

Report No.:

Test Time: 02.10.2020 10:19

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 55 48LED 0.3A 45W 4000K opal

Number of Lamps: 1

Luminous Width (mm): 55

Voltage: 221.2 V

Power: 47.55 W

Luminous Length (mm): 1245

Luminous Height (mm): 80

Current: 0.220 A

Power Factor: 0.975

Photometric Results

CIE Class: Direct

Measurement Flux: 4894 lm

Downward Ratio: 99%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 160.9, 164.7, 163.1, 163.1

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 114.7, 115.9, 115.2, 115.2

Luminaire Efficacy Rating (LER): 102.97

Max. Intensity: 1638.2 cd

S/MH(C0/C180): 1.27

Total Rated Lamp Lumens: 4894.0 lm

Efficiency: 100%

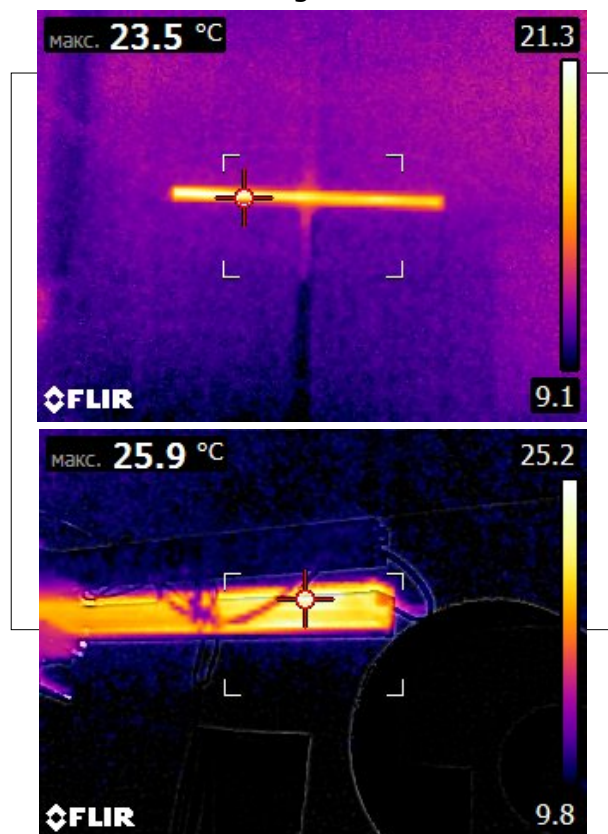
Upward Ratio: 1%

Central Intensity: 1634.75 cd

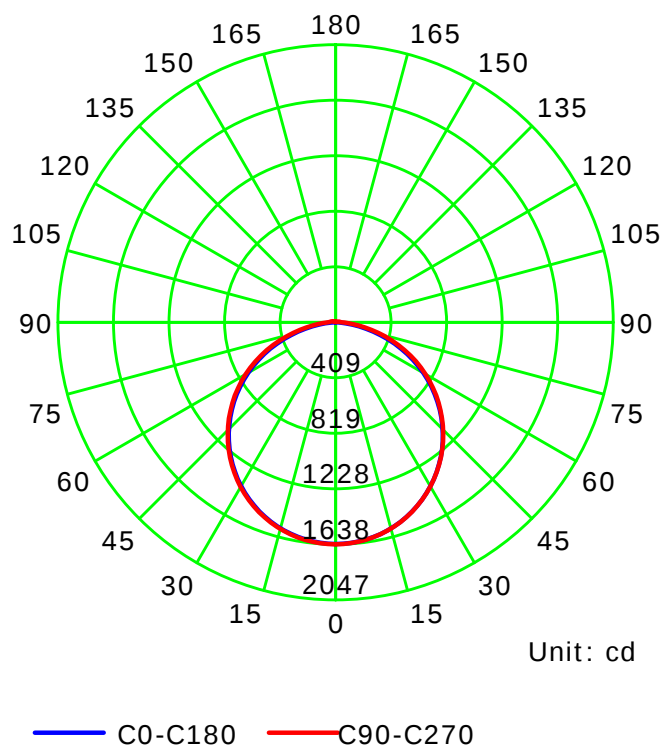
Pos of Max. Intensity: H157.5 V0

S/MH(C90/C270): 1.27

Termogramma



Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

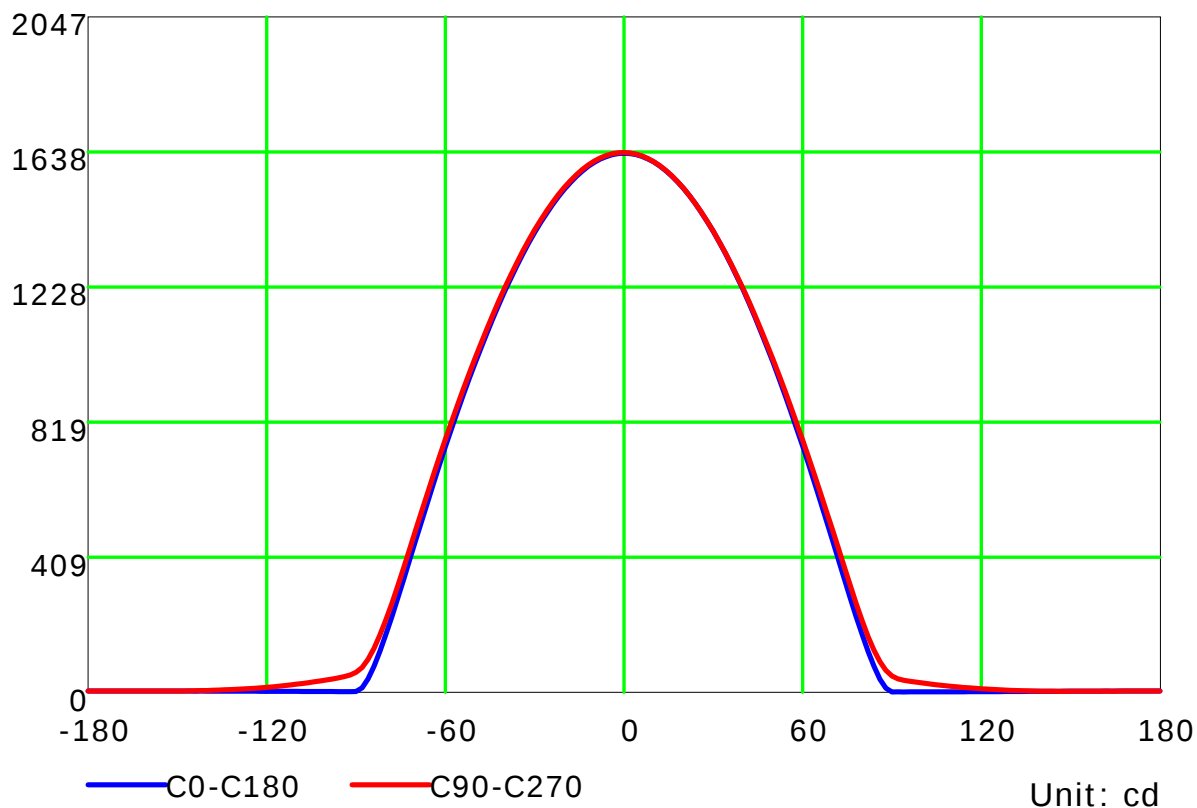
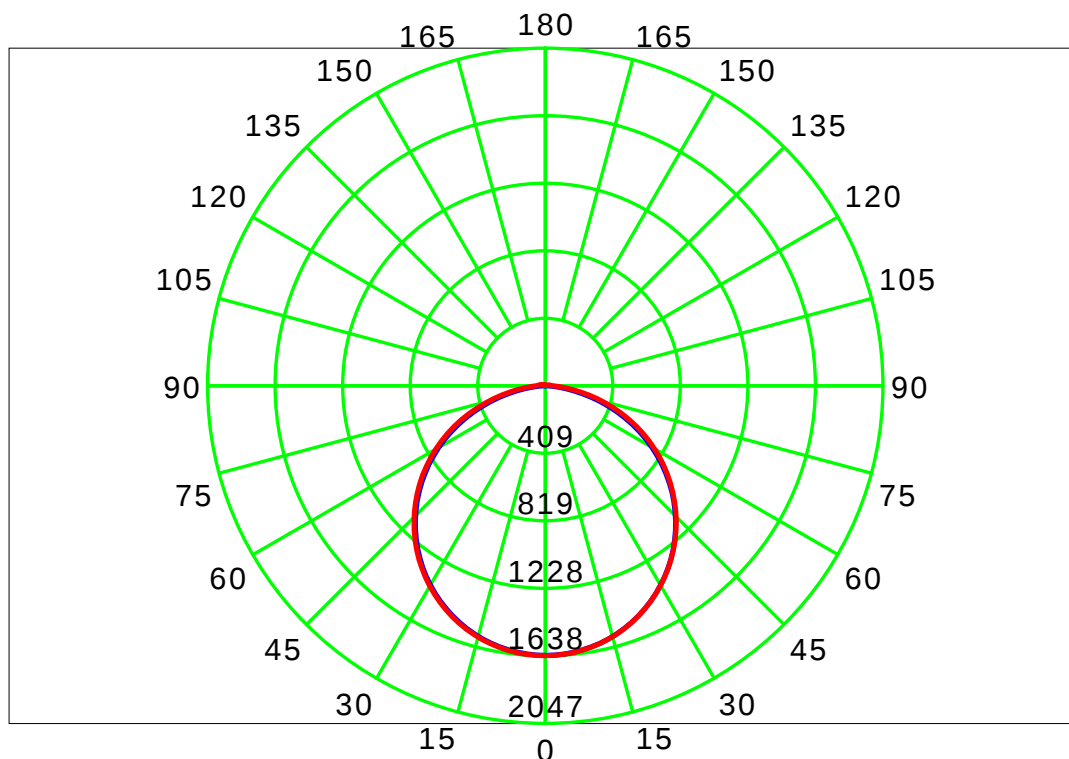
Test Device: LSG-1800B

Distance: 12.682 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 (°):0.0-180.0:2.0

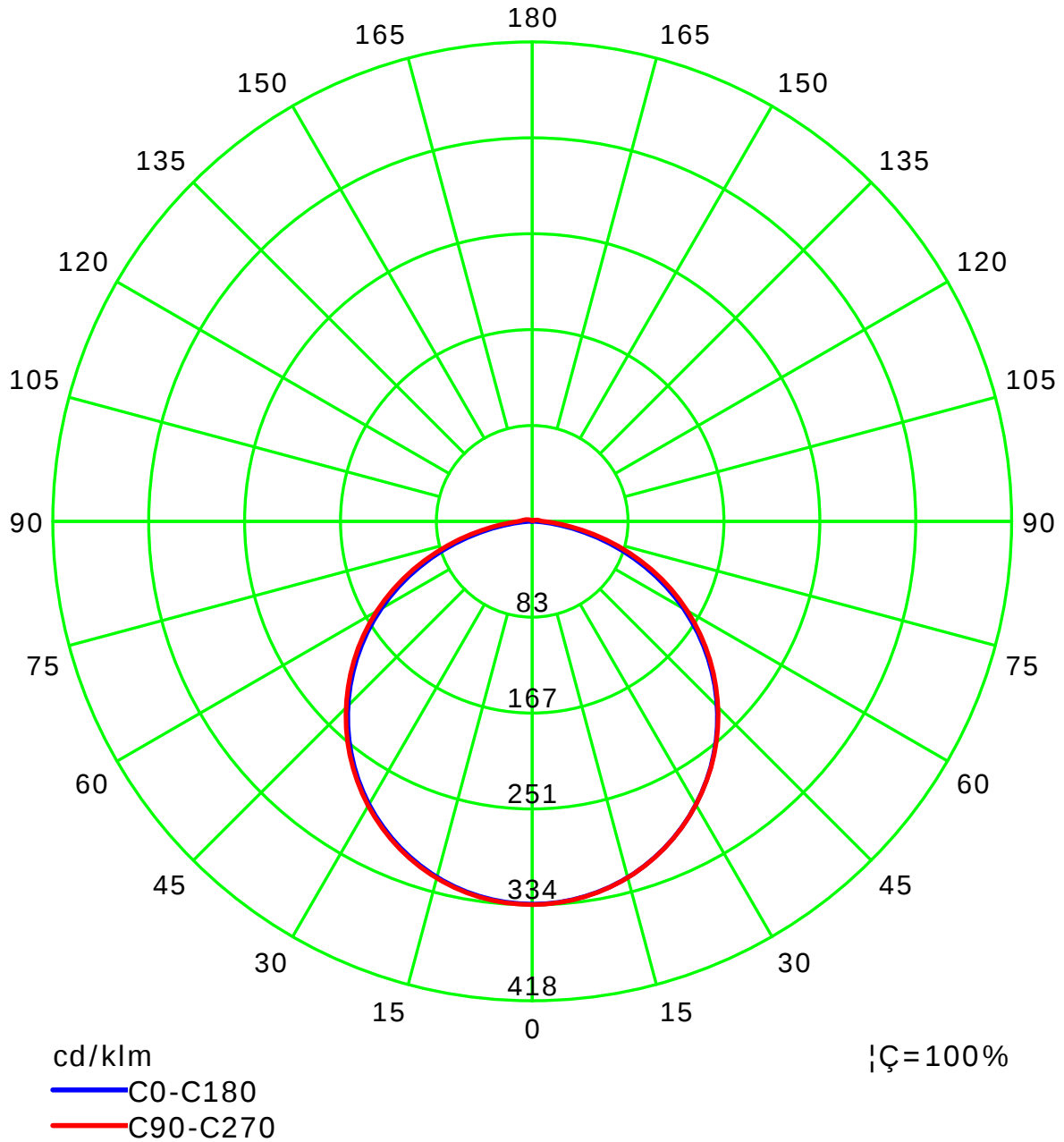
Test Device: LSG-1800B

Distance: 12.682 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve(cd / klm)



C Plane (°):0.0-360.0: 22.5

Test Lab:

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Temperature:

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Test Device: LSG-1800B

Distance: 12.682 m

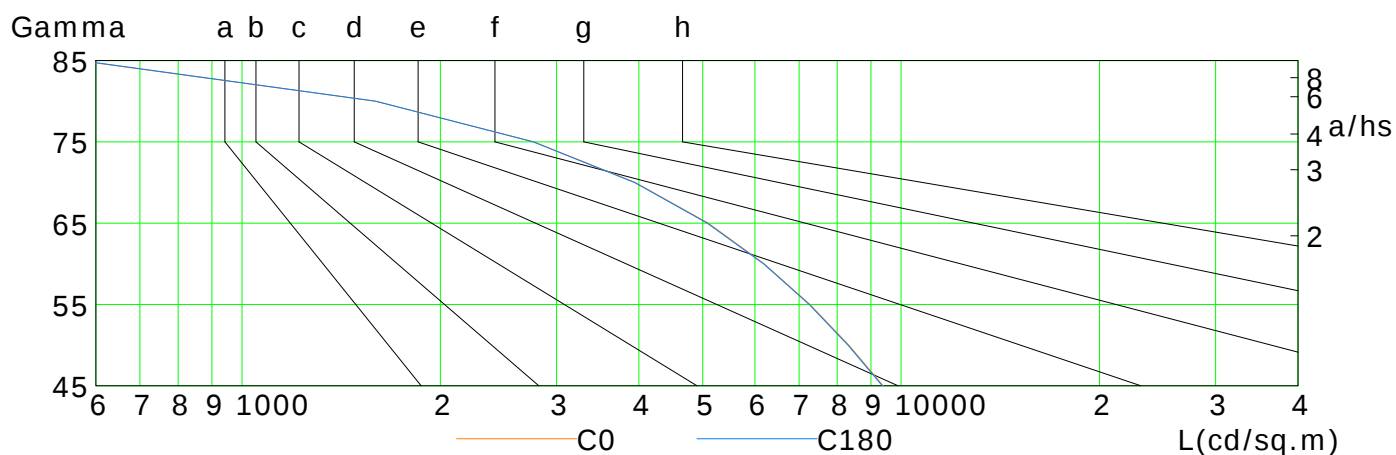
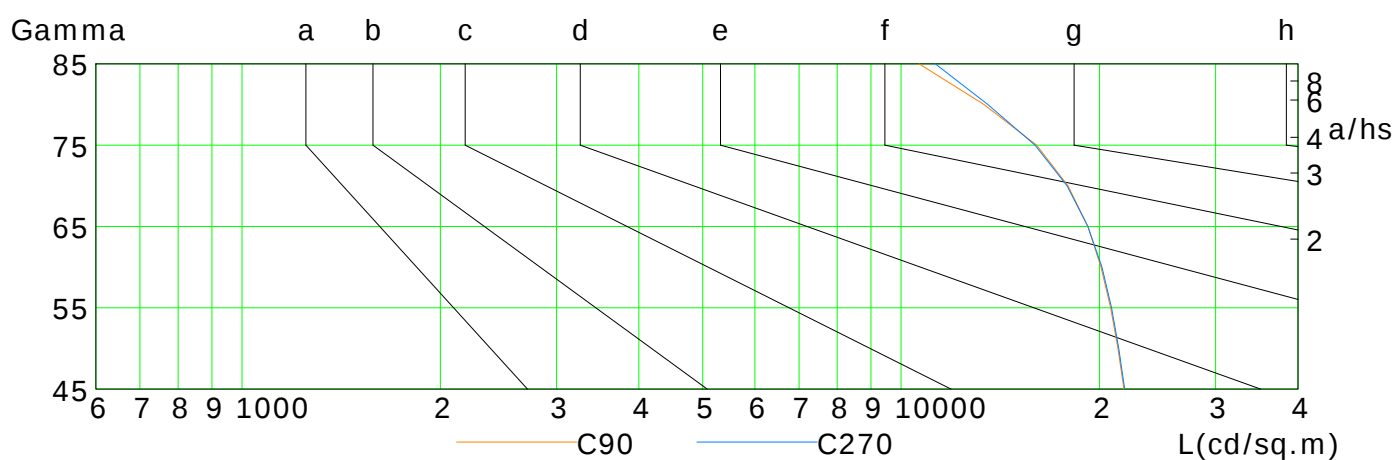
Humidity:

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	9392	8330	7272	6199	5098	3951	2772	1593	565
C90	21770	21329	20792	20105	19199	17915	16058	13353	10649
C180	9365	8304	7253	6185	5080	3939	2765	1596	570
C270	21833	21391	20858	20167	19203	17856	15963	13538	11267

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

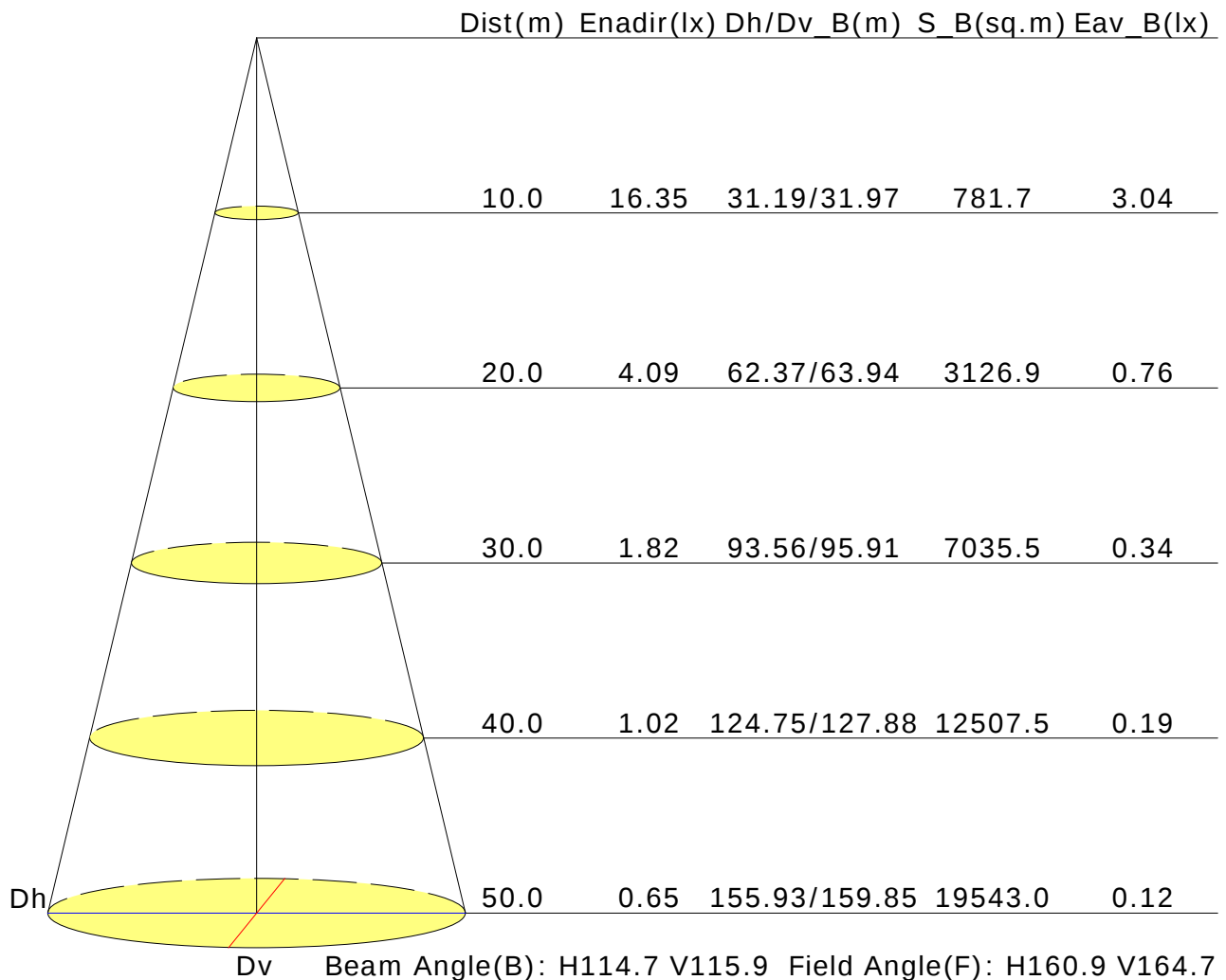
Test Device: LSG-1800B

Distance: 12.682 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	19.6	21.0	19.9	21.3	21.5	21.7	23.1	22.0	23.3	23.6
3H	20.7	21.9	21.0	22.2	22.5	23.3	24.5	23.6	24.8	25.1
4H	21.0	22.2	21.4	22.5	22.8	23.9	25.1	24.3	25.4	25.7
6H	21.1	22.2	21.5	22.6	22.9	24.3	25.5	24.7	25.8	26.1
8H	21.1	22.2	21.5	22.6	22.9	24.5	25.6	24.9	25.9	26.3
12H	21.1	22.2	21.5	22.5	22.9	24.6	25.6	25.0	26.0	26.4
X=4H Y=2H	20.3	21.5	20.7	21.8	22.1	22.0	23.2	22.3	23.5	23.8
3H	21.5	22.5	21.9	22.9	23.2	23.7	24.7	24.1	25.1	25.4
4H	21.9	22.8	22.3	23.2	23.6	24.4	25.3	24.8	25.7	26.1
6H	22.1	22.9	22.6	23.3	23.8	24.9	25.7	25.4	26.1	26.6
8H	22.1	22.9	22.6	23.3	23.8	25.1	25.9	25.6	26.3	26.7
12H	22.1	22.8	22.6	23.3	23.7	25.3	25.9	25.7	26.4	26.9
X=8H Y=4H	22.1	22.9	22.6	23.3	23.8	24.4	25.2	24.9	25.6	26.1
6H	22.4	23.0	22.9	23.5	24.0	25.1	25.7	25.5	26.1	26.6
8H	22.5	23.0	23.0	23.5	24.0	25.3	25.8	25.8	26.3	26.8
12H	22.5	23.0	23.0	23.5	24.0	25.5	25.9	26.0	26.4	27.0
X=12H Y=4H	22.2	22.8	22.6	23.3	23.7	24.4	25.1	24.9	25.5	26.0
6H	22.5	23.0	23.0	23.5	24.0	25.1	25.6	25.6	26.1	26.6
8H	22.6	23.0	23.1	23.5	24.1	25.3	25.8	25.8	26.3	26.8
Variations with the observer position at spacings:										
S=1.0H	+0.2/-0.3					+0.2/-0.2				
S=1.5H	+0.4/-0.7					+0.5/-0.6				
S=2.0H	+0.7/-1.4					+1.2/-1.3				

Calculate in accordance with CIE Pub.117. The table is revised with 4894lm ($8\log(F/F_0) = 5.5$).

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Test Device: LSG-1800B

Distance: 12.682 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	0.55	0.66	0.73	0.79	0.86	0.91	0.95	0.99	1.02	
	0.30		0.47	0.58	0.66	0.71	0.80	0.85	0.90	0.95	0.99	
	0.20		0.42	0.52	0.60	0.66	0.74	0.81	0.85	0.91	0.95	
0.50	0.50	0.20	0.54	0.63	0.70	0.76	0.83	0.87	0.91	0.95	0.98	
	0.30		0.46	0.57	0.64	0.69	0.77	0.83	0.86	0.92	0.95	
	0.20		0.41	0.51	0.59	0.64	0.73	0.78	0.83	0.89	0.92	
0.30	0.50	0.20	0.52	0.61	0.68	0.73	0.80	0.84	0.87	0.91	0.94	
	0.30		0.46	0.55	0.62	0.68	0.75	0.80	0.84	0.88	0.91	
	0.20		0.41	0.51	0.58	0.63	0.71	0.76	0.80	0.86	0.89	
0.00	0.00	0.00	0.38	0.48	0.55	0.60	0.67	0.73	0.76	0.81	0.84	
Rating:48W 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	0.84	0.71	0.62	0.50	0.41	0.35	0.28	0.23	
	0.30		0.84	0.72	0.62	0.55	0.45	0.38	0.33	0.26	0.21	
	0.20		0.72	0.63	0.55	0.49	0.41	0.35	0.31	0.24	0.20	
0.50	0.50	0.20	0.97	0.80	0.68	0.60	0.48	0.43	0.34	0.26	0.21	
	0.30		0.82	0.70	0.60	0.53	0.43	0.37	0.32	0.25	0.20	
	0.20		0.72	0.62	0.54	0.48	0.40	0.34	0.30	0.24	0.20	
0.30	0.50	0.20	0.94	0.77	0.66	0.57	0.45	0.38	0.32	0.25	0.20	
	0.30		0.81	0.68	0.59	0.52	0.42	0.35	0.30	0.24	0.20	
	0.20		0.71	0.61	0.53	0.47	0.39	0.33	0.29	0.23	0.19	
0.00	0.00	0.00	0.60	0.51	0.44	0.39	0.31	0.26	0.23	0.18	0.15	
Rating:48W 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	0.18	0.19	0.20	0.20	0.21	0.22	0.22	0.23	0.23	
	0.30		0.11	0.12	0.14	0.15	0.16	0.17	0.18	0.20	0.20	
	0.20		0.06	0.07	0.09	0.10	0.12	0.14	0.15	0.17	0.18	
0.50	0.50	0.20	0.17	0.18	0.19	0.20	0.21	0.21	0.21	0.22	0.22	
	0.30		0.11	0.12	0.13	0.14	0.16	0.17	0.18	0.19	0.20	
	0.20		0.06	0.07	0.09	0.10	0.12	0.13	0.15	0.16	0.17	
0.30	0.50	0.20	0.17	0.18	0.18	0.19	0.20	0.20	0.21	0.21	0.21	
	0.30		0.10	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	
	0.20		0.06	0.07	0.09	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:48W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												