

Report No.: 1

Test Time: 25.03.2020 20:39

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FL 58 L 60LED 32W 3000K 20-90 gr.

Luminous Length (mm): 1500

Luminous Width (mm): 75

Luminous Height (mm): 60

Voltage: 228.8 V

Current: 0.145 A

Power: 31.92 W

Power Factor: 0.955

Photometric Results

CIE Class: Direct

Measurement Flux: 4247 lm

Downward Ratio: 99%

Total Rated Lamp Lumens: 4247.0 lm

Efficiency: 100%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 162.3, 127.3, 136.8, 137.2

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 103.0, 85.2, 85.5, 85.5

Luminaire Efficacy Rating (LER): 133.10

Central Intensity: 1960.63 cd

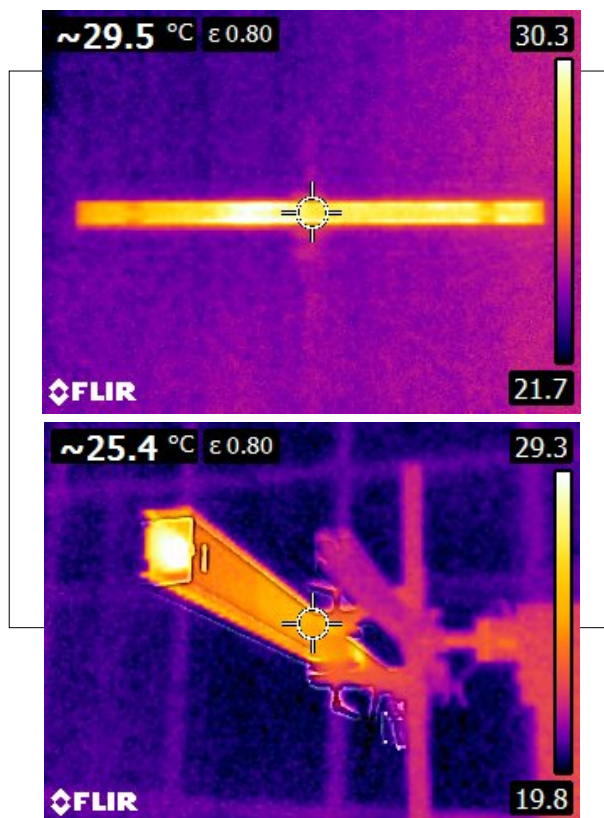
Max. Intensity: 2027.83 cd

Pos of Max. Intensity: H90 V16

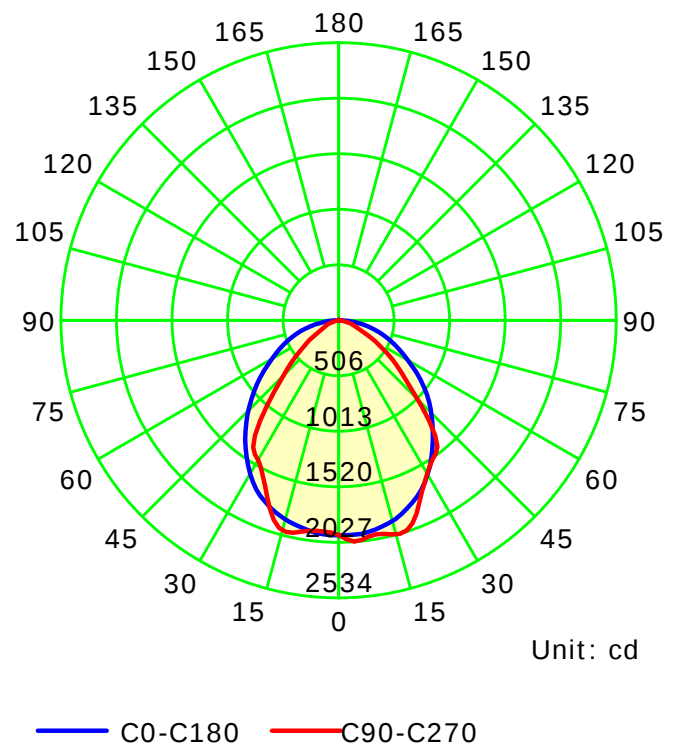
S/MH(C0/C180): 1.22

S/MH(C90/C270): 1.18

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

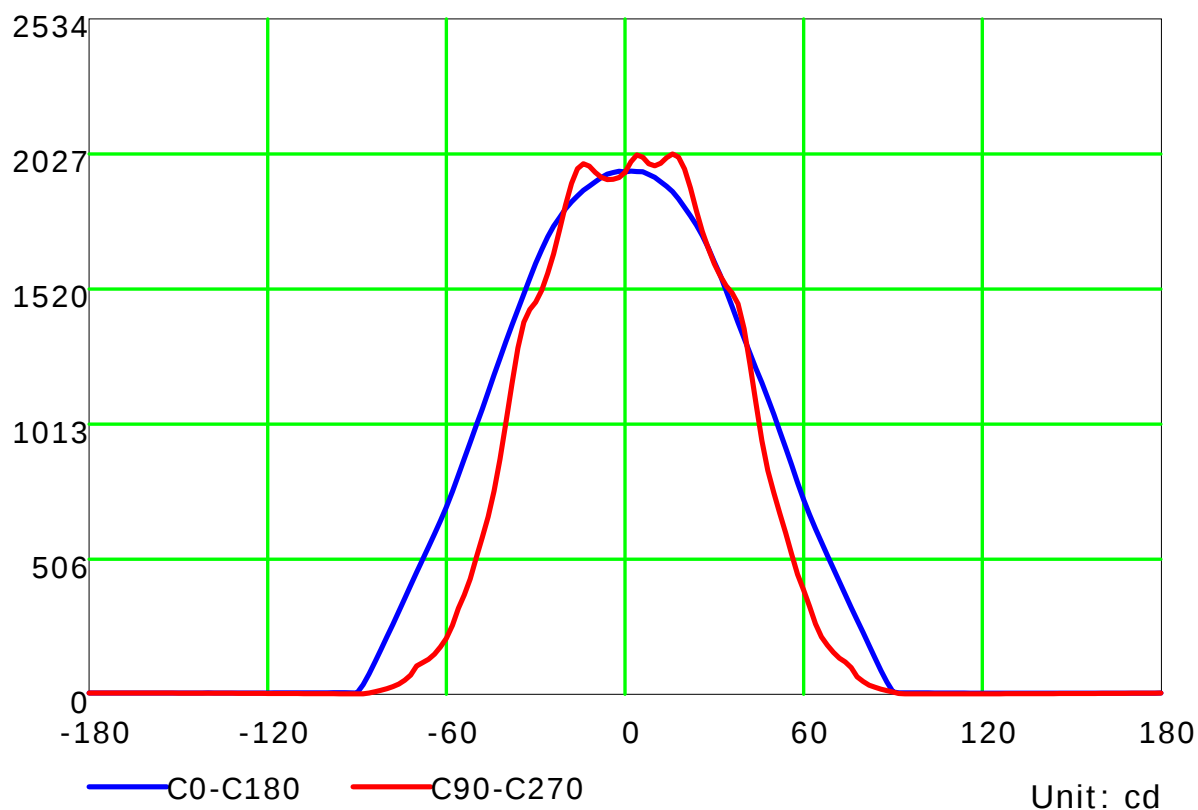
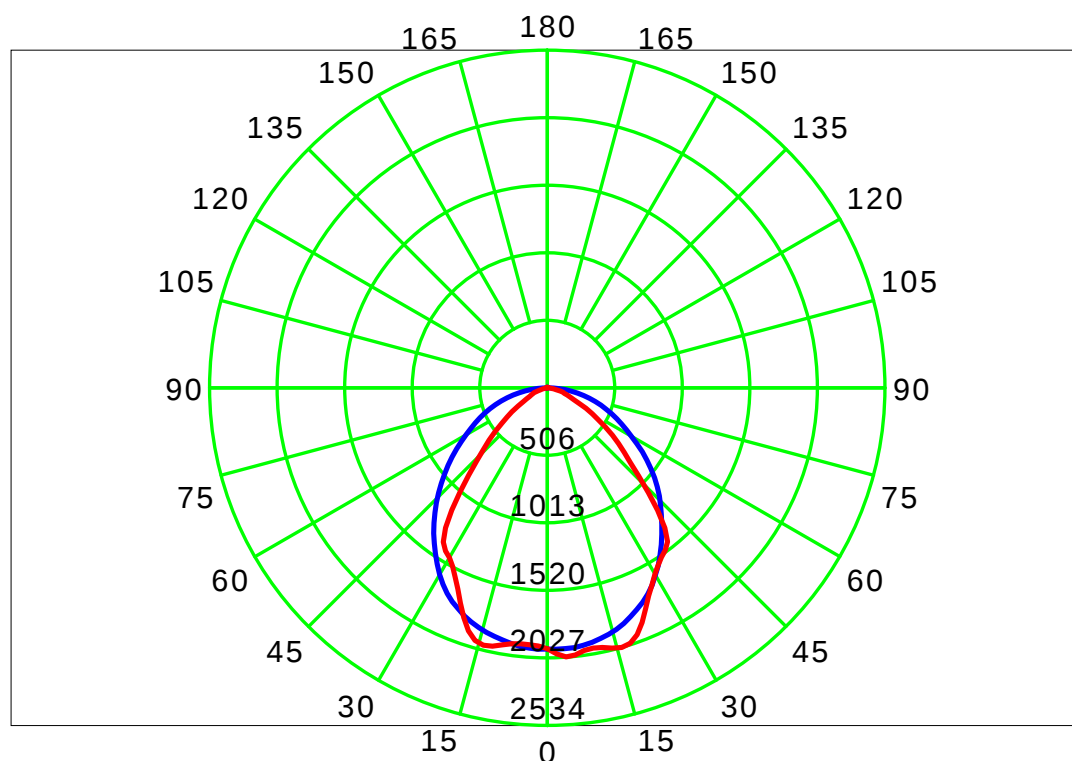
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve



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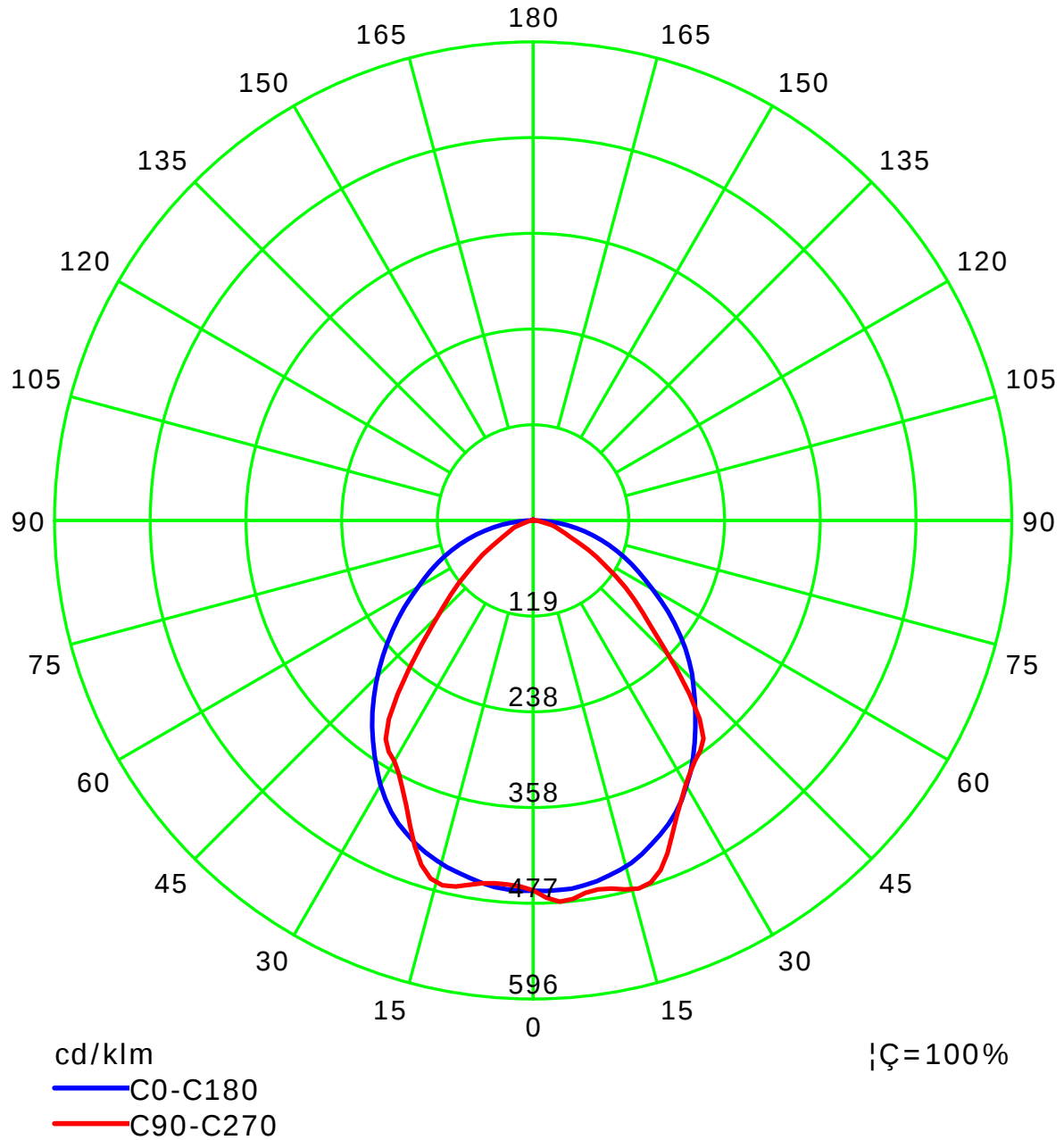
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

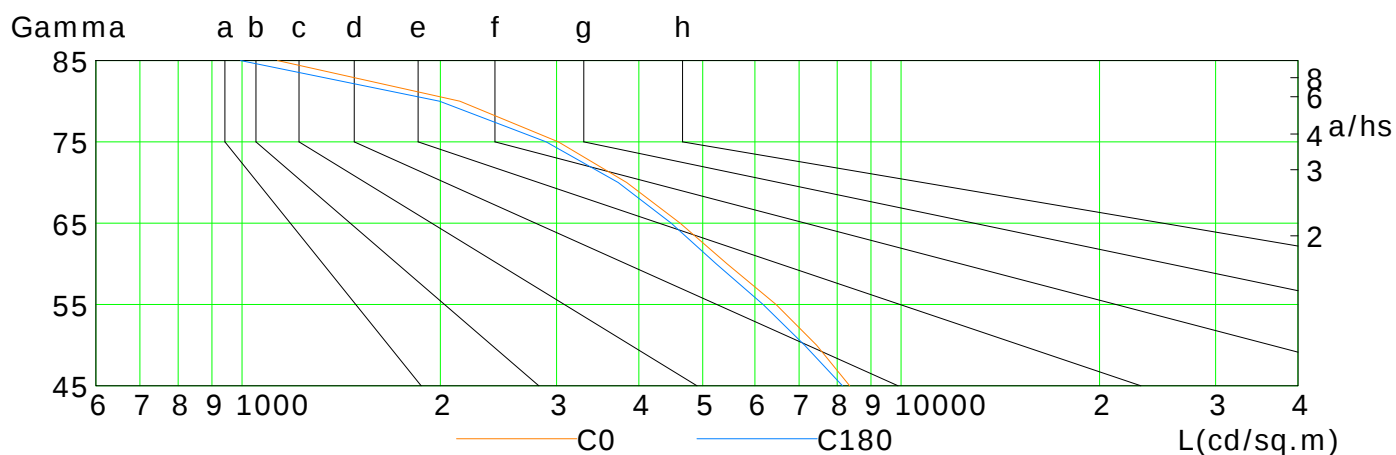
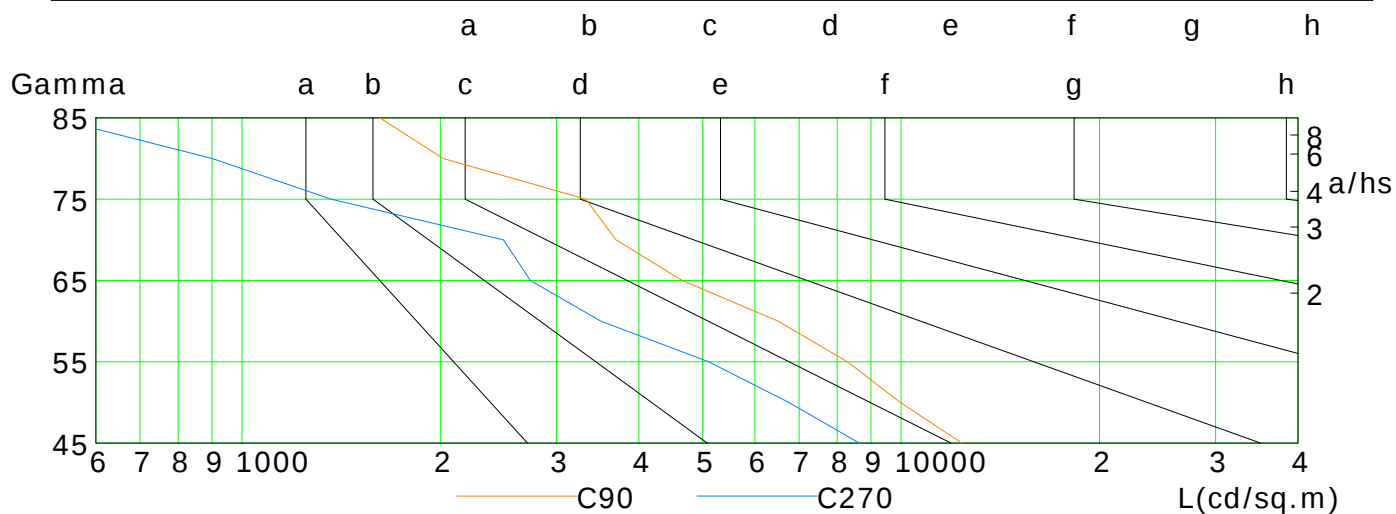
Inspector:

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	8355	7441	6458	5445	4620	3833	3019	2140	1132
C90	12361	9975	8290	6501	4655	3692	3325	2019	1618
C180	8147	7138	6173	5241	4477	3722	2893	1993	995
C270	8638	6755	5105	3502	2738	2492	1365	901	516

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Temperature:

Operator:

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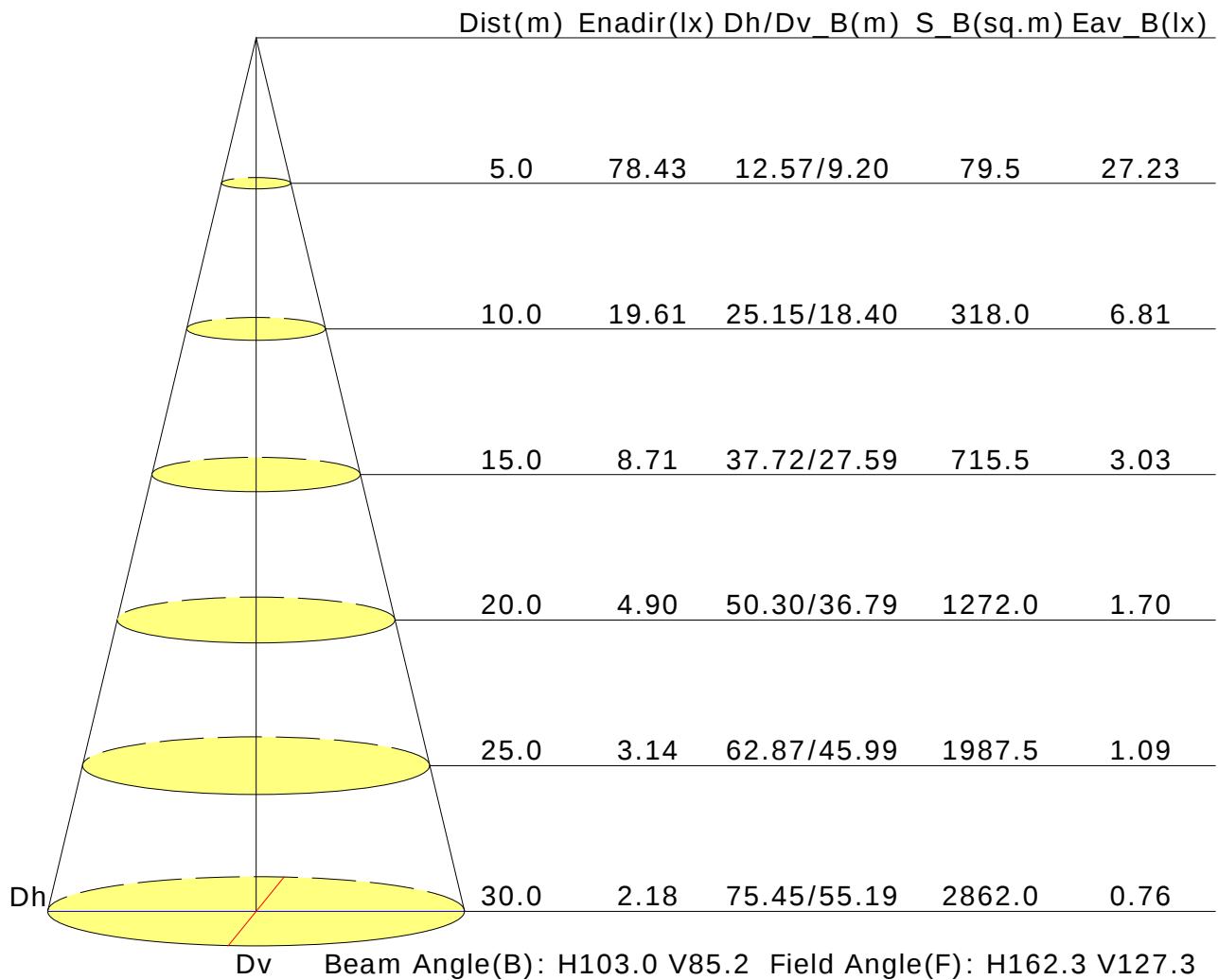
Test Device: LSG-1800B

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	18.3	19.6	18.6	19.8	20.1	17.7	19.0	18.0	19.2	19.5
3H	19.5	20.6	19.8	20.9	21.2	18.1	19.2	18.4	19.5	19.7
4H	20.0	21.0	20.3	21.3	21.6	18.2	19.2	18.5	19.5	19.8
6H	20.3	21.3	20.7	21.6	21.9	18.2	19.2	18.6	19.5	19.8
8H	20.4	21.3	20.8	21.7	22.0	18.2	19.1	18.6	19.5	19.8
12H	20.4	21.3	20.8	21.7	22.0	18.2	19.1	18.6	19.4	19.8
X=4H Y=2H	18.5	19.6	18.9	19.9	20.2	18.0	19.0	18.3	19.3	19.6
3H	19.8	20.7	20.1	21.0	21.3	18.4	19.3	18.8	19.6	20.0
4H	20.3	21.1	20.7	21.5	21.8	18.5	19.3	18.9	19.7	20.1
6H	20.7	21.4	21.2	21.8	22.2	18.6	19.3	19.0	19.7	20.1
8H	20.9	21.5	21.3	21.9	22.4	18.6	19.3	19.0	19.7	20.1
12H	20.9	21.5	21.4	22.0	22.4	18.6	19.2	19.1	19.6	20.1
X=8H Y=4H	20.3	20.9	20.7	21.3	21.8	18.6	19.2	19.0	19.6	20.1
6H	20.8	21.3	21.2	21.7	22.2	18.7	19.2	19.2	19.6	20.1
8H	20.9	21.4	21.4	21.8	22.3	18.7	19.1	19.2	19.6	20.1
12H	21.0	21.4	21.5	21.9	22.4	18.7	19.1	19.2	19.6	20.1
X=12H Y=4H	20.2	20.8	20.7	21.3	21.7	18.6	19.2	19.0	19.6	20.0
6H	20.7	21.2	21.2	21.6	22.1	18.7	19.1	19.2	19.6	20.1
8H	20.9	21.3	21.4	21.8	22.3	18.7	19.1	19.2	19.6	20.1
Variations with the observer position at spacings:										
S=1.0H	+0.3/-0.5					+0.7/-1.1				
S=1.5H	+0.8/-1.1					+1.3/-2.6				
S=2.0H	+1.6/-2.0					+2.8/-3.5				

Calculate in accordance with CIE Pub.117. The table is revised with 4247lm ($8\log(F/F_0) = 5.0$).

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Temperature:

Operator:

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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 = 1.25									
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	0.65	0.75	0.82	0.86	0.92	0.97	1.00	1.03	1.06	
	0.30		0.59	0.68	0.75	0.80	0.87	0.92	0.95	1.00	1.03	
	0.20		0.54	0.63	0.70	0.76	0.83	0.88	0.92	0.97	1.00	
0.50	0.50	0.20	0.64	0.73	0.79	0.84	0.89	0.93	0.96	0.99	1.02	
	0.30		0.58	0.67	0.74	0.79	0.85	0.89	0.92	0.97	0.99	
	0.20		0.53	0.63	0.70	0.74	0.81	0.86	0.89	0.94	0.97	
0.30	0.50	0.20	0.62	0.71	0.77	0.81	0.87	0.90	0.93	0.96	0.98	
	0.30		0.57	0.66	0.72	0.77	0.83	0.87	0.90	0.93	0.96	
	0.20		0.53	0.62	0.69	0.73	0.80	0.84	0.87	0.91	0.94	
0.00	0.00	0.00	0.51	0.60	0.66	0.70	0.76	0.80	0.83	0.87	0.89	
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	0.86	0.70	0.59	0.51	0.41	0.34	0.29	0.22	0.18	
	0.30		0.72	0.60	0.52	0.45	0.37	0.31	0.26	0.21	0.17	
	0.20		0.62	0.52	0.46	0.41	0.33	0.28	0.25	0.20	0.16	
0.50	0.50	0.20	0.83	0.67	0.56	0.49	0.38	0.35	0.27	0.21	0.17	
	0.30		0.70	0.58	0.50	0.44	0.35	0.29	0.25	0.20	0.16	
	0.20		0.61	0.51	0.45	0.40	0.32	0.27	0.24	0.19	0.16	
0.30	0.50	0.20	0.80	0.64	0.54	0.46	0.36	0.30	0.26	0.20	0.16	
	0.30		0.69	0.57	0.48	0.42	0.34	0.28	0.24	0.19	0.15	
	0.20		0.60	0.50	0.44	0.39	0.31	0.26	0.23	0.18	0.15	
0.00	0.00	0.00	0.49	0.40	0.34	0.29	0.23	0.19	0.16	0.13	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 = 1.25									
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	0.17	0.18	0.19	0.20	0.20	0.21	0.22	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	0.20	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		0.06	0.07	0.09	0.10	0.12	0.14	0.15	0.16	0.17	
0.30	0.50	0.20	0.15	0.16	0.17	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												