

Report No.:

Test Time: 30.04.2020 15:18

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FL 58 L 200LED 62W Refond 3N 4000K 20x90 rp

Luminous Length (mm): 1500

Luminous Width (mm): 75

Luminous Height (mm): 60

Voltage: 229.1 V

Current: 0.274 A

Power: 62.46 W

Power Factor: 0.991

Photometric Results

CIE Class: Direct

Measurement Flux: 9297.5 lm

Downward Ratio: 99%

Total Rated Lamp Lumens: 9297.5 lm

Efficiency: 100%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 150.4, 141.1, 134.3, 134.8

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 79.2, 47.5, 59.7, 60.6

Luminaire Efficacy Rating (LER): 148.91

Central Intensity: 3710.33 cd

Max. Intensity: 6255.32 cd

Pos of Max. Intensity: H270 V20

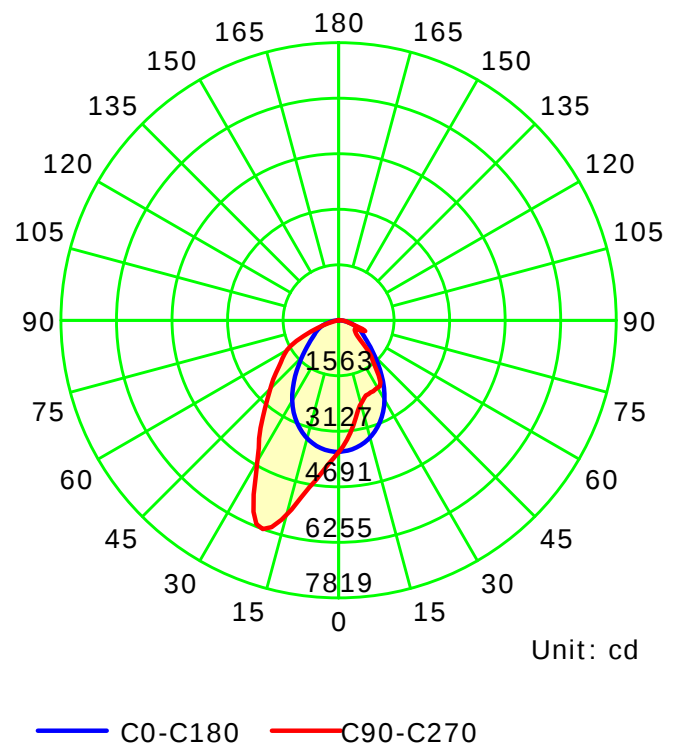
S/MH(C0/C180): 1.08

S/MH(C90/C270): 1.30

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

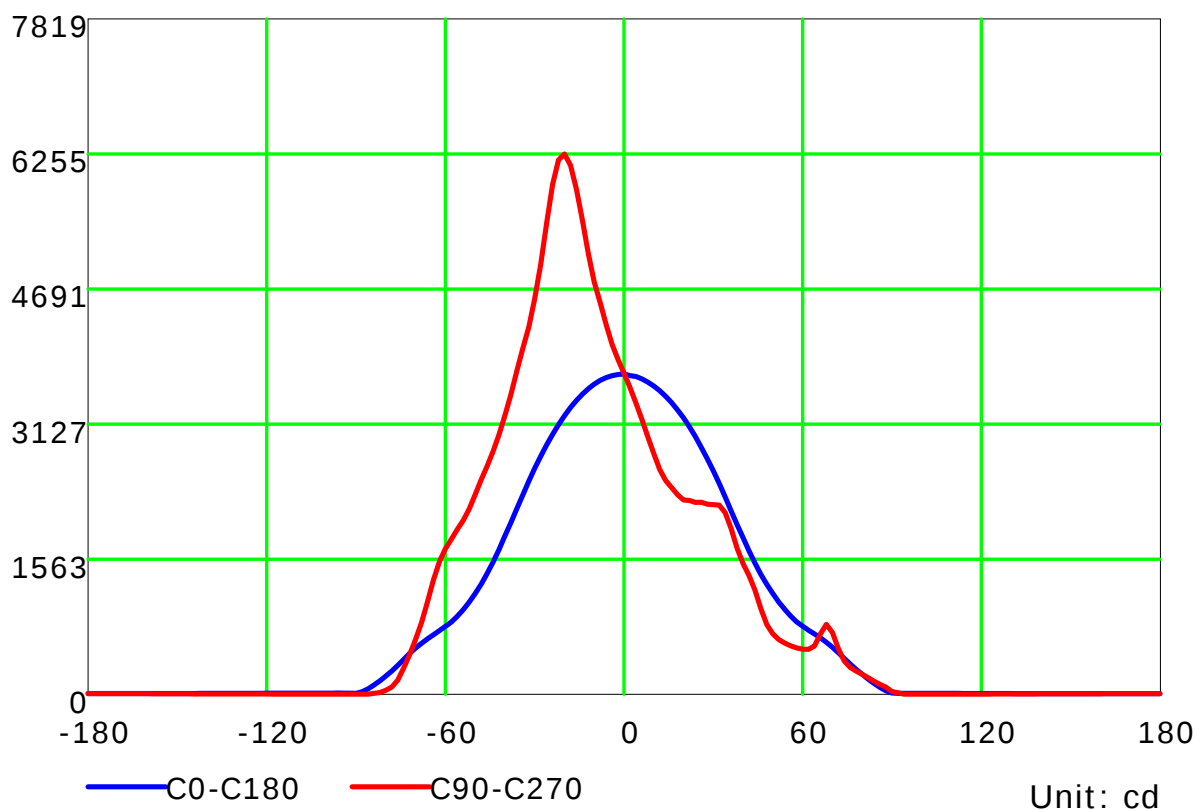
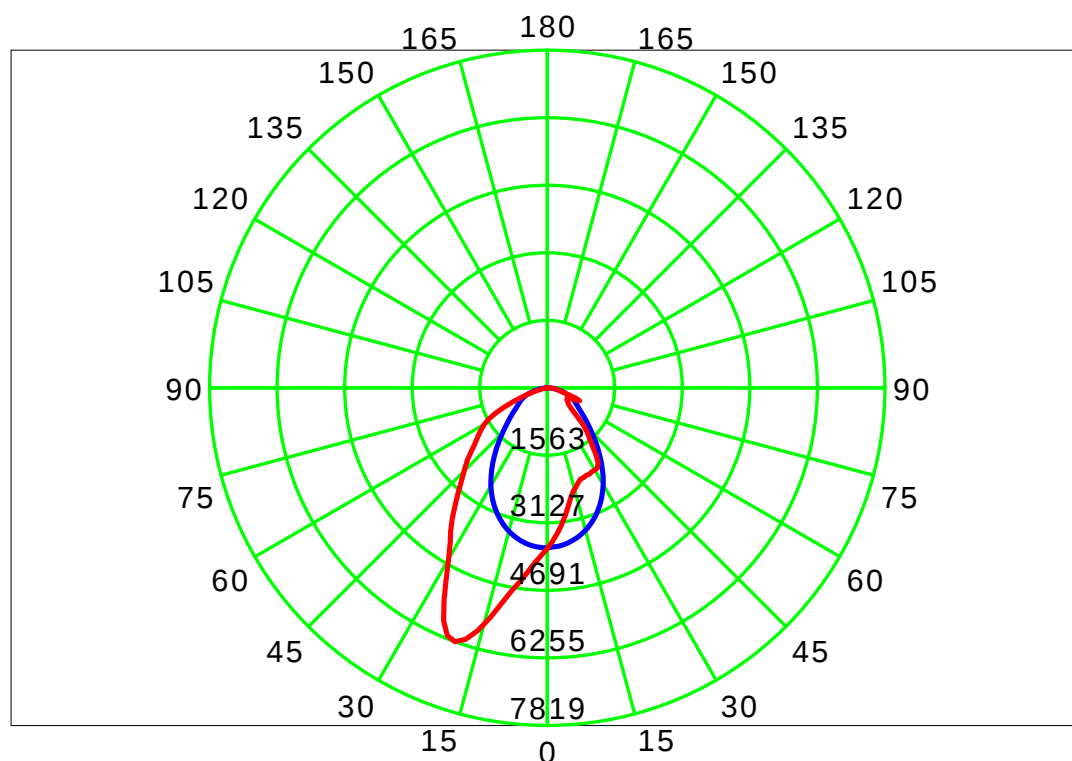
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve



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Test Type: TYPE C

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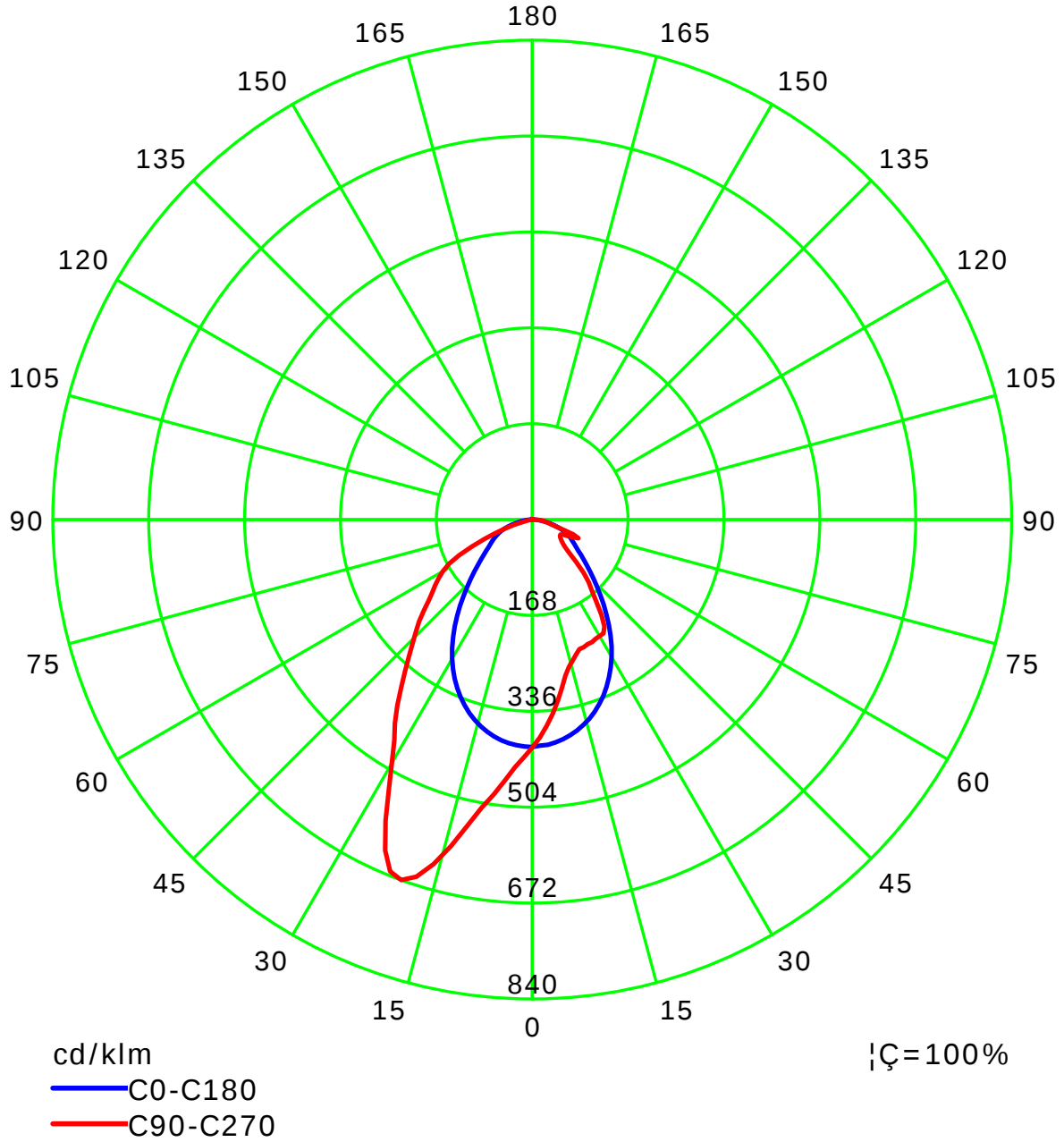
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve(cd / klm)



C Plane (°):0.0-360.0: 22.5

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Test Device: LSG-1800B

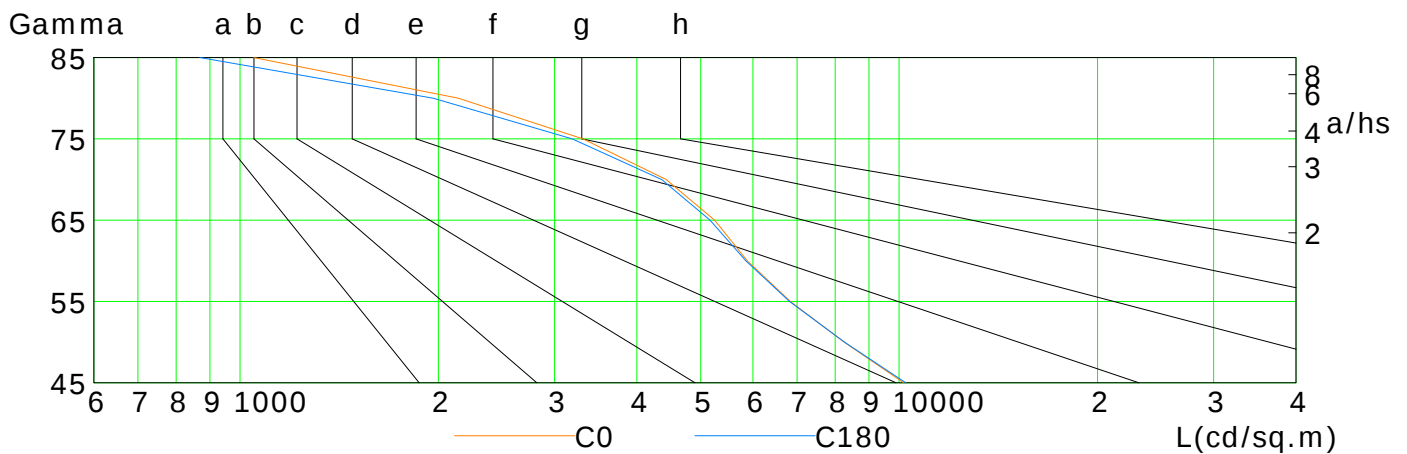
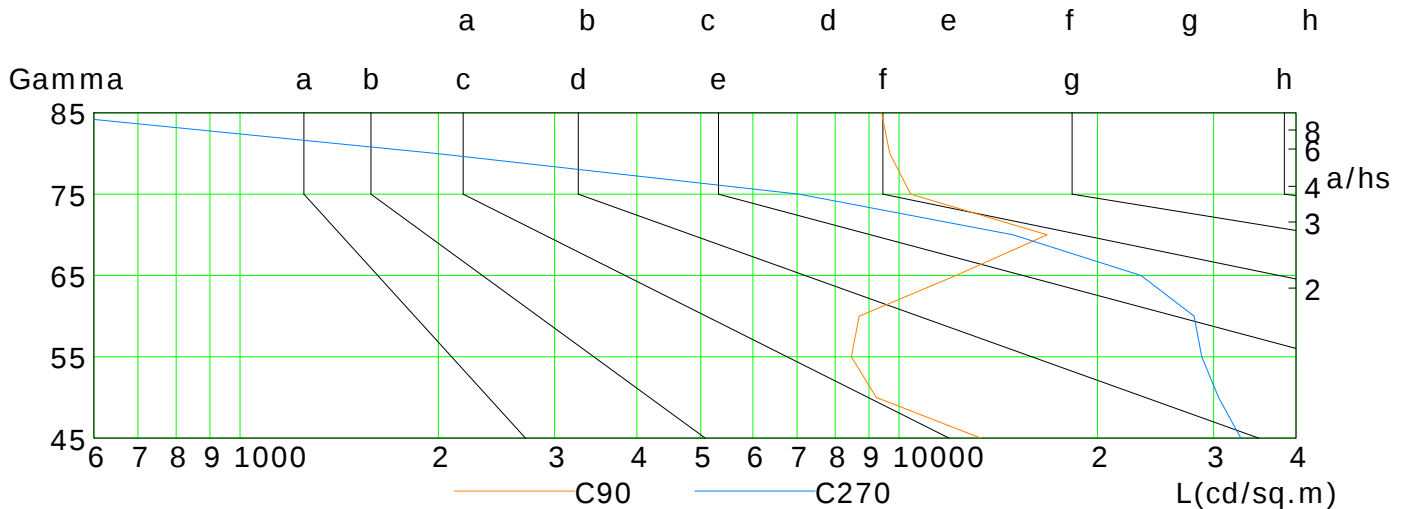
Distance: 12.677 m

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



L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	10162	8254	6837	5885	5250	4431	3313	2144	1049
C90	13298	9235	8465	8698	12197	16770	10412	9680	9406
C180	10233	8260	6820	5855	5164	4362	3191	1964	870
C270	32983	30518	28782	28020	23273	14887	7047	1988	479

C Plane (°):0.0-360.0: 22.5

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Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

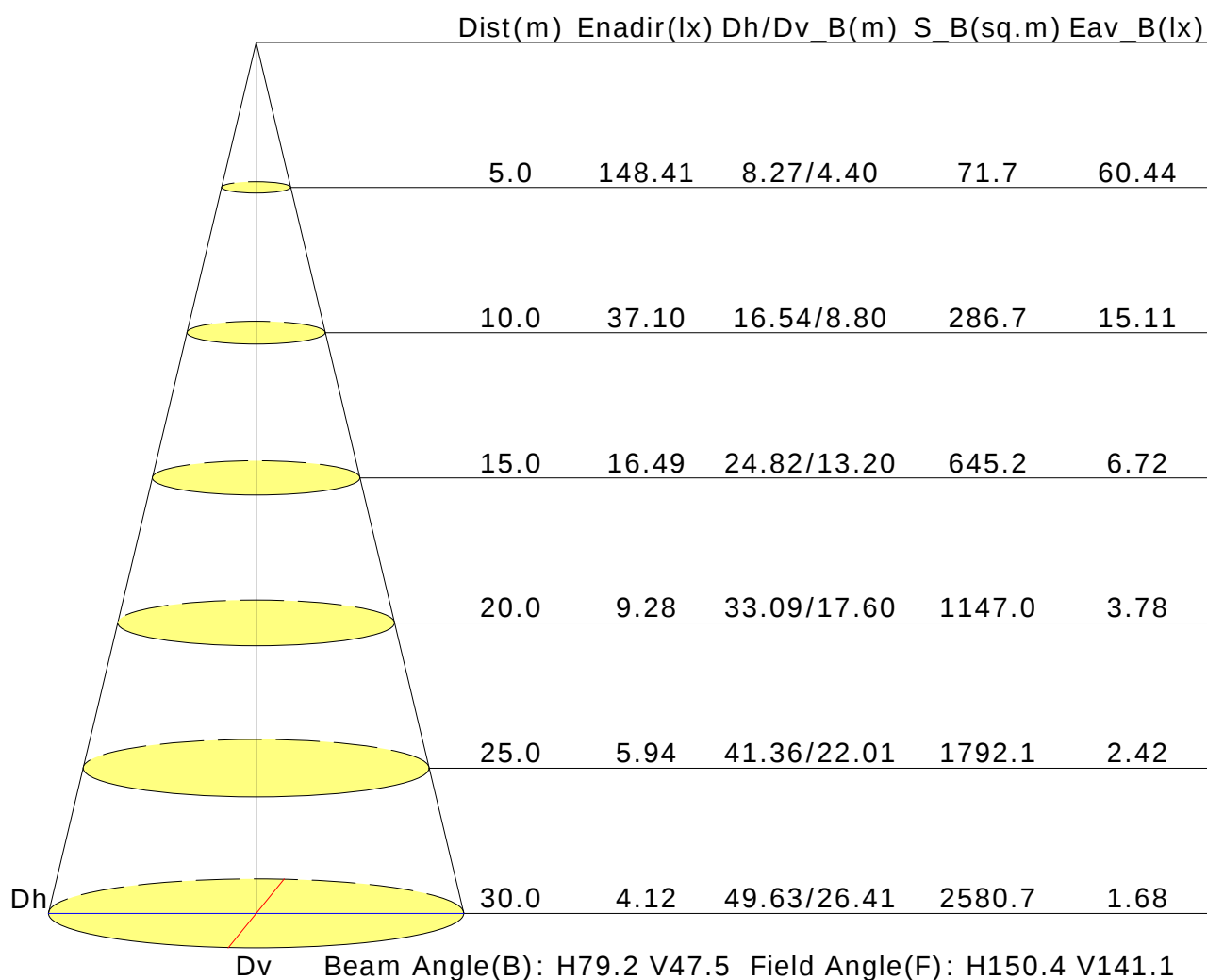
Test Device: LSG-1800B

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	20.9	22.2	21.2	22.5	22.7	22.3	23.6	22.6	23.8	24.0
3H	21.5	22.7	21.9	23.0	23.3	23.4	24.6	23.8	24.9	25.2
4H	21.7	22.8	22.1	23.1	23.4	23.7	24.8	24.0	25.0	25.3
6H	21.8	22.8	22.2	23.2	23.5	23.7	24.7	24.1	25.1	25.4
8H	21.8	22.8	22.2	23.1	23.5	23.7	24.7	24.1	25.0	25.4
12H	21.8	22.8	22.2	23.1	23.4	23.8	24.7	24.1	25.0	25.4
X=4H Y=2H	21.4	22.5	21.8	22.8	23.1	22.6	23.7	22.9	24.0	24.3
3H	22.2	23.2	22.6	23.5	23.9	23.9	24.8	24.3	25.1	25.5
4H	22.5	23.4	22.9	23.7	24.1	24.1	25.0	24.6	25.3	25.7
6H	22.7	23.5	23.1	23.8	24.3	24.2	25.0	24.7	25.4	25.8
8H	22.7	23.4	23.2	23.8	24.3	24.3	25.0	24.7	25.4	25.8
12H	22.8	23.4	23.2	23.8	24.2	24.3	24.9	24.8	25.4	25.8
X=8H Y=4H	22.7	23.4	23.2	23.8	24.2	24.2	24.9	24.6	25.3	25.7
6H	23.0	23.5	23.4	24.0	24.4	24.3	24.9	24.8	25.3	25.8
8H	23.0	23.5	23.5	24.0	24.5	24.4	24.9	24.9	25.3	25.8
12H	23.1	23.5	23.6	24.0	24.5	24.5	24.9	25.0	25.4	25.9
X=12H Y=4H	22.7	23.3	23.2	23.7	24.2	24.2	24.8	24.6	25.2	25.7
6H	23.0	23.4	23.5	23.9	24.4	24.3	24.8	24.8	25.3	25.8
8H	23.1	23.5	23.6	23.9	24.5	24.4	24.8	24.9	25.3	25.8
Variations with the observer position at spacings:										
S=1.0H	+0.5/-0.7					+0.4/-0.6				
S=1.5H	+1.0/-1.3					+0.8/-1.2				
S=2.0H	+0.9/-1.8					+1.3/-2.2				

Calculate in accordance with CIE Pub.117. The table is revised with 9298lm ($8\log(F/F_0) = 7.7$).

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Temperature:

Operator:

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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	0.63	0.72	0.79	0.84	0.91	0.95	0.98	1.03	1.05	
	0.30		0.55	0.66	0.73	0.78	0.85	0.90	0.94	0.99	1.02	
	0.20		0.50	0.60	0.68	0.73	0.81	0.86	0.90	0.96	0.99	
0.50	0.50	0.20	0.61	0.70	0.77	0.82	0.88	0.92	0.95	0.99	1.01	
	0.30		0.55	0.64	0.71	0.76	0.83	0.88	0.91	0.96	0.98	
	0.20		0.50	0.60	0.67	0.72	0.79	0.84	0.88	0.93	0.96	
0.30	0.50	0.20	0.60	0.69	0.75	0.79	0.85	0.89	0.91	0.95	0.97	
	0.30		0.54	0.63	0.70	0.74	0.81	0.85	0.88	0.92	0.95	
	0.20		0.50	0.59	0.66	0.71	0.78	0.82	0.86	0.90	0.93	
0.00	0.00	0.00	0.47	0.57	0.63	0.68	0.74	0.79	0.82	0.86	0.88	
Rating:62W 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	0.91	0.74	0.63	0.54	0.43	0.36	0.30	0.23	0.19	
	0.30		0.76	0.63	0.55	0.48	0.39	0.33	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	0.87	0.71	0.60	0.52	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	0.17	
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		0.72	0.60	0.51	0.45	0.36	0.30	0.26	0.20	0.16	
	0.20		0.63	0.53	0.46	0.41	0.33	0.28	0.24	0.19	0.16	
0.00	0.00	0.00	0.52	0.43	0.37	0.32	0.26	0.21	0.18	0.14	0.11	
Rating:62W 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	0.21	0.21	0.22	0.22	
	0.30		0.10	0.11	0.13	0.14	0.16	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	0.16	0.17	0.18	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		0.05	0.07	0.09	0.10	0.12	0.13	0.14	0.16	0.17	
0.30	0.50	0.20	0.15	0.16	0.17	0.18	0.18	0.19	0.19	0.20	0.20	
	0.30		0.09	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.18	
	0.20		0.05	0.07	0.08	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:62W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												