

Report No.: 1

Test Time: 14.11.2019 20:13

## Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 595 (80) 24LED 0,3A 32W 4000K opal Hygiene Griliyto

Luminous Length (mm): 595

Luminous Width (mm): 595

Luminous Height (mm): 80

Voltage: 221.4 V

Current: 0.152 A

Power: 33.04 W

Power Factor: 0.978

## Photometric Results

CIE Class: Direct

Total Rated Lamp Lumens: 3575.3 lm

Measurement Flux: 3575.3 lm

Efficiency: 100%

Downward Ratio: 99%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 164.7, 164.4, 164.5, 164.5

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 111.1, 110.9, 111.0, 111.1

Luminaire Efficacy Rating (LER): 108.26

Central Intensity: 1243.96 cd

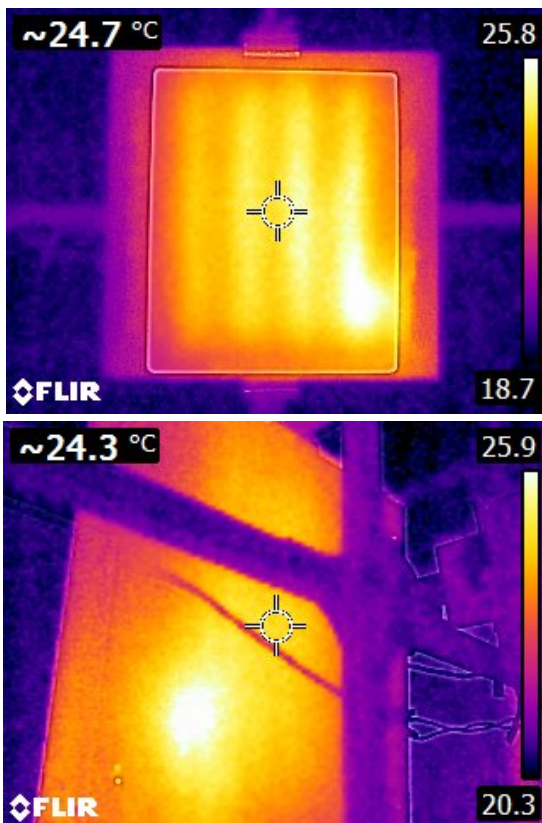
Max. Intensity: 1246.6 cd

Pos of Max. Intensity: H157.5 V1

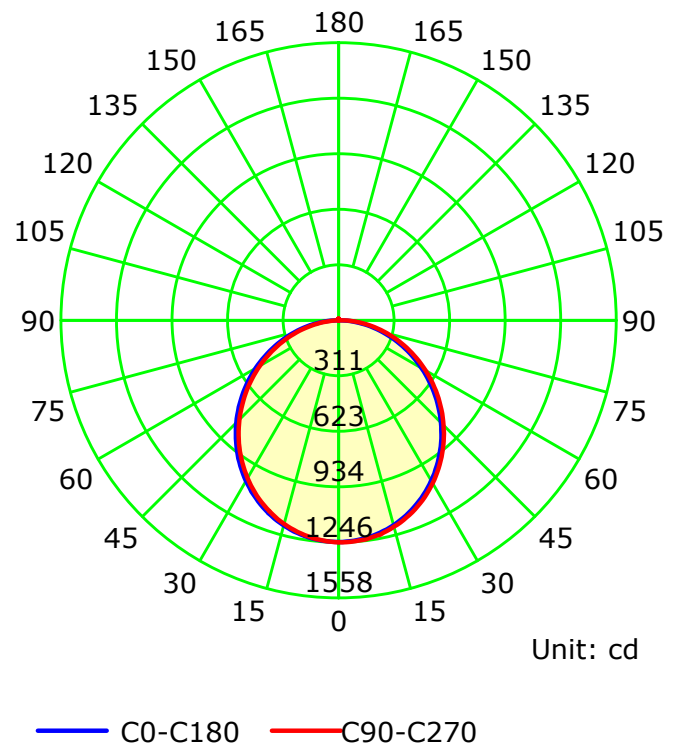
S/MH(C0/C180): 1.24

S/MH(C90/C270): 1.24

Termogramma



Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 22.5

Gamma Plane (°):0.0-180.0:1.0

Test Lab:

Test Device: LSG-1800B

Test Type: TYPE C

Distance: 12.677 m

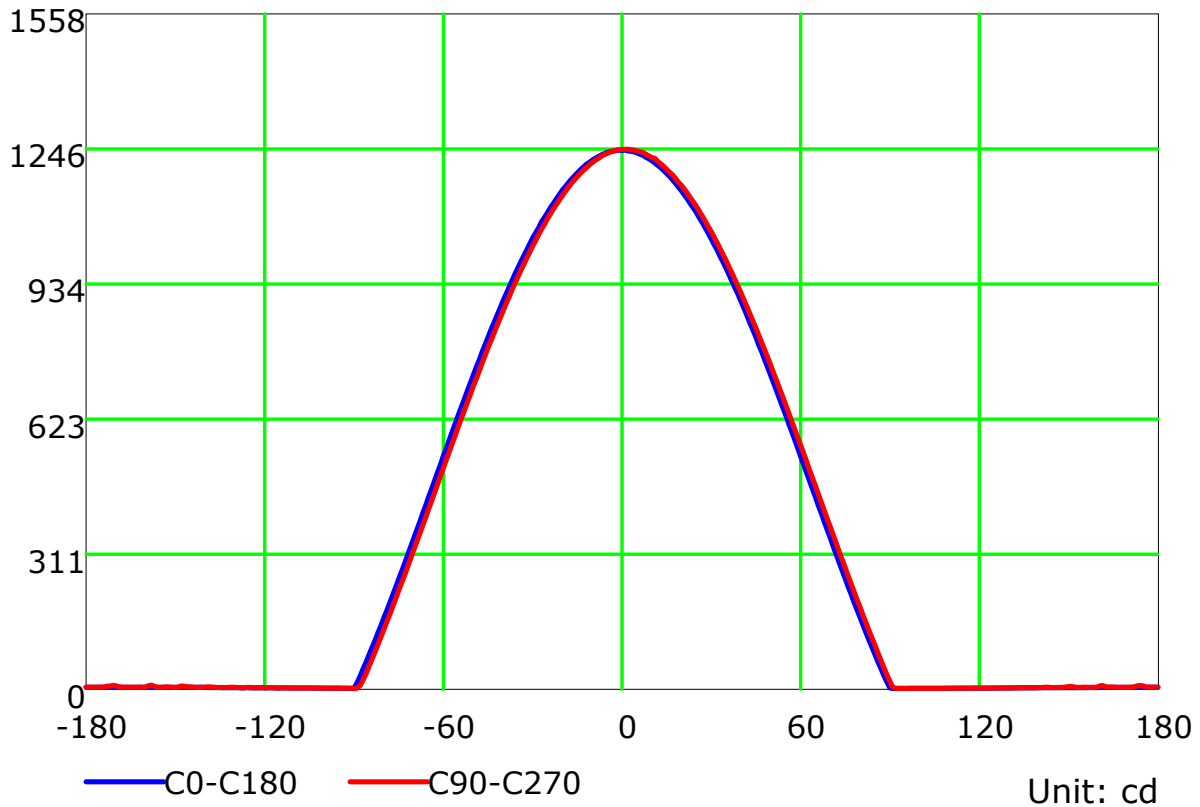
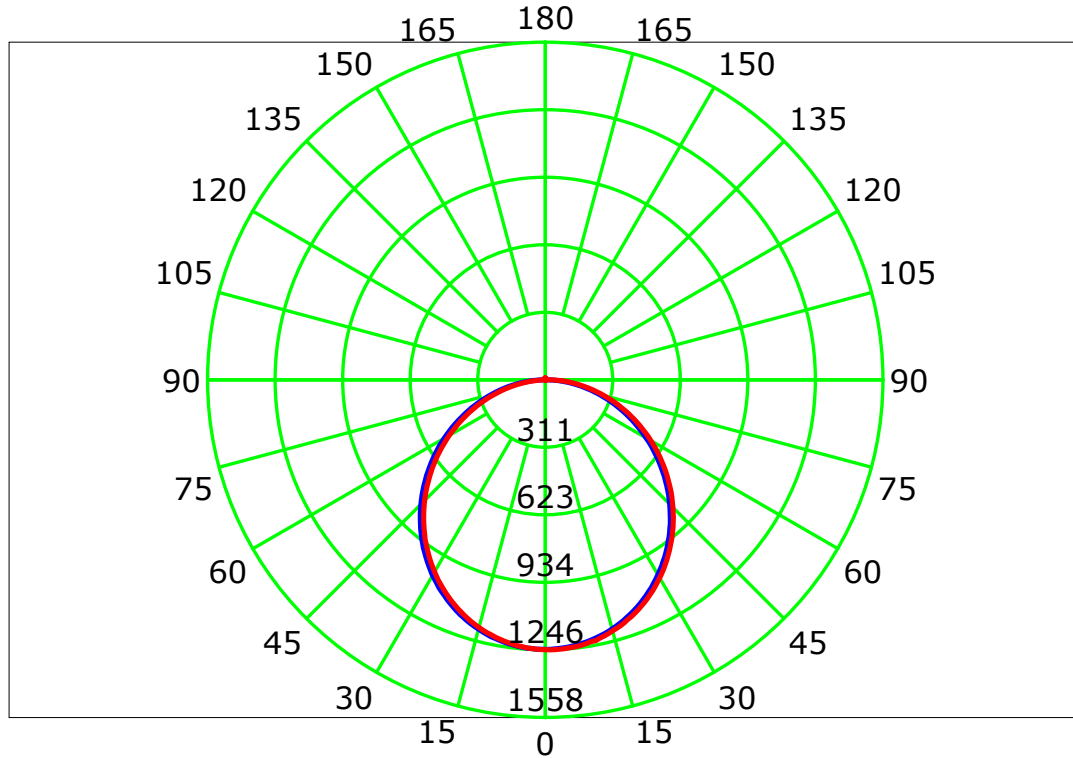
Temperature:

Humidity:

Operator:

Inspector:

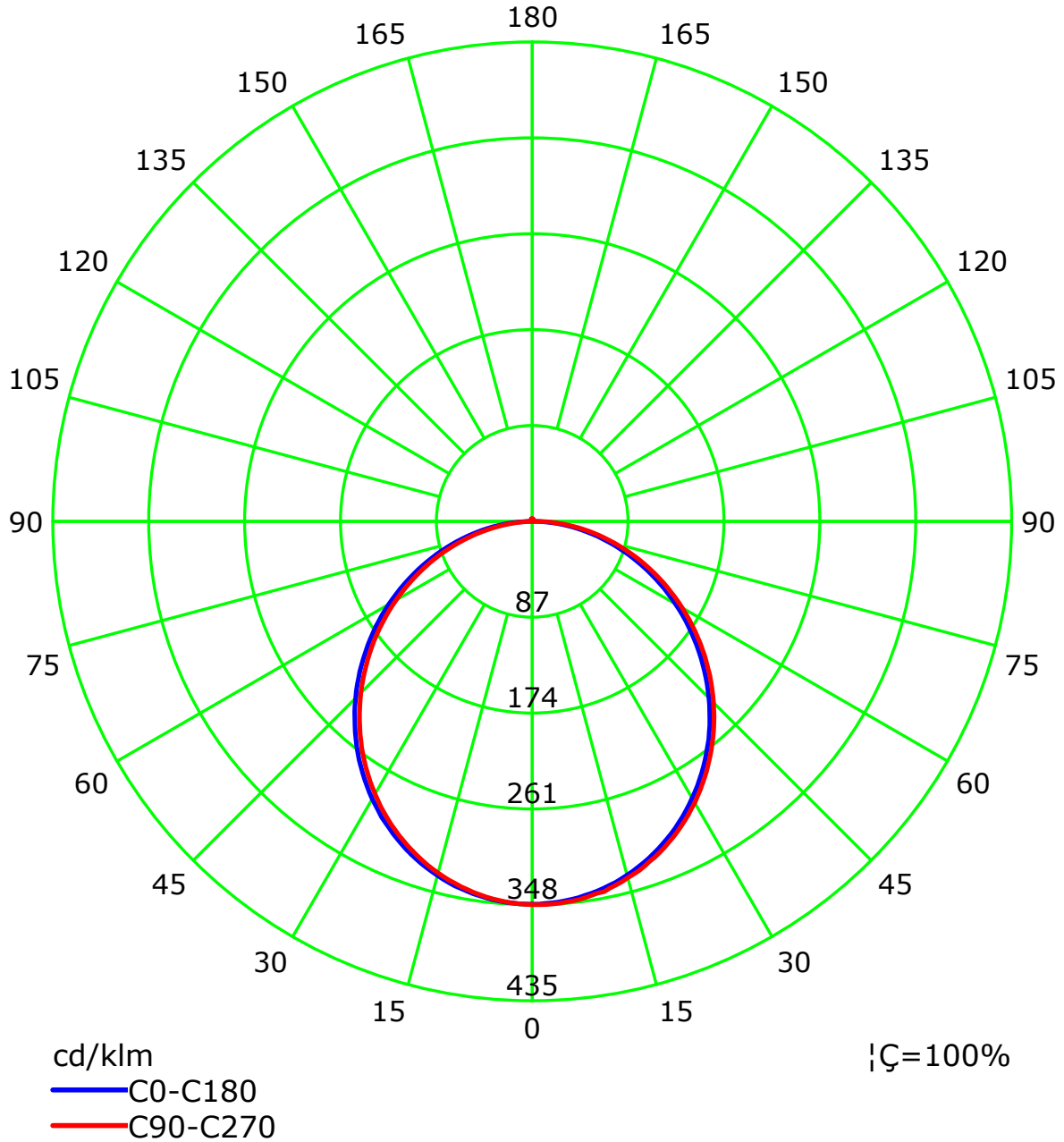
## Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 22.5  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: LSG-1800B  
 Distance: 12.677 m  
 Humidity:  
 Inspector:

## Luminous Intensity Distribution Curve(cd/klm)



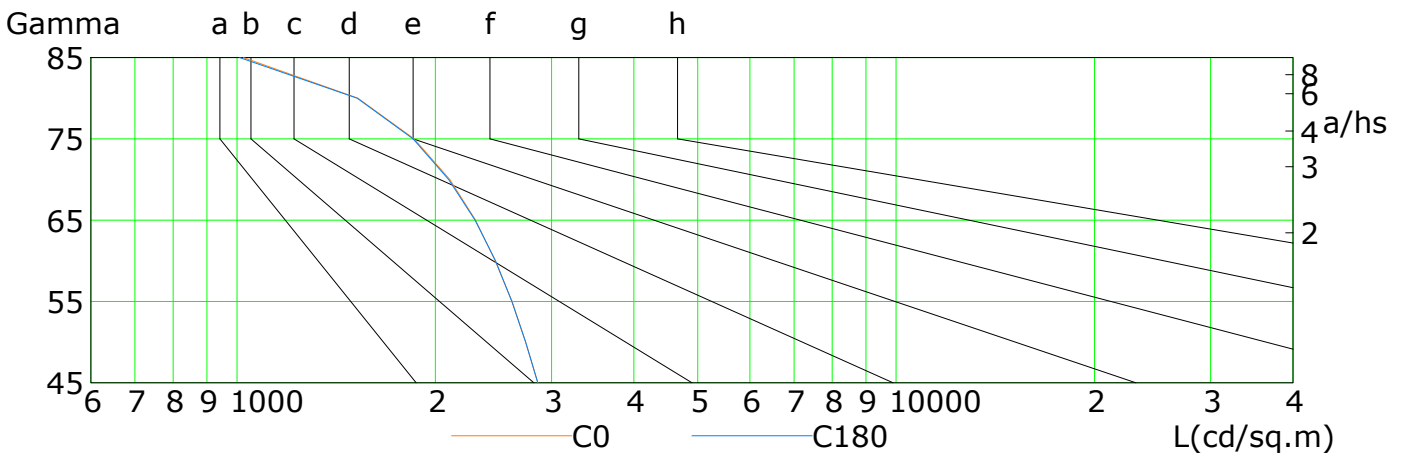
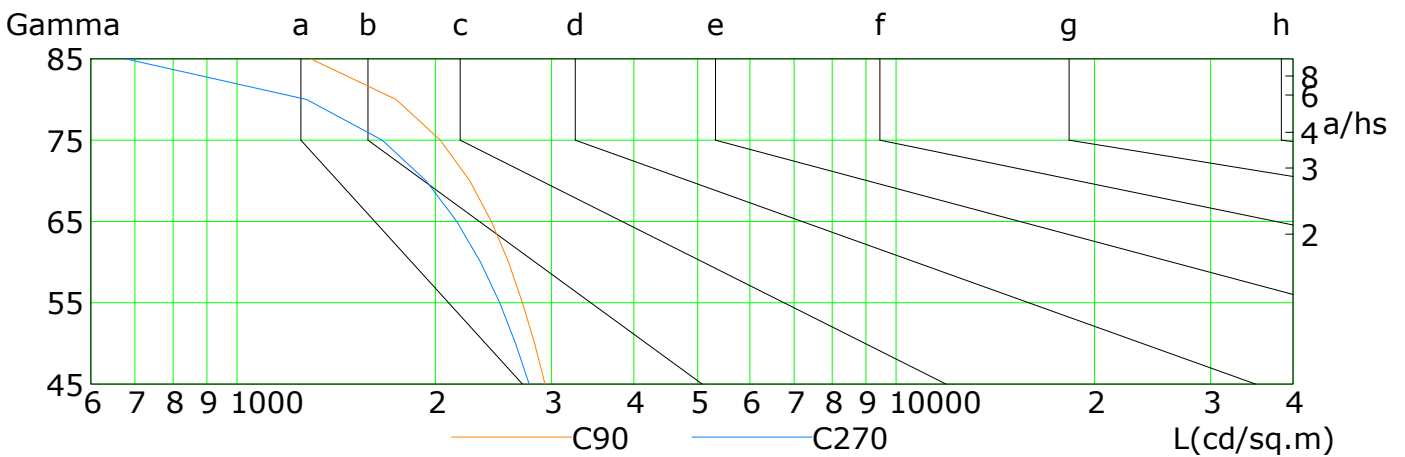
C Plane (°):0.0-360.0: 22.5  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: LSG-1800B  
 Distance: 12.677 m  
 Humidity:  
 Inspector:

## Lum Limit Curve

Dazzle	Quality	Illuminance (lx)							
		2000	1000	500	<=300				
1.15	A								
1.50	B								
1.85	C								
2.20	D								
2.55	E								

a b c d e f g h



L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	2860	2740	2613	2465	2300	2103	1856	1525	1022
C90	2934	2829	2711	2582	2431	2255	2034	1744	1294
C180	2860	2742	2612	2467	2297	2094	1850	1522	1009
C270	2775	2647	2504	2341	2155	1935	1660	1275	677

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

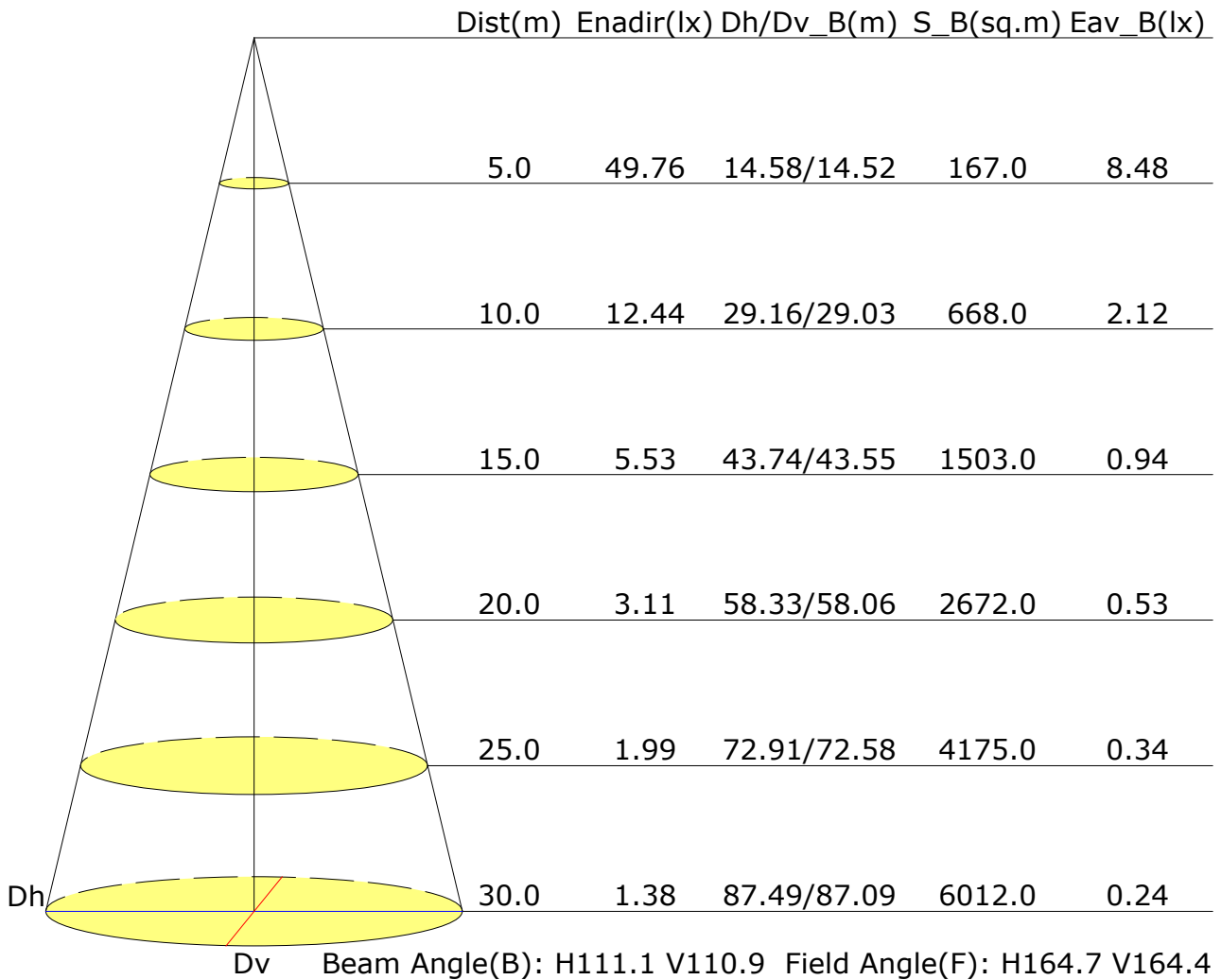
Test Device: LSG-1800B

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 (°):0.0-180.0:1.0  
 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	15.7	17.1	16.0	17.4	17.6	15.7	17.1	16.0	17.4	17.6
3H	17.2	18.5	17.5	18.8	19.1	17.2	18.5	17.5	18.8	19.1
4H	17.8	19.0	18.2	19.3	19.6	17.8	19.0	18.2	19.3	19.6
6H	18.2	19.4	18.6	19.7	20.0	18.2	19.4	18.6	19.7	20.0
8H	18.4	19.5	18.8	19.8	20.1	18.4	19.5	18.8	19.8	20.1
12H	18.5	19.5	18.9	19.8	20.2	18.5	19.5	18.9	19.8	20.2
X=4H Y=2H	16.3	17.5	16.7	17.8	18.1	16.3	17.5	16.7	17.8	18.1
3H	18.0	19.0	18.4	19.4	19.7	18.0	19.0	18.4	19.4	19.7
4H	18.7	19.6	19.1	20.0	20.4	18.7	19.6	19.1	20.0	20.4
6H	19.3	20.1	19.7	20.5	20.9	19.3	20.1	19.7	20.5	20.9
8H	19.5	20.2	19.9	20.6	21.1	19.5	20.2	19.9	20.6	21.1
12H	19.6	20.3	20.0	20.7	21.2	19.6	20.3	20.0	20.7	21.2
X=8H Y=4H	19.0	19.7	19.4	20.2	20.6	19.0	19.7	19.4	20.1	20.6
6H	19.7	20.3	20.1	20.7	21.2	19.7	20.3	20.1	20.7	21.2
8H	19.9	20.5	20.4	20.9	21.4	19.9	20.5	20.4	20.9	21.4
12H	20.1	20.6	20.6	21.1	21.6	20.1	20.6	20.6	21.1	21.6
X=12H Y=4H	19.0	19.7	19.5	20.1	20.6	19.0	19.7	19.5	20.1	20.6
6H	19.7	20.3	20.2	20.7	21.2	19.7	20.3	20.2	20.7	21.2
8H	20.0	20.5	20.5	21.0	21.5	20.0	20.5	20.5	21.0	21.5
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					+0.4/-0.5				
S=2.0H	+0.6/-0.8					+0.5/-1.0				

Calculate in accordance with CIE Pub.117. The table is revised with 3575lm ( $8\log(F/F_0) = 4.4$ ).

C Plane (°):0.0-360.0: 22.5  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

Gamma Plane (°):0.0-180.0:1.0  
 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	0.56	0.66	0.74	0.79	0.86	0.91	0.95	1.00	1.03	
	0.30		0.48	0.58	0.66	0.72	0.80	0.86	0.90	0.95	0.99	
	0.20		0.42	0.53	0.60	0.66	0.75	0.81	0.85	0.92	0.96	
0.50	0.50	0.20	0.54	0.64	0.71	0.76	0.83	0.88	0.91	0.96	0.98	
	0.30		0.47	0.57	0.64	0.70	0.78	0.83	0.87	0.92	0.95	
	0.20		0.42	0.52	0.59	0.65	0.73	0.79	0.83	0.89	0.92	
0.30	0.50	0.20	0.53	0.62	0.69	0.73	0.80	0.84	0.88	0.92	0.94	
	0.30		0.46	0.56	0.63	0.68	0.75	0.80	0.84	0.89	0.92	
	0.20		0.42	0.51	0.58	0.64	0.72	0.77	0.81	0.86	0.90	
0.00	0.00	0.00	0.39	0.49	0.56	0.61	0.68	0.73	0.77	0.82	0.85	
<p>Rating:33W Photometrically tested without ceiling board.            Multiply UF values by service correction factors            Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>												

## 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	0.71	0.62	0.50	0.42	0.36	0.28	0.23	
	0.30		0.84	0.71	0.62	0.55	0.45	0.38	0.33	0.26	0.22	
	0.20		0.72	0.62	0.55	0.50	0.41	0.35	0.31	0.25	0.21	
0.50	0.50	0.20	0.97	0.80	0.68	0.60	0.48	0.43	0.34	0.26	0.22	
	0.30		0.82	0.70	0.60	0.54	0.44	0.37	0.32	0.25	0.21	
	0.20		0.71	0.62	0.54	0.48	0.40	0.34	0.30	0.24	0.20	
0.30	0.50	0.20	0.94	0.77	0.66	0.57	0.46	0.38	0.33	0.25	0.21	
	0.30		0.81	0.68	0.59	0.52	0.42	0.36	0.31	0.24	0.20	
	0.20		0.71	0.61	0.53	0.48	0.39	0.33	0.29	0.23	0.19	
0.00	0.00	0.00	0.60	0.51	0.44	0.39	0.32	0.27	0.23	0.18	0.15	
<p>Rating:33W Photometrically tested without ceiling board.            Multiply UF values by service correction factors            Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>												



## 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	0.22	0.22	0.23	
	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	0.10	0.12	0.13	0.14	0.16	0.17	
0.50	0.50	0.20	0.16	0.18	0.18	0.19	0.20	0.20	0.21	0.21	0.22	
	0.30		0.10	0.11	0.13	0.14	0.15	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	0.20	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	0.13	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	
<p>Rating:33W Photometrically tested without ceiling board.</p> <p>Multiply UF values by service correction factors</p> <p>Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>												