

Report No.:

Test Time: 28.10.2020 14:21

## Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 180 40LED 50W 5000K frozen

Luminous Length (mm): 1200

Luminous Width (mm): 180

Luminous Height (mm): 35

Voltage: 221.4 V

Current: 0.226 A

Power: 48.87 W

Power Factor: 0.975

## Photometric Results

CIE Class: Direct

Measurement Flux: 6582 lm

Downward Ratio: 100%

Total Rated Lamp Lumens: 6582.0 lm

Efficiency: 100%

Upward Ratio: 0%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 150.8, 144.4, 147.8, 147.8

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 102.3, 96.2, 98.5, 99.0

Luminaire Efficacy Rating (LER): 134.73

Central Intensity: 2740.89 cd

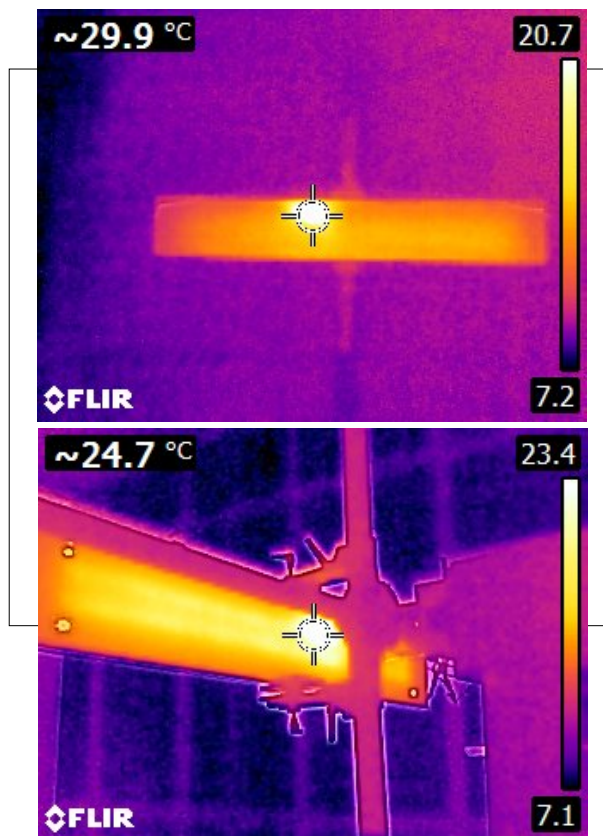
Max. Intensity: 2750.86 cd

Pos of Max. Intensity: H67.5 V4

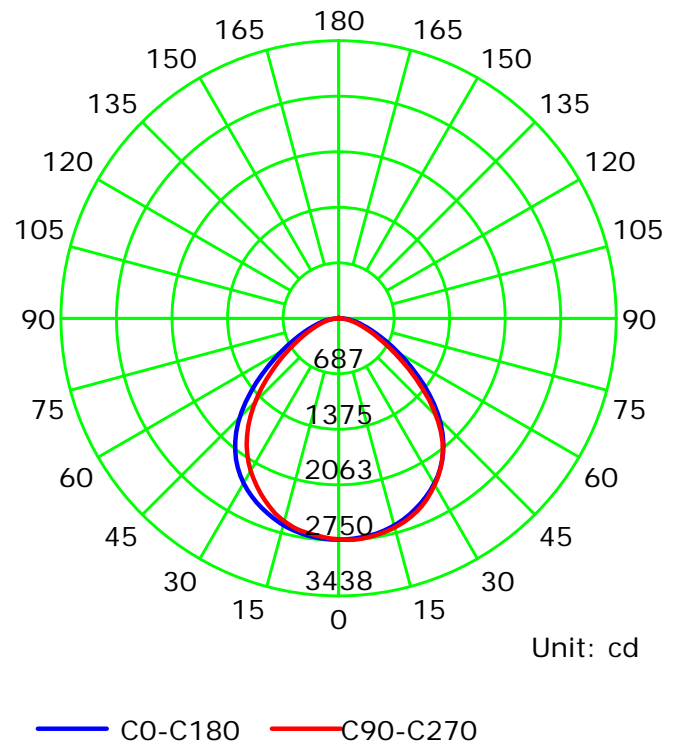
S/MH(C0/C180): 1.28

S/MH(C90/C270): 1.24

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

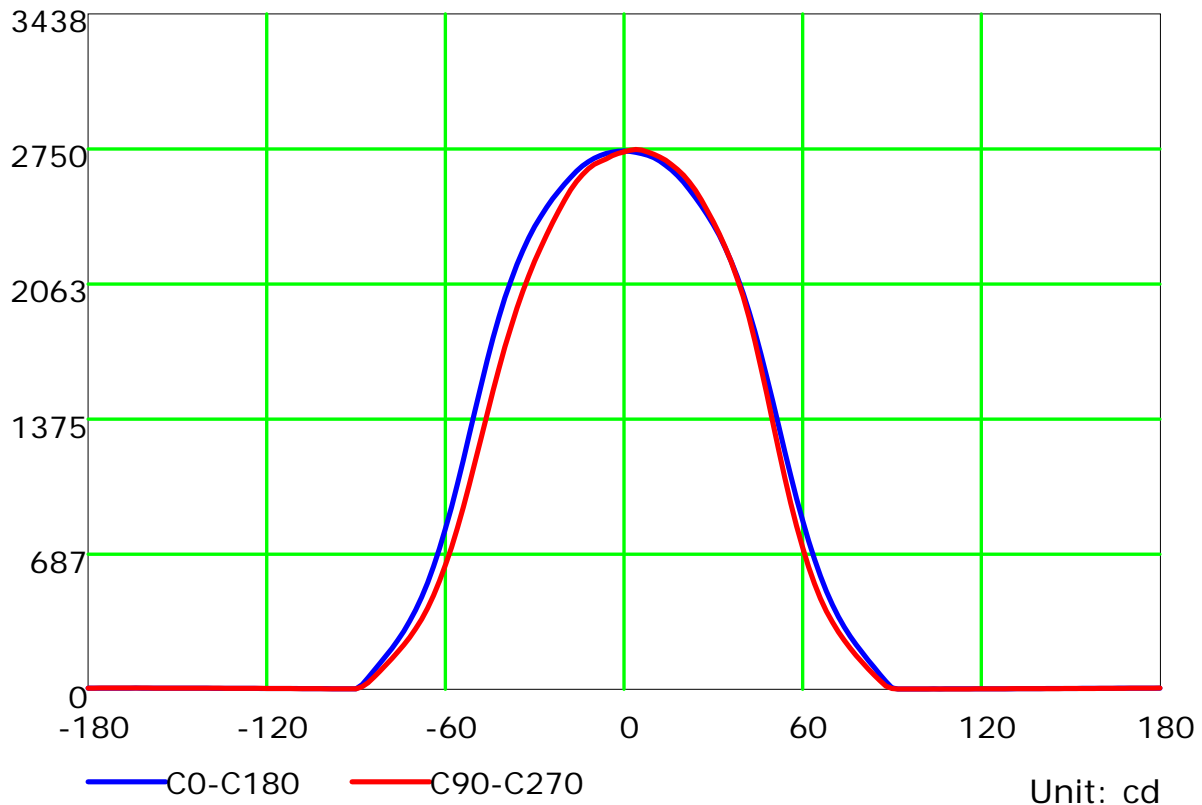
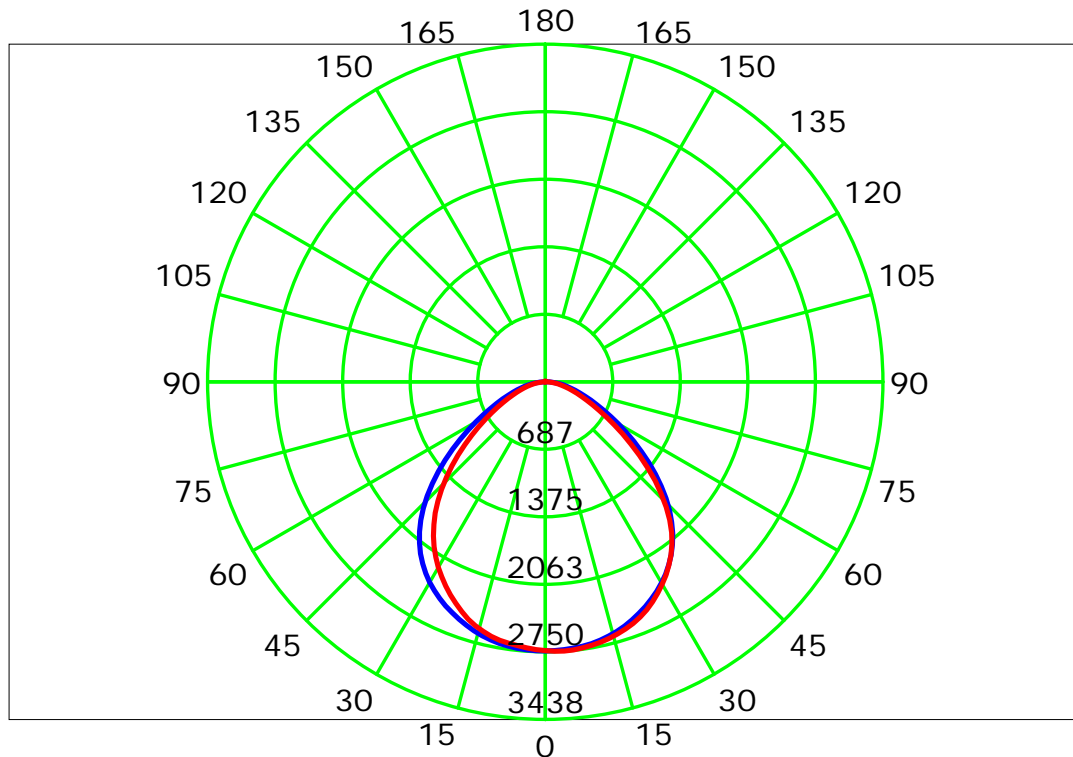
Test Device: LSG-1800B

Distance: 12.682 m

Humidity:

Inspector:

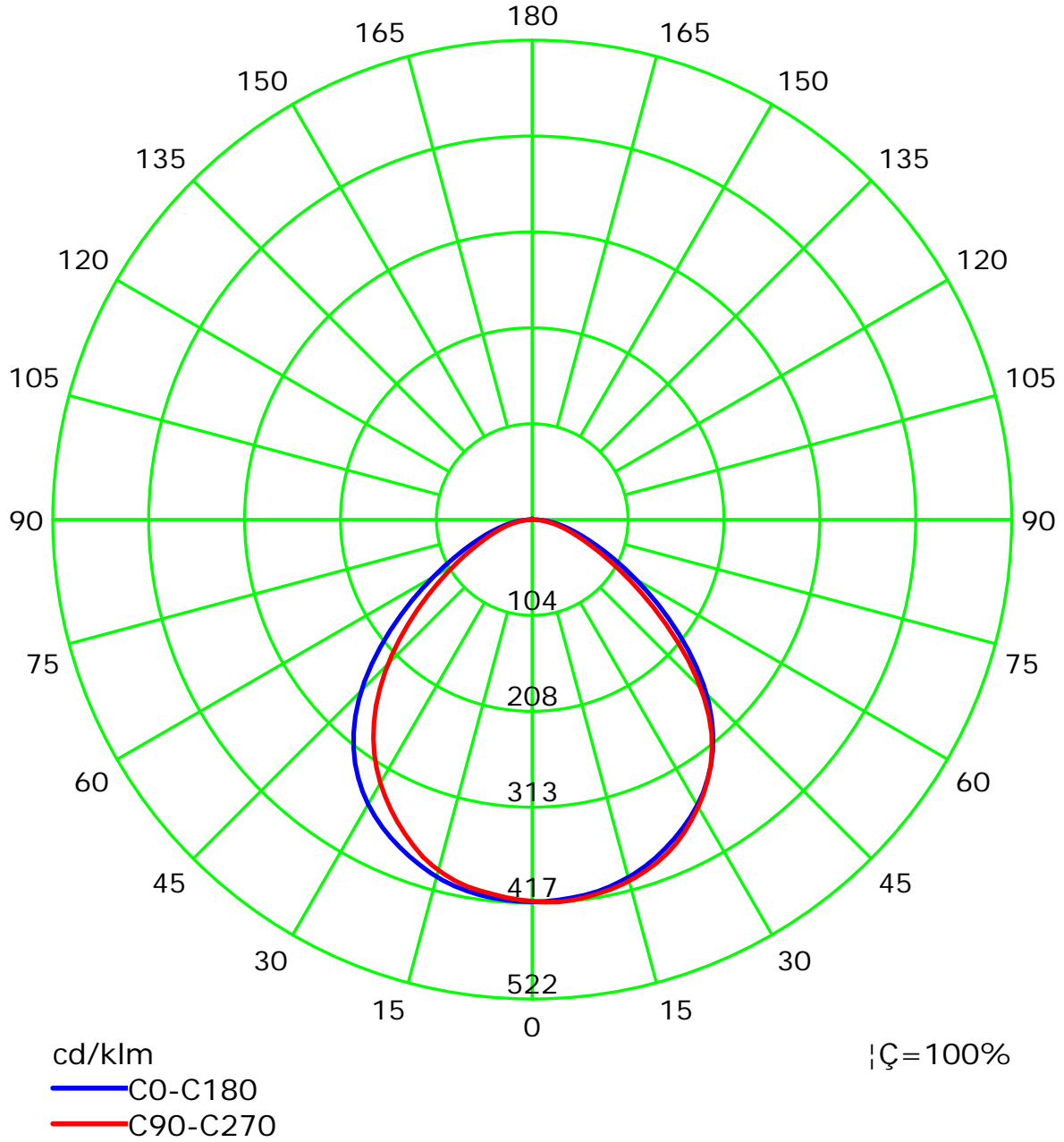
## Luminous Intensity Distribution Curve



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

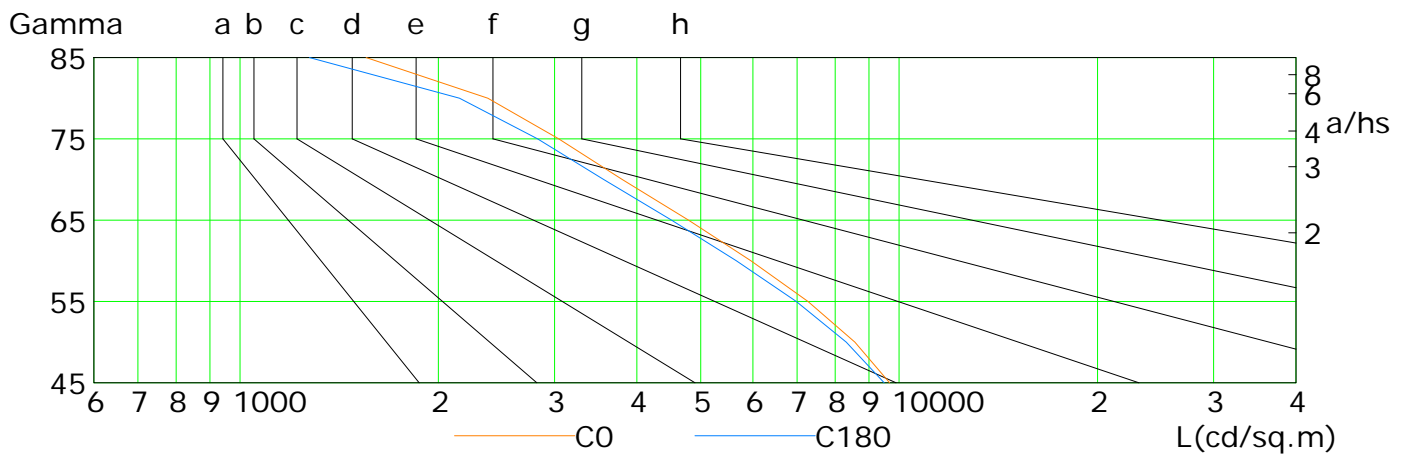
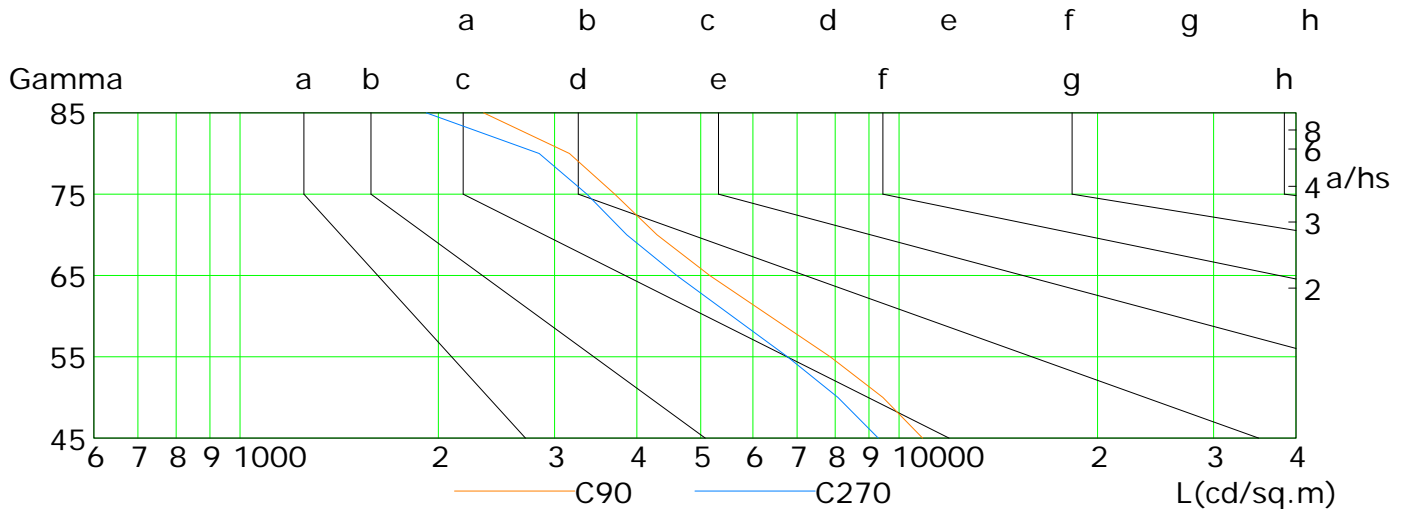
Gamma Plane (°): 0.0-180.0: 2.0  
Test Device: LSG-1800B  
Distance: 12.682 m  
Humidity:  
Inspector:

## Luminous Intensity Distribution Curve(cd/klm)



## 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



L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	9672	8565	7271	5959	4792	3802	3045	2377	1554
C90	10855	9448	7860	6365	5158	4292	3703	3161	2343
C180	9493	8314	6982	5664	4515	3563	2829	2152	1275
C270	9294	8075	6770	5578	4598	3862	3360	2844	1917

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

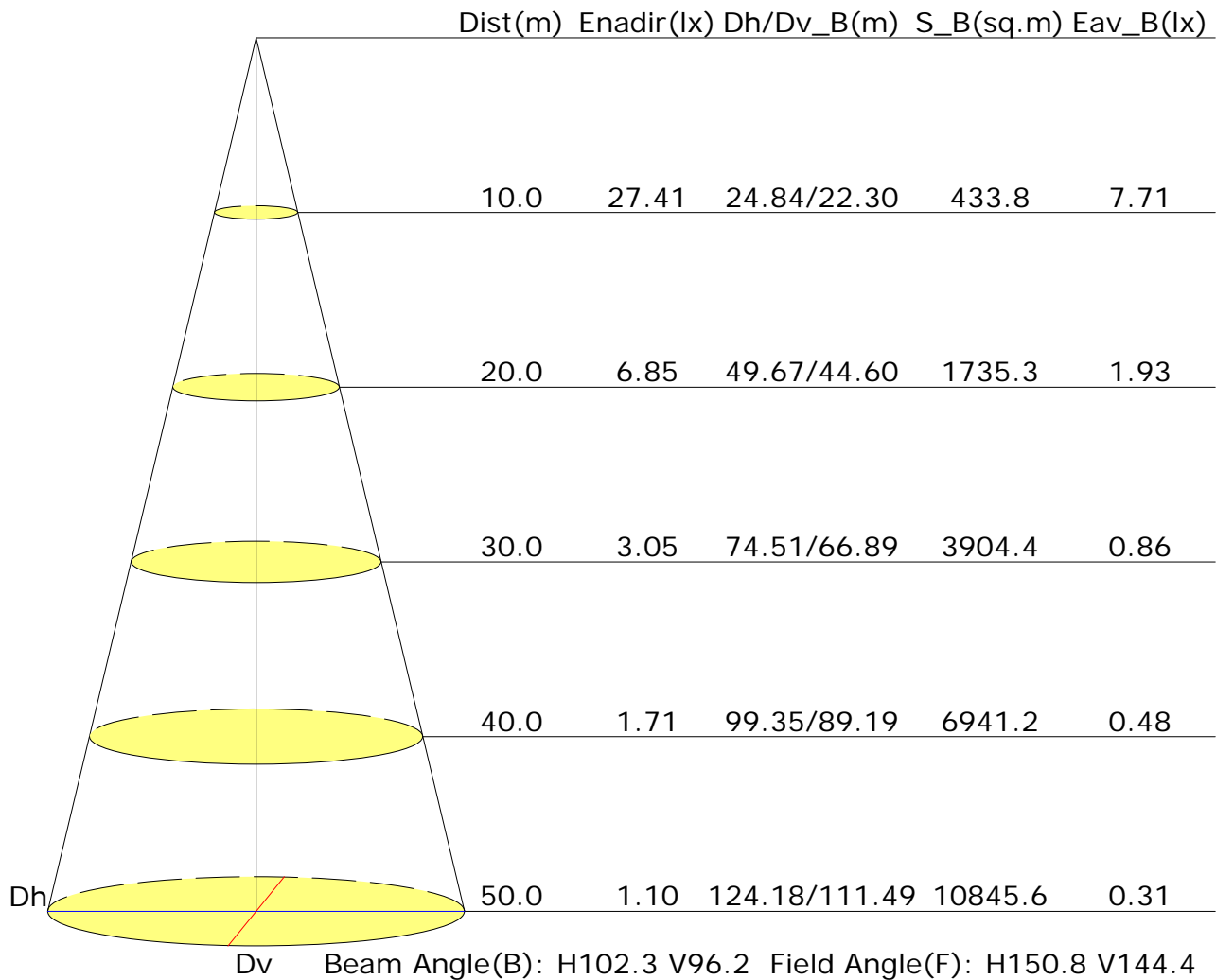
Test Device: LSG-1800B

Distance: 12.682 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	19.2	20.5	19.5	20.7	21.0	18.9	20.1	19.2	20.4	20.6
3H	20.0	21.1	20.3	21.4	21.7	19.5	20.7	19.9	21.0	21.2
4H	20.2	21.3	20.6	21.6	21.9	19.8	20.9	20.1	21.2	21.5
6H	20.4	21.4	20.8	21.8	22.1	20.0	21.0	20.3	21.3	21.6
8H	20.5	21.5	20.9	21.8	22.1	20.0	21.0	20.4	21.3	21.6
12H	20.5	21.4	20.9	21.8	22.1	20.0	21.0	20.4	21.3	21.7
X=4H Y=2H	19.5	20.6	19.9	20.9	21.2	19.2	20.3	19.6	20.6	20.9
3H	20.4	21.4	20.8	21.7	22.0	20.0	21.0	20.4	21.3	21.6
4H	20.8	21.6	21.2	22.0	22.4	20.4	21.2	20.8	21.6	22.0
6H	21.1	21.8	21.5	22.2	22.6	20.7	21.4	21.1	21.8	22.2
8H	21.2	21.9	21.6	22.3	22.7	20.8	21.4	21.2	21.8	22.3
12H	21.3	21.9	21.7	22.3	22.7	20.8	21.4	21.3	21.8	22.3
X=8H Y=4H	20.9	21.6	21.3	22.0	22.4	20.5	21.2	21.0	21.6	22.0
6H	21.3	21.8	21.8	22.3	22.7	20.9	21.4	21.4	21.9	22.3
8H	21.4	21.9	21.9	22.4	22.9	21.0	21.5	21.5	22.0	22.4
12H	21.5	22.0	22.0	22.4	22.9	21.1	21.5	21.6	22.0	22.5
X=12H Y=4H	20.9	21.5	21.3	21.9	22.4	20.5	21.1	21.0	21.5	22.0
6H	21.3	21.8	21.8	22.2	22.7	20.9	21.4	21.4	21.8	22.3
8H	21.5	21.9	22.0	22.4	22.9	21.1	21.5	21.6	22.0	22.5
Variations with the observer position at spacings:										
S=1.0H	+0.3/-0.4					+0.4/-0.5				
S=1.5H	+0.6/-1.1					+0.6/-1.2				
S=2.0H	+1.3/-1.8					+1.2/-1.9				

Calculate in accordance with CIE Pub.117. The table is revised with 6582lm ( $8\log(F/F_0) = 6.5$ ).

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: 12.682 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	0.62	0.73	0.80	0.84	0.91	0.96	0.99	1.03	1.05	
	0.30		0.55	0.66	0.73	0.78	0.86	0.91	0.94	0.99	1.02	
	0.20		0.50	0.60	0.68	0.73	0.81	0.87	0.90	0.96	0.99	
0.50	0.50	0.20	0.61	0.71	0.77	0.82	0.88	0.92	0.95	0.99	1.01	
	0.30		0.54	0.64	0.71	0.76	0.83	0.88	0.91	0.96	0.98	
	0.20		0.49	0.60	0.67	0.72	0.79	0.85	0.88	0.93	0.96	
0.30	0.50	0.20	0.59	0.69	0.75	0.79	0.85	0.89	0.92	0.95	0.97	
	0.30		0.53	0.63	0.70	0.75	0.81	0.86	0.89	0.93	0.95	
	0.20		0.49	0.59	0.66	0.71	0.78	0.83	0.86	0.90	0.93	
0.00	0.00	0.00	0.47	0.57	0.63	0.68	0.75	0.79	0.82	0.86	0.88	
<p>Rating: 49W 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>												

## 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	0.91	0.74	0.62	0.54	0.43	0.35	0.30	0.23	0.19	
	0.30		0.76	0.63	0.54	0.48	0.39	0.32	0.28	0.22	0.18	
	0.20		0.65	0.55	0.48	0.43	0.35	0.30	0.26	0.21	0.17	
0.50	0.50	0.20	0.88	0.71	0.60	0.51	0.41	0.37	0.29	0.22	0.18	
	0.30		0.74	0.62	0.53	0.46	0.37	0.31	0.27	0.21	0.17	
	0.20		0.64	0.54	0.47	0.42	0.34	0.29	0.25	0.20	0.16	
0.30	0.50	0.20	0.85	0.68	0.57	0.49	0.39	0.32	0.27	0.21	0.17	
	0.30		0.73	0.60	0.51	0.45	0.36	0.30	0.25	0.20	0.16	
	0.20		0.64	0.53	0.46	0.41	0.33	0.28	0.24	0.19	0.16	
0.00	0.00	0.00	0.53	0.43	0.36	0.32	0.25	0.21	0.18	0.14	0.11	
<p>Rating: 49W 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>												



## 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	0.15	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	0.17	0.17	0.18	0.19	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	0.07	0.08	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	0.18	0.18
	0.20		0.05	0.07	0.08	0.10	0.11	0.13	0.14	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
<p>Rating: 49W 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>											