

Report No.:

Test Time: 06.05.2020 17:41

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FL 58 L 200LED 55W Refond 3N 3000K 96x55 rp

Number of Lamps: 1

Luminous Length (mm): 1500

Luminous Width (mm): 75

Luminous Height (mm): 60

Voltage: 229.1 V

Current: 0.227 A

Power: 51.11 W

Power Factor: 0.984

Photometric Results

CIE Class: Direct

Total Rated Lamp Lumens: 7708.1 lm

Measurement Flux: 7708.1 lm

Efficiency: 100%

Downward Ratio: 100%

Upward Ratio: 0%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 134.6, 96.4, 113.3, 113.3

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 95.1, 54.5, 63.2, 63.2

Luminaire Efficacy Rating (LER): 150.86

Central Intensity: 5341.29 cd

Max. Intensity: 5377.44 cd

Pos of Max. Intensity: H157.5 V2

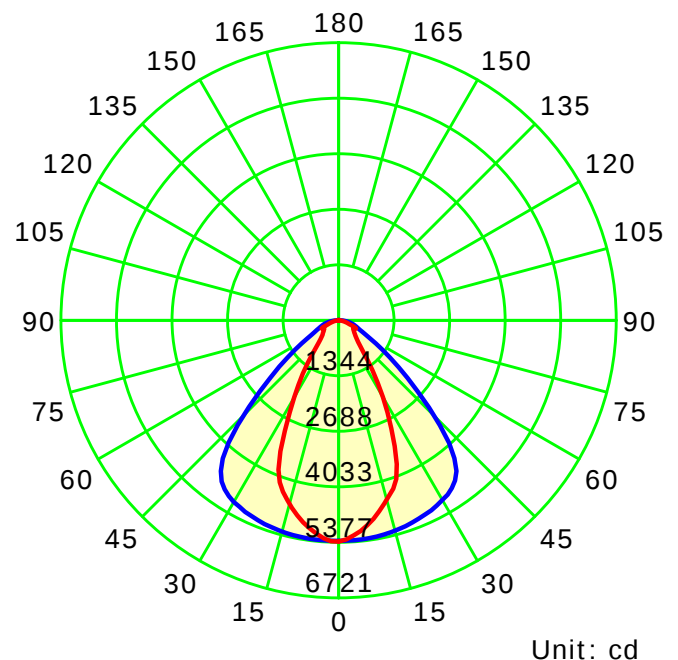
S/MH(C0/C180): 1.40

S/MH(C90/C270): 0.87

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 22.5

Gamma Plane (°):0.0-180.0:2.0

Test Lab:

Test Device: LSG-1800B

Test Type: TYPE C

Distance: 12.677 m

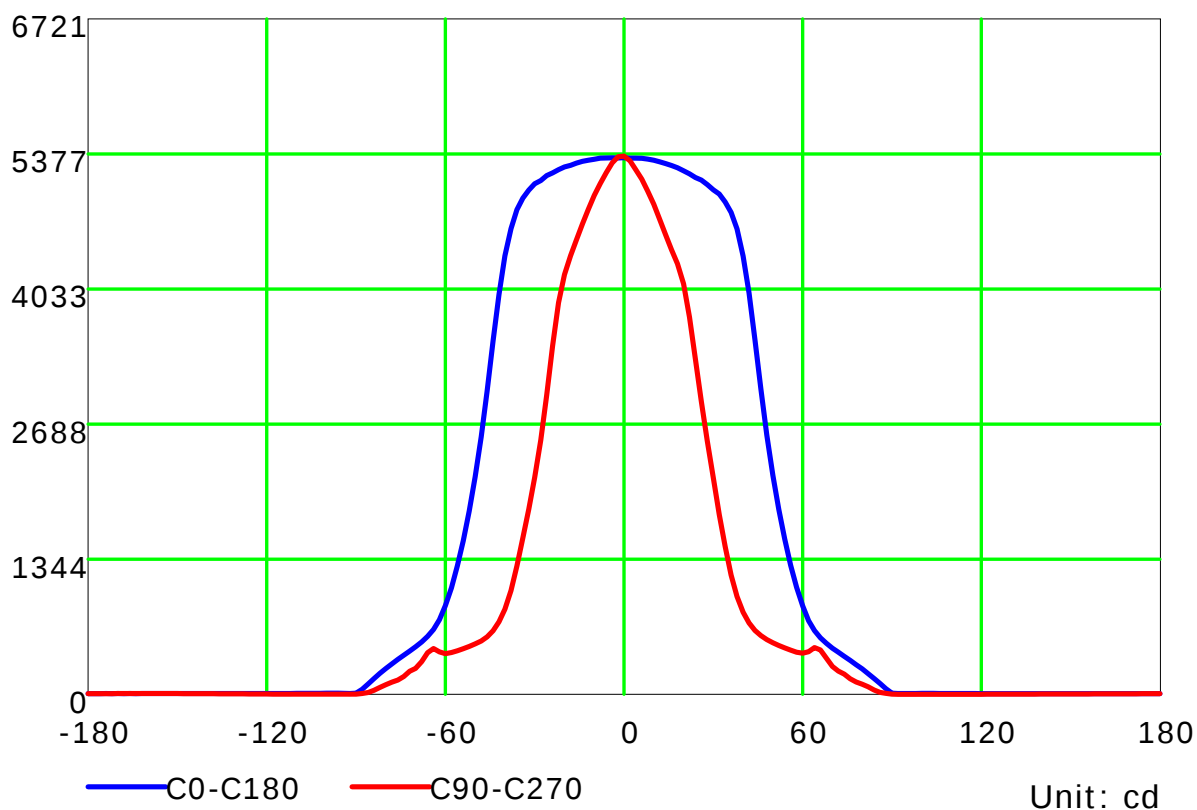
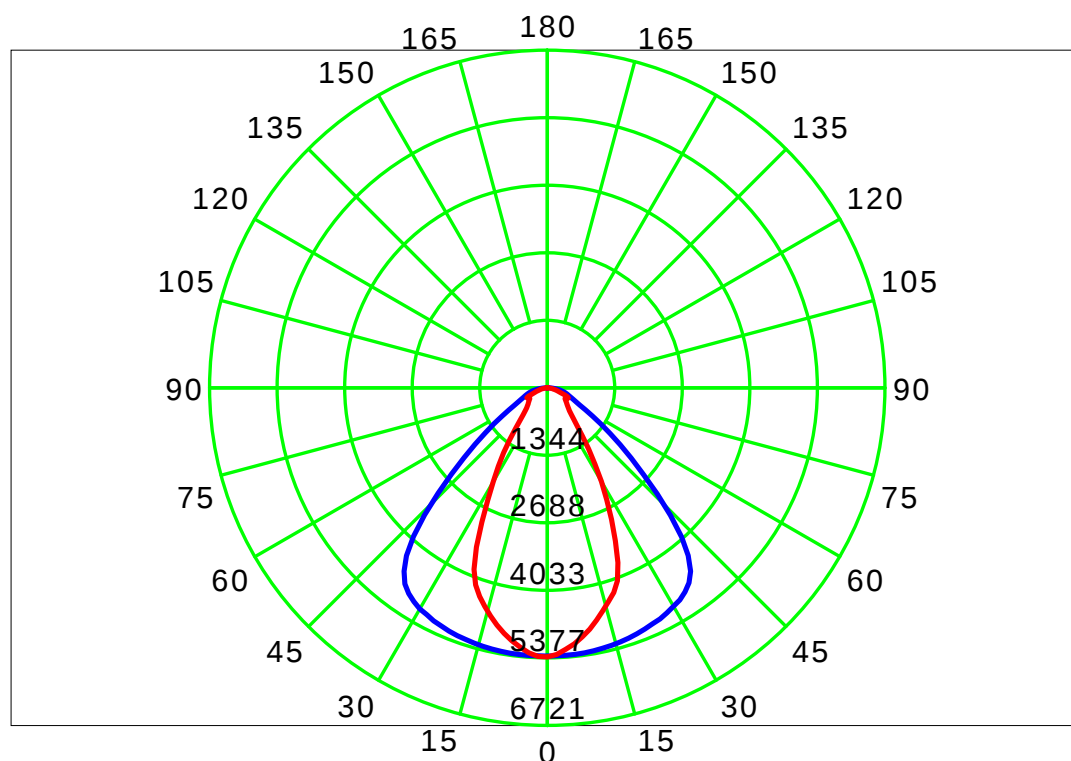
Temperature:

Humidity:

Operator:

Inspector:

Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 22.5

Test Lab:

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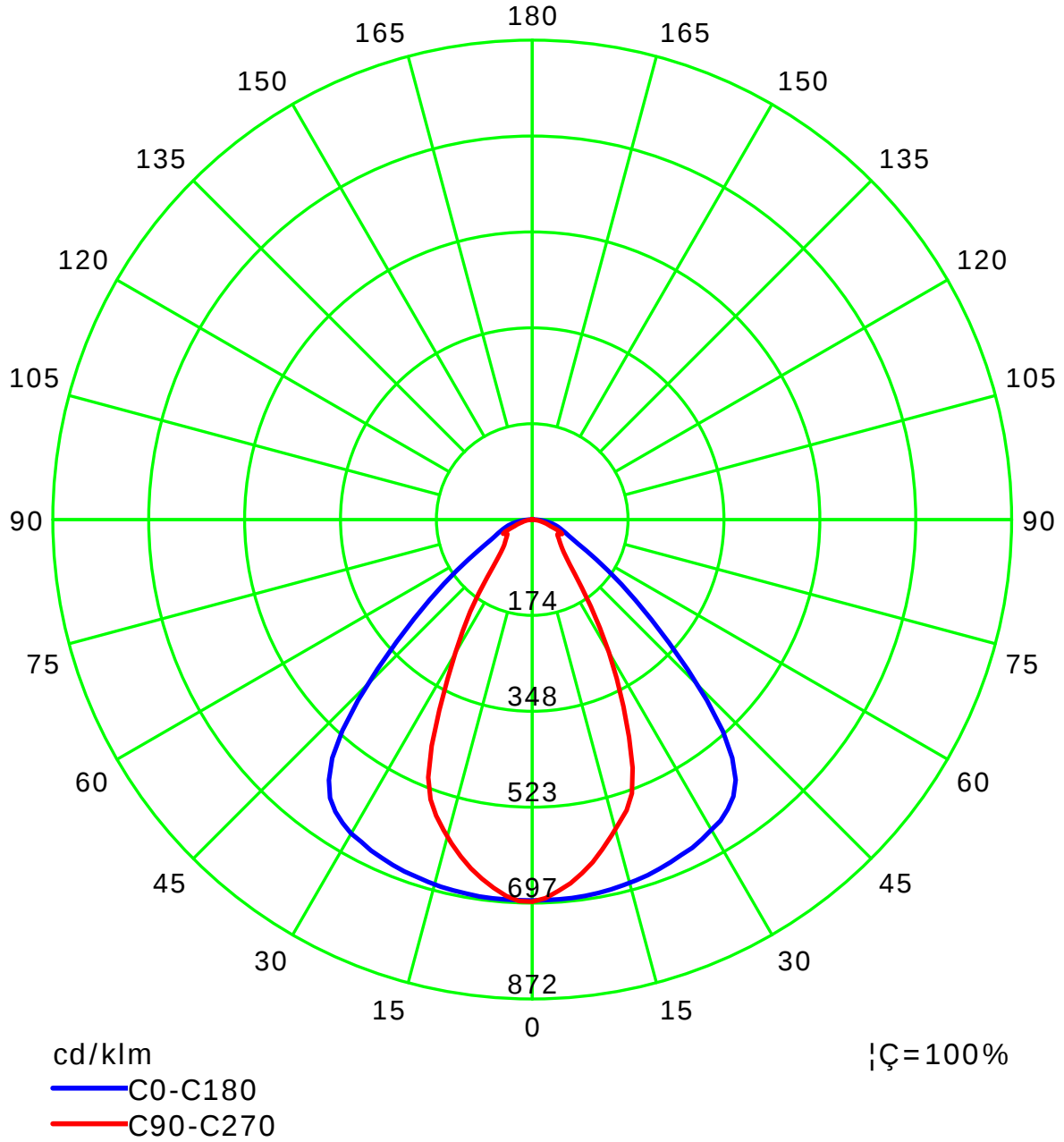
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve(cd / klm)



C Plane (°): 0.0-360.0: 22.5

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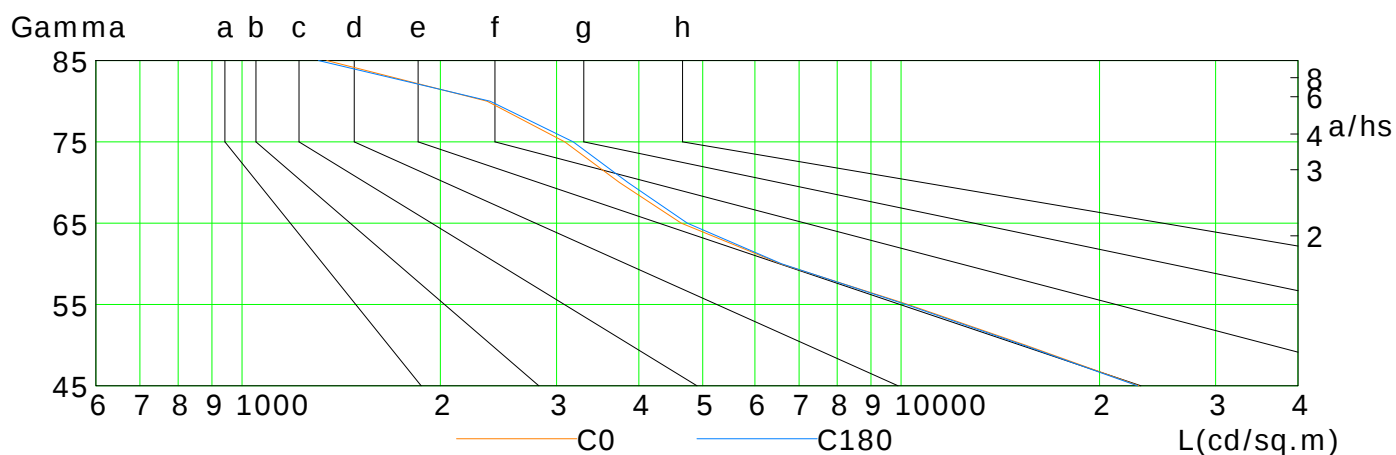
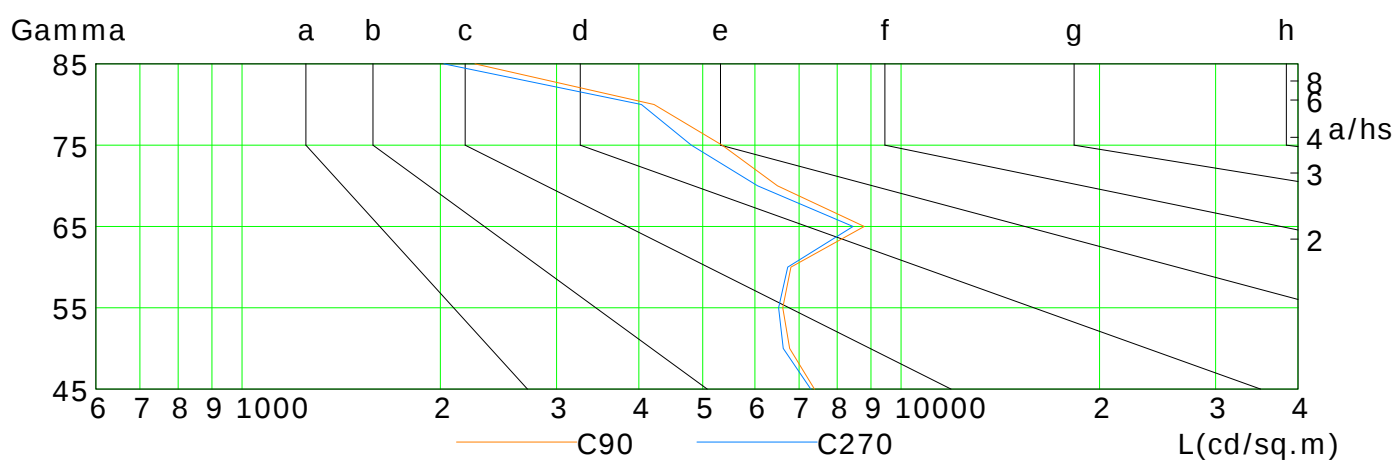
Humidity:

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	22933	15435	10239	6565	4639	3738	3088	2354	1345
C90	7386	6775	6614	6806	8790	6493	5349	4219	2256
C180	22832	15322	10164	6587	4740	3851	3181	2379	1306
C270	7293	6624	6519	6729	8452	6056	4804	4035	2025

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Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

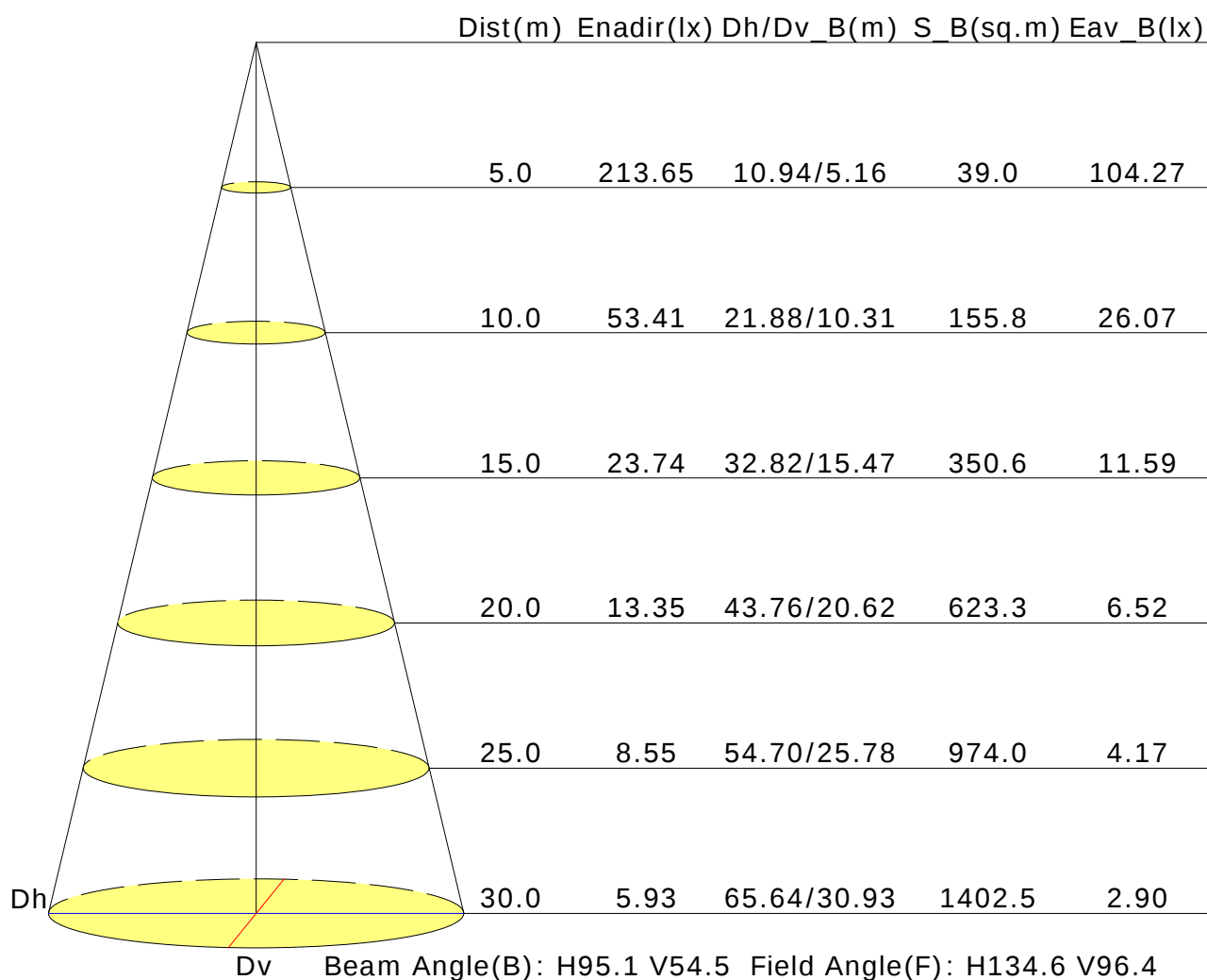
Test Device: LSG-1800B

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	19.7	20.8	20.0	21.1	21.3	15.8	16.9	16.1	17.2	17.4
3H	20.2	21.2	20.5	21.5	21.7	17.5	18.6	17.9	18.8	19.1
4H	20.4	21.4	20.8	21.7	22.0	18.0	18.9	18.3	19.2	19.5
6H	20.6	21.5	21.0	21.8	22.2	18.2	19.1	18.6	19.4	19.7
8H	20.7	21.6	21.1	21.9	22.2	18.3	19.2	18.7	19.5	19.8
12H	20.7	21.5	21.1	21.9	22.2	18.3	19.1	18.7	19.5	19.8
X=4H Y=2H	19.7	20.7	20.1	21.0	21.3	16.4	17.3	16.7	17.6	17.9
3H	20.4	21.2	20.8	21.5	21.9	18.2	19.0	18.6	19.3	19.7
4H	20.7	21.5	21.1	21.8	22.2	18.7	19.4	19.1	19.8	20.1
6H	21.1	21.7	21.5	22.1	22.5	19.0	19.6	19.4	20.0	20.4
8H	21.2	21.8	21.6	22.2	22.6	19.1	19.7	19.5	20.1	20.5
12H	21.2	21.8	21.7	22.2	22.6	19.1	19.7	19.6	20.1	20.5
X=8H Y=4H	20.8	21.4	21.2	21.8	22.2	18.9	19.4	19.3	19.9	20.3
6H	21.2	21.7	21.7	22.1	22.6	19.2	19.7	19.7	20.2	20.6
8H	21.4	21.8	21.8	22.2	22.7	19.4	19.8	19.9	20.3	20.7
12H	21.5	21.8	22.0	22.3	22.8	19.4	19.8	19.9	20.3	20.8
X=12H Y=4H	20.8	21.3	21.2	21.7	22.2	18.9	19.4	19.3	19.8	20.3
6H	21.2	21.6	21.7	22.1	22.6	19.3	19.7	19.8	20.2	20.6
8H	21.4	21.7	21.9	22.2	22.7	19.4	19.8	19.9	20.3	20.8
Variations with the observer position at spacings:										
S=1.0H	+1.2/-1.1					+0.4/-0.3				
S=1.5H	+2.9/-1.8					+1.5/-0.7				
S=2.0H	+4.4/-2.4					+1.9/-0.7				

Calculate in accordance with CIE Pub.117. The table is revised with 7708lm ($8\log(F/F_0) = 7.1$).

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 = 1.00									
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	0.71	0.79	0.85	0.89	0.95	0.99	1.01	1.05	1.07	
	0.30		0.64	0.73	0.79	0.84	0.90	0.94	0.97	1.02	1.04	
	0.20		0.60	0.68	0.75	0.79	0.86	0.91	0.94	0.99	1.02	
0.50	0.50	0.20	0.69	0.77	0.83	0.86	0.92	0.95	0.98	1.01	1.03	
	0.30		0.63	0.72	0.78	0.82	0.88	0.92	0.94	0.98	1.00	
	0.20		0.59	0.68	0.74	0.78	0.84	0.89	0.92	0.96	0.99	
0.30	0.50	0.20	0.68	0.75	0.80	0.84	0.89	0.92	0.94	0.97	0.99	
	0.30		0.63	0.71	0.76	0.80	0.86	0.89	0.92	0.95	0.97	
	0.20		0.59	0.67	0.73	0.77	0.83	0.87	0.89	0.93	0.95	
0.00	0.00	0.00	0.57	0.65	0.70	0.74	0.79	0.83	0.85	0.89	0.91	
Rating:51W 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 = 1.00									
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	0.79	0.65	0.55	0.47	0.38	0.31	0.27	0.21	0.17	
	0.30		0.66	0.55	0.48	0.42	0.34	0.29	0.25	0.19	0.16	
	0.20		0.57	0.48	0.42	0.38	0.31	0.26	0.23	0.18	0.15	
0.50	0.50	0.20	0.76	0.62	0.52	0.45	0.36	0.33	0.25	0.19	0.16	
	0.30		0.64	0.53	0.46	0.40	0.33	0.27	0.23	0.18	0.15	
	0.20		0.56	0.47	0.41	0.37	0.30	0.25	0.22	0.17	0.14	
0.30	0.50	0.20	0.73	0.59	0.50	0.43	0.34	0.28	0.24	0.18	0.15	
	0.30		0.63	0.52	0.44	0.39	0.31	0.26	0.22	0.17	0.14	
	0.20		0.55	0.46	0.40	0.36	0.29	0.24	0.21	0.17	0.14	
0.00	0.00	0.00	0.43	0.35	0.30	0.26	0.21	0.17	0.15	0.11	0.09	
Rating:51W 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 = 1.00									
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	0.15	0.17	0.17	0.18	0.19	0.20	0.21	0.21	0.22	
	0.30		0.10	0.11	0.13	0.14	0.16	0.17	0.18	0.19	0.20	
	0.20		0.06	0.08	0.09	0.10	0.12	0.14	0.15	0.17	0.18	
0.50	0.50	0.20	0.15	0.16	0.17	0.18	0.19	0.19	0.20	0.20	0.21	
	0.30		0.09	0.11	0.12	0.14	0.15	0.16	0.17	0.18	0.19	
	0.20		0.06	0.07	0.09	0.10	0.12	0.14	0.15	0.16	0.17	
0.30	0.50	0.20	0.14	0.15	0.16	0.17	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		0.06	0.07	0.09	0.10	0.12	0.13	0.14	0.16	0.17	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Rating:51W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												