

Report No.: 1

Test Time: 25.03.2020 18:24

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FL 58 L 60LED 32W 3000K 104x90 gr.

Luminous Length (mm): 1500

Luminous Width (mm): 75

Luminous Height (mm): 60

Voltage: 228.9 V

Current: 0.146 A

Power: 32.04 W

Power Factor: 0.958

Photometric Results

CIE Class: Direct

Measurement Flux: 4109.9 lm

Downward Ratio: 99%

Total Rated Lamp Lumens: 4109.9 lm

Efficiency: 100%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 151.4, 141.1, 136.5, 136.9

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 78.9, 45.7, 59.0, 58.9

Luminaire Efficacy Rating (LER): 128.33

Central Intensity: 1564.86 cd

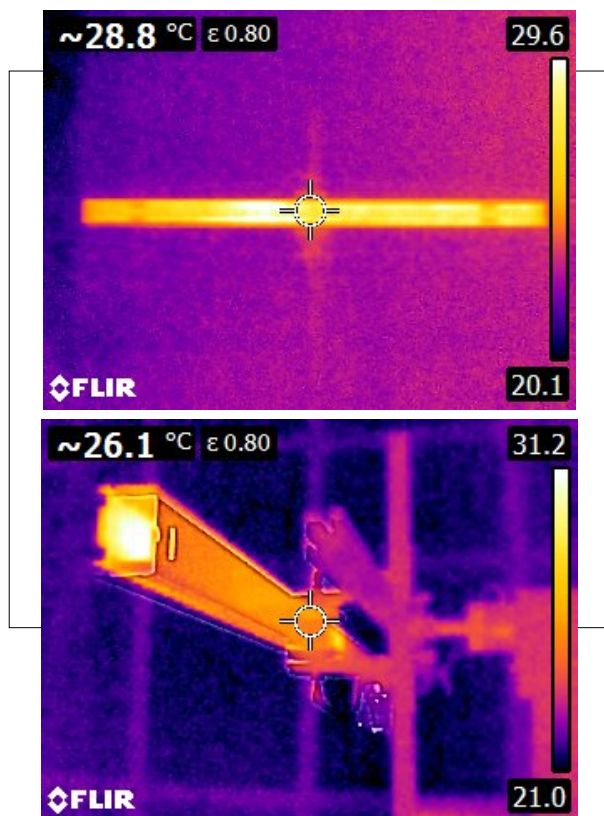
Max. Intensity: 2717.55 cd

Pos of Max. Intensity: H270 V22

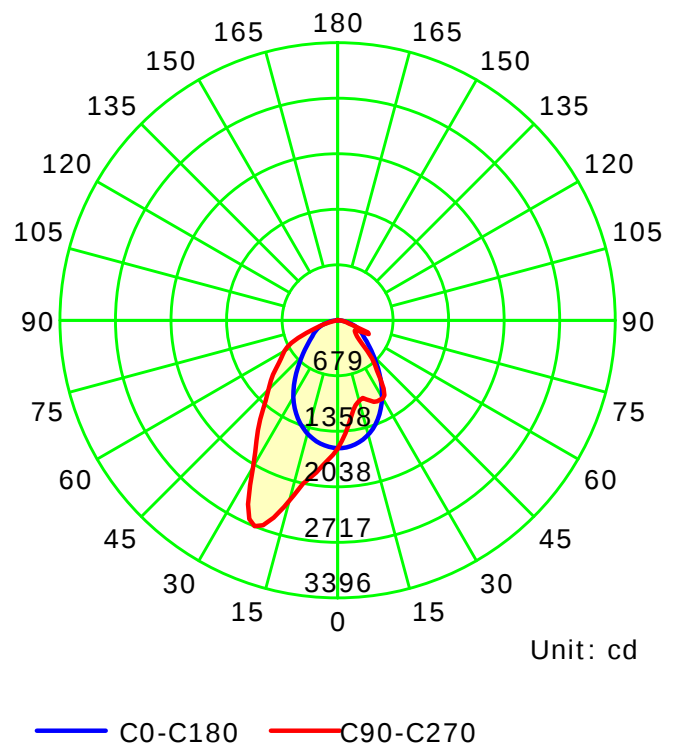
S/MH(C0/C180): 1.07

S/MH(C90/C270): 1.36

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

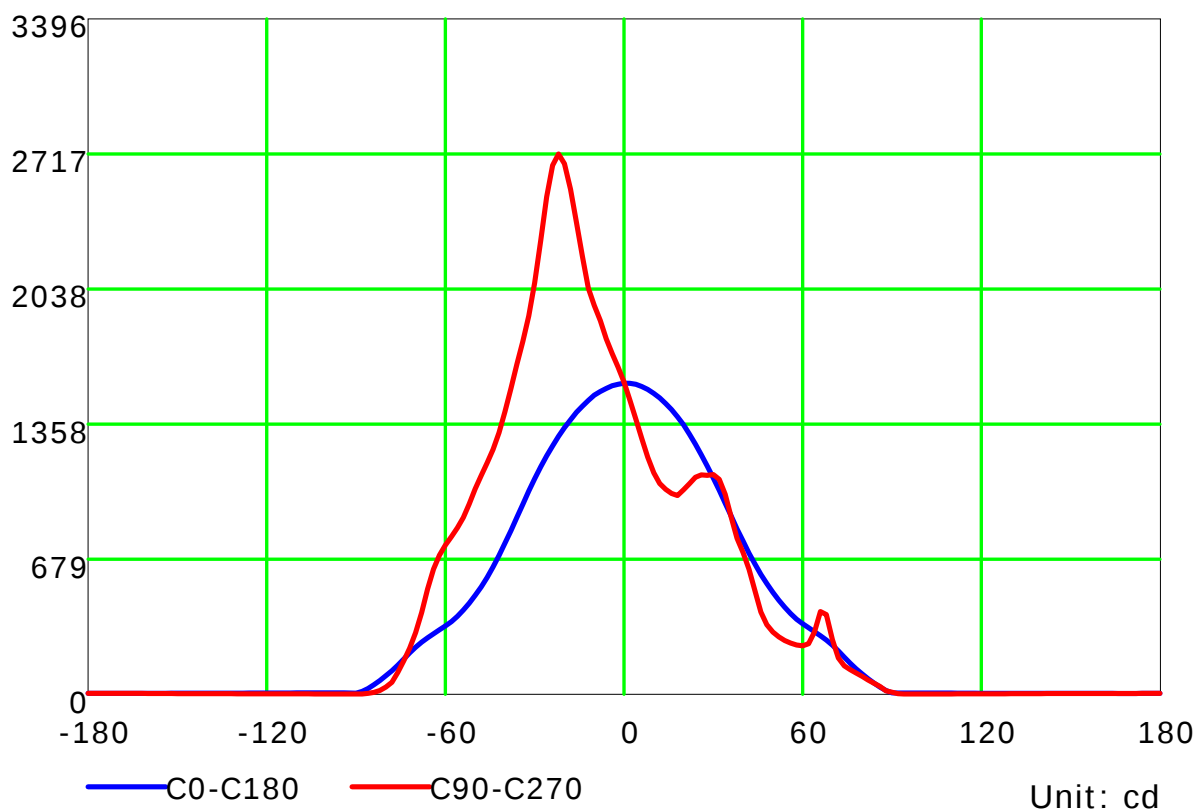
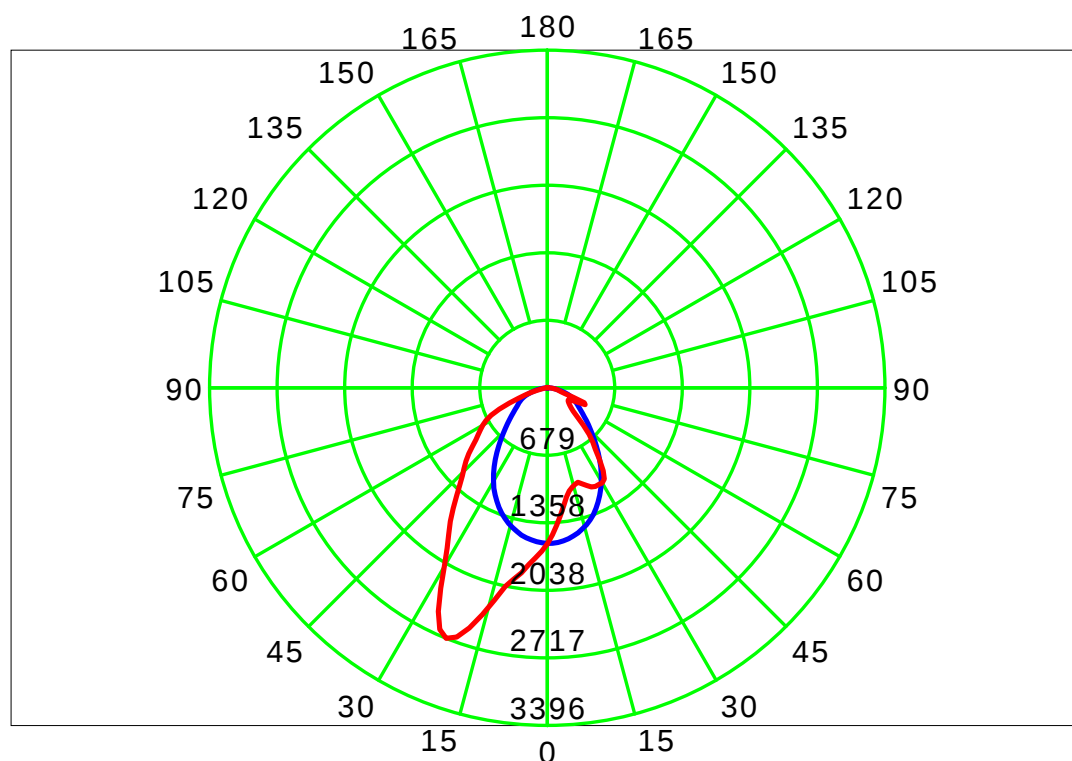
Test Device: LSG-1800B

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

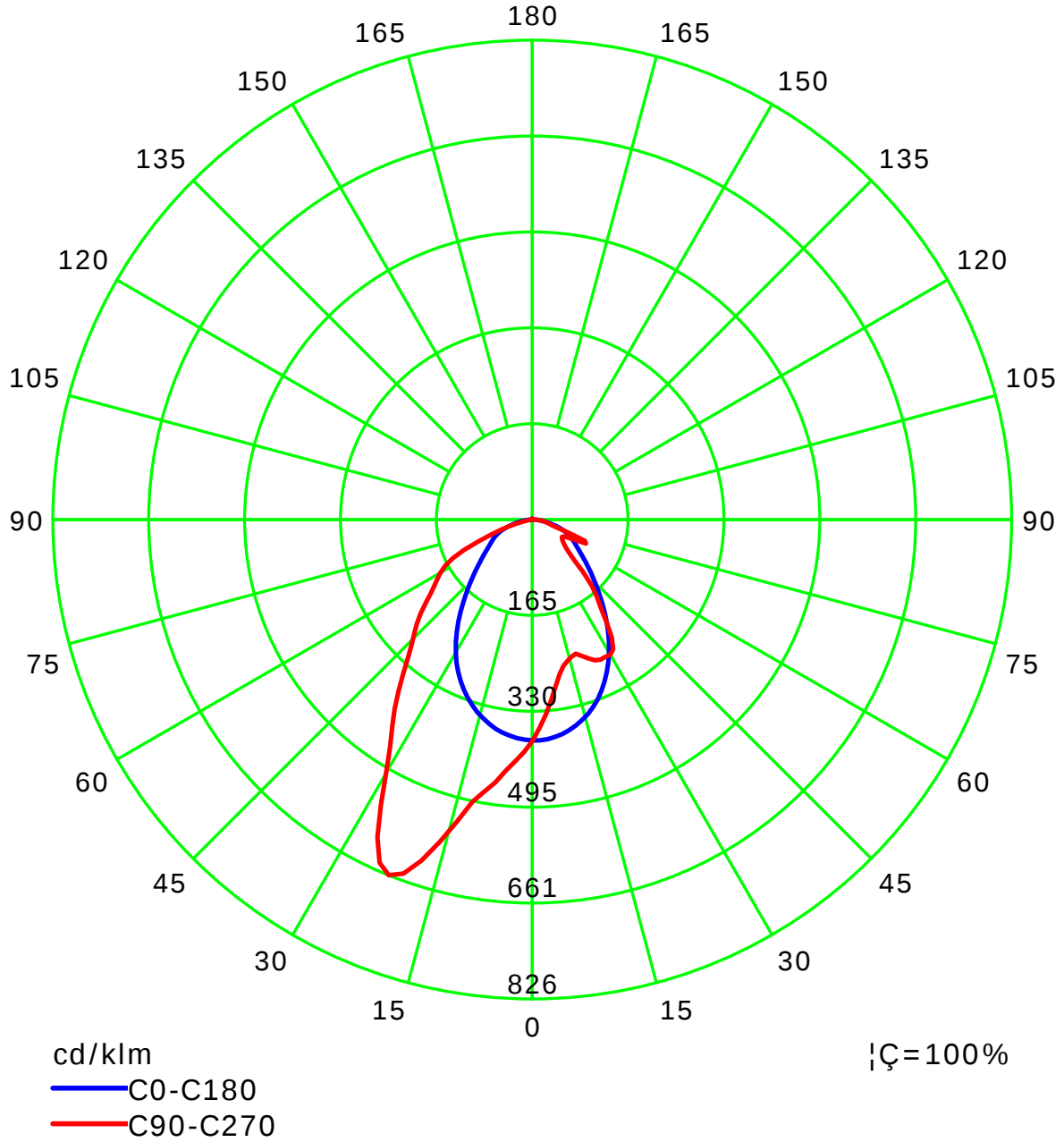
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve(cd / klm)



C Plane (°): 0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°): 0.0-180.0: 2.0

Test Device: LSG-1800B

Distance: 12.677 m

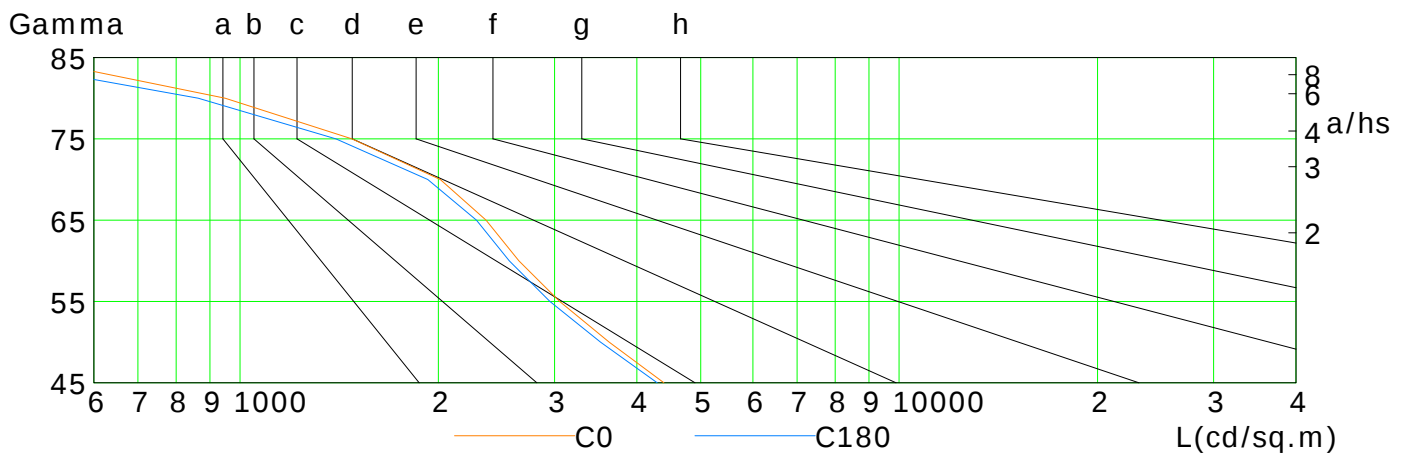
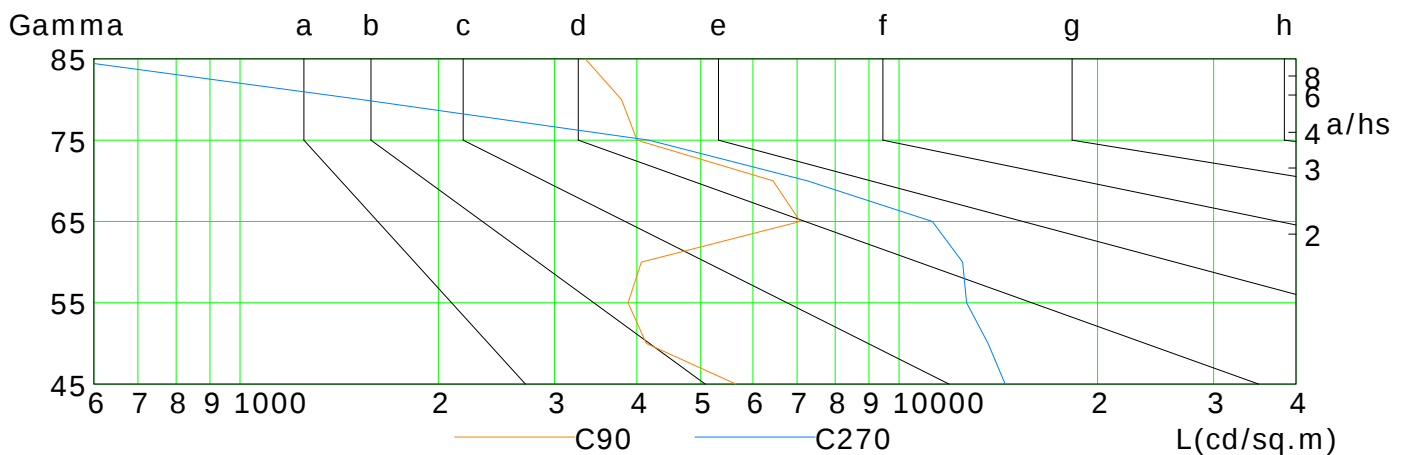
Humidity:

Inspector:

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	4396	3632	3054	2649	2362	2013	1478	949	473
C90	5656	4135	3880	4063	7078	6439	4002	3790	3341
C180	4294	3523	2953	2562	2284	1927	1398	864	394
C270	14481	13642	12657	12481	11233	7257	4172	1526	533

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

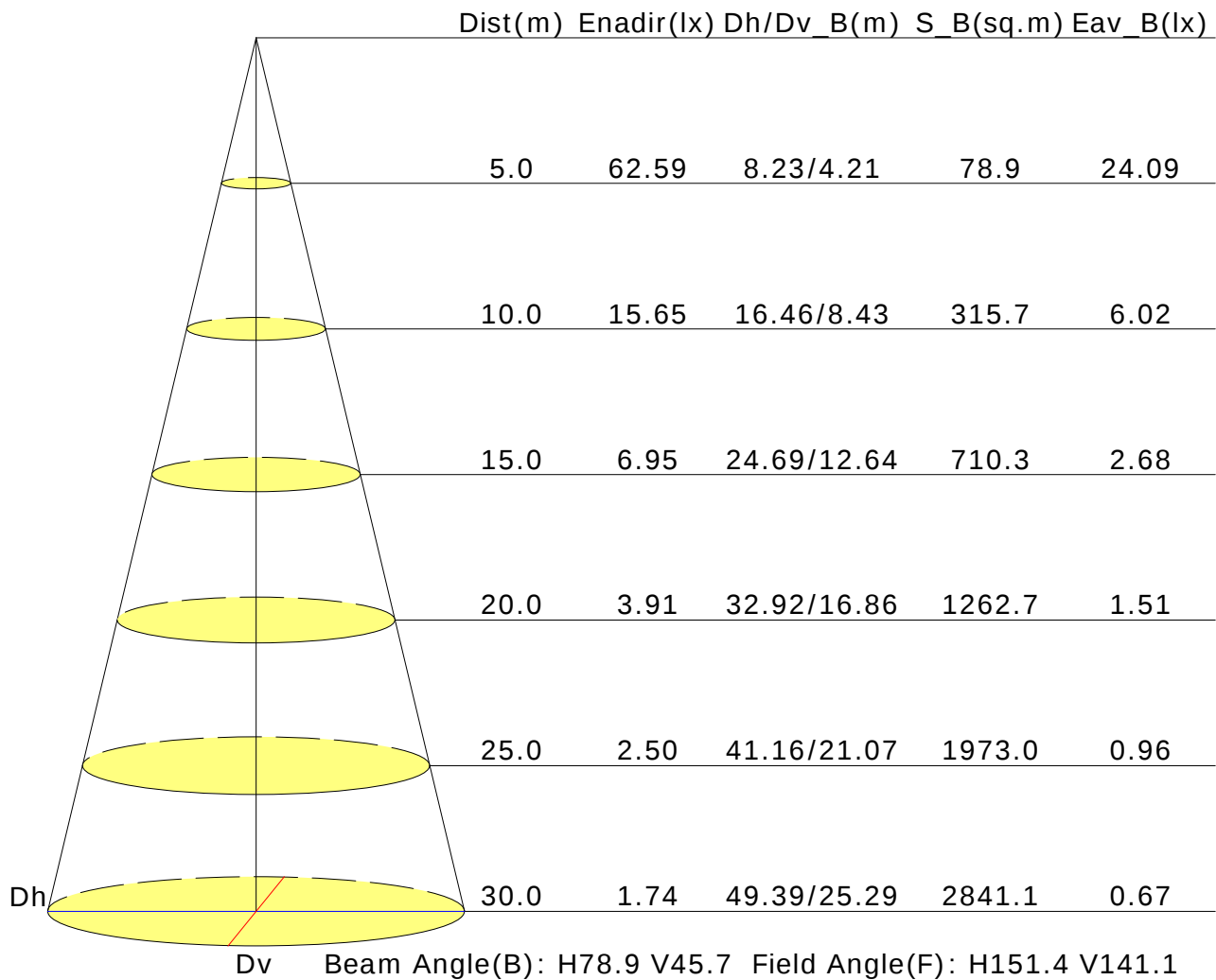
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

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	18.1	19.4	18.4	19.7	19.9	19.5	20.8	19.9	21.1	21.3
3H	18.7	19.9	19.1	20.2	20.5	20.9	22.1	21.2	22.4	22.6
4H	18.9	20.0	19.3	20.3	20.6	21.1	22.2	21.5	22.5	22.8
6H	19.0	20.1	19.4	20.4	20.7	21.2	22.2	21.5	22.5	22.8
8H	19.0	20.0	19.4	20.4	20.7	21.2	22.1	21.5	22.5	22.8
12H	19.0	20.0	19.4	20.3	20.7	21.1	22.1	21.5	22.4	22.8
X=4H Y=2H	18.6	19.7	19.0	20.0	20.3	19.8	21.0	20.2	21.2	21.6
3H	19.5	20.4	19.9	20.8	21.1	21.3	22.3	21.7	22.6	23.0
4H	19.8	20.6	20.2	21.0	21.4	21.6	22.4	22.0	22.8	23.2
6H	19.9	20.7	20.4	21.1	21.5	21.7	22.4	22.1	22.8	23.2
8H	20.0	20.7	20.4	21.1	21.5	21.7	22.4	22.2	22.8	23.2
12H	20.0	20.6	20.4	21.0	21.5	21.7	22.3	22.2	22.8	23.2
X=8H Y=4H	20.0	20.7	20.4	21.1	21.5	21.7	22.3	22.1	22.8	23.2
6H	20.2	20.8	20.7	21.2	21.7	21.8	22.3	22.3	22.8	23.3
8H	20.3	20.8	20.8	21.3	21.8	21.8	22.3	22.3	22.8	23.3
12H	20.4	20.8	20.9	21.3	21.8	21.9	22.3	22.4	22.8	23.3
X=12H Y=4H	20.0	20.6	20.4	21.0	21.5	21.6	22.3	22.1	22.7	23.1
6H	20.2	20.7	20.7	21.2	21.7	21.8	22.3	22.3	22.7	23.2
8H	20.3	20.8	20.8	21.2	21.8	21.8	22.3	22.3	22.7	23.3
Variations with the observer position at spacings:										
S=1.0H	+0.5/-0.7					+0.4/-0.5				
S=1.5H	+1.0/-1.3					+0.9/-1.2				
S=2.0H	+1.1/-1.7					+1.2/-1.6				

Calculate in accordance with CIE Pub.117. The table is revised with 4110lm ($8\log(F/F_0) = 4.9$).

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:

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	0.62	0.72	0.79	0.84	0.90	0.95	0.98	1.02	1.05	
	0.30		0.54	0.65	0.72	0.77	0.85	0.90	0.94	0.98	1.02	
	0.20		0.49	0.59	0.67	0.72	0.80	0.86	0.90	0.95	0.99	
0.50	0.50	0.20	0.60	0.70	0.76	0.81	0.87	0.91	0.94	0.98	1.01	
	0.30		0.53	0.63	0.70	0.75	0.82	0.87	0.91	0.95	0.98	
	0.20		0.49	0.59	0.66	0.71	0.78	0.84	0.87	0.92	0.96	
0.30	0.50	0.20	0.59	0.68	0.74	0.78	0.84	0.88	0.91	0.94	0.97	
	0.30		0.53	0.62	0.69	0.74	0.80	0.85	0.88	0.92	0.94	
	0.20		0.48	0.58	0.65	0.70	0.77	0.82	0.85	0.90	0.93	
0.00	0.00	0.00	0.46	0.56	0.62	0.67	0.73	0.78	0.81	0.85	0.88	
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 = 1.25									
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	0.92	0.75	0.64	0.55	0.44	0.36	0.31	0.24	0.19	
	0.30		0.77	0.64	0.55	0.49	0.40	0.33	0.29	0.22	0.18	
	0.20		0.66	0.56	0.49	0.44	0.36	0.31	0.27	0.21	0.18	
0.50	0.50	0.20	0.88	0.72	0.61	0.53	0.42	0.38	0.29	0.22	0.18	
	0.30		0.75	0.62	0.54	0.47	0.38	0.32	0.27	0.21	0.17	
	0.20		0.65	0.55	0.48	0.43	0.35	0.30	0.26	0.20	0.17	
0.30	0.50	0.20	0.86	0.69	0.58	0.50	0.40	0.33	0.28	0.21	0.17	
	0.30		0.73	0.61	0.52	0.45	0.37	0.30	0.26	0.20	0.17	
	0.20		0.64	0.54	0.47	0.42	0.34	0.29	0.25	0.19	0.16	
0.00	0.00	0.00	0.53	0.44	0.37	0.33	0.26	0.22	0.18	0.14	0.12	
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 = 1.25									
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	0.16	0.18	0.19	0.19	0.20	0.21	0.21	0.22	0.22	
	0.30		0.10	0.12	0.13	0.14	0.16	0.17	0.18	0.19	0.20	
	0.20		0.05	0.07	0.09	0.10	0.12	0.14	0.15	0.17	0.18	
0.50	0.50	0.20	0.16	0.17	0.18	0.18	0.19	0.20	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		0.05	0.07	0.09	0.10	0.12	0.13	0.15	0.16	0.17	
0.30	0.50	0.20	0.15	0.16	0.17	0.18	0.19	0.19	0.20	0.20	0.20	
	0.30		0.10	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.18	
	0.20		0.05	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												