

Report No.: 1

Test Time: 25.03.2020 19:40

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FL 58 L 60LED 32W 3000K 2x25-90 gr.

Luminous Length (mm): 1500

Luminous Height (mm): 60

Current: 0.145 A

Power Factor: 0.956

Luminous Width (mm): 75

Voltage: 229.2 V

Power: 31.98 W

Photometric Results

CIE Class: Direct

Measurement Flux: 4323.1 lm

Downward Ratio: 99%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 159.8, 130.4, 134.8, 134.9

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 104.1, 71.2, 86.1, 86.0

Luminaire Efficacy Rating (LER): 135.23

Max. Intensity: 2536.87 cd

S/MH(C0/C180): 1.21

Total Rated Lamp Lumens: 4323.1 lm

Efficiency: 100%

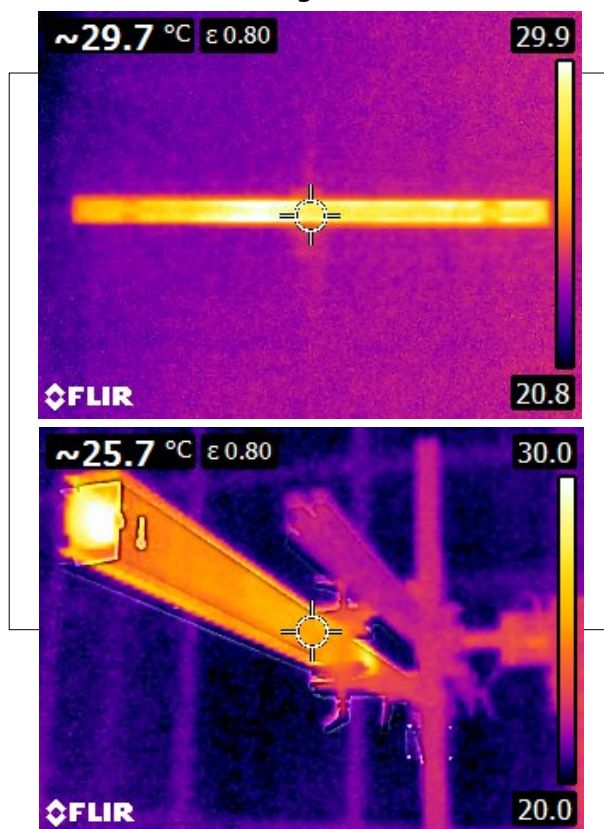
Upward Ratio: 1%

Central Intensity: 1313.53 cd

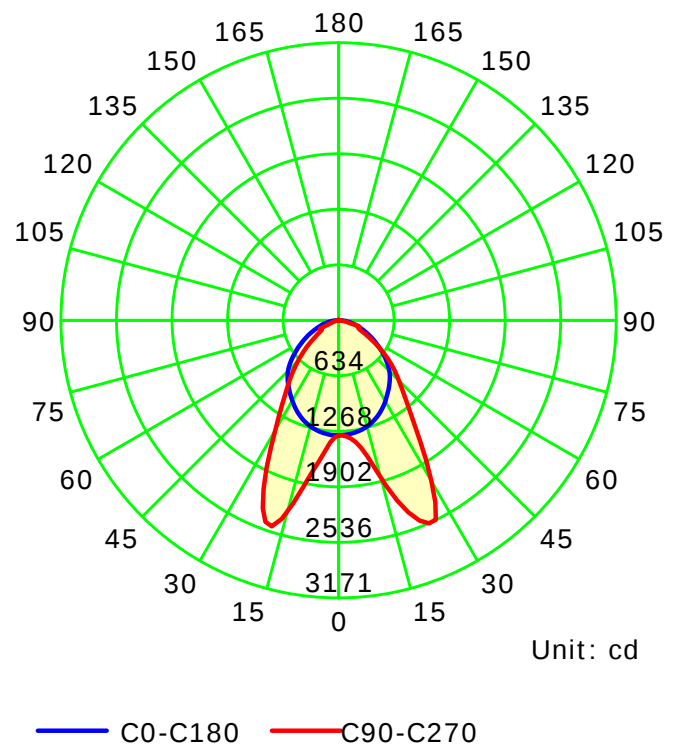
Pos of Max. Intensity: H90 V24

S/MH(C90/C270): 1.46

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

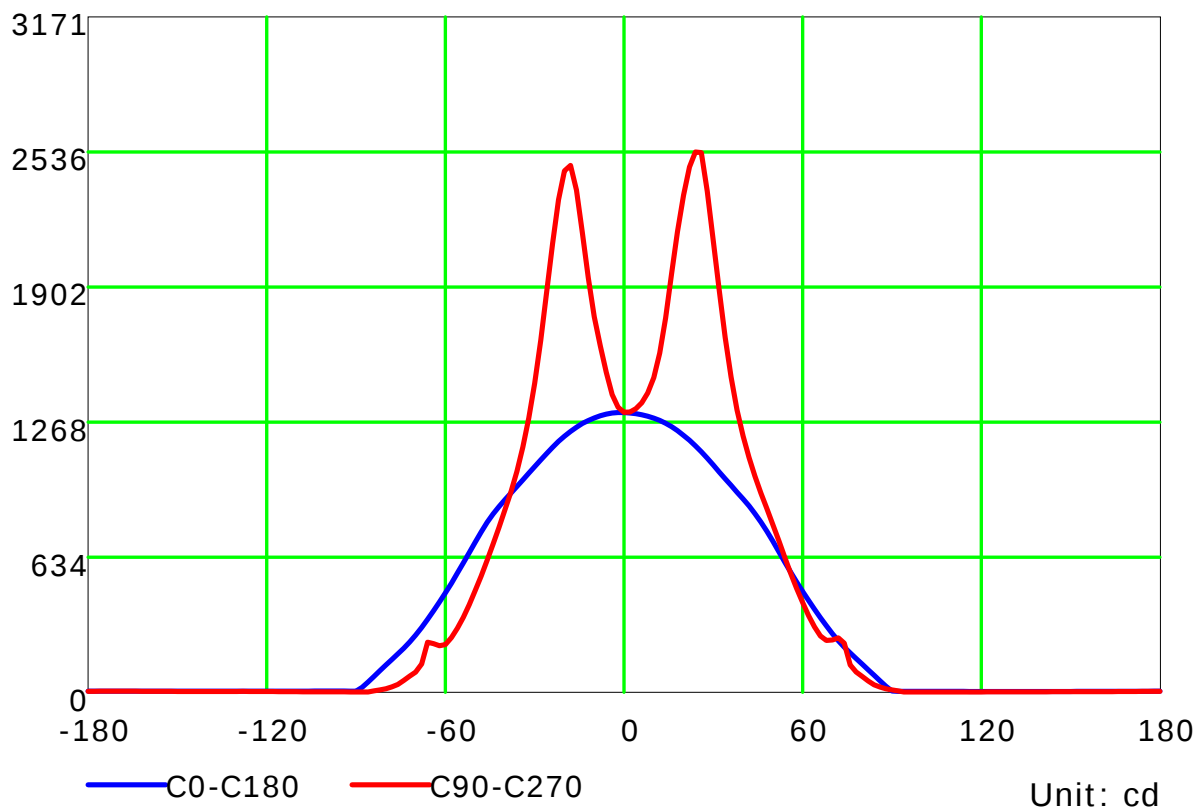
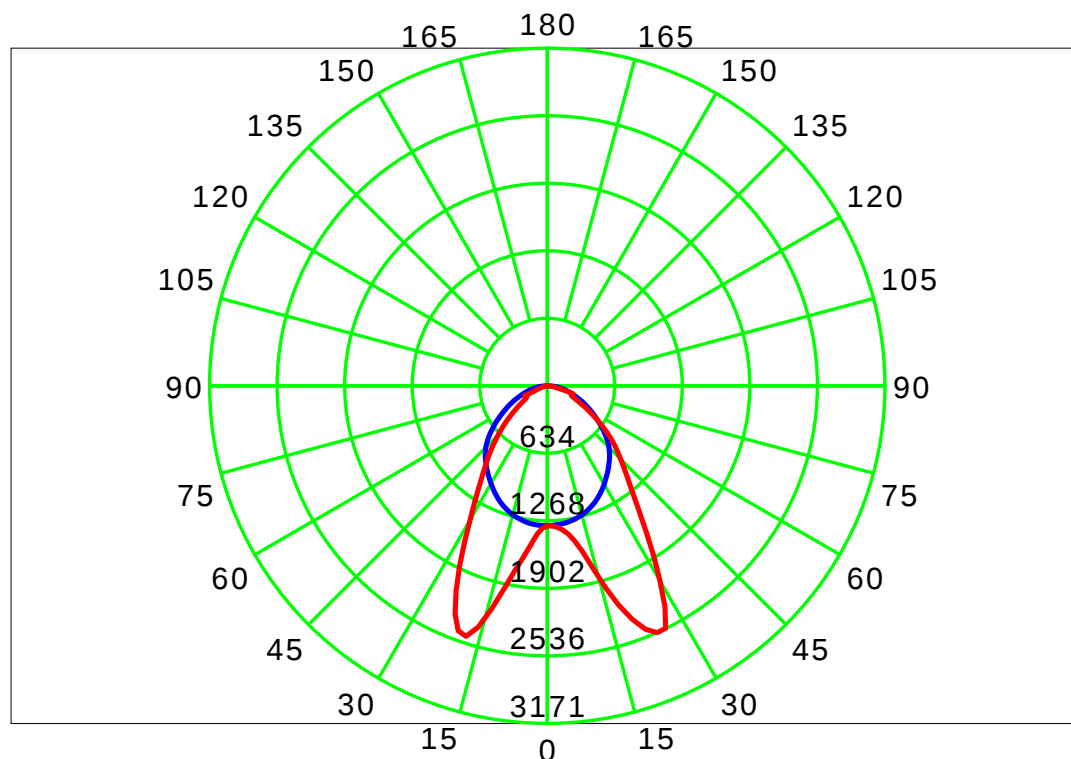
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve



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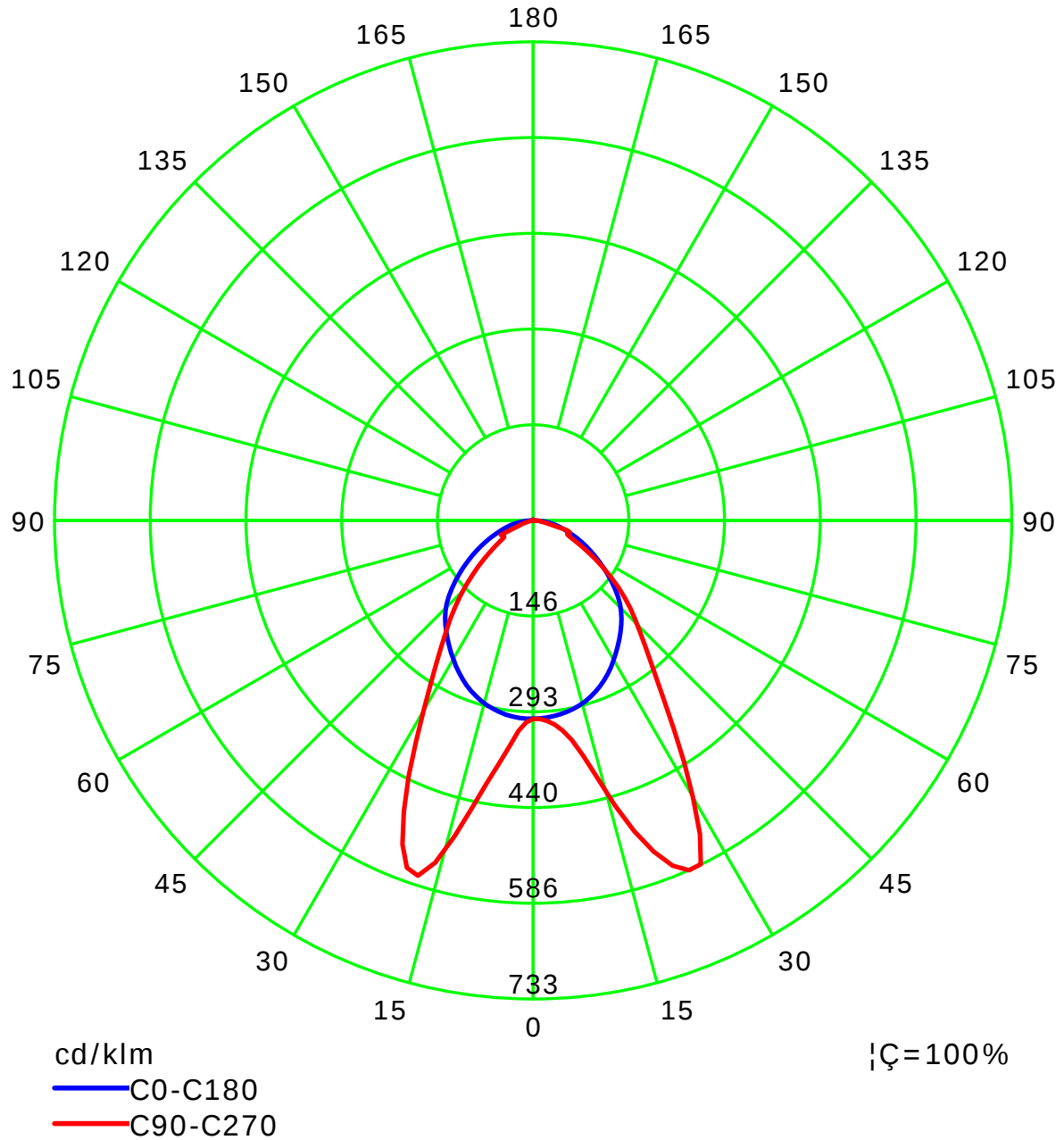
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Humidity:

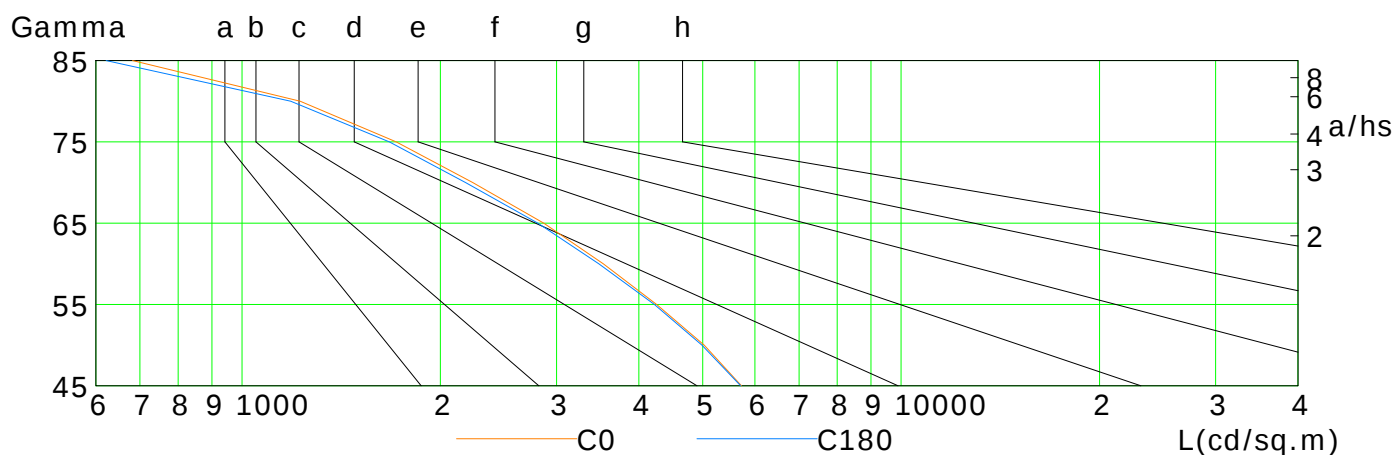
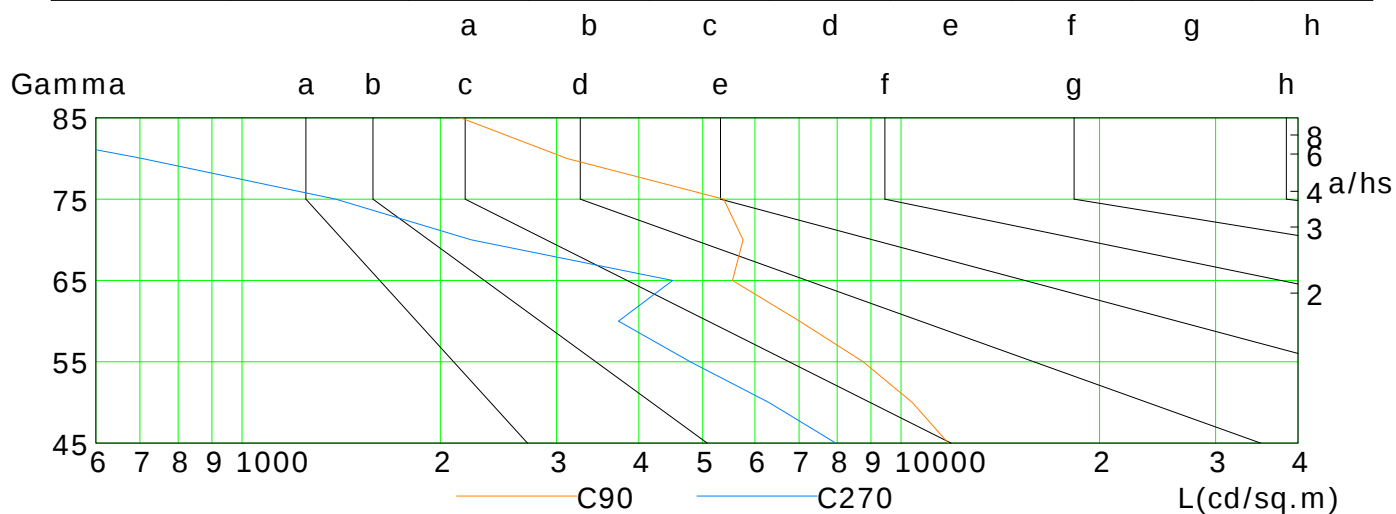
Inspector:

Luminous Intensity Distribution Curve(cd / klm)



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	5725	5025	4256	3533	2870	2239	1714	1225	682
C90	11789	10394	8755	7011	5547	5758	5380	3114	2146
C180	5710	4987	4222	3479	2810	2183	1673	1185	622
C270	7958	6299	4787	3725	4501	2227	1388	706	336

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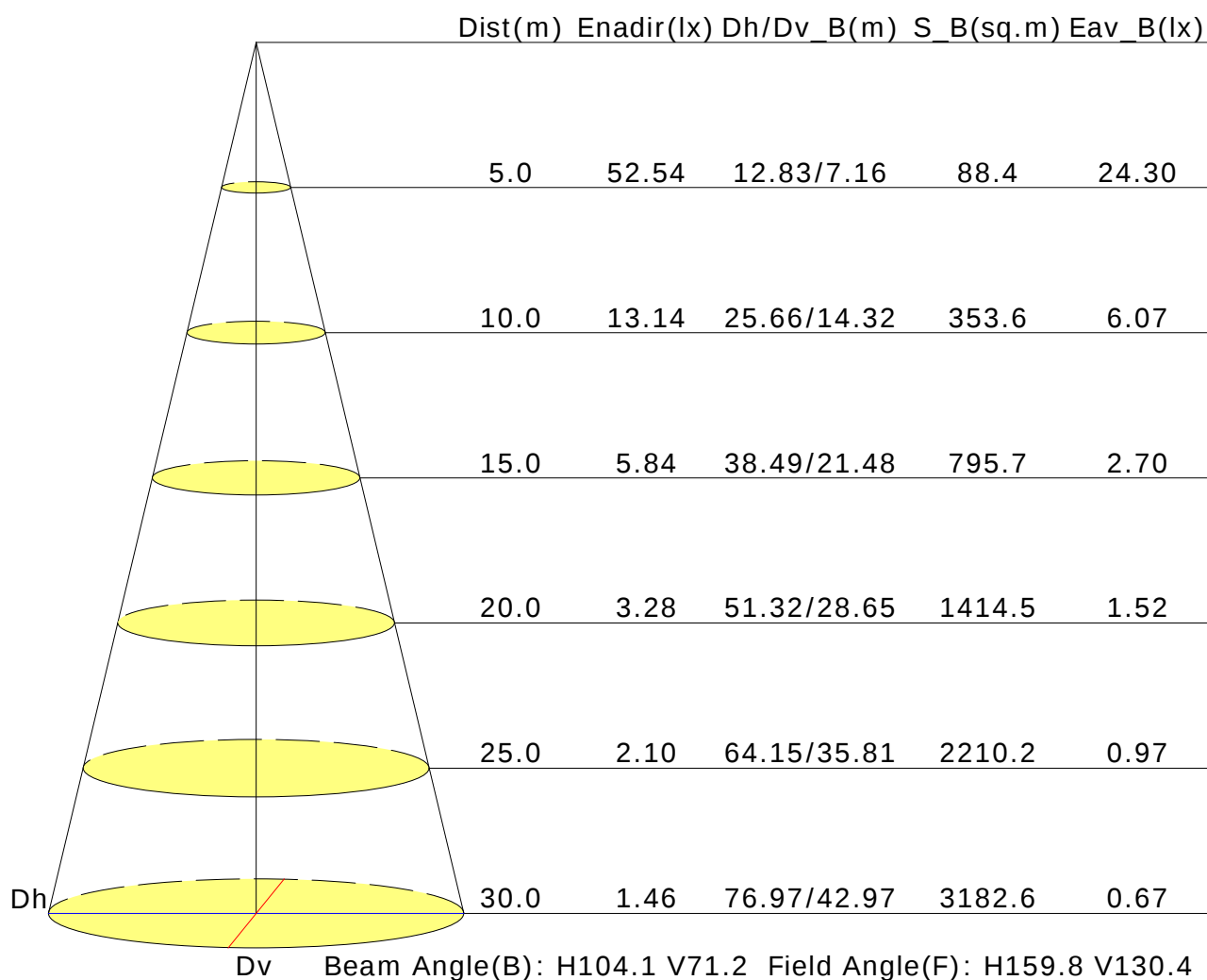
Test Device: LSG-1800B

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	18.6	19.8	18.9	20.1	20.3	17.7	19.0	18.0	19.2	19.5
3H	19.1	20.2	19.4	20.5	20.8	18.4	19.5	18.7	19.8	20.1
4H	19.3	20.4	19.6	20.6	21.0	18.8	19.8	19.1	20.1	20.4
6H	19.4	20.4	19.8	20.7	21.0	18.9	19.9	19.2	20.2	20.5
8H	19.4	20.4	19.8	20.7	21.1	18.9	19.8	19.2	20.1	20.5
12H	19.5	20.4	19.8	20.7	21.0	18.9	19.8	19.2	20.1	20.5
X=4H Y=2H	18.7	19.7	19.0	20.0	20.3	18.0	19.0	18.3	19.3	19.6
3H	19.4	20.3	19.8	20.6	21.0	18.8	19.7	19.2	20.0	20.4
4H	19.7	20.5	20.1	20.8	21.2	19.2	20.0	19.6	20.4	20.8
6H	19.9	20.6	20.3	21.0	21.4	19.4	20.1	19.8	20.5	20.9
8H	20.0	20.6	20.4	21.0	21.4	19.4	20.1	19.8	20.5	20.9
12H	20.0	20.6	20.4	21.0	21.5	19.4	20.0	19.9	20.4	20.9
X=8H Y=4H	19.7	20.4	20.2	20.8	21.2	19.3	20.0	19.8	20.4	20.8
6H	20.0	20.5	20.5	21.0	21.5	19.5	20.0	20.0	20.5	20.9
8H	20.1	20.6	20.6	21.1	21.6	19.5	20.0	20.0	20.5	21.0
12H	20.2	20.6	20.7	21.1	21.6	19.6	20.0	20.1	20.5	21.0
X=12H Y=4H	19.7	20.3	20.2	20.7	21.2	19.3	19.9	19.8	20.3	20.8
6H	20.0	20.5	20.5	20.9	21.4	19.5	20.0	20.0	20.4	20.9
8H	20.1	20.5	20.6	21.0	21.5	19.6	20.0	20.1	20.4	21.0
Variations with the observer position at spacings:										
S=1.0H	+0.9/-0.9					+0.8/-0.9				
S=1.5H	+1.6/-1.9					+1.1/-1.7				
S=2.0H	+2.8/-2.6					+1.6/-2.0				

Calculate in accordance with CIE Pub.117. The table is revised with 4323lm ($8\log(F/F_0) = 5.1$).

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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 = 1.50									
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	0.77	0.84	0.88	0.94	0.98	1.01	1.04	1.06	
	0.30		0.63	0.71	0.78	0.82	0.89	0.93	0.97	1.01	1.04	
	0.20		0.59	0.66	0.73	0.78	0.85	0.90	0.93	0.98	1.01	
0.50	0.50	0.20	0.68	0.75	0.81	0.85	0.91	0.94	0.97	1.00	1.02	
	0.30		0.62	0.70	0.76	0.81	0.87	0.91	0.94	0.97	1.00	
	0.20		0.58	0.66	0.72	0.77	0.83	0.88	0.91	0.95	0.98	
0.30	0.50	0.20	0.67	0.73	0.79	0.83	0.88	0.91	0.94	0.96	0.98	
	0.30		0.62	0.69	0.75	0.79	0.85	0.88	0.91	0.94	0.97	
	0.20		0.58	0.65	0.71	0.76	0.82	0.86	0.89	0.92	0.95	
0.00	0.00	0.00	0.56	0.63	0.69	0.73	0.78	0.82	0.84	0.88	0.90	
Rating:32W 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 = 1.50									
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	0.67	0.56	0.48	0.38	0.32	0.27	0.21	0.17	
	0.30		0.67	0.57	0.49	0.43	0.35	0.29	0.25	0.20	0.16	
	0.20		0.57	0.50	0.43	0.38	0.32	0.27	0.23	0.19	0.16	
0.50	0.50	0.20	0.77	0.64	0.53	0.46	0.36	0.34	0.26	0.20	0.16	
	0.30		0.65	0.55	0.47	0.41	0.33	0.28	0.24	0.19	0.15	
	0.20		0.56	0.49	0.42	0.37	0.31	0.26	0.23	0.18	0.15	
0.30	0.50	0.20	0.74	0.61	0.51	0.44	0.34	0.28	0.24	0.19	0.15	
	0.30		0.63	0.54	0.46	0.40	0.32	0.27	0.23	0.18	0.15	
	0.20		0.56	0.48	0.41	0.36	0.30	0.25	0.21	0.17	0.14	
0.00	0.00	0.00	0.44	0.37	0.31	0.27	0.21	0.18	0.15	0.12	0.10	
Rating:32W 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 = 1.50									
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	0.15	0.17	0.18	0.18	0.20	0.20	0.21	0.21	0.22	
	0.30		0.10	0.11	0.13	0.14	0.16	0.17	0.18	0.19	0.20	
	0.20		0.06	0.08	0.09	0.10	0.12	0.14	0.15	0.17	0.18	
0.50	0.50	0.20	0.15	0.16	0.17	0.18	0.19	0.19	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		0.06	0.07	0.09	0.10	0.12	0.14	0.15	0.16	0.17	
0.30	0.50	0.20	0.14	0.16	0.16	0.17	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		0.06	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:32W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												