

Report No.: 1

Test Time: 11.12.2019 20:01

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 180 4x18LED 0.3A 36W 5000K bez stekla

Luminous Length (mm): 1200

Luminous Width (mm): 180

Luminous Height (mm): 35

Voltage: 221.4 V

Current: 0.168 A

Power: 36.02 W

Power Factor: 0.968

Photometric Results

CIE Class: Direct

Measurement Flux: 5012.8 lm

Downward Ratio: 100%

Total Rated Lamp Lumens: 5012.8 lm

Efficiency: 100%

Upward Ratio: 0%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 161.0, 141.2, 150.7, 150.5

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 119.2, 116.7, 120.1, 120.1

Luminaire Efficacy Rating (LER): 139.22

Central Intensity: 1728.39 cd

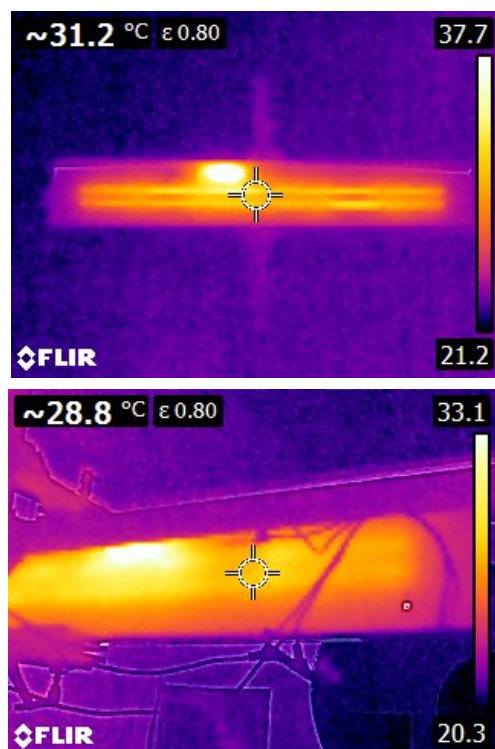
Max. Intensity: 1733.67 cd

Pos of Max. Intensity: H135 V0

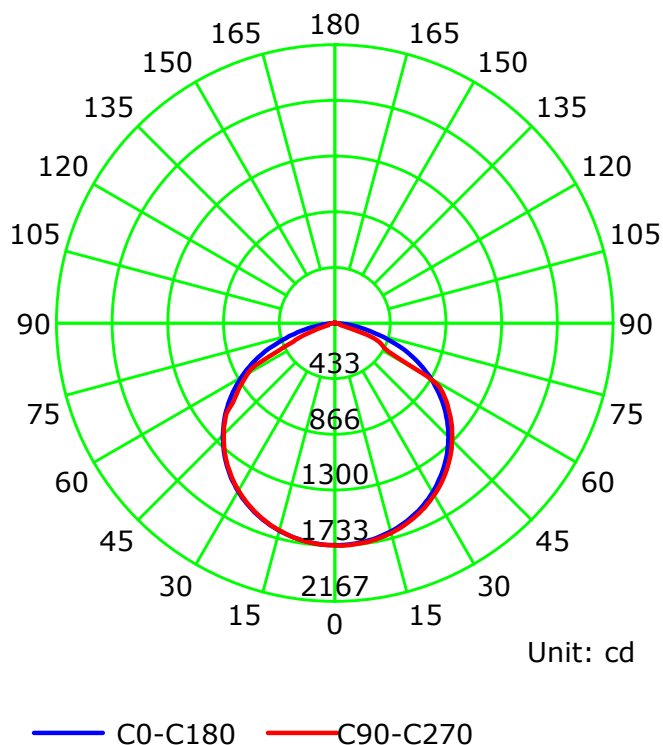
S/MH(C0/C180): 1.30

S/MH(C90/C270): 1.31

Termogramma



Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

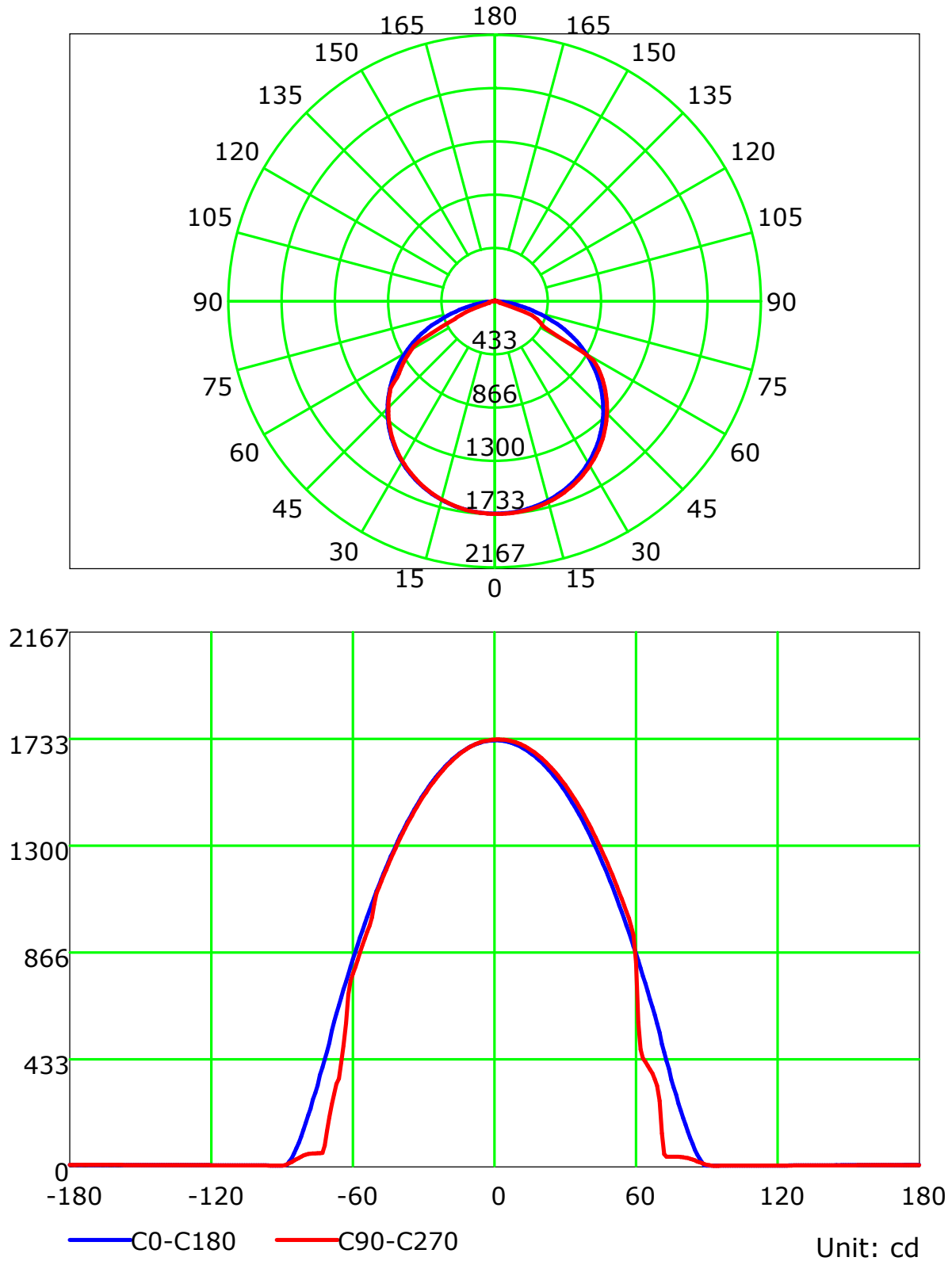
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

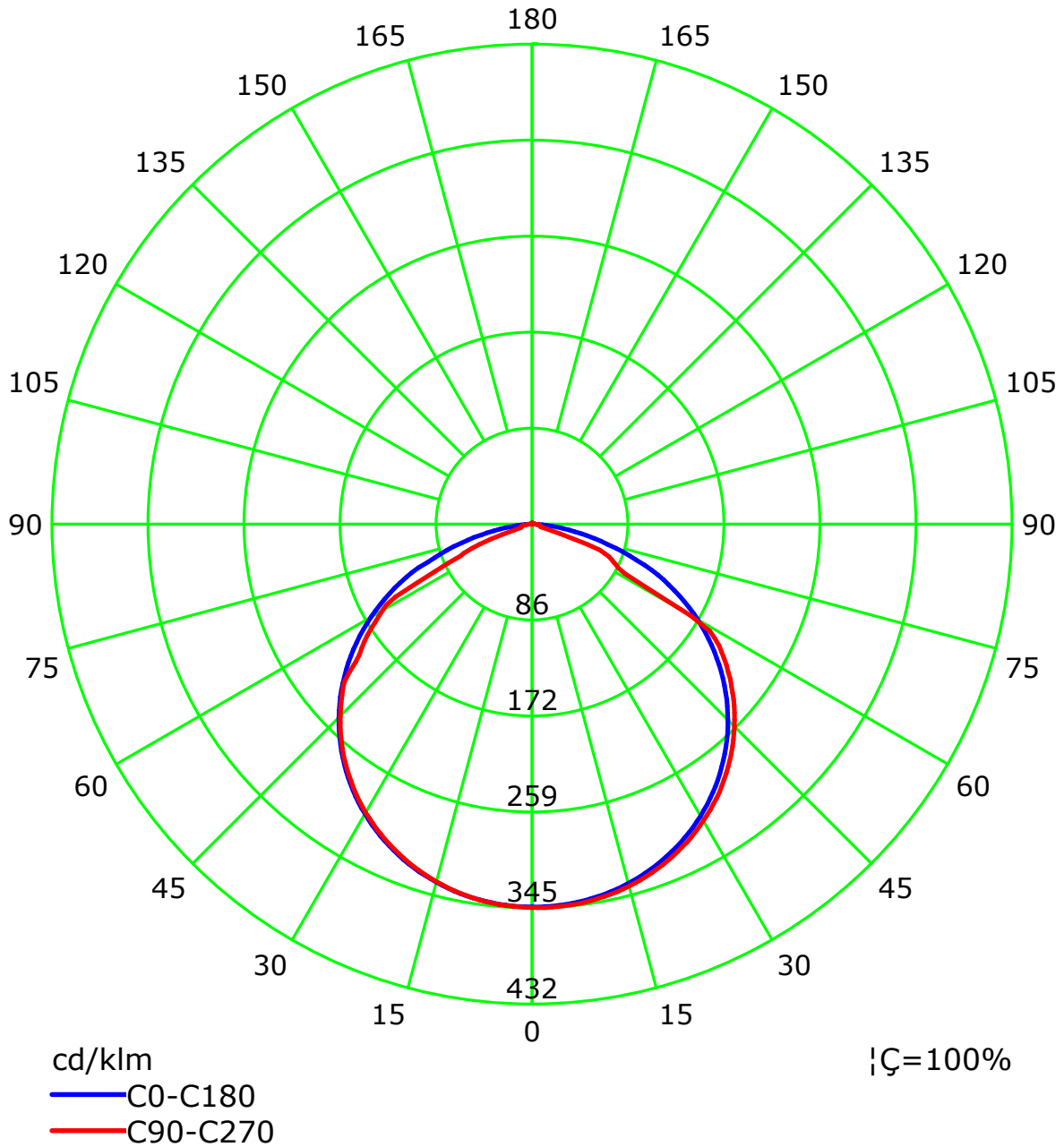
Luminous Intensity Distribution Curve



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)



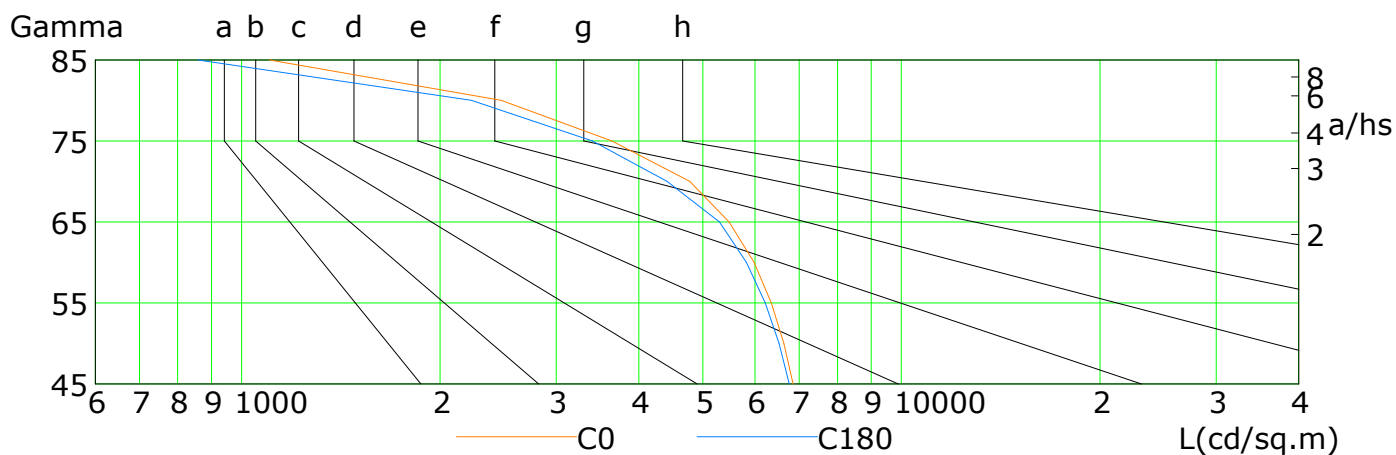
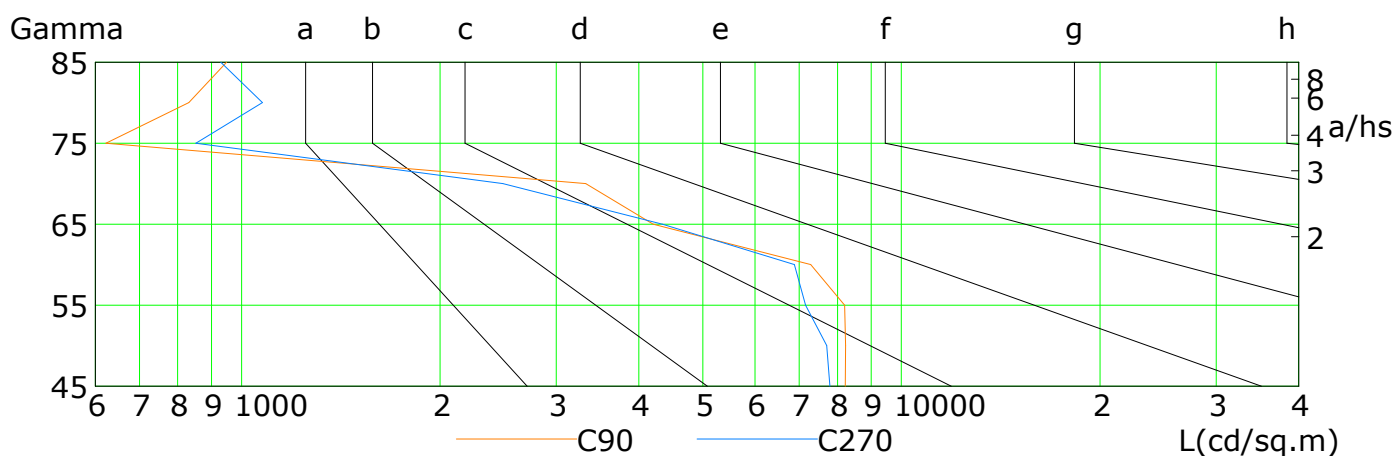
C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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

a b c d e f g h

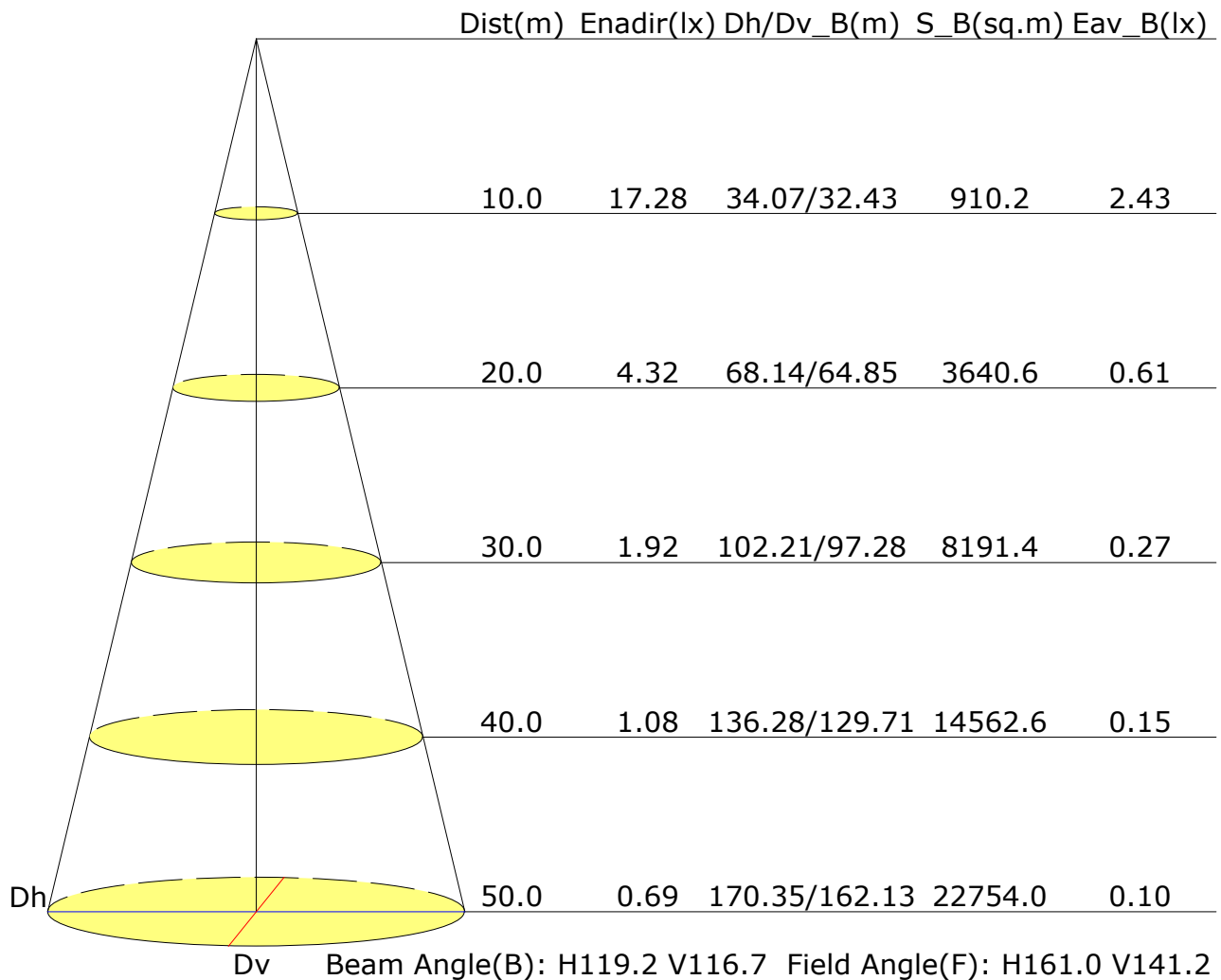


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	6855	6635	6351	5981	5484	4780	3641	2475	1103
C90	8220	8227	8204	7289	4208	3322	623	832	949
C180	6763	6526	6221	5820	5300	4414	3402	2230	860
C270	7795	7709	7161	6882	4345	2487	853	1075	930

C Plane (°):0.0-360.0: 22.5
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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	19.4	20.7	19.7	21.0	21.2	19.5	20.8	19.8	21.1	21.3
3H	20.8	22.1	21.2	22.3	22.6	19.9	21.2	20.3	21.4	21.7
4H	21.3	22.4	21.6	22.7	23.0	19.9	21.0	20.2	21.3	21.6
6H	21.5	22.6	21.9	22.9	23.2	19.8	20.9	20.2	21.2	21.5
8H	21.6	22.6	21.9	22.9	23.3	19.8	20.8	20.2	21.2	21.5
12H	21.5	22.5	21.9	22.9	23.2	19.8	20.8	20.2	21.1	21.4
X=4H Y=2H	20.0	21.2	20.4	21.5	21.8	20.1	21.2	20.4	21.5	21.8
3H	21.6	22.6	22.0	22.9	23.2	20.6	21.6	21.0	21.9	22.3
4H	22.1	23.0	22.5	23.4	23.8	20.6	21.4	21.0	21.8	22.2
6H	22.4	23.2	22.9	23.6	24.0	20.5	21.3	20.9	21.7	22.1
8H	22.5	23.2	22.9	23.6	24.0	20.5	21.2	20.9	21.6	22.1
12H	22.5	23.1	22.9	23.5	24.0	20.5	21.1	21.0	21.6	22.0
X=8H Y=4H	22.1	22.8	22.6	23.3	23.7	20.6	21.4	21.1	21.8	22.2
6H	22.5	23.0	22.9	23.5	24.0	20.6	21.2	21.1	21.6	22.1
8H	22.5	23.0	23.0	23.5	24.0	20.6	21.1	21.1	21.6	22.1
12H	22.5	23.0	23.0	23.5	24.0	20.6	21.0	21.1	21.5	22.0
X=12H Y=4H	22.1	22.7	22.6	23.2	23.6	20.6	21.3	21.1	21.7	22.1
6H	22.4	22.9	22.9	23.4	23.9	20.6	21.1	21.1	21.6	22.1
8H	22.5	22.9	23.0	23.4	23.9	20.6	21.0	21.1	21.5	22.0
Variations with the observer position at spacings:										
S=1.0H	+0.2/-0.2					+0.5/-0.3				
S=1.5H	+0.4/-0.5					+0.7/-1.0				
S=2.0H	+0.6/-1.2					+1.5/-3.0				

Calculate in accordance with CIE Pub.117. The table is revised with 5013lm ($8\log(F/F_0) = 5.6$).

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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 = 1.50									
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	0.61	0.70	0.77	0.83	0.90	0.94	0.98	1.02	1.05	
	0.30		0.53	0.62	0.70	0.76	0.84	0.89	0.93	0.98	1.02	
	0.20		0.48	0.57	0.65	0.71	0.79	0.85	0.89	0.95	0.99	
0.50	0.50	0.20	0.59	0.67	0.75	0.80	0.87	0.91	0.94	0.98	1.00	
	0.30		0.53	0.61	0.69	0.74	0.82	0.87	0.90	0.95	0.98	
	0.20		0.48	0.56	0.64	0.70	0.78	0.83	0.87	0.92	0.95	
0.30	0.50	0.20	0.58	0.66	0.73	0.77	0.84	0.88	0.91	0.94	0.96	
	0.30		0.52	0.60	0.68	0.73	0.80	0.84	0.87	0.92	0.94	
	0.20		0.47	0.56	0.63	0.69	0.76	0.81	0.85	0.89	0.92	
0.00	0.00	0.00	0.45	0.53	0.61	0.66	0.73	0.77	0.81	0.85	0.88	
Rating:36W 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 = 1.50									
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	0.93	0.78	0.65	0.56	0.44	0.36	0.31	0.24	0.19	
	0.30		0.77	0.67	0.57	0.50	0.40	0.33	0.29	0.22	0.18	
	0.20		0.66	0.58	0.50	0.44	0.36	0.31	0.27	0.21	0.17	
0.50	0.50	0.20	0.89	0.75	0.62	0.54	0.42	0.38	0.29	0.22	0.18	
	0.30		0.76	0.65	0.55	0.48	0.38	0.32	0.27	0.21	0.17	
	0.20		0.66	0.57	0.49	0.43	0.35	0.30	0.26	0.20	0.17	
0.30	0.50	0.20	0.87	0.72	0.60	0.51	0.40	0.33	0.28	0.21	0.17	
	0.30		0.74	0.63	0.53	0.46	0.37	0.31	0.26	0.20	0.17	
	0.20		0.65	0.56	0.48	0.42	0.34	0.29	0.25	0.19	0.16	
0.00	0.00	0.00	0.54	0.46	0.39	0.34	0.27	0.22	0.19	0.14	0.12	
Rating:36W 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 = 1.50									
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	0.18	0.18	0.19	0.20	0.20	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	0.10	0.12	0.13	0.15	0.16	0.17	
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	0.12	0.14	0.15	0.16	0.17	0.18	0.19	
	0.20		0.05	0.07	0.08	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	0.18	0.19	0.19	0.20	0.20	
	0.30		0.09	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	0.13	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:36W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												