

Report No.: 1

Test Time: 22.01.2020 11:30

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FW 150 HE 3x28LED 1.7A 75W 5000K 2x40-100gr.

Number of Lamps: 1

Luminous Length (mm): 504 mm

Luminous Height (mm): 80 mm

Current: 0.347 A

Power Factor: 0.977

Lumens per Lamp: 11129.3 lm

Luminous Width (mm): 153 mm

Voltage: 221.6 V

Power: 75.34 W

Photometric Results

CIE Class: Direct

Measurement Flux: 11129.3 lm

Downward Ratio: 99.42%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 115.3, 130.6, 132.4, 130.0

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 97.3, 105.8, 112.8, 110.7

Luminaire Efficacy Rating (LER): 147.77

Max. Intensity: 5475.71 cd

S/MH(C0/C180): 2.19

Total Rated Lamp Lumens: 11129.3 lm

Efficiency: 100.00%

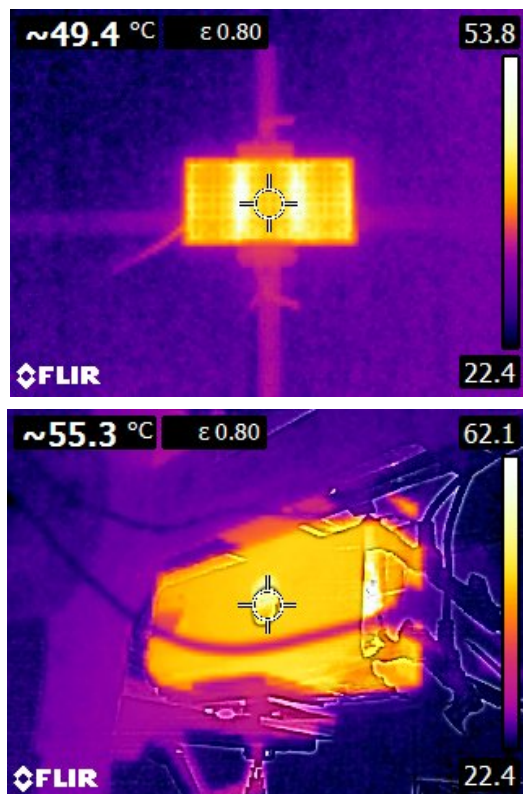
Upward Ratio: 0.58%

Central Intensity: 1883.96 cd

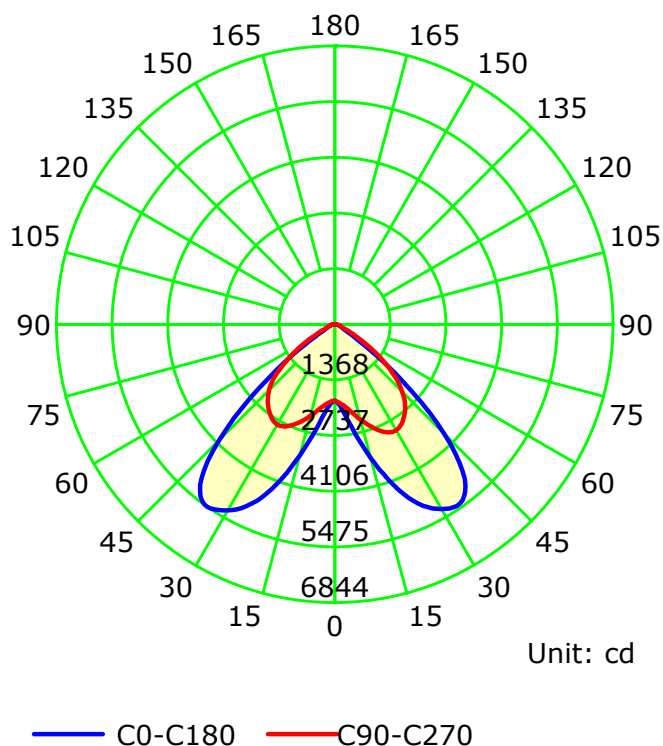
Pos of Max. Intensity: H180 V35

S/MH(C90/C270): 1.88

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

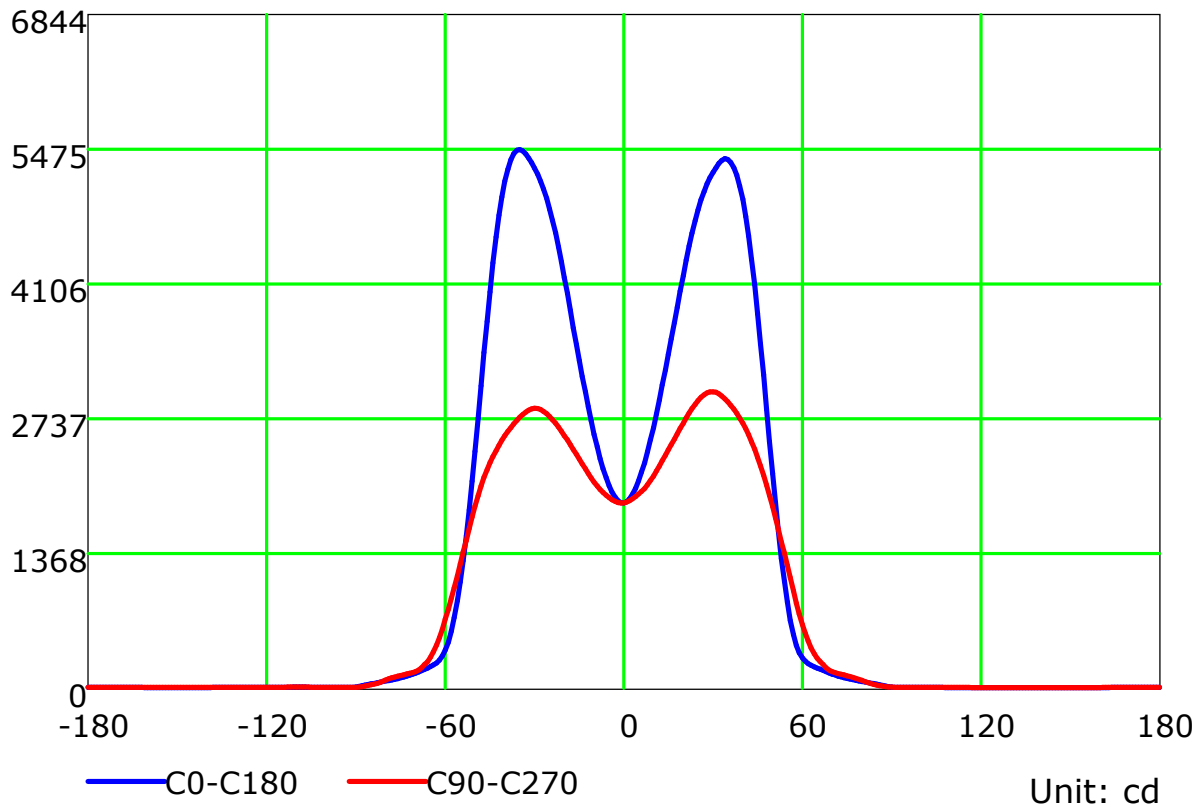
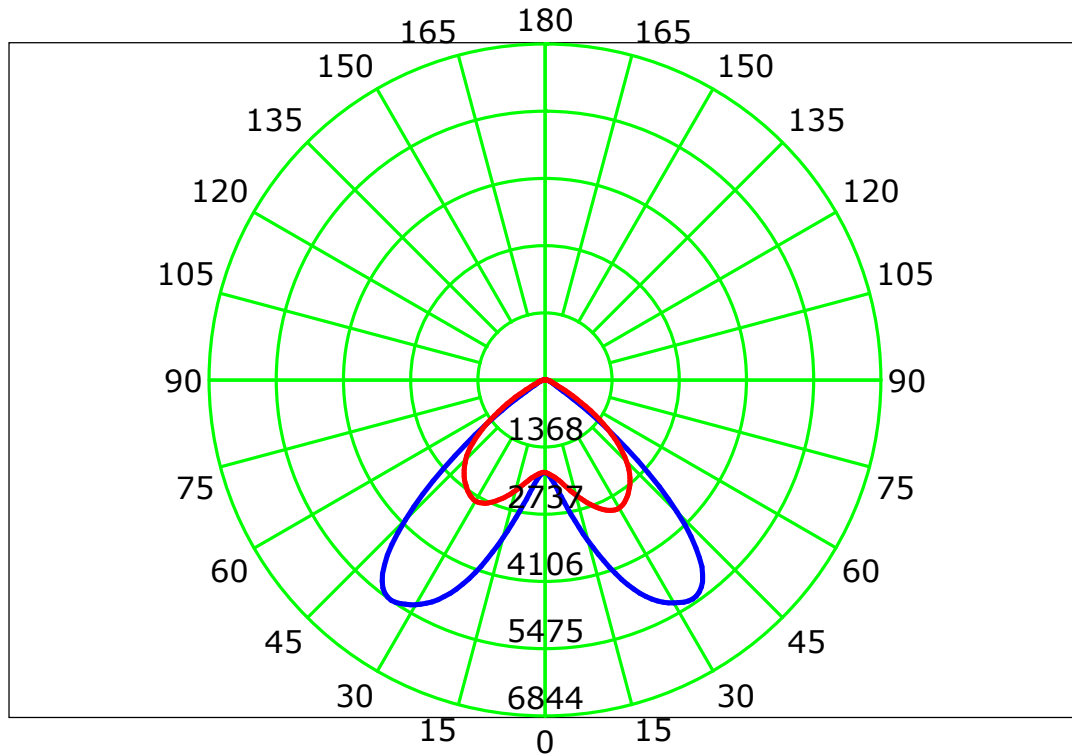
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

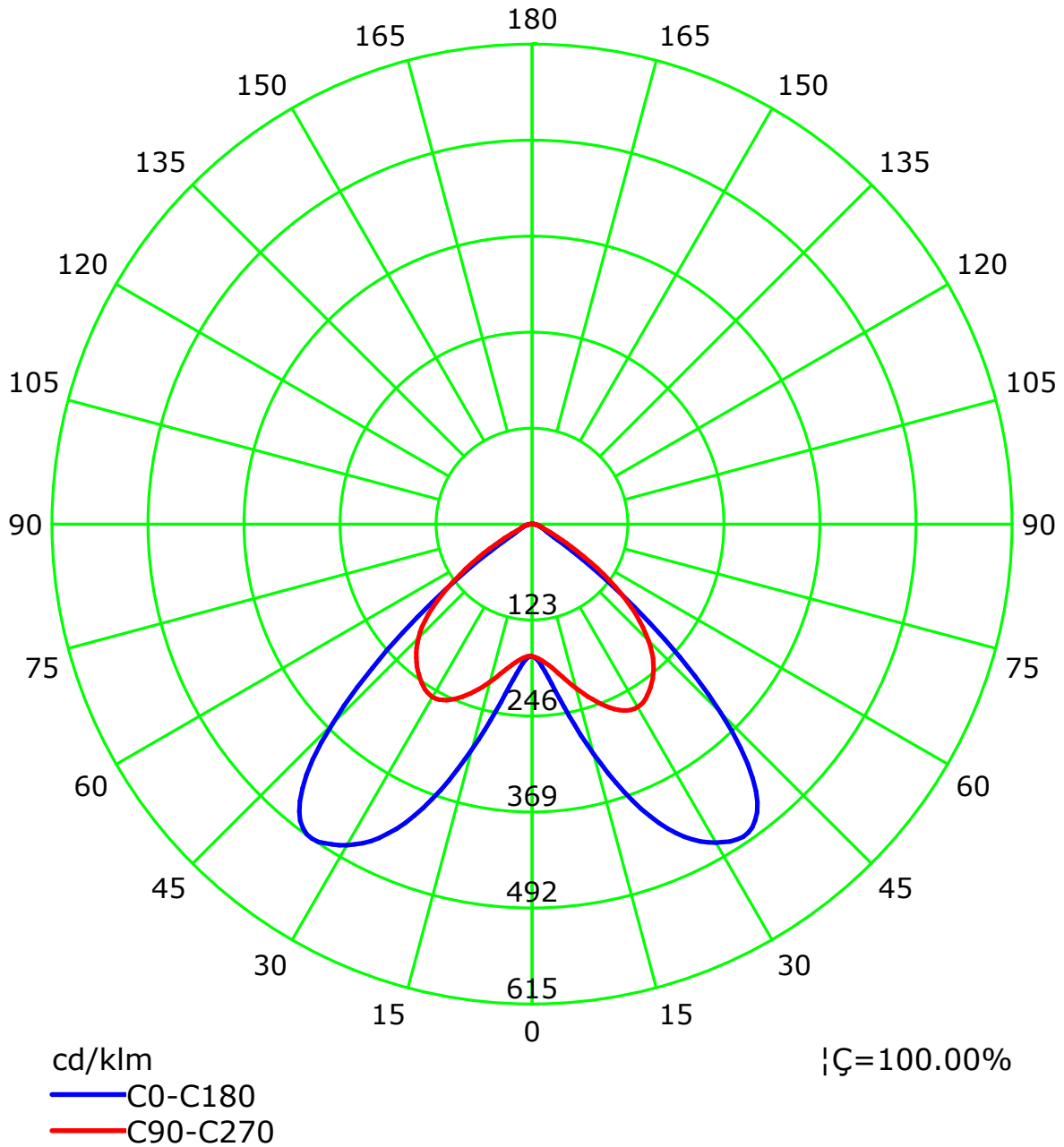
Luminous Intensity Distribution Curve



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)



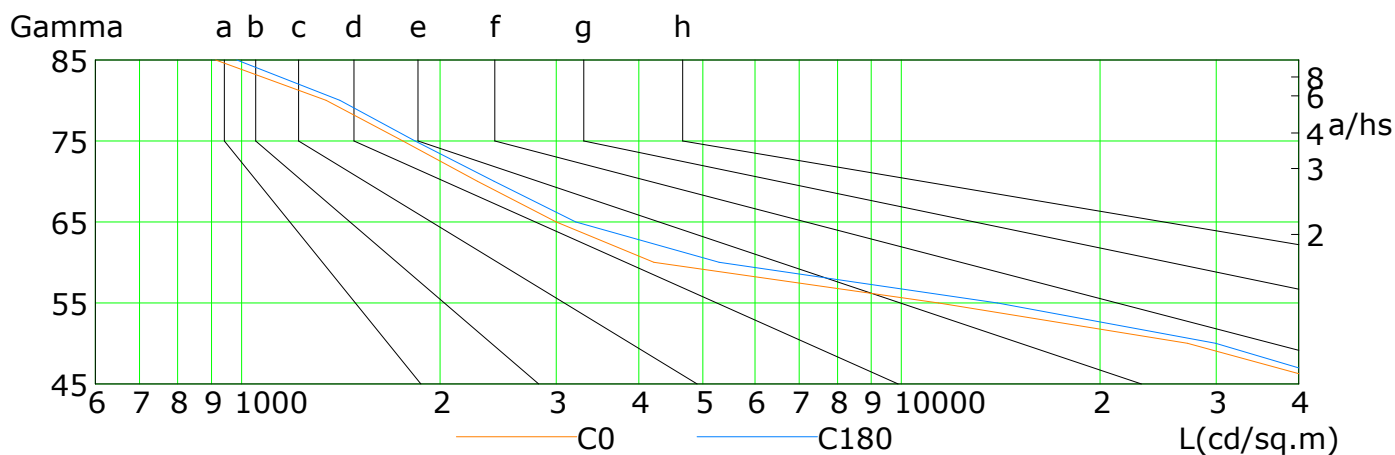
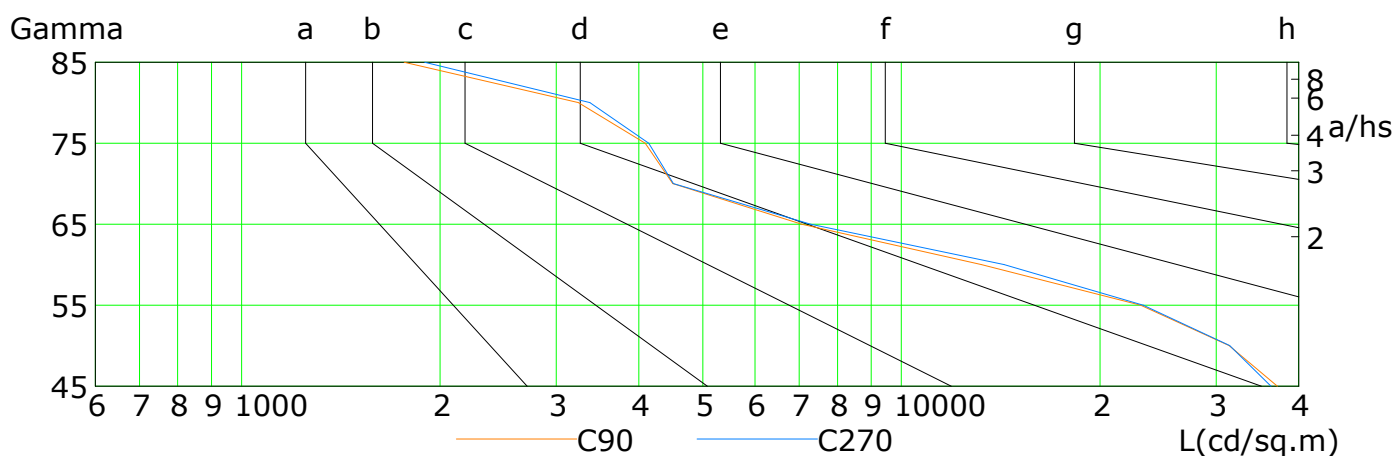
C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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

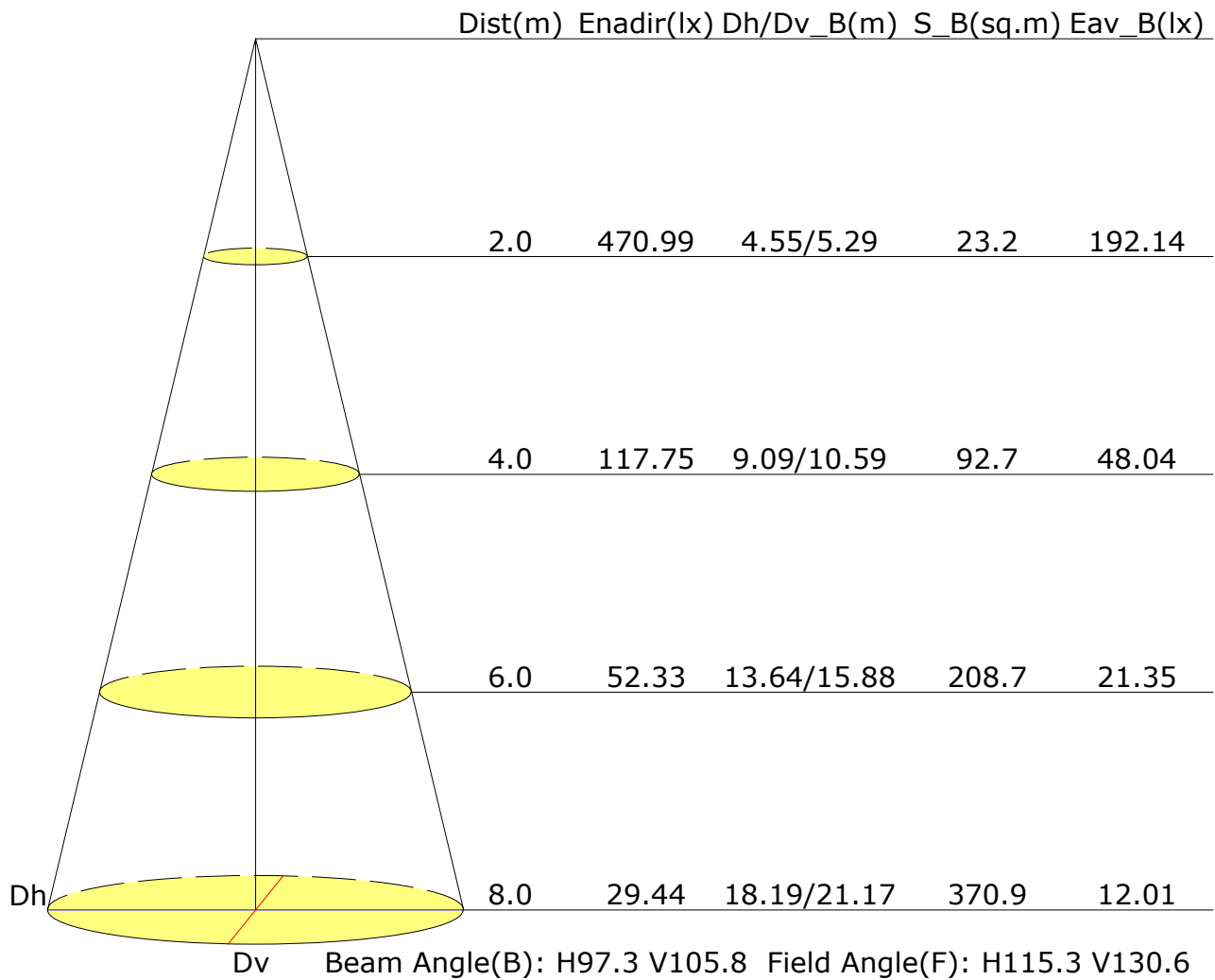


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	45816	27120	11384	4217	2997	2277	1757	1343	914
C90	37148	31363	23047	13210	7064	4503	4092	3239	1764
C180	48493	29929	13976	5296	3209	2414	1832	1409	984
C270	36303	31428	23256	14307	7287	4515	4140	3372	1894

C Plane (°):0.0-360.0: 22.5
 Test Lab:
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 Temperature:
 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	23.9	25.2	24.2	25.4	25.6	24.6	25.9	24.9	26.1	26.4
3H	23.8	24.9	24.1	25.2	25.4	24.6	25.7	24.9	26.0	26.3
4H	23.7	24.8	24.0	25.0	25.3	24.5	25.6	24.9	25.9	26.2
6H	23.6	24.6	24.0	24.9	25.2	24.5	25.4	24.8	25.8	26.1
8H	23.6	24.5	24.0	24.9	25.2	24.4	25.4	24.8	25.7	26.0
12H	23.6	24.5	23.9	24.8	25.1	24.4	25.3	24.8	25.6	26.0
X=4H Y=2H	24.1	25.1	24.4	25.4	25.7	24.7	25.7	25.0	26.0	26.3
3H	24.0	24.9	24.3	25.2	25.5	24.7	25.6	25.0	25.9	26.2
4H	23.9	24.7	24.3	25.1	25.4	24.6	25.4	25.0	25.8	26.2
6H	23.9	24.6	24.3	24.9	25.4	24.6	25.3	25.0	25.7	26.1
8H	23.8	24.5	24.3	24.9	25.3	24.6	25.2	25.0	25.6	26.0
12H	23.8	24.4	24.3	24.8	25.2	24.5	25.1	25.0	25.5	26.0
X=8H Y=4H	23.8	24.5	24.3	24.9	25.3	24.5	25.2	25.0	25.6	26.0
6H	23.8	24.3	24.3	24.7	25.2	24.5	25.0	25.0	25.5	25.9
8H	23.8	24.2	24.3	24.7	25.2	24.5	24.9	25.0	25.4	25.9
12H	23.7	24.1	24.2	24.6	25.1	24.5	24.9	25.0	25.3	25.9
X=12H Y=4H	23.8	24.4	24.3	24.8	25.2	24.5	25.1	25.0	25.5	25.9
6H	23.8	24.2	24.2	24.7	25.2	24.5	24.9	25.0	25.4	25.9
8H	23.7	24.1	24.2	24.6	25.1	24.5	24.9	25.0	25.3	25.8
Variations with the observer position at spacings:										
S=1.0H	+1.7/-3.8					+1.0/-1.5				
S=1.5H	+3.3/-9.1					+2.6/-5.6				
S=2.0H	+4.3/-10.7					+3.2/-8.8				

Calculate in accordance with CIE Pub.117. The table is revised with $11129 \ln(8 \log(F/F_0) = 8.4)$.

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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 = 2.00									
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	NA	0.85	0.90	0.94	0.99	1.02	1.04	1.07	1.09	
	0.30		NA	0.80	0.85	0.89	0.95	0.98	1.01	1.04	1.06	
	0.20		NA	0.76	0.81	0.86	0.92	0.96	0.98	1.02	1.04	
0.50	0.50	0.20	NA	0.83	0.88	0.91	0.96	0.99	1.00	1.03	1.04	
	0.30		NA	0.79	0.84	0.87	0.93	0.96	0.98	1.01	1.03	
	0.20		NA	0.76	0.80	0.84	0.90	0.93	0.96	0.99	1.01	
0.30	0.50	0.20	NA	0.82	0.86	0.89	0.93	0.96	0.97	0.99	1.01	
	0.30		NA	0.78	0.82	0.86	0.90	0.93	0.95	0.98	0.99	
	0.20		NA	0.75	0.79	0.83	0.88	0.91	0.93	0.96	0.98	
0.00	0.00	0.00	NA	0.73	0.77	0.80	0.85	0.88	0.89	0.92	0.93	
Rating:75W 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 = 2.00									
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	NA	0.54	0.46	0.40	0.31	0.25	0.22	0.17	0.13	
	0.30		NA	0.46	0.40	0.35	0.28	0.23	0.20	0.16	0.13	
	0.20		NA	0.40	0.36	0.31	0.25	0.21	0.19	0.15	0.12	
0.50	0.50	0.20	NA	0.51	0.43	0.37	0.29	0.27	0.20	0.15	0.12	
	0.30		NA	0.45	0.38	0.33	0.26	0.22	0.19	0.14	0.12	
	0.20		NA	0.39	0.34	0.30	0.24	0.20	0.18	0.14	0.11	
0.30	0.50	0.20	NA	0.49	0.41	0.35	0.27	0.22	0.19	0.14	0.12	
	0.30		NA	0.43	0.37	0.32	0.25	0.20	0.17	0.14	0.11	
	0.20		NA	0.38	0.33	0.29	0.23	0.19	0.17	0.13	0.11	
0.00	0.00	0.00	0.99	0.27	0.23	0.19	0.15	0.12	0.10	0.08	0.06	
Rating:75W 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 = 2.00									
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	NA	0.16	0.17	0.18	0.19	0.19	0.20	0.21	0.21	
	0.30		NA	0.11	0.13	0.14	0.16	0.17	0.18	0.19	0.20	
	0.20		NA	0.08	0.10	0.11	0.13	0.15	0.16	0.17	0.18	
0.50	0.50	0.20	NA	0.15	0.16	0.17	0.18	0.19	0.19	0.20	0.21	
	0.30		NA	0.11	0.12	0.14	0.15	0.16	0.17	0.18	0.19	
	0.20		NA	0.08	0.10	0.11	0.13	0.14	0.15	0.17	0.18	
0.30	0.50	0.20	NA	0.14	0.16	0.16	0.17	0.18	0.19	0.19	0.20	
	0.30		NA	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.18	
	0.20		NA	0.08	0.09	0.11	0.13	0.14	0.15	0.16	0.17	
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:75W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												