

Report No.:

Test Time: 22.06.2020 16:25

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FL 60/1000 24W 4000K frozen

Luminous Length (mm): 950

Luminous Width (mm): 60

Luminous Height (mm): 70

Voltage: 222.4 V

Current: 0.111 A

Power: 23.42 W

Power Factor: 0.946

Photometric Results

CIE Class: Direct

Measurement Flux: 3046.3 lm

Downward Ratio: 100%

Total Rated Lamp Lumens: 3046.3 lm

Efficiency: 100%

Upward Ratio: 0%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 148.5, 134.2, 142.0, 142.1

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 99.0, 88.5, 93.7, 94.1

Luminaire Efficacy Rating (LER): 130.12

Central Intensity: 1366.58 cd

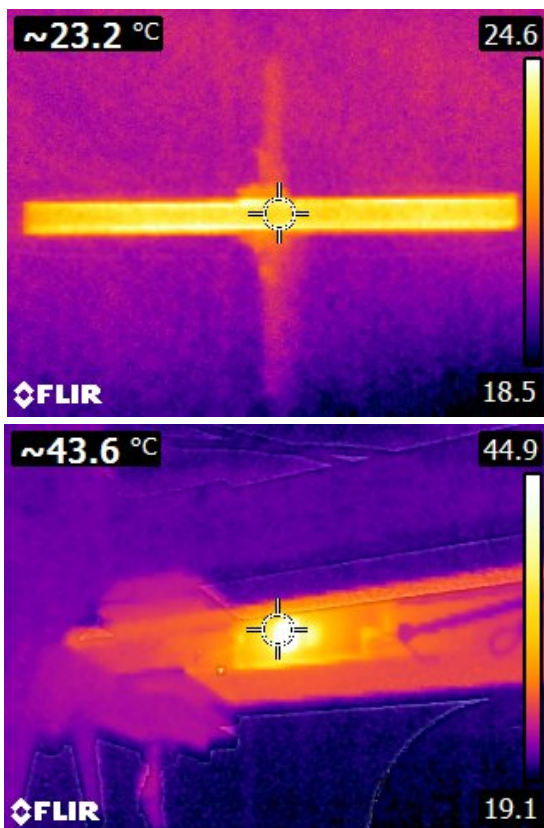
Max. Intensity: 1369.92 cd

Pos of Max. Intensity: H90 V2

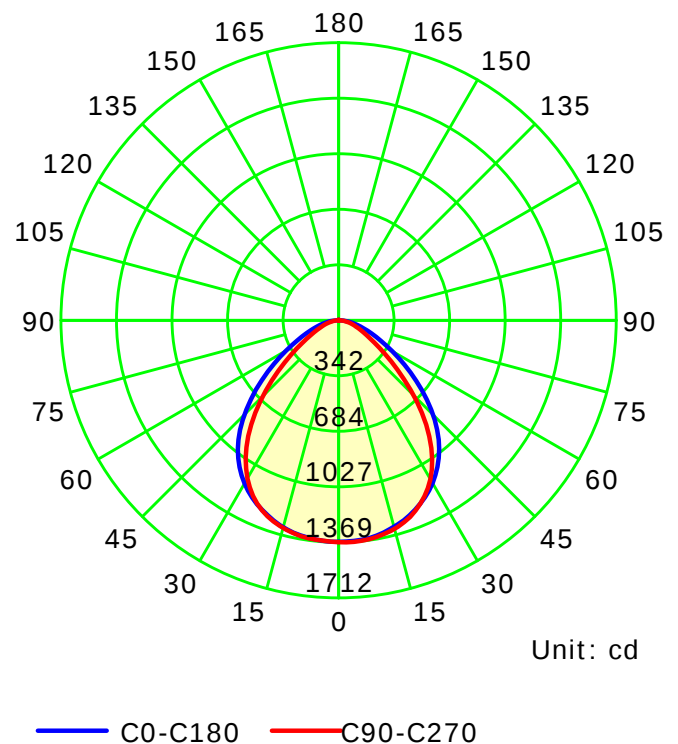
S/MH(C0/C180): 1.26

S/MH(C90/C270): 1.22

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

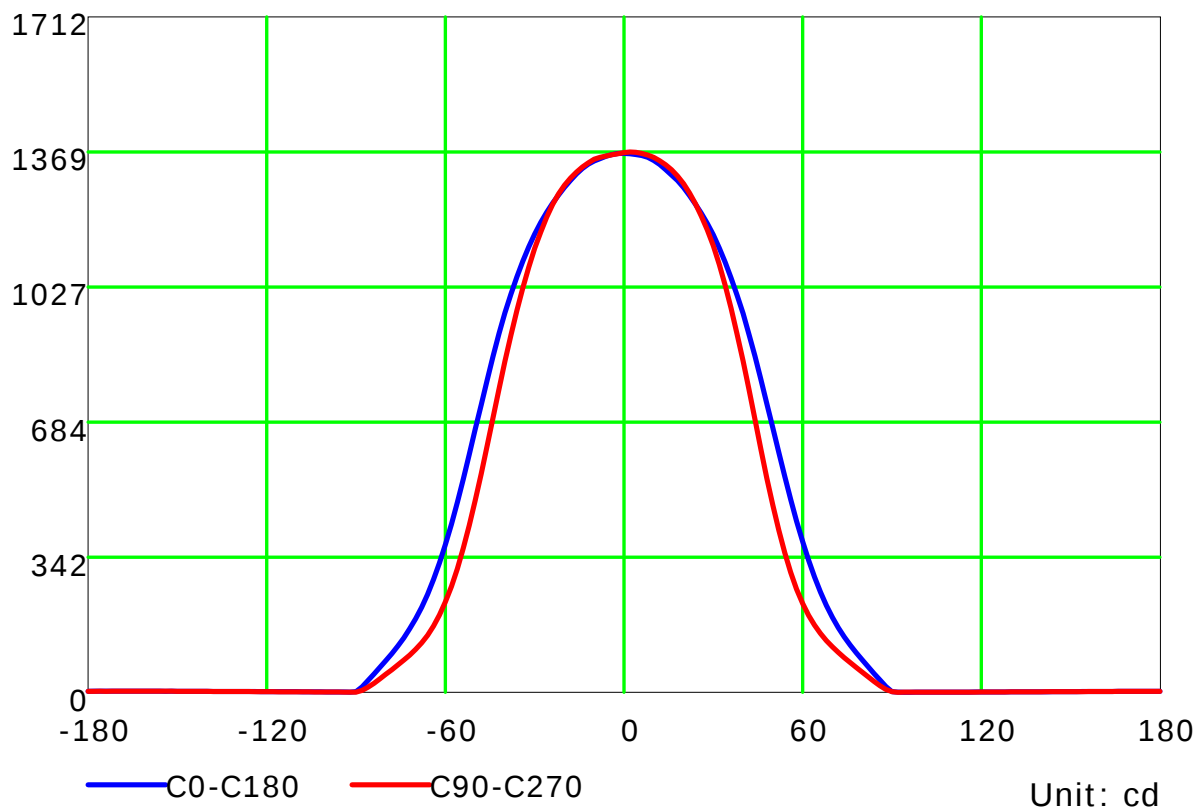
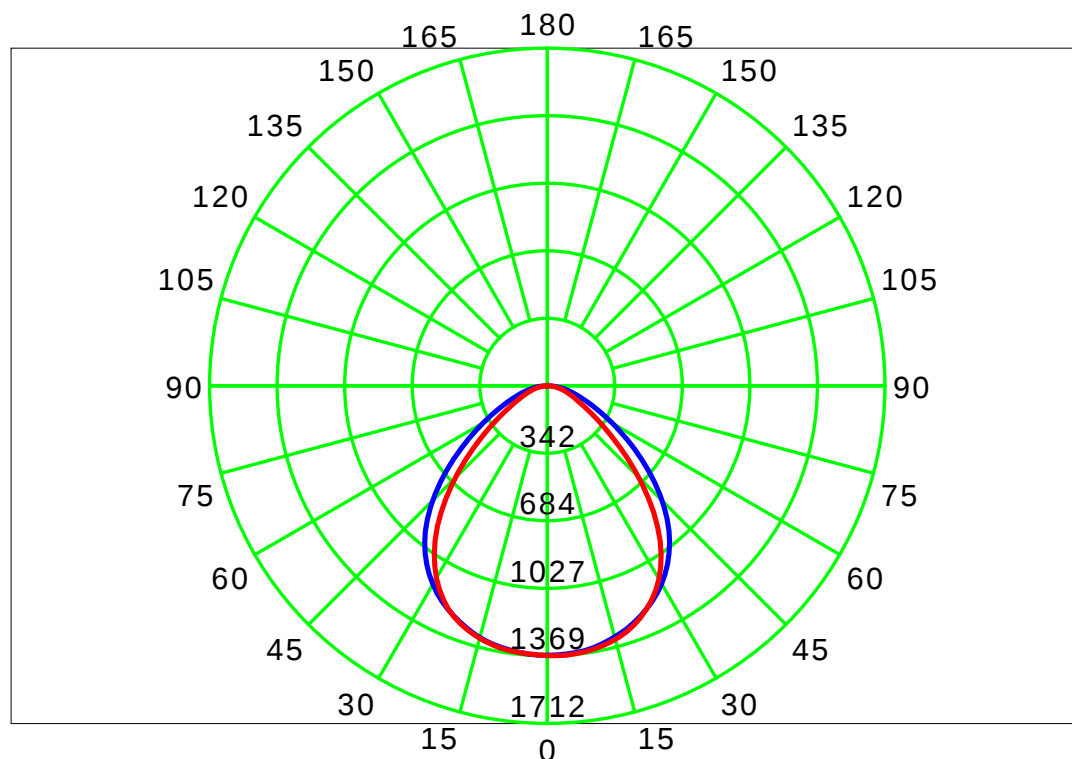
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve



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Test Lab:

Test Type: TYPE C

Temperature:

Operator:

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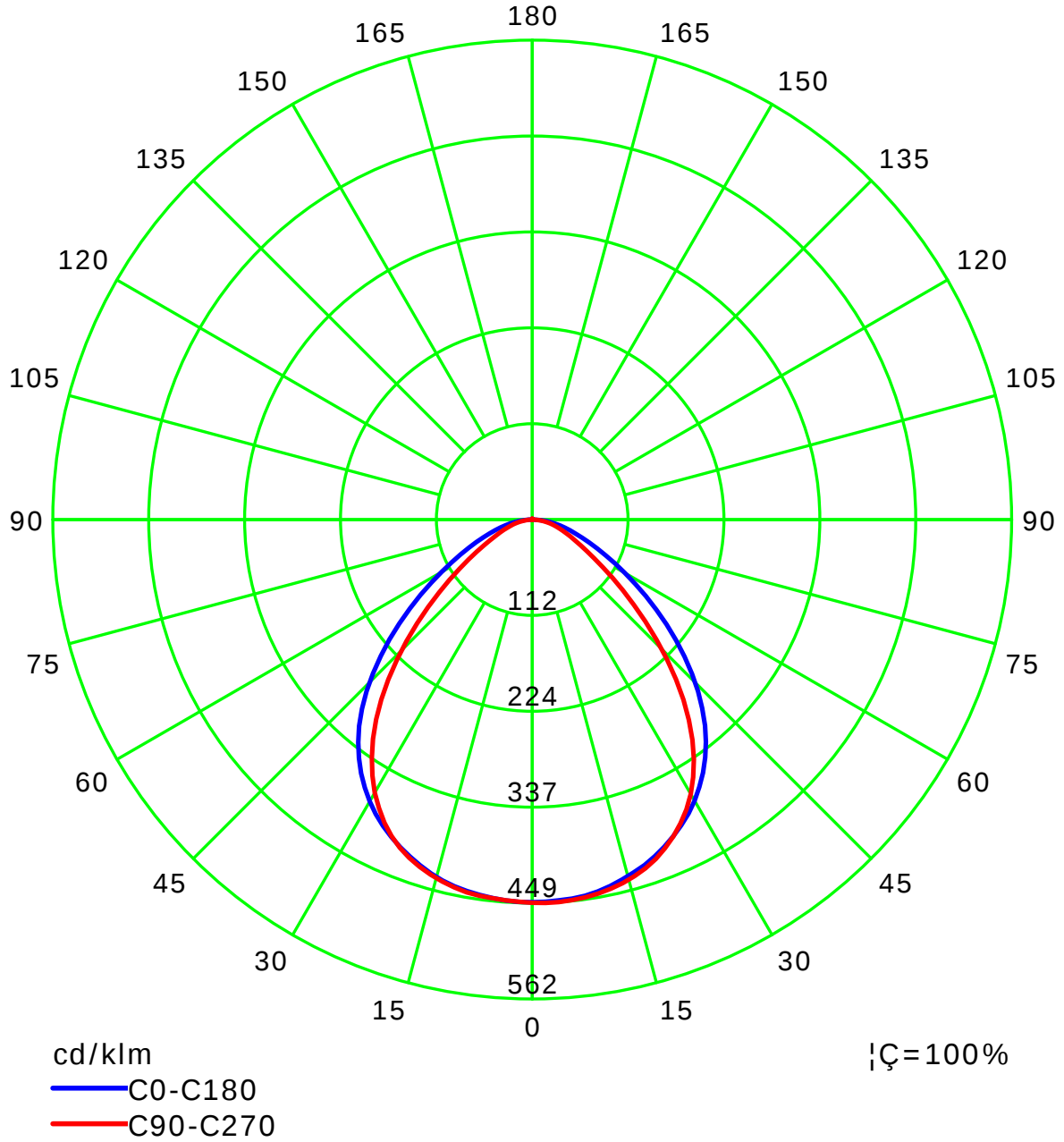
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve(cd / klm)



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Test Device: LSG-1800B

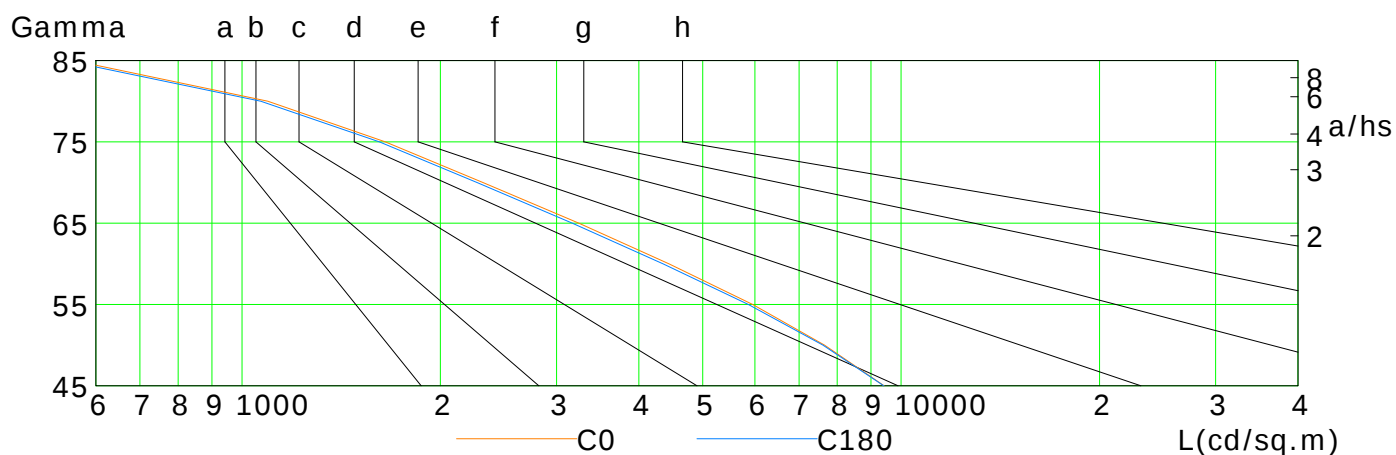
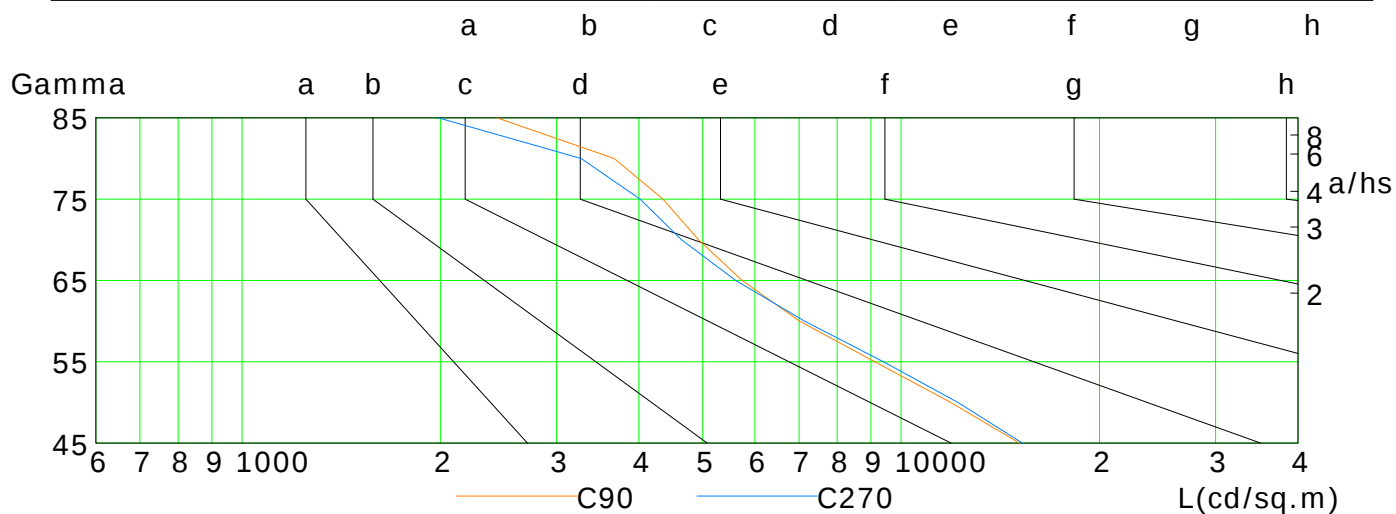
Distance: 12.677 m

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	9424	7653	5952	4444	3243	2321	1650	1094	556
C90	15124	11892	9119	7012	5737	4927	4352	3670	2438
C180	9413	7608	5864	4354	3169	2272	1616	1068	539
C270	15273	12194	9399	7135	5612	4643	4019	3270	1986

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Test Type: TYPE C

Temperature:

Operator:

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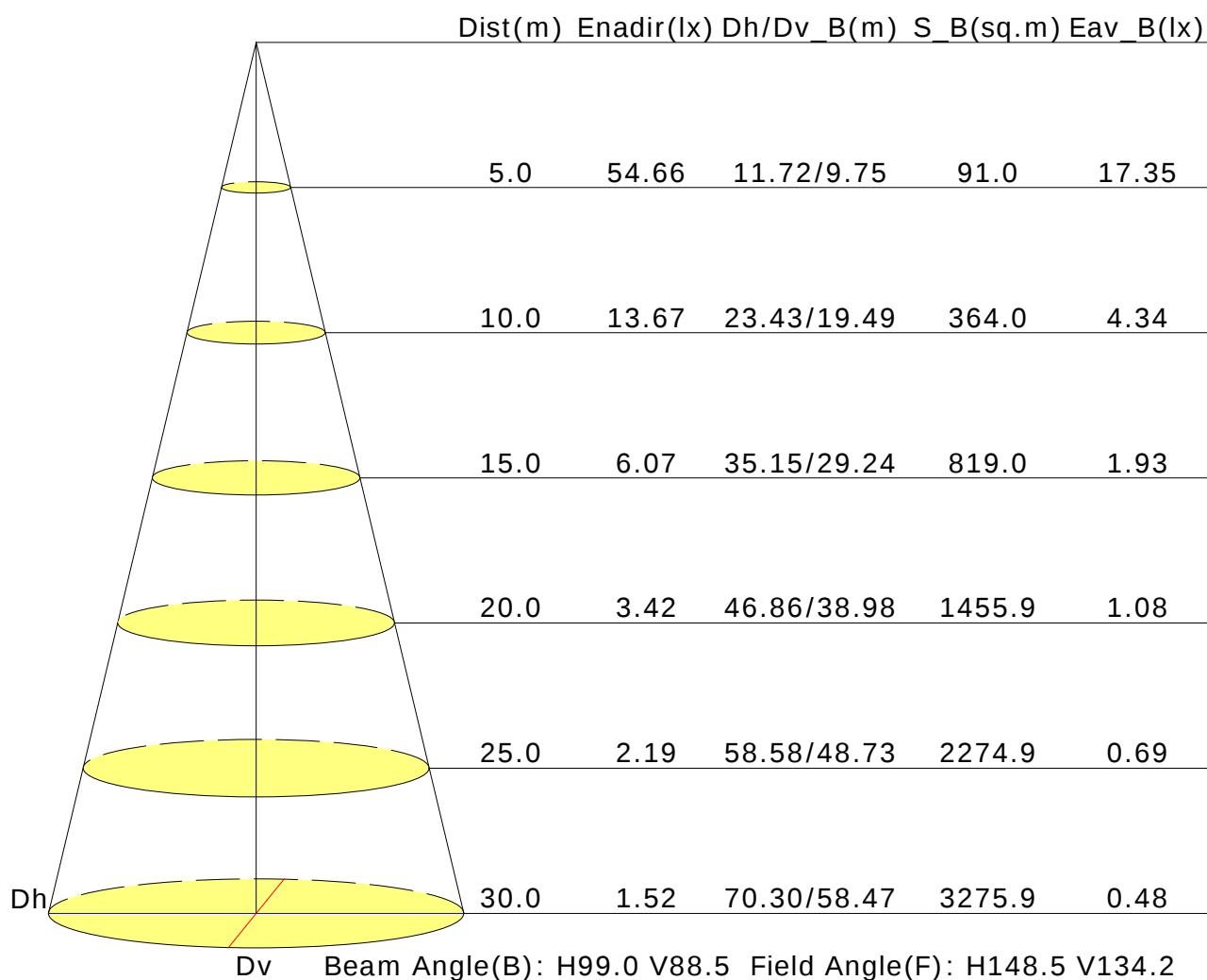
Test Device: LSG-1800B

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	18.8	20.0	19.1	20.3	20.5	18.7	19.9	19.0	20.1	20.4
3H	19.3	20.4	19.6	20.7	20.9	19.1	20.2	19.4	20.5	20.8
4H	19.4	20.5	19.8	20.8	21.1	19.3	20.4	19.7	20.7	20.9
6H	19.5	20.5	19.9	20.8	21.1	19.5	20.4	19.8	20.7	21.1
8H	19.5	20.5	19.9	20.8	21.1	19.5	20.4	19.9	20.8	21.1
12H	19.5	20.4	19.9	20.7	21.1	19.5	20.4	19.9	20.7	21.1
X=4H Y=2H	18.9	20.0	19.3	20.3	20.6	18.8	19.9	19.2	20.2	20.5
3H	19.6	20.5	19.9	20.8	21.1	19.4	20.3	19.8	20.6	21.0
4H	19.8	20.6	20.2	21.0	21.3	19.7	20.5	20.1	20.8	21.2
6H	20.0	20.7	20.4	21.1	21.5	19.9	20.6	20.3	21.0	21.4
8H	20.0	20.6	20.4	21.1	21.5	19.9	20.6	20.4	21.0	21.4
12H	20.0	20.6	20.5	21.0	21.5	20.0	20.6	20.4	21.0	21.4
X=8H Y=4H	19.8	20.5	20.3	20.9	21.3	19.7	20.4	20.1	20.8	21.2
6H	20.1	20.6	20.5	21.0	21.5	20.0	20.5	20.4	20.9	21.4
8H	20.1	20.6	20.6	21.0	21.5	20.1	20.5	20.6	21.0	21.5
12H	20.2	20.6	20.7	21.0	21.5	20.1	20.5	20.6	21.0	21.5
X=12H Y=4H	19.8	20.4	20.3	20.8	21.3	19.7	20.3	20.1	20.7	21.1
6H	20.0	20.5	20.5	21.0	21.5	20.0	20.4	20.5	20.9	21.4
8H	20.1	20.5	20.6	21.0	21.5	20.1	20.5	20.6	21.0	21.5
Variations with the observer position at spacings:										
S=1.0H	+0.5/-0.7					+0.4/-0.8				
S=1.5H	+0.9/-1.6					+1.4/-1.9				
S=2.0H	+1.9/-2.5					+2.7/-3.0				

Calculate in accordance with CIE Pub.117. The table is revised with 3046lm ($8\log(F/F_0) = 3.9$).

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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 = 1.25									
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	0.81	0.86	0.92	0.97	1.00	1.03	1.06	
	0.30		0.58	0.68	0.75	0.80	0.87	0.92	0.95	1.00	1.03	
	0.20		0.53	0.63	0.70	0.76	0.83	0.88	0.92	0.97	1.00	
0.50	0.50	0.20	0.63	0.73	0.79	0.83	0.89	0.93	0.96	0.99	1.02	
	0.30		0.57	0.67	0.74	0.78	0.85	0.89	0.93	0.97	0.99	
	0.20		0.53	0.62	0.69	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		0.56	0.66	0.72	0.77	0.83	0.87	0.90	0.94	0.96	
	0.20		0.52	0.62	0.68	0.73	0.80	0.84	0.87	0.91	0.94	
0.00	0.00	0.00	0.50	0.59	0.66	0.70	0.76	0.80	0.83	0.87	0.89	
Rating:23W 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	0.87	0.71	0.60	0.52	0.41	0.34	0.29	0.22	0.18	
	0.30		0.73	0.61	0.52	0.46	0.37	0.31	0.27	0.21	0.17	
	0.20		0.63	0.53	0.46	0.41	0.34	0.28	0.25	0.20	0.16	
0.50	0.50	0.20	0.84	0.68	0.57	0.49	0.39	0.35	0.27	0.21	0.17	
	0.30		0.71	0.59	0.50	0.44	0.35	0.29	0.25	0.20	0.16	
	0.20		0.62	0.52	0.45	0.40	0.33	0.27	0.24	0.19	0.16	
0.30	0.50	0.20	0.81	0.65	0.54	0.47	0.37	0.30	0.26	0.20	0.16	
	0.30		0.70	0.57	0.49	0.42	0.34	0.28	0.24	0.19	0.15	
	0.20		0.61	0.51	0.44	0.39	0.32	0.26	0.23	0.18	0.15	
0.00	0.00	0.00	0.50	0.40	0.34	0.30	0.24	0.19	0.17	0.13	0.11	
Rating:23W 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	0.18	0.20	0.20	0.21	0.21	0.22	
	0.30		0.10	0.11	0.13	0.14	0.15	0.17	0.18	0.19	0.20	
	0.20		0.05	0.07	0.09	0.10	0.12	0.14	0.15	0.16	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		0.05	0.07	0.09	0.10	0.12	0.13	0.14	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	0.16	0.17	0.18	
	0.20		0.05	0.07	0.08	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:23W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												