

Report No.: 1

Test Time: 21.01.2020 18:00

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FW 150 HE 2x28LED 1.25A 50W 5000K 2x40-100gr

Luminous Length (mm): 200

Luminous Width (mm): 150

Luminous Height (mm): 80

Voltage: 221.3 V

Current: 0.240 A

Power: 52.64 W

Power Factor: 0.988

Photometric Results

CIE Class: Direct

Measurement Flux: 7867.2 lm

Downward Ratio: 99%

Total Rated Lamp Lumens: 7867.2 lm

Efficiency: 100%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 122.0, 137.9, 139.1, 139.3

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 109.3, 118.7, 126.2, 126.5

Luminaire Efficacy Rating (LER): 149.50

Central Intensity: 1357.6 cd

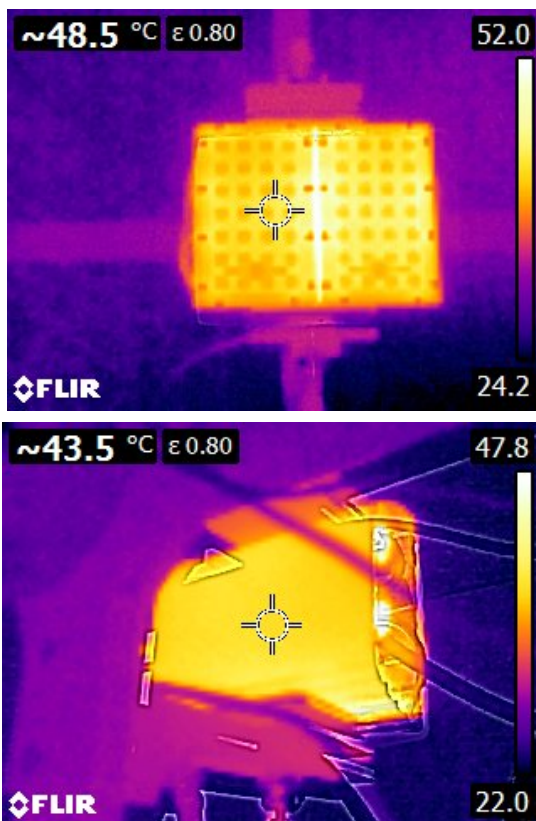
Max. Intensity: 3451.45 cd

Pos of Max. Intensity: H0 V40

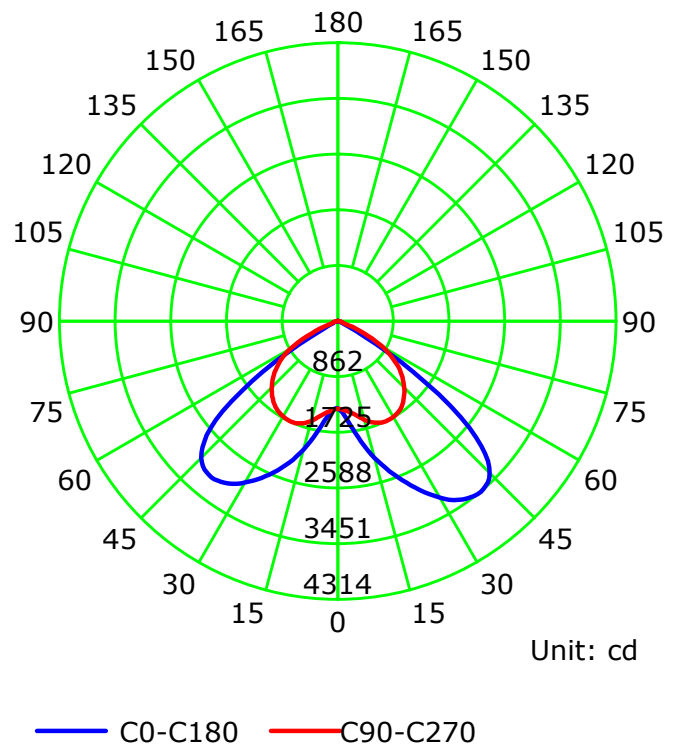
S/MH(C0/C180): 2.42

S/MH(C90/C270): 1.72

Termogramma



Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

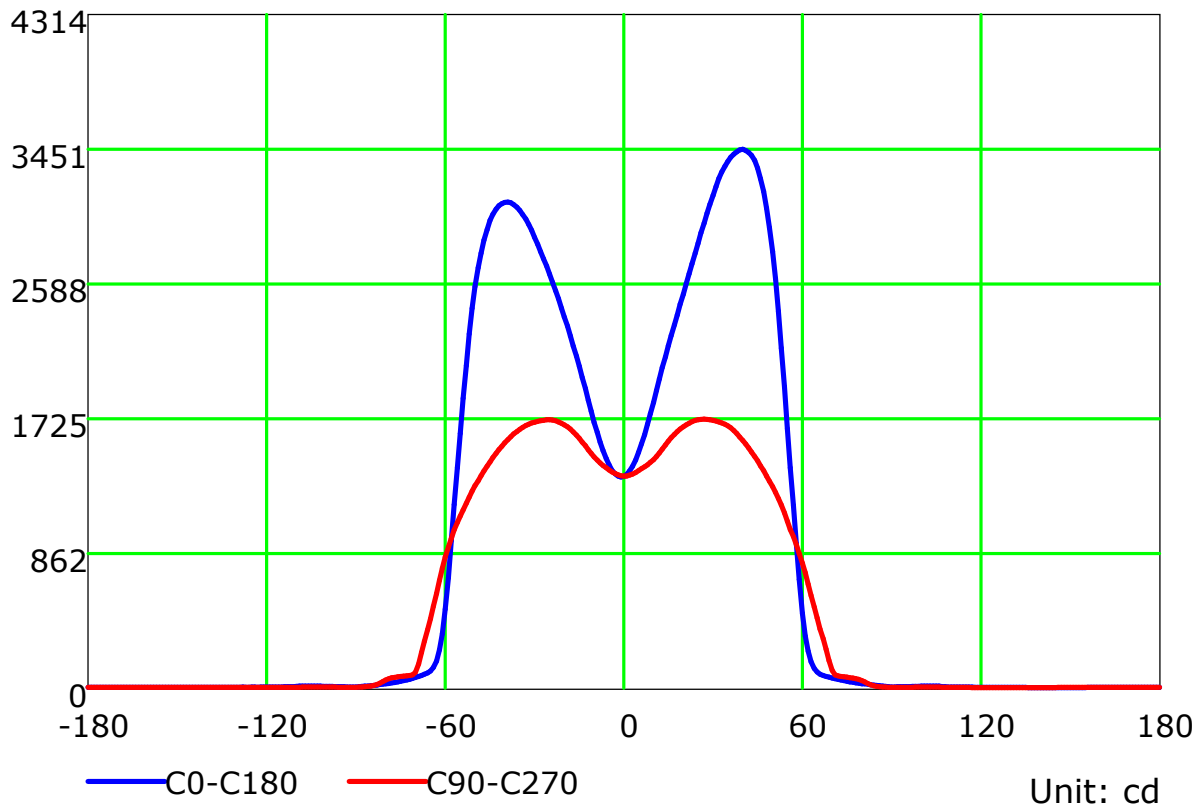
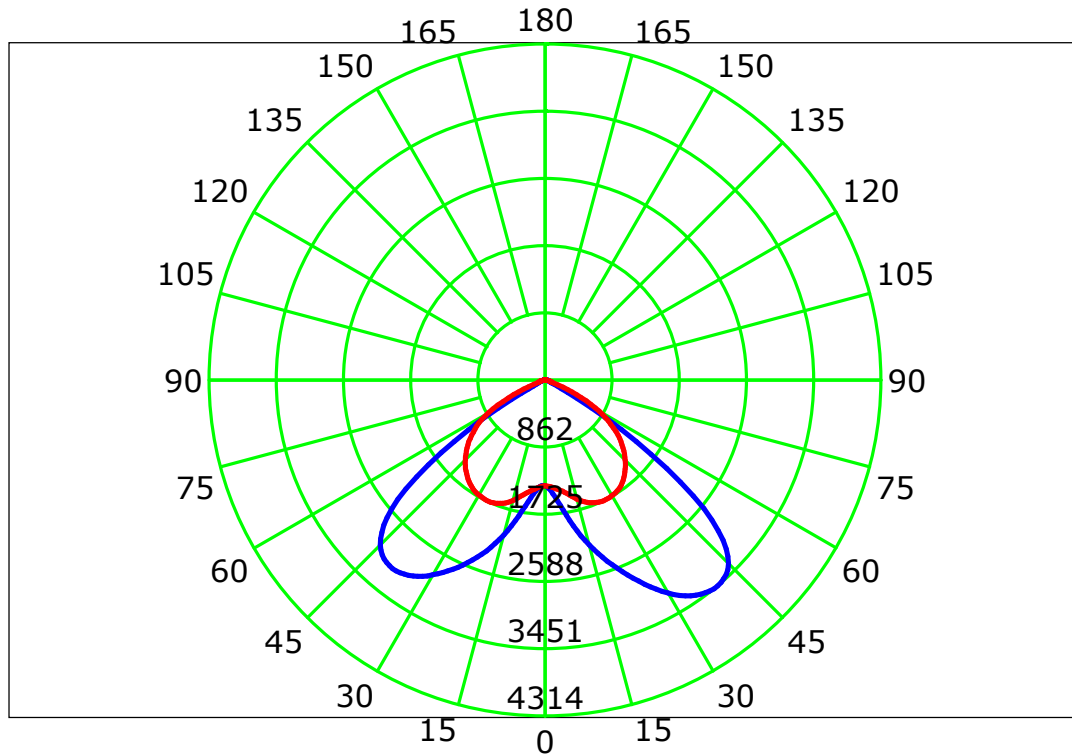
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

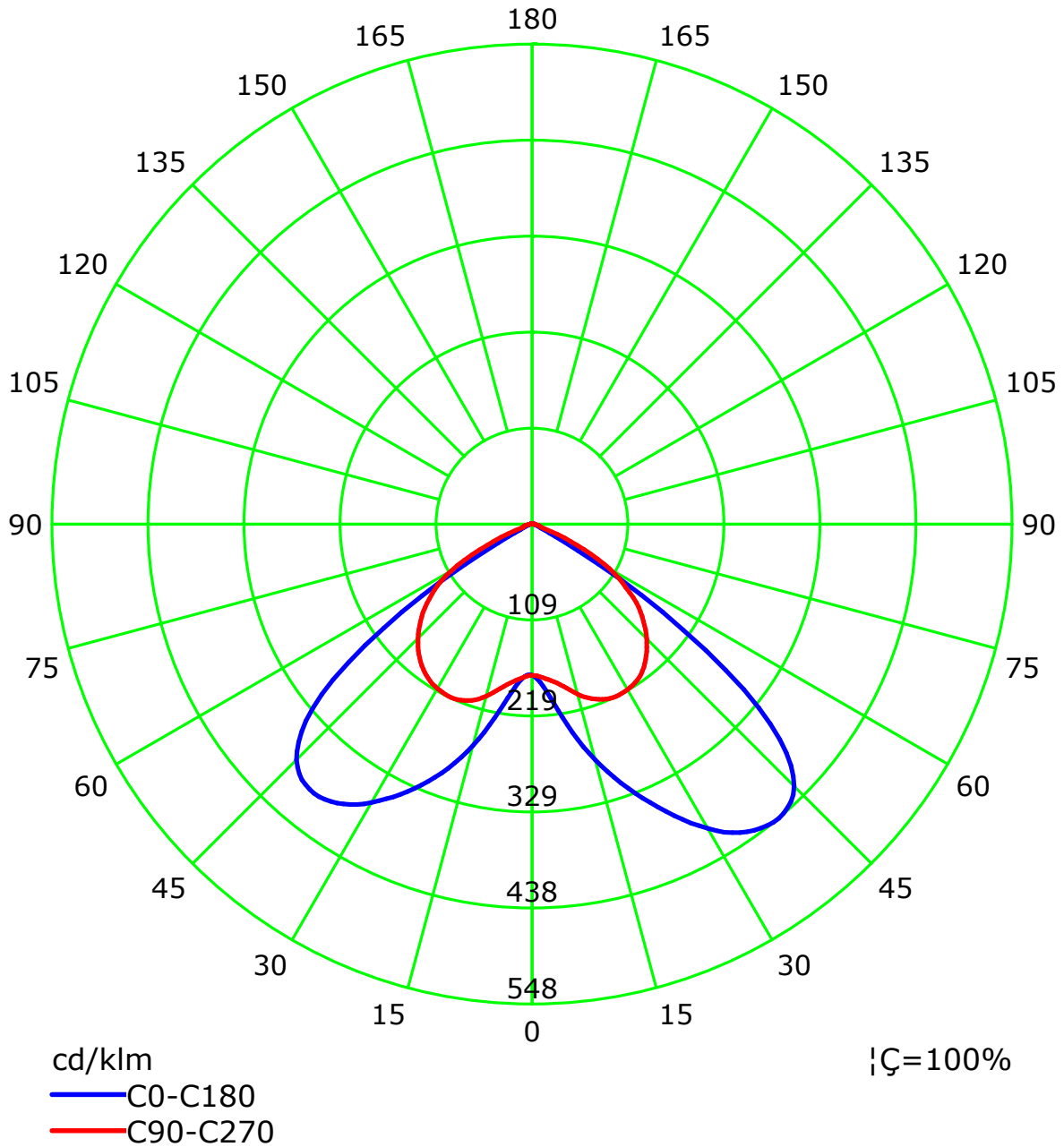
Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-180.0:1.0
Test Device: LSG-1800B
Distance: 12.677 m
Humidity:
Inspector:

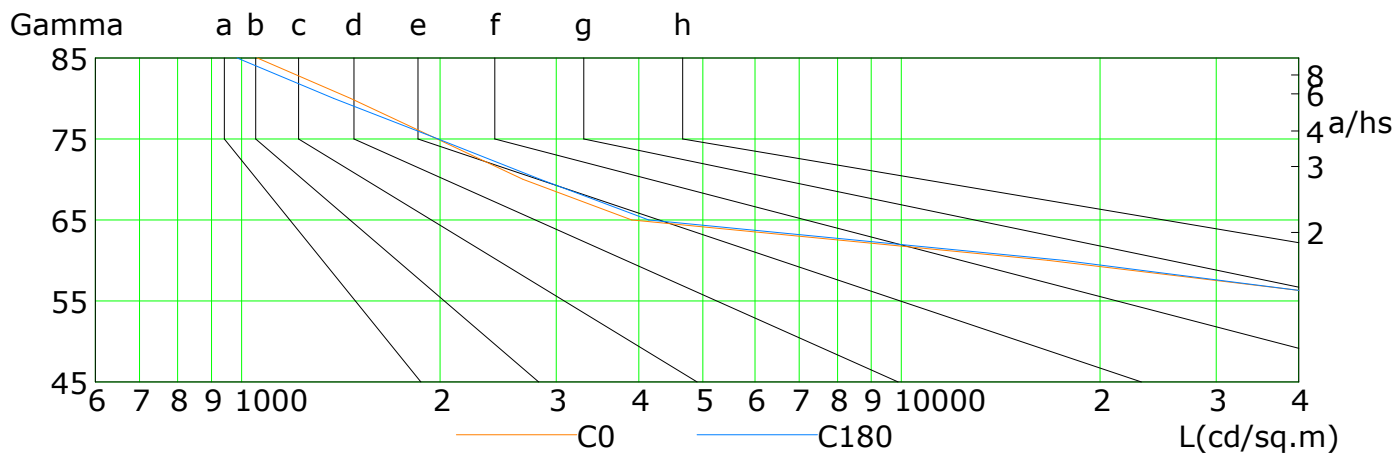
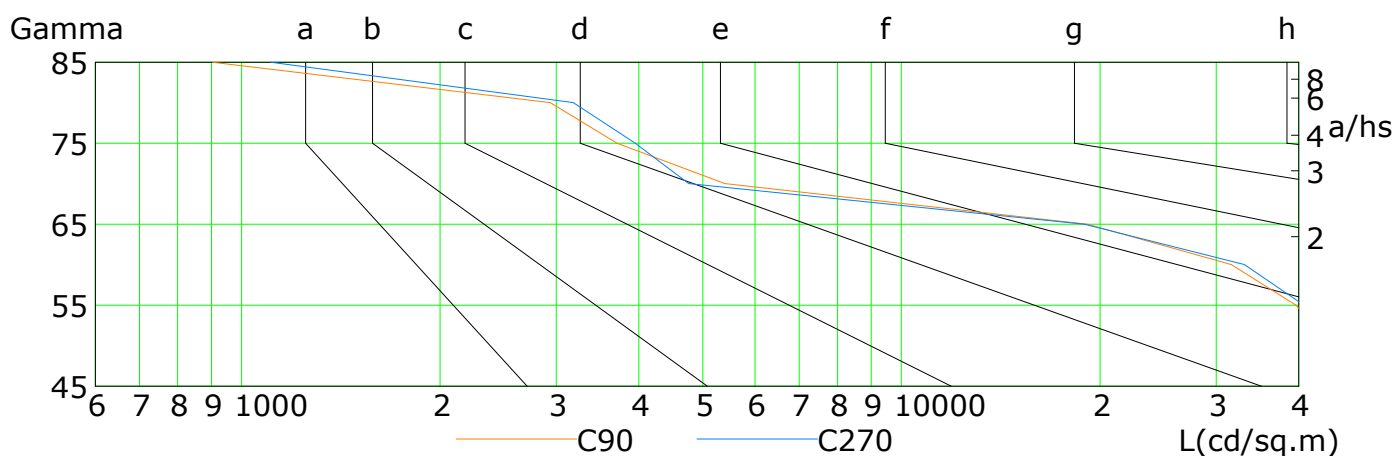
Luminous Intensity Distribution Curve(cd/klm)



Lum Limit Curve

Dazzle	Quality	Illuminance (lx)							
1.15	A	2000	1000	500	<=300				
1.50	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.20	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300

a b c d e f g h

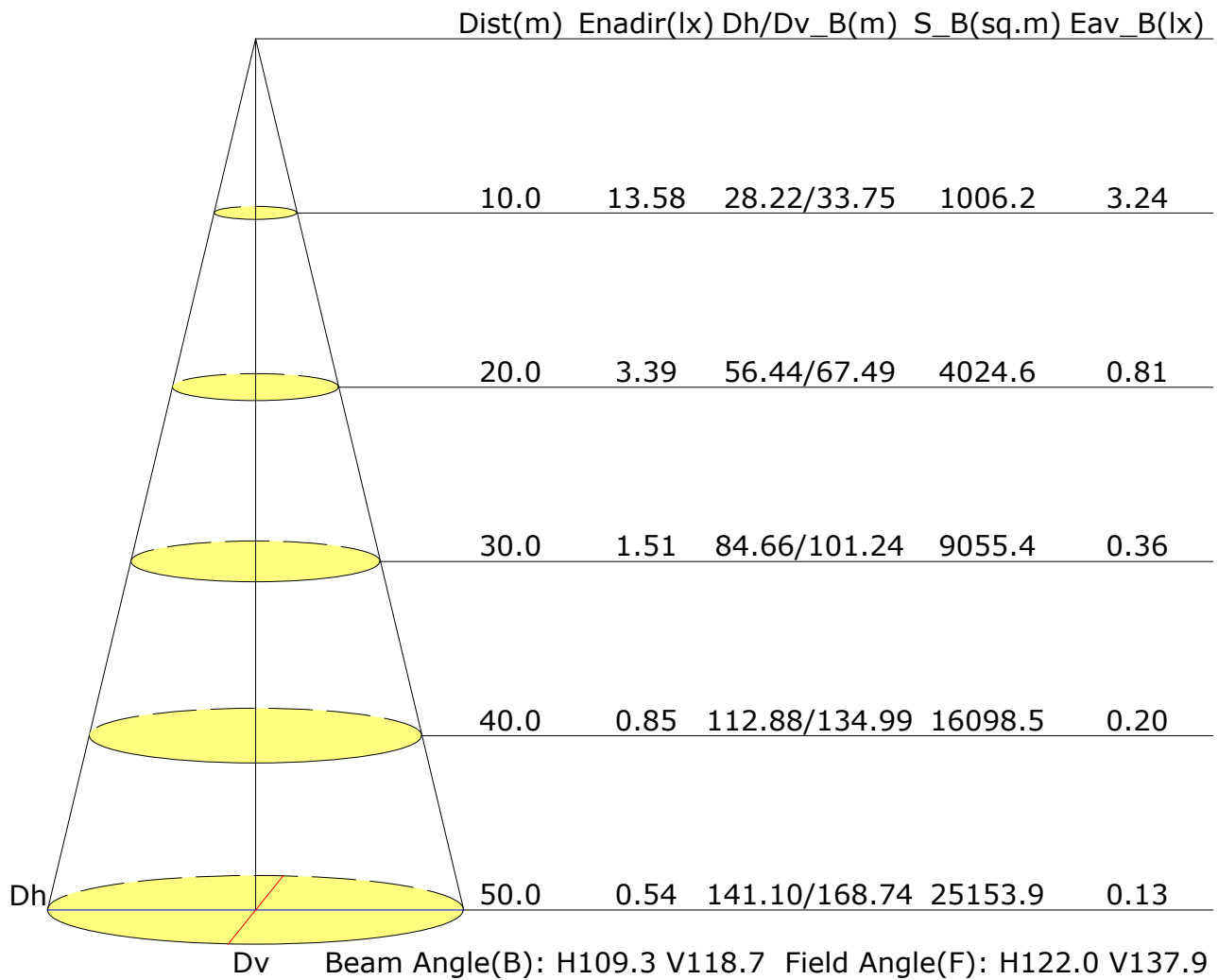


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	102402	88651	54862	16652	3902	2670	1979	1463	1057
C90	49075	45361	39627	31632	19159	5400	3707	2935	904
C180	92131	81609	53829	17571	4143	2834	1986	1379	984
C270	48852	45566	40787	33119	18942	4764	3952	3183	1109

C Plane (°):0.0-360.0: 22.5
 Test Lab:
 Test Type: TYPE C
 Temperature:
 Operator:

Gamma Plane (°):0.0-180.0:1.0
 Test Device: LSG-1800B
 Distance: 12.677 m
 Humidity:
 Inspector:

Illuminance at a Distance



UGR Table

Reflectance:										
Ceiling (cavity)	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
X=2H Y=2H	27.6	28.9	27.9	29.2	29.4	27.1	28.5	27.4	28.7	29.0
3H	27.4	28.6	27.7	28.9	29.2	27.2	28.4	27.6	28.7	29.0
4H	27.3	28.5	27.7	28.8	29.1	27.2	28.3	27.5	28.6	28.9
6H	27.3	28.3	27.6	28.6	29.0	27.1	28.1	27.5	28.5	28.8
8H	27.2	28.2	27.6	28.6	28.9	27.1	28.1	27.4	28.4	28.7
12H	27.2	28.1	27.6	28.5	28.8	27.0	28.0	27.4	28.3	28.7
X=4H Y=2H	28.1	29.2	28.4	29.5	29.8	27.7	28.9	28.1	29.2	29.5
3H	27.9	28.9	28.3	29.2	29.6	27.9	28.8	28.3	29.2	29.5
4H	27.8	28.7	28.3	29.1	29.4	27.8	28.7	28.2	29.0	29.4
6H	27.8	28.5	28.2	28.9	29.3	27.8	28.5	28.2	28.9	29.3
8H	27.7	28.4	28.2	28.8	29.3	27.7	28.4	28.2	28.8	29.2
12H	27.7	28.3	28.2	28.8	29.2	27.7	28.3	28.2	28.7	29.2
X=8H Y=4H	27.8	28.4	28.2	28.8	29.3	27.7	28.4	28.2	28.8	29.2
6H	27.7	28.2	28.2	28.7	29.2	27.7	28.2	28.1	28.6	29.1
8H	27.7	28.1	28.2	28.6	29.1	27.6	28.1	28.1	28.6	29.1
12H	27.6	28.0	28.1	28.5	29.0	27.6	28.0	28.1	28.5	29.0
X=12H Y=4H	27.7	28.3	28.2	28.8	29.2	27.7	28.3	28.1	28.7	29.2
6H	27.7	28.1	28.2	28.6	29.1	27.6	28.1	28.1	28.6	29.1
8H	27.6	28.0	28.1	28.5	29.0	27.6	28.0	28.1	28.5	29.0
Variations with the observer position at spacings:										
S=1.0H	+1.2/-1.4					+0.3/-0.3				
S=1.5H	+2.7/-9.4					+2.0/-3.2				
S=2.0H	+3.7/-14.9					+3.5/-7.7				

Calculate in accordance with CIE Pub.117. The table is revised with 7867lm ($8\log(F/F_0) = 7.2$).

C Plane (°):0.0-360.0: 22.5
 Test Lab:
 Test Type: TYPE C
 Temperature:
 Operator:

Gamma Plane (°):0.0-180.0:1.0
 Test Device: LSG-1800B
 Distance: 12.677 m
 Humidity:
 Inspector:

Utilisation Factor Table(Floor cavity)

Utilisation Factors UF(F)			SHR NOM = 2.00									
Room Reflectance			Room Index(RI)									
Ceiling	Wall	Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00	
0.70	0.50	0.20	NA	0.77	0.83	0.88	0.95	0.99	1.01	1.05	1.07	
	0.30		NA	0.71	0.77	0.83	0.90	0.95	0.98	1.02	1.04	
	0.20		NA	0.66	0.73	0.78	0.86	0.91	0.94	0.99	1.02	
0.50	0.50	0.20	NA	0.75	0.81	0.85	0.92	0.95	0.98	1.01	1.03	
	0.30		NA	0.70	0.76	0.81	0.88	0.92	0.95	0.98	1.01	
	0.20		NA	0.66	0.72	0.77	0.84	0.89	0.92	0.96	0.99	
0.30	0.50	0.20	NA	0.73	0.79	0.83	0.89	0.92	0.94	0.97	0.99	
	0.30		NA	0.69	0.74	0.79	0.86	0.89	0.92	0.95	0.97	
	0.20		NA	0.65	0.71	0.76	0.83	0.87	0.90	0.93	0.96	
0.00	0.00	0.00	NA	0.63	0.68	0.73	0.79	0.83	0.86	0.89	0.91	
Rating:53W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												

Utilisation Factor Table(Wall)

Utilisation Factors UF(W)			SHR NOM = 2.00									
Room Reflectance			Room Index(RI)									
Ceiling	Wall	Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00	
0.70	0.50	0.20	NA	0.66	0.56	0.48	0.37	0.30	0.26	0.20	0.16	
	0.30		NA	0.57	0.49	0.43	0.33	0.28	0.24	0.18	0.15	
	0.20		NA	0.50	0.44	0.38	0.30	0.25	0.22	0.17	0.14	
0.50	0.50	0.20	NA	0.63	0.54	0.46	0.35	0.32	0.24	0.18	0.15	
	0.30		NA	0.55	0.47	0.41	0.32	0.26	0.22	0.17	0.14	
	0.20		NA	0.49	0.42	0.37	0.29	0.24	0.21	0.16	0.14	
0.30	0.50	0.20	NA	0.61	0.51	0.43	0.33	0.27	0.23	0.17	0.14	
	0.30		NA	0.53	0.46	0.39	0.30	0.25	0.21	0.16	0.13	
	0.20		NA	0.48	0.41	0.36	0.28	0.23	0.20	0.16	0.13	
0.00	0.00	0.00	0.99	0.37	0.31	0.27	0.20	0.16	0.14	0.10	0.08	
Rating:53W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												

Utilisation Factor Table(Ceiling cavity)

Utilisation Factors UF(C)			SHR NOM = 2.00									
Room Reflectance			Room Index(RI)									
Ceiling	Wall	Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00	
0.70	0.50	0.20	NA	0.17	0.18	0.18	0.19	0.20	0.21	0.21	0.22	
	0.30		NA	0.11	0.13	0.14	0.16	0.17	0.18	0.19	0.20	
	0.20		NA	0.08	0.09	0.11	0.13	0.14	0.15	0.17	0.18	
0.50	0.50	0.20	NA	0.16	0.17	0.18	0.19	0.19	0.20	0.20	0.21	
	0.30		NA	0.11	0.13	0.14	0.15	0.16	0.17	0.18	0.19	
	0.20		NA	0.07	0.09	0.10	0.12	0.14	0.15	0.17	0.18	
0.30	0.50	0.20	NA	0.16	0.17	0.17	0.18	0.19	0.19	0.20	0.20	
	0.30		NA	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.18	
	0.20		NA	0.07	0.09	0.10	0.12	0.14	0.15	0.16	0.17	
0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
Rating:53W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												