

Report No.:

Test Time: 29.09.2020 13:10

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 595 36W 5000K opal (NOVATTRO) IP40 EVEN

Luminous Length (mm): 595

Luminous Width (mm): 595

Luminous Height (mm): 40

Voltage: 221.5 V

Current: 0.175 A

Power: 33.31 W

Power Factor: 0.855

Photometric Results

CIE Class: Direct

Measurement Flux: 3137.5 lm

Downward Ratio: 100%

Total Rated Lamp Lumens: 3137.5 lm

Efficiency: 100%

Upward Ratio: 0%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 161.6, 160.9, 161.2, 161.1

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 115.4, 114.9, 115.1, 115.1

Luminaire Efficacy Rating (LER): 94.24

Central Intensity: 1067.99 cd

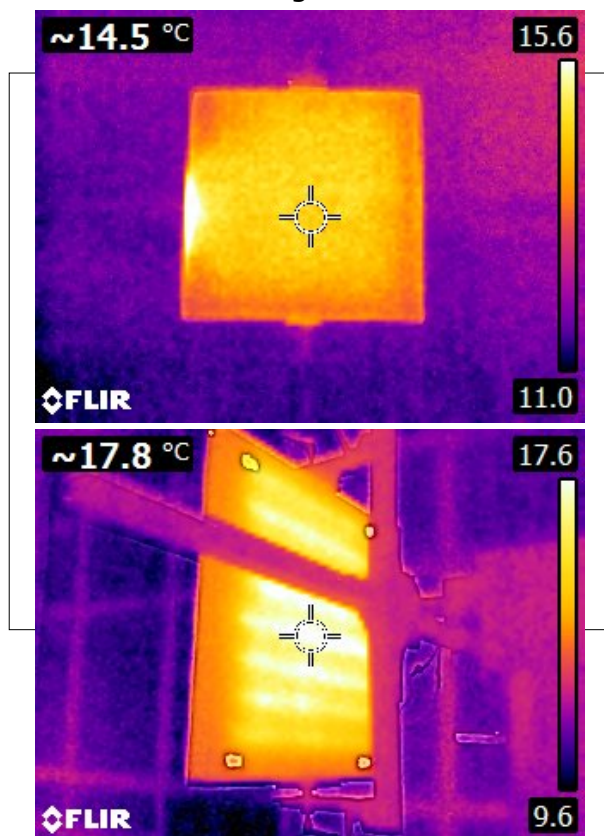
Max. Intensity: 1067.99 cd

Pos of Max. Intensity: H0 V0

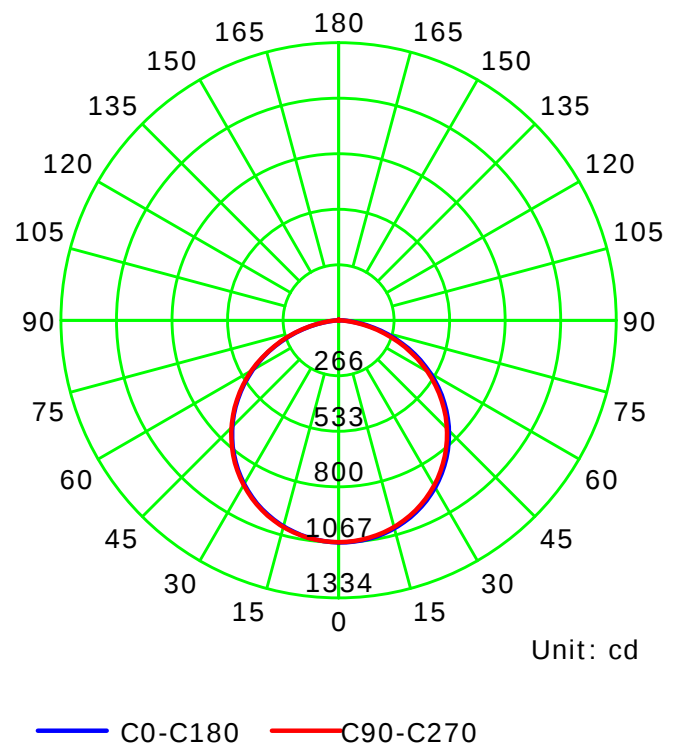
S/MH(C0/C180): 1.28

S/MH(C90/C270): 1.28

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

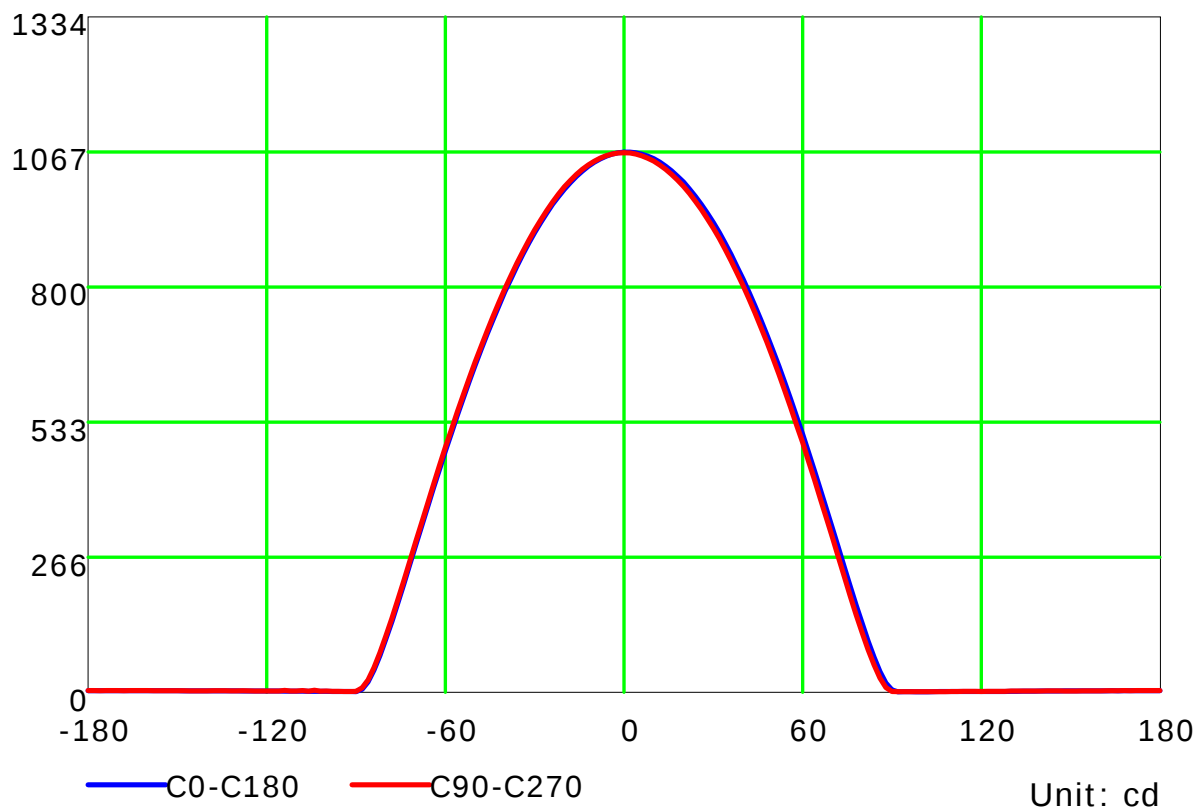
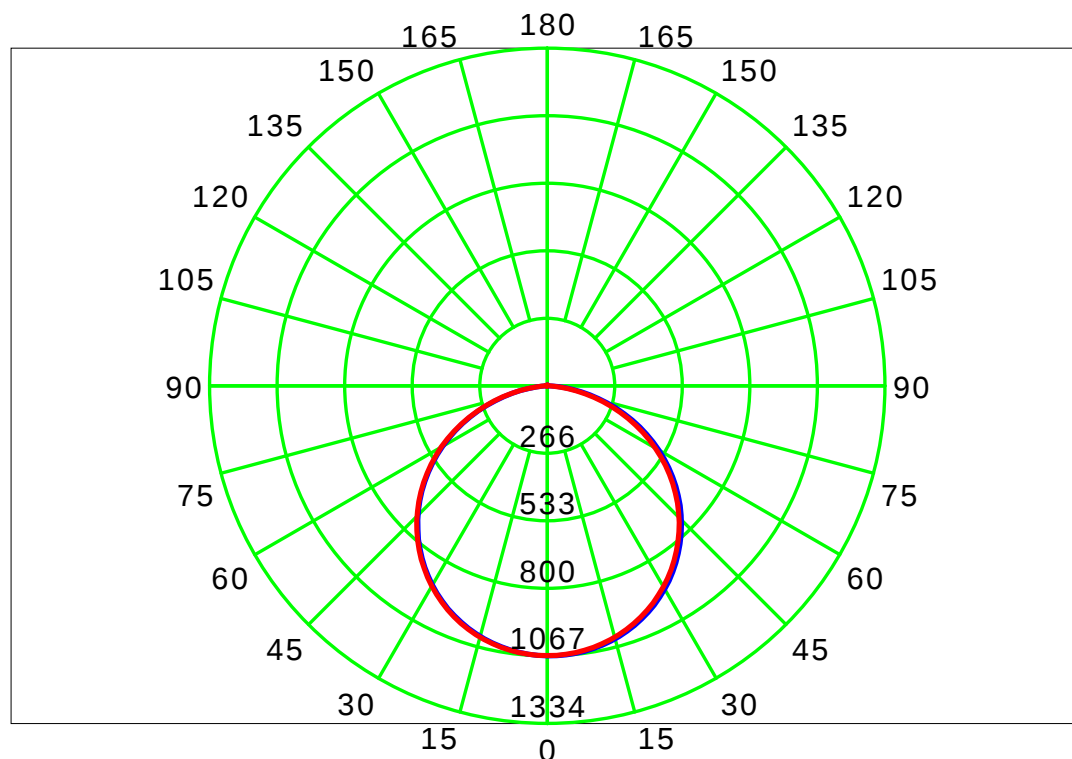
Test Device: LSG-1800B

Distance: 12.682 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve



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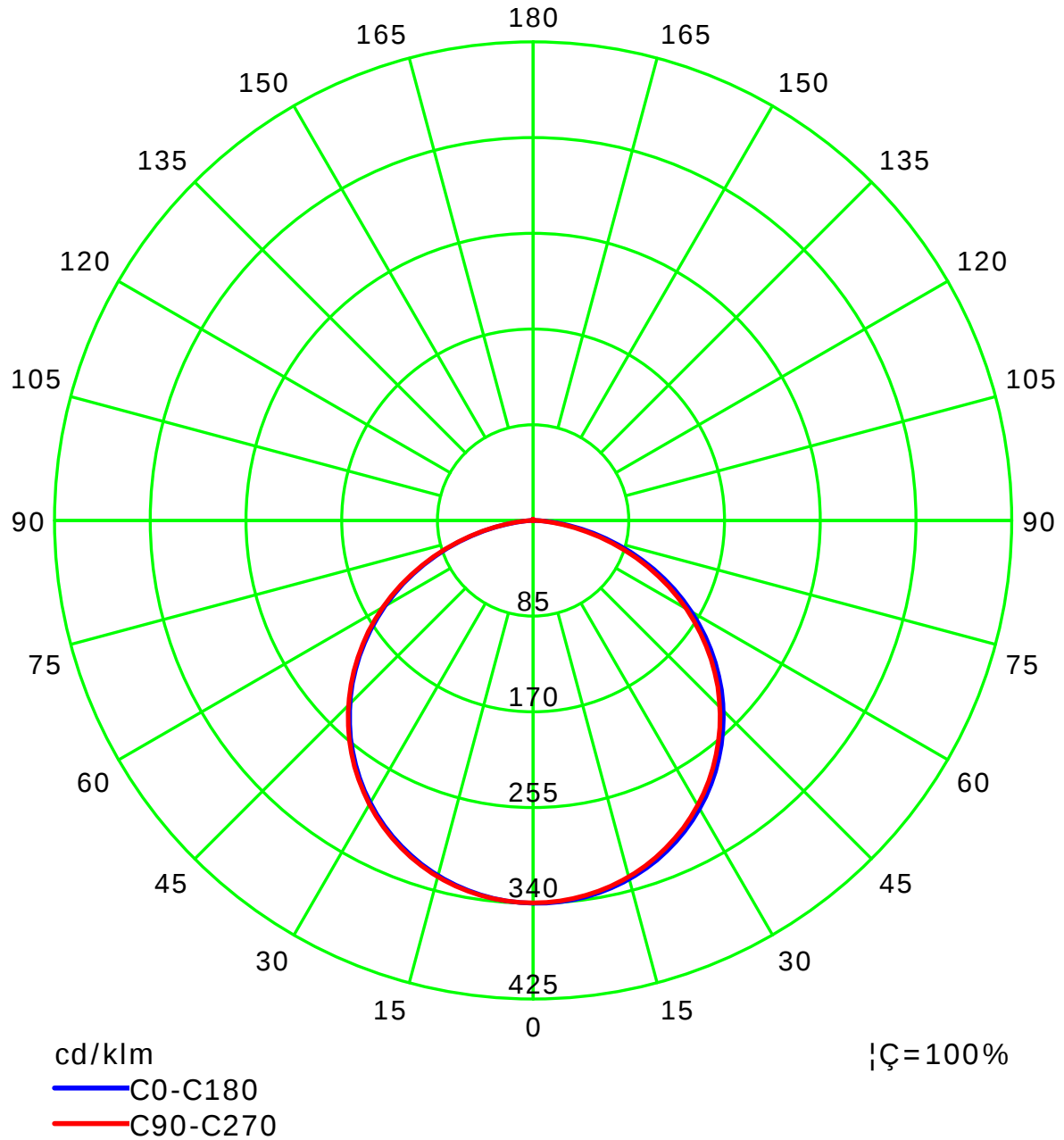
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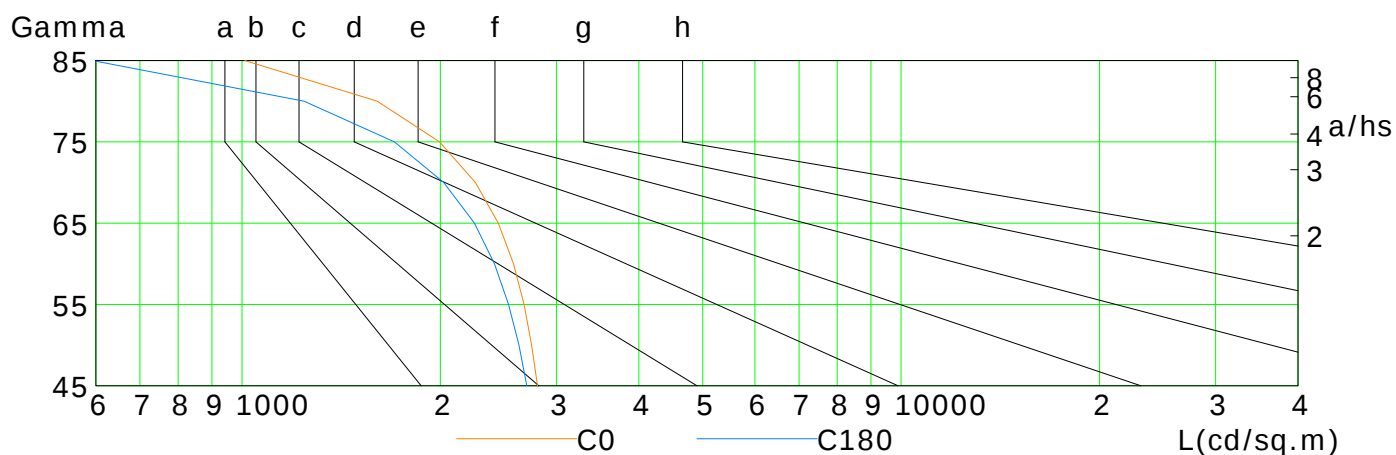
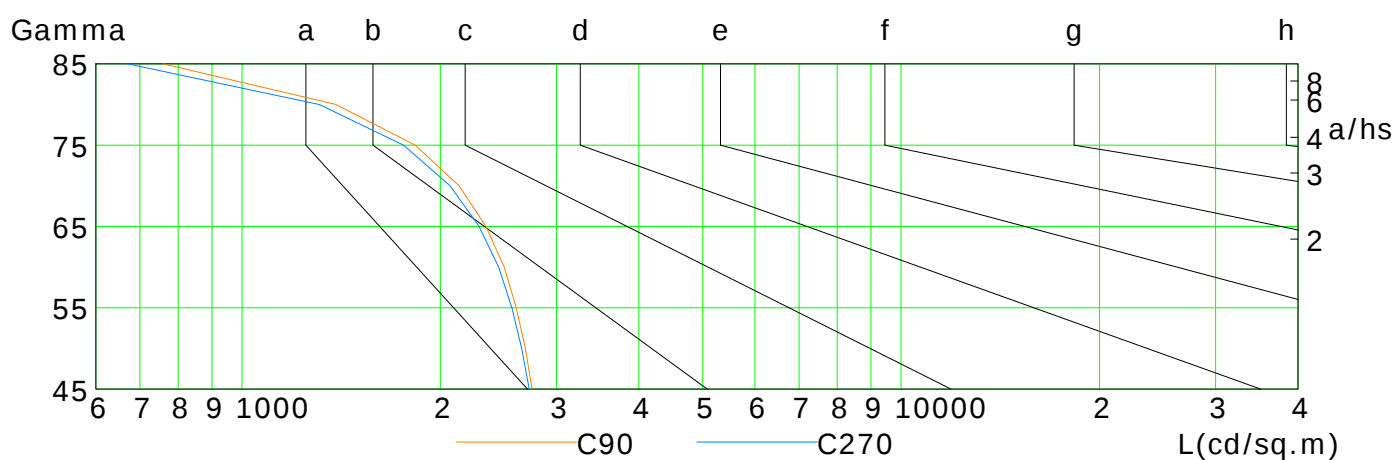
Luminous Intensity Distribution Curve(cd / klm)



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	2807	2750	2678	2581	2448	2260	1994	1604	1010
C90	2755	2691	2607	2499	2344	2135	1831	1389	759
C180	2705	2632	2538	2415	2252	2023	1703	1242	594
C270	2727	2657	2567	2451	2289	2069	1758	1310	671

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Test Type: TYPE C

Temperature:

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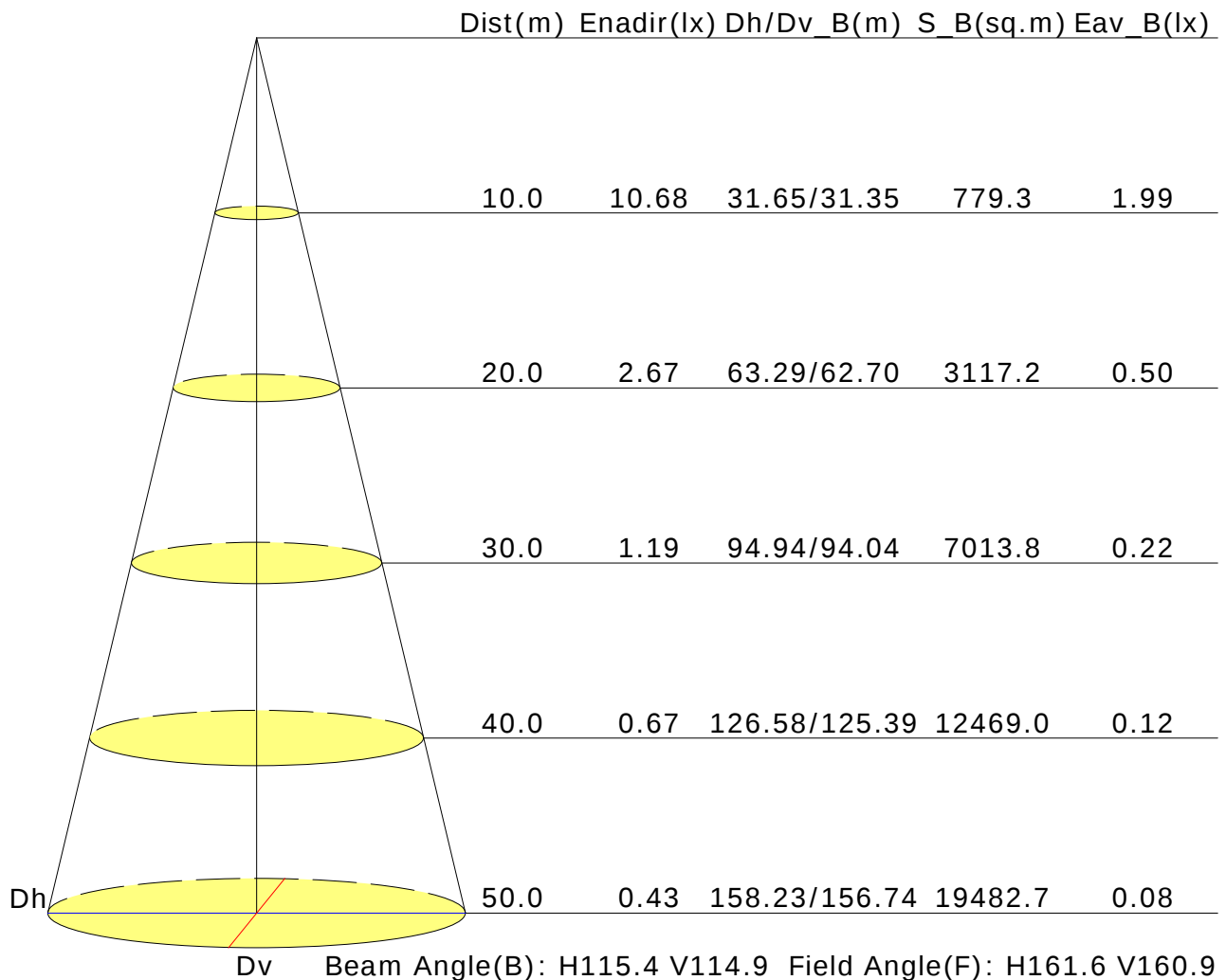
Test Device: LSG-1800B

Distance: 12.682 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	16.0	17.4	16.4	17.7	17.9	15.9	17.3	16.2	17.5	17.8
3H	17.6	18.9	17.9	19.1	19.4	17.4	18.6	17.7	18.9	19.2
4H	18.2	19.4	18.5	19.7	20.0	17.9	19.1	18.3	19.4	19.7
6H	18.6	19.7	19.0	20.0	20.4	18.2	19.3	18.6	19.7	20.0
8H	18.7	19.8	19.1	20.1	20.4	18.3	19.4	18.7	19.7	20.0
12H	18.7	19.8	19.1	20.1	20.5	18.3	19.4	18.7	19.7	20.0
X=4H Y=2H	16.7	17.9	17.0	18.2	18.5	16.6	17.7	16.9	18.0	18.4
3H	18.4	19.4	18.8	19.8	20.1	18.2	19.2	18.6	19.6	19.9
4H	19.1	20.0	19.5	20.4	20.8	18.8	19.8	19.3	20.1	20.5
6H	19.6	20.4	20.0	20.8	21.2	19.3	20.1	19.7	20.5	20.9
8H	19.7	20.5	20.2	20.9	21.3	19.4	20.1	19.8	20.5	21.0
12H	19.8	20.5	20.3	20.9	21.4	19.4	20.1	19.9	20.5	21.0
X=8H Y=4H	19.3	20.1	19.8	20.5	20.9	19.1	19.9	19.5	20.3	20.7
6H	19.9	20.5	20.4	21.0	21.5	19.6	20.2	20.1	20.7	21.2
8H	20.2	20.7	20.6	21.1	21.6	19.8	20.3	20.3	20.8	21.3
12H	20.3	20.7	20.8	21.2	21.7	19.9	20.3	20.4	20.8	21.3
X=12H Y=4H	19.3	20.0	19.8	20.4	20.9	19.1	19.8	19.6	20.2	20.7
6H	20.0	20.5	20.5	21.0	21.5	19.7	20.2	20.2	20.7	21.2
8H	20.2	20.7	20.7	21.1	21.7	19.9	20.3	20.4	20.8	21.3
Variations with the observer position at spacings:										
S=1.0H	+0.2/-0.1					+0.2/-0.2				
S=1.5H	+0.3/-0.4					+0.3/-0.5				
S=2.0H	+0.5/-0.8					+0.5/-0.9				

Calculate in accordance with CIE Pub.117. The table is revised with 3138lm ($8\log(F/F_0) = 4.0$).

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Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

Test Device: LSG-1800B

Distance: 12.682 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	0.74	0.79	0.87	0.92	0.95	1.00	1.03	
	0.30		0.48	0.59	0.66	0.72	0.80	0.86	0.90	0.96	1.00	
	0.20		0.42	0.53	0.61	0.67	0.75	0.81	0.86	0.92	0.96	
0.50	0.50	0.20	0.54	0.64	0.71	0.76	0.84	0.88	0.92	0.96	0.99	
	0.30		0.47	0.57	0.65	0.70	0.78	0.84	0.87	0.93	0.96	
	0.20		0.42	0.52	0.60	0.65	0.74	0.80	0.84	0.90	0.93	
0.30	0.50	0.20	0.53	0.62	0.69	0.74	0.81	0.85	0.88	0.92	0.95	
	0.30		0.46	0.56	0.63	0.69	0.76	0.81	0.85	0.89	0.92	
	0.20		0.41	0.52	0.59	0.64	0.72	0.78	0.82	0.87	0.90	
0.00	0.00	0.00	0.39	0.49	0.56	0.61	0.69	0.74	0.77	0.82	0.85	
Rating:33W 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	0.83	0.71	0.62	0.49	0.41	0.35	0.27	0.22	
	0.30		0.84	0.71	0.62	0.55	0.44	0.37	0.32	0.25	0.21	
	0.20		0.72	0.62	0.55	0.49	0.41	0.34	0.30	0.24	0.20	
0.50	0.50	0.20	0.97	0.80	0.68	0.59	0.47	0.42	0.33	0.26	0.21	
	0.30		0.82	0.69	0.60	0.53	0.43	0.36	0.31	0.24	0.20	
	0.20		0.71	0.61	0.54	0.48	0.40	0.33	0.29	0.23	0.19	
0.30	0.50	0.20	0.94	0.77	0.65	0.57	0.45	0.37	0.32	0.24	0.20	
	0.30		0.81	0.68	0.58	0.51	0.41	0.35	0.30	0.23	0.19	
	0.20		0.71	0.60	0.53	0.47	0.39	0.33	0.28	0.22	0.18	
0.00	0.00	0.00	0.60	0.51	0.44	0.38	0.31	0.26	0.22	0.17	0.14	
Rating:33W 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	0.20	0.21	0.21	0.22	0.22
	0.30		0.10	0.12	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	0.07	0.08	0.09	0.11	0.13	0.14	0.16	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	0.07	0.08	0.09	0.11	0.12	0.14	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:33W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980											