

Report No.:

Test Time: 30.04.2020 13:40

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FL 58 L 200LED 62W Refond 3N 5000K 96x55 rp

Number of Lamps: 1

Luminous Length (mm): 1500

Luminous Width (mm): 75

Luminous Height (mm): 60

Voltage: 228.8 V

Current: 0.275 A

Power: 62.55 W

Power Factor: 0.993

Photometric Results

CIE Class: Direct

Total Rated Lamp Lumens: 10054.7 lm

Measurement Flux: 10054.7 lm

Efficiency: 100%

Downward Ratio: 99%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 136.0, 99.8, 115.8, 116.0

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 94.2, 55.1, 63.4, 63.7

Luminaire Efficacy Rating (LER): 160.80

Central Intensity: 6801.23 cd

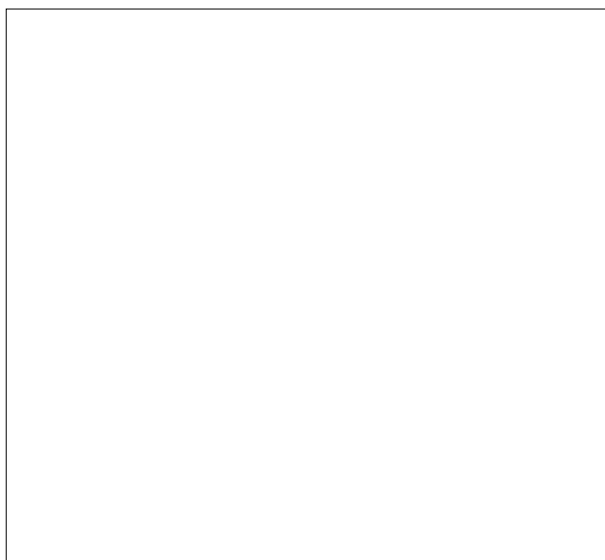
Max. Intensity: 6884.09 cd

Pos of Max. Intensity: H112.5 V0

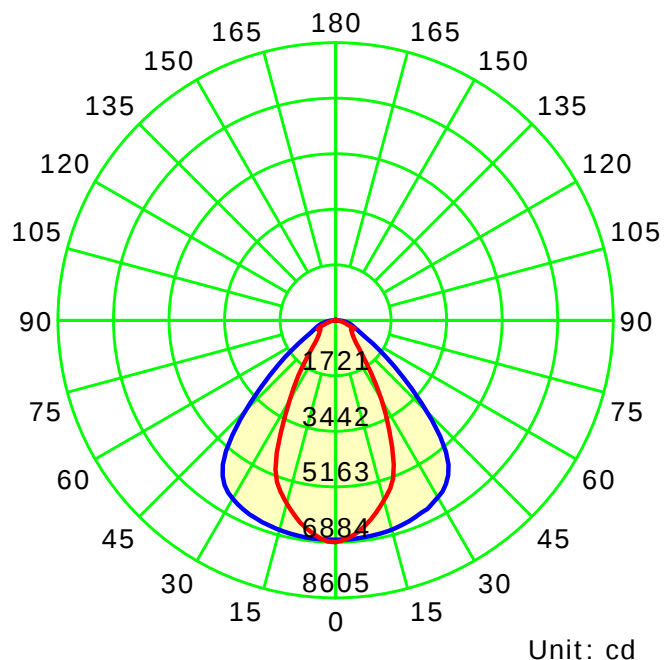
S/MH(C0/C180): 1.38

S/MH(C90/C270): 0.88

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 22.5

Gamma Plane (°):0.0-180.0:2.0

Test Lab:

Test Device: LSG-1800B

Test Type: TYPE C

Distance: 12.677 m

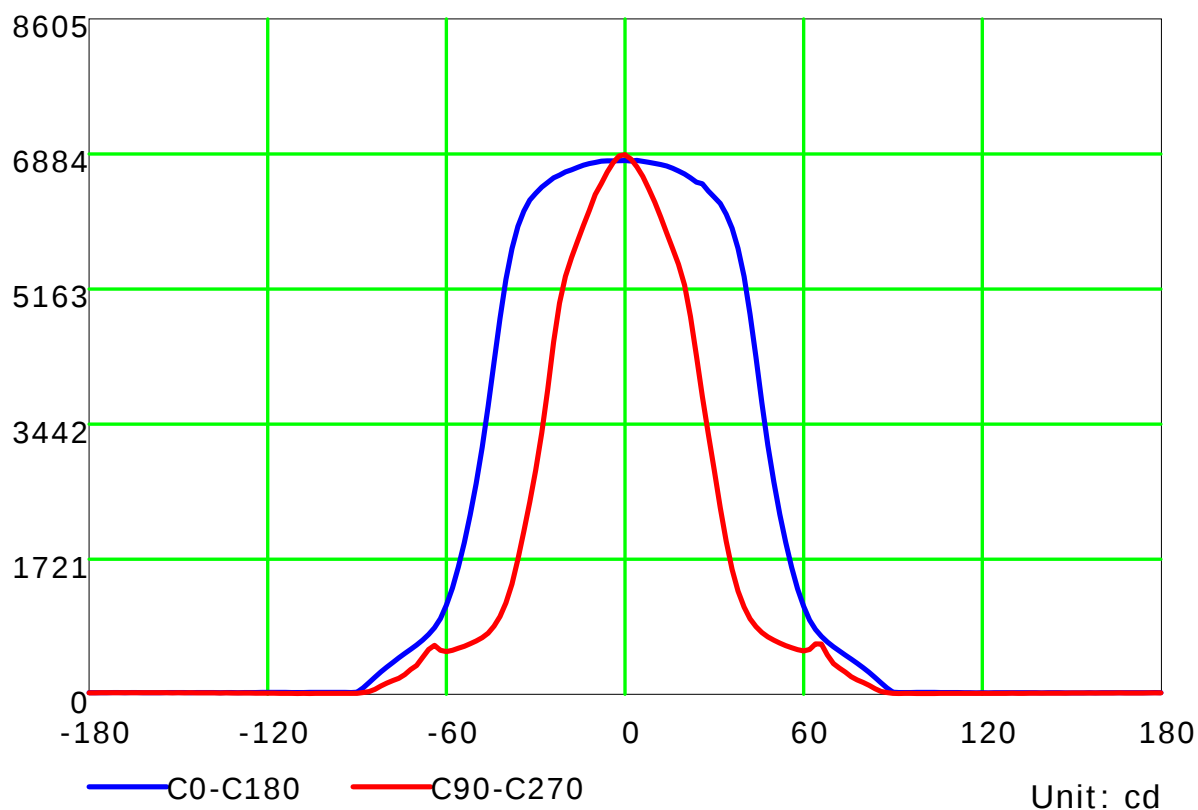
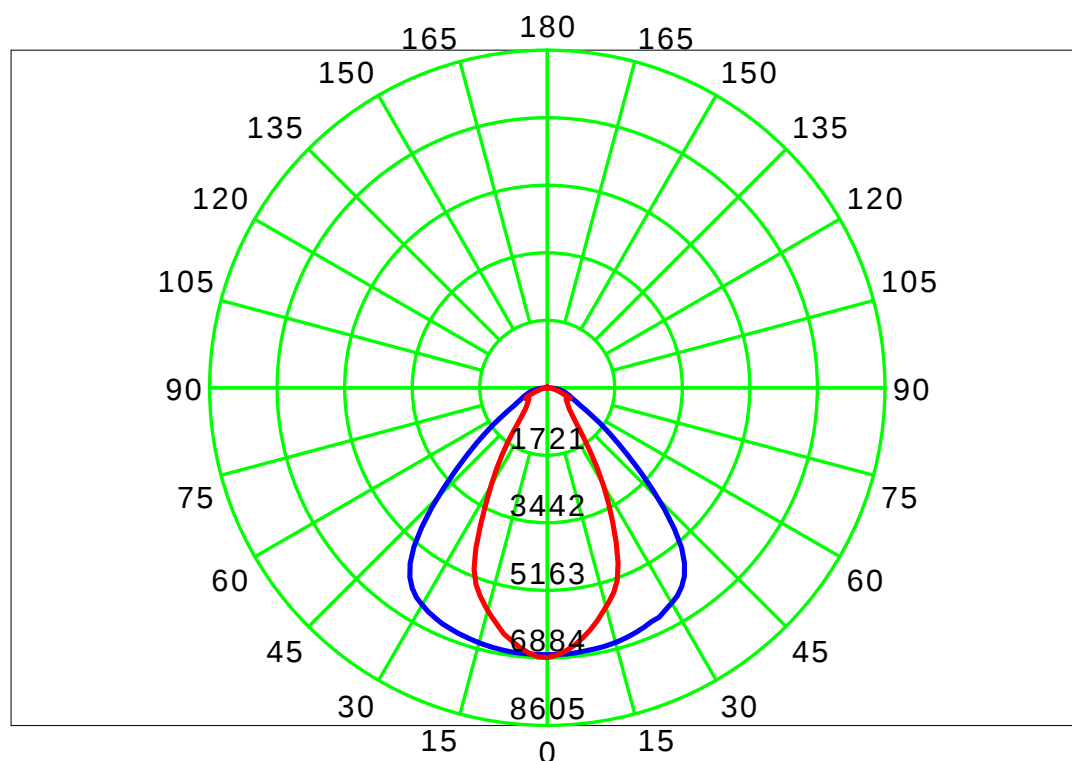
Temperature:

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 (°):0.0-180.0:2.0

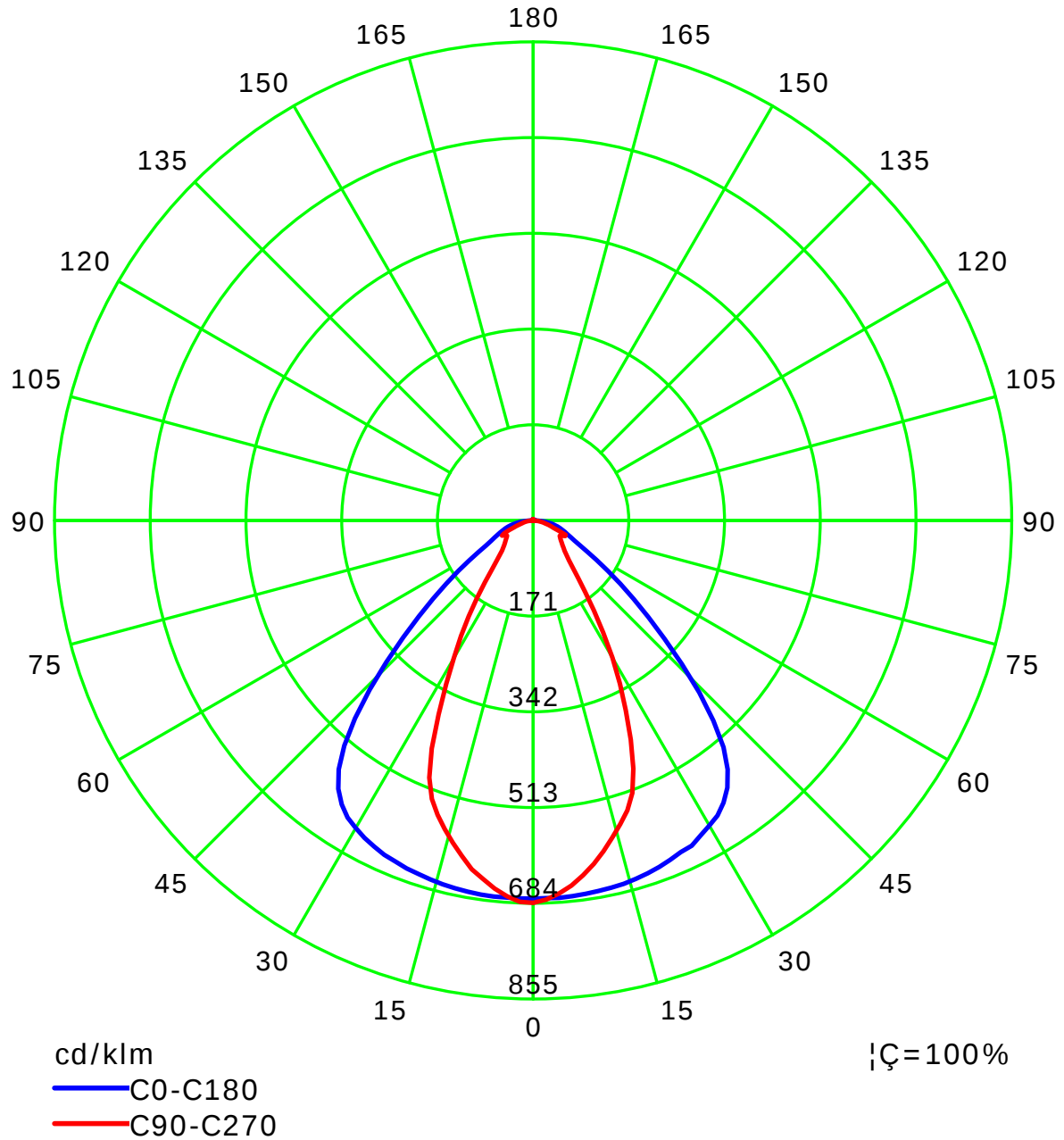
Test Device: LSG-1800B

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 (°):0.0-180.0:2.0

Test Device: LSG-1800B

Distance: 12.677 m

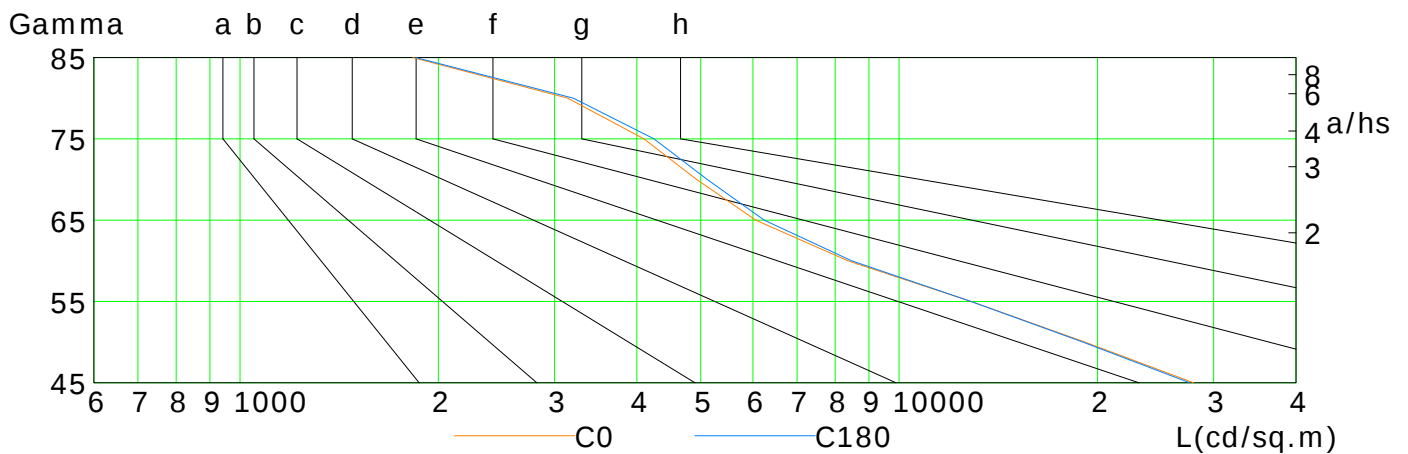
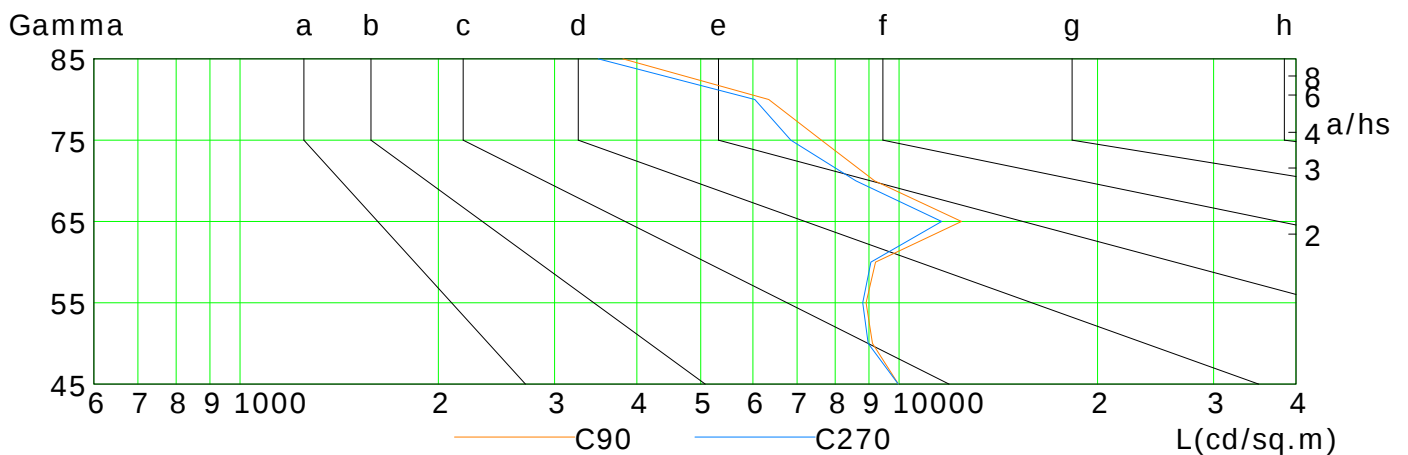
Humidity:

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	27977	19144	12855	8362	6062	4932	4099	3144	1829
C90	9977	9113	8910	9210	12430	9175	7621	6342	3811
C180	27606	19005	12860	8472	6243	5117	4247	3205	1848
C270	9968	8975	8805	9059	11602	8598	6849	6039	3495

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

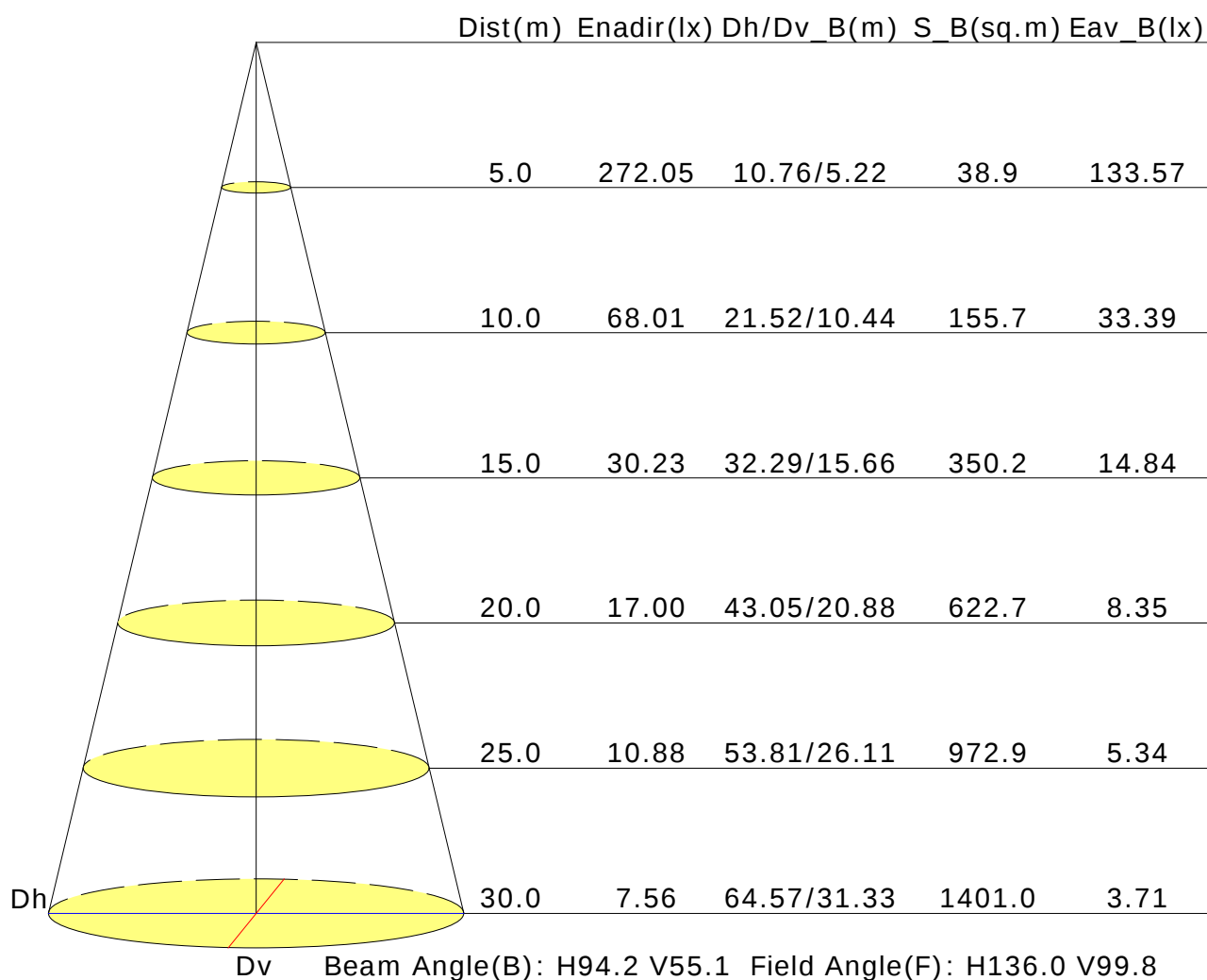
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

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	20.4	21.6	20.7	21.8	22.0	16.9	18.0	17.2	18.3	18.5
3H	21.0	22.0	21.3	22.3	22.5	18.8	19.8	19.1	20.1	20.4
4H	21.2	22.2	21.6	22.5	22.8	19.2	20.2	19.6	20.5	20.8
6H	21.5	22.3	21.8	22.7	23.0	19.5	20.4	19.9	20.8	21.1
8H	21.5	22.4	21.9	22.7	23.1	19.6	20.5	20.0	20.8	21.2
12H	21.6	22.4	21.9	22.7	23.1	19.7	20.5	20.1	20.8	21.2
X=4H Y=2H	20.5	21.4	20.8	21.7	22.0	17.4	18.4	17.8	18.7	19.0
3H	21.2	22.0	21.6	22.4	22.7	19.4	20.2	19.8	20.6	20.9
4H	21.6	22.3	22.0	22.7	23.1	19.9	20.7	20.4	21.0	21.4
6H	21.9	22.6	22.4	23.0	23.4	20.3	21.0	20.7	21.4	21.8
8H	22.0	22.6	22.5	23.1	23.5	20.4	21.0	20.9	21.5	21.9
12H	22.1	22.7	22.6	23.1	23.6	20.5	21.0	21.0	21.5	21.9
X=8H Y=4H	21.7	22.3	22.1	22.7	23.1	20.1	20.7	20.6	21.1	21.6
6H	22.1	22.6	22.6	23.0	23.5	20.6	21.1	21.1	21.5	22.0
8H	22.3	22.7	22.8	23.2	23.7	20.7	21.2	21.2	21.6	22.1
12H	22.4	22.8	22.9	23.3	23.8	20.8	21.2	21.3	21.7	22.2
X=12H Y=4H	21.6	22.2	22.1	22.6	23.1	20.1	20.7	20.6	21.1	21.6
6H	22.1	22.5	22.6	23.0	23.5	20.6	21.0	21.1	21.5	22.0
8H	22.3	22.7	22.8	23.2	23.7	20.8	21.2	21.3	21.6	22.2
Variations with the observer position at spacings:										
S=1.0H	+1.0/-1.0					+0.4/-0.3				
S=1.5H	+2.6/-1.6					+1.4/-0.7				
S=2.0H	+4.1/-2.3					+1.8/-0.6				

Calculate in accordance with CIE Pub.117. The table is revised with 10055lm ($8\log(F/F_0) = 8.0$).

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:

Utilisation Factor Table(Floor cavity)

Utilisation Factors UF(F)			SHR NOM = 1.00									
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	0.70	0.78	0.84	0.88	0.94	0.98	1.01	1.04	1.06	
	0.30		0.64	0.72	0.78	0.83	0.89	0.94	0.97	1.01	1.04	
	0.20		0.59	0.68	0.74	0.79	0.85	0.90	0.93	0.98	1.01	
0.50	0.50	0.20	0.68	0.76	0.82	0.86	0.91	0.95	0.97	1.00	1.02	
	0.30		0.63	0.71	0.77	0.81	0.87	0.91	0.94	0.97	1.00	
	0.20		0.59	0.67	0.73	0.77	0.83	0.88	0.91	0.95	0.98	
0.30	0.50	0.20	0.67	0.75	0.80	0.83	0.88	0.91	0.93	0.96	0.98	
	0.30		0.62	0.70	0.75	0.79	0.85	0.88	0.91	0.94	0.96	
	0.20		0.58	0.66	0.72	0.76	0.82	0.86	0.89	0.92	0.95	
0.00	0.00	0.00	0.56	0.64	0.69	0.73	0.78	0.82	0.84	0.88	0.90	
Rating:63W 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 = 1.00									
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	0.80	0.65	0.55	0.48	0.38	0.32	0.27	0.21	0.17	
	0.30		0.67	0.56	0.48	0.43	0.35	0.29	0.25	0.20	0.16	
	0.20		0.57	0.49	0.43	0.38	0.32	0.27	0.23	0.19	0.16	
0.50	0.50	0.20	0.76	0.62	0.53	0.46	0.36	0.34	0.25	0.20	0.16	
	0.30		0.65	0.54	0.46	0.41	0.33	0.28	0.24	0.19	0.15	
	0.20		0.56	0.48	0.42	0.37	0.30	0.26	0.22	0.18	0.15	
0.30	0.50	0.20	0.74	0.59	0.50	0.43	0.34	0.28	0.24	0.18	0.15	
	0.30		0.63	0.52	0.45	0.39	0.31	0.26	0.23	0.18	0.15	
	0.20		0.55	0.47	0.41	0.36	0.29	0.25	0.21	0.17	0.14	
0.00	0.00	0.00	0.43	0.35	0.30	0.26	0.21	0.18	0.15	0.12	0.10	
Rating:63W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												

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:

Utilisation Factor Table(Ceiling cavity)

Utilisation Factors UF(C)			SHR NOM = 1.00									
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	0.21	0.21	0.22	0.22	
	0.30		0.10	0.12	0.13	0.15	0.16	0.18	0.18	0.20	0.20	
	0.20		0.06	0.08	0.10	0.11	0.13	0.15	0.16	0.17	0.19	
0.50	0.50	0.20	0.15	0.17	0.18	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		0.06	0.08	0.10	0.11	0.13	0.14	0.15	0.17	0.18	
0.30	0.50	0.20	0.15	0.16	0.17	0.18	0.19	0.19	0.20	0.20	0.21	
	0.30		0.10	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	
	0.20		0.06	0.08	0.09	0.11	0.13	0.14	0.15	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:63W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												