

Report No.:

Test Time: 24.04.2020 11:26

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FL 58 L 200LED 62W Refond 3N 4000K 2x25-90 rp

Luminous Length (mm): 1500

Luminous Width (mm): 75

Luminous Height (mm): 60

Voltage: 228.9 V

Current: 0.275 A

Power: 62.54 W

Power Factor: 0.990

Photometric Results

CIE Class: Direct

Measurement Flux: 9722 lm

Downward Ratio: 100%

Total Rated Lamp Lumens: 9722.0 lm

Efficiency: 100%

Upward Ratio: 0%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 159.5, 130.9, 135.3, 135.4

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 103.6, 73.7, 87.3, 87.1

Luminaire Efficacy Rating (LER): 155.50

Central Intensity: 2974.37 cd

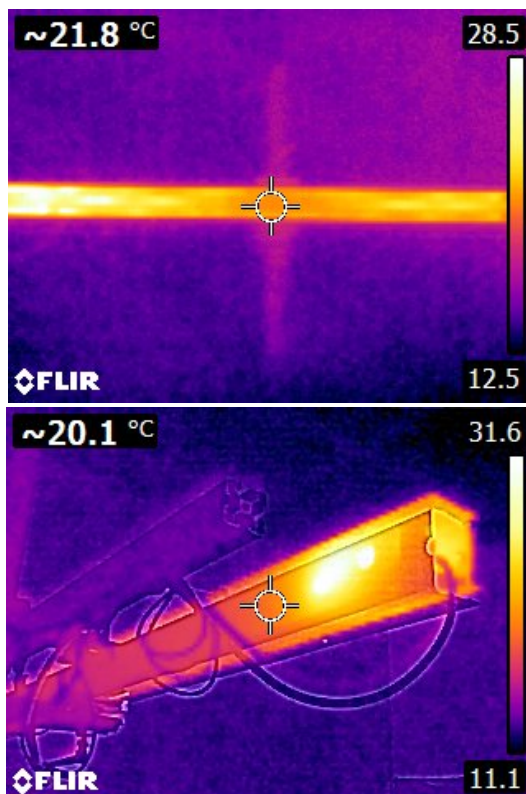
Max. Intensity: 5581.28 cd

Pos of Max. Intensity: H270 V22

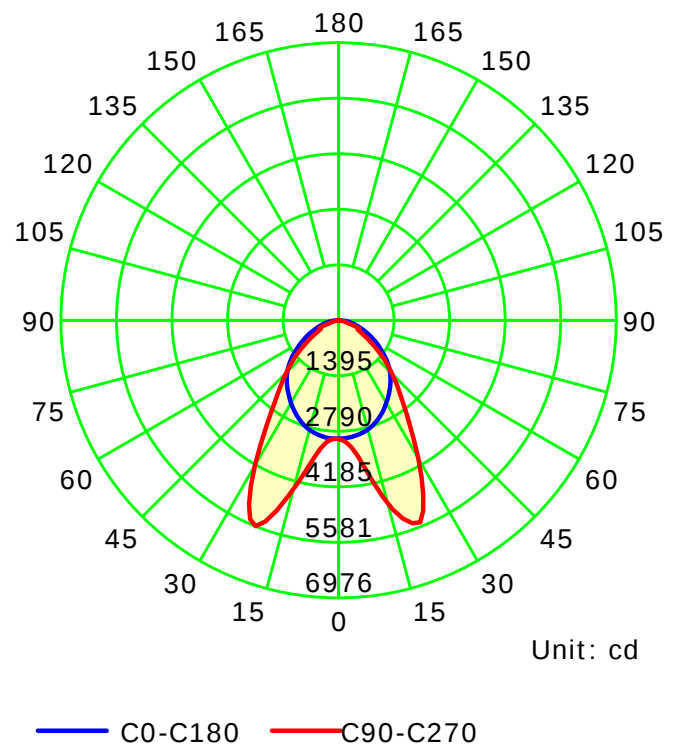
S/MH(C0/C180): 1.20

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

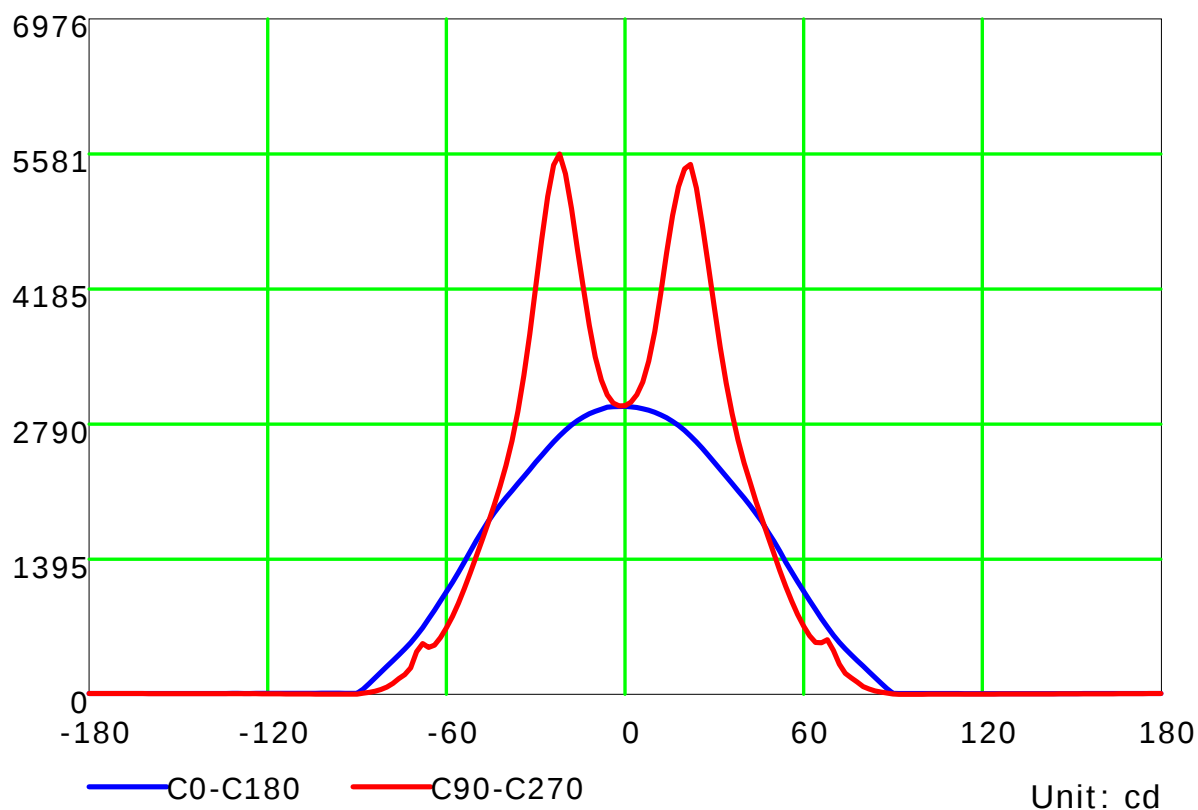
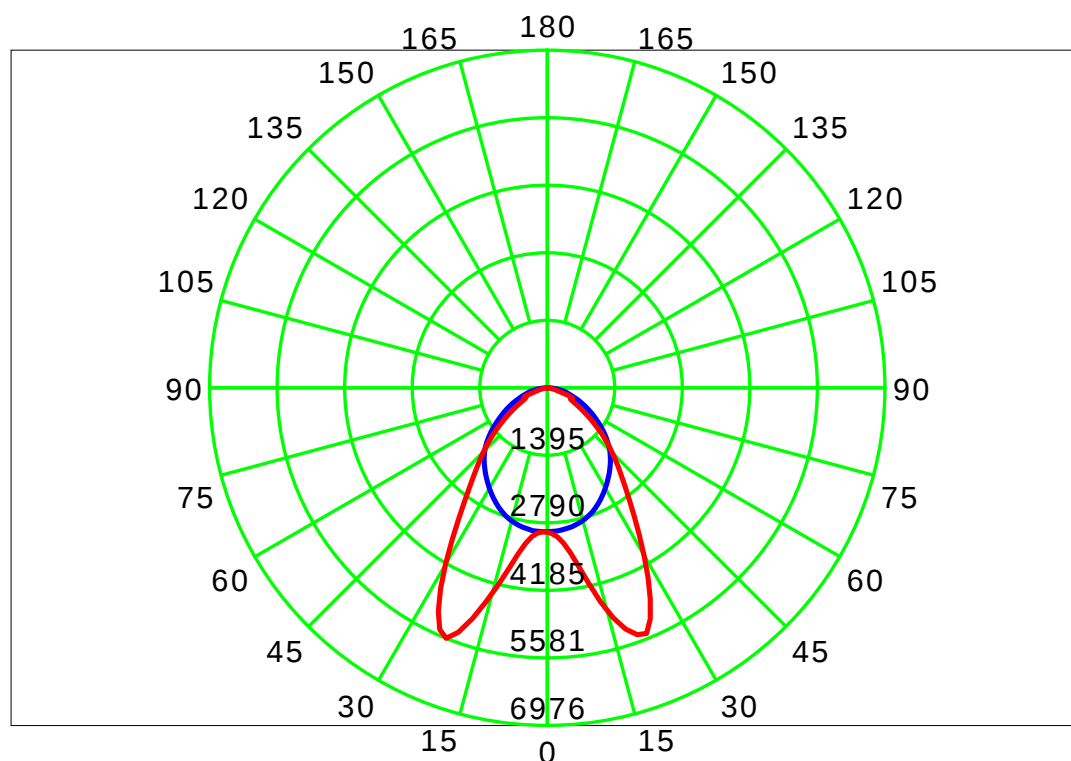
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 22.5

Test Lab:

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Temperature:

Operator:

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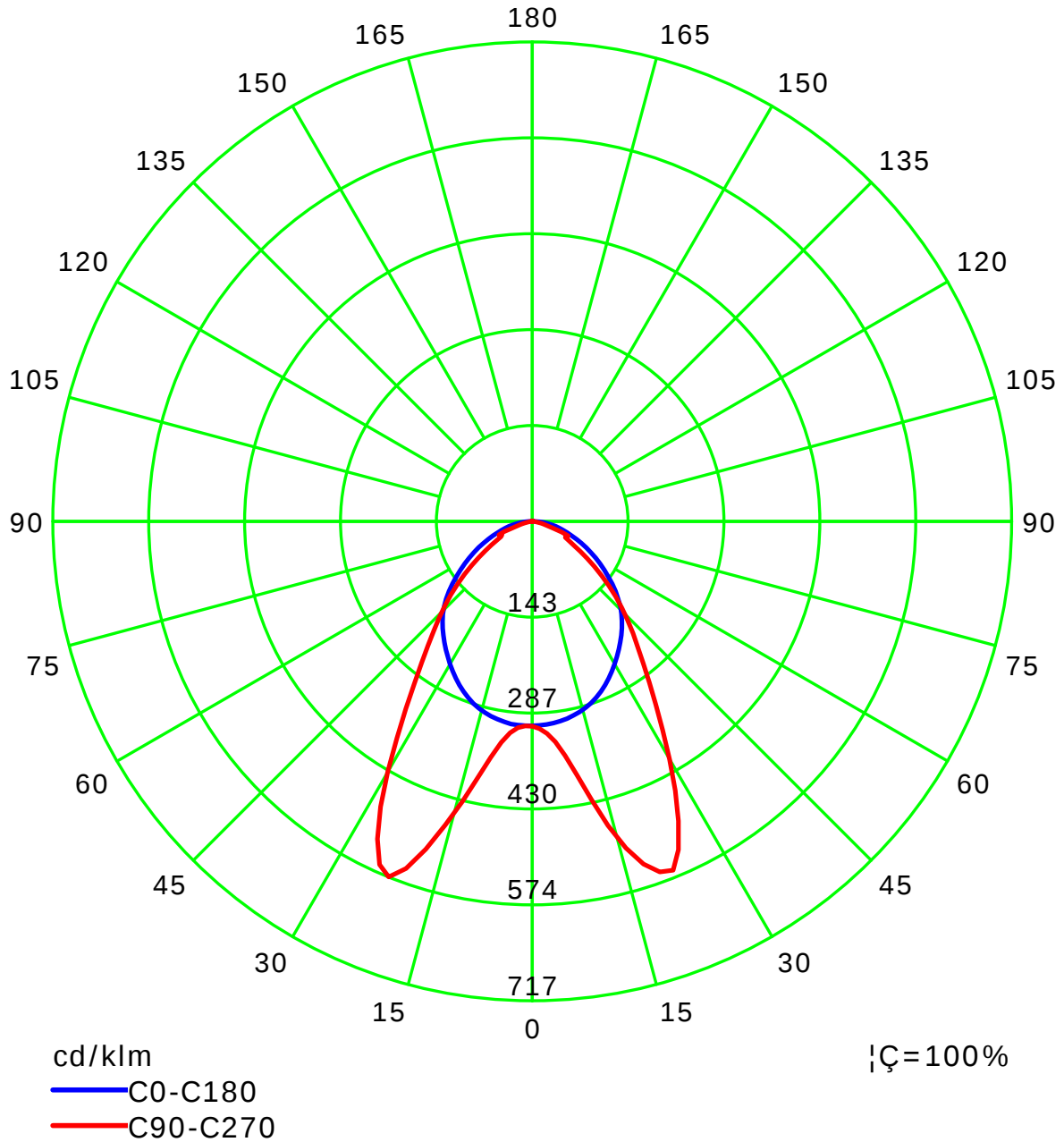
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve(cd / klm)



C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

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Operator:

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Test Device: LSG-1800B

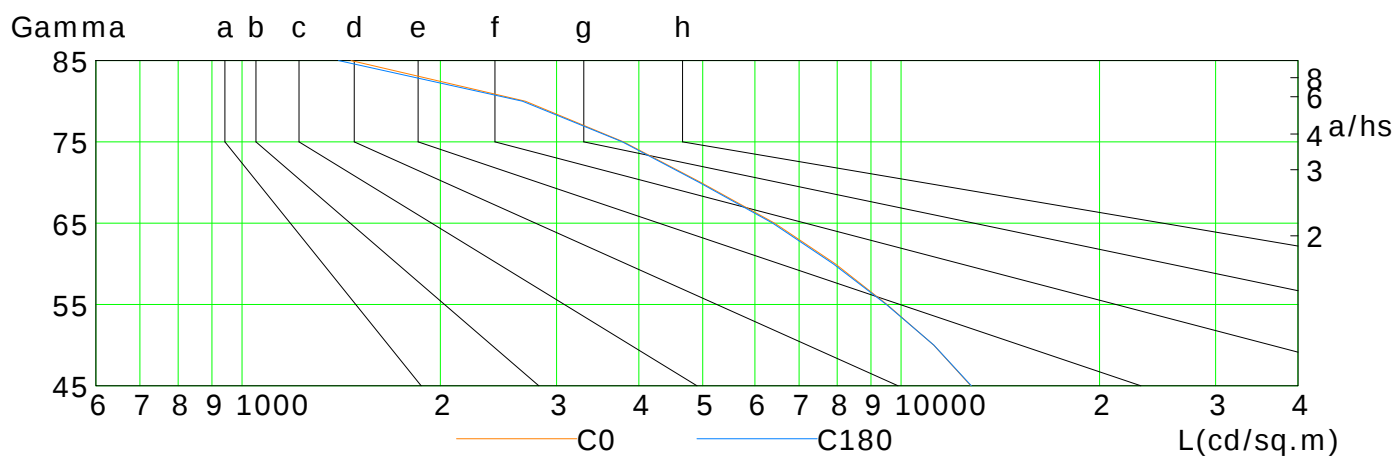
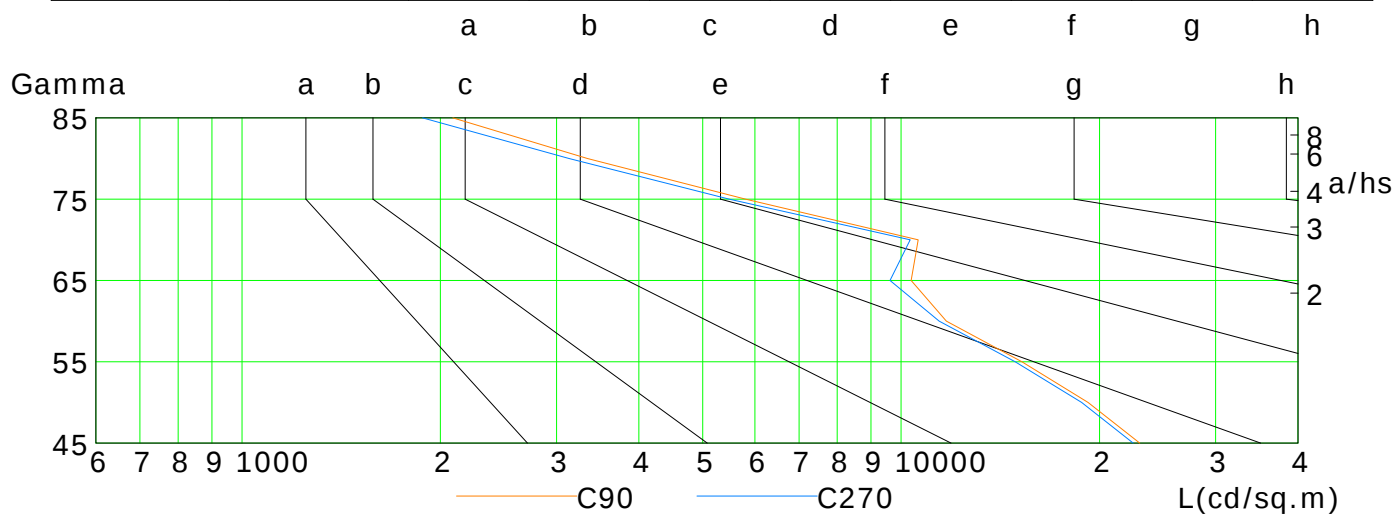
Distance: 12.677 m

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	12758	11206	9518	7943	6428	4971	3791	2691	1463
C90	23018	19213	15249	11711	10358	10617	5808	3343	2089
C180	12781	11213	9498	7885	6384	4941	3776	2664	1401
C270	22497	18781	14893	11419	9620	10322	5485	3134	1880

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Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

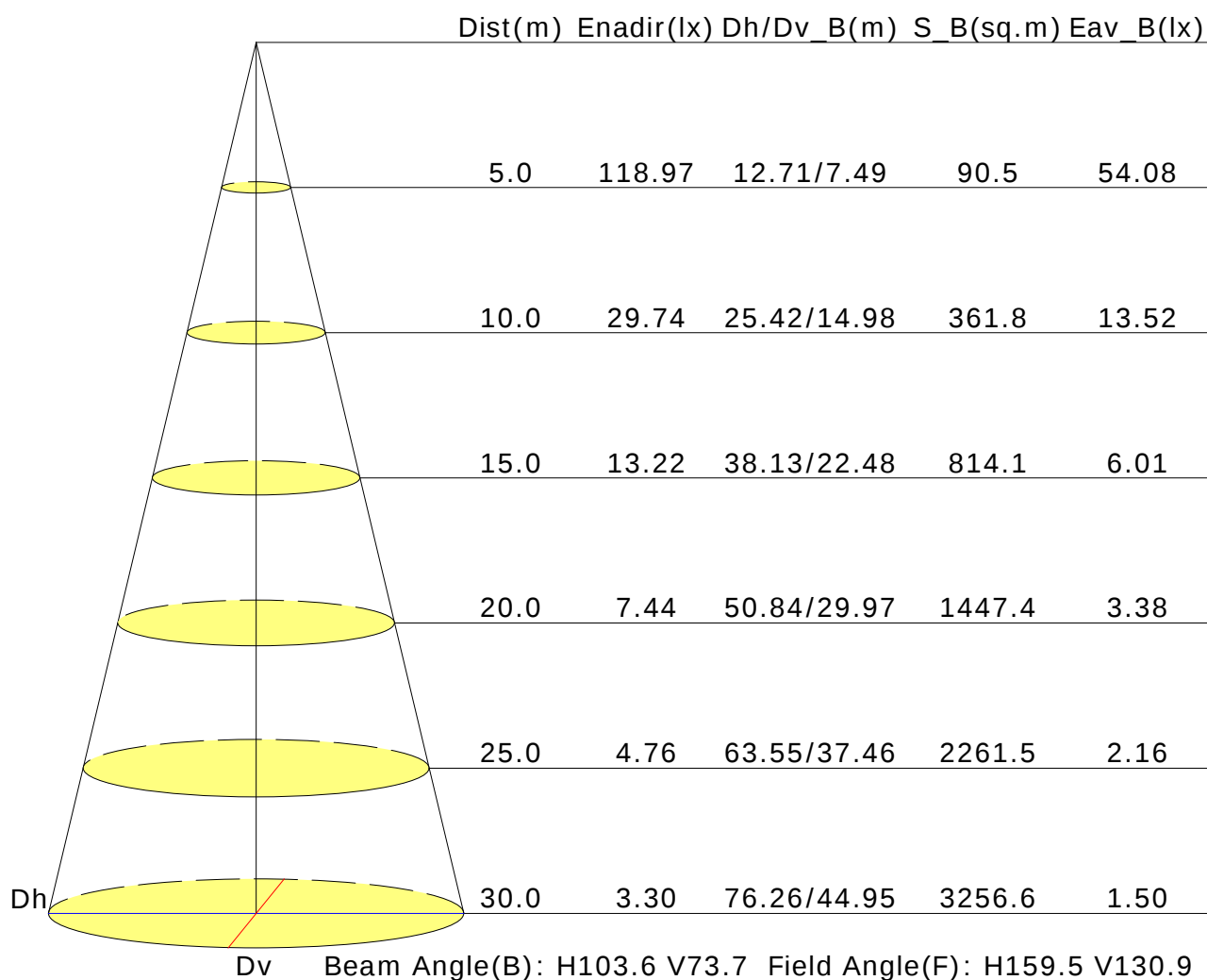
Test Device: LSG-1800B

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	21.4	22.6	21.7	22.9	23.1	20.4	21.6	20.7	21.9	22.1
3H	21.9	23.0	22.2	23.3	23.6	21.1	22.2	21.4	22.5	22.8
4H	22.1	23.2	22.4	23.4	23.7	21.2	22.3	21.6	22.6	22.9
6H	22.2	23.2	22.6	23.5	23.8	21.3	22.2	21.6	22.6	22.9
8H	22.2	23.2	22.6	23.5	23.8	21.2	22.2	21.6	22.5	22.8
12H	22.2	23.1	22.6	23.5	23.8	21.2	22.1	21.6	22.4	22.8
X=4H Y=2H	21.5	22.5	21.8	22.8	23.1	20.6	21.7	21.0	22.0	22.3
3H	22.2	23.1	22.5	23.4	23.8	21.5	22.4	21.8	22.7	23.0
4H	22.5	23.3	22.9	23.6	24.0	21.7	22.5	22.1	22.8	23.2
6H	22.7	23.4	23.1	23.8	24.2	21.7	22.4	22.1	22.8	23.2
8H	22.7	23.4	23.2	23.8	24.2	21.7	22.4	22.1	22.8	23.2
12H	22.8	23.3	23.2	23.8	24.2	21.7	22.3	22.1	22.7	23.1
X=8H Y=4H	22.5	23.1	22.9	23.5	24.0	21.7	22.4	22.2	22.8	23.2
6H	22.8	23.3	23.2	23.7	24.2	21.8	22.3	22.3	22.8	23.3
8H	22.9	23.3	23.4	23.8	24.3	21.8	22.3	22.3	22.7	23.2
12H	22.9	23.3	23.4	23.8	24.3	21.8	22.2	22.3	22.7	23.2
X=12H Y=4H	22.5	23.0	22.9	23.5	23.9	21.7	22.3	22.2	22.7	23.2
6H	22.8	23.2	23.2	23.7	24.2	21.8	22.3	22.3	22.7	23.2
8H	22.9	23.3	23.4	23.7	24.3	21.8	22.2	22.3	22.7	23.2
Variations with the observer position at spacings:										
S=1.0H	+1.0/-0.9					+0.7/-0.8				
S=1.5H	+1.6/-1.8					+1.3/-2.2				
S=2.0H	+2.8/-2.4					+2.8/-2.3				

Calculate in accordance with CIE Pub.117. The table is revised with 9722Im ($8\log(F/F_0) = 7.9$).

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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	0.83	0.89	0.94	0.97	1.01	1.04	
	0.20		0.59	0.67	0.73	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	0.76	0.81	0.87	0.91	0.94	0.98	1.00	
	0.20		0.58	0.66	0.72	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	0.96	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	0.72	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	0.79	0.82	0.85	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 = 1.50									
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	0.66	0.55	0.48	0.38	0.31	0.27	0.21	0.17	
	0.30		0.66	0.57	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	0.27	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		0.65	0.55	0.47	0.41	0.33	0.27	0.24	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	0.37	0.31	0.26	0.21	0.17	0.15	0.12	0.09	
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 = 1.50									
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	0.20	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	0.14	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	0.16	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:63W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												