

Report No.: 1

Test Time: 16.12.2019 18:39

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 180 4x24LED 0.48A 26.5W 5000K opal

Luminous Length (mm): 1200

Luminous Width (mm): 180

Luminous Height (mm): 35

Voltage: 221.2 V

Current: 0.114 A

Power: 25.03 W

Power Factor: 0.985

Photometric Results

CIE Class: Direct

Measurement Flux: 2596.2 lm

Downward Ratio: 99%

Total Rated Lamp Lumens: 2596.2 lm

Efficiency: 100%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 164.6, 163.9, 164.3, 164.1

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 112.3, 111.5, 112.0, 111.8

Luminaire Efficacy Rating (LER): 103.77

Central Intensity: 898.2 cd

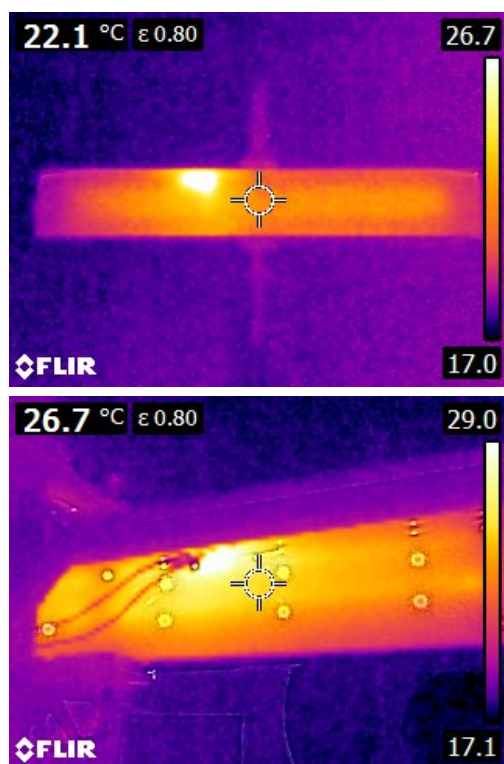
Max. Intensity: 900.08 cd

Pos of Max. Intensity: H22.5 V0

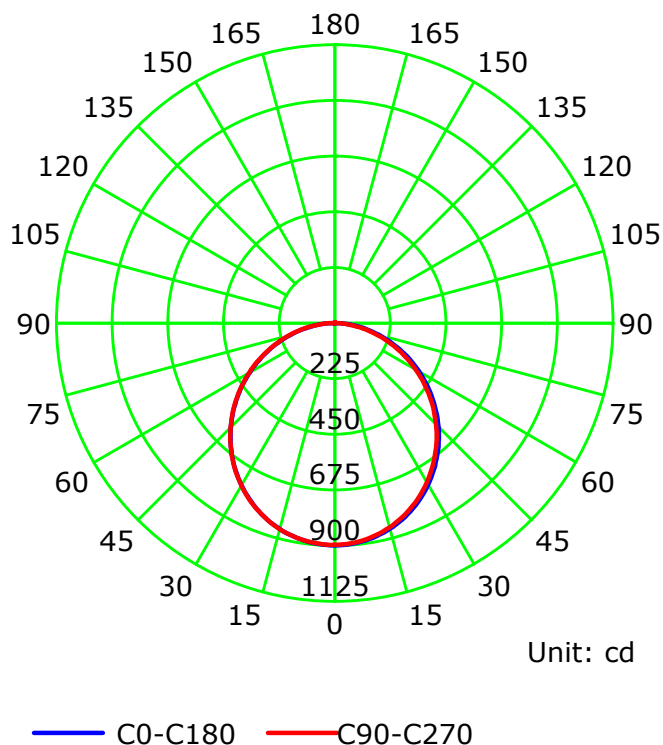
S/MH(C0/C180): 1.25

S/MH(C90/C270): 1.25

Termogramma



Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

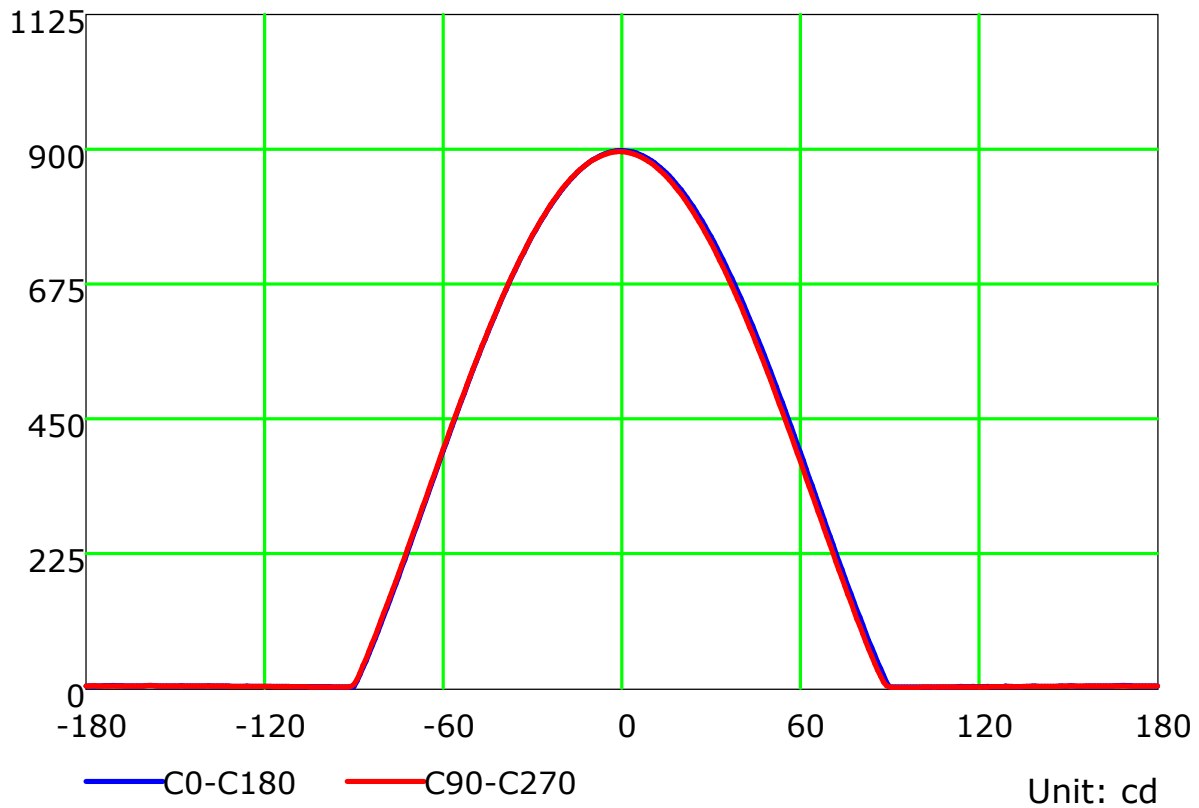
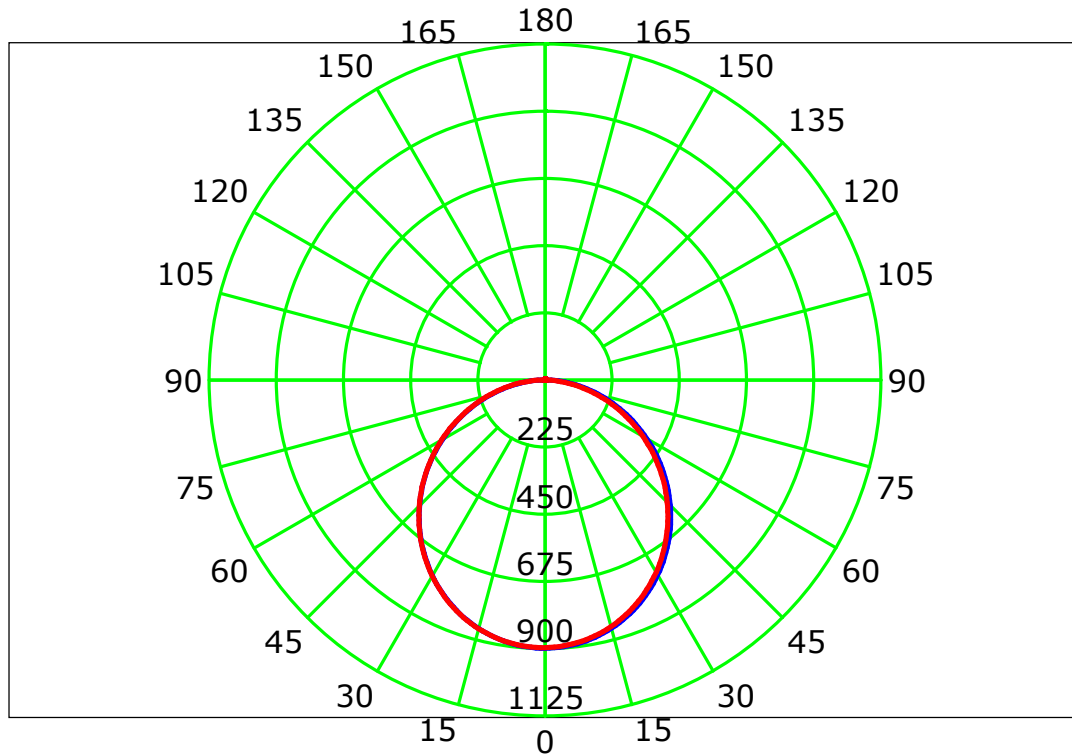
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

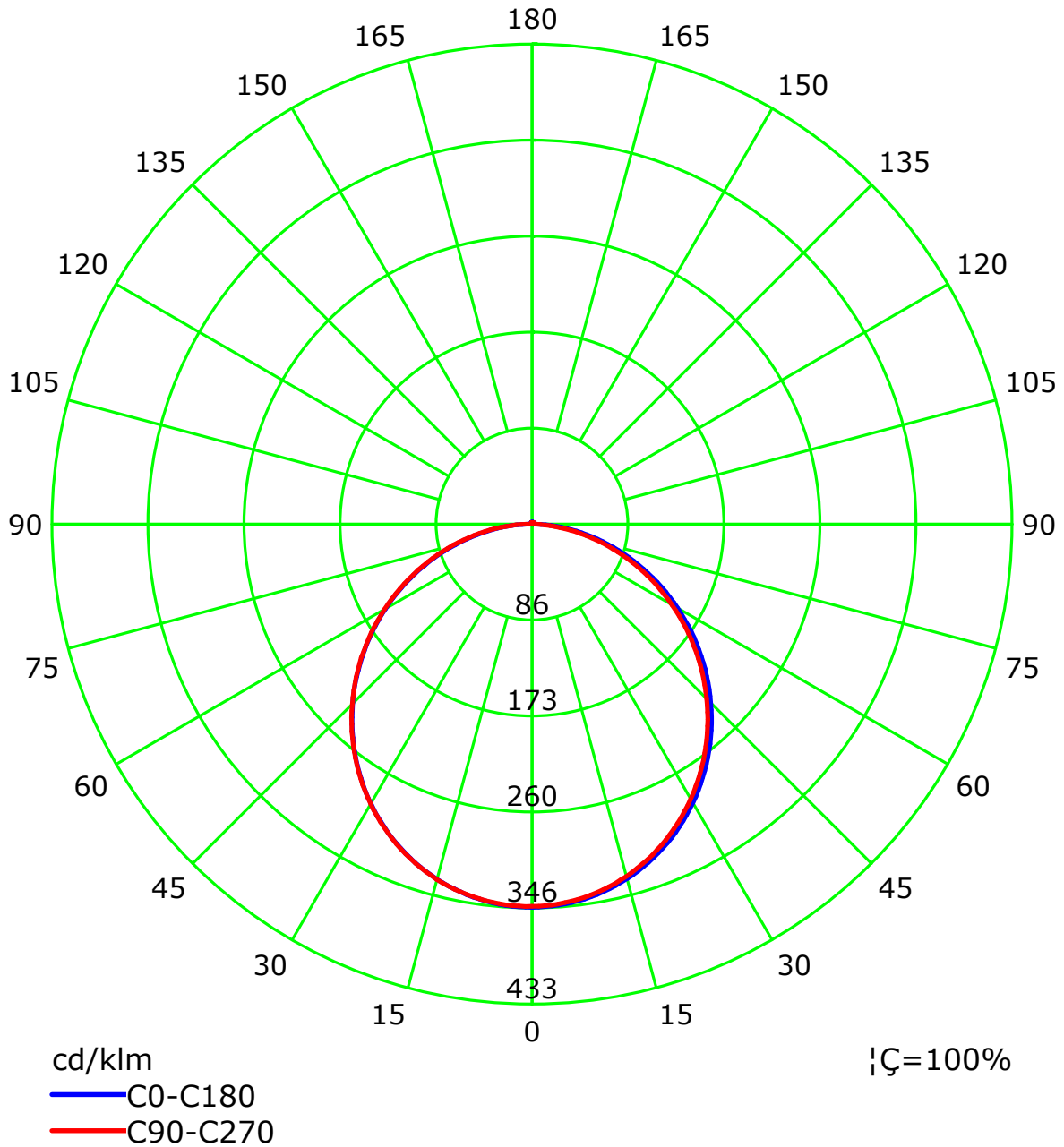
Luminous Intensity Distribution Curve



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

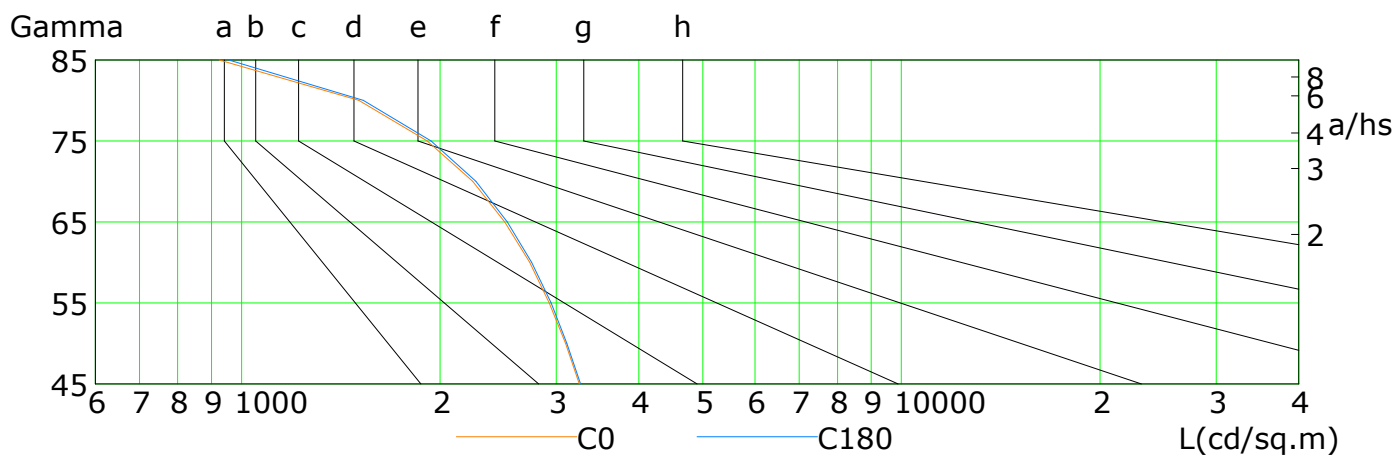
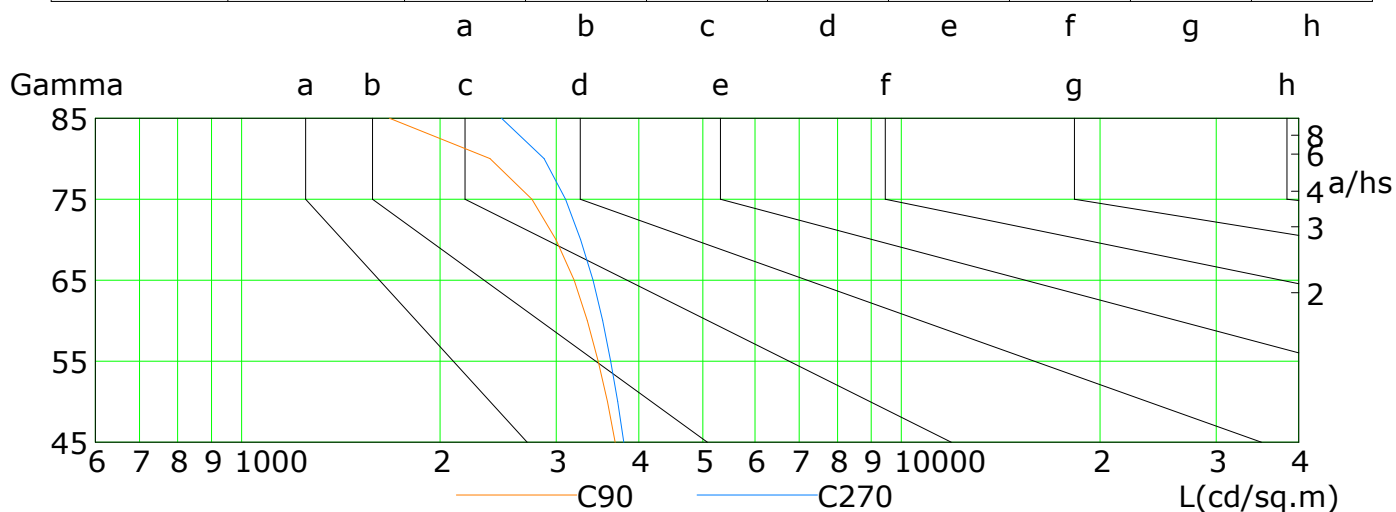
Gamma Plane (°):0.0-180.0:1.0
Test Device: LSG-1800B
Distance: 12.677 m
Humidity:
Inspector:

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

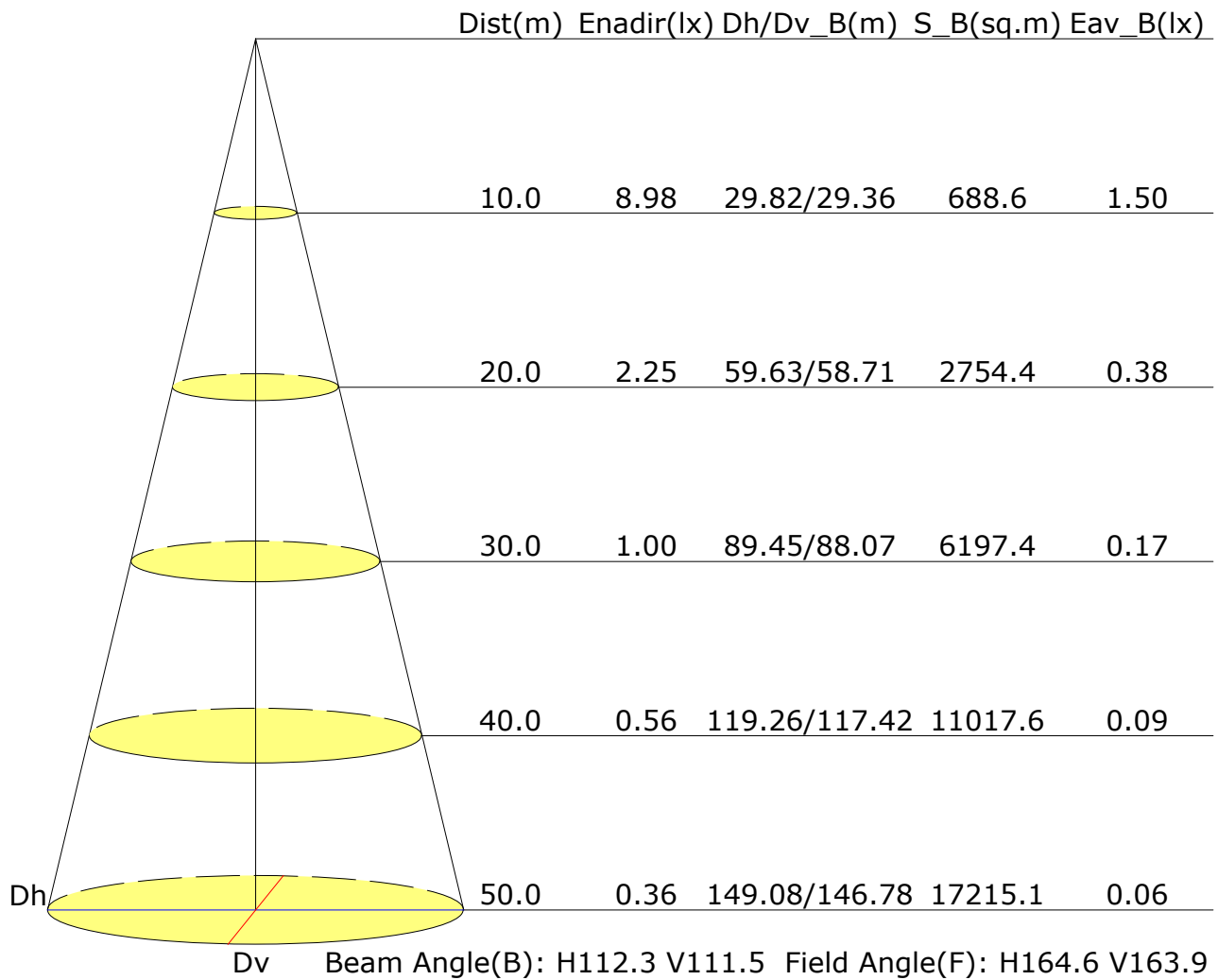


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	3249	3097	2927	2732	2505	2239	1913	1505	925
C90	3681	3584	3471	3341	3192	2997	2756	2379	1675
C180	3263	3110	2945	2751	2527	2265	1938	1529	957
C270	3795	3714	3627	3526	3409	3266	3098	2875	2478

C Plane (°):0.0-360.0: 22.5
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 Temperature:
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Gamma Plane (°):0.0-180.0:1.0
 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	16.3	17.7	16.6	17.9	18.2	16.7	18.1	17.0	18.3	18.6
3H	17.7	19.0	18.1	19.3	19.6	18.3	19.5	18.6	19.8	20.1
4H	18.3	19.5	18.6	19.8	20.1	18.9	20.1	19.3	20.4	20.7
6H	18.7	19.8	19.0	20.1	20.4	19.4	20.5	19.8	20.9	21.2
8H	18.8	19.8	19.1	20.2	20.5	19.6	20.7	20.0	21.0	21.4
12H	18.8	19.9	19.2	20.2	20.6	19.7	20.7	20.1	21.1	21.4
X=4H Y=2H	16.9	18.1	17.3	18.4	18.8	17.3	18.4	17.6	18.8	19.1
3H	18.6	19.6	18.9	19.9	20.3	19.0	20.0	19.4	20.4	20.8
4H	19.2	20.2	19.6	20.5	20.9	19.8	20.7	20.2	21.1	21.5
6H	19.7	20.5	20.2	20.9	21.4	20.4	21.2	20.8	21.6	22.1
8H	19.9	20.6	20.3	21.1	21.5	20.6	21.4	21.1	21.8	22.2
12H	20.0	20.7	20.4	21.1	21.6	20.8	21.5	21.3	21.9	22.4
X=8H Y=4H	19.5	20.3	20.0	20.7	21.1	20.0	20.8	20.5	21.2	21.6
6H	20.2	20.8	20.6	21.2	21.7	20.8	21.4	21.3	21.8	22.3
8H	20.4	20.9	20.9	21.4	21.9	21.1	21.6	21.6	22.1	22.6
12H	20.5	21.0	21.0	21.5	22.0	21.3	21.8	21.8	22.2	22.8
X=12H Y=4H	19.5	20.2	20.0	20.7	21.1	20.0	20.7	20.5	21.2	21.6
6H	20.2	20.8	20.7	21.2	21.7	20.8	21.4	21.3	21.8	22.3
8H	20.5	20.9	21.0	21.4	21.9	21.1	21.6	21.6	22.1	22.6
Variations with the observer position at spacings:										
S=1.0H	+0.2/-0.2					+0.2/-0.1				
S=1.5H	+0.3/-0.5					+0.3/-0.4				
S=2.0H	+0.5/-0.9					+0.6/-0.8				

Calculate in accordance with CIE Pub.117. The table is revised with 2596lm ($8\log(F/F_0) = 3.3$).

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	0.52	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		0.41	0.51	0.58	0.64	0.71	0.77	0.81	0.86	0.89	
0.00	0.00	0.00	0.39	0.49	0.55	0.61	0.68	0.73	0.77	0.82	0.85	
Rating:25W 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	1.01	0.84	0.71	0.62	0.50	0.42	0.36	0.28	0.23	
	0.30		0.84	0.72	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	0.53	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	0.32	0.25	0.21	
	0.30		0.81	0.68	0.59	0.52	0.42	0.35	0.31	0.24	0.20	
	0.20		0.71	0.61	0.53	0.47	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	
Rating:25W 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	0.17	0.19	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	0.17	0.18	0.19	0.19	0.20	0.21	0.21	0.21	0.22	
	0.30		0.10	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	
	0.20		0.05	0.07	0.08	0.10	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	0.13	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	0.15	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	
Rating:25W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												