

Report No.: 1

Test Time: 19.02.2020 14:30

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 100 36 LED 400W 5000K 20 gr.

Number of Lamps: 1

Luminous Width (mm): 337

Voltage: 221.8 V

Power: 400.30 W

Luminous Length (mm): 439

Luminous Height (mm): 320

Current: 1.842 A

Power Factor: 0.980

Photometric Results

CIE Class: Direct

Measurement Flux: 67069 lm

Downward Ratio: 94%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 43.8, 40.3, 42.4, 41.2

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 19.7, 20.1, 20.4, 19.3

Luminaire Efficacy Rating (LER): 167.60

Max. Intensity: 273939.44 cd

S/MH(C0/C180): 0.34

Total Rated Lamp Lumens: 67069.0 lm

Efficiency: 100%

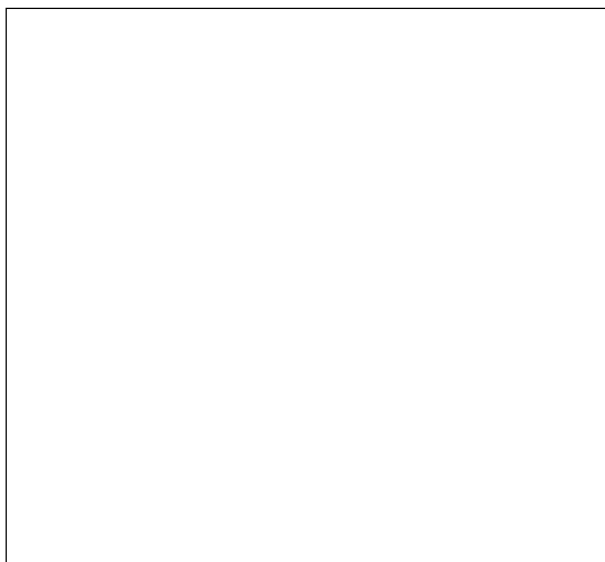
Upward Ratio: 6%

Central Intensity: 267443.28 cd

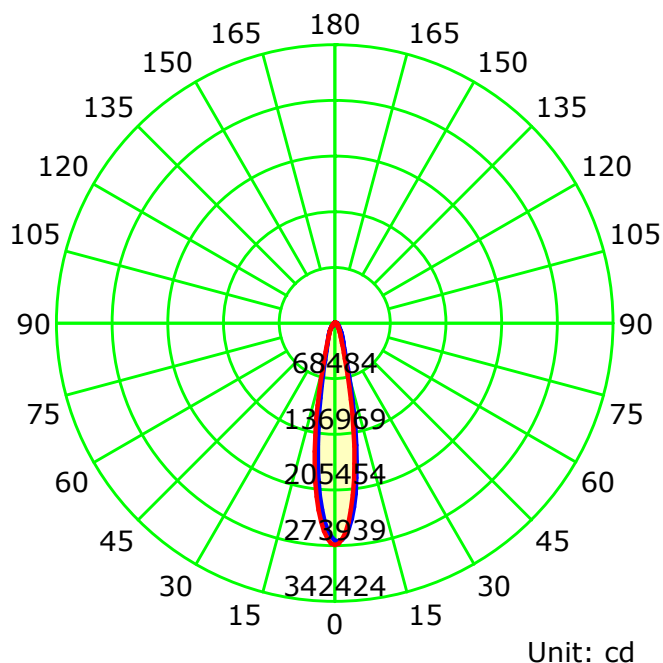
Pos of Max. Intensity: H135 V0

S/MH(C90/C270): 0.34

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

— 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

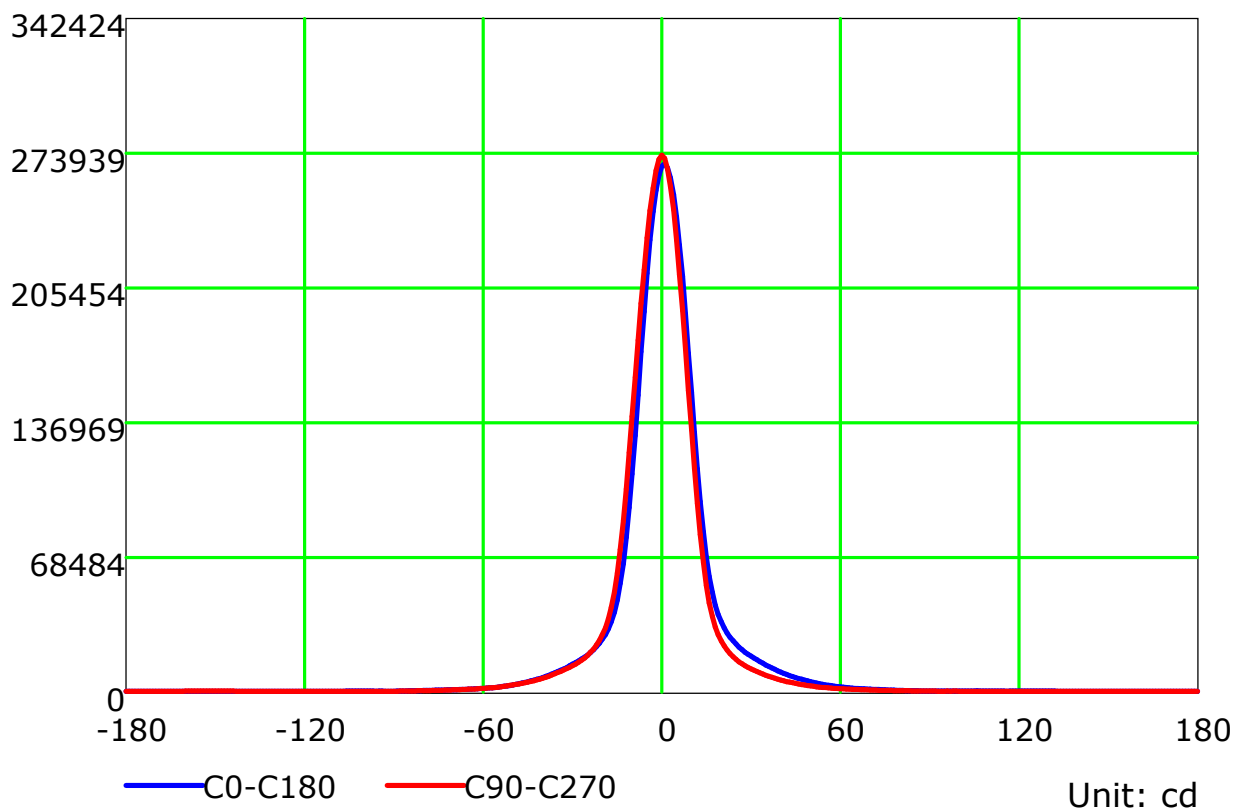
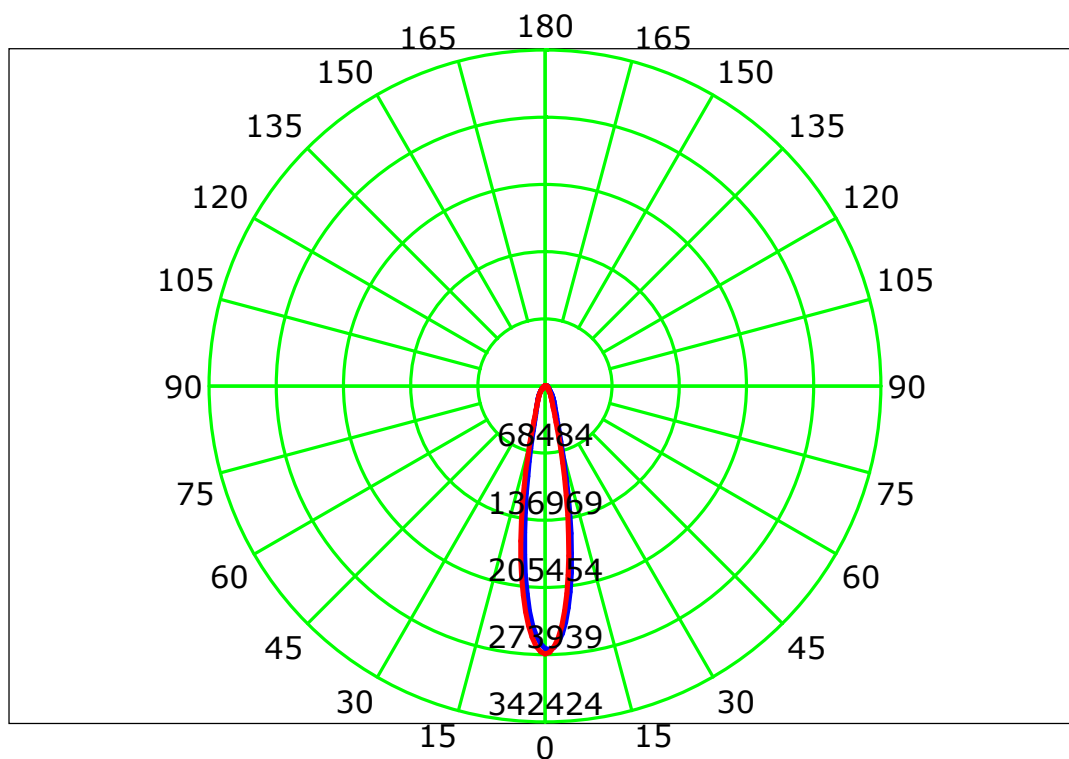
Test Device: LSG-1800B

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

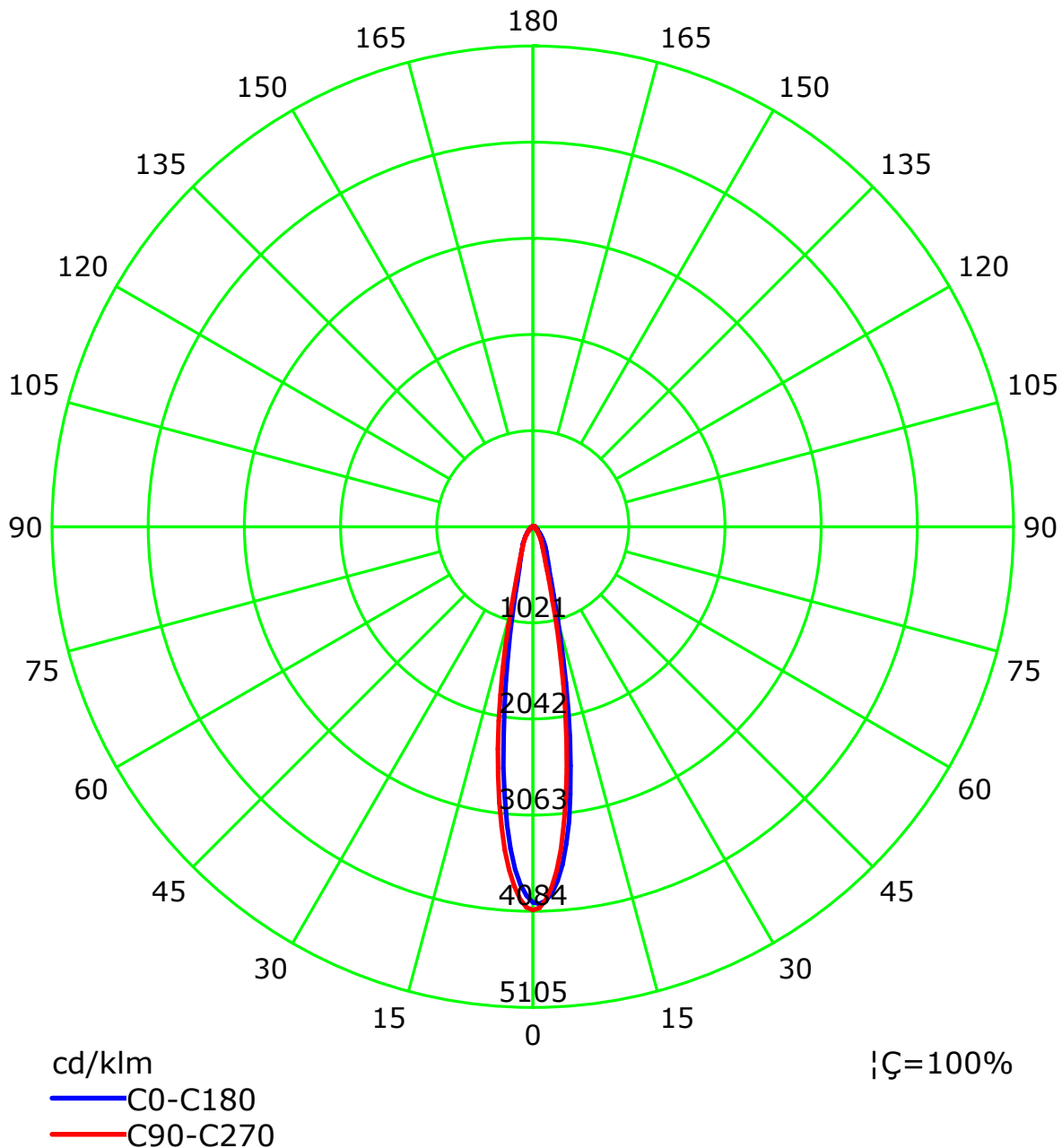
Test Device: LSG-1800B

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

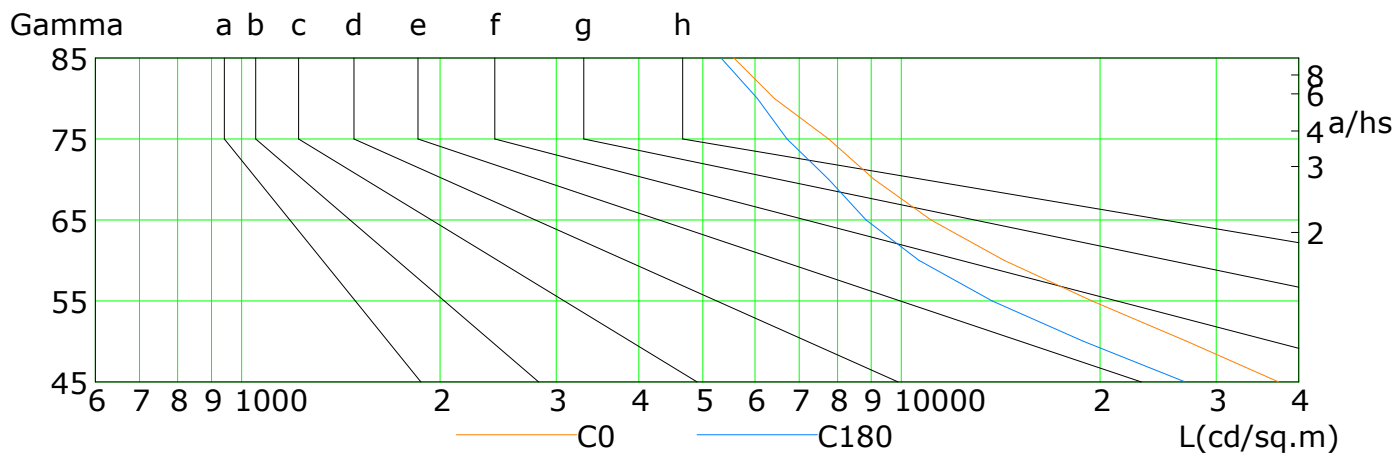
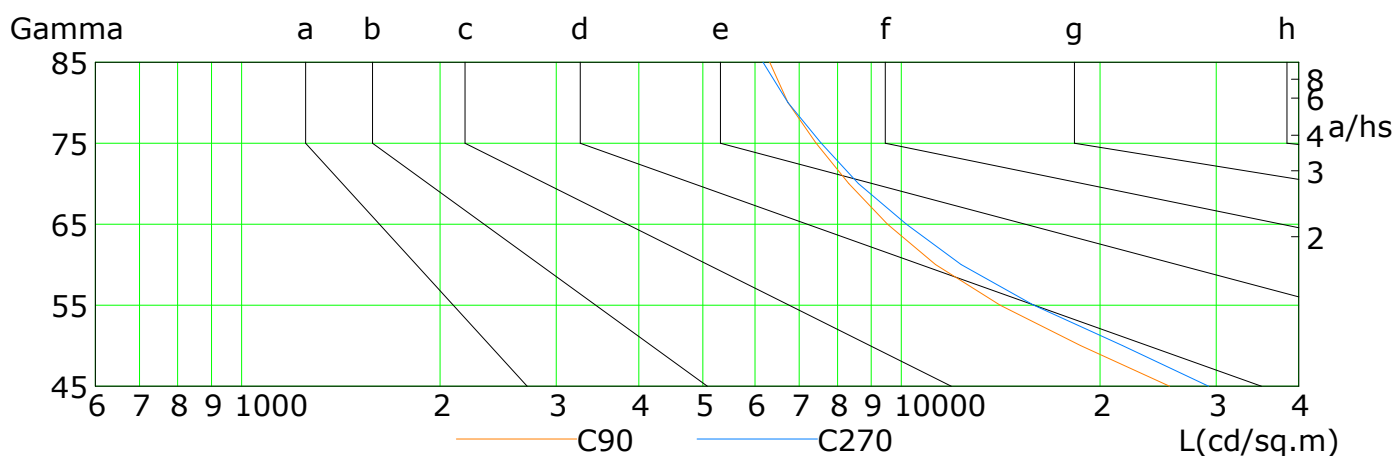
Humidity:

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

a b c d e f g h



L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	37310	27066	19440	14302	11086	9093	7761	6415	5572
C90	25492	18689	14118	11266	9527	8327	7429	6733	6319
C180	26931	18874	13721	10633	8843	7761	6712	6044	5333
C270	29225	21632	15874	12320	10172	8607	7557	6733	6167

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

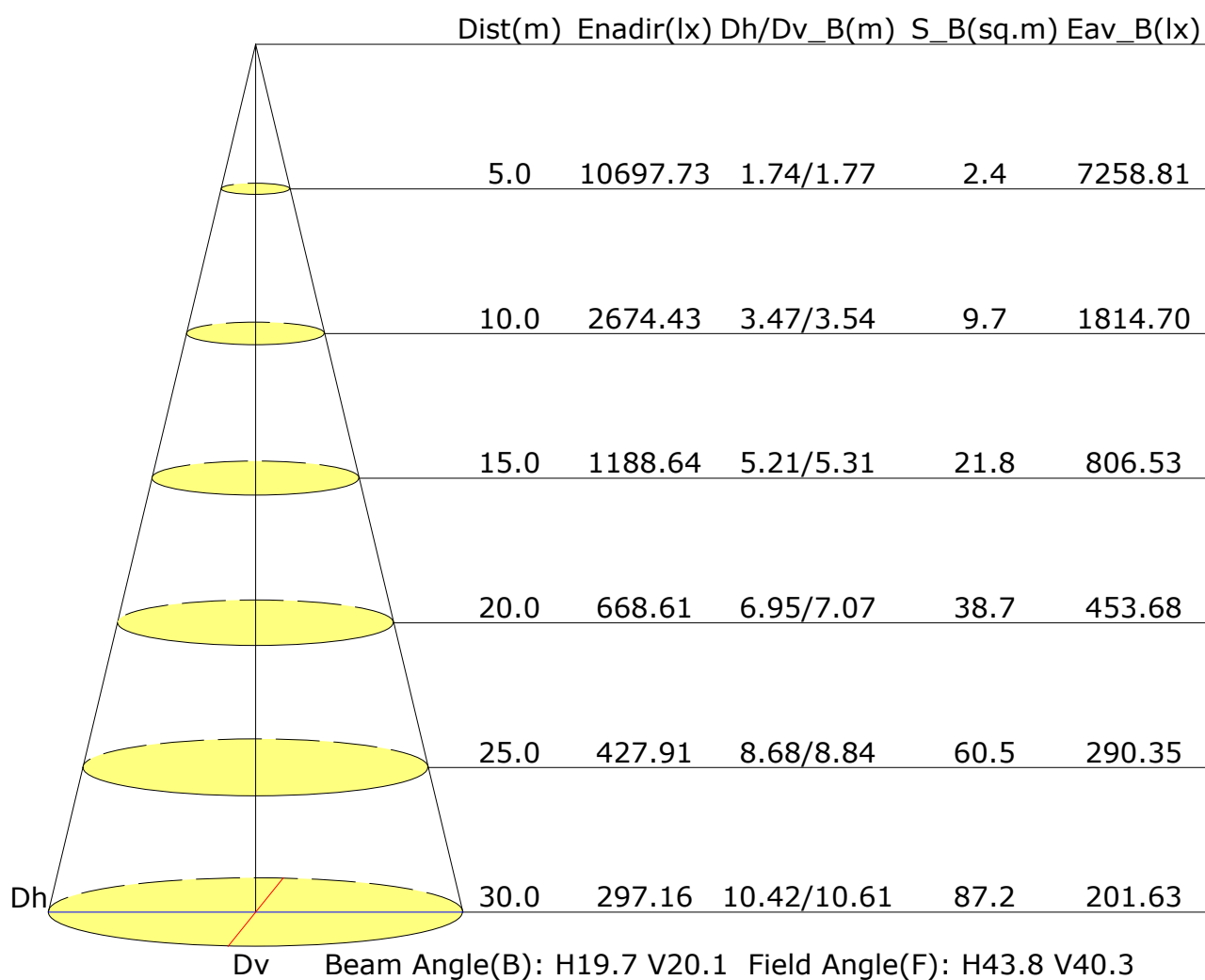
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Illuminance at a Distance



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:

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	19.6	20.4	20.0	20.7	21.0	18.2	19.0	18.5	19.3	19.6
3H	20.1	20.9	20.5	21.2	21.6	18.8	19.5	19.1	19.8	20.2
4H	20.4	21.1	20.8	21.4	21.8	19.1	19.7	19.5	20.1	20.5
6H	20.6	21.3	21.1	21.7	22.1	19.4	20.0	19.8	20.4	20.8
8H	20.7	21.4	21.2	21.8	22.2	19.5	20.2	20.0	20.6	21.0
12H	20.8	21.4	21.3	21.8	22.3	19.7	20.3	20.1	20.7	21.1
X=4H Y=2H	19.7	20.4	20.1	20.7	21.1	18.4	19.1	18.8	19.4	19.8
3H	20.3	20.9	20.8	21.3	21.8	19.1	19.7	19.6	20.1	20.6
4H	20.7	21.2	21.2	21.7	22.1	19.6	20.1	20.0	20.5	21.0
6H	21.1	21.5	21.6	22.0	22.5	20.0	20.5	20.5	20.9	21.5
8H	21.2	21.7	21.8	22.2	22.7	20.2	20.7	20.8	21.2	21.7
12H	21.4	21.8	21.9	22.3	22.9	20.5	20.9	21.0	21.4	21.9
X=8H Y=4H	20.8	21.2	21.3	21.7	22.2	19.7	20.1	20.2	20.6	21.1
6H	21.2	21.6	21.8	22.1	22.7	20.3	20.6	20.8	21.2	21.7
8H	21.5	21.8	22.1	22.3	22.9	20.6	20.9	21.2	21.5	22.1
12H	21.8	22.0	22.4	22.6	23.2	21.0	21.3	21.6	21.8	22.4
X=12H Y=4H	20.7	21.1	21.3	21.6	22.2	19.7	20.1	20.2	20.6	21.1
6H	21.3	21.6	21.8	22.1	22.7	20.3	20.6	20.9	21.2	21.8
8H	21.6	21.8	22.1	22.4	23.0	20.7	21.0	21.3	21.5	22.2
Variations with the observer position at spacings:										
S=1.0H	+0.9/-0.9					+0.8/-0.9				
S=1.5H	+2.1/-1.6					+1.8/-1.5				
S=2.0H	+3.5/-2.3					+2.9/-2.1				

Calculate in accordance with CIE Pub.117. The table is revised with 67069lm ($8\log(F/F_0) = 14.6$).

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 Test Lab:
 Test Type: TYPE C
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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 = 0.50									
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	0.81	0.88	0.92	0.95	1.00	1.03	1.05	1.08	1.10	
	0.30		0.76	0.83	0.87	0.91	0.96	0.99	1.02	1.05	1.07	
	0.20		0.72	0.79	0.84	0.87	0.93	0.96	0.99	1.03	1.05	
0.50	0.50	0.20	0.79	0.85	0.89	0.92	0.96	0.99	1.00	1.03	1.04	
	0.30		0.75	0.81	0.85	0.88	0.93	0.96	0.98	1.01	1.02	
	0.20		0.72	0.78	0.82	0.85	0.90	0.93	0.95	0.99	1.01	
0.30	0.50	0.20	0.78	0.83	0.87	0.89	0.93	0.95	0.96	0.98	1.00	
	0.30		0.74	0.79	0.83	0.86	0.90	0.92	0.94	0.97	0.98	
	0.20		0.71	0.77	0.81	0.84	0.88	0.90	0.92	0.95	0.97	
0.00	0.00	0.00	0.69	0.74	0.77	0.80	0.83	0.86	0.87	0.89	0.91	
Rating:400W 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 = 0.50									
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	0.65	0.53	0.45	0.40	0.32	0.26	0.23	0.18	0.14	
	0.30		0.54	0.46	0.40	0.35	0.29	0.24	0.21	0.17	0.14	
	0.20		0.46	0.40	0.35	0.31	0.26	0.22	0.20	0.16	0.13	
0.50	0.50	0.20	0.61	0.50	0.42	0.36	0.29	0.28	0.21	0.16	0.13	
	0.30		0.51	0.43	0.37	0.33	0.26	0.22	0.19	0.15	0.13	
	0.20		0.44	0.38	0.33	0.30	0.24	0.21	0.18	0.15	0.12	
0.30	0.50	0.20	0.57	0.46	0.39	0.34	0.27	0.22	0.19	0.15	0.12	
	0.30		0.49	0.41	0.35	0.30	0.25	0.21	0.18	0.14	0.12	
	0.20		0.43	0.36	0.32	0.28	0.23	0.19	0.17	0.13	0.11	
0.00	0.00	0.00	0.29	0.23	0.20	0.17	0.14	0.12	0.10	0.08	0.06	
Rating:400W 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 = 0.50									
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	0.19	0.21	0.22	0.23	0.24	0.25	0.26	0.26	0.27	
	0.30		0.15	0.17	0.18	0.19	0.21	0.22	0.23	0.24	0.25	
	0.20		0.11	0.13	0.15	0.16	0.18	0.20	0.21	0.23	0.24	
0.50	0.50	0.20	0.18	0.20	0.21	0.22	0.23	0.24	0.25	0.25	0.26	
	0.30		0.14	0.16	0.18	0.19	0.20	0.21	0.22	0.24	0.24	
	0.20		0.11	0.13	0.15	0.16	0.18	0.19	0.20	0.22	0.23	
0.30	0.50	0.20	0.18	0.19	0.20	0.21	0.22	0.23	0.24	0.24	0.25	
	0.30		0.14	0.16	0.17	0.18	0.20	0.21	0.22	0.23	0.23	
	0.20		0.11	0.13	0.15	0.16	0.18	0.19	0.20	0.21	0.22	
0.00	0.00	0.00	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	
Rating:400W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												