

Report No.:

Test Time: 25.03.2020 22:21

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FL 58 L 105LED 46W 4000K 20-90 gr

Number of Lamps: 1

Luminous Width (mm): 75

Voltage: 229.1 V

Power: 45.30 W

Luminous Length (mm): 1500

Luminous Height (mm): 60

Current: 0.203 A

Power Factor: 0.976

Photometric Results

CIE Class: Direct

Measurement Flux: 6147.9 lm

Downward Ratio: 99%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 152.3, 141.6, 137.2, 138.5

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 79.7, 46.0, 59.1, 60.4

Luminaire Efficacy Rating (LER): 135.77

Max. Intensity: 3956.59 cd

S/MH(C0/C180): 1.07

Total Rated Lamp Lumens: 6147.9 lm

Efficiency: 100%

Upward Ratio: 1%

Central Intensity: 2200.14 cd

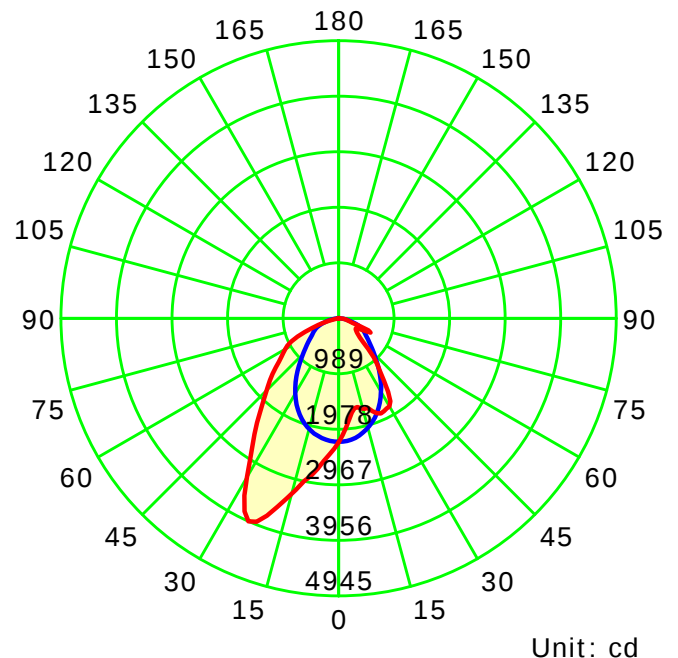
Pos of Max. Intensity: H270 V24

S/MH(C90/C270): 1.42

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

— 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

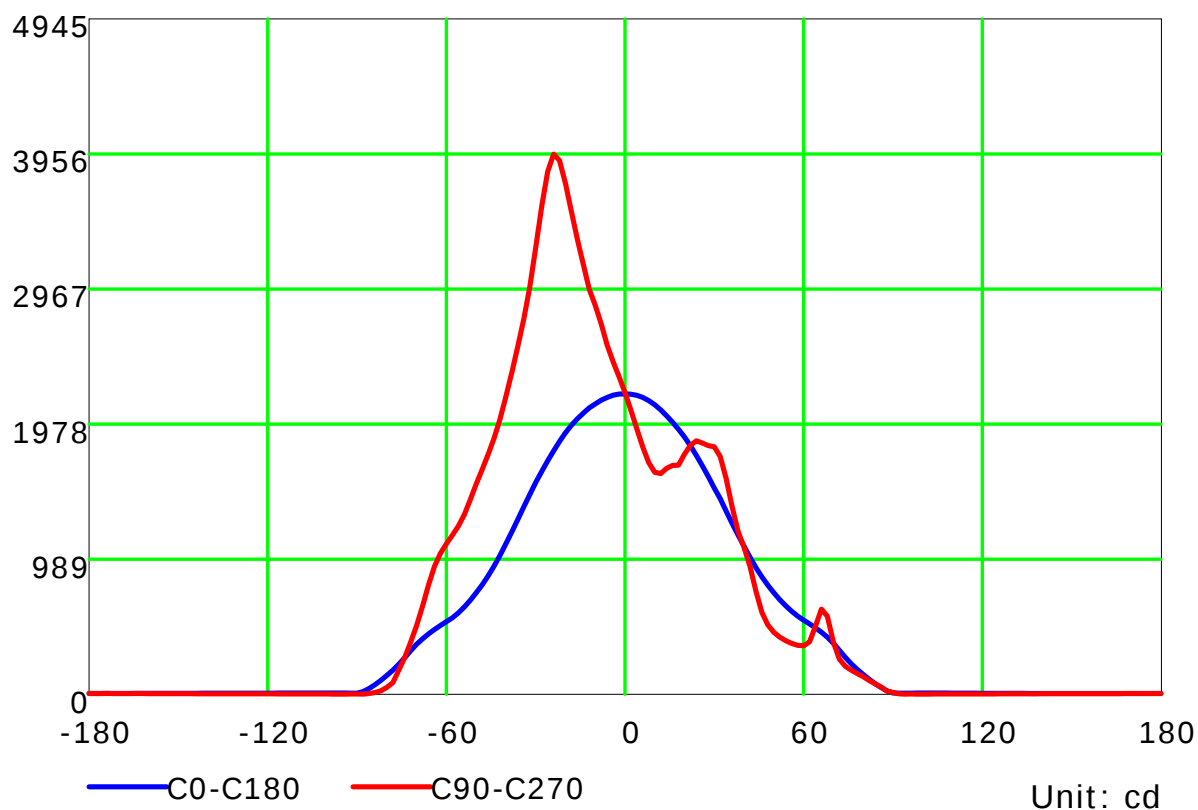
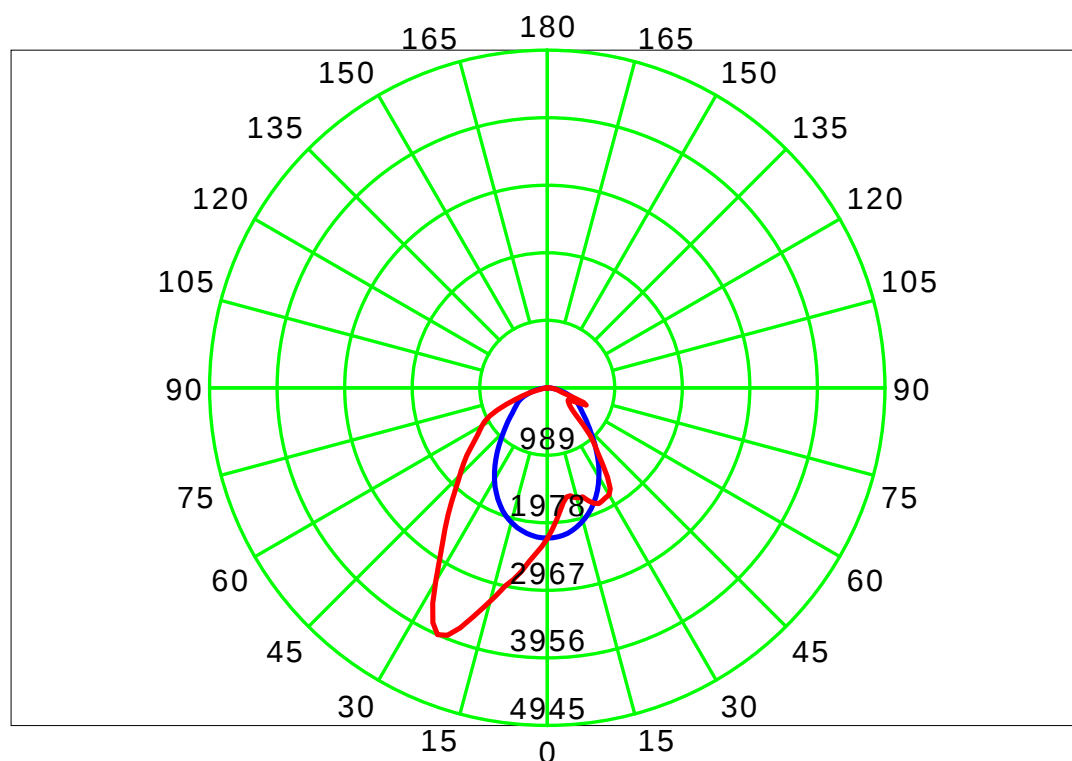
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve



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Test Lab:

Test Type: TYPE C

Temperature:

Operator:

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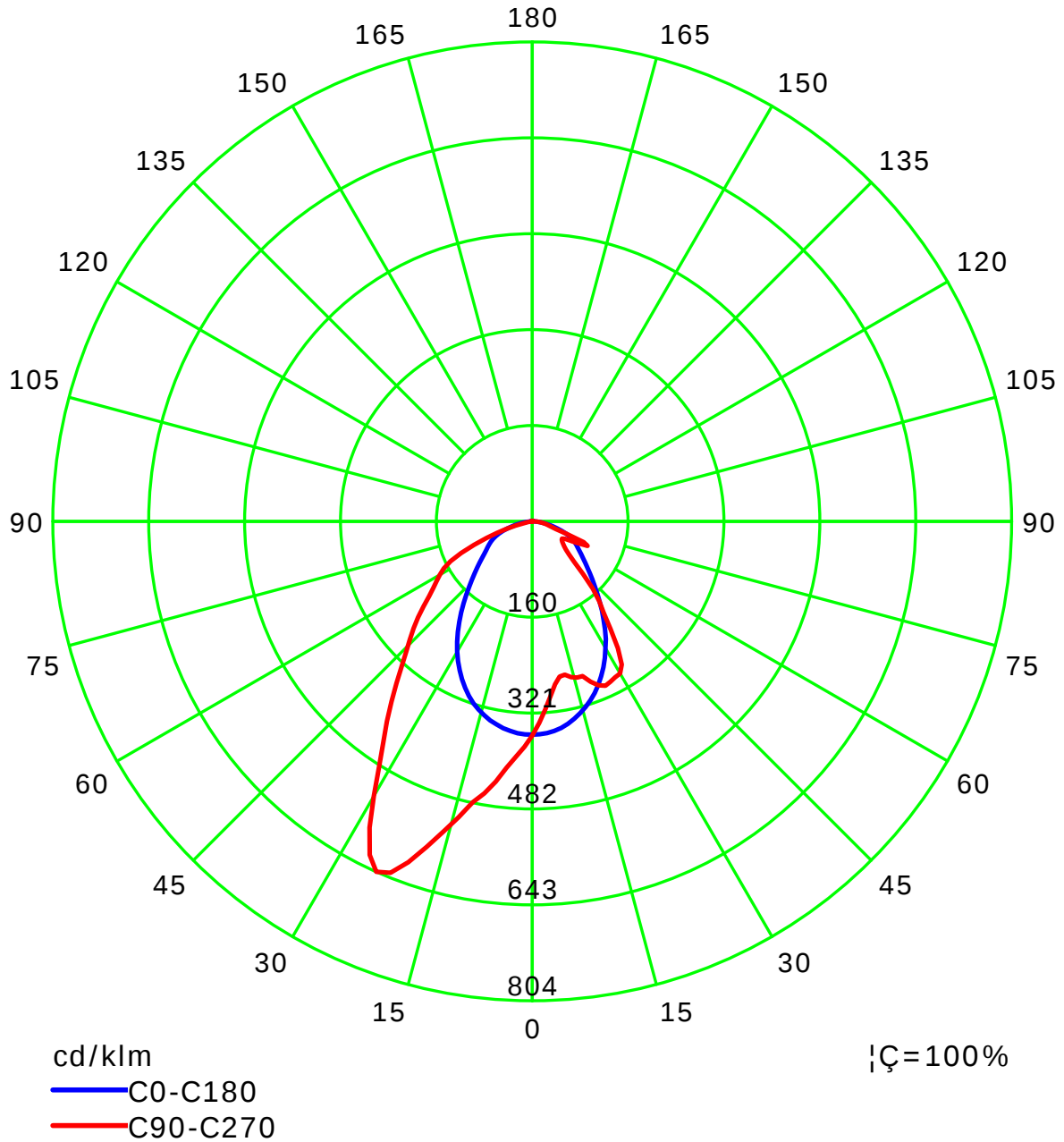
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve(cd / klm)



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Test Device: LSG-1800B

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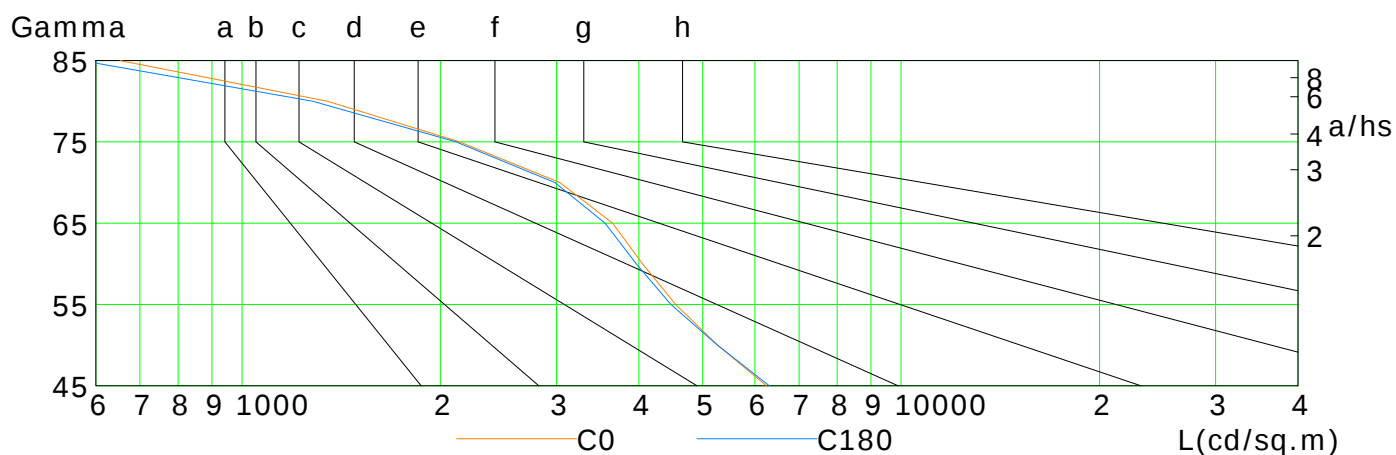
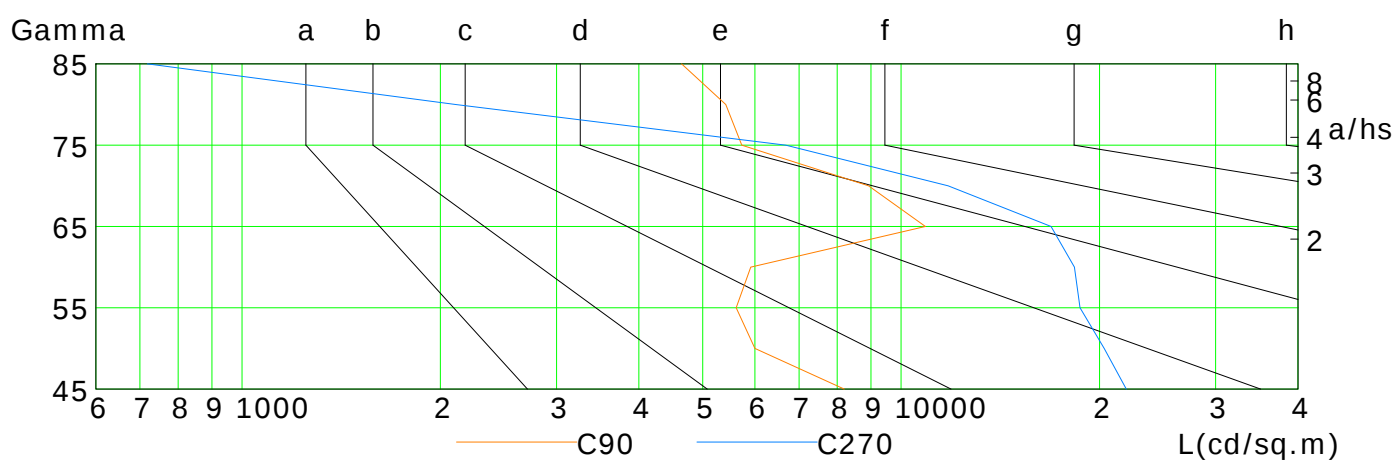
Humidity:

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	6245	5266	4550	4051	3650	3034	2138	1347	653
C90	8195	5999	5620	5914	10882	8925	5732	5418	4644
C180	6309	5264	4474	3965	3556	2982	2113	1280	571
C270	21962	20322	18678	18324	16878	11785	6683	2110	718

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Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

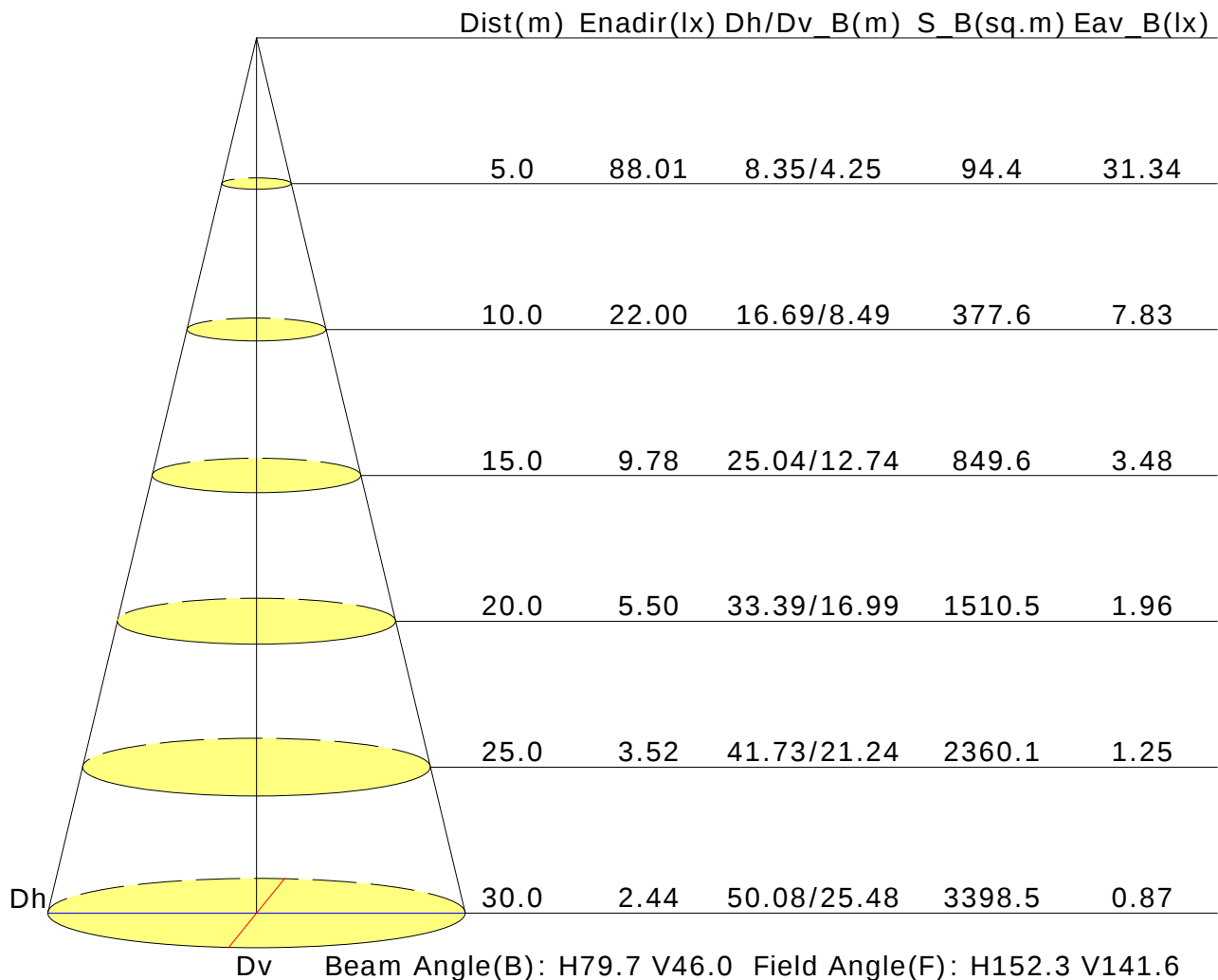
Test Device: LSG-1800B

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	19.4	20.7	19.7	21.0	21.2	20.9	22.2	21.2	22.5	22.7
3H	20.1	21.3	20.4	21.5	21.8	22.3	23.5	22.6	23.7	24.0
4H	20.3	21.4	20.6	21.7	22.0	22.5	23.6	22.8	23.9	24.2
6H	20.3	21.4	20.7	21.7	22.0	22.5	23.6	22.9	23.9	24.2
8H	20.4	21.4	20.7	21.7	22.0	22.5	23.5	22.9	23.9	24.2
12H	20.3	21.3	20.7	21.6	22.0	22.5	23.5	22.9	23.8	24.2
X=4H Y=2H	20.0	21.1	20.3	21.4	21.7	21.2	22.3	21.5	22.6	22.9
3H	20.8	21.7	21.2	22.1	22.4	22.7	23.6	23.1	24.0	24.3
4H	21.1	21.9	21.5	22.3	22.7	23.0	23.8	23.4	24.2	24.6
6H	21.2	22.0	21.7	22.4	22.8	23.1	23.8	23.5	24.2	24.6
8H	21.3	22.0	21.7	22.4	22.8	23.1	23.8	23.5	24.2	24.6
12H	21.3	21.9	21.7	22.3	22.8	23.1	23.7	23.5	24.1	24.6
X=8H Y=4H	21.3	22.0	21.7	22.4	22.8	23.0	23.7	23.5	24.1	24.6
6H	21.5	22.1	22.0	22.5	23.0	23.2	23.7	23.6	24.2	24.6
8H	21.6	22.1	22.1	22.6	23.1	23.2	23.7	23.7	24.1	24.6
12H	21.6	22.1	22.1	22.5	23.1	23.2	23.6	23.7	24.1	24.6
X=12H Y=4H	21.3	21.9	21.7	22.3	22.8	23.0	23.6	23.5	24.1	24.5
6H	21.5	22.0	22.0	22.5	23.0	23.1	23.6	23.6	24.1	24.6
8H	21.6	22.0	22.1	22.5	23.0	23.2	23.6	23.7	24.1	24.6
Variations with the observer position at spacings:										
S=1.0H	+0.6/-0.7					+0.4/-0.5				
S=1.5H	+1.0/-1.4					+1.0/-1.3				
S=2.0H	+1.3/-1.7					+1.3/-1.8				

Calculate in accordance with CIE Pub.117. The table is revised with 6148lm ($8\log(F/F_0) = 6.3$).

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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	0.61	0.71	0.78	0.83	0.90	0.95	0.98	1.02	1.05	
	0.30		0.54	0.64	0.72	0.77	0.85	0.90	0.94	0.98	1.02	
	0.20		0.49	0.59	0.66	0.72	0.80	0.86	0.90	0.95	0.99	
0.50	0.50	0.20	0.60	0.69	0.76	0.81	0.87	0.91	0.94	0.98	1.01	
	0.30		0.53	0.63	0.70	0.75	0.82	0.87	0.91	0.95	0.98	
	0.20		0.48	0.58	0.66	0.71	0.78	0.84	0.87	0.92	0.96	
0.30	0.50	0.20	0.58	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	0.55	0.62	0.67	0.73	0.78	0.81	0.85	0.88	
Rating:45W 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	0.64	0.55	0.44	0.36	0.31	0.24	0.19	
	0.30		0.77	0.65	0.56	0.49	0.40	0.33	0.29	0.22	0.18	
	0.20		0.66	0.56	0.49	0.44	0.36	0.31	0.27	0.21	0.18	
0.50	0.50	0.20	0.89	0.72	0.61	0.53	0.42	0.38	0.29	0.22	0.18	
	0.30		0.75	0.63	0.54	0.47	0.38	0.32	0.27	0.21	0.18	
	0.20		0.65	0.55	0.48	0.43	0.35	0.30	0.26	0.20	0.17	
0.30	0.50	0.20	0.86	0.69	0.58	0.50	0.40	0.33	0.28	0.21	0.17	
	0.30		0.74	0.61	0.52	0.46	0.37	0.31	0.26	0.20	0.17	
	0.20		0.64	0.54	0.47	0.42	0.34	0.29	0.25	0.19	0.16	
0.00	0.00	0.00	0.54	0.44	0.38	0.33	0.26	0.22	0.19	0.14	0.12	
Rating:45W 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	0.18	0.18	0.19	0.20	0.21	0.21	0.22	0.22	
	0.30		0.10	0.12	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	0.16	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	0.19	0.19	0.19	0.20	0.20	
	0.30		0.10	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:45W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												