

Report No.: 1

Test Time: 23.12.2019 22:09

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FI 135 4x24LED 0.4A 20.5W 5000K matoviy

Luminous Length (mm): 1280

Luminous Width (mm): 350

Luminous Height (mm): 100

Voltage: 221.4 V

Current: 0.097 A

Power: 20.72 W

Power Factor: 0.964

Photometric Results

CIE Class: Direct

Measurement Flux: 2732.3 lm

Downward Ratio: 92%

Total Rated Lamp Lumens: 2732.3 lm

Efficiency: 100%

Upward Ratio: 8%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 159.8, 218.0, 193.4, 194.9

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 107.3, 124.4, 115.1, 115.5

Luminaire Efficacy Rating (LER): 131.92

Central Intensity: 806.02 cd

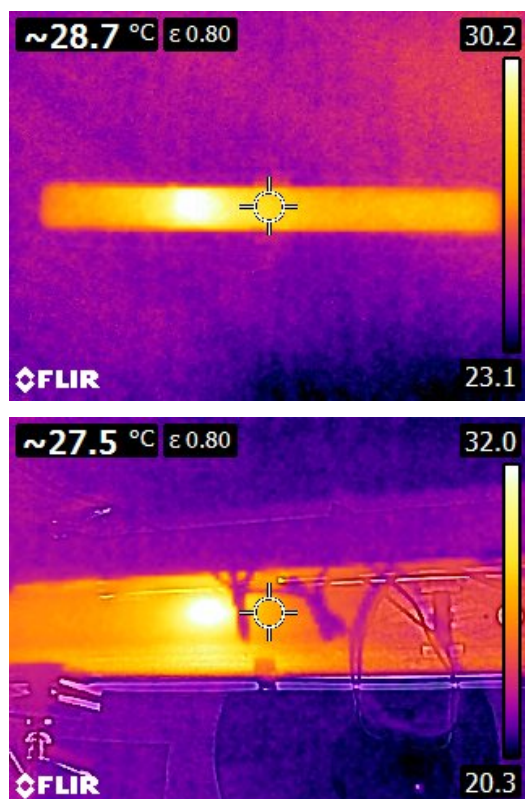
Max. Intensity: 807.48 cd

Pos of Max. Intensity: H157.5 V1

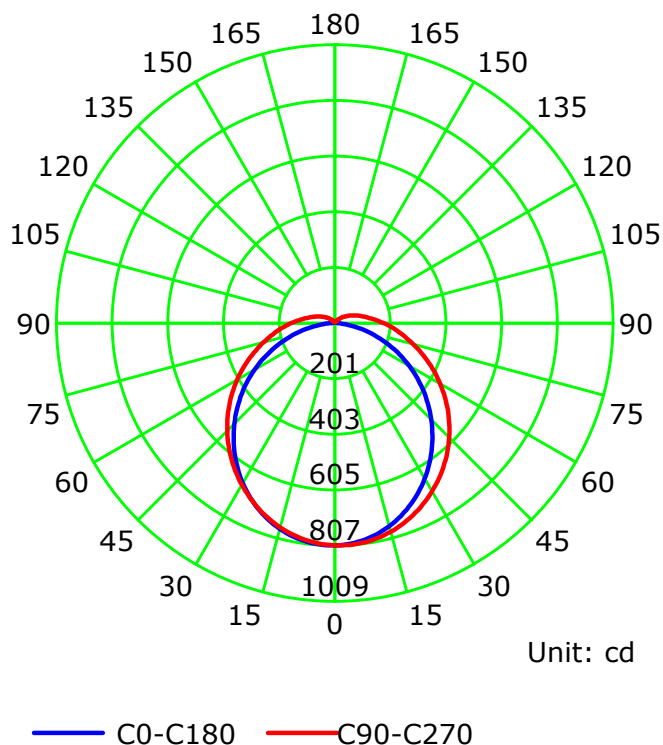
S/MH(C0/C180): 1.22

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 (°):0.0-180.0:1.0

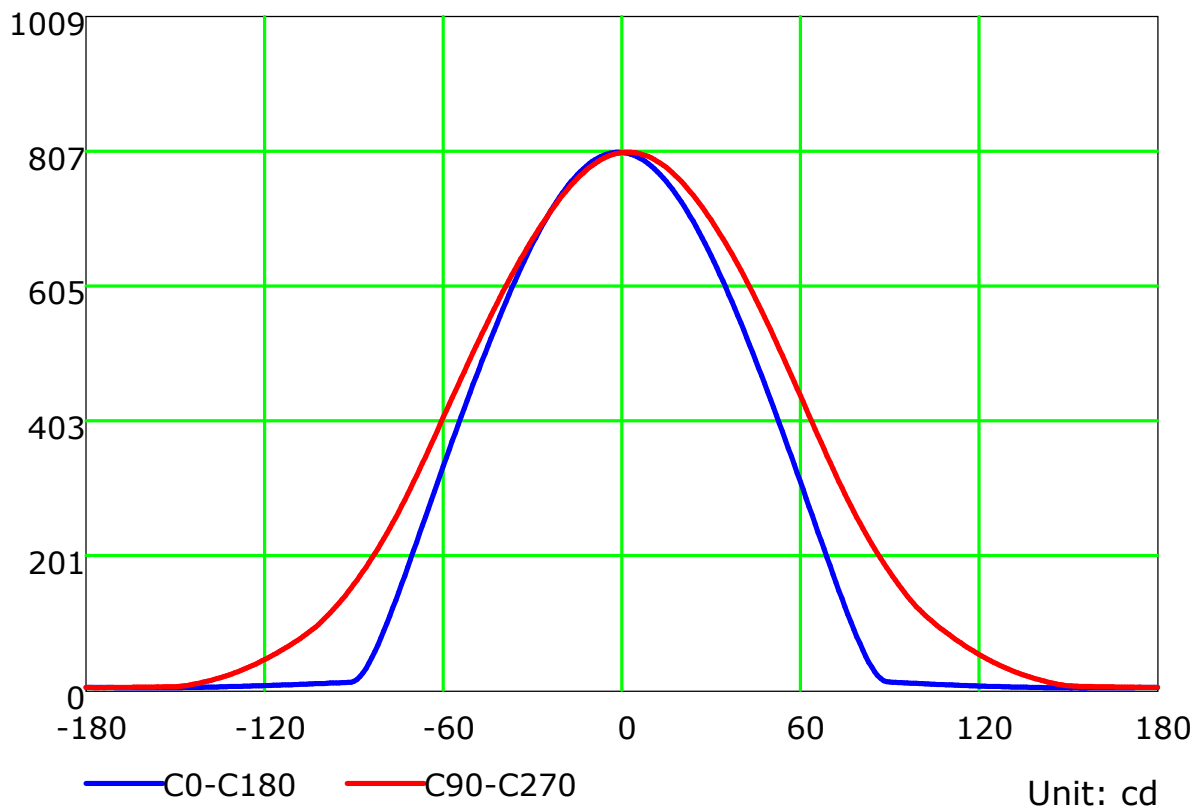
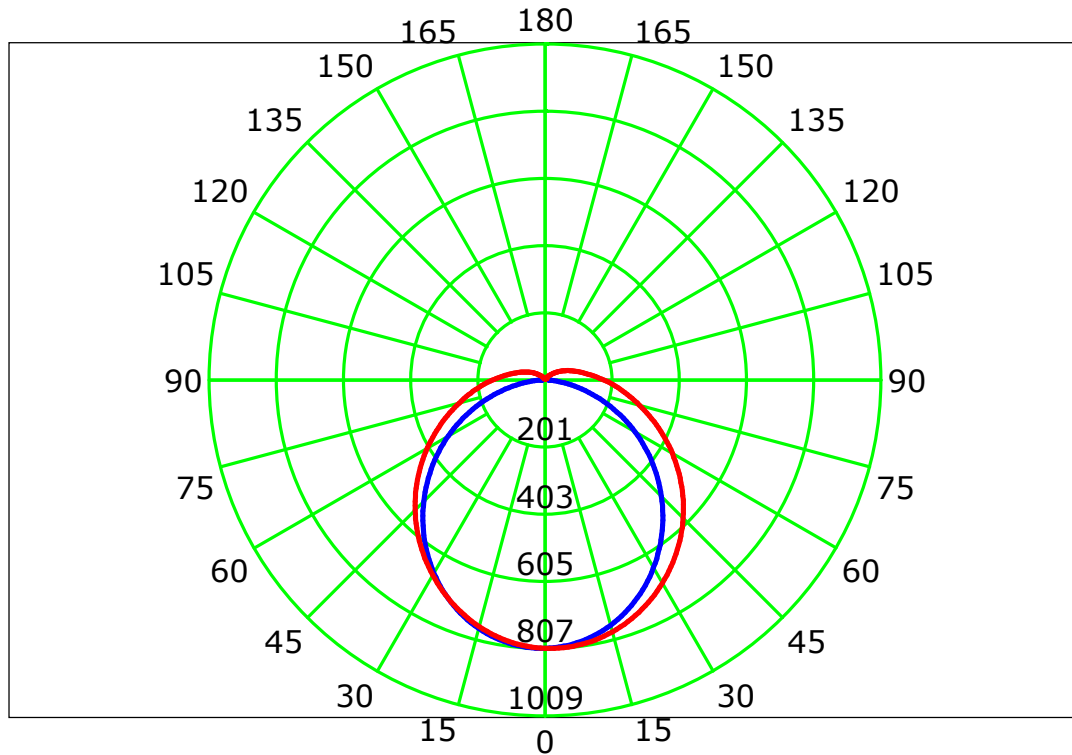
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

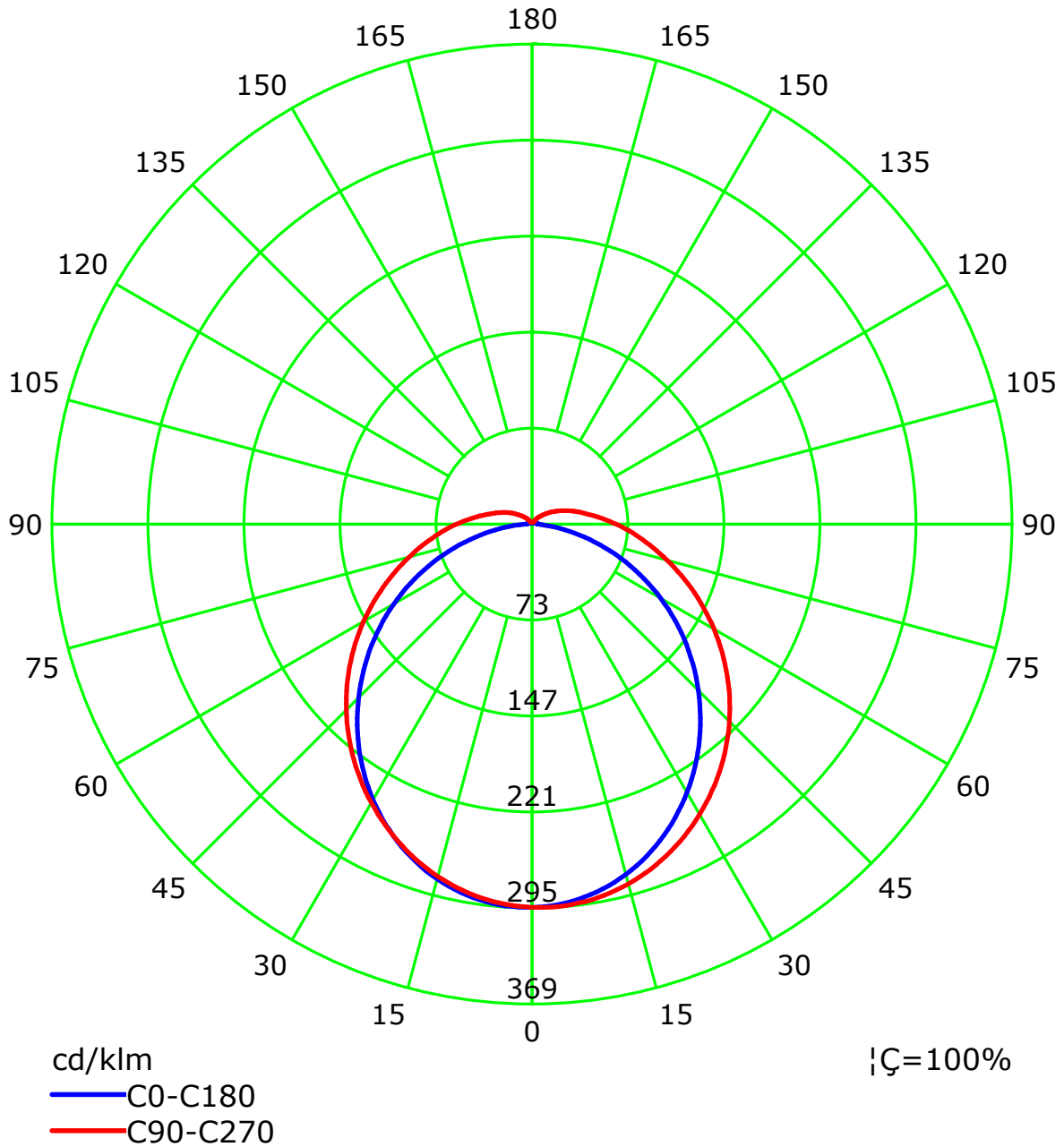
Luminous Intensity Distribution Curve



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)

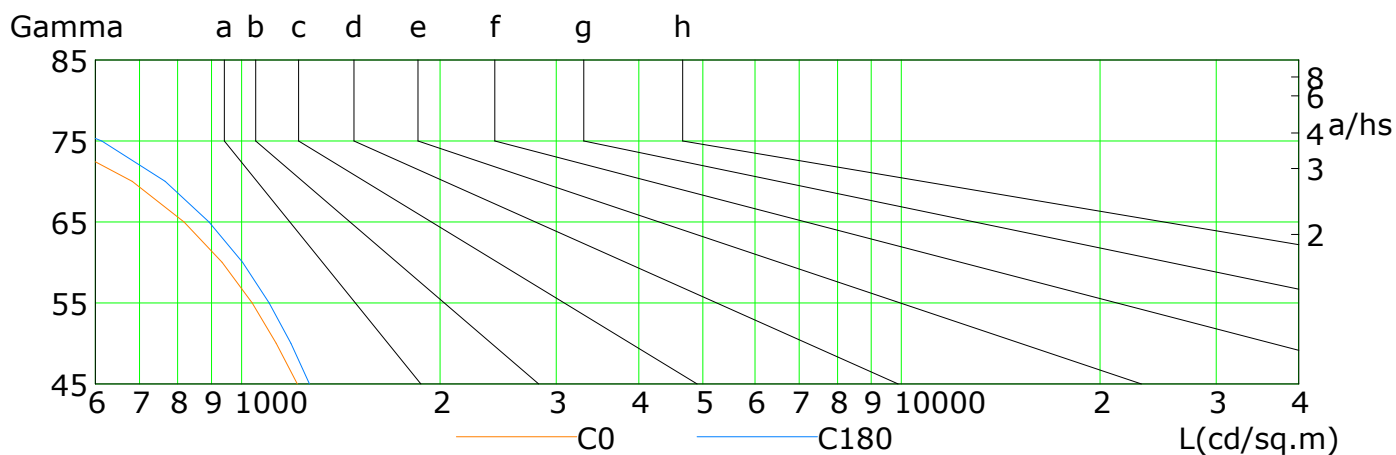
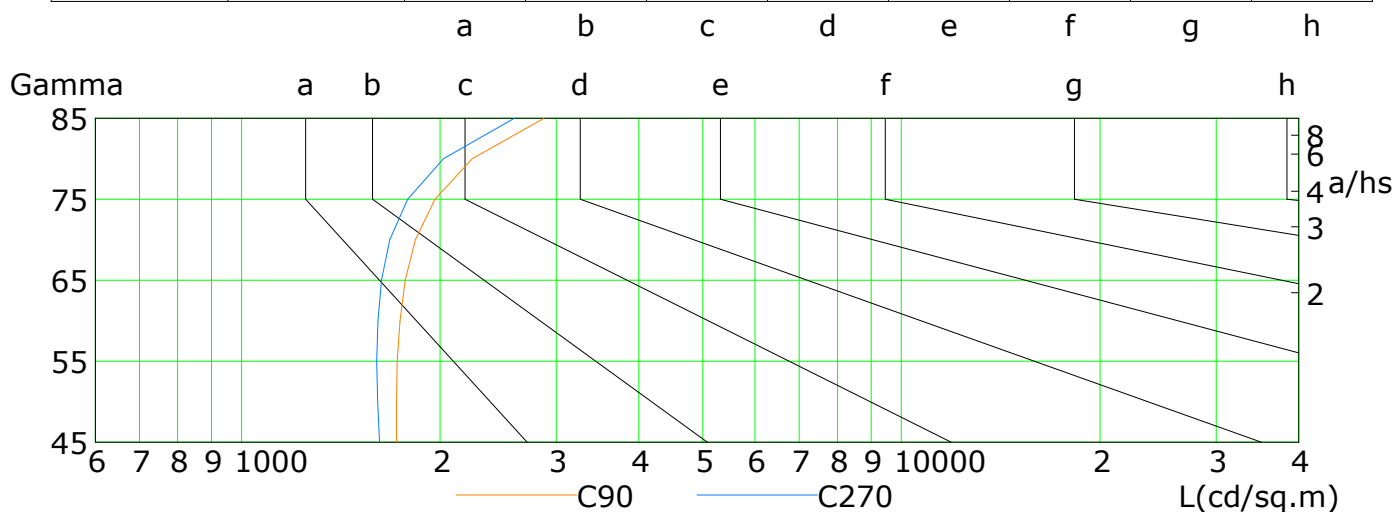


C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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

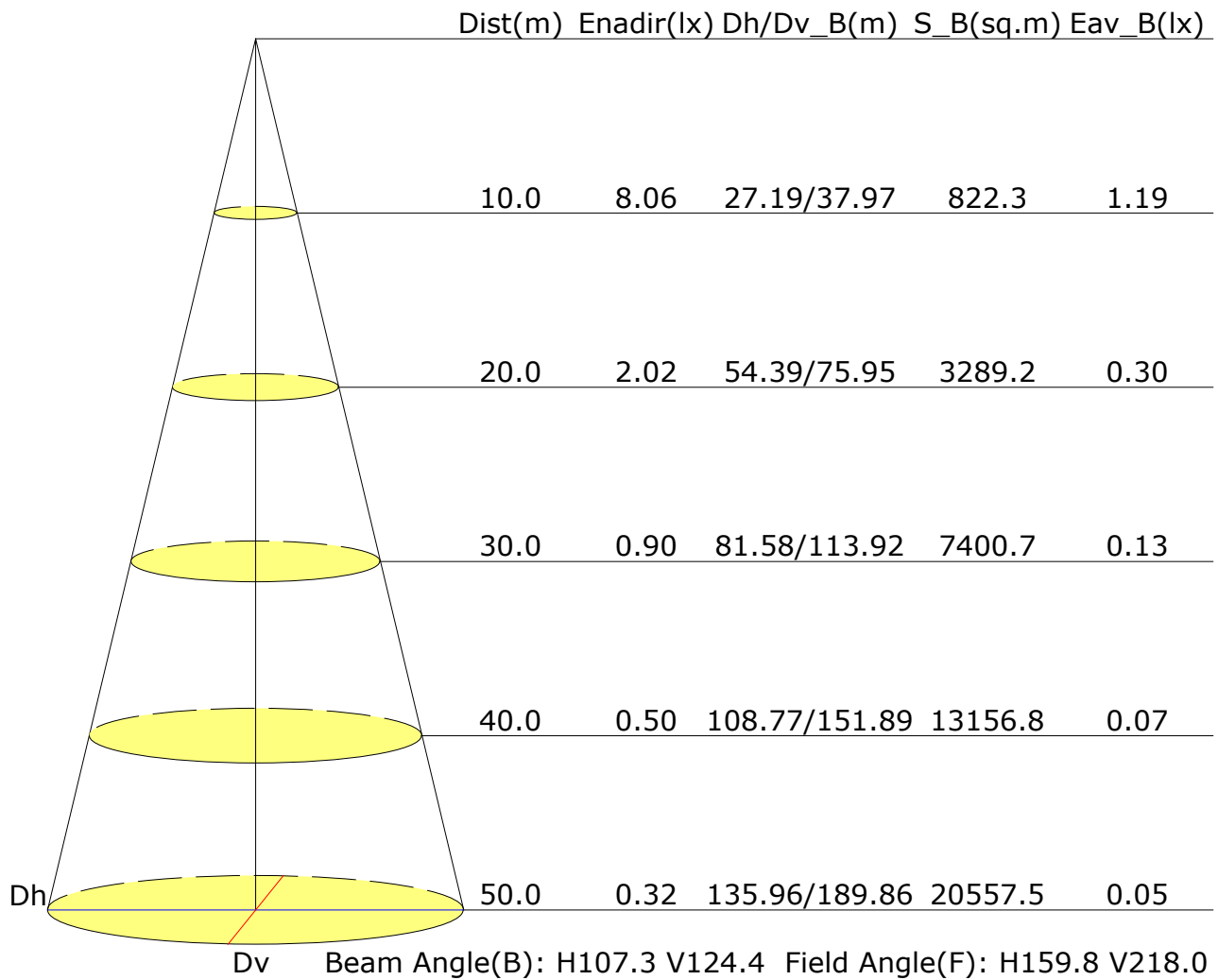


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	1215	1129	1037	935	818	683	524	346	168
C90	1718	1717	1721	1738	1770	1835	1964	2237	2873
C180	1267	1188	1101	1003	893	766	614	436	245
C270	1619	1608	1603	1609	1629	1678	1786	2024	2589

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

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	11.9	13.2	12.3	13.6	14.0	13.6	14.9	14.0	15.3	15.7
3H	13.1	14.3	13.5	14.7	15.1	15.7	16.9	16.1	17.3	17.8
4H	13.5	14.6	13.9	15.1	15.5	16.7	17.9	17.2	18.3	18.8
6H	13.7	14.8	14.2	15.3	15.7	17.8	18.9	18.3	19.3	19.8
8H	13.8	14.8	14.3	15.3	15.8	18.4	19.4	18.9	19.9	20.4
12H	13.8	14.8	14.3	15.2	15.8	19.0	20.0	19.5	20.4	20.9
X=4H Y=2H	12.7	13.9	13.2	14.3	14.8	14.1	15.2	14.5	15.6	16.1
3H	14.1	15.1	14.6	15.6	16.1	16.3	17.3	16.8	17.8	18.3
4H	14.7	15.6	15.2	16.1	16.6	17.6	18.5	18.1	19.0	19.5
6H	15.0	15.9	15.6	16.4	16.9	18.8	19.6	19.4	20.2	20.7
8H	15.1	15.9	15.7	16.4	17.0	19.5	20.2	20.1	20.8	21.4
12H	15.2	15.9	15.8	16.4	17.0	20.2	20.9	20.8	21.4	22.0
X=8H Y=4H	15.3	16.0	15.8	16.6	17.2	17.8	18.5	18.3	19.1	19.6
6H	15.9	16.5	16.4	17.0	17.7	19.2	19.9	19.8	20.4	21.1
8H	16.1	16.6	16.7	17.2	17.8	20.1	20.6	20.7	21.2	21.8
12H	16.2	16.7	16.8	17.3	17.9	20.9	21.4	21.6	22.0	22.7
X=12H Y=4H	15.4	16.1	16.0	16.7	17.3	17.8	18.4	18.3	19.0	19.6
6H	16.1	16.7	16.7	17.3	17.9	19.3	19.8	19.9	20.4	21.1
8H	16.4	16.9	17.0	17.5	18.2	20.2	20.6	20.8	21.2	21.9
Variations with the observer position at spacings:										
S=1.0H	+0.2/-0.2					+0.3/-0.3				
S=1.5H	+0.3/-0.5					+0.5/-0.5				
S=2.0H	+0.5/-1.0					+0.6/-0.7				

Calculate in accordance with CIE Pub.117. The table is revised with 2732lm ($8\log(F/F_0) = 3.5$).

C Plane (°):0.0-360.0: 22.5
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 Temperature:
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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	0.52	0.62	0.69	0.74	0.81	0.86	0.90	0.95	0.98	
	0.30		0.44	0.54	0.61	0.66	0.74	0.80	0.84	0.90	0.94	
	0.20		0.38	0.48	0.55	0.60	0.69	0.75	0.79	0.86	0.90	
0.50	0.50	0.20	0.50	0.59	0.65	0.70	0.77	0.81	0.85	0.89	0.92	
	0.30		0.42	0.52	0.58	0.64	0.71	0.76	0.80	0.85	0.89	
	0.20		0.37	0.46	0.53	0.58	0.66	0.72	0.76	0.82	0.86	
0.30	0.50	0.20	0.47	0.56	0.62	0.66	0.73	0.77	0.80	0.84	0.87	
	0.30		0.41	0.50	0.56	0.61	0.68	0.73	0.76	0.81	0.84	
	0.20		0.36	0.45	0.52	0.57	0.64	0.69	0.73	0.78	0.82	
0.00	0.00	0.00	0.33	0.42	0.48	0.52	0.59	0.64	0.67	0.72	0.75	
Rating:21W 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	1.03	0.86	0.74	0.66	0.53	0.45	0.39	0.31	0.26	
	0.30		0.86	0.74	0.65	0.58	0.48	0.41	0.36	0.29	0.25	
	0.20		0.73	0.64	0.58	0.52	0.44	0.38	0.34	0.28	0.23	
0.50	0.50	0.20	0.97	0.82	0.70	0.62	0.51	0.45	0.37	0.29	0.24	
	0.30		0.83	0.71	0.62	0.56	0.46	0.39	0.35	0.28	0.23	
	0.20		0.72	0.63	0.56	0.50	0.43	0.37	0.32	0.26	0.22	
0.30	0.50	0.20	0.93	0.77	0.67	0.59	0.48	0.40	0.35	0.28	0.23	
	0.30		0.80	0.68	0.60	0.53	0.44	0.38	0.33	0.26	0.22	
	0.20		0.70	0.61	0.54	0.49	0.41	0.35	0.31	0.25	0.21	
0.00	0.00	0.00	0.59	0.51	0.45	0.40	0.33	0.29	0.25	0.20	0.17	
Rating:21W 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	0.24	0.26	0.26	0.27	0.28	0.28	0.29	0.29	0.30	
	0.30		0.17	0.19	0.20	0.21	0.23	0.24	0.24	0.26	0.26	
	0.20		0.12	0.14	0.15	0.16	0.18	0.20	0.21	0.22	0.24	
0.50	0.50	0.20	0.23	0.25	0.25	0.26	0.27	0.27	0.28	0.28	0.28	
	0.30		0.17	0.18	0.19	0.20	0.22	0.23	0.24	0.25	0.26	
	0.20		0.12	0.13	0.15	0.16	0.18	0.19	0.20	0.22	0.23	
0.30	0.50	0.20	0.23	0.24	0.24	0.25	0.26	0.26	0.27	0.27	0.27	
	0.30		0.16	0.18	0.19	0.20	0.21	0.22	0.23	0.24	0.25	
	0.20		0.12	0.13	0.15	0.16	0.17	0.19	0.20	0.21	0.22	
0.00	0.00	0.00	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
Rating:21W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												