

Report No.: 1

Test Time: 11.12.2019 10:40

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FL 1500 ID 2x60LED 0,39A 40W 4000K opal

Luminous Length (mm): 1500

Luminous Width (mm): 55

Luminous Height (mm): 90

Voltage: 221.7 V

Current: 0.459 A

Power: 99.61 W

Power Factor: 0.977

Photometric Results

CIE Class: Direct

Measurement Flux: 7817.5 lm

Downward Ratio: 100%

Total Rated Lamp Lumens: 7817.5 lm

Efficiency: 100%

Upward Ratio: 0%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 164.8, 160.9, 162.9, 162.9

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 113.2, 110.9, 112.0, 112.0

Luminaire Efficacy Rating (LER): 78.53

Central Intensity: 2728.31 cd

Max. Intensity: 2728.32 cd

Pos of Max. Intensity: H0 V0

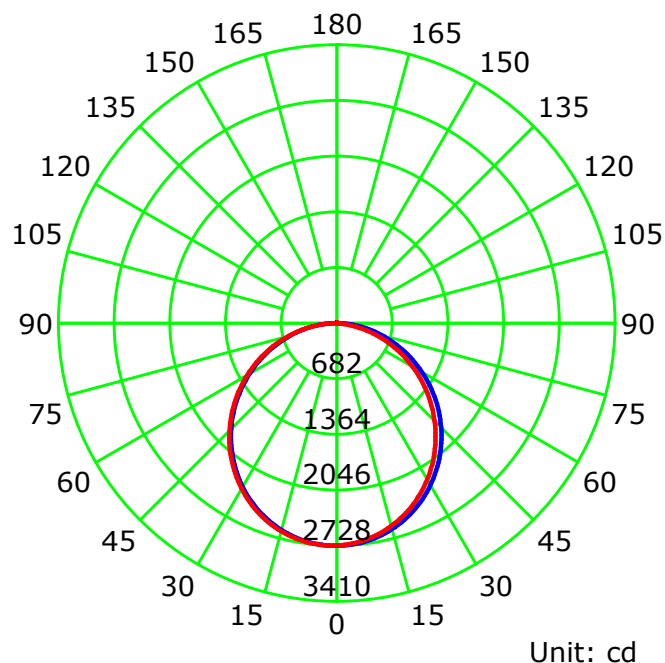
S/MH(C0/C180): 1.26

S/MH(C90/C270): 1.24

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 (°):0.0-180.0:1.0

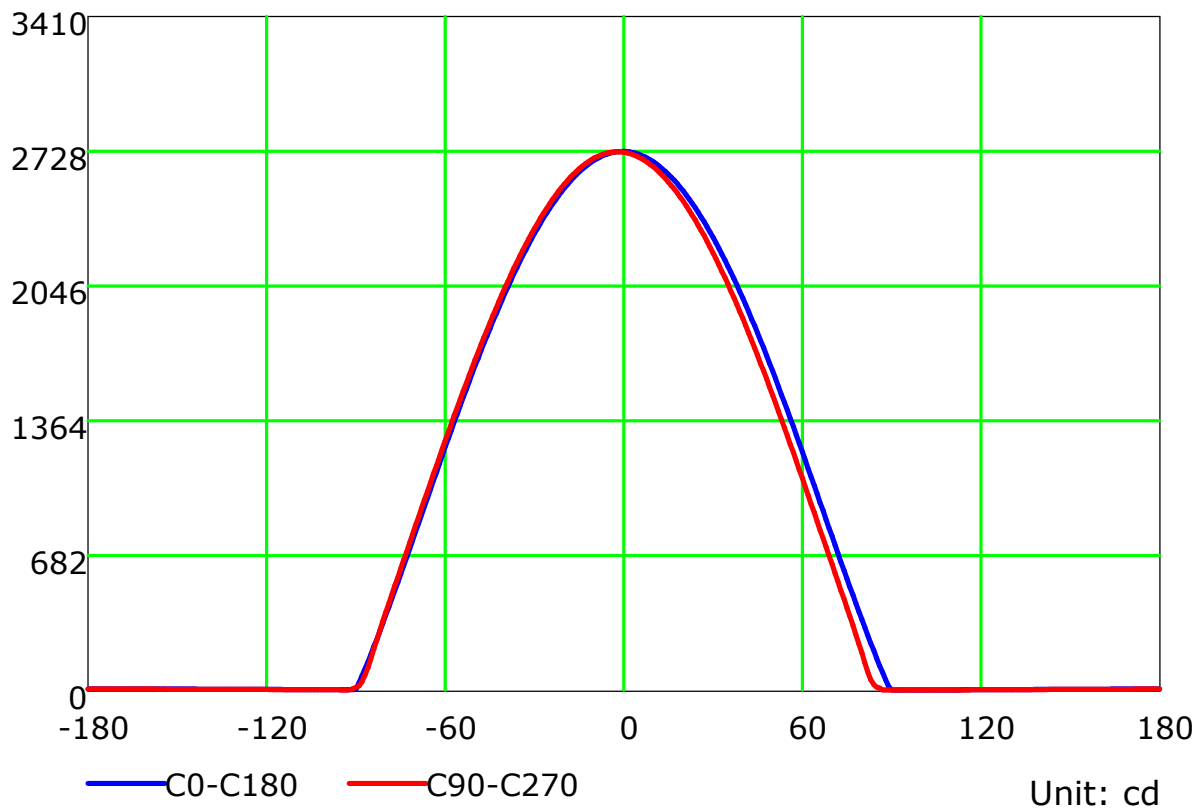
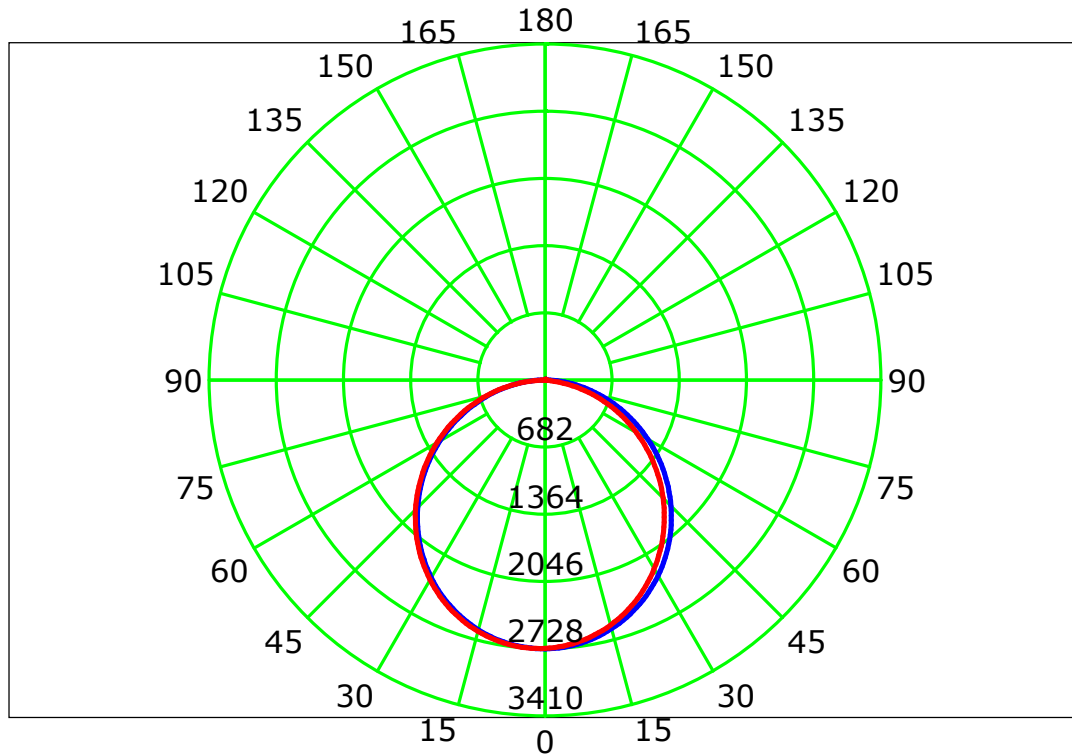
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

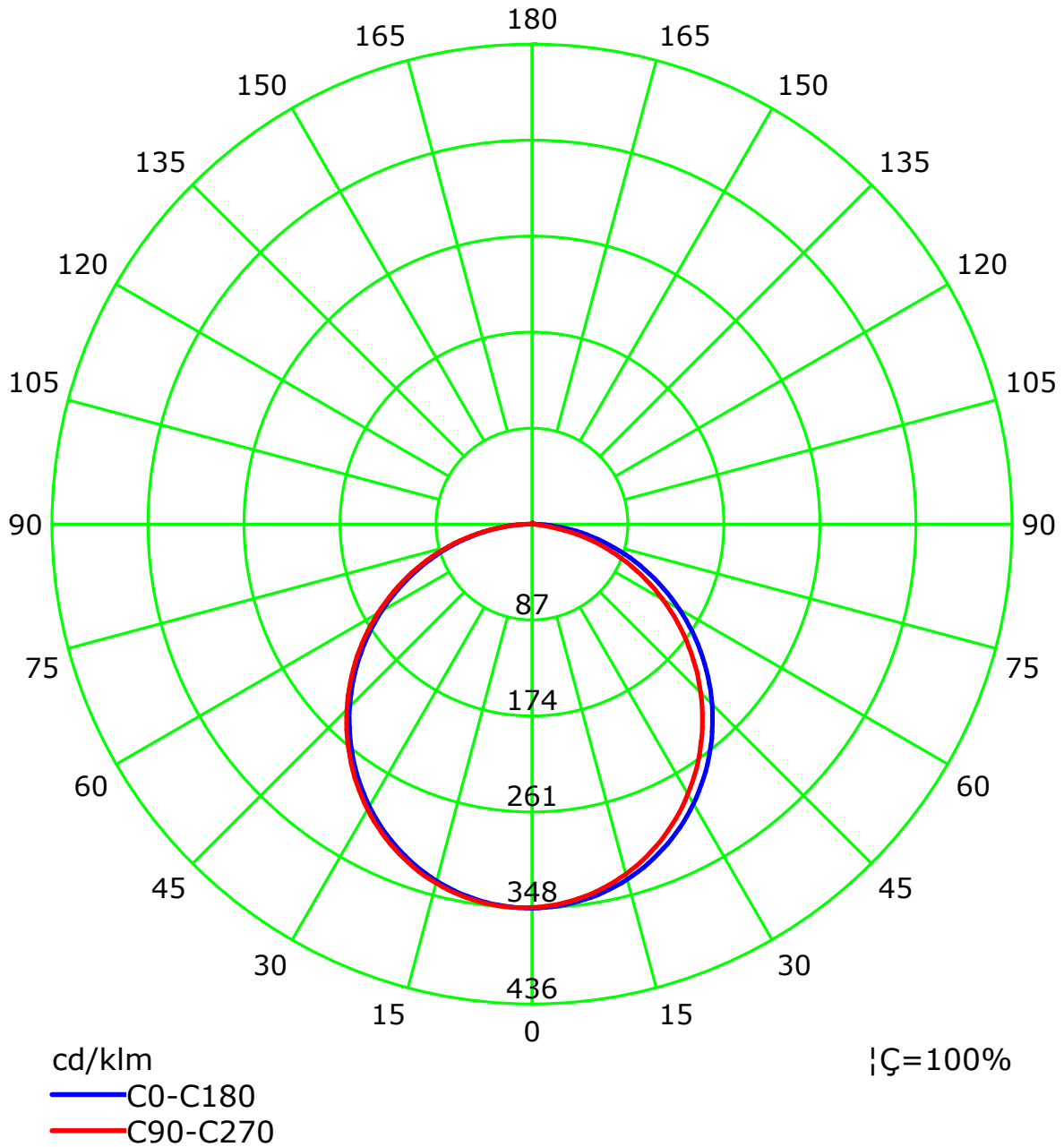
Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-180.0:1.0
Test Device: LSG-1800B
Distance: 12.677 m
Humidity:
Inspector:

Luminous Intensity Distribution Curve(cd/klm)

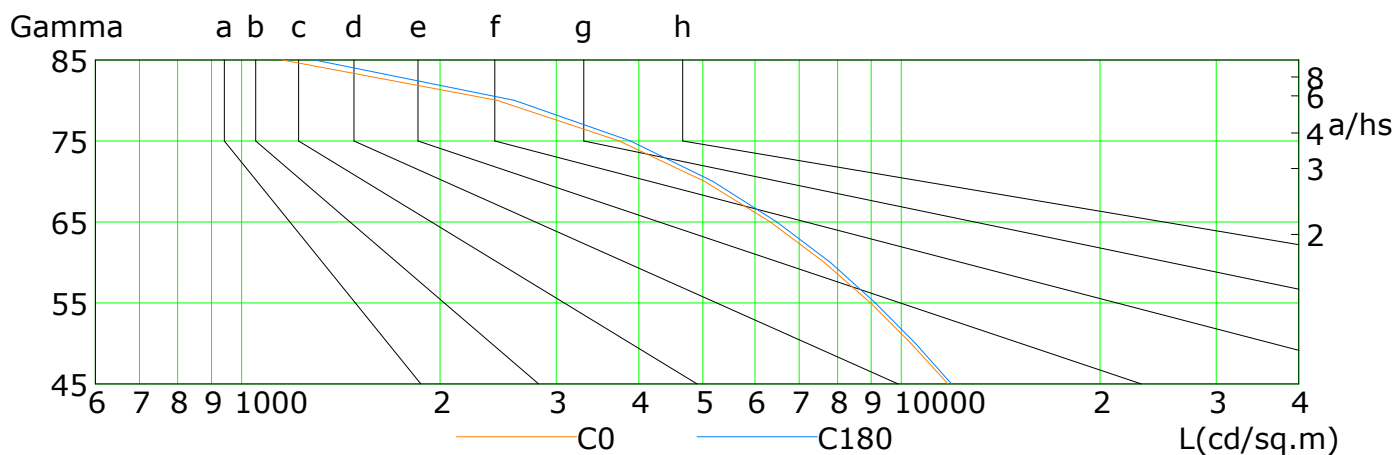
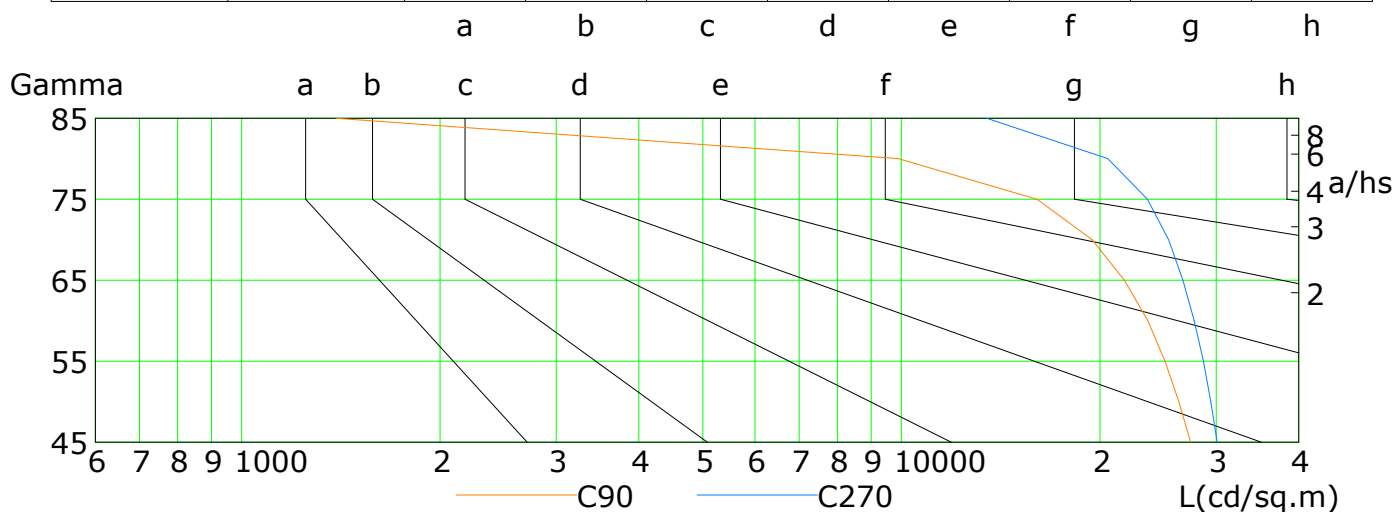


C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-180.0:1.0
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

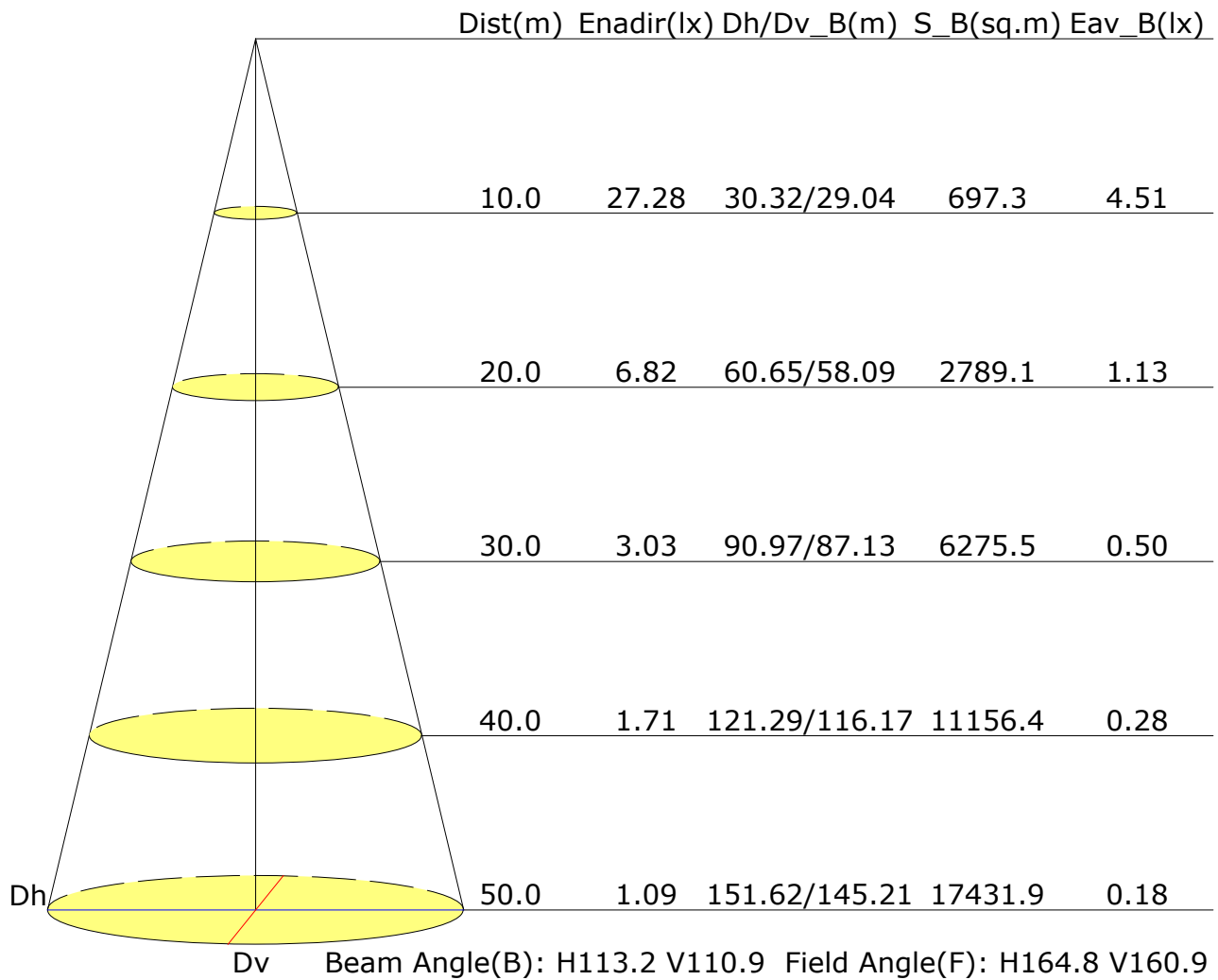


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	11764	10340	8981	7635	6329	5031	3736	2440	1154
C90	27424	26313	25087	23614	21775	19453	16051	9886	1391
C180	11913	10502	9135	7805	6474	5176	3885	2592	1291
C270	30100	29450	28696	27785	26718	25408	23597	20546	13462

C Plane (°):0.0-360.0: 22.5
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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	20.4	21.8	20.7	22.0	22.3	22.4	23.8	22.7	24.0	24.3
3H	21.5	22.7	21.8	23.0	23.3	23.9	25.2	24.2	25.4	25.7
4H	21.8	23.0	22.2	23.3	23.6	24.5	25.7	24.9	26.0	26.3
6H	22.1	23.2	22.4	23.5	23.8	24.9	26.0	25.3	26.3	26.7
8H	22.1	23.2	22.5	23.5	23.9	25.0	26.1	25.4	26.4	26.8
12H	22.1	23.1	22.5	23.5	23.8	25.1	26.1	25.5	26.4	26.8
X=4H Y=2H	21.0	22.2	21.4	22.5	22.8	22.7	23.8	23.0	24.1	24.5
3H	22.3	23.3	22.6	23.6	24.0	24.3	25.3	24.7	25.7	26.0
4H	22.7	23.6	23.1	24.0	24.4	25.0	25.9	25.4	26.3	26.6
6H	23.0	23.8	23.5	24.2	24.7	25.5	26.3	25.9	26.7	27.1
8H	23.1	23.9	23.5	24.3	24.7	25.6	26.4	26.1	26.8	27.2
12H	23.1	23.8	23.6	24.2	24.7	25.7	26.4	26.1	26.8	27.2
X=8H Y=4H	23.0	23.7	23.4	24.1	24.6	25.0	25.8	25.5	26.2	26.6
6H	23.4	24.0	23.8	24.4	24.9	25.6	26.2	26.1	26.7	27.1
8H	23.5	24.0	24.0	24.5	25.0	25.8	26.3	26.3	26.8	27.3
12H	23.5	24.0	24.0	24.5	25.0	25.9	26.3	26.4	26.8	27.3
X=12H Y=4H	23.0	23.6	23.4	24.1	24.5	25.0	25.7	25.5	26.1	26.6
6H	23.4	23.9	23.9	24.4	24.9	25.6	26.1	26.1	26.6	27.1
8H	23.5	24.0	24.0	24.5	25.0	25.8	26.3	26.3	26.7	27.2
Variations with the observer position at spacings:										
S=1.0H	+0.2/-0.3					+0.3/-0.3				
S=1.5H	+0.4/-0.7					+0.8/-0.9				
S=2.0H	+0.7/-1.3					+1.4/-1.7				

Calculate in accordance with CIE Pub.117. The table is revised with 7818lm ($8\log(F/F_0) = 7.1$).

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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	0.56	0.66	0.74	0.79	0.87	0.92	0.95	1.00	1.03	
	0.30		0.48	0.59	0.66	0.72	0.80	0.86	0.90	0.96	0.99	
	0.20		0.42	0.53	0.61	0.66	0.75	0.81	0.86	0.92	0.96	
0.50	0.50	0.20	0.54	0.64	0.71	0.76	0.83	0.88	0.92	0.96	0.99	
	0.30		0.47	0.57	0.65	0.70	0.78	0.83	0.87	0.92	0.96	
	0.20		0.42	0.52	0.60	0.65	0.74	0.79	0.84	0.89	0.93	
0.30	0.50	0.20	0.53	0.62	0.69	0.74	0.80	0.85	0.88	0.92	0.95	
	0.30		0.47	0.56	0.63	0.69	0.76	0.81	0.85	0.89	0.92	
	0.20		0.42	0.52	0.59	0.64	0.72	0.77	0.81	0.87	0.90	
0.00	0.00	0.00	0.39	0.49	0.56	0.61	0.69	0.74	0.77	0.82	0.85	
Rating:100W 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	1.01	0.83	0.71	0.62	0.49	0.41	0.35	0.27	0.22	
	0.30		0.84	0.71	0.62	0.55	0.45	0.38	0.32	0.26	0.21	
	0.20		0.72	0.62	0.55	0.49	0.41	0.35	0.30	0.24	0.20	
0.50	0.50	0.20	0.97	0.80	0.68	0.59	0.47	0.42	0.33	0.26	0.21	
	0.30		0.82	0.69	0.60	0.53	0.43	0.36	0.31	0.24	0.20	
	0.20		0.71	0.61	0.54	0.48	0.40	0.34	0.29	0.23	0.19	
0.30	0.50	0.20	0.94	0.77	0.65	0.57	0.45	0.37	0.32	0.25	0.20	
	0.30		0.80	0.68	0.58	0.52	0.42	0.35	0.30	0.24	0.19	
	0.20		0.70	0.60	0.53	0.47	0.39	0.33	0.28	0.22	0.19	
0.00	0.00	0.00	0.60	0.51	0.44	0.39	0.31	0.26	0.22	0.18	0.14	
Rating:100W 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	0.17	0.18	0.19	0.19	0.20	0.21	0.21	0.22	0.22	
	0.30		0.10	0.11	0.13	0.14	0.15	0.17	0.17	0.19	0.20	
	0.20		0.05	0.07	0.08	0.09	0.11	0.13	0.14	0.16	0.17	
0.50	0.50	0.20	0.16	0.17	0.18	0.19	0.20	0.20	0.20	0.21	0.21	
	0.30		0.10	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.19	
	0.20		0.05	0.06	0.08	0.09	0.11	0.13	0.14	0.15	0.17	
0.30	0.50	0.20	0.16	0.17	0.18	0.18	0.19	0.19	0.20	0.20	0.20	
	0.30		0.09	0.11	0.12	0.13	0.15	0.16	0.16	0.17	0.18	
	0.20		0.05	0.06	0.08	0.09	0.11	0.12	0.13	0.15	0.16	
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:100W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												