

Report No.:

Test Time: 25.05.2020 09:44

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 240_680 2x24LED 0,4A 20,5W 5000K opal

Luminous Length (mm): 680

Luminous Width (mm): 240

Luminous Height (mm): 70

Voltage: 221.1 V

Current: 0.099 A

Power: 21.26 W

Power Factor: 0.965

Photometric Results

CIE Class: Direct

Total Rated Lamp Lumens: 2332.0 lm

Measurement Flux: 2332 lm

Efficiency: 100%

Downward Ratio: 99%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 163.5, 163.2, 163.5, 163.4

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 108.4, 107.6, 108.0, 108.0

Luminaire Efficacy Rating (LER): 109.74

Central Intensity: 839.58 cd

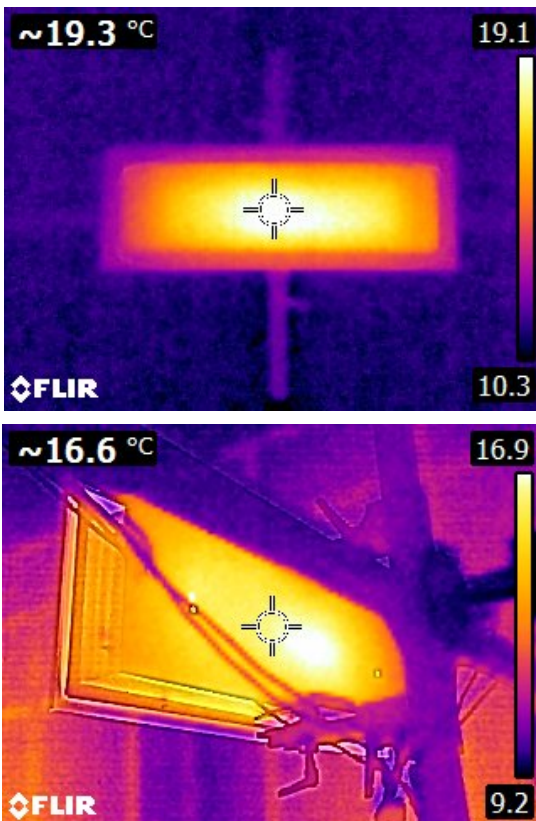
Max. Intensity: 839.59 cd

Pos of Max. Intensity: H0 V0

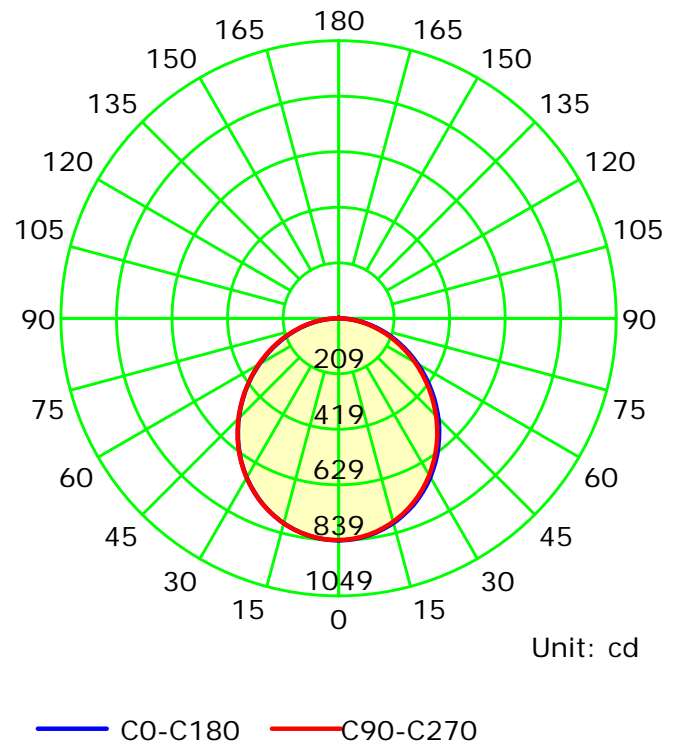
S/MH(C0/C180): 1.23

S/MH(C90/C270): 1.23

Termogramma



Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 22.5

Gamma Plane (°):0.0-180.0:2.0

Test Lab:

Test Device: LSG-1800B

Test Type: TYPE C

Distance: 12.677 m

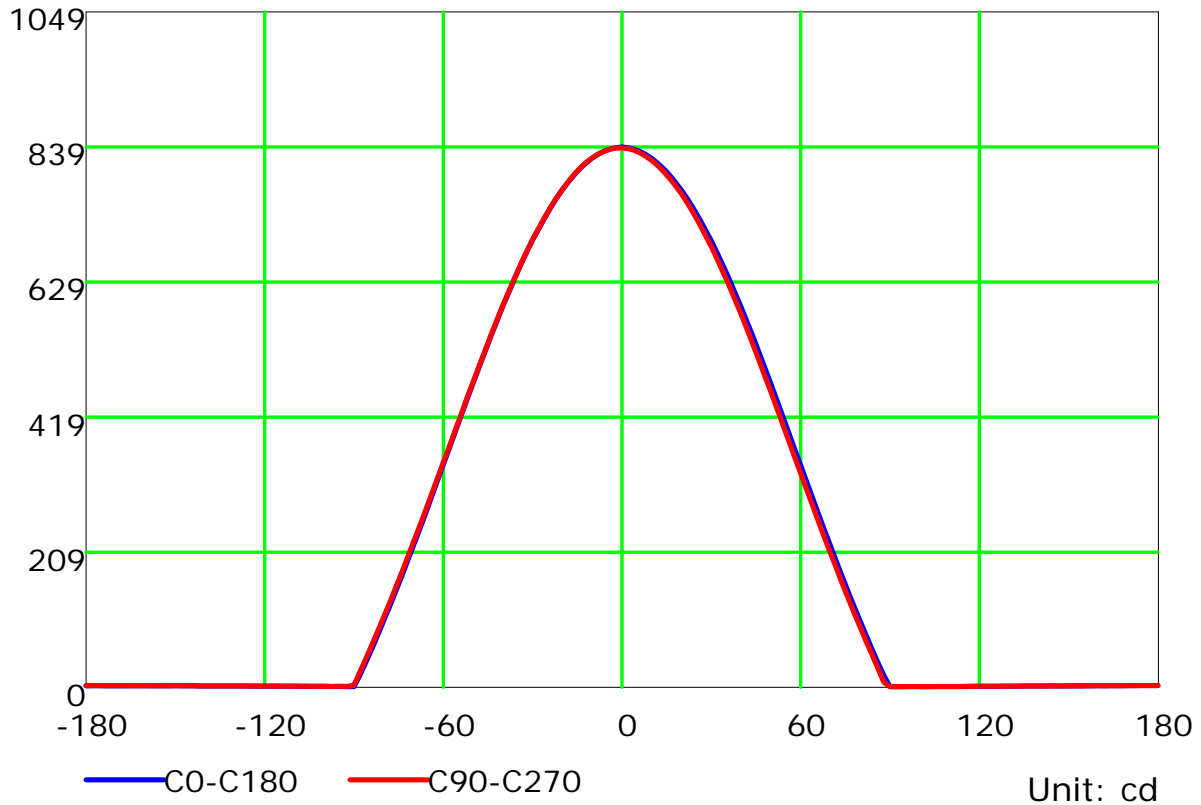
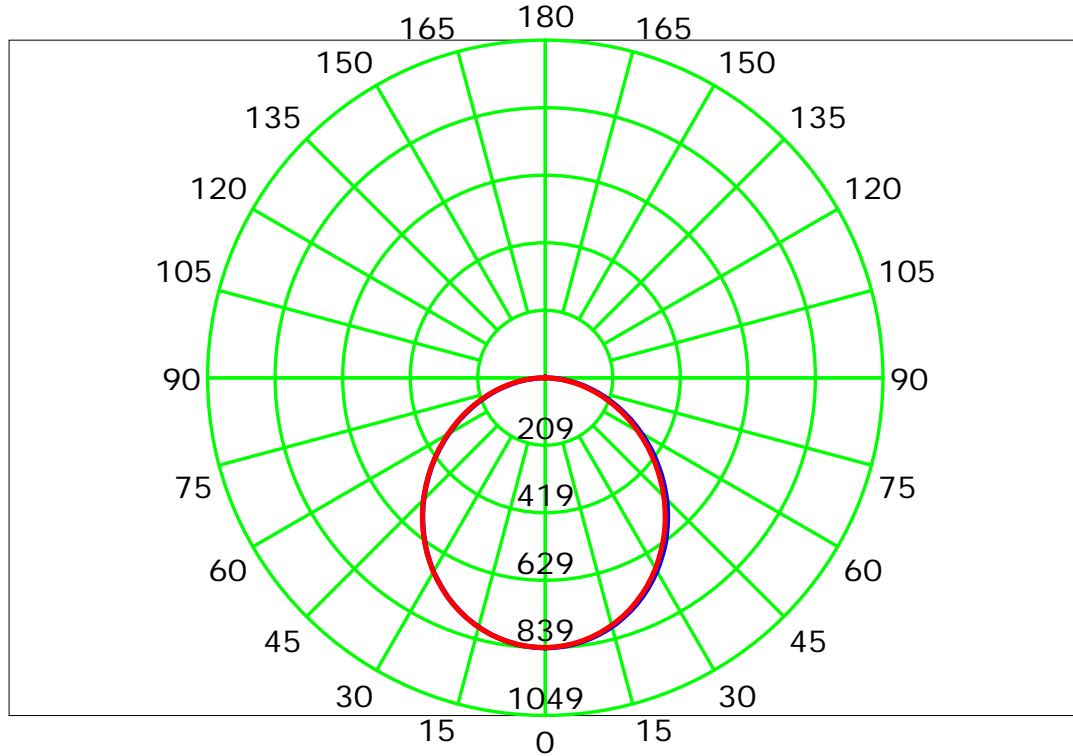
Temperature:

Humidity:

Operator:

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

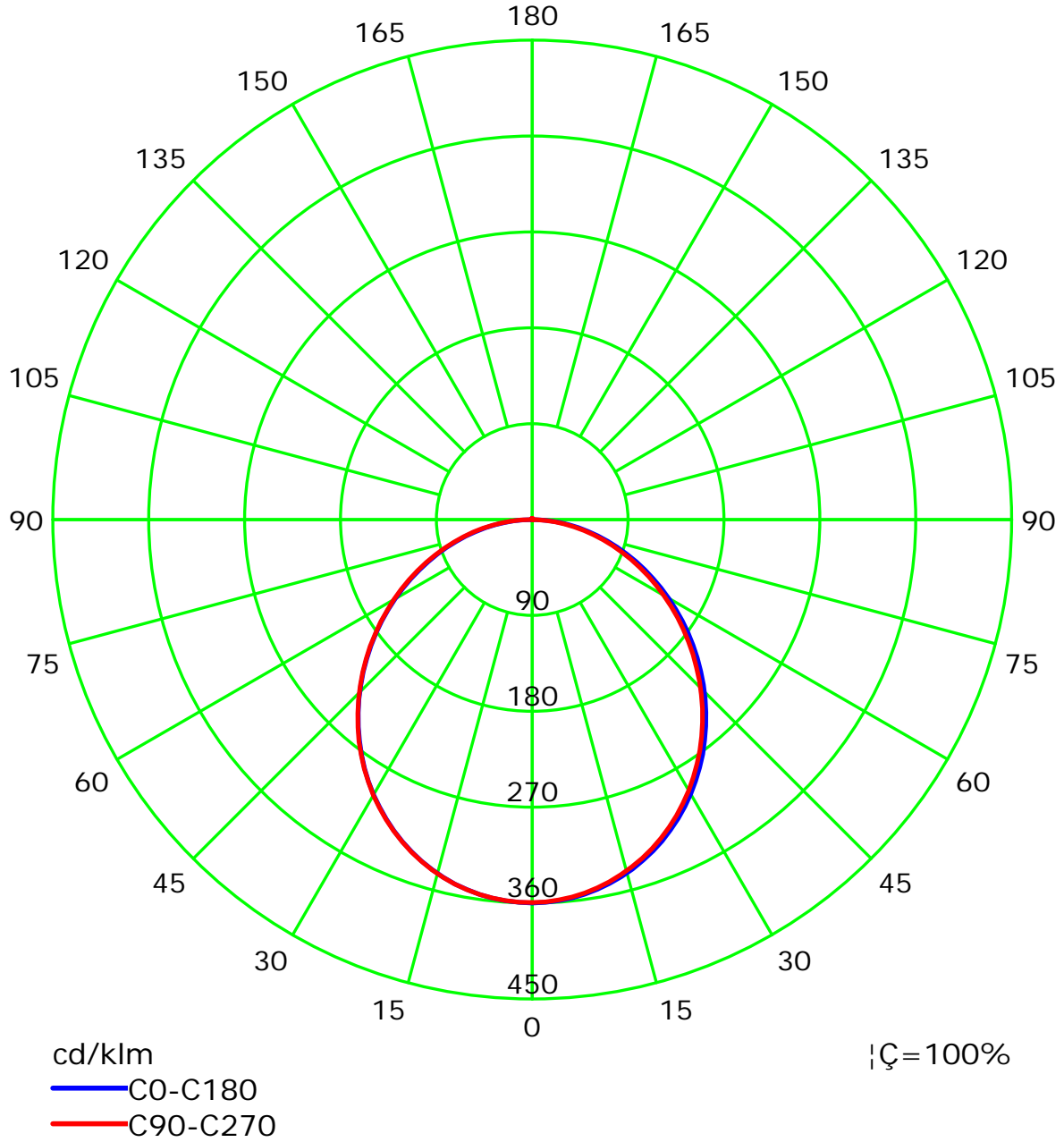
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve(cd/klm)

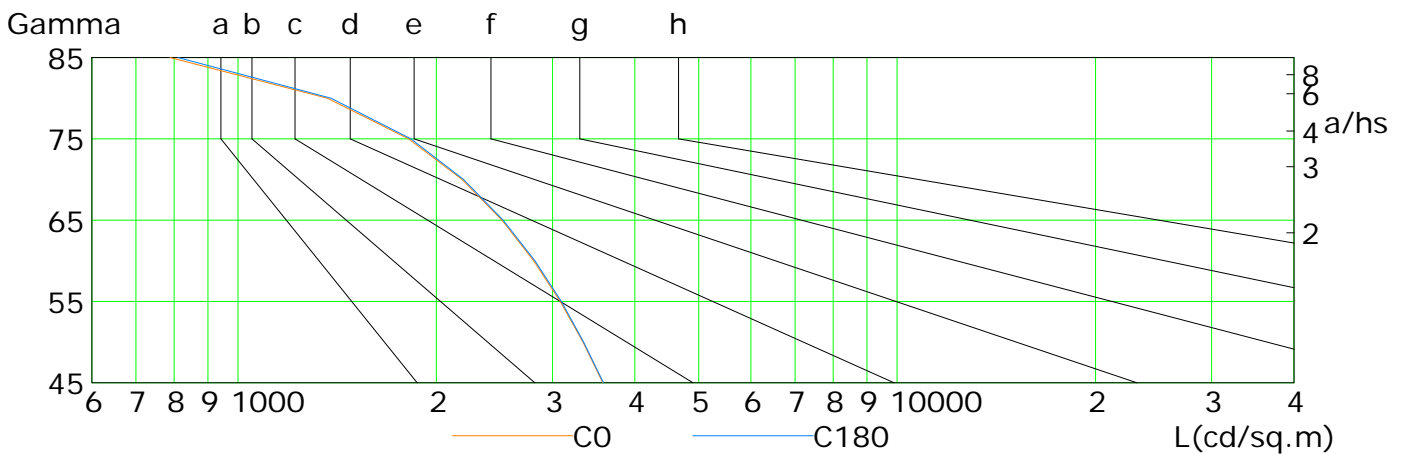
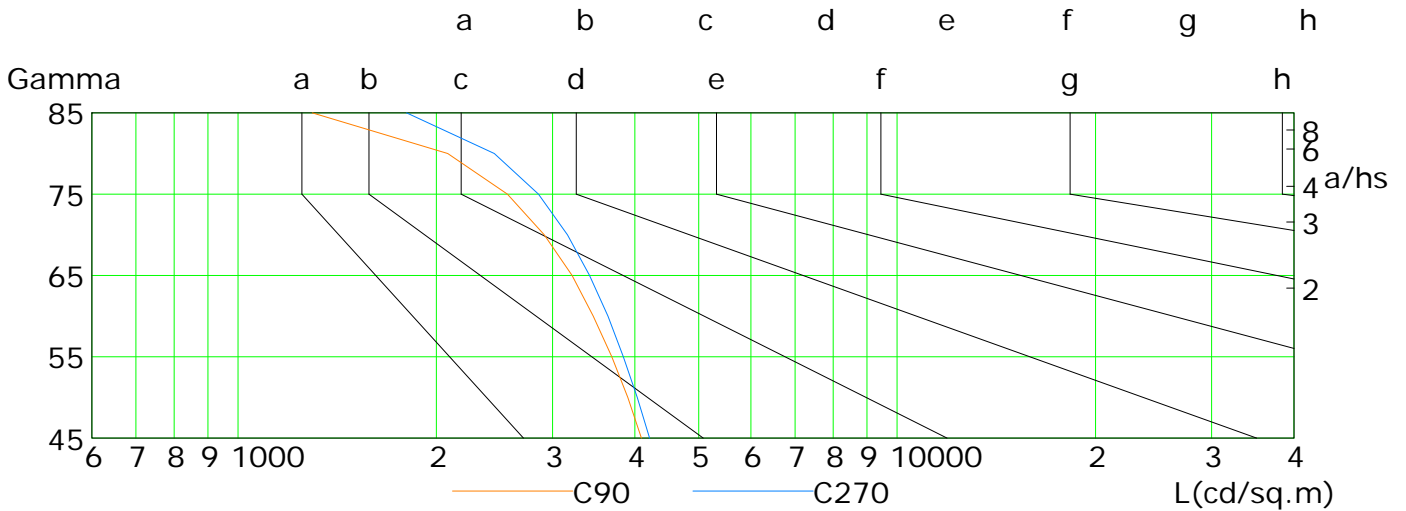


C Plane (°):0.0-360.0: 22.5
 Test Lab:
 Test Type: TYPE C
 Temperature:
 Operator:

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)							
		a	b	c	d	e	f	g	h
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	3576	3337	3083	2809	2515	2188	1815	1366	789
C90	4092	3902	3690	3460	3212	2914	2563	2080	1296
C180	3584	3344	3095	2822	2525	2198	1829	1384	811
C270	4210	4033	3842	3642	3415	3161	2856	2448	1802

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

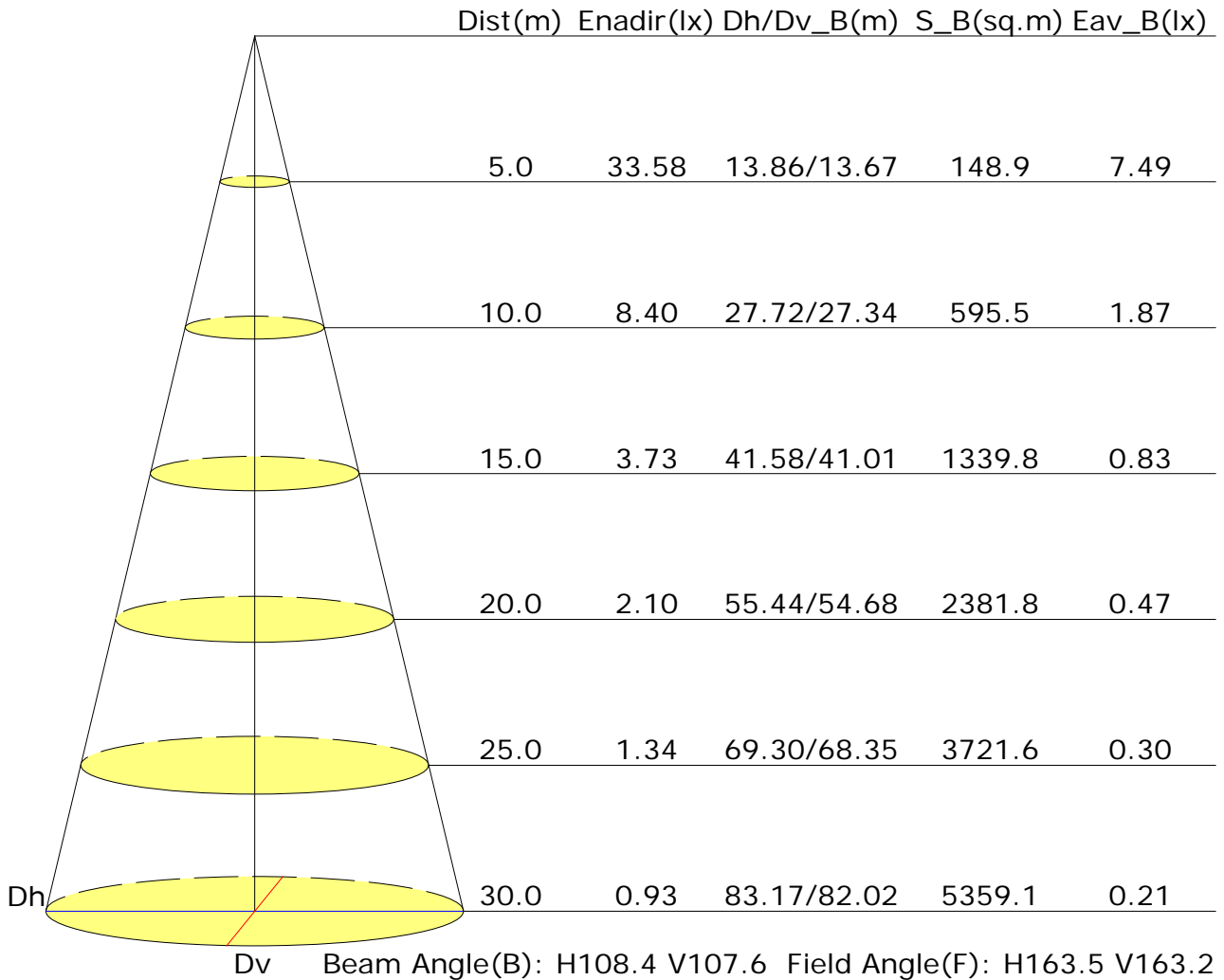
Test Device: LSG-1800B

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	16.3	17.7	16.7	18.0	18.2	16.7	18.1	17.1	18.4	18.6
3H	17.7	18.9	18.0	19.2	19.5	18.2	19.5	18.5	19.7	20.0
4H	18.2	19.4	18.5	19.7	20.0	18.8	20.0	19.2	20.3	20.6
6H	18.5	19.6	18.9	20.0	20.3	19.2	20.4	19.6	20.7	21.0
8H	18.6	19.7	19.0	20.0	20.4	19.4	20.5	19.8	20.8	21.1
12H	18.7	19.7	19.1	20.0	20.4	19.5	20.5	19.9	20.8	21.2
X=4H Y=2H	16.9	18.1	17.3	18.4	18.7	17.3	18.5	17.6	18.8	19.1
3H	18.4	19.5	18.8	19.8	20.2	18.9	19.9	19.3	20.3	20.6
4H	19.1	20.0	19.5	20.4	20.7	19.6	20.5	20.0	20.9	21.3
6H	19.5	20.3	20.0	20.7	21.2	20.2	21.0	20.6	21.4	21.8
8H	19.7	20.4	20.1	20.8	21.3	20.4	21.1	20.8	21.5	22.0
12H	19.7	20.4	20.2	20.9	21.3	20.5	21.2	20.9	21.6	22.0
X=8H Y=4H	19.3	20.1	19.8	20.5	20.9	19.8	20.6	20.3	21.0	21.4
6H	19.9	20.5	20.4	21.0	21.4	20.5	21.1	21.0	21.5	22.0
8H	20.1	20.6	20.6	21.1	21.6	20.7	21.3	21.2	21.7	22.2
12H	20.2	20.7	20.7	21.2	21.7	20.9	21.4	21.4	21.9	22.4
X=12H Y=4H	19.3	20.0	19.8	20.5	20.9	19.8	20.5	20.3	20.9	21.4
6H	20.0	20.5	20.4	21.0	21.5	20.5	21.1	21.0	21.5	22.0
8H	20.2	20.7	20.7	21.1	21.6	20.8	21.3	21.3	21.8	22.3
Variations with the observer position at spacings:										
S=1.0H	+0.2/-0.2					+0.2/-0.1				
S=1.5H	+0.3/-0.5					+0.3/-0.4				
S=2.0H	+0.6/-1.0					+0.6/-0.9				

Calculate in accordance with CIE Pub.117. The table is revised with 2332Im ($8\log(F/F_0) = 2.9$).

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	0.57	0.67	0.74	0.79	0.87	0.92	0.95	1.00	1.03	
	0.30		0.49	0.59	0.67	0.72	0.80	0.86	0.90	0.96	0.99	
	0.20		0.43	0.53	0.61	0.67	0.75	0.81	0.86	0.92	0.96	
0.50	0.50	0.20	0.55	0.65	0.72	0.77	0.84	0.88	0.92	0.96	0.99	
	0.30		0.48	0.58	0.65	0.71	0.78	0.83	0.87	0.92	0.96	
	0.20		0.43	0.53	0.60	0.66	0.74	0.79	0.83	0.89	0.93	
0.30	0.50	0.20	0.54	0.63	0.69	0.74	0.81	0.85	0.88	0.92	0.95	
	0.30		0.47	0.57	0.64	0.69	0.76	0.81	0.84	0.89	0.92	
	0.20		0.42	0.52	0.59	0.65	0.72	0.77	0.81	0.87	0.90	
0.00	0.00	0.00	0.40	0.50	0.56	0.61	0.69	0.74	0.77	0.82	0.85	
<p>Rating: 21W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>												

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	1.00	0.83	0.71	0.62	0.49	0.41	0.35	0.27	0.22	
	0.30		0.83	0.71	0.61	0.54	0.45	0.38	0.33	0.26	0.21	
	0.20		0.71	0.62	0.55	0.49	0.41	0.35	0.30	0.24	0.20	
0.50	0.50	0.20	0.96	0.79	0.68	0.59	0.47	0.42	0.34	0.26	0.21	
	0.30		0.81	0.69	0.60	0.53	0.43	0.36	0.31	0.25	0.20	
	0.20		0.71	0.61	0.54	0.48	0.40	0.34	0.29	0.23	0.20	
0.30	0.50	0.20	0.93	0.76	0.65	0.57	0.45	0.37	0.32	0.25	0.20	
	0.30		0.80	0.67	0.58	0.51	0.42	0.35	0.30	0.24	0.20	
	0.20		0.70	0.60	0.53	0.47	0.39	0.33	0.29	0.23	0.19	
0.00	0.00	0.00	0.60	0.50	0.43	0.38	0.31	0.26	0.23	0.18	0.15	
<p>Rating: 21W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>												

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	0.12	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	0.16	0.17
0.30	0.50	0.20	0.16	0.17	0.18	0.18	0.19	0.19	0.20	0.20	0.21
	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	0.08	0.09	0.11	0.13	0.14	0.15	0.16
0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
<p>Rating: 21W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>											