

Report No.:

Test Time: 19.06.2020 21:27

## Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FL 60/1000 52W 4000K frozen

Number of Lamps: 1

Luminous Width (mm): 60

Voltage: 221.1 V

Power: 52.56 W

Luminous Length (mm): 950

Luminous Height (mm): 70

Current: 0.247 A

Power Factor: 0.961

## Photometric Results

CIE Class: Direct

Measurement Flux: 6246.6 lm

Downward Ratio: 99%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 151.8, 132.9, 142.4, 142.7

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 99.7, 88.4, 94.1, 94.3

Luminaire Efficacy Rating (LER): 118.90

Max. Intensity: 2783.84 cd

S/MH(C0/C180): 1.26

Total Rated Lamp Lumens: 6246.6 lm

Efficiency: 100%

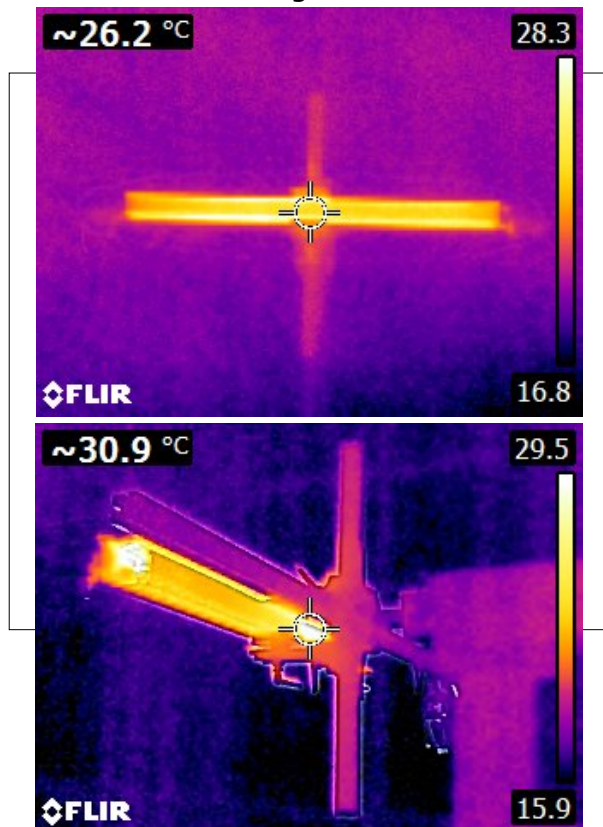
Upward Ratio: 1%

Central Intensity: 2778.69 cd

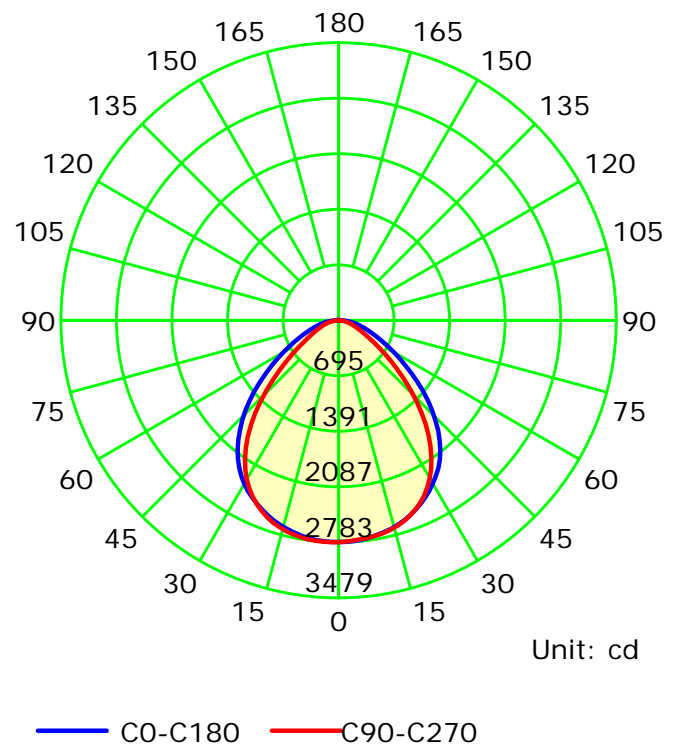
Pos of Max. Intensity: H292.5 V2

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

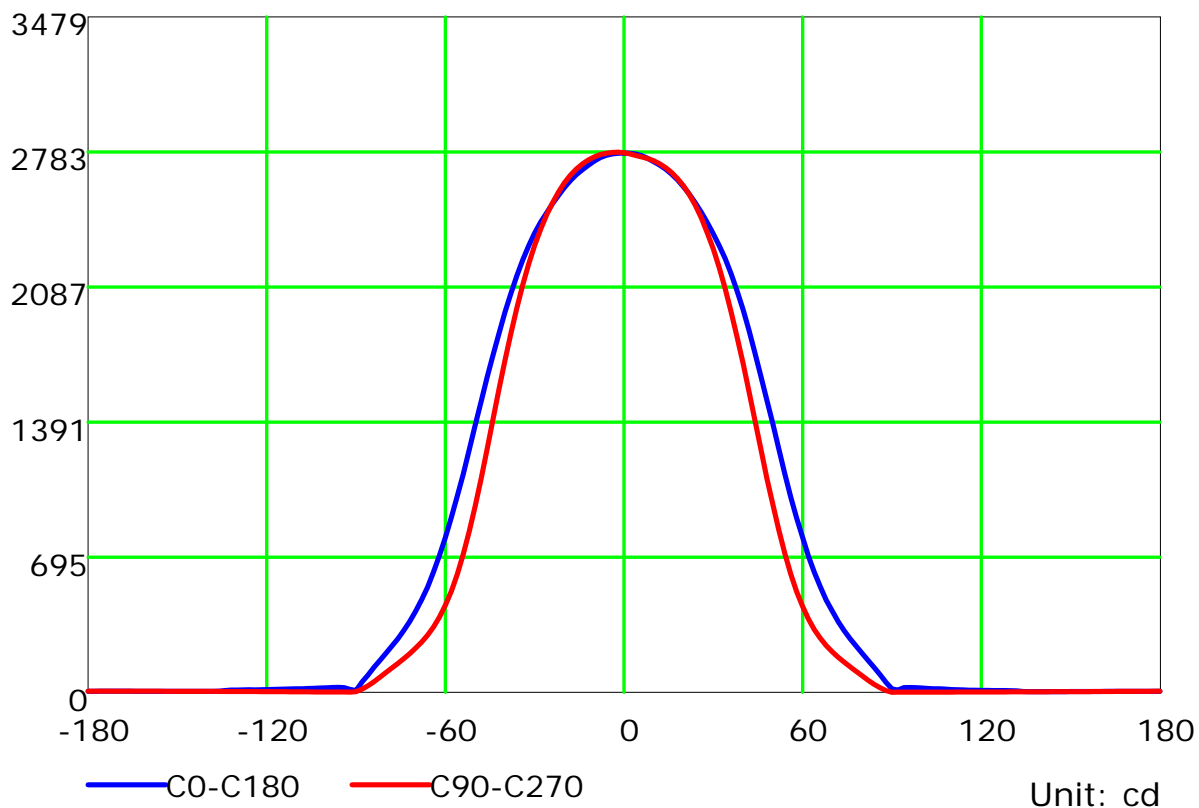
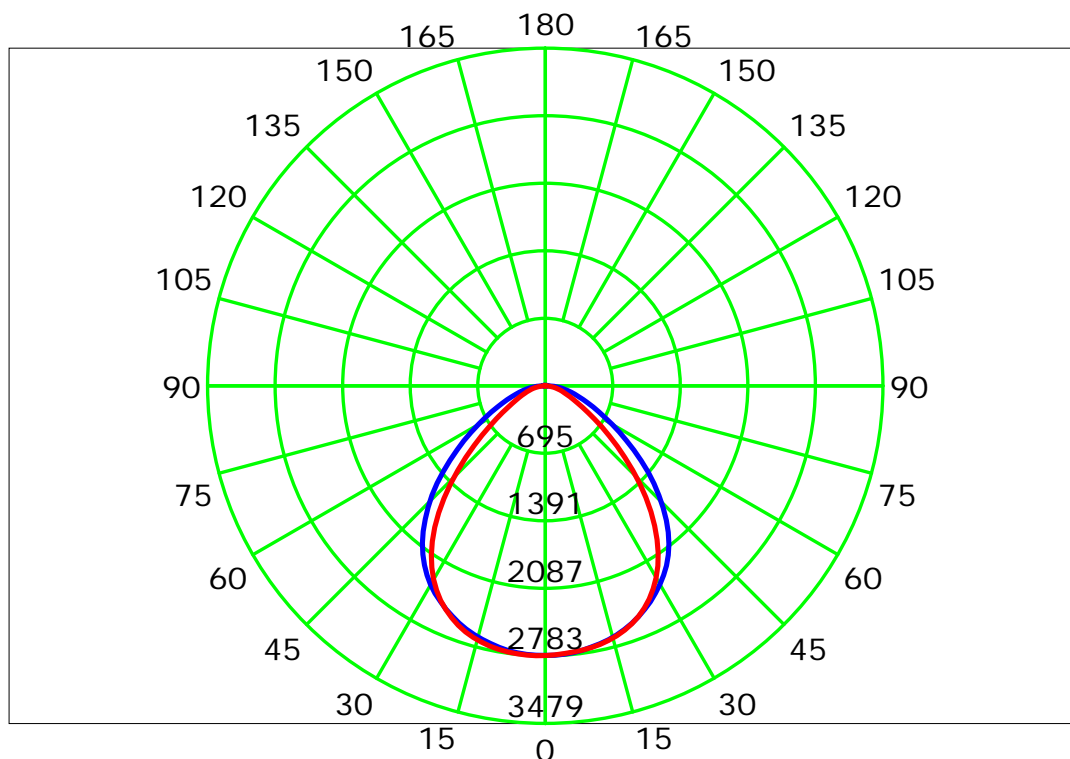
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

## Luminous Intensity Distribution Curve



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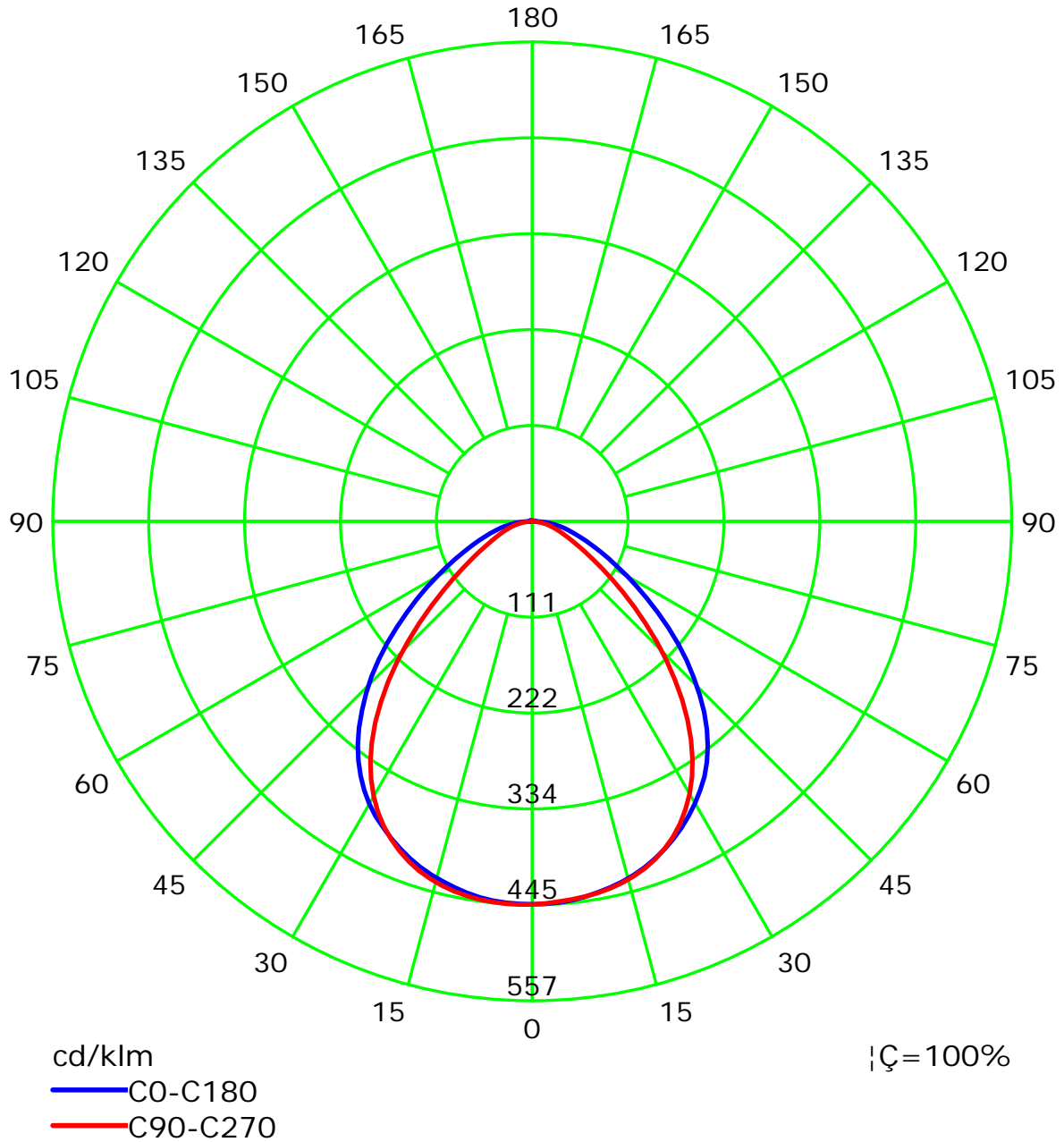
Test Device: LSG-1800B

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

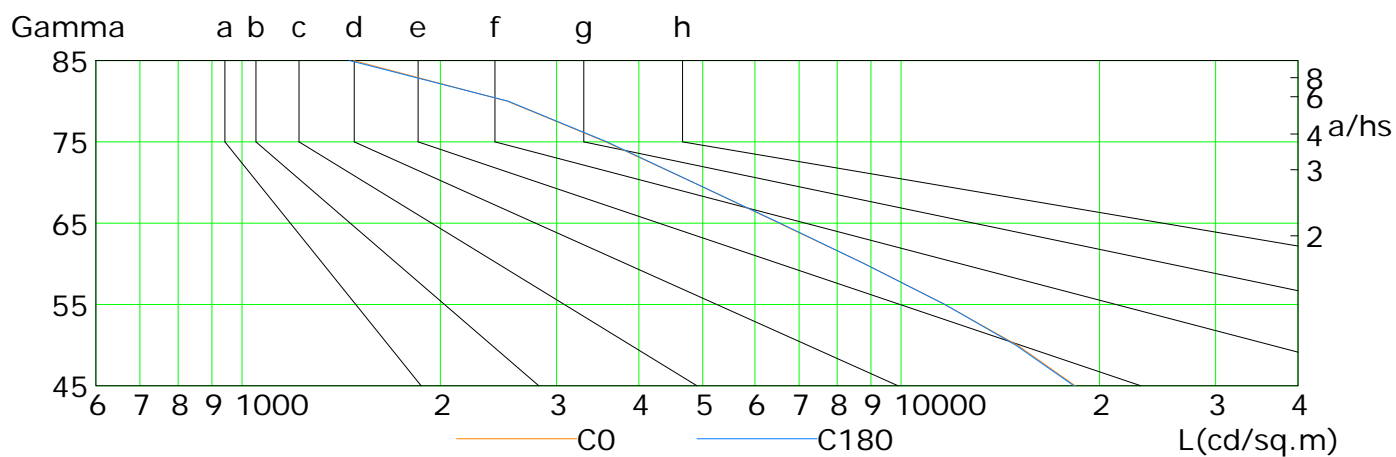
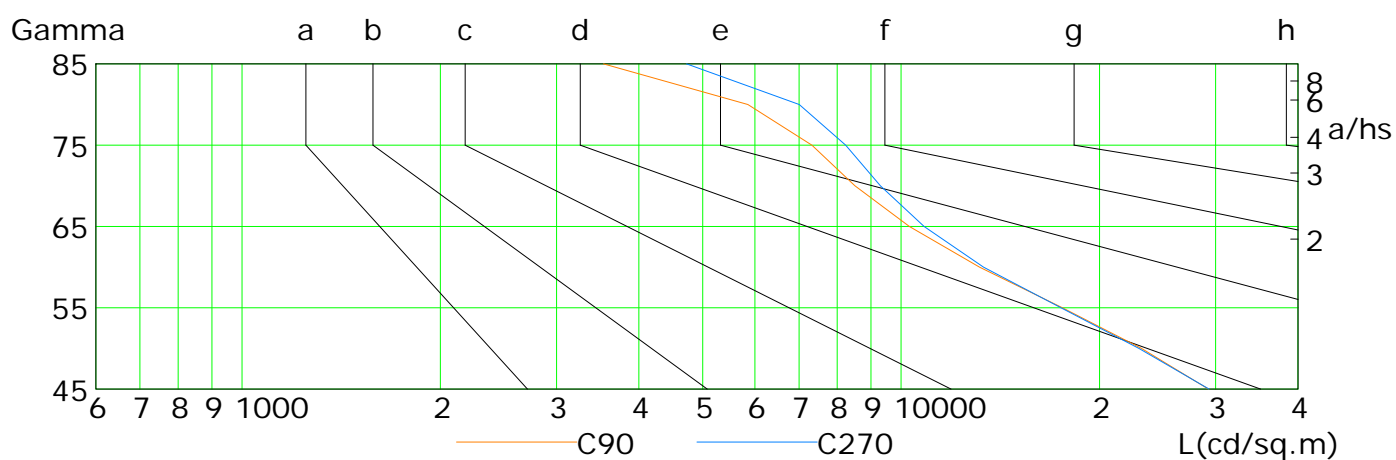
Humidity:

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	18373	15000	11638	8800	6528	4837	3562	2527	1476
C90	29246	23156	17567	13146	10292	8510	7320	5855	3534
C180	18289	14922	11651	8800	6549	4842	3579	2534	1456
C270	29324	22948	17474	13336	10837	9304	8236	7004	4726

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Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

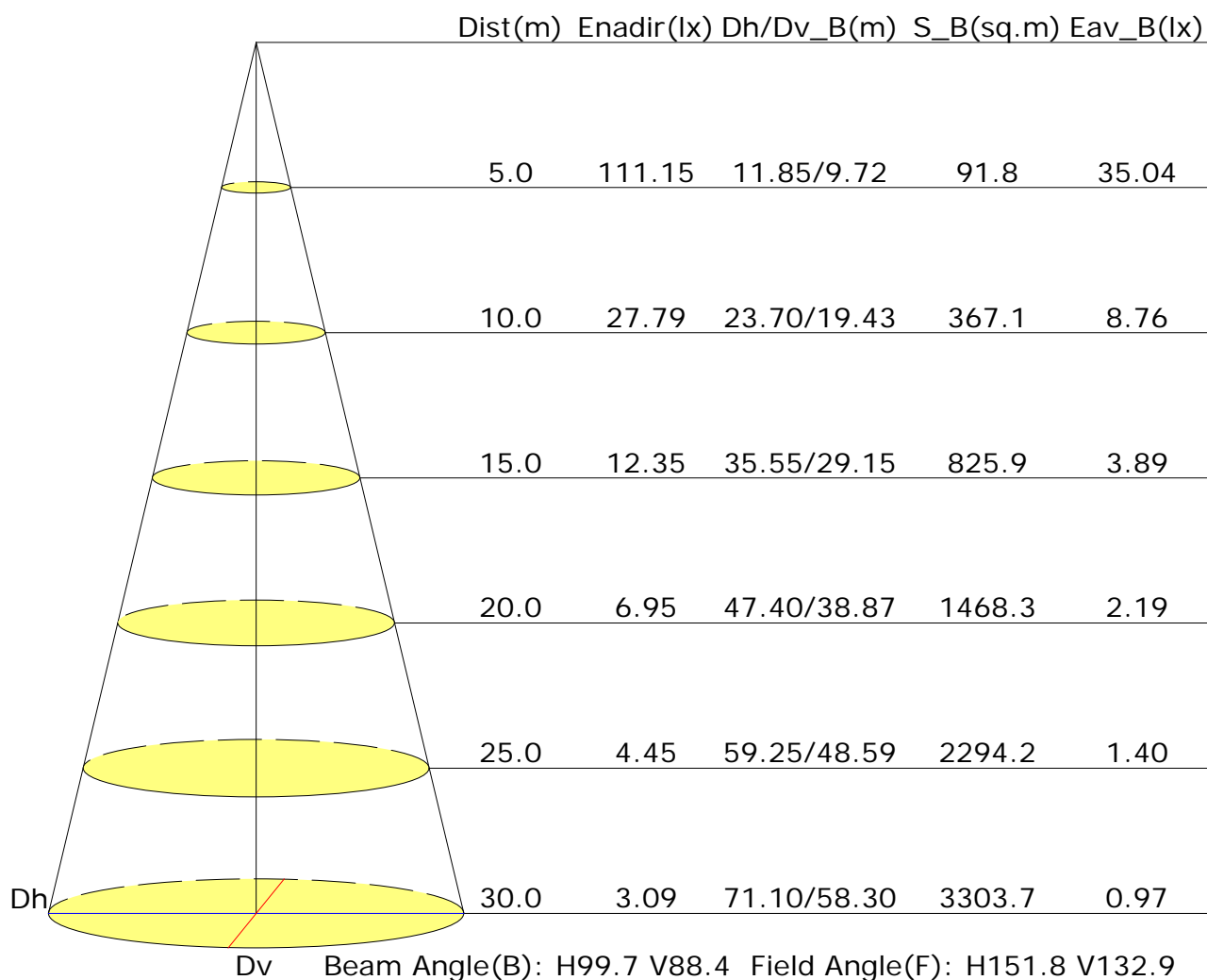
Test Device: LSG-1800B

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	21.1	22.4	21.4	22.6	22.9	20.8	22.1	21.1	22.3	22.6
3H	21.7	22.8	22.0	23.1	23.4	21.3	22.4	21.6	22.7	22.9
4H	21.9	22.9	22.2	23.2	23.5	21.4	22.5	21.8	22.8	23.1
6H	22.0	23.0	22.4	23.3	23.6	21.6	22.6	21.9	22.9	23.2
8H	22.0	23.0	22.4	23.3	23.6	21.6	22.6	22.0	22.9	23.2
12H	22.0	22.9	22.4	23.3	23.6	21.6	22.5	22.0	22.9	23.2
X=4H Y=2H	21.3	22.3	21.6	22.6	22.9	21.0	22.1	21.4	22.4	22.7
3H	22.0	22.9	22.4	23.2	23.6	21.6	22.5	22.0	22.8	23.2
4H	22.3	23.1	22.7	23.4	23.8	21.8	22.6	22.2	23.0	23.4
6H	22.5	23.2	22.9	23.6	24.0	22.0	22.7	22.4	23.1	23.5
8H	22.5	23.2	23.0	23.6	24.0	22.1	22.7	22.5	23.1	23.6
12H	22.6	23.2	23.0	23.6	24.0	22.1	22.7	22.6	23.1	23.6
X=8H Y=4H	22.3	22.9	22.7	23.3	23.8	21.9	22.5	22.3	22.9	23.4
6H	22.6	23.1	23.0	23.5	24.0	22.1	22.6	22.6	23.1	23.6
8H	22.7	23.1	23.2	23.6	24.1	22.2	22.7	22.7	23.1	23.6
12H	22.7	23.1	23.2	23.6	24.1	22.2	22.6	22.7	23.1	23.6
X=12H Y=4H	22.3	22.9	22.7	23.3	23.7	21.8	22.4	22.3	22.9	23.3
6H	22.6	23.0	23.0	23.5	24.0	22.1	22.6	22.6	23.0	23.5
8H	22.7	23.1	23.2	23.5	24.1	22.2	22.6	22.7	23.1	23.6
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					+1.5/-2.0				
S=2.0H	+1.8/-2.3					+2.8/-3.1				

Calculate in accordance with CIE Pub.117. The table is revised with 6247lm ( $8\log(F/F_0) = 6.4$ ).

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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	0.64	0.74	0.81	0.86	0.92	0.96	0.99	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	0.72	0.79	0.83	0.89	0.93	0.96	0.99	1.01	
	0.30		0.57	0.67	0.73	0.78	0.85	0.89	0.92	0.96	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	0.76	0.81	0.86	0.90	0.92	0.95	0.97	
	0.30		0.56	0.65	0.72	0.76	0.82	0.87	0.89	0.93	0.96	
	0.20		0.52	0.61	0.68	0.73	0.79	0.84	0.87	0.91	0.94	
0.00	0.00	0.00	0.50	0.59	0.65	0.70	0.76	0.80	0.83	0.87	0.89	
Rating: 53W 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	0.17	
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	0.36	0.30	0.26	0.20	0.16	
	0.20		0.62	0.52	0.45	0.40	0.33	0.28	0.24	0.19	0.16	
0.30	0.50	0.20	0.82	0.65	0.55	0.47	0.37	0.30	0.26	0.20	0.16	
	0.30		0.70	0.57	0.49	0.43	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: 53W 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	0.22	0.22
	0.30		0.10	0.12	0.13	0.14	0.16	0.17	0.18	0.19	0.20
	0.20		0.06	0.07	0.09	0.10	0.12	0.14	0.15	0.17	0.18
0.50	0.50	0.20	0.15	0.17	0.17	0.18	0.19	0.20	0.20	0.21	0.21
	0.30		0.10	0.11	0.13	0.14	0.15	0.16	0.17	0.18	0.19
	0.20		0.06	0.07	0.09	0.10	0.12	0.14	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		0.10	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.18
	0.20		0.06	0.07	0.09	0.10	0.12	0.13	0.14	0.16	0.17
0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Rating: 53W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980											