.94	13.2
42-Vpa	22	22.4	19.2	17.9	17.2	18.8	19.4	19.5	17.9	18.1	24.7	24
E_{max}	321.6	336.7	284.9	279.2	268.3	302.9	309	314.2	246	218.1	319.6	316.8

Activity : Basal Metabolism

$1/f = e^{0.6\,(E/Emax\ -\ 0.12)}$

1/f = The Cooling Efficiency of Sweating

e = The Amount of Evaporative Sweat

E = The Required Evaporative Cooling

Emax = The Maximum Evaporative Capacity of the Air

The Year 1996	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; E	46.93	44.5	67.24	79.6	68.17	60.53	46.53	53.9	44.57	51.2	46.94	31.28
Emax	437.2	477.8	404.7	376.9	329.7	331.2	336.7	345.1	312.2	343.9	364.9	469
E/Emax - 0.12	-0.013	-0.027	0.046	0.091	0.087	0.063	0.018	0.036	0.023	0.029	0.009	-0.053
1/f	0.992	0.984	1.028	1.056	1.053	1.038	1.011	1.022	1.014	1.018	1.005	0.969
10.50M ; E	47.78	45.41	67.48	79.5	68.4	60.97	47.78	54.52	45.46	51.91	47.74	32.58
Emax	424.6	463.8	393.4	366	320.1	321.7	327	335.2	303.4	334	354.8	455.4
E/Emax - 0.12	0.008	-0.022	0.052	0.097	0.094	0.07	0.026	0.043	0.03	0.035	0.015	-0.049
1/f	0.996	0.987	1.031	1.06	1.058	1.043	1.016	1.026	1.018	1.022	1.009	0.971
7.65M. ; E	48.82	46.53	67.8	79.37	68.68	61.53	48.82	55.33	46.55	52.82	48.8	34.19
Emax	408.7	447	378.6	352	308.2	309.7	314.8	322.7	292.6	321.4	341.6	438.4
E/Emax - 0.12	-0.001	-0.016	0.059	0.106	0.103	0.079	0.035	0.051	0.039	0.044	0.023	-0.042
1/f	1	0.991	1.036	1.065	1.064	1.048	1.021	1.031	1.024	1.027	1.014	0.975
4.80M. ; E	50.28	48.15	68.25	79.19	69.07	62.31	50.28	56.45	48.19	54.07	50.27	36.43
Emax	386.9	422.3	358.1	333.3	291.7	293	298	305.3	276.3	304.1	323.2	415
E/Emax - 0.12	0.01	-0.006	0.071	0.118	0.117	0.093	0.049	0.065	0.054	0.058	0.036	-0.032
1/f	1.006	0.996	1.043	1.073	1.073	1.057	1.03	1.04	1.033	1.035	1.022	0.981

The Year 1997	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; E	42.85	61.46	69.79	78.18	82.93	78.29	56.57	55.43	58.61	62.56	61.48	65.79
Emax	437.5	447.2	409.6	362.9	362.2	373	358.6	353.2	290.9	254.2	301.9	342.6
E/Emax - 0.12	-0.022	0.017	0.05	0.095	0.109	0.09	0.038	0.037	0.082	0.126	0.084	0.072
1/f	0.987	1.011	1.031	1.059	1.068	1.055	1.023	1.022	1.05	1.079	1.051	1.044

10.50M ; E	43.79	61.88	69.96	78.12	82.73	78.22	57.13	56.02	59.1	62.96	61.9	66.08
Emax	424.9	434.1	398.2	352.6	352	362.5	348.5	343.2	282.7	246.7	293.3	333
E/Emax - 0.12	-0.017	0.023	0.056	0.102	0.115	0.096	0.044	0.043	0.089	0.135	0.091	0.079
1/f	0.99	1.014	1.034	1.063	1.071	1.059	1.027	1.026	1.055	1.085	1.056	1.048

7.65M. ; E	44.99	62.4	70.19	78.04	82.48	78.14	57.83	56.76	59.74	63.44	62.42	66.45
Emax	409.1	418.4	383.1	339.5	339.1	348.8	335.3	330.3	272.2	237.7	282.5	320.4
E/Emax - 0.12	-0.01	0.029	0.063	0.11	0.123	0.104	0.053	0.052	0.1	0.147	0.101	0.087
1/f	0.994	1.018	1.039	1.068	1.077	1.064	1.032	1.032	1.062	1.092	1.062	1.054

4.80M. ; E	46.67	63.15	70.51	77.93	82.13	78.02	58.83	57.82	60.63	64.1	63.15	66.96
Emax	387	395.2	362	321.4	320.6	329.8	317	312.2	257.3	225.2	267.3	303.3
E/Emax - 0.12	0.001	0.04	0.074	0.123	0.136	0.117	0.066	0.065	0.116	0.165	0.116	0.101
1/f	1	1.024	1.045	1.076	1.085	1.073	1.04	1.04	1.072	1.104	1.072	1.062

The Year 1998	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; E	65.62	65.95	79.39	83.58	85.43	70.35	67.57	58.03	51.41	59.51	51.16	43.93
Emax	327.4	313.5	331.5	307.4	294	322.5	286	301.7	274.6	287.8	336.2	360.5
E/Emax - 0.12	0.081	0.09	0.12	0.152	0.171	0.098	0.116	0.072	0.067	0.087	0.032	0.002
1/f	1.05	1.056	1.074	1.095	1.108	1.061	1.072	1.044	1.041	1.053	1.02	1.001

10.50M ; E	65.9	66.24	79.3	83.36	85.21	70.51	67.8	58.54	52.13	59.96	51.85	44.84
Emax	318.3	304.4	322.2	298.6	285.5	313.5	277.8	293.2	266.6	279.8	326.9	350.2
E/Emax - 0.12	0.087	0.098	0.126	0.159	0.179	0.105	0.124	0.08	0.076	0.094	0.039	0.008
1/f	1.054	1.06	1.079	1.1	1.113	1.065	1.077	1.049	1.046	1.058	1.023	1.005

7.65M. ; E	66.29	66.6	79.18	83.1	84.16	70.71	68.11	59.18	53.01	60.57	52.76	45.96
Emax	306.2	293	310.4	287.8	274.7	302.1	267.6	282.4	256.9	269.2	314.6	337.4
E/Emax - 0.12	0.097	0.107	0.135	0.169	0.186	0.114	0.135	0.09	0.086	0.105	0.048	0.016
1/f	1.06	1.067	1.084	1.107	1.118	1.071	1.084	1.055	1.053	1.065	1.029	1.01

4.80M. ; E	66.8	67.11	79	82.71	84.38	71	68.54	60.09	54.25	61.4	54.1	47.59
Emax	290	277.3	293.3	272	259.8	285.4	252.8	267.2	242.9	254.7	297.3	319.2
E/Emax - 0.12	0.11	0.122	0.149	0.184	0.205	0.129	0.151	0.105	0.103	0.121	0.062	0.029
1/f	1.069	1.076	1.094	1.117	1.131	1.08	1.095	1.065	1.064	1.075	1.038	1.018

The Year 1999	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; E	55.98	55.87	80.75	64.16	52.23	53.29	56.26	50.32	55.69	47.67	46.44	18.05
Emax	315.8	317.5	395.4	298.7	285.3	315.6	347.9	323.9	293	311	341.9	440.8
E/Emax - 0.12	0.057	0.056	0.084	0.095	0.063	0.049	0.042	0.035	0.07	0.033	0.029	-0.079
1/f	1.035	1.034	1.052	1.059	1.039	1.03	1.025	1.021	1.043	1.02	1.018	0.954

10.50M ; E	56.55	56.44	80.62	64.49	52.92	53.94	56.82	51.04	56.27	48.48	47.26	19.68
Emax	306.6	308.6	384	290.4	277	306.4	338	314.9	284.8	302.1	332.4	428.5
E/Emax - 0.12	0.064	0.063	0.09	0.102	0.071	0.056	0.048	0.042	0.078	0.041	0.022	-0.074
1/f	1.039	1.039	1.055	1.063	1.044	1.034	1.029	1.026	1.048	1.025	1.013	0.957

7.65M. ; E	57.28	57.15	80.45	64.92	53.78	54.73	57.55	51.98	56.99	49.46	48.35	21.76
Emax	295.2	297.2	369.9	279.7	266.5	295.5	326.3	303.2	274.3	291.4	319.9	412.8
E/Emax - 0.12	0.074	0.072	0.098	0.112	0.082	0.065	0.056	0.052	0.088	0.05	0.031	-0.067
1/f	1.045	1.044	1.06	1.07	1.05	1.04	1.034	1.031	1.054	1.03	1.019	0.96

4.80M. ; E	58.29	58.17	80.21	65.52	54.98	55.91	58.54	53.29	58.03	50.94	49.83	24.72
Emax	279.2	281.2	350.1	264.5	252.2	279.2	307.8	286.5	259.3	275.2	302.7	390.2
E/Emax - 0.12	0.089	0.087	0.109	0.128	0.098	0.08	0.07	0.066	0.104	0.065	0.045	-0.057
1/f	1.055	1.054	1.068	1.08	1.061	1.049	1.043	1.04	1.064	1.04	1.027	0.967

The Year 2000	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; E	54.34	60.11	67.89	59.35	65.44	50.92	48.57	49.7	53.58	54.25	52.63	60.9
Emax	408.2	402.7	392.8	301.2	294.7	306.5	344.3	330.1	313.4	268.7	368.6	354.1
E/Emax - 0.12	0.013	0.029	0.053	0.077	0.102	0.046	0.021	0.031	0.051	0.082	0.023	0.052
1/f	1.008	1.018	1.032	1.047	1.063	1.028	1.013	1.019	1.031	1.05	1.014	1.032

10.50M ; E	54.97	60.56	68.12	59.83	65.74	51.63	49.35	50.45	54.23	54.88	53.29	61.31
Emax	396.5	391.4	381.6	292.2	286.4	297.8	334.5	320.7	304.2	260.9	358.1	344.4
E/Emax - 0.12	0.019	0.035	0.059	0.085	0.11	0.053	0.028	0.037	0.058	0.09	0.029	0.058
1/f	1.011	1.021	1.036	1.052	1.068	1.033	1.017	1.023	1.036	1.056	1.017	1.035

7.65M. ; E	55.72	61.12	68.41	60.42	66.12	52.54	50.32	51.41	55.01	55.66	54.16	61.88
Emax	382.2	376.9	367.7	281.7	275.8	286.8	322.4	308.5	293.5	251.4	344.4	331.3
E/Emax - 0.12	0.026	0.042	0.066	0.095	0.12	0.063	0.036	0.047	0.067	0.101	0.037	0.067
1/f	1.016	1.026	1.04	1.058	1.075	1.039	1.022	1.028	1.041	1.063	1.023	1.041

4.80M. ; E	56.84	61.92	68.83	61.28	66.67	53.82	51.75	52.76	56.18	56.78	55.31	62.63
Emax	361.1	356.7	347.2	266.3	260.5	271.2	304.3	291.7	277.1	237.4	326.2	313.7
E/Emax - 0.12	0.037	0.054	0.078	0.11	0.136	0.079	0.05	0.061	0.083	0.119	0.05	0.08
1/f	1.023	1.033	1.048	1.068	1.085	1.048	1.031	1.037	1.051	1.074	1.03	1.049

The Year 2001	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; E	58.19	63.08	55.8	83.83	58.11	55.22	54.29	49.45	61.24	55.28	45.37	48.52
Emax	363.4	380.1	322	315.6	303.2	342.2	349.6	354.9	277.8	246.3	361.6	358.6
E/Emax - 0.12	0.04	0.046	0.053	0.146	0.072	0.041	0.035	0.019	0.1	0.104	0.006	0.015
1/f	1.024	1.028	1.033	1.091	1.044	1.025	1.021	1.012	1.062	1.065	1.003	1.009

10.50M ; E	58.7	63.44	56.39	83.6	58.63	55.81	54.91	50.2	61.67	55.88	46.23	49.31
Emax	353.1	369.6	312.6	306.5	294.5	332.6	339.7	345	269.8	239.3	351.5	348.2
E/Emax - 0.12	0.046	0.052	0.06	0.153	0.079	0.048	0.042	0.026	0.109	0.114	0.012	0.022
1/f	1.028	1.032	1.037	1.096	1.049	1.029	1.025	1.015	1.067	1.071	1.007	1.013

7.65M. ; E	59.34	63.91	57.1	83.32	59.28	56.55	55.7	51.15	62.19	56.59	47.34	50.29
Emax	340.1	355.9	301.1	295	283.5	320.4	326.9	332.3	259.7	230.8	338.1	335.5
E/Emax - 0.12	0.055	0.06	0.07	0.163	0.089	0.057	0.05	0.034	0.119	0.125	0.02	0.03
1/f	1.033	1.036	1.043	1.102	1.055	1.035	1.031	1.021	1.074	1.078	1.012	1.018

4.80M. ; E	60.24	64.57	58.12	82.93	60.17	57.61	56.81	52.5	62.93	57.65	48.93	51.72
Emax	321.6	336.7	284.9	279.2	268.3	308.9	309	314.2	246	218.1	319.6	316.8
E/Emax - 0.12	0.067	0.072	0.084	0.177	0.104	0.07	0.064	0.047	0.136	0.144	0.033	0.043
1/f	1.041	1.044	1.052	1.112	1.065	1.043	1.039	1.029	1.085	1.09	1.02	1.026

Activity : Sitting at Rest

$1/f = e^{0.6\,(E/Emax\ -\ 0.12)}$

1/f = The Cooling Efficiency of Sweating

e = The Amount of Evaporative Sweat

E = The Required Evaporative Cooling

Emax = The Maximum Evaporative Capacity of the Air

The Year 1996	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; E	70.93	68.5	91.24	103.6	92.17	84.53	70.93	77.9	68.57	75.2	70.94	55.28
Emax	437.2	477.8	404.7	376.9	329.7	331.2	336.7	345.1	312.2	343.9	364.9	469
E/Emax - 0.12	0.042	0.023	0.106	0.155	0.16	0.135	0.091	0.106	0.1	0.099	0.074	-0.002
1/f	1.026	1.014	1.065	1.097	1.101	1.085	1.056	1.066	1.062	1.061	1.046	0.999

10.50M ; E	71.78	69.41	91.48	103.5	92.4	84.97	71.78	78.52	69.42	75.91	71.74	56.58
Emax	424.6	463.8	393.4	366	320.1	321.7	327	335.2	303.4	334	354.8	455.4
E/Emax - 0.12	0.049	0.03	0.113	0.163	0.169	0.144	0.1	0.114	0.109	0.107	0.082	0.004
1/f	1.03	1.018	1.07	1.103	1.107	1.09	1.062	1.071	1.068	1.067	1.051	1.003

7.65M. ; E	78.82	70.53	91.8	103.4	92.68	85.53	72.82	79.33	70.55	76.82	72.8	58.19
Emax	408.7	447	378.6	352	308.2	309.7	314.8	322.7	298.6	321.4	341.6	438.4
E/Emax - 0.12	0.073	0.038	0.122	0.174	0.181	0.156	0.111	0.126	0.121	0.119	0.093	0.013
1/f	1.045	1.023	1.076	1.11	1.115	1.098	1.069	1.078	1.075	1.074	1.057	1.008

4.80M. ; E	74.28	72.15	92.25	103.2	93.07	86.31	74.28	80.45	72.19	78.07	74.27	60.43
Emax	386.9	422.3	358.1	333.3	291.7	293	298	305.3	276.3	304.1	323.2	415
E/Emax - 0.12	0.072	0.051	0.138	0.19	0.199	0.175	0.129	0.144	0.141	0.137	0.11	0.026
1/f	1.044	1.031	1.086	1.121	1.127	1.11	1.081	1.09	1.088	1.086	1.068	1.016

The Year 1997	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; E	66.85	85.46	93.79	102.2	106.9	102.3	80.57	79.43	82.61	86.56	85.48	89.79
Emax	437.5	447.2	409.6	362.9	362.2	373	358.6	353.2	290.9	254.2	301.9	343.6
E/Emax - 0.12	0.033	0.071	0.109	0.162	0.175	0.154	0.105	0.105	0.164	0.221	0.163	0.142
1/f	1.02	1.044	1.068	1.102	1.111	1.097	1.065	1.065	1.103	1.142	1.103	1.089

10.50M ; E	67.79	85.88	93.96	102.1	106.7	102.2	81.13	80.02	83.1	86.96	85.9	90.08
Emax	424.9	434.1	398.2	352.6	352	362.5	348.5	343.2	282.7	246.7	293.3	333
E/Emax - 0.12	0.04	0.078	0.116	0.17	0.183	0.162	0.113	0.113	0.174	0.233	0.173	0.151
1/f	1.024	1.048	1.072	1.107	1.116	1.102	1.07	1.07	1.11	1.15	1.109	1.095

7.65M. ; E	68.99	86.4	94.19	102	106.5	102.1	81.83	80.76	83.74	87.44	86.42	90.45
Emax	409.1	418.4	383.1	339.5	339.1	348.8	335.3	330.3	272.2	237.7	282.5	320.4
E/Emax - 0.12	0.049	0.087	0.126	0.18	0.194	0.173	0.124	0.125	0.188	0.248	0.186	0.162
1/f	1.03	1.053	1.078	1.114	1.124	1.109	1.077	1.078	1.119	1.16	1.118	1.102

4.80M. ; E	70.67	87.15	94.51	101.9	106.1	102	82.83	81.82	84.63	88.1	87.15	90.96
Emax	387	395.2	362	321.4	320.6	329.8	317	312.2	257.3	225.2	267.3	303.3
E/Emax - 0.12	0.063	0.101	0.141	0.197	0.211	0.189	0.141	0.142	0.209	0.271	0.206	0.18
1/f	1.038	1.062	1.088	1.126	1.135	1.12	1.089	1.089	1.134	1.177	1.132	1.114

The Year 1998	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; E	89.62	89.95	103.4	107.6	109.5	94.35	91.57	82.03	75.41	83.51	75.16	67.93
Emax	327.4	313.5	331.5	307.4	294	322.5	286	301.7	274.6	287.8	336.2	360.5
E/Emax - 0.12	0.154	0.167	0.192	0.23	0.252	0.173	0.2	0.152	0.155	0.17	0.104	0.068
1/f	1.097	1.105	1.122	1.148	1.164	1.109	1.128	1.095	1.097	1.108	1.064	1.042

10.50M ; E	89.9	90.24	103.3	107.4	109.2	94.51	91.8	82.54	76.13	83.96	75.85	68.84
Emax	318.3	304.4	322.2	298.6	285.5	313.5	277.8	293.2	266.6	279.8	326.9	350.2
E/Emax - 0.12	0.162	0.177	0.201	0.24	0.263	0.182	0.211	0.162	0.166	0.18	0.112	0.077
1/f	1.102	1.112	1.128	1.155	1.171	1.115	1.135	1.102	1.105	1.114	1.07	1.047

7.65M. ; E	90.29	90.6	103.2	107.1	108.9	94.71	92.11	83.18	77.01	84.57	76.76	69.96
Emax	306.2	293	310.4	287.8	274.7	302.1	267.6	282.4	256.9	269.2	314.6	337.4
E/Emax - 0.12	0.175	0.189	0.212	0.252	0.276	0.101	0.224	0.175	0.18	0.194	0.124	0.087
1/f	1.111	1.12	1.136	1.163	1.18	1.123	1.144	1.11	1.114	1.124	1.077	1.054

4.80M. ; E	90.8	91.11	103	106.7	108.4	95	92.54	84.09	78.25	85.4	78.1	71.59
Emax	290	277.3	293.3	272	259.8	285.4	252.8	267.2	242.9	254.7	297.3	319.2
E/Emax - 0.12	0.193	0.209	0.231	0.272	0.297	0.213	0.246	0.195	0.202	0.215	0.143	0.104
1/f	1.123	1.133	1.149	1.178	1.195	1.136	1.159	1.124	1.129	1.138	1.089	1.065

The Year 1999	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; E	79.98	79.87	104.8	88.16	76.23	77.29	80.26	74.32	79.69	71.67	70.44	42.05
Emax	315.8	317.5	395.4	298.7	285.3	315.6	347.9	323.9	293	311	341.9	440.8
E/Emax - 0.12	0.133	0.132	0.145	0.175	0.147	0.125	0.111	0.11	0.152	0.111	0.086	-0.025
1/f	1.083	1.082	1.091	1.111	1.092	1.078	1.069	1.068	1.096	1.069	1.053	0.985

10.50M ; E	80.55	80.44	104.6	88.49	76.92	77.94	80.82	75.04	80.27	72.48	71.26	43.68
Emax	306.6	308.6	384	290.4	277	306.4	332	314.9	284.8	302.1	334.4	428.5
E/Emax - 0.12	0.143	0.141	0.152	0.185	0.158	0.134	0.119	0.118	0.162	0.12	0.093	-0.018
1/f	1.089	1.088	1.096	1.117	1.099	1.084	1.074	1.074	1.102	1.075	1.057	0.989

7.65M. ; E	81.23	81.5	104.5	88.92	77.78	78.73	81.55	75.98	80.99	73.46	72.35	45.76
Emax	295.2	297.2	370	279.7	266.5	295.5	325.3	303.2	274.3	291.4	319.9	412.8
E/Emax - 0.12	0.155	0.154	0.162	0.198	0.172	0.147	0.131	0.131	0.175	0.132	0.106	-0.009
1/f	1.098	1.097	1.102	1.126	1.109	1.092	1.082	1.082	1.111	1.083	1.066	0.995

4.80M. ; E	82.29	82.17	104.2	89.52	78.98	79.91	82.54	77.29	82.03	74.94	73.83	48.72
Emax	279.2	281.2	350.1	264.5	252.2	279.2	307.8	286.5	259.3	275.2	302.7	390.2
E/Emax - 0.12	0.175	0.172	0.178	0.218	0.193	0.166	0.148	0.15	0.196	0.152	0.124	0.005
1/f	1.111	1.109	1.113	1.14	1.123	1.105	1.093	1.094	1.125	1.096	1.077	1.003

The Year 2000	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; E	78.34	84.11	91.89	83.35	89.44	74.92	72.57	73.7	77.58	78.25	76.63	84.9
Emax	408.2	402.7	392.8	301.2	294.7	306.5	344.3	330.1	313.4	268.7	368.6	354.1
E/Emax - 0.12	0.072	0.089	0.114	0.157	0.184	0.124	0.091	0.103	0.128	0.171	0.088	0.12
1/f	1.044	1.055	1.071	1.099	1.116	1.078	1.056	1.064	1.08	1.108	1.054	1.075

10.50M ; E	78.97	84.56	92.12	83.83	89.74	75.63	73.35	74.45	78.23	78.88	77.29	85.31
Emax	396.5	391.4	381.6	292.2	286.4	297.8	334.5	320.7	304.2	260.9	358.1	344.4
E/Emax - 0.12	0.079	0.096	0.121	0.167	0.193	0.134	0.099	0.112	0.137	0.182	0.096	0.128
1/f	1.049	1.059	1.076	1.105	1.123	1.084	1.061	1.07	1.086	1.116	1.059	1.08

7.65M. ; E	79.72	85.12	92.41	84.42	90.12	76.54	74.32	75.41	79.01	79.66	78.16	85.88
Emax	382.2	376.9	367.7	281.7	275.8	286.8	322.4	308.5	293.5	251.4	344.4	331.3
E/Emax - 0.12	0.089	0.106	0.131	0.18	0.207	0.147	0.111	0.125	0.149	0.197	0.107	0.139
1/f	1.055	1.066	1.082	1.114	1.132	1.092	1.069	1.078	1.094	1.125	1.066	1.087

4.80M. ; E	80.84	85.92	92.83	85.28	90.67	77.82	75.75	76.76	80.18	80.78	79..31	86.63
Emax	361.1	356.7	347.2	266.3	260.5	271.2	304.3	291.7	277.1	237.4	326.2	313.7
E/Emax - 0.12	0.107	0.121	0.147	0.2	0.228	0.167	0.129	0.143	0.169	0.22	0.123	0.156
1/f	1.066	1.075	1.092	1.128	1.147	1.105	1.08	1.09	1.107	1.141	1.077	1.098

The Year 2001	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; E	82.19	87.08	79.8	107.8	82.11	79.22	78.29	73.45	85.24	79.28	69.37	72.52
Emax	363.4	380.1	322	315.6	303.2	342.2	349.6	354.9	277.8	244.3	361.6	358.6
E/Emax - 0.12	0.106	0.109	0.128	0.222	0.151	0.112	0.104	0.087	0.187	0.202	0.072	0.082
1/f	1.066	1.068	1.08	1.142	1.095	1.069	1.064	1.054	1.119	1.129	1.044	1.051

10.50M ; E	82.7	87.44	80.39	107.6	82.63	79.81	78.91	74.2	85.67	79.88	70.23	73.31
Emax	353.1	369.6	312.6	306.5	294.5	332.6	339.7	345	269.8	239.3	351.5	348.2
E/Emax - 0.12	0.114	0.117	0.137	0.231	0.161	0.12	0.112	0.095	0.198	0.214	0.08	0.091
1/f	1.071	1.073	1.086	1.149	1.101	1.075	1.07	1.059	1.126	1.137	1.049	1.056

7.65M. ; E	83.34	87.91	81.1	107.3	83.28	80.55	79.7	75.15	86.19	80.59	71.34	74.29
Emax	340.1	355.9	301.1	295	283.5	320.4	326.9	332.3	259.7	230.8	338.1	335.5
E/Emax - 0.12	0.125	0.127	0.149	0.244	0.174	0.131	0.124	0.106	0.212	0.229	0.091	0.101
1/f	1.078	1.079	1.094	1.158	1.11	1.082	1.077	1.066	1.136	1.148	1.056	1.063

4.80M. ; E	84.24	88.57	82.12	106.9	84.17	81.61	80.81	76.5	86.93	81.65	72.93	75.72
Emax	321.6	336.7	284.9	279.2	268.3	302.9	309	314.2	246	218.1	319.6	316.8
E/Emax - 0.12	0.142	0.143	0.168	0.263	0.194	0.15	0.142	0.124	0.233	0.254	0.108	0.119
1/f	1.089	1.09	1.106	1.171	1.123	1.094	1.089	1.077	1.15	1.165	1.067	1.074

Activity : Sedentary

$1/f = e^{0.6\,(E/Emax\ -\ 0.12)}$

1/f = The Cooling Efficiency of Sweating

e = The Amount of Evaporative Sweat

E = The Required Evaporative Cooling

Emax = The Maximum Evaporative Capacity of the Air

The Year 1996	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; E	86.93	84.5	107.2	119.6	108.2	100.5	86.93	93.9	84.57	91.2	86.94	71.28
Emax	437.2	477.8	404.7	376.9	329.7	331.2	336.7	345.1	312.2	343.9	364.9	469
E/Emax - 0.12	0.079	0.057	0.145	0.197	0.208	0.184	0.138	0.152	0.151	0.145	0.118	0.032
1/f	1.048	1.035	1.091	1.126	1.133	1.116	1.086	1.096	1.095	1.091	1.074	1.019

10.50M ; E	87.78	85.41	107.5	119.5	108.4	101	87.78	94.54	85.46	91.91	87.74	72.58
Emax	424.6	463.8	393.4	366	320.1	321.7	327	335.2	303.4	334	354.8	455.4
E/Emax - 0.12	0.087	0.064	0.153	0.207	0.219	0.194	0.148	0.162	0.162	0.155	0.127	0.039
1/f	1.053	1.039	1.096	1.132	1.14	1.123	1.093	1.102	1.102	1.098	1.079	1.024

7.65M. ; E	88.82	86.53	107.8	119.4	108.7	101.5	88.82	95.33	86.55	92.82	88.8	74.19
Emax	408.7	447	378.6	352	308.2	309.7	314.8	322.7	292.6	321.4	341.6	438.4
E/Emax - 0.12	0.097	0.074	0.165	0.219	0.233	0.208	0.162	0.175	0.176	0.169	0.14	0.049
1/f	1.06	1.045	1.104	1.141	1.15	1.133	1.102	1.111	1.111	1.107	1.088	1.03

4.80M. ; E	90.28	88.15	108.3	119.2	109.1	102.3	90.28	96.45	88.19	94.07	90.27	76.43
Emax	386.9	422.3	358.1	333.3	291.7	293	298	305.3	276.3	304.1	323.2	415
E/Emax - 0.12	0.113	0.089	0.182	0.238	0.254	0.229	0.183	0.196	0.199	0.189	0.159	0.064
1/f	1.07	1.055	1.116	1.153	1.165	1.147	1.116	1.125	1.127	1.12	1.1	1.039

The Year 1997	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; E	82.85	101.5	109.8	118.2	122.9	118.3	96.57	95.43	98.61	102.6	101.5	105.8
Emax	437.5	447.2	409.6	362.9	362.2	373	358.6	353.2	290.9	254.2	301.9	342.6
E/Emax - 0.12	0.069	0.107	0.148	0.206	0.219	0.197	0.149	0.15	0.219	0.284	0.216	0.189
1/f	1.043	1.066	1.093	1.131	1.141	1.126	1.094	1.094	1.14	1.186	1.139	1.12

10.50M ; E	83.8	101.9	110	118.1	122.7	118.2	97.13	96.02	99.1	103	101.9	106.1
Emax	424.9	434.1	398.2	352.6	352	362.5	348.5	343.2	282.7	246.7	293.3	333
E/Emax - 0.12	0.077	0.115	0.156	0.215	0.229	0.206	0.159	0.16	0.231	0.298	0.227	0.199
1/f	1.047	1.071	1.098	1.138	1.147	1.132	1.1	1.101	1.148	1.195	1.146	1.127

7.65M. ; E	84.99	102.4	110.2	118	122.5	118.1	97.83	96.76	99.74	103.4	102.4	106.5
Emax	409.1	418.4	383.1	339.5	339.1	348.8	335.3	330.3	272.2	237.7	282.5	320.4
E/Emax - 0.12	0.088	0.125	0.168	0.228	0.241	0.219	0.172	0.173	0.246	0.315	0.242	0.212
1/f	1.054	1.078	1.106	1.146	1.156	1.14	1.109	1.109	1.159	1.208	1.157	1.136

4.80M. ; E	86.67	103.2	110.5	117.9	122.1	118	98.83	97.82	100.6	104.1	103.2	107
Emax	387	395.2	362	321.4	320.6	329.8	317	312.2	257.3	225.2	267.3	303.3
E/Emax - 0.12	0.104	0.141	0.185	0.247	0.261	0.238	0.192	0.193	0.271	0.342	0.266	0.233
1/f	1.064	1.088	1.118	1.16	1.169	1.153	1.122	1.123	1.177	1.228	1.173	1.15

The Year 1998	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; E	105.6	106	119.4	123.6	125.5	110.4	107.6	98.03	91.41	99.51	91.16	83.93
Emax	327.4	313.5	331.5	307.4	294	322.5	286	301.7	274.6	287.8	336.2	360.5
E/Emax - 0.12	0.203	0.218	0.24	0.282	0.307	0.222	0.256	0.205	0.213	0.226	0.151	0.113
1/f	1.129	1.14	1.155	1.184	1.202	1.143	1.166	1.131	1.136	1.145	1.095	1.07

10.50M ; E	105.9	106.2	119.3	123.4	125.2	110.5	107.8	98.54	92.13	99.96	91.85	84.84
Emax	318.3	304.4	322.2	298.6	285.5	313.5	277.8	293.2	266.6	279.8	326.9	350.2
E/Emax - 0.12	0.213	0.229	0.25	0.293	0.319	0.233	0.268	0.216	0.226	0.237	0.161	0.122
1/f	1.136	1.147	1.162	1.192	1.211	1.15	1.175	1.138	1.145	1.153	1.101	1.076

7.65M. ; E	106.3	106.6	119.2	123.1	124.9	110.7	108.1	99.18	93.01	100.6	92.76	85.96
Emax	306.2	293	310.4	287.8	274.7	302.1	267.6	282.4	256.9	269.2	314.6	337.4
E/Emax - 0.12	0.227	0.244	0.264	0.308	0.335	0.246	0.284	0.231	0.242	0.254	0.175	0.135
1/f	1.146	1.158	1.172	1.203	1.222	1.159	1.186	1.149	1.156	1.164	1.111	1.084

4.80M. ; E	106.8	107.1	119	122.7	124.4	111	108.5	100.1	94.25	101.4	94.1	87.59
Emax	290	277.3	293.3	272	259.8	285.4	252.8	267.2	242.9	254.7	297.3	319.2
E/Emax - 0.12	0.248	0.266	0.286	0.331	0.359	0.269	0.309	0.255	0.268	0.278	0.197	0.154
1/f	1.161	1.173	1.187	1.22	1.24	1.175	1.204	1.165	1.174	1.182	1.125	1.097

The Year 1999	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; E	95.98	95.87	120.8	104.2	92.23	93.29	96.26	90.32	95.69	87.67	86.44	58.05
Emax	315.8	317.5	395.4	298.7	285.3	315.6	347.9	323.9	293	311	341.9	440.8
E/Emax - 0.12	0.184	0.182	0.186	0.228	0.203	0.176	0.157	0.159	0.207	0.162	0.133	0.012
1/f	1.117	1.115	1.118	1.147	1.13	1.111	1.099	1.1	1.132	1.102	1.083	1.007

10.50M ; E	96.55	96.44	120.6	104.5	92.92	93.94	96.82	91.04	96.27	88.48	88.26	59.68
Emax	306.6	308.6	384	290.4	277	306.4	338	314.9	284.8	302.1	332.4	428.5
E/Emax - 0.12	0.195	0.193	0.194	0.24	0.215	0.187	0.166	0.169	0.218	0.173	0.146	0.019
1/f	1.124	1.123	1.124	1.155	1.138	1.119	1.105	1.107	1.14	1.109	1.091	1.012

7.65M. ; E	97.28	97.15	120.5	104.9	93.78	94.73	97.55	91.98	96.99	89.46	88.35	61.76
Emax	295.2	297.2	369.9	279.7	266.5	295.5	325.3	303.2	274.3	291.4	319.9	412.8
E/Emax - 0.12	0.21	0.207	0.206	0.255	0.232	0.201	0.18	0.183	0.234	0.187	0.156	0.03
1/f	1.134	1.132	1.131	1.165	1.149	1.128	1.114	1.116	1.15	1.119	1.098	1.018

4.80M. ; E	98.29	98.17	120.2	105.5	94.98	95.91	98.54	93.29	98.03	90.94	89.83	64.72
Emax	279.2	281.2	350.1	264.5	252.2	279.2	307.8	286.5	259.3	275.2	302.7	390.2
E/Emax - 0.12	0.232	0.229	0.223	0.279	0.257	0.224	0.2	0.206	0.258	0.21	0.177	0.046
1/f	1.149	1.147	1.143	1.182	1.167	1.144	1.128	1.131	1.168	1.135	1.112	1.028

The Year 2000	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; E	93.34	100.1	107.9	99.35	105.4	90.92	88.57	89.7	93.58	94.25	92.63	100.9
Emax	408.2	402.7	392.8	301.2	294.7	306.5	344.3	330.1	313.4	268.7	368.6	354.1
E/Emax - 0.12	0.109	0.129	0.155	0.21	0.238	0.177	0.137	0.152	0.179	0.231	0.131	0.165
1/f	1.067	1.08	1.097	1.134	1.153	1.112	1.086	1.095	1.113	1.149	1.082	1.104

10.50M ; E	94.97	100.6	108.1	99.83	105.7	91.63	89.35	90.45	94.23	94.88	93.29	101.3
Emax	396.5	391.4	381.6	292.2	286.4	297.8	334.5	320.7	304.2	260.9	358.1	344.4
E/Emax - 0.12	0.12	0.137	0.163	0.222	0.249	0.188	0.147	0.162	0.19	0.244	0.141	0.174
1/f	1.074	1.086	1.103	1.142	1.161	1.119	1.092	1.102	1.121	1.157	1.088	1.11

7.65M. ; E	95.72	101.1	108.4	100.4	106.1	92.54	90.32	91.41	95.01	95.66	96.16	101.9
Emax	382.2	376.9	367.7	281.7	275.8	286.8	322.4	308.5	293.5	251.4	344.4	331.3
E/Emax - 0.12	0.131	0.148	0.175	0.236	0.265	0.203	0.16	0.176	0.204	0.261	0.159	0.188
1/f	1.081	1.093	1.111	1.152	1.172	1.129	1.101	1.112	1.13	1.169	1.1	1.119

4.80M. ; E	96.84	101.9	108.8	101.3	106.7	93.82	91.75	92.76	96.18	96.78	95.31	102.6
Emax	361.1	356.7	347.2	266.3	260.5	271.2	304.3	291.7	277.1	237.4	326.2	313.7
E/Emax - 0.12	0.148	0.166	0.193	0.261	0.29	0.226	0.182	0.198	0.227	0.288	0.172	0.207
1/f	1.093	1.105	1.123	1.169	1.19	1.145	1.115	1.126	1.146	1.188	1.109	1.132

The Year 2001	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; E	98.19	103.1	95.8	123.8	98.11	95.22	94.29	89.45	101.2	95.28	85.37	88.52
Emax	363.4	380.1	322	315.6	303.2	342.2	349.6	354.9	277.8	246.3	361.6	358.6
E/Emax - 0.12	0.15	0.151	0.178	0.272	0.204	0.158	0.15	0.132	0.244	0.267	0.116	0.127
1/f	1.094	1.095	1.112	1.178	1.13	1.1	1.094	1.082	1.158	1.174	1.072	1.079

10.50M ; E	98.7	103.4	96.4	123.6	98.63	95.81	94.91	90.2	101.7	95.88	86.23	89.31
Emax	353.1	369.6	312.6	306.5	294.5	332.6	339.7	345	269.8	239.3	351.5	348.2
E/Emax - 0.12	0.16	0.16	0.188	0.283	0.215	0.168	0.159	0.142	0.257	0.281	0.125	0.137
1/f	1.1	1.101	1.12	1.185	1.138	1.106	1.1	1.089	1.167	1.183	1.078	1.085

7.65M. ; E	99.34	103.9	97.1	123.3	99.28	96.55	95.7	91.15	102.2	96.59	87.34	90.29
Emax	340.1	355.9	301.1	295	283.5	320.4	326.9	332.3	259.7	230.8	338.1	335.5
E/Emax - 0.12	0.172	0.172	0.203	0.298	0.23	0.181	0.173	0.154	0.274	0.299	0.138	0.149
1/f	1.109	1.109	1.129	1.196	1.148	1.115	1.109	1.097	1.178	1.196	1.087	1.094

4.80M. ; E	100.2	104.6	98.12	122.9	100.2	97.61	96.81	92.5	102.9	97.65	88.93	91.72
Emax	321.6	336.7	284.9	279.2	268.3	302.9	309	314.2	246	218.1	319.6	316.8
E/Emax - 0.12	0.192	0.191	0.224	0.32	0.253	0.202	0.193	0.174	0.298	0.328	0.158	0.17
1/f	1.122	1.121	1.144	1.212	1.164	1.129	1.123	1.11	1.196	1.217	1.1	1.107

Activity : Basal Metabolism

SP. = - 0.3 + 5(E/Emax)

SP. = Sensible Perspiration Scale

E = The Required Evaporative Cooling

Emax = The Maximum Evaporative Capacity of the Air

The Year 1996	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M;E/Emax	0.107	0.093	0.166	0.211	0.207	0.183	0.138	0.156	0.143	0.149	0.129	0.067
SP.	0.237	0.166	0.531	0.756	0.734	0.614	0.391	0.481	0.414	0.445	0.344	0.035
SP. SCALE	0	0	1	1	1	1	0	0	0	0	0	0

10.50M;E/Emax	0.113	0.098	0.172	0.217	0.214	0.19	0.146	0.163	0.15	0.155	0.135	0.072
SP.	0.263	0.19	0.558	0.786	0.769	0.648	0.431	0.513	0.45	0.477	0.373	0.058
SP. SCALE	0	0	1	1	1	1	0	1	0	0	0	0

7.65M;E/Emax	0.12	0.104	0.179	0.226	0.223	0.199	0.155	0.171	0.159	0.164	0.143	0.078
SP.	0.298	0.221	0.596	0.828	0.815	0.694	0.476	0.557	0.496	0.522	0.414	0.09
SP. SCALE	0	0	1	1	1	1	0	1	0	1	0	0

4.80M;E/Emax	0.13	0.114	0.191	0.238	0.237	0.213	0.169	0.185	0.174	0.178	0.156	0.088
SP.	0.35	0.27	0.653	0.888	0.884	0.764	0.544	0.625	0.572	0.589	0.478	0.139
SP. SCALE	0	0	1	1	1	1	1	1	1	1	0	0

The Year 1997	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M;E/Emax	0.098	0.137	0.17	0.215	0.229	0.21	0.158	0.157	0.202	0.246	0.204	0.192
SP.	0.19	0.387	0.552	0.777	0.845	0.75	0.489	0.485	0.708	0.931	0.718	0.66
SP. SCALE	0	0	1	1	1	1	0	0	1	1	1	1

10.50M;E/Emax	0.103	0.143	0.176	0.222	0.235	0.216	0.164	0.163	0.209	0.255	0.211	0.199
SP.	0.215	0.413	0.579	0.808	0.875	0.779	0.52	0.516	0.746	0.976	0.755	0.693
SP. SCALE	0	0	1	1	1	1	1	1	1	1	1	1

7.65M;E/Emax	0.11	0.149	0.183	0.23	0.243	0.224	0.173	0.172	0.22	0.267	0.221	0.207
SP.	0.25	0.446	0.616	0.85	0.916	0.82	0.563	0.56	0.798	1.035	0.805	0.737
SP. SCALE	0	0	1	1	1	1	1	1	1	1	1	1

4.80M;E/Emax	0.121	0.16	0.194	0.243	0.256	0.237	0.186	0.185	0.236	0.285	0.236	0.221
SP.	0.303	0.499	0.669	0.913	0.981	0.883	0.628	0.626	0.879	1.123	0.881	0.804
SP. SCALE	0	0	1	1	1	1	1	1	1	1	1	1

The Year 1998	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M;E/Emax	0.201	0.21	0.24	0.272	0.291	0.218	0.236	0.192	0.187	0.207	0.152	0.122
SP.	0.701	0.752	0.898	1.06	1.153	0.791	0.881	0.662	0.637	0.734	0.461	0.31
SP. SCALE	1	1	1	1	1	1	1	1	1	1	0	0

10.50M;E/Emax	0.207	0.218	0.246	0.279	0.299	0.225	0.244	0.2	0.196	0.214	0.159	0.128
SP.	0.735	0.788	0.931	1.096	1.193	0.825	0.921	0.698	0.678	0.772	0.493	0.34
SP. SCALE	1	1	1	1	1	1	1	1	1	1	0	0

7.65M;E/Emax	0.217	0.227	0.255	0.289	0.306	0.234	0.255	0.21	0.206	0.225	0.168	0.136
SP.	0.783	0.837	0.976	1.144	1.232	0.871	0.973	0.748	0.732	0.825	0.539	0.381
SP. SCALE	1	1	1	1	1	1	1	1	1	1	1	0

4.80M;E/Emax	0.23	0.242	0.269	0.304	0.325	0.249	0.271	0.225	0.223	0.241	0.182	0.149
SP.	0.852	0.91	1.047	1.221	1.324	0.944	1.056	0.825	0.817	0.906	0.61	0.446
SP. SCALE	1	1	1	1	1	1	1	1	1	1	1	0

The Year 1999	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M;E/Emax	0.177	0.176	0.204	0.215	0.183	0.169	0.162	0.155	0.19	0.153	0.149	0.041
SP.	0.587	0.58	0.721	0.774	0.616	0.544	0.509	0.477	0.651	0.467	0.447	-0.096
SP. SCALE	1	1	1	1	1	1	1	0	1	0	0	0

10.50M;E/Emax	0.184	0.183	0.21	0.222	0.191	0.176	0.168	0.162	0.198	0.161	0.142	0.046
SP.	0.622	0.615	0.75	0.811	0.655	0.581	0.541	0.511	0.688	0.503	0.411	-0.071
SP. SCALE	1	1	1	1	1	1	1	1	1	1	0	0

7.65M;E/Emax	0.194	0.192	0.218	0.232	0.202	0.185	0.176	0.172	0.208	0.17	0.151	0.053
SP.	0.67	0.662	0.788	0.861	0.709	0.626	0.582	0.558	0.739	0.549	0.456	-0.037
SP. SCALE	1	1	1	1	1	1	1	1	1	1	0	0

4.80M;E/Emax	0.209	0.207	0.229	0.248	0.218	0.2	0.19	0.186	0.224	0.185	0.165	0.063
SP.	0.744	0.735	0.846	0.939	0.79	0.702	0.651	0.63	0.819	0.626	0.523	0.017
SP. SCALE	1	1	1	1	1	1	1	1	1	1	1	0

The Year 2000	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M;E/Emax	0.133	0.149	0.173	0.197	0.222	0.166	0.141	0.151	0.171	0.202	0.143	0.172
SP.	0.366	0.447	0.564	0.686	0.81	0.531	0.406	0.453	0.555	0.71	0.414	0.56
SP. SCALE	0	0	1	1	1	1	0	0	1	1	0	1

10.50M;E/Emax	0.139	0.155	0.179	0.205	0.23	0.173	0.148	0.157	0.178	0.21	0.149	0.178
SP.	0.393	0.474	0.593	0.724	0.848	0.567	0.438	0.487	0.592	0.752	0.444	0.59
SP. SCALE	0	0	1	1	1	1	0	0	1	1	0	1

7.65M;E/Emax	0.146	0.162	0.186	0.215	0.24	0.183	0.156	0.167	0.187	0.221	0.157	0.187
SP.	0.429	0.511	0.631	0.773	0.899	0.616	0.481	0.534	0.637	0.807	0.487	0.634
SP. SCALE	0	1	1	1	1	1	0	1	1	1	0	1

4.80M;E/Emax	0.157	0.174	0.198	0.23	0.256	0.199	0.17	0.181	0.203	0.239	0.17	0.2
SP.	0.487	0.568	0.691	0.851	0.98	0.693	0.551	0.605	0.714	0.896	0.548	0.698
SP. SCALE	0	1	1	1	1	1	1	1	1	1	1	1

The Year 2001	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M;E/Emax	0.16	0.166	0.173	0.266	0.192	0.161	0.155	0.139	0.22	0.224	0.126	0.135
SP.	0.501	0.53	0.567	1.028	0.658	0.507	0.477	0.397	0.802	0.822	0.328	0.377
SP. SCALE	1	1	1	1	1	1	0	0	1	1	0	0

10.50M;E/Emax	0.166	0.172	0.18	0.273	0.199	0.168	0.162	0.146	0.229	0.234	0.132	0.142
SP.	0.531	0.558	0.602	1.064	0.696	0.539	0.508	0.428	0.843	0.868	0.358	0.408
SP. SCALE	1	1	1	1	1	1	1	0	1	1	0	0

7.65M;E/Emax	0.175	0.18	0.19	0.283	0.209	0.177	0.17	0.154	0.239	0.245	0.14	0.15
SP.	0.573	0.598	0.649	1.113	0.746	0.583	0.552	0.47	0.897	0.926	0.4	0.45
SP. SCALE	1	1	1	1	1	1	1	0	1	1	0	0

4.80M;E/Emax	0.187	0.192	0.204	0.297	0.224	0.19	0.184	0.167	0.256	0.264	0.153	0.163
SP.	0.637	0.659	0.72	1.185	0.821	0.651	0.619	0.536	0.98	1.022	0.466	0.517
SP. SCALE	1	1	1	1	1	1	1	1	1	1	0	1

Activity : Sitting at Rest

SP. = - 0.3 + 5(E/Emax)

SP. = Sensible Perspiration Scale

E = The Required Evaporative Cooling

Emax = The Maximum Evaporative Capacity of the Air

The Year 1996	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M;E/Emax	0.162	0.143	0.226	0.275	0.28	0.255	0.211	0.226	0.22	0.219	0.194	0.118
SP.	0.511	0.417	0.828	1.075	1.098	0.976	0.753	0.829	0.798	0.793	0.672	0.29
SP. SCALE	1	0	1	1	1	1	1	1	1	1	1	0

10.50M;E/Emax	0.169	0.15	0.233	0.283	0.289	0.264	0.22	0.234	0.229	0.227	0.202	0.124
SP.	0.546	0.449	0.863	1.114	1.143	1.021	0.798	0.871	0.844	0.837	0.711	0.321
SP. SCALE	1	0	1	1	1	1	1	1	1	1	1	0

7.65M;E/Emax	0.193	0.158	0.242	0.294	0.301	0.276	0.231	0.246	0.241	0.239	0.213	0.133
SP.	0.665	0.489	0.912	1.169	1.204	1.081	0.857	0.929	0.906	0.896	0.766	0.364
SP. SCALE	1	0	1	1	1	1	1	1	1	1	1	0

4.80M;E/Emax	0.192	0.171	0.258	0.31	0.319	0.295	0.249	0.264	0.261	0.257	0.23	0.146
SP.	0.66	0.555	0.988	1.248	1.295	1.173	0.947	1.018	1.007	0.984	0.849	0.429
SP. SCALE	1	1	1	1	1	1	1	1	1	1	1	0

The Year 1997	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M;E/Emax	0.153	0.191	0.229	0.282	0.295	0.274	0.225	0.225	0.284	0.341	0.283	0.262
SP.	0.464	0.656	0.845	1.108	1.176	1.072	0.824	0.825	1.12	1.403	1.116	1.011
SP. SCALE	0	1	1	1	1	1	1	1	1	1	1	1

10.50M;E/Emax	0.16	0.198	0.236	0.29	0.303	0.282	0.233	0.233	0.294	0.353	0.293	0.271
SP.	0.498	0.689	0.88	1.148	1.216	1.11	0.864	0.866	1.17	1.463	1.165	1.053
SP. SCALE	0	1	1	1	1	1	1	1	1	1	1	1

7.65M;E/Emax	0.169	0.207	0.246	0.3	0.314	0.293	0.244	0.245	0.308	0.368	0.306	0.282
SP.	0.543	0.733	0.93	1.202	1.271	1.164	0.92	0.923	1.239	1.54	1.23	1.112
SP. SCALE	1	1	1	1	1	1	1	1	1	1	1	1

4.80M;E/Emax	0.183	0.221	0.261	0.317	0.331	0.309	0.261	0.262	0.329	0.391	0.326	0.3
SP.	0.613	0.803	1.006	1.286	1.355	1.247	1.007	1.011	1.345	1.656	1.33	1.2
SP. SCALE	1	1	1	1	1	1	1	1	1	2	1	1

The Year 1998	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M;E/Emax	0.274	0.287	0.312	0.35	0.372	0.293	0.32	0.272	0.275	0.29	0.224	0.188
SP.	1.069	1.135	1.26	1.45	1.562	1.163	1.301	1.06	1.074	1.151	0.818	0.642
SP. SCALE	1	1	1	1	2	1	1	1	1	1	1	1

10.50M;E/Emax	0.282	0.297	0.321	0.36	0.383	0.302	0.331	0.282	0.286	0.3	0.232	0.197
SP.	1.112	1.183	1.304	1.499	1.613	1.208	1.353	1.108	1.128	1.2	0.86	0.683
SP. SCALE	1	1	1	1	2	1	1	1	1	1	1	1

7.65M;E/Emax	0.295	0.309	0.332	0.372	0.396	0.314	0.344	0.295	0.3	0.314	0.214	0.209
SP.	1.174	1.246	1.362	1.561	1.682	1.268	1.421	1.173	1.199	1.271	0.772	0.747
SP. SCALE	1	1	1	2	2	1	1	1	1	1	1	1

4.80M;E/Emax	0.313	0.329	0.351	0.392	0.417	0.333	0.366	0.315	0.322	0.335	0.263	0.224
SP.	1.266	1.343	1.456	1.662	1.786	1.364	1.53	1.274	1.311	1.377	1.014	0.822
SP. SCALE	1	1	1	2	2	1	2	1	1	1	1	1

The Year 1999	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M;E/Emax	0.253	0.252	0.265	0.295	0.267	0.245	0.231	0.23	0.272	0.231	0.206	0.095
SP.	0.967	0.958	1.025	1.176	1.036	0.925	0.854	0.848	1.06	0.853	0.73	0.177
SP. SCALE	1	1	1	1	1	1	1	1	1	1	1	0
10.50M;E/Emax	0.263	0.261	0.272	0.305	0.278	0.254	0.239	0.238	0.282	0.24	0.213	0.102
SP.	1.014	1.004	1.062	1.224	1.089	0.972	0.896	0.892	1.11	0.9	0.766	0.21
SP. SCALE	1	1	1	1	1	1	1	1	1	1	1	0
7.65M;E/Emax	0.275	0.274	0.282	0.318	0.292	0.267	0.251	0.251	0.295	0.252	0.226	0.111
SP.	1.076	1.072	1.112	1.29	1.159	1.033	0.954	0.953	1.176	0.961	0.831	0.255
SP. SCALE	1	1	1	1	1	1	1	1	1	1	1	0
4.80M;E/Emax	0.295	0.292	0.298	0.338	0.313	0.286	0.268	0.27	0.316	0.272	0.244	0.125
SP.	1.174	1.161	1.189	1.392	1.266	1.131	1.041	1.049	1.282	1.062	0.92	0.324
SP. SCALE	1	1	1	1	1	1	1	1	1	1	1	0

The Year 2000	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M;E/Emax	0.192	0.209	0.234	0.277	0.304	0.244	0.211	0.223	0.248	0.291	0.208	0.24
SP.	0.66	0.745	0.87	1.084	1.218	0.922	0.754	0.817	0.938	1.157	0.74	0.899
SP. SCALE	1	1	1	1	1	1	1	1	1	1	1	1
10.50M;E/Emax	0.199	0.216	0.241	0.287	0.313	0.254	0.219	0.232	0.257	0.302	0.216	0.248
SP.	0.696	0.781	0.907	1.135	1.267	0.97	0.797	0.861	0.986	1.212	0.779	0.939
SP. SCALE	1	1	1	1	1	1	1	1	1	1	1	1

7.65M;E/Emax	0.209	0.226	0.251	0.3	0.327	0.267	0.231	0.245	0.269	0.317	0.227	0.259
SP.	0.743	0.829	0.957	1.198	1.334	1.035	0.853	0.923	1.046	1.285	0.835	0.996
SP. SCALE	1	1	1	1	1	1	1	1	1	1	1	1

4.80M;E/Emax	0.227	0.241	0.267	0.32	0.348	0.287	0.249	0.263	0.289	0.34	0.243	0.276
SP.	0.833	0.905	1.037	1.302	1.44	1.135	0.945	1.016	1.147	1.401	0.916	1.081
SP. SCALE	1	1	1	1	1	1	1	1	1	1	1	1

The Year 2001	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M;E/Emax	0.226	0.229	0.248	0.342	0.271	0.232	0.224	0.207	0.307	0.322	0.192	0.202
SP.	0.831	0.846	0.939	1.408	1.054	0.858	0.82	0.735	1.234	1.309	0.659	0.712
SP. SCALE	1	1	1	1	1	1	1	1	1	1	1	1

10.50M;E/Emax	0.234	0.237	0.257	0.351	0.281	0.24	0.232	0.215	0.318	0.334	0.2	0.211
SP.	0.871	0.883	0.986	1.456	1.103	0.9	0.862	0.776	1.288	1.369	0.699	0.753
SP. SCALE	1	1	1	1	1	1	1	1	1	1	1	1

7.65M;E/Emax	0.245	0.247	0.269	0.364	0.294	0.251	0.244	0.226	0.332	0.349	0.211	0.221
SP.	0.925	0.935	1.047	1.519	1.169	0.957	0.919	0.831	1.359	1.446	0.755	0.807
SP. SCALE	1	1	1	2	1	1	1	1	1	1	1	1

4.80M;E/Emax	0.262	0.263	0.288	0.383	0.314	0.27	0.262	0.244	0.353	0.374	0.228	0.239
SP.	1.01	1.016	1.141	1.614	1.269	1.048	1.008	0.918	1.467	1.572	0.841	0.895
SP. SCALE	1	1	1	2	1	1	1	1	1	2	1	1

Activity : Sedentary

SP. = - 0.3 + 5(E/Emax)

SP. = Sensible Perspiration Scale

E = The Required Evaporative Cooling

Emax = The Maximum Evaporative Capacity of the Air

The Year 1996	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M;E/Emax	0.199	0.177	0.265	0.317	0.328	0.304	0.258	0.272	0.271	0.265	0.238	0.152
SP.	0.694	0.585	1.025	1.287	1.341	1.218	0.991	1.061	1.055	1.026	0.892	0.46
SP. SCALE	1	1	1	1	1	1	1	1	1	1	1	0

10.50M;E/Emax	0.207	0.184	0.273	0.327	0.339	0.314	0.268	0.282	0.282	0.275	0.247	0.159
SP.	0.734	0.621	1.067	1.333	1.393	1.27	1.042	1.11	1.109	1.076	0.937	0.497
SP. SCALE	1	1	1	1	1	1	1	1	1	1	1	0

7.65M;E/Emax	0.217	0.194	0.285	0.339	0.353	0.328	0.282	0.295	0.296	0.289	0.26	0.169
SP.	0.787	0.668	1.124	1.396	1.464	1.339	1.111	1.177	1.179	1.144	1	0.546
SP. SCALE	1	1	1	1	1	1	1	1	1	1	1	1

4.80M;E/Emax	0.233	0.209	0.302	0.358	0.374	0.349	0.303	0.316	0.319	0.309	0.279	0.184
SP.	0.867	0.744	1.212	1.488	1.57	1.446	1.215	1.28	1.296	1.247	1.097	0.621
SP. SCALE	1	1	1	1	2	1	1	1	1	1	1	1

The Year 1997	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M;E/Emax	0.189	0.227	0.268	0.326	0.339	0.317	0.269	0.27	0.339	0.404	0.336	0.309
SP.	0.647	0.835	1.04	1.329	1.397	1.286	1.047	1.051	1.395	1.718	1.381	1.244
SP. SCALE	1	1	1	1	1	1	1	1	1	2	1	1

10.50M;E/Emax	0.197	0.235	0.276	0.335	0.349	0.326	0.279	0.28	0.351	0.418	0.347	0.319
SP.	0.686	0.874	1.082	1.375	1.443	1.331	1.094	1.099	1.453	1.788	1.437	1.293
SP. SCALE	1	1	1	1	1	1	1	1	1	2	1	1

7.65M;E/Emax	0.208	0.245	0.288	0.348	0.361	0.339	0.292	0.293	0.366	0.435	0.362	0.332
SP.	0.739	0.924	1.139	1.438	1.507	1.393	1.159	1.165	1.532	1.875	1.512	1.362
SP. SCALE	1	1	1	1	2	1	1	1	2	2	2	1

4.80M;E/Emax	0.224	0.261	0.305	0.367	0.381	0.358	0.312	0.313	0.391	0.462	0.386	0.353
SP.	0.82	1.006	1.227	1.535	1.605	1.489	1.259	1.267	1.655	2.011	1.63	1.464
SP. SCALE	1	1	1	2	2	1	1	1	2	2	2	1

The Year 1998	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M;E/Emax	0.323	0.338	0.36	0.402	0.427	0.342	0.376	0.325	0.333	0.346	0.271	0.233
SP.	1.313	1.391	1.501	1.71	1.835	1.412	1.581	1.325	1.365	1.429	1.056	0.864
SP. SCALE	1	1	2	2	2	1	2	1	1	1	1	1

10.50M;E/Emax	0.333	0.349	0.37	0.413	0.439	0.353	0.388	0.336	0.346	0.357	0.281	0.242
SP.	1.364	1.445	1.552	1.766	1.893	1.463	1.64	1.381	1.428	1.486	1.105	0.912
SP. SCALE	1	1	2	2	2	1	2	1	1	1	1	1

7.65M;E/Emax	0.347	0.364	0.384	0.428	0.455	0.366	0.404	0.351	0.362	0.374	0.295	0.255
SP.	1.436	1.519	1.62	1.839	1.974	1.532	1.72	1.457	1.511	1.569	1.175	0.974
SP. SCALE	1	2	2	2	2	2	2	1	2	2	1	1

4.80M;E/Emax	0.368	0.386	0.406	0.451	0.479	0.389	0.429	0.375	0.388	0.398	0.317	0.274
SP.	1.542	1.631	1.729	1.956	2.094	1.645	1.846	1.574	1.64	1.691	1.283	1.072
SP. SCALE	2	2	2	2	2	2	2	2	2	2	1	1

The Year 1999	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M;E/Emax	0.304	0.302	0.306	0.349	0.323	0.296	0.277	0.279	0.327	0.282	0.253	0.132
SP.	1.22	1.21	1.228	1.445	1.317	1.178	1.084	1.095	1.333	1.11	0.964	0.359
SP. SCALE	1	1	1	1	1	1	1	1	1	1	1	0

10.50M;E/Emax	0.315	0.313	0.314	0.36	0.335	0.307	0.286	0.289	0.338	0.293	0.266	0.139
SP.	1.275	1.263	1.27	1.499	1.377	1.233	1.132	1.146	1.391	1.165	1.028	0.397
SP. SCALE	1	1	1	1	1	1	1	1	1	1	1	0

7.65M;E/Emax	0.33	0.327	0.326	0.375	0.352	0.321	0.3	0.303	0.354	0.307	0.276	0.15
SP.	1.348	1.335	1.329	1.576	1.46	1.303	1.2	1.217	1.468	1.235	1.081	0.448
SP. SCALE	1	1	1	2	1	1	1	1	1	1	1	0

4.80M;E/Emax	0.352	0.349	0.343	3988	0.377	0.344	0.32	0.326	0.378	0.33	0.297	0.166
SP.	1.46	1.446	1.417	1.694	1.583	1.418	1.301	1.329	1.59	1.352	1.184	0.53
SP. SCALE	1	1	1	2	2	1	1	1	2	1	1	1

The Year 2000	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M;E/Emax	0.229	0.249	0.275	0.33	0.358	0.297	0.257	0.272	0.299	0.351	0.251	0.285
SP.	0.843	0.943	1.074	1.35	1.488	1.183	0.987	1.059	1.193	1.454	0.957	1.125
SP. SCALE	1	1	1	1	1	1	1	1	1	1	1	1

10.50M;E/Emax	0.24	0.257	0.283	0.342	0.369	0.308	0.267	0.282	0.31	0.364	0.261	0.294
SP.	0.898	0.985	1.117	1.408	1.546	1.239	1.036	1.11	1.249	1.518	1.003	1.171
SP. SCALE	1	1	1	1	2	1	1	1	1	2	1	1

7.65M;E/Emax	0.251	0.268	0.295	0.356	0.385	0.323	0.28	0.296	0.324	0.381	0.279	0.308
SP.	0.953	1.041	1.174	1.482	1.624	1.314	1.11	1.182	1.319	1.603	1.096	1.238
SP. SCALE	1	1	1	1	2	1	1	1	1	2	1	1

4.80M;E/Emax	0.268	0.286	0.313	0.381	0.41	0.346	0.302	0.318	0.347	0.408	0.292	0.327
SP.	1.041	1.129	1.267	1.603	1.748	1.43	1.208	1.29	1.436	1.738	1.161	1.336
SP. SCALE	1	1	1	2	2	1	1	1	1	2	1	1

The Year 2001	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M;E/Emax	0.27	0.271	0.298	0.392	0.324	0.278	0.27	0.252	0.364	0.387	0.236	0.247
SP.	1.051	1.056	1.188	1.662	1.318	1.092	1.049	0.96	1.522	1.634	0.881	0.935
SP. SCALE	1	1	1	2	1	1	1	1	2	2	1	1

10.50M;E/Emax	0.28	0.28	0.308	0.403	0.335	0.288	0.279	0.262	0.377	0.401	0.245	0.257
SP.	1.098	1.099	1.242	1.717	1.375	1.141	1.097	1.008	1.585	1.704	0.927	0.983
SP. SCALE	1	1	1	2	1	1	1	1	2	2	1	1

7.65M;E/Emax	0.292	0.292	0.323	0.418	0.35	0.301	0.293	0.274	0.394	0.419	0.258	0.269
SP.	1.161	1.16	1.313	1.79	1.451	1.207	1.164	1.072	1.668	1.793	0.992	1.046
SP. SCALE	1	1	1	2	1	1	1	1	2	2	1	1

4.80M;E/Emax	0.312	0.311	0.344	0.44	0.373	0.322	0.313	0.294	0.418	0.448	0.278	0.29
SP.	1.258	1.254	1.422	1.901	1.567	1.312	1.267	1.172	1.792	1.939	1.091	1.148
SP. SCALE	1	1	1	2	2	1	1	1	2	2	1	1

S = {(M-W) ± C} 1/f ; Kcal

Basal Metabolism, Metabolic Level = 70 Kcal/h.sq.m.

Required Sweat rate , In equivalent (S) ; Kcal/h

Metabolic Rate (M) ; Kcal/h Metabolic Energy Transformed into Mechanical Work (W) ; Kcal/h

Convection Heat Exchange (C) ; Kcal/h Cooling Efficiency of Sweating (1/f)

1 Kcal = 1.163 Watt . hour

The Year 1996	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; 1/f	0.992	0.984	1.028	1.056	1.053	1.038	1.011	1.022	1.014	1.018	1.005	0.969
(M-W)+C	46.93	44.5	67.24	79.6	68.17	60.53	46.53	53.9	44.57	51.2	46.94	31.28
S(Kcal/h)	46.57	43.79	69.13	84.07	71.81	62.85	47.04	55.08	45.18	52.1	47.18	30.3
S(Watt)	54.16	50.93	80.4	97.78	83.52	73.1	54.71	64.06	52.55	60.59	54.88	35.23
10.50M. ; 1/f	0.996	0.987	1.031	1.06	1.058	1.043	1.016	1.026	1.018	1.022	1.009	0.971
(M-W)+C	47.78	45.41	67.48	79.5	68.4	60.94	47.78	54.52	45.46	51.91	47.74	32.58
S(Kcal/h)	47.56	44.81	69.6	84.28	72.35	63.54	48.53	55.93	46.28	53.03	48.17	31.64
S(Watt)	55.32	52.11	80.94	98.02	84.15	73.89	56.45	65.05	53.83	61.67	56.02	36.8
7.65M. ; 1/f	1	0.991	1.036	1.065	1.064	1.048	1.021	1.031	1.024	1.027	1.014	0.975
(M-W)+C	48.82	46.53	67.8	79.37	68.68	61.53	48.82	55.33	46.55	52.82	48.8	34.19
S(Kcal/h)	48.81	46.09	70.25	84.55	73.05	64.5	49.86	57.06	47.65	54.25	49.47	33.34
S(Watt)	56.76	53.6	81.7	98.33	84.96	75.02	57.99	66.36	55.42	63.09	57.54	38.77
4.80M. ; 1/f	1.006	0.996	1.043	1.073	1.073	1.057	1.03	1.04	1.033	1.035	1.022	0.981
(M-W)+C	50.28	48.15	68.25	79.19	69.07	62.31	50.28	56.45	48.19	54.07	50.27	36.43
S(Kcal/h)	50.58	47.98	71.2	84.98	74.08	65.87	51.77	58.69	49.79	55.98	51.36	35.73
S(Watt)	58.83	55.8	82.8	98.83	86.16	76.61	60.21	68.26	57.91	65.1	59.73	41.56

The Year 1997	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; 1/f	0.987	1.011	1.031	1.059	1.068	1.055	1.023	1.022	1.05	1.079	1.051	1.044
(M-W)+C	42.85	61.46	69.79	78.18	82.93	78.29	56.59	55.43	58.61	62.56	61.48	65.79
S(Kcal/h)	42.29	62.11	71.93	82.78	88.54	82.63	57.89	56.67	61.55	67.48	64.64	68.7
S(Watt)	49.18	72.23	83.66	96.28	103	96.1	67.32	65.91	71.58	78.48	75.18	79.9

10.50M. ; 1/f	0.99	1.014	1.034	1.063	1.071	1.059	1.027	1.026	1.055	1.085	1.056	1.048
(M-W)+C	43.79	61.88	69.96	78.12	82.73	78.22	57.13	56.02	59.1	62.96	61.9	66.08
S(Kcal/h)	43.35	62.72	72.34	83.03	88.64	82.85	58.66	57.49	62.34	68.28	65.38	69.27
S(Watt)	50.41	72.95	84.13	96.56	103.1	96.36	68.22	66.86	72.51	79.41	76.04	80.56

7.65M. ; 1/f	0.994	1.018	1.039	1.068	1.077	1.064	1.032	1.032	1.062	1.092	1.062	1.054
(M-W)+C	44.99	62.4	70.19	78.04	82.48	78.14	57.83	56.76	59.74	63.44	62.42	66.45
S(Kcal/h)	44.72	63.5	72.91	83.35	88.81	83.17	59.68	58.55	63.41	69.28	66.32	70.03
S(Watt)	52.01	73.85	84.79	96.94	103.3	96.73	69.41	68.1	73.75	80.58	77.12	81.45

4.80M. ; 1/f	1	1.024	0.045	1.076	1.085	1.073	1.04	1.04	1.072	1.104	1.072	1.062
(M-W)+C	46.67	63.15	70.51	77.93	82.13	78.02	58.83	57.82	60.63	64.1	63.15	66.96
S(Kcal/h)	46.69	64.68	73.7	83.88	89.12	83.68	61.19	60.13	64.99	70.75	67.71	71.13
S(Watt)	54.3	75.22	85.72	97.55	103.6	97.32	71.16	69.93	75.58	82.29	78.75	82.73

The Year 1998	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; 1/f	1.05	1.056	1.074	1.095	1.108	1.061	1.072	1.044	1.041	1.053	1.02	1.001
(M-W)+C	65.62	65.95	79.39	83.58	85.48	70.35	67.57	58.03	51.41	59.51	51.16	43.93
S(Kcal/h)	68.87	69.62	85.29	91.55	94.69	74.61	72.45	60.6	53.53	62.69	52.16	43.98
S(Watt)	80.09	80.97	99.19	106.5	110.1	86.78	84.26	70.48	62.25	72.91	60.66	51.15

10.50M. ; 1/f	1.054	1.06	1.079	1.1	1.113	1.065	1.077	1.049	1.046	1.058	1.023	1.005
(M-W)+C	65.9	66.24	79.3	83.36	85.21	70.51	67.8	58.54	52.13	59.96	51.85	44.84
S(Kcal/h)	69.43	7023	85.53	91.71	94.84	75.09	73.04	61.4	54.55	63.45	53.06	45.06
S(Watt)	80.75	81.68	99.47	106.7	110.3	87.33	84.95	71.41	63.44	73.79	61.71	52.4

7.65M. ; 1/f	1.06	1.067	1.084	1.107	1.118	1.071	1.084	1.055	1.053	1.065	1.029
(M-W)+C	66.29	66.6	79.18	83.1	84.86	70.71	68.11	59.18	53.01	60.57	52.76
S(Kcal/h)	70.24	71.03	85.86	91.95	94.9	75.72	73.83	62.45	55.83	64.51	54.29
S(Watt)	81.69	82.61	99.86	106.9	110.4	88.06	85.87	72.63	64.93	75.02	63.14

4.80M. ; 1/f	1.069	1.076	1.094	1.117	1.131	1.08	1.095	1.065	1.064	1.075	1.038
(M-W)+C	66.8	67.11	79	82.71	84.38	71	68.54	60.09	54.25	61.4	54.1
S(Kcal/h)	71.38	72.2	86.4	92.37	95.41	76.7	75.04	64	57.72	66.02	56.15
S(Watt)	83.01	83.97	100.5	107.4	111	89.2	87.28	74.43	67.13	76.79	65.3

The Year 1999	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; 1/f	1.035	1.034	1.052	1.059	1.039	1.03	1.025	1.021	1.043	1.02	1.018	0.954
(M-W)+C	55.98	55.87	80.75	64.16	52.23	53.29	56.26	50.32	55.69	47.67	46.44	18.05
S(Kcal/h)	57.94	57.78	84.93	67.91	54.25	54.87	57.68	51.4	58.08	48.63	47.27	17.21
S(Watt)	67.38	67.2	98.78	78.98	63.09	63.82	67.09	59.77	67.55	56.56	54.97	20.02

10.50M. ; 1/f	1.039	1.039	1.055	1.063	1.044	1.034	1.029	1.026	1.048	1.025	1.013	0.957
(M-W)+C	56.55	56.44	80.62	64.49	52.92	53.94	56.82	51.04	56.27	48.48	47.26	19.68
S(Kcal/h)	58.78	58.61	85.09	68.57	55.22	55.78	58.47	52.35	58.95	49.67	47.89	18.82
S(Watt)	68.36	68.17	98.96	79.74	64.22	64.88	68	60.88	68.56	57.77	55.7	21.89

7.65M. ; 1/f	1.045	1.044	1.06	1.057	1.05	1.04	1.034	1.031	1.054	1.03	1.019	0.96
(M-W)+C	57.28	57.15	80.45	64.92	53.78	54.73	57.55	51.98	56.99	49.46	48.35	21.76
S(Kcal/h)	59.88	59.68	85.29	69.44	56.49	56.91	59.53	53.61	60.07	50.96	49.26	20.9
S(Watt)	69.64	69.41	99.2	80.76	65.69	66.19	69.23	62.35	69.87	59.26	57.29	24.3

4.80M. ; 1/f	1.055	1.054	1.068	1.08	1.061	1.049	1.043	1.04	1.064	1.04	1.027	0.967
(M-W)+C	58.29	58.17	80.21	65.52	54.98	55.91	58.54	53.27	58.03	50.94	49.83	24.72
S(Kcal/h)	61.48	61.28	85.64	70.74	58.31	58.65	61.06	55.42	61.76	52.97	51.18	23.89
S(Watt)	71.5	71.27	99.6	82.27	67.82	68.21	71.01	64.46	71.83	61.6	59.52	27.79

The Year 2000	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; 1/f	1.008	1.018	1.032	1.047	1.063	1.028	1.013	1.019	1.031	1.05	1.014	1.032
(M-W)+C	54.34	60.11	67.89	59.35	65.44	50.92	48.57	49.7	53.58	54.25	52.63	60.9
S(Kcal/h)	54.77	61.17	70.08	62.16	69.57	52.35	49.19	50.62	55.25	56.98	53.36	62.83
S(Watt)	63.7	71.15	81.5	72.29	80.91	60.88	57.2	58.87	64.25	66.27	62.05	73.07

10.50M. ; 1/f	1.011	1.021	1.036	1.052	1.068	1.033	1.017	1.023	1.036	1.056	1.017	1.035
(M-W)+C	54.97	60.56	68.12	59.83	65.74	51.63	49.35	50.45	54.23	54.88	53.29	61.31
S(Kcal/h)	55.59	61.84	70.55	62.95	70.2	53.31	50.17	51.59	56.16	57.94	54.22	63.48
S(Watt)	64.65	71.92	82.05	73.21	81.65	62	58.35	60	65.31	67.38	63.05	73.83

7.65M. ; 1/f	1.016	1.026	1.04	1.058	1.075	1.039	1.022	1.028	1.041	1.063	1.023	1.041
(M-W)+C	55.72	61.12	68.41	60.42	66.12	52.54	50.32	51.41	55.01	55.66	54.16	61.88
S(Kcal/h)	56.59	62.68	71.17	63.94	71.05	54.57	51.42	52.87	57.28	59.16	55.38	64.41
S(Watt)	65.81	72.9	82.78	74.37	82.63	63.46	59.8	61.49	66.62	68.8	64.41	74.91

4.80M. ; 1/f	1.023	1.033	1.048	1.068	1.085	1.048	1.031	1.037	1.051	1.074	1.03	1.049
(M-W)+C	56.84	61.92	68.83	61.28	66.67	53.82	51.75	52.76	56.18	56.78	55.31	62.63
S(Kcal/h)	58.13	63.94	72.14	65.47	72.34	56.41	53.33	54.72	59.04	60.99	56.98	65.7
S(Watt)	67.61	74.37	83.9	76.14	84.13	65.61	62.02	63.64	68.66	70.93	66.27	76.41

The Year 2001	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; 1/f	1.024	1.028	1.033	1.091	1.044	1.025	1.021	1.012	1.062	1.065	1.003	1.009
(M-W)+C	58.19	63.08	55.8	83.83	58.11	55.22	54.29	49.45	61.24	55.28	45.37	48.52
S(Kcal/h)	59.61	64.84	57.61	91.48	60.66	56.61	55.45	50.03	65.04	58.85	45.52	48.97
S(Watt)	69.33	75.41	67	106.4	70.55	65.83	64.49	58.18	75.65	68.44	52.94	56.95

10.50M. ; 1/f	1.028	1.032	1.037	1.096	1.049	1.029	1.025	1.015	1.067	1.071	1.007	1.013
(M-W)+C	58.7	63.44	56.39	83.6	58.63	55.81	54.91	50.2	61.67	55.88	46.23	49.31
S(Kcal/h)	60.35	65.44	58.47	91.63	61.48	57.43	56.3	50.97	65.82	59.82	46.55	49.95
S(Watt)	70.19	76.1	68	106.6	71.5	66.8	65.48	59.28	76.55	69.57	54.14	58.09

7.65M. ; 1/f	1.033	1.036	1.043	1.102	1.055	1.035	1.031	1.021	1.074	1.078	1.012	1.018
(M-W)+C	59.34	63.91	57.1	83.32	59.28	56.55	55.7	51.15	62.19	56.59	47.34	50.29
S(Kcal/h)	61.31	66.24	59.54	91.85	62.53	58.5	57.41	52.2	66.81	61	47.91	51.2
S(Watt)	71.3	77.03	69.24	106.8	72.73	68.04	66.77	60.71	77.7	70.95	55.72	59.55

4.80M. ; 1/f	1.041	1.044	1.052	1.112	1.065	1.043	1.039	1.029	1.085	1.09	1.02	1.026
(M-W)+C	60.24	64.57	58.12	82.93	60.17	57.61	56.81	52.5	62.93	57.65	48.93	51.72
S(Kcal/h)	62.72	67.41	61.12	92.22	64.05	60.09	59.03	54.01	68.27	62.86	49.91	53.08
S(Watt)	72.95	78.4	71.09	107.3	74.49	69.88	68.65	62.81	79.4	73.11	58.05	61.73

S = {(M-W) + C} 1/f ; Kcal

Sitting at Rest, Metabolic Level = 100 Kcal/h.sq.m.

Required Sweat rate , Inequivalent (S) ; Kcal/h

Metabolic Rate (M) ; Kcal/h

Metabolic Energy Transformed into Mechanical Work (W) ; Kcal/h

Cooling Efficiency of Sweating (1/f)

Convection Heat Exchange (C) ; Kcal/h

1 Kcal = 1.163 Watt . hour

The Year 1996	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; 1/f	1.026	1.014	1.065	1.097	1.101	1.085	1.056	1.066	1.062	1.061	1.046	0.999
(M-W)+C	70.93	68.5	91.24	103.6	92.17	84.53	70.93	77.9	68.57	75.2	70.94	55.28
S(Kcal/h)	72.75	69.47	97.2	113.7	101.4	91.67	74.89	83	72.79	79.79	74.18	55.21
S(Watt)	84.61	80.79	113	132.2	118	106.6	87.1	96.53	84.66	92.79	86.27	64.21

10.50M. ; 1/f	1.03	1.018	1.07	1.103	1.107	1.09	1.062	1.071	1.068	1.067	1.051	1.003
(M-W)+C	71.78	69.41	91.48	103.5	92.4	84.97	71.78	78.52	69.46	75.91	71.74	56.58
S(Kcal/h)	73.93	70.66	97.88	114.1	102.2	92.64	76.19	84.09	74.15	80.96	75.37	56.73
S(Watt)	85.98	82.18	113.8	132.7	118.9	107.7	88.61	97.79	86.23	94.15	87.66	65.97

7.65M. ; 1/f	1.045	1.023	1.076	1.11	1.115	1.098	1.069	1.078	1.075	1.074	1.057	1.008
(M-W)+C	72.82	70.53	91.8	103.4	92.68	85.53	72.82	79.33	70.55	76.82	72.8	58.19
S(Kcal/h)	76.08	72.15	98.8	114.8	103.3	93.93	77.85	85.55	75.87	82.5	76.98	58.64
S(Watt)	88.48	83.9	114.9	133.5	120.1	109.2	90.54	99.49	88.24	95.95	89.53	68.2

4.80M. ; 1/f	1.044	1.031	1.086	1.121	1.127	1.11	1.081	1.09	1.088	1.086	1.068	1.016
(M-W)+C	74.28	72.15	92.25	103.2	93.07	86.31	74.28	80.45	72.19	78.07	74.27	60.43
S(Kcal/h)	77.56	74.39	100.2	115.6	104.9	95.84	80.27	87.68	78.57	84.74	79.33	61.37
S(Watt)	90.2	86.51	116.5	134.5	122	111.5	93.36	102	91.38	98.56	92.26	71.38

The Year 1996	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; 1/f	1.02	1.044	1.068	1.102	1.111	1.097	1.065	1.065	1.103	1.142	1.103	1.089
(M-W)+C	66.85	85.46	93.79	102.2	106.9	102.3	80.57	79.43	82.61	86.56	85.48	89.79
S(Kcal/h)	68.18	89.19	100.1	112.6	118.7	112.2	85.79	84.59	91.15	98.81	94.27	97.78
S(Watt)	79.29	103.7	116.5	131	138.1	130.5	99.77	98.38	106	114.9	109.6	113.7

10.50M. ; 1/f	1.024	1.048	1.072	1.107	1.116	1.102	1.07	1.07	1.11	1.15	1.109	1.095
(M-W)+C	67.79	85.88	93.96	102.1	106.7	102.2	81.13	80.02	83.1	86.96	85.9	90.08
S(Kcal/h)	69.42	89.99	100.7	113	119.1	112.6	86.81	85.65	92.24	99.98	95.29	98.59
S(Watt)	80.73	104.7	117.2	131.5	138.5	131	101	99.61	107.3	116.3	110.8	114.7

7.65M. ; 1/f	1.03	1.053	1.078	1.114	1.124	1.109	1.077	1.078	1.119	1.16	1.118	1.102
(M-W)+C	68.99	86.4	94.19	102	106.5	102.1	81.83	80.76	83.74	87.44	86.42	90.45
S(Kcal/h)	71.03	91.01	101.6	113.7	119.7	113.2	88.16	87.03	93.72	101.5	96.62	99.7
S(Watt)	82.61	105.8	118.1	132.2	139.2	131.7	102.5	101.2	109	118	112.4	116

4.80M. ; 1/f	1.038	1.062	1.088	1.126	1.135	1.12	1.089	1.089	1.134	1.177	1.132	1.114
(M-W)+C	70.67	87.15	94.51	101.9	106	102	82.83	81.82	84.63	88.1	87.15	90.96
S(Kcal/h)	73.38	92.57	102.9	114.7	120.3	114.3	90.16	89.1	95.94	103.7	98.62	101.3
S(Watt)	85.34	107.7	119.6	133.4	139.9	132.9	104.9	103.6	111.6	120.6	114.7	117.8

The Year 1998	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; 1/f	1.097	1.105	1.122	1.148	1.164	1.109	1.128	1.095	1.097	1.108	1.064	1.042
(M-W)+C	89.62	89.95	103.4	107.6	109.5	94.35	91.57	82.03	75.41	83.51	75.16	67.93
S(Kcal/h)	98.28	99.43	116	123.5	127.4	104.6	103.3	89.86	82.74	92.49	79.98	70.78
S(Watt)	114.3	115.6	134.9	143.7	148.2	121.7	120.1	104.5	96.23	107.6	93.01	82.31

10.50M. ; 1/f	1.102	1.112	1.128	1.155	1.171	1.115	1.135	1.102	1.105	1.114	1.07	1.047
(M-W)+C	89.9	90.24	103.3	107.4	109.2	94.51	91.8	82.54	76.13	83.96	75.85	68.84
S(Kcal/h)	99.1	100.3	116.5	124	127.8	105.4	104.2	90.93	84.09	93.54	81.12	72.08
S(Watt)	115.2	116.7	135.5	144.2	148.7	122.6	121.1	105.8	97.79	108.8	94.34	83.82

7.65M. ; 1/f	1.111	1.12	1.136	1.163	1.18	1.123	1.144	1.11	1.114	1.124	1.077	1.054
(M-W)+C	90.29	90.6	103.2	107.1	108.9	94.71	92.11	83.18	77.01	84.57	76.76	69.96
S(Kcal/h)	100.3	101.5	117.2	124.6	128.5	106.4	105.4	92.36	85.78	95.01	82.69	73.72
S(Watt)	116.6	118	136.3	144.9	149.5	123.7	122.5	107.4	99.76	110.5	96.17	85.74

4.80M. ; 1/f	1.123	1.133	1.149	1.178	1.195	1.136	1.159	1.124	1.129	1.138	1.089	1.065
(M-W)+C	90.8	91.11	103	106.4	108.4	95	92.54	84.09	78.25	85.4	78.1	71.59
S(Kcal/h)	102	103.3	118.3	125.3	129.6	107.9	107.3	94.52	88.34	97.18	85.08	76.21
S(Watt)	118.6	120.1	137.6	145.7	150.7	125.5	124.7	109.9	102.7	113	98.95	88.64

The Year 1999	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; 1/f	1.083	1.082	1.091	1.111	1.092	1.078	1.069	1.068	1.096	1.069	1.053	0.985
(M-W)+C	79.98	79.87	104.8	88.16	76.23	77.29	80.26	74.32	79.69	71.67	70.44	42.05
S(Kcal/h)	86.63	86.43	114.3	97.93	83.27	83.3	85.77	79.37	87.3	76.58	74.17	41.43
S(Watt)	100.8	100.5	133	113.9	96.85	96.88	99.76	92.3	101.5	89.06	86.26	48.19

10.50M. ; 1/f	1.089	1.088	1.096	1.117	1.099	1.084	1.074	1.074	1.102	1.075	1.057	0.989
(M-W)+C	80.55	80.44	104.6	88.49	76.92	77.94	80.82	75.04	80.27	72.48	71.26	43.68
S(Kcal/h)	87.75	87.53	114.6	98.86	84.55	84.49	86.81	80.56	88.46	77.89	75.35	43.21
S(Watt)	102.1	101.8	133.3	115	98.33	98.26	101	93.69	102.9	90.58	87.63	50.25

7.65M. ; 1/f	1.098	1.097	1.102	1.126	1.109	1.092	1.082	1.082	1.111	1.083	1.066	0.995
(M-W)+C	81.28	81.15	104.5	88.6	77.78	78.73	81.55	75.98	80.99	73.46	72.35	45.76
S(Kcal/h)	89.21	89.02	115.2	99.77	86.23	85.97	88.2	82.17	89.97	79.52	77.11	45.51
S(Watt)	103.8	103.5	134	116	100.3	99.98	102.6	95.57	104.6	92.48	89.68	52.93

4.80M. ; 1/f	1.111	1.109	1.113	1.14	1.123	1.105	1.093	1.094	1.125	1.096	1.077	1.003
(M-W)+C	82.29	82.17	104.2	89.52	78.98	79.91	82.54	77.29	82.03	74.94	73.83	48.72
S(Kcal/h)	91.38	91.12	115.9	102.1	88.69	88.29	90.22	84.56	92.28	82.11	79.53	48.86
S(Watt)	106.3	106	134.8	118.7	103.1	102.7	104.9	98.35	107.3	95.5	92.49	56.83

The Year 2000	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; 1/f	1.044	1.055	1.071	1.099	1.116	1.078	1.056	1.064	1.08	1.108	1.054	1.075
(M-W)+C	78.34	84.11	91.89	83.35	89.44	74.92	72.54	73.7	77.58	78.25	76.63	84.9
S(Kcal/h)	81.79	88.72	98.39	91.57	99.85	80.73	76.6	78.41	83.75	86.72	80.78	91.23
S(Watt)	95.13	103.2	114.4	106.5	116.1	93.88	89.09	91.19	97.4	100.9	93.94	106.1

10.50M. ; 1/f	1.049	1.059	1.076	1.105	1.123	1.084	1.061	1.07	1.086	1.116	1.059	1.08
(M-W)+C	78.97	84.56	92.12	83.83	89.74	75.63	73.35	74.45	78.23	78.88	77.29	85.31
S(Kcal/h)	82.81	89.57	99.08	92.66	100.8	81.96	77.85	79.63	84.94	88	81.87	92.1
S(Watt)	96.31	104.2	115.2	107.8	117.2	95.32	90.54	92.61	98.79	102.3	95.21	107.1

7.65M. ; 1/f	1.055	1.066	1.082	1.114	1.132	1.092	1.069	1.078	1.094	1.125	1.066	1.087
(M-W)+C	79.72	85.12	92.41	84.42	90.12	76.54	74.32	75.41	79.01	79.66	78.16	85.88
S(Kcal/h)	84.07	90.7	99.99	94.03	102	83.59	79.42	81.25	86.41	89.65	83.34	93.36
S(Watt)	97.78	105.5	116.3	109.4	118.7	970.2	92.36	94.5	100.5	104.3	96.93	108.6

4.80M. ; 1/f	1.066	1.075	1.092	1.128	1.147	1.105	1.08	1.09	1.107	1.141	1.077	1.098
(M-W)+C	80.84	85.92	92.83	85.28	90.67	77.82	75.75	76.76	80.18	80.78	79.31	86.63
S(Kcal/h)	86.18	92.38	101.4	96.17	104	86.02	81.84	83.67	88.76	92.19	85.39	95.14
S(Watt)	100.2	107.4	117.9	111.8	120.9	100	95.18	97.31	103.2	107.2	99.31	110.6

The Year 2001	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; 1/f	1.066	1.068	1.08	1.142	1.095	1.069	1.064	1.054	1.119	1.129	1.044	1.051
(M-W)+C	82.19	87.08	79.8	107.8	82.11	79.22	78.29	73.45	85.24	79.28	69.37	72.52
S(Kcal/h)	87.6	92.97	86.16	123.1	89.89	84.7	83.33	77.39	95.35	89.48	72.42	76.19
S(Watt)	101.9	108.1	100.2	143.2	104.5	98.51	96.91	90	110.9	104.1	84.23	88.61

10.50M. ; 1/f	1.071	1.073	1.086	1.149	1.101	1.075	1.07	1.059	1.126	1.137	1.049	1.056
(M-W)+C	82.7	87.44	80.39	107.6	82.63	79.81	78.91	74.2	85.67	79.88	70.23	73.31
S(Kcal/h)	88.56	93.78	87.29	123.6	90.99	85.76	84.41	78.56	96.46	90.82	73.68	77.4
S(Watt)	103	109.1	101.5	143.7	105.8	99.74	98.17	91.36	112.2	105.6	85.69	90.02

7.65M. ; 1/f	1.078	1.079	1.094	1.158	1.11	1.082	1.077	1.066	1.136	1.148	1.056	1.063
(M-W)+C	83.34	87.91	81.1	107.3	83.28	80.55	79.7	75.15	86.19	80.59	71.34	74.29
S(Kcal/h)	89.83	94.87	88.71	124.2	92.43	87.16	85.84	80.09	97.87	92.48	75.34	78.95
S(Watt)	104.5	110.3	103.2	144.4	107.5	101.4	99.84	93.15	113.8	107.6	87.62	91.82

4.80M. ; 1/f	1.089	1.09	1.106	1.171	1.123	1.094	1.089	1.077	1.15	1.165	1.067	1.074
(M-W)+C	84.24	88.57	82.12	106.9	84.17	81.61	80.81	76.5	86.93	81.65	72.93	75.72
S(Kcal/h)	91.73	96.51	90.84	125.2	94.54	89.27	87.97	82.38	100	95.11	77.82	81.32
S(Watt)	106.7	112.2	105.6	145.6	109.9	103.8	102.3	95.81	116.3	110.6	90.51	94.58

S = {(M-W) + C} 1/f ; Kcal

Sedentary Activity ; Metabolic Level = 120 Kcal/h.sq.m.

Required Sweat rate , Inequivalent (S) ; Kcal/h

Metabolic Rate (M) ; Kcal/h

Metabolic Energy Transformed into Mechanical Work (W) ; Kcal/h Cooling Efficiency of Sweating (1/f)

Convection Heat Exchange (C) ; Kcal/h 1 Kcal = 1.163 Watt . hour

The Year 1996	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; 1/f	1.048	1.035	1.091	1.126	1.133	1.116	1.086	1.096	1.095	1.091	1.074	1.019
(M-W)+C	86.93	84.5	107.2	119.6	108.2	100.5	86.93	93.9	84.57	91.2	86.94	71.28
S(Kcal/h)	91.14	87.43	116.9	134.6	122.6	112.2	94.44	102.9	92.58	99.5	93.33	72.66
S(Watt)	106	101.7	136	156.6	142.6	130.5	109.8	119.6	107.7	115.7	108.5	84.51

10.50M. ; 1/f	1.053	1.039	1.096	1.132	1.14	1.123	1.093	1.102	1.102	1.098	1.079	1.024
(M-W)+C	87.78	85.41	107.5	119.5	108.4	101	87.78	94.54	85.46	91.91	87.74	72.58
S(Kcal/h)	92.47	88.77	117.9	135.3	123.6	113.5	95.96	104.2	94.17	100.9	94.71	74.31
S(Watt)	107.5	103.2	137.1	157.3	143.7	132	111.6	121.2	109.5	117.3	110.1	86.43

7.65M. ; 1/f	1.06	1.045	1.104	1.141	1.15	1.133	1.102	1.111	1.111	1.107	1.088	1.03
(M-W)+C	88.82	86.53	107.8	119.4	108.7	101.5	88.82	95.33	86.55	92.82	88.8	74.19
S(Kcal/h)	94.16	90.43	119	136.2	125	115	97.9	105.9	96.18	102.7	96.58	76.42
S(Watt)	109.5	105.2	138.4	158.4	145.4	133.7	113.9	123.2	111.9	119.5	112.3	88.87

4.80M. ; 1/f	1.07	1.055	1.116	1.153	1.165	1.147	1.116	1.125	1.127	1.12	1.1	1.039
(M-W)+C	90.28	88.15	108.3	119.2	109.1	102.3	90.28	96.45	88.19	94.07	90.27	76.43
S(Kcal/h)	96.64	92.97	120.8	137.5	127.1	117.4	100.8	108.5	99.38	105.4	99.32	79.43
S(Watt)	112.4	108.1	140.5	159.9	147.8	136.5	117.2	126.2	115.6	122.6	115.5	92.38

The Year 1997	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; 1/f	1.043	1.066	1.093	1.131	1.141	1.126	1.094	1.094	1.14	1.186	1.139	1.12
(M-W)+C	82.85	101.5	109.8	118.2	122.9	118.3	96.57	95.43	98.61	102.6	101.5	105.8
S(Kcal/h)	86.37	108.2	120	133.7	140.2	133.2	105.6	104.4	112.5	121.6	115.6	118.5
S(Watt)	100.4	125.9	139.6	155.5	163	154.9	122.8	121.5	130.8	141.5	134.4	137.8

10.50M. ; 1/f	1.047	1.071	1.098	1.138	1.147	1.132	1.1	1.101	1.148	1.195	1.146	1.127
(M-W)+C	83.8	101.9	110	118.1	122.7	118.2	97.13	96.02	99.1	103	101.9	106.1
S(Kcal/h)	87.77	109.2	120.8	134.4	140.7	133.8	106.8	105.7	113.8	123.1	116.8	119.5
S(Watt)	102.1	127	140.5	156.3	163.7	155.6	124.2	122.9	132.4	143.2	135.8	139

7.65M. ; 1/f	1.054	1.078	1.106	1.146	1.156	1.14	1.109	1.109	1.159	1.208	1.157	1.136
(M-W)+C	84.99	102.4	110.2	118	122.5	118	97.83	96.76	99.74	103.4	102.4	106.5
S(Kcal/h)	89.59	110.4	121.9	135.3	141.6	134.5	108.4	107.4	115.6	124.9	118.4	121
S(Watt)	104.2	128.3	141.7	157.3	164.7	156.5	126.1	124.8	134.5	145.3	137.7	140.7

4.80M. ; 1/f	1.064	1.088	1.118	1.16	1.169	1.153	1.122	1.123	1.177	1.228	1.173	1.15
(M-W)+C	86.67	103.2	110.5	117.9	122.1	118	98.83	97.82	100.6	104.1	103.2	107
S(Kcal/h)	92.24	112.3	123.5	136.7	142.8	136.1	110.9	109.9	118.4	127.8	121.1	123
S(Watt)	107.3	130.6	143.6	159	166.1	158.3	129	127.8	137.7	148.7	140.8	143.1

The Year 1998	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; 1/f	1.129	1.14	1.155	1.184	1.202	1.143	1.166	1.131	1.136	1.145	1.095	1.07
(M-W)+C	105.6	106	119.4	123.6	125.5	110.4	107.6	98	91.41	99.51	91.16	83.93
S(Kcal/h)	119.2	120.8	137.9	146.4	150.9	126.2	125.5	110.8	103.9	114	99.81	89.81
S(Watt)	138.7	140.5	160.4	170.3	175.5	146.7	145.9	128.9	120.8	132.5	116.1	104.4

10.50M. ; 1/f	1.136	1.147	1.162	1.192	1.211	1.15	1.175	1.138	1.145	1.153	1.101	1.076
(M-W)+C	105.9	106.2	119.3	123.4	125.2	110.5	107.8	98.54	92.13	99.96	91.85	84.84
S(Kcal/h)	120.3	121.8	138.6	147.1	151.6	127	126.6	112.2	105.5	115.2	101.2	91.3
S(Watt)	139.9	141.7	161.2	171.1	176.3	147.7	147.2	130.5	122.7	134	117.7	106.2

7.65M. ; 1/f	1.146	1.158	1.172	1.203	1.222	1.159	1.186	1.149	1.156	1.164	1.111	1.084
(M-W)+C	106.3	106.6	119.2	123.1	124.9	110.7	108.1	99.18	93.01	100.6	92.76	85.96
S(Kcal/h)	121.8	123.4	139.7	148.1	152.7	128.3	128.2	113.9	107.5	117.1	103	93.2
S(Watt)	141.7	143.5	162.4	172.2	177.6	149.3	149.1	132.5	125.1	136.2	119.8	108.4

4.80M. ; 1/f	1.161	1.173	1.187	1.22	1.24	1.175	1.204	1.165	1.174	1.182	1.125	1.097
(M-W)+C	106.8	107.1	119	122.7	124.4	111	108.5	100.1	94.3	101.4	94.1	87.59
S(Kcal/h)	124	125.7	141.3	149.7	154.3	130.4	130.6	116.6	110.7	119.8	105.9	96.09
S(Watt)	144.2	146.1	164.3	174.1	179.4	151.7	151.9	135.6	128.8	139.3	123.1	111.8

The Year 1999	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; 1/f	1.117	1.115	1.118	1.147	1.13	1.111	1.099	1.1	1.132	1.102	1.083	1.007
(M-W)+C	95.98	95.87	120.8	104.2	92.23	93.29	96.26	90.32	95.69	87.67	86.44	58.05
S(Kcal/h)	107.2	106.9	135	119.5	104.2	103.7	105.8	99.35	108.3	96.61	93.61	58.46
S(Watt)	124.7	124.4	157	139	121.2	120.6	123	115.5	126	112.4	108.9	67.98

10.50M. ; 1/f	1.124	1.123	1.124	1.155	1.138	1.119	1.105	1.107	1.14	1.109	1.091	1.012
(M-W)+C	96.55	96.44	120.6	104.5	92.92	93.94	96.82	91.04	96.27	88.48	87.26	59.68
S(Kcal/h)	108.5	108.3	135.5	120.7	105.7	105.1	107	100.8	109.7	98.15	95.22	60.37
S(Watt)	126.2	125.9	157.6	140.3	123	122.2	124.4	117.2	127.6	114.1	110.7	70.21

7.65M. ; 1/f	1.134	1.132	1.131	1.165	1.149	1.128	1.114	1.116	1.15	1.119	1.098	1.018
(M-W)+C	97.28	97.15	120.5	104.9	93.78	94.73	97.55	91.98	96.99	89.46	88.35	61.76
S(Kcal/h)	110.3	110	136.3	122.3	107.8	106.8	108.7	102.7	111.6	100.1	97.03	62.87

S(Watt)	128.3	127.9	158.6	142.2	125.3	124.3	126.4	119.4	129.8	116.4	112.9	73.11

4.80M. ; 1/f	1.149	1.147	1.143	1.182	1.167	1.144	1.128	1.131	1.168	1.135	1.112	1.028
(M-W)+C	98.29	98.17	120.2	105.5	94.98	95.91	98.54	93.29	98.03	90.94	89.83	64.72
S(Kcal/h)	113	112.6	137.4	124.7	110.8	109.7	111.1	105.5	114.5	103.2	99.88	66.53
S(Watt)	131.4	131	159.8	145	128.9	127.5	129.2	122.7	133.1	120	116.2	77.37

The Year 2000	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; 1/f	1.067	1.08	1.097	1.134	1.153	1.112	1.086	1.095	1.113	1.149	1.082	1.104
(M-W)+C	94.34	100.1	107.9	99.35	105.4	90.92	88.57	89.7	93.58	94.25	92.63	100.9
S(Kcal/h)	100.7	108.1	118.4	112.7	121.5	101.1	96.17	98.25	104.2	108.2	100.2	111.4
S(Watt)	117.1	125.8	137.7	131.1	141.4	117.6	111.8	114.3	121.1	125.9	116.6	129.6

10.50M. ; 1/f	1.074	1.086	1.103	1.142	1.161	1.119	1.092	1.102	1.121	1.157	1.088	1.11
(M-W)+C	94.97	100.6	108.1	99.83	105.7	91.63	89.35	90.45	94.23	94.88	93.29	101.3
S(Kcal/h)	102	109.2	119.2	114	122.7	102.6	97.6	99.68	105.6	109.8	101.5	112.5
S(Watt)	118.7	127	138.7	132.6	142.7	119.3	113.5	115.9	122.8	127.7	118	130.8

7.65M. ; 1/f	1.081	1.093	1.111	1.152	1.172	1.129	1.101	1.112	1.13	1.169	1.1	1.119
(M-W)+C	95.72	101.1	108.4	100.4	106.1	92.54	90.32	91.41	95.01	95.66	94.16	101.9
S(Kcal/h)	103.5	110.5	120.4	115.7	124.4	104.5	99.43	101.6	107.4	111.8	103.6	114
S(Watt)	120.4	128.5	140	134.6	144.6	121.5	115.6	118.2	124.9	130.1	120.5	132.6

4.80M. ; 1/f	1.093	1.105	1.123	1.169	1.19	1.145	1.115	1.126	1.146	1.188	1.109	1.132
(M-W)+C	96.84	101.9	108.8	101.3	106.7	93.82	91.75	92.76	96.18	96.78	95.31	102.6
S(Kcal/h)	105.9	112.5	122.2	118.4	126.9	107.4	102.3	104.5	110.2	115	105.7	116.2
S(Watt)	123.1	130.9	142.1	137.7	147.6	125	119	121.5	128.2	133.7	122.9	135.1

The Year 2001	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M. ; 1/f	1.094	1.095	1.112	1.178	1.13	1.1	1.094	1.082	1.158	1.174	1.072	1.079
(M-W)+C	98.19	103.1	95.8	123.8	98.11	95.22	94.29	89.45	101.2	95.28	85.37	88.52
S(Kcal/h)	107.4	112.9	106.6	145.8	110.9	104.7	103.2	96.82	117.2	111.8	91.53	95.52
S(Watt)	125	131.3	123.9	169.5	128.9	121.8	120	112.6	136.3	130	106.4	111.1

10.50M. ; 1/f	1.1	1.101	1.12	1.185	1.138	1.106	1.1	1.089	1.167	1.183	1.078	1.085
(M-W)+C	98.7	103.4	96.4	123.6	98.63	95.81	94.91	90.2	101.7	95.88	86.23	89.31
S(Kcal/h)	108.6	113.8	107.9	146.5	112.2	106	104.4	98.19	118.7	113.5	92.96	96.93
S(Watt)	126.3	132.4	125.5	170.4	130.5	123.2	121.5	114.2	138	132	108.1	112.7

7.65M. ; 1/f	1.109	1.109	1.129	1.196	1.148	1.115	1.109	1.097	1.178	1.196	1.087	1.094
(M-W)+C	99.34	103.9	97.1	123.3	99.28	96.55	95.7	91.15	102.2	96.59	87.34	90.29
S(Kcal/h)	110.1	115.2	109.6	147.4	114	107.7	106.2	99.99	120.4	115.5	94.89	98.74
S(Watt)	128.1	134	127.5	171.5	132.6	125.2	123.5	116.3	140.1	134.4	110.4	114.8

4.80M. ; 1/f	1.122	1.121	1.144	1.212	1.164	1.129	1.123	1.11	1.196	1.217	1.1	1.107
(M-W)+C	100.2	104.6	98.12	122.9	100.2	97.61	96.81	92.5	102.9	97.65	88.93	91.72
S(Kcal/h)	112.4	117.3	112.3	148.9	116.7	110.2	108.7	102.7	123.1	118.9	97.79	101.5
S(Watt)	130.7	136.4	130.6	173.2	135.7	128.2	126.4	119.4	143.1	138.2	113.7	118.1

Volume of Space = V x 3600/RVH

Recommended Fresh Air Ventilation Rate per Hour (RVH.) ; Living Room = 1-4 RVH.

QV,S = cd. x V x $\triangle$ T.

The Ventilation Heat Flow Rate (Gain & Loss) , QV,S; (Watt)

Volumetric Specific Heat of Air (cd.) = 1300 J/cu.m. ^{0}C

The Ventilation Rate (V) ; Cu.m./sec = Volume of Space x RVH. x 1/3600

The Difference in Temperature between 2 Areas ; $\triangle$ T. ; (^{0}C) ; $\triangle$ T. = 35 ^{0} - Ta

The Year 1996

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
MEAN MAX TEMP.	32.4	32.4	34.3	35.3	34.3	33.6	32.4	33	32	32.6	32.3	31
35^0 -Ta	2.6	2.6	0.7	-0.3	0.7	1.4	2.6	2	3	2.4	2.7	4

The Year 1997

MEAN MAX TEMP.	32	33.8	34.5	35.2	35.6	35.2	33.3	33.2	33.2	33.4	33.4	33.9
35^0 -Ta	3	1.2	0.5	-0.2	-0.6	-0.2	1.7	1.8	1.8	1.6	1.6	1.1

The Year 1998

MEAN MAX TEMP.	33.9	34.1	35.3	35.7	35.9	34.5	34.2	33.3	32.6	33.4	32.6	31.8
35^0 -Ta	1.1	0.9	-0.3	-0.7	-0.9	0.5	0.8	1.7	2.4	1.6	2.4	3.2

The Year 1999

MEAN MAX TEMP.	33	33.1	35.4	33.9	32.7	32.9	33.3	32.6	33	32.3	32	29.3
35^0 -Ta	2	1.9	-0.4	2.1	2.3	2.1	1.7	2.4	2	2.7	3	5.7

The Year 2000

MEAN MAX TEMP.	33	33.5	34.3	33.5	34	32.6	32.5	32.6	32.8	32.6	32.6	33.4
35^0 -Ta	2	1.5	0.7	1.5	1	2.4	2.5	2.4	2.2	2.4	2.4	1.6

The Year 2001

MEAN MAX TEMP.	33.3	33.8	33.1	35.7	33.4	33.2	33.1	32.7	33.5	32.6	31.7	32.1
35^0 -Ta	1.7	1.2	1.9	-0.7	1.6	1.8	1.9	2.3	1.5	2.4	3.3	2.9

Activity : Basal Metabolism

Volume of Space (Vs) = 0.69231 x S(Watt) / delta T

Mean Max Temperature , Ta ; ^{0} C.

The Year 1996	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M.;S(Watt)	54.16	50.93	80.4	97.78	83.52	73.1	54.71	64.06	52.55	60.59	54.88	35.23
0.69231 S	37.5	35.26	55.66	67.69	57.82	50.61	37.88	44.35	36.38	41.95	37.99	24.39
35^0 -Ta	2.6	2.6	0.7	-0.3	0.7	1.4	2.6	2	3	2.4	2.7	4
Vs	14.42	13.56	79.51	-225.6	82.6	36.15	14.57	22.17	12.13	17.48	14.07	6.1

10.50M.;S(Watt)	55.32	52.11	80.94	98.02	84.15	73.89	56.45	65.05	53.83	61.67	56.02	36.8
0.69231 S	38.3	36.08	56.04	67.86	58.26	51.16	39.08	45.03	37.26	42.69	38.78	25.48
35^{0} -Ta	2.6	2.6	0.7	-0.3	0.7	1.4	2.6	2	3	2.4	2.7	4
Vs	14.73	13.88	80.08	-226.2	83.22	36.54	15.03	22.52	12.42	17.79	14.36	6.37

7.65M.;S(Watt)	56.76	53.6	81.7	98.33	84.96	75.02	57.99	66.36	55.42	63.09	57.54	38.77
0.69231 S	39.3	37.11	56.56	68.08	58.82	51.93	40.14	45.94	38.37	43.68	39.83	26.84
35^{0} -Ta	2.6	2.6	0.7	-0.3	0.7	1.4	2.6	2	3	2.4	2.7	4
Vs	15.11	14.27	80.8	-226.9	84.03	37.1	15.44	22.97	12.79	18.2	14.75	6.71

4.80M.;S(Watt)	58.83	55.8	82.8	98.83	86.16	76.61	60.21	68.26	57.91	65.1	59.73	41.56
0.69231 S	40.73	38.63	57.33	68.42	59.65	53.04	41.69	42.26	40.09	45.07	41.35	28.77
35^{0} -Ta	2.6	2.6	0.7	-0.3	0.7	1.4	2.6	2	3	2.4	2.7	4
Vs	15.66	14.86	81.89	-228.1	85.21	37.88	16.03	23.63	13.36	18.78	15.31	7.19

The Year 1997	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M.;S(Watt)	49.18	72.23	83.66	96.28	103	96.1	67.32	65.91	71.58	78.48	75.18	79.9
0.69231 S	34.05	50	57.92	66.65	71.29	66.53	46.61	45.63	49.55	54.33	52.05	55.31
35^{0} -Ta	3	1.2	0.5	-0.2	-0.6	-0.2	1.7	1.8	1.8	1.6	1.6	1.1
Vs	11.35	41.67	115.8	-333.3	-118.8	-332.6	27.42	25.35	27.53	33.96	32.53	50.28

10.50M.;S(Watt)	50.41	72.95	84.13	96.56	103.1	96.36	68.22	66.86	72.51	79.41	76.04	80.56
0.69231 S	34.9	50.5	58.24	66.85	71.37	66.71	47.23	46.29	50.2	54.98	52.64	55.77
35^{0} -Ta	3	1.2	0.5	-0.2	-0.6	-0.2	1.7	1.8	1.8	1.6	1.6	1.1
Vs	11.63	42.08	116.5	-334.2	-118.9	-333.5	27.78	25.72	27.89	34.36	32.9	50.7

7.65M.;S(Watt)	52.01	73.85	84.79	96.94	103.3	96.73	69.41	68.1	73.75	80.58	77.12	81.45
0.69231 S	36.01	51.13	58.7	67.11	71.5	66.97	48.05	47.14	51.06	55.78	53.39	56.39
35^0 -Ta	3	1.2	0.5	-0.2	-0.6	-0.2	1.7	1.8	1.8	1.6	1.6	1.1
Vs	12	42.61	117.4	-335.6	-119.2	-334.8	28.27	26.19	28.37	34.86	33.37	51.26

4.80M.;S(Watt)	54.3	75.22	85.72	97.55	103.6	97.32	71.16	69.93	75.58	82.29	78.75	82.73
0.69231 S	37.59	52.08	59.34	67.53	71.75	67.37	49.27	48.41	52.33	56.97	54.52	57.27
35^0 -Ta	3	1.2	0.5	-0.2	-0.6	-0.2	1.7	1.8	1.8	1.6	1.6	1.1
Vs	12.53	43.4	118.7	-337.7	-119.6	-336.9	28.98	26.9	29.07	35.6	34.07	52.07

The Year 1998	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M.;S(Watt)	80.09	80.97	99.19	106.5	110.1	86.78	84.26	70.48	62.25	72.91	60.66	51.15
0.69231 S	55.45	56.06	68.67	73.71	76.24	60.08	58.33	48.79	43.1	50.47	42	35.41
35^0 -Ta	1.1	0.9	-0.3	-0.7	-0.9	0.5	0.8	1.7	2.4	1.6	2.4	3.2
Vs	50.41	62.29	-228.9	-105.3	-84.72	120.2	72.92	28.7	17.96	31.55	17.5	11.07

10.50M.;S(Watt)	80.75	81.68	99.47	106.7	110.3	87.33	84.95	71.41	63.44	73.79	61.71	52.4
0.69231 S	55.9	56.55	68.87	73.84	76.36	60.46	58.81	49.44	43.92	51.09	42.72	36.28
35^0 -Ta	1.1	0.9	-0.3	-0.7	-0.9	0.5	0.8	1.7	2.4	1.6	2.4	3.2
Vs	50.82	62.83	-229.6	-105.5	-84.85	120.9	73.51	29.08	18.3	31.93	17.8	11.34

7.65M.;S(Watt)	81.69	82.61	99.86	106.9	110.4	88.06	85.87	72.63	64.93	75.02	63.14	53.98
0.69231 S	56.55	57.19	69.13	74.03	76.41	60.96	59.45	50.28	44.95	51.94	43.71	37.37
35^0 -Ta	1.1	0.9	-0.3	-0.7	-0.9	0.5	0.8	1.7	2.4	1.6	2.4	3.2
Vs	51.41	63.54	-230.4	-105.8	-84.9	121.9	74.31	29.58	18.73	32.46	18.21	11.68

4.80M.;S(Watt)	83.01	83.97	100.5	107.4	111	89.2	87.28	74.43	67.13	76.79	65.3	56.32
0.69231 S	57.49	58.14	69.57	74.37	76.82	61.76	60.42	51.53	46.48	53.16	45.21	38.99
35^{0} -Ta	1.1	0.9	-0.3	-0.7	-0.9	0.5	0.8	1.7	2.4	1.6	2.4	3.2
Vs	52.24	64.59	-231.9	-106.2	-85.35	123.5	75.53	30.31	19.36	33.22	18.84	12.18

The Year 1999	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M.;S(Watt)	67.38	67.2	98.78	78.98	63.09	63.82	67.09	59.77	67.55	56.56	54.97	20.02
0.69231 S	46.65	46.52	68.38	54.68	43.68	44.18	46.44	41.38	46.76	39.16	38.06	13.86
35^{0} -Ta	2	1.9	-0.4	1.1	2.3	2.1	1.7	2.4	2	2.7	3	5.7
Vs	23.33	24.49	-171	49.71	18.99	21.04	27.32	17.24	23.38	14.5	12.69	2.43

10.50M.;S(Watt)	68.36	68.17	98.96	79.74	64.22	64.88	68	60.88	68.56	57.77	55.7	21.89
0.69231 S	47.33	47.19	68.51	55.21	44.46	44.92	47.08	42.15	47.47	39.99	38.56	15.16
35^{0} -Ta	2	1.9	-0.4	1.1	2.3	2.1	1.7	2.4	2	2.7	3	5.7
Vs	23.66	24.84	-171.3	50.19	19.33	21.39	27.69	17.56	23.73	14.81	12.85	2.66

7.65M.;S(Watt)	69.64	69.41	99.2	80.76	65.69	66.19	69.23	62.35	69.87	59.26	57.29	24.3
0.69231 S	48.21	48.05	68.67	55.91	45.48	45.82	47.93	43.17	48.37	41.03	39.67	16.83
35^{0} -Ta	2	1.9	-0.4	1.1	2.3	2.1	1.7	2.4	2	2.7	3	5.7
Vs	24.11	25.29	-171.7	50.83	19.77	21.82	28.19	17.99	24.18	15.2	13.22	2.95

4.80M.;S(Watt)	71.5	71.27	99.6	82.27	67.82	68.21	71.01	64.46	71.83	61.6	59.52	27.79
0.69231 S	49.5	49.34	68.95	56.95	46.95	47.32	49.16	44.62	49.73	42.65	41.21	19.24
35^{0} -Ta	2	1.9	-0.4	1.1	2.3	2.1	1.7	2.4	2	2.7	3	5.7
Vs	24.75	25.97	-172.4	51.78	20.41	22.49	28.92	18.59	24.86	15.8	13.74	3.38

The Year 2000	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M.;S(Watt)	63.7	71.15	81.5	72.29	80.91	60.88	57.2	58.87	64.25	66.27	62.05	73.07
0.69231 S	44.1	49.25	56.42	50.05	56.01	42.15	39.6	40.76	44.48	45.88	42.96	50.59
35^{0} -Ta	2	1.5	0.7	1.5	1	2.4	2.5	2.4	2.2	2.4	2.4	1.6
Vs	22.05	32.84	80.6	33.36	56.01	17.56	15.84	16.98	20.22	19.12	17.9	31.62

10.50M.;S(Watt)	64.65	71.92	82.05	73.21	81.65	62	58.35	60	65.31	67.38	63.05	73.83
0.69231 S	44.76	49.79	56.81	50.69	56.53	42.92	40.4	41.54	45.22	46.65	43.65	51.11
35^{0} -Ta	2	1.5	0.7	1.5	1	2.4	2.5	2.4	2.2	2.4	2.4	1.6
Vs	22.38	33.19	81.15	33.79	56.53	17.88	16.16	17.31	20.55	19.44	18.19	31.94

7.65M.;S(Watt)	65.81	72.9	82.78	74.37	82.63	63.46	59.8	61.49	66.62	68.8	64.41	74.91
0.69231 S	45.56	50.47	57.31	51.48	57.2	43.94	41.4	42.57	46.12	47.63	44.59	51.86
35^{0} -Ta	2	1.5	0.7	1.5	1	2.4	2.5	2.4	2.2	2.4	2.4	1.6
Vs	22.78	33.65	81.87	34.32	57.2	18.31	16.56	17.74	20.96	19.85	18.58	32.41

4.80M.;S(Watt)	67.61	74.37	83.9	76.14	84.13	65.61	62.02	63.64	68.66	70.93	66.27	76.41
0.69231 S	46.8	51.49	58.08	52.71	58.24	45.42	42.94	44.06	47.54	49.1	45.88	52.9
35^{0} -Ta	2	1.5	0.7	1.5	1	2.4	2.5	2.4	2.2	2.4	2.4	1.6
Vs	23.4	34.32	82.98	35.14	58.24	18.93	17.18	18.36	21.61	20.46	19.12	33.06

The Year 2001	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M.;S(Watt)	69.33	75.41	67	106.4	70.55	65.83	64.49	58.18	75.65	68.44	52.94	56.95
0.69231 S	48	52.21	46.39	73.66	48.84	45.58	44.65	40.28	52.37	47.38	36.65	39.43
35^{0} -Ta	1.7	1.2	1.9	-0.7	1.6	1.8	1.9	2.3	1.5	2.4	3.3	2.9
Vs	28.23	43.51	24.41	-105.2	30.53	25.32	23.5	17.51	34.91	19.74	11.11	13.6

10.50M.;S(Watt)	70.19	73.1	68	106.6	71.5	66.8	65.48	59.28	76.55	69.57	54.14	58.09
0.69231 S	48.59	52.69	47.08	73.77	49.5	46.24	45.33	41.04	53	48.16	37.48	40.22
35^{0} -Ta	1.7	1.2	1.9	-0.7	1.6	1.8	1.9	2.3	1.5	2.4	3.3	2.9
Vs	28.58	43.91	24.78	-105.4	30.94	25.69	23.86	17.84	35.33	20.07	11.36	13.87

7.65M.;S(Watt)	71.3	77.03	69.24	106.8	72.73	68.04	66.77	60.71	77.7	70.95	55.72	59.55
0.69231 S	49.36	53.33	47.94	73.96	50.35	47.1	46.22	42.03	53.79	49.12	38.58	41.22
35^{0} -Ta	1.7	1.2	1.9	-0.7	1.6	1.8	1.9	2.3	1.5	2.4	3.3	2.9
Vs	29.04	44.44	25.23	-105.7	31.47	26.17	24.33	18.27	35.86	20.47	11.69	14.22

4.80M.;S(Watt)	72.95	78.4	71.09	107.3	74.49	69.88	68.65	62.81	79.4	73.11	58.05	61.73
0.69231 S	50.5	54.28	49.22	74.25	51.57	48.38	47.52	43.48	54.97	50.61	40.19	42.74
35^{0} -Ta	1.7	1.2	1.9	-0.7	1.6	1.8	1.9	2.3	1.5	2.4	3.3	2.9
Vs	29.71	45.23	25.9	-106.1	32.23	26.88	25.01	18.91	36.65	21.09	12.18	14.74

Activity : Sitting at Rest

Volume of Space (Vs) = 0.69231 x S(Watt) / $\triangle$ T

Mean Max Temperature , Ta ; ^{0} C.

The Year 1996	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M.;S(Watt)	84.61	80.79	113	132.2	118	106.6	87.1	96.53	84.66	92.79	86.27	64.21
0.69231 S	58.58	55.93	78.26	91.54	81.67	73.81	60.3	66.83	58.61	64.24	59.73	44.45
35^{0} -Ta	2.6	2.6	0.7	-0.3	0.7	1.4	2.6	2	3	2.4	2.7	4
Vs	22.53	21.51	111.8	-305.1	116.7	52.72	23.19	33.41	19.54	26.77	22.12	11.11

10.50M.;S(Watt)	85.98	82.18	113.8	132.7	118.9	107.7	88.61	97.79	86.23	94.15	87.66	65.97
0.69231 S	59.52	56.89	78.81	91.88	82.32	74.59	61.35	67.7	59.7	65.18	60.68	45.67
35^{0} -Ta	2.6	2.6	0.7	-0.3	0.7	1.4	2.6	2	3	2.4	2.7	4
Vs	22.89	21.88	112.6	-306.3	117.6	53.28	23.6	33.85	19.9	27.16	22.48	11.42

7.65M.;S(Watt)	88.48	83.9	114.9	133.5	120.1	109.2	90.54	99.49	88.24	95.95	89.53	68.2
0.69231 S	61.25	58.09	79.55	92.4	83.17	75.63	62.68	68.88	61.09	66.43	61.98	47.21
35^0 -Ta	2.6	2.6	0.7	-0.3	0.7	1.4	2.6	2	3	2.4	2.7	4
Vs	23.56	22.34	113.6	-308	118.8	54.02	24.11	34.44	20.36	27.68	22.96	11.8

4.80M.;S(Watt)	90.2	86.51	116.5	134.5	122	111.5	93.36	102	91.38	98.56	92.26	71.38
0.69231 S	62.44	59.89	80.67	93.1	84.44	77.17	64.63	70.6	63.26	68.23	63.87	49.41
35^0 -Ta	2.6	2.6	0.7	-0.3	0.7	1.4	2.6	2	3	2.4	2.7	4
Vs	24.02	23.04	115.2	-310.3	120.6	55.12	24.86	35.3	21.09	28.43	23.66	12.35

The Year 1997	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M.;S(Watt)	79.29	103.7	116.5	131	138.1	130.5	99.77	98.38	106	114.9	109.6	113.7
0.69231 S	54.9	71.81	80.62	90.66	95.61	90.36	69.08	68.11	73.39	79.56	75.9	78.73
35^0 -Ta	3	1.2	0.5	-0.2	-0.6	-0.2	1.7	1.8	1.8	1.6	1.6	1.1
Vs	18.3	59.84	161.2	-453.3	-159.3	-451.8	40.63	37.84	40.77	49.72	47.44	71.57

10.50M.;S(Watt)	80.73	104.7	117.2	131.5	138.5	131	101	99.61	107.3	116.3	110.8	114.7
0.69231 S	55.89	72.45	81.11	91.01	95.88	90.69	69.89	68.96	74.27	80.5	76.72	79.38
35^0 -Ta	3	1.2	0.5	-0.2	-0.6	-0.2	1.7	1.8	1.8	1.6	1.6	1.1
Vs	18.63	60.38	162.2	-455.1	-159.8	-453.4	41.11	38.31	41.26	50.31	47.95	72.17

7.65M.;S(Watt)	82.61	105.8	118.1	132.2	139.2	131.7	102.5	101.2	109	118	112.4	116
0.69231 S	57.19	73.27	81.78	91.51	96.34	91.18	70.98	70.07	75.46	81.69	77.79	80.28
35^0 -Ta	3	1.2	0.5	-0.2	-0.6	-0.2	1.7	1.8	1.8	1.6	1.6	1.1
Vs	19.06	61.06	163.6	-457.6	-160.6	-455.9	41.75	38.93	41.92	51.06	48.62	72.98

4.80M.;S(Watt)	85.34	107.7	119.6	133.4	139.9	132.9	104.9	103.6	111.6	120.6	114.7	117.8
0.69231 S	59.08	74.53	82.81	92.34	96.86	92.01	72.59	71.74	77.24	83.47	79.4	81.59
35^{0} -Ta	3	1.2	0.5	-0.2	-0.6	-0.2	1.7	1.8	1.8	1.6	1.6	1.1
Vs	19.69	62.11	165.6	-461.7	-161.4	-460	42.7	39.86	42.91	52.17	49.63	74.17

The Year 1998	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M.;S(Watt)	114.3	115.6	134.9	143.7	148.2	121.7	120.1	104.5	96.23	107.6	93.01	82.31
0.69231 S	79.13	80.06	93.42	99.46	102.6	84.25	83.14	72.35	66.62	74.47	64.39	56.99
35^{0} -Ta	1.1	0.9	-0.3	-0.7	-0.9	0.5	0.8	1.7	2.4	1.6	2.4	3.2
Vs	71.94	88.95	-311.4	.142.1	-114	168.5	103.9	42.56	27.76	46.54	26.83	17.81

10.50M.;S(Watt)	115.2	116.7	135.5	144.2	148.7	122.6	121.1	105.8	97.79	108.8	94.34	83.82
0.69231 S	79.79	80.77	93.81	99.84	102.9	84.85	83.86	73.22	67.7	75.31	63.32	58.03
35^{0} -Ta	1.1	0.9	-0.3	-0.7	-0.9	0.5	0.8	1.7	2.4	1.6	2.4	3.2
Vs	72.53	89.75	-312.7	-142.6	-114.4	169.7	104.8	43.07	28.21	47.07	27.21	18.14

7.65M.;S(Watt)	116.6	118	136.3	144.9	149.5	123.7	122.5	107.4	99.76	110.5	96.17	85.74
0.69231 S	80.74	81.72	94.38	100.3	103.5	85.64	84.84	74.37	69.07	76.5	66.58	59.36
35^{0} -Ta	1.1	0.9	-0.3	-0.7	-0.9	0.5	0.8	1.7	2.4	1.6	2.4	3.2
Vs	73.4	90.79	-314.6	-143.3	-115	171.3	106.1	43.75	28.78	47.81	27.74	18.55

4.80M.;S(Watt)	118.6	120.1	137.6	145.7	150.7	125.5	124.7	109.9	102.7	113	98.95	88.64
0.69231 S	82.09	83.14	95.27	100.9	104.3	86.91	86.36	76.1	71.12	78.24	68.5	61.36
35^{0} -Ta	1.1	0.9	-0.3	-0.7	-0.9	0.5	0.8	1.7	2.4	1.6	2.4	3.2
Vs	74.63	92.37	-317.6	-144.1	-115.9	173.8	108	44.77	29.64	48.9	28.54	19.18

The Year 1999	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M.;S(Watt)	100.8	100.5	133	113.9	96.85	96.88	99.76	92.3	101.5	89.06	86.26	48.19
0.69231 S	69.75	69.59	92.05	78.85	67.05	67.07	69.06	63.9	70.29	61.66	59.72	33.36
35^{0} -Ta	2	1.9	-0.4	1.1	2.3	2.1	1.7	2.4	2	2.7	3	5.7
Vs	34.88	36.63	-230.1	71.68	29.15	31.94	40.62	26.63	35.15	22.84	19.91	5.85
10.50M.;S(Watt)	102.1	101.8	133.3	115	98.33	98.26	101	93.69	102.9	90.53	87.63	50.25
0.69231 S	70.65	70.47	92.28	79.6	68.08	68.03	69.89	64.87	71.22	62.71	60.67	34.79
35^{0} -Ta	2	1.9	-0.4	1.1	2.3	2.1	1.7	2.4	2	2.7	3	5.7
Vs	35.33	37.09	-230.7	72.36	29.6	32.39	41.11	27.03	35.61	23.23	20.22	6.1
7.65M.;S(Watt)	103.8	103.5	134	116	100.3	99.98	102.6	95.57	104.6	92.48	89.68	52.93
0.69231 S	71.83	71.68	92.75	80.33	69.43	69.22	71.02	66.16	72.44	64.03	62.09	36.64
35^{0} -Ta	2	1.9	-0.4	1.1	2.3	2.1	1.7	2.4	2	2.7	3	5.7
Vs	35.92	37.72	-231.9	73.03	30.19	32.96	41.78	27.57	36.22	23.71	20.7	6.43
4.80M.;S(Watt)	106.3	106	134.8	118.7	103.1	102.7	104.9	98.35	107.3	95.5	92.49	56.83
0.69231 S	73.58	73.36	93.34	82.17	71.41	71.09	72.64	68.09	74.3	66.11	64.03	39.34
35^{0} -Ta	2	1.9	-0.4	1.1	2.3	2.1	1.7	2.4	2	2.7	3	5.7
Vs	36.79	38.61	-233.3	74.7	31.05	33.85	42.73	28.37	37.15	24.49	21.34	6.9

The Year 2000	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M.;S(Watt)	95.1	103.2	114.4	106.5	116.1	93.88	89.09	91.19	97.4	100.9	93.94	106.1
0.69231 S	65.86	71.43	79.22	73.73	80.4	65	61.68	63.13	67.43	69.82	65.04	73.45
35^{0} -Ta	2	1.5	0.7	1.5	1	2.4	2.5	2.4	2.2	2.4	2.4	1.6
Vs	32.93	47.62	113.2	49.15	80.4	27.08	24.67	26.3	30.65	29.09	27.1	45.91

10.50M.;S(Watt)	96.31	104.2	115.2	107.8	117.2	95.32	90.54	92.61	98.79	102.3	95.21	107.1
0.69231 S	66.67	72.12	79.77	74.6	81.14	65.99	62.68	64.12	68.39	70.85	65.91	74.16
35^{0} -Ta	2	1.5	0.7	1.5	1	2.4	2.5	2.4	2.2	2.4	2.4	1.6
Vs	33.34	48.08	114	49.74	81.14	27.5	25.07	26.71	31.09	29.52	27.46	46.35

7.65M.;S(Watt)	97.78	105.5	116.3	109.4	118.7	97.21	92.36	94.5	100.5	104.3	96.93	108.6
0.69231 S	67.69	73.03	80.51	75.71	82.15	67.3	63.94	65.42	69.58	72.18	67.1	75.17
35^{0} -Ta	2	1.5	0.7	1.5	1	2.4	2.5	2.4	2.2	2.4	2.4	1.6
Vs	33.85	48.69	115	50.47	82.15	28.04	25.58	27.26	31.63	30.08	27.96	46.98

4.80M.;S(Watt)	100.2	107.4	117.9	111.8	120.9	100	95.18	97.31	103.2	107.2	99.31	110.6
0.69231 S	69.39	74.38	81.65	77.43	83.71	69.26	65.89	67.37	71.47	74.23	68.75	76.6
35^{0} -Ta	2	1.5	0.7	1.5	1	2.4	2.5	2.4	2.2	2.4	2.4	1.6
Vs	34.7	49.59	116.6	51.62	83.71	28.86	26.36	28.07	32.48	30.93	28.65	47.88

The Year 2001	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M.;S(Watt)	101.9	108.1	100.2	143.2	104.5	98.51	96.91	90	110.9	104.1	84.23	88.61
0.69231 S	70.53	74.85	69.37	99.14	72.37	68.2	67.1	62.31	76.77	72.05	58.31	61.34
35^{0} -Ta	1.7	1.2	1.9	-0.7	1.6	1.8	1.9	2.3	1.5	2.4	3.3	2.9
Vs	41.49	62.38	36.51	-141.6	45.23	37.89	35.31	27.09	51.18	30.02	17.67	21.15

10.50M.;S(Watt)	103	109.1	101.5	143.7	105.8	99.74	98.17	91.36	112.2	105.6	85.69	90.02
0.69231 S	71.31	75.51	70.28	99.52	73.26	69.05	67.96	63.25	77.66	73.12	59.32	62.32
35^{0} -Ta	1.7	1.2	1.9	-0.7	1.6	1.8	1.9	2.3	1.5	2.4	3.3	2.9
Vs	41.95	62.92	36.99	-142.2	45.79	38.36	35.77	27.5	51.77	30.47	17.98	21.49

7.65M.;S(Watt)	104.5	110.3	103.2	144.4	107.5	101.4	99.84	93.15	113.8	107.6	87.62	91.82
0.69231 S	72.33	76.39	71.42	100	74.42	70.18	69.12	64.49	78.8	74.46	60.66	63.57
35^0 -Ta	1.7	1.2	1.9	-0.7	1.6	1.8	1.9	2.3	1.5	2.4	3.3	2.9
Vs	42.55	63.66	37.59	-142.9	46.51	38.99	36.38	28.04	52.53	31.02	18.38	21.92

4.80M.;S(Watt)	106.7	112.2	105.6	145.6	109.9	103.8	102.3	95.81	116.3	110.6	90.51	94.58
0.69231 S	73.86	77.7	73.14	100.8	76.12	71.87	70.83	66.33	80.52	76.58	62.66	65.48
35^0 -Ta	1.7	1.2	1.9	-0.7	1.6	1.8	1.9	2.3	1.5	2.4	3.3	2.9
Vs	43.44	64.75	38.5	-144	47.57	39.93	37.28	28.84	53.68	31.91	18.99	22.58

Activity : Sedentary

Volume of Space (Vs) = 0.69231 x S(Watt) / $\triangle$T

Mean Max Temperature , Ta ; ^{0} C.

The Year 1996	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M.;S(Watt)	106	101.7	136	156.6	142.6	130.5	109.8	119.6	107.7	115.7	108.5	84.51
0.69231 S	73.38	70.4	94.15	108.4	98.71	90.34	76.04	82.82	74.54	80.11	75.15	58.5
35^0 -Ta	2.6	2.6	0.7	-0.3	0.7	1.4	2.6	2	3	2.4	2.7	4
Vs	28.22	27.08	134.5	-361.3	141	64.53	29.25	41.41	24.85	33.38	27.83	14.63

10.50M.;S(Watt)	107.5	103.2	137.1	157.3	143.7	132	111.6	121.2	109.5	117.3	110.1	86.43
0.69231 S	74.45	71.47	94.89	108.9	99.52	91.36	77.26	83.89	75.82	81.22	76.25	59.83
35^0 -Ta	2.6	2.6	0.7	-0.3	0.7	1.4	2.6	2	3	2.4	2.7	4
Vs	28.63	27.49	135.6	-363	142.2	65.25	29.72	41.95	25.27	33.84	28.24	14.96

7.65M.;S(Watt)	109.5	105.2	138.4	158.4	145.4	133.7	113.9	123.2	111.9	119.5	112.3	88.87
0.69231 S	75.81	72.81	95.81	109.6	100.6	92.57	78.82	85.28	77.44	82.7	77.76	61.53
35^0 -Ta	2.6	2.6	0.7	-0.3	0.7	1.4	2.6	2	3	2.4	2.7	4
Vs	29.16	28	136.9	-365.5	143.8	66.12	30.32	42.64	25.81	34.46	28.8	15.38

4.80M.;S(Watt)	112.4	108.1	140.5	159.9	147.8	136.5	117.2	126.2	115.6	122.6	115.5	92.38
0.69231 S	77.81	74.86	97.29	110.7	102.3	94.51	81.13	87.34	80.02	84.85	79.97	63.96
35^{0} -Ta	2.6	2.6	0.7	-0.3	0.7	1.4	2.6	2	3	2.4	2.7	4
Vs	29.93	28.79	139	368.9	146.1	67.51	31.2	43.67	26.67	35.36	29.62	15.99

The Year 1997	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M.;S(Watt)	100.4	125.9	139.6	155.5	163	154.9	122.8	121.5	130.8	141.5	134.4	137.8
0.69231 S	69.54	87.14	96.62	107.7	112.9	107.2	85.04	84.08	90.54	97.93	93.04	95.41
35^{0} -Ta	3	1.2	0.5	-0.2	-0.6	-0.2	1.7	1.8	1.8	1.6	1.6	1.1
Vs	23.18	72.62	193.2	-538.4	-188.1	-536.1	50.02	46.71	50.3	61.21	58.15	86.73

10.50M.;S(Watt)	102.1	127	140.5	156.3	163.7	155.6	124.2	122.9	132.4	143.2	135.8	139
0.69231 S	70.67	87.9	97.27	108.2	113.3	107.7	86.02	85.09	91.63	99.14	94.04	96.24
35^{0} -Ta	3	1.2	0.5	-0.2	-0.6	-0.2	1.7	1.8	1.8	1.6	1.6	1.1
Vs	23.56	73.25	194.5	-540.9	-188.9	-538.5	50.6	47.27	50.91	61.96	58.78	87.49

7.65M.;S(Watt)	104.2	128.3	141.7	157.3	164.7	156.5	126.1	124.8	134.5	145.3	137.7	140.7
0.69231 S	72.13	88.85	98.12	108.9	114	108.3	87.31	86.43	93.11	100.6	95.36	97.41
35^{0} -Ta	3	1.2	0.5	-0.2	-0.6	-0.2	1.7	1.8	1.8	1.6	1.6	1.1
Vs	24.04	74.05	196.2	-544.5	-190	-541.6	51.36	48.02	51.73	62.86	59.6	88.56

4.80M.;S(Watt)	107.3	130.6	143.6	159	166.1	158.3	129	127.8	137.7	148.7	140.8	143.1
0.69231 S	74.27	90.44	99.43	110.1	115	109.6	89.27	88.45	95.3	102.9	97.48	99.06
35^{0} -Ta	3	1.2	0.5	-0.2	-0.6	-0.2	1.7	1.8	1.8	1.6	1.6	1.1
Vs	24.76	75.36	198.9	-550.4	-191.6	-547.9	52.51	49.14	52.95	64.32	60.92	90.06

The Year 1998	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M.;S(Watt)	138.7	140.5	160.4	170.3	175.5	146.7	145.9	128.9	120.8	132.5	116.1	104.4
0.69231 S	96.01	97.29	111	117.9	121.5	101.6	101	89.23	83.63	91.75	80.36	72.31
35^{0} -Ta	1.1	0.9	-0.3	-0.7	-0.9	0.5	0.8	1.7	2.4	1.6	2.4	3.2
Vs	87.28	108.1	-370.1	-168.4	-135	203.1	126.3	52.49	34.85	57.34	33.48	22.6

10.50M.;S(Watt)	139.9	141.7	161.2	171.1	176.3	147.7	147.2	130.5	122.7	134	117.7	106.2
0.69231 S	96.87	98.09	111.6	118.5	122	102.3	101.9	90.3	84.94	92.79	81.45	73.51
35^{0} -Ta	1.1	0.9	-0.3	-0.7	-0.9	0.5	0.8	1.7	2.4	1.6	2.4	3.2
Vs	88.06	109	-372.1	-169.2	-135.6	-204.6	127.4	53.13	35.39	57.99	33.94	22.97

7.65M.;S(Watt)	141.7	143.5	162.4	172.2	177.6	149.3	149.1	132.5	125.1	136.2	119.8	108.4
0.69231 S	98.08	99.35	112.4	119.2	122.9	103.3	103.2	91.74	86.59	94.31	82.95	75.04
35^{0} -Ta	1.1	0.9	-0.3	-0.7	-0.9	0.5	0.8	1.7	2.4	1.6	2.4	3.2
Vs	89.17	110.4	-374.8	-170.3	-136.6	206.7	129	53.96	36.08	58.95	34.56	23.45

4.80M.;S(Watt)	144.2	146.1	164.3	174.1	179.4	151.7	151.9	135.6	128.8	139.3	123.1	111.8
0.69231 S	99.81	101.2	113.7	120.5	124.2	105	105.2	93.9	89.17	96.47	85.25	77.37
35^{0} -Ta	1.1	0.9	-0.3	-0.7	-0.9	0.5	0.8	1.7	2.4	1.6	2.4	3.2
Vs	90.74	112.4	-379.1	-172.2	-138	210	131.5	55.24	37.15	60.29	35.52	24.18

The Year 1999	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M.;S(Watt)	124.7	124.4	157	139	121.2	120.6	123	115.5	126	112.4	108.9	67.98
0.69231 S	86.3	86.1	108.7	96.25	83.9	83.46	85.15	79.99	87.22	77.79	75.37	47.07
35^{0} -Ta	2	1.9	-0.4	1.1	2.3	2.1	1.7	2.4	2	2.7	3	5.7
Vs	43.15	45.31	-271.8	87.5	36.48	39.74	50.09	33.33	43.61	28.81	25.12	8.26

10.50M.;S(Watt)	126.2	125.9	157.6	140.3	123	122.2	124.4	117.2	127.6	114.1	110.7	70.21
0.69231 S	87.39	87.16	109.1	97.16	85.14	84.6	86.14	81.13	88.35	79.03	76.67	48.61
35^{0} -Ta	2	1.9	-0.4	1.1	2.3	2.1	1.7	2.4	2	2.7	3	5.7
Vs	43.69	45.87	-272.7	88.33	37.02	40.29	50.67	33.8	44.17	29.27	25.56	8.53

7.65M.;S(Watt)	128.3	127.9	158.6	142.2	125.3	124.3	126.4	119.4	129.8	116.4	112.9	73.11
0.69231 S	88.82	88.56	109.8	98.43	86.78	86.03	87.5	82.67	89.84	80.58	78.13	50.62
35^{0} -Ta	2	1.9	-0.4	1.1	2.3	2.1	1.7	2.4	2	2.7	3	5.7
Vs	44.41	46.61	-274.4	89.48	37.73	40.97	51.47	34.45	44.92	29.84	26.04	8.88

4.80M.;S(Watt)	131.4	131	159.8	145	128.9	127.5	129.2	122.7	133.1	120	116.2	77.37
0.69231 S	90.96	90.69	110.7	100.4	89.21	88.3	89.46	84.98	92.15	83.08	80.42	53.56
35^{0} -Ta	2	1.9	-0.4	1.1	2.3	2.1	1.7	2.4	2	2.7	3	5.7
Vs	45.48	47.73	-276.6	91.28	38.79	42.05	52.63	35.41	46.08	30.77	26.81	9.4

The Year 2000	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M.;S(Watt)	117.1	125.8	137.7	131.1	141.4	117.6	111.8	114.3	121.1	125.9	116.6	129.6
0.69231 S	81.08	87.06	95.33	90.73	97.86	81.39	77.43	79.11	83.87	87.16	80.7	89.69
35^{0} -Ta	2	1.5	0.7	1.5	1	2.4	2.5	2.4	2.2	2.4	2.4	1.6
Vs	40.54	58.04	136.2	60.48	97.86	33.91	30.97	32.96	38.12	36.31	33.62	56.06

10.50M.;S(Watt)	118.7	127	138.7	132.6	142.7	119.3	113.5	115.9	122.8	127.7	118	130.8
0.69231 S	82.15	87.94	95.99	91.81	98.82	82.57	78.58	80.26	85.02	88.42	81.72	90.54
35^{0} -Ta	2	1.5	0.7	1.5	1	2.4	2.5	2.4	2.2	2.4	2.4	1.6
Vs	41.07	58.63	137.1	61.21	98.82	34.4	31.43	33.44	38.65	36.84	34.05	56.59

7.65M.;S(Watt)	120.4	128.5	140	134.6	144.6	121.5	115.6	118.2	124.9	130.1	120.5	132.6
0.69231 S	83.34	88.97	96.93	93.16	100.1	84.14	80.06	81.81	86.44	90.05	83.41	91.82
35^0 -Ta	2	1.5	0.7	1.5	1	2.4	2.5	2.4	2.2	2.4	2.4	1.6
Vs	41.67	59.31	138.5	62.1	100.1	35.06	32.02	34.09	39.29	37.52	34.75	57.39

4.80M.;S(Watt)	123.1	130.9	142.1	137.7	147.6	125	119	121.5	128.2	133.7	122.9	135.1
0.69231 S	85.22	90.62	98.38	95.35	102.2	86.51	82.38	84.11	88.75	92.6	85.1	93.54
35^0 -Ta	2	1.5	0.7	1.5	1	2.4	2.5	2.4	2.2	2.4	2.4	1.6
Vs	42.61	60.41	140.5	63.57	102.2	36.05	32.95	35.05	40.34	38.58	35.46	58.46

The Year 2001	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
13.35M.;S(Watt)	125	131.3	123.9	169.5	128.9	121.8	120	112.6	136.3	130	106.4	111.1
0.69231 S	86.51	90.9	85.8	117.4	89.26	84.3	83.05	77.96	94.35	90.03	73.69	76.91
35^0 -Ta	1.7	1.2	1.9	-0.7	1.6	1.8	1.9	2.3	1.5	2.4	3.3	2.9
Vs	50.89	75.75	45.16	-167.7	55.78	46.84	43.71	33.89	62.9	37.51	22.33	26.52

10.50M.;S(Watt)	126.3	132.4	125.5	170.4	130.5	123.2	121.5	114.2	138	132	108.1	112.7
0.69231 S	87.45	91.63	86.91	118	90.35	85.33	84.09	79.06	95.53	91.36	74.85	78.04
35^0 -Ta	1.7	1.2	1.9	-0.7	1.6	1.8	1.9	2.3	1.5	2.4	3.3	2.9
Vs	51.44	76.36	45.74	-168.5	56.45	47.4	44.26	34.37	63.69	38.07	22.68	26.91

7.65M.;S(Watt)	128.1	134	127.5	171.5	132.6	125.2	123.5	116.3	140.1	134.4	110.4	114.8
0.69231 S	88.69	92.74	88.28	118.7	91.77	86.68	85.47	80.51	96.96	93.03	76.41	79.5
35^0 -Ta	1.7	1.2	1.9	-0.7	1.6	1.8	1.9	2.3	1.5	2.4	3.3	2.9
Vs	52.17	77.28	46.46	-169.6	57.36	48.15	44.98	35	64.64	38.76	23.15	27.41

4.80M.;S(Watt)	130.7	136.4	130.6	173.2	135.7	128.2	126.4	119.4	143.1	138.2	113.7	118.1
0.69231 S	90.5	94.43	90.39	119.9	93.92	88.73	87.53	82.69	99.1	95.71	78.73	81.76
35^{0} -Ta	1.7	1.2	1.9	-0.7	1.6	1.8	1.9	2.3	1.5	2.4	3.3	2.9
Vs	53.24	78.69	47.57	-171.3	58.7	49.29	46.07	35.95	66.07	39.88	23.86	28.19

<u>หมวดที่ 4</u> รายละเอียดการคำนวณหาปริมาตรความร้อน ตามทฤษฎี ITS. และการคำนวณหาปริมาตรต่อคน โดยทฤษฎีการระบายความร้อนด้วยอากาศ จากข้อมูลภูมิอากาศที่เก็บราย 3 ชั่วโมง ทุก 7 วัน ตลอดปี ค.ศ. 2001 เฉพาะห้องที่ใช้เป็นกรณีศึกษา

การศึกษาห้องที่เป็นกรณีศึกษา เป็นราย 3 ชั่วโมง ซึ่งมีความสูงจากระดับพื้นดิน 7.65 เมตร

To study of case study's room : each 3 hours/day ,every 7 days in the year 2001.

Date : January 01 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	26.8	25.2	23.7	27.7	30.4	31.8	28	26.2
RH (%)	60	62	66	51	43	42	57	66
V. at 7.65 M.; (Mps.)	0	0	0	2.003	2.289	0	0	0
Vi= 0.65 V ; Mps.	0.2	0.2	0.2	1.302	1.488	0.2	0.2	0.2
Vpa (mm.Hg.)	15.9	14.4	14.8	14.2	14.1	14	16.5	17

The Convection Heat Exchange (C) = α x $Vi^{0.3}$ $(Ta-35^{0})$

Ta - 35^{0}C	-8.2	-9.8	-11.3	-7.3	-4.6	-3.2	-7	-8.8
$Vi^{0.3}$	0.617	0.617	0.617	1.082	1.127	0.617	0.617	0.617
C	-65.77	-78.61	-90.64	-102.7	-67.39	-25.67	-56.15	-70.58

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 $\pm$ C

Sitting at Rest ; E = 100 $\pm$ C , Sedentary Activity ; E = 116 $\pm$ C

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism;E	10.23	-2.61	-14.64	-26.7	8.61	50.33	19.85	5.42
Sitting at Rest ; E	34.23	21.39	9.36	-2.7	32.61	74.33	43.85	29.42
Sedentary Activity; E	50.23	37.39	25.36	13.3	48.61	90.33	59.85	45.42

E max = $pV^{0.3}$ (42- Vpa) ; p = 20.5

$V^{0.3}$	0.617	0.617	0.617	1.082	1.127	.61 7	0.617	0.617
$pV^{0.3}$	12.65	12.65	12.649	22.18	23.1	12.65	12.65	12.65
42 - Vpa	26.1	27.6	27.2	27.8	27.9	28	25.5	25
E max	33.017	349.1	344.1	616.6	644.5	354.2	322.6	316.3

1/f = $e^{0.6\ (E/Emax\ -\ 0.12\ )}$

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism;E	10.23	-2.61	-14.64	-26.7	8.61	50.33	19.85	5.42
Emax	330.17	349.1	344.1	616.6	644.5	354.2	322.6	316.3
E/Emax	0.031	-0.0075	-0.0425	-0.0433	0.0134	0.1421	0.0615	0.0171
E/Emax - 0.12	-0.089	-0.127	-0.1625	-0.1633	-0.1066	0.0221	-0.0585	-0.1029
1/f	0.948	0.926	0.9071	0.9067	0.938	1.0133	0.9655	0.9401

Sitting at Rest ;E	34.23	21.39	9.36	-2.7	32.61	74.33	43.85	29.42
Emax	330.17	349.1	344.1	616.1	644.5	354.2	322.6	316.3
E/Emax	0.1037	0.0613	0.0272	0.00438	0.0506	0.2099	0.1359	0.093
E/Emax - 0.12	-0.0163	-0.0587	-0.0928	-0.1244	-0.0694	0.0899	0.01493	-0.02699
1/f	0.9903	0.9654	0.9458	0.9281	0.9592	1.0554	1.0096	0.9839

Sedentary Activity ;E	50.23	37.39	25.36	13.3	48.61	90.33	59.85	45.42
Emax	330.17	349.1	344.1	616.6	644.5	354.2	322.6	316.3
E/Emax	0.1521	0.1071	0.0737	0.02157	0.07542	0.255	0.1855	0.1436
E/Emax - 0.12	0.0321	-0.0129	-0.0463	-0.09843	-0.0446	0.135	0.0655	0.0236
1/f	1.019	0.9923	0.9726	0.9427	0.9736	1.0844	1.0401	1.0143

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	0.031	-0.0075	-0.0425	-0.0433	0.0134	0.1421	0.0615	0.0171
SP./SP.Scale	-0.145	-0.3375	-0.5125	-5165	-0.233	0.411	0.0075	-0.2145
	0	0	0	0	0	0	0	0

Sitting at Rest ;

E/Emax	0.1037	0.0613	0.0272	0.00438	0.0506	0.2099	0.1359	0.093
SP. / SP. Scale	0.2185	0.0065	-0.164	-0.2781	-0.047	0.7495	0.3795	0.165
	0	0	0	0	0	1	0	0

Sedentary Activity ;

E/Emax	0.1521	0.1071	0.0737	0.02157	0.07542	0.255	0.1855	0.1436
SP. /SP. Scale	0.4605	0.2355	0.0685	-0.19215	0.0771	0.975	0.6275	0.418
	0	0	0	0	0	1	1	0

S = { (M-W) ± C } 1/f ....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	0.948	0.926	0.9071	0.9067	0.938	1.0133	0.9655	0.9401
(M-W) ± C	10.23	-2.61	-14.64	-26.7	8.61	50.33	19.85	5.42
S(Kcal/h)	9.698	-1.684	-13.7329	-25.793	8.07618	50.999	19.165	5.095
S(Watt)	11.279	-1.9585	-15.9714	-29.9976	9.3926	59.312	22.289	5.926

Sitting at Rest ;1/f	0.9903	0.9654	0.9458	0.9281	0.9592	1.0554	1.0096	0.9839
(M-W) ± C	34.23	21.39	9.36	-2.7	32.61	74.33	43.85	29.42
S(Kcal/h)	33.898	20.6499	0.101047	-1.7719	31.2795	78.448	44.27	28.946
S(Watt)	39.423	24.016	0.1175	-2.0607	36.378	91.235	51.487	33.665

Sedentary Act.;1/f	1.019	0.9923	0.9726	0.9427	0.9736	1.0844	1.0401	1.0143
(M-W) ± C	50.23	37.39	25.36	13.3	48.61	90.33	59.85	45.42
S(Kcal/h)	51.184	37.102	24.665	12.5379	47.327	97.954	62.25	46.2695
S(Watt)	59.527	43.1497	28.686	14.5816	55.041	113.92	72.397	53.579

35 ^{0}C - Ta	8.2	9.8	11.3	7.3	4.6	3.2	7	8.8

Volume of Space (Cu.M.) = 0.69231 S(Watt) / (35^{0}C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	11.279	-1.9585	-15.9714	-29.9976	9.3926	59.312	22.289	5.926
0.69231 S	7.808	-1.3559	-11.057	-20.7676	6.5026	41.0625	15.431	4.103
Volume of Space	0.95219	-0.01172	-0.9785	-2.8449	1.4136	12.832	2.2044	0.46625

Sitting .;S (Watt)	39.423	24.016	0.1175	-2.0607	36.378	91.235	51.487	33.665
0.69231 S	27.293	16.626	0.0813	-1.42665	25.1849	63.1628	35.645	23.306
Volume of Space	3.3284	1.6965	0.00719	-0.1954	5.475	19.7384	5.0921	2.6484

Sedentary. ;S (Watt)	59.527	43.1497	28.686	14.5816	55.041	113.92	72.397	53.579
0.69231 S	41.211	29.873	19.859	10.095	38.105	78.868	50.121	37.093
Volume of Space	5.0257	3.0483	1.7574	1.3829	8.2837	24.6463	7.1601	4.2151

Date : January 07 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	26.8	26.2	25.1	30.5	33.1	32.4	29	27.6
RH (%)	77	83	88	64	50	59	67	82
V. at 7.65 M.; (Mps.)	0	0	0	0.5722	0.8583	0	0.5722	1.144
Vi= 0.65 V ; Mps.	0.2	0.2	0.2	0.372	0.558	0.2	0.372	0.7436
Vpa (mm.Hg.)	20.1	21.7	21.2	21	19	21.3	20.1	23

The Convection Heat Exchange (C) = α x Vi $^{0.3}$ (Ta-35 ^{0})

Ta - 35 ^{0}C	-8.2	-8.8	-9.9	-4.5	-1.9	-2.6	-6	-7.4
Vi $^{0.3}$	0.617	0.617	0.617	0.743	0.8394	0.617	0.743	0.915
C	-65.77	-70.58	-79.41	-43.47	-20.73	-20.85	-57.95	-88.02

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 ±C

Sitting at Rest ; E = 100± C , Sedentary Activity ; E = 116 ± C

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism:E	10.23	5.42	-3.41	32.53	55.27	55.15	18.05	-12.02
Sitting at Rest ; E	34.23	29.42	20.59	56.53	79.27	79.15	42.05	11.98
Sedentary Activity ; E	50.23	45.42	36.59	72.53	95.27	95.15	58.05	27.98

E max = $pV^{0.3}$(42- Vpa) ; p = 20.5

$V^{0.3}$	0.617	0.617	0.617	0.743	0.8394	0.617	0.743	0.915
$pV^{0.3}$	12.6485	12.6485	12.6485	15.2315	17.2077	12.6485	15.2315	18.7575
42 - Vpa	21.9	20.3	20.8	21	23	20.7	21.9	19
E max	277.002	256.76	263.089	319.86	395.777	261.824	333.57	356.39

$1/f = e^{0.6\,(E/Emax - 0.12)}$

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism;E	10.23	5.42	-3.41	32.53	55.27	55.15	18.05	-12.02
Emax	277.002	256.76	263.089	319.86	395.777	261.824	333.57	356.39
E/Emax	0.03693	0.02111	-0.01296	0.1017	0.13965	0.21064	0.05411	-0.03373
E/Emax - 0.12	-0.0831	-0.09889	-0.13296	-0.0183	0.019649	0.09064	-0.06589	-0.15373
1/f	0.9514	0.9424	0.92332	0.9891	1.01186	1.05589	0.97399	0.91189

Sitting at Rest ;E	34.23	29.42	20.59	56.53	79.27	79.15	42.05	11.98
Emax	277.002	256.76	263.089	319.86	395.777	261.824	333.57	356.39
E/Emax	0.12357	0.11458	0.07826	0.17673	0.2003	0.3023	0.12606	0.033615
E/Emax - 0.12	0.003573	-0.00542	-0.04174	0.05673	0.0803	0.1823	0.00606	-0.08639
1/f	1.00215	0.99675	0.97527	1.0346	1.0494	1.11559	1.0036	0.94949

Sedentary Activity ;E	50.23	45.42	36.59	72.53	95.27	95.15	58.05	27.98
Emax	277.002	256.76	263.089	319.86	395.777	261.824	333.57	356.39
E/Emax	0.18133	0.176897	0.13908	0.22676	0.2407	0.363412	0.17403	0.078509
E/Emax - 0.12	0.06133	0.056897	0.019078	0.106755	0.1207	0.243412	0.054026	-0.04149
1/f	1.03749	1.03473	1.011513	1.06615	1.07512	1.15725	1.032946	0.9754

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	0.03693	0.02111	-0.01296	0.1017	0.13965	0.21064	0.05411	-0.03373
SP./SP.Scale	-0.1154	-0.1944	-0.3648	0.2085	0.39825	0.7532	-0.02945	-0.4686
	0	0	0	0	0	1	0	0

Sitting at Rest ;

E/Emax	0.12357	0.11458	0.07826	0.17673	0.2003	0.3023	0.12606	0.033615
SP. / SP. Scale	0.31785	0.2729	0.0913	0.58365	0.7015	1.2115	0.3303	-0.1319
	0	0	0	1	1	1	0	0

Sedentary Activity ;

E/Emax	0.18133	0.176897	0.13908	0.22676	0.2407	0.363412	0.17403	0.078509
SP. /SP. Scale	0.60665	0.5845	0.3954	0.8338	0.9035	1.5171	0.57015	0.092545
	1	1	0	1	1	2	1	0

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	0.9514	0.9424	0.9233	0.9891	1.01186	1.05589	0.97399	0.91189
(M-W) ± C	10.23	5.42	-3.41	32.53	55.27	55.15	18.05	-12.02
S(Kcal/h)	9.7328	5.1078	-3.148	32.175	55.926	58.2323	17.5805	-10.961
S(Watt)	11.31927	5.9404	-3.6617	37.42	65.0414	67.724	20.446	-12.7475

Sitting at Rest ;1/f	1.00215	0.99675	0.97527	1.0346	1.0494	1.11559	1.0036	0.94949
(M-W) ± C	34.23	29.42	20.59	56.53	79.27	79.15	42.05	11.98
S(Kcal/h)	34.3036	29.3244	20.0808	58.4859	83.1859	88.299	42.2014	11.37489
S(Watt)	39.895	34.104	23.35398	68.0191	96.745	102.692	49.0802	13.229

Sedentary Act.; 1/f	1.03749	1.03473	1.011513	1.06615	1.07512	1.15725	1.032946	0.9754
(M-W) ± C	50.23	45.42	36.59	72.53	95.27	95.15	58.05	27.98
S(Kcal/h)	52.11312	46.9974	37.01126	77.3279	102.4267	110.1123	59.9625	27.2917
S(Watt)	60.60756	54.658	43.044	89.9323	119.1222	128.0606	69.7364	31.7402

35^0 - Ta	8.2	8.8	9.9	4.5	1.9	2.6	6	7.4

Volume of Space (Cu.M.) = 0.69231 S(Watt) / (35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	11.31927	5.9404	-3.6617	37.42	65.0414	67.724	20.446	-12.7475
0.69231 S	7.836	4.1126	-2.535	25.906	45.0288	46.886	14.155	-8.82525
Volume of Space	0.9556	0.4673	-0.2561	5.7569	23.6994	18.0331	2.3592	-1.1926
Sitting .;S (Watt)	39.895	34.104	23.35398	68.0191	96.745	102.692	49.0802	13.229
0.69231 S	27.6198	23.6107	16.1682	47.09	66.98	71.094	33.9787	9.158567
Volume of Space	3.3683	2.683	1.6332	10.4644	35.2526	27.3438	5.6631	1.2376
Sedentary. ;S (Watt)	60.60756	54.658	43.044	89.9323	116.1222	128.0606	69.7364	31.7402
0.69231 S	41.9592	37.8403	29.79986	62.261	82.4695	88.6577	48.2792	21.9741
Volume of Space	5.117	4.3	3.0101	13.8358	43.405	34.0991	8.0465	2.9695

Date : January 14 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	28.2	27.6	27.9	29.5	27.2	26.2	26.9	26.2
RH (%)	80	84	85	78	80	83	85	87
V. at 7.65 M.; (Mps.)	0	0	0	0	2.861	0.2861	0.5722	0
Vi= 0.65 V ; Mps.	0.2	0.2	0.2	0.2	1.85965	0.185965	0.37193	0.2
Vpa (mm.Hg.)	23.2	23.2	24	24	22	21.2	22.9	22.1

The Convection Heat Exchange (C) = α x Vi $^{0.3}$ (Ta-35^0)

Ta - 35 ^{0}C	-6.8	-7.4	-7.1	-5.5	-7.8	-8.8	-8.1	-8.8
Vi $^{0.3}$	0.617	0.617	0.617	0.617	1.20456	0.6037	0.743256	0.617
C	-54.543	-59.355	-56.949	-44.1155	-122.142	-69.0633	-78.2649	-70.5848

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 ± C

Sitting at Rest ; E = 100± C , Sedentary Activity ; E = 116 ± C

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism;E	21.46	16.65	19.05	31.88	-46.14	-6.94	-2.26	5.415
Sitting at Rest ; E	45.46	40.65	43.05	55.88	-22.14	30.94	21.74	29.415
Sedentary Activity ; E	61.46	56.65	59.05	71.88	-6.14	46.94	37.74	45.415

$E_{max} = pV^{0.3}(42 - Vpa)$; p = 20.5

$V^{0.3}$	0.617	0.617	0.617	0.617	1.20456	0.6037	0.743256	0.617
$pV^{0.3}$	12.6485	12.6485	12.6485	12.6485	24.6935	12.37585	15.23675	12.6485
42 - Vpa	18.8	18.8	18	18	20	20.8	19.1	19.9
E max	237.7918	237.7918	227.673	227.673	493.87	257.4177	291.0219	251.7052

$1/f = e^{0.6\,(E/Emax - 0.12)}$

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism ;E	21.457	16.645	19.051	31.8845	-46.1424	-6.9367	-2.2649	5.4152
Emax	237.7918	237.7918	227.673	227.673	493.87	257.4177	291.0219	251.7052
E/Emax	0.09023	0.069998	0.083677	0.140045	-0.09343	-0.02695	-0.00778	0.021514
E/Emax - 0.12	-0.02977	-0.05	-0.03632	0.02005	-0.21343	-0.14695	-0.12778	-0.09849
1/f	0.982299	0.97044	0.97844	1.0121	0.8798	0.91561	0.926196	0.94262

Sitting at Rest ;E	45.457	40.645	43.051	55.8845	-22.1424	30.9367	21.7351	29.4152
Emax	237.7918	237.7918	227.673	227.673	493.87	257.4177	291.0219	251.7052
E/Emax	0.19116	0.170927	0.188867	0.245459	-0.04483	0.120181	0.074685	0.116864
E/Emax - 0.12	0.07116	0.05093	0.068867	0.125459	-0.16483	0.000181	-0.04532	-0.00314
1/f	1.04362	1.03103	1.04219	1.07818	0.90583	1.00011	0.97318	0.99812

Sedentary Activity ;E	61.457	56.645	59.051	71.8845	-6.1424	46.9367	37.7351	45.4152
Emax	237.7918	237.7918	227.673	227.673	493.87	257.4177	291.0219	251.7052
E/Emax	0.25845	0.2382	0.25937	0.315736	-0.01244	0.18234	0.129664	0.18043
E/Emax - 0.12	0.13845	0.118212	0.13937	195736	-0.13244	0.062337	0.009664	0.06043
1/f	1.08662	1.0735	1.0872	1.1246	0.92361	1.03811	1.005815	1.0369

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	0.09023	0.069998	0.083677	0.140045	-0.09343	-0.02695	-0.00778	0.021514
SP./SP.Scale	0.15115	0.04999	0.118385	0.400225	-0.76715	-0.4347	-0.3389	-0.19243
	0	0	0	0	0	0	0	0

Sitting at Rest ;

E/Emax	0.19116	0.170927	0.188867	0.245459	-0.04483	0.120181	0.074685	0.116864
SP. / SP. Scale	0.6558	0.5546	0.6443	0.9273	-0.52415	0.30091	0.07343	0.28432
	1	1	1	1	0	0	0	0

Sedentary Activity ;

E/Emax	0.25845	0.2382	0.25937	0.315736	-0.01244	0.18234	0.129664	0.18043
SP. /SP. Scale	0.99225	0.891	0.99685	1.2787	-0.3622	0.6117	0.34832	0.60215
	1	1	1	1	0	1	0	1

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	0.982299	0.97044	0.97844	1.0121	0.8798	0.91561	0.926196	0.94262
(M-W) ± C	21.457	16.645	19.051	31.8845	-46.1424	-6.9367	-2.2649	5.4152
S(Kcal/h)	21.0772	16.15297	18.6403	32.2703	-45.2626	-6.0211	-1.3387	5.1045
S(Watt)	24.5128	18.7829	21.6786	37.5304	-52.6404	-7.0025	-1.5569	5.9365
Sitting at Rest ;1/f	1.04362	1.03103	1.04219	1.07818	0.90583	1.00011	0.97318	0.99812
(M-W) ± C	45.457	40.645	43.051	55.8845	-22.1424	30.9367	21.7351	29.4152
S(Kcal/h)	47.4398	41.9062	44.8673	60.2536	-21.2366	30.9401	21.1522	29.3599
S(Watt)	55.1725	48.7369	52.1807	70.0749	-24.6981	35.9833	24.5999	34.1456
Sedentary Act.; 1/f	1.08662	1.0735	1.0872	1.1246	0.92361	1.03811	1.005815	1.0369
(M-W) ± C	61.457	56.645	59.051	71.8845	-6.1424	46.9367	37.7351	45.4152
S(Kcal/h)	66.7804	60.8084	64.2002	80.8413	-5.21879	48.7255	37.9545	47.091
S(Watt)	77.6656	70.7202	74.6649	94.0184	-6.06945	56.6677	44.1411	54.7669
35^0 - Ta	6.8	7.4	7.1	5.5	7.8	8.8	8.1	8.8

Volume of Space (Cu.M.) = 0.69231 S(Watt) / (35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	24.5128	18.7859	21.6786	37.5304	-52.6404	-7.0025	-1.5569	5.9365
0.69231 S	16.9704	13.00567	15.0083	25.9826	-36.4435	-4.8479	-1.07787	4.1099
Volume of Space	2.4956	1.7576	2.1138	4.7241	-4.6722	-0.5509	-0.1331	0.467
Sitting .;S (Watt)	55.1725	48.7369	52.1807	70.0749	-24.6981	35.9833	24.5999	34.1456
0.69231 S	38.1965	33.7411	36.1252	48.5135	-17.0988	24.9116	17.0308	23.6393
Volume of Space	5.6171	4.5596	5.0881	8.8206	-2.1922	2.8309	2.1026	2.6863
Sedentary. ;S (Watt)	77.6656	70.7202	74.6649	94.0184	-6.06945	56.6677	44.1411	54.7669
0.69231 S	53.7687	48.9603	51.6912	65.0899	-4.2019	39.2316	30.5596	37.9156
Volume of Space	7.9072	6.6163	7.2805	11.8345	-0.5387	4.4581	3.7728	4.3086

Date : January 21 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	28.9	28.3	27.4	29	32	26.1	27.5	27.5
RH (%)	70	83	84	74	58	89	82	85
V. at 7.65 M.; (Mps.)	0	0	0.5722	0	0	0	0	0
Vi= 0.65 V ; Mps.	0.2	0.2	0.37193	0.2	0.2	0.2	0.2	0.2
Vpa (mm.Hg.)	21	24.1	23	22.2	21	22.1	23	23.8

The Convection Heat Exchange (C) = α x $Vi^{0.3}$ ($Ta-35^0$)

Ta - 35 ^{0}C	-6.1	-6.7	-7.6	-6	-3	-8.9	-7.5	-7.5
$Vi^{0.3}$	0.617	0.617	0.7433	0.617	0.617	0.617	0.617	0.617
C	-48.9281	-53.7407	-73.438	-48.126	-24.063	-71.3869	-60.1575	-60.1575

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 $\pm$ C

Sitting at Rest ; E = 100 $\pm$ C , Sedentary Activity ; E = 116 $\pm$ C

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism	27.072	22.259	2.562	27.874	51.937	4.613	15.843	15.843
Sitting at Rest	51.072	46.259	26.562	51.874	75.937	28.613	39.843	39.843
Sedentary Activity	67.072	62.259	42.562	67.874	91.937	44.613	55.843	55.843

$E\ max = pV^{0.3}(42 - Vpa)$; p = 20.5

$V^{0.3}$	0.617	0.617	0.7433	0.617	0.617	0.617	0.617	0.617
$pV^{0.3}$	12.6485	12.6485	15.23765	12.6485	12.6485	12.6485	15.23675	12.6485
42 - Vpa	21	17.9	19	19.8	21	19.9	19	18.2
E max	265.6185	226.4082	289.5154	250.4403	265.6185	251.7052	240.3215	230.2027

$1/f = e^{0.6\,(E/Emax - 0.12)}$

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism ;E	27.0719	22.2593	2.562	27.874	51.937	4.6131	15.8425	15.8425
Emax	265.6185	226.4082	289.5154	250.4403	265.6185	251.7052	240.3215	230.2027
E/Emax	0.10192	0.09831	0.008849	0.1113	0.19553	0.01833	0.06592	0.06882
E/Emax - 0.12	-0.01808	-0.02169	-0.11115	-0.0087	0.07553	-0.1017	-0.05408	-0.05118
1/f	0.9892	0.98707	0.93548	0.99479	1.0464	0.9408	0.96807	0.96976

Sitting at Rest ;E	51.0719	46.2593	26.562	51.874	48.063	28.6131	39.8425	39.8425
Emax	265.6185	226.4082	289.5154	250.4403	265.6185	251.7052	240.3215	230.2027
E/Emax	0.19228	0.20432	0.9175	0.20713	0.18095	0.11368	0.16579	0.17307
E/Emax - 0.12	0.07228	0.08432	-0.02825	0.08713	0.06095	-0.00632	0.04579	0.05307
1/f	1.0443	1.05189	0.9832	1.0537	1.0372	0.99621	1.02785	1.03236

Sedentary Activity ;E	67.0719	62.2593	42.562	67.874	91.937	44.6131	55.8425	55.8425
Emax	265.6185	226.4082	289.5154	250.4403	265.6185	251.7052	240.3215	230.2027
E/Emax	0.2525	0.27499	0.14701	0.271	0.34612	0.17724	0.232366	0.24258
E/Emax - 0.12	0.1325	0.15499	0.02701	0.151	0.22612	0.05724	0.112366	0.12258
1/f	1.0828	1.0975	1.0163	1.0948	1.1453	1.0349	1.06974	1.0763

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	0.10192	0.09831	0.008849	0.1113	0.19553	0.01833	0.06592	0.06882
SP./SP.Scale	0.2096	0.19155	-0.2558	0.2565	0.67765	-0.20835	0.0296	0.0441
	0	0	0	0	1	0	0	0

Sitting at Rest ;

E/Emax	0.19228	0.20432	0.09175	0.20713	0.18095	0.11368	0.16579	0.17307
SP. / SP. Scale	0.6614	0.7216	0.15875	0.73565	0.60475	0.2684	0.52895	0.56535
	1	1	0	1	1	0	1	1

Sedentary Activity ;

E/Emax	0.2525	0.27499	0.14701	0.271	0.34612	0.17724	0.232366	0.24258
SP. /SP. Scale	0.9625	1.07495	0.43505	1.055	1.4306	0.5862	0.86183	0.9129
	1	1	0	1	1	1	1	1

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	0.9892	0.98707	0.93548	0.99479	1.0464	0.9408	0.96807	0.96976
(M-W) ± C	27.0719	22.2593	2.562	27.874	51.937	4.6131	15.8425	15.8425
S(Kcal/h)	26.7795	21.9715	2.3967	27.7288	54.3469	4.34	15.3366	15.3634
S(Watt)	31.1446	25.5528	2.7874	32.2486	63.2054	5.0474	17.8365	17.8677

Sitting at Rest ;1/f	1.0443	1.05189	0.9832	1.0537	1.0372	0.99621	1.02785	1.03236
(M-W) ± C	51.0719	46.2593	26.562	51.874	75.937	28.6131	39.8425	39.8425
S(Kcal/h)	53.3344	48.6597	26.1158	54.6596	78.7619	28.5046	40.9521	41.1308
S(Watt)	62.0279	56.5912	30.3726	63.5692	91.6	33.1509	47.6273	47.8352

Sedentary Act.; 1/f	1.0828	1.0975	1.0163	1.0948	1.1453	1.0349	1.06974	1.0763
(M-W) ± C	67.0719	62.2593	42.562	67.874	91.937	44.6131	55.8425	55.8425
S(Kcal/h)	72.6255	68.3296	43.2558	74.3085	105.2954	46.1701	59.737	60.1033
S(Watt)	84.4634	79.4673	50.3064	86.4207	122.4586	53.6958	69.4741	69.9001

35^0 - Ta	6.1	6.7	7.6	6	3	8.9	7.5	7.5

Volume of Space (Cu.M.) = 0.69231 S(Watt) / (35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	31.1446	25.5528	2.7874	32.2486	63.2054	5.0474	17.8365	17.8677
0.69231 S	21.5617	17.6905	1.9297	22.326	43.7577	3.4944	12.3484	12.36996
Volume of Space	3.5347	2.6404	0.2539	3.721	14.5859	0.3926	1.6465	1.6493
Sitting .;S (Watt)	62.0279	56.5912	30.3726	63.5692	91.6	33.1509	47.6273	47.8352
0.69231 S	42.9425	39.1787	21.0273	44.0096	63.4157	22.9507	32.9729	33.1168
Volume of Space	7.0398	5.8476	2.7668	7.3349	21.1386	2.5787	4.3964	4.4156
Sedentary. ;S (Watt)	84.4634	79.4673	50.3064	86.4207	122.4586	53.6958	69.4741	69.9001
0.69231 S	58.4749	55.016	34.8277	59.8299	84.7793	37.1742	48.0976	48.3926
Volume of Space	9.586	8.2113	4.5826	9.9717	28.2598	4.1769	6.413	6.4523

Date : Jauuary 28 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	27.6	27.1	26.9	31.2	33.2	33.5	29.9	28.4
RH (%)	83	87	87	67	56	56	69	80
V. at 7.65 M.; (Mps.)	1.4305	1.4305	0.5722	1.7166	2.0027	2.0027	2.0027	0.8583
Vi= 0.65 V ; Mps.	0.9298	0.9298	0.3719	1.1158	1.3018	1.3018	1.3018	0.5579
Vpa (mm.Hg.)	23	23.8	22.9	22.8	21.2	22	21.8	23

The Convection Heat Exchange (C) = α x $Vi^{0.3}$ ($Ta-35^0$)

Ta - 35 ^{0}C	-7.4	-7.9	-8.1	-3.8	-1.8	-1.5	-5.5	-6.6
$Vi^{0.3}$	0.9784	0.9784	0.7432	1.0334	1.0823	1.0823	1.0823	0.8394
C	-94.1221	-100.482	-78.2589	-51.0499	-25.3258	-21.1049	77.3845	-72.0205

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 $\pm$ C

Sitting at Rest ; E = 100 $\pm$ C Sedentary Activity ; E = 116 $\pm$ C

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism; E	-18.122	-24.482	-2.259	24.95	50.674	54.895	-1.385	3.98
Sitting at Rest ; E	5.878	-0.482	21.741	48.95	74.674	78.895	22.616	27.98
Sedentary Activity; E	21.878	15.518	37.741	64.95	90.674	94.895	38.616	43.98

$E\ max = pV^{0.3}(42 - Vpa)$; p = 20.5

$V^{0.3}$	0.9784	0.9784	0.7432	1.0334	1.0823	1.0823	1.0823	0.8394
$pV^{0.3}$	20.0572	20.0572	15.2356	21.1847	22.1872	22.18715	22.18715	17.2077
42 - Vpa	19	18.2	19.1	19.2	20.8	20	20.2	19
E max	381.0868	365.041	291	406.746	461.4927	443.743	448.1804	326.9463

$1/f = e^{0.6\,(E/Emax - 0.12)}$

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism ;E	-18.1221	-24.4817	-2.2589	24.9501	50.6742	54.8951	-1.3845	3.9795
Emax	381.0868	365.041	291	406.746	461.4927	443.743	448.1804	326.9463
E/Emax	-0.04755	-0.06706	-0.00776	0.06134	0.1098	0.12371	-0.00309	0.012172
E/Emax - 0.12	-0.16755	-0.18707	-0.12776	-0.05866	-0.0102	0.003709	-0.12309	-0.10783
1/f	0.90436	0.89383	0.92621	0.96542	0.9939	1.00223	0.92881	0.93735

Sitting at Rest ;E	5.8779	-0.4817	21.7411	48.9501	74.6742	78.8951	22.6155	27.9795
Emax	381.0868	365.041	291	406.746	461.4927	443.743	448.1804	326.9463
E/Emax	0.01542	-0.00132	0.074712	0.12035	0.16181	0.177795	0.050461	0.085578
E/Emax - 0.12	-0.10458	-0.12132	-0.04529	0.000346	0.04181	0.057795	-0.06954	-0.03442
1/f	0.93918	0.92979	0.97319	1.00021	1.0254	1.03528	0.95913	0.979559

Sedentary Activity ;E	21.8779	15.5183	37.7411	64.9501	90.6742	94.8951	38.6155	43.9795
Emax	381.0868	365.041	291	406.746	461.4927	443.743	448.1804	326.9463
E/Emax	0.05741	0.04251	0.129695	0.15968	0.19648	0.21385	0.08616	0.13452
E/Emax - 0.12	-0.06259	-0.07749	0.009695	0.03968	0.07648	0.09385	-0.03384	0.014516
1/f	0.96314	0.95457	1.00583	1.02409	1.04696	1.05793	0.9799	1.00875

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	-0.04755	-0.06706	-0.00776	0.06134	0.1098	0.12371	-0.00309	0.012172
SP./SP.Scale	-0.53775	-0.6353	-0.33882	0.0067	0.249	0.31855	-0.31545	-0.23914
	0	0	0	0	0	0	0	0

Sitting at Rest ;

E/Emax	0.01542	-0.00132	0.074712	0.12035	0.16181	0.177795	0.050461	0.085578
SP. / SP. Scale	-0.2229	-0.3066	0.07356	0.30175	0.50905	0.588975	-0.04769	0.12789
	0	0	0	0	1	1	0	0

Sedentary Activity ;

E/Emax	0.05741	0.04251	0.129695	0.15968	0.19648	0.21385	0.08616	0.13452
SP. /SP. Scale	-0.01295	-0.08745	0.348475	0.4984	0.6824	0.76925	0.1308	0.3726
	0	0	0	0	1	1	0	0

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	0.90436	0.89383	0.92621	0.96542	0.9939	1.0023	0.92881	0.93735
(M-W) ± C	-18.1221	-24.4817	-2.2589	24.9501	50.6742	54.8951	-1.3845	3.9795
S(Kcal/h)	-17.2177	-23.5879	-1.33269	24.0873	50.3651	55.0175	-0.45569	3.7302
S(Watt)	-20.0242	-27.4327	-1.5499	28.0136	58.5746	63.9854	-0.52997	4.3382

Sitting at Rest ;1/f	0.93918	0.92979	0.97319	1.00021	1.0254	1.03528	0.95913	0.979559
(M-W) ± C	5.8779	-0.4817	21.7411	48.9501	74.6742	78.8951	22.6155	27.9795
S(Kcal/h)	5.5204	-0.44788	21.1582	48.9604	76.5709	81.6785	21.6912	27.4076
S(Watt)	6.4202	-0.5209	24.607	56.9409	89.05199	94.9921	25.2269	31.875

Sedentary Act.; 1/f	0.96314	0.95457	1.00583	1.02409	1.04696	1.05793	0.9799	1.00875
(M-W) ± C	21.8779	15.5183	37.7411	64.9501	90.6742	94.8951	38.6155	43.9795
S(Kcal/h)	21.0715	14.8133	37.9611	66.5147	94.9323	100.3924	37.8393	44.3643
S(Watt)	24.5061	17.2279	44.1488	77.3566	110.4062	116.7563	44.0071	51.5957

35^0 - Ta	7.4	7.9	8.1	3.8	1.8	1.5	5.5	6.6

Volume of Space (Cu.M.) = 0.69231 S(Watt) / (35^{0}C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	-20.0242	-27.4327	-1.5499	28.0136	58.5746	63.9854	-0.52997	4.3382
0.69231 S	-13.8629	-18.9919	-1.073	19.3941	40.5518	44.2977	-0.3669	3.00338
Volume of Space	-1.8734	-2.404	-0.1325	5.1037	22.5288	29.5318	-0.07194	0.4551
Sitting .;S (Watt)	6.4202	-0.5209	24.607	56.9409	89.05199	94.9921	25.2269	31.875
0.69231 S	4.4448	-0.3606	17.0357	39.4208	61.6516	65.76399	17.4648	22.0674
Volume of Space	0.6006	-0.0456	2.1032	10.3739	34.2509	43.8427	3.4245	3.3435
Sedentary. ;S (Watt)	24.5061	17.2279	44.1488	77.3566	110.4062	116.7563	44.0071	51.5957
0.69231 S	16.9658	11.927	30.5647	53.5548	76.4353	80.8316	30.4666	35.7202
Volume of Space	2.2927	1.5097	3.7734	14.0934	42.4641	53.8877	5.9738	5.4122

Date : February 1 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	27.5	27	26.7	30.2	33.5	33.8	30.5	28.7
RH (%)	87	89	91	61	41	37	47	78
V. at 7.65 M.; (Mps.)	0.8583	0.5722	0.2861	0.8583	1.7166	0	0	0.5722
Vi= 0.65 V ; Mps.	0.5579	0.37193	0.18597	0.5579	1.11579	0.2	0.2	0.37193
Vpa (mm.Hg.)	24.3	24	24	20	15.9	14.7	15.3	23

The Convection Heat Exchange (C) = α x $Vi^{0.3}$ ($Ta-35^{0}$)

Ta - 35 ^{0}C	-7.5	-8	-8.3	-4.8	-1.5	-1.2	-4.5	-6.3
$Vi^{0.3}$	0.8394	0.7433	0.6037	0.8394	1.0334	0.61703	0.61703	0.74326
C	-81.8415	-77.3032	-65.1392	-52.3786	-20.1513	-9.6257	-36.0963	-60.873

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 $\pm$ C

Sitting at Rest ; E = 100 $\pm$ C Sedentary Activity ; E = 116 $\pm$ C

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism; E	-5.8415	-1.3032	10.8608	23.6214	55.8487	66.3743	39.9037	15.127
Sitting at Rest ; E	18.1585	22.6968	34.8608	47.6214	79.8487	90.3743	63.9037	39.127
Sedentary Activity; E	34.1585	38.6968	50.8608	63.6214	95.8487	106.3743	79.9037	55.127

$E\ max = pV^{0.3}(42- Vpa)$; p = 20.5

$V^{0.3}$	0.8394	0.7433	0.6037	0.8394	1.0334	0.61703	0.61703	0.74326
$pV^{0.3}$	17.2077	15.2377	12.3759	17.2077	21.1847	12.6491	12.6491	15.2368
42 - Vpa	17.7	18	18	22	26.1	27.3	26.7	19
E max	304.5763	274.2777	222.7653	378.5694	552.9207	345.3208	337.7314	289.4998

$1/f = e^{0.6\ (E/Emax - 0.12\ )}$

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism ;E	-5.8415	-1.3032	10.8608	23.6214	55.8487	66.3743	39.9037	15.127
Emax	304.5763	274.2777	222.7653	378.5694	552.9207	345.3208	337.7314	289.4998
E/Emax	-0.01918	-0.00475	0.048754	0.062396	0.10101	0.19221	0.118152	0.05225
E/Emax - 0.12	-1.13918	-0.12475	-0.07125	-0.0576	-0.01899	0.07221	0.001848	-0.06775
1/f	0.91988	0.92788	0.95815	0.96603	0.988669	1.04428	0.99889	0.96017

Sitting at Rest ;E	18.1585	22.6968	34.8608	47.6214	79.8487	90.3743	63.9037	39.127
Emax	304.5763	274.2777	222.7653	378.5694	552.9207	345.3208	337.7314	289.4998
E/Emax	0.05962	0.08275	0.15649	0.125793	0.1444	0.26171	0.18921	0.13515
E/Emax - 0.12	-0.06038	-0.03725	0.036491	0.005793	0.02441	0.14171	0.06921	0.01515
1/f	0.96442	0.977899	1.02214	1.00348	1.01476	1.08875	1.0424	1.00913

Sedentary Activity ;E	34.1585	38.6968	50.8608	63.6214	95.8487	106.3743	79.9037	55.127
Emax	304.5763	274.2777	222.7653	378.5694	552.9207	345.3208	337.7314	289.4998
E/Emax	0.11215	0.14109	0.22832	0.16806	0.17335	0.30804	0.23659	0.19042
E/Emax - 0.12	0.007849	0.021086	0.10832	0.04806	0.05335	0.18804	0.116589	0.07042
1/f	0.9953	1.01273	1.06715	1.02925	1.03253	1.1194	1.0725	1.04316

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	-0.01918	-0.00475	0.048754	0.062396	0.10101	0.19221	0.118152	0.05225
SP./SP.Scale	-0.3959	-0.32375	-0.05623	0.01198	0.20505	0.66105	0.29076	-0.03875
	0	0	0	0	0	1	0	0

Sitting at Rest ;

E/Emax	0.05962	0.08275	0.15649	0.125793	0.1444	0.26171	0.18921	0.13515
SP. / SP. Scale	0.0019	0.11375	0.48245	0.328965	0.422	1.00855	0.64605	0.37575
	0	0	0	0	0	1	1	0

Sedentary Activity ;

E/Emax	0.11215	0.14109	0.22832	0.16806	0.17335	0.30804	0.23659	0.19042
SP. /SP. Scale	0.26075	0.40545	0.8416	0.5403	0.56675	1.2402	0.88295	0.6521
	0	0	1	1	1	1	1	1

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	0.91988	0.92788	0.95815	0.96603	0.988669	1.04428	0.99889	0.96017
(M-W) ± C	-5.8415	-1.3032	10.8608	23.6214	55.8487	66.3743	39.9037	15.127
S(Kcal/h)	-4.92162	-0.37532	10.4063	22.81898	55.216	69.3133	39.8594	14.5245
S(Watt)	-5.7238	-0.4365	12.1025	26.5385	64.216	80.6114	46.3565	16.89198

Sitting at Rest ;1/f	0.96442	0.977899	1.02214	1.00348	1.01476	1.08875	1.0424	1.00913
(M-W) ± C	18.1585	22.6968	34.8608	47.6214	79.8487	90.3743	63.9037	39.127
S(Kcal/h)	17.5124	22.1952	35.6326	47.7871	81.0273	98.395	66.6132	39.4842
S(Watt)	20.3669	25.81299	41.4407	55.5764	94.2347	114.4334	77.4712	45.9202

Sedentary Act.; 1/f	0.9953	1.01273	1.06715	1.02925	1.03253	1.1194	1.0725	1.04316
(M-W) ± C	34.1585	38.6968	50.8608	63.6214	95.8487	106.3743	79.9037	55.127
S(Kcal/h)	33.998	39.1894	54.2761	65.4823	98.9666	119.0754	85.6967	57.5063
S(Watt)	39.5396	45.5773	63.1231	76.1559	115.0982	138.4847	99.6653	66.8798

35^0 - Ta	7.5	8	8.3	4.8	1.5	1.2	4.5	6.3

Volume of Space (Cu.M.) = 0.69231 S(Watt) / (35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	-5.7238	-0.4365	12.1025	26.5385	64.216	80.6114	46.3565	16.89198
0.69231 S	-3.9626	-0.30219	8.3787	18.3729	44.457	55.8081	32.0931	11.6945
Volume of Space	-0.5283	-0.03777	1.0095	3.8277	29.638	46.5068	7.1318	1.8563
Sitting .;S (Watt)	20.3669	25.81299	41.4407	55.5764	94.2347	114.4334	77.4712	45.9202
0.69231 S	14.1002	17.8706	28.6898	38.4761	65.2396	79.2234	53.6341	31.79099
Volume of Space	1.88	2.2338	3.4566	8.0159	43.4931	66.0195	11.9187	5.0462
Sedentary. ;S (Watt)	39.5396	45.5773	63.1231	76.1559	115.0982	138.4847	99.6653	66.8798
0.69231 S	27.3737	31.5536	43.7008	52.7235	79.6837	95.8743	68.9993	46.3016
Volume of Space	3.6498	3.9442	5.2652	10.9841	53.1225	79.8953	15.3332	7.3495

Date : February 7 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	27.8	27.1	27.1	31.4	34.2	33.6	30.7	29.1
RH (%)	83	88	90	69	58	56	73	82
V. at 7.65 M.; (Mps.)	0	0	1.1444	1.1444	1.1444	1.1444	1.1444	0
Vi= 0.65 V ; Mps.	0.2	0.2	0.74386	0.74386	0.74386	0.74386	0.74386	0.2
Vpa (mm.Hg.)	23.1	23.9	24.6	23.6	23.9	22	24.4	25.1

The Convection Heat Exchange (C) = α x Vi $^{0.3}$ (Ta-35^0)

Ta - 35^0C	-7.2	-7.9	-7.9	-3.6	-0.8	-1.4	-4.3	-5.9
Vi $^{0.3}$	0.61703	0.61703	0.48351	0.48351	0.48351	0.48351	0.48351	0.61703
C	-57.754	-63.369	-49.6565	-22.6283	-5.0285	-8.79988	-27.0282	-47.3262

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 $\pm$ C

Sitting at Rest ; E = 100$\pm$ C Sedentary Activity ; E = 116 $\pm$ C

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism; E	18.246	12.63102	26.3435	53.3717	70.9715	67.2001	48.9718	28.6738
Sitting at Rest ; E	42.246	36.63102	50.3435	77.3717	94.9715	91.2001	72.9718	52.6738
Sedentary Activity; E	58.246	52.631	66.3435	93.3717	110.9715	107.2001	88.9718	68.6738

$E\ max = pV^{0.3}(42- Vpa)$; p = 20.5

$V^{0.3}$	0.61703	0.61703	0.48351	0.48351	0.48351	0.48351	0.48351	0.61703
$pV^{0.3}$	12.6491	12.6491	9.911955	9.911955	9.911955	9.911955	9.911955	12.6491
42 - Vpa	18.9	18.1	17.4	18.4	18.1	20	17.6	16.9
E max	239.0683	228.949	172.468	182.38	179.4064	198.2391	174.4504	213.77

$E\ max = pV^{0.3}(42- Vpa)$; p = 20.5

$V^{0.3}$	0.61703	0.61703	0.48351	0.48351	0.48351	0.48351	0.48351	0.61703
$pV^{0.3}$	12.6491	12.6491	9.911955	9.911955	9.911955	9.911955	9.911955	12.6491
42 - Vpa	18.9	18.1	17.4	18.4	18.1	20	17.6	16.9
E max	239.0683	228.949	172.468	182.38	179.4064	198.2391	174.4504	213.77

$1/f = e^{0.6\ (E/Emax - 0.12\ )}$

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism ;E	18.246	12.63102	26.3435	53.3717	70.9715	67.2001	48.9718	28.6738
Emax	239.0683	228.949	172.468	182.38	179.4064	198.2391	174.4504	213.77
E/Emax	0.07632	0.05517	0.15274	0.29264	0.39559	0.33899	0.28072	0.134134
E/Emax - 0.12	-0.04368	-0.06483	0.03274	0.17264	0.27559	0.21899	0.16072	0.014134
1/f	0.97413	0.96185	1.0198	1.1091	1.1798	1.1404	1.10124	1.00852

Sitting at Rest ;E	42.246	36.63102	50.3435	77.3717	94.9715	91.2001	72.9718	52.6738
Emax	239.0683	228.949	172.468	182.38	179.4064	198.2391	174.4504	213.77
E/Emax	0.17671	0.159996	0.291901	0.42423	0.52937	0.46005	0.418295	0.2464
E/Emax - 0.12	0.05671	0.039996	0.171901	0.30423	0.40937	0.34005	0.298295	0.126404
1/f	1.03461	1.024288	1.10865	1.20026	1.2784	1.2263	1.19599	1.07879

Sedentary Activity ;E	58.246	52.631	66.3435	93.3717	110.9715	107.2001	88.9718	68.6738
Emax	239.0683	228.949	172.468	182.38	179.4064	198.2391	174.4504	213.77
E/Emax	0.24364	0.22988	0.38467	0.511963	0.618548	0.54076	0.510012	0.321251
E/Emax - 0.12	0.12364	0.10988	0.26467	0.39196	0.49855	0.42076	0.390012	0.20125
1/f	1.077	1.06815	1.17211	1.265133	1.34868	1.28718	1.26365	1.12834

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	0.07632	0.05517	0.15274	0.29264	0.39559	0.33899	0.28072	0.134134
SP./SP.Scale	0.0816	-0.02415	0.4637	1.1632	1.67795	1.39495	1.1036	0.37067
	0	0	0	1	2	1	1	0

Sitting at Rest ;

E/Emax	0.17671	0.159996	0.291901	0.42423	0.52937	0.46005	0.418295	0.2464
SP. / SP. Scale	0.58355	0.49998	1.15951	1.82115	2.34685	2.00025	1.791475	0.932
	1	0	1	2	2	2	2	1

Sedentary Activity ;

E/Emax	0.24364	0.22988	0.38467	0.511963	0.618548	0.54076	0.510012	0.321251
SP. /SP. Scale	0.9182	0.8494	1.62335	2.2598	2.79274	2.4038	2.25006	1.30626
	1	1	2	2	3	2	2	1

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	0.97413	0.96185	1.0198	1.1091	1.1798	1.1404	1.10124	1.00852
(M-W) ± C	18.246	12.63102	26.3435	53.3717	70.9715	67.2001	48.9718	28.6738
S(Kcal/h)	17.77398	12.14915	26.8651	59.1946	83.7322	76.635	53.9297	28.9181
S(Watt)	20.67113	14.1295	31.2441	68.8433	97.3805	89.1265	62.7202	33.6318

Sitting at Rest ;1/f	1.03461	1.024288	1.10865	1.20026	1.2784	1.2263	1.19599	1.07879
(M-W) ± C	42.246	36.63102	50.3435	77.3717	94.9715	91.2001	72.9718	52.6738
S(Kcal/h)	43.7081	37.5207	55.8133	92.8662	121.4116	111.8387	87.2735	56.82397
S(Watt)	50.8326	43.6366	64.9109	108.0033	141.2017	130.0684	101.4991	66.0863

Sedentary Act.; 1/f	1.077	1.06815	1.17211	1.265133	1.34868	1.28718	1.26365	1.12834
(M-W) ± C	58.246	52.631	66.3435	93.3717	110.9715	107.2001	88.9718	68.6738
S(Kcal/h)	62.7309	56.2178	77.7619	118.1276	149.665	137.9858	112.4292	77.4874
S(Watt)	72.9561	65.3813	90.4371	137.3824	174.0604	160.4775	130.7552	90.1178

35^0 - Ta	7.2	7.9	7.9	3.6	0.8	1.4	4.3	5.9

Volume of Space (Cu.M.) =0 .69231 S(Watt) / (35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	20.67113	14.1295	31.2441	68.8433	97.3805	89.1265	62.7202	33.6318
0.69231 S	14.3108	9.78196	21.63061	47.6609	67.4175	61.7032	43.4219	23.2836
Volume of Space	1.9876	1.2382	2.7381	13.2391	84.2719	44.0737	10.0981	3.9464
Sitting .;S (Watt)	50.8326	43.6366	64.9109	108.0033	141.2017	130.0684	101.4991	66.0863
0.69231 S	35.1919	30.21	44.9385	74.7718	97.7553	90.0476	70.26886	45.7522
Volume of Space	4.8878	3.8241	5.6884	20.7699	122.1941	64.3197	16.3416	7.7546
Sedentary. ;S (Watt)	72.9561	65.3813	90.4371	137.3824	174.0604	160.4775	130.7552	90.1178
0.69231 S	50.5082	45.2641	62.6105	95.1112	120.5038	111.1002	90.5231	62.3895
Volume of Space	7.01503	5.7296	7.9254	26.4198	150.6298	79.3573	21.0519	10.5745

Date : February 14 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	29.2	27.8	27.9	29.4	30.5	30.2	28.5	27.1
RH (%)	77	82	82	57	54	58	65	77
V. at 7.65 M.; (Mps.)	0	0.8583	0	0.8583	1.1444	2.2888	0	0
Vi= 0.65 V ; Mps.	0.2	0.557895	0.2	0.557895	0.74386	1.48772	0.2	0.2
Vpa (mm.Hg.)	23.3	23.1	23.1	17	17.9	18.7	19.1	21

The Convection Heat Exchange (C) = α x Vi $^{0.3}$ (Ta-35^0)

Ta - 35 ^{0}C	-5.8	-7.2	-7.1	-5.6	-4.5	-4.8	-6.5	-7.9
Vi $^{0.3}$	0.61703	0.839394	0.61703	0.839394	0.91506	1.126565	0.61703	0.61703
C	-46.5241	-78.5673	-56.9519	-61.1079	-53.531	-70.2977	-52.139	-63.3689

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 ± C

Sitting at Rest ; E = 100± C Sedentary Activity ; E = 116 ± C

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism; E	29.4759	-2.5673	19.0481	14.8921	22.469	5.7023	23.861	12.631
Sitting at Rest ; E	53.4759	21.4327	43.0481	38.8921	46.469	29.7023	47.861	36.631
Sedentary Activity; E	69.4759	37.4327	59.0481	54.8921	62.469	45.7023	63.861	52.63102

E max = pV $^{0.3}$ (42- Vpa) ; p = 20.5

V $^{0.3}$	0.61703	0.839394	0.61703	0.839394	0.91506	1.126565	0.61703	0.61703
pV $^{0.3}$	12.64912	17.20758	12.64912	17.2076	18.7587	23.0946	12.6491	12.6491
42 - Vpa	18.7	18.9	18.9	25	24.1	23.3	22.9	21
E max	236.5385	325.2232	239.0683	430.1894	452.0854	53801038	289.6647	265.6314

1/f = e $^{0.6\ (E/Emax\ -\ 0.12\ )}$

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism ;E	29.4759	-2.5673	19.0481	14.8921	22.469	5.7023	23.861	12.631
Emax	236.5385	325.2232	239.0683	430.1894	452.0854	538.1038	289.6647	265.6314
E/Emax	0.124613	-0.00789	0.079667	0.034617	0.049701	0.010597	0.082375	0.047551
E/Emax - 0.12	0.004614	-0.12789	-0.04032	-0.08538	-0.0703	-0.1094	-0.03763	-0.07245
1/f	1.00277	0.92613	0.976096	0.950061	958698	0.936466	0.977678	0.957462

Sitting at Rest ;E	53.4759	21.4327	43.0481	38.8921	46.469	29.7023	47.861	36.631
Emax	236.5385	325.2232	239.0683	430.1894	452.0854	538.1038	289.6647	265.6314
E/Emax	0.226077	0.065902	0.18007	0.090407	0.102788	0.055198	0.165229	0.137902
E/Emax - 0.12	0.10608	-0.0541	0.06007	-0.02959	-0.01721	-0.0648	0.045229	0.017902
1/f	1.06572	0.96806	1.036697	0.982401	0.989726	0.961865	1.02751	1.010799

Sedentary Activity ;E	69.4759	37.4327	59.0481	54.8921	62.469	45.7023	63.861	52.63102
Emax	236.5385	325.2232	239.0683	430.1894	452.0854	538.1038	289.6647	265.6314
E/Emax	0.293719	0.115099	0.246993	0.1276	0.13818	0.084932	0.22047	0.198132
E/Emax - 0.12	0.173719	-0.0049	0.126993	0.00756	0.01818	-0.03507	0.100465	0.07813
1/f	1.10986	0.99706	1.07917	1.00457	1.010967	0.97918	1.06213	1.047996

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	0.124613	-0.00789	0.079676	0.034617	0.049701	0.010597	0.082375	0.047551
SP./SP.Scale	0.323065	-0.33947	0.09838	-0.12692	-0.0515	-0.24702	0.111873	-0.06225
	0	0	0	0	0	0	0	0

Sitting at Rest ;

E/Emax	0.226077	0.065902	0.18007	0.090407	0.102788	0.055198	0.165229	0.137902
SP. / SP. Scale	0.83039	0.02951	0.60035	0.152035	0.21394	-0.02401	0.526145	0.38951
	1	0	1	0	0	0	1	0

Sedentary Activity ;

E/Emax	0.293719	0.115099	0.246993	0.1276	0.13818	0.084932	0.22047	0.198132
SP. /SP. Scale	1.168595	0.27549	0.93497	0.337999	0.390898	0.12466	0.80235	0.69066
	1	0	1	0	0	0	1	1

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	1.00277	0.92613	0.976096	0.950061	0.958698	0.936466	0.977678	0.957462
(M-W) ± C	29.4759	-2.5673	19.0481	14.8921	22.469	5.7023	23.861	12.631
S(Kcal/h)	29.5575	-1.64117	18.5928	14.1484	21.54099	5.34001	23.3284	12.0937
S(Watt)	34.3754	-1.90868	21.6234	16.4546	25.05217	6.2104	27.1309	14.065

Sitting at Rest ;1/f	1.06572	0.96806	1.036697	0.982401	0.989726	0.961865	1.02751	1.010799
(M-W) ± C	53.4759	21.4327	43.0481	38.8921	46.469	29.7023	47.861	36.631
S(Kcal/h)	56.9903	20.7481	44.6278	38.2076	45.9916	28.5696	49.1776	37.0266
S(Watt)	66.2798	24.1301	51.9022	44.4355	53.4882	33.2264	57.1936	43.0619

Sedentary Act.; 1/f	1.10986	0.99706	1.07917	1.00457	1.010967	0.97918	1.06213	1.047996
(M-W) ± C	69.4759	37.4327	59.0481	54.8921	62.469	45.7023	63.861	52.63102
S(Kcal/h)	77.1085	37.3226	63.7229	55.143	63.1541	44.7508	67.8287	55.1571
S(Watt)	89.6772	43.4062	74.1098	64.1313	73.4482	52.0452	78.8848	64.1477

35^0 - Ta	5.8	7.2	7.1	5.6	4.5	4.8	6.5	7.9

Volume of Space (Cu.M.) =0 .69231 S(Watt) / (35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	34.3754	-1.90868	21.6234	16.4546	25.05217	6.2104	27.1309	14.065
0.69231 S	23.7985	-1.3214	14.9701	11.3917	17.3439	4.2995	18.783	9.7375
Volume of Space	4.1032	-0.1835	2.1085	2.0342	3.8542	0.8957	2.8897	1.2326
Sitting .;S (Watt)	66.2798	24.1301	51.9022	44.4355	53.4882	33.2464	57.1936	43.0619
0.69231 S	45.8861	16.7055	35.9324	30.7631	37.0304	23.003	39.5957	29.8122
Volume of Space	7.9114	2.3202	5.0609	5.4934	8.229	4.7923	6.0916	3.7737
Sedentary. ;S (Watt)	89.6772	43.4062	74.1098	64.1313	73.4482	52.0452	78.8848	64.1477
0.69231 S	62.0844	30.0506	51.3069	44.3987	50.8489	36.0314	54.613	44.4101
Volume of Space	10.7042	4.1737	7.2263	7.9283	11.2998	7.5065	8.402	5.6215

Date : February 21 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	27.2	27.1	26.8	29.7	33	33.5	29.5	28.4
RH (%)	87	87	90	73	59	60	77	83
V. at 7.65 M.; (Mps.)	0	0	0	1.7166	1.1444	1.4305	1.1444	0.5722
Vi= 0.65 V ; Mps.	0.2	0.2	0.2	1.11579	0.74386	0.929825	0.74386	0.37193
Vpa (mm.Hg.)	23.3	23.8	23.9	23	22.5	23.4	23.9	24.3

The Convection Heat Exchange (C) = α x $Vi^{0.3}$ ($Ta-35^0$)

Ta - 35 ^{0}C	-7.8	-7.9	-8.2	-5.3	-2	-1.5	-5.5	-6.6
Vi $^{0.3}$	0.61703	0.61703	0.61703	1.0334	0.91506	0.97841	0.91506	0.74326
C	-62.5668	-63.369	-65.7754	-71.2013	-23.7916	-19.079	-65.4268	-63.7717

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 ± C

Sitting at Rest ; E = 100± C Sedentary Activity ; E = 116 ± C

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism; E	13.4332	12.63102	10.2246	4.7987	52.2084	56.92101	10.5732	12.2283
Sitting at Rest ; E	37.4332	36.63102	34.2246	28.7987	76.2084	80.92101	34.5732	36.2283
Sedentary Activity; E	53.4332	52.63102	50.2246	44.7987	92.2084	96.92101	50.5732	52.2283

E max = pV $^{0.3}$ (42- Vpa) ; p = 20.5

V $^{0.3}$	0.61703	0.61703	0.61703	1.0334	0.91506	0.97841	0.91506	74326
pV $^{0.3}$	12.64912	12.64912	12.64912	21.1847	18.7587	20.0574	18.7587	15.2368
42 - Vpa	18.7	18.2	18.1	19	19.5	18.6	18.1	17.7
E max	236.538	230.2139	228.949	402.5093	365.7952	373.0677	339.533	269.6919

1/f = e $^{0.6\ (E/Emax\ -\ 0.12\ )}$

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism ;E	13.4332	12.63102	10.2246	4.7987	52.2084	56.92101	10.5732	12.2283
Emax	236.538	230.2139	228.949	402.5093	365.7952	373.0677	339.533	269.6919
E/Emax	0.05679	0.054867	0.044659	0.011922	0.142726	0.152576	0.03114	0.045342
E/Emax - 0.12	-0.06321	-0.06513	-0.07534	-0.10808	0.02273	0.03258	-0.08886	-0.07466
1/f	0.962785	0.961674	0.955802	0.93721	1.01373	1.01974	0.948081	0.95619

Sitting at Rest ;E	37.4332	36.63102	34.2246	28.7987	76.2084	80.92101	34.5732	36.2283
Emax	236.538	230.2139	228.949	402.5093	365.7952	373.0677	339.533	269.6919
E/Emax	0.15825	0.159117	0.149486	0.071548	0.20834	0.21691	0.10183	0.134332
E/Emax - 0.12	0.03825	0.03912	0.02949	-0.04845	0.088336	0.09691	-0.01817	0.01433
1/f	1.02322	1.02375	1.017849	0.97135	1.05443	1.05987	0.98915	1.00864

Sedentary Activity ;E	53.4332	52.63102	50.2246	44.7987	92.2084	96.92101	50.5732	52.2283
Emax	236.538	230.2139	228.949	402.5093	365.7652	373.0677	339.533	269.6919
E/Emax	0.225897	0.22862	0.21937	0.111299	0.252077	0.259795	0.148949	0.193659
E/Emax - 0.12	0.105897	0.10862	0.09937	-0.0087	0.13208	0.139795	0.028949	0.073659
1/f	1.0656	1.06734	1.06144	0.99479	1.08247	1.087495	1.017521	1.04519

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	0.05679	0.054867	0.044659	0.011922	0.142726	0.152576	0.03114	0.045342
SP./SP.Scale	-0.01605	-0.02567	-0.07671	-0.24039	0.41363	0.46288	-0.1443	-0.07329
	0	0	0	0	0	0	0	0

Sitting at Rest ;

E/Emax	0.15825	0.159117	0.149486	0.071548	0.20834	0.21691	0.10183	0.134332
SP. / SP. Scale	0.49125	0.495585	0.44743	0.05774	0.7417	0.78455	0.20915	0.37166
	0	0	0	0	1	1	0	0

Sedentary Activity ;

E/Emax	0.225897	0.22862	0.21937	0.111299	0.252077	0.259795	0.148949	0.193659
SP. /SP. Scale	0.829485	0.8431	0.79685	0.256495	0.96039	0.998975	0.444745	0.668295
	1	1	1	0	1	1	0	1

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	0.962785	0.961674	0.955802	0.93721	1.01373	1.01974	0.948081	0.95619
(M-W) ± C	13.4332	12.63102	10.2246	4.7987	52.2084	56.92101	10.5732	12.2283
S(Kcal/h)	12.9333	12.1469	9.7727	4.4974	52.92252	58.0446	10.0243	11.6926
S(Watt)	15.0414	14.1269	11.3656	5.2305	61.55203	67.5059	11.6582	13.5985

Sitting at Rest ;1/f	1.02322	1.02375	1.017849	0.97135	1.05443	1.05987	0.98915	1.00864
(M-W) ± C	34.4332	36.63102	34.2246	28.7987	76.2084	80.92101	34.5732	36.2283
S(Kcal/h)	35.2327	37.501	34.8355	27.9736	80.3564	83.3381	34.1981	36.5413
S(Watt)	40.9757	43.6137	40.5137	32.5333	93.4545	96.9222	39.7724	42.4975

Sedentary Act.; 1/f	1.0656	1.06734	1.06144	0.99479	1.08247	1.087495	1.017521	1.04519
(M-W) ± C	53.4332	52.63102	50.2246	44.7987	92.2084	96.92101	50.5732	52.2283
S(Kcal/h)	56.9384	56.17519	53.3104	44.5653	99.8128	105.4011	51.4593	54.5885
S(Watt)	66.2194	65.3317	61.9999	51.8294	116.0823	122.5815	59.8472	63.4864

35^0 - Ta	7.8	7.9	8.2	5.3	2	1.5	5.5	6.6

Volume of Space (Cu.M.) =0 .69231 S(Watt) / (35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	15.0414	14.1269	11.3656	5.2305	61.55203	67.5059	11.6582	13.5985
0.69231 S	10.4133	9.7802	7.8685	3.6211	42.6131	46.735	8.07109	9.4144
Volume of Space	1.335	1.238	0.9596	0.6832	21.3066	31.1567	1.4675	1.4264
Sitting .;S (Watt)	40.9757	43.6137	40.5137	32.5333	93.4545	96.9222	39.7724	42.4975
0.69231 S	28.3679	30.1942	28.048	22.5231	64.6995	67.1002	27.5348	29.4215
Volume of Space	3.6369	3.8221	3.4205	4.2496	32.3498	44.7335	5.0063	4.4578
Sedentary. ;S (Watt)	66.2194	65.3317	61.9999	51.8294	116.0823	122.5815	59.8472	63.4864
0.69231 S	45.8443	45.2298	42.9232	35.88204	80.3649	84.8644	41.4328	43.9523
Volume of Space	5.8775	5.7253	5.2345	6.7702	40.1825	56.5763	7.5332	6.6594

Date : March 1 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	28.5	28	26.7	30.6	33.5	33	30.3	29
RH (%)	85	88	88	72	61	62	73	84
V. at 7.65 M.; (Mps.)	0	0	0.2861	1.1444	2.2888	1.1444	1.1444	1.1444
Vi= 0.65 V ; Mps.	0.2	0.2	0.185965	0.74386	1.48772	0.74386	0.74386	0.74386
Vpa (mm.Hg.)	25.1	24.9	22.9	23.7	24.4	23.8	23.5	25.6

The Convection Heat Exchange (C) = α x $Vi^{0.3}$ ($Ta-35^0$)

Ta - 35 ^{0}C	-6.5	-7	-8.3	-4.4	-1.5	-2	-4.7	-6
Vi $^{0.3}$	0.61703	0.61703	0.60371	0.91506	1.12657	0.91506	0.91506	0.91506
C	-52.139	-56.1497	-65.1403	-52.3414	-21.9681	-23.7916	-55.9102	-71.3747

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 ± C

Sitting at Rest ; E = 100± C Sedentary Activity ; E = 116 ± C

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism; E	23.861	19.8503	10.8597	23.6586	54.0319	52.2084	20.0898	4.6253
Sitting at Rest ; E	47.861	43.8503	34.8597	47.6586	78.0319	76.2084	44.0898	28.6253
Sedentary Activity; E	63.861	59.8503	50.8597	63.6586	94.0319	92.2084	60.0898	44.6253

E max = pV $^{0.3}$ (42- Vpa) ; p = 20.5

V $^{0.3}$	0.61703	0.61703	0.60371	0.91506	1.12657	0.91506	0.91506	0.91506
pV $^{0.3}$	12.6491	12.6491	12.3761	18.7587	23.0947	18.7587	18.7587	18.7587
42 - Vpa	16.9	17.1	19.1	18.3	17.6	18.2	18.5	16.4
E max	213.77	216.2999	236.3827	343.2848	406.4665	341.4089	347.0365	307.6432

1/f = e $^{0.6\ (E/Emax\ -\ 0.12\ )}$

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism ;E	23.861	19.8503	10.8597	23.6586	54.0319	52.2084	20.0898	4.6253
Emax	213.77	216.2999	236.3827	343.2848	406.4665	341.4089	347.0365	307.6432
E/Emax	0.11162	0.09177	0.04594	0.06697	0.132931	0.15292	0.05789	0.015035
E/Emax - 0.12	-0.00838	-0.02823	-0.07406	-0.05303	0.01293	0.03292	-0.06211	-0.10497
1/f	0.99498	0.98877	0.95654	0.96868	1.00779	1.01995	0.96342	0.938963

Sitting at Rest ;E	47.861	43.8503	34.8597	47.6586	78.0319	76.2084	44.0898	28.6253
Emax	213.77	216.2999	236.3827	343.2848	406.4665	341.4089	347.0365	307.6432
E/Emax	0.22389	0.20273	0.147471	0.138831	0.191976	0.223217	0.127047	0.093047
E/Emax - 0.12	0.10389	0.082729	0.02747	0.018831	0.071976	0.103217	0.007047	-0.02695
1/f	1.064318	1.05089	1.01662	1.01136	1.04413	1.063888	1.004237	0.983958

Sedentary Activity ;E	63.861	59.8503	50.8597	63.6586	94.0319	92.2084	60.0898	44.6253
Emax	213.77	216.2999	236.3827	343.2848	406.4665	341.4089	347.0365	307.6432
E/Emax	0.298737	0.276701	0.215158	0.18544	0.23134	0.270082	0.173151	0.145055
E/Emax - 0.12	0.178737	0.156701	0.095158	0.06544	0.11134	0.150082	0.05315	0.025055
1/f	1.113204	1.09858	1.05876	1.04004	1.06909	1.09423	1.032405	1.01515

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	0.11162	0.09177	0.04594	0.06697	0.132931	0.15292	0.05789	0.015035
SP./SP.Scale	0.2581	0.1589	-0.0703	0.03485	0.36466	0.4646	-0.01055	-0.22483
	0	0	0	0	0	0	0	0

Sitting at Rest ;

E/Emax	0.22389	0.20273	0.147471	0.138831	0.191976	0.223217	0.127047	0.093047
SP. / SP. Scale	0.81945	0.71365	0.43736	0.39416	0.65988	0.81609	0.33523	0.165235
	1	1	0	0	1	1	0	0

Sedentary Activity ;

E/Emax	0.298737	0.276701	0.215158	0.18544	0.23134	0.270082	0.173151	0.145055
SP. /SP. Scale	1.1937	1.08351	0.7758	0.6272	0.856699	1.05041	0.56576	0.42528
	1	1	1	1	1	1	1	0

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	0.99498	0.98877	0.95654	0.96868	1.00779	1.01995	0.96342	0.938963
(M-W) ± C	23.861	19.8503	10.8597	23.6586	54.0319	52.2084	20.0898	4.6253
S(Kcal/h)	23.7412	19.6274	10.3877	22.9176	54.4528	53.24996	19.3549	4.34299
S(Watt)	27.61104	22.8266	12.0809	26.6532	63.3286	61.9297	22.5098	5.0509

Sitting at Rest ;1/f	1.064318	1.05089	1.01662	1.01136	1.04413	1.063888	1.004237	0.983958
(M-W) ± C	47.861	43.8503	34.8597	47.6586	78.0319	76.2084	44.0898	28.6253
S(Kcal/h)	50.9393	46.0818	35.4391	50.2227	81.4754	81.0772	44.2766	28.16609
S(Watt)	59.2424	53.5932	41.2156	58.409	94.7559	94.2928	51.4937	32.7572

Sedentary Act.; 1/f	1.113204	1.09858	1.05876	1.04004	1.06909	1.09423	1.032405	1.01515
(M-W) ± C	63.861	59.8503	50.8597	63.6586	94.0319	92.2084	60.0898	44.6253
S(Kcal/h)	71.0903	65.7503	53.8482	66.2075	100.5286	100.8972	62.03701	45.3014
S(Watt)	82.678	76.4676	62.6255	76.9993	116.9147	117.3434	72.149	52.6855

35^0 - Ta	6.5	7	8.3	4.4	1.5	2	4.7	6

Volume of Space (Cu.M.) =0 .69231 S(Watt) / (35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	27.61104	22.8266	12.0809	26.6532	63.3286	61.9297	22.5098	5.0509
0.69231 S	19.1154	15.8031	8.3638	18.4523	43.843	42.8746	15.5837	3.4968
Volume of Space	2.9408	2.2576	1.0077	4.1937	29.2287	21.4373	3.3157	0.5828
Sitting .;S (Watt)	59.2424	53.5932	41.2156	58.409	94.7559	94.2928	51.4937	32.7572
0.69231 S	41.0141	37.1031	28.534	40.4372	65.6005	65.2798	35.6496	22.6781
Volume of Space	6.3099	5.3004	3.4378	9.1903	43.7337	32.6399	7.585	3.7797
Sedentary. ;S (Watt)	82.678	76.4676	62.6255	76.9993	116.9147	117.3434	72.149	52.6855
0.69231 S	57.2388	52.9393	43.3562	53.3074	80.9412	81.238	49.9495	36.4747
Volume of Space	8.806	7.5628	5.2236	12.1153	53.9608	40.619	10.6276	6.0791

Date : March 7 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	28.6	28	28.1	31.8	33.5	33.1	30	29.4
RH (%)	85	89	88	71	60	58	76	79
V. at 7.65 M.; (Mps.)	0	0	0	1.1444	2.0027	1.4305	0.8583	1.4305
Vi= 0.65 V ; Mps.	0.2	0.2	0.2	0.74386	1.301755	0.929825	0.557895	0.929825
Vpa (mm.Hg.)	25.1	25	25	25.2	23.9	22.2	24.2	24.4

The Convection Heat Exchange (C) = α x $Vi^{0.3}$ $(Ta-35^{0})$

Ta - 35 ^{0}C	-6.4	-7	-6.9	-3.2	-1.5	-1.9	-5	-5.6
$Vi^{0.3}$	0.61703	0.61703	0.61703	1.04129	1.23164	1.11339	0.955194	1.11339
C	-51.3369	-56.1497	-55.3476	-43.3177	-24.017	-27.5007	-62.0876	-81.0548

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 ± C

Sitting at Rest ; E = 100± C Sedentary Activity ; E = 116 ± C

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism;E	24.6631	19.8503	20.6524	32.6823	51.983	48.4993	13.91239	-5.0548
Sitting at Rest ; E	48.6631	43.8503	44.6524	56.6823	75.98302	72.4993	37.91239	18.9452
Sedentary Activity; E	64.6631	59.8503	60.6524	72.6823	91.98302	88.4993	53.9124	34.9452

E max = $pV^{0.3}$ (42- Vpa) ; p = 20.5

$V^{0.3}$	0.61703	0.61703	0.61703	1.04129	1.23164	1.11339	0.955194	1.11339
$pV^{0.3}$	12.6491	12.6491	12.6491	21.34645	25.2486	22.8245	19.5815	22.8245
42 - Vpa	16.9	17	17	16.8	18.1	19.8	17.8	17.6
E max	213.77	215.035	215.035	358.6203	457.0002	451.925	348.55	401.7111

$1/f = e^{0.6\,(E/Emax - 0.12)}$

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism ;E	24.6631	19.8503	20.6524	32.6823	51.983	48.4993	13.91239	-5.0548
Emax	213.77	215.035	215.035	358.6203	457	451.925	348.55	401.7111
E/Emax	0.115372	0.092312	0.09604	0.091133	0.113748	0.107317	0.039915	-0.01258
E/Emax - 0.12	-0.00463	-0.02769	-0.02396	-0.02887	-0.00625	-0.01268	-0.08009	-0.13258
1/f	0.99723	0.98352	0.98573	0.98283	0.996256	0.992419	0.953085	0.923532

Sitting at Rest ;E	48.6631	43.8503	44.6524	56.6823	75.98302	72.4993	37.91239	18.9452
Emax	213.77	215.035	215.035	358.6203	457	451.925	348.55	401.7111
E/Emax	0.227642	0.203922	0.207652	0.158057	0.166265	0.16042	0.108772	0.047161
E/Emax - 0.12	0.107642	0.083922	0.087652	0.03806	0.046265	0.040423	-0.01123	-0.07288
1/f	1.06672	1.05164	1.053999	1.023097	1.02815	1.024551	0.993286	0.957238

Sedentary Activity ;E	64.6631	59.8503	60.6524	72.6823	91.98302	88.4993	53.9124	34.9452
Emax	213.77	215.035	215.035	358.6203	457	451.925	348.55	401.7111
E/Emax	0.302489	0.278328	0.282058	0.202672	0.20128	0.195827	0.154676	0.086991
E/Emax - 0.12	0.182489	0.158328	0.16206	0.082672	0.081276	0.075827	0.034676	-0.03301
1/f	1.115713	1.09966	1.102119	1.05085	1.04997	1.04655	1.02102	0.98039

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	0.115372	0.092312	0.09604	0.091133	0.113748	0.107317	0.039915	0.012583
SP./SP.Scale	0.27686	0.16156	0.1802	0.155665	0.26874	0.23659	-0.10043	-0.23709
	0	0	0	0	0	0	0	0

Sitting at Rest ;

E/Emax	0.227642	0.203922	0.207652	0.158057	0.166265	0.16042	0.108772	0.047161
SP. / SP. Scale	0.83821	0.71961	0.73826	0.49029	0.531325	0.5021	0.24386	-0.0642
	1	1	1	0	1	1	0	0

Sedentary Activity ;

E/Emax	0.302489	0.278328	0.282058	0.202672	0.20128	0.195827	0.154676	0.086991
SP. /SP. Scale	1.212445	1.09164	1.11029	0.71336	0.7064	0.679135	0.47338	0.134955
	1	1	1	1	1	1	0	0

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	0.99723	0.98352	0.98573	0.98283	0.996256	0.992419	0.953085	0.923532
(M-W) ± C	24.6631	19.8503	20.6524	32.6823	51.983	48.4993	13.91239	-5.0548
S(Kcal/h)	24.5948	19.5232	20.3577	32.1211	51.7884	48.1316	13.2597	-4.6683
S(Watt)	28.6037	22.7054	23.676	37.3569	60.2299	55.9771	15.421	-5.4292

Sitting at Rest ;1/f	1.06672	1.05164	1.053999	1.023097	1.02815	1.024551	0.993286	0.957238
(M-W) ± C	48.6631	43.8503	44.6524	56.6823	75.98302	72.4993	37.91239	18.9452
S(Kcal/h)	51.9099	46.1147	47.0636	57.9915	78.1219	74.2792	37.6578	18.1351
S(Watt)	60.3712	53.6314	54.7349	67.444	90.8558	86.3867	43.7961	21.0911

Sedentary Act.; 1/f	1.115713	1.09966	1.102119	1.05085	1.04997	1.04655	1.02102	0.98039
(M-W) ± C	64.6631	59.8503	60.6524	72.6823	91.98302	88.4993	53.9124	34.9452
S(Kcal/h)	72.1455	65.815	66.8462	76.3782	96.5794	92.6189	55.0456	34.2599
S(Watt)	83.9052	76.5428	77.7421	88.8278	112.3219	107.7158	64.0181	39.8443

35^0 - Ta	6.4	7	6.9	3.2	1.5	1.9	5	5.6

Volume of Space (Cu.M.) = 0.69231 S(Watt) / (35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	28.6037	22.7054	23.676	37.3569	60.2299	55.9771	15.421	-5.4292
0.69231 S	19.8027	15.71921	16.3911	25.8625	41.6977	38.7535	10.6761	-3.7587
Volume of Space	3.0942	2.2456	2.3755	8.082	27.7985	20.3966	2.1352	-0.6712
Sitting .;S (Watt)	60.3712	53.6314	54.7349	67.4441	90.8558	86.3867	43.7961	21.0911
0.69231 S	41.7956	37.1296	37.8936	46.69223	62.9004	59.8064	30.3205	14.6016
Volume of Space	6.5306	5.3042	5.4918	14.5913	41.9336	31.4771	6.0641	2.6074
Sedentary. ;S (Watt)	83.9052	76.5428	77.7421	88.8278	112.3219	107.7158	64.0181	39.8443
0.69231 S	58.0884	52.9914	53.8216	61.4964	77.7615	74.5727	44.3204	27.5846
Volume of Space	9.0763	7.5702	7.8002	19.2176	51.841	39.2488	8.8641	4.9258

Date : March 14 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	23.8	23.4	23.5	27	30.3	32.6	27.5	27.1
RH (%)	93	94	94	77	64	54	81	84
V. at 7.65 M.; (Mps.)	0.5722	0.8583	0	0	0	0	0	0
Vi= 0.65 V ; Mps.	0.37193	0.557895	0.2	0.2	0.2	0.2	0.2	0.2
Vpa (mm.Hg.)	20.7	20.8	20.5	20.9	21	20	22.5	23

The Convection Heat Exchange (C) = α x $Vi^{0.3}$ (Ta-35^0)

Ta - 35 ^{0}C	-11.2	-11.6	-11.5	-8	-4.7	-2.4	-7.5	-7.9
Vi $^{0.3}$	0.74326	0.83939	0.61703	0.61703	0.61703	0.61703	0.61703	0.61703
C	-108.219	-126.58	-92.246	-64.1711	-37.7005	-19.2513	-60.1604	-63.369

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 ± C

Sitting at Rest ; E = 100± C Sedentary Activity ; E = 116 ± C

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism;E	-32.2187	-50.58	-16.246	11.82229	38.2995	56.74487	15.8396	12.63102
Sitting at Rest ; E	-8.2187	-26.58	7.754	35.8289	62.2995	80.7487	39.8396	36.63102
Sedentary Activity; E	7.7813	-10.58	23.754	51.8289	78.2995	96.7487	55.8396	52.63102

E max = pV $^{0.3}$ (42- Vpa) ; p = 20.5

V $^{0.3}$	0.74326	0.83939	0.61703	0.61703	0.61703	0.61703	0.61703	0.61703
pV $^{0.3}$	15.2368	17.2075	12.6491	12.6491	12.6491	12.6491	12.6491	12.6491
42 - Vpa	21.3	21.2	21.5	21.1	21	22	19.5	19
E max	324.5445	364.7989	271.956	266.8963	265.6314	278.2805	246.6577	240.3332

1/f = e $^{0.6\ (E/Emax\ -\ 0.12\ )}$

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism;E	-32.2187	-50.58	-16.246	11.82888	38.2995	56.7487	15.8396	12.63102
Emax	324.5445	364.7989	271.956	266.8963	265.6314	278.2805	246.6577	240.3332
E/Emax	-0.09927	-0.13865	-0.05974	0.04432	0.14418	0.20393	0.06422	0.052556
E/Emax - 0.12	-0.21927	-0.25865	-0.17974	0.07568	0.024183	0.08393	-0.05578	-0.06744
1/f	0.876723	0.856252	0.89777	0.95561	1.01462	1.05165	0.96708	0.96034

Sitting at Rest ;E	-8.2187	-26.58	7.754	35.8289	62.2995	80.7487	39.8396	36.63102
Emax	324.5445	364.7989	271.956	266.8963	265.6314	278.2805	246.6577	240.3332
E/Emax	-0.02532	-0.07286	0.028512	0.134243	0.234534	0.29017	0.16152	0.152418
E/Emax - 0.12	-0.14532	-0.19286	-0.09149	0.014243	0.114534	0.17017	0.04152	0.03242
1/f	0.916499	0.89073	0.946587	1.00858	1.07114	1.1075	1.02522	1.01964

Sedentary Activity ;E	7.7813	-10.58	23.754	51.8289	78.2995	96.7487	55.8396	52.63102
Emax	324.5445	364.7989	271.956	266.8963	265.6314	278.2805	246.6577	240.3332
E/Emax	0.023976	-0.029	0.087345	0.19419	0.294767	0.34767	0.226385	0.218992
E/Emax - 0.12	-0.09602	-0.149	-0.03266	0.07419	0.17477	0.22767	0.106385	0.098992
1/f	0.94401	0.91448	0.980598	1.04552	1.1106	1.14637	1.06591	1.061194

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	-0.09927	-0.13865	-0.05974	0.04432	0.14418	0.20393	0.06422	0.052556
SP./SP.Scale	-0.7964	-0.9932	-0.5987	-0.0784	0.4209	0.71965	0.0211	-0.03722
	0	0	0	0	0	1	0	0

Sitting at Rest ;

E/Emax	-0.02532	-0.07286	0.028512	0.134243	0.234534	0.29017	0.16152	0.152418
SP. / SP. Scale	-0.4266	-0.6643	-0.15744	0.371215	0.87267	1.1509	0.5076	0.46209
	0	0	0	0	1	1	1	0

Sedentary Activity ;

E/Emax	0.023976	0.029002	0.087345	0.19419	0.294767	0.34767	0.226385	0.218992
SP. /SP. Scale	-0.18012	-0.44501	0.13676	0.67095	1.1738	1.43835	0.8319	0.79496
	0	0	0	1	1	1	1	1

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	0.876723	0.856252	0.89777	0.95561	1.01462	1.05165	0.96708	0.96034
(M-W) ± C	-32.2187	-50.58	-16.246	11.82888	38.2995	56.7487	15.8396	12.63102
S(Kcal/h)	-31.342	-43.3092	-14.5852	11.3038	38.8594	59.6798	15.3182	12.13007
S(Watt)	-36.4507	-50.3686	-16.9626	13.1463	45.1935	69.4076	17.815	14.1073

Sitting at Rest ;1/f	0.916499	0.89073	0.946587	1.00858	1.07114	1.1075	1.02522	1.01964
(M-W) ± C	-8.2187	-26.58	7.754	35.8289	62.2995	80.7487	39.8396	36.63102
S(Kcal/h)	-7.5324	-23.6756	7.3398	36.13631	66.7315	89.4292	40.8444	37.3505
S(Watt)	-8.7602	-27.5347	8.5362	42.0265	77.6087	104.0061	47.502	43.4386

Sedentary Act.; 1/f	0.94401	0.91448	0.980598	1.04552	1.1106	1.14637	1.06591	1.061194
(M-W) ± C	7.7813	-10.58	23.754	51.8289	78.2995	96.7487	55.8396	52.63102
S(Kcal/h)	7.3456	-9.6752	23.2922	54.1882	86.9594	110.9098	59.51999	55.8517
S(Watt)	8.543	-11.2523	27.0888	63.0208	101.1338	128.9881	69.2217	64.9556

35^0 - Ta	11.2	11.6	11.5	8	4.7	2.4	7.5	7.9

Volume of Space (Cu.M.) = 0.69231 S(Watt) /(35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	-36.4507	-50.3686	-16.9626	13.1463	45.1935	69.4076	17.815	14.1073
0.69231 S	-25.2352	-34.8707	-11.7433	9.1013	31.2879	48.0516	12.3335	9.7666
Volume of Space	-2.2531	-3.0061	-1.0212	1.1377	6.657	20.0215	1.6445	1.2363
Sitting .;S (Watt)	-8.7602	-27.5347	8.5362	42.0265	77.6087	104.0061	47.502	43.4386
0.69231 S	-6.0648	-19.0626	5.90972	29.0954	53.7293	72.0045	32.8861	30.073
Volume of Space	-0.5415	-1.6433	0.5139	3.6369	11.4318	30.0019	4.3848	3.8067
Sedentary. ;S (Watt)	8.543	-11.2523	27.0888	63.0208	101.1338	128.9881	69.2217	64.9556
0.69231 S	5.9144	-7.79	18.7539	43.6299	70.01595	89.2998	47.9229	44.9694
Volume of Space	0.5281	-0.6716	1.6308	5.4537	14.897	37.2083	6.3897	5.6923

Date : March 21 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	27.4	27.1	27.5	31.4	30.5	28.4	28.2	27.7
RH (%)	82	84	86	66	83	85	78	85
V. at 7.65 M.; (Mps.)	0	0	0	0.5722	0	0.8583	1.1444	0
Vi= 0.65 V ; Mps.	0.2	0.2	0.2	0.37193	0.2	0.558	0.7436	0.2
Vpa (mm.Hg.)	22.7	23	23.9	22.6	27.3	24.9	22.6	23.9

The Convection Heat Exchange (C) = α x $Vi^{0.3}$ (Ta-35^0)

Ta - 35 ^{0}C	-7.6	-7.9	-7.5	-3.6	-4.5	-6.6	-6.8	-7.3
Vi $^{0.3}$	0.61703	0.61703	0.61703	0.74326	0.61703	0.83944	0.91496	0.61703
C	-60.9626	-63.369	-60.1604	-34.7846	-36.0963	-72.024	-80.8825	-58.5561

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 $\pm$ C

Sitting at Rest ; E = 100 $\pm$ C Sedentary Activity ; E = 116 $\pm$ C

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism; E	15.0374	12.63102	15.8396	41.2154	39.9037	3.976	-4.8825	17.4439
Sitting at Rest ; E	39.0374	36.63102	39.8396	65.2154	63.9037	27.976	20.8825	41.4439
Sedentary Activity; E	55.0374	52.63102	55.8396	81.2154	79.9037	43.976	36.8825	57.4439

E max = pV $^{0.3}$ (42- Vpa) ; p = 20.5

V $^{0.3}$	0.61703	0.61703	0.61703	0.74326	0.61703	0.83944	0.91496	0.61703
pV $^{0.3}$	12.6491	12.6491	12.6491	15.2368	12.64912	17.2085	18.7567	12.6491
42 - Vpa	19.3	19	18.1	19.4	14.7	17.1	19.4	18.1
E max	244.1279	240.3332	228.949	295.5945	185.942	294.2657	363.8796	228.949

1/f = e $^{0.6\ (E/Emax\ -\ 0.12\ )}$

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism ;E	15.0374	12.63102	15.8396	41.2154	39.9037	3.976	-4.8825	17.4439
Emax	244.1279	240.3332	228.949	295.5945	185.942	294.2657	363.8796	228.949
E/Emax	0.061596	0.052556	0.069184	0.139432	0.2146	0.013512	-0.01342	0.076191
E/Emax - 0.12	-0.0584	-0.06744	-0.05082	0.019432	0.094603	-0.10649	-0.13342	-0.04381
1/f	0.965565	0.960342	0.969971	1.011728	1.058404	0.93811	0.92307	0.974057

Sitting at Rest ;E	39.0374	36.63102	39.8396	65.2154	63.9037	27.976	20.8825	41.4439
Emax	2441279	240.3332	228.949	295.5945	185.942	294.2657	363.8796	228.949
E/Emax	0.159906	0.15242	0.17401	0.22062	0.343675	0.095071	0.057388	0.18102
E/Emax - 0.12	0.039906	0.032418	0.05401	0.100625	0.223675	-0.02493	-0.06261	0.06102
1/f	1.02423	1.019641	1.03294	1.062235	1.14363	0.985154	0.96313	1.03729

Sedentary Activity ;E	55.0374	52.63102	55.8396	81.2154	79.9037	43.976	36.8825	57.4439
Emax	244.1279	240.3332	228.949	295.5945	185.942	294.2657	363.8796	228.949
E/Emax	0.225445	218992	0.243895	0.274753	0.429724	0.149443	0.101359	0.2509
E/Emax - 0.12	0.105445	0.098992	0.123895	0.154753	0.309724	0.029443	-0.01864	0.130903
1/f	1.06531	1.061195	1.07717	1.097299	1.204223	1.01782	0.988878	1.08171

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	0.061596	0.052556	0.069184	0.139432	0.2146	0.013512	-0.01342	0.076191
SP./SP.Scale	0.00798	-0.03722	0.04592	0.39716	0.773	-0.23244	-0.36709	0.080955
	0	0	0	0	1	0	0	0

Sitting at Rest ;

E/Emax	0.159906	0.15242	0.17401	0.22062	0.343675	0.095071	0.057388	0.18102
SP. / SP. Scale	0.4995	0.4621	0.57005	0.8031	1.4184	0.17536	-0.01306	0.6051
	0	0	1	1	1	0	0	1

Sedentary Activity ;

E/Emax	0.225445	0.218992	0.243895	0.274753	0.429724	0.149443	0.101359	0.2509
SP. /SP. Scale	0.82723	0.79496	0.919475	1.0738	1.8486	0.447215	0.206796	0.9545
	1	1	1	1	2	0	0	1

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	0.965565	0.960342	0.969971	1.011728	1.058404	0.93811	0.92307	0.974057
(M-W) ± C	15.0374	12.63102	15.8396	41.2154	39.9037	3.976	-4.8825	17.4439
S(Kcal/h)	14.5196	12.1301	15.36395	41.6988	42.2342	3.72993	-3.9594	16.9914
S(Watt)	16.8863	14.1073	17.8683	48.4957	49.1184	4.3379	-4.6048	19.7609

Sitting at Rest ;1/f	1.02423	1.019641	1.03294	1.062235	1.14363	0.985154	0.96313	1.03729
(M-W) ± C	39.0374	36.63102	39.8396	65.2154	63.9037	27.976	20.8825	41.4439
S(Kcal/h)	39.9833	37.3505	41.1519	69.2741	73.0822	27.5607	20.1126	42.9893
S(Watt)	46.5006	43.4386	47.8597	80.5658	84.9946	32.0531	23.3909	49.9966

Sedentary Act.; 1/f	1.06531	1.061195	1.07717	1.097299	1.204223	1.01782	0.988878	1.08171
(M-W) ± C	55.0374	52.63102	55.8396	81.2154	79.9037	43.976	36.8825	57.4439
S(Kcal/h)	58.6319	55.8517	60.1487	89.1176	96.2219	44.7597	36.4723	62.1376
S(Watt)	68.1889	64.9556	69.953	103.6437	111.906	52.0555	42.4173	72.2661

35^0 - Ta	7.6	7.9	7.5	3.6	4.5	6.6	6.8	7.3

Volume of Space (Cu.M.) =0.69231 S(Watt) / (35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	16.8863	14.1073	17.8683	48.4957	49.1184	4.3379	-4.6048	19.7609
0.69231 S	11.6905	9.7666	12.3704	33.57404	34.0052	3.00317	-3.18796	13.6807
Volume of Space	1.5382	1.2363	1.6494	9.3261	7.5567	0.455	-0.4688	1.8741
Sitting .;S (Watt)	46.5006	43.4386	47.8597	80.5658	84.9946	32.0531	23.3909	49.9966
0.69231 S	32.1928	30.073	33.1337	55.7765	58.8426	22.1907	16.1938	34.6132
Volume of Space	4.2359	3.8067	4.4178	15.4935	13.0761	3.3622	2.3814	4.7415
Sedentary. ;S (Watt)	68.1889	64.9556	69.953	103.6437	111.906	52.0555	42.4173	72.2661
0.69231 S	47.2079	44.9694	48.4292	71.7536	77.4737	36.0385	29.3659	50.0305
Volume of Space	6.2116	5.6923	6.4572	19.9316	17.2164	5.4604	4.3185	6.8535

Date : March 28 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	29	28.5	27.6	30.8	34.5	35.9	32	30
RH (%)	84	86	74	63	50	43	67	73
V. at 7.65 M.; (Mps.)	0.5722	0	0.5722	1.4305	0.8583	1.144	0	0.5722
Vi= 0.65 V ; Mps.	0.37193	0.2	0.37193	0.929825	0.558	0.7436	0.2	0.37193
Vpa (mm.Hg.)	25.3	24.8	20.9	21	20.5	19	23.6	23.3

The Convection Heat Exchange (C) = α x $Vi^{0.3}$ ($Ta-35^0$)

Ta - 35 ^{0}C	-6	-6.5	-7.4	-4.2	-0.5	0.9	-3	-5
Vi $^{0.3}$	0.74326	0.61703	0.74326	0.97841	0.83944	0.91496	0.61703	0.74326
C	-55.6343	-52.139	-71.5016	-53.4212	-6.002	10.705	-24.0642	-48.3119

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 ± C

Sitting at Rest ; E = 100± C Sedentary Activity ; E = 116 ± C

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism; E	20.3657	23.861	4.4984	22.5788	69.998	86.705	51.9358	27.6881
Sitting at Rest ; E	44.3657	47.861	28.4984	46.5788	93.998	110.705	75.9358	51.6881
Sedentary Activity; E	60.3657	63.861	44.4984	62.5788	109.998	126.705	91.9358	67.6881

E max = pV $^{0.3}$ (42- Vpa) ; p = 20.5

V $^{0.3}$	0.74326	0.61703	0.74326	0.97841	0.83944	0.91496	0.61703	0.74326
pV $^{0.3}$	15.2368	12.6491	15.2368	20.0574	17.2085	18.7567	12.6491	15.2368
42 - Vpa	16.7	17.2	21.1	21	21.5	23	18.4	18.7
E max	254.4551	217.5648	321.4971	421.2055	369.9832	431.4036	232.7437	284.9287

1/f = e $^{0.6\ (E/Emax\ -\ 0.12\ )}$

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism ;E	20.3657	23.861	4.4984	22.5788	69.998	86.705	51.9358	27.6881
Emax	254.4551	217.5648	321.4971	421.2055	369.9832	431.4036	232.7437	284.9287
E/Emax	0.08004	0.109673	0.013992	0.05361	0.18919	0.20098	0.22315	0.097176
E/Emax - 0.12	-0.03996	-0.01033	-0.10601	-0.06664	0.06919	0.08098	0.10315	-0.02282
1/f	0.97631	0.99382	0.9384	0.96095	1.0424	1.0498	1.06384	0.9864

Sitting at Rest ;E	44.3657	47.861	28.4984	46.5788	93.998	110.705	75.9358	51.6881
Emax	254.4551	217.5648	321.4971	421.2055	369.9832	431.4036	232.7437	284.9287
E/Emax	0.17436	21999	0.08864	0.11058	0.25406	0.25662	0.32626	0.18141
E/Emax - 0.12	0.05436	0.099985	-0.03136	-0.00942	0.13406	0.136616	0.20626	0.06141
1/f	1.03315	1.06183	0.98136	0.99437	1.0838	1.08542	1.1317	1.03753

Sedentary Activity ;E	60.3657	63.861	44.4984	62.5788	109.998	126.705	91.9358	67.6881
Emax	254.4551	217.5648	321.4971	421.2055	369.9832	431.4036	232.7437	284.9287
E/Emax	0.23724	0.29353	0.13841	0.148571	0.29731	0.2937	0.39501	0.23756
E/Emax - 0.12	0.11724	0.17353	0.01841	0.02857	0.17731	0.1737	0.27501	0.11756
1/f	1.0729	1.10973	1.01111	1.01729	1.11225	1.1098	1.179399	1.0731

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	0.08004	0.109673	0.013992	0.05361	0.18919	0.20098	0.22315	0.097176
SP./SP.Scale	0.1002	0.2484	-0.23004	-0.03195	0.64595	0.7049	0.81575	0.18588
	0	0	0	0	1	1	1	0

Sitting at Rest ;

E/Emax	0.17436	0.21999	0.08864	0.11058	0.25406	0.25662	0.32626	0.18141
SP. / SP. Scale	0.5718	0.79995	0.1432	0.2529	0.9703	0.9831	1.3313	0.60705
	1	1	0	0	1	1	1	1

Sedentary Activity ;

E/Emax	0.23724	0.29353	0.13841	0.148571	0.29731	0.2937	0.39501	0.23756
SP. /SP. Scale	0.8862	1.16765	0.39205	0.44286	1.18655	1.1685	1.67505	0.8878
	1	1	0	0	1	1	2	1

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	0.97631	0.99382	0.9384	0.96095	1.0424	1.0498	1.06384	0.9864
(M-W) ± C	20.3657	23.861	4.4984	22.5788	69.998	86.705	51.9358	27.6881
S(Kcal/h)	19.8832	23.7135	4.2213	21.6971	72.9659	91.0229	55.2514	27.3115
S(Watt)	23.1242	27.5788	4.9094	25.2337	84.8594	105.8596	64.2574	31.7633

Sitting at Rest ;1/f	1.03315	1.06183	0.98136	0.99437	1.0838	1.08542	1.1317	1.03753
(M-W) ± C	44.3657	47.861	28.4984	46.5788	93.998	110.705	75.9358	51.6881
S(Kcal/h)	45.8364	50.8202	27.9672	46.3166	101.875	120.1614	85.9365	53.628
S(Watt)	53.3078	59.1039	32.5258	53.8662	118.4807	139.7477	99.9442	62.3693

Sedentary Act.; 1/f	1.0729	1.10973	1.01111	1.01729	1.11225	1.1098	1.179399	1.0731
(M-W) ± C	60.3657	63.861	44.4984	62.5788	109.998	126.705	91.9358	67.6881
S(Kcal/h)	64.7664	70.8685	44.9928	63.6608	122.3453	140.6172	108.429	72.6361
S(Watt)	75.3233	82.42	52.3266	74.0375	142.2876	163.5378	126.1029	84.4758

35^0 - Ta	6	6.5	7.4	4.2	0.5	-0.9	3	5

Volume of Space (Cu.M.) = 0.69231 S(Watt) / (35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	23.1242	27.5788	4.9094	25.2337	84.8594	105.8596	64.2574	31.7633
0.69231 S	16.0091	19.0931	3.3988	17.4696	58.74898	73.2877	44.486	21.9901
Volume of Space	2.6682	2.9374	0.4593	4.1594	117.498	-81.4308	14.8287	4.398

Sitting .;S (Watt)	53.3078	59.1039	32.5258	53.8662	118.4807	139.7477	99.9442	62.3693
0.69231 S	36.9055	40.9183	22.51797	37.2921	82.025	96.7488	69.1924	43.1789
Volume of Space	6.1509	6.2951	3.043	8.8791	164.05	-107.499	23.0641	8.6358

Sedentary. ;S (Watt)	75.3233	82.42	52.3266	74.0375	142.2876	163.5378	126.1029	84.4758
0.69231 S	52.1471	57.0602	36.2262	51.2569	98.5071	113.2189	87.3023	58.4834
Volume of Space	8.6912	8.7785	4.8954	12.204	197.0142	-125.799	29.1008	11.6967

Date : April 1 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	29.2	28.8	28.5	31	34.1	34.4	26.3	27.3
RH (%)	81	85	86	74	62	57	92	91
V. at 7.65 M.; (Mps.)	0	0	0	0	0.8583	1.7166	1.7166	0
Vi= 0.65 V ; Mps.	0.2	0.2	0.2	0.2	0.5579	1.11579	1.11579	0.2
Vpa (mm.Hg.)	25	25.1	25	24.8	25.2	23.6	23.5	25

The Convection Heat Exchange (C) = α x $Vi^{0.3}$ ($Ta-35^0$)

Ta - 35 ^{0}C	-5.8	-6.2	-6.5	-4	-0.9	-0.6	-8.7	-7.7
Vi $^{0.3}$	0.61703	0.61703	0.61703	0.61703	0.8394	1.0334	1.0334	0.61703
C	-46.5241	-49.7326	-52.139	-32.0856	-9.821	-8.0605	-116.878	-61.7647

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 ± C

Sitting at Rest ; E = 100± C Sedentary Activity ; E = 116 ± C

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism; E	29.4759	26.2674	23.861	43.9144	66.179	67.9395	-40.8775	14.2353
Sitting at Rest ; E	53.4759	50.2674	47.861	67.9144	90.179	91.9395	-16.8775	38.2353
Sedentary Activity; E	69.4759	66.2674	63.861	83.9144	106.179	107.9395	-0.8775	54.2353

E max = pV $^{0.3}$ (42- Vpa) ; p = 20.5

V $^{0.3}$	0.61703	0.61703	0.61703	0.61703	0.8394	1.0334	1.0334	0.61703
pV $^{0.3}$	12.6491	12.6491	12.6491	12.6491	17.2077	21.1847	21.1847	12.6491
42 - Vpa	17	16.9	17	17.2	16.8	18.4	18.5	17
E max	215.035	213.77	215.035	217.5648	289.0894	389.7985	385.5615	215.035

1/f = e $^{0.6\ (E/Emax\ -\ 0.12\ )}$

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism ;E	29.4759	26.2674	23.861	43.9144	66.179	67.9395	-40.8775	14.2353
Emax	215.035	213.77	218.035	217.5648	289.0894	389.7985	385.5615	215.035
E/Emax	0.13707	0.12288	0.11096	0.20185	0.22892	0.17429	-0.10602	0.0662
E/Emax - 0.12	0.01707	0.002877	0.00904	0.08185	0.10892	0.05429	-0.22602	-0.0538
1/f	1.0103	1.00173	0.99459	1.0503	1.06754	1.03311	0.8732	0.96824

Sitting at Rest ;E	53.4759	50.2674	47.861	67.9144	90.179	91.9395	-16.8775	38.2353
Emax	215.035	213.77	215.035	217.5648	289.0894	389.7985	385.5615	215.035
E/Emax	0.248685	0.23515	0.222573	0.312157	0.311942	0.235864	-0.04377	0.17781
E/Emax - 0.12	0.128685	0.115147	0.102573	0.192157	0.191942	0.115864	-0.07623	0.05781

1/f	1.0803	1.07153	1.06348	1.1222	1.12206	1.071992	0.95529	1.03529
Sedentary Activity ;E	69.4759	66.2674	63.861	83.9144	106.179	107.9395	-0.8775	54.2353
Emax	215.035	213.77	215.035	217.5648	289.0894	389.7985	385.5615	215.035
E/Emax	0.32309	0.309994	0.29698	0.385998	0.36729	0.27691	-0.00228	0.252216
E/Emax - 0.12	0.20309	0.189994	0.17698	0.265698	0.24729	0.15691	-0.12228	0.132216
1/f	1.12959	1.12075	1.11203	1.17283	1.15995	1.09872	0.929261	1.082561

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	0.13707	0.12288	0.11096	0.20185	0.22892	0.17429	-0.10602	0.0662
SP./SP.Scale	0.38535	0.3144	0.2548	0.70925	0.8446	0.57145	-0.8301	0.031
	0	0	0	1	1	1	0	0

Sitting at Rest ;

E/Emax	0.248685	0.23515	0.22573	0.312157	0.311942	0.235864	-0.04377	0.17781
SP. / SP. Scale	0.9434	0.87575	0.81287	1.2608	1.25971	0.87932	-0.51887	0.58905
	1	1	1	1	1	1	0	1

Sedentary Activity ;

E/Emax	0.32309	0.309994	0.29698	0.385998	0.36729	0.27691	-0.00228	0.252216
SP. /SP. Scale	1.3155	1.24997	1.1849	1.62999	1.5365	1.08455	-0.42518	0.96108
	1	1	1	2	2	1	0	1

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	1.0103	1.00173	0.99459	1.0503	1.06754	1.03311	0.8732	0.96824
(M-W) ± C	29.4759	26.2674	23.861	43.9144	66.179	67.9395	-40.8775	14.2353
S(Kcal/h)	29.7795	26.3128	23.7319	46.1233	70.6487	70.18898	-40.0043	13.7832
S(Watt)	34.6336	30.6018	27.6002	53.6414	82.1645	81.6298	-46.525	16.0298

Sitting at Rest ;1/f	1.0803	1.07153	1.06348	1.1222	1.12206	1.071992	0.95529	1.03529
(M-W) ± C	53.4759	50.2674	47.861	67.9144	90.179	91.9395	-16.8775	38.2353
S(Kcal/h)	57.77001	53.863	50.8992	76.2135	101.1862	98.5584	-15.9222	39.5846

S(Watt)	67.18653	62.6427	59.1958	88.6363	117.6796	114.6234	-18.5175	46.0369
Sedentary Act.; 1/f	1.12959	1.12075	1.11203	1.17283	1.15995	1.09872	0.929261	1.082561
(M-W) ± C	69.4759	66.2674	63.861	83.9144	106.179	107.9395	-0.08775	54.2353
S(Kcal/h)	78.4793	74.2692	71.0153	98.4173	123.1623	118.5953	-0.81543	58.713
S(Watt)	91.2714	86.3751	82.5908	114.4593	143.2378	137.9263	-0.94834	68.2832

35^0 - Ta	5.8	6.2	6.5	4	0.9	0.6	8.7	7.7

Volume of Space (Cu.M.) =0 .69231 S(Watt) / (35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	34.6336	30.6018	27.6002	53.6414	82.1645	81.6298	-46.525	16.0298
0.69231 S	23.9772	21.186	19.1079	37.1365	56.8833	56.5131	-32.2097	11.0976
Volume of Space	4.134	3.4171	2.9397	9.2841	63.2037	94.1885	-3.7023	1.4412

Sitting .;S (Watt)	67.18653	62.6427	59.1958	88.6363	117.6796	114.6234	-18.5175	46.0369
0.69231 S	46.5139	43.3682	40.9818	61.3138	81.4708	79.3549	-12.8199	31.8718
Volume of Space	8.0196	6.9949	6.3049	15.3285	90.5231	132.2582	-1.4736	4.1392

Sedentary. ;S (Watt)	91.2714	86.3751	82.5908	114.4593	143.2378	137.9263	-0.94834	68.2832
0.69231 S	63.1881	59.7983	57.1785	79.2414	99.164	95.4878	-0.65655	47.2732
Volume of Space	10.8945	9.6449	8.7967	19.8104	110.1822	159.1463	-0.0755	6.1394

Date : April 7 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	29.6	29.1	29.6	33	34.2	35.1	31.5	30.2
RH (%)	82	86	82	59	61	56	71	81
V. at 7.65 M.; (Mps.)	0.5722	0.5722	0	2.2888	1.7166	1.1444	0	0
Vi= 0.65 V ; Mps.	0.37193	0.37193	0.2	1.4877	1.11579	0.74386	0.2	0.2
Vpa (mm.Hg.)	25.5	26.2	25.9	22.2	25.1	23.4	24.9	26.4

The Convection Heat Exchange (C) = α x $Vi^{0.3}$ $(Ta-35^{0})$

Ta - 35 ^{0}C	-5.4	-5.9	-5.4	-2	-0.8	0.1	-3.5	-4.8
$Vi^{0.3}$	0.7433	0.7433	0.61703	1.1266	1.0334	0.91506	0.61703	0.61703
C	-52.1797	-57.0111	-43.3155	-29.2916	-10.7474	1.18958	-28.0749	-38.5027

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 $\pm$ C

Sitting at Rest ; E = 100 $\pm$ C Sedentary Activity ; E = 116 $\pm$ C

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism; E	23.8203	18.9889	32.6845	46.7084	65.2526	77.1896	47.9251	37.4973
Sitting at Rest ; E	47.8203	42.9889	56.6845	70.7084	89.2526	101.1896	71.9251	61.4973
Sedentary Activity; E	63.8203	58.9889	72.6845	86.7084	105.2526	117.1896	87.9251	77.4973

E max = $pV^{0.3}$ (42- Vpa) ; p = 20.5

$V^{0.3}$	0.7433	0.7433	0.61703	1.1266	1.0334	0.91506	0.61703	0.61703
$pV^{0.3}$	15.2377	15.2377	12.6491	23.0953	21.1847	18.7587	12.6491	12.6491
42 - Vpa	16.5	15.8	16.1	19.8	16.9	18.6	17.1	15.6
E max	251.4212	240.7549	203.6508	457.2869	358.0214	348.9124	216.2999	197.3262

$1/f = e^{0.6\,(E/Emax - 0.12)}$

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism ;E	23.8203	18.9889	32.6845	46.7084	65.2526	77.1896	47.9251	37.4973
Emax	251.4212	240.7549	203.6508	457.2869	358.0214	348.9124	216.2999	197.3262
E/Emax	0.09474	0.07887	0.16049	0.10214	0.18226	0.22123	0.22157	0.19003
E/Emax - 0.12	-0.02526	-0.04113	0.04049	-0.01786	0.06226	0.10123	0.10157	0.07003
1/f	0.98496	0.97563	1.0246	0.98934	1.03806	1.0626	1.0628	1.04291

Sitting at Rest ;E	47.8203	42.9889	56.6845	70.7084	89.2526	101.1896	71.9251	61.4973
Emax	251.4212	240.7549	203.6508	457.2869	358.0214	348.9124	216.2999	197.3262
E/Emax	0.1902	0.17856	0.27834	0.15463	0.2493	0.29001	0.3325	0.31165
E/Emax - 0.12	0.0702	0.05856	0.15834	0.03463	0.1293	0.17001	0.2125	0.19165
1/f	1.04302	1.0358	1.0997	1.02099	1.0807	1.1074	1.136	1.1219

Sedentary Activity ;E	63.8203	58.9889	72.6845	86.7084	105.2526	117.1896	87.9251	77.4973
Emax	251.4212	240.7549	203.6508	457.2869	358.0214	348.9124	216.2999	197.3262
E/Emax	0.25384	0.24502	0.35691	0.189615	0.293984	0.335871	0.406496	0.392737
E/Emax - 0.12	0.13384	0.12502	0.23691	0.069615	0.173984	0.215871	0.286496	0.272737
1/f	1.0836	1.0779	1.15274	1.04265	1.11003	1.138285	1.187556	1.17779

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	0.09474	0.07887	0.16049	0.10214	0.18226	0.22123	0.22157	0.19003
SP./SP.Scale	0.1737	0.09435	0.50245	0.2107	0.6113	0.80615	0.80785	0.65015
	0	0	1	0	1	1	1	1

Sitting at Rest ;

E/Emax	0.1902	0.17856	0.27834	0.15463	0.2493	0.29001	0.3325	0.31165
SP. / SP. Scale	0.651	0.5928	1.0917	0.47315	0.9465	1.15005	1.3625	1.25825
	1	1	1	0	1	1	1	1

Sedentary Activity ;

E/Emax	0.25384	0.24502	0.35691	0.189615	0.293984	0.335871	0.406496	0.392737
SP. /SP. Scale	0.9692	0.9251	1.48455	0.648075	1.16992	1.37936	1.73248	1.663685
	1	1	1	1	1	1	2	2

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	0.98496	0.97563	1.0246	0.98934	1.03806	1.0626	1.0628	1.04291
(M-W) ± C	23.8203	18.9889	32.6845	46.7084	65.2526	77.1896	47.9251	37.4973
S(Kcal/h)	23.46204	18.5261	33.4885	46.2105	67.7361	82.0217	50.9348	39.10631
S(Watt)	27.2864	21.5459	38.9472	53.7428	78.7771	95.3912	59.2372	45.48064

Sitting at Rest ;1/f	1.04302	1.0358	1.0997	1.02099	1.0807	1.1074	1.136	1.1219
(M-W) ± C	47.8203	42.9889	56.6845	70.7084	89.2526	101.1896	71.9251	61.4973
S(Kcal/h)	49.8775	44.5279	62.3359	72.19257	96.4553	112.0574	81.7069	68.9938

S(Watt)	58.0076	51.78595	72.4967	83.95996	112.1775	130.3227	95.0251	80.2398
Sedentary Act.; 1/f	1.0836	1.0779	1.15274	1.04265	1.11003	1.138285	1.187556	1.17779
(M-W) ± C	63.8203	58.9889	72.6845	86.7084	105.2526	117.1896	87.9251	77.4973
S(Kcal/h)	69.1557	63.5841	83.7863	90.4065	116.8335	133.3952	104.416	91.2755
S(Watt)	80.4281	73.9483	97.4435	105.1428	135.8774	155.1386	121.4358	106.1535

35^0 - Ta	5.4	5.9	5.4	2	0.8	-0.1	3.5	4.8

Volume of Space (Cu.M.) =0 .69231 S(Watt) / (35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	27.2864	21.5459	38.9472	53.7428	78.7771	95.3912	59.2372	45.48064
0.69231 S	18.8906	14.9164	26.9635	37.2067	54.5382	66.0403	41.0105	31.4867
Volume of Space	3.4983	2.5282	4.9932	18.6034	68.1728	-660.403	11.7173	6.5597

Sitting .;S (Watt)	58.0076	51.78595	72.4967	83.95996	112.1775	130.3227	95.0251	80.2398
0.69231 S	40.15922	35.85193	50.1902	58.1263	77.6616	90.2237	65.7869	55.5508
Volume of Space	7.4369	6.0766	9.2945	29.0632	97.077	-902.24	18.7963	11.5731

Sedentary. ;S (Watt)	80.4281	73.9483	97.4435	105.1428	135.8774	155.1386	121.4358	106.1535
0.69231 S	55.68118	51.1952	67.4611	72.7914	94.06929	107.404	84.0712	73.4911
Volume of Space	10.3113	8.6772	12.4928	36.3957	117.5866	-1074.04	24.0203	15.3106

Date : AprilL 14 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	30	29.5	29.4	32.8	35.7	35.5	32.3	31.2
RH (%)	83	82	85	66	52	52	64	72
V. at 7.65 M.; (Mps.)	0	0	0	0.5722	1.7166	0.8583	0.5722	0
Vi= 0.65 V ; Mps.	26.6	25.5	25.4	24.5	22.7	22.5	23.4	24.5
Vpa (mm.Hg.)	0.2	0.2	0.2	0.37193	1.11579	0.558	0.37193	0.2

The Convection Heat Exchange (C) = α x Vi $^{0.3}$ (Ta-35^0)

Ta - 35 ^{0}C	-5	-5.5	-5.6	-2.2	0.7	0.5	-2.7	-3.8
Vi $^{0.3}$	0.61703	0.61703	0.61703	0.74326	1.0334	0.83944	0.74326	0.61703
C	-40.107	-44.1176	-44.9198	-21.2572	9.40394	5.45636	-26.0884	-30.4813

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 ±C

Sitting at Rest ; E = 100± C Sedentary Activity ; E = 116 ± C

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism; E	35.89305	31.8824	31.0802	54.7428	85.4039	81.4564	49.9116	45.5187
Sitting at Rest ; E	59.89305	55.8824	55.0802	78.7428	109.4039	105.4564	73.9116	69.5187
Sedentary Activity; E	75.89305	71.8824	71.0802	94.7428	125.4039	121.4564	89.9116	85.5187

E max = pV $^{0.3}$ (42- Vpa) ; p = 20.5

V $^{0.3}$	0.61703	0.61703	0.61703	0.74326	1.0334	0.83944	0.74326	0.61703
pV $^{0.3}$	12.64912	12.64912	12.64912	15.2368	21.1847	17.2085	15.2368	12.6491
42 - Vpa	15.4	16.5	16.6	17.5	19.3	19.5	18.6	17.5
E max	194.7964	208.7104	209.9753	266.6445	408.8647	335.566	283.405	221.3595

1/f = e $^{0.6\ (E/Emax\ -\ 0.12\ )}$

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism ;E	35.89305	31.8824	31.0802	54.7428	85.4039	81.4564	49.9116	45.5187
Emax	194.7964	208.7104	209.9753	266.6445	408.8647	335.566	283.405	221.3595
E/Emax	0.18425	0.15276	0.14802	0.205303	0.20888	0.24274	0.176114	0.20563
E/Emax - 0.12	0.06425	0.03276	0.02802	0.085303	0.08888	0.12274	0.056114	0.08563
1/f	1.0393	1.01985	1.01695	1.05251	1.054776	1.07643	1.03424	1.05272

Sitting at Rest ;E	59.89305	55.8824	55.0802	78.7428	109.4039	105.4564	73.9116	69.5187
Emax	194.7964	208.7104	209.9753	266.6445	408.8647	335.566	283.405	221.3595
E/Emax	0.307465	0.267751	0.262318	0.29531	0.26758	0.31426	0.2608	0.31405
E/Emax - 0.12	0.187465	0.147751	0.142318	0.17531	0.14758	0.19426	0.1408	0.19405
1/f	1.11905	1.092699	1.08914	1.11092	1.0926	1.1236	1.0882	1.1235

Sedentary Activity ;E	75.8905	71.8824	71.0802	94.7428	125.4039	121.4564	89.9116	85.5187
Emax	194.7964	208.7104	209.9753	266.6445	408.8647	335.566	283.405	221.3595
E/Emax	0.3896	0.344412	0.33852	0.355315	0.30671	0.36194	0.317255	0.38633
E/Emax - 0.12	0.2696	0.2244	0.21852	0.23532	0.18671	0.24194	0.19725	0.2663
1/f	1.1756	1.14413	1.14009	1.1516	1.11854	1.15623	1.12564	1.17328

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	0.18425	0.15276	0.14802	0.205303	0.20888	0.24274	0.176114	0.20563
SP./SP.Scale	0.62125	0.4638	0.4401	0.726515	0.7444	0.9137	0.58057	0.72815
	1	0	0	1	1	1	1	1

Sitting at Rest ;

E/Emax	0.307465	0.267751	0.262318	0.29531	0.26758	0.31426	0.2608	0.31405
SP. / SP. Scale	1.23732	1.03878	1.01159	1.17655	1.0379	1.2713	1.004	1.27025
	1	1	1	1	1	1	1	1

Sedentary Activity ;

E/Emax	0.3896	0.344412	0.33852	0.355315	0.30671	0.36194	0.317255	0.38633
SP. /SP. Scale	1.648	1.42206	1.3926	1.4766	1.2336	1.5097	1.2863	1.6317
	2	1	1	1	1	2	1	2

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	1.0393	1.01985	1.01695	1.05251	1.05478	1.07643	1.03424	1.05272
(M-W) ± C	35.89305	31.8824	31.0802	54.7428	85.4039	81.4564	49.9116	45.5187
S(Kcal/h)	37.3036	32.5153	31.607	57.6173	90.0823	87.6821	51.6206	47.9184
S(Watt)	43.3841	37.8153	36.75895	67.00897	104.7657	101.9743	60.0347	55.7292

Sitting at Rest ;1/f	1.11905	1.092699	1.08914	1.11092	1.0926	1.1236	1.0882	1.1235
(M-W) ± C	59.89305	55.8824	55.0802	78.7428	104.4039	105.4564	73.9116	69.5187
S(Kcal/h)	67.0233	61.0626	59.99005	87.477	114.0717	118.4908	80.4306	78.1043
S(Watt)	77.9481	71.0159	69.7684	101.7357	132.6654	137.8048	93.5408	90.8353

Sedentary Act.; 1/f	1.1756	1.14413	1.14009	1.1516	1.11854	1.15623	1.12564	1.17328
(M-W) ± C	75.89305	71.8824	71.0802	94.7428	125.4039	121.4564	89.9116	85.5187
S(Kcal/h)	89.2199	82.2428	81.0378	109.1058	140.2693	140.4315	101.2081	100.3374
S(Watt)	103.7627	95.6484	94.24699	126.8901	163.1332	163.3219	117.705	116.6924

35^0 - Ta	5	5.5	5.6	2.2	-0.7	-0.5	2.7	3.8

Volume of Space (Cu.M.) = 0.69231 S(Watt) / (35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	43.3841	37.8153	36.75895	67.00897	104.7657	101.9743	60.0347	55.7292
0.69231 S	30.0353	26.1799	25.4486	46.39098	72.5304	70.5978	41.5626	38.5818
Volume of Space	6.00706	8.9391	4.5444	21.0868	-103.615	-141.196	15.3936	10.1531
Sitting .;S (Watt)	77.9481	71.0159	69.7684	101.7357	132.6654	137.8048	93.5408	90.8353
0.69231 S	53.9642	49.16499	48.3014	70.4326	91.84558	94.40365	64.7592	62.8862
Volume of Space	10.7928	8.9391	8.6253	32.0148	-131.208	-190.807	23.9849	16.549
Sedentary. ;S (Watt)	103.7627	95.6484	94.24699	126.8901	163.1332	163.3219	117.705	116.6924
0.69231 S	71.7627	66.2183	65.2481	87.8473	112.9387	113.0694	81.4884	80.7873
Volume of Space	14.3672	12.0397	11.6514	39.9306	-161.341	-226.139	30.1809	21.2598

Date : April 21 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	30.5	30.1	30.3	34	36.1	36.7	31.6	30.3
RH (%)	77	85	82	57	52	46	64	73
V. at 7.65 M.; (Mps.)	1.1444	0.8583	0	0.5722	2.861	2.2888	1.1444	1.7166
Vi= 0.65 V ; Mps.	0.74386	0.557895	0.2	0.37193	1.85965	1.48772	0.74386	1.11579
Vpa (mm.Hg.)	25.1	27.5	26.5	23	25.8	21	22.3	23.6

The Convection Heat Exchange (C) = α x $Vi^{0.3}$ ($Ta-35^0$)

Ta - 35 ^{0}C	-4.5	-4.9	4.7	-1	1.1	1.7	-3.4	-4.7
Vi $^{0.3}$	0.915055	0.839394	0.61703	0.743256	1.20456	1.12657	0.915055	1.033415
C	-53.5307	-53.4694	-37.7005	-9.6623	17.2252	24.8972	-40.4454	-63.1417

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 ± C

Sitting at Rest ; E = 100± C Sedentary Activity ; E = 116 ± C

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism; E	22.4693	22.5306	38.2995	66.3377	93.2252	100.8972	35.5546	12.8583
Sitting at Rest ; E	46.4693	46.5306	62.2995	90.3377	117.2252	124.8972	59.5546	36.8583
Sedentary Activity; E	62.4693	62.5306	78.2995	106.3377	133.2252	140.8972	75.5546	52.8583

E max = pV $^{0.3}$ (42- Vpa) ; p = 20.5

V $^{0.3}$	0.915055	0.839394	0.61703	0.743256	1.20456	1.12657	0.915055	1.033415
pV $^{0.3}$	18.7586	17.2076	12.6491	15.2367	24.6935	23.0947	18.7586	21.18501
42 - Vpa	16.9	14.5	15.5	19	16.2	21	19.7	18.4
E max	317.0208	249.5099	196.0613	289.4982	400.0344	484.988	369.545	389.8041

1/f = e $^{0.6\ (E/Emax\ -\ 0.12\ )}$

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism ;E	22.4693	22.5306	38.2995	66.3377	93.2252	100.8972	35.5546	12.8583
Emax	317.0208	249.5019	196.0613	289.4982	400.0344	484.988	369.545	389.8041
E/Emax	0.070876	0.090299	0.19534	0.229147	0.233043	0.208041	0.096212	0.032987
E/Emax - 0.12	-0.04912	-0.0297	0.07534	0.109147	0.113043	0.088041	-0.02379	-0.08701
1/f	0.97096	0.982337	1.0462	1.06768	1.0702	1.05424	0.985828	0.949131

Sitting at Rest ;E	46.4693	46.5306	62.2995	90.3377	117.2252	124.8972	59.5546	36.8583
Emax	317.0208	249.5099	196.0613	289.4982	400.0344	484.988	369.545	389.8041
E/Emax	0.146581	0.186488	0.31776	0.31205	0.293038	0.257526	0.161157	0.094556
E/Emax - 0.12	0.026581	0.066488	0.19776	0.19205	0.173038	0.137526	0.041157	-0.02544
1/f	1.01608	1.040699	1.12598	1.12213	1.109404	1.08602	1.025001	0.98485

Sedentary Activity ;E	62.4693	62.5306	78.2995	106.3377	133.2252	140.8972	75.5546	52.8583
Emax	317.0208	249.5099	196.0613	289.4982	400.0344	484.988	369.545	389.8041
E/Emax	0.197051	0.250614	0.39936	0.367317	0.33303	0.29052	0.20445	0.135602
E/Emax - 0.12	0.077051	0.130614	0.27936	0.24732	0.21303	0.17052	0.084445	0.015602
1/f	1.047316	1.081521	1.18248	1.159966	1.13635	1.10773	1.05198	1.009405

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	0.070876	0.090299	0.19534	0.229147	0.233043	0.208041	0.096212	0.031987
SP./SP.Scale	0.05438	0.151495	0.6767	0.84574	0.865215	0.740205	0.18106	-0.13507
	0	0	1	1	1	1	0	0

Sitting at Rest ;

E/Emax	0.146581	0.186488	0.31776	0.31205	0.293038	0.257526	0.161157	0.094556
SP. / SP. Scale	0.432905	0.63244	1.2888	1.26025	1.16519	0.98763	0.50578	0.17278
	0	1	1	1	1	1	1	0

Sedentary Activity ;

E/Emax	0.197051	0.250614	0.39936	0.367317	0.33303	0.29052	0.20445	0.135602
SP. /SP. Scale	0.68526	0.95307	1.6968	1.53659	1.36515	1.1526	0.72225	0.37801
	1	1	2	2	1	1	1	0

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	0.97096	0.982337	1.0462	1.06768	1.0702	1.05424	0.985828	0.949131
(M-W) ± C	22.4693	22.5306	38.2995	66.3377	93.2252	100.8972	35.5546	12.8583
S(Kcal/h)	21.81679	22.1326	40.0689	70.8274	99.7696	106.3699	35.0507	12.2042
S(Watt)	25.3729	25.7403	46.6002	82.3723	116.032	123.7082	40.76399	14.1935

Sitting at Rest ;1/f	1.01608	1.040699	1.2598	1.12213	1.109404	1.08602	1.025	0.98485
(M-W) ± C	46.4693	46.5306	62.2995	90.3377	117.2252	124.8972	59.5546	36.8583
S(Kcal/h)	47.2165	48.4243	78.4849	101.3706	130.0501	135.6409	61.0435	36.2999
S(Watt)	54.9128	56.3175	91.27795	117.8941	151.2483	157.7503	70.9935	42.2168

Sedentary Act.; 1/f	1.047316	1.081521	1.18248	1.159966	1.13635	1.10773	1.05198	1.009405
(M-W) ± C	62.4693	62.5306	78.2995	106.3377	133.2252	140.8972	75.5546	52.8583
S(Kcal/h)	65.4251	67.6282	92.5876	123.3481	151.3905	156.0761	79.4819	53.3554
S(Watt)	76.0894	78.6515	107.6794	143.4539	176.0671	181.5165	92.4375	62.0524

35^0 - Ta	4.5	4.9	4.7	1	-1.1	-1.7	3.4	4.7

Volume of Space (Cu.M.) =0 .69231 S(Watt) / (35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	25.3729	25.7403	46.6002	82.3723	116.032	123.7082	40.76399	14.1935
0.69231 S	17.5659	17.8202	32.2618	57.0272	80.33	85.6444	28.2213	9.8263
Volume of Space	3.9035	3.6368	6.8642	57.0272	-73.0273	-50.3791	8.3004	2.0907
Sitting .;S (Watt)	54.9128	56.3175	91.27795	117.8941	151.2483	157.7503	70.9935	42.2168
0.69231 S	38.0167	38.9892	63.1926	81.6192	104.7107	109.2121	49.1495	29.2271
Volume of Space	8.4482	7.957	13.445	81.6192	-95.1915	-64.2424	14.4557	6.2185
Sedentary. ;S (Watt)	76.0894	78.6515	107.6794	143.4539	176.0671	181.5165	92.4375	62.0524
0.69231 S	52.6774	54.4513	74.5475	99.3145	121.893	125.6657	63.9954	42.9595
Volume of Space	11.7061	11.1125	15.8612	99.3145	-110.812	73.921	18.8222	9.1403

Date : April 28 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	30.3	29.7	29.8	34.7	36.3	35.5	32.1	30.9
RH (%)	78	85	83	61	49	55	69	79
V. at 7.65 M.; (Mps.)	0	0	0	0.5722	1.1444	2.0027	0.5722	0.5722
Vi= 0.65 V ; Mps.	0.2	0.2	0.2	0.37193	0.74386	1.301755	0.37193	0.37193
Vpa (mm.Hg.)	25.4	26.5	26	25.5	22.1	24	25	26

The Convection Heat Exchange (C) = α x $Vi^{0.3}$ ($Ta-35^0$)

Ta - 35 ^{0}C	-4.7	-5.3	-5.2	-0.3	1.3	0.5	-2.9	-4.1
Vi $^{0.3}$	0.61703	0.61703	0.61703	0.743256	0.915055	1.082328	0.743256	0.743256
C	-37.7005	-42.5134	-41.7112	-2.8987	15.4644	7.03513	-28.0208	-39.6155

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 ± C

Sitting at Rest ; E = 100± C Sedentary Activity ; E = 116 ± C

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism; E	38.2995	33.4866	34.2888	73.1013	91.4644	83.03513	47.9792	36.38446
Sitting at Rest ; E	62.2995	57.4866	58.2888	97.1013	115.4644	107.0351	71.9792	60.38446
Sedentary Activity; E	78.2995	73.4866	74.2888	113.1013	131.4644	123.0351	87.9792	76.38446

E max = pV $^{0.3}$ (42- Vpa) ; p = 20.5

V $^{0.3}$	0.61703	0.61703	0.61703	0.743256	0.915055	1.082328	0.743256	0.743256
pV $^{0.3}$	12.64912	12.64912	12.64912	15.23675	18.7586	22.1877	15.2367	15.2367
42 - Vpa	16.6	15.5	16	16.5	19.9	18	17	16
E max	209.9753	196.0613	202.3858	251.4063	373.2967	399.379	259.0247	243.788

1/f = e $^{0.6\ (E/Emax\ -\ 0.12\ )}$

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism ;E	38.2995	33.4866	34.2888	73.1013	91.4644	83.03513	47.9792	36.38446
Emax	209.9753	196.0613	202.3858	251.4063	373.2967	399.379	259.0247	243.788
E/Emax	0.1824	0.170797	0.169423	0.29077	0.24502	0.207911	0.18523	0.149246
E/Emax - 0.12	0.0624	0.050797	0.049423	0.17077	0.12502	0.08791	0.06523	0.029246
1/f	1.03815	1.03095	1.030098	1.10789	1.077896	1.05416	1.03991	1.017703

Sitting at Rest ;E	62.2995	57.4866	58.2888	97.1013	115.4644	107.0351	71.9792	60.38446
Emax	209.9753	196.0613	202.3858	251.4063	373.2967	399.379	259.0247	243.788
E/Emax	0.296699	0.293207	0.28801	0.38623	0.30931	0.268004	0.277885	0.247693
E/Emax - 0.12	0.176699	0.173207	0.16801	0.26623	0.18931	0.148004	0.157885	0.127693
1/f	1.11184	1.10952	1.106061	1.17321	1.12029	1.0929	1.09936	1.07963

Sedentary Activity ;E	78.2995	73.4866	74.2888	113.1013	131.4644	123.0351	87.9792	76.38446
Emax	209.9753	196.0613	202.3858	251.4063	373.2967	399.379	259.0247	243.788
E/Emax	0.372899	0.374814	0.367065	0.449875	0.35217	0.30807	0.33966	0.31332
E/Emax - 0.12	0.252899	0.254814	0.247065	0.329875	0.23217	0.18807	0.21966	0.19332
1/f	1.1639	1.165195	1.15979	1.218871	1.14947	1.11945	1.1409	1.12299

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	0.1824	0.170797	0.169423	0.29077	0.24502	0.207911	0.18523	0.149246
SP./SP.Scale	0.612	0.55399	0.547115	1.15385	0.9251	0.73956	0.62615	0.44623
	1	1	1	1	1	1	1	0

Sitting at Rest ;

E/Emax	0.296699	0.293207	0.28801	0.38623	0.30931	0.268004	0.277885	0.247693
SP. / SP. Scale	1.18349	1.16604	1.14005	1.63115	1.24655	1.04002	1.08943	0.938465
	1	1	1	2	1	1	1	1

Sedentary Activity ;

E/Emax	0.37289	0.374814	0.367065	0.449875	0.35217	0.30807	0.33966	0.31332
SP. /SP. Scale	1.56449	1.57407	1.53533	1.9494	1.4609	1.2404	1.3983	1.2666
	2	2	2	2	1	1	1	1

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	1.03815	1.03095	1.030098	1.10789	1.077896	1.05416	1.03991	1.017703
(M-W) ± C	38.2995	33.4866	34.2888	73.1013	91.4644	83.03513	47.9792	36.38446
S(Kcal/h)	39.7606	34.523	35.3208	80.9882	98.5891	87.5323	49.894	37.0286
S(Watt)	46.2416	40.1503	41.0781	94.1893	114.6591	101.8001	58.0268	43.0642

Sitting at Rest ;1/f	1.11184	1.10952	1.106061	1.17321	1.12029	1.0929	1.09936	1.07963
(M-W) ± C	62.2995	57.4866	58.2822	97.1013	115.4644	107.0351	71.9792	60.38446
S(Kcal/h)	69.6758	63.7825	64.471	109.2274	129.3536	116.9787	79.1311	65.19287
S(Watt)	81.0329	74.1791	74.9797	127.0314	150.4383	136.0462	92.0294	75.8193

Sedentary Act.; 1/f	1.1639	1.165195	1.15979	1.218871	1.14947	1.11945	1.1409	1.12299
(M-W) ± C	78.2995	73.4866	74.2888	113.1013	131.4644	123.0351	87.9792	76.38446
S(Kcal/h)	91.1328	85.6262	86.1594	137.8559	151.1144	137.7317	100.3755	85.77898
S(Watt)	105.9874	99.5833	100.2034	160.3264	175.746	160.1819	116.7367	99.76096

35^0 - Ta	4.7	5.3	5.2	0.3	-1.3	-0.5	2.9	4.1

Volume of Space (Cu.M.) = 0.69231 S(Watt) / (35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	46.2416	40.1503	41.0781	94.1893	114.6591	101.8001	58.0268	43.0642
0.69231 S	32.0135	27.7964	28..4388	65.2082	79.3797	70.4772	40.1725	29.8138
Volume of Space	6.8114	5.2446	5.469	217.3607	-61.0613	-140.954	13.8526	7.2717
Sitting .;S (Watt)	81.0329	74.1791	74.9797	127.0314	150.4383	136.0462	92.0294	75.8193
0.69231 S	56.0999	51.3549	51.9092	87.9451	104.1499	94.1862	63.7129	52.4905
Volume of Space	11.9361	9.6896	9.9825	293.1503	-80.1153	-188.372	21.96997	12.8026
Sedentary. ;S (Watt)	105.9874	99.5833	100.2034	160.3264	175.746	160.1819	116.7367	99.761
0.69231 S	73.3762	68.9425	69.3718	110.9956	121.6707	110.8956	80.81796	69.0655
Volume of Space	15.612	13.008	13.3407	369.9853	-93.5928	-221.791	27.8683	16.8452

Date : May 7 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	29.4	29.1	29.2	33.2	36.2	34.6	30.9	30.4
RH (%)	84	87	82	66	55	63	72	69
V. at 7.65 M.; (Mps.)	0.8583	0	0	0	0	1.4305	0.8583	0.5722
Vi= 0.65 V ; Mps.	0.557895	0.2	0.2	0.2	0.2	0.929825	0.557895	0.37193
Vpa (mm.Hg.)	25.7	26.1	24.7	25.1	24.6	25.9	21.1	22.6

The Convection Heat Exchange (C) = α x $Vi^{0.3}$ (Ta-35^0)

Ta - 35 ^{0}C	-5.6	-5.9	-5.8	-1.8	1.2	-0.4	-4.1	-4.6
Vi $^{0.3}$	0.83939	0.61703	0.61703	0.61703	0.61703	0.97841	0.83939	0.743256
C	-61.1076	-47.3262	-46.5241	-14.4385	9.6257	-5.0877	-44.7395	-44.4467

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 ± C

Sitting at Rest ; E = 100± C Sedentary Activity ; E = 116 ± C

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism; E	14.8924	28.6738	29.4759	61.5615	85.6257	70.9123	31.2605	31.5533
Sitting at Rest ; E	38.8924	52.6738	53.4759	85.5615	109.6257	94.9123	55.2605	55.5533
Sedentary Activity; E	54.8924	68.6738	69.4759	101.5615	125.6257	110.9123	71.2605	71.5533

E max = pV $^{0.3}$ (42- Vpa) ; p = 20.5

V $^{0.3}$	0.83939	0.61703	0.61703	0.61703	0.61703	0.97841	0.83939	0.743256
pV $^{0.3}$	17.2075	12.6491	12.6491	12.6491	12.6491	20.0574	17.2075	15.2367
42 - Vpa	16.3	15.9	17.3	16.9	17.4	16.1	20.9	19.4
E max	280.4822	201.1209	218.8297	213.77	220.0946	322.9242	359.6366	295.5929

1/f = e $^{0.6\ (E/Emax\ -\ 0.12\ )}$

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism ;E	14.8924	28.6738	29.4759	61.5615	85.6257	70.9123	31.2605	31.5533
Emax	280.4822	201.1209	218.8297	213.77	220.0946	322.9242	359.6366	295.5929
E/Emax	0.053096	0.142569	0.134698	0.28798	0.38904	0.219594	0.086922	0.106746
E/Emax - 0.12	-0.0669	0.022569	0.014698	0.16798	0.26904	0.099594	-0.03308	-0.01325
1/f	0.96065	1.01363	1.0089	1.10604	1.17518	1.06158	0.98035	0.99208

Sitting at Rest ;E	38. 8924	52.6738	53.4759	85.5615	109.6257	94.9123	55.2605	55.5533
Emax	280.4822	201.1209	218.8297	213.77	220.0946	322.9242	359.6366	295.5929
E/Emax	0.138663	0.2619	0.24437	0.40025	0.49808	0.293915	0.15366	0.18794
E/Emax - 0.12	0.01866	0.141901	0.12437	0.28025	0.37808	0.173915	0.03366	0.06794
1/f	1.01126	1.08887	1.0775	1.1831	1.254643	1.10999	1.0204	1.04161

Sedentary Activity ;E	54.8924	68.6738	69.4759	101.5615	125.6257	110.9123	71.2605	71.5533
Emax	280.4822	201.1209	218.8297	213.77	220.0946	322.9242	359.6366	295.5929
E/Emax	0.19571	0.34146	0.31749	0.4751	0.5718	0.34346	0.19815	0.2421
E/Emax - 0.12	0.07571	0.22146	0.197488	0.3551	0.4508	0.2235	0.07815	0.12207
1/f	1.0465	1.14211	1.1258	1.2375	1.3106	1.1435	1.048	1.07599

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	0.053096	0.142569	0.134698	0.28798	0.38904	0.219594	0.086922	0.106746
SP./SP.Scale	-0.03452	0.4128	0.37349	1.1399	1.6452	0.79797	0.13461	0.23373
	0	0	0	1	2	1	0	0

Sitting at Rest ;

E/Emax	0.138663	0.2619	0.24437	0.40025	0.49808	0.293915	0.15366	0.18794
SP. / SP. Scale	0.393315	1.0095	0.92185	1.70125	2.1904	1.1696	0.4683	0.6397
	0	1	1	2	2	1	0	1

Sedentary Activity ;

E/Emax	0.19571	0.34146	0.31749	0.4751	0.5708	0.34346	0.19815	0.2421
SP. /SP. Scale	0.67855	1.4073	1.28745	2.0755	2.554	1.4173	0.69075	0.9105
	1	1	1	2	3	1	1	1

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	0.96065	1.01363	1.0089	1.10604	1.17518	1.06158	0.98035	0.99208
(M-W) ± C	14.8924	28.6738	29.4759	61.5615	85.6257	70.9123	31.2605	31.5533
S(Kcal/h)	14.3064	29.0646	29.7382	68.0895	100.6256	75.2791	30.6462	31.3034
S(Watt)	16.6383	33.8022	34.5856	79.1881	117.0276	87.5496	35.6416	36.4059

Sitting at Rest ;1/f	1.01126	1.08887	1.0775	1.1831	1.254643	1.10999	1.0204	1.04161
(M-W) ± C	38.8924	52.6738	53.4759	85.5615	109.6257	94.9123	55.2605	55.5533
S(Kcal/h)	39.3303	57.3549	57.6203	101.2278	137.6312	105.3517	56.3878	57.8649
S(Watt)	45.7412	66.7038	67.0124	117.7279	160.065	122.524	65.579	67.2968

Sedentary Act.; 1/f	1.0465	1.14211	1.1258	1.2375	1.3106	1.1435	1.048	1.07599
(M-W) ± C	54.8924	68.6738	69.4759	101.5615	125.6257	110.9123	71.2605	71.5533
S(Kcal/h)	57.4449	78.433	78.21597	125.6824	164.645	126.8282	74.681	76.9906
S(Watt)	66.8084	91.2176	90.9652	146.1686	191.4822	147.5012	86.854	89.5401

35^0 - Ta	5.6	5.9	5.8	1.8	-1.2	0.4	4.1	4.6

Volume of Space (Cu.M.) = 0.69231 S(Watt) / (35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	16.6383	33.8022	34.5856	79.1881	117.0276	87.5496	35.6416	36.4059
0.69231 S	11.5189	23.4016	23.9439	54.8227	81.0194	60.6114	24.675	25.2041
Volume of Space	2.0569	3.9664	4.1283	30.4571	-67.5162	151.5285	6.0183	5.4792
Sitting .;S (Watt)	45.7412	66.7038	67.0124	117.7279	160.065	122.524	65.579	67.2968
0.69231 S	31.6671	46.1797	46.3933	81.5042	110.8146	84.8246	45.401	46.5903
Volume of Space	5.6548	7.8271	7.9988	45.2801	-92.3455	212.0615	11.0734	10.1283
Sedentary. ;S (Watt)	66.8084	91.2176	90.9652	146.1686	191.4822	147.5012	86.854	89.5401
0.69231 S	46.2521	63.1509	62.9761	101.194	132.565	102.1166	60.1299	61.9895
Volume of Space	8.2593	10.7035	10.8579	56.2189	-110.471	255.2915	14.6658	13.476

Date : May 14 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	29.6	28.7	28.6	33.5	33.7	32.3	30.9	30.5
RH (%)	65	71	77	56	55	62	69	73
V. at 7.65 M.; (Mps.)	1.1444	0.5722	0	0	1.7166	2.2888	1.4305	1.1444
Vi= 0.65 V ; Mps.	0.74386	0.37193	0.2	0.2	1.11579	1.48772	0.929825	0.74386
Vpa (mm.Hg.)	20.1	21	22.5	21.3	21.4	22	23.1	24

The Convection Heat Exchange (C) = α x Vi $^{0.3}$ (Ta-35^0)

Ta - 35 ^{0}C	-5.4	-6.3	-6.4	-1.5	-1.3	-2.7	-4.1	-4.5
Vi $^{0.3}$	0.91506	0.7433	0.61703	0.61703	1.0334	1.1266	0.9784	0.91506
C	-61.2372	-60.8763	-51.3369	-12.0321	-17.4645	-39.5437	-52.1487	-53.531

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 ± C

Sitting at Rest ; E = 100± C Sedentary Activity ; E = 116 ± C

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism; E	11.7628	15.1237	24.6631	63.9679	58.53554	36.4563	23.8513	22.469
Sitting at Rest ; E	35.7628	39.1237	48.6631	87.9679	82.53554	60.4563	47.8513	46.469
Sedentary Activity; E	51.7628	55.1237	64.6631	103.9679	98.5355	76.4563	63.8513	62.469

E max = pV $^{0.3}$ (42- Vpa) ; p = 20.5

V $^{0.3}$	0.91506	0.7433	0.61703	0.61703	1.0334	1.1266	0.9784	0.91506
pV $^{0.3}$	18.7587	15.2377	12.6491	12.6491	21.1847	23.0953	20.0572	18.7587
42 - Vpa	21.9	21	19.5	20.7	20.6	20	18.9	18
E max	410.8162	319.9907	246.6577	261.8367	436.4048	461.906	379.0811	337.6571

1/f = e $^{0.6\ (E/Emax\ -\ 0.12\ )}$

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism ;E	11.7628	15.1237	24.6631	63.9679	58.5355	36.4563	23.8513	22.469
Emax	410.8162	319.9907	246.6577	261.8367	436.4048	461.906	379.0811	337.6571
E/Emax	0.02863	0.047263	0.099989	0.244305	0.13413	0.07893	0.06292	0.066544
E/Emax - 0.12	-0.09137	-0.07274	-0.02001	0.124305	0.01413	-0.04107	-0.05708	-0.05346
1/f	0.94666	0.957296	0.98807	1.07743	1.0085	0.97566	0.96633	0.96844

Sitting at Rest ;E	35.7628	39.1237	48.6631	87.9679	82.5355	60.4563	47.8513	46.469
Emax	410.8162	319.9907	246.6577	261.8367	436.4048	461.906	379.0811	337.6571
E/Emax	0.08705	0.122265	0.19729	0.33596	0.18913	0.13088	0.12623	0.13762
E/Emax - 0.12	-0.03295	0.002265	0.07729	0.21596	0.06913	0.01088	0.00623	0.01762
1/f	0.98043	1.00136	1.04747	1.13835	1.04235	1.00655	1.00374	1.0106

Sedentary Activity ;E	51.7628	55.1237	64.6631	103.9679	98.5355	76.4563	63.8513	62.469
Emax	410.8162	319.9907	246.6577	261.8367	436.4048	461.906	379.0811	337.6571
E/Emax	0.126	0.17227	0.26216	0.39707	0.22579	0.16552	0.16844	0.18501
E/Emax - 0.12	0.006	0.05227	0.14216	0.27707	0.10579	0.04552	0.04844	0.06501
1/f	1.00361	1.03186	1.08904	1.1809	1.06553	1.0277	1.0295	1.03977

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	0.02863	0.047263	0.099989	0.244305	0.13413	0.07893	0.06292	0.066544
SP./SP.Scale	-0.15685	-0.06369	0.19995	0.9215	0.37065	0.09465	0.0146	0.03272
	0	0	0	1	0	0	0	0

Sitting at Rest ;

E/Emax	0.08705	0.122265	0.19729	0.33596	0.18913	0.13088	0.12623	0.13762
SP. / SP. Scale	0.13525	0.311325	0.68645	1.3798	0.64565	0.3544	0.33115	0.3881
	0	0	1	1	1	0	0	0

Sedentary Activity ;

E/Emax	0.126	0.17227	0.26216	0.39707	0.22579	0.16552	0.16844	0.18501
SP. /SP. Scale	0.329999	0.5614	1.0108	1.6854	0.82895	0.5276	0.5422	0.62505
	0	1	1	2	1	1	1	1

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	0.94666	0.957296	0.98807	1.07743	1.0085	0.97566	0.96633	0.96844
(M-W) ± C	11.7628	15.1237	24.6631	63.9679	58.53554	36.4563	23.8513	22.469
S(Kcal/h)	11.1354	14.4779	24.3689	68.9209	59.0331	35.569	23.04751	21.7599
S(Watt)	12.9504	16.8377	28.341	80.15505	68.6555	41.3667	26.8043	25.3067

Sitting at Rest ;1/f	0.98043	1.00136	1.04747	1.13835	1.04235	1.00655	1.00374	1.0106
(M-W) ± C	35.7628	39.1237	48.6631	87.9679	82.53554	60.4563	47.8513	46.469
S(Kcal/h)	35.0629	39.1769	50.9731	100.1383	86.0309	60.8523	48.0303	46.9616
S(Watt)	40.7782	45.5627	59.2818	116.4608	100.054	70.7712	55.8592	54.6163

Sedentary Act.; 1/f	1.00361	1.03186	1.08904	1.1809	1.06553	1.0277	1.0295	1.03977
(M-W) ± C	51.7628	55.1237	64.6631	103.9679	98.5355	76.4563	63.8513	62.469
S(Kcal/h)	51.9497	56.8799	70.4207	122.7757	104.9925	78.5741	65.7349	64.9534
S(Watt)	60.4175	66.1514	81.8993	142.7881	122.1063	91.3817	76.4497	75.5408

35^0 - Ta	5.4	6.3	6.4	1.5	1.3	2.7	4.1	4.5

Volume of Space (Cu.M.) = 0.69231 S(Watt) / (35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	12.9504	16.8377	28.341	80.15505	68.6555	41.3667	26.8043	25.3067
0.69231 S	8.9657	11.6569	19.6208	55.4921	47.5309	28.6386	18.5569	17.5201
Volume of Space	1.6603	1.8503	3.0658	36.9947	36.5622	10.6069	4.5261	3.8934
Sitting .;S (Watt)	40.7782	45.5627	59.2818	116.4608	100.054	70.7712	55.8592	54.6163
0.69231 S	28.2311	31.5435	41.0414	80.627	69.2684	48.9956	38.6719	37.8114
Volume of Space	5.228	5.0069	6.4127	53.7513	53.2834	18.1465	9.4322	8.4025
Sedentary. ;S (Watt)	60.4175	66.1514	81.8993	142.7881	122.1063	91.3817	76.4497	75.5408
0.69231 S	41.8276	45.7973	56.6997	98.8537	84.5354	63.2645	52.9269	52.2976
Volume of Space	7.7459	7.2694	8.8593	65.9025	65.0272	23.4313	12.909	11.6217

Date : May 21 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	26	26	27.2	31.8	32.1	32	30	29.5
RH (%)	93	93	91	65	68	67	72	82
V. at 7.65 M.; (Mps.)	0	0	0.2861	0	0	2.861	0	0
Vi= 0.65 V ; Mps.	0.2	0.2	0.185965	0.2	0.2	1.85965	0.2	0.2
Vpa (mm.Hg.)	23.6	23.6	24.6	22.9	24.4	23.8	22.8	25

The Convection Heat Exchange (C) = α x Vi $^{0.3}$ (Ta-35^0)

Ta - 35 ^{0}C	-9	-9	-7.8	-3.2	-2.9	-3	-5	-5.5
Vi $^{0.3}$	0.61703	0.61703	0.686998	0.61703	0.61703	1.20456	0.61703	0.61703
C	-72.1925	-72.1925	-69.6616	-25.6684	-23.262	-46.9778	-40.107	-44.1176

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 ± C

Sitting at Rest ; E = 100± C Sedentary Activity ; E = 116 ± C

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism; E	3.8075	3.8075	6.3384	50.3316	52.738	29.0222	35.893	31.8824
Sitting at Rest ; E	27.8075	27.8075	30.3384	74.3316	76.738	53.0222	59.893	55.8824
Sedentary Activity; E	43.8075	43.8075	46.3384	90.3316	92.738	69.0222	75.893	71.8824

E max = pV $^{0.3}$ (42- Vpa) ; p = 20.5

V $^{0.3}$	0.61703	0.61703	0.686998	0.61703	0.61703	1.20456	0.61703	0.61703
pV $^{0.3}$	12.64912	12.64912	14.0835	12.6491	12.6491	24.6935	12.6491	12.6491
42 - Vpa	18.4	18.4	17.4	19.1	17.6	18.2	19.2	17
E max	232.7437	232.7437	245.0522	241.5981	222.6244	449.4213	242.863	215.035

1/f = e $^{0.6\ (E/Emax\ -\ 0.12\ )}$

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism ;E	3.8075	3.8075	6.3384	50.3316	52.738	29.0222	35.893	31.8824
Emax	232.7437	232.7437	245.0522	241.5981	222.6244	449.4213	242.863	215.035
E/Emax	0.01636	0.01636	0.02587	0.20833	0.23689	0.06458	0.14779	0.14827
E/Emax - 0.12	-0.1036	-0.1036	-0.09413	0.08833	0.11689	-0.05542	0.02779	0.028266
1/f	0.9397	0.9397	0.94508	1.05443	1.07265	0.96729	1.0168	1.0171

Sitting at Rest ;E	27.8075	27.8075	30.3384	74.3316	76.738	53.0222	59.893	55.8824
Emax	232.7437	232.7437	245.0522	241.5981	222.6244	449.4213	242.863	215.035
E/Emax	0.119477	0.119477	0.1238	0.30767	0.344697	0.11798	0.246612	0.25988
E/Emax - 0.12	-0.00052	-0.00052	0.003804	0.18767	0.224697	-0.00202	0.126612	0.13988
1/f	0.99969	0.99969	1.00228	1.1192	1.14433	0.99879	1.07893	1.0875

Sedentary Activity ;E	43.8075	43.8075	46.3384	90.3316	92.738	69.0222	75.893	71.8824
Emax	232.7437	232.7437	245.0522	241.5981	222.6244	449.4213	242.863	215.035
E/Emax	0.18822	0.18822	0.189096	0.373892	0.41657	0.15358	0.31249	0.33428
E/Emax - 0.12	0.0682	0.0682	0.069096	0.253892	0.29657	0.03358	0.19249	0.21428
1/f	1.04178	1.04178	1.04233	1.16455	1.19475	1.0204	1.12243	1.1372

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	0.01636	0.01636	0.02587	0.20833	0.23689	0.06458	0.14779	0.14827
SP./SP.Scale	-0.2182	-0.2182	-0.17065	0.74165	0.88445	0.0229	0.43895	0.44135
	0	0	0	1	1	0	0	0

Sitting at Rest ;

E/Emax	0.119477	0.119477	0.1238	0.30767	0.344697	0.11798	0.246612	0.25988
SP. / SP. Scale	0.2974	0.2974	0.319	1.23835	1.4235	0.2899	0.93306	0.9994
	0	0	0	1	1	0	1	1

Sedentary Activity ;

E/Emax	0.18822	0.18822	0.189096	0.373892	0.41657	0.15358	0.31249	0.33428
SP. /SP. Scale	0.6411	0.6411	0.64548	1.5695	1.78285	0.4679	1.26245	1.3714
	1	1	1	2	2	0	1	1

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 pm.	04.00 pm.	07.00 pm.	10.00 pm.	13.00 am.	16.00 am.	19.00 am.	22.00 am.
Basal. ; 1/f	0.9397	0.9397	0.94508	1.05443	1.07265	0.96729	1.0168	1.0171
(M-W) ± C	3.8075	3.8075	6.3384	50.3316	52.738	29.0222	35.893	31.8824
S(Kcal/h)	3.5779	3.5779	5.9903	53.0712	56.5694	28.0729	36.496	32.4276
S(Watt)	4.1611	4.1611	6.9667	61.7217	65.7902	32.6488	42.4449	37.7133

Sitting at Rest ;1/f	0.99969	0.99969	1.00228	1.1192	1.14433	0.99879	1.07893	1.0875
(M-W) ± C	27.8075	27.8075	30.3384	74.3316	76.738	53.0222	59.893	55.8824
S(Kcal/h)	27.7989	27.7989	30.4076	83.1919	87.8136	52.958	64.6204	60.7721
S(Watt)	32.3301	32.3301	35.36401	96.7522	102.1272	61.5902	75.1535	70.678

Sedentary Act.; 1/f	1.04178	1.04178	1.04233	1.16455	1.19475	1.0204	1.12243	1.1372
(M-W) ± C	43.8075	43.8075	46.3384	90.3316	92.738	69.0222	75.893	71.8824
S(Kcal/h)	45.6378	45.6378	48.2999	105.1957	110.7987	70.4303	85.1846	81.7447
S(Watt)	53.0767	53.0767	56.1728	122.3426	128.8589	81.9104	99.0697	95.069

Volume of Space (Cu.M.) = 0.69231 S(Watt) /(35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	4.1611	4.1611	6.9667	61.7217	65.7902	32.6488	42.4449	37.7133
0.69231 S	2.8808	2.8808	4.8231	42.7306	45.5472	22.6031	29.385	26.109
Volume of Space	0.3201	0.3201	0.61835	13.3533	15.7059	7.5344	5.877	4.7471
Sitting .;S (Watt)	32.3301	32.3301	35.36401	96.7522	102.1272	61.5902	75.1535	70.678
0.69231 S	22.3824	22.3824	24.4829	66.9825	70.7037	42.6395	52.0295	48.9311
Volume of Space	2.4869	2.4869	3.1388	20.932	24.3806	14.2132	10.4059	8.8966
Sedentary. ;S (Watt)	53.0767	53.0767	56.1728	122.3426	128.8589	81.9104	99.0697	95.069
0.69231 S	36.7456	36.7456	38.88898	84.699	89.2103	56.7074	68.5869	65.8173
Volume of Space	4.0828	4.0828	4.9858	26.4684	30.7622	18.9025	13.7174	11.9668

Date : May 28 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	26.4	26.6	27.6	31	32.5	31.4	29.2	29.1
RH (%)	94	87	84	69	62	71	74	78
V. at 7.65 M.; (Mps.)	0	0	0	1.4305	2.5749	1.7166	1.4305	1.4305
Vi= 0.65 V ; Mps.	0.2	0.2	0.2	0.929825	1.673685	1.11579	0.929825	0.929825
Vpa (mm.Hg.)	24	22.5	23.2	23.1	22.4	24.3	22.3	23.8

The Convection Heat Exchange (C) = α x $Vi^{0.3}$ ($Ta-35^0$)

Ta - 35 ^{0}C	-8.6	-8.4	-7.4	-4	-2.5	-3.6	-5.8	-5.9
$Vi^{0.3}$	0.61703	0.61703	0.61703	0.97841	1.16708	1.0334	0.97841	0.97841
C	-68.904	-67.3797	-59.3583	-50.8773	-37.9301	-48.3631	-73.7721	-75.044

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 ± C

Sitting at Rest ; E = 100± C Sedentary Activity ; E = 116 ± C

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism; E	7.0961	8.6203	16.6417	25.1227	38.0699	27.6369	2.2279	0.956
Sitting at Rest ; E	31.0961	32.6203	40.6417	49.1227	62.0699	51.6369	26.2279	24.956
Sedentary Activity; E	47.0961	48.6203	56.6417	65.1227	78.0699	67.6369	42.2279	40.956

$E\ max = pV^{0.3}(42 - Vpa)$; p = 20.5

$V^{0.3}$	0.61703	0.61703	0.61703	0.97841	1.16708	1.0334	0.97841	0.97841
$pV^{0.3}$	12.6491	12.6491	12.6491	20.0574	23.9251	21.1847	20.0574	20.0574
42 - Vpa	18	19.5	18.8	18.9	19.6	17.7	19.7	18.2
E max	227.6841	246.6577	237.8034	379.085	468.9327	374.9692	395.1309	365.0448

$1/f = e^{0.6\ (E/Emax - 0.12)}$

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism ;E	7.0961	8.603	16.6417	25.1227	38.0699	27.6369	2.2279	0.956
Emax	227.6841	246.6577	237.8034	379.085	468.9327	374.9692	395.1309	365.0448
E/Emax	0.03117	0.03495	0.069981	0.0663	0.08118	0.0737	0.00564	0.002619
E/Emax - 0.12	-0.08883	-0.0851	-0.05002	-0.0537	-0.03882	-0.04629	-0.11436	-0.11738
1/f	0.948095	0.9502	0.9704	0.9683	0.97698	0.9726	0.9337	0.93199

Sitting at Rest ;E	31.0961	32.6203	40.6417	49.1227	62.0699	51.6369	26.2279	24.956
Emax	227.6841	246.6577	237.8034	379.085	468.9327	374.9692	395.1309	365.0448
E/Emax	0.13658	0.13225	0.1709	0.12958	0.13236	0.13771	0.06638	0.06836
E/Emax - 0.12	0.01658	0.01225	0.0509	0.00958	0.01236	0.01771	-0.05362	-0.05164
1/f	1.00999	1.0074	1.031	1.0058	1.00745	1.0107	0.96834	0.96949

Sedentary Activity ;E	47.0961	48.6203	56.6417	65.1227	78.0699	67.6369	42.2279	40.956
Emax	227.6841	246.6577	237.8034	379.085	468.9327	374.9692	395.1309	365.0448
E/Emax	0.20685	0.19712	0.238187	0.171789	0.166484	0.18038	0.106871	0.1122
E/Emax - 0.12	0.08685	0.07712	0.118187	0.051789	0.04648	0.0604	-0.01313	-0.0078
1/f	1.0535	1.0474	1.0735	1.03156	1.02828	1.03689	0.99215	0.9953

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	0.03117	0.03495	0.069981	0.0663	0.08118	0.0737	0.00564	0.002619
SP./SP.Scale	-1.4415	-0.12525	0.04991	0.0315	0.1059	0.0685	-0.2718	-0.28691
	0	0	0	0	0	0	0	0

Sitting at Rest ;

E/Emax	0.13658	0.13225	0.1709	0.12958	0.13236	0.13771	0.06638	0.06836
SP. / SP. Scale	0.3829	0.36125	0.5545	0.3479	0.3618	0.38855	0.0319	0.0418
	0	0	1	0	0	0	0	0

Sedentary Activity ;

E/Emax	0.20685	0.19712	0.238187	0.171789	0.166484	0.18038	0.106871	0.1122
SP. /SP. Scale	0.73425	0.6856	0.8909	0.5589	0.53242	0.6019	0.2344	0.261
	1	1	1	1	1	1	0	0

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	0.948095	0.9502	0.9704	0.9683	0.97698	0.9726	0.9337	0.93199
(M-W) ± C	7.0961	8.6203	16.6417	25.1227	38.0699	27.6369	2.2279	0.956
S(Kcal/h)	6.7278	8.191	16.1491	24.3263	37.1935	26.8796	2.0802	0.89098
S(Watt)	7.8244	9.5261	18.7814	28.2915	43.2561	31.261	2.4193	1.0362

Sitting at Rest ;1/f	1.00999	1.0074	1.031	1.0058	1.00745	1.0107	0.96834	0.96949
(M-W) ± C	31.0961	32.6203	40.6417	49.1227	62.0699	51.6369	26.2279	24.956
S(Kcal/h)	31.4068	32.8617	41.9016	49.4076	62.5323	52.1894	25.3975	24.1946
S(Watt)	36.5261	38.2181	48.7316	57.4611	72.7251	60.6963	29.5373	28.1383

Sedentary Act.; 1/f	1.0535	1.0474	1.0735	1.03156	1.02828	1.03689	0.99215	0.9953
(M-W) ± C	47.0961	48.6203	56.6417	65.1227	78.0699	67.6369	42.2279	40.956
S(Kcal/h)	49.6157	50.9249	60.8049	67.17797	80.2777	70.132	41.8964	40.764
S(Watt)	57.7031	59.2257	70.7161	78.12798	93.36298	81.5635	48.7255	47.408

35^0 - Ta	8.6	8.4	7.4	4	2.5	3.6	5.8	5.9

Volume of Space (Cu.M.) = 0.69231 S(Watt) / (35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	7.8244	9.5261	18.7814	28.2915	43.2561	31.261	2.4193	1.0362
0.69231 S	5.4169	6.595	13.0026	19.5865	29.9466	21.6423	1.6749	0.71738
Volume of Space	0.6299	0.7851	1.7571	4.8966	11.9786	6.0118	0.2888	0.1216

Sitting .;S (Watt)	36.5261	38.2181	48.7316	57.4611	72.7251	60.6963	29.5373	28.1383
0.69231 S	25.2874	26.4588	33.7373	39.7809	50.3483	42.0206	20.449	19.4804
Volume of Space	2.9404	3.1499	4.5591	9.9452	20.1393	11.6724	3.5257	3.3018

Sedentary. ;S (Watt)	57.7031	59.2257	70.7161	78.12798	93.36298	81.5635	48.7255	47.408
0.69231 S	39.9484	41.0025	48.9574	54.0888	64.6361	56.4673	33.7332	32.821
Volume of Space	4.6452	4.8813	6.6159	13.5222	25.8544	15.6854	5.8161	5.563

Date : June 7 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	26.2	26.4	27	30.8	28.2	31.3	30	25.4
RH (%)	96	95	91	75	88	69	75	97
V. at 7.65 M.; (Mps.)	0	0	0	1.1444	0	0.8583	0.5922	0
Vi= 0.65 V ; Mps.	0.2	0.2	0.2	0.74386	0.2	0.557895	0.37193	0.2
Vpa (mm.Hg.)	24.8	24.3	24.2	25	25.1	23.8	23.8	23.5

The Convection Heat Exchange (C) = α x $Vi^{0.3}$ ($Ta-35^0$)

Ta - 35 ^{0}C	-8.8	-8.6	-8	-4.2	-6.8	-3.7	-5	-9.6
Vi $^{0.3}$	0.61703	0.61703	0.61703	0.91506	0.61703	0.839394	0.743256	0.61703
C	-70.5882	-68.984	-64.1711	-49.9623	-54.5455	-40.3749	-48.3116	-77.0053

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 ± C

Sitting at Rest ; E = 100± C Sedentary Activity ; E = 116 ± C

	01.00 pm.	04.00 pm.	07.00 pm.	10.00 pm.	13.00 am.	16.00 am.	19.00 am.	22.00 am.
Basal Metabolism; E	5.4118	7.016	11.8289	26.0377	21.4545	35.6251	27.6884	-1.0053
Sitting at Rest ; E	29.4118	31.016	35.8289	50.0377	45.4545	59.6251	51.6884	22.9947
Sedentary Activity; E	45.4118	47.016	51.8289	66.0377	61.4545	75.6251	67.6884	38.9947

E max = pV $^{0.3}$ (42- Vpa) ; p = 20.5

V $^{0.3}$	0.61703	0.61703	0.61703	0.91506	0.61703	0.839394	0.743256	0.61703
pV $^{0.3}$	12.6491	12.6491	12.6491	18.7587	12.64912	17.2076	15.2367	12.6491
42 - Vpa	17.2	17.7	17.8	17	16.9	18.2	18.2	18.5
E max	217.5648	223.8893	225.1542	318.8984	213.77	313.1779	277.3088	234.0086

1/f = e $^{0.6\ (E/Emax\ -\ 0.12\ )}$

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism ;E	5.4118	7.016	11.8289	26.0377	21.4545	35.6251	27.6884	-1.0053
Emax	217.5648	223.8893	225.1542	318.8984	213.77	313.1779	277.3088	234.0086
E/Emax	0.02487	0.03134	0.05254	0.08165	0.10036	0.11375	0.09985	-0.0043
E/Emax - 0.12	-0.09513	-0.08866	-0.06746	-0.03835	-0.01964	0.00625	-0.02015	-0.1243
1/f	0.94452	0.9482	0.9603	0.97725	0.9883	0.9963	0.98798	0.92814

Sitting at Rest ;E	29.4118	31.016	35.8289	50.0377	45.4545	59.6251	51.6884	22.9947
Emax	217.5648	223.8893	225.1542	318.8984	213.77	313.1779	277.3088	234.0086
E/Emax	0.13519	0.13853	15913	156908	0.21263	0.190387	0.186393	0.09826
E/Emax - 0.12	0.01519	0.01853	0.03913	0.03691	0.09263	0.07039	0.06639	-0.02174
1/f	1.00915	1.01118	1.02376	1.02239	1.05715	1.04314	1.04064	0.98704

Sedentary Activity ;E	45.4118	47.016	51.8289	66.0377	61.4545	75.6251	67.6884	38.9947
Emax	217.5648	223.8893	225.1542	318.8984	213.77	313.1779	277.3088	234.0086
E/Emax	0.20873	0.209997	0.23019	0.20708	0.28748	0.241476	0.24409	0.166638
E/Emax - 0.12	0.08873	0.089997	0.11019	0.08708	0.16748	0.121476	0.12409	0.04664
1/f	1.05468	1.05548	1.06835	1.05364	1.10571	1.07561	1.0773	1.0284

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	0.02487	0.03134	0.05254	0.08165	0.10036	0.11375	0.09985	-0.0043
SP./SP.Scale	-0.17565	-0.1433	-0.0373	0.10825	0.2018	0.26875	0.19925	-0.32148
	0	0	0	0	0	0	0	0

Sitting at Rest ;

E/Emax	0.13519	0.13853	15913	156908	0.21263	0.190387	0.186393	0.09826
SP. / SP. Scale	0.37595	0.39265	0.49565	0.48454	0.76315	0.65194	0.63197	0.1913
	0	0	0	0	1	1	1	0

Sedentary Activity ;

E/Emax	0.20873	0.209997	0.23019	0.20708	0.28748	0.241476	0.24409	0.166638
SP. /SP. Scale	0.74365	0.749985	0.85095	0.7354	1.1374	0.90738	0.92045	0.53319
	1	1	1	1	1	1	1	1

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	0.94452	0.9482	0.9603	0.97725	0.9883	0.9963	0.98798	0.92814
(M-W) ± C	5.4118	7.016	11.8289	26.0377	21.4545	35.6251	27.6884	-1.0053
S(Kcal/h)	5.11155	6.6526	11.3593	25.4453	21.2035	35.4933	27.3556	-0.07716
S(Watt)	5.9447	7.7369	13.2109	29.5929	24.6596	41.2787	31.8145	-0.08974

Sitting at Rest ;1/f	1.00915	1.01118	1.02376	1.02239	1.05715	1.04314	1.04064	0.98704
(M-W) ± C	29.4118	31.016	35.8289	50.0377	45.4545	59.6251	51.6884	22.9947
S(Kcal/h)	29.68092	31.3628	36.6802	51.15804	48.0522	62.1973	53.789	22.6967
S(Watt)	34.5189	36.4749	42.6591	59.4968	55.8847	72.3355	62.5566	26.3962

Sedentary Act.; 1/f	1.05468	1.05548	1.06835	1.05364	1.10571	1.07561	1.0773	1.0284
(M-W) ± C	45.4118	47.016	51.8289	66.0377	61.4545	75.6251	67.6884	38.9947
S(Kcal/h)	47.8949	49.6244	55.3714	69.57996	67.9509	81.3431	72.9207	40.1021
S(Watt)	55.7018	57.7132	64.3969	80.9215	79.0268	94.60204	84.8068	46.6388

35^0 - Ta	8.8	8.6	8	4.2	6.8	3.7	5	9.6

Volume of Space (Cu.M.) =0 .69231 S(Watt) / (35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	5.9447	7.7369	13.2109	29.5929	24.6596	41.2787	31.8145	-0.08974
0.69231 S	4.1156	5.3564	9.14601	20.4875	17.0721	28.5777	22.0255	-0.06213
Volume of Space	0.4677	0.6228	1.1433	4.878	2.5106	7.7237	4.4051	-0.00647

Sitting .;S (Watt)	34.5189	36.4749	42.6591	59.4968	55.8847	72.3355	62.5566	26.3962
0.69231 S	23.8978	25.2519	29.5333	41.1902	38.6896	50.0786	43.3086	18.2744
Volume of Space	2.7157	2.9363	3.6917	9.8072	5.6896	13.5348	8.6617	1.904

Sedentary. ;S (Watt)	55.7018	57.7132	64.3969	80.9215	79.0268	94.60204	84.8068	46.6388
0.69231 S	38.5629	39.9554	44.5826	56.0228	54.7111	65.4939	58.7126	32.2885
Volume of Space	4.5368	4.646	5.5728	13.3388	8.0458	17.7011	11.7425	3.3634

Date : June 14 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	28.6	28.5	29	30.6	32.7	31.8	26.6	27.5
RH (%)	78	78	76	65	60	68	84	74
V. at 7.65 M.; (Mps.)	0	0	0.5722	2.0027	0	1.7166	1.7166	1.1444
Vi= 0.65 V ; Mps.	0.2	0.2	0.37193	1.30176	0.2	1.11579	1.11579	0.74386
Vpa (mm.Hg.)	22.9	23	22.9	21.4	22.3	24	22	20.3

The Convection Heat Exchange (C) = α x $Vi^{0.3}$ ($Ta-35^0$)

Ta - 35 ^{0}C	-6.4	-6.5	-6	-4.4	-2.3	-3.2	-8.4	-7.5
Vi $^{0.3}$	0.61703	0.61703	0.74326	1.08233	0.61703	1.0334	1.0334	0.91506
C	-51.3369	-52.139	-57.9743	-61.9093	-18.4492	-42.9894	-112.847	-89.2184

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 $\pm$ C

Sitting at Rest ; E = 100 $\pm$ C Sedentary Activity ; E = 116 $\pm$ C

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism; E	24.6631	23.861	18.0257	14.0907	57.5508	33.0106	-36.8473	-13.2184
Sitting at Rest ; E	48.6631	47.861	42.0257	38.0907	81.5508	57.0106	-12.8473	10.7816
Sedentary Activity; E	64.6631	63.861	58.0257	54.0907	97.5508	73.0106	3.1527	26.7816

E max = pV $^{0.3}$ (42- Vpa) ; p = 20.5

V $^{0.3}$	0.61703	0.61703	0.74326	1.08233	0.61703	1.0334	1.0334	0.91506
pV $^{0.3}$	12.6491	12.6491	15.2368	22.1878	12.6491	21.1847	21.1847	18.7587
42 - Vpa	19.1	19	19.1	20.6	19.7	18	20	21.7
E max	241.5981	240.3332	291.0235	457.068	249.1876	381.3246	423.694	407.0644

1/f = e $^{0.6\ (E/Emax\ -\ 0.12\ )}$

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism ;E	24.6631	23.861	18.0257	14.0907	57.5508	33.0106	-36.8473	-13.2184
Emax	241.5981	240.3332	291.0235	457.068	249.1876	381.3246	423.694	407.0644
E/Emax	0.10208	0.09928	0.06194	0.03083	0.230954	0.08657	-0.08697	-0.03247
E/Emax - 0.12	-0.0179	-0.02072	-0.05806	-0.0892	0.110954	-0.03343	-0.20697	-0.15247
1/f	0.989307	0.98765	0.96576	0.947903	1.06884	0.98014	0.88322	0.91258

Sitting at Rest ;E	48.6631	47.861	42.0257	38.0907	81.5508	57.0106	-12.8473	10.7816
Emax	241.5981	240.3332	291.0235	457.068	249.1876	381.3246	423.694	407.0644
E/Emax	0.20142	0.19914	0.144407	0.083337	0.32727	0.149507	-0.03032	0.026486
E/Emax - 0.12	0.08142	0.07914	0.024407	-0.03666	0.20727	0.02951	-0.15032	-0.0935
1/f	1.0501	1.0486	1.01475	0.97824	1.1324	1.0179	9.1375	0.94544

Sedentary Activity ;E	64.6631	63.861	58.0257	54.0907	97.5508	73.0106	3.1527	26.7816
Emax	241.5981	240.3332	291.0235	457.068	249.1876	381.3246	423.694	407.0644
E/Emax	0.26765	0.26572	0.199385	0.11834	0.391475	0.191466	0.00744	0.06579
E/Emax - 0.12	0.14765	0.14572	0.079385	-0.00166	0.27148	0.071466	-0.11256	-0.05421
1/f	1.09263	1.0914	1.0488	0.99901	1.1769	1.04381	0.934695	0.967998

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	0.10208	0.09928	0.06194	0.03083	0.230954	0.08657	-0.08697	-0.03247
SP./SP.Scale	0.2104	0.1964	0.0097	-0.14585	0.85477	0.13285	-0.7348	-0.46235
	0	0	0	0	1	0	0	0

Sitting at Rest ;

E/Emax	0.20142	0.19914	0.144407	0.083337	0.32727	0.149507	-0.03032	0.026486
SP. / SP. Scale	0.7071	0.6957	0.42204	0.116685	1.3364	0.4475	-0.45161	-0.16757
	1	1	0	0	1	0	0	0

Sedentary Activity ;

E/Emax	0.26765	0.26572	0.199385	0.11834	0.391475	0.191466	0.00744	0.06579
SP. /SP. Scale	1.0383	1.0286	0.696925	0.2917	1.6574	0.6573	-0.2628	0.02895
	1	1	1	0	2	1	0	0

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	0.989307	0.98765	0.96576	0.947903	1.06884	0.98014	0.88322	0.91258
(M-W) ± C	24.6631	23.861	18.0257	14.0907	57.5508	33.0106	-36.8473	-13.2184
S(Kcal/h)	24.3994	23.5663	17.4085	13.3566	61.5126	32.355	-35.9641	-12.3058
S(Watt)	28.3765	27.4076	20.2461	15.5337	71.5392	37.6289	-41.8262	-14.3117

Sitting at Rest ;1/f	1.0501	1.0486	1.01475	0.97824	1.1324	1.0179	9.1375	0.94544
(M-W) ± C	48.6631	47.861	42.0257	38.0907	81.5508	57.0106	-12.8473	10.7816
S(Kcal/h)	51.1011	50.187	42.6456	37.2618	92.3481	58.0311	-11.9316	10.1934
S(Watt)	59.4306	58.3675	49.5968	43.3355	107.4009	67.4902	-13.8764	11.8549

Sedentary Act.; 1/f	1.09263	1.0914	1.0488	0.99901	1.1769	1.04381	0.934695	0.967998
(M-W) ± C	64.6631	63.861	58.0257	54.0907	97.5508	73.0106	3.1527	26.7816
S(Kcal/h)	70.6528	69.6979	60.8574	54.0372	114.8075	76.2092	2.9468	25.9245
S(Watt)	82.1693	81.0587	70.7771	62.8452	133.5212	88.6313	3.4271	30.1502

35^0 - Ta	6.4	6.5	6	4.4	2.3	3.2	8.4	7.5

Volume of Space (Cu.M.) = 0.69231 S(Watt) / (35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	28.3765	27.4076	20.2461	15.5337	71.5392	37.6289	-41.8262	-14.3117
0.69231 S	19.6453	18.9746	14.0166	10.7542	49.5273	26.0508	-28.9567	-9.9081
Volume of Space	3.0696	2.9192	2.3361	2.4441	21.5336	8.1409	-3.4472	-1.3211
Sitting .;S (Watt)	59.4306	58.3675	49.5968	43.3355	107.4009	67.4902	-13.8764	11.8549
0.69231 S	41.1444	40.4084	34.3364	30.0016	74.3547	46.7241	-9.6068	8.2072
Volume of Space	6.4288	6.2167	5.7227	6.8185	32.3281	14.6013	-1.1437	1.0943
Sedentary. ;S (Watt)	82.1693	81.0587	70.7771	62.8452	133.5212	88.6313	3.4271	30.1502
0.69231 S	56.8866	56.1177	48.9997	43.5084	92.438	61.3603	2.3726	20.8733
Volume of Space	8.8885	8.6335	8.1666	9.8883	40.1904	19.1751	2.825	2.7831

Date : June 21 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	28.3	27.6	27.6	31.5	32.8	32.2	26.4	27.9
RH (%)	72	72	72	58	54	64	92	74
V. at 7.65 M.; (Mps.)	0.8583	0.5722	0.8583	1.4305	2.2888	0.5722	1.7166	0.8583
Vi= 0.65 V ; Mps.	0.5579	0.37193	0.5579	0.9298	1.4877	0.37193	1.11579	0.5579
Vpa (mm.Hg.)	20.6	19.9	19.9	20.3	20	23	23.7	21

The Convection Heat Exchange (C) = α x $Vi^{0.3}$ ($Ta-35^0$)

Ta - 35 ^{0}C	-6.7	-7.4	-7.4	-3.5	-2.2	-2.8	-8.6	-7.6
Vi $^{0.3}$	0.8394	0.7433	0.8394	0.9784	1.1266	0.7433	1.03341	0.8394
C	-73.1117	-71.5055	-79.6591	-44.5172	-32.2208	-27.0561	-115.535	-82.9327

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 ± C

Sitting at Rest ; E = 100± C Sedentary Activity ; E = 116 ± C

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism; E	2.8883	4.4945	-3.6591	31.4828	43.7792	48.9439	-39.5352	-6.9327
Sitting at Rest ; E	26.8883	28.4945	20.3409	55.4828	67.7792	72.9439	-15.535	17.0673
Sedentary Activity; E	42.8883	44.4945	36.3409	71.4828	83.7792	88.9439	0.4648	33.0673

E max = pV $^{0.3}$ (42- Vpa) ; p = 20.5

V $^{0.3}$	0.8394	0.7433	0.8394	0.9784	1.1266	0.7433	1.03341	0.8394
pV $^{0.3}$	17.2077	15.23765	17.2077	20.0572	23.0953	15.2377	21.1849	17.2077
42 - Vpa	21.4	22.1	22.1	21.7	22	19	18.3	21
E max	368.2448	336.7521	380.2902	435.2412	508.0966	289.5154	387.6838	361.3617

1/f = e $^{0.6\ (E/Emax\ -\ 0.12\ )}$

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism ;E	2.8883	4.4945	-3.6591	31.4828	43.7792	48.9439	-39.5352	-6.9327
Emax	368.2448	336.7521	380.2902	435.2412	508.0966	289.5154	387.6838	361.3617
E/Emax	0.007843	0.01335	-0.00962	0.072334	0.08616	0.16905	-0.10198	-0.01918
E/Emax - 0.12	-0.11216	-0.10665	-0.12962	-0.04767	-0.03384	0.04905	-0.22198	-0.13918
1/f	0.93492	0.93801	0.92517	0.97181	0.9799	1.02987	0.8753	0.91988

Sitting at Rest ;E	26.8883	28.4945	20.3409	55.4828	67.7792	72.9439	-15.5352	17.0673
Emax	368.2448	336.7521	380.2902	435.2412	508.0966	289.5154	387.6838	361.3617
E/Emax	0.07302	0.084616	0.05349	0.127476	0.133398	0.25195	-0.04007	0.04723
E/Emax - 0.12	-0.04698	-0.03538	-0.0665	0.007476	0.013398	0.13195	-0.16007	-0.0728
1/f	0.9722	0.97899	0.9609	1.004496	1.00807	1.0824	0.90842	0.95728

Sedentary Activity ;E	42.8883	44.4945	36.3409	71.4828	83.7792	88.9439	0.4648	33.0673
Emax	368.2448	336.7521	380.2902	435.2412	508.0966	289.5154	387.6838	361.3617
E/Emax	0.11647	0.13213	0.09556	0.16424	0.16489	0.30722	0.001199	0.09151
E/Emax - 0.12	-0.00353	0.01213	-0.02444	0.04424	0.04489	0.18722	-0.1188	-0.02849
1/f	0.99788	1.0073	0.98544	1.0269	1.0273	1.1189	0.9312	0.98305

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	0.007843	0.01335	-0.00962	0.072334	0.08616	0.16905	-0.10198	-0.01918
SP./SP.Scale	-0.2608	-0.23325	-0.3481	0.06167	0.1308	0.54525	-0.8099	-0.3959
	0	0	0	0	0	1	0	0

Sitting at Rest ;

E/Emax	0.07302	0.084616	0.05349	0.127476	0.133398	0.25195	-0.04007	0.04723
SP. / SP. Scale	0.0651	0.12308	-0.03255	0.33738	0.36699	0.95975	-0.50035	-0.06385
	0	0	0	0	0	1	0	0

Sedentary Activity ;

E/Emax	0.11647	0.13213	0.09556	0.16424	0.16489	0.30722	0.001199	0.09151
SP. /SP. Scale	0.28235	0.36065	0.1778	0.5212	0.52445	1.2361	-0.24006	0.15755
	0	0	0	1	1	1	0	0

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	0.93492	0.93801	0.92517	0.97181	0.9799	1.02987	0.8753	0.91988
(M-W) ± C	2.8883	4.4945	-3.6591	31.4828	43.7792	48.9439	-39.5352	-6.9327
S(Kcal/h)	2.7003	4.2159	-2.7339	30.5953	42.8992	50.4059	-38.6599	-6.01282
S(Watt)	3.1405	4.9031	-3.1796	35.5823	49.8918	58.622	-44.9615	-6.9929

Sitting at Rest ;1/f	0.9722	0.97899	0.9609	1.004496	1.00807	1.0824	0.90842	0.95728
(M-W) ± C	26.8883	28.4945	20.3409	55.4828	67.7792	72.9439	-15.5352	17.0673
S(Kcal/h)	26.1408	27.8958	19.5456	55.7323	68.3262	78.9545	-14.6268	16.3382
S(Watt)	30.4018	32.4429	22.7315	64.8166	79.4633	91.8241	-17.0109	19.0013

Sedentary Act.; 1/f	0.99788	1.0073	0.98544	1.0269	1.0273	1.1189	0.9312	0.98305
(M-W) ± C	42.8883	44.4945	36.3409	71.4828	83.7792	88.9439	0.4648	33.0673
S(Kcal/h)	42.7974	44.8193	35.8118	73.4057	86.0664	99.5193	0.4328	32.5068
S(Watt)	49.7733	52.1249	41.6491	85.3708	100.0952	115.741	0.50337	37.8054

35^0 - Ta	6.7	7.4	7.4	3.5	2.2	2.8	8.6	7.1

Volume of Space (Cu.M.) = 0.69231 S(Watt) / (35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	3.1405	4.9031	-3.1796	35.5823	49.8918	58.622	-44.9615	-6.9929
0.69231 S	2.1742	3.3944	-2.2012	24.634	34.5406	40.5846	-31.1273	-4.8413
Volume of Space	0.3245	0.4587	-0.2975	7.0383	15.7003	14.4945	-3.6195	-0.68187
Sitting .;S (Watt)	30.4018	32.4429	22.7315	64.8166	79.4633	91.8241	-17.0109	19.0013
0.69231 S	21.0474	22.4605	15.7372	44.8732	55.0133	63.5707	-11.7768	13.1548
Volume of Space	3.1414	3.0352	2.1266	12.8209	25.006	22.7038	-1.3694	1.8528
Sedentary. ;S (Watt)	49.7733	52.1249	41.6491	85.3708	100.0952	115.741	0.50337	37.8054
0.69231 S	34.4583	36.0866	28.8341	59.1031	69.2969	80.1286	0.3485	26.1731
Volume of Space	5.1431	4.8766	3.8965	16.8866	31.4986	28.6174	0.0405	3.6864

Date : June 28 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	28	28	28.9	28.5	27.2	28.1	28	28
RH (%)	79	82	81	84	84	74	77	85
V. at 7.65 M.; (Mps.)	1.1444	0.5722	0	1.4305	0.8583	0	1.4305	0
Vi= 0.65 V ; Mps.	0.74386	0.37193	0.2	0.92983	0.5579	0.2	0.92983	0.2
Vpa (mm.Hg.)	22.4	23.2	24.1	24.4	22.8	21.1	21.2	23.9

The Convection Heat Exchange (C) = α x $Vi^{0.3}$ (Ta-35^0)

Ta - 35 ^{0}C	-7	-7	-6.1	-6.5	-7.8	-6.9	-7	-7
Vi $^{0.3}$	0.91506	0.74326	0.61703	0.9784	0.83939	0.61703	0.9784	0.61703
C	-83.2705	-67.6367	-48.9305	-82.6748	-85.1141	-55.3476	-89.0344	-56.1497

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 ± C

Sitting at Rest ; E = 100± C Sedentary Activity ; E = 116 ± C

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism; E	-7.2705	8.3633	27.0695	-6.6748	-9.1141	20.6524	-13.0344	19.8503
Sitting at Rest ; E	16.7295	32.3633	51.0695	17.3252	14.8859	44.6524	10.9656	43.8503
Sedentary Activity; E	32.7295	48.3633	67.0695	33.3252	30.8859	60.6524	26.9656	59.8503

E max = pV $^{0.3}$ (42- Vpa) ; p = 20.5

V $^{0.3}$	0.91506	0.74326	0.61703	0.9784	0.83939	0.61703	0.9784	0.61703
pV $^{0.3}$	18.7587	15.2368	12.6491	20.0572	17.2075	12.6491	19.6472	12.6491
42 - Vpa	19.6	18.8	17.9	17.6	19.2	20.9	20.8	18.1
E max	367.6711	286.4524	226.419	323.0067	330.3839	264.3665	408.6618	228.949

1/f = e $^{0.6\ (E/Emax\ -\ 0.12\ )}$

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism ;E	-7.2705	8.3633	27.0695	-6.6748	-9.1141	20.6524	-13.0344	19.8503
Emax	367.6711	286.4524	226.419	323.0067	330.3839	264.3665	408.6618	228.949
E/Emax	-0.01977	0.029196	0.119555	-0.01891	-0.02759	0.07812	-0.0319	0.0867
E/Emax - 0.12	-0.13977	-0.0908	0.000445	-0.13891	-0.14759	-0.04188	-0.1519	-0.0333
1/f	0.91956	0.94698	0.99973	0.92003	0.91526	0.97519	0.91289	0.98022

Sitting at Rest ;E	16.7295	32.3633	51.0695	17.3252	14.8859	44.6524	10.9656	43.8503
Emax	367.6711	286.4524	226.419	323.0067	330.3839	264.3665	408.6618	228.949
E/Emax	0.0455	0.11298	0.22555	0.04908	0.04506	0.168903	0.02683	0.191529
E/Emax - 0.12	-0.0745	0.000702	0.10555	-0.07092	-0.07494	0.048903	-0.09317	0.07153
1/f	0.95629	0.995797	1.06538	0.95834	0.95603	1.02978	0.94563	1.0439

Sedentary Activity ;E	32.7295	48.3633	67.0695	33.3252	30.8859	60.6524	26.9656	59.8503
Emax	367.6711	286.4524	226.419	323.0067	330.3839	264.3665	408.6618	228.949
E/Emax	0.08902	0.16884	0.29622	0.094404	0.09348	0.229425	0.065985	0.261413
E/Emax - 0.12	-0.03098	0.04884	0.17622	-0.0256	-0.02652	0.109425	-0.05401	0.141413
1/f	0.98158	1.02973	1.11152	0.98476	0.98422	1.06786	0.96811	1.08855

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	-0.01977	0.029196	0.119555	-0.01891	-0.02759	0.07812	-0.0319	0.0867
SP./SP.Scale	-0.39885	-0.15402	0.2978	-0.39455	-0.43795	0.0906	-0.4595	0.1335
	0	0	0	0	0	0	0	0

Sitting at Rest ;

E/Emax	0.0455	0.11298	0.22555	0.04908	0.04506	0.168903	0.02683	0.191529
SP. / SP. Scale	-0.0725	0.264899	0.82775	-0.0546	-0.0747	0.54452	-0.16585	0.65765
	0	0	1	0	0	1	0	1

Sedentary Activity ;

E/Emax	0.08902	0.16884	0.29622	0.094404	0.09348	0.229425	0.065985	0.261413
SP. /SP. Scale	0.1451	0.5442	1.1811	0.17202	0.1674	0.84713	0.02993	1.00707
	0	1	1	0	0	1	0	1

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	0.91956	0.94698	0.99973	0.92003	0.91526	0.97519	0.91289	0.98022
(M-W) ± C	-7.2705	8.3633	27.0695	-6.6748	-9.1141	20.6524	-13.0344	19.8503
S(Kcal/h)	-6.3509	7.9199	27.0622	-5.7548	-8.19884	0.04722	-12.1215	19.4577
S(Watt)	-7.3861	9.2108	31.4733	-6.6928	-9.5353	0.05492	-14.0973	22.6293

Sitting at Rest ;1/f	0.95629	0.995797	1.06538	0.95834	0.95603	1.02978	0.94563	1.0439
(M-W) ± C	16.7295	32.3633	51.0695	17.3252	14.8859	44.6524	10.9656	43.8503
S(Kcal/h)	15.9983	32.2273	54.4084	16.6034	14.2304	45.9821	10.3694	45.7753
S(Watt)	18.60597	37.4803	63.277	19.3098	16.5511	53.4772	12.0596	53.2367

Sedentary Act.; 1/f	0.98158	1.02973	1.11152	0.98476	0.98422	1.06786	0.96811	1.08855
(M-W) ± C	32.7295	48.3633	67.0695	33.3252	30.8859	60.6524	26.9656	59.8503
S(Kcal/h)	32.1266	49.8011	74.5491	32.8173	30.3985	64.7683	26.1057	65.15004
S(Watt)	37.3633	57.9187	86.7006	38.1665	35.3535	75.3255	30.3609	75.7695

35^0 - Ta	7	7	6.1	6.5	7.8	6.9	7	7

Volume of Space (Cu.M.) =0 .69231 S(Watt) / (35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	-7.3861	9.2108	31.4733	-6.6928	-9.5353	0.05492	-14.0973	22.6293
0.69231 S	-5.1135	6.3767	21.7893	-4.6335	-6.60135	0.03802	-9.7597	15.6665
Volume of Space	-0.7305	0.91096	3.572	-0.7128	-0.8463	0.00551	-1.3942	2.2381

Sitting .;S (Watt)	18.60597	37.4803	63.277	19.3098	16.5511	53.4772	12.0596	53.2367
0.69231 S	12.8811	25.948	43.8073	13.3684	11.4585	37.0228	8.349	36.8563
Volume of Space	1.8402	3.7069	7.1815	2.0567	1.469	5.3656	1.1927	5.2652

Sedentary. ;S (Watt)	37.3633	57.9187	86.7006	38.1665	35.3535	75.3255	30.3609	75.7695
0.69231 S	25.86696	40.0977	60.0237	26.4231	24.4756	52.1486	21.0191	52.456
Volume of Space	3.6953	5.7282	9.83995	4.0651	3.1379	7.5578	3.0027	7.4937

Date : July 7 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	29	28.9	28.7	29.7	31	25.5	26.8	27.4
RH (%)	79	81	83	73	68	95	96	95
V. at 7.65 M.; (Mps.)	1.4305	1.1444	0.5722	1.1444	1.1444	0	0	0
Vi= 0.65 V ; Mps.	0.92983	0.74386	0.37193	0.74386	0.74386	0.2	0.2	0.2
Vpa (mm.Hg.)	23.7	23.9	24.4	22.9	22.8	23.1	25.4	25.8

The Convection Heat Exchange (C) = α x $Vi^{0.3}$ ($Ta-35^0$)

Ta - 35 ^{0}C	-6	-6.1	-6.3	-5.3	-4	-9.5	-8.2	-7.6
Vi $^{0.3}$	0.97841	0.91506	0.74326	0.91506	0.91506	0.61703	0.61703	0.61703
C	-76.316	-72.5643	-60.873	-63.0476	-47.5831	-76.2032	-65.7754	-60.9626

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 ± C

Sitting at Rest ; E = 100± C Sedentary Activity ; E = 116 ± C

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism; E	-0.31598	3.4357	15.127	12.9524	28.4169	-0.2032	10.2246	15.0374
Sitting at Rest ; E	23.68402	27.4357	39.127	36.9524	52.4169	23.7968	34.2246	39.0374
Sedentary Activity; E	39.68402	43.4357	55.127	52.9524	68.4169	39.7968	50.2246	55.0374

E max = pV $^{0.3}$ (42- Vpa) ; p = 20.5

V $^{0.3}$	0.97841	0.91506	0.74326	0.91506	0.91506	0.61703	0.61703	0.61703
pV $^{0.3}$	20.0574	18.7587	15.2368	18.7587	18.7587	12.6491	12.6491	12.6491
42 - Vpa	18.3	18.1	17.6	19.1	19.2	18.9	16.6	16.2
E max	367.0505	339.533	268.1682	358.2917	360.1676	239.0683	209.9753	204.9157

1/f = e $^{0.6\ (E/Emax\ -\ 0.12\ )}$

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism ;E	-0.31598	3.4357	15.127	12.9524	28.4169	-0.2032	10.2246	15.0374
Emax	367.0505	339.533	268.1682	358.2917	360.1676	239.0683	209.9753	204.9157
E/Emax	-0.00086	0.010119	0.056409	0.03615	0.078899	-0.00085	0.04869	0.07337
E/Emax - 0.12	-0.12086	-0.10988	-0.06359	-0.08385	-0.0411	-0.12085	-0.07131	-0.04663
1/f	0.93005	0.936198	0.962564	0.950935	0.97564	0.930056	0.95812	0.97241

Sitting at Rest ;E	23.68402	27.4357	39.127	36.9524	52.4169	23.7968	34.2246	39.0374
Emax	367.0505	339.533	268.1682	358.2917	360.1676	239.0683	209.9753	204.9157
E/Emax	0.064515	0.080804	0.145905	0.103135	0.145535	0.09954	0.16299	0.190505
E/Emax - 0.12	-0.05549	-0.0392	0.025905	-0.01687	0.025535	-0.02046	0.042993	0.070505
1/f	0.967257	0.97676	1.01566	0.98993	1.01544	0.987799	1.02613	1.07305

Sedentary Activity ;E	39.68402	43.4357	55.127	52.9524	68.4169	39.7968	50.2246	55.0374
Emax	367.0505	339.533	268.1682	358.2917	360.1676	239.0683	209.9753	204.9157
E/Emax	0.108116	0.127928	0.20557	0.14779	0.189959	0.16647	0.23919	0.268586
E/Emax - 0.12	-0.01188	0.007928	0.08557	0.02779	0.069959	0.04647	0.11919	0.148586
1/f	0.992895	1.00477	1.05268	1.01681	1.042869	1.02827	1.07414	1.09325

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	-0.00086	0.010119	0.056409	0.03615	0.078899	-0.00085	0.04869	0.07337
SP./SP.Scale	-0.30431	-0.24941	-0.01796	-0.11925	0.094495	-0.30425	-0.05655	0.06685
	0	0	0	0	0	0	0	0

Sitting at Rest ;

E/Emax	0.064515	0.080804	0.145905	0.103135	0.145535	0.09954	0.16299	0.190505
SP. / SP. Scale	0.022575	0.10402	0.429525	0.215675	0.427675	0.1977	0.51495	0.652525
	0	0	0	0	0	0	1	1

Sedentary Activity ;

E/Emax	0.108116	0.127928	0.20557	0.14779	0.189959	0.16647	0.23919	0.268586
SP. /SP. Scale	0.24058	0.33964	0.72785	0.43895	0.64979	0.53235	0.89595	1.04293
	0	0	1	0	1	1	1	1

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	0.93005	0.936198	0.962564	0.950935	0.97564	0.930056	0.95812	0.97241
(M-W) ± C	-0.31598	3.4357	15.127	12.9524	28.4169	-0.2032	10.2246	15.0374
S(Kcal/h)	-0.61407	3.2165	14.5607	12.3169	27.7247	-0.18899	9.7964	14.6225
S(Watt)	-0.71416	3.7408	16.9341	14.3245	32.2438	-0.21979	11.3932	17.00599

Sitting at Rest ;1/f	0.967257	0.97676	1.01566	0.98993	1.01544	0.987799	1.02613	1.07305
(M-W) ± C	23.68402	27.4357	39.127	36.9524	52.4169	23.7968	34.2246	39.0374
S(Kcal/h)	22.9085	26.7981	39.7397	36.5803	53.2262	23.50646	35.1189	41.8891
S(Watt)	26.6426	31.1662	46.2173	42.5429	61.9021	27.33801	40.8433	48.717

Sedentary Act.; 1/f	0.992895	1.00477	1.05268	1.01681	1.042869	1.02827	1.07414	1.09325
(M-W) ± C	39.68402	43.4357	55.127	52.9524	68.4169	39.7968	50.2246	55.0374
S(Kcal/h)	39.4021	43.6429	58.0311	53.8425	71.3499	40.9219	53.9483	60.1696
S(Watt)	45.8246	50.7567	67.4902	62.6189	82.9799	47.5921	62.7418	69.9773

35^0 - Ta	6	6.3	6.3	5.3	4	9.5	8.2	7.6

Volume of Space (Cu.M.) = 0.69231 S(Watt) / (35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	-0.71416	3.7408	16.9341	14.3245	32.2438	-0.21979	11.3932	17.00599
0.69231 S	-0.4944	2.5898	11.7236	9.91702	22.3227	-0.15216	7.8876	11.7734
Volume of Space	-0.0824	0.4111	1.8609	1.8711	5.5807	-0.01602	0.9619	1.5491

Sitting .;S (Watt)	26.6426	31.1662	46.2173	42.5429	61.9021	27.33801	40.8433	48.717
0.69231 S	18.44496	21.5767	31.9967	29.4529	42.8554	18.9264	28.2762	33.7273
Volume of Space	3.0742	3.4249	5.0788	5.5572	10.7139	1.9923	3.4483	4.4378

Sedentary. ;S (Watt)	45.8246	50.7567	67.4902	62.6189	82.9799	47.5921	62.7418	69.9773
0.69231 S	31.7248	35.1394	46.7241	43.3517	57.4478	32.9485	43.4368	48.44598
Volume of Space	5.2875	5.5777	7.4165	8.1796	14.36195	3.4683	5.2972	6.3745

Date : July 14 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	29.3	28.2	27.8	30.7	32.2	31.8	30	29
RH (%)	71	75	79	64	62	65	74	70
V. at 7.65 M.; (Mps.)	1.7166	0	0.5722	1.7166	1.1444	1.4305	0.5722	0
Vi= 0.65 V ; Mps.	1.11579	0.2	0.37193	1.11579	0.74386	0.929825	0.37193	0.2
Vpa (mm.Hg.)	21.8	21.5	22	21.1	22.1	21.6	23.4	21

The Convection Heat Exchange (C) = α x $Vi^{0.3}$ ($Ta-35^0$)

Ta - 35 ^{0}C	-5.7	-6.8	-7.2	-4.3	-2.8	-3.2	-5	-6
Vi $^{0.3}$	1.0334	0.61703	0.74326	1.0334	0.91506	0.97841	0.74326	0.61703
C	-76.5749	-54.5455	-69.5691	-57.7671	-33.3082	-40.7019	-48.3119	-48.1283

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 ± C

Sitting at Rest ; E = 100± C Sedentary Activity ; E = 116 ± C

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism; E	-0.5749	21.4545	6.43086	18.2329	42.6918	35.2981	27.6881	27.8717
Sitting at Rest ; E	23.4251	45.4545	30.43086	42.2329	66.6918	59.2981	51.6881	51.8717
Sedentary Activity; E	39.4251	61.4545	46.43086	58.2329	82.6918	75.2981	67.6881	67.8717

E max = pV $^{0.3}$ (42- Vpa) ; p = 20.5

V $^{0.3}$	1.0334	0.61703	0.74326	1.0334	0.91506	0.97841	0.74326	0.61703
pV $^{0.3}$	21.1847	12.6491	15.2368	21.847	18.7587	20.0574	15.2368	12.6491
42 - Vpa	20.2	20.5	20	20.9	19.9	20.4	18.6	21
E max	427.9309	259.3069	304.7366	442.7602	373.2987	409.1711	283.405	265.6314

1/f = e $^{0.6\ (E/Emax\ -\ 0.12\ )}$

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism ;E	-0.5749	21.4545	6.43086	18.2329	42.6918	35.2981	27.6881	27.8717
Emax	427.9309	259.3069	304.7366	442.7602	373.2987	409.1711	283.405	265.6314
E/Emax	-0.00134	0.08274	0.0211	0.04118	0.11436	0.08627	0.097698	0.104926
E/Emax - 0.12	-0.12134	-0.03726	-0.0989	-0.07882	0.005636	-0.03373	-0.0223	-0.01507
1/f	0.92978	0.97789	0.94239	0.95381	0.996624	0.979964	0.986708	0.990997

Sitting at Rest ;E	23.4251	45.4545	30.43086	42.2329	66.6918	59.2981	51.6881	51.8717
Emax	427.9309	259.3069	304.7366	442.7602	373.2987	409.1711	283.405	265.6314
E/Emax	0.05474	0.175292	0.09986	0.095385	0.178655	0.144923	0.18238	0.19528
E/Emax - 0.12	-0.06526	0.05529	-0.02014	-0.02462	0.05866	0.024923	0.06238	0.075277
1/f	0.961601	1.03373	0.98799	0.98534	1.03582	1.01507	1.03814	1.0462

Sedentary Activity ;E	39.4251	61.4545	46.43086	58.2329	82.6918	75.2981	67.6881	67.8717
Emax	427.9309	259.3069	304.7366	442.7602	373.2987	409.1711	283.405	265.6314
E/Emax	0.09213	0.236995	0.152364	0.131522	0.221516	0.18403	0.23884	0.255511
E/Emax - 0.12	-0.02787	0.116995	0.032364	0.011522	0.101516	0.06403	0.11884	0.135511
1/f	0.98342	1.07272	1.01961	1.00694	1.0628	1.03916	1.07391	1.0847

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	-0.00134	0.08274	0.0211	0.04118	0.11436	0.08627	0.097698	0.104926
SP./SP.Scale	-0.30672	0.1137	-0.1945	-0.0941	0.2718	0.13135	0.18849	0.22463
	0	0	0	0	0	0	0	0

Sitting at Rest ;

E/Emax	0.05474	0.175292	0.09986	0.095385	0.178655	0.144923	0.18238	0.19528
SP. / SP. Scale	-0.0263	0.57646	0.1993	0.176925	0.593275	0.424615	0.6119	0.6764
	0	1	0	0	1	0	1	1

Sedentary Activity ;

E/Emax	0.09213	0.236995	0.152364	0.131522	0.221516	0.18403	0.23884	0.255511
Sp. /SP. Scale	0.16065	0.884975	0.46182	0.3576	0.80758	0.62015	0.8942	0.97756
	0	1	0	0	1	1	1	1

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	0.92978	0.97789	0.94239	0.95381	0.996624	0.979964	0.986708	0.990997
(M-W) ± C	-0.5749	21.4545	6.43086	18.2329	42.6918	35.2981	27.6881	27.8717
S(Kcal/h)	-0.53453	20.9801	6.0604	17.3907	42.5477	34.5909	27.3201	27.6208
S(Watt)	-0.62066	24.3999	7.0482	20.2254	49.4829	40.2292	31.7732	32.12296

Sitting at Rest ;1/f	0.961601	1.03373	0.98799	0.98534	1.03582	1.01507	1.03814	1.0462
(M-W) ± C	23.4251	45.4545	30.43086	42.2329	66.6918	59.2981	51.6881	51.8717
S(Kcal/h)	22.5256	46.9877	30.0654	41.6138	69.0807	60.1917	53.6595	54.2682
S(Watt)	26.1973	54.6467	34.966	48.3968	80.3409	70.003	62.40598	63.1139

Sedentary Act.; 1/f	0.98342	1.07272	1.01961	1.00694	1.0628	1.03916	1.07391	1.0847
(M-W) ± C	39.4251	61.4545	46.43086	58.2329	82.6918	75.2981	67.6881	67.8717
S(Kcal/h)	38.7714	65.9235	47.3414	58.637	87.8848	78.2468	72.6909	73.6204
S(Watt)	45.0912	76.669	55.058	68.1949	102.2101	91.001	84.5395	85.6206

35^0 - Ta	5.7	6.8	7.2	4.3	2.8	3.2	5	6

Volume of Space (Cu.M.) = 0.69231 S(Watt) / (35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	-0.62066	24.3999	7.0482	20.2254	49.4829	40.2292	31.7732	32.12296
0.69231 S	-0.4304	16.8923	4.8796	14..0023	34.2575	27.8511	21.9969	22.239
Volume of Space	-0.0755	2.4842	0.6777	3.2563	12.2348	8.7035	4.3994	3.7065
Sitting .;S (Watt)	26.1973	54.6467	34.966	48.3968	80.3409	70.003	62.40598	63.1139
0.69231 S	18.1366	37.8324	24.2073	33.5056	55.6208	48.4638	43.2043	43.6944
Volume of Space	3.1819	5.5636	3.3621	7.792	19.8646	15.1449	8.6409	7.2824
Sedentary. ;S (Watt)	45.0912	76.669	55.058	68.1949	102.2101	91.001	84.5395	85.6206
0.69231 S	31.2171	53.0787	38.1172	47.21199	70.7611	63.0009	58.5276	59.27597
Volume of Space	5.4767	7.8057	5.2941	10.5795	25.2718	19.6878	11.7055	9.8793

Date : July 21 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	29	28.6	28.1	31.6	30.7	31.2	30.4	29.4
RH (%)	70	67	72	61	69	62	62	68
V. at 7.65 M.; (Mps.)	0	0	0	0.8583	1.1444	1.7166	0.8583	0
Vi= 0.65 V ; Mps.	0.2	0.2	0.2	0.557895	0.74386	1.11579	0.557895	0.2
Vpa (mm.Hg.)	21	21	20.5	21.3	22.8	21.1	20.1	21

The Convection Heat Exchange (C) = α x Vi $^{0.3}$ (Ta-35^0)

Ta - 35 ^{0}C	-6	-6.4	-6.9	-3.4	-4.3	-3.8	-4.6	-5.6
Vi $^{0.3}$	0.61703	0.61703	0.61703	0.83939	0.91506	1.03341	0.839394	0.61703
C	-48.1283	-51.3369	-55.3476	-37.101	-51.1519	-51.0505	-50.1958	-44.9198

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 ± C

Sitting at Rest ; E = 100± C Sedentary Activity ; E = 116 ± C

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism; E	27.8717	24.6631	20.6524	38.899	24.8481	24.9495	25.8042	31.0802
Sitting at Rest ; E	51.8717	48.6631	44.6524	62.899	48.8481	48.9495	49.8042	55.0802
Sedentary Activity; E	67.8717	64.6631	60.6524	78.899	64.8481	64.9495	65.8042	71.0802

E max = pV $^{0.3}$ (42- Vpa) ; p = 20.5

V $^{0.3}$	0.61703	0.61703	0.61703	0.83939	0.91506	1.03341	0.839394	0.61703
pV $^{0.3}$	12.6491	12.6491	12.6491	17.2075	18.7587	21.1849	17.2076	12.6491
42 - Vpa	21	21	21.5	20.7	19.2	20.9	21.9	21
E max	265.6314	265.6314	271.956	356.1951	360.1676	442.7645	376.8459	265.6314

1/f = e $^{0.6\ (E/Emax\ -\ 0.12\ )}$

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism ;E	27.8717	24.6631	20.6524	38.899	24.8481	24.9495	25.8042	31.0802
Emax	265.6314	265.6314	271.956	356.1951	360.1676	442.7645	376.8459	265.6314
E/Emax	0.10493	0.09285	0.07594	0.10921	0.06899	0.05635	0.06847	0.117005
E/Emax - 0.12	-0.01507	-0.02715	-0.04406	-0.01079	-0.05101	-0.06365	-0.05153	-0.003
1/f	0.990997	0.98384	0.97391	0.99355	0.96986	0.96253	0.96956	0.998205

Sitting at Rest ;E	51.8717	48.6631	44.6524	62.899	48.8481	48.9495	49.8042	55.0802
Emax	265.6314	265.6314	271.956	356.1951	360.1676	442.7645	376.8459	265.6314
E/Emax	0.19528	0.183198	0.16419	0.176586	0.13563	0.11055	0.13216	0.20736
E/Emax - 0.12	0.07528	0.063198	0.04419	0.05659	0.015626	-0.00945	0.01216	0.08736
1/f	1.046202	1.03865	1.02687	1.03453	1.00942	0.99435	1.007323	1.05381

Sedentary Activity ;E	67.8717	64.6631	60.6524	78.899	64.8481	64.9495	65.8042	71.0802
Emax	265.6314	265.6314	271.956	356.1951	360.1676	442.7645	376.8459	265.6314
E/Emax	0.255511	0.24343	0.22302	0.22151	0.18005	0.146691	0.174618	0.267589
E/Emax - 0.12	0.135511	0.12343	0.10302	0.10151	0.06005	0.026691	0.054618	0.147589
1/f	1.0847	1.07687	1.06376	1.062796	1.03669	1.01614	1.033314	1.09259

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	0.10493	0.09285	0.07594	0.10921	0.06899	0.05635	0.06847	0.117005
SP./SP.Scale	0.22465	0.16425	0.0797	0.24605	0.04495	-0.01825	0.04235	0.28503
	0	0	0	0	0	0	0	0

Sitting at Rest ;

E/Emax	0.19528	0.183198	0.16419	0.176586	0.13563	0.11055	0.13216	0.20736
SP. / SP. Scale	0.6764	0.61599	0.52095	0.58293	0.37815	0.25275	0.3608	0.7368
	1	1	1	1	0	0	0	1

Sedentary Activity ;

E/Emax	0.255511	0.24343	0.22302	0.22151	0.18005	0.146691	0.174618	0.267589
SP. /SP. Scale	0.97756	0.91715	0.8151	0.80755	0.60025	0.43346	0.57309	1.03795
	1	1	1	1	1	0	1	1

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	0.990997	0.98384	0.97391	0.99355	0.96986	0.96253	0.96956	0.998205
(M-W) ± C	27.8717	24.6631	20.6524	38.899	24.8481	24.9495	25.8042	31.0802
S(Kcal/h)	27.6208	24.2645	20.1136	38.6481	24.0992	24.0146	25.0187	31.0244
S(Watt)	32.12296	28.2197	23.3921	44.9477	28.0273	27.929	29.0968	36.0814

Sitting at Rest ;1/f	1.046202	1.03865	1.02687	1.03453	1.00942	0.99435	1.007323	1.05381
(M-W) ± C	51.8717	48.6631	44.6524	62.899	48.8481	48.9495	49.8042	55.0802
S(Kcal/h)	54.2683	50.5439	45.8522	65.0709	49.3082	48.6729	50.1689	58.0441
S(Watt)	63.11401	58.7826	53.3261	75.6775	57.3455	56.6066	58.3464	67.5052

Sedentary Act.; 1/f	1.0847	1.07687	1.06376	1.062796	1.03669	1.01614	1.033314	1.09259
(M-W) ± C	67.8717	64.6631	60.6524	78.899	64.8481	64.9495	65.8042	71.0802
S(Kcal/h)	73.6204	69.6338	64.5196	83.8535	67.2274	65.9978	67.9964	77.6615
S(Watt)	85.6206	80.9841	75.0363	97.5217	78.1854	76.7554	79.0798	90.3203

35^0 - Ta	6	6.4	6.9	3.4	4.3	3.8	4.6	5.6

Volume of Space (Cu.M.) = 0.69231 S(Watt) / (35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	32.12296	28.2197	23.3921	44.9477	28.0273	27.929	29.0968	36.0814
0.69231 S	22.239	19.5368	16.1946	31.1178	19.4036	19.3355	20.14399	24.9795
Volume of Space	3.7065	3.0526	2.347	9.1523	4.5125	5.0883	4.3791	4.4606

Sitting .;S (Watt)	63.11401	58.7826	53.3261	75.6775	57.3455	56.6066	58.3464	67.5052
0.69231 S	43.6945	40.6958	36.9182	52.3923	39.7009	39.18933	40.3938	46.7346
Volume of Space	7.2824	6.3587	5.3505	15.4095	9.2328	10.313	8.7813	8.3455

Sedentary. ;S (Watt)	85.6206	80.9841	75.0363	97.5217	78.1854	76.7554	79.0798	90.3203
0.69231 S	59.276	56.0661	51.9484	67.5152	54.1286	53.1385	54.7477	62.5297
Volume of Space	9.8793	8.7603	7.5288	19.8574	12.588	13.9838	11.9017	11.166

Date : July 28 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	29.6	28.8	28.8	31.2	31.8	33.4	30.7	29.5
RH (%)	76	74	76	64	59	59	66	79
V. at 7.65 M.; (Mps.)	0	0	0	0.8583	1.7166	1.7166	0.8583	0.5722
Vi= 0.65 V ; Mps.	0.2	0.2	0.2	0.557895	1.11579	1.11579	0.557895	0.37193
Vpa (mm.Hg.)	23.8	21.9	22.7	21.7	20.7	22.5	21.9	24.2

The Convection Heat Exchange (C) = α x Vi $^{0.3}$ (Ta-35 ^{0})

Ta - 35 ^{0}C	-5.4	-6.2	-6.2	-3.8	-3.2	-1.6	-4.3	-5.5
Vi $^{0.3}$	0.61703	0.61703	0.61703	0.839394	1.03341	1.03341	0.839394	0.743256
C	-43.3155	-49.7326	-49.7326	-41.4661	-42.9899	-21.4949	-46.9221	-53.1428

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 $\pm$ C

Sitting at Rest ; E = 100 $\pm$ C Sedentary Activity ; E = 116 $\pm$ C

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism; E	32.6845	26.2674	26.2674	34.5339	33.0101	54.5051	29.0779	22.8572
Sitting at Rest ; E	56.6845	50.2674	50.2674	58.5339	57.0101	78.5051	53.0779	46.8572
Sedentary Activity; E	72.6845	66.2674	66.2674	74.5339	73.0101	94.5051	69.0779	62.8572

E max = pV $^{0.3}$ (42- Vpa) ; p = 20.5

V $^{0.3}$	0.61703	0.61703	0.61703	0.839394	1.03341	1.03341	0.839394	0.743256
pV $^{0.3}$	12.6491	12.6491	12.6491	17.2076	21.1849	21.1849	17.2076	15.2367
42 - Vpa	18.2	20.1	19.3	20.3	20.3	19.5	20.1	17.8
E max	230.2139	254.2472	244.1279	349.3138	430.0536	413.1056	345.8723	271.2141

1/f = e $^{0.6 (E/Emax - 0.12)}$

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism ;E	32.6845	26.2674	26.2674	34.5339	33.0101	54.5051	29.0779	22.8572
Emax	230.2139	254.2472	244.1279	349.3138	430.0536	413.1056	345.8723	271.2141
E/Emax	0.14197	0.10331	0.107596	0.09886	0.076758	0.13194	0.084071	0.084277
E/Emax - 0.12	0.02197	-0.01669	-0.0124	-0.02114	-0.04324	0.01194	-0.03593	-0.03572
1/f	1.01327	0.99004	0.99259	0.987397	0.974389	1.00719	0.978673	0.978794

Sitting at Rest ;E	56.6845	50.2674	50.2674	58.5339	57.0101	78.5051	53.0779	46.8572
Emax	230.2139	254.2472	244.1279	349.3138	430.0536	413.1056	345.8723	271.2141
E/Emax	0.246225	0.19771	0.20591	0.167568	0.132565	0.190036	0.153461	0.172768
E/Emax - 0.12	0.12623	0.07771	0.08591	0.047568	0.012565	0.070036	0.033461	0.052768
1/f	1.07868	1.04773	1.052895	1.02895	1.007568	1.042917	1.020279	1.03217

Sedentary Activity ;E	72.6845	66.2674	66.2674	74.5339	73.0101	94.5051	69.0779	62.8572
Emax	230.2139	254.2472	244.1279	349.3138	430.0536	413.1056	345.8723	271.2141
E/Emax	0.315726	0.260642	0.271445	0.213372	0.16977	0.228767	0.199721	0.231762
E/Emax - 0.12	0.195726	0.140642	0.151445	0.093372	0.04977	0.108767	0.079721	0.111762
1/f	1.12461	1.08805	1.095124	1.057622	1.030312	1.067437	1.048995	1.069357

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	0.14197	0.10331	0.107596	0.09886	0.076758	0.13194	0.084071	0.084277
SP./SP.Scale	0.40985	0.21655	0.23798	0.1943	0.08379	0.3597	0.120355	0.12139
	0	0	0	0	0	0	0	0

Sitting at Rest ;

E/Emax	0.246225	0.19771	0.20591	0.167568	0.132565	0.190036	0.153461	0.172768
SP. / SP. Scale	0.931125	0.68855	0.72955	0.53784	0.362825	0.65018	0.467305	0.56384
	1	1	1	1	0	1	0	1

Sedentary Activity ;

E/Emax	0.315726	0.260642	0.271445	0.213372	0.16977	0.228767	0.199721	0.231762
SP. /SP. Scale	1.27863	1.00321	1.057225	0.76686	0.54885	0.843835	0.698605	0.85881
	1	1	1	1	1	1	1	1

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	1.01327	0.99004	0.99259	0.987397	0.974389	1.00719	0.978673	0.978794
(M-W) ± C	32.6845	26.2674	26.2674	34.5339	33.0101	54.5051	29.0779	22.8572
S(Kcal/h)	33.1182	26.0058	26.07276	34.09867	32.16468	54.89699	28.4578	22.3725
S(Watt)	38.5165	30.2447	30.3226	39.6568	37.4075	63.8452	33.0964	26.0192

Sitting at Rest ;1/f	1.07868	1.04773	1.052895	1.02895	1.007568	1.042917	1.020279	1.03217
(M-W) ± C	56.6845	50.2674	50.2674	58.5339	57.0101	78.5051	53.0779	46.8572
S(Kcal/h)	61.14444	52.6667	52.9263	60.2285	57.4416	81.8743	54.1543	48.3646
S(Watt)	71.111	61.2513	61.5533	70.0457	66.8045	95.2198	62.9814	56.248

Sedentary Act.; 1/f	1.12461	1.08805	1.095124	1.057622	1.030312	1.067437	1.048995	1.069357
(M-W) ± C	72.6845	66.2674	66.2674	74.5339	73.0101	94.5051	69.0779	62.8572
S(Kcal/h)	81.7417	72.1022	72.571	78.8287	75.2232	100.8782	72.4624	67.2168
S(Watt)	95.0656	83.8549	84.4001	91.6778	87.4846	117.3214	84.2737	78.1731

35^0 - Ta	5.4	6.2	6.2	3.8	3.2	1.6	4.3	5.5

Volume of Space (Cu.M.) = 0.69231 S(Watt) / (35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	38.5165	30.2447	30.3226	39.6568	37.4075	63.8452	33.0964	26.0192
0.69231 S	26.6654	20.9387	20.9927	27.4548	25.8976	44.2007	22.9129	18.01335
Volume of Space	4.938	3.3772	3.3859	7.2249	8.093	27.6254	5.3286	3.2752

Sitting .;S (Watt)	71.111	61.2513	61.5533	70.0457	66.8045	95.2198	62.9814	56.248
0.69231 S	49.2308	42.4049	42.61397	48.4933	46.2494	65.9216	43.6027	38.9411
Volume of Space	9.1168	6.8395	6.8732	12.7614	14.45295	41.201	10.1402	7.0802

Sedentary. ;S (Watt)	95.0656	83.8549	84.4001	91.6778	87.4846	117.3214	84.2737	78.1731
0.69231 S	65.8149	58.0536	58.431	63.4694	60.5664	81.2228	58.3436	54.12003
Volume of Space	12.1879	9.3635	9.4244	16.7025	18.927	50.7642	13.5683	9.84001

Date : August 7 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	26.3	25.8	26.4	28.7	31.5	31.9	28	28
RH (%)	94	95	92	81	66	64	85	83
V. at 7.65 M.; (Mps.)	0.5722	0	0	0	0	1.1444	0.8583	0
Vi= 0.65 V ; Mps.	0.37193	0.2	0.2	0.2	0.2	0.74386	0.557895	0.2
Vpa (mm.Hg.)	23.9	23.6	23.7	24	22.9	22.6	24.1	23.4

The Convection Heat Exchange (C) = α x Vi $^{0.3}$ (Ta-35 ^{0})

Ta - 35 ^{0}C	-8.7	-9.2	-8.6	-6.3	-3.5	-3.1	-7	-7
Vi $^{0.3}$	0.743256	0.61703	0.61703	0.61703	0.61703	0.91506	0.839394	0.61703
C	-84.0623	-73.7968	-68.984	-50.5348	-28.0749	-36.8769	-76.3849	-56.1497

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 $\pm$ C

Sitting at Rest ; E = 100 $\pm$ C Sedentary Activity ; E = 116 $\pm$ C

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism; E	-8.0623	2.2032	7.0161	25.4652	47.9251	39.1231	-0.3849	19.8503
Sitting at Rest ; E	15.9377	26.2032	31.0161	49.4652	71.9251	63.1231	23.6151	43.8503
Sedentary Activity; E	31.9377	42.2032	47.0161	65.4652	87.9251	79.1231	39.6151	59.8503

E max = $pV^{0.3}$ (42- Vpa) ; p = 20.5

$V^{0.3}$	0.743256	0.61703	0.61703	0.61703	0.61703	0.91506	0.83939	0.61703
$pV^{0.3}$	15.2367	12.6491	12.6491	12.6491	12.6491	18.7587	17.2075	12.6491
42 - Vpa	18.1	18.4	18.3	18	19.1	19.4	17.9	18.6
E max	275.7851	232.7437	231.4788	227.6841	241.5981	363.9194	308.0142	235.2735

1/f = $e^{0.6 (E/Emax - 0.12)}$

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism ;E	-8.0623	2.2032	7.0161	25.4652	47.9251	39.1231	-0.3849	19.8503
Emax	275.7851	232.7437	231.4788	227.6841	241.5981	363.9194	308.0142	235.2735
E/Emax	0.02923	0.009466	0.03031	0.11184	0.1984	0.1075	-0.00125	0.08437
E/Emax - 0.12	-0.1492	-0.11053	-0.08969	0.00816	0.0784	-0.0125	-0.11875	-0.03563
1/f	0.91435	0.93583	0.94761	0.99512	1.0481	0.99253	0.93123	0.97885
Sitting at Rest ;E	15.9377	26.2032	31.0161	49.4652	71.9251	63.1231	23.6151	43.8503
Emax	275.7851	232.7437	231.4788	227.6841	241.5981	363.9194	308.0142	235.2735
E/Emax	0.05779	0.11258	0.13399	0.21725	0.29771	0.71345	0.07667	0.18638
E/Emax - 0.12	-0.06221	-0.00742	0.01399	0.09725	0.17771	0.0535	-0.04333	0.06638
1/f	0.96336	0.99556	1.00843	1.0601	1.1125	1.0326	0.97434	1.0406
Sedentary Activity ;E	31.9377	42.2032	47.0161	65.4652	87.9251	79.1231	39.6151	59.8503
Emax	275.7851	232.7437	231.4788	227.6841	241.5981	363.9194	308.0142	235.2735
E/Emax	0.11581	0.18133	0.20311	0.28753	0.36393	0.21742	0.12861	0.25439
E/Emax - 0.12	-0.00419	0.06133	0.08311	0.16753	0.24393	0.09742	0.008615	0.13439
1/f	0.99749	1.0375	1.0511	1.1057	1.1576	1.0602	1.00518	1.08397

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.

E/Emax	0.02923	0.009466	0.03031	0.11184	0.1984	0.1075	-0.00125	0.08437
SP./SP.Scale	-0.44615	-0.2527	-0.1485	0.2592	0.692	0.2375	-0.3062	0.1219
	0	0	0	0	1	0	0	0

Sitting at Rest ;

E/Emax	0.05779	0.11258	0.13399	0.21725	0.29771	0.71345	0.07667	0.18638
SP. / SP. Scale	-0.01105	0.2629	0.36995	0.78625	1.18855	0.56725	0.08335	0.6319
	0	0	0	1	1	1	0	1

Sedentary Activity ;

E/Emax	0.11581	0.18133	0.20311	0.28753	0.36393	0.21742	0.12861	0.25439
SP. /SP. Scale	0.27905	0.60665	0.71555	1.13765	1.5197	0.7871	0.34305	0.97195
	0	1	1	1	2	1	0	1

S = { (M-W) + C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	0.91435	0.93583	0.94761	0.99512	1.0481	0.99253	0.93123	0.97885
(M-W) - C	-8.0623	2.2032	7.0161	25.4652	47.9251	39.1231	-0.3849	19.8503
S(Kcal/h)	-7.3718	2.0618	6.6485	25.3409	50.2303	38.8309	-0.35584	19.4305
S(Watt)	-8.55734	2.3979	7.7322	29.4715	58.4178	45.1603	-0.4169	22.5976

Sitting at Rest ;1/f	0.96336	0.99556	1.00843	1.0601	1.1125	1.0326	0.97434	1.0406
(M-W) - C	15.9377	26.2032	31.0161	49.4652	71.9251	63.1231	23.6151	43.8503
S(Kcal/h)	15.3537	26.0869	31.2776	52.4381	80.0167	65.1809	23.0091	45.6306
S(Watt)	17.8564	30.339	36.3758	60.9855	93.0594	75.8054	26.7596	53.0684

Sedentary Act.; 1/f	0.99749	1.0375	1.0511	1.1057	1.1576	1.0602	1.00518	1.08397
(M-W) - C	31.9377	42.2032	47.0161	65.4652	87.9251	79.1231	39.6151	59.8503
S(Kcal/h)	31.8575	43.7858	49.4186	72.3849	101.7821	83.8863	39.8203	64.8759
S(Watt)	37.0503	50.9229	57.4739	84.1836	118.3726	97.5598	46.311	75.4507

35^0 - Ta	8.7	9.2	8.6	6.3	3.5	3.1	7	7

Volume of Space (Cu.M.) = 0.69231 S(Watt) / (35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	-8.55734	2.3979	7.7322	29.4715	58.4178	45.1603	-0.4169	22.5976
0.69231 S	-5.9354	1.6601	5.3531	20.4034	40.4433	31.2649	-0.2886	15.6446
Volume of Space	-0.6822	0.1804	0.6225	3.2386	11.5552	10.0855	-0.0412	2.2349
Sitting .;S (Watt)	17.8564	30.339	36.3758	60.9855	93.0594	75.8054	26.7596	53.0684
0.69231 S	12.3622	21.004	25.1833	42.2208	64.4259	52.4808	18.52596	36.7398
Volume of Space	1.4209	2.283	2.9283	6.7017	18.4074	16.9293	2.6466	5.2485
Sedentary. ;S (Watt)	37.0503	50.9229	57.4739	84.1836	118.3726	97.5598	46.311	75.4507
0.69231 S	25.6503	35.2544	39.7897	58.2812	81.9505	67.5416	32.0616	52.2353
Volume of Space	2.9483	3.832	4.6267	9.251	23.4144	21.7876	4.5802	7.46222

Date : August 14 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	25.6	26	26.5	29.8	31.3	30.5	26.6	26.7
RH (%)	98	88	81	66	67	69	86	90
V. at 7.65 M.; (Mps.)	0	0	0.8583	1.1444	1.1444	0.5722	0	0
Vi= 0.65 V ; Mps.	0.2	0.2	0.557895	0.74386	0.74386	0.37193	0.2	0.2
Vpa (mm.Hg.)	24.1	22.1	21	21.1	23	22.4	22.8	23.7

The Convection Heat Exchange (C) = α x $Vi^{0.3}$ ($Ta-35^0$)

Ta - 35 ^{0}C	-9.4	-9	-8.5	-5.2	-3.7	-4.5	-8.4	-8.3
$Vi^{0.3}$	0.61703	0.61703	0.839394	0.91506	0.91506	0.743256	0.61703	0.61703
C	-75.4011	72.1925	-92.753	-61.8581	-44.0144	-43.4805	-67.3797	-66.5775

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 $\pm$ C

Sitting at Rest ; E = 100 $\pm$ C Sedentary Activity ; E = 116 $\pm$ C

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism; E	0.5989	3.8075	-16.753	14.1419	31.9856	32.5195	8.6203	9.4225
Sitting at Rest ; E	24.5989	27.8075	7.247	38.1419	55.9856	56.5195	32.6203	33.4225
Sedentary Activity; E	40.5989	43.8075	23.247	54.1419	71.9856	72.5195	48.6203	49.4225

$E\ max = pV^{0.3}(42- Vpa)$; p = 20.5

$V^{0.3}$	0.61703	0.61703	0.839394	0.91506	0.91506	0.743256	0.61703	0.61703
$pV^{0.3}$	12.6491	12.6491	17.2076	18.7587	18.7587	15.2367	12.6491	12.6491
42 - Vpa	17.9	19.9	21	20.9	19	19.6	19.2	18.3
E max	226.4192	251.7174	361.3591	392.0575	356.4159	298.6403	242.863	231.4788

$1/f = e^{0.6\ (E/Emax - 0.12\ )}$

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism ;E	0.5989	3.8075	-16.753	14.1419	31.9856	32.5195	8.6203	9.4225
Emax	226.4192	251.7174	361.3591	392.0575	356.4159	298.6403	242.863	231.4788
E/Emax	0.002645	0.01513	-0.04636	0.03607	0.08974	0.108892	0.0355	0.040706
E/Emax - 0.12	-0.11736	-0.1049	-0.1664	-0.0839	-0.03026	-0.01111	-0.0845	-0.07929
1/f	0.93201	0.93901	0.905	0.9509	0.98201	0.99336	0.9506	0.95354

Sitting at Rest ;E	24.5989	27.8075	7.247	38.1419	55.9856	56.5195	32.6203	33.4225
Emax	226.4192	251.7174	361.3591	392.0575	356.4159	298.6403	242.863	231.4788
E/Emax	0.10864	0.11047	0.02005	0.0973	0.1571	0.1893	0.1343	0.1444
E/Emax - 0.12	-0.01136	0.00953	-0.09995	-0.0227	0.0371	0.0693	0.0143	0.0244
1/f	0.99321	0.9943	0.9418	0.9865	1.0225	1.0424	1.0086	1.0147

Sedentary Activity ;E	40.5989	43.8075	23.247	54.1419	71.9856	72.5195	48.6203	49.4225
Emax	226.4192	251.7174	361.3591	392.0575	356.4159	298.6403	242.863	231.4788
E/Emax	0.17931	0.17403	0.0643	0.1381	0.20197	0.2428	0.2002	0.2135
E/Emax - 0.12	0.05931	0.05403	-0.05567	0.0181	0.08197	0.1228	0.0802	0.0935
1/f	1.0362	1.03295	0.9672	1.0109	1.0504	1.0765	1.0493	1.0577

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	0.002645	0.01513	-0.04636	0.03607	0.08974	0.108892	0.0355	0.040706
SP./SP.Scale	-0.2868	-0.2244	0.5318	0.11965	0.1487	0.2445	-0.1225	-0.09647
	0	0	1	0	0	0	0	0

Sitting at Rest ;

E/Emax	0.10864	0.11047	0.02005	0.0973	0.1571	0.1893	0.1343	0.1444
SP. / SP. Scale	0.2432	0.25235	-0.19975	0.1865	0.4855	0.6465	0.3715	0.422
	0	0	0	0	0	1	0	0

Sedentary Activity ;

E/Emax	0.17931	0.17403	0.0643	0.1381	0.20197	0.2428	0.2002	0.2135
SP. /SP. Scale	0.59655	0.5702	0.0215	0.3905	0.70985	0.914	0.701	0.7675
	1	1	0	0	1	1	1	1

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	0.93201	0.93901	0.905	0.9509	0.98201	0.99336	0.9506	0.95354
(M-W) ± C	0.5989	3.8075	-16.753	14.1419	31.9856	32.5195	8.6203	9.4225
S(Kcal/h)	0.5582	3.5753	-15.1615	13.4475	31.4102	32.3036	8.1945	8.9847
S(Watt)	0.6492	4.1581	-17.6328	15.6395	36.53	37.5691	9.5302	10.4492

Sitting at Rest ;1/f	0.99321	0.9943	0.9418	0.9865	1.0225	1.0424	1.0086	1.0147
(M-W) ± C	24.5989	27.8075	7.247	38.1419	55.9856	56.5195	32.6203	33.4225
S(Kcal/h)	24.4319	27.649	6.8252	37.627	57.2453	58.9159	32.9008	33.9138
S(Watt)	28.4143	32.1558	7.9377	43.7602	66.5763	68.5192	38.2637	39.4418

Sedentary Act.; 1/f	1.0362	1.03295	0.9672	1.0109	1.0504	1.0765	1.0493	1.0577
(M-W) ± C	40.5989	43.8075	23.247	54.1419	71.9856	72.5195	48.6203	49.4225
S(Kcal/h)	42.0686	45.25096	22.4845	54.732	75.6137	78.0672	51.0173	52.2742
S(Watt)	48.9258	52.6269	26.1495	63.6534	87.9387	90.7922	59.3331	60.7949

35^0 - Ta	9.4	9	8.5	5.2	3.7	4.5	8.4	8.3

Volume of Space (Cu.M.) = 0.69231 S(Watt) / (35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	0.6492	4.1581	-17.6328	15.6395	36.53	37.5691	9.5302	10.4492
0.69231 S	0.4494	2.8787	-12.2074	10.8274	25.2901	26.0094	6.5978	7.2341
Volume of Space	0.04781	0.3199	-1.4362	2.0822	6.8352	5.7799	0.7855	0.8716
Sitting .;S (Watt)	28.4143	32.1558	7.9377	43.7602	66.5763	68.5192	38.2637	39.4418
0.69231 S	19.6715	22.2618	5.4954	30.2956	46.0914	47.4365	26.4903	27.3059
Volume of Space	2.0927	2.4735	0.6465	5.8261	12.4571	10.5415	3.1536	3.2899
Sedentary. ;S (Watt)	48.9258	52.6269	26.1495	63.6534	87.9387	90.7922	59.3331	60.7949
0.69231 S	33.8718	36.4341	18.1035	44.0679	60.8808	62.8563	41.0769	42.0889
Volume of Space	3.6034	4.0482	2.1298	8.4746	16.4543	13.9681	4.8901	5.071

Date : August 21 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	27.5	27.5	27.9	29.3	29.8	32.6	31.5	29.5
RH (%)	81	78	77	70	70	60	60	64
V. at 7.65 M.; (Mps.)	0.8583	0.5722	0.8583	2.5749	2.5749	2.861	2.861	2.861
Vi= 0.65 V ; Mps.	0.5579	0.37193	0.5579	1.6737	1.6737	1.8597	1.8597	1.8597
Vpa (mm.Hg.)	22.3	21.5	21.6	21.4	21.9	22	20.8	19.7

The Convection Heat Exchange (C) = α x $Vi^{0.3}$ ($Ta-35^0$)

Ta - 35^0C	-7.5	-7.5	-7.1	-5.7	-5.2	-2.4	-3.5	-5.5
$Vi^{0.3}$	0.8394	0.74325	0.8394	1.1671	1.1671	1.2046	1.2046	1.2046
C	-81.8415	-72.4669	-77.4766	-86.4821	-78.896	-37.5835	-54.8093	-86.1289

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 $\pm$ C

Sitting at Rest ; E = 100 $\pm$ C Sedentary Activity ; E = 116 $\pm$ C

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism; E	-5.8415	3.5331	-1.4766	-10.4821	-2.896	38.4165	21.1907	-10.1289
Sitting at Rest ; E	18.1585	27.5331	22.5234	13.5179	21.104	62.4165	45.1907	13.8711
Sedentary Activity; E	34.1585	43.5331	38.5234	29.5179	37.104	78.4165	61.1907	29.8711

$E\ max = pV^{0.3}(42 - Vpa)$; p = 20.5

$V^{0.3}$	0.8394	0.74325	0.8394	1.1671	1.1671	1.2046	1.2046	1.2046
$pV^{0.3}$	17.2077	15.2366	17.2077	23.9256	23.9256	24.6943	24.6943	24.6943
42 - Vpa	19.7	20.5	20.4	20.6	20.1	20	21.2	22.3
E max	338.99	312.3508	351.0371	492.8663	480.9036	493.886	523.5192	550.6829

$1/f = e^{0.6\,(E/Emax - 0.12)}$

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism ;E	-5.8415	3.5331	-1.4766	-10.4821	-2.896	38.4165	21.1907	-10.1289
Emax	338.99	312.3508	351.0371	492.8663	480.9036	493.886	523.5192	550.6829
E/Emax	0.01723	0.011311	-0.00421	-0.02127	-0.00602	-0.07778	-0.04048	-0.01839
E/Emax - 0.12	-0.10277	-0.10869	-0.1242	-0.14127	-0.12602	-0.0422	-0.07952	-0.13839
1/f	0.9402	0.9369	0.9282	0.9187	0.9272	0.97499	0.95341	0.92032

Sitting at Rest ;E	18.1585	27.5331	22.5234	13.5179	21.104	62.4165	45.1907	13.8711
Emax	338.99	312.3508	351.0371	492.8663	480.9036	493.886	523.5192	550.6829
E/Emax	0.0536	0.08815	0.06416	0.02743	0.04388	0.12638	0.08632	0.02519
E/Emax - 0.12	-0.06643	-0.03185	-0.05584	-0.09257	-0.07612	0.00638	-0.03368	-0.09481
1/f	0.96092	0.9811	0.96705	0.94597	0.95536	1.0038	0.979995	0.9447

Sedentary Activity ;E	34.1585	43.5331	38.5234	29.5179	37.104	78.4165	61.1907	29.8711
Emax	338.99	312.3508	351.0371	492.8663	480.9036	493.886	523.5192	550.6829
E/Emax	0.100766	0.13937	0.1097	0.05989	0.07715	0.1588	0.1169	0.05424
E/Emax - 0.12	-0.01923	0.01937	-0.0103	-0.0601	-0.04285	0.0388	0.003117	-0.0658
1/f	0.98853	1.0117	0.9939	0.9646	0.97462	1.02354	0.99813	0.9613

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	0.01723	0.011311	-0.00421	-0.02127	-0.00602	-0.07778	-0.04048	-0.01839
SP./SP.Scale	-2139	-2434	-0.32103	-0.40635	-0.3301	0.0889	-0.0976	-0.39195
	0	0	0	0	0	0	0	0

Sitting at Rest ;

E/Emax	0.0536	0.08815	0.06416	0.02743	0.04388	0.12638	0.08632	0.02519
SP. / SP. Scale	-0.032	0.14075	0.0208	-0.16285	-0.0806	0.3319	0.1316	-0.17405
	0	0	0	0	0	0	0	0

Sedentary Activity ;

E/Emax	0.100766	0.13937	0.1097	0.05989	0.07715	0.1588	0.1169	0.05424
SP. /SP. Scale	0.2038	0.39685	0.2485	-0.00055	0.08575	0.494	0.2845	-0.0288
	0	0	0	0	0	0	0	0

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	0.9402	0.9369	0.9282	0.9187	0.9272	0.97499	0.95341	0.92032
(M-W) ± C	-5.8415	3.5331	-1.4766	-10.4821	-2.896	38.4165	21.1907	-10.1289
S(Kcal/h)	-5.4922	3.3102	-1.3706	-9.6299	-0.3202	37.4557	20.2034	-0.09086
S(Watt)	-6.3874	3.8497	-1.59401	-11.0996	-0.3724	43.56098	23.4966	-0.10567

Sitting at Rest ;1/f	0.96092	0.9811	0.96705	0.94597	0.95536	1.0038	0.979995	0.9447
(M-W) ± C	18.1585	27.5331	22.5234	13.5179	21.104	62.4165	45.1907	13.8711
S(Kcal/h)	17.4489	27.0127	21.7813	12.7875	20.1619	62.6537	44.2867	13.104
S(Watt)	20.293	31.4158	25.3316	14.8719	23.4483	72.8662	51.5054	15.23998

Sedentary Act.; 1/f	0.98853	1.0117	0.9939	0.9646	0.97462	1.02354	0.99813	0.9613
(M-W) ± C	34.1585	43.5331	38.5234	29.5179	37.104	78.4165	61.1907	29.8711
S(Kcal/h)	33.7667	44.0424	38.2884	28.473	36.1623	80.2624	60.0763	28.7151
S(Watt)	39.2707	51.2214	44.5294	33.1141	42.0568	93.3452	71.0317	33.3956

35^0 - Ta	7.5	7.5	7.1	5.7	5.2	2.4	3.5	5.5

Volume of Space (Cu.M.) =0 .69231 S(Watt) / (35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	-6.3874	3.8497	-1.59401	-11.0996	-0.3724	43.56098	23.4966	-0.10567
0.69231 S	-4.4221	2.6652	-1.1035	-7.7536	-0.25778	30.1577	16.2669	-0.07316
Volume of Space	-0.58961	0.3554	-0.15543	-1.3603	-0.04957	12.5657	4.6477	-0.0133
Sitting .;S (Watt)	20.293	31.4158	25.3316	14.8719	23.4483	72.8662	51.5054	15.23998
0.69231 S	14.0491	21.7495	17.5373	10.296	16.2335	50.446	35.6577	10.5508
Volume of Space	1.8732	2.8999	2.47004	1.8063	3.1218	21.0192	10.1879	1.9183
Sedentary. ;S (Watt)	39.2707	51.2214	44.5294	33.1141	42.0568	93.3452	71.0317	33.3956
0.69231 S	27.1875	35.4611	30.8282	22.9252	29.1163	64.6238	49.176	23.1201
Volume of Space	3.625	4.7281	4.342	4.022	5.5993	26.9266	14.0503	4.2037

Date : August 28 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	28.5	27.8	28	29.9	31	31.2	29.5	30
RH (%)	67	75	79	70	66	68	78	65
V. at 7.65 M.; (Mps.)	1.1444	0	0	0.8583	0.8583	0.2861	0	0.5722
Vi= 0.65 V ; Mps.	0.74386	0.2	0.2	0.557895	0.557895	0.185965	0.2	0.37193
Vpa (mm.Hg.)	19.2	21	22.2	22	22.2	23.1	24	20.7

The Convection Heat Exchange (C) = α x $Vi^{0.3}$ ($Ta-35^0$)

Ta - 35 ^{0}C	-6.5	-7.2	-7	-5.1	-4	-3.8	-5.5	-5
$Vi^{0.3}$	0.915055	0.61703	0.61703	0.83939	0.83939	0.60371	0.61703	0.74326
C	-77.3221	-57.754	-56.1497	-55.6516	-43.6483	-29.8233	-44.1176	-48.3119

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 $\pm$ C

Sitting at Rest ; E = 100± C Sedentary Activity ; E = 116 ± C

	01.00 am.	04.00 am.	07.00 am.	10.00 am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism; E	-1.3221	18.2446	19.8503	20.3484	32.3517	46.1767	31.8824	27.6881
Sitting at Rest ; E	22.6779	42.2446	43.8503	44.3484	56.3517	70.1767	55.8824	51.6881
Sedentary Activity;E	35.66779	58.2446	59.8503	60.3484	72.3517	86.1767	71.8824	67.6881

$E_{max} = pV^{0.3}(42 - Vpa)$; p = 20.5

$V^{0.3}$	0.915055	0.61703	0.61703	0.8394	0.83939	0.60371	0.61703	0.74326
$pV^{0.3}$	18.7586	12.64912	12.6491	17.2075	17.2075	12.3761	12.6491	15.2368
42 - Vpa	22.8	21	19.8	20	19.8	18.9	18	21.3
E max	427.6967	265.6314	250.4525	344.149	340.7084	233.9074	227.6841	324.5445

$1/f = e^{0.6\,(E/Emax - 0.12)}$

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism ;E	-1.3221	18.2446	19.8503	20.3484	32.3517	46.1767	31.8824	27.6881
Emax	427.6967	265.6314	250.4525	344.1499	340.7084	233.9074	227.6841	324.5445
E/Emax	-0.00309	0.06868	0.07926	0.05913	0.09495	0.197414	0.14003	0.08531
E/Emax - 0.12	-0.12309	-0.0513	-0.04074	-0.06087	-0.02505	0.077414	0.02003	-0.0347
1/f	0.92881	0.96968	0.97585	0.96413	0.9851	1.0475	1.0121	0.9794

Sitting at Rest ;E	22.6779	42.2446	43.8503	44.3484	56.3517	70.1767	55.882	51.6881
Emax	427.6967	265.6314	250.4525	344.1499	340.7084	233.9074	227.684	324.5445
E/Emax	0.05302	0.15903	0.17508	0.12886	0.1654	0.300019	0.24544	0.12926
E/Emax - 0.12	-0.06698	0.03903	0.05508	0.00886	0.045396	0.18002	0.12544	0.03926
1/f	0.9606	1.0237	1.0336	1.0053	1.0276	1.1141	1.0782	1.02384

Sedentary Activity;E	35.66779	58.2446	59.8503	60.3484	72.3517	86.1767	71.8824	67.6881
Emax	427.6967	265.6314	250.4525	344.1499	340.7084	233.9074	227.684	324.5445
E/Emax	0.09043	0.21927	0.23897	0.17535	0.21236	0.36842	0.31571	0.20856
E/Emax - 0.12	-0.02957	0.09927	0.11897	0.05535	0.09236	0.24842	0.19571	0.08856
1/f	0.98242	1.0614	1.07399	1.0338	1.05698	1.1607	1.1246	1.0546

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	-0.00309	0.06868	0.07926	0.05913	0.09495	0.197414	0.14003	0.08531
SP./SP.Scale	-0.31545	0.0434	0.0963	-0.00435	0.17475	0.68707	0.40015	0.12655
	0	0	0	0	0	1	0	0

Sitting at Rest ;

E/Emax	0.05302	0.15903	0.17508	0.12886	0.1654	0.300019	0.24544	0.12926
SP. / SP. Scale	-0.0349	0.49515	0.5754	0.3443	0.527	1.200095	0.9272	0.4963
	0	0	1	0	1	1	1	0

Sedentary Activity ;

E/Emax	0.09043	0.21927	0.23897	0.17535	0.21236	0.36842	0.31571	0.20856
SP. /SP. Scale	0.15215	0.79635	0.89485	0.57675	0.7618	1.5421	1.2786	0.7428
	0	1	1	1	1	2	1	1

S = { (M-W) + C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	0.92881	0.96968	0.97585	0.96413	0.9851	1.0475	1.0121	0.9794
(M-W) ± C	-1.3221	18.2446	19.8503	20.3484	32.3517	46.1767	31.8824	27.6881
S(Kcal/h)	-1.22798	17.6914	19.3709	19.6185	31.8697	48.3701	32.2682	27.1177
S(Watt)	-1.4281	20.5751	22.5284	22.8163	37.0644	56.2544	37.5279	31.5379

Sitting at Rest ;1/f	0.9606	1.0237	1.0336	1.0053	1.0276	1.1141	1.0782	1.02384
(M-W) ± C	22.6779	42.2446	43.8503	44.3484	56.3517	70.1767	55.8824	51.6881
S(Kcal/h)	21.7912	43.2458	45.3237	44.5834	57.907	78.1839	60.2524	52.9203
S(Watt)	25.3432	50.2949	52.7114	51.8505	67.3458	90.9278	70.0735	61.5464

Sedentary Act.; 1/f	0.98242	1.0614	1.07399	1.0338	1.05698	1.1607	1.1246	1.0546
(M-W) ± C	35.66779	58.2446	59.8503	60.3484	72.3517	86.1767	71.8824	67.6881
S(Kcal/h)	37.9979	61.8208	64.2786	62.3882	76.4743	100.0253	80.8389	71.3839
S(Watt)	44.1916	71.8976	74.756	72.5574	88.9396	116.3294	94.0157	83.0194

35^0 - Ta	6.5	7.2	7	5.1	4	3.8	5.5	5

Volume of Space (Cu.M.) = 0.69231 S(Watt) / (35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	1.4281	20.5751	22.5284	22.8163	37.0644	56.2544	37.5279	31.5379
0.69231 S	0.9887	14.2444	15.5966	15.79597	25.6601	38.9455	25.9809	21.834
Volume of Space	0.15211	7.9784	2.2281	3.0972	6.41502	10.2488	4.7238	4.3668
Sitting .;S (Watt)	25.3432	50.2949	52.7114	51.8505	67.3458	90.9278	70.0735	61.5464
0.69231 S	17.5453	34.8196	36.4926	35.8967	46.6242	62.9502	48.5126	42.6092
Volume of Space	2.6993	4.8361	5.2132	7.0386	11.6561	16.5659	8.8205	8.5218
Sedentary. ;S (Watt)	44.1916	71.8976	74.756	72.5574	88.9396	116.3294	94.0157	83.0194
0.69231 S	30.5943	49.7754	51.7544	50.2322	61.5738	80.536	65.08801	57.4752
Volume of Space	4.7068	6.9133	7.3935	9.8495	15.3934	21.1937	11.8342	11.495

Date : September 7 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	24.5	28.1	24.9	28.8	32.3	32.2	29.7	29.3
RH (%)	84	87	97	86	64	63	80	83
V. at 7.65 M.; (Mps.)	0	0	0	0	1.1444	1.7166	0.5722	0.8583
Vi= 0.65 V ; Mps.	0.2	0.2	0.2	0.2	0.74386	1.11579	0.37193	0.5579
Vpa (mm.Hg.)	24.3	24.7	22.8	25.4	23.1	22.8	24.9	25.1

The Convection Heat Exchange (C) = α x $Vi^{0.3}$ ($Ta-35^0$)

Ta - 35^0C	-6.5	-6.9	-10.1	-6.2	-2.7	-2.8	-5.3	-5.7
$Vi^{0.3}$	0.61703	0.61703	0.61703	0.61703	0.91506	1.03341	0.74326	0.83939
C	-52.139	-55.3476	-81.016	.49.7326	-32.1186	-37.6161	-51.2106	-62.1988

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 $\pm$ C

Sitting at Rest ; E = 100 $\pm$ C Sedentary Activity ; E = 116 $\pm$ C

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism; E	23.861	20.6524	-5.016	26.2674	43.8814	38.3839	24.7894	13.8012
Sitting at Rest ; E	47.861	44.6524	18.984	50.2674	67.8814	62.3839	48.7894	37.8012
Sedentary Activity; E	63.861	60.6524	34.984	66.2674	83.8814	78.3839	64.7894	53.8012

$E\ max = pV^{0.3}(42- Vpa)$; p = 20.5

$V^{0.3}$	0.61703	0.61703	0.61703	0.61703	0.91506	1.03341	0.74326	0.83939
$pV^{0.3}$	12.6491	12.6491	12.6491	12.6491	18.7587	21.1849	15.2368	17.2075
42 - Vpa	17.7	17.3	19.2	16.6	18.9	19.2	17.1	16.9
E max	223.8893	218.8297	242.863	209.9753	354.54	406.7502	260.5498	290.8067

$1/f = e^{0.6\ (E/Emax - 0.12\ )}$

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism ;E	23.861	20.6524	-5.016	26.2674	43.8814	38.3839	24.7894	13.8012
Emax	223.8893	218.8297	242.863	209.9753	354.54	406.7502	260.5498	290.8067
E/Emax	0.10657	0.09438	-0.02065	0.125098	0.12377	0.09437	0.09514	0.04746
E/Emax - 0.12	-0.01343	-0.02562	-0.14065	0.005098	0.00377	-0.02563	-0.02486	-0.0725
1/f	0.99198	0.98474	0.91907	1.00306	1.00226	0.98474	0.9852	0.95741

Sitting at Rest ;E	47.861	44.6524	18.984	50.2674	67.8814	62.3839	48.7894	37.8012
Emax	223.8893	218.8297	242.863	209.9753	354.54	406.7502	260.5498	290.8067
E/Emax	0.21377	0.20405	0.07817	0.2394	0.19146	0.15337	0.18726	0.12999
E/Emax - 0.12	0.09377	0.08405	-0.04183	0.1194	0.07146	0.03337	0.06726	0.00999
1/f	1.05788	1.0517	0.97521	1.0743	1.04381	1.02022	1.04118	1.00601

Sedentary Activity ;E	63.861	60.6524	34.984	66.2674	83.8814	78.3839	64.7894	53.8012
Emax	223.8893	218.8297	242.863	209.9753	354.54	406.7502	260.5498	290.8067
E/Emax	0.28523	0.27717	0.14405	0.3156	0.23659	0.19271	0.2487	0.18501
E/Emax - 0.12	0.16523	0.15717	0.02405	0.1956	0.11659	0.07271	0.1287	0.06501
1/f	1.10422	1.09889	1.0145	1.1245	1.0725	1.0446	1.0803	1.0398

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	0.10657	0.09438	-0.02065	0.125098	0.12377	0.09437	0.09514	0.04746
SP./SP.Scale	0.23285	0.1719	-0.40325	0.32549	0.31885	0.17185	0.1757	-0.0627
	0	0	0	0	0	0	0	0

Sitting at Rest ;

E/Emax	0.21377	0.20405	0.07817	0.2394	0.19146	0.15337	0.18726	0.12999
SP. / SP. Scale	0.76885	0.7203	0.09085	0.897	0.6573	0.46685	0.6363	0.34995
	1	1	0	1	1	0	1	0

Sedentary Activity ;

E/Emax	0.28523	0.27717	0.14405	0.3156	0.23659	0.19271	0.2487	0.18501
SP. /SP. Scale	1.1262	1.0859	0.4203	1.278	0.88295	0.66355	0.9435	0.62505
	1	1	0	1	1	1	1	1

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	0.99198	0.98474	0.91907	1.00306	1.00226	0.98474	0.9852	0.95741
(M-W) ± C	23.861	20.6524	-5.016	26.2674	43.8814	38.3839	24.7894	13.8012
S(Kcal/h)	23.6696	20.3372	-4.6101	26.3478	43.9806	37.7982	24.4225	13.2134
S(Watt)	27.5278	23.6522	-5.3615	30.6425	51.1494	43.9593	28.4034	15.3672

Sitting at Rest ;1/f	1.05788	1.0517	0.97521	1.0743	1.04381	1.02022	1.04118	1.00601
(M-W) ± C	47.861	44.6524	18.984	50.2674	67.8814	62.3839	48.7894	37.8012
S(Kcal/h)	50.6312	46.9609	18.5134	54.0023	70.8553	63.6453	50.7985	38.0284
S(Watt)	58.8841	54.6156	21.5311	62.8046	82.4047	74.0195	59.0787	44.227

Sedentary Act.; 1/f	1.10422	1.09889	1.0145	1.1245	1.0725	1.0446	1.0803	1.0398
(M-W) ± C	63.861	60.6524	34.984	66.2674	83.8814	78.3839	64.7894	53.8012
S(Kcal/h)	70.5166	66.6503	35.4913	74.5177	89.9628	81.8798	69.992	55.9425
S(Watt)	82.0108	77.5143	41.2763	86.6641	104.6267	95.2262	81.4007	65.0611

35^0 - Ta	6.5	6.9	10.1	6.2	2.7	2.8	5.3	5.7

Volume of Space (Cu.M.) =0 .69231 S(Watt) / (35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	27.5278	23.6522	-5.3615	30.6425	51.1494	43.9593	28.4034	15.3672
0.69231 S	19.0578	16.3747	-3.7118	21.2141	35.4112	30.4334	19.6639	10.6389
Volume of Space	2.932	2.3731	-0.3675	3.4216	13.1153	10.8691	3.7102	1.8665

Sitting .;S (Watt)	58.8841	54.6156	21.5311	62.8046	82.4047	74.0195	59.0787	44.227
0.69231 S	40.766	37.8109	14.9062	43.4803	57.0496	51.2444	40.9008	30.6188
Volume of Space	6.2717	5.4798	1.4759	7.0129	21.1295	18.3016	7.7171	5.3717

Sedentary. ;S (Watt)	82.0108	77.5143	41.2763	86.6641	104.6267	95.2262	81.4007	65.0611
0.69231 S	56.7769	53.6639	28.576	59.9984	72.4341	65.9261	56.3545	45.0425
Volume of Space	8.7349	7.7774	2.8293	9.6772	26.8275	23.545	10.6329	7.9022

Date : September 14 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	27.1	26.3	26.3	30.4	31.7	32.1	30	27.9
RH (%)	80	88	90	66	66	68	75	77
V. at 7.65 M.; (Mps.)	0	0	0	1.1444	1.7166	0	0.8583	0
Vi= 0.65 V ; Mps.	0.2	0.2	0.2	0.74386	1.11579	0.2	0.5579	0.2
Vpa (mm.Hg.)	21.6	22.6	23.1	21.5	23.1	24.7	23.9	21.7

The Convection Heat Exchange (C) = α x $Vi^{0.3}$ ($Ta-35^0$)

Ta - 35^0C	-7.9	-8.7	-8.7	-4.6	-3.3	-2.9	-5	-7.1
$Vi^{0.3}$	0.61703	0.61703	0.61703	0.91506	1.03341	0.61703	0.83939	0.61703
C	-63.369	-69.7861	-69.7861	-54.7206	-44.3333	-23.262	-54.5604	-56.9519

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 ± C

Sitting at Rest ; E = 100± C Sedentary Activity ; E = 116 ± C

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism; E	12.631	6.2139	6.2139	21.2794	31.6667	52.738	21.4396	19.0481
Sitting at Rest ; E	36.631	30.2139	30.2139	45.2794	55.6667	76.738	45.4396	43.0481
Sedentary Activity; E	52.631	46.2139	46.2139	61.2794	71.6667	92.738	61.4396	59.0481

$E\ max = pV^{0.3}(42- Vpa)$; p = 20.5

$V^{0.3}$	0.61703	0.61703	0.61703	0.91506	1.03341	0.61703	0.83939	0.61703
$pV^{0.3}$	12.6491	12.6491	12.6491	18.7587	21.1849	12.6491	17.2075	12.6491
42 - Vpa	20.4	19.4	18.9	20.5	18.9	17.3	18.1	20.3
E max	258.0419	245.3928	239.0683	384.554	400.3947	218.8297	311.4557	256.777

$1/f = e^{0.6\,(E/Emax - 0.12)}$

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism ;E	12.631	6.2139	6.2139	21.2794	31.6667	52.738	21.4396	19.0481
Emax	258.0419	245.3928	239.0683	384.554	400.3947	218.8297	311.4557	256.777
E/Emax	0.04895	0.02532	0.02599	0.05534	0.07909	0.241	0.06884	0.07418
E/Emax - 0.12	0.0711	-0.0947	-0.09401	-0.06466	-0.04091	0.121	-0.05116	-0.04582
1/f	0.9583	0.9448	0.94516	0.96194	0.97575	1.0753	0.96977	0.97288

Sitting at Rest ;E	36.631	30.2139	30.2139	45.2794	55.6667	76.738	45.4396	43.0481
Emax	258.0419	245.3928	239.0683	384.554	400.3947	218.8297	311.4557	256.777
E/Emax	0.14196	0.12312	0.126382	0.11775	0.13903	0.35067	0.14589	0.16765
E/Emax - 0.12	0.02196	0.003125	0.006382	0.002255	0.01903	0.23067	0.02589	0.04765
1/f	1.0133	1.0019	1.00384	0.99865	1.01148	1.1484	1.01566	1.029

Sedentary Activity ;E	52.631	46.2139	46.2139	61.2794	71.6667	92.738	61.4396	59.0481
Emax	258.0419	245.3928	239.0683	384.554	400.3947	218.8297	311.4557	256.777
E/Emax	0.20396	0.18833	0.193308	0.15935	0.17899	0.423791	0.197266	0.22996
E/Emax - 0.12	0.08396	0.06833	0.07331	0.03935	0.05899	0.3038	0.077266	0.10996
1/f	1.0517	1.04185	1.04497	1.02389	1.03603	1.19994	1.0475	1.0682

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	0.04895	0.02532	0.02599	0.05534	0.07909	0.241	0.06884	0.07418
SP./SP.Scale	-0.05525	-0.1734	-0.17005	-0.0233	0.09545	0.905	0.0442	0.0709
	0	0	0	0	0	1	0	0

Sitting at Rest ;

E/Emax	0.14196	0.12312	0.126382	0.11775	0.13903	0.35067	0.14589	0.16765
SP. / SP. Scale	0.4098	0.3156	0.3319	0.28875	0.3952	1.45335	0.42945	0.53825
	0	0	0	0	0	1	0	1

Sedentary Activity ;

E/Emax	0.20396	0.18833	0.193308	0.15935	0.17899	0.423791	0.197266	0.22996
SP. /SP. Scale	0.7198	0.6417	0.6665	0.49675	0.59495	1.81896	0.6863	0.8498
	1	1	1	0	1	2	1	1

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	0.9583	0.9448	0.94516	0.96194	0.97575	1.0753	0.96977	0.97288
(M-W) ± C	12.631	6.2139	6.2139	21.2794	31.6667	52.738	21.4396	19.0481
S(Kcal/h)	12.1043	0.15205	5.8731	20.4695	30.8988	56.7092	20.7915	18.5315
S(Watt)	14.0773	0.17683	6.8304	23.806	35.9253	65.9528	24.1805	21.5522

Sitting at Rest ;1/f	1.0133	1.0019	1.00384	0.99865	1.01148	1.1484	1.01566	1.029
(M-W) ± C	36.631	30.2139	30.2139	45.2794	55.6667	76.738	45.4396	43.0481
S(Kcal/h)	37.1182	30.2713	30.3299	45.2183	56.3058	88.1259	46.1512	44.2965
S(Watt)	43.1685	35.2055	35.2737	52.5889	65.4836	102.4904	53.6738	51.5168

Sedentary Act.; 1/f	1.0517	1.04185	1.04497	1.02389	1.03603	1.19994	1.0475	1.0682
(M-W) ± C	52.631	46.2139	46.2139	61.2794	71.6667	92.738	61.4396	59.0481
S(Kcal/h)	55.352	48.14795	48.2921	62.7434	74.2489	111.28	64.358	63.0752
S(Watt)	64.3744	55.9961	56.1638	72.9705	86.3514	129.4187	74.8483	73.3564

35^0 - Ta	7.9	8.7	8.7	4.6	3.3	2.9	5	7.1

Volume of Space (Cu.M.) = 0.69231 S(Watt) / (35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	14.0773	0.17683	6.8304	23.806	35.9253	65.9528	24.1805	21.5522
0.69231 S	9.7458	0.12242	4.7288	16.4812	24.8784	45.6598	16.7404	14.9208
Volume of Space	1.2337	0.01407	0.5435	3.5829	7.5389	15.7447	3.3481	2.1015
Sitting .;S (Watt)	43.1685	35.2055	35.2737	52.5889	65.4836	102.4904	53.6738	51.5168
0.69231 S	29.886	24.3731	24.4203	36.4078	45.3349	70.9552	37.1589	35.6656
Volume of Space	3.783	2.8015	2.8069	7.9147	13.7379	24.4673	7.4318	5.0233
Sedentary. ;S (Watt)	64.3744	55.9961	56.1638	72.9705	86.3514	129.4187	74.8483	73.3564
0.69231 S	44.567	38.7666	38.8827	50.5182	59.7819	89.5978	51.8182	50.7854
Volume of Space	5.6414	4.4559	4.4693	10.9822	18.1157	30.8958	10.3636	7.1529

Date : September 21 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	25.9	25.9	25.9	30.3	32.1	31.8	29.9	24.6
RH (%)	96	96	93	71	68	71	78	98
V. at 7.65 M.; (Mps.)	0	0	0	0.5722	0.8583	0.8583	0.5722	0
Vi= 0.65 V ; Mps.	0.2	0.2	0.2	0.37193	0.5579	0.5579	0.37193	0.2
Vpa (mm.Hg.)	23.9	23.9	23.2	21	24.4	25	24.6	22.8

The Convection Heat Exchange (C) = α x Vi $^{0.3}$ (Ta-35^0)

Ta - 35 ^{0}C	9.1	9.1	9.1	4.7	2.9	3.2	5.1	10.4
Vi $^{0.3}$	0.61703	0.61703	0.61703	0.74326	0.83939	0.83939	0.74326	0.61703
C	-72.9946	-72.9946	-72.9946	-45.4132	-31.645	-34.9186	-49.2781	-83.4225

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 $\pm$ C

Sitting at Rest ; E = 100 $\pm$ C Sedentary Activity ; E = 116 $\pm$ C

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism; E	3.0054	3.0054	3.0054	30.5868	44.355	41.0814	26.7219	-7.4225
Sitting at Rest ; E	27.0054	27.0054	27.0054	54.5868	68.355	65.0814	50.7219	16.5775
Sedentary Activity; E	43.0054	43.0054	43.0054	70.5868	84.355	81.0814	66.7219	32.5775

$E_{max} = pV^{0.3}(42 - Vpa)$; p = 20.5

$V^{0.3}$	0.61703	0.61703	0.61703	0.74326	0.83939	0.83939	0.74326	0.61703
$pV^{0.3}$	12.6491	12.6491	12.6491	15.2368	17.2075	17.2075	15.2368	12.6491
42 - Vpa	18.1	18.1	18.8	21	17.6	17	17.4	19.2
E max	228.949	228.949	237.8034	319.9734	302.8519	292.5274	265.1208	242.863

$1/f = e^{0.6\,(E/Emax - 0.12)}$

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism ;E	3.0054	3.0054	3.0054	30.5868	44.355	41.0814	26.7219	-7.4225
Emax	228.949	228.949	237.8034	319.9734	302.8519	292.5274	265.1208	242.863
E/Emax	0.01313	0.01313	0.012638	0.09559	0.14646	0.14044	0.10079	-0.03056
E/Emax - 0.12	-0.10687	-0.10687	-0.10736	-0.02441	0.02646	0.02044	-0.01921	-0.15056
1/f	0.9379	0.9379	0.937614	0.98546	1.016001	1.01234	0.98854	0.91362

Sitting at Rest ;E	27.0054	27.0054	27.0054	54.5868	68.355	65.0814	50.7219	16.5775
Emax	228.949	228.949	237.8034	319.9734	302.8519	292.5274	265.1208	242.863
E/Emax	0.117954	0.11795	0.11356	0.170598	0.2257	0.22248	0.191316	0.0683
E/Emax - 0.12	-0.00205	-0.00205	-0.00644	0.050598	0.105704	0.10248	0.07132	-0.05174
1/f	0.9988	0.9988	0.99614	1.030824	1.0655	1.0634	1.0437	0.969432

Sedentary Activity ;E	43.0054	43.0054	43.0054	70.5868	84.355	81.0814	66.7219	32.5775
Emax	228.949	228.949	237.8034	319.9734	302.8519	292.5274	265.1208	242.863
E/Emax	0.18784	0.18784	0.18084	0.2206	0.27854	0.27718	0.25167	0.13414
E/Emax - 0.12	0.06784	0.06784	0.06084	0.1006	0.15854	0.15718	0.13167	0.01414
1/f	1.0415	1.0415	1.0372	1.0622	1.0998	1.0989	1.0822	1.0085

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	0.01313	0.01313	0.012638	0.09559	0.14646	0.14044	0.10079	-0.03056
SP./SP.Scale	-0.23435	-0.23435	-0.23681	0.17795	0.4323	0.4022	0.20395	-0.4528
	0	0	0	0	0	0	0	0

Sitting at Rest ;

E/Emax	0.117954	0.11795	0.11356	0.170598	0.2257	0.22248	0.191316	0.0683
SP. / SP. Scale	0.28977	0.28975	0.2678	0.55299	0.8285	0.8124	0.65658	0.0415
	0	0	0	1	1	1	1	0

Sedentary Activity ;

E/Emax	0.18784	0.18784	0.18084	0.2206	0.27854	0.27718	0.25167	0.13414
SP. /SP. Scale	0.6392	0.6392	0.6042	0.803	1.0927	1.0859	0.95835	0.3707
	1	1	1	1	1	1	1	0

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	0.9379	0.9379	0.937614	0.98546	1.016001	1.01234	0.98854	0.91362
(M-W) ± C	3.0054	3.0054	3.0054	30.5868	44.355	41.0814	26.7219	-7.4225
S(Kcal/h)	2.8188	2.8188	2.8179	30.1421	45.0647	41.5883	26.4157	-6.7813
S(Watt)	3.2782	3.2782	3.2772	35.0552	52.4103	48.3672	30.7214	-7.8867

Sitting at Rest ;1/f	0.9988	0.9988	0.99614	1.030824	1.0655	1.0634	1.0437	0.969432
(M-W) ± C	27.0054	27.0054	27.0054	54.5868	68.355	65.0814	50.7219	16.5775
S(Kcal/h)	26.973	26.973	26.9012	56.2694	72.8323	69.2076	52.9384	16.07076
S(Watt)	31.3696	31.3696	31.286	65.4413	84.7039	80.4884	61.5674	18.6903

Sedentary Act.; 1/f	1.0415	1.0415	1.0372	1.0622	1.0998	1.0989	1.0822	1.0085
(M-W) ± C	43.0054	43.0054	43.0054	70.5868	84.355	81.0814	66.7219	32.5775
S(Kcal/h)	44.79	44.7901	44.6052	74.9773	92.7736	89.1004	72.2064	32.8544
S(Watt)	52.0909	52.0909	51.8758	87.1986	107.8957	103.6237	83.9761	38.2097

35^0 - Ta	9.1	9.1	9.1	4.7	2.9	3.2	5.1	10.4

Volume of Space (Cu.M.) = 0.69231 S(Watt) / (35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	3.2782	3.2782	3.2772	35.0552	52.4103	48.3672	30.7214	-7.8867
0.69231 S	2.2695	2.2695	2.2688	24.2691	36.2842	33.4851	21.2687	-5.46004
Volume of Space	0.2494	0.2494	0.2493	5.1636	12.5118	10.4641	4.1703	-0.525
Sitting .;S (Watt)	31.3696	31.3696	31.286	65.4413	84.7039	80.4884	61.5674	18.6903
0.69231 S	21.7175	21.7175	21.6596	45.3057	58.6414	55.7229	42.6237	12.9395
Volume of Space	2.3865	2.3865	2.3802	9.6395	20.2212	17.4134	8.3576	1.2442
Sedentary. ;S (Watt)	52.0909	52.0909	51.8758	87.1986	107.8957	103.6237	83.9761	38.2097
0.69231 S	36.0631	36.0631	35.9142	60.3685	74.6973	71.7397	58.1375	26.4529
Volume of Space	3.963	3.96297	3.9466	12.8444	25.7577	22.4187	11.3995	2.5436

Date : September 28 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	25.2	25.5	25.2	26.3	31.8	31.8	27.1	26.8
RH (%)	98	97	98	90	70	68	87	86
V. at 7.65 M.; (Mps.)	0	0	0	0	0.5722	0	0.5722	0
Vi= 0.65 V ; Mps.	0.2	0.2	0.2	0.2	0.37193	0.2	0.37193	0.2
Vpa (mm.Hg.)	23.6	23.8	23.6	23.1	24.7	24.1	23.3	22.6

The Convection Heat Exchange (C) = α x $Vi^{0.3}$ ($Ta-35^0$)

Ta - 35 ^{0}C	-9.8	-9.5	-9.8	-8.7	-3.2	-3.2	-7.9	-8.2
$Vi^{0.3}$	0.61703	0.61703	0.61703	0.61703	0.74326	0.61703	0.74326	0.61703
C	-78.6096	-76.2032	-78.6096	-69.7861	-30.9196	-25.6684	-76.3328	-65.7754

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 $\pm$ C

Sitting at Rest ; E = 100 $\pm$ C Sedentary Activity ; E = 116 $\pm$ C

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism; E	-2.6096	-0.2032	-2.6096	6.2139	45.0804	50.3316	-0.3328	10.2246
Sitting at Rest ; E	21.3904	23.7968	21.3904	30.2139	69.0804	74.3316	23.6672	34.2246
Sedentary Activity; E	37.3704	39.7968	37.3904	46.2139	85.0804	90.3316	39.6672	50.2246

$E\ max = pV^{0.3}(42- Vpa)$; p = 20.5

$V^{0.3}$	0.61703	0.61703	0.61703	0.61703	0.74326	0.61703	0.74326	0.61703
$pV^{0.3}$	12.6491	12.6491	12.6491	12.6491	15.2368	12.6491	15.2368	12.6491
42 - Vpa	18.4	18.2	18.4	18.9	17.3	17.9	18.7	19.4
E max	232.7437	230.2139	232.7437	239.0683	263.5972	226.4192	284.9287	245.3928

$1/f = e^{0.6\,(E/Emax - 0.12)}$

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism ;E	-2.6096	-0.2032	-2.6096	6.2139	45.0804	50.3316	-0.3328	10.2246
Emax	232.7437	230.2139	232.7437	239.0683	263.5972	226.4192	284.9287	245.3928
E/Emax	-0.01121	-0.00088	-0.01121	0.02599	0.17102	0.22229	-0.00117	0.04167
E/Emax - 0.12	-0.13121	-0.12088	-0.1312	-0.09401	0.05102	0.10229	-0.12117	-0.07833
1/f	0.9243	0.93004	0.9243	0.94516	1.0311	1.0633	0.92988	0.9541

Sitting at Rest ;E	21.3904	23.7968	21.3904	30.2139	69.0804	74.3316	23.6672	34.2246
Emax	232.7437	230.2139	232.7437	239.0683	263.5972	226.4192	284.9287	245.3928
E/Emax	0.09191	0.10337	0.09191	0.12638	0.262068	0.328292	0.08306	0.13947
E/Emax - 0.12	-0.0281	-0.01663	-0.0281	0.006382	0.142068	0.20829	-0.03694	0.01947
1/f	0.9833	0.9901	0.98328	1.00384	1.08898	1.13312	0.97808	1.01175

Sedentary Activity ;E	37.3704	39.7968	37.3904	46.2139	85.0804	90.3316	39.6672	50.2246
Emax	232.7437	230.2139	232.7437	239.0683	263.5972	226.4192	284.9287	245.3928
E/Emax	0.16056	0.17287	0.16065	0.19331	0.32277	0.39896	0.13922	0.20467
E/Emax - 0.12	0.04056	0.05287	0.04065	0.07331	0.20277	0.27896	0.01922	0.08467
1/f	1.0246	1.03223	1.0247	1.04497	1.12937	1.1822	1.0116	1.0521

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	-0.01121	-0.00088	-0.01121	0.02599	0.17102	0.22229	-0.00117	0.04167
SP./SP.Scale	-0.35605	-0.3044	-0.35605	-0.17005	0.5551	0.81145	-0.30584	-0.09165
	0	0	0	0	1	1	0	0

Sitting at Rest ;

E/Emax	0.09191	0.10337	0.09191	0.12638	0.262068	0.328292	0.08306	0.13947
SP. / SP. Scale	0.15955	0.21685	0.15955	0.3319	1.0103	1.3415	0.1153	0.39735
	0	0	0	0	1	1	1	0

Sedentary Activity ;

E/Emax	0.16056	0.17287	0.16065	0.19331	0.32277	0.39896	0.13922	0.20467
SP. /SP. Scale	0.5028	0.5644	0.50325	0.66655	1.31385	1.6948	0.3961	0.72335
	1	1	1	1	1	2	0	1

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	0.9243	0.93004	0.9243	0.94516	1.0311	1.0633	0.92988	0.9541
(M-W) ± C	-2.6096	-0.2032	-2.6096	6.2139	45.0804	50.3316	-0.3328	10.2246
S(Kcal/h)	-2.4121	-0.18898	-2.4121	5.8731	46.4824	53.5176	-0.30946	9.7553
S(Watt)	-2.8052	-0.21979	-2.8052	6.8304	54.059	62.24096	-0.35991	11.3454

Sitting at Rest ;1/f	0.9833	0.9901	0.98328	1.00384	1.08898	1.13312	0.97808	1.01175
(M-W) ± C	21.3904	23.7968	21.3904	30.2139	69.0804	74.3316	23.6672	34.2246
S(Kcal/h)	21.0332	23.5612	21.0328	30.3299	75.2272	84.2266	23.1484	34.6267
S(Watt)	24.4616	27.4017	24.4611	35.2737	87.4892	97.9556	26.9216	40.2709

Sedentary Act.; 1/f	1.0246	1.03223	1.0247	1.04497	1.12937	1.1822	1.0116	1.0521
(M-W) ± C	37.3704	39.7968	37.3904	46.2139	85.0804	90.3316	39.6672	50.2246
S(Kcal/h)	38.2897	41.0795	38.3139	48.2921	96.0873	106.79	40.1273	52.8413
S(Watt)	44.5309	47.7754	44.5591	56.1638	111.7495	124.1968	46.6681	61.4544

35^0 - Ta	9.8	9.5	9.8	8.7	3.2	3.2	7.9	8.2

Volume of Space (Cu.M.) = 0.69231 S(Watt) / (35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	-2.8052	-0.21979	-2.8052	6.8304	54.059	62.24096	-0.35991	11.3454
0.69231 S	1.9421	-0.15216	-1.9421	4.7288	37.4256	43.09004	-0.24917	7.8545
Volume of Space	-0.19817	-0.01602	-0.19817	0.54354	11.6955	13.4656	-0.03154	0.9579
Sitting .;S (Watt)	24.4616	27.4017	24.4611	35.2737	87.4892	97.9556	26.9216	40.2709
0.69231 S	16.935	18.9705	16.9347	24.4203	60.5697	67.8156	18.6381	27.8799
Volume of Space	1.7281	1.9969	1.728	2.8069	18.928	21.1924	2.3593	3.39999
Sedentary. ;S (Watt)	44.5309	47.7754	44.5591	56.1638	111.7495	124.1968	46.6681	61.4544
0.69231 S	30.8292	33.0754	30.8487	38.8827	77.3653	85.9827	32.3088	42.5455
Volume of Space	3.1458	3.4816	3.1478	4.4693	24.1766	26.8696	4.0897	5.1885

Date : October 7 , 2001

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	25.2	25.8	26.8	29.4	29.9	29.9	28.2	27.9
RH (%)	95	94	95	82	76	73	83	84
V. at 7.65 M.; (Mps.)	0	0	0	0	0.8583	0	0	0
Vi= 0.65 V ; Mps.	0.2	0.2	0.2	0.2	0.5579	0.2	0.2	0.2
Vpa (mm.Hg.)	22.9	23.4	25	25	24	23	23.7	23.7

The Convection Heat Exchange (C) = α x $Vi^{0.3}$ ($Ta-35^0$)

Ta - 35 ^{0}C	-9.8	-9.2	-8.2	-5.6	-5.1	-5.1	-6.8	-7.1
$Vi^{0.3}$	0.61703	0.61703	0.61703	0.61703	0.83939	0.61703	0.61703	0.61703
C	-78.6096	-73.7968	-65.7754	-44.9198	-55.6516	-40.9091	-54.546	-56.9519

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 ± C

Sitting at Rest ; E = 100± C Sedentary Activity ; E = 116 ± C

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism; E	-2.6096	2.2032	10.224	31.080	20.3484	35.0909	21.454	19.0481
Sitting at Rest ; E	21.3904	26.2032	34.2246	55.0802	44.3484	59.0909	45.455	43.0481
Sedentary Activity; E	37.3904	42.2032	50.2246	71.0802	60.3484	75.0909	61.455	59.0481

$E\ max = pV^{0.3}(42- Vpa)$; p = 20.5

$V^{0.3}$	0.61703	0.61703	0.61703	0.61703	0.83939	0.61703	0.61703	0.61703
$pV^{0.3}$	12.6491	12.6491	12.649	12.6491	17.2075	12.6491	12.6491	12.6491
42 - Vpa	19.1	18.6	17	17	18	19	18.3	18.3
E max	241.5981	235.2735	215.032	215.0345	309.735	240.333	231.4788	231.479

$1/f = e^{0.6\,(E/Emax - 0.12)}$

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism ;E	-2.6096	2.2032	10.2246	31.0802	20.3484	35.0909	21.4545	19.0481
Emax	241.5981	235.2735	215.0315	215.0345	309.7349	240.333	231.4788	231.4788
E/Emax	-0.0108	0.009364	0.04755	0.14454	0.065696	0.14601	0.09268	0.08229
E/Emax - 0.12	-0.1308	-0.11064	-0.07245	0.02454	-0.0543	0.02601	-0.02732	-0.0377
1/f	0.92452	0.93577	0.95746	1.01483	0.9679	1.01573	0.9837	0.97763

Sitting at Rest ;E	21.3904	26.2032	34.2246	55.080	44.3484	59.0909	45.4545	43.0481
Emax	241.5981	235.2735	215.0315	215.034	309.7349	240.3332	231.478	231.4788
E/Emax	0.08854	0.11137	0.15916	0.2561	0.14318	0.24587	0.19637	0.18597
E/Emax - 0.12	-0.03146	0.00863	0.03916	0.1361	0.02318	0.12587	0.07637	0.06597
1/f	0.9813	0.99484	1.0238	1.0851	1.01401	1.0784	1.04689	1.0404

Sedentary Activity ;E	37.3904	42.2032	50.2246	71.0802	60.3484	75.0909	61.4545	59.0481
Emax	241.5981	235.2735	215.0315	215.0345	309.7349	240.3332	231.4788	231.4788
E/Emax	0.1548	0.17938	0.23356	0.33055	0.19484	0.31244	0.26549	0.25509
E/Emax - 0.12	0.0348	0.05938	0.11356	0.21055	0.07484	0.19244	0.14549	0.13509
1/f	1.0211	1.0363	1.0705	1.1347	1.0459	1.1224	1.09122	1.08443

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	-0.0108	0.009364	0.04755	0.14454	0.065696	0.146009	0.09268	0.08229
SP./SP.Scale	-0.354	-0.25318	-0.06225	0.4227	0.02848	0.43005	0.1634	0.11145
	0	0	0	0	0	0	0	0

Sitting at Rest ;

E/Emax	0.08854	0.11137	0.15916	0.25615	0.14318	0.24587	0.19637	0.1859
SP. / SP. Scale	0.1427	0.25685	0.4958	0.98075	0.4159	0.92935	0.68185	0.6298
	0	0	0	1	0	1	1	1

Sedentary Activity ;

E/Emax	0.1548	0.17938	0.23356	0.33055	0.19484	0.31244	0.26549	0.2551
SP. /SP. Scale	0.474	0.5969	0.8678	1.35275	0.6742	1.2622	1.02745	0.9755
	0	1	1	1	1	1	1	1

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	0.92452	0.93577	0.95746	1.01483	0.9679	1.01573	0.9837	0.9776
(M-W) ± C	-2.6096	2.2032	10.2246	31.0802	20.3484	35.0909	21.4545	19.048
S(Kcal/h)	-2.4126	2.0617	9.7896	31.5411	19.6952	35.6429	21.1048	18.622
S(Watt)	-2.8059	2.3977	11.3854	36.6823	22.9055	41.4527	24.5449	21.657

Sitting at Rest ;1/f	0.9813	0.99484	1.0238	1.0851	1.01401	1.0784	1.04689	1.0404
(M-W) ± C	21.3904	26.2032	34.2246	55.0802	44.3484	59.0909	45.4545	43.048
S(Kcal/h)	20.9904	26.0678	35.0391	59.7675	44.9697	63.7236	47.5859	44.787
S(Watt)	24.4118	30.3171	40.7505	69.5096	52.2998	74.1106	55.3424	52.088

Sedentary Act.; 1/f	1.0211	1.0363	1.0705	1.1347	1.0459	1.1224	1.09122	1.08443
(M-W) ± C	37.3904	42.2032	50.2246	71.0802	60.3484	75.0909	61.4545	59.0481
S(Kcal/h)	38.1793	43.7252	53.7654	80.6547	63.1184	84.282	67.0604	64.0335
S(Watt)	44.4026	50.864	62.5292	93.8014	73.4067	98.02	77.9912	74.471

35^0 - Ta	9.8	9.2	8.2	5.6	5.1	5.1	6.8	7.1

Volume of Space (Cu.M.) = 0.69231 S(Watt) / (35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	-2.8059	2.3977	11.3854	36.6823	22.9055	41.4527	24.5449	21.6574
0.69231 S	-1.9425	1.65998	7.8822	25.3955	15.8577	28.6981	16.9927	14.9936
Volume of Space	-0.1982	0.1804	0.9612	4.5349	3.1094	5.6271	2.4989	2.1118
Sitting .;S (Watt)	24.4118	30.3171	40.7505	69.5096	52.2998	74.1106	55.3424	52.0876
0.69231 S	16.9006	20.9888	28.212	48.1222	36.2077	51.3075	38.3141	36.0607
Volume of Space	1.7245	2.2814	3.4405	8.5933	7.0995	10.0603	5.6344	5.07898
Sedentary. ;S (Watt)	44.4026	50.864	62.5292	93.8014	73.4067	98.02	77.9912	74.471
0.69231 S	30.7403	35.2137	43.2896	64.9397	50.8202	67.8602	53.9941	51.557
Volume of Space	3.1368	3.8276	5.2792	11.5964	9.9647	13.3059	7.9403	7.2616

Date : October 14 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	27.5	27.5	27.2	29.5	32.5	33.6	30	28
RH (%)	91	92	91	81	67	61	78	80
V. at 7.65 M.; (Mps.)	0	0	0	0	0	0	0	0
Vi= 0.65 V ; Mps.	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Vpa (mm.Hg.)	24.9	25.2	24.7	25	24.3	23.8	25	22.6

The Convection Heat Exchange (C) = α x $Vi^{0.3}$ ($Ta-35^0$)

Ta - 35 ^{0}C	-7.5	-7.5	-7.8	-5.5	-2.5	-1.4	-5	-7
$Vi^{0.3}$	0.61703	0.61703	0.61703	0.61703	0.61703	0.61703	0.61703	0.61703
C	-60.1604	-60.1604	-62.5668	-44.1176	-20.0535	-11.2299	.40.10695	-56.1497

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 ± C

Sitting at Rest ; E = 100± C Sedentary Activity ; E = 116 ± C

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism; E	15.8396	15.8396	3.4332	31.8824	55.9465	64.7701	35.8931	19.8503
Sitting at Rest ; E	39.8396	39.8396	27.4332	55.8824	79.9465	88.7701	59.8931	43.8503
Sedentary Activity; E	55.8396	55.8396	43.4332	71.8824	95.9465	104.7701	75.8931	59.8503

$E_{max} = pV^{0.3}(42 - Vpa)$; p = 20.5

$V^{0.3}$	0.61703	0.61703	0.61703	0.61703	0.61703	0.61703	0.61703	0.61703
$pV^{0.3}$	12.6491	12.6491	12.6491	12.6491	12.6491	12.6491	12.6491	12.6491
42 - Vpa	17.1	16.8	17.3	17	17.7	18.2	17	19.4
E max	216.2999	212.5051	218.8297	215.035	223.8893	230.2139	215.035	245.3928

$1/f = e^{0.6\,(E/Emax - 0.12)}$

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism ;E	15.8396	15.8396	3.4332	31.8824	55.9465	64.7701	35.8931	19.8503
Emax	216.2999	212.5051	218.8297	215.035	223.8893	230.2139	215.035	245.3928
E/Emax	0.07337	0.07454	0.01569	0.148266	0.24988	0.28135	0.16692	0.080892
E/Emax - 0.12	-0.04663	-0.04546	-0.10431	0.02827	0.12988	0.16135	0.04692	-0.03911
1/f	0.97241	0.97309	0.93933	1.0171	1.08105	1.10165	1.0286	0.97681

Sitting at Rest ;E	39.8396	39.8396	27.4332	55.8824	79.9465	88.7701	59.8931	43.8503
Emax	216.2999	212.5051	218.8297	215.035	223.8893	230.2139	215.035	245.3928
E/Emax	0.18419	0.18748	0.12536	0.25988	0.35708	0.385598	0.27853	0.17869
E/Emax - 0.12	0.06419	0.06748	0.005363	0.13988	0.23708	0.265598	0.15853	0.05869
1/f	1.03926	1.04132	1.0032	1.08755	1.15286	1.17276	1.0998	1.03584

Sedentary Activity ;E	55.8396	55.8396	43.4332	71.8824	95.9465	104.7701	75.8931	59.8503
Emax	216.2999	212.5051	218.8297	215.035	223.8893	230.2139	215.035	245.3928
E/Emax	0.25816	0.26277	0.198479	0.3343	0.42854	0.4551	0.3529	0.243896
E/Emax - 0.12	0.13816	0.14277	0.07848	0.21428	0.30854	0.3351	0.2329	0.123896
1/f	1.08643	1.08944	1.04821	1.1372	1.2034	1.2227	1.149998	1.07717

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	0.07337	0.07454	0.01569	0.148266	0.24988	0.28135	0.16692	0.080892
SP./SP.Scale	0.06685	0.0727	-0.22155	0.44133	0.9494	1.10675	0.5346	0.10446
	0	0	0	0	1	1	1	0

Sitting at Rest ;

E/Emax	0.18419	0.18748	0.12536	0.25988	0.35708	0.385598	0.27853	0.17869
SP. / SP. Scale	0.62095	0.6374	0.3268	0.9994	1.4854	1.62799	1.09265	0.59345
	1	1	0	1	1	2	1	1

Sedentary Activity ;

E/Emax	0.25816	0.26277	0.198479	0.3343	0.42854	0.4551	0.3529	0.243896
SP. /SP. Scale	0.9908	1.01385	0.6924	1.3715	1.8427	1.9755	1.4645	0.91948
	1	1	1	1	2	2	1	1

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	0.97241	0.97309	0.93933	1.0171	1.08105	1.10165	1.0286	0.97681
(M-W) ± C	15.8396	15.8396	3.4332	31.8824	55.9465	64.7701	35.8931	19.8503
S(Kcal/h)	15.4026	15.4134	3.2249	32.4276	60.48096	71.354	36.9196	19.38997
S(Watt)	17.9132	17.9257	3.7506	37.7133	70.3394	82.9847	42.9375	22.5505

Sitting at Rest ;1/f	1.03926	1.04132	1.0032	1.08755	1.15286	1.17276	1.0998	1.03584
(M-W) ± C	39.8396	39.8396	27.4332	55.8824	79.9465	88.7701	59.8931	43.8503
S(Kcal/h)	41.4037	41.4858	27.52099	60.7749	92.1671	104.106	65.8704	45.4219
S(Watt)	48.1525	48.24795	32.0069	70.6812	107.1904	121.0753	76.6073	52.8257

Sedentary Act.; 1/f	1.08643	1.08944	1.04821	1.1372	1.2034	1.2227	1.149998	1.07717
(M-W) ±C	55.8396	55.8396	43.4332	71.8824	95.9465	104.7701	75.8931	59.8503
S(Kcal/h)	60.6658	60.8339	45.5271	81.7447	115.462	128.1024	87.2769	64.4689
S(Watt)	70.5543	70.7498	52.948	95.069	134.2823	148.9831	101.5031	74.9774

35^0 - Ta	7.5	7.5	7.8	5.5	2.5	1.4	5	7

Volume of Space (Cu.M.) = 0.69231 S(Watt) / (35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	17.9132	17.9257	3.7506	37.7133	70.3394	82.9847	42.9375	22.5505
0.69231 S	12.4015	12.4102	2.5966	26.1093	48.6966	57.4511	29.7261	15.61196
Volume of Space	1.6535	1.6547	0.33289	4.7474	19.4787	41.0365	5.945	2.2303
Sitting .;S (Watt)	48.1525	48.24795	32.0069	70.6812	107.1904	121.0753	76.6073	52.8257
0.69231 S	33.3365	33.4025	22.1587	48.9333	74.20896	83.8216	53.036	36.5717
Volume of Space	4.4449	4.4537	2.8409	8.89697	29.6836	59.8726	10.6072	5.2245
Sedentary. ;S (Watt)	70.5543	70.7498	52.948	95.069	134.2823	148.9831	101.5031	74.9774
0.69231 S	48.8455	48.9808	36.6565	65.8173	92.965	103.1425	70.2716	51.9076
Volume of Space	6.5127	6.5308	4.6995	11.9668	37.186	73.6732	14.0543	7.4154

Date : October 21 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	27.5	27	26.4	31.5	33	32.7	30	29.1
RH (%)	85	82	83	61	56	53	70	73
V. at 7.65M.;(Mps.)	0	0	0	0.5722	0.5722	0	0	0.8583
Vi= 0.65 V ; Mps.	0.2	0.2	0.2	0.3719	0.3719	0.2	0.2	0.5579
Vpa (mm.Hg.)	23.6	21.8	21.4	21.1	21	19.7	22.2	22.1

The Convection Heat Exchange (C) = α x Vi $^{0.3}$ (Ta-35^0)

Ta - 35 ^{0}C	-7.5	-8	-8.6	-3.5	-2	-2.3	-5	-5.9
Vi $^{0.3}$	0.61703	0.61703	0.61703	0.74326	0.74326	0.61703	0.61703	0.83939
C	-60.1604	-64.1711	-68.984	-33.8183	-19.3248	-18.4492	-40.107	-64.3812

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 $\pm$ C

Sitting at Rest ; E = 100 $\pm$ C Sedentary Activity ; E = 116 $\pm$ C

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism; E	15.8396	11.8289	7.0161	42.1817	56.6752	57.551	35.8931	11.6188
Sitting at Rest ; E	39.8396	35.8289	31.0161	66.1817	80.6752	81.551	59.8931	35.6188
Sedentary Activity;E	55.8396	51.8289	47.0161	82.1817	96.6752	97.551	75.8931	51.6188

$E\ max = pV^{0.3}(42- Vpa)$; p = 20.5

$V^{0.3}$	0.61703	0.61703	0.61703	0.74326	0.74326	0.61703	0.61703	0.83939
$pV^{0.3}$	12.6491	12.6491	12.6491	15.2368	15.2368	12.6491	12.6491	17.2075
42 - Vpa	18.4	20.2	20.6	20.9	21	22.3	19.8	19.9
E max	232.7437	255.5121	260.5718	318.4497	319.9734	282.0753	250.4525	342.4292

$1/f = e^{0.6\,(E/Emax - 0.12)}$

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism;E	15.8396	11.8289	7.0161	42.1817	56.6752	57.5508	35.8931	11.6188
Emax	232.7437	255.5121	260.5718	318.4497	319.9734	282.0753	250.4525	342.4292
E/Emax	0.06806	0.04629	0.02693	0.13246	0.177125	0.20403	0.14331	0.03393
E/Emax - 0.12	-0.05194	-0.07371	-0.09307	0.01246	0.057125	0.08403	0.02331	-0.08607
1/f	0.969314	0.95674	0.94569	1.0075	1.034869	1.0517	1.01409	0.94967

Sitting at Rest ;E	39.8396	35.8289	31.0161	66.1817	80.6752	81.5508	59.8931	35.6188
Emax	232.7437	255.5121	260.5718	318.4497	319.9734	282.0753	250.4525	342.4292
E/Emax	0.17117	0.140224	0.11903	0.20782	0.25213	0.28911	0.23914	0.10402
E/Emax - 0.12	0.05117	0.020224	0.000969	0.08782	0.13213	0.16911	0.11914	-0.01598
1/f	1.03118	1.01221	0.99942	1.05411	1.0825	1.1068	1.0741	0.9905

Sedentary Activity;E	55.8396	51.8289	47.0161	82.1817	96.6752	97.5508	75.8931	51.6188
Emax	232.7437	255.5121	260.5718	318.4497	319.9734	282.0753	250.4525	342.4292
E/Emax	0.23992	0.20284	0.18043	0.25807	0.30214	0.34583	0.303024	0.15074
E/Emax - 0.12	0.00992	0.08284	0.06043	0.13807	0.182135	0.22583	0.18302	0.03074
1/f	1.0746	1.05096	1.03693	1.08634	1.11548	1.14511	1.11607	1.01862

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	0.06806	0.04629	0.02693	0.13246	0.177125	0.20403	0.14331	0.03393
SP./SP.Scale	0.0403	-0.06855	-0.16535	0.3623	0.58563	0.72015	0.41655	-0.13035
	0	0	0	0	1	1	0	0

Sitting at Rest ;

E/Emax	0.17117	0.140224	0.11903	0.207825	0.25213	0.28911	0.23914	0.10402
SP. / SP. Scale	0.55585	0.40112	0.29515	0.739125	0.96065	1.14555	0.8957	0.2201
	1	0	0	1	1	1	1	0

Sedentary Activity ;

E/Emax	0.23992	0.20284	0.18043	0.25807	0.30214	0.34583	0.303024	0.15074
SP. /SP. Scale	0.8996	0.7142	0.60215	0.99035	1.2107	1.42915	1.21512	0.4537
	1	1	1	1	1	1	1	0

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	0.969314	0.95674	0.94569	1.0075	1.034869	1.0517	1.01409	0.94967
(M-W) ± C	15.8396	11.8289	7.0161	42.1817	56.6752	57.5508	35.8931	11.6188
S(Kcal/h)	15.3535	11.3172	6.6351	42.4981	58.6514	60.5262	36.3988	11.034
S(Watt)	17.8562	13.1619	7.7166	49.4252	68.2116	70.3919	42.3318	12.8326

Sitting at Rest ;1/f	1.03118	1.01221	0.99942	1.05411	1.0825	1.1068	1.0741	0.9905
(M-W) ± C	39.8396	35.8289	31.0161	66.1817	80.6752	81.5508	59.8931	35.6188
S(Kcal/h)	41.0818	36.2664	30.9981	69.7628	87.3309	90.2604	64.3312	35.2804
S(Watt)	47.7781	42.1778	36.0508	81.1341	101.5658	104.9729	74.8172	41.0311

Sedentary Act.; 1/f	1.0746	1.05096	1.03693	1.08634	1.11548	1.14511	1.11607	1.01862
(M-W) ± C	55.8396	51.8289	47.0161	82.1817	96.6752	97.5508	75.8931	51.6188
S(Kcal/h)	60.0052	54.4701	48.7524	89.2773	107.8393	111.7064	84.702	52.5799
S(Watt)	69.7861	63.3487	56.699	103.8295	125.4171	129.9145	98.5084	61.1505

35^0 - Ta	7.5	8	8.6	3.5	2	2.3	5	5.9

Volume of Space (Cu.M.) =0 .69231 S(Watt) / (35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	17.8562	13.1619	7.7166	49.4252	68.2116	70.3919	42.3318	12.8326
0.69231 S	12.36201	9.1121	5.3423	34.2176	47.2236	48.733	29.3068	8.8841
Volume of Space	1.6483	1.139	0.62119	9.7765	23.6118	21.1883	5.8614	1.5058
Sitting .;S (Watt)	47.7781	42.1778	36.0508	81.1341	101.5658	104.9729	74.8172	41.0311
0.69231 S	33.0773	29.2001	24.9583	56.16997	70.31505	72.6738	51.7967	28.4063
Volume of Space	4.4103	3.65001	2.9021	16.0486	35.1575	31.5973	10.3593	4.8146
Sedentary. ;S (Watt)	69.7861	63.3487	56.699	103.8295	125.4171	129.9145	98.5084	61.1505
0.69231 S	48.3136	43.85696	39.2533	71.8822	86.8275	89.9411	68.1984	42.3351
Volume of Space	6.4418	5.4821	4.5643	20.5378	43.4137	39.1048	13.6397	7.1754

Date : October 28 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	27	26.5	26.6	29.7	31.2	29.5	26	26.4
RH (%)	91	92	94	70	72	76	93	93
V. at 7.65 M.; (Mps.)	0	0	0	0	0	1.4305	0	0
Vi= 0.65 V ; Mps.	0.2	0.2	0.2	0.2	0.2	0.929825	0.2	0.2
Vpa (mm.Hg.)	24.2	23.8	24.5	21.8	24.4	23.6	23.4	24

The Convection Heat Exchange (C) = α x $Vi^{0.3}$ ($Ta-35^0$)

Ta - 35^0C	-8	-8.5	-8.4	-5.3	-3.8	-5.5	-9	-8.6
$Vi^{0.3}$	0.61703	0.61703	0.61703	0.61703	0.61703	0.977841	0.61703	0.61703
C	-64.1711	-68.1818	-67.3797	-42.5134	-30.4813	-69.9563	-72.1925	-68.984

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 $\pm$ C

Sitting at Rest ; E = 100 $\pm$ C Sedentary Activity ; E = 116 $\pm$ C

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism; E	11.8289	7.8182	8.6203	33.4866	45.5187	6.0437	3.8075	7.016
Sitting at Rest ; E	35.8289	31.8182	32.6203	57.4866	69.5187	30.0437	27.8075	31.0161
Sedentary Activity; E	51.8289	47.8182	48.6203	73.4866	85.5187	46.0437	43.8075	47.0161

$E_{max} = pV^{0.3}(42 - Vpa)$; p = 20.5

$V^{0.3}$	0.61703	0.61703	0.61703	0.61703	0.61703	0.977841	0.61703	0.61703
$pV^{0.3}$	12.6491	12.6491	12.6491	12.6491	12.6491	20.0574	12.6491	12.6491
42 - Vpa	17.8	18.2	17.5	20.2	17.6	18.4	18.6	18
E max	225.1542	230.2139	221.3595	225.5121	222.6244	369.0562	235.2735	227.6841

$1/f = e^{0.6\,(E/Emax - 0.12)}$

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism ;E	11.8289	7.8182	8.6203	33.4866	45.5187	6.0437	3.8075	7.016
Emax	225.1542	230.2139	221.3595	225.5121	222.6244	369.0562	235.2735	227.6841
E/Emax	0.05254	0.03396	0.03894	0.14849	0.204464	0.016376	0.016183	0.0308
E/Emax - 0.12	-0.06746	-0.08604	-0.08106	0.02849	0.084464	-0.10362	-0.10382	-0.0892
1/f	0.96033	0.94969	0.95253	1.01724	1.05198	0.93972	0.93961	0.9479

Sitting at Rest ;E	35.8289	31.8182	32.6203	57.4866	69.5187	30.0437	27.8075	31.0161
Emax	225.1542	230.2139	221.3595	225.5121	222.6244	369.0562	235.2735	227.6841
E/Emax	0.15913	0.138211	0.147363	0.25492	0.31227	0.08141	0.118192	0.136224
E/Emax - 0.12	0.03913	0.018211	0.02736	0.13492	0.19227	-0.03859	0.001808	0.016224
1/f	1.02376	1.01099	1.01655	1.08432	1.12228	0.97711	0.99892	1.00978

Sedentary Activity ;E	51.8289	47.8182	48.6203	73.4866	85.5187	46.0437	43.8075	47.0161
Emax	225.1542	230.2139	221.3595	225.5121	222.6244	369.0562	235.2735	227.6841
E/Emax	0.23019	0.207712	0.21964	0.32587	0.38414	0.12476	0.186198	0.206497
E/Emax - 0.12	0.11019	0.087712	0.09964	0.20587	0.26414	0.004761	0.066198	0.086497
1/f	1.0684	1.05404	1.06161	1.13147	1.1717	1.00286	1.04052	1.05327

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	0.05254	0.03396	0.03894	0.14849	0.204464	0.016376	0.016183	0.0308
SP./SP.Scale	-0.0373	-0.1302	-0.1053	0.44245	0.72232	-0.21812	-0.21909	-0.146
	0	0	0	0	1	1	0	0

Sitting at Rest ;

E/Emax	0.15913	0.138211	0.147363	0.25492	0.31227	0.08141	0.118192	0.136224
SP. / SP. Scale	0.4957	0.3911	0.4368	0.9746	1.2614	0.1071	0.291	0.3811
	0	0	0	1	1	0	0	0

Sedentary Activity ;

E/Emax	0.23019	0.207712	0.21964	0.32587	0.38414	0.12476	0.186198	0.206497
SP. /SP. Scale	0.851	0.7386	0.7982	1.3294	1.6207	0.3238	0.63099	0.7325
	1	1	1	1	2	0	1	1

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	0.96033	0.94969	0.95253	1.01724	1.05198	0.93972	0.93961	0.9479
(M-W) ± C	11.8289	7.8182	8.6203	33.4866	45.5187	6.0437	3.8075	7.016
S(Kcal/h)	11.3596	7.4249	8.2111	34.0639	47.8848	5.6794	3.5776	6.65
S(Watt)	13.2113	8.6351	9.5495	39.6163	55.68998	6.6051	4.1607	7.734

Sitting at Rest ;1/f	1.02376	1.01099	1.01655	1.08432	1.12228	0.97711	0.99892	1.00978
(M-W) ± C	35.8289	31.8182	32.6203	57.4866	69.5187	30.0437	27.8075	31.0161
S(Kcal/h)	36.6802	32.1679	33.1602	62.3339	85.0075	29.3555	27.7775	31.3194
S(Watt)	42.6591	37.4112	38.5653	72.4943	98.8637	34.1405	32.3052	36.4245

Sedentary Act.; 1/f	1.0684	1.05404	1.06161	1.13147	1.1717	1.00286	1.04052	1.05327
(M-W) ± C	51.8289	47.8182	48.6203	73.4866	85.5187	46.0437	43.8075	47.0161
S(Kcal/h)	55.374	50.4023	51.6158	83.1479	100.2023	46.1754	45.5826	45.3076
S(Watt)	64.39996	58.6179	60.0292	96.70099	116.5352	53.702	53.0125	52.6927

35^0 - Ta	8	8.5	8.4	5.3	3.8	5.5	9	8.6

Volume of Space (Cu.M.) =0 .69231 S(Watt) / (35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	13.2113	8.6351	9.5495	39.6163	55.68998	6.6051	4.1607	7.734
0.69231 S	9.1463	5.9782	6.6112	27.4268	38.5547	4.5728	2.8805	5.355
Volume of Space	1.1433	0.7033	0.787	5.1749	10.14598	0.83142	0.32006	0.6226
Sitting .;S (Watt)	42.6591	37.4112	38.5653	72.4943	98.8637	34.1405	32.3052	36.4245
0.69231 S	29.5333	25.9002	26.6991	50.1885	68.4443	23.6358	22.3652	25.217
Volume of Space	3.6917	3.0471	3.1785	9.4695	18.0117	4.2974	2.485	2.9322
Sedentary. ;S (Watt)	64.39996	58.6179	60.0292	96.70099	116.5352	53.702	53.0125	52.6927
0.69231 S	44.5847	40.5817	41.5588	66.9471	80.6785	37.1784	36.7011	36.4797
Volume of Space	5.5731	4.7743	4.9475	12.6315	21.2312	6.7597	4.0779	4.2418

Date : November 7 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	29	28	26.5	27.4	32	32.1	30	29
RH (%)	72	74	77	71	58	60	62	69
V. at 7.65 M.; (Mps.)	0	0.8583	2.2888	1.7166	1.7166	1.4305	0	0
Vi= 0.65 V ; Mps.	0.2	0.557895	1.48772	1.11579	1.11579	0.929825	0.2	0.2
Vpa (mm.Hg.)	21.4	21	19.8	19.3	20.9	21.5	19.6	20.7

The Convection Heat Exchange (C) = α x $Vi^{0.3}$ ($Ta-35^0$)

Ta - 35^0C	-6	-7	-8.5	-7.6	-3	-2.9	-5	-6
$Vi^{0.3}$	0.61703	0.839394	1.12657	1.03341	1.03341	0.97841	0.61703	0.61703
C	-48.1283	-76.3849	-124.486	-102.101	-40.303	-36.8861	-40.107	-48.1283

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 ± C

Sitting at Rest ; E = 100± C Sedentary Activity ; E = 116 ± C

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism; E	27.8717	-0.3849	-48.486	-26.1009	35.697	39.1139	35.8931	27.8717
Sitting at Rest ; E	51.8717	23.6151	-24.486	-2.1009	59.697	63.1139	59.8931	51.8717
Sedentary Activity; E	67.8717	39.6151	-8.486	13.8991	75.697	79.1139	75.8931	67.8717

$E\ max = pV^{0.3}(42- Vpa)$; p = 20.5

$V^{0.3}$	0.61703	0.839394	1.12657	1.03341	1.03341	0.97841	0.61703	0.61703
$pV^{0.3}$	12.6491	17.2076	23.0947	21.1849	21.1849	20.0574	12.6491	12.6491
42 - Vpa	20.6	21	22.2	22.7	21.1	20.5	22.4	21.3
E max	260.5718	361.3591	512.702	480.8973	447.0015	411.1768	283.3402	269.4261

$1/f = e^{0.6\,(E/Emax - 0.12)}$

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism ;E	27.8717	-0.3849	-48.486	-26.1009	35.697	39.1139	35.8931	27.8717
Emax	260.5718	361.3591	512.702	480.8973	447.0015	411.1768	283.3402	269.4261
E/Emax	0.10696	0.001065	-0.09457	-0.05428	0.07986	0.09513	0.12668	0.10345
E/Emax - 0.12	-0.01304	-0.12107	-0.21457	-0.17428	-0.04014	-0.02487	0.00668	-0.01655
1/f	0.99221	0.92994	0.8792	0.90072	0.9762	0.98519	1.00402	0.99012

Sitting at Rest ;E	51.8717	23.6151	-24.486	-2.1009	59.697	63.1139	59.8931	51.8717
Emax	260.5718	361.3591	512.702	480.8973	447.0015	411.1768	283.3402	269.4261
E/Emax	0.19907	0.06535	-0.04776	-0.00437	0.13355	0.1535	0.21138	0.19253
E/Emax - 0.12	0.07907	-0.05465	-0.16776	-0.12437	0.01355	0.0335	0.09138	0.07253
1/f	1.04858	0.96774	0.90424	0.92809	1.00816	1.0203	1.05636	1.0445

Sedentary Activity ;E	67.8717	39.6151	-8.486	13.8991	75.697	79.1139	75.8931	67.8717
Emax	260.5718	361.3591	512.702	480.8973	447.0015	411.1768	283.3402	269.4261
E/Emax	0.26047	0.10963	-0.01655	0.0289	0.16934	0.19241	0.26785	0.251912
E/Emax - 0.12	0.14047	-0.01037	-0.13655	-0.0911	0.04934	0.07241	0.14785	0.131912
1/f	1.0879	0.9938	0.92134	0.9468	1.03005	1.0444	1.09276	1.0824

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	0.10696	0.001065	-0.09457	-0.05428	0.07986	0.09513	0.12668	0.10345
SP./SP.Scale	0.2348	-0.2947	-0.7729	-0.5714	0.0993	0.1757	0.3334	0.2173
	0	0	0	0	0	0	0	0

Sitting at Rest ;

E/Emax	0.19907	0.06535	-0.04776	-0.00437	0.13355	0.1535	0.21138	0.19253
SP. / SP. Scale	0.6954	0.0268	-0.5388	-0.3219	0.36775	0.4675	0.7569	0.6627
	1	0	0	0	0	0	1	1

Sedentary Activity ;

E/Emax	0.26047	0.10963	-0.01655	0.0289	0.16934	0.19241	0.26785	0.251912
SP. /SP. Scale	1.00235	0.2482	-0.3828	-0.1555	0.5467	0.6621	1.0393	0.9596
	1	0	0	0	1	1	1	1

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	0.99221	0.92994	0.8792	0.90072	0.9762	0.98519	1.00402	0.99012
(M-W) ± C	27.8717	-0.3849	-48.486	-26.1009	35.697	39.1139	35.8931	27.8717
S(Kcal/h)	27.6546	-0.3579	-42.6289	-23.5096	34.8474	38.5346	36.0374	27.5963
S(Watt)	32.1623	-0.4163	-49.5774	-27.3417	40.5275	44.8158	41.9115	32.0945

Sitting at Rest ;1/f	1.04858	0.96774	0.90424	0.92809	1.00816	1.0203	1.05636	1.0445
(M-W) ± C	51.8717	23.6151	-24.486	-2.1009	59.697	63.1139	59.8931	51.8717
S(Kcal/h)	54.3916	22.8533	-22.1412	-1.9498	60.1841	64.3951	63.2687	54.17999
S(Watt)	63.2575	26.5784	-25.7502	-2.2676	69.9941	74.8915	73.5815	63.0113

Sedentary Act.; 1/f	1.0879	0.9938	0.92134	0.9468	1.03005	1.0444	1.09276	1.0824
(M-W) ± C	67.8717	39.6151	-8.486	13.8991	75.697	79.1139	75.8931	67.8717
S(Kcal/h)	73.8376	39.3695	-7.8185	13.1597	77.9717	82.6266	82.9329	73.4643
S(Watt)	85.8732	45.7867	-9.0929	15.3047	90.6811	96.0947	96.451	85.439

35^0 - Ta	6	7	8.5	7.6	3	2.9	5	6

Volume of Space (Cu.M.) = 0.69231 S(Watt) / (35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	32.1623	-0.4163	-49.5774	-27.3417	40.5275	44.8158	41.9115	32.0945
0.69231 S	22.2663	-0.28819	-34.3229	-18.9289	28.0576	31.0264	29.0157	22.2194
Volume of Space	3.711	-0.04117	-4.03799	-2.4906	9.3525	10.6988	5.8031	3.7032
Sitting .;S (Watt)	63.2575	26.5784	-25.7502	-2.2676	69.9941	74.8915	73.5815	63.0113
0.69231 S	43.7938	18.4005	-17.8271	-1.5699	48.4576	51.8481	50.9412	43.6234
Volume of Space	7.299	2.6286	-2.0973	-0.2066	16.1525	17.8787	10.1882	7.2706
Sedentary. ;S (Watt)	85.8732	45.7867	-9.0929	15.3047	90.6811	96.0947	96.451	85.439
0.69231 S	59.4508	31.6986	-6.2951	10.5956	62.7794	66.5273	66.774	59.1503
Volume of Space	9.9085	4.5284	-0.7406	1.3942	20.9265	22.9405	13.3548	9.8584

Date : November 14 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	24.7	24.3	24.3	26.3	26.4	26	24.9	23.5
RH (%)	78	79	79	67	67	64	68	71
V. at 7.65 M.; (Mps.)	0.8583	0	0	0.8583	0	1.4305	0	0.5722
Vi= 0.65 V ; Mps.	0.5579	0.2	0.2	0.5579	0.2	0.9298	0.2	0.37193
Vpa (mm.Hg.)	18.2	17.8	17.8	17	17.1	15.9	15.8	15.2

The Convection Heat Exchange (C) = α x $Vi^{0.3}$ ($Ta-35^0$)

Ta - 35^0C	-10.3	-10.7	-10.7	-8.7	-8.6	-9	-10.1	-11.5
$Vi^{0.3}$	0.83939	0.61703	0.61703	0.83939	0.61703	0.97841	0.61703	0.74326
C	-112.394	-85.8289	-85.8289	-94.935	-68.984	-114.474	-81.016	-111.117

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 $\pm$ C

Sitting at Rest ; E = 100 $\pm$ C Sedentary Activity ; E = 116 $\pm$ C

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism; E	-36.3943	-9.8289	-9.8289	-18.935	7.0161	-38.474	-5.01604	-35.1174
Sitting at Rest ; E	-12.3943	14.1711	14.1711	5.06499	31.0161	-14.474	18.984	-11.1174
Sedentary Activity; E	3.6057	30.1711	30.1711	21.06499	47.0161	1.52603	34.984	4.8826

$E\ max = pV^{0.3}(42- Vpa)$; p = 20.5

$V^{0.3}$	0.83939	0.61703	0.61703	0.83939	0.61703	0.97841	0.61703	0.74326
$pV^{0.3}$	17.2075	12.6491	12.6491	17.2075	12.6491	20.0574	12.6491	15.2368
42 - Vpa	23.8	24.2	24.2	25	24.9	26.1	26.2	26.8
E max	409.5384	306.1086	306.1086	430.1874	314.963	523.4983	331.4068	408.347

$1/f = e^{0.6\,(E/Emax - 0.12)}$

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism ;E	-36.3943	-9.8289	-9.8289	-18.935	7.0161	-38.474	-5.01604	-35.1174
Emax	409.5384	306.1086	306.1086	430.1874	314.963	523.4983	331.4068	408.347
E/Emax	-0.08887	-0.03211	-0.03211	-0.04402	0.022276	-0.07349	-0.01514	-0.086
E/Emax - 0.12	-0.20887	-0.15211	-0.15211	-0.16402	-0.09772	-0.19349	-0.13514	-0.206
1/f	0.882215	0.91278	0.91278	0.90628	0.94305	0.89039	0.92212	0.88373

Sitting at Rest ;E	-12.3943	14.1711	14.1711	5.06499	31.0161	-14.474	18.984	-11.1174
Emax	409.5384	306.1086	306.1086	430.1874	314.963	523.4983	331.4068	408.347
E/Emax	-0.03026	0.04629	0.04629	0.011774	0.09848	-0.02765	0.05728	-0.02723
E/Emax - 0.12	-0.15026	-0.07371	-0.07371	-0.10823	-0.02152	-0.14765	-0.06272	-0.14723
1/f	0.91379	0.95674	0.95674	0.93713	0.98717	0.91522	0.96307	0.91545

Sedentary Activity ;E	3.6057	30.1711	30.1711	21.06499	47.0161	1.52603	34.984	4.8826
Emax	409.5384	306.1086	306.1086	430.1874	314.963	523.4983	331.4068	408.347
E/Emax	0.008804	0.09856	0.09856	0.048967	0.14927	0.002915	0.10556	0.011957
E/Emax - 0.12	-0.1112	-0.02144	-0.02144	-0.07103	0.02927	-0.11709	-0.01444	-0.10804
1/f	0.93546	0.98722	0.98722	0.95828	1.01772	0.93216	0.99137	0.93723

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	-0.08887	-0.03211	-0.03211	-0.04402	0.022276	-0.07349	-0.01514	-0.086
SP./SP.Scale	-0.7444	-0.46055	-0.46055	-0.5201	-0.18862	-0.66745	-0.3757	-0.73
	0	0	0	0	0	0	0	0

Sitting at Rest ;

E/Emax	-0.03026	0.04629	0.04629	0.011774	0.09848	-0.02765	0.05728	-0.02723
SP. / SP. Scale	-0.4513	-0.06855	-0.06855	-0.24113	0.1924	-0.43825	-0.0136	-0.43615
	0	0	0	0	0	0	0	0

Sedentary Activity ;

E/Emax	0.008804	0.09856	0.09856	0.048967	0.14927	0.002915	0.10556	0.011957
SP. /SP. Scale	-0.25598	0.1928	0.1928	-0.05517	0.44635	-0.28543	0.2278	-0.24022
	0	0	0	0	0	0	0	0

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	0.882215	0.91278	0.91278	0.90628	0.94305	0.89039	0.92212	0.88373
(M-W) ± C	-36.3943	-9.8289	-9.8289	-18.935	7.0161	-38.474	-5.01604	-35.1174
S(Kcal/h)	-32.1076	-8.9716	-8.9716	-17.1604	6.6165	-34.2569	-4.6254	-31.0343
S(Watt)	-37.3411	-10.434	-10.434	-19.9576	7.695	-39.8407	-5.3793	-36.0929

Sitting at Rest ;1/f	0.91379	0.95674	0.95674	0.93713	0.98717	0.91522	0.96307	0.91545
(M-W) ± C	-12.3943	14.1711	14.1711	5.06499	31.0161	-14.474	18.984	-11.1174
S(Kcal/h)	-11.328	13.5581	13.5581	4.7466	30.6182	-13.2469	18.2829	-10.1774
S(Watt)	-13.1719	15.768	15.768	5.5202	35.6089	-15.4061	21.263	-11.8363

Sedentary Act.; 1/f	0.93546	0.98722	0.98722	0.95828	1.01772	0.93216	0.99137	0.93723
(M-W) ± C	3.6057	30.1711	30.1711	21.06499	47.0161	1.52603	34.984	4.8826
S(Kcal/h)	3.373	29.7855	29.7855	20.1862	47.8492	1.4225	34.6821	4.5761
S(Watt)	3.9228	34.6406	34.6406	23.4765	55.6486	1.6544	40.3353	5.322

35^0 - Ta	10.3	10.7	10.7	8.7	8.6	9	10.1	11.5

Volume of Space (Cu.M.) = 0.69231 S(Watt) / (35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	-37.3411	-10.434	-10.434	-19.9576	7.695	-39.8407	-5.3793	-36.0929
0.69231 S	-25.8516	-7.2236	-7.2236	-13.8168	5.3273	-27.5821	-3.7242	-24.9875
Volume of Space	-2.5099	-0.6751	-0.6751	-1.5881	0.61946	-3.0647	-0.3687	-2.1728
Sitting .;S (Watt)	-13.1719	15.768	15.768	5.5202	35.6089	-15.4061	21.263	-11.8363
0.69231 S	-9.119	10.9164	10.9164	3.8217	24.6524	-10.6658	14.7206	-8.1944
Volume of Space	-0.8853	1.0202	1.0202	0.43928	2.8666	-1.1851	1.4575	-0.7126
Sedentary. ;S (Watt)	3.9228	34.6406	34.6406	23.4765	55.6486	1.6544	40.3353	5.322
0.69231 S	2.7158	23.982	23.982	16.253	38.5261	1.1453	27.9245	3.6845
Volume of Space	0.2637	2.2413	2.2413	1.8682	4.4798	0.12726	2.7648	0.32039

Date : November 21 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	22.8	21.5	20.7	25.5	28.7	28.5	25	23.2
RH (%)	67	70	67	48	45	46	58	67
V. at 7.65 M.; (Mps.)	0	0	0.8583	0.5722	0	0	0	0
Vi= 0.65 V ; Mps.	0.2	0.2	0.5579	0.37193	0.2	0.2	0.2	0.2
Vpa (mm.Hg.)	13.8	13.1	12	11.7	13.1	13	13.6	14.1

The Convection Heat Exchange (C) = α x $Vi^{0.3}$ ($Ta-35^0$)

Ta - 35 ^{0}C	-12.2	-13.5	-14.3	-9.5	-6.3	-6.5	-10	-11.8
$Vi^{0.3}$	0.61703	0.61703	0.83939	0.74326	0.61703	0.61703	0.61703	0.61703
C	-97.861	-108.289	-156.043	-91.7926	-50.5348	-52.139	-80.2139	-94.6524

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 $\pm$ C

Sitting at Rest ; E = 100 $\pm$ C Sedentary Activity ; E = 116 $\pm$ C

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism; E	-21.861	-32.2888	-80.0426	-15.7926	25.4652	23.861	-4.2139	-18.6524
Sitting at Rest ; E	2.13904	-8.2888	-56.0426	8.2074	49.4652	47.861	19.7861	5.3476
Sedentary Activity; E	18.13904	7.7112	-40.0426	24.2074	65.4652	63.861	35.7861	21.3476

$E\ max = pV^{0.3}(42- Vpa)$; p = 20.5

$V^{0.3}$	0.61703	0.61703	0.83939	0.74326	0.61703	0.61703	0.61703	0.61703
$pV^{0.3}$	12.6491	12.6491	17.2075	15.2368	12.6491	12.6491	12.6491	12.6491
42 - Vpa	28.2	28.9	30	30.3	28.9	29	28.4	27.9
E max	356.705	365.5594	516.2249	461.6759	365.5594	366.8243	359.2349	352.9103

$1/f = e^{0.6\ (E/Emax - 0.12\ )}$

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism ;E	-21.861	-32.2888	-80.0426	-15.7926	25.4652	23.861	-4.2139	-18.6524
Emax	356.705	365.5594	516.2249	461.6759	365.5594	366.8243	359.2349	352.9103
E/Emax	-0.06129	-0.08833	-0.15505	-0.03421	0.06966	0.06505	-0.01173	-0.05285
E/Emax - 0.12	-0.18129	-0.20833	-0.27505	-0.15421	-0.05034	-0.05495	-0.13173	-0.17285
1/f	0.89694	0.8825	0.84787	0.91163	0.97025	0.96757	0.924005	0.90149

Sitting at Rest ;E	2.13904	-8.2888	-56.0426	8.2074	49.4652	47.861	19.7861	5.3476
Emax	356.705	365.5594	516.2249	461.6759	365.5594	366.8243	359.2349	352.9103
E/Emax	0.005997	-0.02267	-0.10856	0.01778	0.135314	0.130474	0.05508	0.01515
E/Emax - 0.12	-0.114	-0.14267	-0.22856	-0.10222	0.015314	0.010474	-0.06492	-0.10485
1/f	0.93388	0.91796	0.87185	0.94051	1.00923	1.0063	0.961796	0.93903

Sedentary Activity ;E	18.13904	7.7112	-40.0426	24.2074	65.4652	63.861	35.7861	21.3476
Emax	356.705	365.5594	516.2249	461.6759	365.5594	366.8243	359.2349	352.9103
E/Emax	0.05085	0.02109	-0.07757	0.052434	0.17908	0.17409	0.09962	0.06049
E/Emax - 0.12	-0.06915	-0.09891	-0.19757	-0.06757	0.05908	0.05409	-0.02038	-0.05951
1/f	0.95936	0.94238	0.888216	0.96027	1.03609	1.03299	0.98785	0.964924

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	-0.06129	-0.08833	-0.15505	-0.03421	0.06966	0.06505	-0.01173	-0.05285
SP./SP.Scale	-0.60645	-0.74164	-1.0753	-0.47105	0.0483	0.02525	-0.35865	-0.56425
	0	0	0	0	0	0	0	0

Sitting at Rest ;

E/Emax	0.005997	-0.02267	-0.10856	0.01778	0.135314	0.130474	0.05508	0.01515
SP. / SP. Scale	-0.27002	-0.4134	-0.8428	-0.2111	0.3766	0.3524	-0.0246	-0.22425
	0	0	0	0	0	0	0	0

Sedentary Activity ;

E/Emax	0.05085	0.02109	-0.07757	0.052434	0.17908	0.17409	0.09962	0.06049
SP. /SP. Scale	-0.0458	-0.1946	-0.6878	-0.0378	0.5954	0.5705	0.1981	0.00245
	0	0	0	0	1	1	0	0

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	0.89694	0.8825	0.84787	0.91163	0.97025	0.96757	0.924005	0.90149
(M-W) ± C	-21.861	-32.2888	-80.0426	-15.7926	25.4652	23.861	-4.2139	-18.6524
S(Kcal/h)	-0.04103	-28.4949	-67.8657	-14.397	24.7076	23.0872	-3.8937	-16.815
S(Watt)	-0.04772	-33.1395	-78.9278	-16.7437	28.73495	26.8504	-4.5283	-19.5558

Sitting at Rest ;1/f	0.93388	0.91796	0.87185	0.94051	1.00923	1.0063	0.961796	0.93903
(M-W) ± C	2.13904	-8.2888	-56.0426	8.2074	49.4652	47.861	19.7861	5.3476
S(Kcal/h)	1.9976	-7.6088	-48.8607	7.71914	49.9218	48.1625	19.0302	5.0216
S(Watt)	2.3232	-8.849	-56.825	8.9774	58.059	56.013	22.1321	5.8401

Sedentary Act.; 1/f	0.95936	0.94238	0.888216	0.96027	1.03609	1.03299	0.98785	0.964924
(M-W) ± C	18.13904	7.7112	-40.0426	24.2074	65.4652	63.861	35.7861	21.3476
S(Kcal/h)	17.4019	7.2669	-35.5665	23.2456	67.8278	65.9678	35.3513	20.5988
S(Watt)	20.2384	8.4514	-41.3638	27.0347	78.8838	76.7205	41.1136	23.9564

35^0 - Ta	12.2	13.5	14.3	9.5	6.3	6.5	10	11.8

Volume of Space (Cu.M.) = 0.69231 S(Watt) / (35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	-0.04772	-33.1395	-78.9278	-16.7437	28.73495	26.8504	-4.5283	-19.5558
0.69231 S	-0.03304	-22.9428	-54.6425	-11.5918	19.8935	18.5888	-3.13501	-13.5387
Volume of Space	-0.00271	-1.6995	-3.8212	-1.2202	3.1577	2.85982	-0.3135	-1.1473
Sitting .;S (Watt)	2.3232	-8.849	-56.825	8.9774	58.059	56.013	22.1321	5.8401
0.69231 S	1.6084	-6.12626	-39.3405	6.21512	40.1948	38.7784	15.3223	4.0431
Volume of Space	0.13183	-0.4538	-2.7511	0.6542	6.3801	5.9659	1.5322	0.34264
Sedentary. ;S (Watt)	20.2384	8.4514	-41.3638	27.0347	78.8838	76.7205	41.1136	23.9564
0.69231 S	14.0112	5.851	-28.6366	18.7164	54.612	53.1144	28.4633	16.5853
Volume of Space	1.1485	0.4334	-2.0026	1.9701	8.6686	8.1714	2.8463	1.4055

Date : November 28 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	23.6	22.5	22	26.6	30.1	31	27	25.5
RH (%)	63	70	72	56	47	46	62	69
V. at 7.65 M.; (Mps.)	0	0	0	0	0.8583	0	0	0
Vi= 0.65 V ; Mps.	0.2	0.2	0.2	0.2	0.5579	0.2	0.2	0.2
Vpa (mm.Hg.)	13.8	14.1	14.2	14.3	14.9	15.3	16.4	16.6

The Convection Heat Exchange (C) = α x $Vi^{0.3}$ ($Ta-35^0$)

Ta - 35^0C	-11.4	-12.5	-13	-8.4	-4.9	-4	-8	-9.5
$Vi^{0.3}$	0.61703	0.61703	0.61703	0.61703	0.83939	0.61703	0.61703	0.61703
C	-91.4438	-100.267	-104.278	-67.3797	-53.4691	-32.0856	-64.1711	-76.2032

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 $\pm$ C

Sitting at Rest ; E = 100 $\pm$ C Sedentary Activity ; E = 116 $\pm$ C

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism; E	-15.4438	-24.2674	-28.2781	8.6203	22.5309	43.9144	11.8289	-0.2032
Sitting at Rest ; E	8.5562	-0.2674	-4.2781	32.6203	46.5309	67.9144	35.8289	23.7968
Sedentary Activity; E	24.5562	15.7326	11.7219	48.6203	62.5309	83.9144	51.8289	39.7968

$E_{max} = pV^{0.3}(42 - Vpa)$; p = 20.5

$V^{0.3}$	0.61703	0.61703	0.61703	0.61703	0.83939	0.61703	0.61703	0.61703
$pV^{0.3}$	12.6491	12.6491	12.6491	12.6491	17.2075	12.6491	12.6491	12.6491
42 - Vpa	28.2	27.9	27.8	27.7	27.1	26.7	25.6	25.4
E max	356.705	352.9103	351.6454	350.3805	466.3231	337.7314	323.8173	321.2875

$1/f = e^{0.6\,(E/Emax - 0.12)}$

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism ;E	-15.4438	-24.2674	-28.2781	8.6203	22.5309	43.9144	11.8289	-0.2032
Emax	356.705	352.9103	351.6454	350.3805	466.3231	337.7314	323.8173	321.2875
E/Emax	-0.0433	-0.06876	-0.08042	0.0246	0.04832	0.13003	0.03653	-0.00063
E/Emax - 0.12	-0.1633	-0.18876	-0.20042	-0.0954	-0.07168	0.01003	-0.08347	-0.12063
1/f	0.90667	0.89292	0.886699	0.94437	0.9579	1.00603	0.95115	0.93018

Sitting at Rest ;E	8.5562	-0.2674	-4.2781	32.6203	46.5309	67.9144	35.8289	23.7968
Emax	356.705	352.9103	351.6454	350.3805	466.3231	337.7314	323.8173	321.2875
E/Emax	0.02399	-0.00076	-0.01217	0.0931	0.09978	0.20109	0.110645	0.07407
E/Emax - 0.12	-0.09601	-0.12076	-0.13217	-0.0269	-0.02022	0.08109	0.00935	-0.04593
1/f	0.94402	0.930109	0.92376	0.98399	0.987943	1.0499	0.9944	0.97282

Sedentary Activity ;E	24.5562	15.7326	11.7219	48.6203	62.5309	83.9144	51.8289	39.7968
Emax	356.705	352.9103	351.6454	350.3805	466.3231	337.7314	323.8173	321.2875
E/Emax	0.06884	0.04458	0.033334	0.13876	0.13409	0.24846	0.16006	0.12387
E/Emax - 0.12	-0.05116	-0.07542	-0.08666	0.018766	0.01409	0.12846	0.04006	0.00387
1/f	0.96977	0.95576	0.94933	1.01132	1.0085	1.08013	1.02432	1.0023

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	-0.0433	-0.06876	-0.08042	0.0246	0.04832	0.13003	0.03653	-0.00063
SP./SP.Scale	-0.51648	-0.6438	-0.7021	-0.177	-0.0584	0.3502	-0.1174	-0.3032
	0	0	0	0	0	0	0	0

Sitting at Rest ;

E/Emax	0.02399	-0.00076	-0.01217	0.0931	0.09978	0.20109	0.110645	0.07407
SP. / SP. Scale	-0.1801	-0.3038	-0.3609	0.1655	0.1989	0.7055	0.2532	0.0704
	0	0	0	0	0	1	0	0

Sedentary Activity ;

E/Emax	0.06884	0.04458	0.033334	0.13876	0.13409	0.24846	0.16006	0.12387
SP. /SP. Scale	0.0442	-0.0771	-0.13333	0.3938	0.3705	0.9423	0.5003	0.3194
	0	0	0	0	0	1	1	0

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	0.90667	0.89292	0.886699	0.94437	0.9579	1.00603	0.95115	0.93018
(M-W) ± C	-15.4438	-24.2674	-28.2781	8.6203	22.5309	43.9144	11.8289	-0.2032
S(Kcal/h)	-14.0024	-21.6688	-25.0742	8.1408	21.5823	44.1792	11.2511	-0.18901
S(Watt)	-16.2848	-25.2009	-29.1613	9.4677	25.1003	51.3804	13.085	-0.21982

Sitting at Rest ;1/f	0.94402	0.930109	0.92376	0.98399	0.987943	1.0499	0.9944	0.97282
(M-W) ± C	8.5562	-0.2674	-4.2781	32.6203	46.5309	67.9144	35.8289	23.7968
S(Kcal/h)	8.0772	-0.24871	-3.9519	32.098	45.9699	71.3033	35.6283	23.15
S(Watt)	9.3938	-0.2893	-4.5961	37.33	53.463	82.9258	41.4357	26.9235

Sedentary Act.; 1/f	0.96977	0.95576	0.94933	1.01132	1.0085	1.08013	1.02432	1.0023
(M-W) ± C	24.5562	15.7326	11.7219	48.6203	62.5309	83.9144	51.8289	39.7968
S(Kcal/h)	23.8139	15.0366	11.12795	49.1707	63.0624	90.6385	53.0894	39.8883
S(Watt)	27.6955	17.4876	12.9418	57.1855	73.3416	105.4125	61.7429	46.3901

35^0 - Ta	11.4	12.5	13	8.4	4.9	4	8	9.5

Volume of Space (Cu.M.) = 0.69231 S(Watt) / (35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	-16.2848	-25.2009	-29.1613	9.4677	25.1003	51.3804	13.085	-0.21982
0.69231 S	-11.2741	-17.4468	-20.1886	6.5546	17.3772	35.5712	9.0589	-0.15218
Volume of Space	-0.98896	-1.3957	-1.553	0.7803	3.5464	8.8928	1.1324	-0.01602
Sitting .;S (Watt)	9.3938	-0.2893	-4.5961	37.33	53.463	82.9258	41.4357	26.9235
0.69231 S	6.5034	-0.2003	-3.1819	25.844	37.0129	57.4103	28.6863	18.6394
Volume of Space	0.5705	-0.01602	-0.2448	3.0767	7.5537	14.3526	3.5858	1.962
Sedentary. ;S (Watt)	27.6955	17.4876	12.9418	57.1855	73.3416	105.4125	61.7429	46.3901
0.69231 S	19.1739	12.1068	8.9597	39.5901	50.7751	72.9781	42.7453	32.1164
Volume of Space	1.6819	0.9685	0.68921	4.7131	10.3623	18.2445	5.3432	3.3807

Date : December 7 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	26.8	26	25.8	32	24	34.4	29.5	27.5
RH (%)	79	86	79	58	48	45	68	75
V. at 7.65 M.; (Mps.)	0	0	0	1.4305	1.1444	0	0	0
Vi= 0.65 V ; Mps.	0.2	0.2	0.2	0.929825	0.74386	0.2	0.2	0.2
Vpa (mm.Hg.)	21	21.8	19.6	20.9	19.4	18.2	21.1	20.8

The Convection Heat Exchange (C) = α x $Vi^{0.3}$ ($Ta-35^0$)

Ta - 35 ^{0}C	-8.2	-9	-9.2	-3	-1	-0.6	-5.5	-7.5
$Vi^{0.3}$	0.61703	0.61703	0.61703	0.97841	0.91506	61703	0.61703	0.61703
C	-65.7754	-72.1925	-73.7968	-38.158	-11.8958	-4.8128	-44.1176	-60.1604

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 ± C

Sitting at Rest ; E = 100± C Sedentary Activity ; E = 116 ± C

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism; E	10.2246	3.8075	2.2032	37.842	64.1042	71.1872	31.8824	15.8396
Sitting at Rest ; E	34.2246	27.8075	26.2032	61.842	88.1042	95.1872	55.8824	39.8396
Sedentary Activity; E	50.2246	43.8075	42.2032	77.842	104.1042	111.1872	71.8824	55.8396

$E\ max = pV^{0.3}(42- Vpa)$; p = 20.5

$V^{0.3}$	0.61703	0.61703	0.61703	0.97841	0.91506	61703	0.61703	0.61703
$pV^{0.3}$	12.6491	12.6491	12.6491	20.0574	18.7587	12.6491	12.6491	12.6491
42 - Vpa	21	20.2	22.4	21.1	22.6	23.8	20.9	21.2
E max	265.6314	255.5121	283.3402	423.2112	423.9473	301.0489	264.3665	268.1612

$1/f = e^{0.6\ (E/Emax - 0.12\ )}$

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism ;E	10.2246	3.8075	2.2032	37.842	64.1042	71.1872	31.8824	15.8396
Emax	265.6314	255.5121	283.3402	423.2112	423.9473	301.0489	264.3665	268.1612
E/Emax	0.03849	0.0149	0.007776	0.08942	0.15121	0.23646	0.120599	0.05907
E/Emax - 0.12	-0.0815	-0.1051	-0.11222	-0.03058	0.03121	0.11646	0.000599	-0.06093
1/f	0.95227	0.93889	0.93488	0.98182	1.0189	1.0724	1.00036	0.964101

Sitting at Rest ;E	34.2246	27.8075	26.2032	61.842	88.1042	95.1872	55.8824	39.8396
Emax	265.6314	255.5121	283.3402	423.2112	423.9473	301.0489	264.3665	268.1612
E/Emax	0.12884	0.10883	0.09248	0.14613	0.20782	0.31619	0.21138	0.14857
E/Emax - 0.12	0.00884	-0.01117	-0.02752	0.02613	0.08782	0.1962	0.09138	0.02857
1/f	1.00532	0.99332	0.9836	1.0158	1.0541	1.12492	1.0564	1.0173

Sedentary Activity ;E	50.2246	43.8075	42.2032	77.842	104.1042	111.1872	71.8824	55.8396
Emax	265.6314	255.5121	283.3402	423.2112	423.9473	301.0489	264.3665	268.1612
E/Emax	0.18908	0.17145	0.14895	0.18393	0.24556	0.36933	0.2719	0.20823
E/Emax - 0.12	0.06908	0.05145	0.02895	0.06393	0.12556	0.24933	0.1519	0.08823
1/f	1.04232	1.0314	1.01752	1.0391	1.0783	1.1614	1.0954	1.0544

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	0.03849	0.0149	0.007776	0.08942	0.15121	0.23646	0.120599	0.05907
SP./SP.Scale	-0.1076	-0.2255	-0.26112	0.1471	0.45605	0.8823	0.303	-0.0047
	0	0	0	0	0	1	0	0

Sitting at Rest ;

E/Emax	0.12884	0.10883	0.09248	0.14613	0.20782	0.31619	0.21138	0.14857
SP. / SP. Scale	0.3442	0.2442	0.1624	0.4307	0.7391	1.28095	0.7569	0.4429
	0	0	0	0	1	1	1	0

Sedentary Activity ;

E/Emax	0.18908	0.17145	0.14895	0.18393	0.24556	0.36933	0.2719	0.20823
SP. /SP. Scale	0.6454	0.5573	0.4448	0.6197	0.9278	1.5467	1.0595	0.74115
	1	1	0	1	1	2	1	1

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	0.95227	0.93889	0.93488	0.98182	1.0189	1.0724	1.00036	0.964101
(M-W) ± C	10.2246	3.8075	2.2032	37.842	64.1042	71.1872	31.8824	15.8396
S(Kcal/h)	9.7366	3.5748	2.0597	37.154	65.3158	76.3412	31.8939	15.271
S(Watt)	11.3236	4.1575	2.3955	43.2101	75.9622	88.7848	37.0926	17.7601

Sitting at Rest ;1/f	1.00532	0.99332	0.9836	1.0158	1.0541	1.12492	1.0564	1.0173
(M-W) ± C	34.2246	27.8075	26.2032	61.842	88.1042	95.1872	55.8824	39.8396
S(Kcal/h)	34.4067	27.6217	25.7735	62.8191	92.8706	107.0761	59.0342	40.5288
S(Watt)	40.01496	32.1241	29.9745	73.0586	108.0086	124.5295	68.6567	47.135

Sedentary Act.; 1/f	1.04232	1.0314	1.01752	1.0391	1.0783	1.1614	1.0954	1.0544
(M-W) ± C	50.2246	43.8075	42.2032	77.842	104.1042	111.1872	71.8824	55.8396
S(Kcal/h)	52.3491	45.1831	42.9418	80.8856	112.2556	129.1328	78.73998	58.8773
S(Watt)	60.882	52.5479	49.9413	94.06998	130.5532	150.1815	91.5746	68.4743

35^0 - Ta	8.2	9	9.2	3	1	0.6	5.5	7.5

Volume of Space (Cu.M.) =0 .69231 S(Watt) / (35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	11.3236	4.1575	2.3955	43.2101	75.9622	88.7848	37.0926	17.7601
0.69231 S	7.8395	2.8783	1.6584	29.9148	52.5894	61.4666	25.6796	12.2955
Volume of Space	0.95603	0.31981	0.1803	9.9716	52.5894	102.4443	4.669	1.6394
Sitting .;S (Watt)	40.01496	32.1241	29.9745	73.0586	108.0086	124.5295	68.6567	47.135
0.69231 S	27.7028	22.2398	20.7517	50.5792	74.7754	86.213	47.5317	32.632
Volume of Space	3.3784	2.4711	2.2556	16.8597	74.7754	143.6883	8.6421	4.3509
Sedentary. ;S (Watt)	60.882	52.5479	49.9413	94.06998	130.5532	150.1815	91.5746	68.4743
0.69231 S	42.1492	36.3794	34.5748	65.1256	90.3833	103.9721	63.398	47.4054
Volume of Space	5.1401	4.0422	3.7581	21.7085	90.3833	173.2869	11.5269	6.3207

Date : December 14 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	27.5	26.7	26	29.1	31	30	27.8	27.1
RH (%)	81	84	81	61	57	58	68	69
V. at 7.65 M.; (Mps.)	0	0	0	3.1471	3.1471	0	0	0
Vi= 0.65 V ; Mps.	0.2	0.2	0.2	2.0456	2.0456	0.2	0.2	0.2
Vpa (mm.Hg.)	22.2	22	20.5	18.4	19.1	18.7	19.1	18.5

The Convection Heat Exchange (C) = α x $Vi^{0.3}$ ($Ta-35^0$)

Ta - 35 ^{0}C	-7.5	-8.3	-9	-5.9	-4	-5	-7.2	-7.9
$Vi^{0.3}$	0.61703	0.61703	0.61703	1.2395	1.2395	0.61703	0.61703	0.61703
C	-60.1604	-66.5775	-72.1925	-95.0697	-64.454	-40.107	-57.754	-63.369

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 $\pm$ C

Sitting at Rest ; E = 100 $\pm$ C Sedentary Activity ; E = 116 $\pm$ C

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism; E	15.8396	9.4225	3.8075	-19.0697	11.546	35.8931	18.246	12.631
Sitting at Rest ; E	39.8396	33.4225	27.8075	4.9303	35.546	59.8931	42.246	36.631
Sedentary Activity;E	55.8396	49.4225	43.8075	20.9303	51.546	75.8931	58.246	52.631

$E\ max = pV^{0.3}(42- Vpa)$; p = 20.5

$V^{0.3}$	0.61703	0.61703	0.61703	1.2395	1.2395	0.61703	0.61703	0.61703
$pV^{0.3}$	12.6491	12.6491	12.6491	25.40975	25.40975	12.6491	12.6491	12.6491
42 - Vpa	19.8	20	21.5	23.6	22.9	23.3	22.9	23.5
E max	250.4525	252.9823	271.956	599.6701	581.8833	294.7244	289.6647	297.2542

$1/f = e^{0.6\ (E/Emax - 0.12\ )}$

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism ;E	15.8396	9.4225	3.8075	-19.0697	11.546	35.8931	18.246	12.631
Emax	250.4525	252.9823	271.956	599.6701	581.8833	294.7244	289.6647	297.2542
E/Emax	0.06324	0.03725	0.014	-0.0318	0.01984	0.121785	0.06299	0.04249
E/Emax - 0.12	-0.05676	-0.08275	-0.106	-0.1518	-0.10016	0.001785	-0.05701	-0.07751
1/f	0.96652	0.95156	0.93838	0.91294	0.94168	1.00107	0.96637	0.95456

Sitting at Rest ;E	39.8396	33.4225	27.8075	4.9303	35.546	59.8931	42.246	36.631
Emax	250.4525	252.9823	271.956	599.6701	581.8833	294.7244	289.6647	297.2542
E/Emax	0.15907	0.132114	0.10225	0.008222	0.06109	0.20322	0.14584	0.12323
E/Emax - 0.12	0.03907	0.012114	-0.01775	-0.11178	-0.0589	0.08322	0.02584	0.00323
1/f	1.02372	1.007295	0.989407	0.93513	0.96527	1.051198	1.01563	1.00194

Sedentary Activity;E	55.8396	49.4225	43.8075	20.9303	51.546	75.8931	58.246	52.631
Emax	250.4525	252.9823	271.956	599.6701	581.8833	294.7244	289.6647	297.2542
E/Emax	0.222955	0.19536	0.16108	0.034903	0.08858	0.25751	0.20108	0.17706
E/Emax - 0.12	0.102955	0.07536	0.04108	-0.0851	-0.03142	0.13751	0.08108	0.05706
1/f	1.06372	1.04625	1.02496	0.95022	0.98133	1.086002	1.04985	1.03483

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	0.06324	0.03725	0.014	-0.0318	0.01984	0.121785	0.06299	0.04249
SP./SP.Scale	0.0162	-0.11375	-0.23	-0.459	-0.2008	0.3089	0.01495	-0.08755
	0	0	0	0	0	0	0	0

Sitting at Rest ;

E/Emax	0.15907	0.132114	0.10225	0.008222	0.06109	0.20322	0.14584	0.12323
SP. / SP. Scale	0.4954	0.3606	0.21125	-0.2589	0.00545	0.7161	0.4292	0.31615
	0	0	0	0	0	1	0	0

Sedentary Activity ;

E/Emax	0.222955	0.19536	0.16108	0.034903	0.08858	0.25751	0.20108	0.17706
SP. /SP. Scale	0.81478	0.6768	0.5054	-0.12549	0.1429	0.9876	0.7054	0.5853
	1	1	1	0	0	1	1	1

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	0.96652	0.95156	0.93838	0.91294	0.94168	1.00107	0.96637	0.95456
(M-W) ± C	15.8396	9.4225	3.8075	-19.0697	11.546	35.8931	18.246	12.631
S(Kcal/h)	15.3093	8.9661	3.5729	-17.4095	10.8726	35.9315	17.6324	12.057
S(Watt)	17.8047	10.4275	4.1553	-20.2472	12.6449	41.7883	20.5065	14.0223

Sitting at Rest ;1/f	1.02372	1.007295	0.989407	0.93513	0.96527	1.051198	1.01563	1.00194
(M-W) ± C	39.8396	33.4225	27.8075	4.9303	35.546	59.8931	42.246	36.631
S(Kcal/h)	40.7846	33.6663	27.5129	4.6105	34.3115	62.9595	42.9063	36.7021
S(Watt)	47.4325	39.1539	31.9975	5.36198	39.9043	73.2219	49.90003	42.6845

Sedentary Act.; 1/f	1.06372	1.04625	1.02496	0.95022	0.98133	1.086002	1.04985	1.03483
(M-W) ± C	55.8396	49.4225	43.8075	20.9303	51.546	75.8931	58.246	52.631
S(Kcal/h)	59.3977	51.7083	44.9009	19.8884	50.5836	82.42006	61.1496	54.4641
S(Watt)	69.0795	60.1367	52.2198	23.1302	58.8288	95.8545	71.1169	63.3418

35^0 - Ta	7.5	8.3	9	5.9	4	5	7.2	7.9

Volume of Space (Cu.M.) = 0.69231 S(Watt) / (35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	17.8047	10.4275	4.1553	-20.2472	12.6449	41.7883	20.5065	14.0223
0.69231 S	12.3264	7.2191	2.8767	-14.0174	8.7542	28.9305	14.1968	9.7078
Volume of Space	1.6435	0.8698	0.3196	-2.3758	2.1885	5.7861	1.9718	1.2288
Sitting .;S (Watt)	47.4325	39.1539	31.9975	5.36198	39.9043	73.2219	49.90003	42.6845
0.69231 S	32.838	27.1067	22.1522	3.7122	27.6261	50.6923	34.5463	29.5509
Volume of Space	4.3784	3.2659	2.4614	0.6292	6.9065	10.1385	4.7981	3.7406
Sedentary. ;S (Watt)	69.0795	60.1367	52.2198	23.1302	58.8288	95.8545	71.1169	63.3418
0.69231 S	47.8244	41.6333	36.1523	16.0133	40.7277	66.361	49.235	43.8522
Volume of Space	6.3766	5.0161	4.0169	2.7141	10.1819	13.2722	6.8382	5.5509

Date : December 21 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	27.5	25.7	24.6	29.7	31.4	32.4	29.5	27.9
RH (%)	65	71	80	57	50	48	57	57
V. at 7.65 M.; (Mps.)	0.8583	0	0	1.7166	0	0	0	0
Vi= 0.65 V ; Mps.	0.557895	0.2	0.2	1.11579	0.2	0.2	0.2	0.2
Vpa (mm.Hg.)	17.8	17.4	18.6	17.7	17.1	17.6	17.3	15.7

The Convection Heat Exchange (C) = α x $Vi^{0.3}$ ($Ta-35^0$)

Ta - 35 ^{0}C	-7.5	-9.3	-10.4	-5.3	-3.6	-2.6	-5.5	-7.1
$Vi^{0.3}$	0.839394	0.61703	0.61703	1.03341	0.61703	0.61703	0.61703	0.61703
C	-81.8409	-74.5989	-83.4225	-71.2019	-28.877	-20.8556	-44.1176	-56.9519

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 $\pm$ C

Sitting at Rest ; E = 100 $\pm$ C Sedentary Activity ; E = 116 $\pm$ C

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism; E	-5.8409	1.4011	-7.4225	4.7981	47.123	55.1444	31.8824	19.0481
Sitting at Rest ; E	18.1591	25.4011	16.5775	28.7981	71.123	79.1444	55.8824	43.0481
Sedentary Activity; E	34.1591	41.4011	32.5775	44.7981	87.123	95.1444	71.8824	59.0481

$E_{max} = pV^{0.3}(42 - Vpa)$; p = 20.5

$V^{0.3}$	0.839394	0.61703	0.61703	1.03341	0.61703	0.61703	0.61703	0.61703
$pV^{0.3}$	17.2076	12.6491	12.6491	21.849	12.6491	12.6491	12.6491	12.6491
42 - Vpa	24.2	24.6	23.4	24.3	24.9	24.4	24.7	26.3
E max	416.4234	311.1682	295.9893	514.7932	314.963	308.6384	312.4331	332.6717

$1/f = e^{0.6\,(E/Emax - 0.12)}$

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism ;E	-5.8409	1.4011	-7.4225	4.7981	47.123	55.1444	31.8824	19.0481
Emax	416.4234	311.1682	295.9893	514.7932	314.963	308.6384	312.4331	332.6717
E/Emax	-0.01403	0.004503	-0.02508	0.00932	0.149614	0.17867	0.10205	0.05726
E/Emax - 0.12	-0.13403	-0.1155	-0.14508	-0.11068	0.029614	0.05867	-0.01795	-0.06274
1/f	0.92273	0.93305	0.916635	0.93575	1.01793	1.03583	0.98929	0.96305

Sitting at Rest ;E	18.1591	25.4011	16.5775	28.7981	71.123	79.1444	55.8824	43.0481
Emax	416.4234	311.1682	295.9893	514.7932	314.963	308.6384	312.4331	332.6717
E/Emax	0.04361	0.08163	0.05601	0.05594	0.225814	0.25643	0.17886	0.1294
E/Emax - 0.12	-0.07639	-0.03837	-0.06399	-0.06406	0.105814	0.13643	0.05886	0.009401
1/f	0.9552	0.977242	0.96233	0.962294	1.06555	1.0853	1.03595	1.00566

Sedentary Activity ;E	34.1591	41.4011	32.5775	44.7981	87.123	95.1444	71.8824	59.0481
Emax	416.4234	311.1682	295.9893	514.7932	314.963	308.6384	312.4331	332.6717
E/Emax	0.08203	0.13305	0.11006	0.08702	0.27661	0.30827	0.23007	0.177497
E/Emax - 0.12	-0.03797	0.01305	0.009937	-0.03298	0.15661	0.18827	0.11007	0.057497
1/f	0.97748	1.00786	0.99406	0.98041	1.0985	1.11959	1.0683	1.0351

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	-0.01403	0.004503	-0.02508	0.00932	0.149614	0.17867	0.10205	0.05726
SP./SP.Scale	-0.37015	-0.27749	-0.4254	-0.2534	0.44807	0.59335	0.21025	-0.0137
	0	0	0	0	0	1	0	0

Sitting at Rest ;

E/Emax	0.04361	0.08163	0.05601	0.05594	0.225814	0.25643	0.1789	0.1294
SP. / SP. Scale	-0.08195	0.10815	-0.01995	-0.0203	0.82907	0.98215	0.5943	0.347
	0	0	0	0	1	1	1	0

Sedentary Activity ;

E/Emax	0.08203	0.13305	0.11006	0.08702	0.27661	0.30827	0.23007	0.1775
SP. /SP. Scale	0.11015	0.36525	0.2503	0.1351	1.08305	1.2414	0.8504	0.5875
	0	0	0	0	1	1	1	1

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	0.92273	0.93305	0.916635	0.93575	1.01793	1.03583	0.98929	0.96305
(M-W) ± C	-5.8409	1.4011	-7.4225	4.7981	47.123	55.1444	31.8824	19.0481
S(Kcal/h)	-5.38957	1.3073	-6.8037	4.4898	47.9679	57.12022	31.5409	18.3443
S(Watt)	-6.26807	1.5204	-7.9127	5.2217	55.7867	66.4308	36.6821	21.3344

Sitting at Rest ;1/f	0.9552	0.977242	0.96233	0.962294	1.06555	1.0853	1.03595	1.0057
(M-W) ± C	18.1591	25.4011	16.5775	28.7981	71.123	79.1444	55.8824	43.048
S(Kcal/h)	17.3456	24.823	15.953	27.7122	75.7851	85.8954	57.8914	43.292
S(Watt)	20.1729	28.8692	18.5534	32.2293	88.1381	99.8964	67.3277	50.348

Sedentary Act.; 1/f	0.97748	1.00786	0.99406	0.98041	1.0985	1.11959	1.0683	1.0351
(M-W) ± C	34.1591	41.4011	32.5775	44.7981	87.123	95.1444	71.8824	59.0481
S(Kcal/h)	33.3898	41.7265	32.384	43.9205	95.7046	106.522	76.79197	61.1207
S(Watt)	38.8324	48.5279	37.6626	51.0795	111.305	123.886	89.3091	71.0834

35^0 - Ta	7.5	9.3	10.4	5.3	3.6	2.6	5.5	7.1

Volume of Space (Cu.M.) = 0.69231 S(Watt) /(35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	-6.26807	1.5204	-7.9127	5.2217	55.7867	66.4308	36.6821	21.3344
0.69231 S	-4.3395	1.0526	-5.4781	3.615	38.6217	45.9907	25.3954	14.77
Volume of Space	-0.5786	0.1132	-0.5267	0.68208	10.7282	17.6887	4.6173	2.0803
Sitting .;S (Watt)	20.1729	28.8692	18.5534	32.2293	88.1381	99.8964	67.3277	50.3483
0.69231 S	13.9659	19.9864	12.8447	22.3127	61.0189	69.1593	46.6116	34.8566
Volume of Space	1.8621	2.1491	1.2351	4.2099	16.9497	26.5997	8.4748	4.9094
Sedentary. ;S (Watt)	38.8324	48.5279	37.6626	51.0795	111.3045	123.8859	89.3091	71.0834
0.69231 S	26.884	33.5964	26.0742	35.3629	77.0572	85.7675	61.8296	49.2117
Volume of Space	3.5608	3.6125	2.5071	6.6722	21.4048	32.9875	11.2417	6.9312

Date : December 28 , 2001 .

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Ta(^{0}C)	23.8	23	22	27.9	31.1	30.7	28.4	27.3
RH (%)	78	75	79	57	50	47	59	55
V. at 7.65 M.;(Mps.)	0	0.5722	0	0	0.8583	1.1444	0.5722	0
Vi= 0.65 V ; Mps.	0.2	0.3719	0.2	0.2	0.557895	0.74386	0.3719	0.2
Vpa (mm.Hg.)	17	15.4	15.5	15.8	16.9	15.3	16.8	14.9

The Convection Heat Exchange (C) = α x Vi $^{0.3}$ (Ta-35^0)

Ta - 35 ^{0}C	-11.2	-12	-13	-7.1	-3.9	-4.3	-6.6	-7.7
Vi $^{0.3}$	0.61703	0.74326	0.61703	0.61703	0.83939	0.91506	0.74326	0.61703
C	-89.8396	-115.949	-104.278	-56.9519	-42.5571	-51.1519	-63.7717	-61.7647

The Required Evaporative Cooling (E) ; Basal Metabolism ; E = 76 $\pm$ C

Sitting at Rest ; E = 100± C Sedentary Activity ; E = 116 ± C

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolism;E	-13.8396	-39.9486	-28.2781	19.0481	33.4429	24.8481	12.2283	14.2353
Sitting at Rest ; E	10.1604	-15.9486	-4.2781	43.0481	57.4429	48.8481	36.2283	38.2353
SedentaryActivity;E	26.1604	0.0514	11.7219	59.0481	73.4429	64.8481	52.2283	54.2353

$E_{max} = pV^{0.3}(42 - Vpa)$; p = 20.5

$V^{0.3}$	0.61703	0.74326	0.61703	0.61703	0.83939	0.91506	0.74326	0.61703
$pV^{0.3}$	12.6491	15.2368	12.6491	12.6491	17.2075	18.7587	15.2368	12.6491
42 - Vpa	25	26.6	26.5	26.2	25.1	26.7	25.2	27.1
E max	316.2279	405.2997	335.2015	331.4068	431.9081	500.858	383.968	342.791

$1/f = e^{0.6\,(E/Emax - 0.12)}$

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal Metabolis;E	-13.8396	-39.9486	-28.2781	19.0481	33.4429	24.8481	12.2283	14.2353
Emax	316.2279	405.2997	335.2015	331.4068	431.9081	500.8581	383.9681	342.791
E/Emax	-0.04376	-0.09857	-0.08436	0.05748	0.077431	0.049611	0.03185	0.04153
E/Emax - 0.12	-0.16376	-0.21857	-0.20436	-0.06252	-0.04257	-0.07039	-0.08815	-0.07847
1/f	0.9064	0.877096	0.8846	0.96318	0.97478	0.95865	0.94848	0.95401

Sitting at Rest ;E	10.1604	-15.9486	-4.2781	43.0481	57.4429	48.8481	36.2283	38.2353
Emax	316.2279	405.2997	335.2015	331.4068	431.9081	500.8581	383.9681	342.791
E/Emax	0.03213	-0.03935	-0.01276	0.129895	0.132998	0.09753	0.09435	0.11154
E/Emax - 0.12	-0.08787	-0.15935	-0.13276	0.009895	0.012998	-0.02247	-0.02565	0.008459
1/f	0.94864	0.90882	0.92343	1.00595	1.00783	0.98661	0.98473	0.99494

Sedentary Activity;E	26.1604	0.0514	11.7219	59.0481	73.4429	64.8481	52.2283	54.2353
Emax	316.228	405.2997	335.2015	331.4068	431.9081	500.8581	383.9681	342.791
E/Emax	0.0827	0.000127	0.03497	0.178174	0.17004	0.12947	0.13602	0.15822
E/Emax - 0.12	-0.0373	-0.11987	-0.08503	0.05817	0.05004	0.00947	0.016022	0.03822
1/f	0.9779	0.9306	0.95026	1.0355	1.0305	1.0057	1.00966	1.0232

SP. Scale ; SP. = -0.3 + 5(E/Emax)

Basal Metabolism;	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
E/Emax	-0.04376	-0.09857	-0.08436	0.05748	0.077431	0.049611	0.03185	0.04153
SP./SP.Scale	-0.5188	-0.79285	-0.7218	-0.0126	0.0872	-0.0519	-0.1408	-0.0924
	0	0	0	0	0	0	0	0

Sitting at Rest ;

E/Emax	0.03213	-0.03935	-0.01276	0.129895	0.132998	0.09753	0.09435	0.11154
SP. / SP. Scale	-0.1394	-0.4968	-0.3638	0.3495	0.36499	0.1877	0.17175	0.2577
	0	0	0	0	0	0	0	0

Sedentary Activity ;

E/Emax	0.08273	0.000127	0.03497	0.178174	0.17004	0.12947	0.13602	0.15822
SP. /SP. Scale	0.1137	-0.2994	-0.1252	0.5909	0.5502	0.3474	0.3801	0.4911
	0	0	0	1	1	0	0	0

S = { (M-W) ± C } 1/f .....Kcal/Hour , 1 Kcal = 1.163 Watt.Hour

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal. ; 1/f	0.9064	0.87709	0.8846	0.9631	0.97478	0.9586	0.9485	0.9540
(M-W) ± C	-13.839	-39.948	-28.278	19.048	33.4429	24.848	12.2283	14.235
S(Kcal/h)	-12.544	-35.038	-25.014	18.346	32.5995	23.820	11.5983	13.581
S(Watt)	-14.588	-40.750	-29.092	21.337	37.9132	27.7034	13.4888	15.794

Sitting at Rest ;1/f	0.94864	0.90882	0.92343	1.00595	1.00783	0.98661	0.98473	0.99494
(M-W) ± C	10.1604	-15.9486	-4.2781	43.0481	57.4429	48.8481	36.2283	38.2353
S(Kcal/h)	9.6386	-14.4944	-3.9505	43.3042	57.8927	48.194	35.6751	38.0418
S(Watt)	11.2096	-16.857	-4.5945	50.3628	67.3292	56.0496	41.4901	44.2426

Sedentary Act.; 1/f	0.97788	0.9306	0.95026	1.0355	1.0305	1.0057	1.00966	1.0232
(M-W) ± C	26.1604	0.0514	11.7219	59.0481	73.4429	64.8481	52.2283	54.2353
S(Kcal/h)	25.5817	0.0478	11.1389	61.1443	75.6829	65.2177	52.7328	55.4936
S(Watt)	29.7516	0.05563	12.9545	71.1108	88.0192	75.8482	61.3283	64.53901

35^0 - Ta	11.2	12	13	7.1	3.9	4.3	6.6	7.7

Volume of Space (Cu.M.) = 0.69231 S(Watt) / (35^0C- Ta)

	01.00 am.	04.00 am.	07.00 am.	10.00am.	13.00 pm.	16.00 pm.	19.00 pm.	22.00 pm.
Basal.; S (Watt)	-14.5889	-40.7501	-29.0922	21.3373	37.9132	27.7034	13.4888	15.7943
0.69231 S	-10.1001	-28.2117	-20.1408	14.772	26.2477	19.1793	9.3384	10.9345
Volume of Space	0.9018	-2.351	-1.5493	2.0806	1.8883	4.4603	1.4149	1.4201

Sitting .;S (Watt)	11.2096	-16.857	-4.5945	50.3628	67.3292	56.0496	41.4901	44.2426
0.69231 S	7.7606	-11.6703	-3.1808	34.8667	46.6127	38.8037	28.724	30.6296
Volume of Space	0.6929	-0.9725	-0.2447	4.9108	3.3534	9.0241	4.3521	3.9779

Sedentary. ;S (Watt)	29.7516	0.05563	12.9545	71.1108	88.0192	75.8482	61.3283	64.53901
0.69231 S	20.5973	0.03851	8.9685	49.2307	60.9366	52.5105	42.4582	44.681
Volume of Space	1.839	0.003209	0.6899	6.9339	4.3839	12.2117	6.4331	5.8027

ประวัติผู้เขียน

ชื่อ ผู้ช่วยศาตราจารย์ กัญจนี ญาณะชัย

เกิด 2 กุมภาพันธ์ พ.ศ. 2499

ประวัติการศึกษา และการทำงาน

ระดับปริญญาตรี

พ.ศ. 2521 คณะสถาปัตยกรรมศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย

ระดับปริญญาโท

พ.ศ. 2540 สาขาสถาปัตยกรรมเขตร้อน สถาบันเทคโนโลยีพระจอมเกล้าลาดกระบัง

ประสบการณ์การทำงาน

พ.ศ. 2535 จนถึงปัจจุบัน

อาจารย์ประจำ คณะสถาปัตยกรรมศาสตร์ มหาวิทยาลัยเกษมบัณฑิต

พ.ศ. 2549 จนถึงปัจจุบัน

ผู้ช่วยคณบดีฝ่ายวิจัย คณะสถาปัตยกรรมศาสตร์ มหาวิทยาลัยเกษมบัณฑิต

หน้าที่การงานอื่น ๆ ในปัจจุบัน

พ.ศ. 2550 จนถึงปัจจุบัน

สถาปนิกที่ปรึกษา สถาบันมะเร็งแห่งชาติ

พ.ศ. 2551 จนถึงปัจจุบัน

สถาปนิกที่ปรึกษา ด้านพลังงานและสิ่งแวดล้อม บริษัทสยามสตีล อินเตอร์เนชั่นนอล จำกัด (มหาชน)