

Report No.: 1

Test Time: 22.01.2020 16:41

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FW 150 HE 4x28LED 2.4A 100W 5000K 90x90gr.

Luminous Length (mm): 604

Luminous Width (mm): 153

Luminous Height (mm): 80

Voltage: 221.4 V

Current: 0.466 A

Power: 100.95 W

Power Factor: 0.978

Photometric Results

CIE Class: Direct

Measurement Flux: 15341.9 lm

Downward Ratio: 99%

Total Rated Lamp Lumens: 15341.9 lm

Efficiency: 100%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 112.1, 111.7, 120.9, 120.6

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 81.6, 81.4, 89.9, 89.7

Luminaire Efficacy Rating (LER): 152.03

Central Intensity: 5957.68 cd

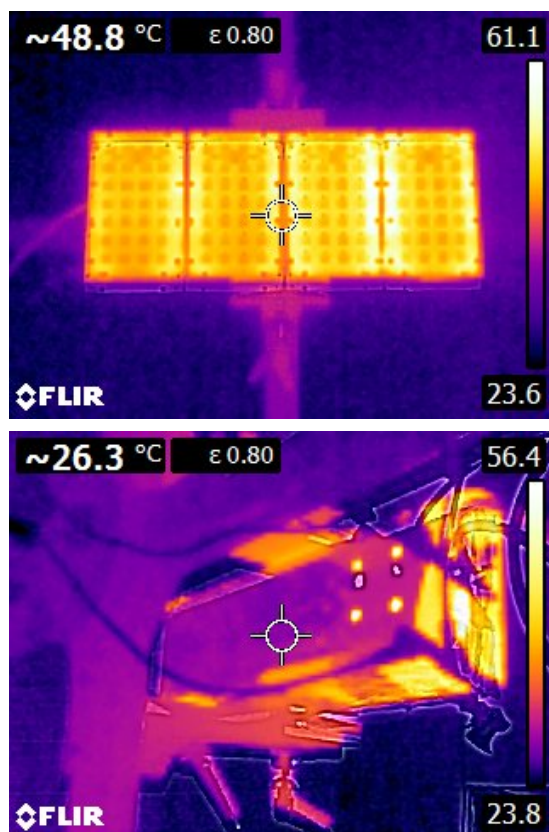
Max. Intensity: 9498.21 cd

Pos of Max. Intensity: H315 V33

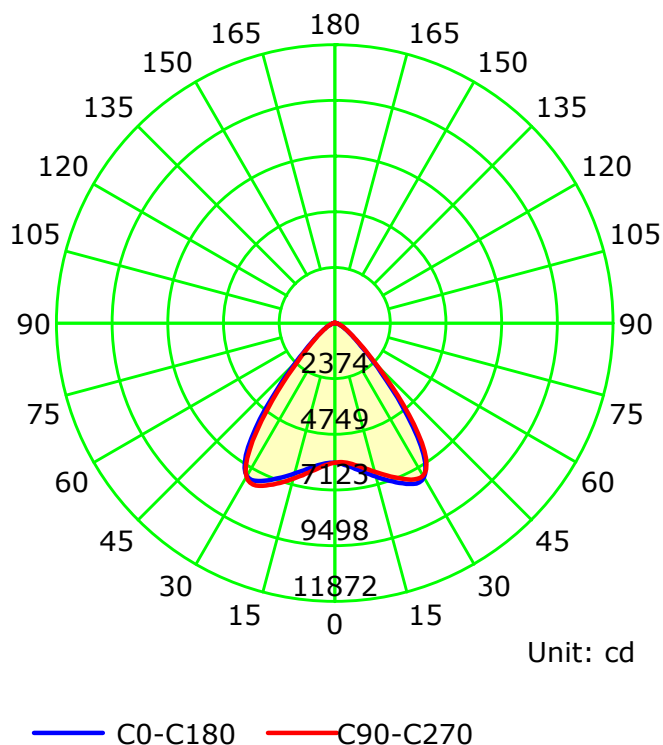
S/MH(C0/C180): 1.49

S/MH(C90/C270): 1.48

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

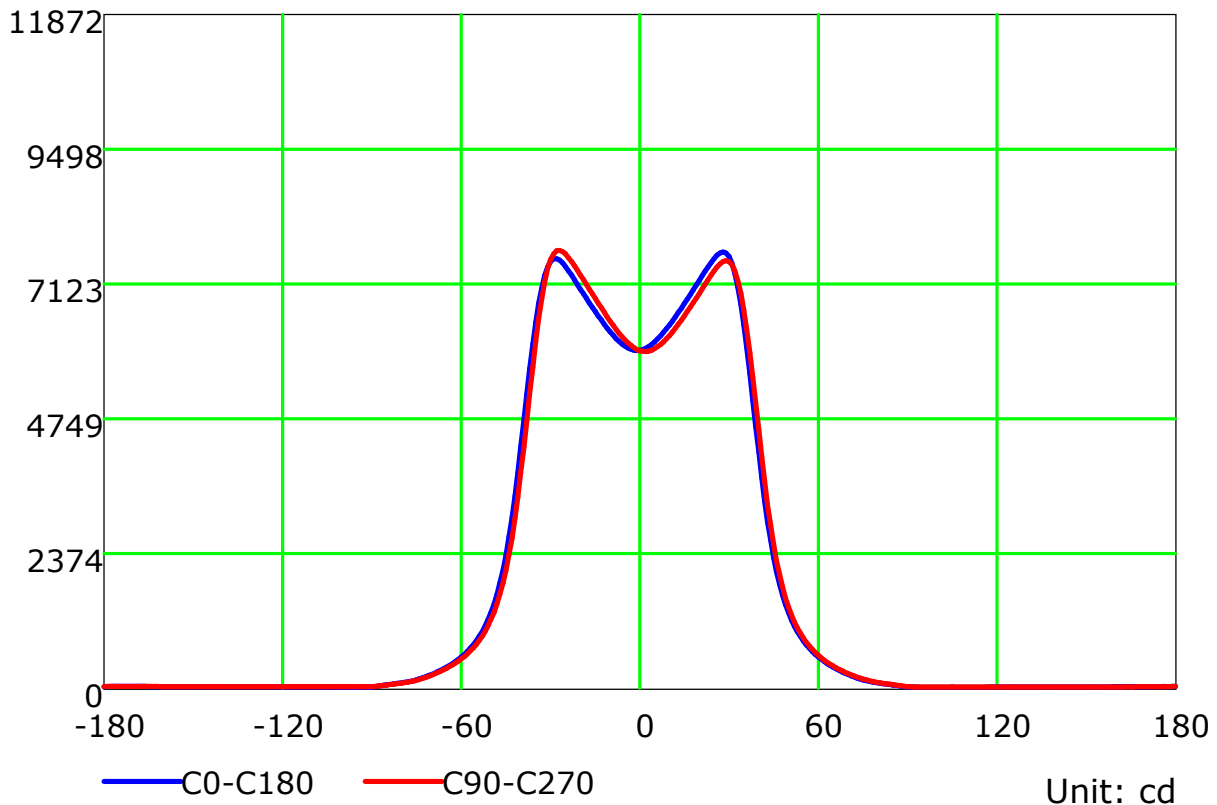
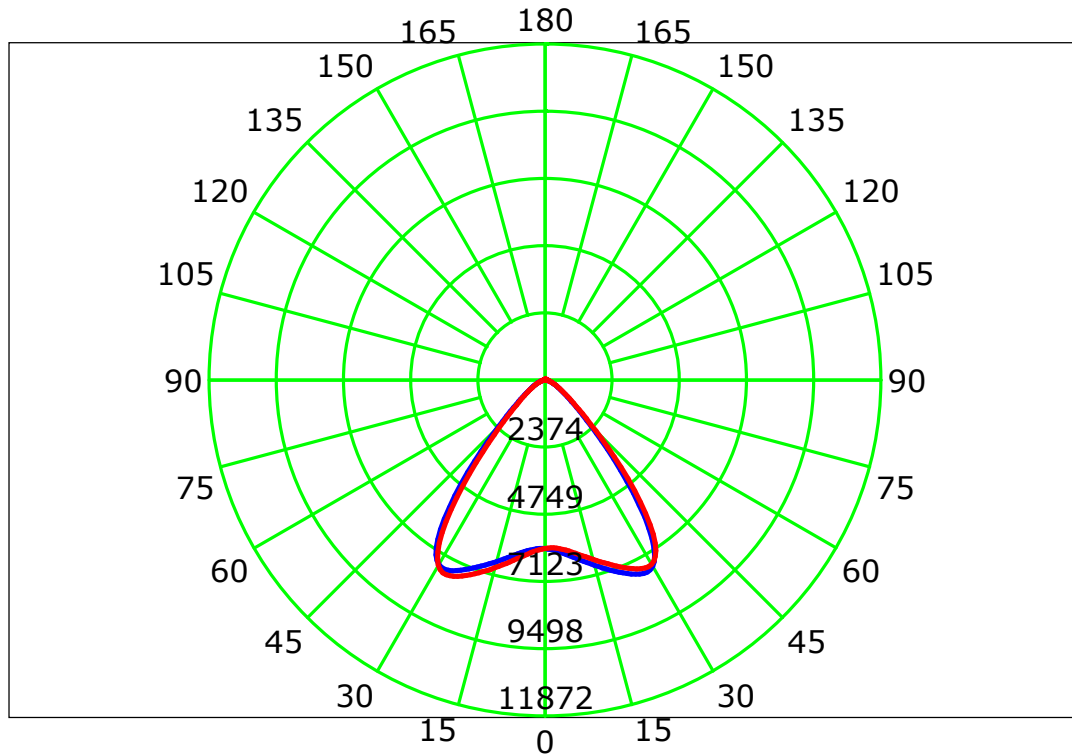
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

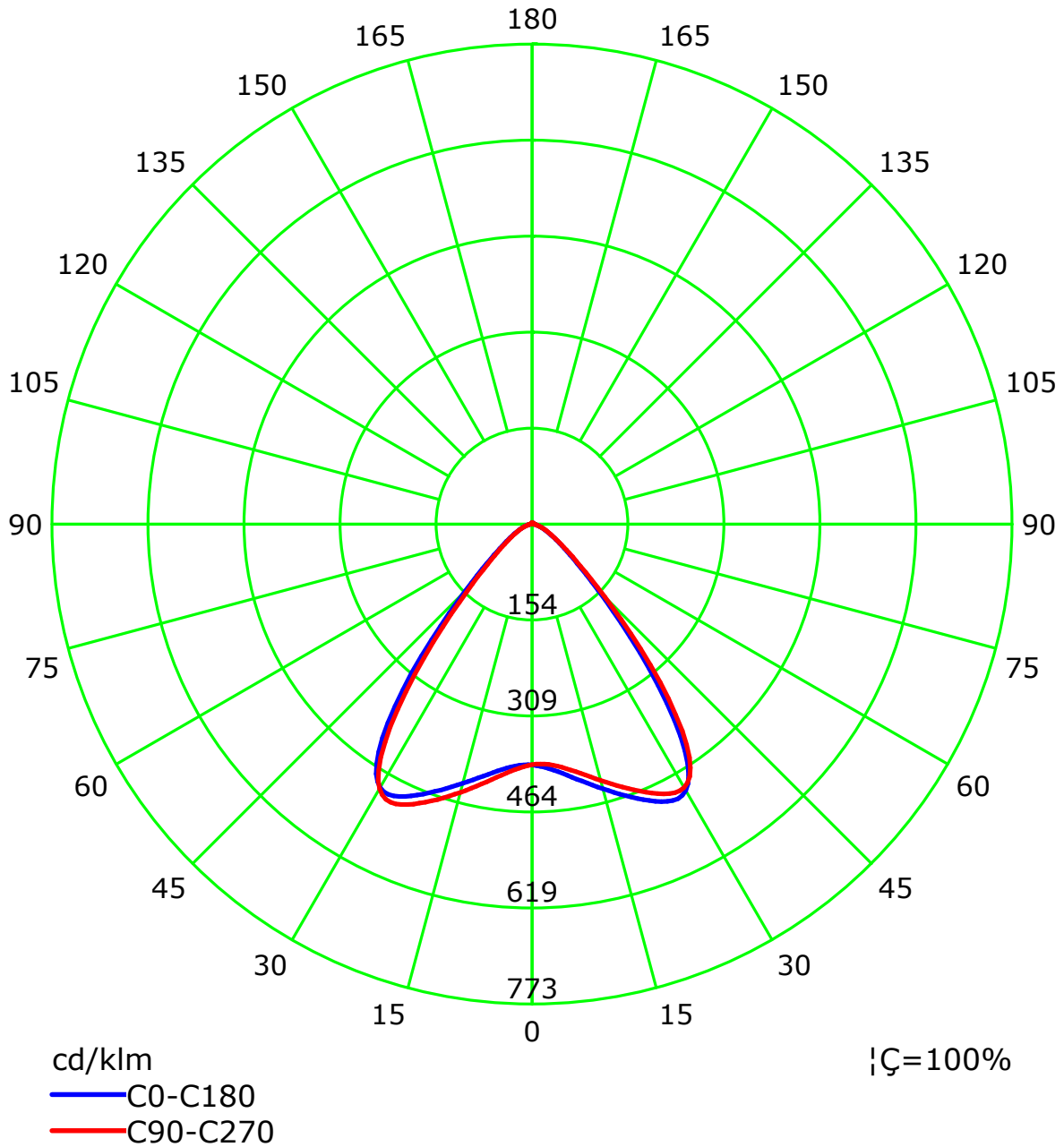
Luminous Intensity Distribution Curve



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)



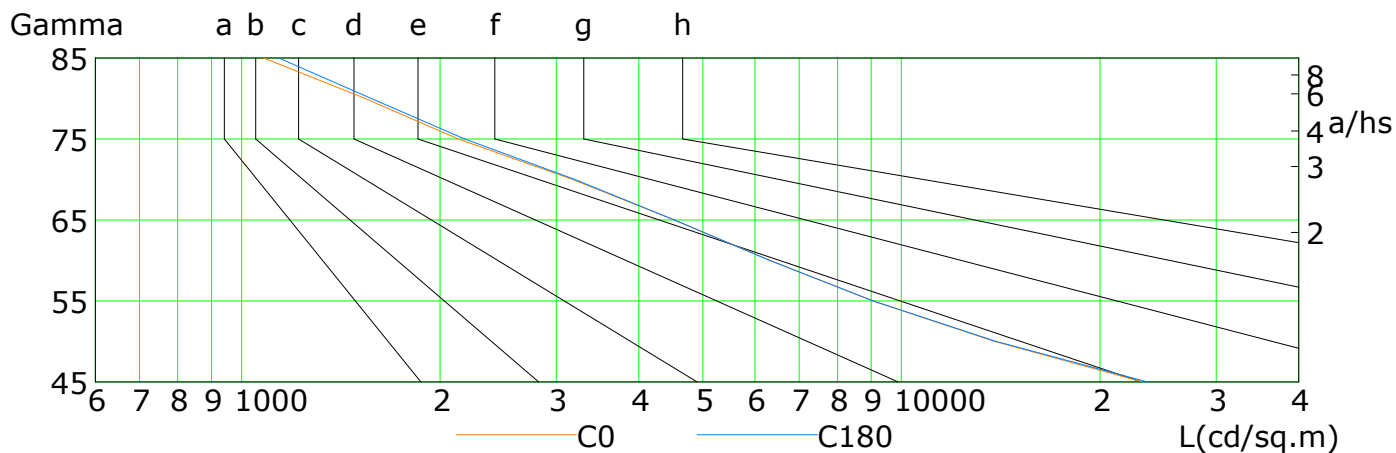
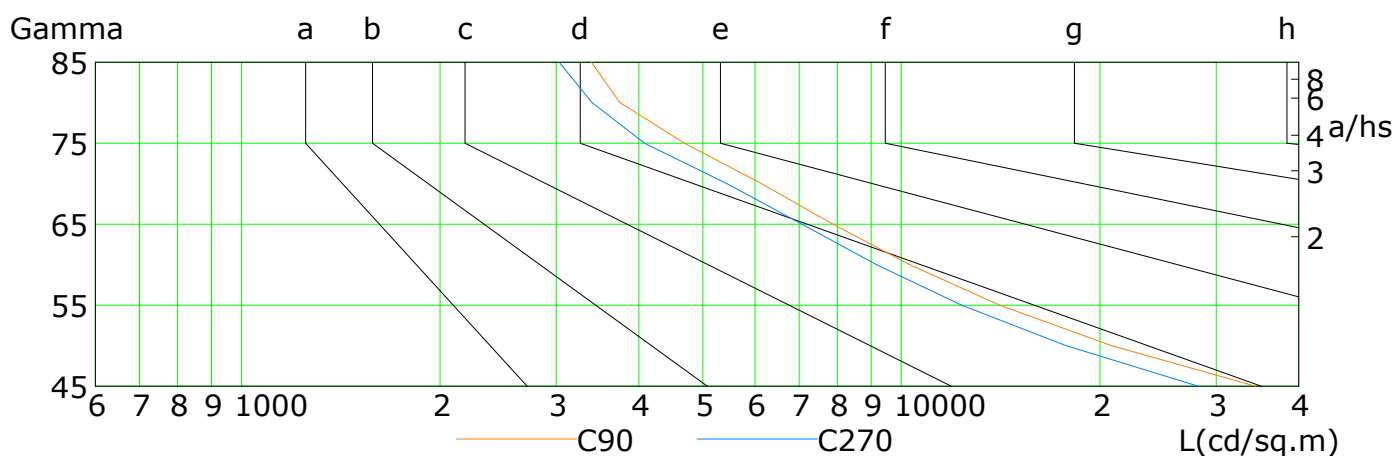
C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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

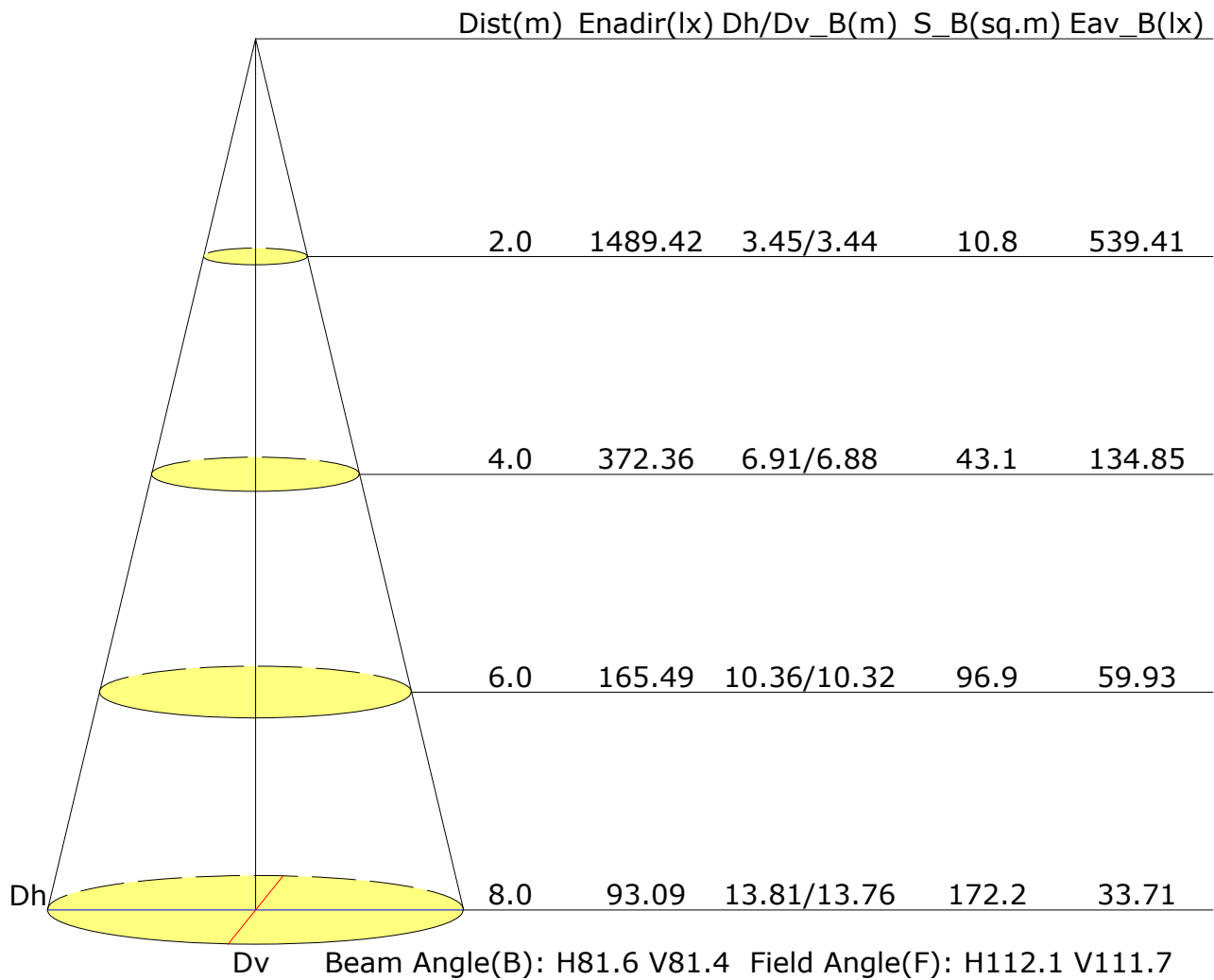


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	23200	13825	9061	6317	4526	3169	2130	1538	1081
C90	34417	20799	14100	10295	7882	6134	4693	3745	3392
C180	23588	13905	9058	6307	4526	3196	2180	1570	1138
C270	28183	17744	12346	9164	7071	5436	4082	3399	3028

C Plane (°):0.0-360.0: 22.5
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 Temperature:
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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	21.7	22.8	22.0	23.1	23.3	22.3	23.4	22.6	23.7	23.9
3H	21.7	22.7	22.0	23.0	23.2	22.3	23.3	22.6	23.6	23.9
4H	21.6	22.6	22.0	22.9	23.2	22.3	23.2	22.6	23.5	23.8
6H	21.6	22.5	22.0	22.8	23.1	22.3	23.1	22.6	23.5	23.8
8H	21.6	22.4	21.9	22.7	23.1	22.3	23.1	22.6	23.4	23.8
12H	21.5	22.3	21.9	22.7	23.0	22.2	23.0	22.6	23.4	23.7
X=4H Y=2H	21.7	22.7	22.1	23.0	23.3	22.3	23.2	22.6	23.5	23.8
3H	21.8	22.6	22.2	22.9	23.3	22.4	23.2	22.7	23.5	23.9
4H	21.8	22.5	22.2	22.8	23.2	22.4	23.1	22.8	23.5	23.8
6H	21.7	22.4	22.2	22.8	23.2	22.4	23.0	22.8	23.4	23.8
8H	21.7	22.3	22.2	22.7	23.1	22.4	23.0	22.8	23.4	23.8
12H	21.7	22.2	22.2	22.6	23.1	22.4	22.9	22.8	23.3	23.8
X=8H Y=4H	21.7	22.3	22.2	22.7	23.2	22.3	22.9	22.8	23.3	23.8
6H	21.7	22.2	22.2	22.6	23.1	22.4	22.8	22.9	23.3	23.8
8H	21.7	22.1	22.2	22.6	23.1	22.4	22.8	22.9	23.2	23.8
12H	21.7	22.1	22.2	22.5	23.1	22.4	22.7	22.9	23.2	23.7
X=12H Y=4H	21.7	22.2	22.2	22.6	23.1	22.3	22.8	22.8	23.2	23.7
6H	21.7	22.1	22.2	22.6	23.1	22.3	22.7	22.8	23.2	23.7
8H	21.7	22.0	22.2	22.5	23.1	22.4	22.7	22.9	23.2	23.7
Variations with the observer position at spacings:										
S=1.0H	+2.9/-3.6					+2.7/-3.4				
S=1.5H	+3.8/-5.2					+3.7/-4.7				
S=2.0H	+5.6/-6.4					+5.5/-5.7				

Calculate in accordance with CIE Pub.117. The table is revised with 15342lm ($8\log(F/F_0) = 9.5$).

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

Gamma Plane (°):0.0-180.0:1.0
 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	0.73	0.82	0.87	0.92	0.97	1.00	1.03	1.06	1.08	
	0.30		0.67	0.76	0.82	0.87	0.93	0.97	0.99	1.03	1.05	
	0.20		0.62	0.72	0.78	0.83	0.89	0.93	0.96	1.00	1.03	
0.50	0.50	0.20	0.71	0.80	0.85	0.89	0.94	0.97	0.99	1.02	1.03	
	0.30		0.66	0.75	0.81	0.85	0.90	0.94	0.96	0.99	1.01	
	0.20		0.62	0.71	0.77	0.81	0.87	0.91	0.94	0.97	1.00	
0.30	0.50	0.20	0.70	0.78	0.83	0.86	0.91	0.94	0.96	0.98	1.00	
	0.30		0.65	0.74	0.79	0.83	0.88	0.91	0.93	0.96	0.98	
	0.20		0.62	0.70	0.76	0.80	0.85	0.89	0.91	0.95	0.97	
0.00	0.00	0.00	0.60	0.68	0.73	0.77	0.82	0.85	0.87	0.90	0.92	
Rating:101W 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	0.75	0.60	0.50	0.43	0.34	0.28	0.24	0.18	0.15	
	0.30		0.63	0.51	0.43	0.38	0.30	0.25	0.22	0.17	0.14	
	0.20		0.54	0.45	0.39	0.34	0.28	0.23	0.20	0.16	0.13	
0.50	0.50	0.20	0.72	0.57	0.47	0.40	0.32	0.30	0.22	0.17	0.14	
	0.30		0.61	0.49	0.42	0.36	0.29	0.24	0.21	0.16	0.13	
	0.20		0.53	0.44	0.37	0.33	0.27	0.22	0.19	0.15	0.13	
0.30	0.50	0.20	0.69	0.54	0.45	0.38	0.30	0.24	0.20	0.16	0.13	
	0.30		0.59	0.48	0.40	0.35	0.27	0.23	0.19	0.15	0.12	
	0.20		0.52	0.42	0.36	0.32	0.25	0.21	0.18	0.14	0.12	
0.00	0.00	0.00	0.39	0.31	0.26	0.22	0.17	0.14	0.12	0.09	0.07	
Rating:101W 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	0.15	0.17	0.18	0.18	0.20	0.20	0.21	0.22	0.22	
	0.30		0.10	0.12	0.13	0.14	0.16	0.17	0.18	0.20	0.20	
	0.20		0.06	0.08	0.10	0.11	0.13	0.15	0.16	0.18	0.19	
0.50	0.50	0.20	0.15	0.16	0.17	0.18	0.19	0.19	0.20	0.21	0.21	
	0.30		0.10	0.12	0.13	0.14	0.16	0.17	0.18	0.19	0.20	
	0.20		0.06	0.08	0.10	0.11	0.13	0.15	0.16	0.17	0.18	
0.30	0.50	0.20	0.14	0.15	0.16	0.17	0.18	0.19	0.19	0.20	0.20	
	0.30		0.10	0.11	0.13	0.14	0.15	0.16	0.17	0.18	0.19	
	0.20		0.06	0.08	0.10	0.11	0.13	0.14	0.15	0.17	0.18	
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:101W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												