

Report No.: 1

Test Time: 10.02.2020 15:15

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 120 150W 5000K 13-13gr.

Luminous Length (mm): 348 mm

Luminous Width (mm): 250 mm

Luminous Height (mm): 132 mm

Voltage: 221.4 V

Current: 0.686 A

Power: 151.23 W

Power Factor: 0.981

Photometric Results

CIE Class: Direct

Measurement Flux: 20447.3

lm Downward Ratio: 99%

Total Rated Lamp Lumens: 20447.3 lm

Efficiency: 100%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 36.6, 37.4, 37.2, 36.5

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 18.0, 18.4, 18.2, 18.1

Luminaire Efficacy Rating (LER): 135.02

Central Intensity: 78337.6 cd

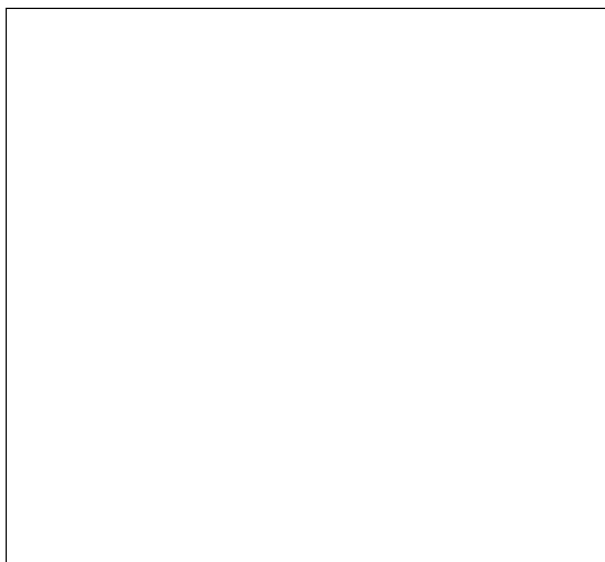
Max. Intensity: 80958.68 cd

Pos of Max. Intensity: H157.5 V0

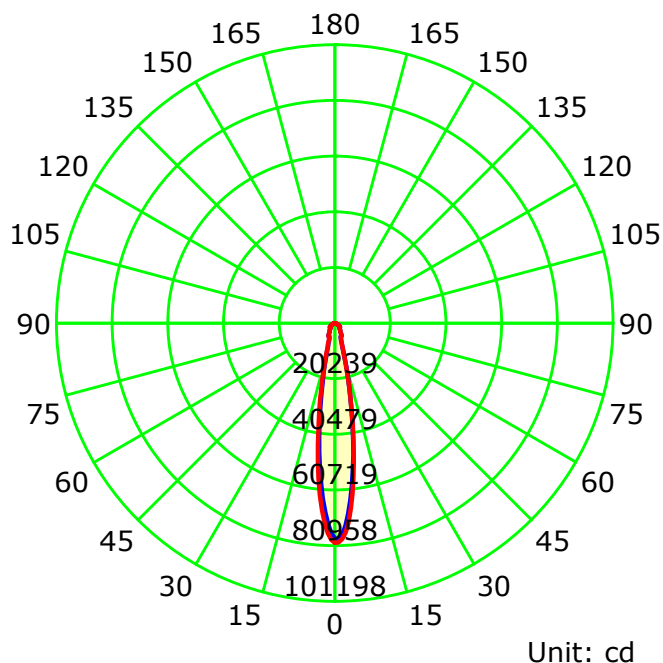
S/MH(C0/C180): 0.31

S/MH(C90/C270): 0.31

Picture Of Luminaire



Luminous Intensity Distribution Curve



— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

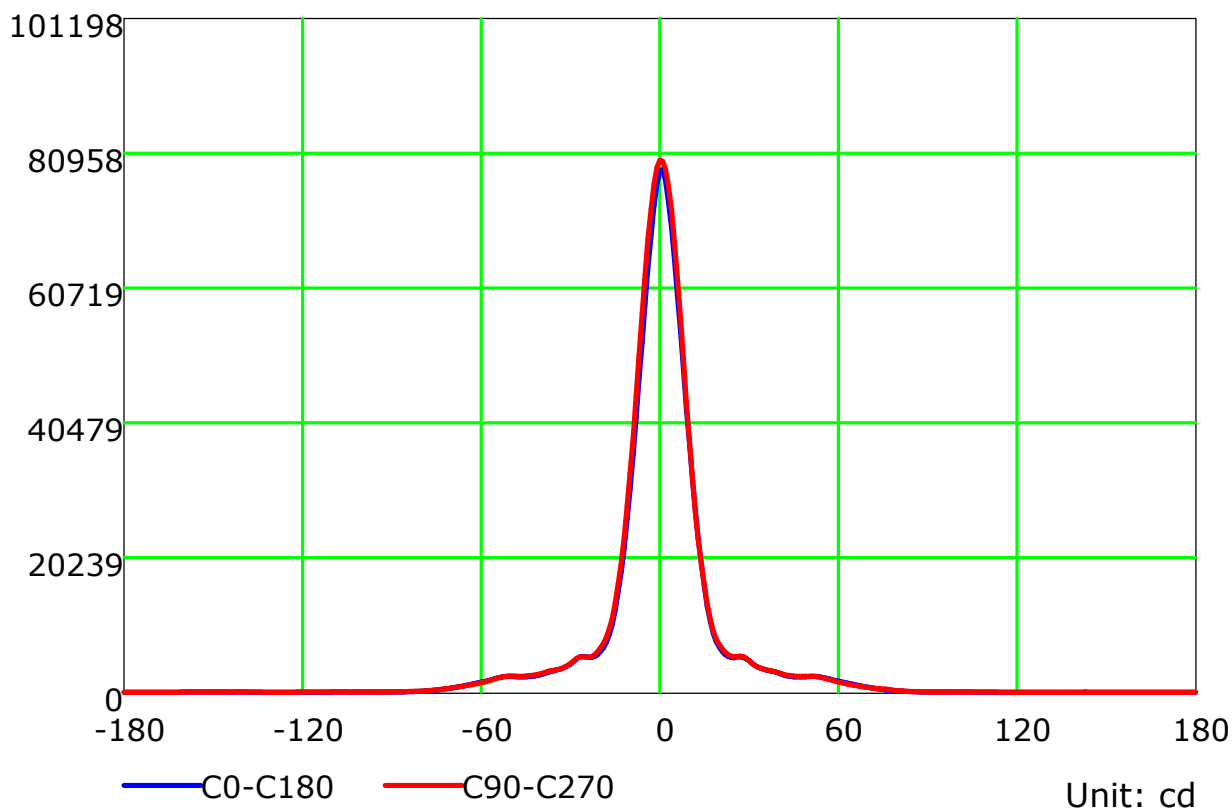
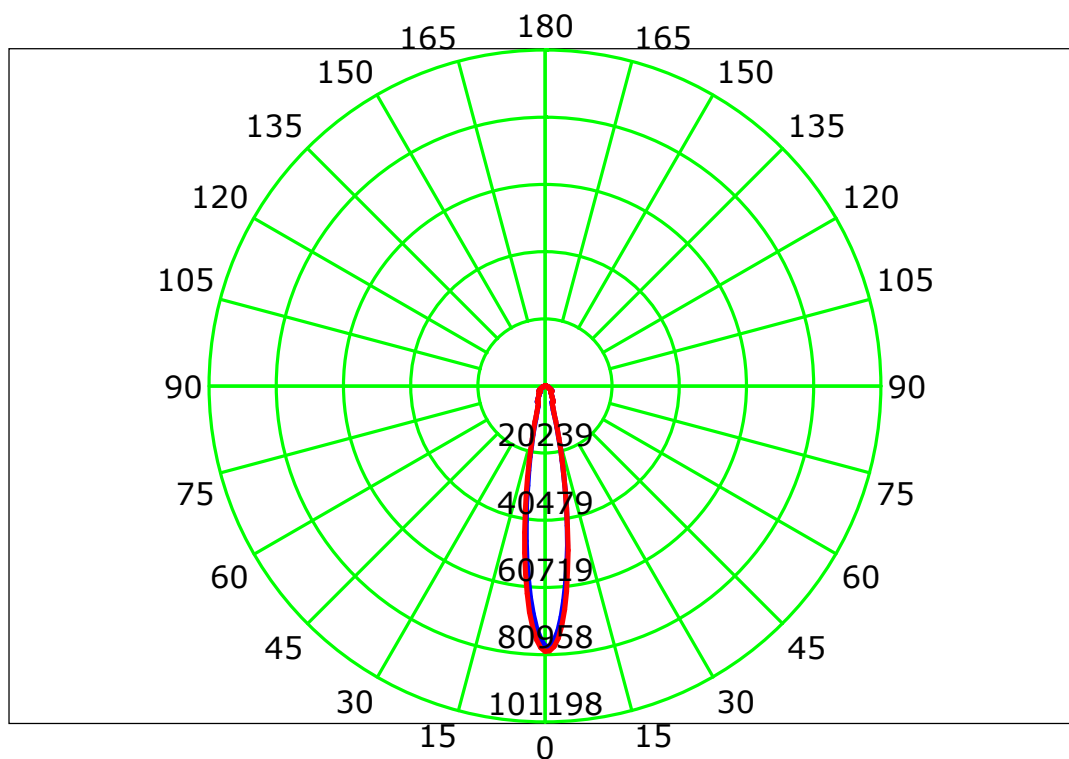
Test Device: LSG-1800B

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

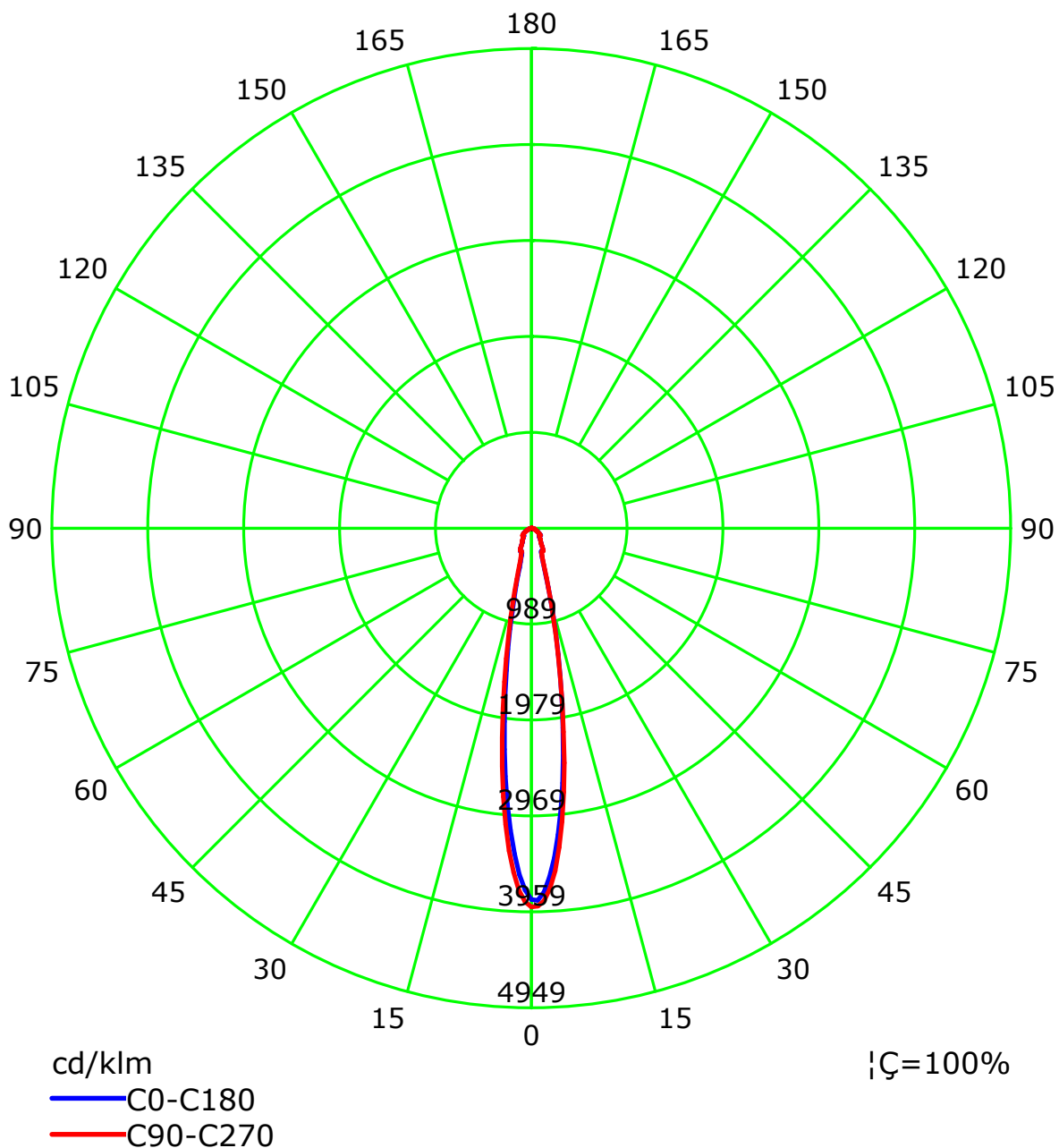
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve(cd/klm)



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

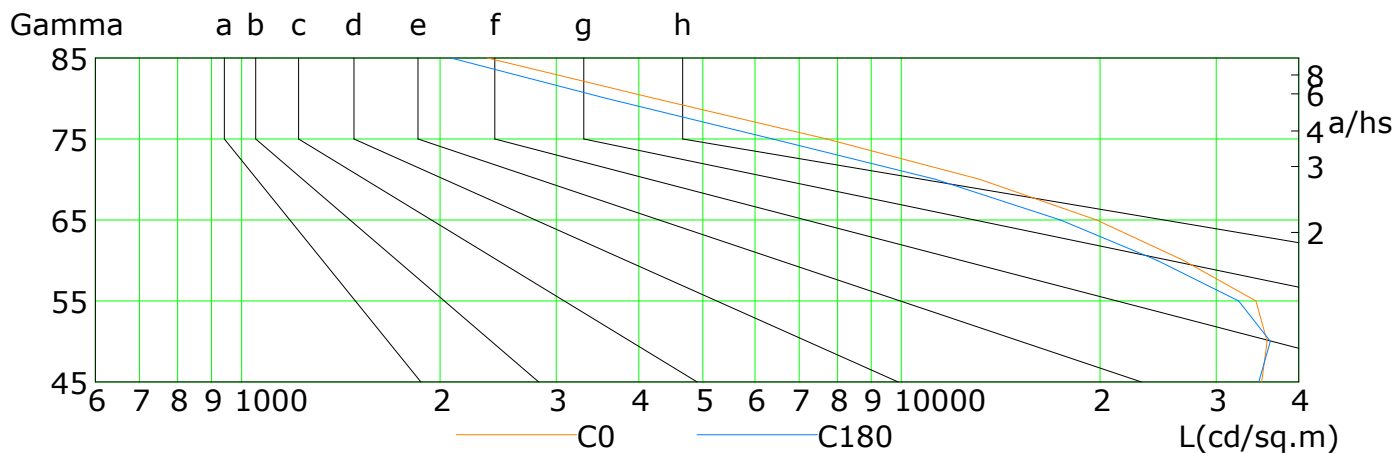
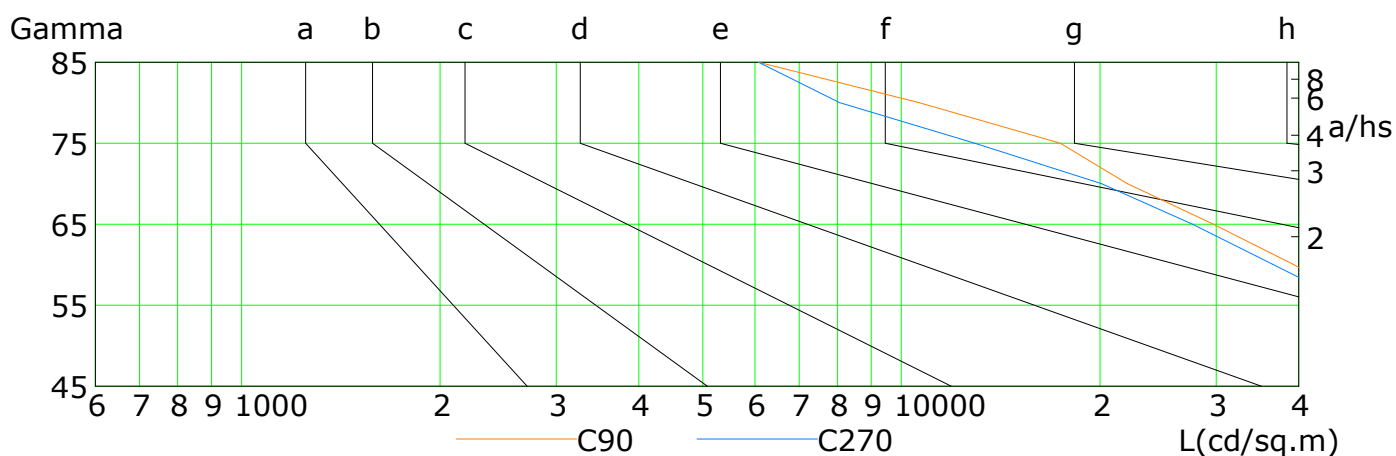
Humidity:

Inspector:

Lum Limit Curve

Dazzle	Quality	Illuminance (lx)							
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	35177	35847	34460	26734	19748	13136	7703	4222	2357
C90	51929	53613	50875	39312	29692	22006	17415	10629	6076
C180	34812	36216	32458	24413	17410	11259	6378	3567	2076
C270	51818	54727	48765	36582	27628	20099	12917	8055	6076

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

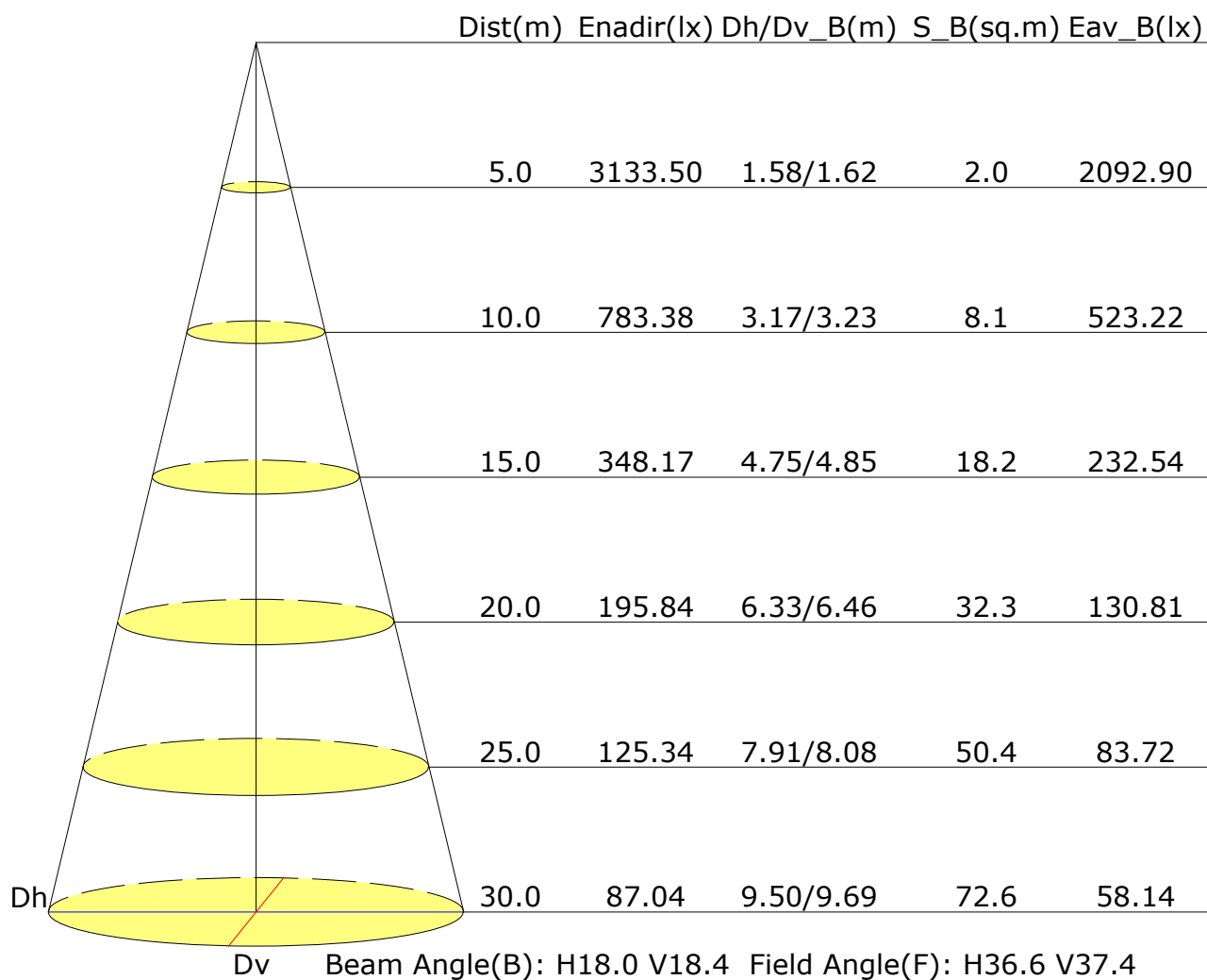
Test Device: LSG-1800B

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	23.0	24.0	23.3	24.2	24.5	23.6	24.6	23.9	24.8	25.0
3H	23.6	24.5	24.0	24.8	25.1	24.2	25.1	24.6	25.4	25.7
4H	23.8	24.6	24.1	24.9	25.2	24.4	25.3	24.8	25.5	25.9
6H	23.8	24.5	24.1	24.9	25.2	24.5	25.3	24.9	25.6	25.9
8H	23.8	24.5	24.1	24.8	25.2	24.5	25.3	24.9	25.6	25.9
12H	23.7	24.5	24.1	24.8	25.1	24.5	25.2	24.9	25.6	25.9
X=4H Y=2H	23.5	24.3	23.8	24.6	24.9	24.0	24.8	24.3	25.1	25.4
3H	24.2	24.9	24.6	25.2	25.6	24.7	25.4	25.1	25.7	26.1
4H	24.3	25.0	24.8	25.4	25.8	24.9	25.6	25.3	25.9	26.3
6H	24.4	25.0	24.9	25.4	25.8	25.1	25.7	25.5	26.1	26.5
8H	24.4	24.9	24.9	25.4	25.8	25.1	25.6	25.6	26.1	26.5
12H	24.4	24.9	24.9	25.3	25.8	25.1	25.6	25.6	26.0	26.5
X=8H Y=4H	24.4	24.9	24.9	25.3	25.8	25.0	25.5	25.4	25.9	26.3
6H	24.5	24.9	25.0	25.4	25.9	25.2	25.6	25.7	26.1	26.5
8H	24.6	24.9	25.1	25.4	25.9	25.2	25.6	25.7	26.1	26.6
12H	24.6	24.9	25.1	25.4	25.9	25.3	25.6	25.8	26.1	26.6
X=12H Y=4H	24.4	24.8	24.8	25.3	25.8	24.9	25.4	25.4	25.8	26.3
6H	24.5	24.9	25.0	25.4	25.9	25.2	25.5	25.7	26.0	26.5
8H	24.6	24.9	25.1	25.4	25.9	25.2	25.6	25.8	26.1	26.6
Variations with the observer position at spacings:										
S=1.0H	+0.2/-0.2					+0.2/-0.2				
S=1.5H	+0.9/-1.2					+0.8/-1.2				
S=2.0H	+1.6/-2.3					+1.8/-2.3				

Calculate in accordance with CIE Pub.117. The table is revised with 20412lm ($8\log(F/F_0) = 10.5$).

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 = 0.50									
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	0.76	0.84	0.89	0.93	0.99	1.02	1.05	1.08	1.10	
	0.30		0.70	0.78	0.83	0.88	0.94	0.98	1.01	1.05	1.08	
	0.20		0.66	0.73	0.79	0.84	0.90	0.95	0.98	1.02	1.05	
0.50	0.50	0.20	0.74	0.82	0.87	0.90	0.95	0.99	1.01	1.04	1.06	
	0.30		0.69	0.76	0.82	0.86	0.91	0.95	0.98	1.01	1.04	
	0.20		0.65	0.73	0.78	0.82	0.88	0.92	0.95	0.99	1.02	
0.30	0.50	0.20	0.73	0.80	0.84	0.88	0.92	0.95	0.97	1.00	1.02	
	0.30		0.68	0.75	0.80	0.84	0.89	0.92	0.95	0.98	1.00	
	0.20		0.65	0.72	0.77	0.81	0.86	0.90	0.93	0.96	0.98	
0.00	0.00	0.00	0.63	0.69	0.74	0.78	0.83	0.86	0.88	0.91	0.93	
Rating:151W 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 = 0.50									
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	0.76	0.62	0.53	0.46	0.36	0.30	0.26	0.20	0.16	
	0.30		0.63	0.53	0.46	0.41	0.33	0.28	0.24	0.19	0.15	
	0.20		0.54	0.47	0.41	0.37	0.30	0.26	0.22	0.18	0.15	
0.50	0.50	0.20	0.72	0.59	0.50	0.43	0.34	0.32	0.24	0.19	0.15	
	0.30		0.61	0.51	0.44	0.39	0.31	0.26	0.23	0.18	0.14	
	0.20		0.53	0.45	0.40	0.35	0.29	0.24	0.21	0.17	0.14	
0.30	0.50	0.20	0.69	0.56	0.48	0.41	0.32	0.27	0.23	0.17	0.14	
	0.30		0.59	0.50	0.43	0.37	0.30	0.25	0.21	0.17	0.14	
	0.20		0.52	0.44	0.39	0.34	0.28	0.23	0.20	0.16	0.13	
0.00	0.00	0.00	0.39	0.32	0.28	0.24	0.19	0.16	0.13	0.10	0.09	
Rating:151W 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 = 0.50									
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	0.18	0.19	0.19	0.21	0.21	0.22	0.23	0.23	
	0.30		0.11	0.13	0.14	0.15	0.17	0.18	0.19	0.20	0.21	
	0.20		0.07	0.09	0.11	0.12	0.14	0.16	0.17	0.18	0.19	
0.50	0.50	0.20	0.15	0.17	0.18	0.19	0.20	0.21	0.21	0.22	0.22	
	0.30		0.11	0.12	0.14	0.15	0.16	0.18	0.19	0.20	0.21	
	0.20		0.07	0.09	0.10	0.12	0.14	0.15	0.16	0.18	0.19	
0.30	0.50	0.20	0.15	0.16	0.17	0.18	0.19	0.20	0.20	0.21	0.21	
	0.30		0.10	0.12	0.13	0.14	0.16	0.17	0.18	0.19	0.20	
	0.20		0.07	0.09	0.10	0.12	0.13	0.15	0.16	0.17	0.18	
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:151W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												