

Report No.:

Test Time: 17.04.2020 18:24

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FL 60 2x96LED 0,45A 45W 4000K матовый (opal)

Luminous Length (mm): 1500

Luminous Width (mm): 60

Luminous Height (mm): 70

Voltage: 228.9 V

Current: 0.198 A

Power: 44.61 W

Power Factor: 0.981

Photometric Results

CIE Class: Direct

Measurement Flux: 4311.3 lm

Downward Ratio: 100%

Total Rated Lamp Lumens: 4311.3 lm

Efficiency: 100%

Upward Ratio: 0%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 165.7, 162.9, 163.9, 163.9

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 113.9, 112.2, 113.0, 113.0

Luminaire Efficacy Rating (LER): 96.69

Central Intensity: 1479.69 cd

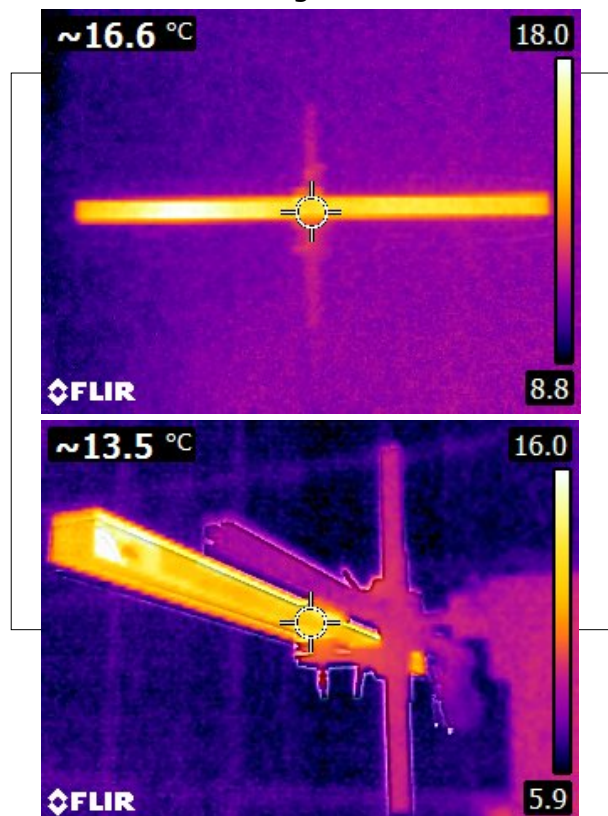
Max. Intensity: 1480.34 cd

Pos of Max. Intensity: H45 V2

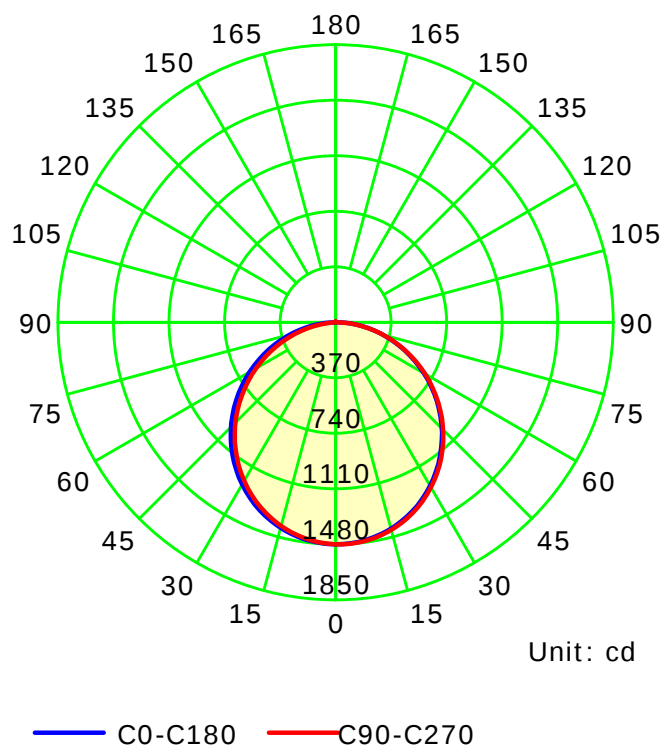
S/MH(C0/C180): 1.26

S/MH(C90/C270): 1.25

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

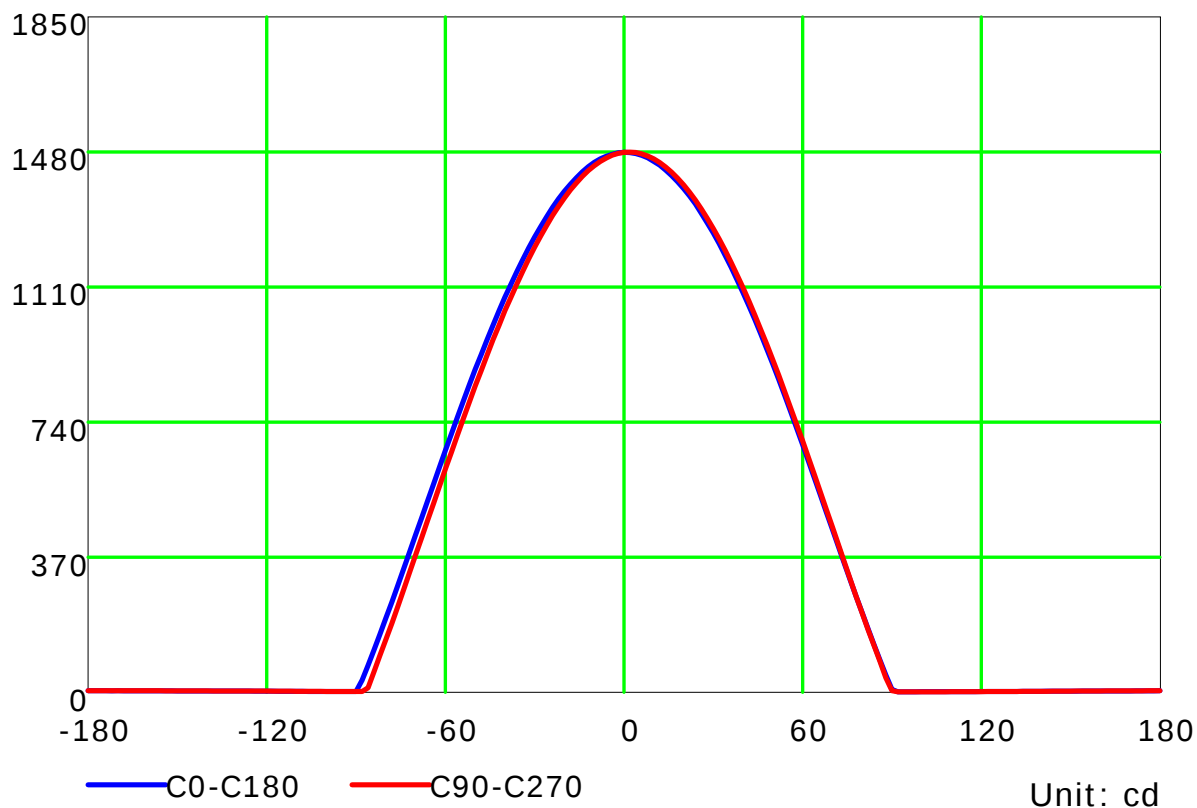
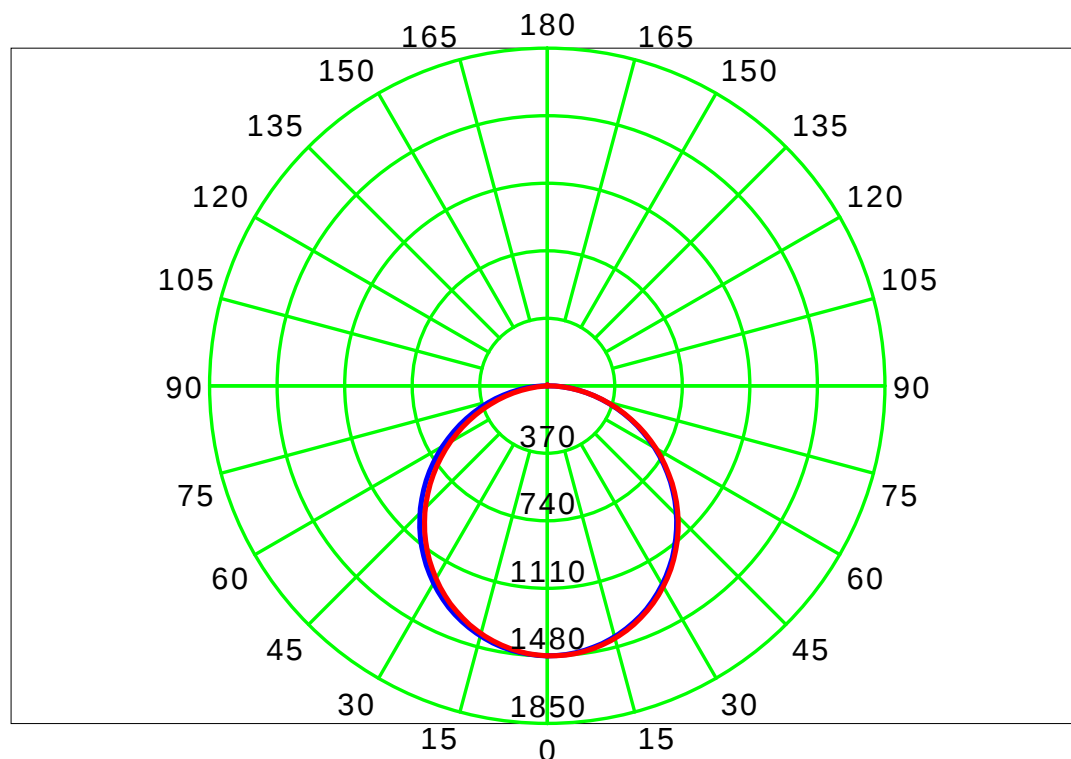
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve



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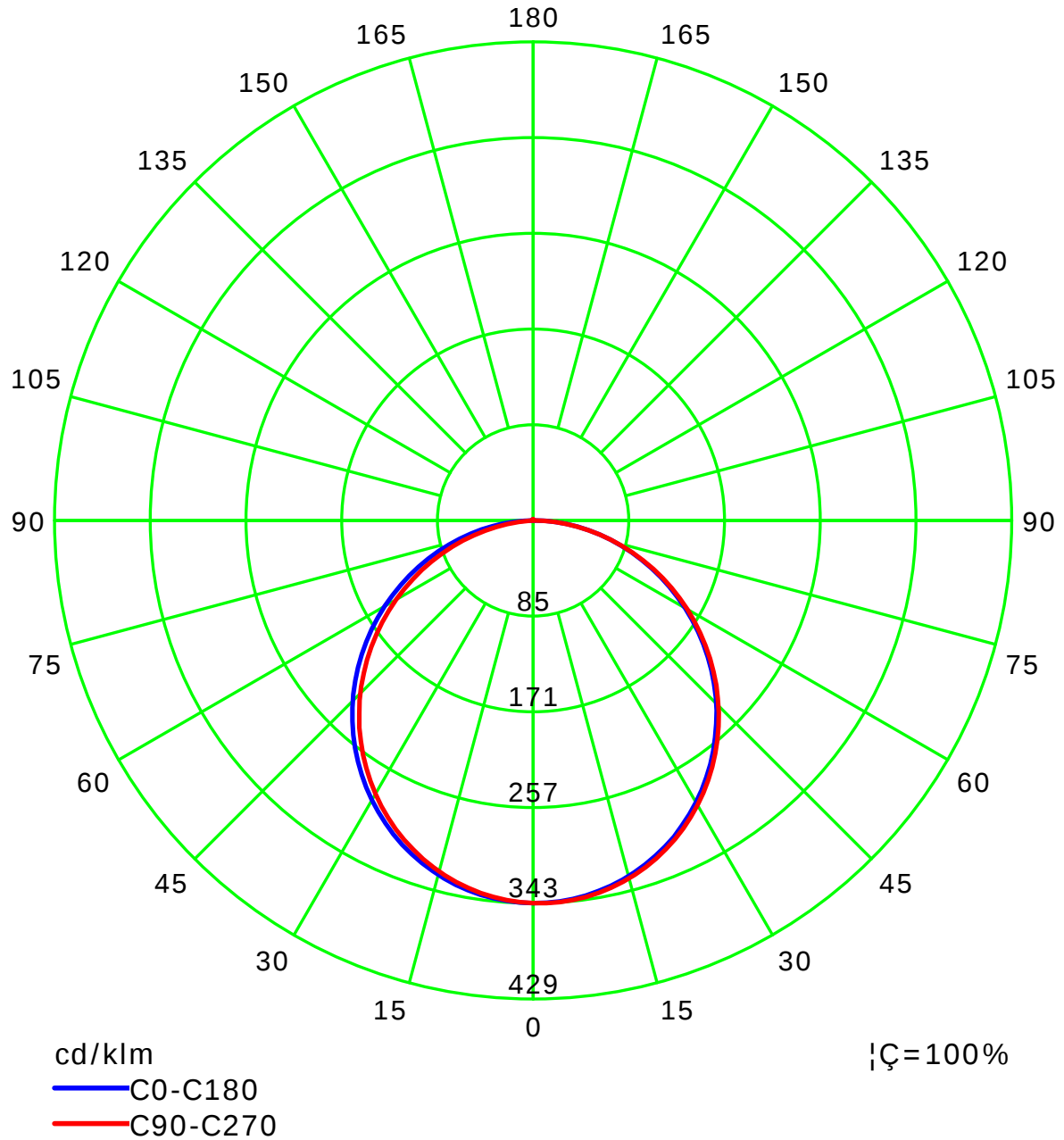
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

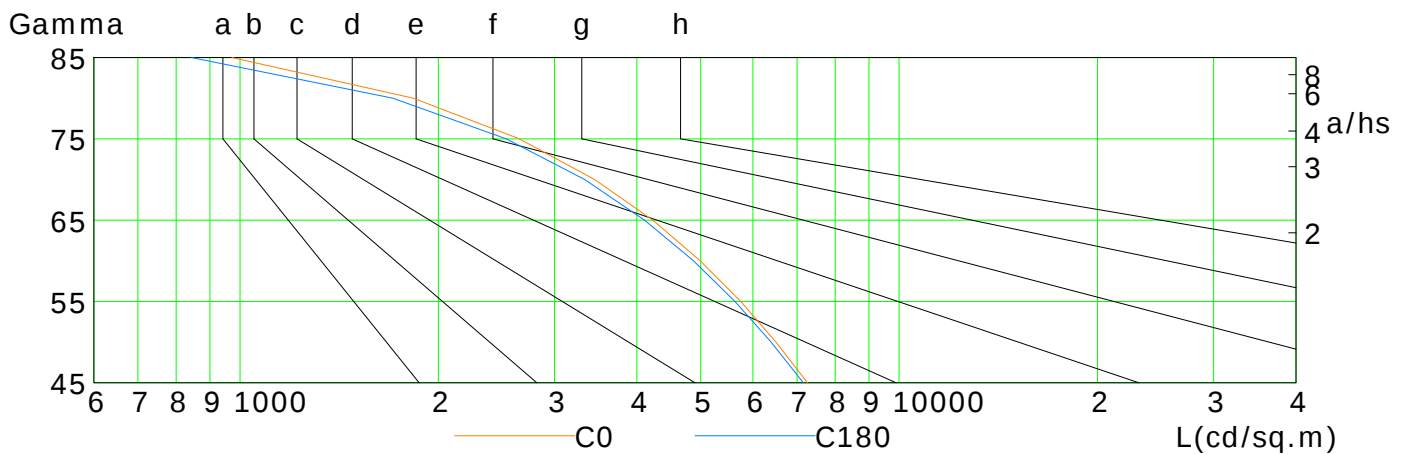
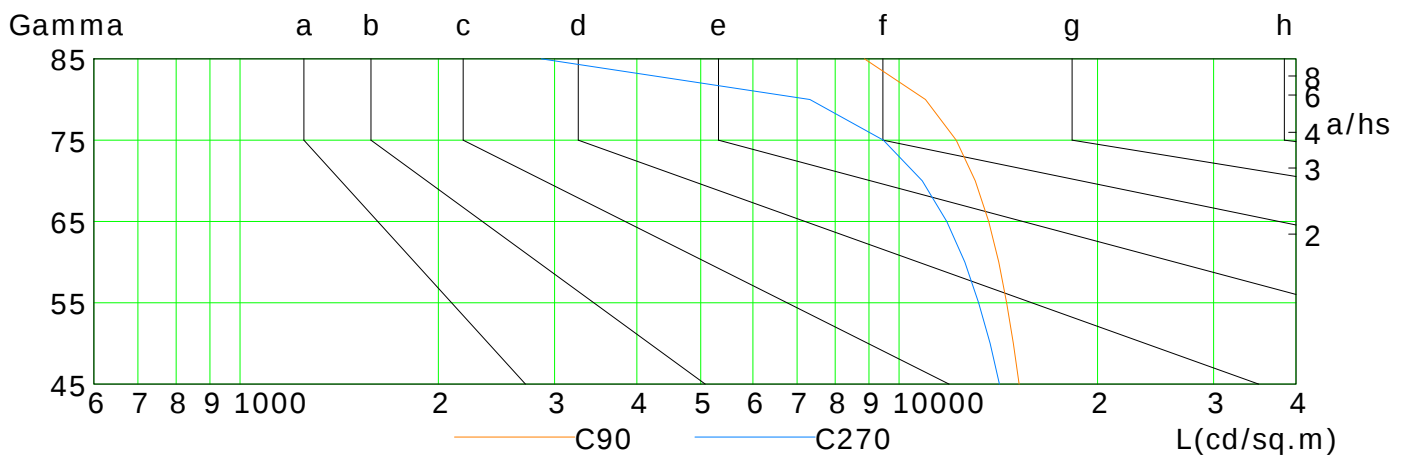
Luminous Intensity Distribution Curve(cd / klm)



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	7262	6503	5750	4993	4229	3450	2654	1833	972
C90	15207	14907	14554	14164	13671	13043	12208	10963	8861
C180	7154	6396	5636	4876	4110	3334	2534	1706	844
C270	14196	13739	13202	12579	11812	10844	9465	7321	2866

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Operator:

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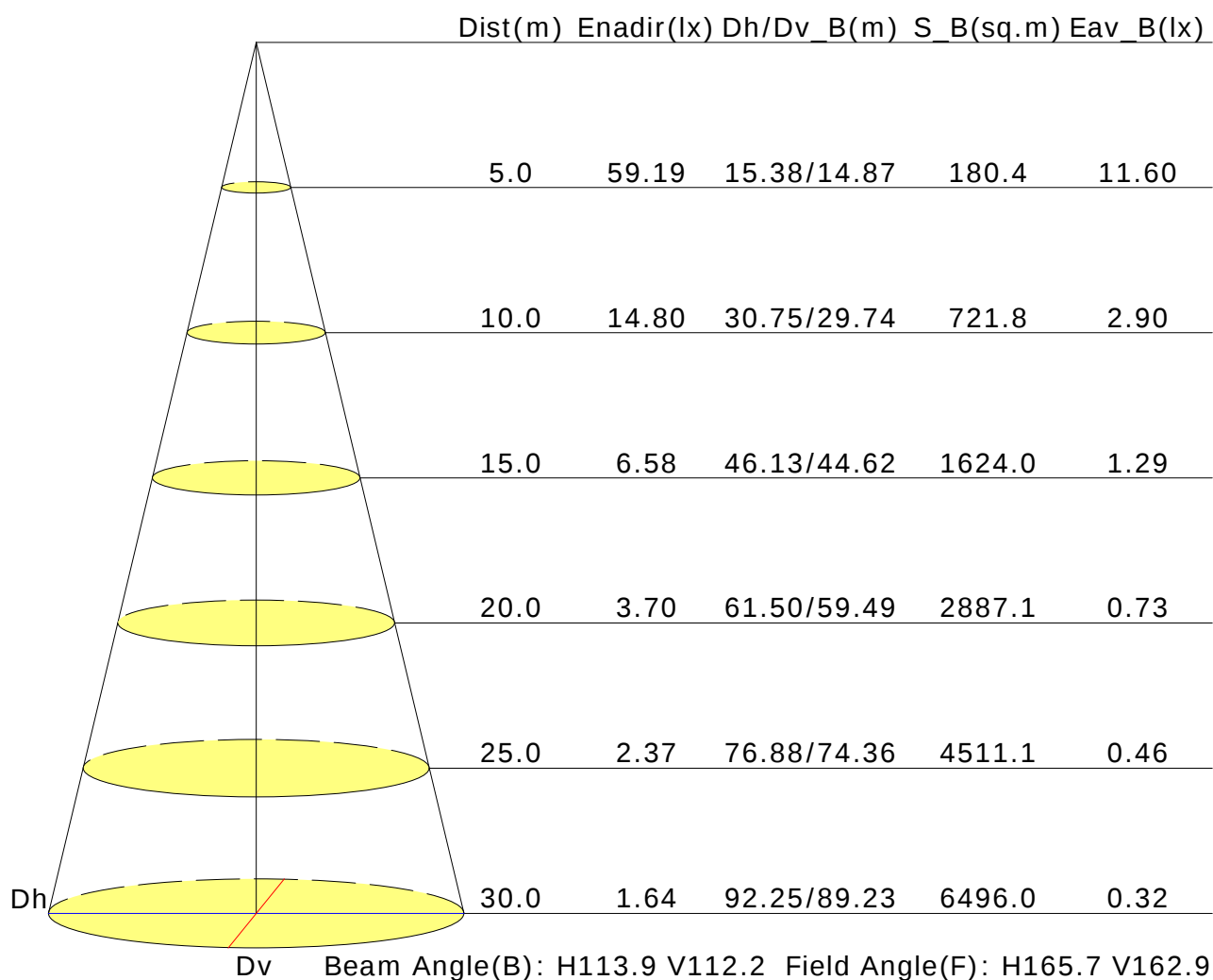
Test Device: LSG-1800B

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	18.8	20.2	19.2	20.5	20.7	20.5	21.9	20.8	22.1	22.4
3H	20.0	21.3	20.4	21.6	21.9	22.0	23.3	22.3	23.6	23.9
4H	20.4	21.6	20.8	21.9	22.3	22.6	23.8	23.0	24.1	24.5
6H	20.7	21.8	21.1	22.2	22.5	23.1	24.2	23.5	24.5	24.9
8H	20.8	21.9	21.2	22.2	22.5	23.2	24.3	23.6	24.7	25.0
12H	20.8	21.9	21.2	22.2	22.5	23.3	24.4	23.7	24.7	25.1
X=4H Y=2H	19.5	20.7	19.8	21.0	21.3	20.8	22.0	21.1	22.3	22.6
3H	20.8	21.9	21.2	22.2	22.6	22.5	23.5	22.9	23.9	24.2
4H	21.4	22.3	21.8	22.7	23.0	23.2	24.1	23.6	24.5	24.9
6H	21.7	22.6	22.2	22.9	23.4	23.8	24.6	24.2	25.0	25.4
8H	21.8	22.6	22.3	23.0	23.4	23.9	24.7	24.4	25.1	25.5
12H	21.9	22.6	22.3	23.0	23.5	24.1	24.7	24.5	25.2	25.6
X=8H Y=4H	21.6	22.4	22.1	22.8	23.2	23.3	24.1	23.8	24.5	24.9
6H	22.1	22.7	22.6	23.1	23.6	23.9	24.6	24.4	25.0	25.5
8H	22.2	22.8	22.7	23.2	23.7	24.2	24.7	24.7	25.2	25.7
12H	22.3	22.8	22.8	23.3	23.8	24.3	24.8	24.8	25.3	25.8
X=12H Y=4H	21.6	22.3	22.1	22.7	23.2	23.3	24.0	23.8	24.4	24.9
6H	22.1	22.7	22.6	23.1	23.6	23.9	24.5	24.4	25.0	25.4
8H	22.3	22.8	22.8	23.3	23.8	24.2	24.7	24.7	25.1	25.7
Variations with the observer position at spacings:										
S=1.0H	+0.2/-0.2					+0.2/-0.1				
S=1.5H	+0.4/-0.7					+0.3/-0.4				
S=2.0H	+0.6/-1.2					+0.9/-1.0				

Calculate in accordance with CIE Pub.117. The table is revised with 4311lm ($8\log(F/F_0) = 5.1$).

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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	0.56	0.66	0.73	0.79	0.86	0.91	0.95	1.00	1.03	
	0.30		0.48	0.58	0.66	0.72	0.80	0.86	0.90	0.95	0.99	
	0.20		0.42	0.52	0.60	0.66	0.75	0.81	0.85	0.92	0.96	
0.50	0.50	0.20	0.54	0.64	0.71	0.76	0.83	0.88	0.91	0.96	0.98	
	0.30		0.47	0.57	0.64	0.70	0.78	0.83	0.87	0.92	0.95	
	0.20		0.42	0.52	0.59	0.65	0.73	0.79	0.83	0.89	0.93	
0.30	0.50	0.20	0.53	0.62	0.69	0.73	0.80	0.85	0.88	0.92	0.94	
	0.30		0.46	0.56	0.63	0.68	0.75	0.81	0.84	0.89	0.92	
	0.20		0.41	0.51	0.58	0.64	0.72	0.77	0.81	0.86	0.90	
0.00	0.00	0.00	0.39	0.49	0.56	0.61	0.68	0.73	0.77	0.82	0.85	
Rating:45W 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	1.01	0.84	0.72	0.62	0.50	0.42	0.36	0.28	0.23	
	0.30		0.84	0.72	0.62	0.55	0.45	0.38	0.33	0.26	0.22	
	0.20		0.72	0.63	0.55	0.50	0.41	0.35	0.31	0.25	0.21	
0.50	0.50	0.20	0.98	0.81	0.69	0.60	0.48	0.43	0.34	0.26	0.22	
	0.30		0.83	0.70	0.61	0.54	0.44	0.37	0.32	0.25	0.21	
	0.20		0.72	0.62	0.54	0.49	0.40	0.34	0.30	0.24	0.20	
0.30	0.50	0.20	0.95	0.77	0.66	0.57	0.46	0.38	0.32	0.25	0.21	
	0.30		0.81	0.68	0.59	0.52	0.42	0.36	0.31	0.24	0.20	
	0.20		0.71	0.61	0.53	0.48	0.39	0.33	0.29	0.23	0.19	
0.00	0.00	0.00	0.61	0.51	0.44	0.39	0.32	0.27	0.23	0.18	0.15	
Rating:45W 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	0.17	0.18	0.19	0.20	0.21	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	0.08	0.09	0.11	0.13	0.14	0.16	0.17
0.50	0.50	0.20	0.16	0.17	0.18	0.19	0.20	0.20	0.21	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	0.06	0.08	0.09	0.11	0.13	0.14	0.15	0.17
0.30	0.50	0.20	0.16	0.17	0.18	0.18	0.19	0.19	0.20	0.20	0.20
	0.30		0.10	0.11	0.12	0.13	0.15	0.16	0.16	0.18	0.18
	0.20		0.05	0.06	0.08	0.09	0.11	0.12	0.13	0.15	0.16
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rating:45W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980											