

Report No.: 1

Test Time: 04.03.2020 18:15

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FL 1500 A30 2x84LED 40W 4000K microprisma

Luminous Length (mm): 1500

Luminous Width (mm): 80

Luminous Height (mm): 91

Voltage: 228.7 V

Current: 0.180 A

Power: 40.36 W

Power Factor: 0.979

Photometric Results

CIE Class: Direct

Measurement Flux: 5009.6 lm

Downward Ratio: 94%

Total Rated Lamp Lumens: 5009.6 lm

Efficiency: 100%

Upward Ratio: 6%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 168.8, 158.2, 153.3, 152.0

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 77.1, 78.0, 72.4, 73.1

Luminaire Efficacy Rating (LER): 124.17

Central Intensity: 1632.98 cd

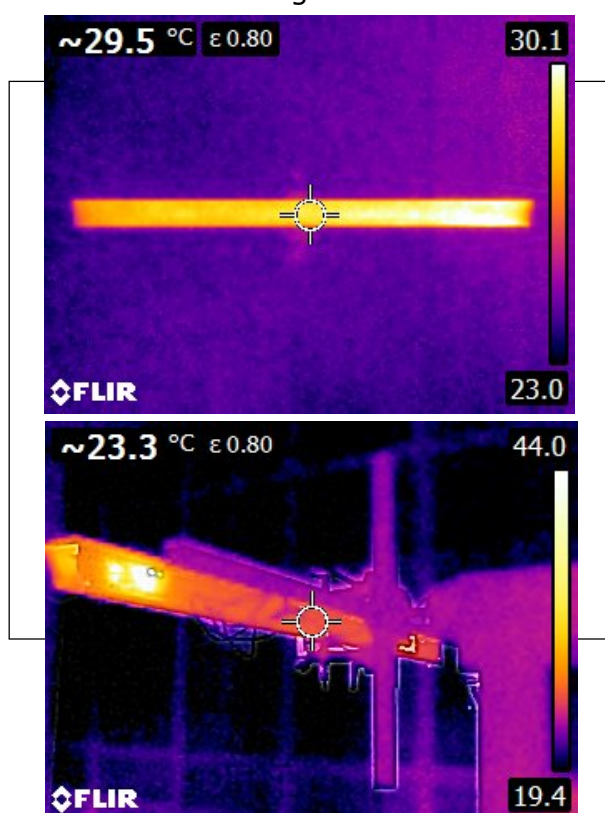
Max. Intensity: 2536.39 cd

Pos of Max. Intensity: H90 V32

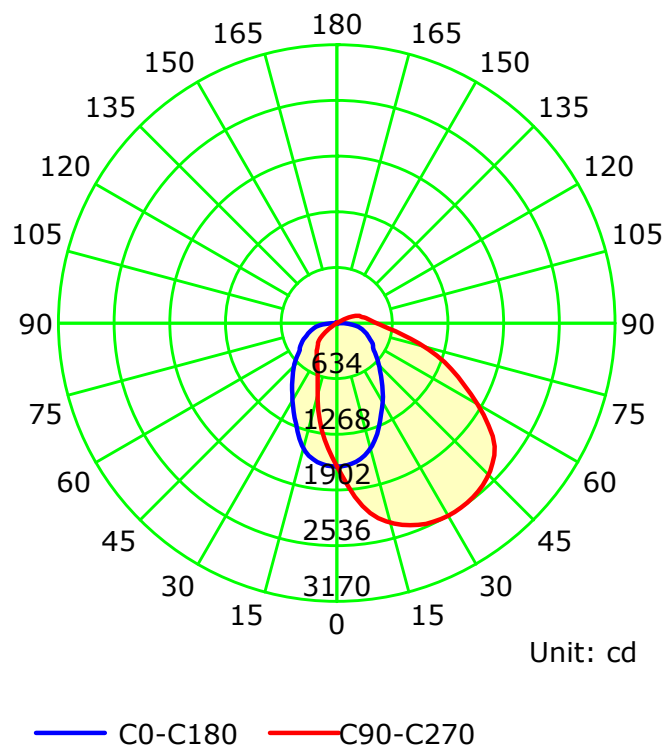
S/MH(C0/C180): 0.99

S/MH(C90/C270): 1.39

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

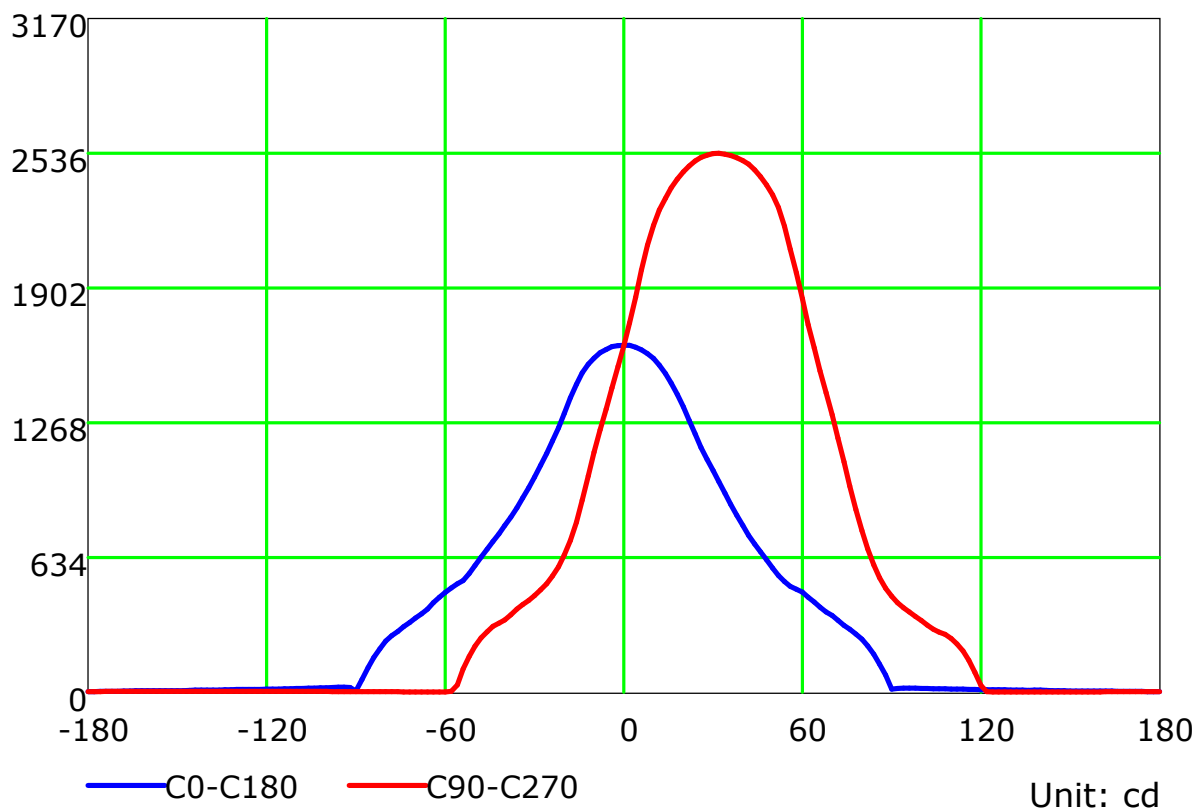
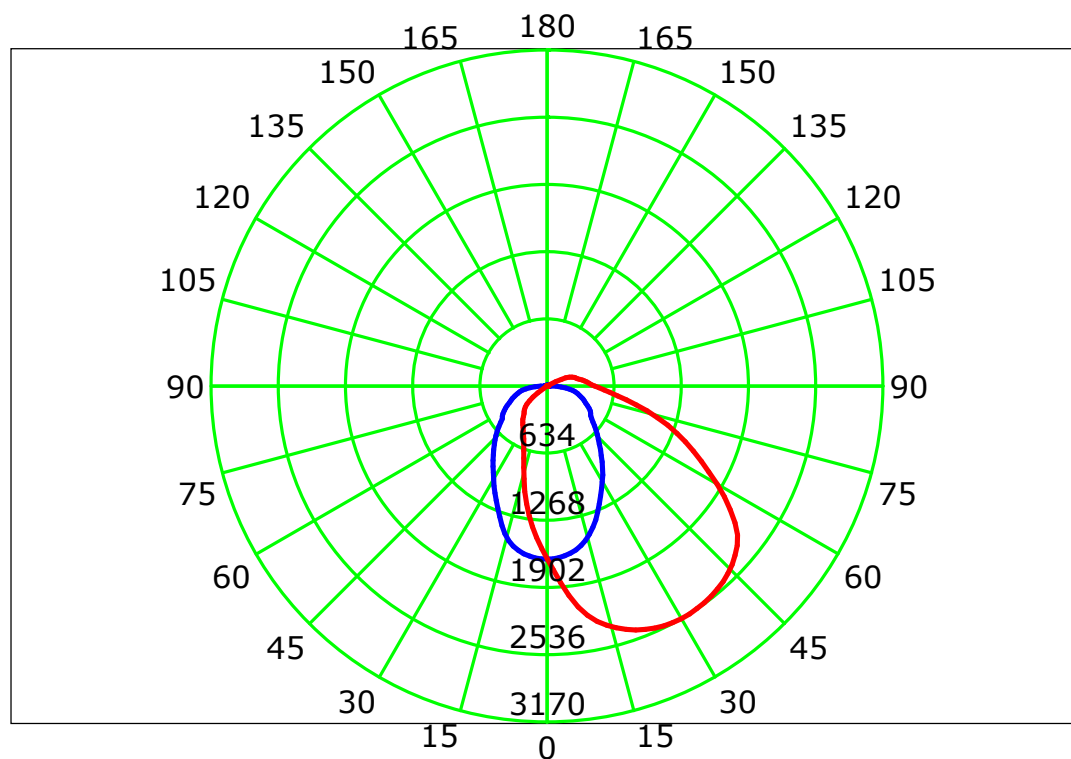
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

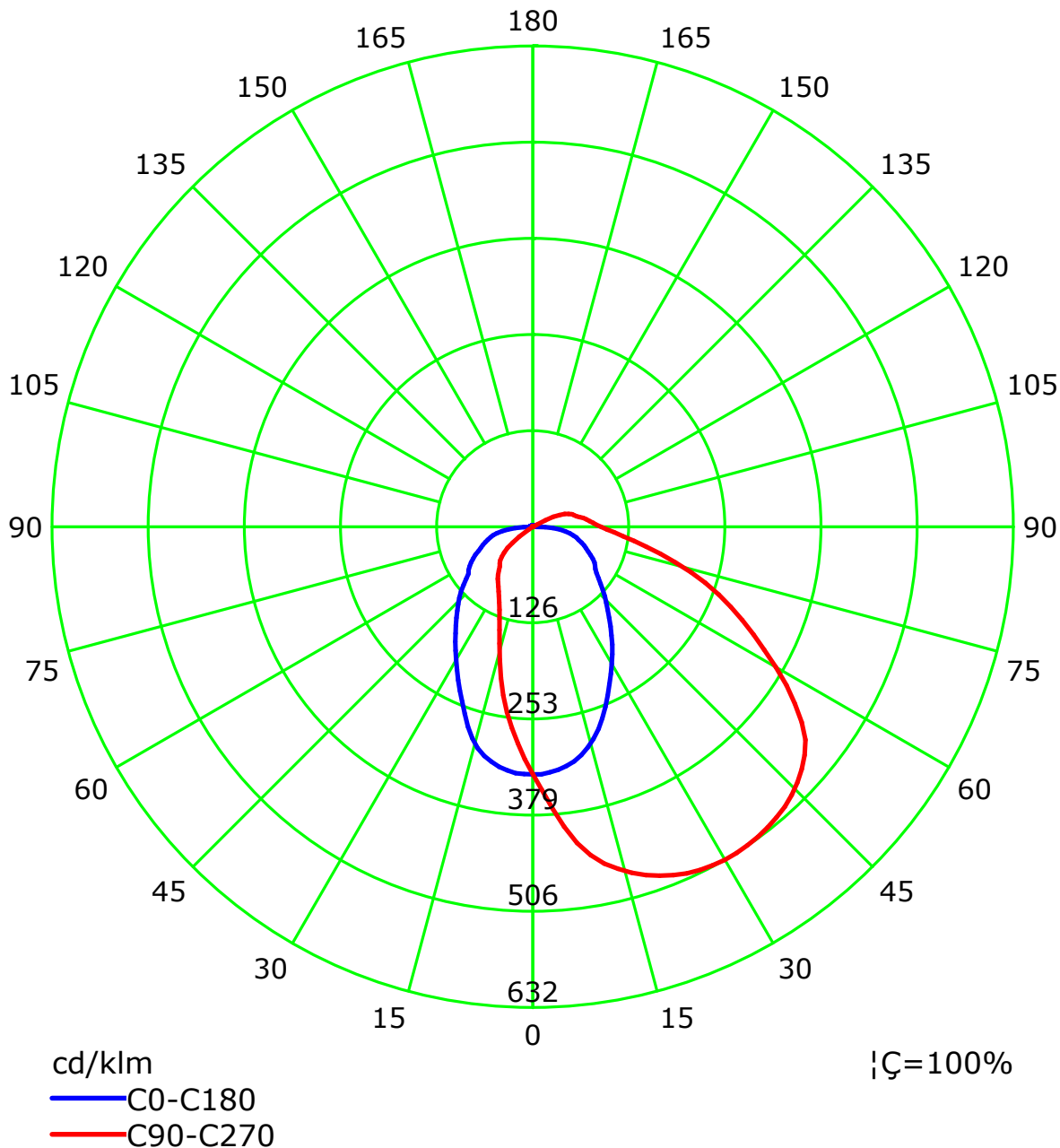
Test Device: LSG-1800B

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:

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Test Device: LSG-1800B

Distance: 12.677 m

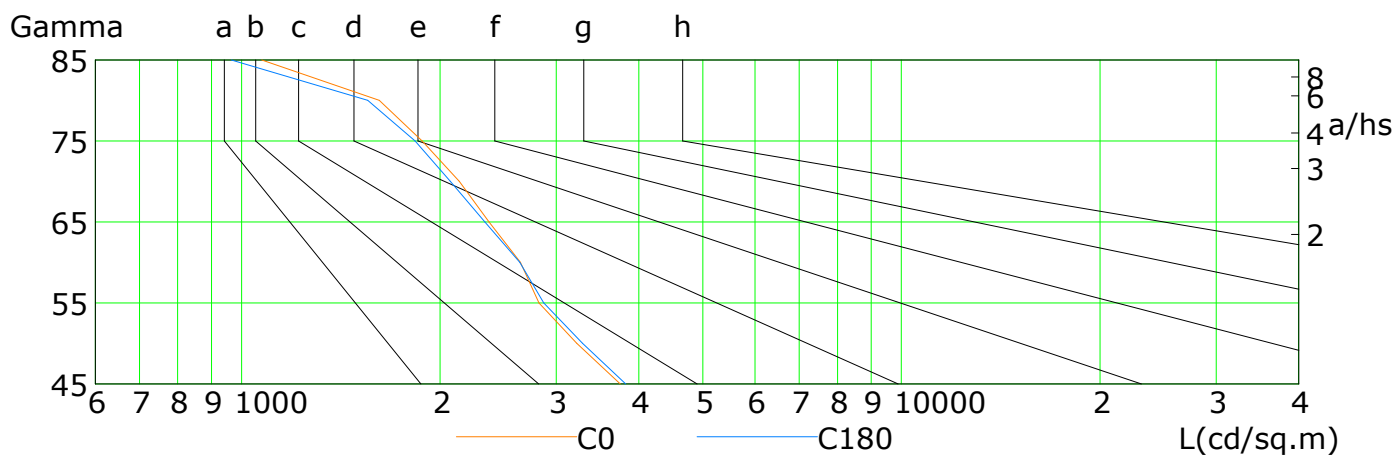
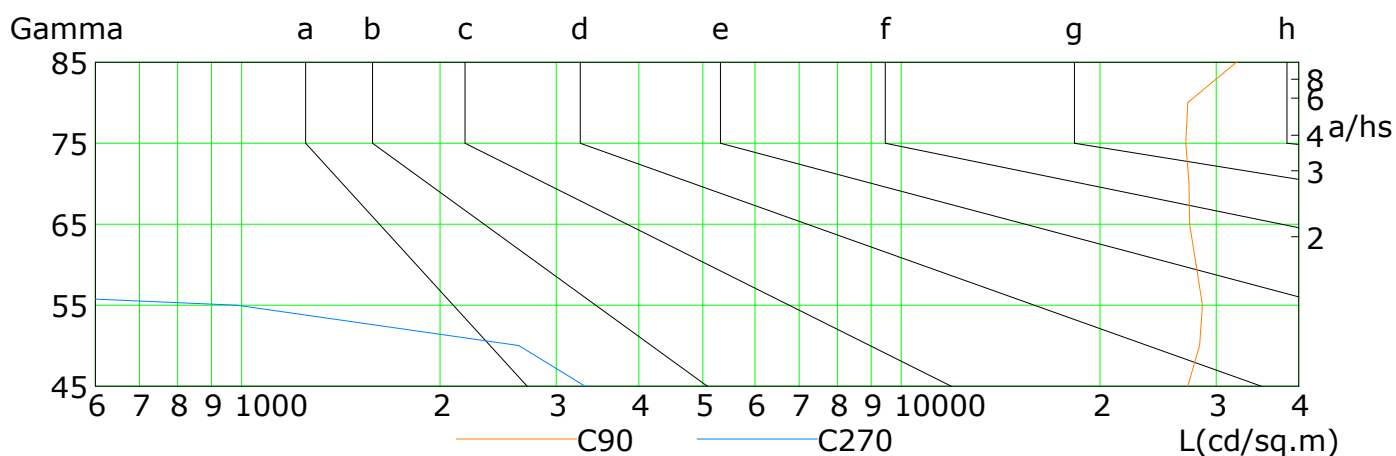
Humidity:

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	3749	3223	2825	2647	2370	2137	1879	1618	1073
C90	27149	28315	28609	27951	27345	27296	26994	27176	32201
C180	3819	3286	2872	2641	2336	2072	1833	1554	965
C270	3316	2632	984	40	45	55	78	115	207

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

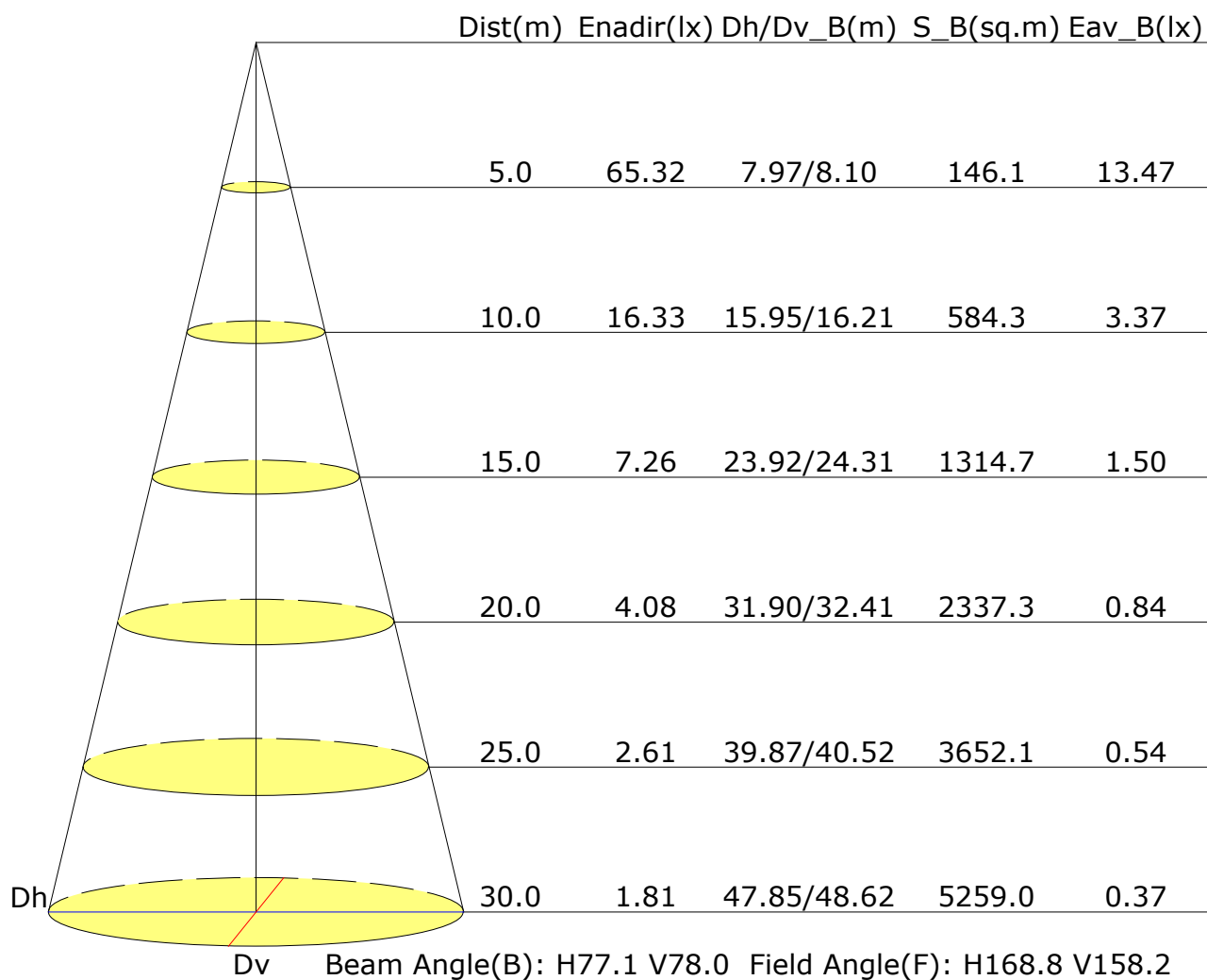
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Illuminance at a Distance



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:

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	16.2	17.5	16.6	17.9	18.2	22.8	24.1	23.2	24.5	24.8
3H	17.1	18.4	17.5	18.7	19.1	24.7	25.9	25.1	26.3	26.7
4H	17.6	18.8	18.0	19.2	19.6	25.6	26.7	26.0	27.1	27.5
6H	18.1	19.1	18.5	19.5	20.0	26.4	27.5	26.8	27.9	28.3
8H	18.2	19.3	18.7	19.7	20.1	26.8	27.8	27.2	28.2	28.7
12H	18.4	19.4	18.8	19.8	20.3	27.2	28.2	27.6	28.6	29.1
X=4H Y=2H	17.7	18.8	18.1	19.2	19.6	22.8	24.0	23.3	24.4	24.8
3H	18.7	19.7	19.1	20.1	20.6	24.9	25.9	25.3	26.3	26.8
4H	19.2	20.1	19.7	20.6	21.1	25.9	26.8	26.4	27.3	27.8
6H	19.7	20.5	20.2	21.0	21.5	26.9	27.7	27.4	28.2	28.7
8H	19.9	20.7	20.4	21.2	21.7	27.4	28.1	27.9	28.6	29.2
12H	20.1	20.7	20.6	21.3	21.8	27.9	28.6	28.4	29.1	29.6
X=8H Y=4H	20.0	20.7	20.5	21.2	21.8	25.9	26.6	26.4	27.1	27.7
6H	20.7	21.3	21.2	21.8	22.4	27.0	27.6	27.6	28.2	28.7
8H	21.0	21.5	21.5	22.1	22.7	27.6	28.1	28.2	28.7	29.3
12H	21.2	21.7	21.8	22.3	22.9	28.2	28.7	28.8	29.3	29.9
X=12H Y=4H	20.2	20.8	20.7	21.4	21.9	25.9	26.6	26.4	27.1	27.6
6H	20.9	21.5	21.5	22.0	22.6	27.0	27.6	27.6	28.1	28.7
8H	21.3	21.8	21.9	22.4	23.0	27.6	28.1	28.2	28.7	29.3
Variations with the observer position at spacings:										
S=1.0H	+0.3/-0.4					+0.7/-0.9				
S=1.5H	+0.7/-0.8					+1.4/-1.8				
S=2.0H	+1.2/-1.5					+2.0/-2.8				

Calculate in accordance with CIE Pub.117. The table is revised with 5010lm ($8\log(F/F_0) = 5.6$).

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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	0.54	0.64	0.71	0.76	0.83	0.88	0.92	0.96	1.00	
	0.30		0.46	0.56	0.63	0.69	0.77	0.82	0.86	0.92	0.96	
	0.20		0.40	0.50	0.58	0.63	0.71	0.77	0.82	0.88	0.92	
0.50	0.50	0.20	0.52	0.61	0.68	0.73	0.79	0.84	0.87	0.91	0.94	
	0.30		0.45	0.54	0.61	0.67	0.74	0.79	0.83	0.88	0.91	
	0.20		0.40	0.49	0.56	0.61	0.69	0.75	0.79	0.84	0.88	
0.30	0.50	0.20	0.50	0.59	0.65	0.69	0.76	0.80	0.83	0.87	0.89	
	0.30		0.44	0.53	0.59	0.64	0.71	0.76	0.79	0.84	0.87	
	0.20		0.39	0.48	0.55	0.60	0.67	0.72	0.76	0.81	0.84	
0.00	0.00	0.00	0.36	0.45	0.51	0.56	0.63	0.67	0.71	0.75	0.78	
Rating:40W 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	0.72	0.63	0.51	0.43	0.37	0.30	0.25	
	0.30		0.84	0.72	0.63	0.56	0.46	0.40	0.35	0.28	0.23	
	0.20		0.72	0.63	0.56	0.50	0.42	0.37	0.32	0.26	0.22	
0.50	0.50	0.20	0.96	0.80	0.68	0.60	0.49	0.44	0.35	0.28	0.23	
	0.30		0.81	0.69	0.60	0.54	0.44	0.38	0.33	0.27	0.22	
	0.20		0.70	0.61	0.54	0.49	0.41	0.35	0.31	0.25	0.21	
0.30	0.50	0.20	0.92	0.76	0.65	0.57	0.46	0.39	0.34	0.26	0.22	
	0.30		0.79	0.67	0.58	0.52	0.43	0.36	0.32	0.25	0.21	
	0.20		0.69	0.60	0.53	0.47	0.40	0.34	0.30	0.24	0.20	
0.00	0.00	0.00	0.58	0.49	0.43	0.38	0.32	0.27	0.24	0.19	0.16	
Rating:40W 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	0.22	0.23	0.24	0.25	0.26	0.26	0.27	0.27	0.27	
	0.30		0.15	0.17	0.18	0.19	0.20	0.22	0.22	0.24	0.24	
	0.20		0.10	0.12	0.13	0.14	0.16	0.18	0.19	0.21	0.22	
0.50	0.50	0.20	0.21	0.22	0.23	0.24	0.25	0.25	0.25	0.26	0.26	
	0.30		0.15	0.16	0.17	0.18	0.20	0.21	0.22	0.23	0.24	
	0.20		0.10	0.11	0.13	0.14	0.16	0.17	0.18	0.20	0.21	
0.30	0.50	0.20	0.20	0.22	0.22	0.23	0.24	0.24	0.24	0.25	0.25	
	0.30		0.14	0.16	0.17	0.18	0.19	0.20	0.21	0.22	0.23	
	0.20		0.10	0.11	0.13	0.14	0.15	0.17	0.18	0.19	0.20	
0.00	0.00	0.00	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	
Rating:40W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												