

Report No.:

Test Time: 09.10.2020 14:55

Luminaire Property

Luminaire Manufacturer: FAROS LED

Luminaire Description: FI 171 4x40LED 44W 5000K opal

Luminous Length (mm): 605

Luminous Width (mm): 172

Luminous Height (mm): 203

Voltage: 221.3 V

Current: 0.204 A

Power: 44.52 W

Power Factor: 0.983

Photometric Results

CIE Class: Direct

Measurement Flux: 4621.3 lm

Downward Ratio: 100%

Total Rated Lamp Lumens: 4621.3 lm

Efficiency: 100%

Upward Ratio: 0%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 164.7, 163.3, 163.8, 163.9

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 112.3, 112.0, 112.2, 112.2

Luminaire Efficacy Rating (LER): 103.85

Central Intensity: 1594.03 cd

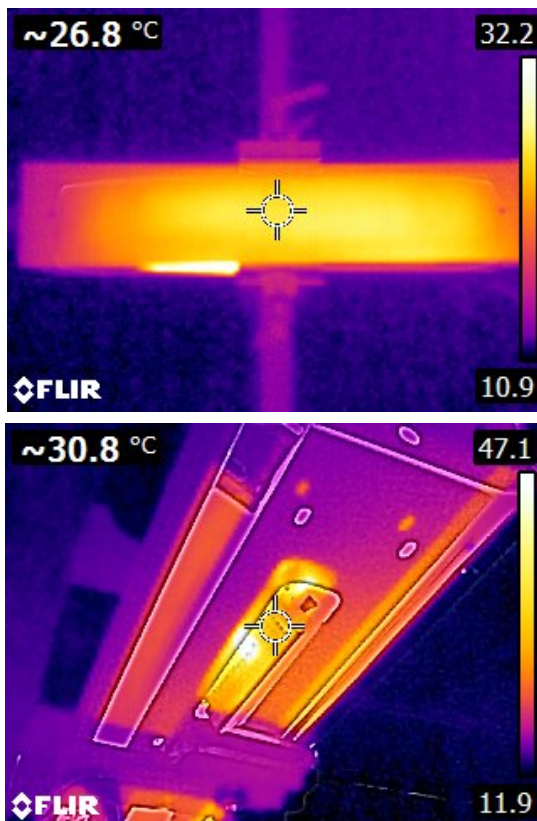
Max. Intensity: 1606.21 cd

Pos of Max. Intensity: H337.5 V2

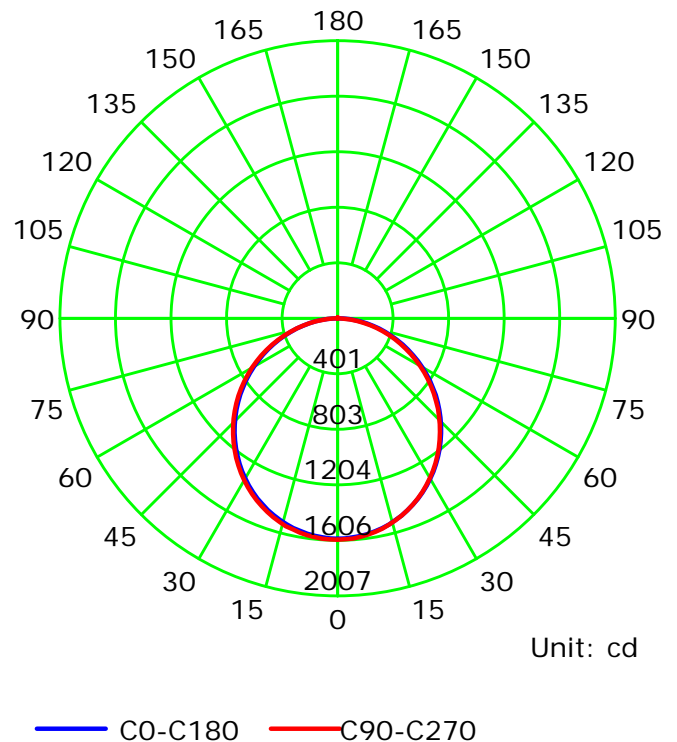
S/MH(C0/C180): 1.25

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

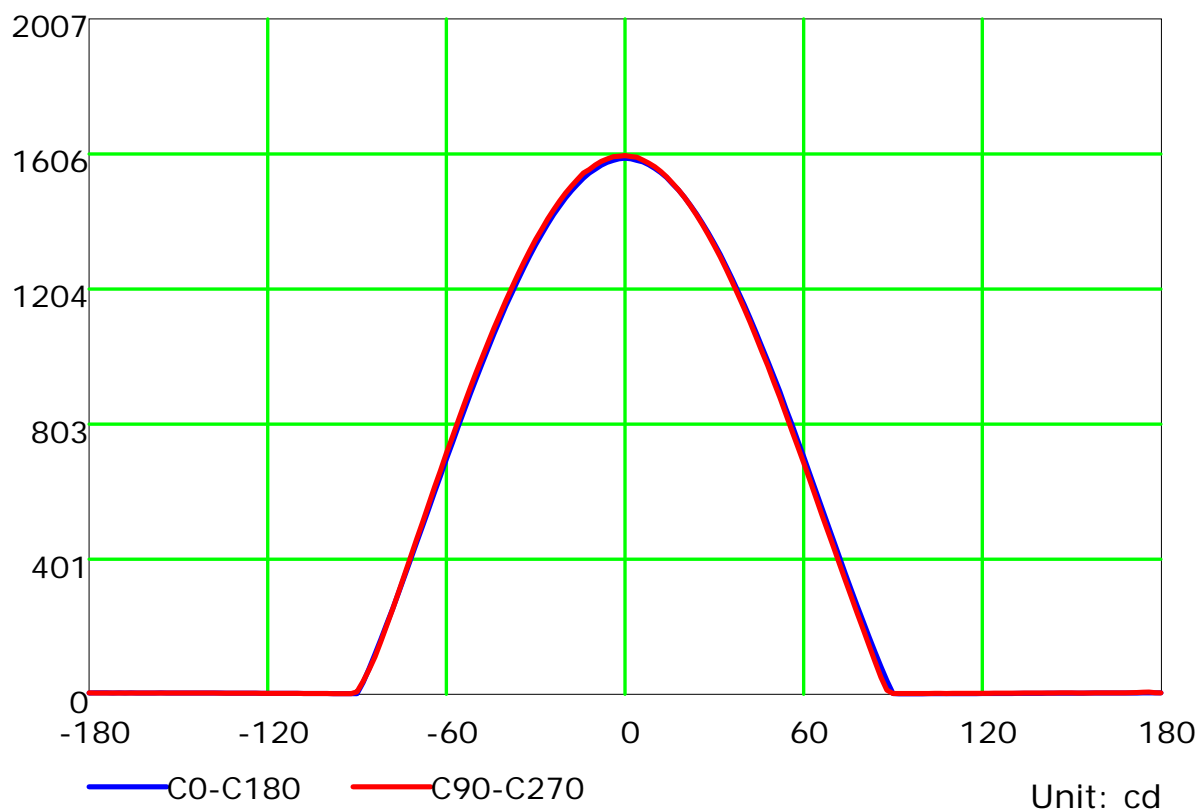
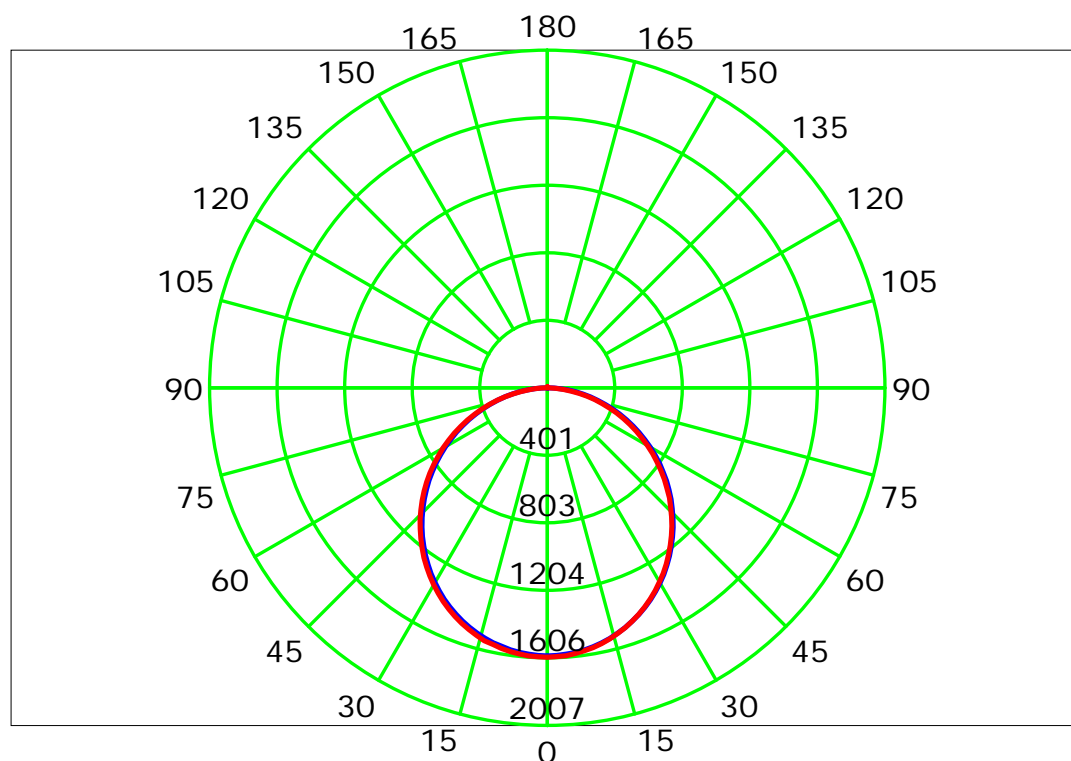
Test Device: LSG-1800B

Distance: 12.682 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve



C Plane (°): 0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°): 0.0-180.0: 2.0

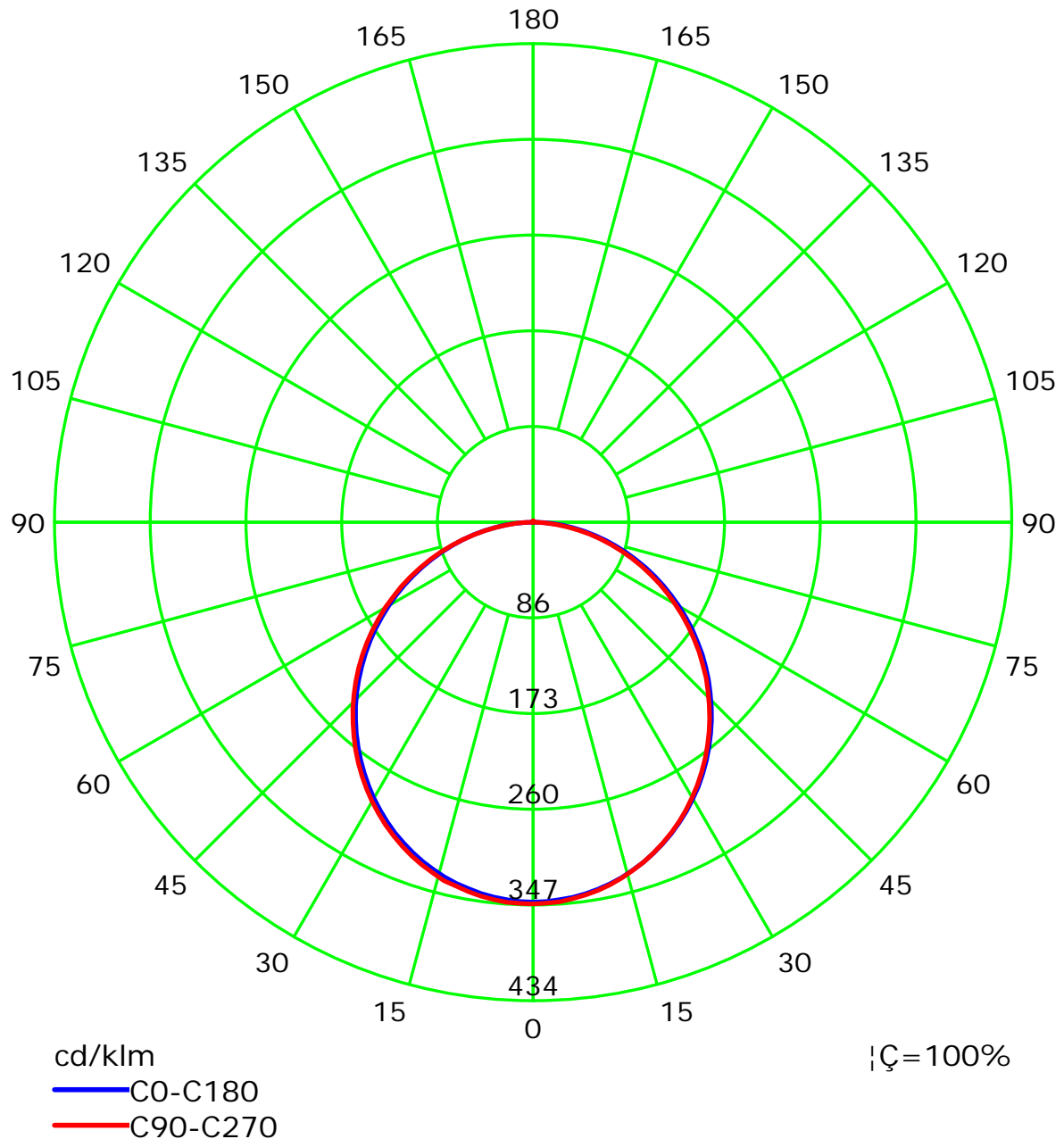
Test Device: LSG-1800B

Distance: 12.682 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve(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

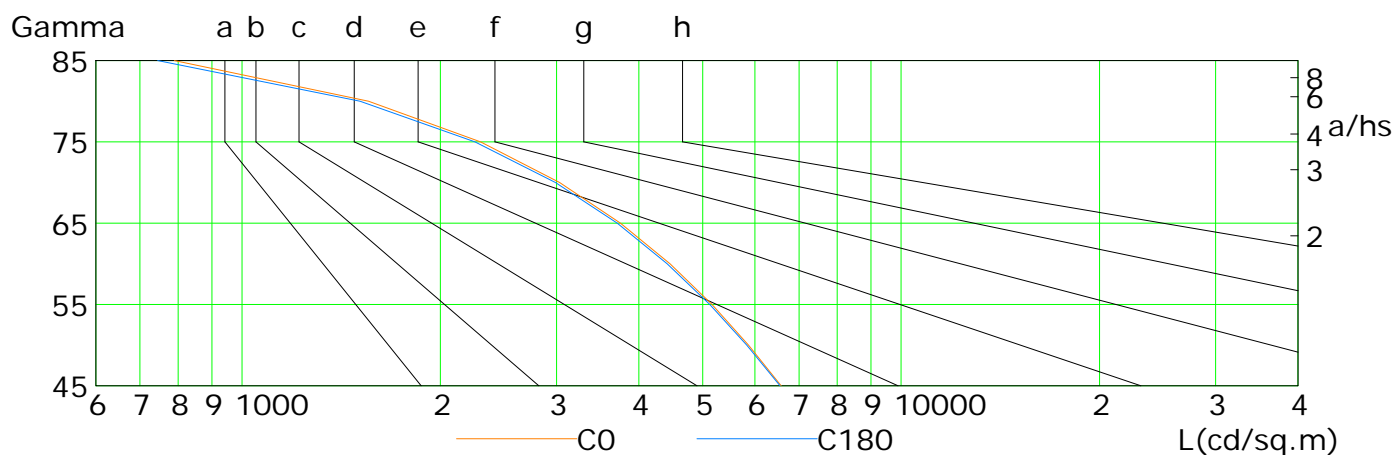
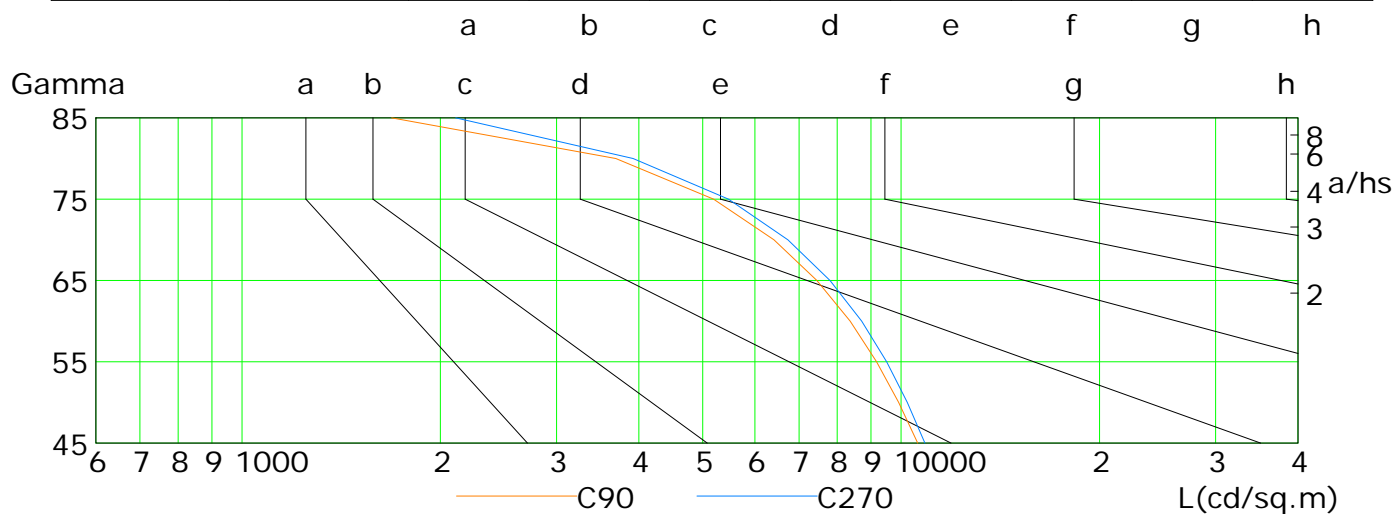
Distance: 12.682 m

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	6575	5867	5163	4461	3752	3032	2301	1556	789
C90	10597	9915	9177	8370	7450	6413	5194	3690	1687
C180	6550	5831	5125	4416	3708	2989	2256	1510	745
C270	10863	10220	9504	8710	7800	6734	5471	3921	2109

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

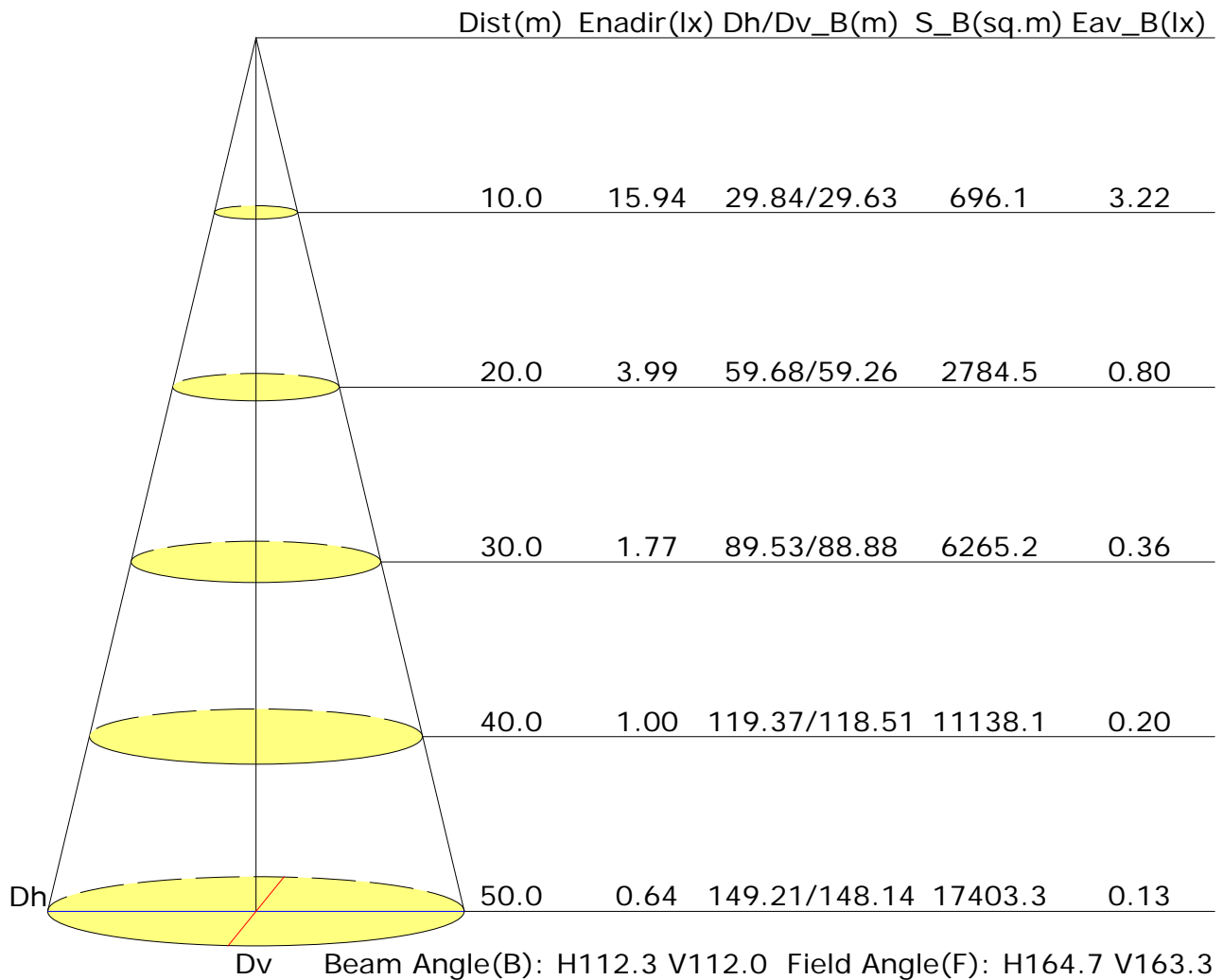
Test Device: LSG-1800B

Distance: 12.682 m

Humidity:

Inspector:

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	19.7	18.6	19.9	20.2	19.4	20.8	19.7	21.0	21.3
3H	19.4	20.7	19.7	21.0	21.3	20.8	22.0	21.1	22.3	22.6
4H	19.8	21.0	20.2	21.3	21.6	21.3	22.5	21.6	22.8	23.1
6H	20.1	21.2	20.4	21.5	21.9	21.6	22.8	22.0	23.1	23.4
8H	20.1	21.2	20.5	21.6	21.9	21.7	22.8	22.1	23.1	23.5
12H	20.2	21.2	20.5	21.5	21.9	21.7	22.8	22.1	23.1	23.5
X=4H Y=2H	18.9	20.1	19.2	20.4	20.7	19.8	21.0	20.1	21.3	21.6
3H	20.2	21.2	20.6	21.5	21.9	21.3	22.3	21.7	22.7	23.0
4H	20.7	21.6	21.1	22.0	22.4	21.9	22.8	22.3	23.2	23.6
6H	21.0	21.9	21.5	22.2	22.7	22.3	23.2	22.8	23.6	24.0
8H	21.1	21.9	21.6	22.3	22.7	22.5	23.2	22.9	23.6	24.1
12H	21.2	21.9	21.6	22.3	22.7	22.5	23.2	23.0	23.6	24.1
X=8H Y=4H	20.9	21.7	21.3	22.1	22.5	22.0	22.8	22.5	23.2	23.6
6H	21.3	22.0	21.8	22.4	22.9	22.6	23.2	23.0	23.6	24.1
8H	21.5	22.0	22.0	22.5	23.0	22.7	23.3	23.2	23.7	24.2
12H	21.6	22.1	22.1	22.5	23.0	22.8	23.3	23.3	23.8	24.3
X=12H Y=4H	20.9	21.6	21.4	22.0	22.5	22.0	22.7	22.5	23.1	23.6
6H	21.4	21.9	21.9	22.4	22.9	22.6	23.1	23.1	23.6	24.1
8H	21.5	22.0	22.0	22.5	23.0	22.8	23.2	23.3	23.7	24.2
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					+1.0/-1.2				

Calculate in accordance with CIE Pub.117. The table is revised with 4621lm ($8\log(F/F_0) = 5.3$).

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Operator:

Gamma Plane (°):0.0-180.0:2.0

Test Device: LSG-1800B

Distance: 12.682 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	0.56	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	0.74	0.80	0.85	0.88	0.92	0.95	
	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: 45W 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	0.62	0.55	0.49	0.41	0.35	0.31	0.25	0.21	
0.50	0.50	0.20	0.97	0.80	0.68	0.60	0.48	0.43	0.34	0.26	0.22	
	0.30		0.82	0.70	0.60	0.54	0.44	0.37	0.32	0.25	0.21	
	0.20		0.71	0.62	0.54	0.48	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	0.35	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: 45W 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: 45W 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>											