

Report No.:

Test Time: 06.05.2020 19:09

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FL 58 L 200LED 55W Refond 3N 5000K 20x90 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: 51.47 W

Power Factor: 0.987

Photometric Results

CIE Class: Direct

Total Rated Lamp Lumens: 8025.1 lm

Measurement Flux: 8025.1 lm

Efficiency: 100%

Downward Ratio: 99%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 150.3, 141.0, 134.9, 135.4

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 79.3, 48.7, 60.9, 61.6

Luminaire Efficacy Rating (LER): 155.97

Central Intensity: 3095.56 cd

Max. Intensity: 5357.53 cd

Pos of Max. Intensity: H270 V22

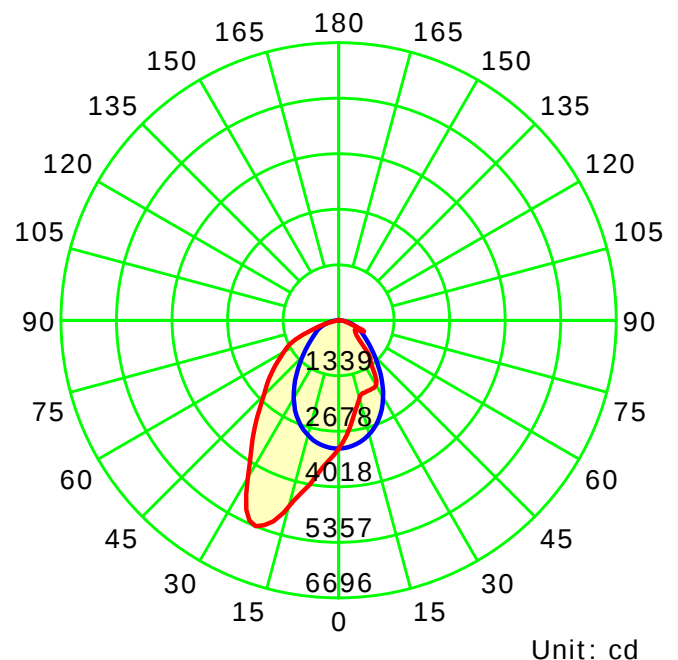
S/MH(C0/C180): 1.07

S/MH(C90/C270): 1.34

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

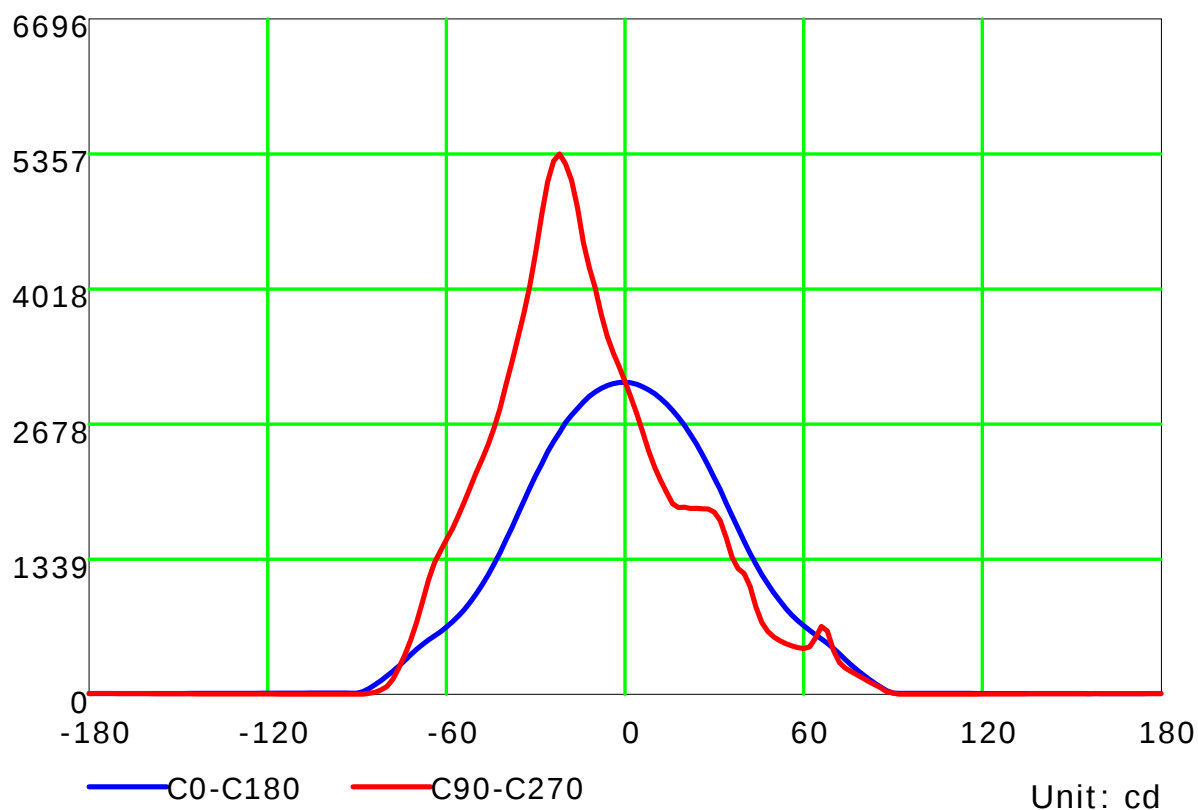
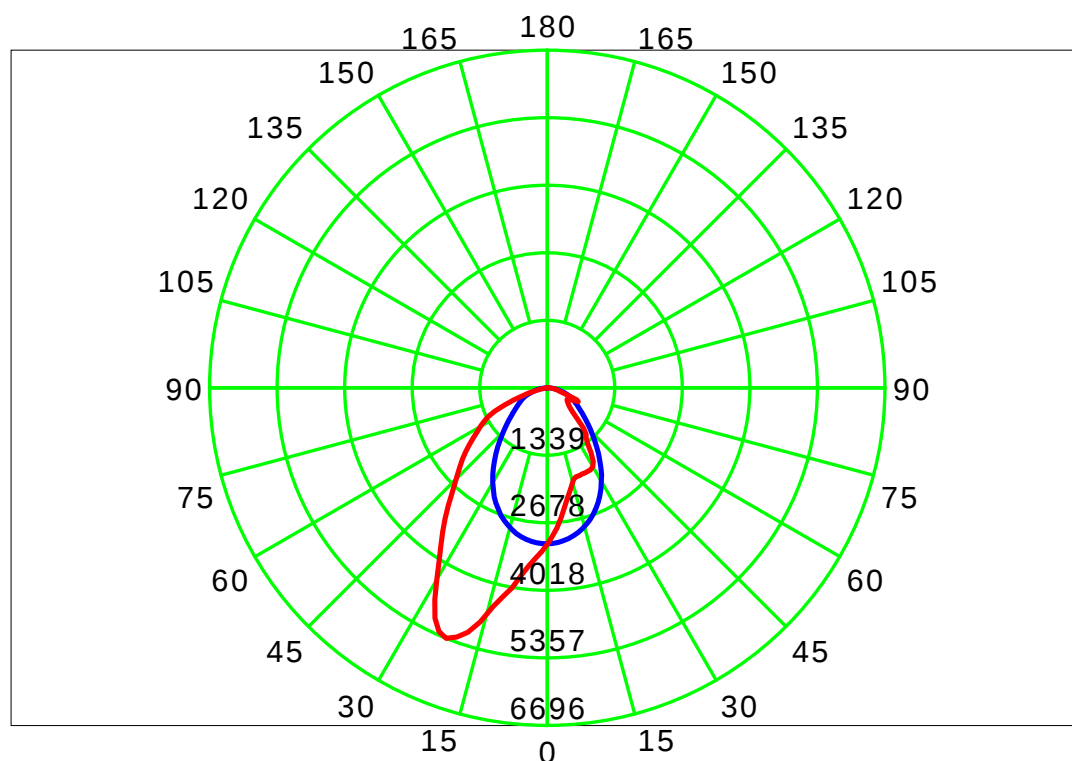
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve



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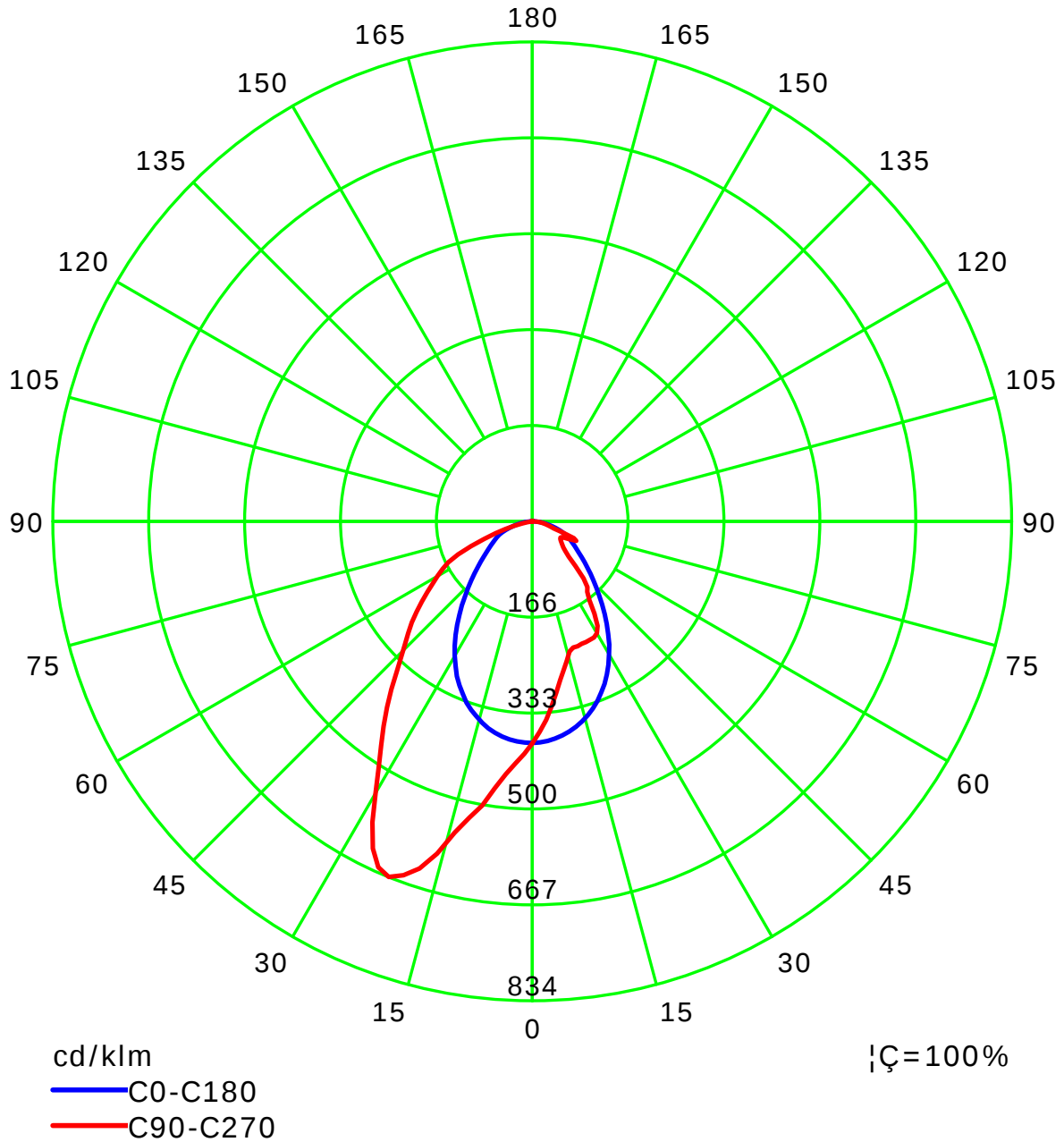
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve(cd / klm)



C Plane (°): 0.0-360.0: 22.5

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Test Device: LSG-1800B

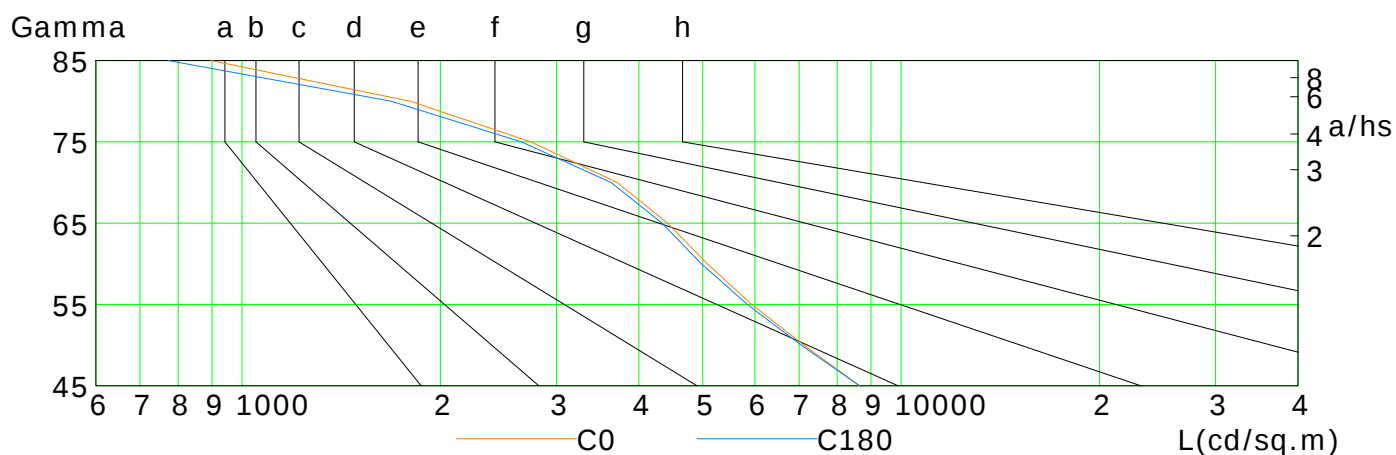
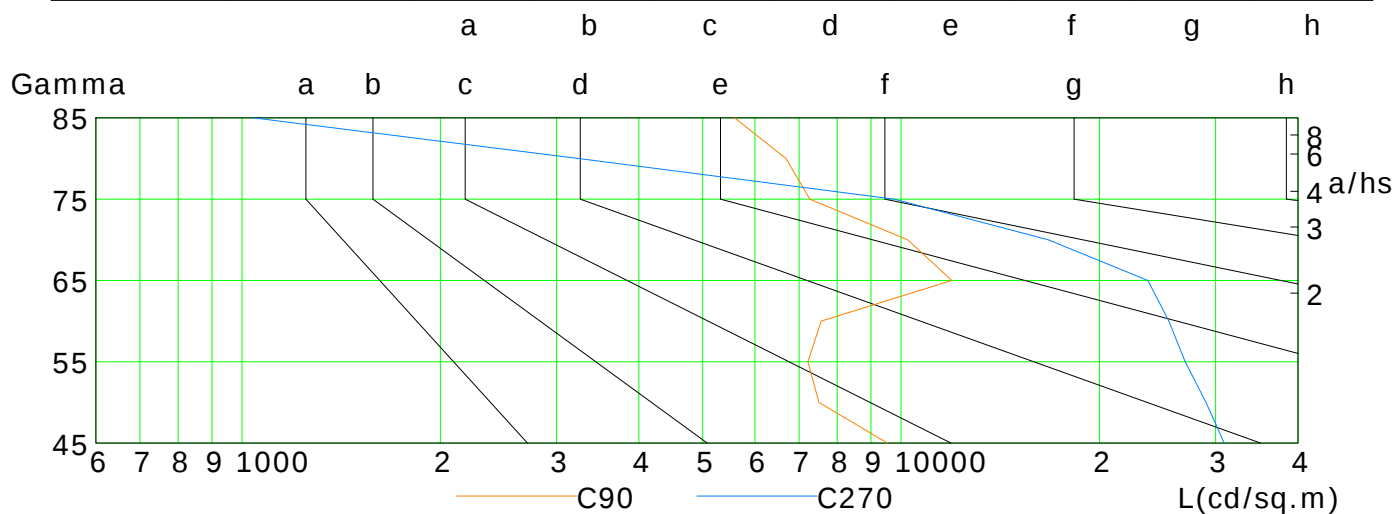
Distance: 12.677 m

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



L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	8650	7119	5933	5083	4422	3709	2742	1800	898
C90	9534	7503	7221	7561	11933	10229	7269	6688	5587
C180	8650	7051	5844	4976	4339	3631	2654	1684	773
C270	30924	29011	26980	25477	23681	16719	9767	3241	1041

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Test Lab:

Test Type: TYPE C

Temperature:

Operator:

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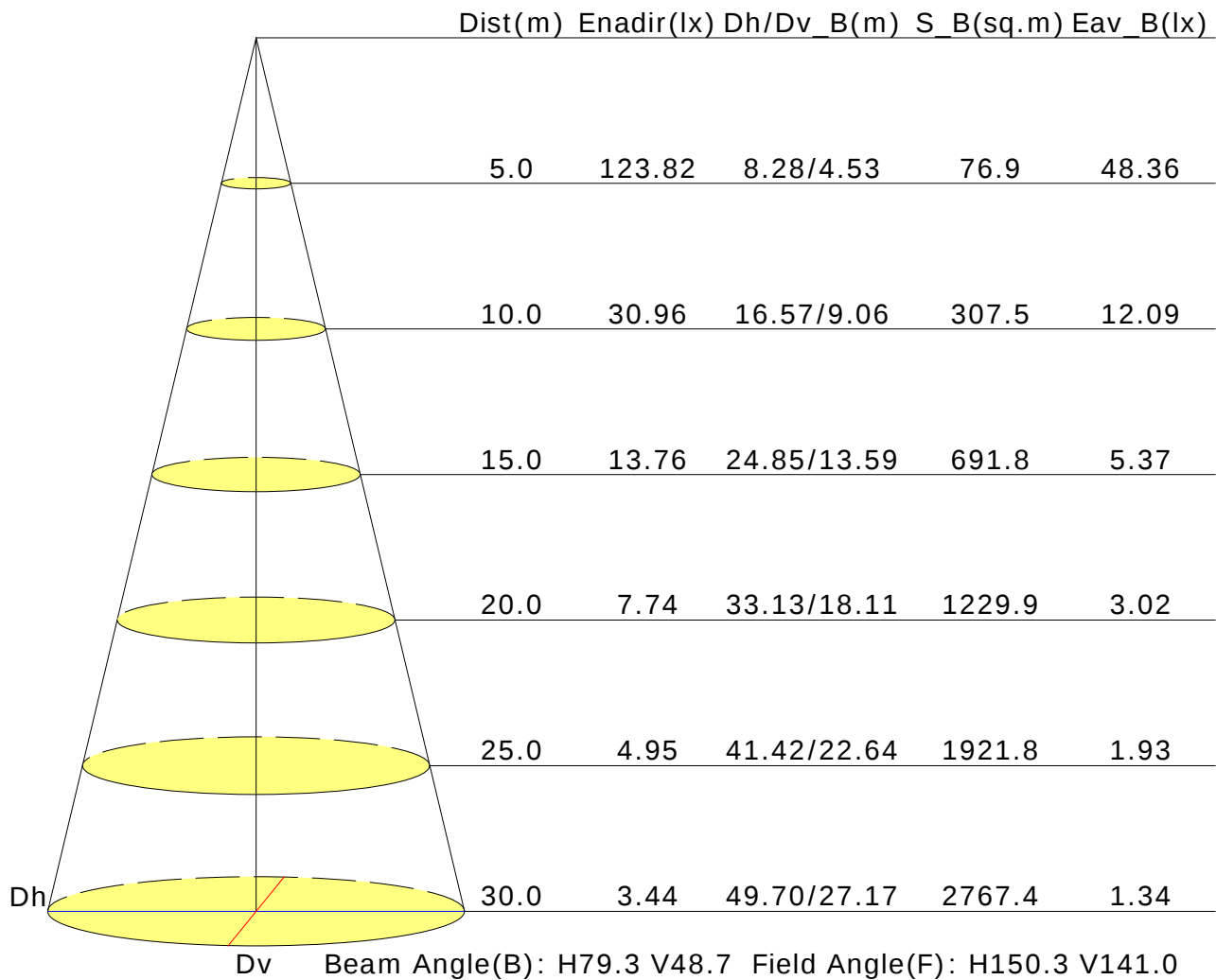
Test Device: LSG-1800B

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	20.5	21.8	20.8	22.0	22.2	22.2	23.5	22.5	23.8	24.0
3H	21.1	22.2	21.4	22.5	22.8	23.5	24.7	23.8	24.9	25.2
4H	21.2	22.4	21.6	22.6	23.0	23.7	24.8	24.0	25.1	25.4
6H	21.3	22.4	21.7	22.7	23.0	23.7	24.8	24.1	25.1	25.4
8H	21.3	22.3	21.7	22.7	23.0	23.7	24.7	24.1	25.0	25.4
12H	21.3	22.3	21.7	22.6	23.0	23.7	24.7	24.1	25.0	25.3
X=4H Y=2H	21.0	22.2	21.4	22.4	22.8	22.5	23.6	22.9	23.9	24.2
3H	21.9	22.8	22.2	23.1	23.5	23.9	24.8	24.3	25.2	25.5
4H	22.1	23.0	22.6	23.4	23.7	24.2	25.0	24.6	25.4	25.8
6H	22.3	23.0	22.7	23.4	23.9	24.3	25.0	24.7	25.4	25.8
8H	22.3	23.0	22.8	23.4	23.9	24.3	24.9	24.7	25.4	25.8
12H	22.3	23.0	22.8	23.4	23.8	24.3	24.9	24.7	25.3	25.8
X=8H Y=4H	22.3	23.0	22.8	23.4	23.9	24.2	24.9	24.7	25.3	25.7
6H	22.6	23.1	23.1	23.6	24.1	24.3	24.9	24.8	25.3	25.8
8H	22.7	23.1	23.1	23.6	24.1	24.4	24.9	24.9	25.3	25.8
12H	22.7	23.1	23.2	23.6	24.1	24.4	24.8	24.9	25.3	25.8
X=12H Y=4H	22.3	22.9	22.8	23.4	23.8	24.2	24.8	24.7	25.2	25.7
6H	22.6	23.1	23.1	23.5	24.0	24.3	24.8	24.8	25.3	25.8
8H	22.7	23.1	23.2	23.6	24.1	24.4	24.8	24.9	25.3	25.8
Variations with the observer position at spacings:										
S=1.0H	+0.5/-0.7					+0.4/-0.5				
S=1.5H	+1.0/-1.3					+0.9/-1.4				
S=2.0H	+1.1/-1.7					+1.4/-2.1				

Calculate in accordance with CIE Pub.117. The table is revised with 8025lm ($8\log(F/F_0) = 7.2$).

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Operator:

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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	0.62	0.72	0.79	0.84	0.90	0.95	0.98	1.02	1.05	
	0.30		0.54	0.65	0.72	0.77	0.85	0.90	0.94	0.98	1.02	
	0.20		0.49	0.59	0.67	0.72	0.80	0.86	0.90	0.95	0.99	
0.50	0.50	0.20	0.60	0.70	0.76	0.81	0.87	0.91	0.94	0.98	1.01	
	0.30		0.54	0.63	0.70	0.75	0.82	0.87	0.91	0.95	0.98	
	0.20		0.49	0.59	0.66	0.71	0.78	0.84	0.87	0.92	0.96	
0.30	0.50	0.20	0.59	0.68	0.74	0.78	0.84	0.88	0.91	0.94	0.97	
	0.30		0.53	0.62	0.69	0.74	0.80	0.85	0.88	0.92	0.95	
	0.20		0.48	0.58	0.65	0.70	0.77	0.82	0.85	0.90	0.93	
0.00	0.00	0.00	0.46	0.56	0.62	0.67	0.74	0.78	0.81	0.85	0.88	
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	0.92	0.75	0.63	0.55	0.44	0.36	0.31	0.24	0.19	
	0.30		0.77	0.64	0.55	0.49	0.39	0.33	0.28	0.22	0.18	
	0.20		0.66	0.56	0.49	0.44	0.36	0.30	0.26	0.21	0.17	
0.50	0.50	0.20	0.88	0.72	0.61	0.52	0.41	0.38	0.29	0.22	0.18	
	0.30		0.75	0.62	0.54	0.47	0.38	0.32	0.27	0.21	0.17	
	0.20		0.65	0.55	0.48	0.43	0.35	0.29	0.26	0.20	0.17	
0.30	0.50	0.20	0.86	0.69	0.58	0.50	0.39	0.32	0.28	0.21	0.17	
	0.30		0.73	0.61	0.52	0.45	0.36	0.30	0.26	0.20	0.17	
	0.20		0.64	0.54	0.47	0.42	0.34	0.28	0.25	0.19	0.16	
0.00	0.00	0.00	0.53	0.44	0.37	0.33	0.26	0.22	0.18	0.14	0.12	
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	0.21	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	0.08	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	0.11	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:51W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												