

Report No.:

Test Time: 22.06.2020 20:37

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FL 60/1000 30W 4000K frozen

Luminous Length (mm): 950

Luminous Width (mm): 60

Luminous Height (mm): 70

Voltage: 221.2 V

Current: 0.142 A

Power: 30.42 W

Power Factor: 0.966

Photometric Results

CIE Class: Direct

Measurement Flux: 3931 lm

Downward Ratio: 100%

Total Rated Lamp Lumens: 3931.0 lm

Efficiency: 100%

Upward Ratio: 0%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 148.5, 134.3, 141.9, 142.3

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 98.9, 88.5, 93.6, 94.1

Luminaire Efficacy Rating (LER): 129.27

Central Intensity: 1764.15 cd

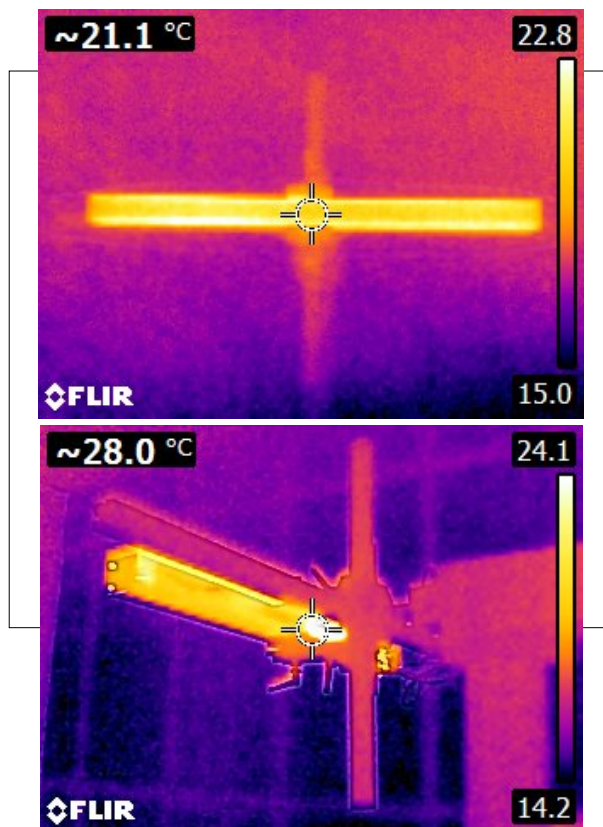
Max. Intensity: 1765.8 cd

Pos of Max. Intensity: H315 V2

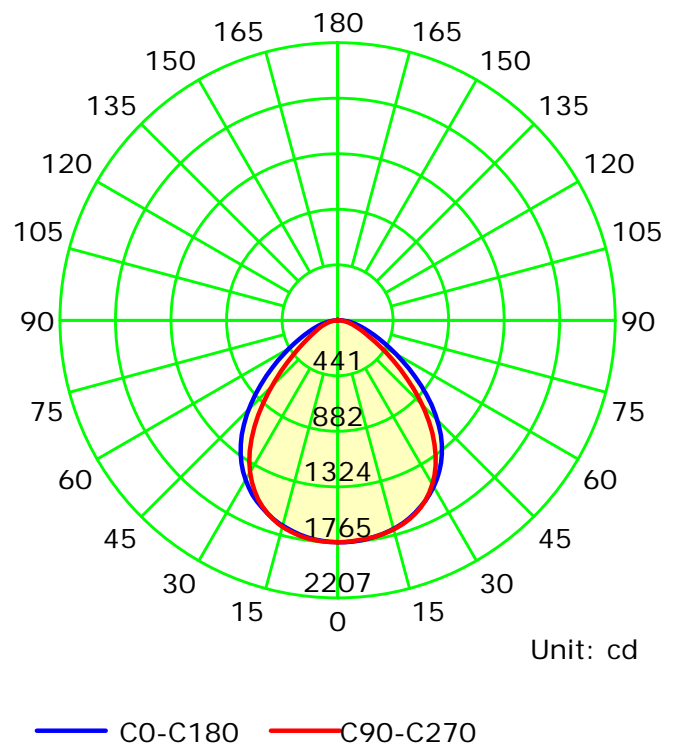
S/MH(C0/C180): 1.26

S/MH(C90/C270): 1.21

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

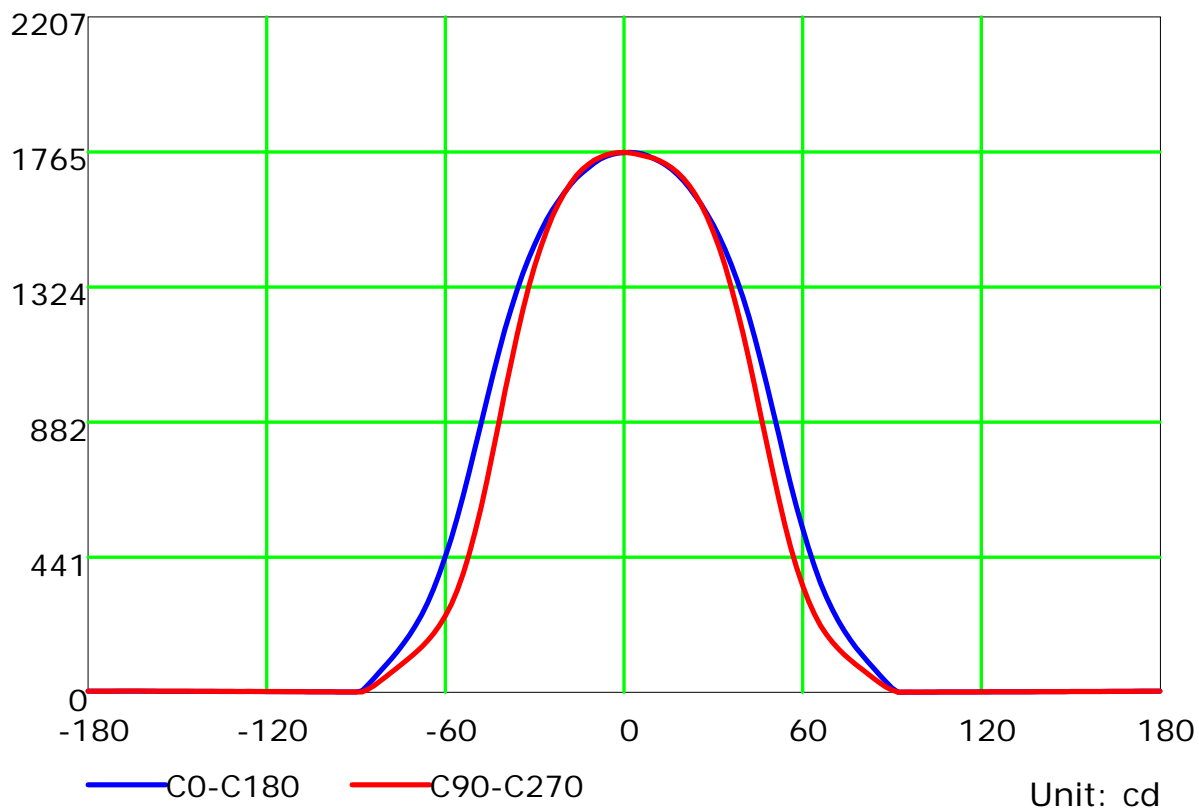
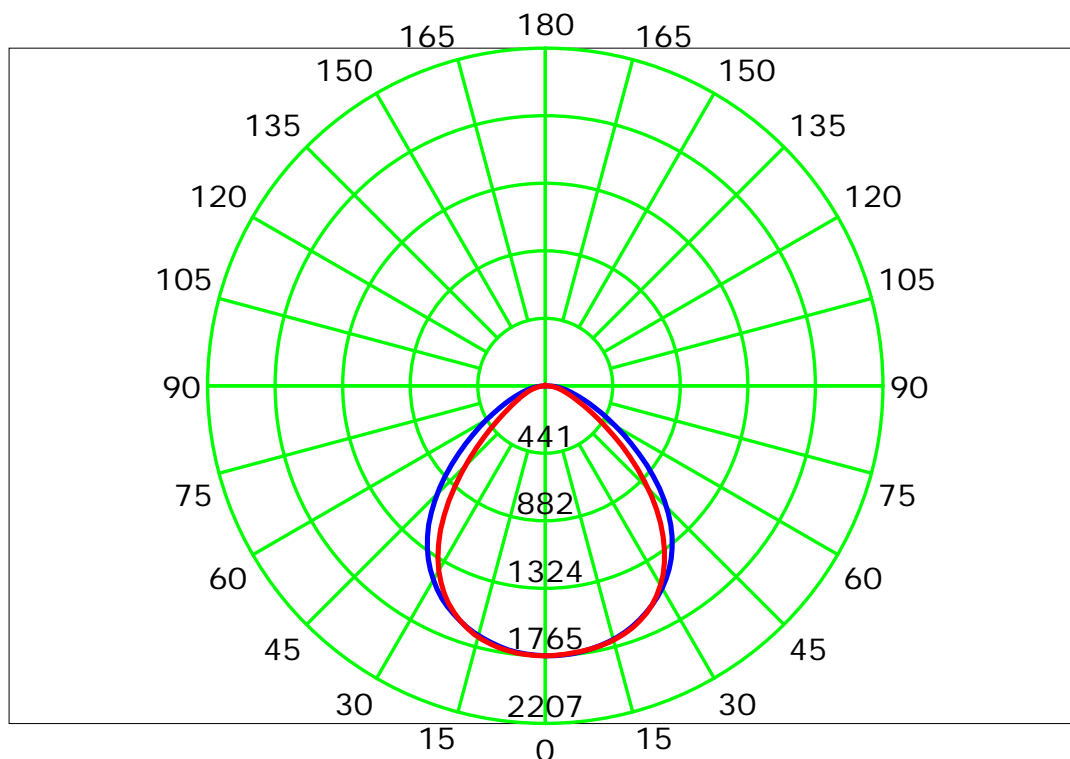
Test Device: LSG-1800B

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

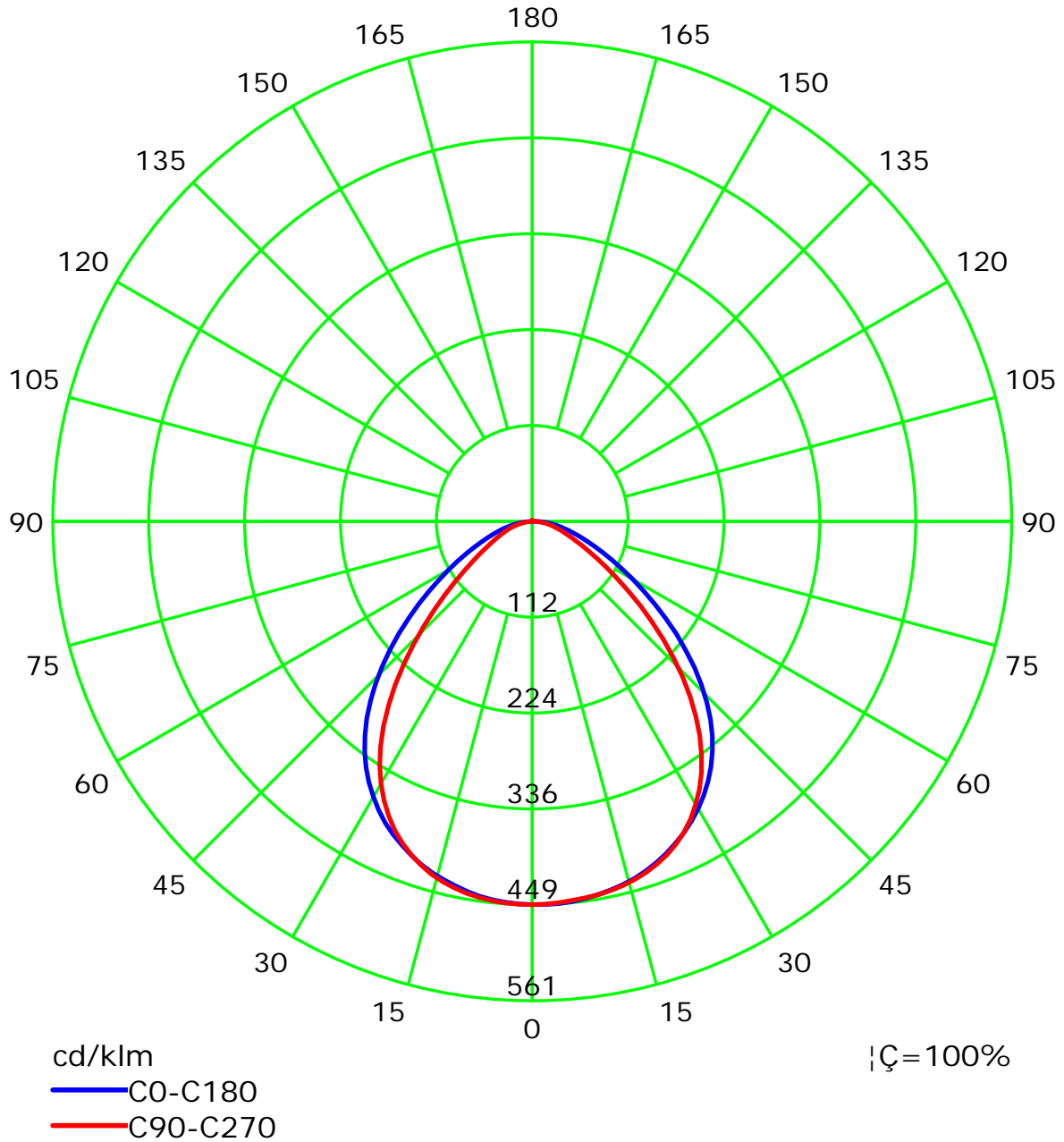
Test Device: LSG-1800B

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

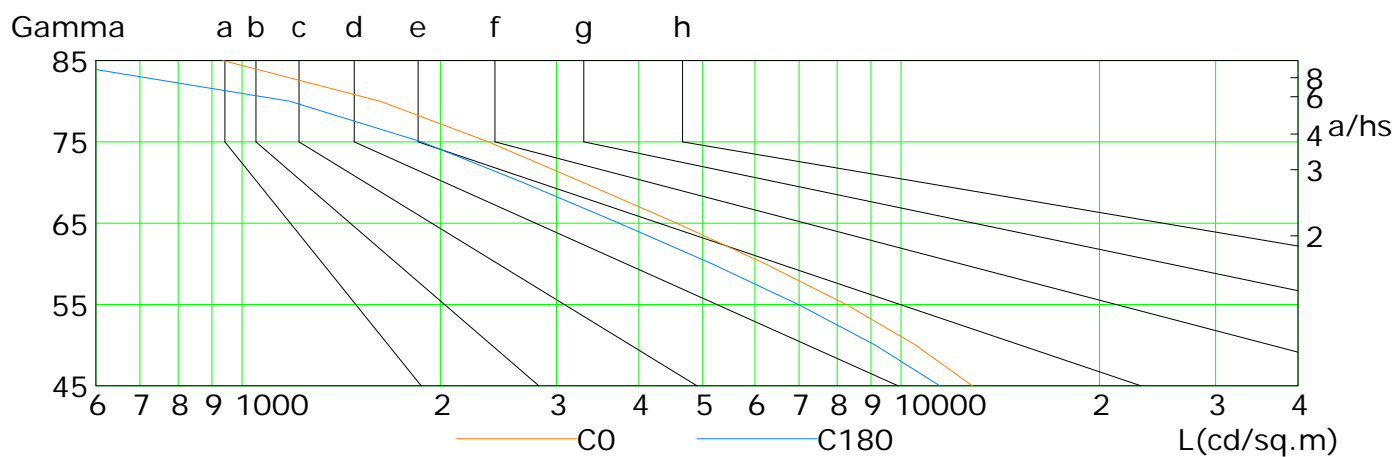
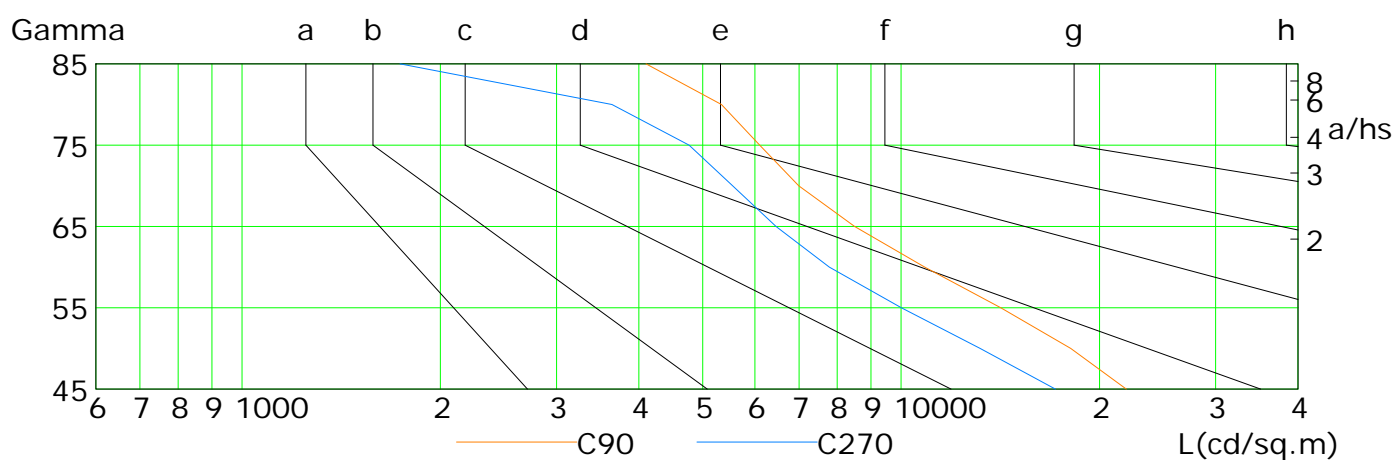
Humidity:

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	12822	10528	8253	6221	4564	3295	2364	1620	936
C90	21961	18083	14164	10860	8501	6993	6101	5338	4103
C180	11447	9135	6981	5164	3734	2668	1873	1182	497
C270	17140	13179	10009	7782	6459	5550	4767	3641	1736

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

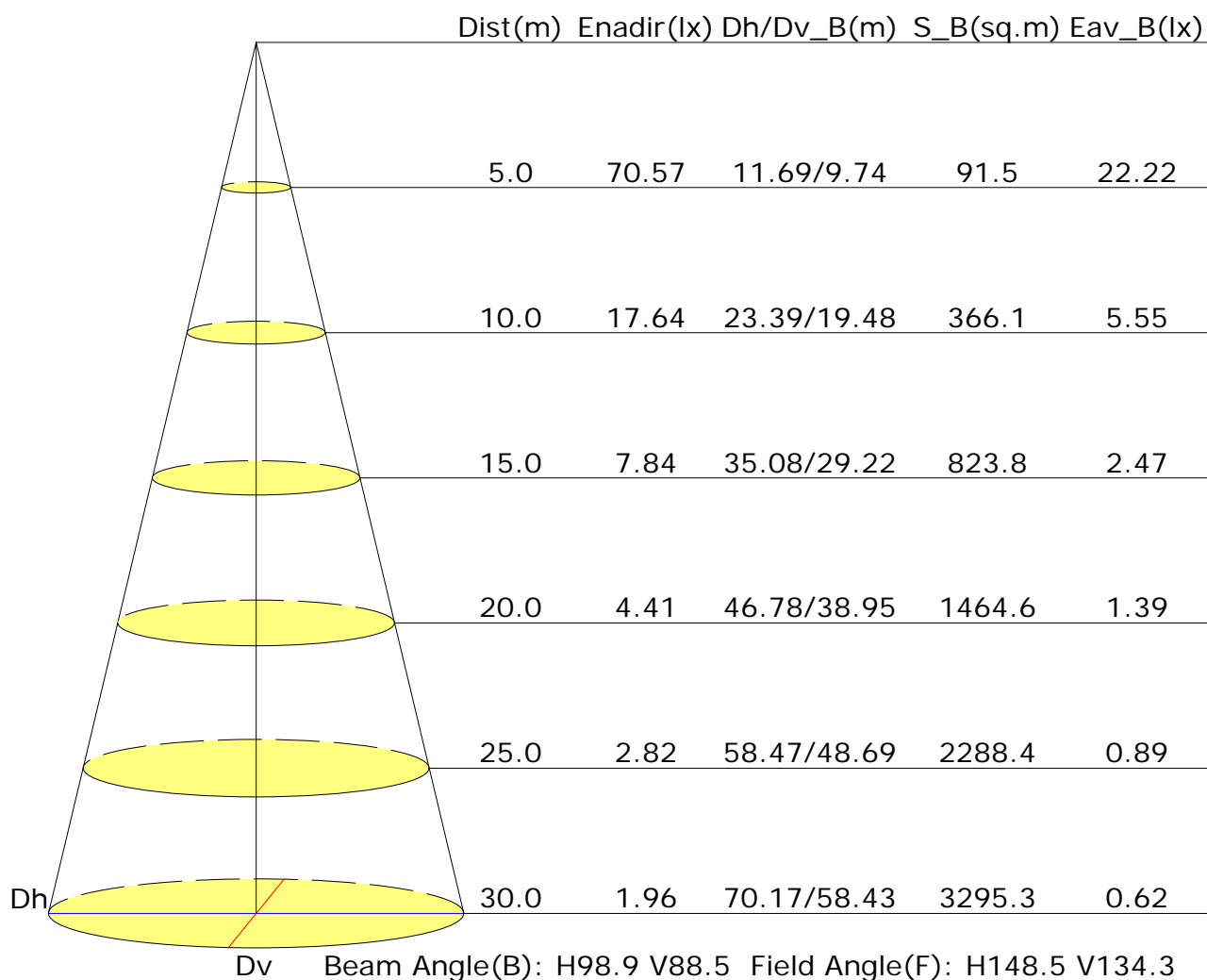
Test Device: LSG-1800B

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	20.1	21.3	20.3	21.5	21.8	19.7	21.0	20.0	21.2	21.5
3H	20.6	21.7	20.9	22.0	22.3	20.2	21.3	20.5	21.6	21.9
4H	20.8	21.8	21.1	22.1	22.4	20.4	21.5	20.7	21.8	22.0
6H	20.9	21.8	21.2	22.1	22.5	20.5	21.5	20.9	21.8	22.2
8H	20.9	21.8	21.2	22.1	22.5	20.6	21.5	21.0	21.9	22.2
12H	20.9	21.8	21.3	22.1	22.5	20.6	21.5	21.0	21.8	22.2
X=4H Y=2H	20.2	21.3	20.6	21.6	21.9	20.0	21.0	20.3	21.3	21.6
3H	20.9	21.8	21.3	22.1	22.5	20.5	21.4	20.9	21.8	22.1
4H	21.1	22.0	21.6	22.3	22.7	20.8	21.6	21.2	22.0	22.3
6H	21.3	22.0	21.8	22.4	22.8	21.0	21.7	21.4	22.1	22.5
8H	21.4	22.0	21.8	22.4	22.9	21.1	21.7	21.5	22.1	22.6
12H	21.4	22.0	21.9	22.4	22.9	21.1	21.7	21.6	22.1	22.6
X=8H Y=4H	21.2	21.8	21.6	22.2	22.7	20.8	21.5	21.3	21.9	22.3
6H	21.4	22.0	21.9	22.4	22.9	21.1	21.6	21.6	22.1	22.6
8H	21.5	22.0	22.0	22.4	22.9	21.2	21.7	21.7	22.1	22.6
12H	21.6	22.0	22.1	22.5	23.0	21.3	21.7	21.8	22.2	22.7
X=12H Y=4H	21.2	21.7	21.6	22.2	22.6	20.8	21.4	21.3	21.8	22.3
6H	21.4	21.9	21.9	22.3	22.8	21.1	21.6	21.6	22.0	22.5
8H	21.5	21.9	22.0	22.4	22.9	21.2	21.6	21.7	22.1	22.6
Variations with the observer position at spacings:										
S=1.0H	+0.4/-0.6					+0.5/-0.9				
S=1.5H	+0.8/-1.5					+1.2/-1.8				
S=2.0H	+1.8/-2.5					+2.4/-2.5				

Calculate in accordance with CIE Pub.117. The table is revised with 3931lm ($8\log(F/F_0) = 4.8$).

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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	0.65	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	0.93	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: 30W 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	0.36	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	0.82	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	0.16	
	0.20		0.61	0.51	0.44	0.39	0.32	0.27	0.23	0.18	0.15	
0.00	0.00	0.00	0.50	0.41	0.34	0.30	0.24	0.20	0.17	0.13	0.11	
Rating: 30W 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	0.18	0.20	0.20	0.21	0.21	0.22
	0.30		0.10	0.11	0.13	0.14	0.15	0.17	0.18	0.19	0.20
	0.20		0.05	0.07	0.09	0.10	0.12	0.14	0.15	0.16	0.18
0.50	0.50	0.20	0.15	0.16	0.17	0.18	0.19	0.19	0.20	0.20	0.21
	0.30		0.09	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.19
	0.20		0.05	0.07	0.09	0.10	0.12	0.13	0.14	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	0.16	0.17	0.18
	0.20		0.05	0.07	0.08	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: 30W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980											