

Report No.:

Test Time: 21.08.2020 13:40

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FL 52 56LED 24W 4000K 80 rp.

Luminous Length (mm): 1130

Luminous Width (mm): 75

Luminous Height (mm): 60

Voltage: 221.6 V

Current: 0.116 A

Power: 24.05 W

Power Factor: 0.932

Photometric Results

CIE Class: Direct

Total Rated Lamp Lumens: 2398.3 lm

Measurement Flux: 2398.3 lm

Efficiency: 100%

Downward Ratio: 100%

Upward Ratio: 0%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 85.8, 86.8, 94.5, 95.2

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 74.6, 73.8, 80.2, 80.3

Luminaire Efficacy Rating (LER): 99.77

Central Intensity: 1832.07 cd

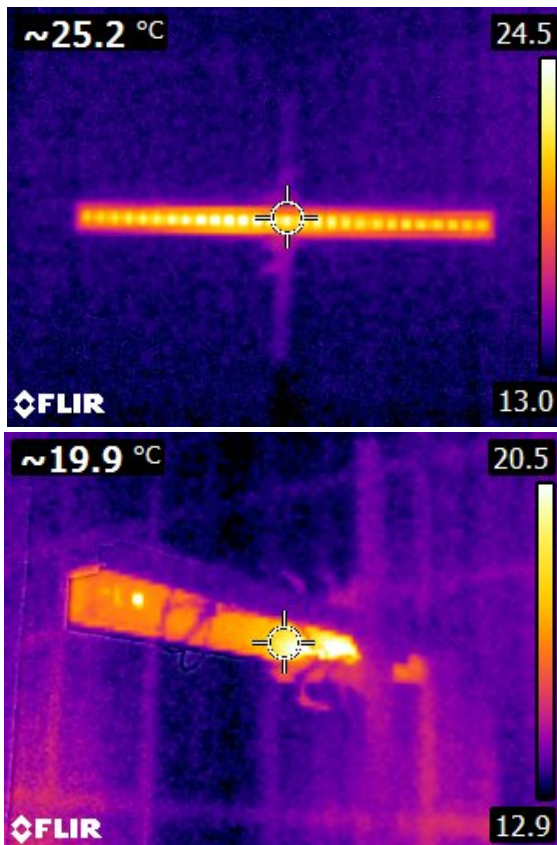
Max. Intensity: 1837.52 cd

Pos of Max. Intensity: H135 V2

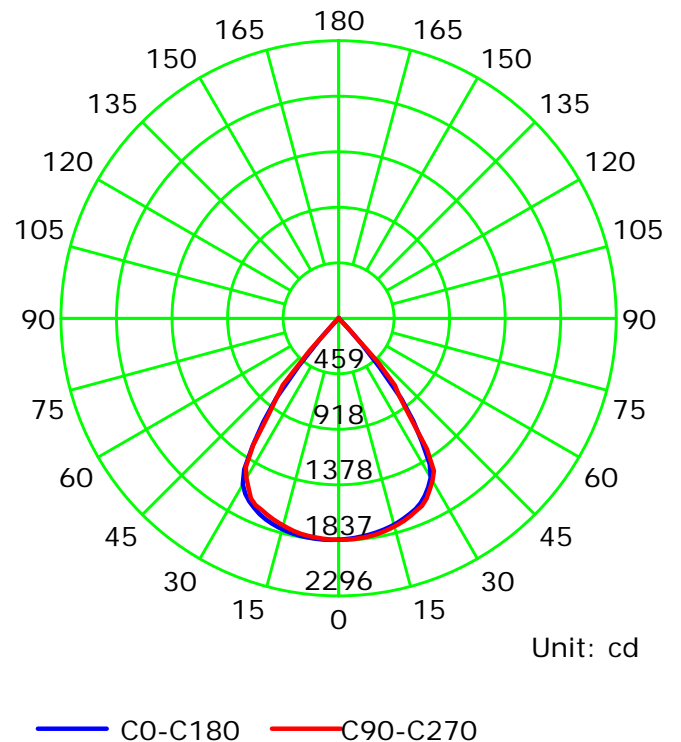
S/MH(C0/C180): 1.22

S/MH(C90/C270): 1.23

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

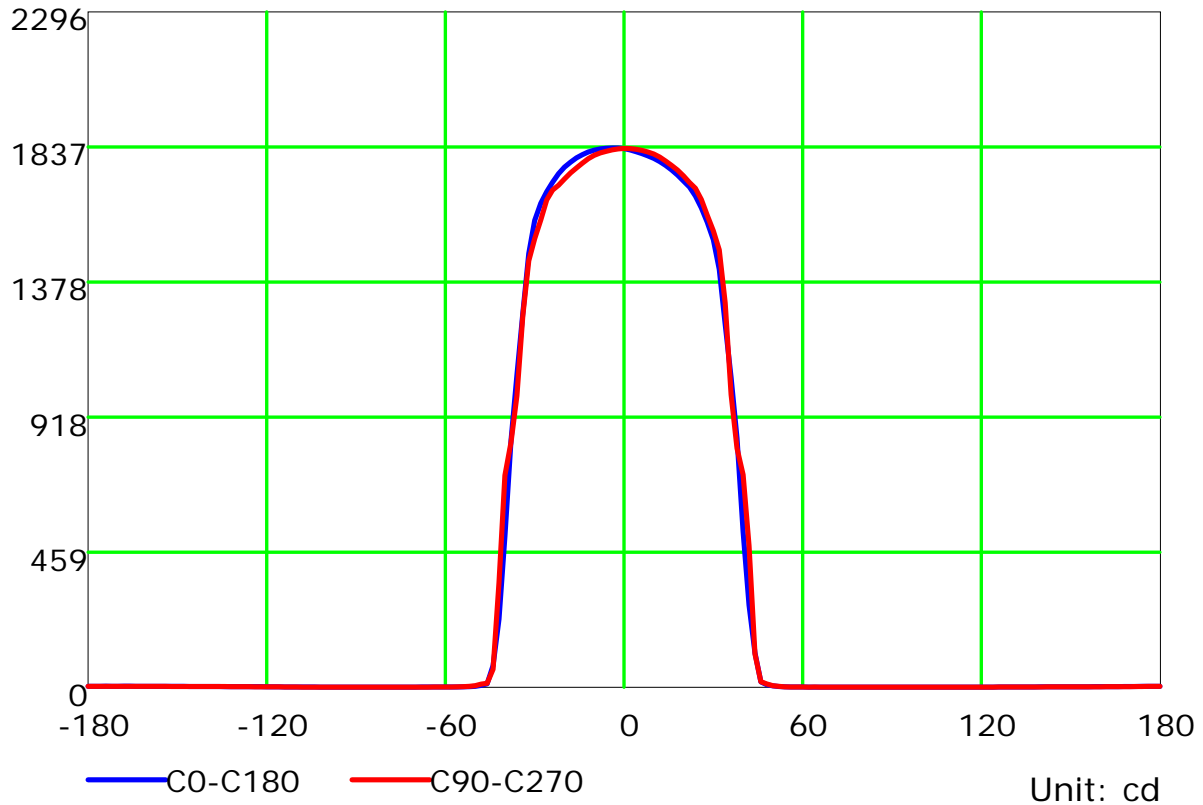
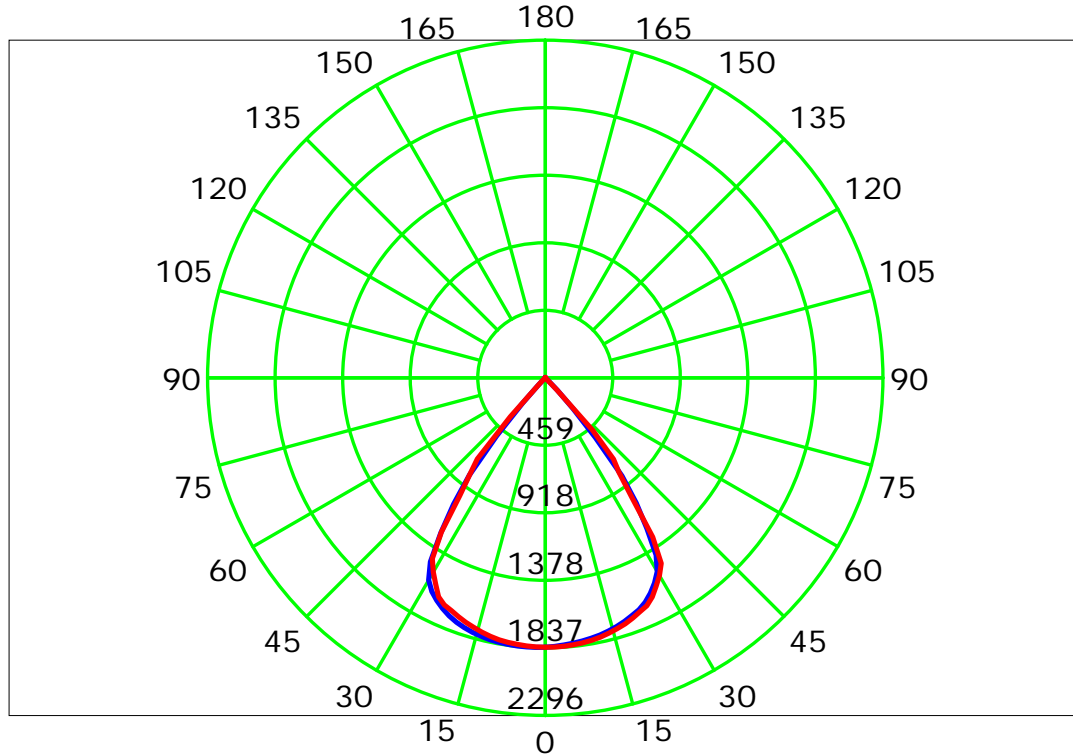
Temperature:

Humidity:

Operator:

Inspector:

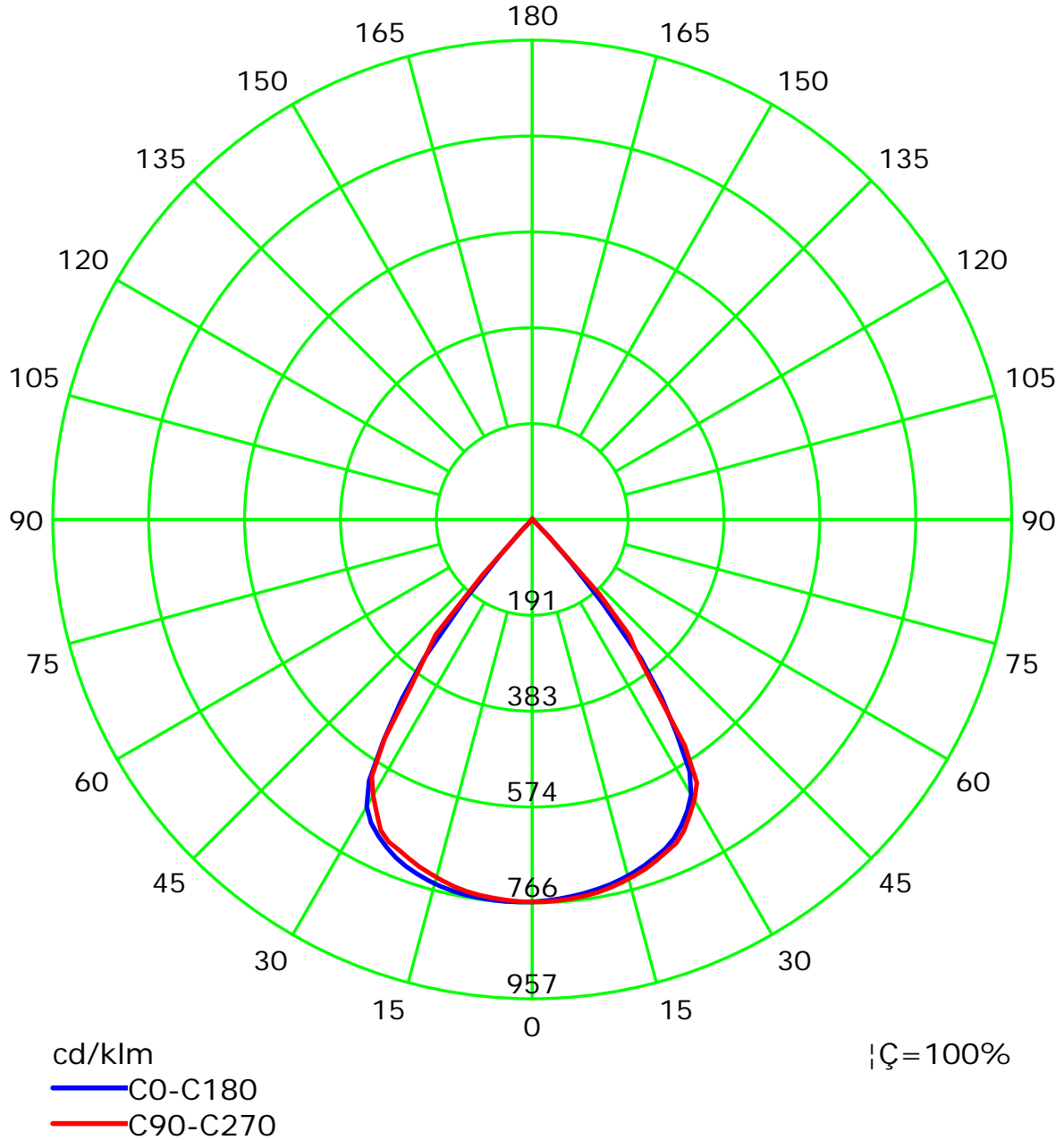
Luminous Intensity Distribution Curve



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

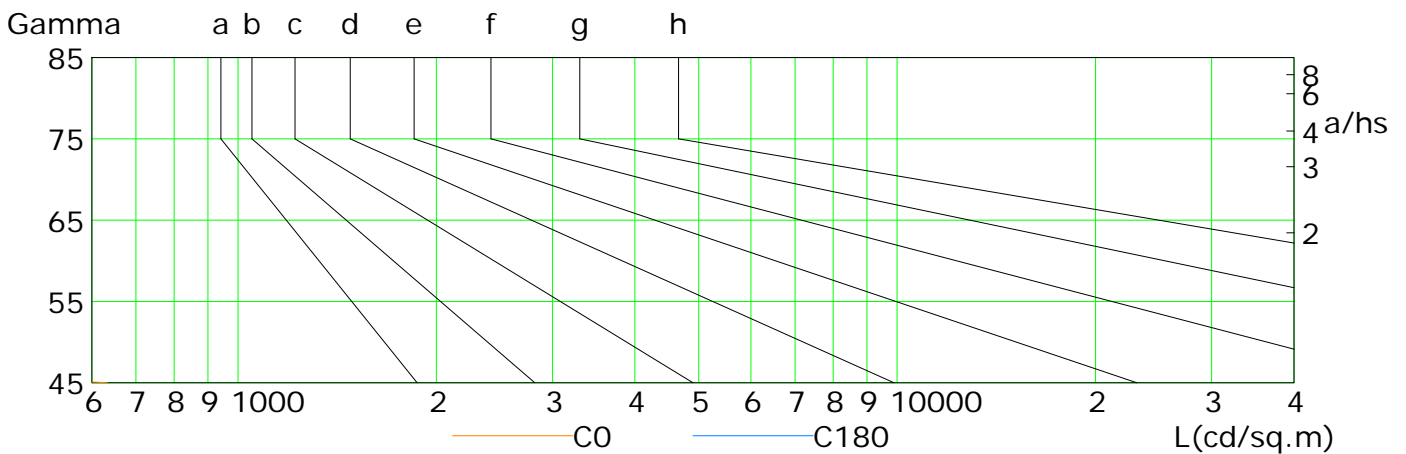
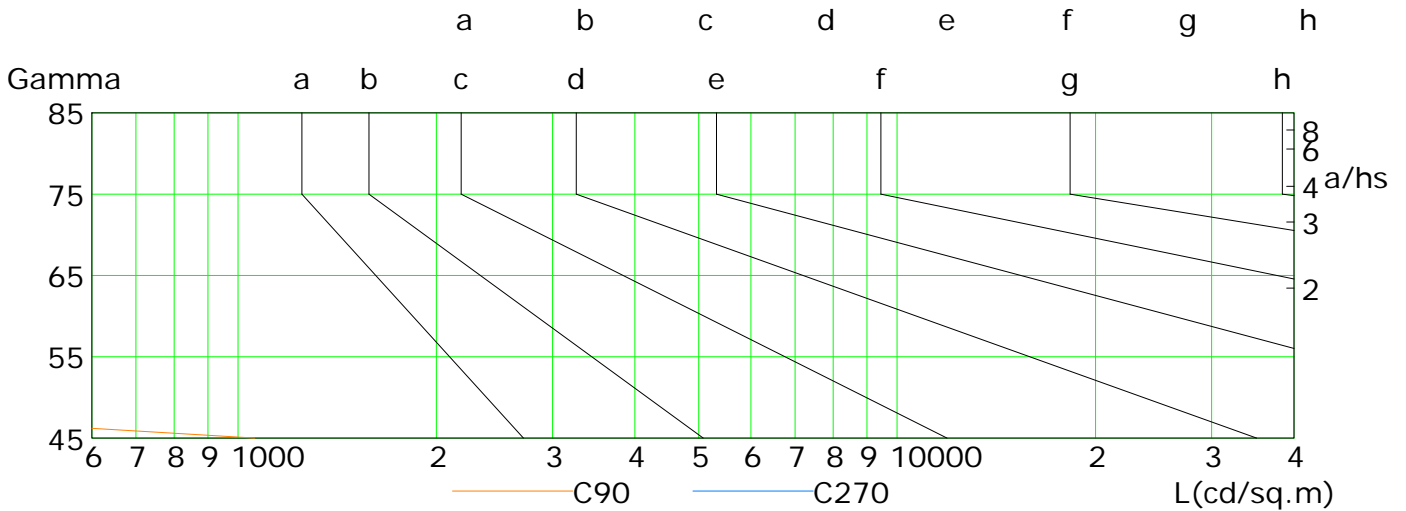
Gamma Plane (°):0.0-180.0:2.0
 Test Device: LSG-1800B
 Distance: 12.677 m
 Humidity:
 Inspector:

Luminous Intensity Distribution Curve(cd/klm)



Lum Limit Curve

Dazzle	Quality	Illuminance (lx)							
		a	b	c	d	e	f	g	h
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	633	48	17	12	9	8	10	11	11
C90	1060	99	32	24	26	25	29	40	62
C180	402	36	16	13	13	11	11	11	11
C270	599	95	37	31	27	29	33	43	62

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

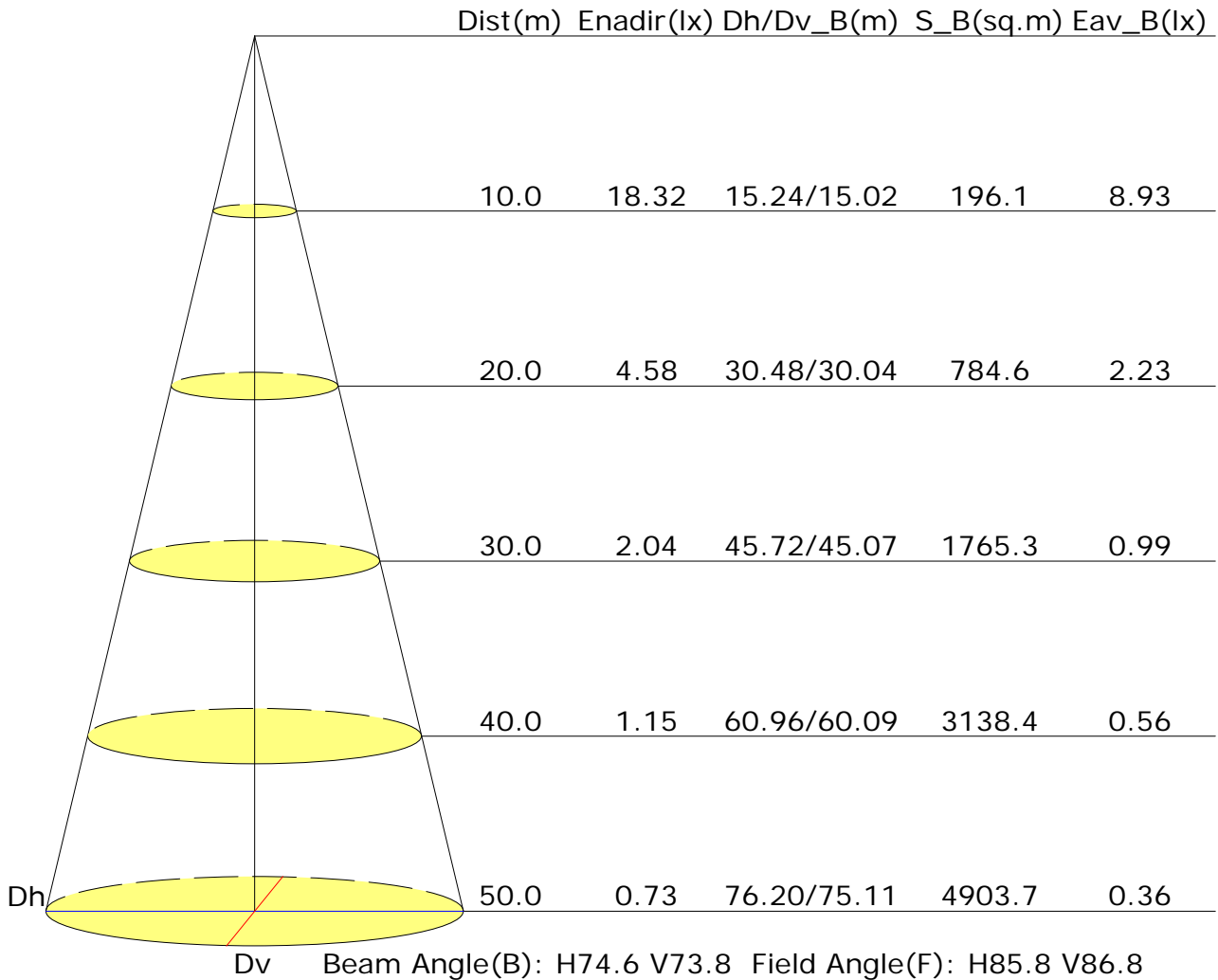
Test Device: LSG-1800B

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	13.1	14.0	13.4	14.2	14.5	14.3	15.2	14.5	15.4	15.6
3H	13.0	13.8	13.3	14.0	14.3	14.1	14.9	14.4	15.2	15.5
4H	12.9	13.7	13.2	13.9	14.2	14.0	14.8	14.4	15.1	15.4
6H	12.8	13.5	13.2	13.8	14.1	14.0	14.7	14.3	15.0	15.3
8H	12.8	13.5	13.1	13.8	14.1	13.9	14.6	14.3	14.9	15.2
12H	12.7	13.4	13.1	13.7	14.0	13.9	14.5	14.3	14.9	15.2
X=4H Y=2H	12.9	13.7	13.2	13.9	14.2	14.0	14.8	14.4	15.1	15.4
3H	12.7	13.4	13.1	13.7	14.0	13.9	14.5	14.3	14.9	15.2
4H	12.6	13.2	13.0	13.6	13.9	13.8	14.4	14.2	14.7	15.1
6H	12.6	13.1	13.0	13.5	13.9	13.7	14.2	14.1	14.6	15.0
8H	12.5	13.0	13.0	13.4	13.8	13.7	14.1	14.1	14.5	15.0
12H	12.5	12.9	12.9	13.3	13.8	13.6	14.1	14.1	14.5	14.9
X=8H Y=4H	12.5	13.0	13.0	13.4	13.8	13.7	14.1	14.1	14.5	15.0
6H	12.4	12.8	12.9	13.2	13.7	13.6	14.0	14.1	14.4	14.9
8H	12.4	12.7	12.9	13.2	13.7	13.6	13.9	14.0	14.3	14.8
12H	12.4	12.6	12.9	13.1	13.6	13.5	13.8	14.0	14.3	14.8
X=12H Y=4H	12.5	12.9	12.9	13.3	13.8	13.6	14.1	14.1	14.5	14.9
6H	12.4	12.7	12.9	13.2	13.7	13.6	13.9	14.0	14.3	14.8
8H	12.4	12.6	12.9	13.1	13.6	13.5	13.8	14.0	14.3	14.8
Variations with the observer position at spacings:										
S=1.0H	+4.5/-27.9					+4.2/-27.3				
S=1.5H	+7.1/-29.2					+7.0/-28.4				
S=2.0H	+9.1/-29.7					+9.0/-29.0				

Calculate in accordance with CIE Pub.117. The table is revised with 2398lm ($8\log(F/F_0) = 3.0$).

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	1.05	1.08	1.09	
	0.30		0.76	0.84	0.89	0.93	0.97	1.00	1.03	1.05	1.07	
	0.20		0.72	0.81	0.86	0.89	0.95	0.98	1.00	1.04	1.06	
0.50	0.50	0.20	0.80	0.87	0.91	0.94	0.98	1.00	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	1.02	
0.30	0.50	0.20	0.78	0.85	0.89	0.92	0.95	0.97	0.99	1.00	1.01	
	0.30		0.74	0.82	0.86	0.89	0.93	0.95	0.97	0.99	1.00	
	0.20		0.72	0.79	0.84	0.87	0.91	0.94	0.95	0.98	0.99	
0.00	0.00	0.00	0.70	0.77	0.81	0.84	0.88	0.90	0.92	0.93	0.95	
<p>Rating: 24W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>												

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	0.62	0.49	0.40	0.35	0.27	0.22	0.19	0.14	0.12
	0.30		0.52	0.42	0.35	0.31	0.24	0.20	0.17	0.14	0.11
	0.20		0.44	0.36	0.31	0.27	0.22	0.19	0.16	0.13	0.11
0.50	0.50	0.20	0.59	0.46	0.38	0.32	0.25	0.24	0.17	0.13	0.11
	0.30		0.50	0.40	0.33	0.29	0.23	0.19	0.16	0.12	0.10
	0.20		0.43	0.35	0.30	0.26	0.21	0.18	0.15	0.12	0.10
0.30	0.50	0.20	0.56	0.43	0.36	0.30	0.23	0.19	0.16	0.12	0.10
	0.30		0.48	0.38	0.32	0.27	0.21	0.18	0.15	0.12	0.09
	0.20		0.42	0.34	0.29	0.25	0.20	0.17	0.14	0.11	0.09
0.00	0.00	0.00	0.29	0.22	0.18	0.15	0.11	0.09	0.08	0.06	0.05
<p>Rating: 24W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>											

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	0.20	0.21
	0.30		0.09	0.11	0.13	0.14	0.15	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	0.18
0.50	0.50	0.20	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.20
	0.30		0.09	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.19
	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	0.13	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	0.16	0.18	0.18
	0.20		0.06	0.08	0.10	0.11	0.13	0.14	0.15	0.16	0.17
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<p>Rating: 24W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>											