

Report No.:

Test Time: 30.04.2020 15:18

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FL 58 L 200LED 62W Refond 3N 3000K 20x90 rp

Number of Lamps: 1

Luminous Length (mm): 1500

Luminous Width (mm): 75

Luminous Height (mm): 90

Voltage: 229.0 V

Current: 0.276 A

Power: 62.46 W

Power Factor: 0.990

Photometric Results

CIE Class: Direct

Total Rated Lamp Lumens: 9158.1 lm

Measurement Flux: 9158.1 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): 146.67

Central Intensity: 3654.68 cd

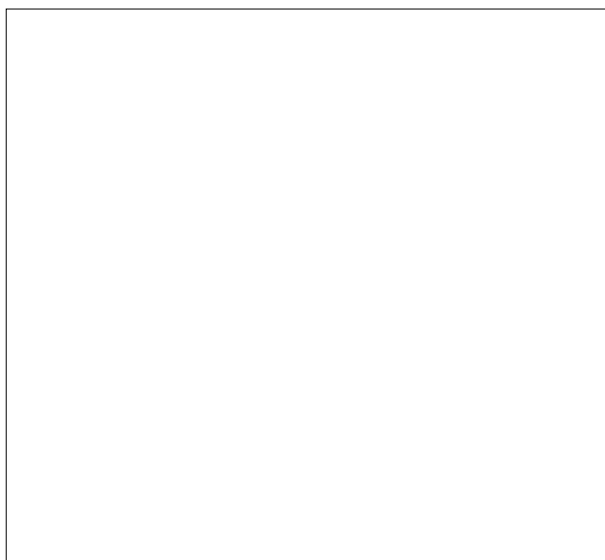
Max. Intensity: 6161.5 cd

Pos of Max. Intensity: H270 V20

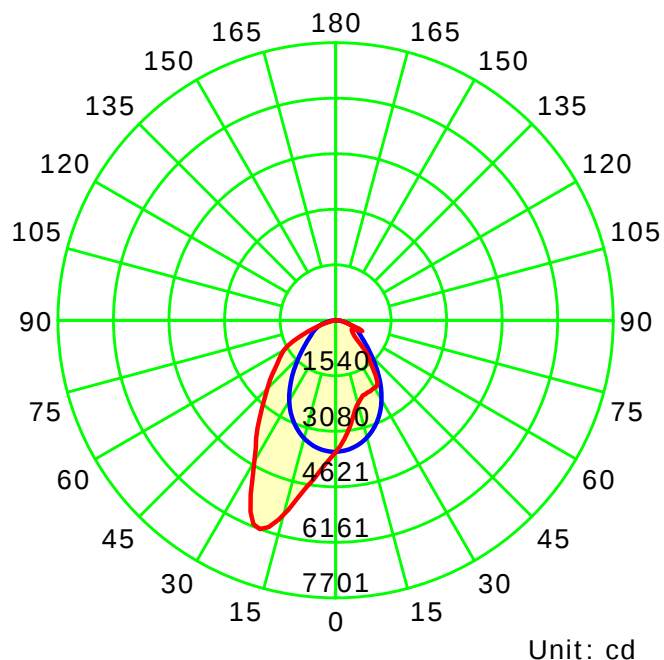
S/MH(C0/C180): 1.08

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

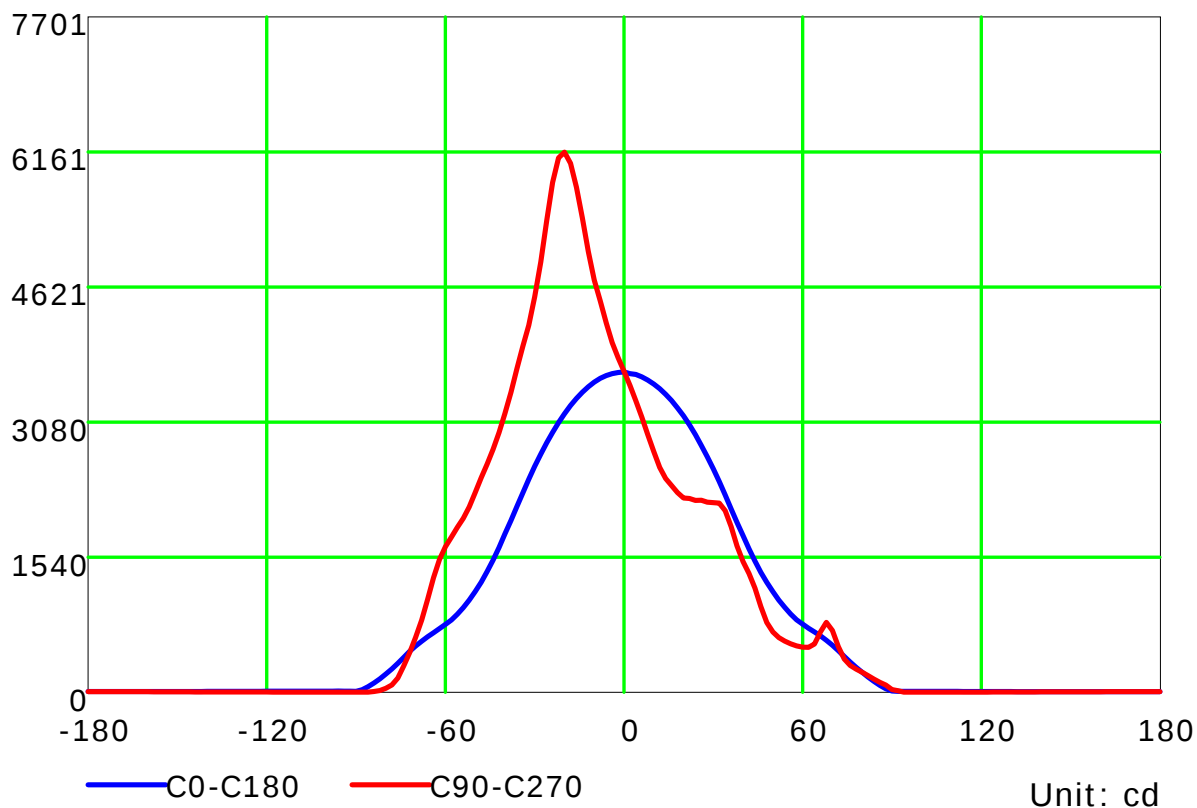
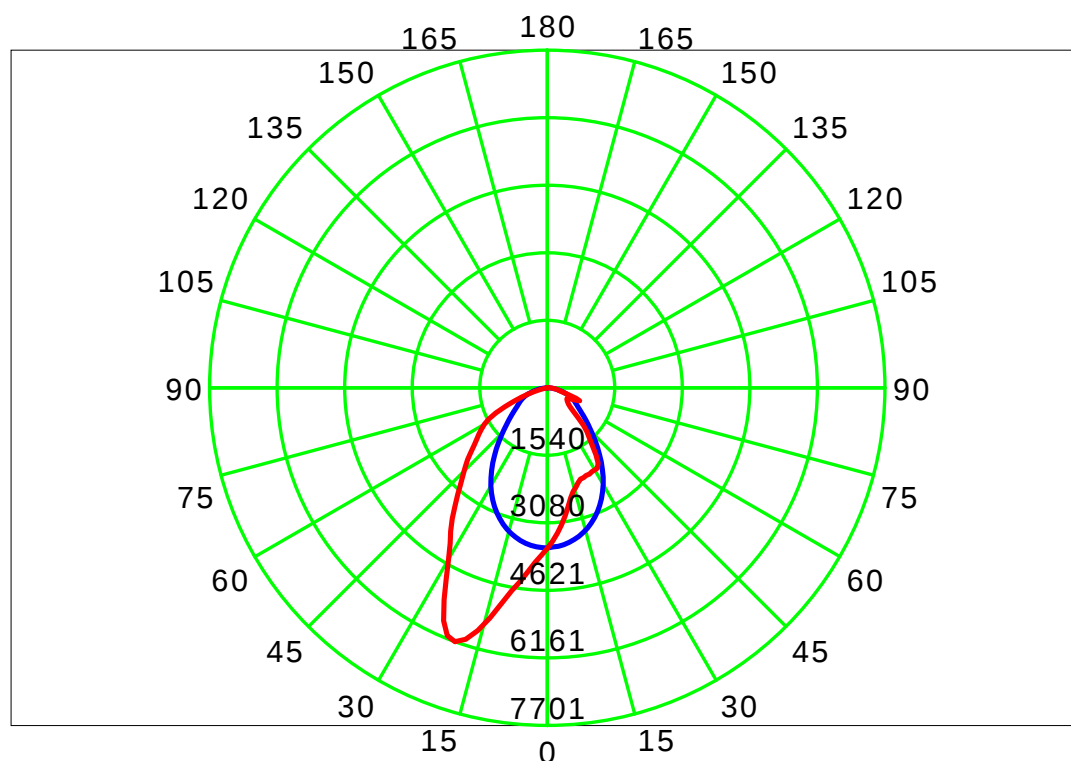
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve



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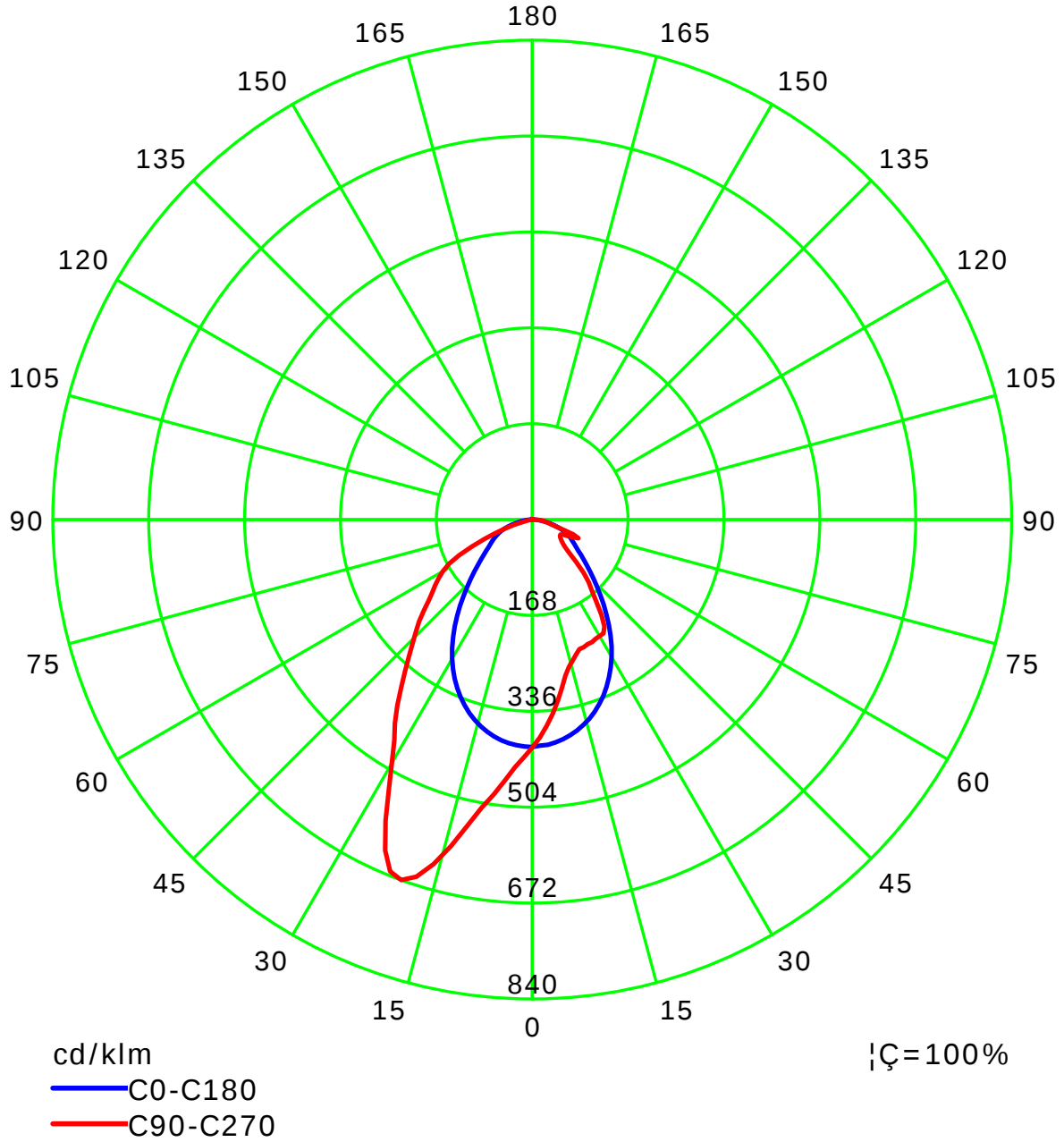
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve(cd / klm)



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Test Device: LSG-1800B

Distance: 12.677 m

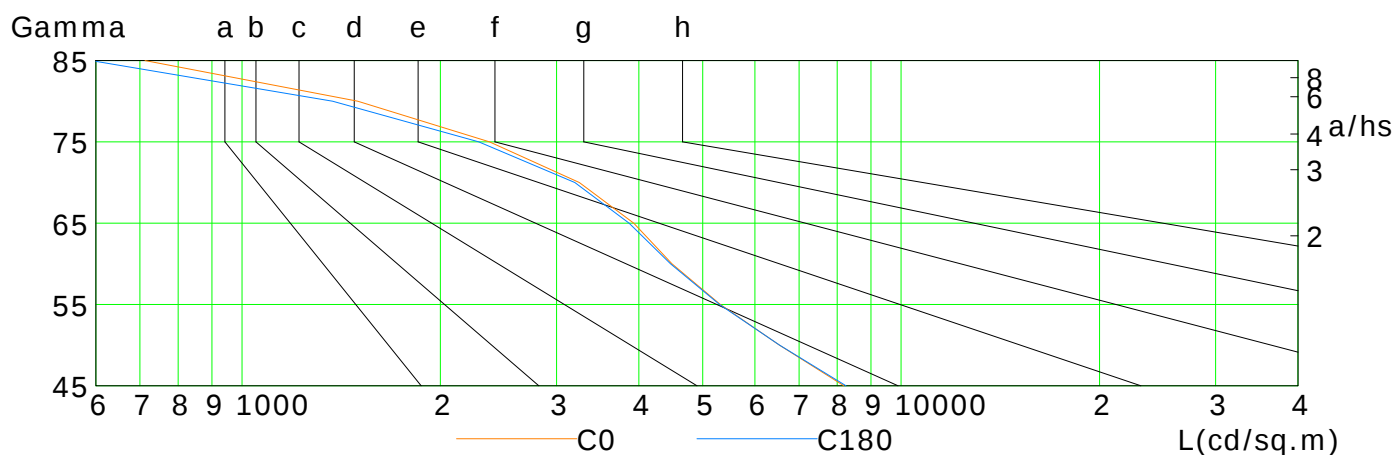
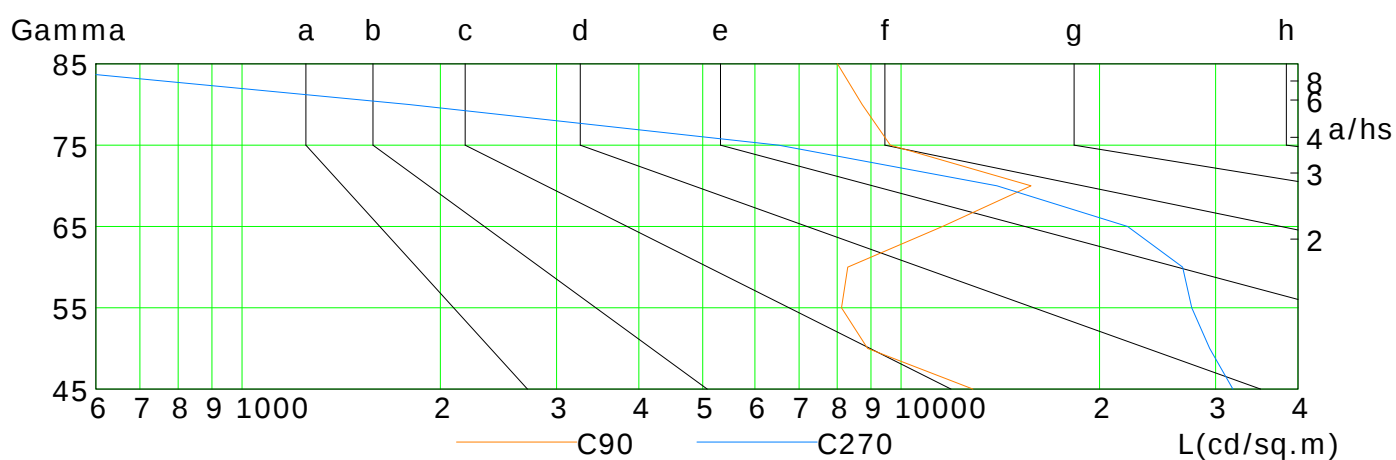
Humidity:

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	8189	6535	5317	4492	3929	3248	2374	1498	712
C90	12851	8894	8118	8298	11558	15739	9631	8728	8008
C180	8247	6540	5304	4469	3865	3198	2286	1372	591
C270	31875	29391	27605	26733	22053	13972	6518	1792	408

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Test Type: TYPE C

Temperature:

Operator:

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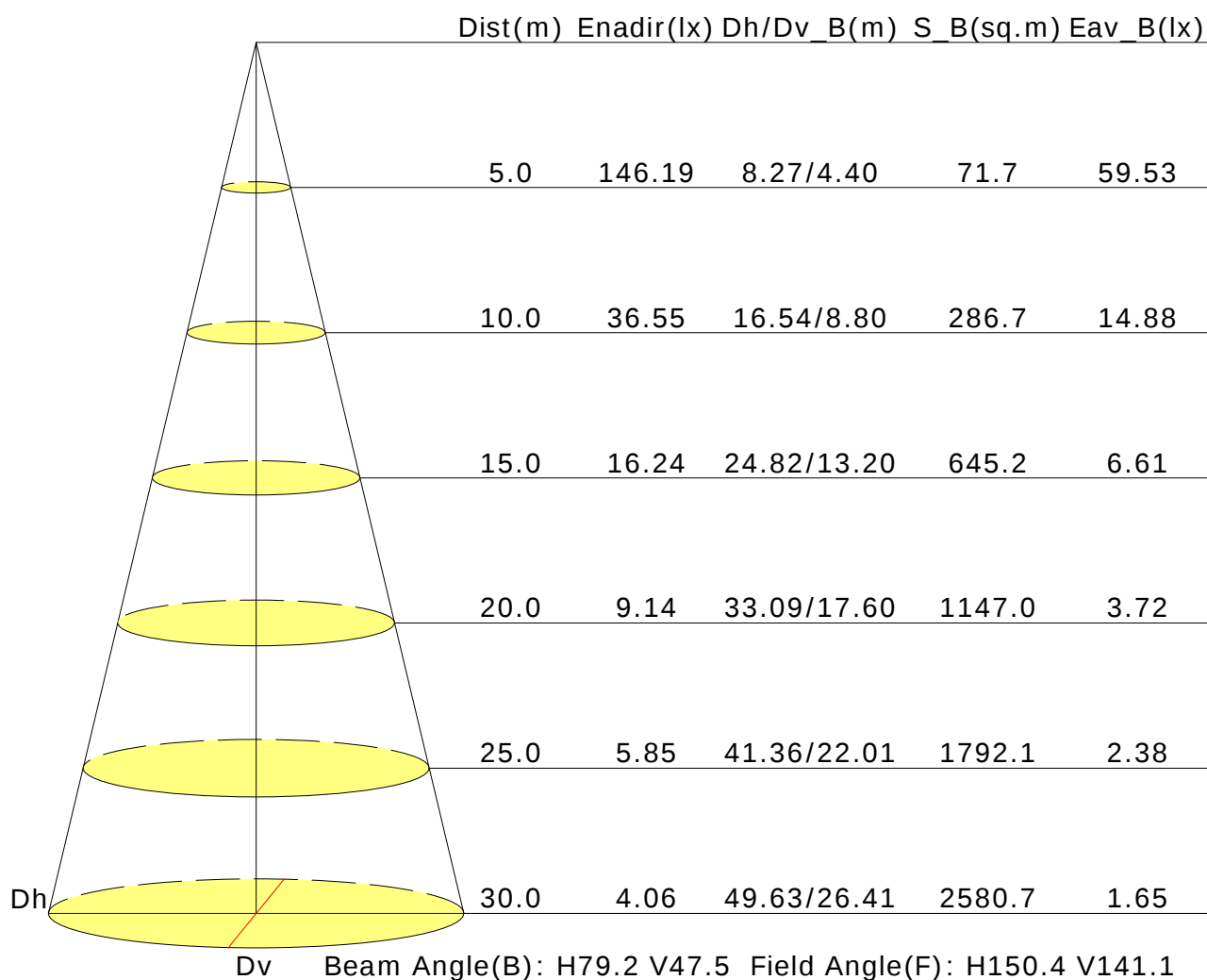
Test Device: LSG-1800B

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	20.1	21.4	20.4	21.7	21.9	21.8	23.1	22.1	23.3	23.6
3H	20.7	21.9	21.0	22.1	22.4	23.0	24.1	23.3	24.4	24.7
4H	20.9	22.0	21.2	22.2	22.6	23.2	24.3	23.5	24.6	24.9
6H	20.9	22.0	21.3	22.3	22.6	23.2	24.2	23.6	24.6	24.9
8H	20.9	21.9	21.3	22.2	22.6	23.2	24.2	23.6	24.5	24.9
12H	20.9	21.9	21.3	22.2	22.6	23.2	24.2	23.6	24.5	24.9
X=4H Y=2H	20.6	21.7	21.0	22.0	22.3	22.0	23.1	22.4	23.4	23.7
3H	21.4	22.3	21.8	22.7	23.0	23.3	24.3	23.7	24.6	24.9
4H	21.6	22.5	22.1	22.8	23.2	23.6	24.4	24.0	24.8	25.2
6H	21.8	22.5	22.2	22.9	23.3	23.7	24.4	24.1	24.8	25.2
8H	21.8	22.5	22.3	22.9	23.3	23.7	24.4	24.2	24.8	25.2
12H	21.8	22.4	22.3	22.9	23.3	23.7	24.4	24.2	24.8	25.2
X=8H Y=4H	21.8	22.5	22.3	22.9	23.3	23.6	24.3	24.1	24.7	25.1
6H	22.0	22.6	22.5	23.0	23.5	23.7	24.3	24.2	24.7	25.2
8H	22.1	22.6	22.6	23.0	23.5	23.8	24.3	24.3	24.7	25.2
12H	22.1	22.5	22.6	23.0	23.5	23.9	24.3	24.4	24.7	25.3
X=12H Y=4H	21.8	22.4	22.3	22.8	23.3	23.6	24.2	24.1	24.6	25.1
6H	22.0	22.5	22.5	23.0	23.5	23.7	24.2	24.2	24.7	25.2
8H	22.1	22.5	22.6	23.0	23.5	23.8	24.2	24.3	24.7	25.2
Variations with the observer position at spacings:										
S=1.0H	+0.6/-0.7					+0.5/-0.7				
S=1.5H	+1.0/-1.4					+0.9/-1.4				
S=2.0H	+0.9/-1.9					+1.6/-2.4				

Calculate in accordance with CIE Pub.117. The table is revised with 9158lm ($8\log(F/F_0) = 7.7$).

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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												