

Report No.:

Test Time: 22.06.2020 16:59

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FL 60/1000 24W 4000K матовый (opal)

Number of Lamps: 1

Lumens per Lamp: 2614.2 lm

Luminous Length (mm): 60 mm

Luminous Width (mm): 950 mm

Luminous Height (mm): 70 mm

Voltage: 222.1 V

Current: 0.111 A

Power: 23.53 W

Power Factor: 0.946

Photometric Results

CIE Class: Direct

Total Rated Lamp Lumens: 2614.2 lm

Measurement Flux: 2614 lm

Efficiency: 99.99%

Downward Ratio: 99.66%

Upward Ratio: 0.34%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 164.0, 162.1, 163.0, 163.0

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 109.6, 107.3, 108.4, 108.5

Luminaire Efficacy Rating (LER): 111.14

Central Intensity: 940.52 cd

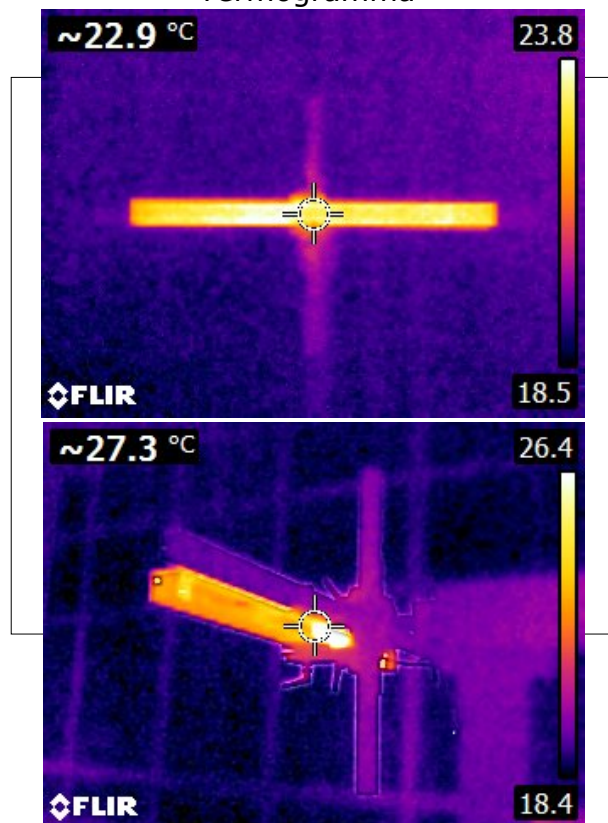
Max. Intensity: 941.21 cd

Pos of Max. Intensity: H45 V0

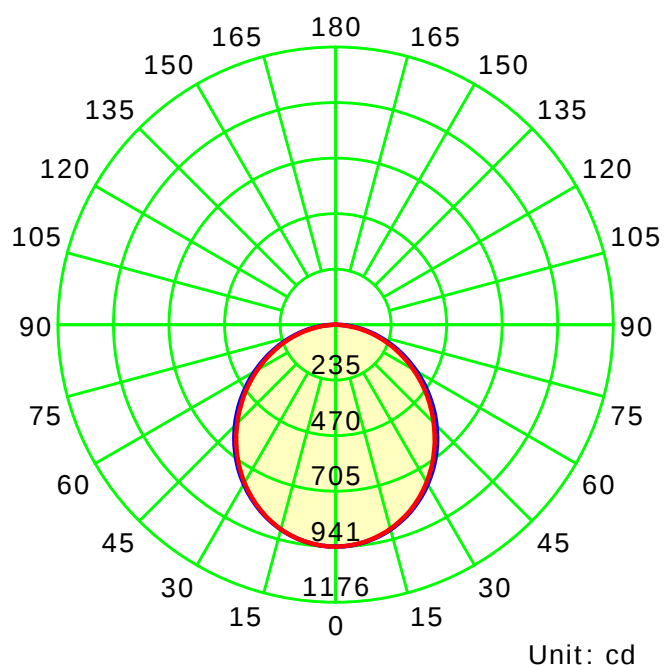
S/MH(C0/C180): 1.23

S/MH(C90/C270): 1.22

Termogramma



Luminous Intensity Distribution Curve



— C0-C180 — C90-C270

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

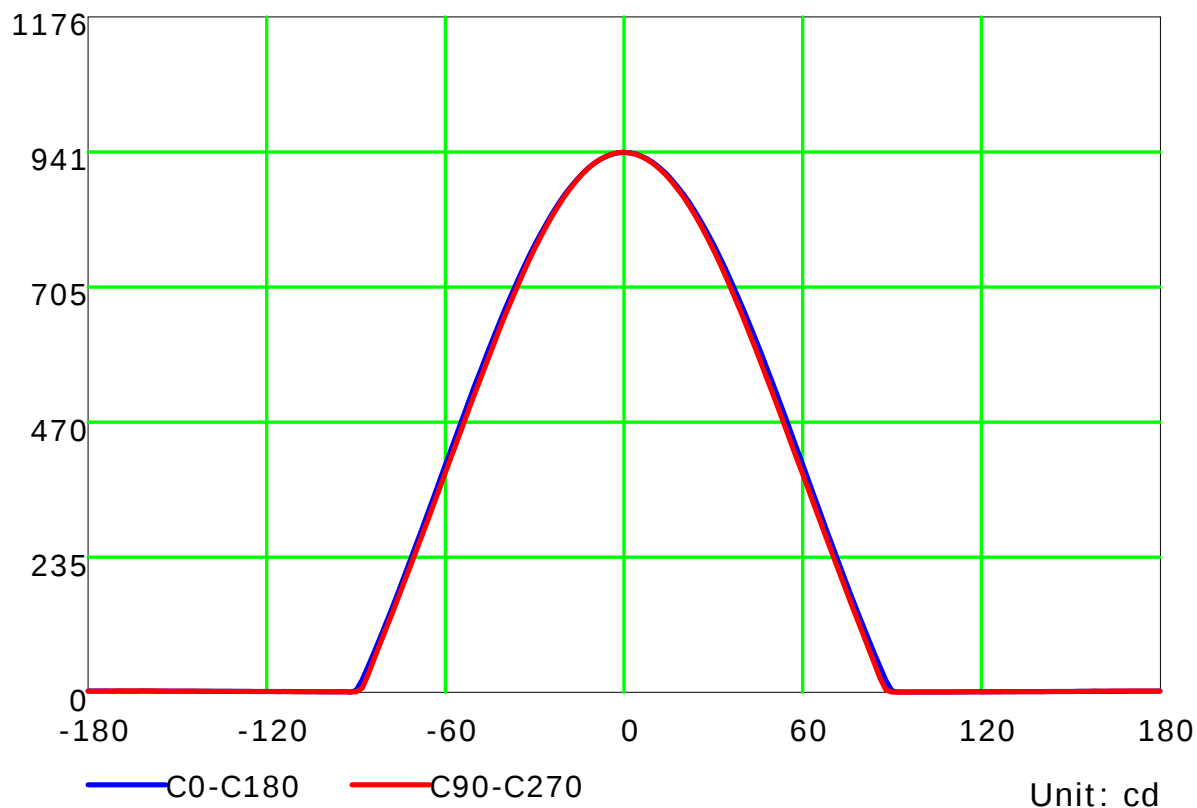
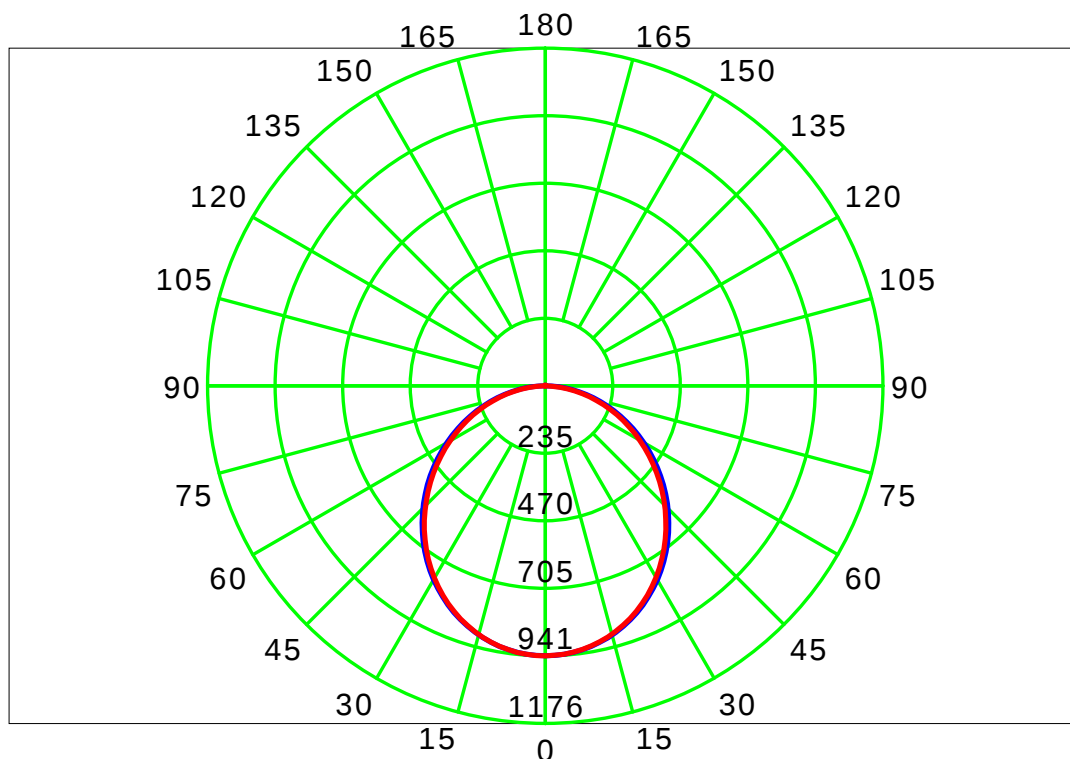
Temperature:

Humidity:

Operator:

Inspector:

Luminous Intensity Distribution Curve



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Test Lab:

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Temperature:

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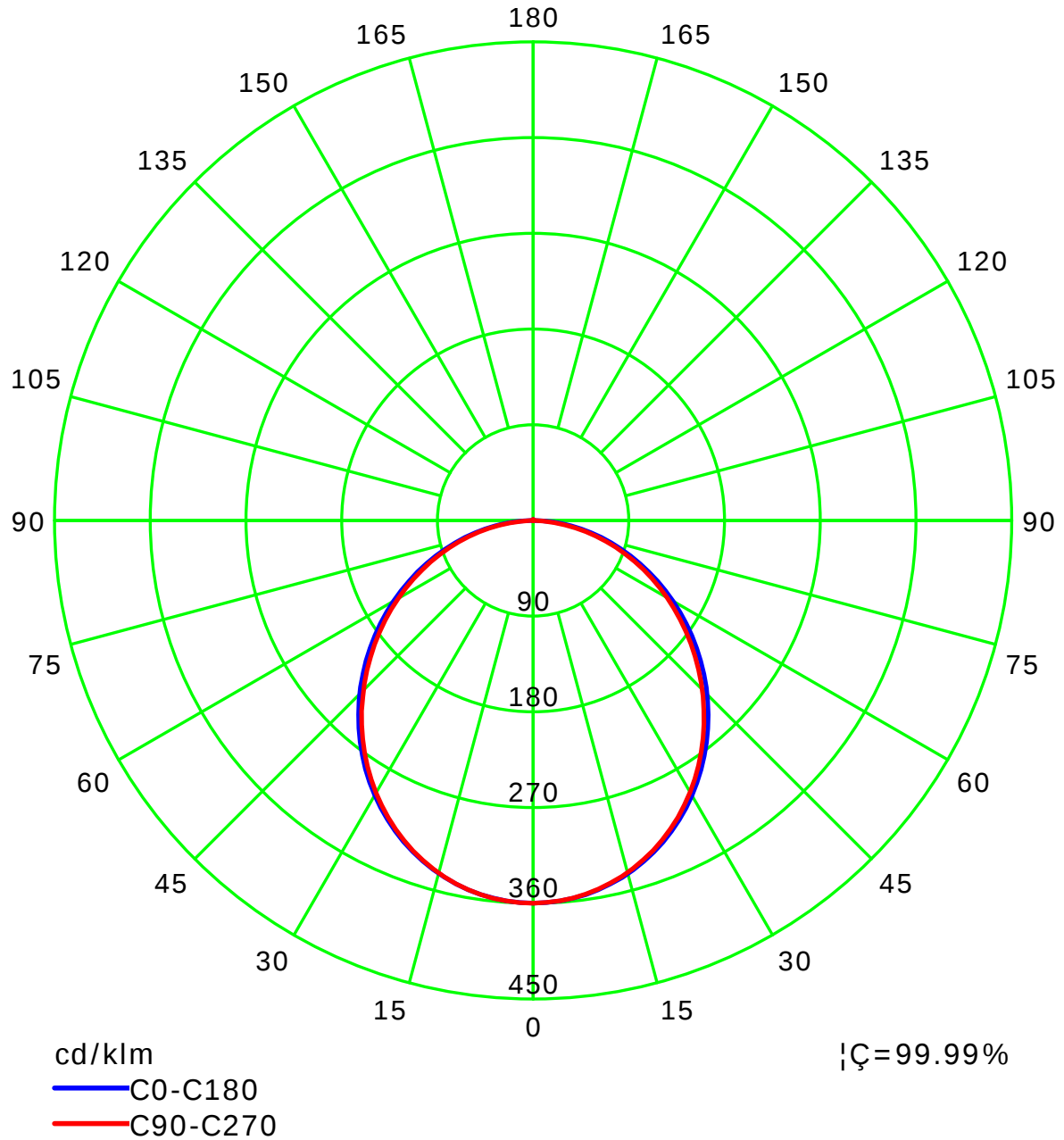
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve(cd / klm)



C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

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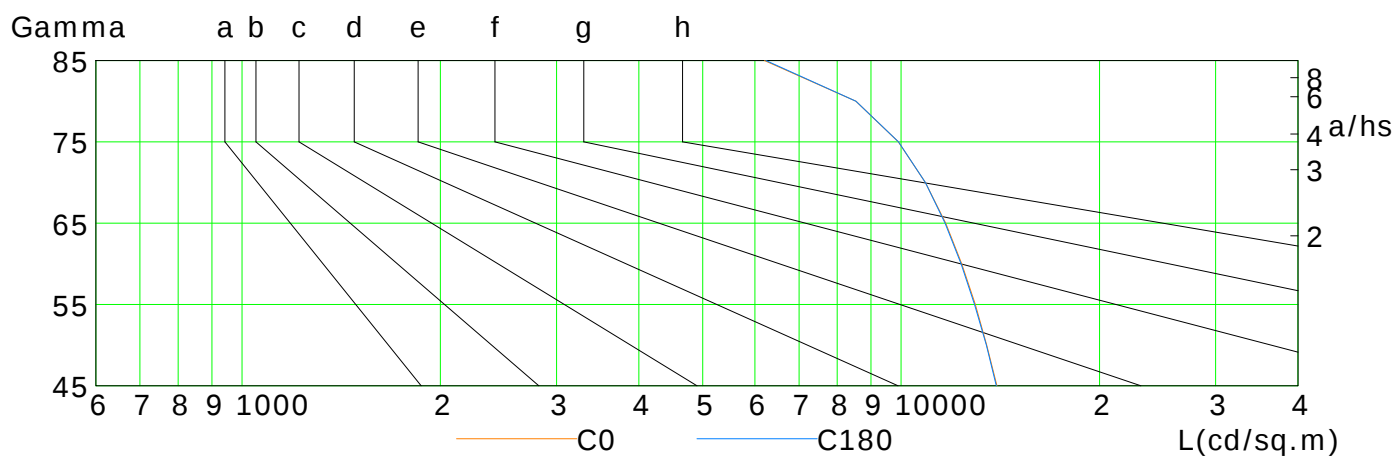
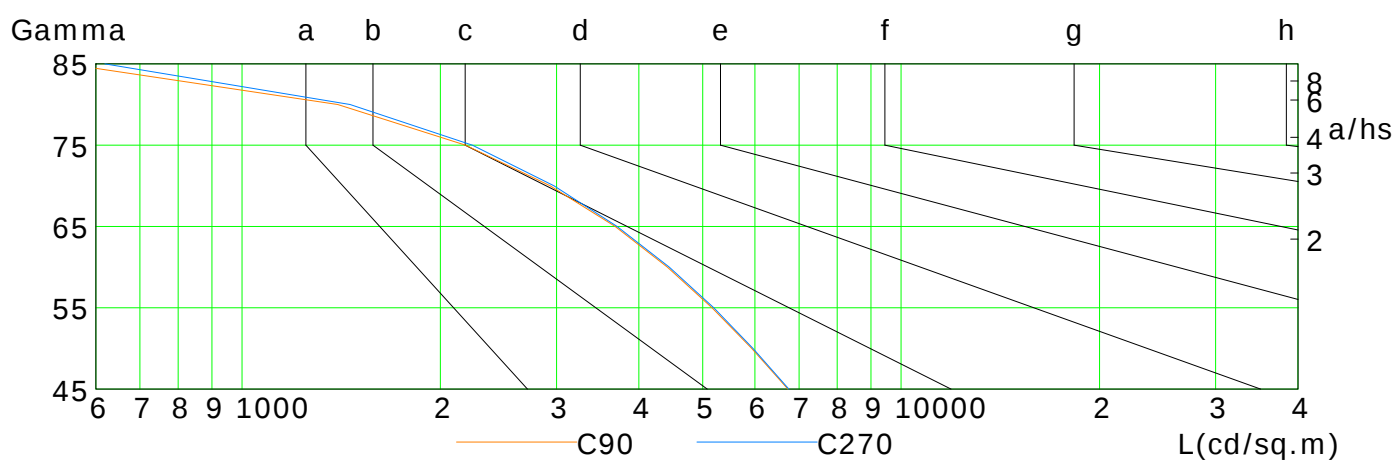
Humidity:

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	13975	13486	12957	12354	11684	10886	9901	8539	6205
C90	6732	5934	5166	4419	3682	2935	2183	1397	541
C180	13941	13465	12921	12329	11662	10884	9909	8539	6236
C270	6754	5961	5196	4448	3708	2973	2236	1459	619

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

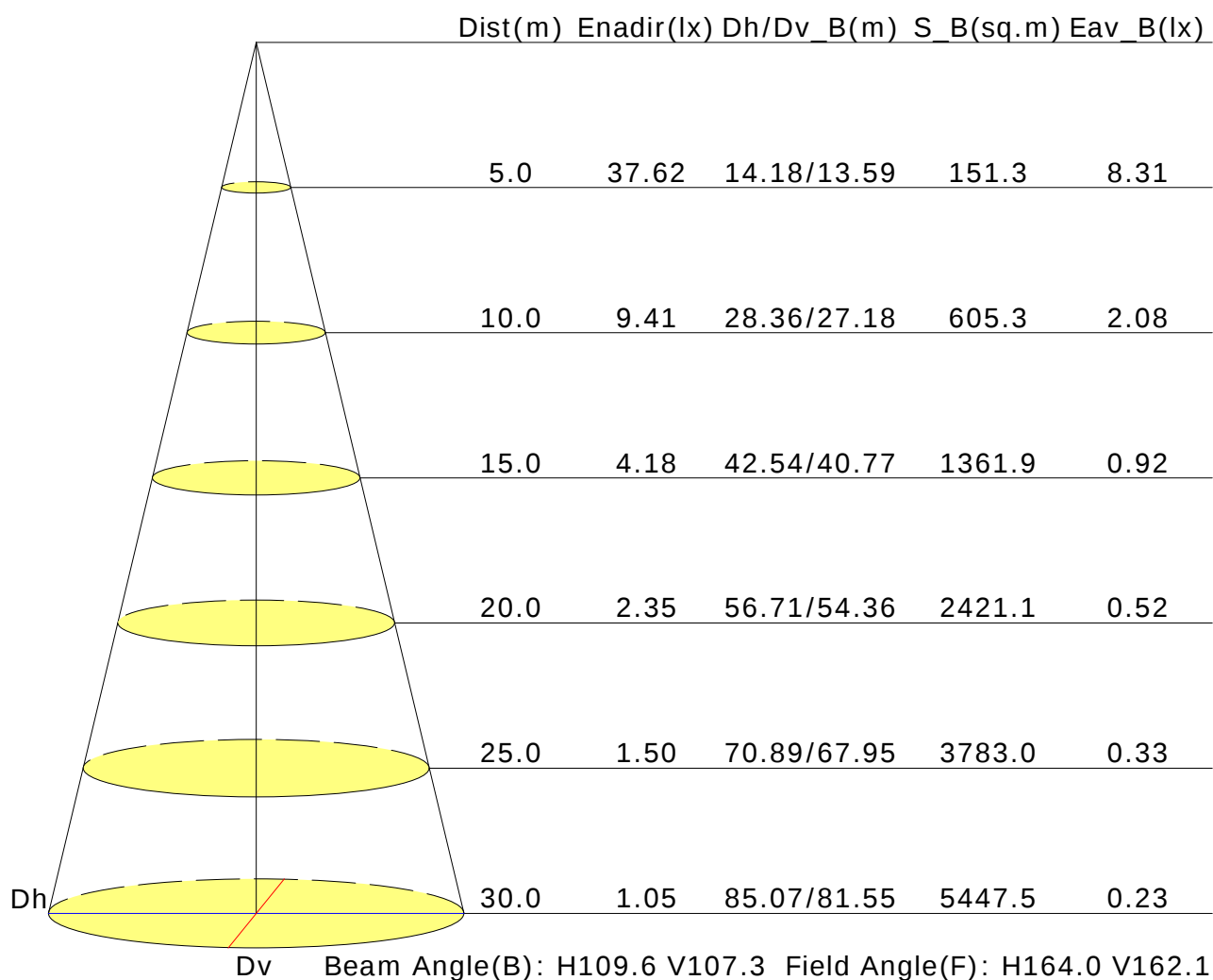
Test Device: LSG-1800B

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	20.2	21.6	20.5	21.9	22.1	18.4	19.8	18.7	20.0	20.3
3H	21.8	23.0	22.1	23.3	23.6	19.5	20.7	19.8	21.0	21.3
4H	22.4	23.6	22.8	23.9	24.2	19.8	21.0	20.2	21.3	21.6
6H	22.9	24.0	23.3	24.3	24.6	20.0	21.2	20.4	21.5	21.8
8H	23.0	24.1	23.4	24.5	24.8	20.1	21.2	20.5	21.5	21.8
12H	23.2	24.2	23.5	24.5	24.9	20.1	21.1	20.5	21.4	21.8
X=4H Y=2H	20.5	21.7	20.9	22.0	22.3	19.0	20.2	19.4	20.5	20.8
3H	22.2	23.2	22.6	23.6	23.9	20.3	21.3	20.7	21.6	22.0
4H	22.9	23.9	23.4	24.2	24.6	20.7	21.7	21.2	22.0	22.4
6H	23.5	24.4	24.0	24.7	25.2	21.0	21.9	21.5	22.2	22.7
8H	23.7	24.5	24.2	24.9	25.3	21.1	21.9	21.6	22.3	22.7
12H	23.9	24.6	24.3	25.0	25.4	21.1	21.8	21.6	22.2	22.7
X=8H Y=4H	23.0	23.8	23.5	24.2	24.6	21.0	21.8	21.5	22.2	22.6
6H	23.7	24.3	24.2	24.8	25.2	21.4	22.0	21.9	22.5	22.9
8H	24.0	24.5	24.4	25.0	25.5	21.5	22.1	22.0	22.5	23.0
12H	24.1	24.6	24.6	25.1	25.6	21.6	22.0	22.1	22.5	23.0
X=12H Y=4H	23.0	23.7	23.5	24.1	24.6	21.0	21.7	21.5	22.1	22.6
6H	23.7	24.2	24.2	24.7	25.2	21.5	22.0	21.9	22.5	22.9
8H	24.0	24.5	24.5	24.9	25.4	21.6	22.1	22.1	22.5	23.0
Variations with the observer position at spacings:										
S=1.0H	+0.1/-0.2					+0.2/-0.3				
S=1.5H	+0.5/-0.5					+0.4/-0.7				
S=2.0H	+1.1/-1.2					+0.7/-1.3				

Calculate in accordance with CIE Pub.117. The table is revised with 2614lm ($8\log(F/F_0) = 3.3$).

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:

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	0.80	0.87	0.92	0.95	1.00	1.03	
	0.30		0.49	0.59	0.67	0.72	0.81	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	0.84	0.87	0.93	0.96	
	0.20		0.43	0.53	0.60	0.66	0.74	0.80	0.84	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	0.85	0.89	0.92	
	0.20		0.42	0.52	0.59	0.65	0.72	0.78	0.82	0.87	0.90	
0.00	0.00	0.00	0.40	0.50	0.57	0.62	0.69	0.74	0.77	0.82	0.85	
Rating:24W 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	0.70	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	0.32	0.26	0.21	
	0.20		0.71	0.62	0.54	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	0.33	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	0.53	0.48	0.40	0.34	0.29	0.23	0.19	
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	0.19	
	0.20		0.70	0.60	0.53	0.47	0.39	0.33	0.28	0.23	0.19	
0.00	0.00	0.00	0.60	0.50	0.43	0.38	0.31	0.26	0.22	0.18	0.15	
Rating:24W 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	0.19	0.20	0.21	0.21	0.22	0.22	
	0.30		0.10	0.11	0.13	0.14	0.15	0.17	0.17	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	0.20	0.21	0.21	
	0.30		0.10	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.19	
	0.20		0.05	0.06	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		0.09	0.11	0.12	0.13	0.15	0.16	0.16	0.17	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	
Rating:24W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												