

Report No.:

Test Time: 23.06.2020 21:00

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FL 60/1000 17W 4000K frozen

Number of Lamps: 1

Luminous Width (mm): 60

Voltage: 222.2 V

Power: 16.80 W

Luminous Length (mm): 950

Luminous Height (mm): 70

Current: 0.080 A

Power Factor: 0.934

Photometric Results

CIE Class: Direct

Measurement Flux: 2248 lm

Downward Ratio: 100%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 148.7, 134.3, 142.1, 142.4

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 98.9, 88.7, 93.7, 94.3

Luminaire Efficacy Rating (LER): 133.86

Max. Intensity: 1007.97 cd

S/MH(C0/C180): 1.26

Total Rated Lamp Lumens: 2248.0 lm

Efficiency: 100%

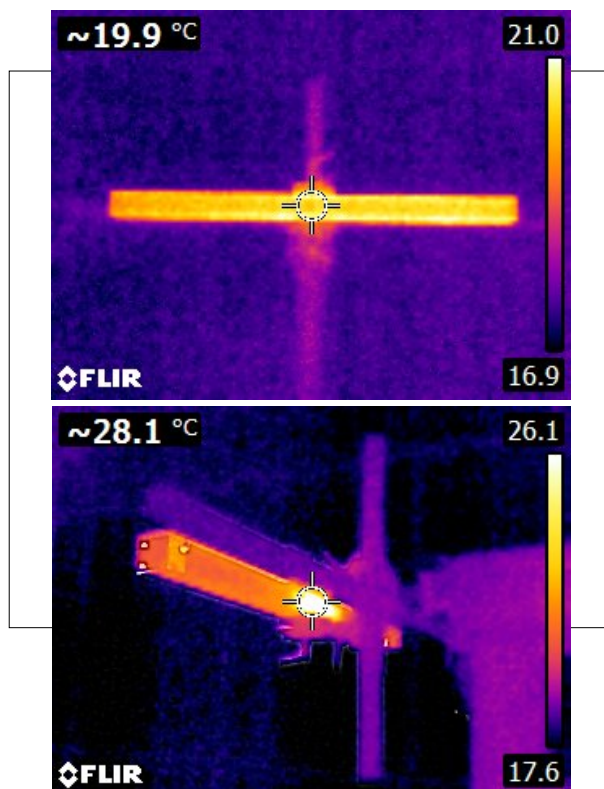
Upward Ratio: 0%

Central Intensity: 1007.52 cd

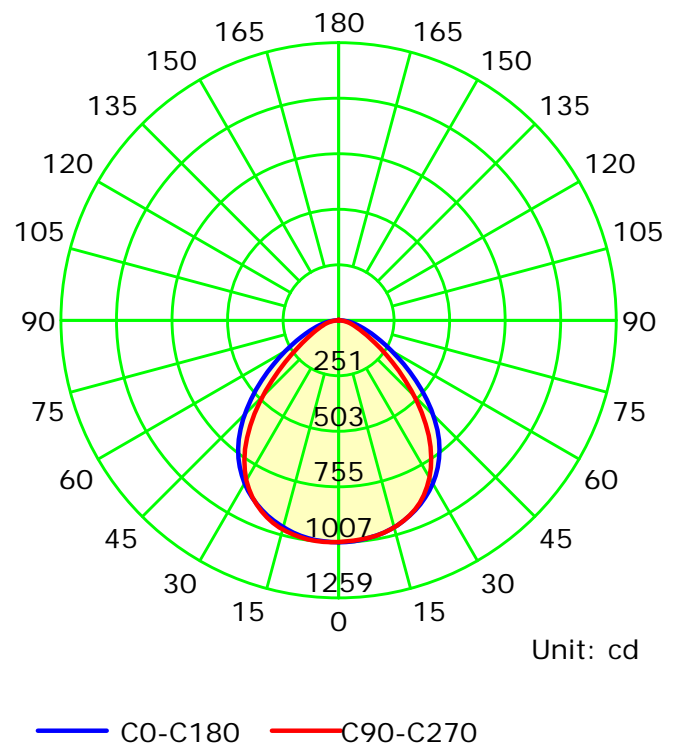
Pos of Max. Intensity: H247.5 V2

S/MH(C90/C270): 1.22

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

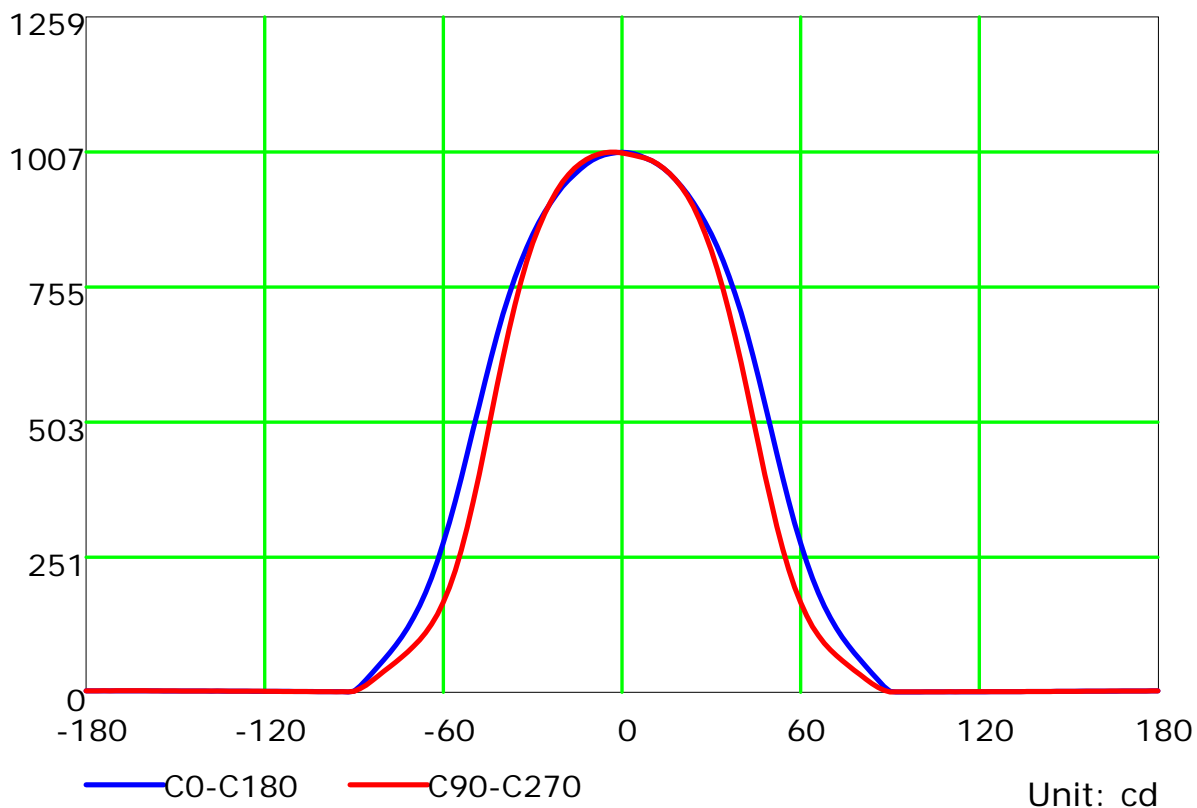
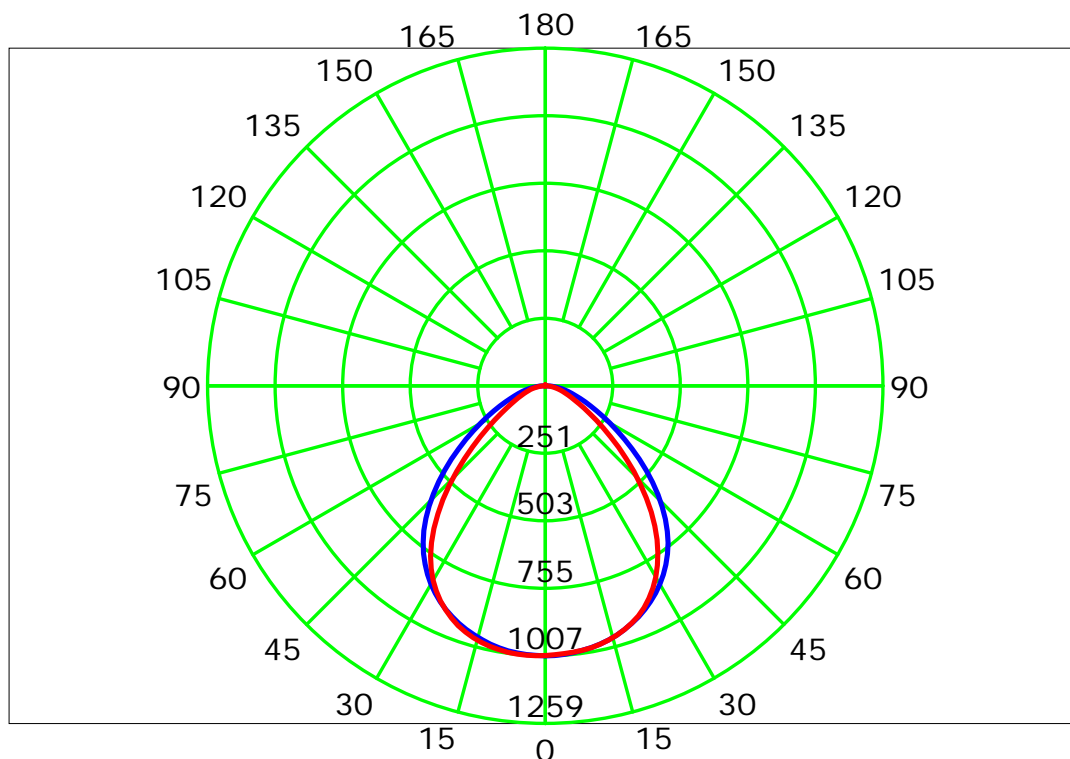
Test Device: LSG-1800B

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

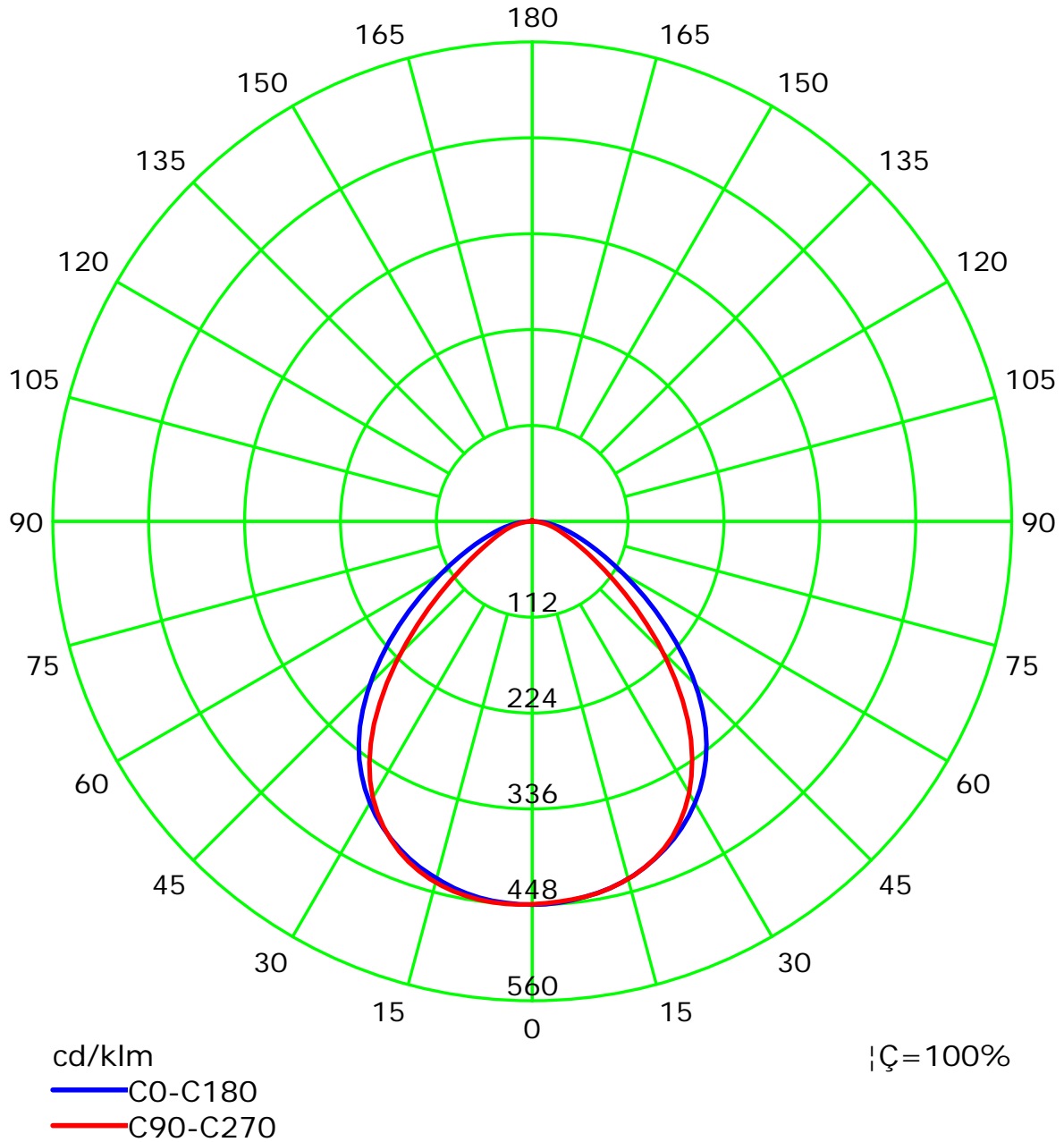
Test Device: LSG-1800B

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:

Gamma Plane (°): 0.0-180.0: 2.0

Test Device: LSG-1800B

Distance: 12.677 m

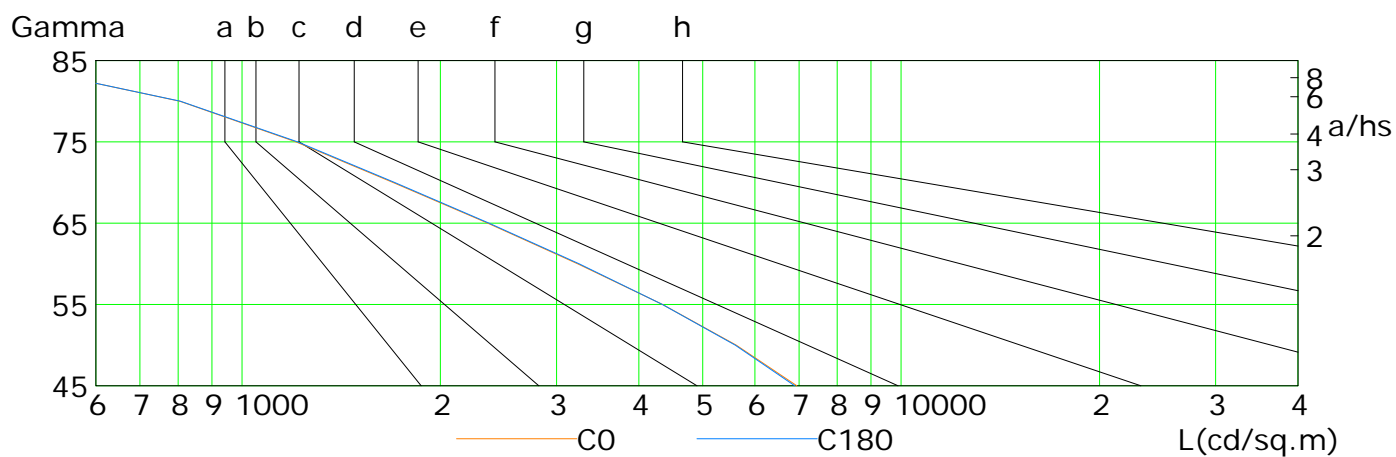
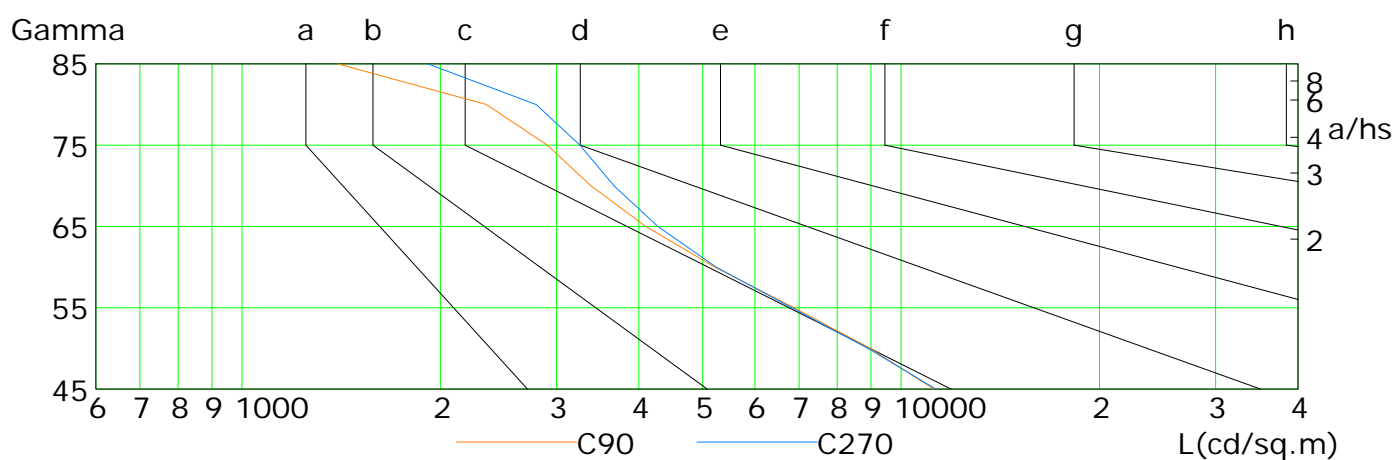
Humidity:

Inspector:

Lum Limit Curve

Dazzle	Quality	Illuminance (lx)							
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	6946	5619	4345	3231	2359	1695	1208	805	414
C90	11215	8967	6883	5218	4100	3385	2905	2347	1398
C180	6897	5602	4344	3247	2369	1705	1214	806	414
C270	11286	8910	6822	5240	4276	3668	3256	2793	1914

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

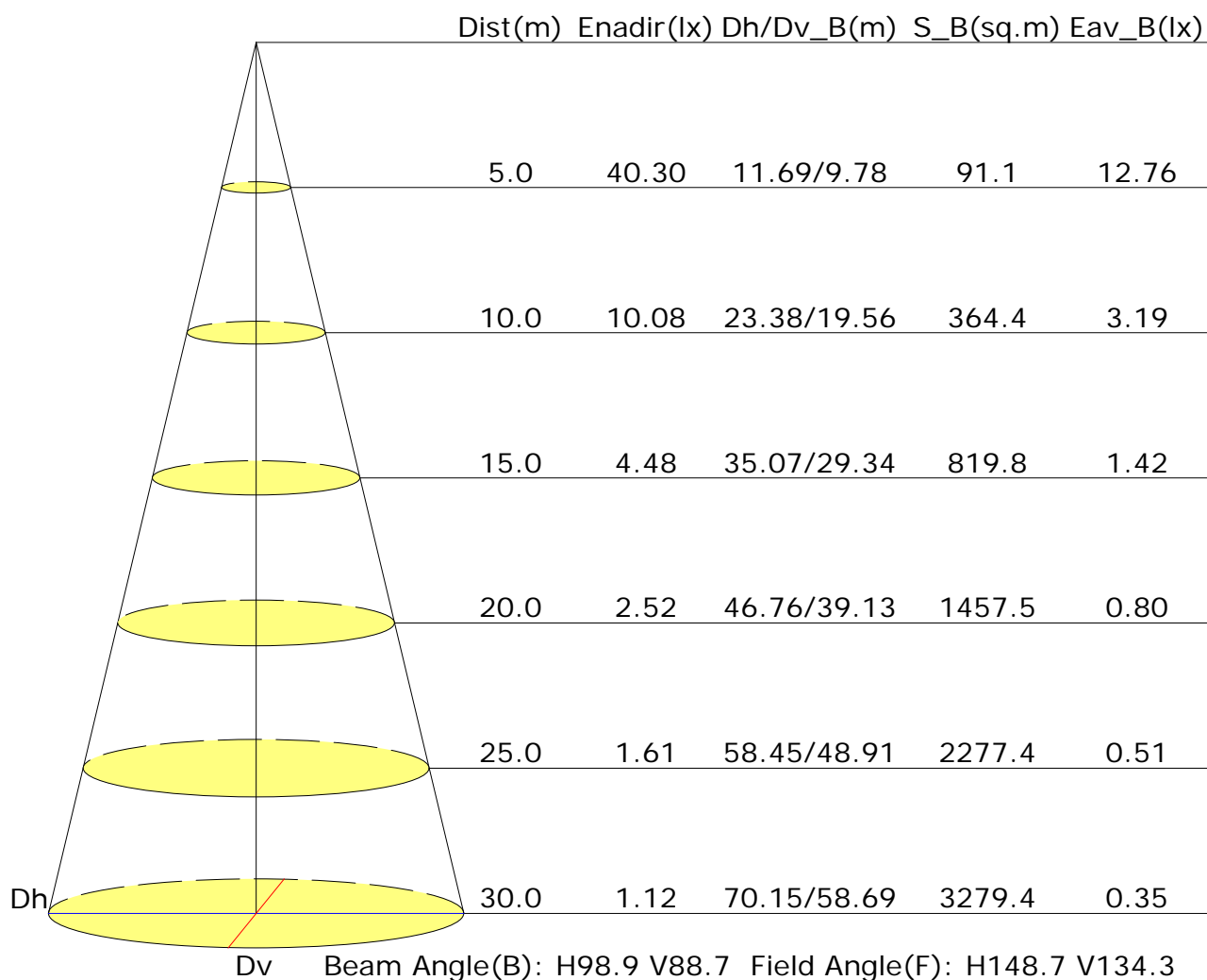
Test Device: LSG-1800B

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	17.7	18.9	18.0	19.2	19.4	17.6	18.9	17.9	19.1	19.3
3H	18.2	19.3	18.5	19.6	19.8	18.1	19.2	18.4	19.5	19.7
4H	18.3	19.4	18.7	19.7	20.0	18.3	19.3	18.6	19.6	19.9
6H	18.4	19.4	18.8	19.7	20.0	18.4	19.4	18.8	19.7	20.0
8H	18.4	19.4	18.8	19.7	20.0	18.4	19.4	18.8	19.7	20.0
12H	18.4	19.3	18.8	19.6	20.0	18.5	19.4	18.8	19.7	20.0
X=4H Y=2H	17.8	18.9	18.2	19.2	19.5	17.8	18.8	18.1	19.1	19.4
3H	18.5	19.4	18.9	19.7	20.1	18.4	19.3	18.7	19.6	19.9
4H	18.7	19.5	19.1	19.9	20.2	18.6	19.4	19.0	19.8	20.2
6H	18.9	19.6	19.3	20.0	20.4	18.8	19.5	19.3	19.9	20.3
8H	18.9	19.6	19.3	20.0	20.4	18.9	19.5	19.3	20.0	20.4
12H	18.9	19.5	19.4	19.9	20.4	18.9	19.5	19.4	19.9	20.4
X=8H Y=4H	18.7	19.4	19.2	19.8	20.2	18.7	19.3	19.1	19.7	20.1
6H	19.0	19.5	19.4	19.9	20.4	18.9	19.4	19.4	19.9	20.4
8H	19.0	19.5	19.5	19.9	20.4	19.0	19.5	19.5	19.9	20.4
12H	19.1	19.5	19.6	19.9	20.5	19.1	19.5	19.6	20.0	20.5
X=12H Y=4H	18.7	19.3	19.2	19.7	20.2	18.6	19.2	19.1	19.6	20.1
6H	19.0	19.4	19.4	19.9	20.4	18.9	19.4	19.4	19.8	20.3
8H	19.0	19.4	19.5	19.9	20.4	19.0	19.4	19.5	19.9	20.4
Variations with the observer position at spacings:										
S=1.0H	+0.5/-0.7					+0.5/-0.8				
S=1.5H	+0.9/-1.6					+1.5/-1.9				
S=2.0H	+1.9/-2.5					+2.7/-3.0				

Calculate in accordance with CIE Pub.117. The table is revised with 2248lm ($8\log(F/F_0) = 2.8$).

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	0.65	0.75	0.81	0.86	0.92	0.97	1.00	1.03	1.06	
		0.30	0.58	0.68	0.75	0.80	0.87	0.92	0.95	1.00	1.03	
		0.20	0.53	0.63	0.70	0.75	0.83	0.88	0.92	0.97	1.00	
0.50	0.50	0.20	0.63	0.73	0.79	0.83	0.89	0.93	0.96	0.99	1.02	
		0.30	0.57	0.67	0.73	0.78	0.85	0.89	0.92	0.97	0.99	
		0.20	0.52	0.62	0.69	0.74	0.81	0.86	0.89	0.94	0.97	
0.30	0.50	0.20	0.62	0.71	0.77	0.81	0.86	0.90	0.92	0.96	0.98	
		0.30	0.56	0.66	0.72	0.77	0.83	0.87	0.90	0.93	0.96	
		0.20	0.52	0.62	0.68	0.73	0.80	0.84	0.87	0.91	0.94	
0.00	0.00	0.00	0.50	0.59	0.66	0.70	0.76	0.80	0.83	0.87	0.89	
Rating: 17W 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	0.88	0.71	0.60	0.52	0.41	0.34	0.29	0.22	0.18	
	0.30		0.73	0.61	0.52	0.46	0.37	0.31	0.27	0.21	0.17	
	0.20		0.63	0.53	0.46	0.41	0.34	0.29	0.25	0.20	0.16	
0.50	0.50	0.20	0.84	0.68	0.57	0.49	0.39	0.35	0.27	0.21	0.17	
	0.30		0.71	0.59	0.50	0.44	0.35	0.30	0.25	0.20	0.16	
	0.20		0.62	0.52	0.45	0.40	0.33	0.27	0.24	0.19	0.16	
0.30	0.50	0.20	0.81	0.65	0.54	0.47	0.37	0.30	0.26	0.20	0.16	
	0.30		0.70	0.57	0.49	0.42	0.34	0.28	0.24	0.19	0.15	
	0.20		0.61	0.51	0.44	0.39	0.32	0.26	0.23	0.18	0.15	
0.00	0.00	0.00	0.50	0.40	0.34	0.30	0.24	0.19	0.17	0.13	0.11	
Rating: 17W 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	0.16	0.17	0.18	0.19	0.20	0.20	0.21	0.21	0.22
	0.30		0.10	0.11	0.13	0.14	0.16	0.17	0.18	0.19	0.20
	0.20		0.05	0.07	0.09	0.10	0.12	0.14	0.15	0.17	0.18
0.50	0.50	0.20	0.15	0.16	0.17	0.18	0.19	0.19	0.20	0.21	0.21
	0.30		0.10	0.11	0.12	0.14	0.15	0.16	0.17	0.18	0.19
	0.20		0.05	0.07	0.09	0.10	0.12	0.13	0.15	0.16	0.17
0.30	0.50	0.20	0.15	0.16	0.17	0.17	0.18	0.19	0.19	0.20	0.20
	0.30		0.09	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.18
	0.20		0.05	0.07	0.09	0.10	0.12	0.13	0.14	0.16	0.17
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: 17W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980											