

Report No.: 1

Test Time: 06.11.2019 17:21

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 180 4x18 LED 0,3A 36W 3000K microprisma

Luminous Length (mm): 1200

Luminous Width (mm): 180

Luminous Height (mm): 35

Voltage: 221.0 V

Current: 0.172 A

Power: 37.38 W

Power Factor: 0.982

Photometric Results

CIE Class: Direct

Measurement Flux: 3770.5 lm

Downward Ratio: 99%

Total Rated Lamp Lumens: 3770.5 lm

Efficiency: 100%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 159.1, 161.8, 148.7, 148.1

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 78.2, 79.0, 76.2, 75.9

Luminaire Efficacy Rating (LER): 100.92

Central Intensity: 1964.2 cd

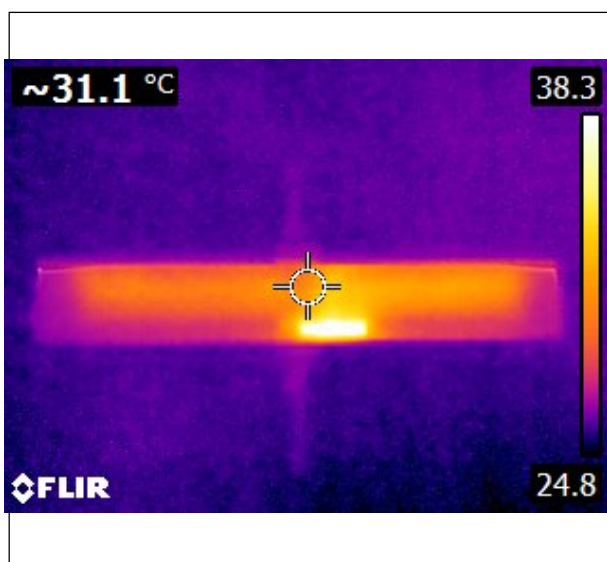
Max. Intensity: 1965.08 cd

Pos of Max. Intensity: H22.5 V1

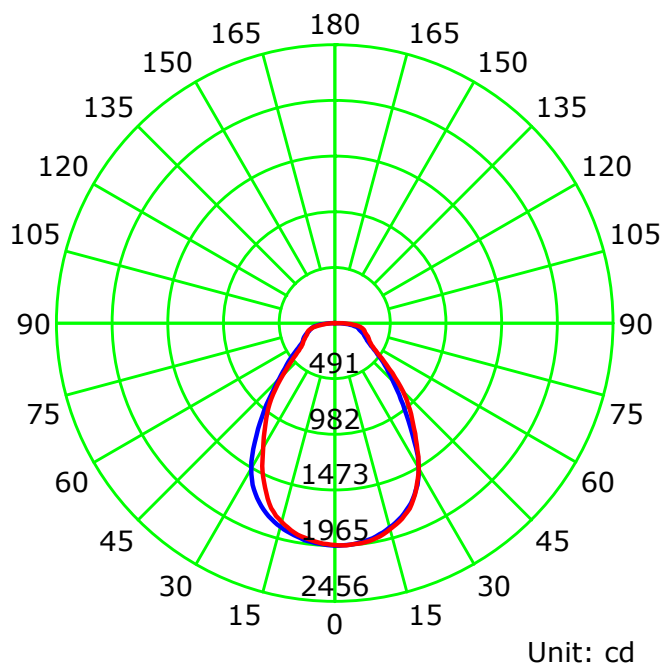
S/MH(C0/C180): 1.14

S/MH(C90/C270): 1.08

Termogramma



Luminous Intensity Distribution Curve



— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

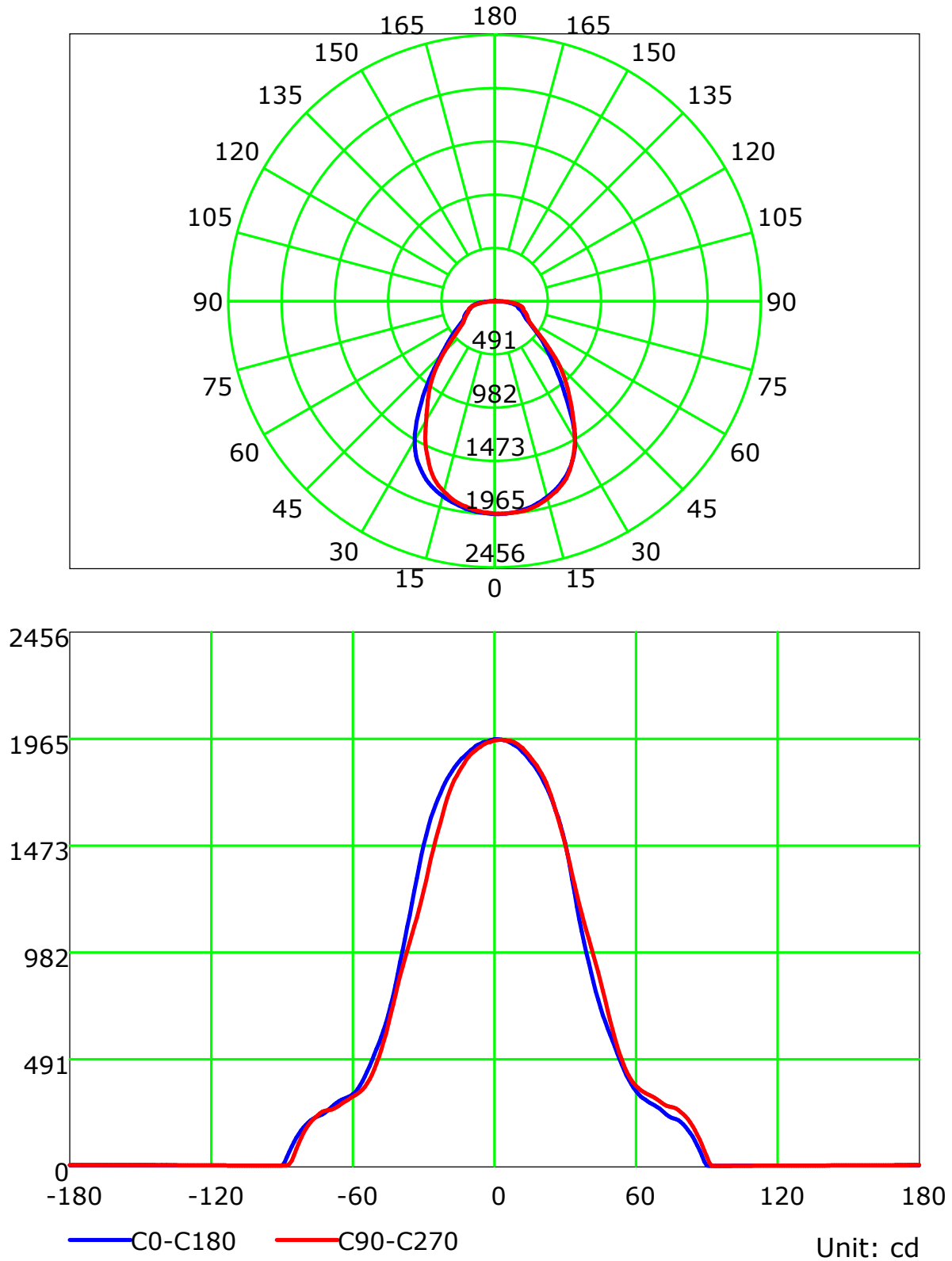
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

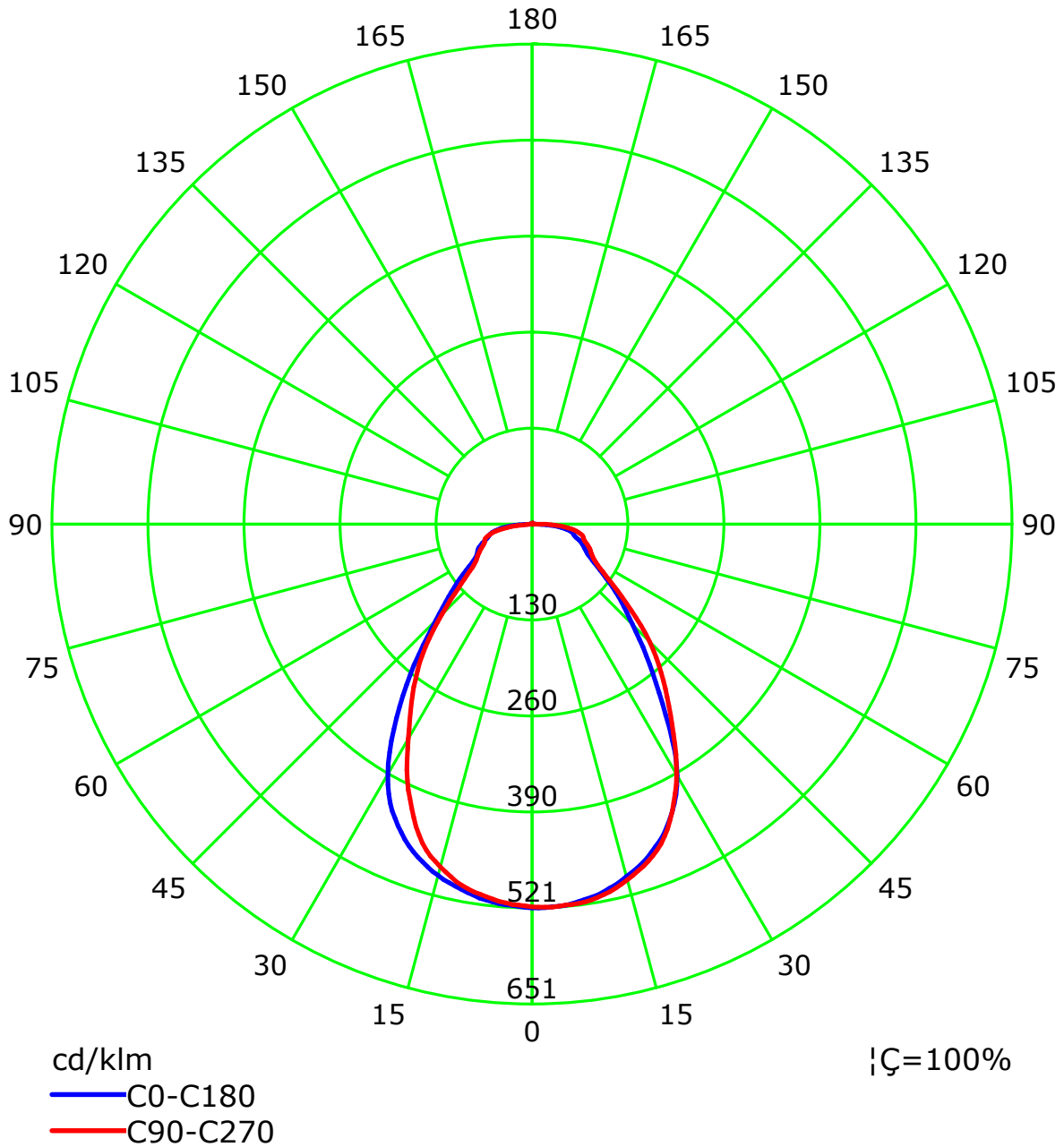
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve(cd/klm)



C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: LSG-1800B

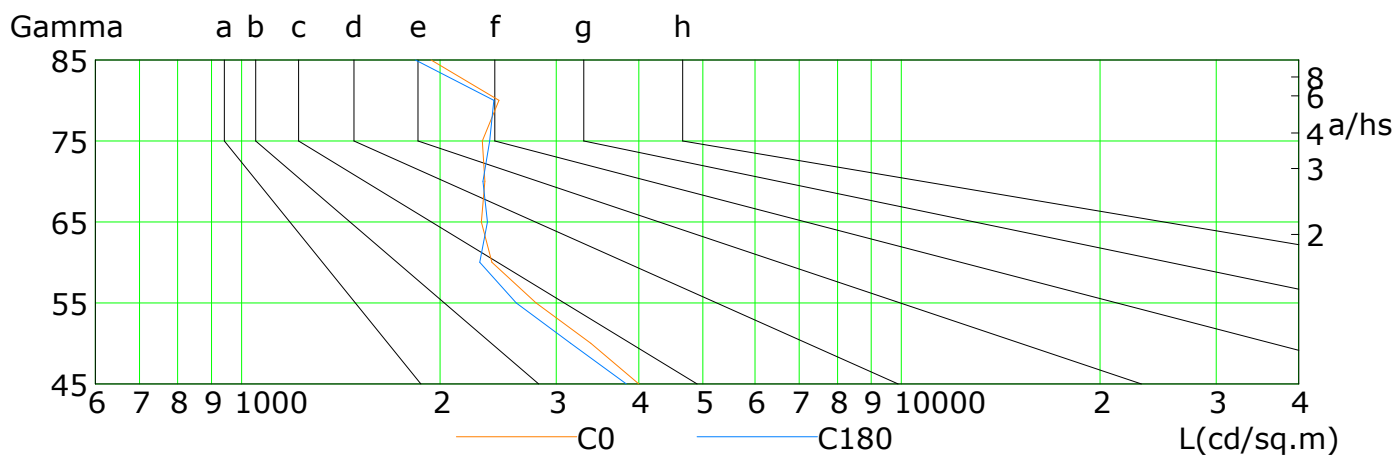
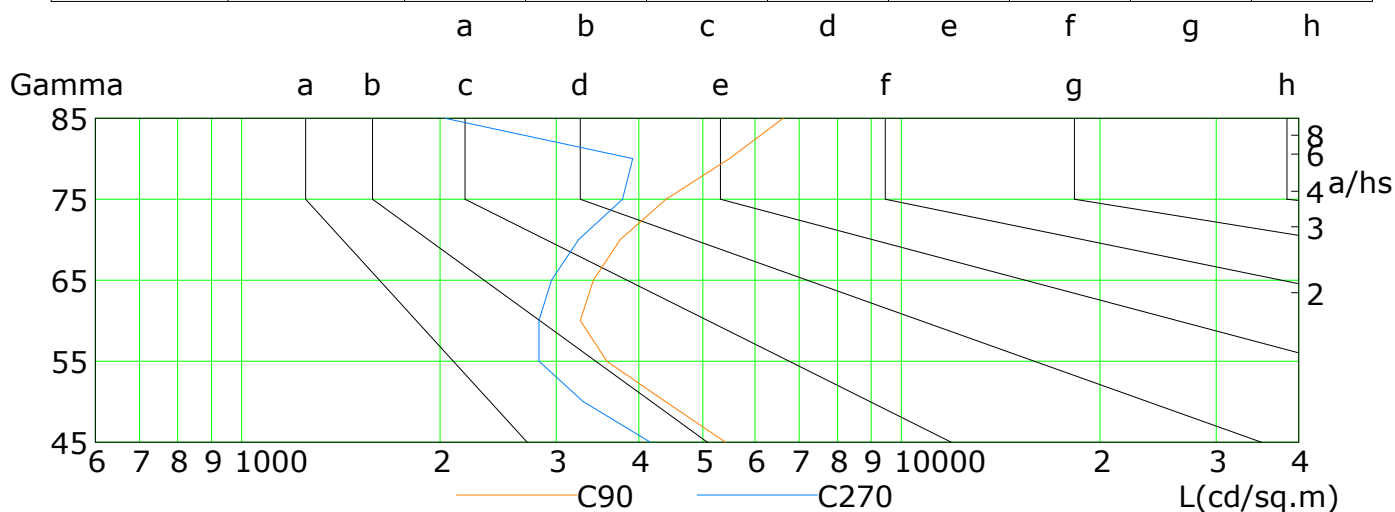
Distance: 12.677 m

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

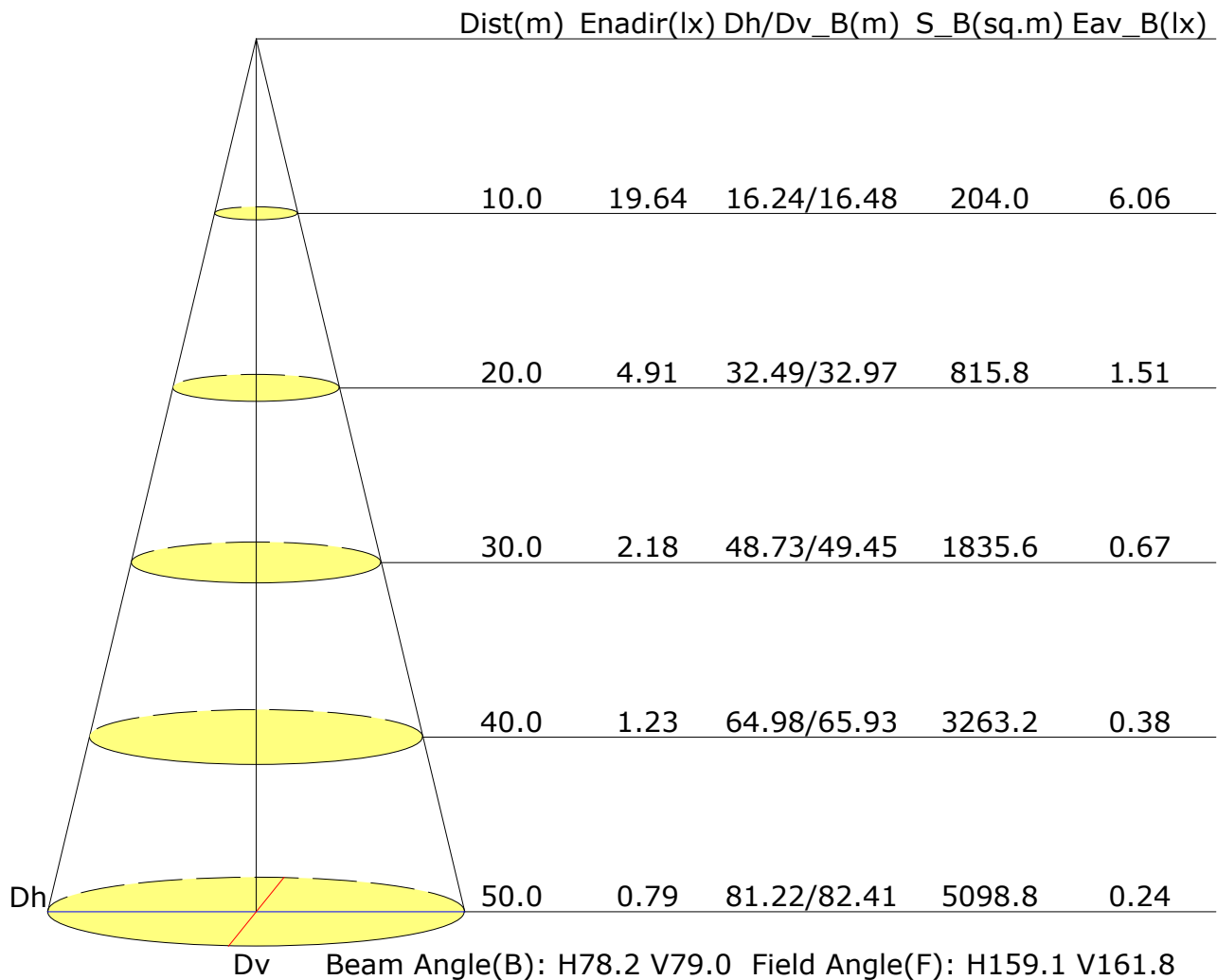


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	3999	3382	2796	2395	2309	2339	2317	2455	1937
C90	5411	4387	3577	3260	3413	3749	4397	5490	6620
C180	3828	3153	2606	2297	2359	2323	2376	2410	1834
C270	4165	3294	2824	2824	2950	3244	3779	3918	2033

C Plane (°):0.0-360.0: 22.5
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Gamma Plane (°):0.0-180.0:1.0
 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	15.3	16.6	15.6	16.8	17.0	15.6	16.9	15.9	17.1	17.4
3H	16.6	17.8	16.9	18.0	18.3	17.3	18.4	17.6	18.7	18.9
4H	17.3	18.4	17.7	18.7	19.0	18.3	19.3	18.6	19.6	19.9
6H	18.1	19.1	18.5	19.4	19.7	19.4	20.4	19.7	20.7	21.0
8H	18.4	19.4	18.8	19.7	20.0	19.9	20.8	20.2	21.2	21.5
12H	18.7	19.6	19.0	19.9	20.3	20.3	21.2	20.6	21.5	21.9
X=4H Y=2H	15.8	16.8	16.1	17.1	17.4	16.0	17.1	16.4	17.4	17.7
3H	17.3	18.3	17.7	18.6	18.9	17.9	18.8	18.3	19.2	19.5
4H	18.2	19.0	18.6	19.4	19.8	19.1	19.9	19.5	20.3	20.7
6H	19.1	19.9	19.6	20.3	20.7	20.4	21.1	20.8	21.5	21.9
8H	19.5	20.2	20.0	20.6	21.1	21.0	21.7	21.4	22.1	22.5
12H	19.9	20.5	20.3	20.9	21.4	21.4	22.1	21.9	22.5	22.9
X=8H Y=4H	18.5	19.2	19.0	19.6	20.1	19.4	20.0	19.8	20.4	20.9
6H	19.6	20.2	20.1	20.6	21.1	20.8	21.4	21.3	21.8	22.3
8H	20.2	20.6	20.6	21.1	21.6	21.5	22.0	22.0	22.5	23.0
12H	20.6	21.0	21.1	21.5	22.0	22.1	22.5	22.6	23.0	23.5
X=12H Y=4H	18.6	19.2	19.1	19.7	20.1	19.4	20.0	19.8	20.4	20.9
6H	19.8	20.2	20.2	20.7	21.2	20.9	21.4	21.4	21.8	22.3
8H	20.3	20.7	20.8	21.2	21.7	21.6	22.0	22.1	22.5	23.0
Variations with the observer position at spacings:										
S=1.0H	+0.3/-0.3					+0.4/-0.3				
S=1.5H	+0.4/-0.8					+0.4/-0.7				
S=2.0H	+0.7/-1.1					+0.5/-0.9				

Calculate in accordance with CIE Pub.117. The table is revised with 3771lm ($8\log(F/F_0) = 4.6$).

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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 = 1.00									
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	0.72	0.79	0.83	0.90	0.94	0.97	1.02	1.04	
	0.30		0.56	0.65	0.72	0.77	0.84	0.89	0.93	0.98	1.01	
	0.20		0.51	0.60	0.67	0.72	0.79	0.85	0.89	0.94	0.98	
0.50	0.50	0.20	0.62	0.70	0.76	0.81	0.87	0.91	0.94	0.97	1.00	
	0.30		0.55	0.64	0.71	0.75	0.82	0.86	0.90	0.94	0.97	
	0.20		0.51	0.60	0.66	0.71	0.78	0.83	0.86	0.91	0.95	
0.30	0.50	0.20	0.60	0.69	0.74	0.78	0.84	0.88	0.90	0.94	0.96	
	0.30		0.55	0.63	0.69	0.74	0.80	0.84	0.87	0.91	0.94	
	0.20		0.50	0.59	0.65	0.70	0.76	0.81	0.84	0.89	0.92	
0.00	0.00	0.00	0.48	0.57	0.62	0.67	0.73	0.77	0.80	0.84	0.87	
Rating:37W 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	0.90	0.74	0.64	0.56	0.45	0.37	0.32	0.25	0.21	
	0.30		0.75	0.64	0.55	0.49	0.40	0.34	0.30	0.24	0.20	
	0.20		0.64	0.55	0.49	0.44	0.37	0.32	0.28	0.22	0.19	
0.50	0.50	0.20	0.86	0.71	0.61	0.53	0.43	0.39	0.30	0.24	0.20	
	0.30		0.73	0.62	0.54	0.48	0.39	0.33	0.28	0.23	0.19	
	0.20		0.63	0.54	0.48	0.43	0.36	0.31	0.27	0.21	0.18	
0.30	0.50	0.20	0.84	0.68	0.58	0.51	0.40	0.34	0.29	0.23	0.19	
	0.30		0.71	0.60	0.52	0.46	0.37	0.32	0.27	0.22	0.18	
	0.20		0.63	0.54	0.47	0.42	0.35	0.30	0.26	0.21	0.17	
0.00	0.00	0.00	0.52	0.43	0.37	0.33	0.27	0.23	0.20	0.16	0.13	
Rating:37W 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	0.16	0.17	0.18	0.19	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	0.09	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	0.19	0.19	0.20	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	0.11	0.13	0.14	0.15	0.16	
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:37W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												