

Report No.:

Test Time: 25.08.2020 17:59

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FL 52 56LED 18W 4000K 80gr.

Luminous Length (mm): 1130

Luminous Width (mm): 75

Luminous Height (mm): 60

Voltage: 221.6 V

Current: 0.086 A

Power: 18.02 W

Power Factor: 0.937

Photometric Results

CIE Class: Direct

Total Rated Lamp Lumens: 1815.3 lm

Measurement Flux: 1815.3 lm

Efficiency: 100%

Downward Ratio: 99%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 86.4, 87.1, 94.5, 95.4

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 75.3, 75.4, 80.3, 80.0

Luminaire Efficacy Rating (LER): 100.79

Central Intensity: 1372.82 cd

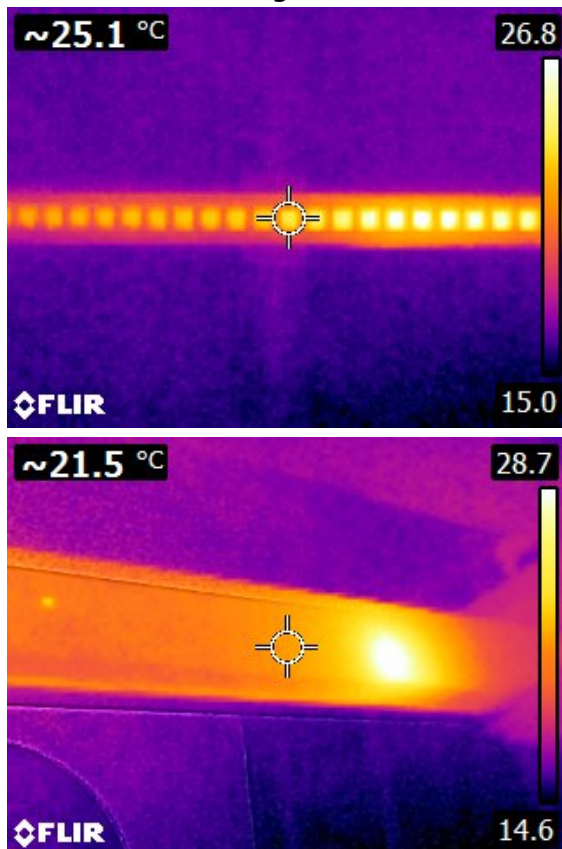
Max. Intensity: 1395.35 cd

Pos of Max. Intensity: H270 V8

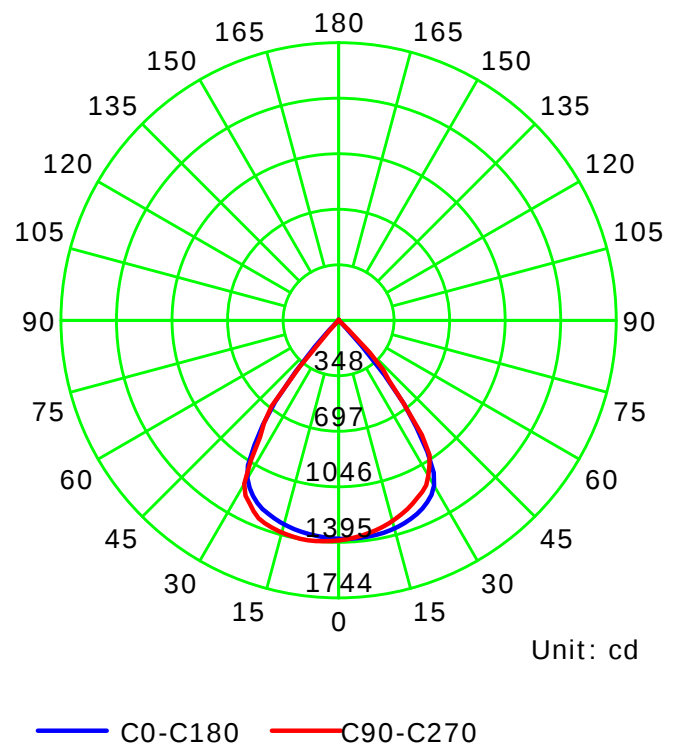
S/MH(C0/C180): 1.23

S/MH(C90/C270): 1.21

Termogramma



Luminous Intensity Distribution Curve



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

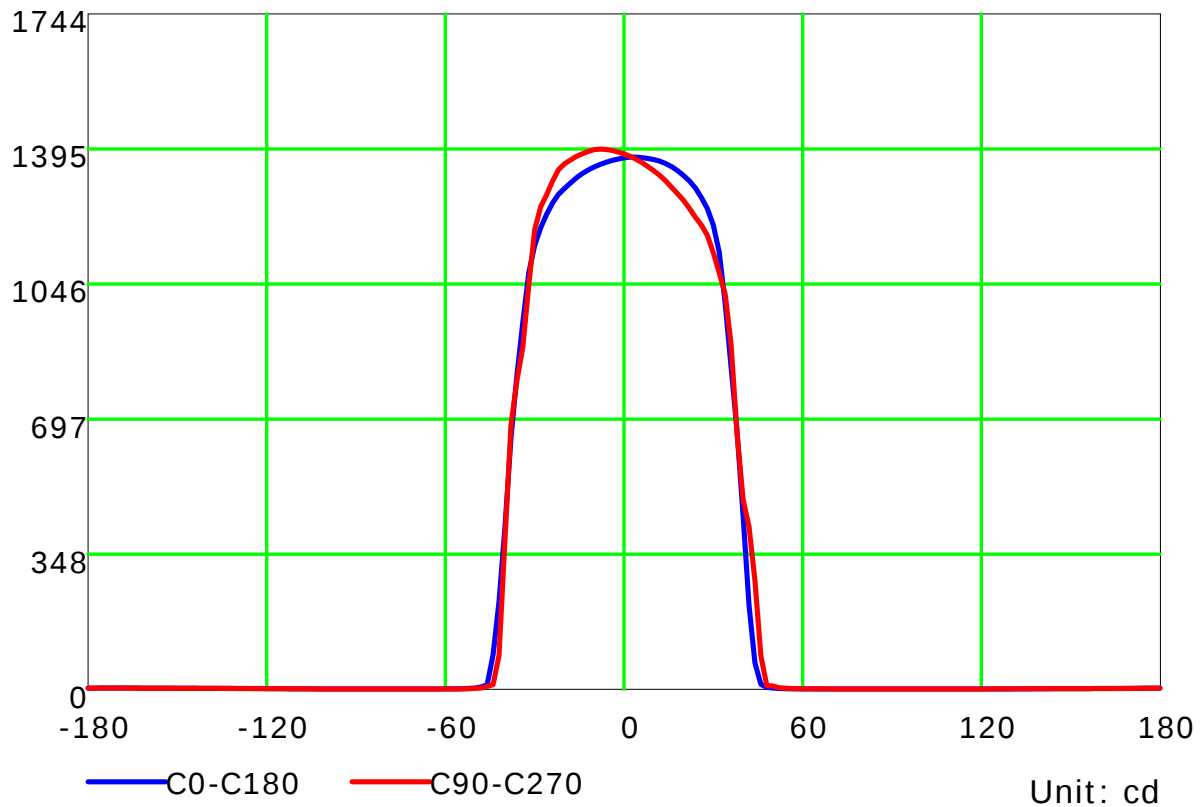
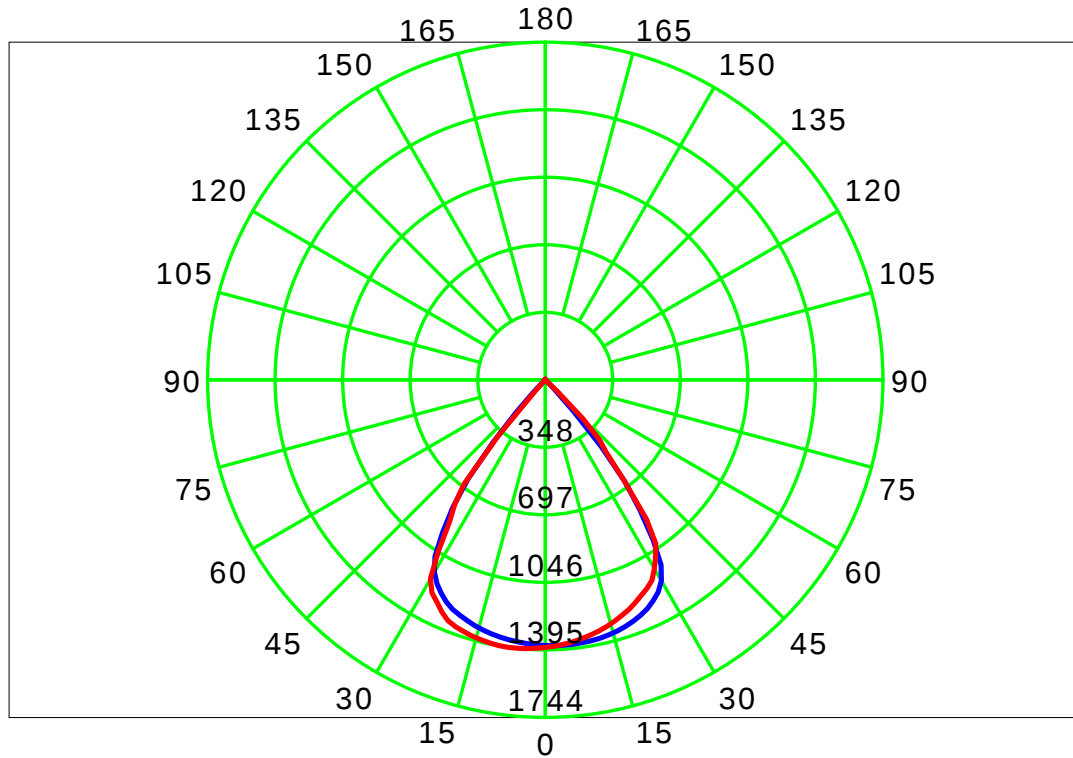
Temperature:

Humidity:

Operator:

Inspector:

Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 22.5

Test Lab:

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Operator:

Gamma Plane (°):0.0-180.0:2.0

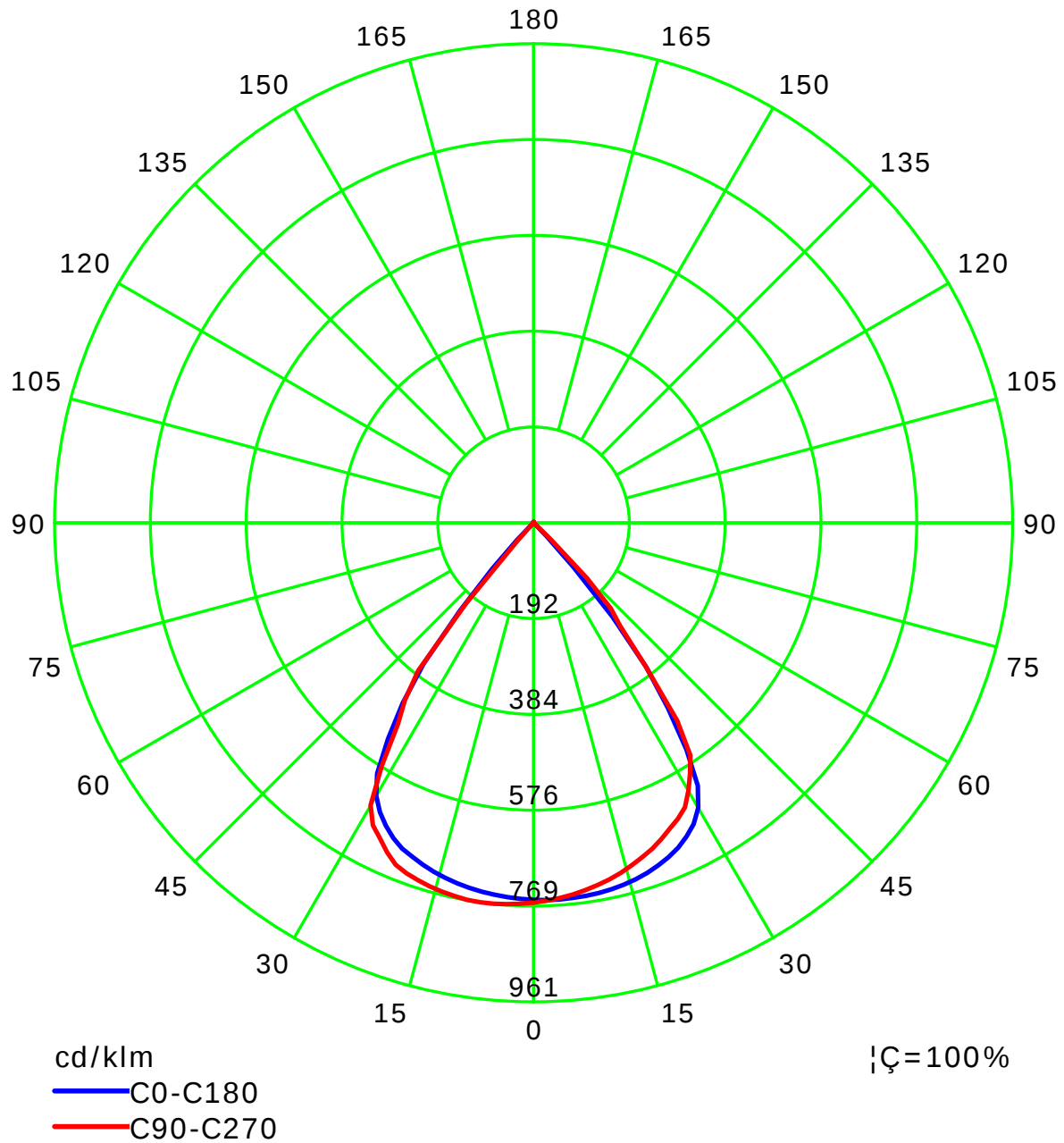
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

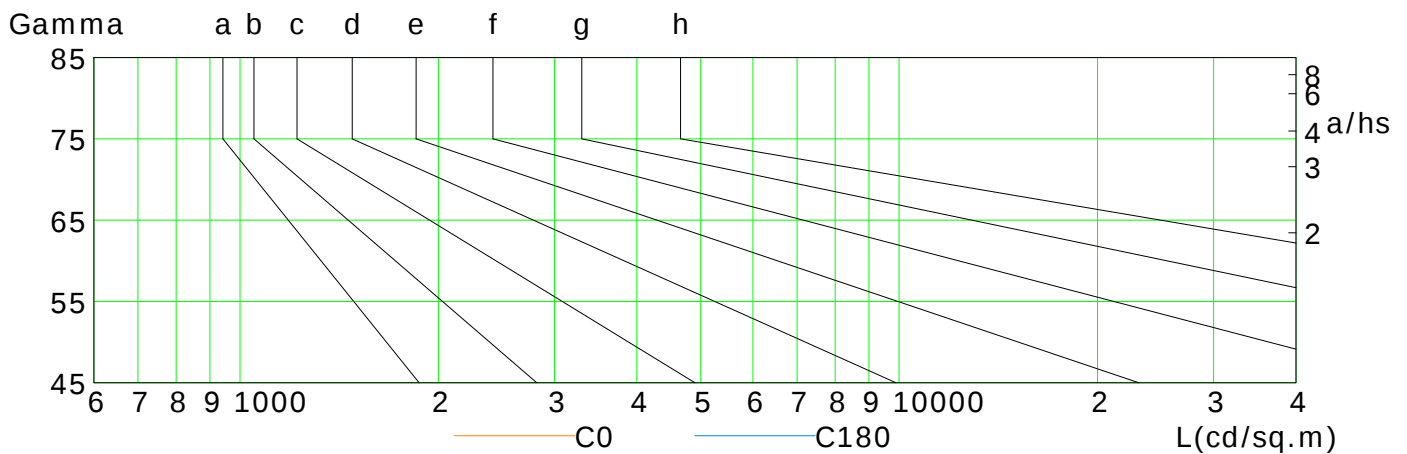
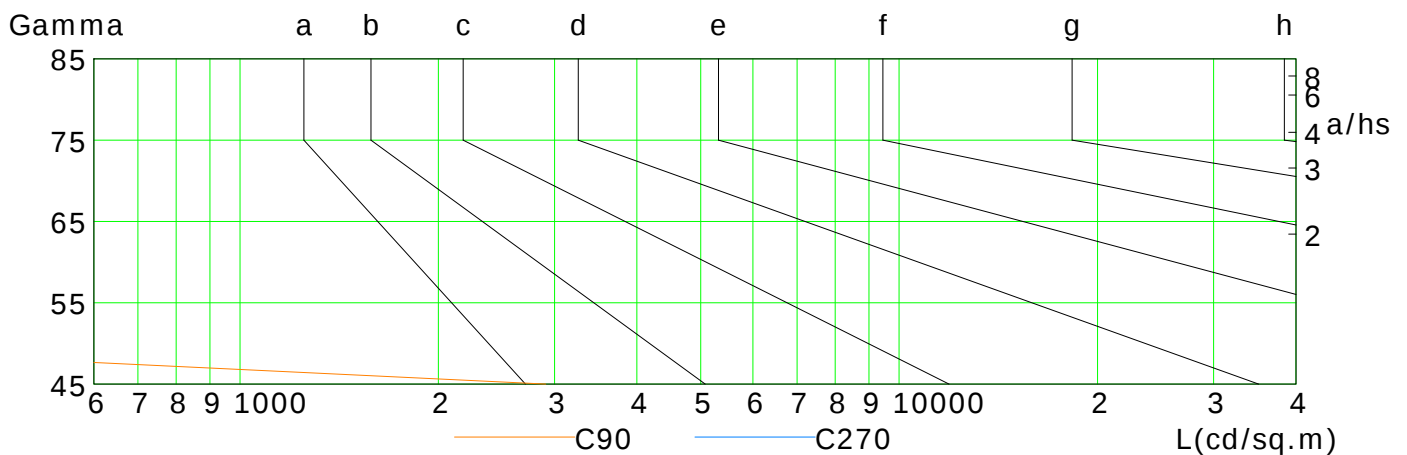
Luminous Intensity Distribution Curve(cd / klm)



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	378	31	15	12	12	12	13	14	14
C90	2911	151	51	32	33	34	43	57	88
C180	466	34	15	13	11	11	11	12	13
C270	157	44	24	22	25	31	40	50	80

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

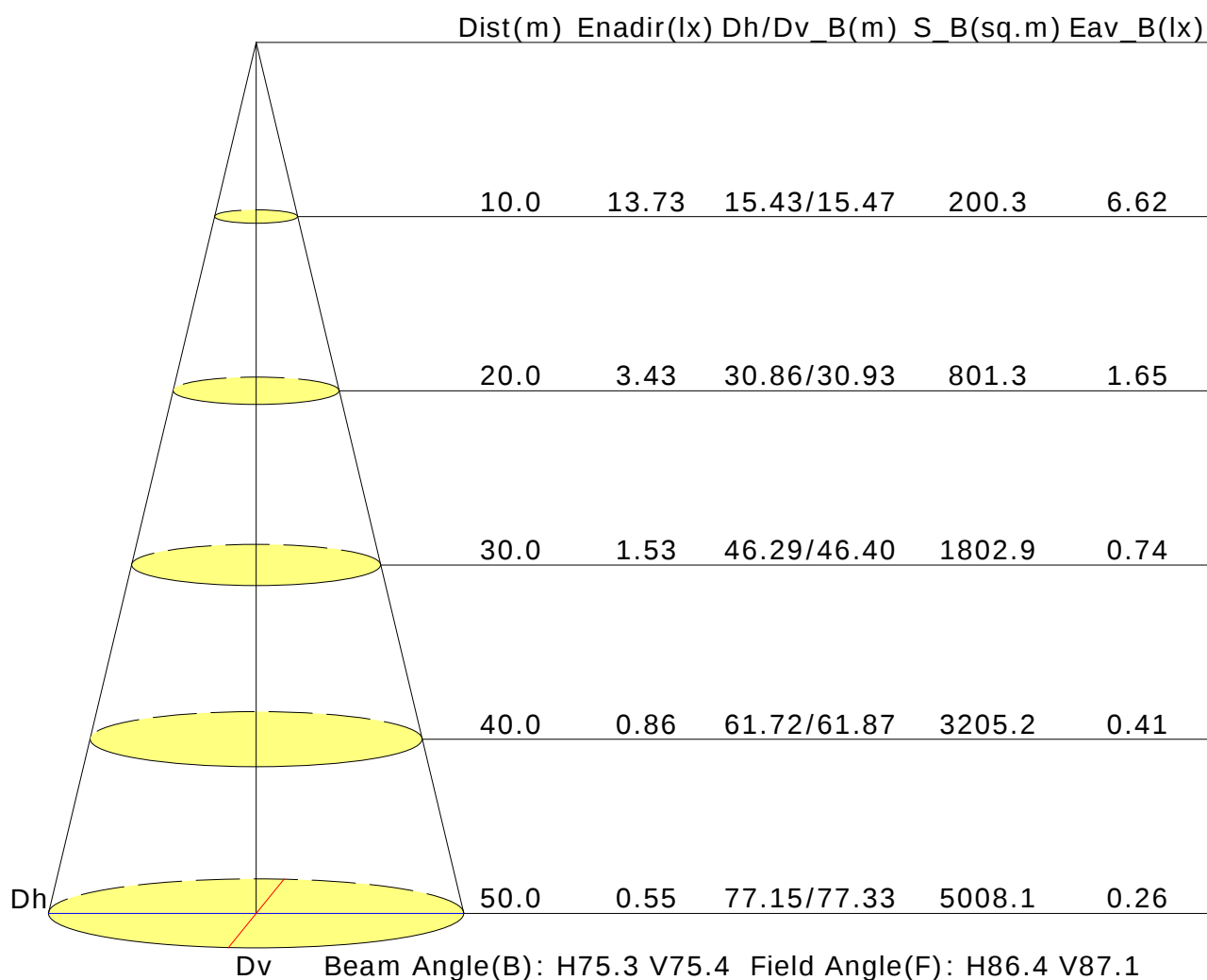
Test Device: LSG-1800B

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	12.3	13.3	12.6	13.5	13.7	13.0	14.0	13.3	14.2	14.4
3H	12.2	13.0	12.5	13.3	13.5	12.9	13.7	13.2	14.0	14.2
4H	12.1	12.9	12.4	13.2	13.5	12.8	13.6	13.1	13.9	14.1
6H	12.0	12.8	12.4	13.1	13.4	12.7	13.4	13.1	13.7	14.1
8H	12.0	12.7	12.4	13.0	13.3	12.7	13.4	13.0	13.7	14.0
12H	12.0	12.6	12.3	12.9	13.3	12.7	13.3	13.0	13.6	14.0
X=4H Y=2H	12.1	12.9	12.4	13.2	13.5	12.8	13.6	13.1	13.9	14.1
3H	12.0	12.6	12.3	12.9	13.3	12.7	13.3	13.0	13.6	14.0
4H	11.9	12.5	12.3	12.8	13.2	12.6	13.1	13.0	13.5	13.9
6H	11.8	12.3	12.2	12.7	13.1	12.5	13.0	12.9	13.4	13.8
8H	11.8	12.2	12.2	12.6	13.0	12.5	12.9	12.9	13.3	13.7
12H	11.7	12.1	12.2	12.6	13.0	12.4	12.8	12.9	13.2	13.7
X=8H Y=4H	11.8	12.2	12.2	12.6	13.0	12.4	12.9	12.9	13.3	13.7
6H	11.7	12.0	12.1	12.5	13.0	12.4	12.7	12.8	13.2	13.6
8H	11.6	12.0	12.1	12.4	12.9	12.3	12.6	12.8	13.1	13.6
12H	11.6	11.9	12.1	12.3	12.9	12.3	12.6	12.8	13.0	13.5
X=12H Y=4H	11.7	12.1	12.2	12.6	13.0	12.4	12.8	12.9	13.2	13.7
6H	11.6	12.0	12.1	12.4	12.9	12.3	12.6	12.8	13.1	13.6
8H	11.6	11.9	12.1	12.3	12.9	12.3	12.6	12.8	13.0	13.5
Variations with the observer position at spacings:										
S=1.0H	+4.3/-25.7					+4.6/-24.9				
S=1.5H	+7.1/-26.4					+7.5/-25.6				
S=2.0H	+9.0/-26.8					+9.5/-26.1				

Calculate in accordance with CIE Pub.117. The table is revised with 1815lm ($8\log(F/F_0) = 2.1$).

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	0.81	0.89	0.93	0.97	1.01	1.04	1.06	1.08	1.10	
	0.30		0.76	0.84	0.89	0.93	0.97	1.01	1.03	1.06	1.08	
	0.20		0.72	0.80	0.86	0.89	0.95	0.98	1.00	1.04	1.06	
0.50	0.50	0.20	0.79	0.87	0.91	0.94	0.98	1.01	1.02	1.04	1.05	
	0.30		0.75	0.83	0.88	0.91	0.95	0.98	1.00	1.02	1.04	
	0.20		0.72	0.80	0.85	0.88	0.93	0.96	0.98	1.01	1.03	
0.30	0.50	0.20	0.78	0.85	0.89	0.92	0.95	0.97	0.99	1.01	1.02	
	0.30		0.74	0.82	0.86	0.89	0.93	0.95	0.97	0.99	1.00	
	0.20		0.71	0.79	0.84	0.87	0.91	0.94	0.96	0.98	0.99	
0.00	0.00	0.00	0.70	0.77	0.81	0.84	0.88	0.90	0.92	0.94	0.95	
Rating:18W 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	0.63	0.49	0.41	0.35	0.27	0.22	0.19	0.15	0.12	
	0.30		0.52	0.42	0.36	0.31	0.25	0.21	0.18	0.14	0.11	
	0.20		0.45	0.37	0.32	0.28	0.22	0.19	0.16	0.13	0.11	
0.50	0.50	0.20	0.60	0.46	0.38	0.33	0.25	0.25	0.18	0.13	0.11	
	0.30		0.50	0.40	0.34	0.29	0.23	0.19	0.16	0.13	0.10	
	0.20		0.44	0.36	0.30	0.27	0.21	0.18	0.15	0.12	0.10	
0.30	0.50	0.20	0.57	0.44	0.36	0.31	0.23	0.19	0.16	0.12	0.10	
	0.30		0.49	0.39	0.32	0.28	0.22	0.18	0.15	0.12	0.10	
	0.20		0.43	0.35	0.29	0.25	0.20	0.17	0.14	0.11	0.09	
0.00	0.00	0.00	0.30	0.22	0.18	0.15	0.12	0.09	0.08	0.06	0.05	
Rating:18W 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 = 1.00									
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	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.21	
	0.30		0.09	0.11	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	0.15	0.16	0.17	0.19	
0.50	0.50	0.20	0.13	0.15	0.16	0.16	0.18	0.18	0.19	0.20	0.20	
	0.30		0.09	0.11	0.12	0.14	0.15	0.16	0.17	0.18	0.19	
	0.20		0.06	0.08	0.10	0.11	0.13	0.14	0.16	0.17	0.18	
0.30	0.50	0.20	0.13	0.14	0.15	0.16	0.17	0.18	0.18	0.19	0.19	
	0.30		0.09	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.18	
	0.20		0.06	0.08	0.10	0.11	0.13	0.14	0.15	0.17	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:18W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												