

Report No.:

Test Time: 06.05.2020 18:27

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FL 58 L 200LED 55W Refond 3N 3000K 104x90 rp

Number of Lamps: 1

Luminous Length (mm): 1500

Luminous Width (mm): 75

Luminous Height (mm): 60

Voltage: 228.9 V

Current: 0.228 A

Power: 51.30 W

Power Factor: 0.984

Photometric Results

CIE Class: Direct

Total Rated Lamp Lumens: 7722.1 lm

Measurement Flux: 7722.1 lm

Efficiency: 100%

Downward Ratio: 100%

Upward Ratio: 0%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 160.1, 128.3, 138.1, 138.2

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 98.3, 87.4, 86.9, 86.7

Luminaire Efficacy Rating (LER): 150.58

Central Intensity: 3631.11 cd

Max. Intensity: 3663.36 cd

Pos of Max. Intensity: H135 V2

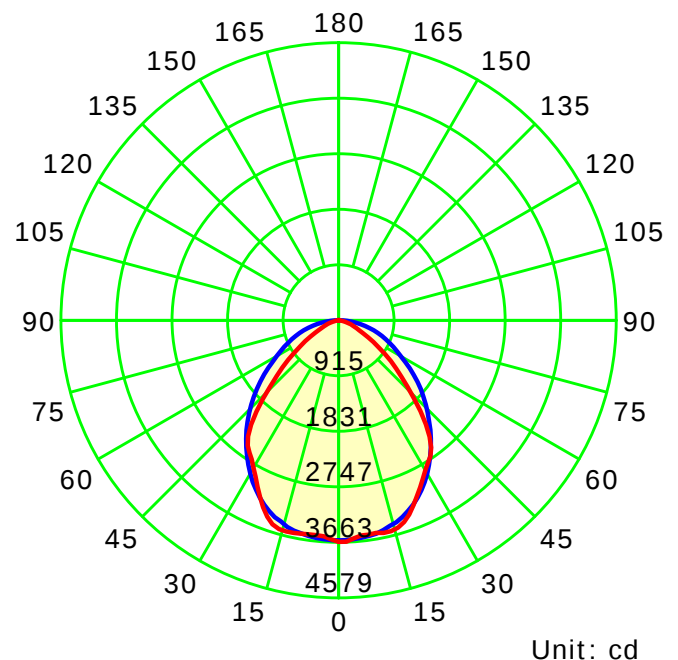
S/MH(C0/C180): 1.20

S/MH(C90/C270): 1.16

Picture Of Luminaire



Luminous Intensity Distribution Curve



— 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

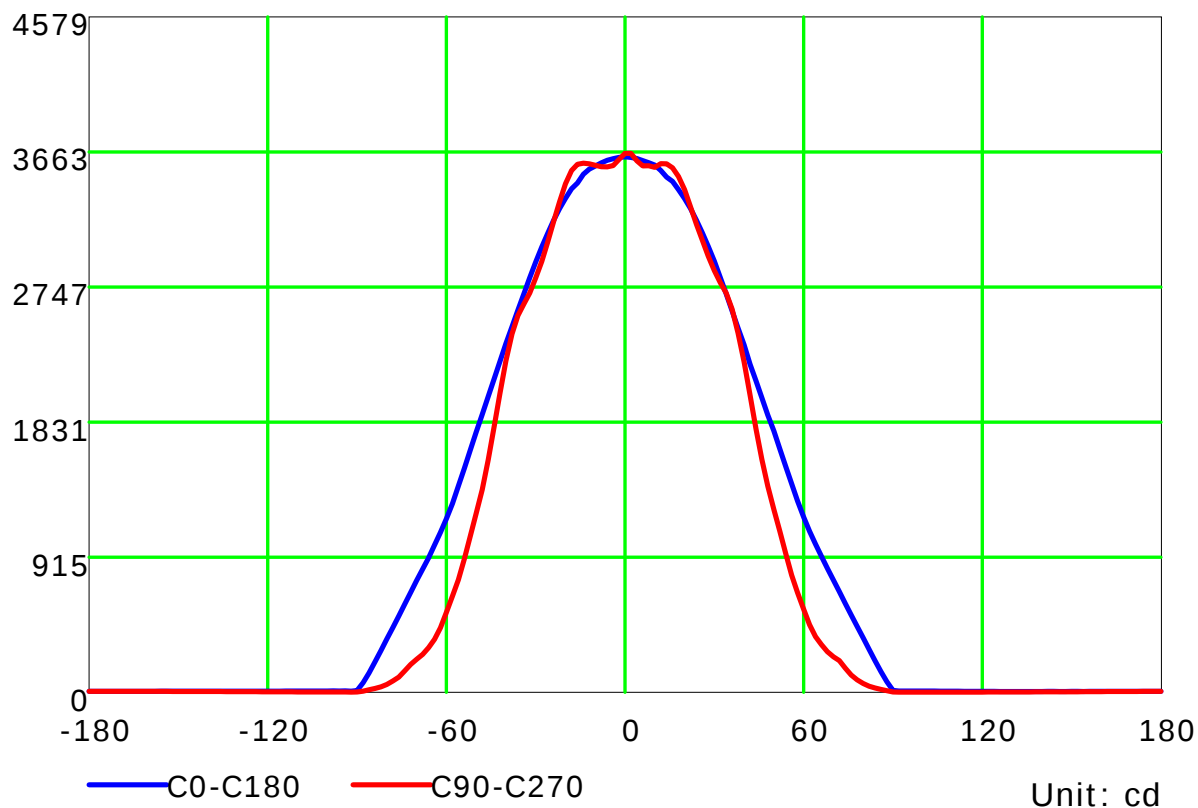
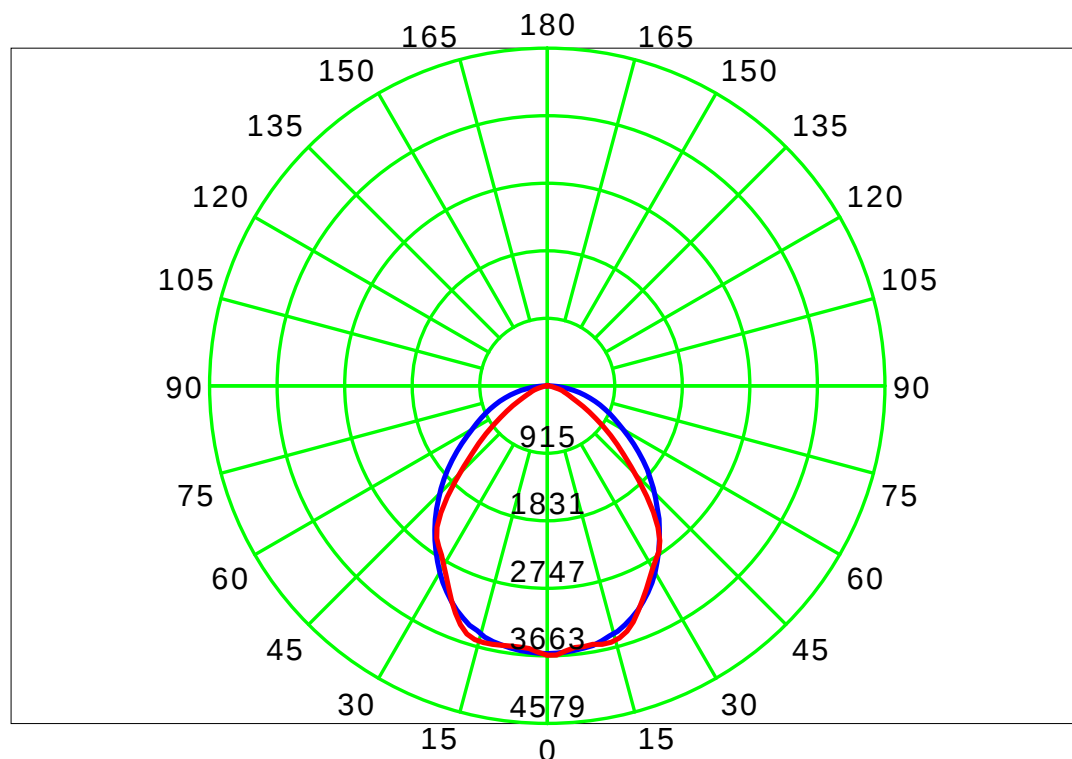
Temperature:

Humidity:

Operator:

Inspector:

Luminous Intensity Distribution Curve



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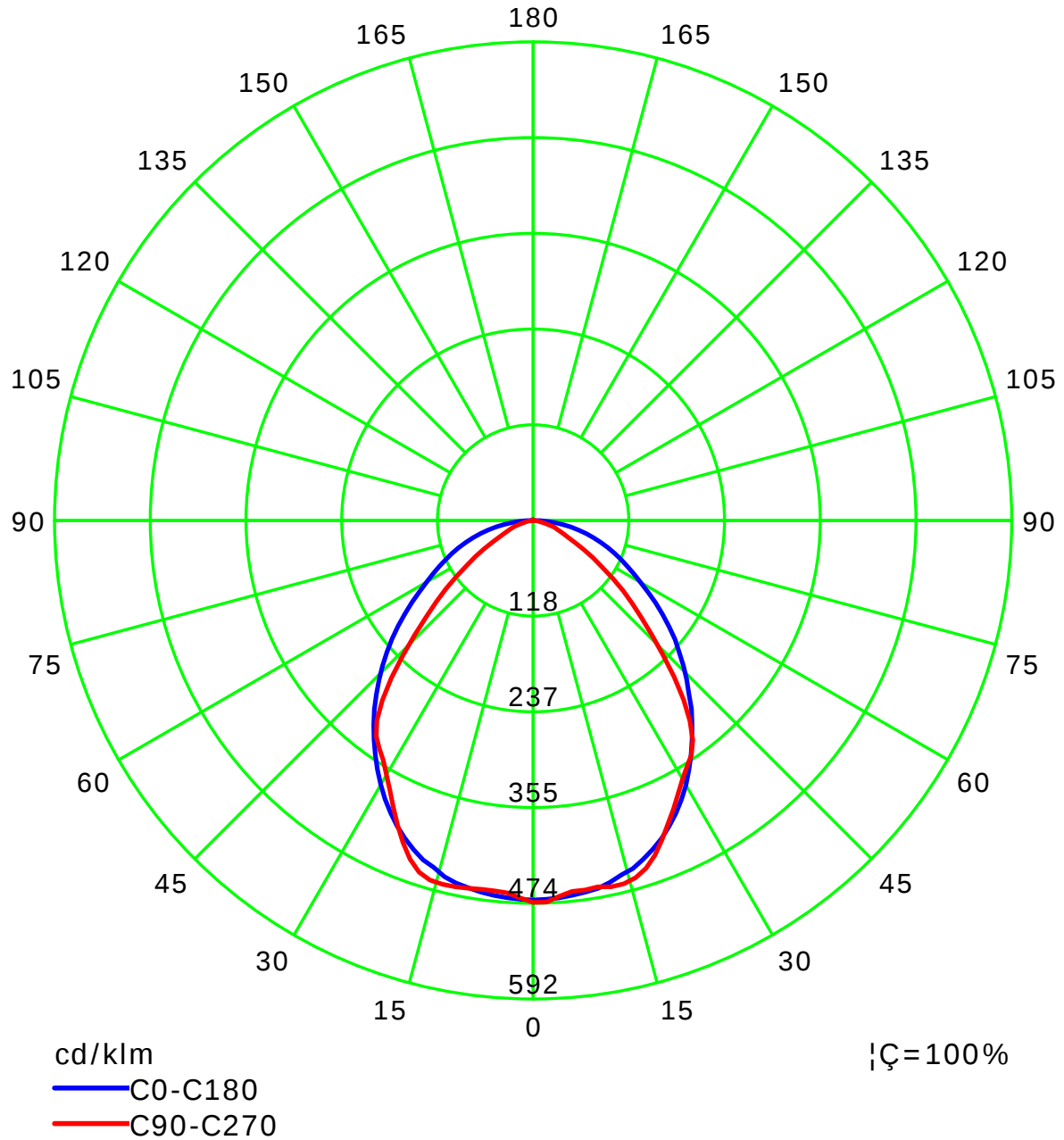
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

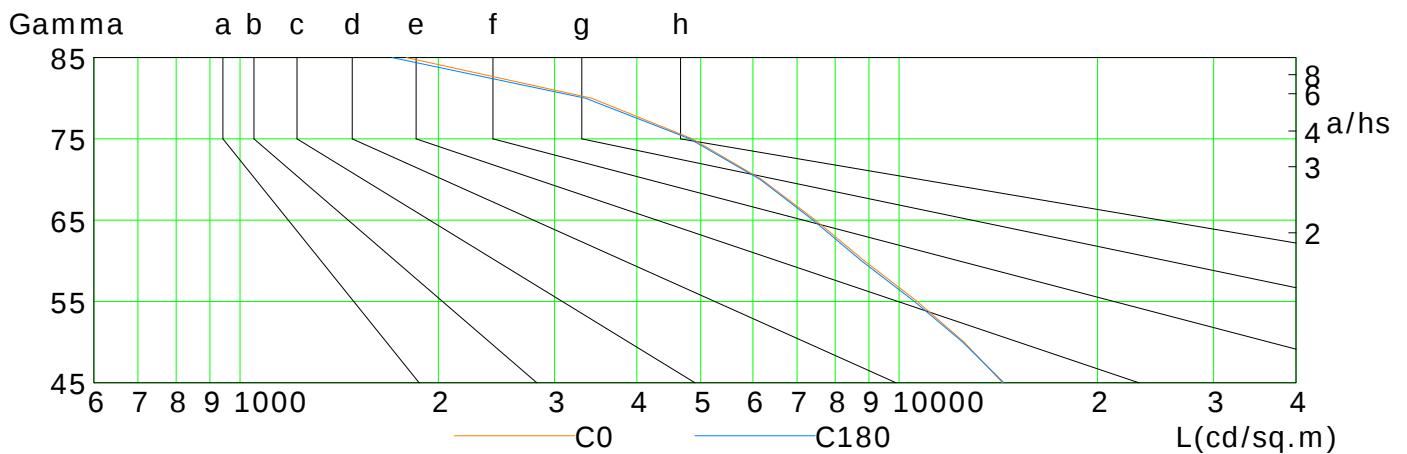
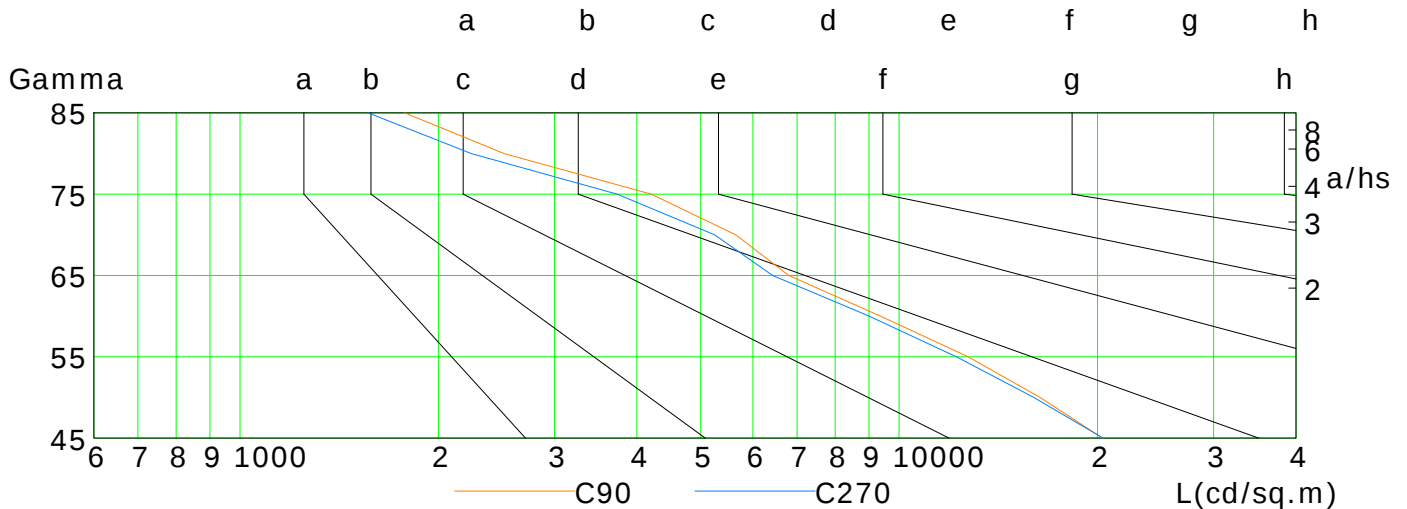
Inspector:

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



L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	14354	12546	10655	8855	7466	6187	4857	3414	1788
C90	20349	16363	12722	9369	6802	5653	4207	2515	1778
C180	14419	12486	10549	8767	7402	6156	4813	3342	1701
C270	20381	16008	12212	9004	6426	5249	3733	2242	1564

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Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

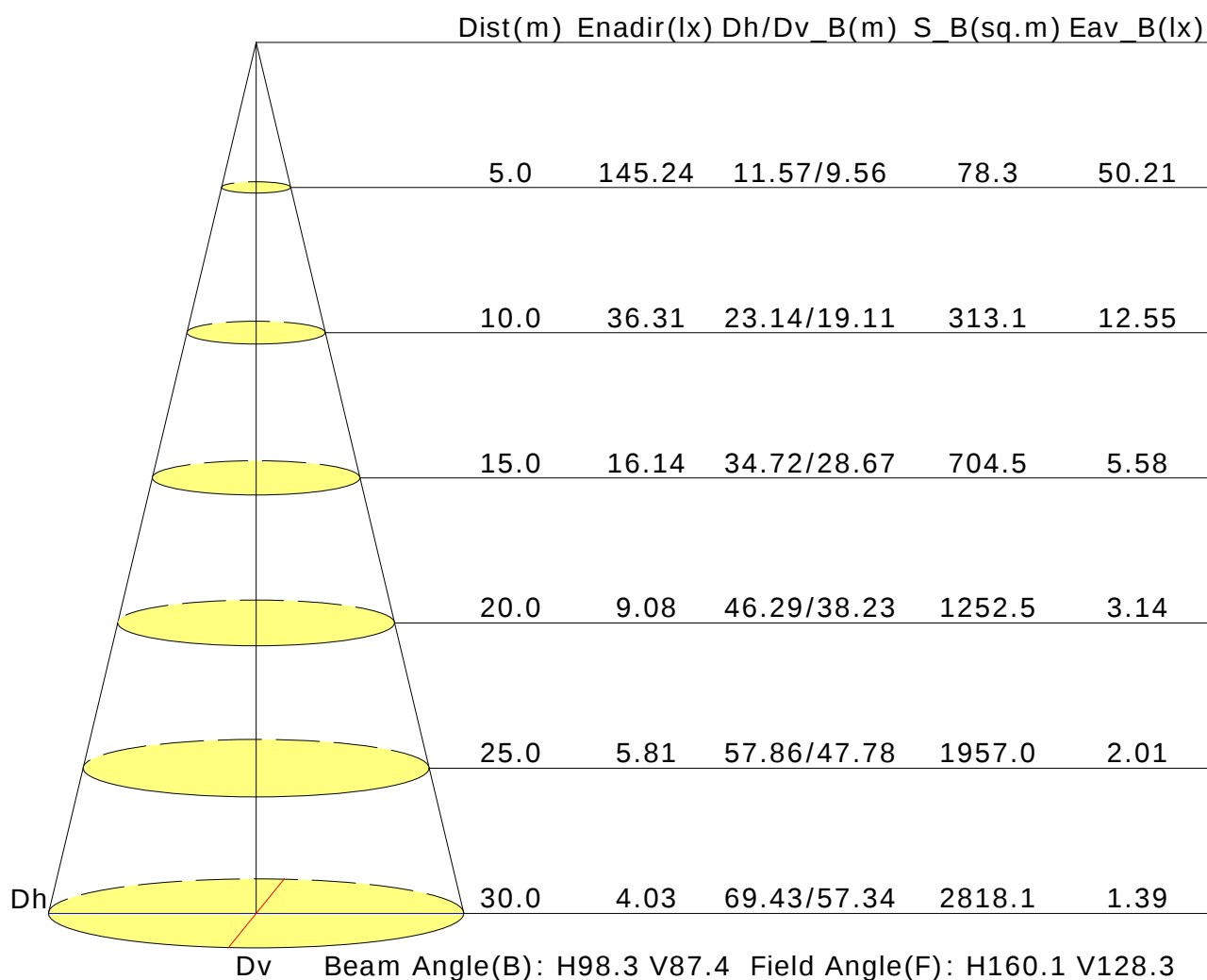
Test Device: LSG-1800B

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	20.2	21.5	20.5	21.7	21.9	19.9	21.1	20.2	21.4	21.6
3H	21.3	22.4	21.6	22.7	22.9	20.2	21.3	20.5	21.6	21.9
4H	21.7	22.8	22.1	23.0	23.3	20.3	21.3	20.6	21.6	21.9
6H	22.0	23.0	22.4	23.3	23.6	20.3	21.2	20.6	21.6	21.9
8H	22.1	23.0	22.5	23.3	23.7	20.2	21.2	20.6	21.5	21.8
12H	22.1	23.0	22.5	23.4	23.7	20.2	21.1	20.6	21.5	21.8
X=4H Y=2H	20.4	21.5	20.8	21.7	22.0	20.1	21.2	20.5	21.4	21.7
3H	21.6	22.5	22.0	22.8	23.2	20.5	21.4	20.9	21.7	22.1
4H	22.1	22.9	22.5	23.3	23.7	20.6	21.4	21.0	21.8	22.2
6H	22.5	23.2	22.9	23.6	24.0	20.6	21.3	21.1	21.7	22.1
8H	22.6	23.3	23.1	23.7	24.1	20.6	21.3	21.1	21.7	22.1
12H	22.7	23.3	23.1	23.7	24.1	20.6	21.2	21.1	21.6	22.1
X=8H Y=4H	22.1	22.7	22.5	23.1	23.6	20.7	21.3	21.1	21.7	22.1
6H	22.5	23.1	23.0	23.5	24.0	20.7	21.2	21.2	21.7	22.1
8H	22.7	23.2	23.2	23.6	24.1	20.7	21.2	21.2	21.6	22.1
12H	22.8	23.2	23.3	23.7	24.2	20.7	21.1	21.2	21.6	22.1
X=12H Y=4H	22.1	22.6	22.5	23.1	23.5	20.6	21.2	21.1	21.7	22.1
6H	22.5	23.0	23.0	23.4	23.9	20.7	21.2	21.2	21.6	22.1
8H	22.7	23.1	23.2	23.5	24.1	20.7	21.1	21.2	21.6	22.1
Variations with the observer position at spacings:										
S=1.0H	+0.2/-0.4					+0.5/-0.9				
S=1.5H	+0.6/-1.0					+1.7/-2.3				
S=2.0H	+1.4/-1.7					+3.2/-3.9				

Calculate in accordance with CIE Pub.117. The table is revised with 7722Im ($8\log(F/F_0) = 7.1$).

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 = 1.25									
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	0.65	0.75	0.82	0.86	0.93	0.97	1.00	1.03	1.06	
	0.30		0.58	0.68	0.75	0.80	0.87	0.92	0.96	1.00	1.03	
	0.20		0.54	0.63	0.70	0.76	0.83	0.88	0.92	0.97	1.00	
0.50	0.50	0.20	0.64	0.73	0.79	0.84	0.89	0.93	0.96	1.00	1.02	
	0.30		0.58	0.67	0.74	0.79	0.85	0.89	0.93	0.97	0.99	
	0.20		0.53	0.63	0.70	0.74	0.81	0.86	0.90	0.94	0.97	
0.30	0.50	0.20	0.62	0.71	0.77	0.81	0.87	0.90	0.93	0.96	0.98	
	0.30		0.57	0.66	0.72	0.77	0.83	0.87	0.90	0.94	0.96	
	0.20		0.53	0.62	0.69	0.73	0.80	0.84	0.87	0.92	0.94	
0.00	0.00	0.00	0.51	0.60	0.66	0.70	0.76	0.80	0.83	0.87	0.89	
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 = 1.25									
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	0.87	0.70	0.59	0.51	0.41	0.33	0.29	0.22	0.18	
	0.30		0.72	0.60	0.52	0.45	0.37	0.31	0.26	0.21	0.17	
	0.20		0.62	0.52	0.46	0.41	0.33	0.28	0.25	0.20	0.16	
0.50	0.50	0.20	0.83	0.67	0.56	0.49	0.38	0.35	0.27	0.21	0.17	
	0.30		0.70	0.58	0.50	0.44	0.35	0.29	0.25	0.20	0.16	
	0.20		0.61	0.51	0.45	0.40	0.32	0.27	0.24	0.19	0.15	
0.30	0.50	0.20	0.81	0.64	0.54	0.46	0.36	0.30	0.25	0.19	0.16	
	0.30		0.69	0.57	0.48	0.42	0.34	0.28	0.24	0.19	0.15	
	0.20		0.60	0.51	0.44	0.39	0.31	0.26	0.23	0.18	0.15	
0.00	0.00	0.00	0.49	0.40	0.34	0.29	0.23	0.19	0.16	0.13	0.10	
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 = 1.25									
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	0.20	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		0.05	0.07	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	0.21	0.21	
	0.30		0.10	0.11	0.12	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	0.15	0.16	0.17	
0.30	0.50	0.20	0.15	0.16	0.17	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		0.05	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												