

Report No.:

Test Time: 09.10.2020 10:18

Luminaire Property

Luminaire Manufacturer: FAROS LED

Luminaire Description: FI 171 4x40LED 38W 5000K opal

Luminous Length (mm): 605

Luminous Width (mm): 172

Luminous Height (mm): 203

Voltage: 221.3 V

Current: 0.176 A

Power: 38.20 W

Power Factor: 0.979

Photometric Results

CIE Class: Direct

Measurement Flux: 4054.7 lm

Downward Ratio: 100%

Total Rated Lamp Lumens: 4054.7 lm

Efficiency: 100%

Upward Ratio: 0%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 164.7, 163.7, 164.1, 164.3

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 112.4, 112.1, 112.2, 112.3

Luminaire Efficacy Rating (LER): 106.19

Central Intensity: 1399.44 cd

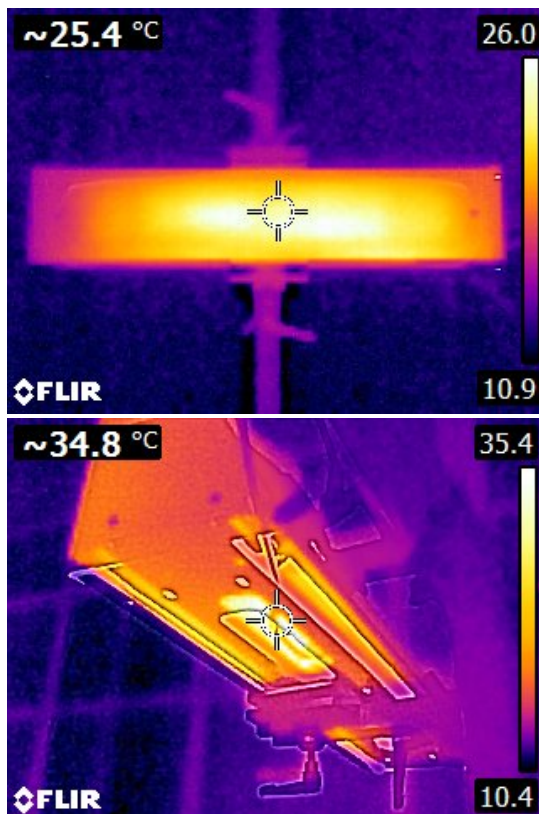
Max. Intensity: 1406.24 cd

Pos of Max. Intensity: H157.5 V2

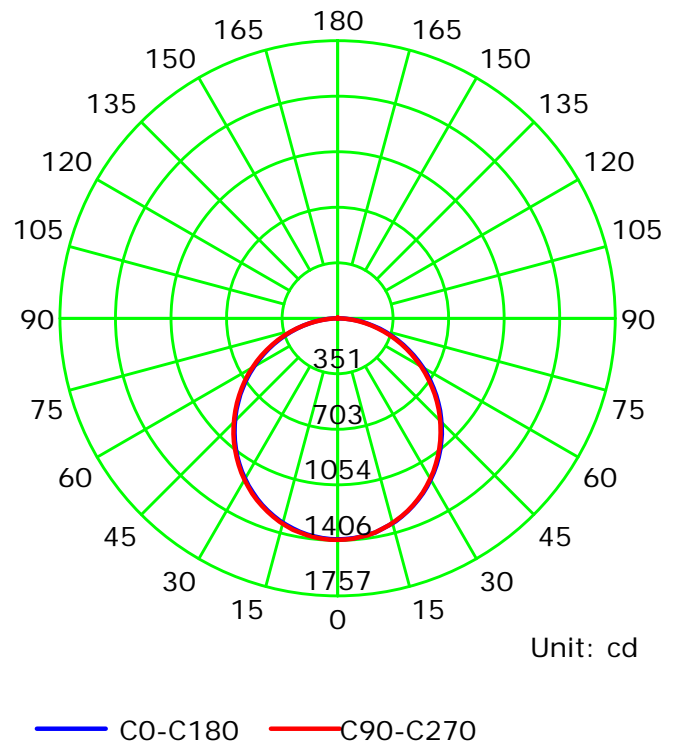
S/MH(C0/C180): 1.25

S/MH(C90/C270): 1.25

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

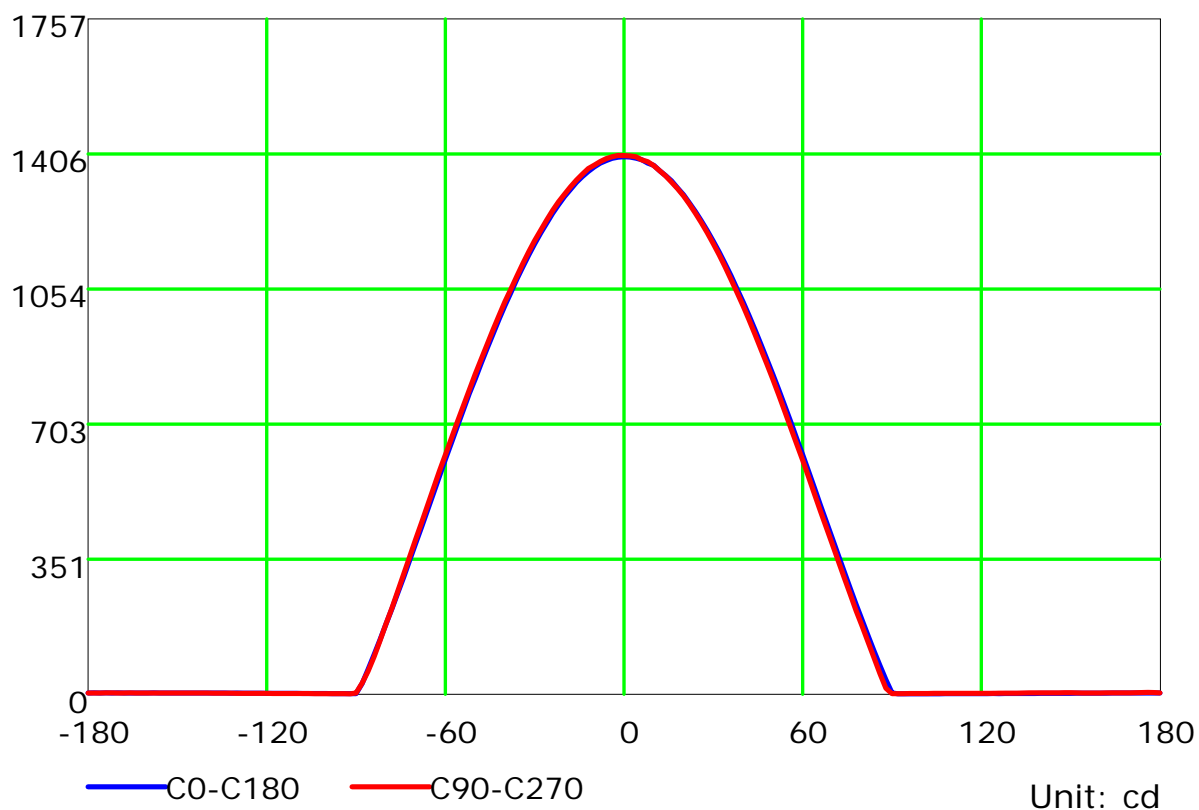
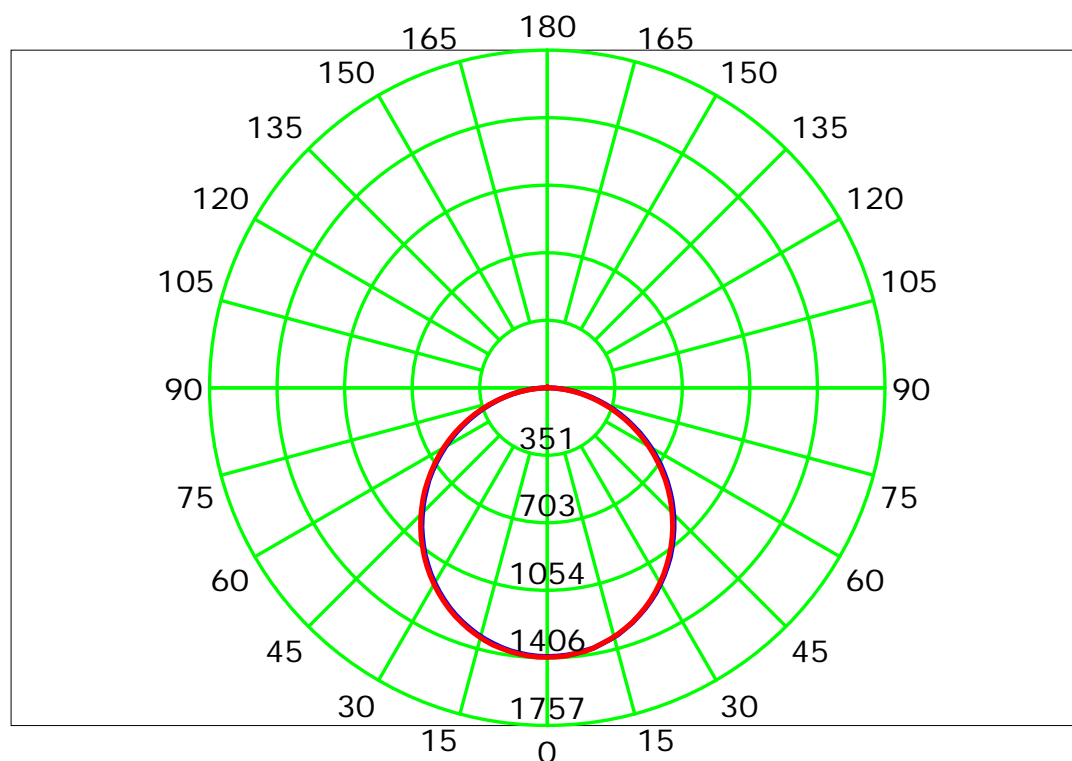
Test Device: LSG-1800B

Distance: 12.682 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve



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Test Lab:

Test Type: TYPE C

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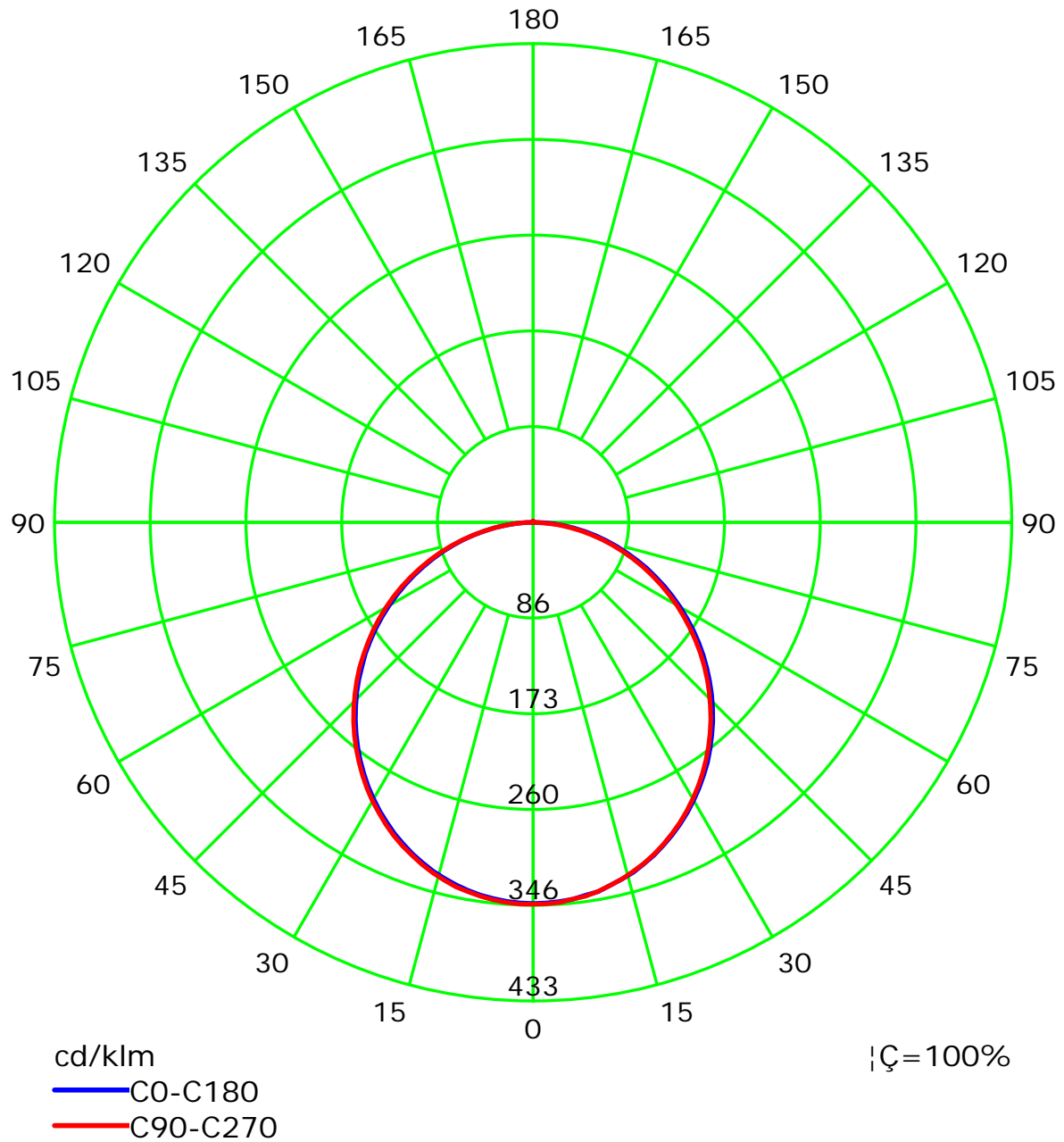
Test Device: LSG-1800B

Distance: 12.682 m

Humidity:

Inspector:

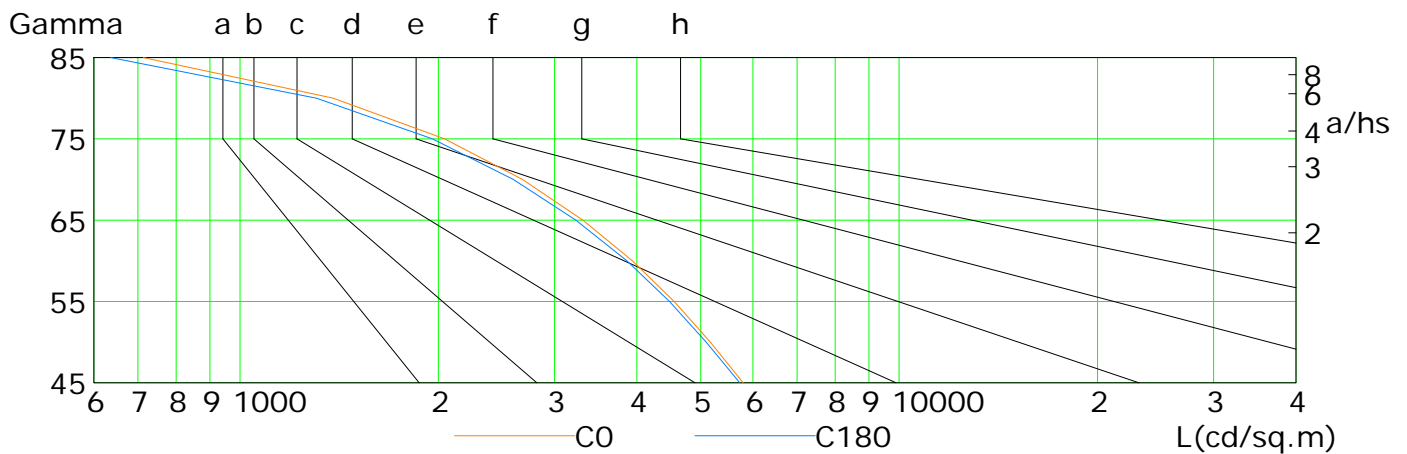
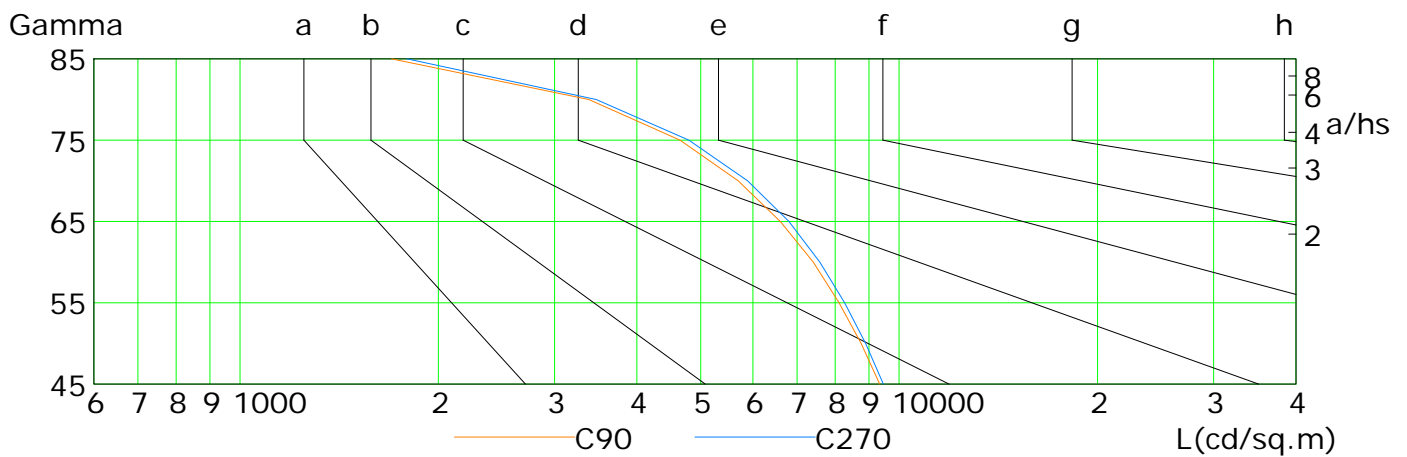
Luminous Intensity Distribution Curve(cd/klm)



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

a b c d e f g h



L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	5798	5172	4558	3939	3313	2683	2043	1386	713
C90	9342	8758	8107	7410	6603	5700	4651	3381	1698
C180	5732	5096	4485	3863	3232	2599	1958	1306	636
C270	9464	8897	8266	7579	6804	5890	4798	3470	1793

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Test Lab:

Test Type: TYPE C

Temperature:

Operator:

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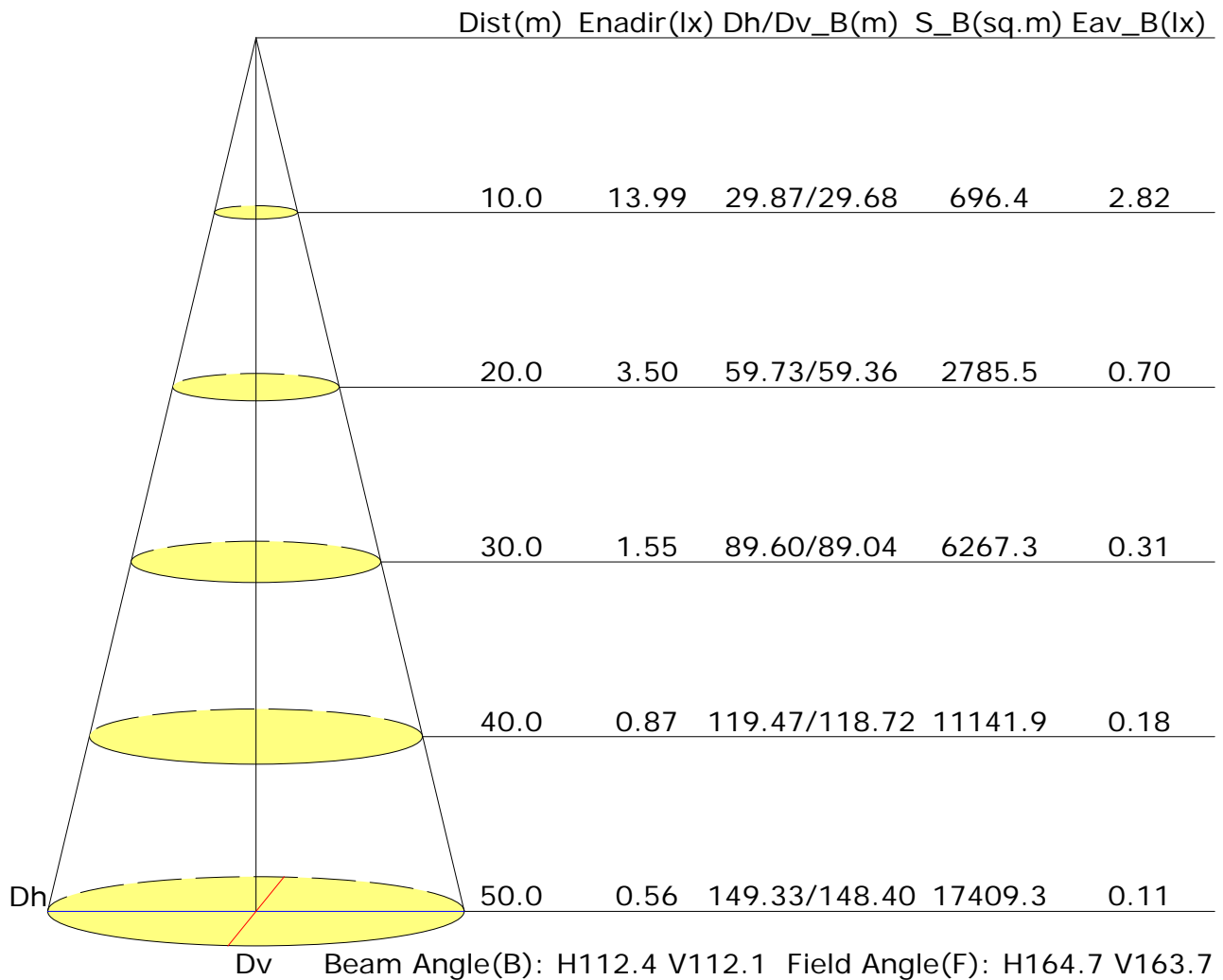
Test Device: LSG-1800B

Distance: 12.682 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	17.8	19.2	18.1	19.5	19.7	18.9	20.3	19.2	20.6	20.8
3H	19.0	20.3	19.3	20.5	20.8	20.3	21.6	20.7	21.9	22.2
4H	19.4	20.6	19.8	20.9	21.2	20.9	22.1	21.2	22.4	22.7
6H	19.7	20.8	20.0	21.1	21.4	21.2	22.3	21.6	22.7	23.0
8H	19.7	20.8	20.1	21.1	21.5	21.3	22.4	21.7	22.7	23.1
12H	19.7	20.8	20.1	21.1	21.5	21.3	22.4	21.7	22.7	23.1
X=4H Y=2H	18.4	19.6	18.8	19.9	20.2	19.3	20.5	19.7	20.8	21.1
3H	19.7	20.8	20.1	21.1	21.5	20.9	21.9	21.2	22.2	22.6
4H	20.3	21.2	20.7	21.6	21.9	21.5	22.4	21.9	22.8	23.2
6H	20.6	21.4	21.0	21.8	22.2	21.9	22.8	22.4	23.2	23.6
8H	20.7	21.5	21.2	21.9	22.3	22.1	22.8	22.5	23.2	23.7
12H	20.8	21.5	21.2	21.9	22.3	22.1	22.8	22.6	23.3	23.7
X=8H Y=4H	20.5	21.2	20.9	21.7	22.1	21.6	22.4	22.1	22.8	23.2
6H	20.9	21.6	21.4	22.0	22.5	22.2	22.8	22.6	23.2	23.7
8H	21.1	21.6	21.6	22.1	22.6	22.3	22.9	22.8	23.3	23.8
12H	21.2	21.7	21.7	22.1	22.7	22.4	22.9	22.9	23.4	23.9
X=12H Y=4H	20.5	21.2	21.0	21.6	22.1	21.6	22.3	22.1	22.7	23.2
6H	21.0	21.5	21.5	22.0	22.5	22.2	22.7	22.7	23.2	23.7
8H	21.1	21.6	21.7	22.1	22.6	22.4	22.8	22.9	23.3	23.8
Variations with the observer position at spacings:										
S=1.0H	+0.2/-0.2					+0.1/-0.1				
S=1.5H	+0.4/-0.6					+0.4/-0.5				
S=2.0H	+0.7/-1.2					+0.9/-1.2				

Calculate in accordance with CIE Pub.117. The table is revised with 4055lm ($8\log(F/F_0) = 4.9$).

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	0.56	0.66	0.74	0.79	0.86	0.91	0.95	1.00	1.03	
	0.30		0.48	0.58	0.66	0.72	0.80	0.86	0.90	0.95	0.99	
	0.20		0.42	0.52	0.60	0.66	0.75	0.81	0.85	0.92	0.96	
0.50	0.50	0.20	0.54	0.64	0.71	0.76	0.83	0.88	0.91	0.96	0.98	
	0.30		0.47	0.57	0.64	0.70	0.78	0.83	0.87	0.92	0.95	
	0.20		0.42	0.52	0.59	0.65	0.73	0.79	0.83	0.89	0.93	
0.30	0.50	0.20	0.53	0.62	0.69	0.73	0.80	0.85	0.88	0.92	0.94	
	0.30		0.46	0.56	0.63	0.68	0.76	0.81	0.84	0.89	0.92	
	0.20		0.41	0.51	0.58	0.64	0.72	0.77	0.81	0.86	0.90	
0.00	0.00	0.00	0.39	0.49	0.56	0.61	0.68	0.73	0.77	0.82	0.85	
Rating: 38W 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	1.01	0.84	0.71	0.62	0.50	0.42	0.36	0.28	0.23	
	0.30		0.84	0.72	0.62	0.55	0.45	0.38	0.33	0.26	0.22	
	0.20		0.72	0.63	0.55	0.50	0.41	0.35	0.31	0.25	0.21	
0.50	0.50	0.20	0.97	0.80	0.69	0.60	0.48	0.43	0.34	0.26	0.22	
	0.30		0.82	0.70	0.61	0.54	0.44	0.37	0.32	0.25	0.21	
	0.20		0.72	0.62	0.54	0.49	0.40	0.34	0.30	0.24	0.20	
0.30	0.50	0.20	0.95	0.77	0.66	0.57	0.46	0.38	0.32	0.25	0.21	
	0.30		0.81	0.68	0.59	0.52	0.42	0.36	0.31	0.24	0.20	
	0.20		0.71	0.61	0.53	0.48	0.39	0.33	0.29	0.23	0.19	
0.00	0.00	0.00	0.61	0.51	0.44	0.39	0.32	0.27	0.23	0.18	0.15	
Rating: 38W 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	0.17	0.18	0.19	0.20	0.21	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	0.08	0.09	0.11	0.13	0.14	0.16	0.17
0.50	0.50	0.20	0.16	0.17	0.18	0.19	0.20	0.20	0.21	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	0.08	0.09	0.11	0.13	0.14	0.15	0.17
0.30	0.50	0.20	0.16	0.17	0.18	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	0.16	0.18	0.18
	0.20		0.05	0.06	0.08	0.09	0.11	0.12	0.13	0.15	0.16
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<p>Rating: 38W Photometrically tested without ceiling board.</p> <p>Multiply UF values by service correction factors</p> <p>Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>											