

Report No.:

Test Time: 30.04.2020 13:40

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FL 58 L 200LED 62W Refond 3N 4000K 96x55 rp

Number of Lamps: 1

Luminous Length (mm): 1500

Luminous Width (mm): 75

Luminous Height (mm): 60

Voltage: 228.6 V

Current: 0.275 A

Power: 62.55 W

Power Factor: 0.991

Photometric Results

CIE Class: Direct

Total Rated Lamp Lumens: 9575.9 lm

Measurement Flux: 9575.9 lm

Efficiency: 100%

Downward Ratio: 99%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 136.0, 99.8, 115.8, 116.0

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 94.2, 55.1, 63.4, 63.7

Luminaire Efficacy Rating (LER): 153.14

Central Intensity: 6477.36 cd

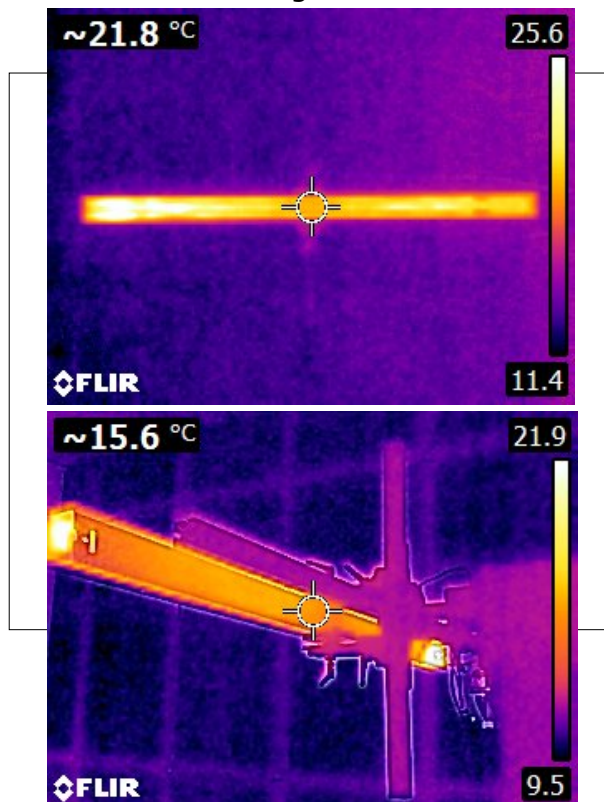
Max. Intensity: 6556.28 cd

Pos of Max. Intensity: H112.5 V0

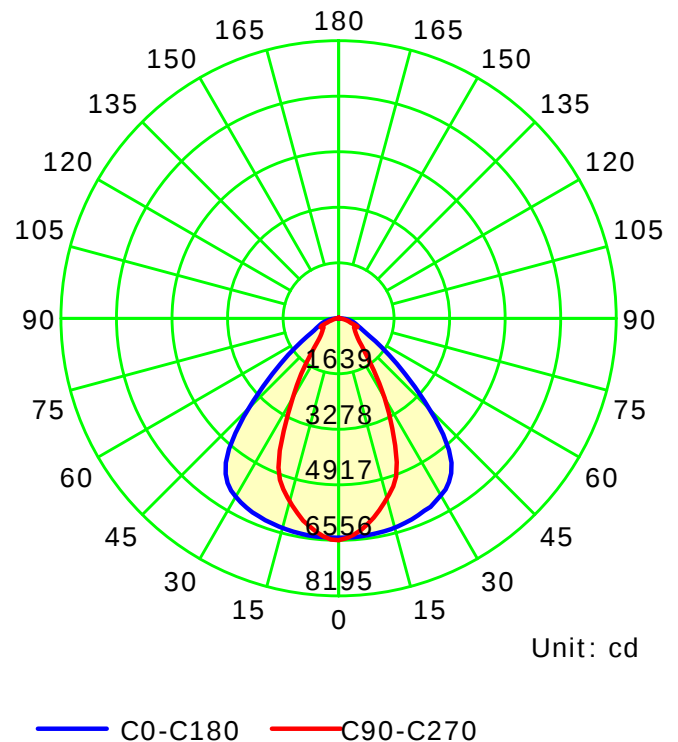
S/MH(C0/C180): 1.38

S/MH(C90/C270): 0.88

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

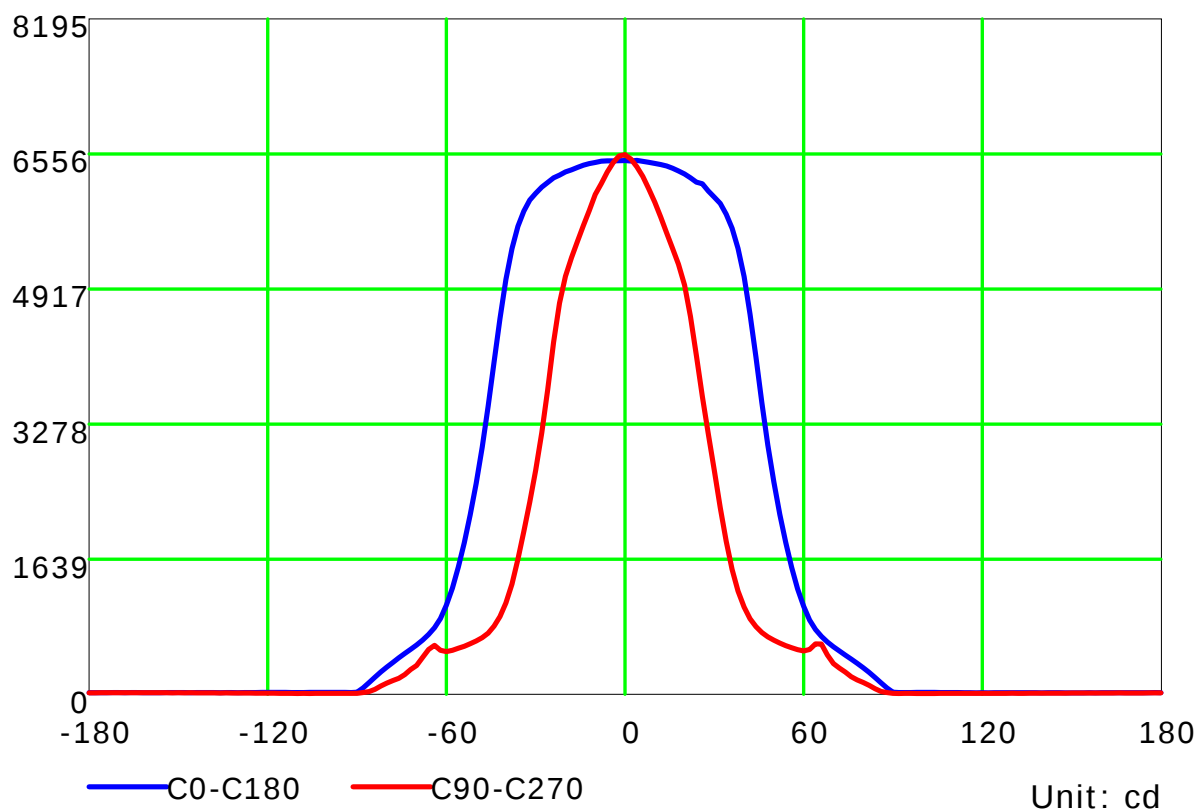
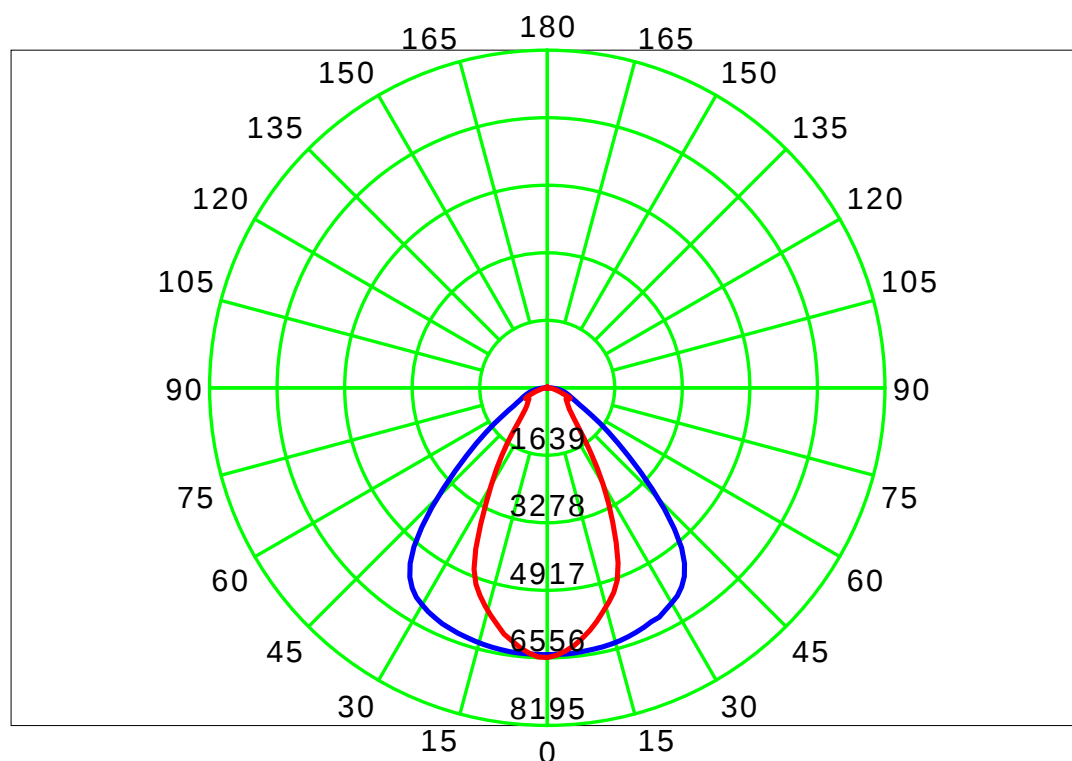
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve



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Test Lab:

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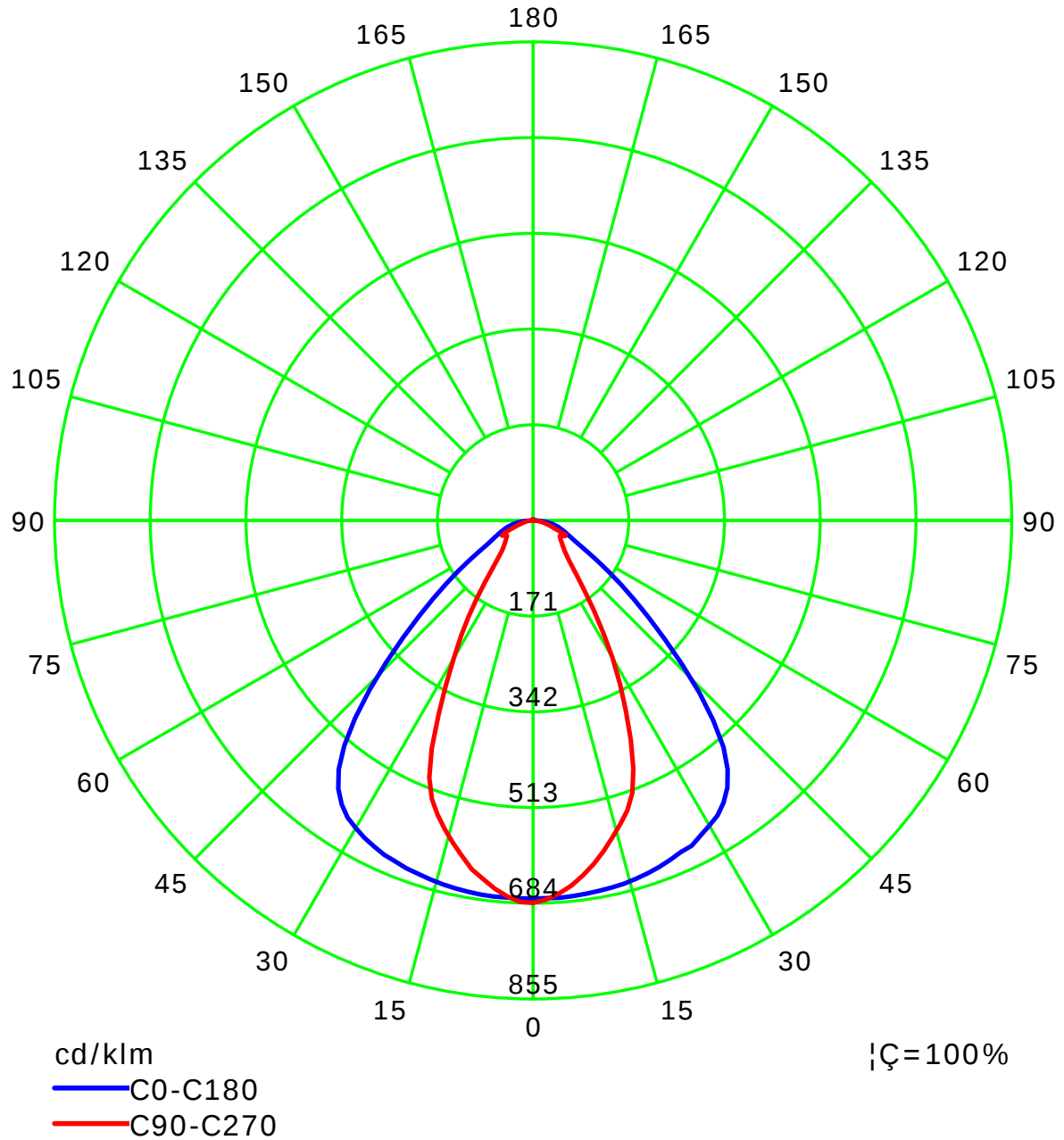
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve(cd / klm)



C Plane (°): 0.0-360.0: 22.5

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Distance: 12.677 m

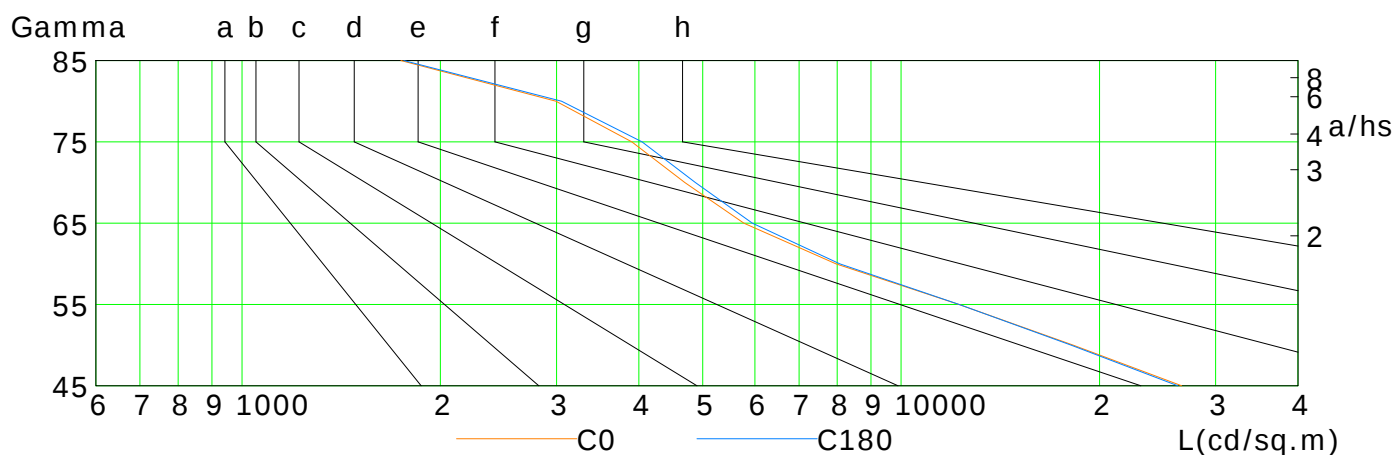
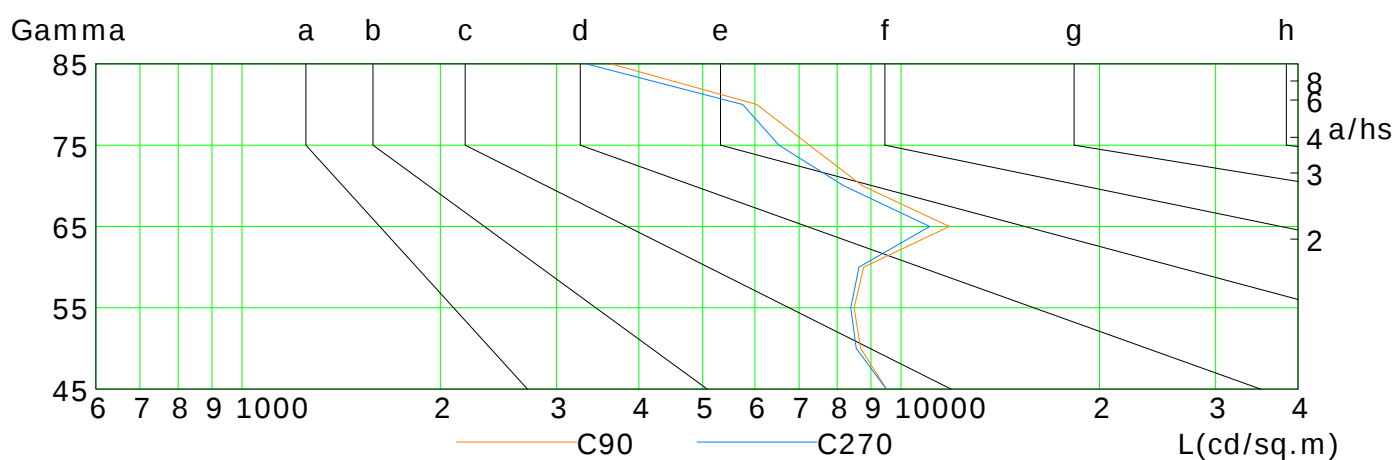
Humidity:

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	26645	18232	12242	7964	5774	4697	3904	2994	1742
C90	9502	8679	8486	8771	11838	8738	7258	6040	3629
C180	26292	18100	12248	8069	5946	4873	4045	3053	1760
C270	9493	8548	8386	8628	11050	8188	6523	5752	3329

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Test Type: TYPE C

Temperature:

Operator:

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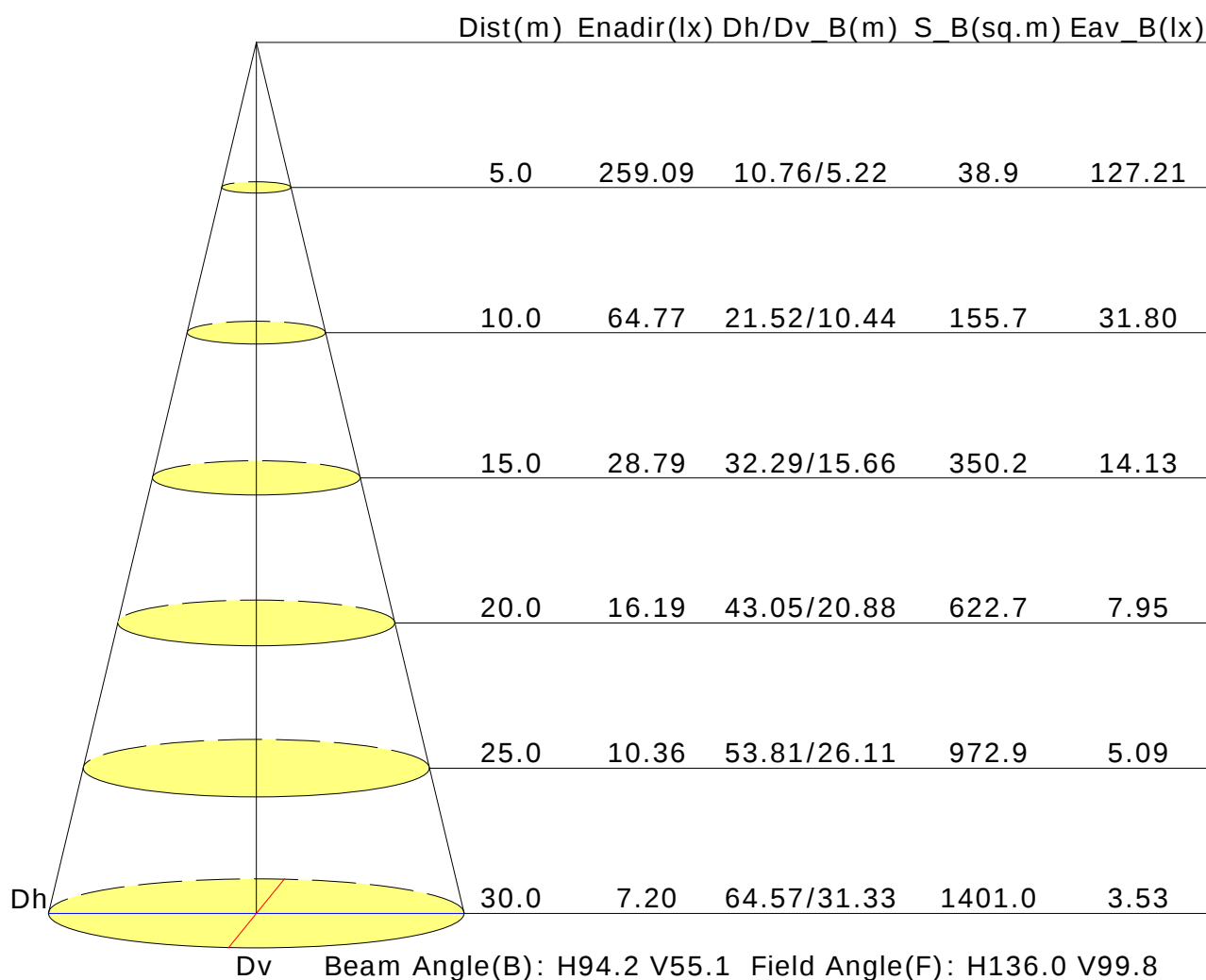
Test Device: LSG-1800B

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	20.3	21.4	20.6	21.6	21.9	16.7	17.9	17.0	18.1	18.4
3H	20.8	21.8	21.1	22.1	22.4	18.6	19.6	18.9	19.9	20.2
4H	21.1	22.0	21.4	22.3	22.6	19.1	20.0	19.4	20.3	20.6
6H	21.3	22.2	21.7	22.5	22.8	19.4	20.3	19.7	20.6	20.9
8H	21.4	22.2	21.7	22.5	22.9	19.5	20.3	19.8	20.7	21.0
12H	21.4	22.2	21.8	22.6	22.9	19.5	20.3	19.9	20.7	21.0
X=4H Y=2H	20.3	21.3	20.6	21.6	21.9	17.3	18.2	17.6	18.5	18.8
3H	21.0	21.8	21.4	22.2	22.5	19.2	20.1	19.6	20.4	20.8
4H	21.4	22.2	21.8	22.5	22.9	19.8	20.5	20.2	20.9	21.3
6H	21.8	22.4	22.2	22.8	23.2	20.1	20.8	20.6	21.2	21.6
8H	21.9	22.5	22.3	22.9	23.3	20.3	20.9	20.7	21.3	21.7
12H	22.0	22.5	22.4	22.9	23.4	20.3	20.9	20.8	21.3	21.8
X=8H Y=4H	21.5	22.1	21.9	22.5	23.0	20.0	20.5	20.4	21.0	21.4
6H	21.9	22.4	22.4	22.9	23.4	20.4	20.9	20.9	21.3	21.8
8H	22.1	22.5	22.6	23.0	23.5	20.6	21.0	21.1	21.5	22.0
12H	22.2	22.6	22.7	23.1	23.6	20.6	21.0	21.2	21.5	22.0
X=12H Y=4H	21.5	22.0	21.9	22.4	22.9	20.0	20.5	20.4	20.9	21.4
6H	21.9	22.4	22.4	22.8	23.3	20.4	20.9	20.9	21.3	21.8
8H	22.1	22.5	22.6	23.0	23.5	20.6	21.0	21.1	21.5	22.0
Variations with the observer position at spacings:										
S=1.0H	+1.0/-1.0					+0.4/-0.3				
S=1.5H	+2.6/-1.6					+1.4/-0.7				
S=2.0H	+4.1/-2.3					+1.8/-0.6				

Calculate in accordance with CIE Pub.117. The table is revised with 9576lm ($8\log(F/F_0) = 7.8$).

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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 = 1.00									
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	0.70	0.78	0.84	0.88	0.94	0.98	1.01	1.04	1.06	
	0.30		0.64	0.72	0.78	0.83	0.89	0.94	0.97	1.01	1.04	
	0.20		0.59	0.68	0.74	0.79	0.85	0.90	0.93	0.98	1.01	
0.50	0.50	0.20	0.68	0.76	0.82	0.86	0.91	0.95	0.97	1.00	1.02	
	0.30		0.63	0.71	0.77	0.81	0.87	0.91	0.94	0.97	1.00	
	0.20		0.59	0.67	0.73	0.77	0.83	0.88	0.91	0.95	0.98	
0.30	0.50	0.20	0.67	0.75	0.80	0.83	0.88	0.91	0.93	0.96	0.98	
	0.30		0.62	0.70	0.75	0.79	0.85	0.88	0.91	0.94	0.96	
	0.20		0.58	0.66	0.72	0.76	0.82	0.86	0.89	0.92	0.95	
0.00	0.00	0.00	0.56	0.64	0.69	0.73	0.78	0.82	0.84	0.88	0.90	
Rating:63W 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 = 1.00									
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	0.80	0.65	0.55	0.48	0.38	0.32	0.27	0.21	0.17	
	0.30		0.67	0.56	0.48	0.43	0.35	0.29	0.25	0.20	0.16	
	0.20		0.57	0.49	0.43	0.38	0.32	0.27	0.23	0.19	0.16	
0.50	0.50	0.20	0.76	0.62	0.53	0.46	0.36	0.34	0.25	0.20	0.16	
	0.30		0.65	0.54	0.46	0.41	0.33	0.28	0.24	0.19	0.15	
	0.20		0.56	0.48	0.42	0.37	0.30	0.26	0.22	0.18	0.15	
0.30	0.50	0.20	0.74	0.59	0.50	0.43	0.34	0.28	0.24	0.18	0.15	
	0.30		0.63	0.52	0.45	0.39	0.31	0.26	0.23	0.18	0.15	
	0.20		0.55	0.47	0.41	0.36	0.29	0.25	0.21	0.17	0.14	
0.00	0.00	0.00	0.43	0.35	0.30	0.26	0.21	0.18	0.15	0.12	0.10	
Rating:63W 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 = 1.00									
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	0.12	0.13	0.15	0.16	0.18	0.18	0.20	0.20	
	0.20		0.06	0.08	0.10	0.11	0.13	0.15	0.16	0.17	0.19	
0.50	0.50	0.20	0.15	0.17	0.18	0.18	0.19	0.20	0.20	0.21	0.21	
	0.30		0.10	0.12	0.13	0.14	0.16	0.17	0.18	0.19	0.20	
	0.20		0.06	0.08	0.10	0.11	0.13	0.14	0.15	0.17	0.18	
0.30	0.50	0.20	0.15	0.16	0.17	0.18	0.19	0.19	0.20	0.20	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	0.08	0.09	0.11	0.13	0.14	0.15	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:63W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												