

Report No.:

Test Time: 30.04.2020 15:18

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FL 58 L 200LED 62W Refond 3N 5000K 20x90 rp

Number of Lamps: 1

Luminous Length (mm): 1500

Luminous Width (mm): 75

Luminous Height (mm): 60

Voltage: 229.3 V

Current: 0.274 A

Power: 62.46 W

Power Factor: 0.993

Photometric Results

CIE Class: Direct

Total Rated Lamp Lumens: 9762.4 lm

Measurement Flux: 9762.4 lm

Efficiency: 100%

Downward Ratio: 99%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 150.4, 141.1, 134.3, 134.8

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 79.2, 47.5, 59.7, 60.6

Luminaire Efficacy Rating (LER): 156.35

Central Intensity: 3895.85 cd

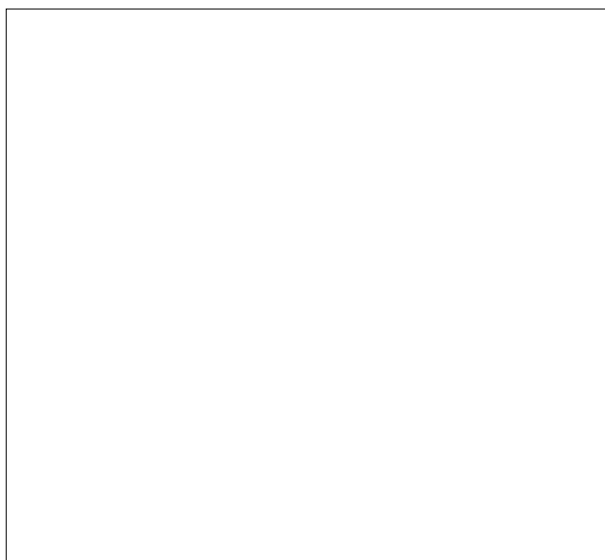
Max. Intensity: 6568.09 cd

Pos of Max. Intensity: H270 V20

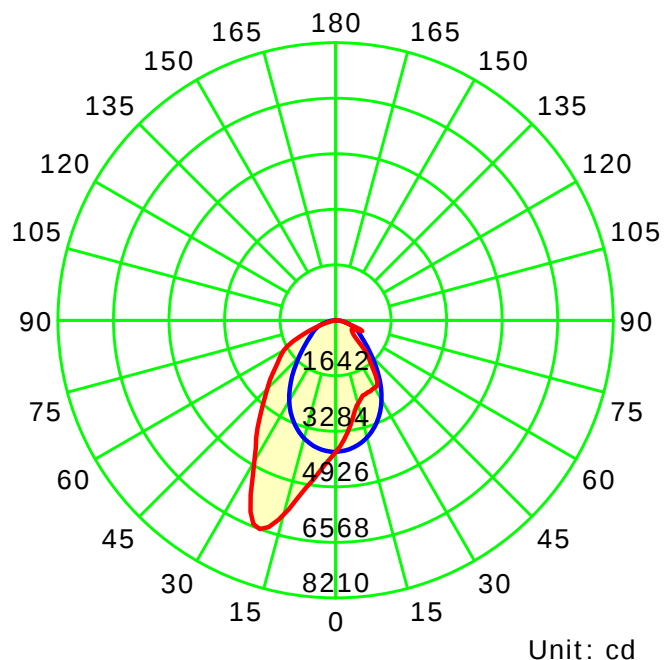
S/MH(C0/C180): 1.08

S/MH(C90/C270): 1.30

Picture Of Luminaire



Luminous Intensity Distribution Curve



— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

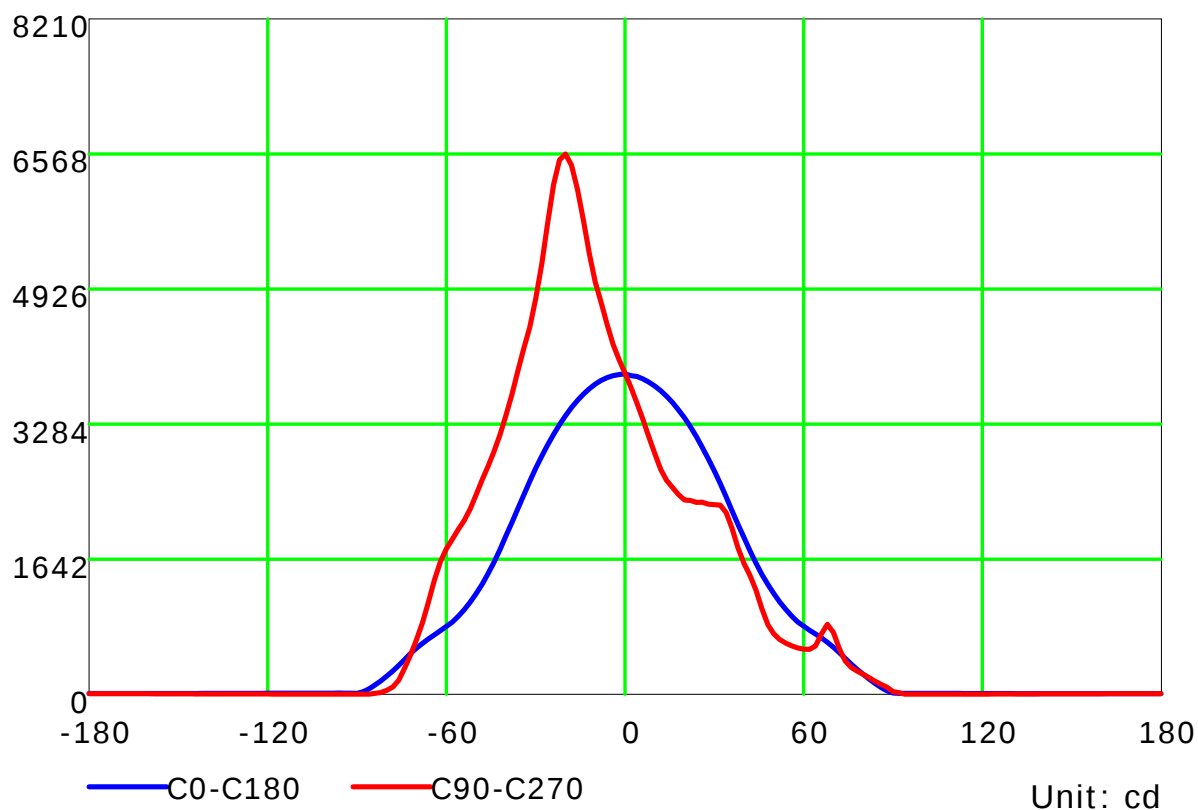
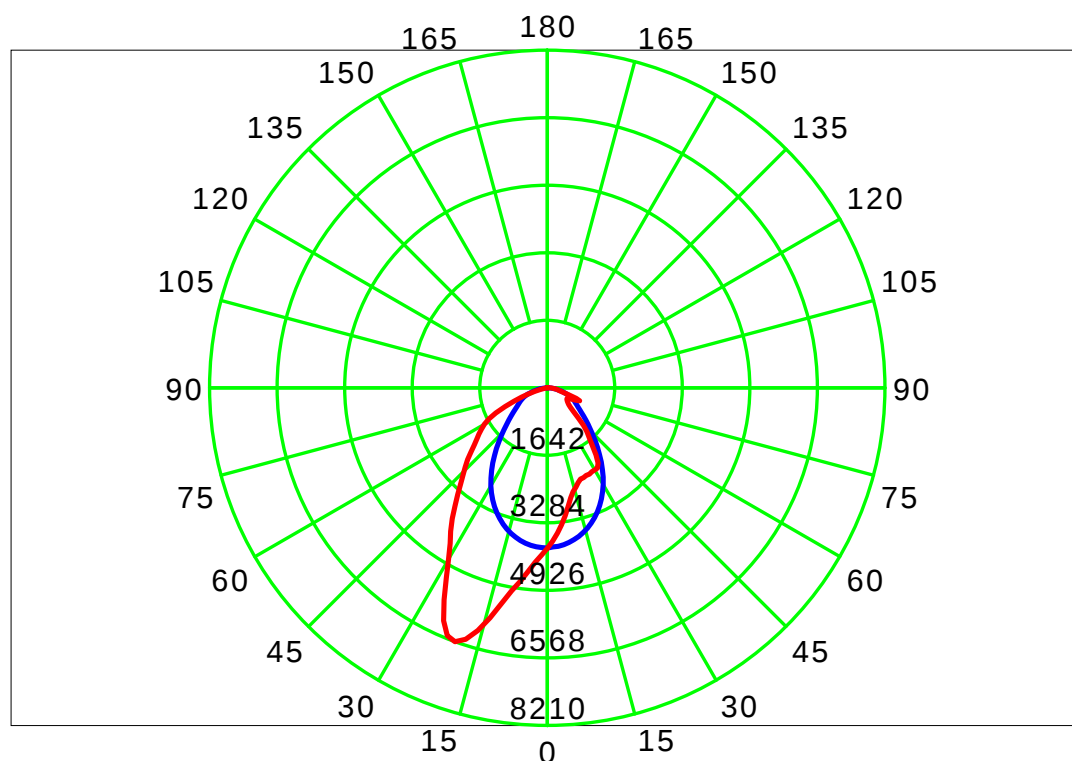
Test Device: LSG-1800B

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 (°):0.0-180.0:2.0

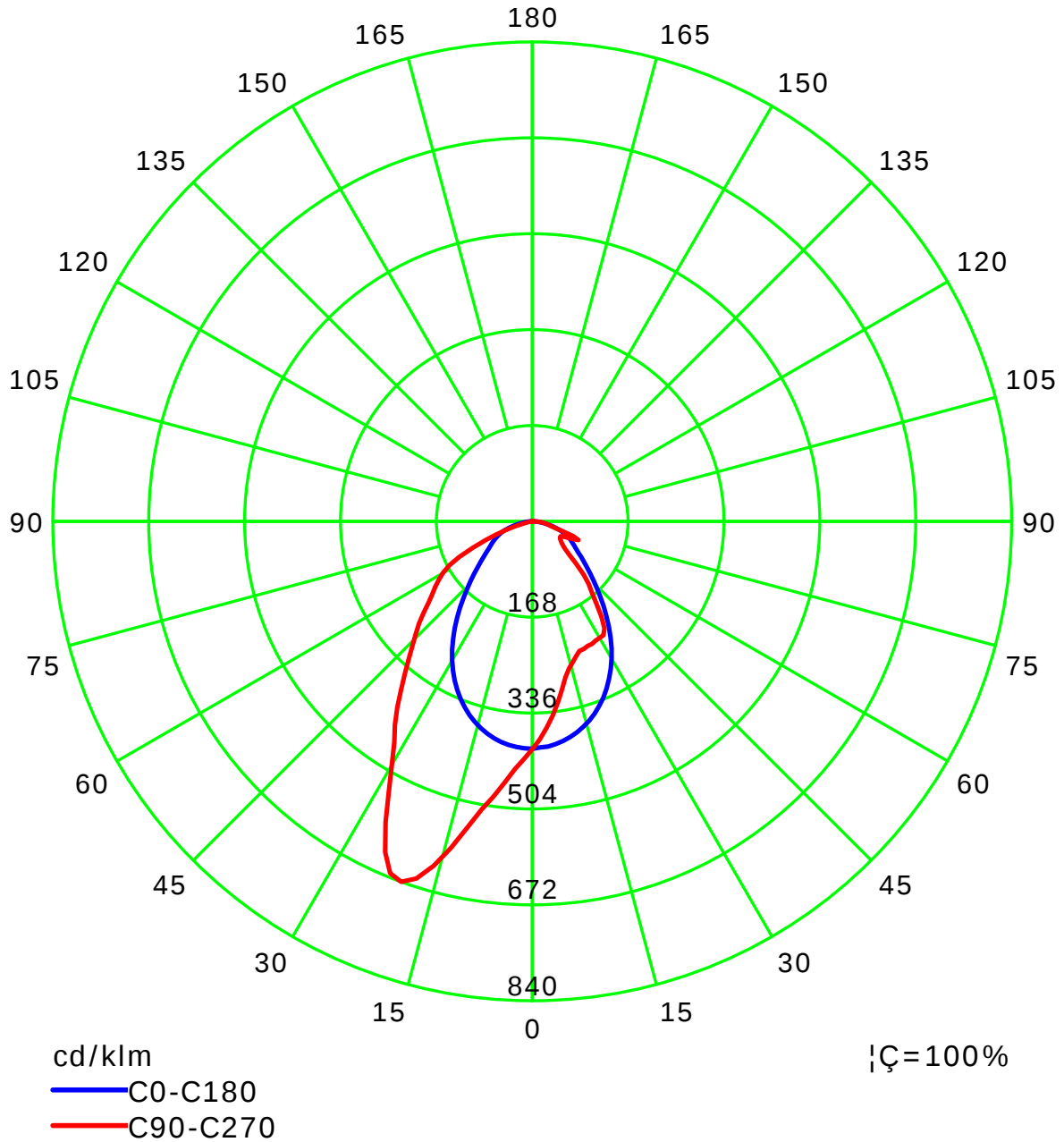
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve(cd / klm)



C Plane (°): 0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°): 0.0-180.0: 2.0

Test Device: LSG-1800B

Distance: 12.677 m

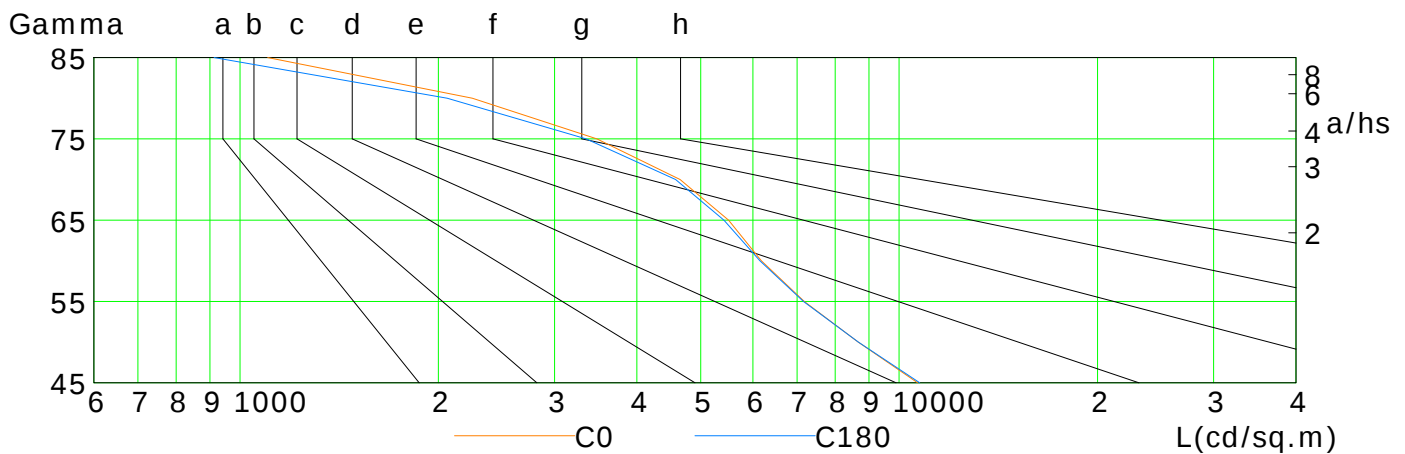
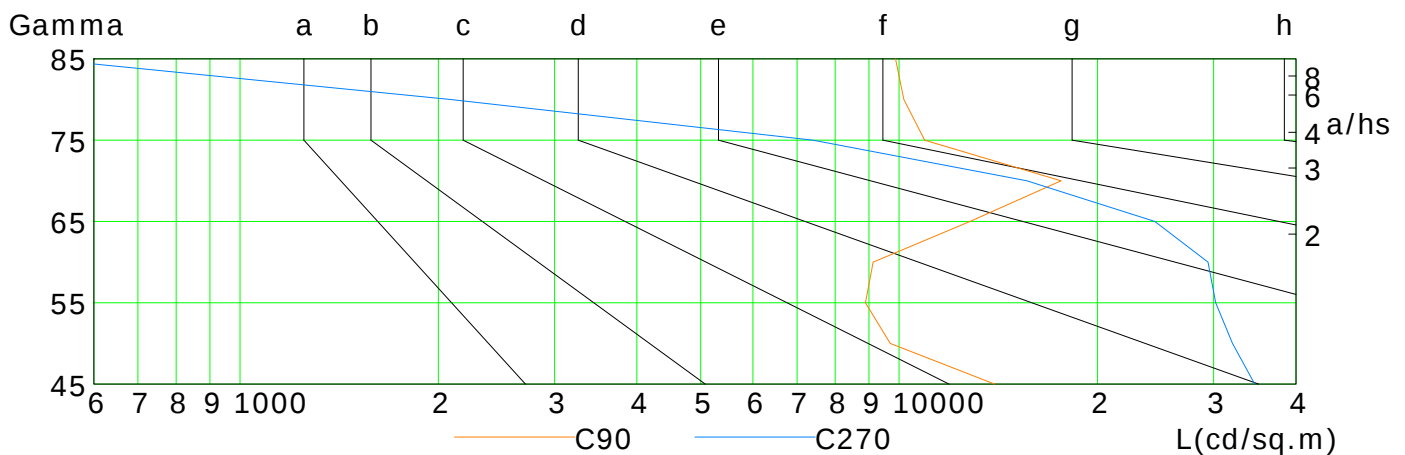
Humidity:

Inspector:

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	10670	8667	7179	6179	5512	4653	3478	2251	1102
C90	13962	9697	8888	9133	12807	17608	10933	10164	9876
C180	10745	8673	7161	6148	5422	4580	3350	2062	913
C270	34632	32044	30221	29421	24437	15631	7399	2087	504

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

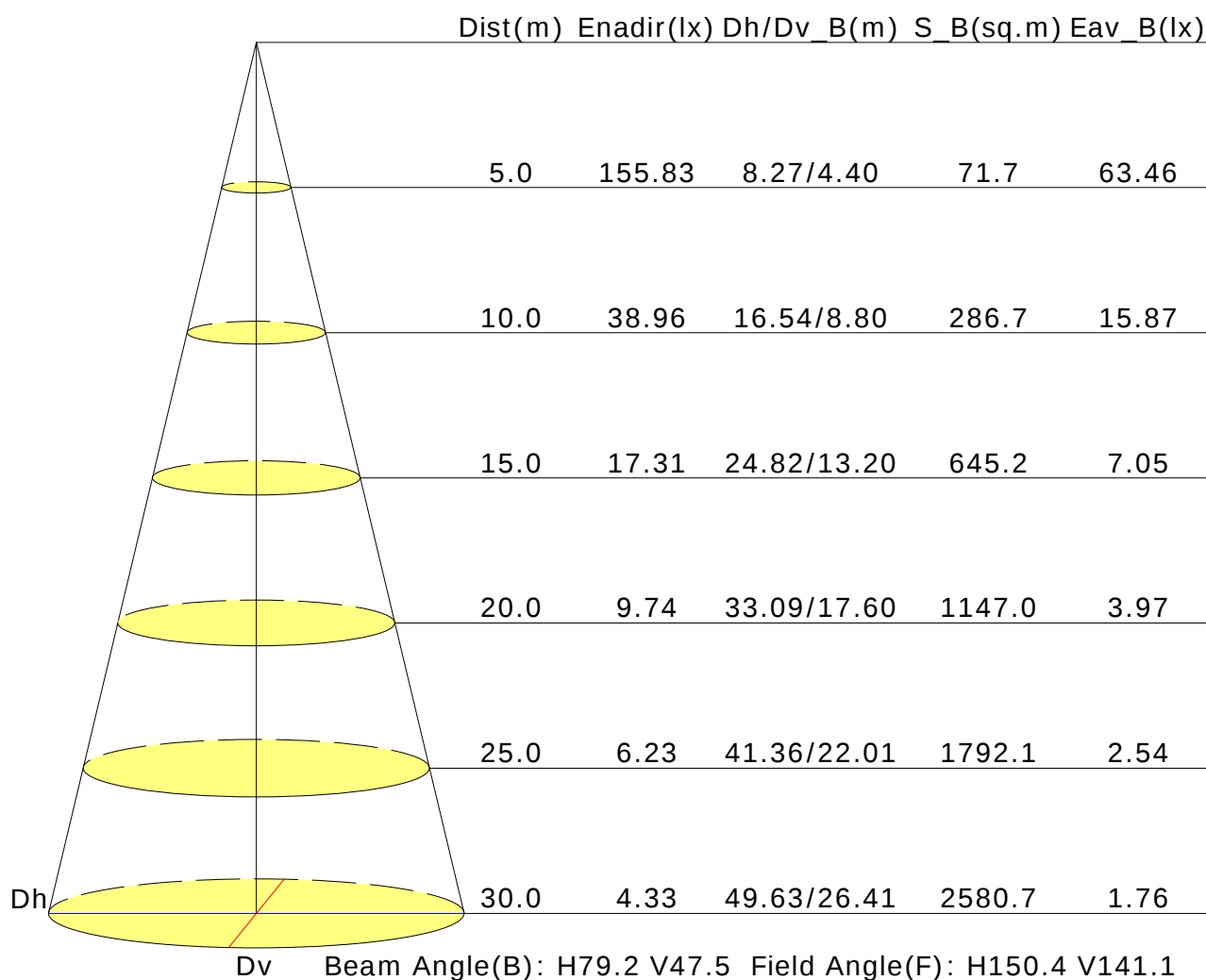
Test Device: LSG-1800B

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	21.1	22.4	21.4	22.6	22.9	22.4	23.7	22.7	24.0	24.2
3H	21.7	22.9	22.0	23.1	23.4	23.6	24.8	23.9	25.1	25.3
4H	21.9	23.0	22.2	23.3	23.6	23.8	24.9	24.2	25.2	25.5
6H	22.0	23.0	22.4	23.3	23.7	23.9	24.9	24.3	25.2	25.5
8H	22.0	23.0	22.4	23.3	23.6	23.9	24.9	24.3	25.2	25.6
12H	22.0	22.9	22.4	23.3	23.6	23.9	24.9	24.3	25.2	25.5
X=4H Y=2H	21.6	22.7	21.9	23.0	23.3	22.7	23.8	23.1	24.1	24.4
3H	22.4	23.4	22.8	23.7	24.0	24.0	25.0	24.4	25.3	25.7
4H	22.7	23.5	23.1	23.9	24.3	24.3	25.2	24.7	25.5	25.9
6H	22.9	23.6	23.3	24.0	24.4	24.4	25.2	24.8	25.5	26.0
8H	22.9	23.6	23.4	24.0	24.4	24.5	25.1	24.9	25.5	26.0
12H	22.9	23.5	23.4	24.0	24.4	24.5	25.1	24.9	25.5	26.0
X=8H Y=4H	22.9	23.6	23.3	24.0	24.4	24.4	25.1	24.8	25.5	25.9
6H	23.1	23.7	23.6	24.1	24.6	24.5	25.1	25.0	25.5	26.0
8H	23.2	23.7	23.7	24.2	24.6	24.6	25.1	25.1	25.5	26.0
12H	23.2	23.7	23.7	24.1	24.7	24.6	25.0	25.1	25.5	26.0
X=12H Y=4H	22.9	23.5	23.3	23.9	24.4	24.4	25.0	24.8	25.4	25.8
6H	23.1	23.6	23.6	24.1	24.6	24.5	25.0	25.0	25.4	25.9
8H	23.2	23.6	23.7	24.1	24.6	24.6	25.0	25.1	25.5	26.0
Variations with the observer position at spacings:										
S=1.0H	+0.5/-0.7					+0.4/-0.6				
S=1.5H	+1.0/-1.3					+0.8/-1.2				
S=2.0H	+0.9/-1.8					+1.3/-2.2				

Calculate in accordance with CIE Pub.117. The table is revised with 9762Im ($8\log(F/F_0) = 7.9$).

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Utilisation Factor Table(Floor cavity)

Utilisation Factors UF(F)			SHR NOM = 1.25									
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	0.63	0.72	0.79	0.84	0.91	0.95	0.98	1.03	1.05	
	0.30		0.55	0.66	0.73	0.78	0.85	0.90	0.94	0.99	1.02	
	0.20		0.50	0.60	0.68	0.73	0.81	0.86	0.90	0.96	0.99	
0.50	0.50	0.20	0.61	0.70	0.77	0.82	0.88	0.92	0.95	0.99	1.01	
	0.30		0.55	0.64	0.71	0.76	0.83	0.88	0.91	0.96	0.98	
	0.20		0.50	0.60	0.67	0.72	0.79	0.84	0.88	0.93	0.96	
0.30	0.50	0.20	0.60	0.69	0.75	0.79	0.85	0.89	0.91	0.95	0.97	
	0.30		0.54	0.63	0.70	0.74	0.81	0.85	0.88	0.92	0.95	
	0.20		0.50	0.59	0.66	0.71	0.78	0.82	0.86	0.90	0.93	
0.00	0.00	0.00	0.47	0.57	0.63	0.68	0.74	0.79	0.82	0.86	0.88	
Rating:62W 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 = 1.25									
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	0.91	0.74	0.63	0.54	0.43	0.36	0.30	0.23	0.19	
	0.30		0.76	0.63	0.55	0.48	0.39	0.33	0.28	0.22	0.18	
	0.20		0.65	0.55	0.48	0.43	0.35	0.30	0.26	0.21	0.17	
0.50	0.50	0.20	0.87	0.71	0.60	0.52	0.41	0.37	0.29	0.22	0.18	
	0.30		0.74	0.62	0.53	0.46	0.37	0.31	0.27	0.21	0.17	
	0.20		0.64	0.54	0.47	0.42	0.34	0.29	0.25	0.20	0.17	
0.30	0.50	0.20	0.85	0.68	0.57	0.49	0.39	0.32	0.27	0.21	0.17	
	0.30		0.72	0.60	0.51	0.45	0.36	0.30	0.26	0.20	0.16	
	0.20		0.63	0.53	0.46	0.41	0.33	0.28	0.24	0.19	0.16	
0.00	0.00	0.00	0.52	0.43	0.37	0.32	0.26	0.21	0.18	0.14	0.11	
Rating:62W 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 = 1.25									
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	0.16	0.17	0.18	0.19	0.20	0.21	0.21	0.22	0.22	
	0.30		0.10	0.11	0.13	0.14	0.16	0.17	0.18	0.19	0.20	
	0.20		0.05	0.07	0.09	0.10	0.12	0.14	0.15	0.16	0.18	
0.50	0.50	0.20	0.16	0.17	0.18	0.18	0.19	0.20	0.20	0.21	0.21	
	0.30		0.10	0.11	0.13	0.14	0.15	0.16	0.17	0.18	0.19	
	0.20		0.05	0.07	0.09	0.10	0.12	0.13	0.14	0.16	0.17	
0.30	0.50	0.20	0.15	0.16	0.17	0.18	0.18	0.19	0.19	0.20	0.20	
	0.30		0.09	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.18	
	0.20		0.05	0.07	0.08	0.10	0.12	0.13	0.14	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:62W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												