

Report No.:

Test Time: 23.04.2020 14:59

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FL 58 L 200LED 55W Refond 3N 4000K 2x25-90 rp

Number of Lamps: 1

Luminous Length (mm): 1500

Luminous Width (mm): 75

Luminous Height (mm): 60

Voltage: 228.9 V

Current: 0.227 A

Power: 51.43 W

Power Factor: 0.985

Photometric Results

CIE Class: Direct

Total Rated Lamp Lumens: 8073.8 lm

Measurement Flux: 8073.8 lm

Efficiency: 100%

Downward Ratio: 100%

Upward Ratio: 0%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 159.2, 125.9, 134.9, 134.8

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 103.6, 73.2, 86.8, 86.4

Luminaire Efficacy Rating (LER): 157.04

Central Intensity: 2506.3 cd

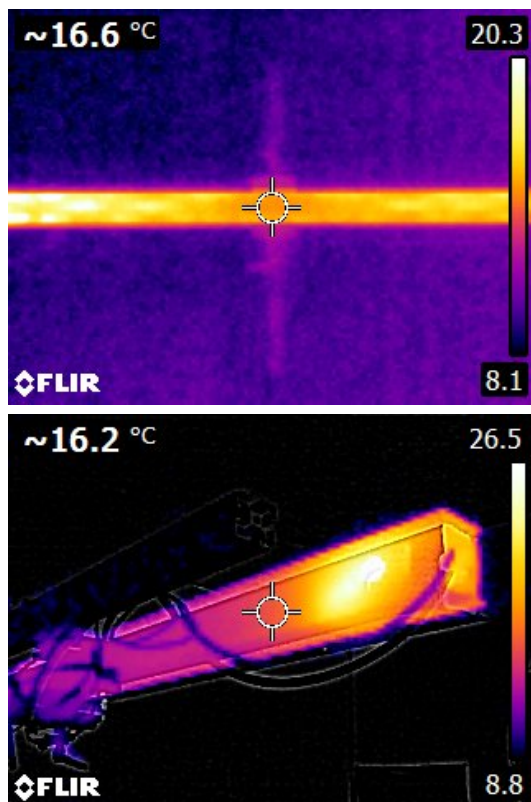
Max. Intensity: 4661 cd

Pos of Max. Intensity: H270 V22

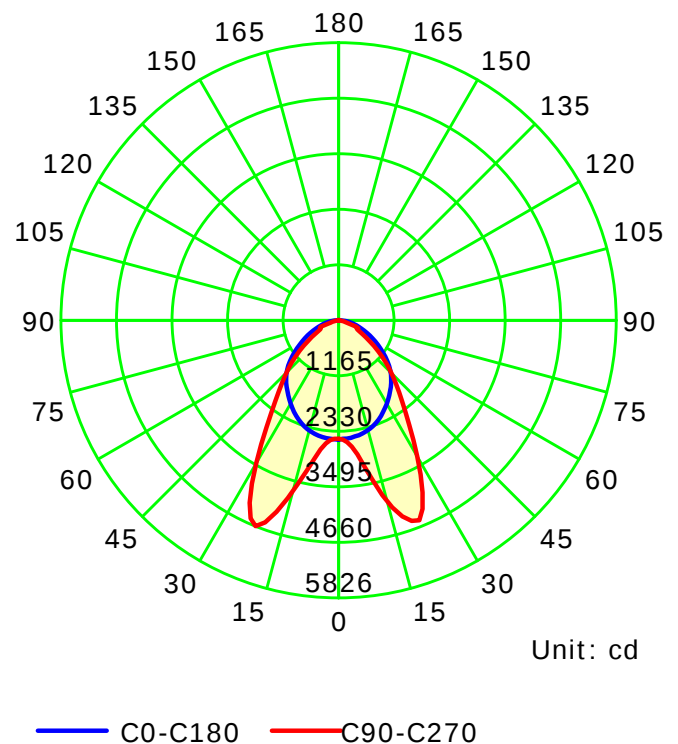
S/MH(C0/C180): 1.20

S/MH(C90/C270): 1.47

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

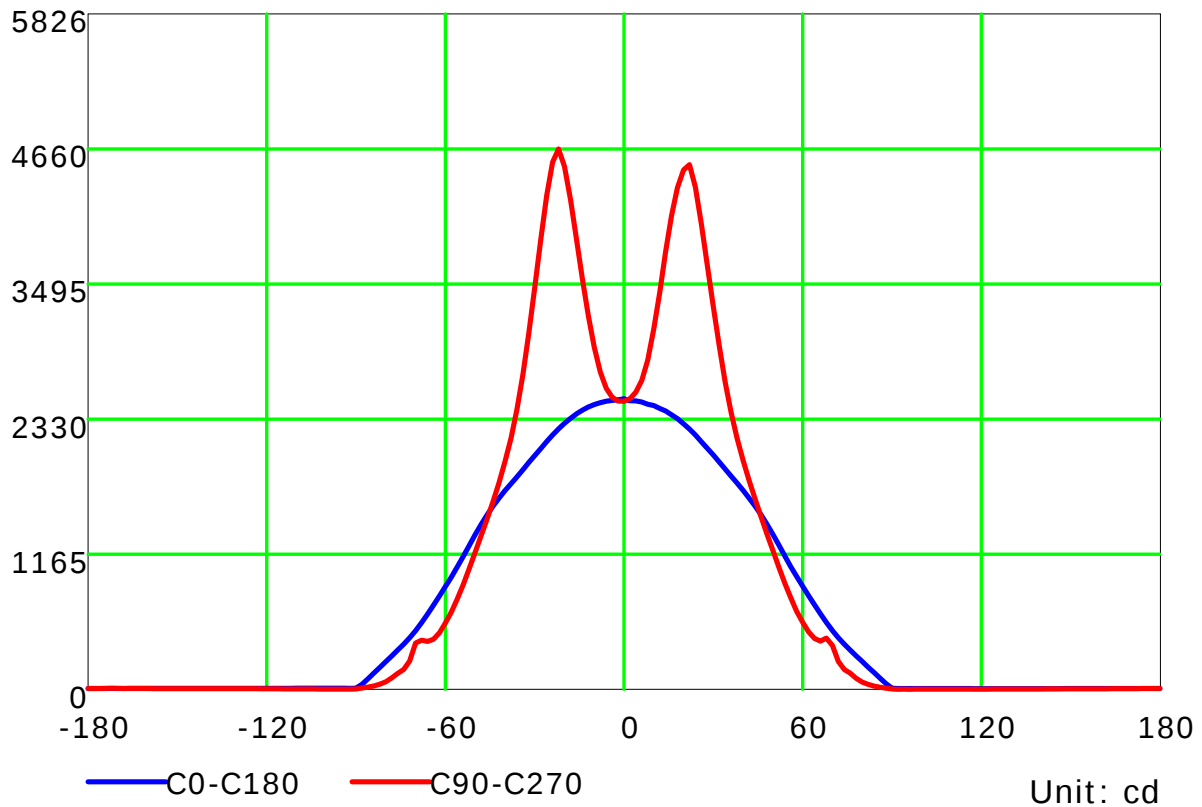
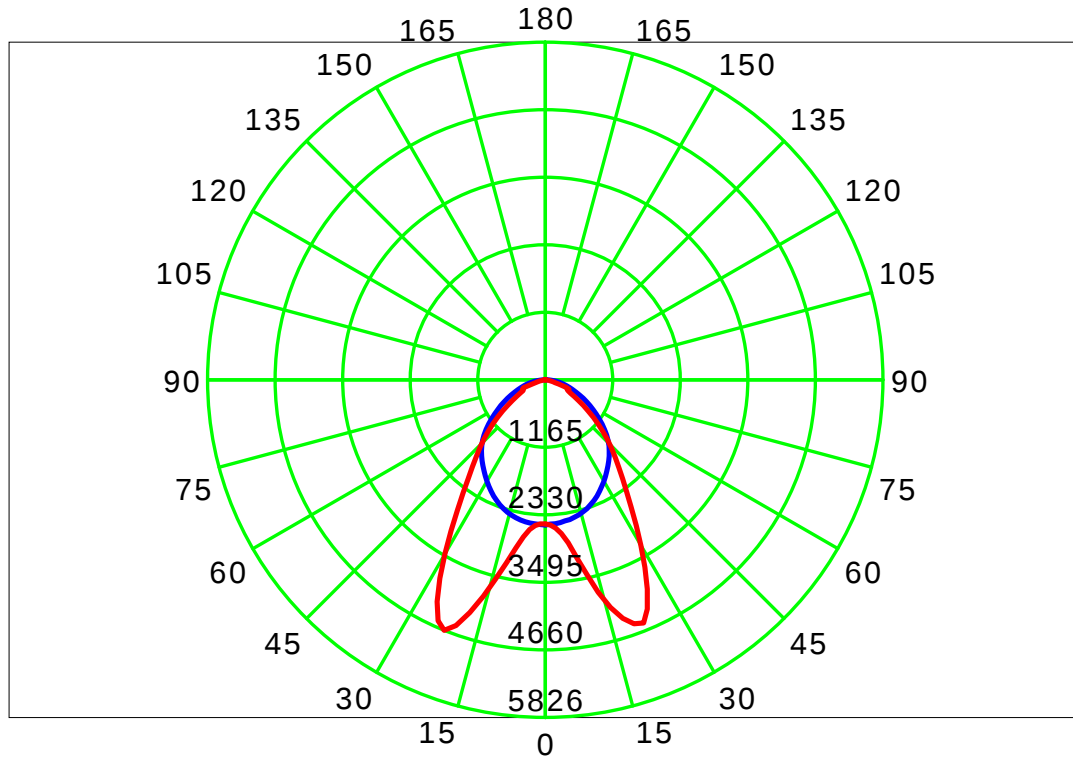
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

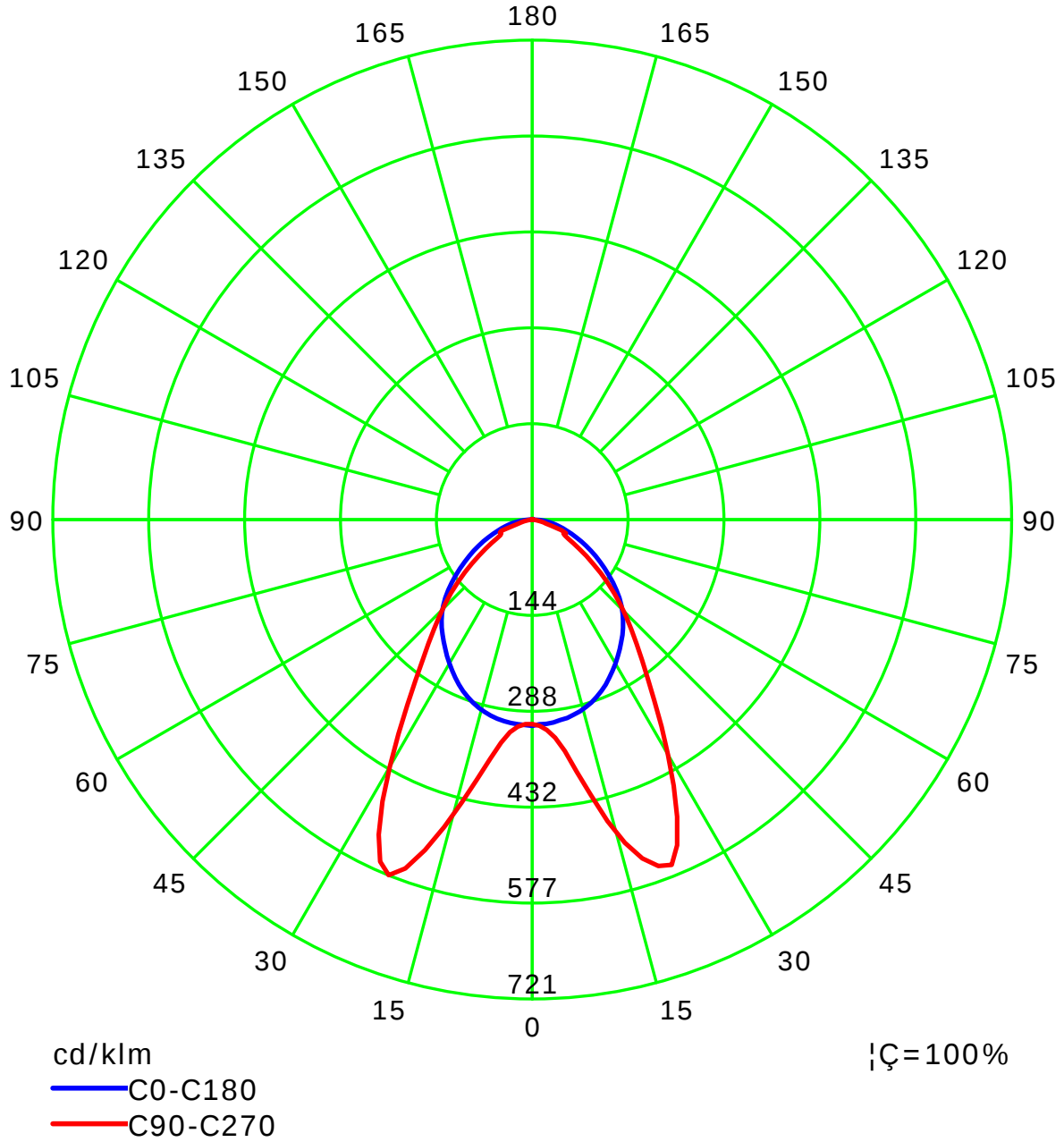
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve(cd / klm)



C Plane (°):0.0-360.0: 22.5

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Operator:

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Test Device: LSG-1800B

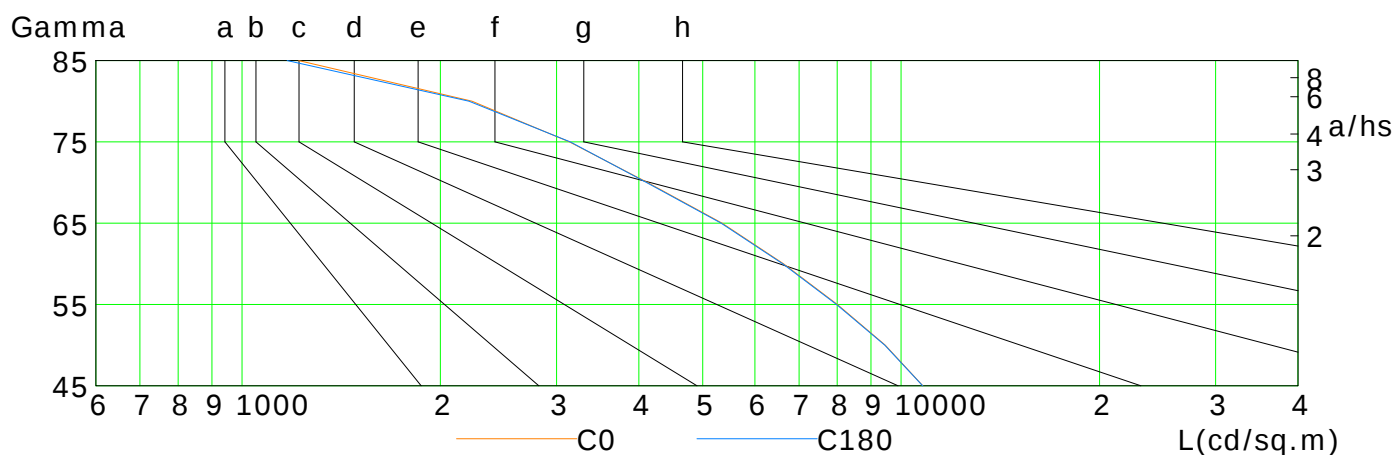
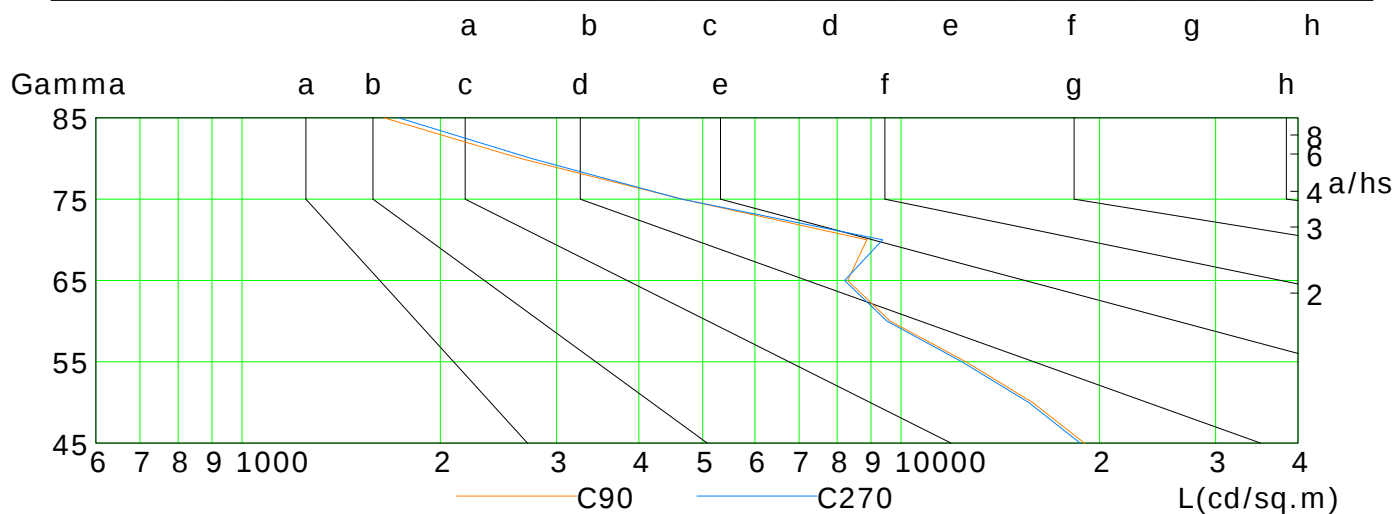
Distance: 12.677 m

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	10790	9461	8001	6631	5350	4123	3138	2233	1219
C90	18973	15820	12540	9623	8296	8870	4656	2647	1642
C180	10779	9443	7981	6614	5332	4110	3146	2210	1171
C270	18691	15608	12365	9517	8205	9374	4646	2750	1729

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Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

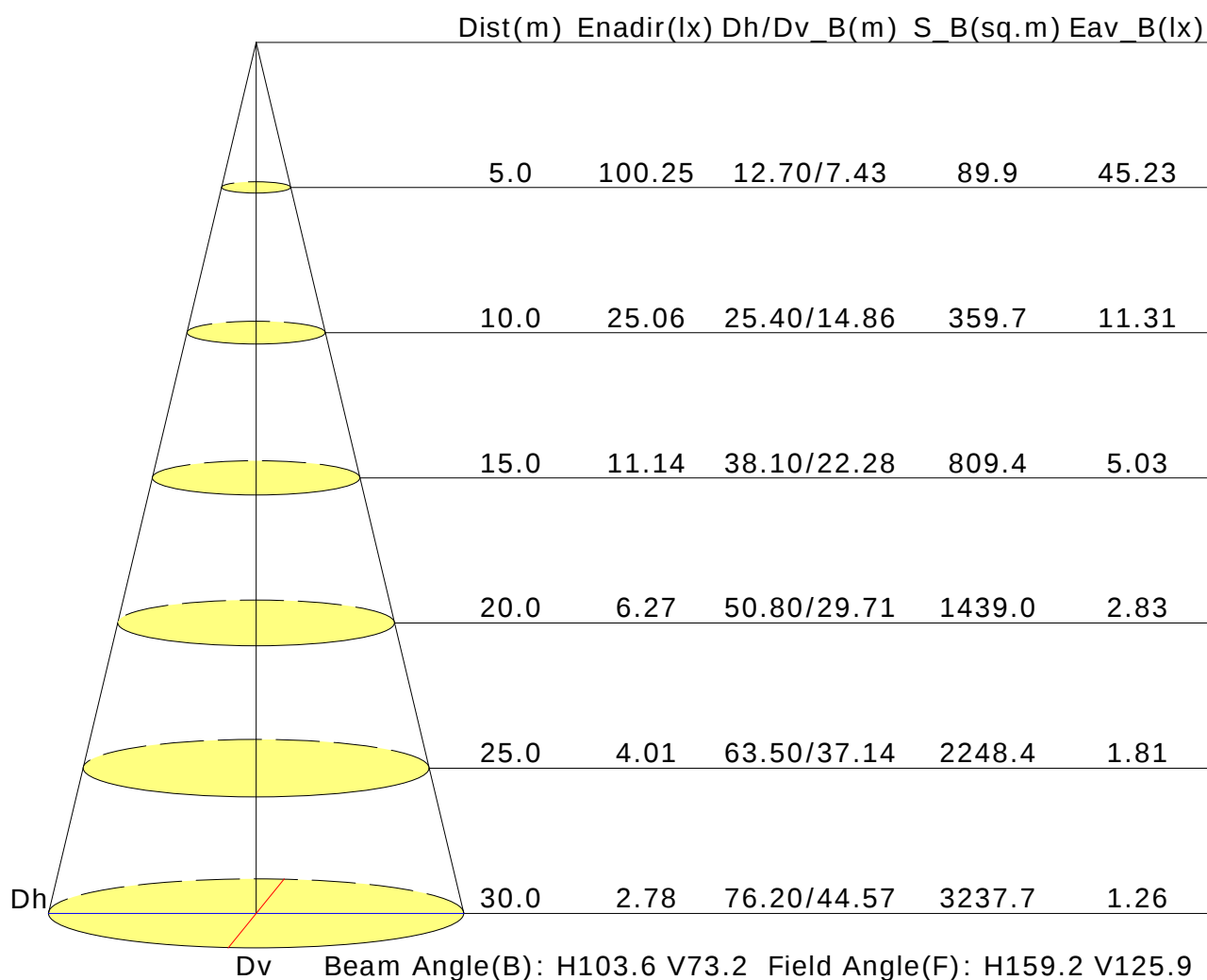
Test Device: LSG-1800B

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	20.7	22.0	21.0	22.2	22.4	19.7	21.0	20.0	21.2	21.4
3H	21.2	22.4	21.6	22.6	22.9	20.4	21.6	20.7	21.8	22.1
4H	21.4	22.5	21.8	22.8	23.1	20.6	21.6	20.9	21.9	22.2
6H	21.5	22.5	21.9	22.8	23.2	20.6	21.6	20.9	21.9	22.2
8H	21.6	22.5	21.9	22.8	23.2	20.6	21.5	20.9	21.8	22.2
12H	21.6	22.5	22.0	22.8	23.2	20.5	21.4	20.9	21.8	22.1
X=4H Y=2H	20.8	21.9	21.1	22.2	22.5	19.9	21.0	20.3	21.3	21.6
3H	21.5	22.4	21.9	22.7	23.1	20.8	21.7	21.2	22.0	22.4
4H	21.8	22.6	22.2	23.0	23.3	21.0	21.8	21.4	22.1	22.5
6H	22.0	22.7	22.4	23.1	23.5	21.0	21.7	21.5	22.1	22.5
8H	22.1	22.7	22.5	23.1	23.5	21.0	21.7	21.5	22.1	22.5
12H	22.1	22.7	22.5	23.1	23.6	21.0	21.6	21.5	22.0	22.5
X=8H Y=4H	21.8	22.5	22.3	22.9	23.3	21.0	21.7	21.5	22.1	22.5
6H	22.1	22.6	22.6	23.1	23.5	21.1	21.7	21.6	22.1	22.6
8H	22.2	22.7	22.7	23.1	23.6	21.1	21.6	21.6	22.1	22.6
12H	22.3	22.7	22.8	23.2	23.7	21.1	21.5	21.6	22.0	22.5
X=12H Y=4H	21.8	22.4	22.3	22.8	23.3	21.0	21.6	21.5	22.0	22.5
6H	22.1	22.5	22.6	23.0	23.5	21.1	21.6	21.6	22.1	22.6
8H	22.2	22.6	22.7	23.1	23.6	21.2	21.6	21.7	22.0	22.5
Variations with the observer position at spacings:										
S=1.0H	+0.9/-0.9					+0.7/-0.8				
S=1.5H	+1.5/-1.7					+1.3/-2.2				
S=2.0H	+2.7/-2.4					+2.7/-2.3				

Calculate in accordance with CIE Pub.117. The table is revised with 8074Im ($8\log(F/F_0) = 7.3$).

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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 = 1.50									
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	0.78	0.84	0.88	0.94	0.98	1.01	1.04	1.06	
	0.30		0.64	0.71	0.78	0.83	0.89	0.94	0.97	1.01	1.04	
	0.20		0.59	0.67	0.74	0.78	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	0.70	0.77	0.81	0.87	0.91	0.94	0.98	1.00	
	0.20		0.59	0.66	0.73	0.77	0.84	0.88	0.91	0.95	0.98	
0.30	0.50	0.20	0.67	0.74	0.79	0.83	0.88	0.91	0.94	0.97	0.98	
	0.30		0.62	0.69	0.75	0.79	0.85	0.89	0.91	0.94	0.97	
	0.20		0.58	0.65	0.72	0.76	0.82	0.86	0.89	0.93	0.95	
0.00	0.00	0.00	0.56	0.63	0.69	0.73	0.79	0.82	0.85	0.88	0.90	
Rating:51W 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	0.79	0.66	0.55	0.48	0.38	0.31	0.27	0.21	0.17	
	0.30		0.66	0.56	0.48	0.42	0.34	0.29	0.25	0.19	0.16	
	0.20		0.57	0.49	0.43	0.38	0.31	0.26	0.23	0.18	0.15	
0.50	0.50	0.20	0.76	0.63	0.53	0.45	0.36	0.33	0.25	0.19	0.16	
	0.30		0.64	0.55	0.46	0.41	0.33	0.27	0.23	0.18	0.15	
	0.20		0.56	0.48	0.42	0.37	0.30	0.25	0.22	0.17	0.14	
0.30	0.50	0.20	0.74	0.60	0.50	0.43	0.34	0.28	0.24	0.18	0.15	
	0.30		0.63	0.53	0.45	0.39	0.31	0.26	0.22	0.17	0.14	
	0.20		0.55	0.47	0.41	0.36	0.29	0.24	0.21	0.17	0.14	
0.00	0.00	0.00	0.43	0.36	0.30	0.26	0.21	0.17	0.15	0.11	0.09	
Rating:51W 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	0.17	0.18	0.19	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	0.07	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	0.20	0.21	
	0.30		0.09	0.11	0.12	0.13	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	0.15	0.16	0.17	0.18	0.18	0.19	0.19	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Rating:51W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												