

Report No.:

Test Time: 18.05.2020 17:26

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 240_1290 4x24LED 0.48A 20.5W 5000K opal

Luminous Length (mm): 1290

Luminous Width (mm): 240

Luminous Height (mm): 70

Voltage: 221.9 V

Current: 0.096 A

Power: 20.76 W

Power Factor: 0.966

Photometric Results

CIE Class: Direct

Measurement Flux: 2608 lm

Downward Ratio: 99%

Total Rated Lamp Lumens: 2608.0 lm

Efficiency: 100%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 163.8, 163.5, 163.6, 163.6

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 109.0, 108.0, 108.4, 108.6

Luminaire Efficacy Rating (LER): 125.67

Central Intensity: 931.94 cd

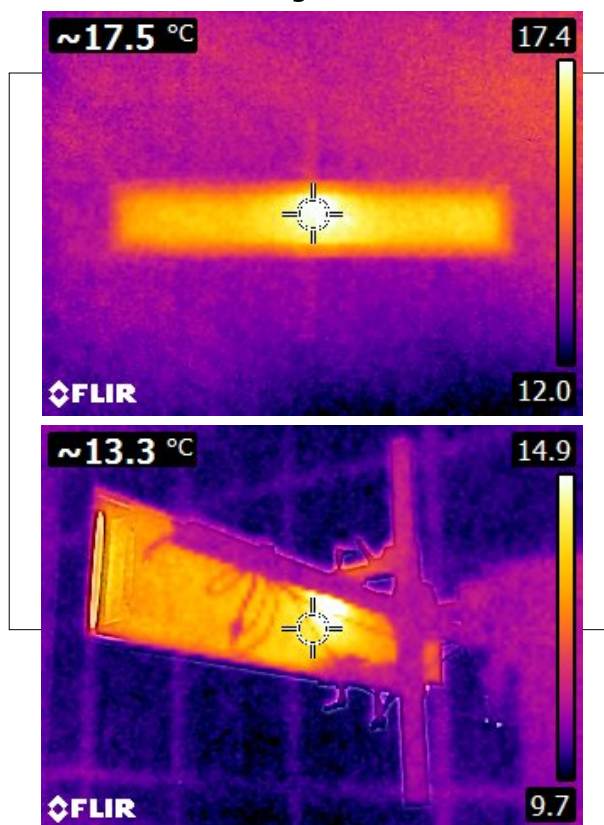
Max. Intensity: 933.15 cd

Pos of Max. Intensity: H135 V0

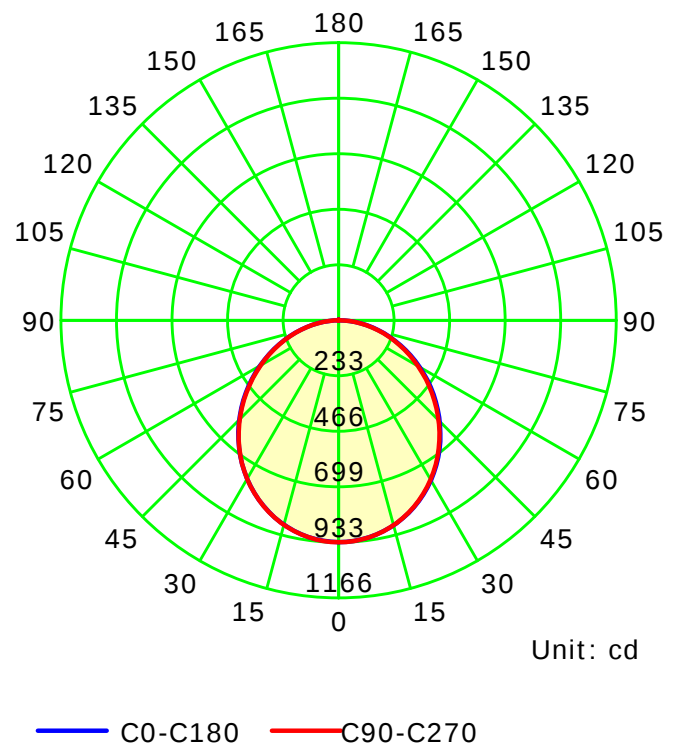
S/MH(C0/C180): 1.23

S/MH(C90/C270): 1.23

Termogramma



Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

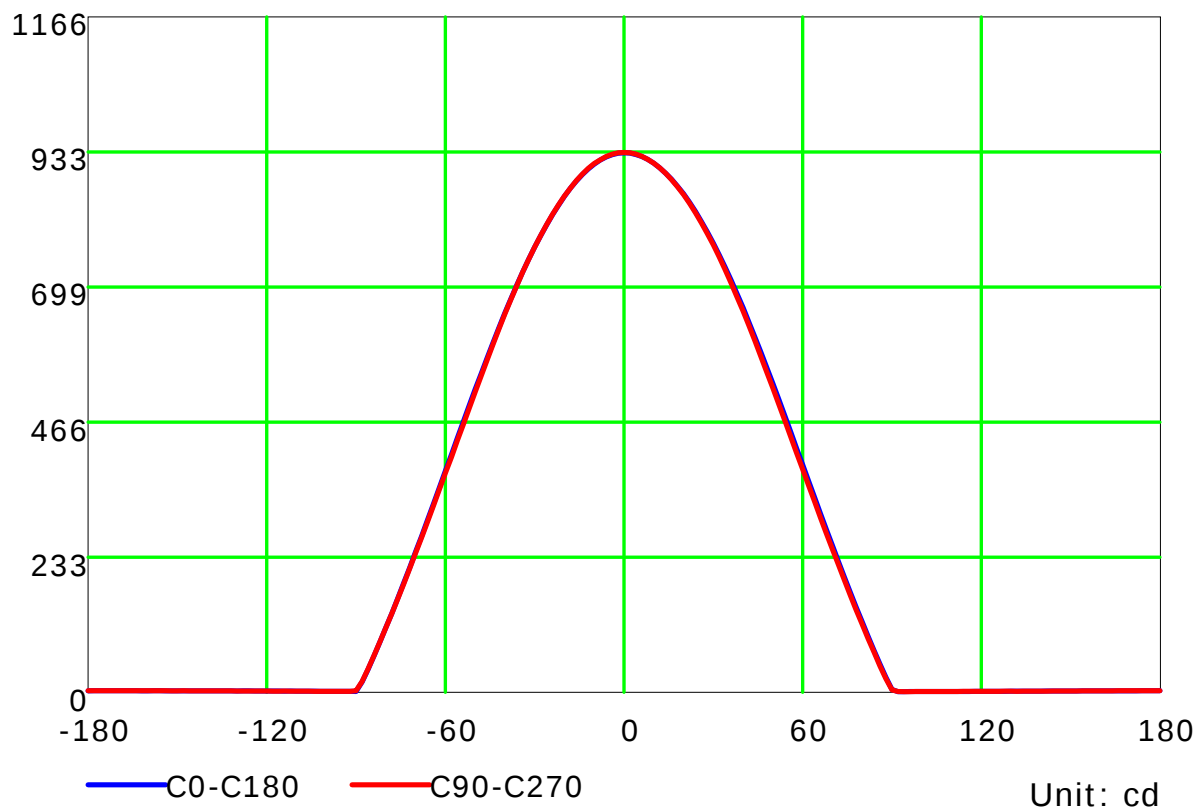
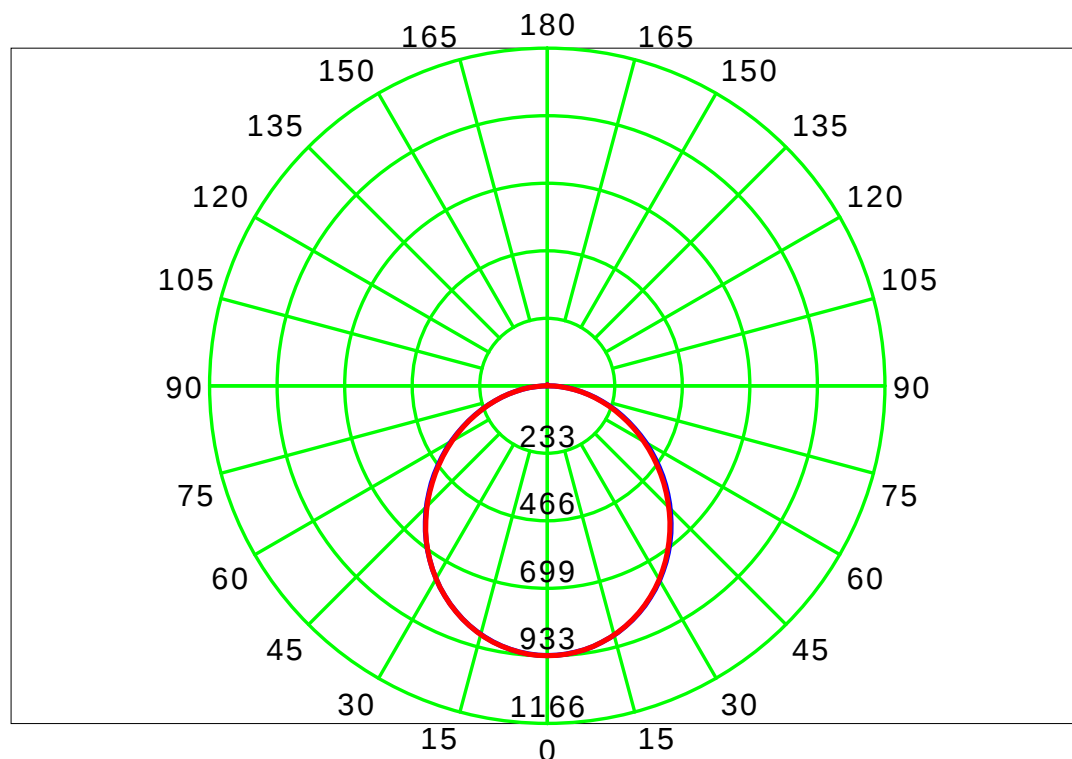
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve



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Test Lab:

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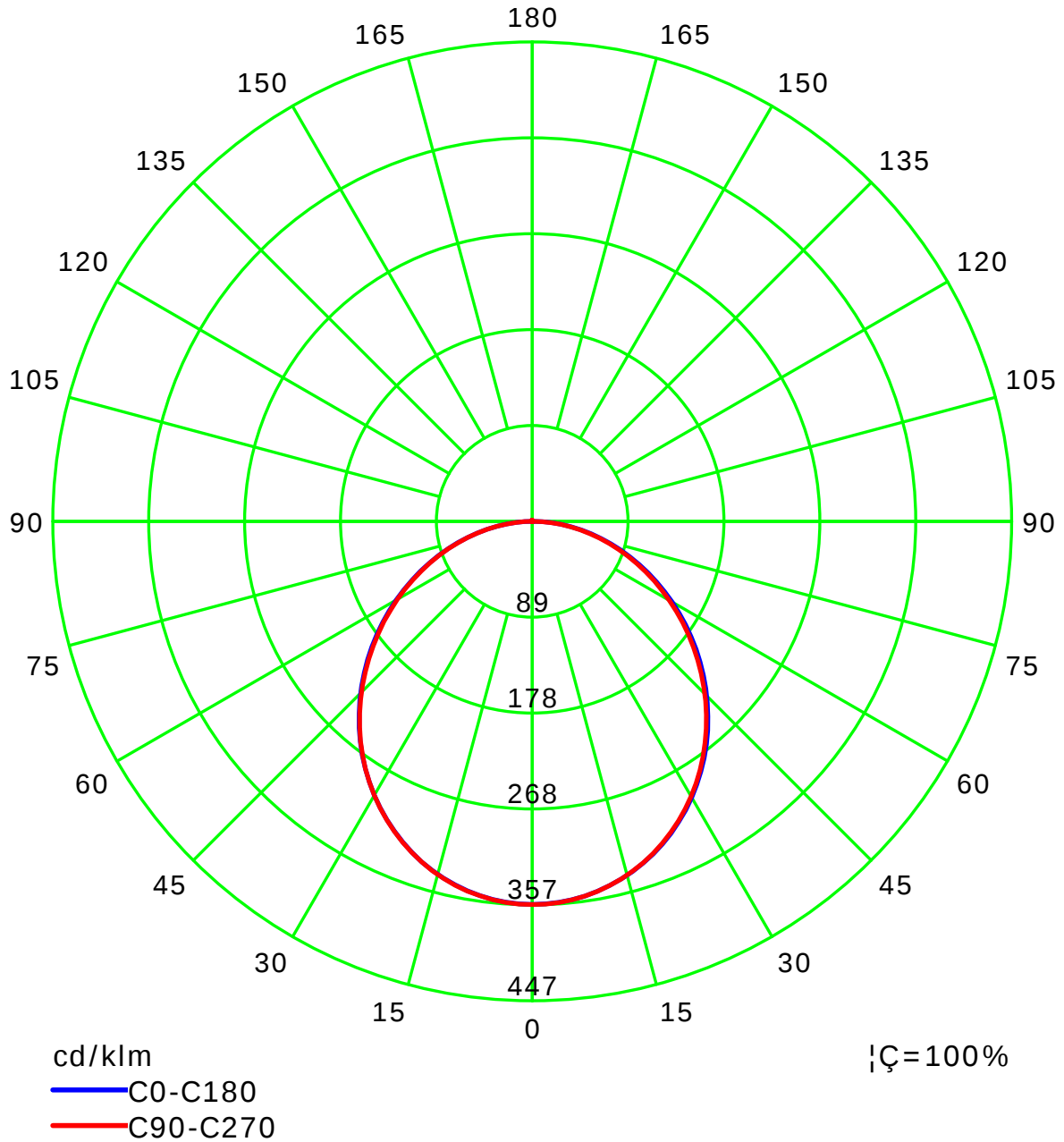
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve(cd / klm)



C Plane (°):0.0-360.0: 22.5

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Test Device: LSG-1800B

Distance: 12.677 m

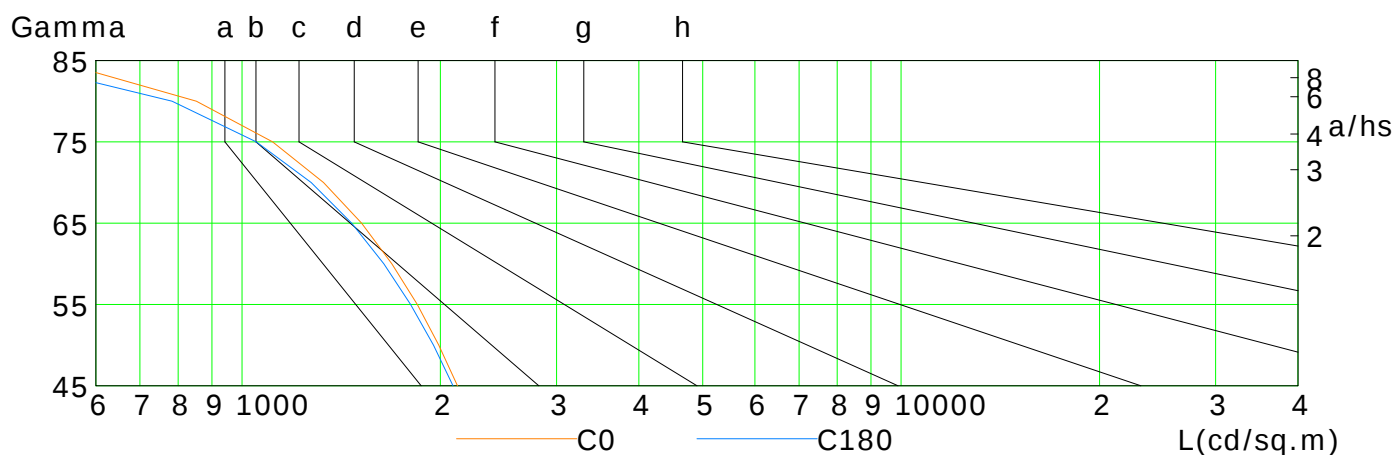
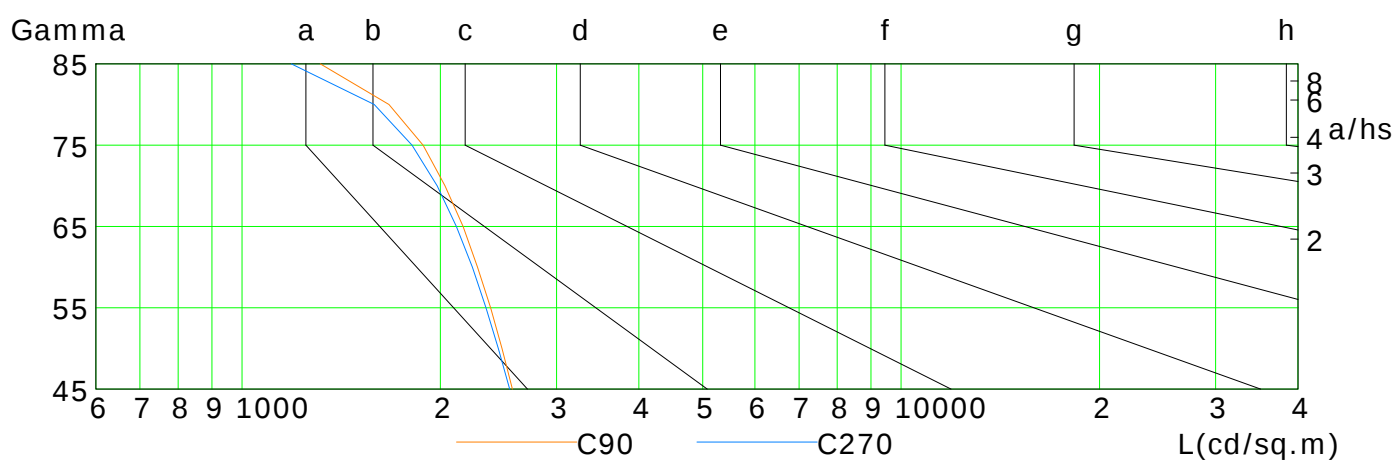
Humidity:

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

a b c d e f g h



L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	2123	1989	1845	1688	1519	1329	1113	853	518
C90	2572	2480	2383	2276	2164	2032	1882	1671	1315
C180	2089	1951	1802	1642	1467	1273	1051	783	439
C270	2547	2448	2346	2237	2114	1977	1811	1587	1188

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Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

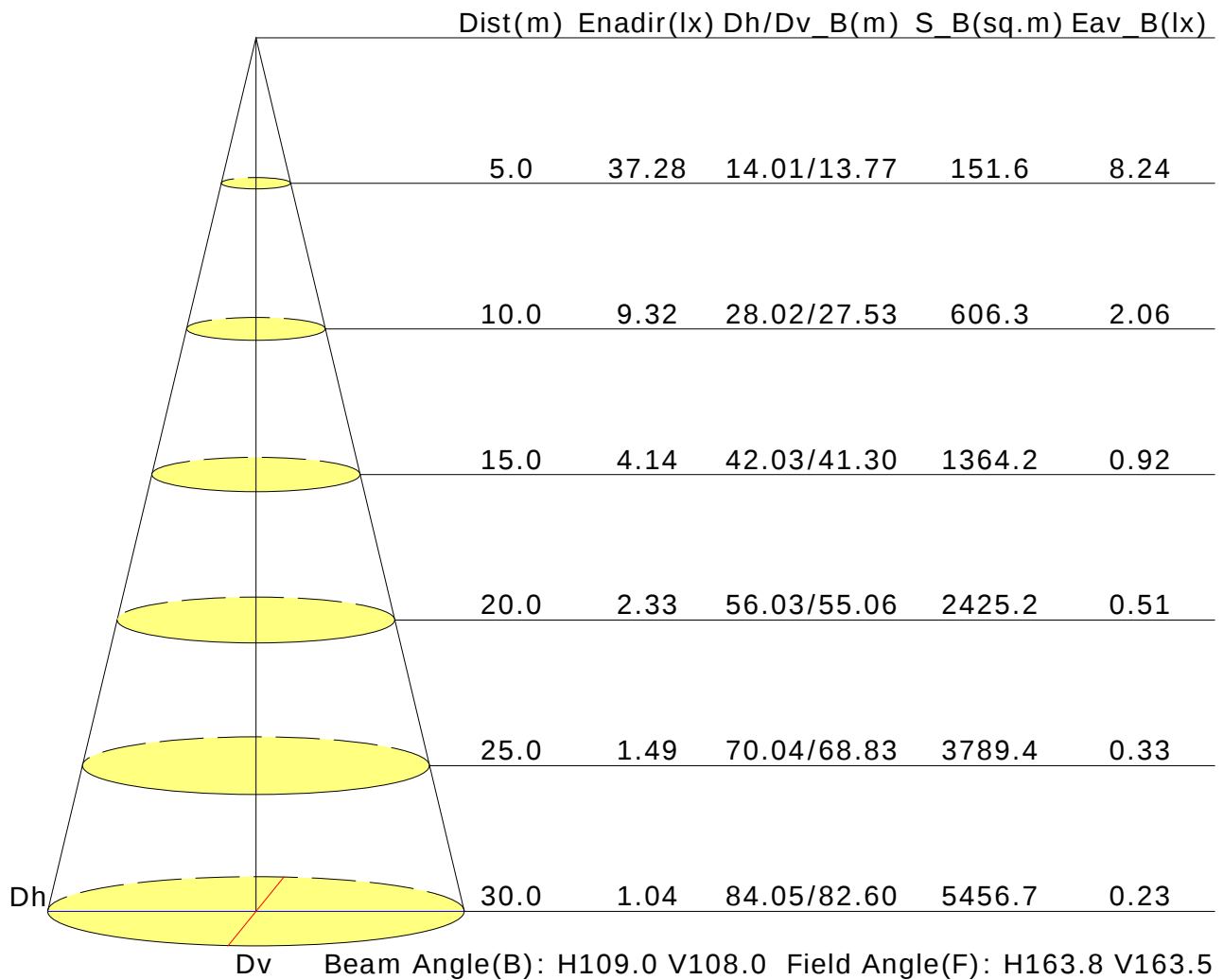
Test Device: LSG-1800B

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	14.7	16.0	15.0	16.3	16.5	15.1	16.5	15.4	16.8	17.0
3H	16.0	17.3	16.4	17.6	17.8	16.6	17.9	17.0	18.2	18.5
4H	16.5	17.7	16.9	18.0	18.3	17.3	18.5	17.6	18.8	19.1
6H	16.9	18.0	17.3	18.3	18.7	17.8	18.9	18.1	19.2	19.5
8H	17.0	18.1	17.4	18.4	18.8	17.9	19.0	18.3	19.3	19.7
12H	17.1	18.1	17.5	18.4	18.8	18.0	19.0	18.4	19.4	19.7
X=4H Y=2H	15.3	16.5	15.6	16.8	17.1	15.7	16.8	16.0	17.1	17.5
3H	16.8	17.9	17.2	18.2	18.5	17.3	18.4	17.7	18.7	19.1
4H	17.5	18.4	17.9	18.8	19.1	18.1	19.0	18.5	19.4	19.8
6H	17.9	18.8	18.4	19.2	19.6	18.7	19.5	19.1	19.9	20.3
8H	18.1	18.8	18.5	19.3	19.7	18.9	19.7	19.4	20.1	20.5
12H	18.2	18.9	18.6	19.3	19.8	19.1	19.7	19.5	20.2	20.6
X=8H Y=4H	17.7	18.5	18.2	18.9	19.3	18.3	19.1	18.7	19.5	19.9
6H	18.3	19.0	18.8	19.4	19.9	19.0	19.6	19.5	20.1	20.6
8H	18.6	19.1	19.1	19.6	20.1	19.3	19.9	19.8	20.3	20.8
12H	18.7	19.2	19.2	19.7	20.2	19.5	20.0	20.0	20.5	21.0
X=12H Y=4H	17.8	18.4	18.2	18.9	19.3	18.3	19.0	18.8	19.4	19.9
6H	18.4	18.9	18.9	19.4	19.9	19.1	19.6	19.6	20.1	20.6
8H	18.6	19.1	19.2	19.6	20.1	19.4	19.8	19.9	20.3	20.8
Variations with the observer position at spacings:										
S=1.0H	+0.2/-0.2					+0.2/-0.2				
S=1.5H	+0.3/-0.5					+0.3/-0.4				
S=2.0H	+0.6/-1.0					+0.6/-0.8				

Calculate in accordance with CIE Pub.117. The table is revised with 2608lm ($8\log(F/F_0) = 3.3$).

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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	0.57	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	0.83	0.88	0.91	0.96	0.99	
	0.30		0.48	0.58	0.65	0.70	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	0.53	0.63	0.69	0.74	0.80	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	0.64	0.72	0.77	0.81	0.87	0.90	
0.00	0.00	0.00	0.40	0.49	0.56	0.61	0.69	0.74	0.77	0.82	0.85	
Rating:21W 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	1.00	0.83	0.71	0.62	0.49	0.41	0.35	0.27	0.22	
	0.30		0.83	0.71	0.62	0.55	0.45	0.38	0.33	0.26	0.21	
	0.20		0.72	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	0.43	0.34	0.26	0.21	
	0.30		0.82	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	0.30	0.24	0.20	
0.30	0.50	0.20	0.94	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	
Rating:21W 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	0.12	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	0.12	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	
Rating:21W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												