

Report No.: 1

Test Time: 06.11.2019 16:12

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 180 4x18 LED 0,3A 36W 3000K bes stekla

Luminous Length (mm): 1200

Luminous Width (mm): 180

Luminous Height (mm): 35

Voltage: 221.0 V

Current: 0.173 A

Power: 37.59 W

Power Factor: 0.982

Photometric Results

CIE Class: Direct

Measurement Flux: 4710.8 lm

Downward Ratio: 100%

Total Rated Lamp Lumens: 4710.8 lm

Efficiency: 100%

Upward Ratio: 0%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 160.4, 145.0, 153.6, 152.4

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 116.6, 112.9, 116.7, 115.7

Luminaire Efficacy Rating (LER): 125.37

Central Intensity: 1682.85 cd

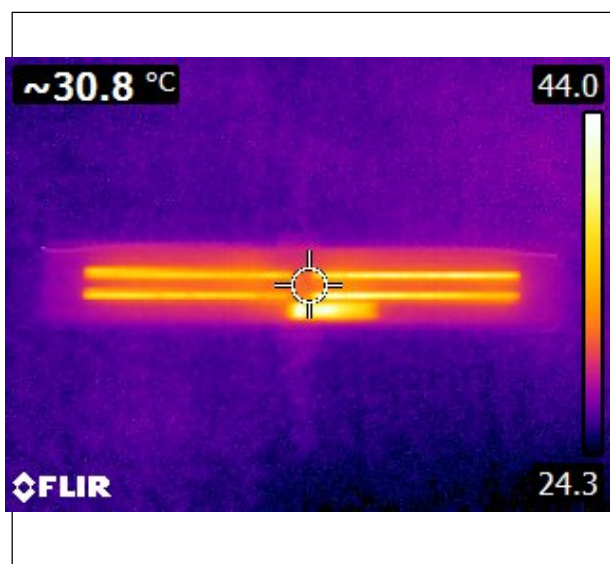
Max. Intensity: 1682.85 cd

Pos of Max. Intensity: H0 V0

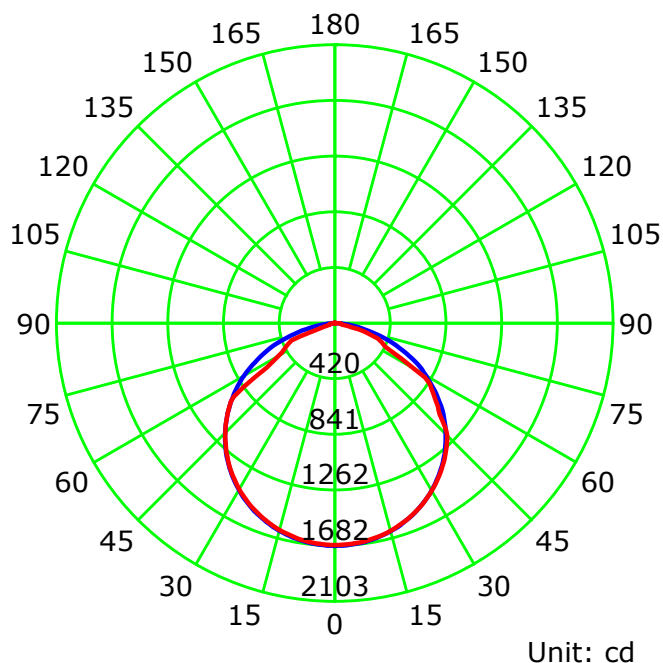
S/MH(C0/C180): 1.29

S/MH(C90/C270): 1.29

Termogramma



Luminous Intensity Distribution Curve



— 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

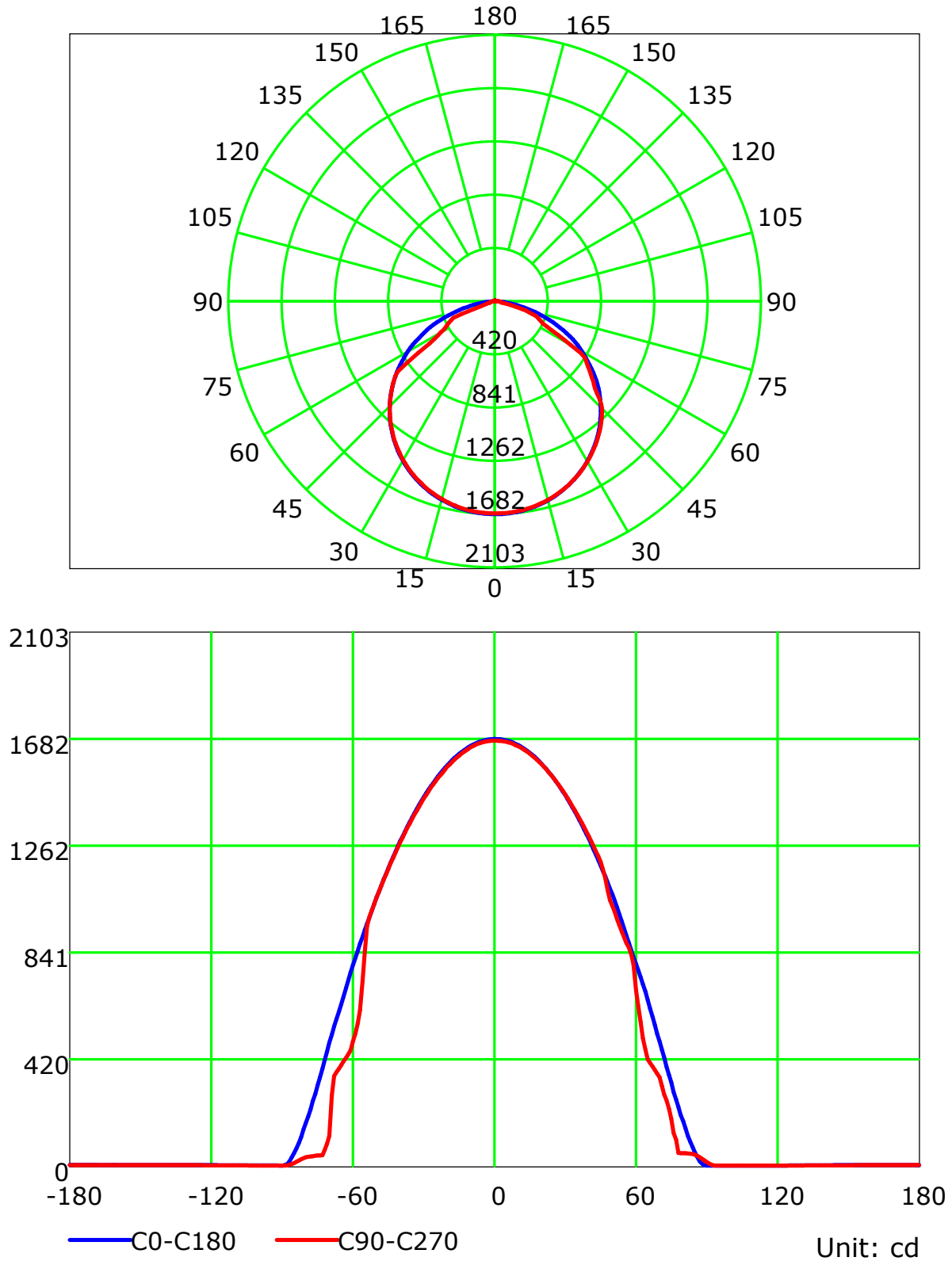
Test Device: LSG-1800B

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

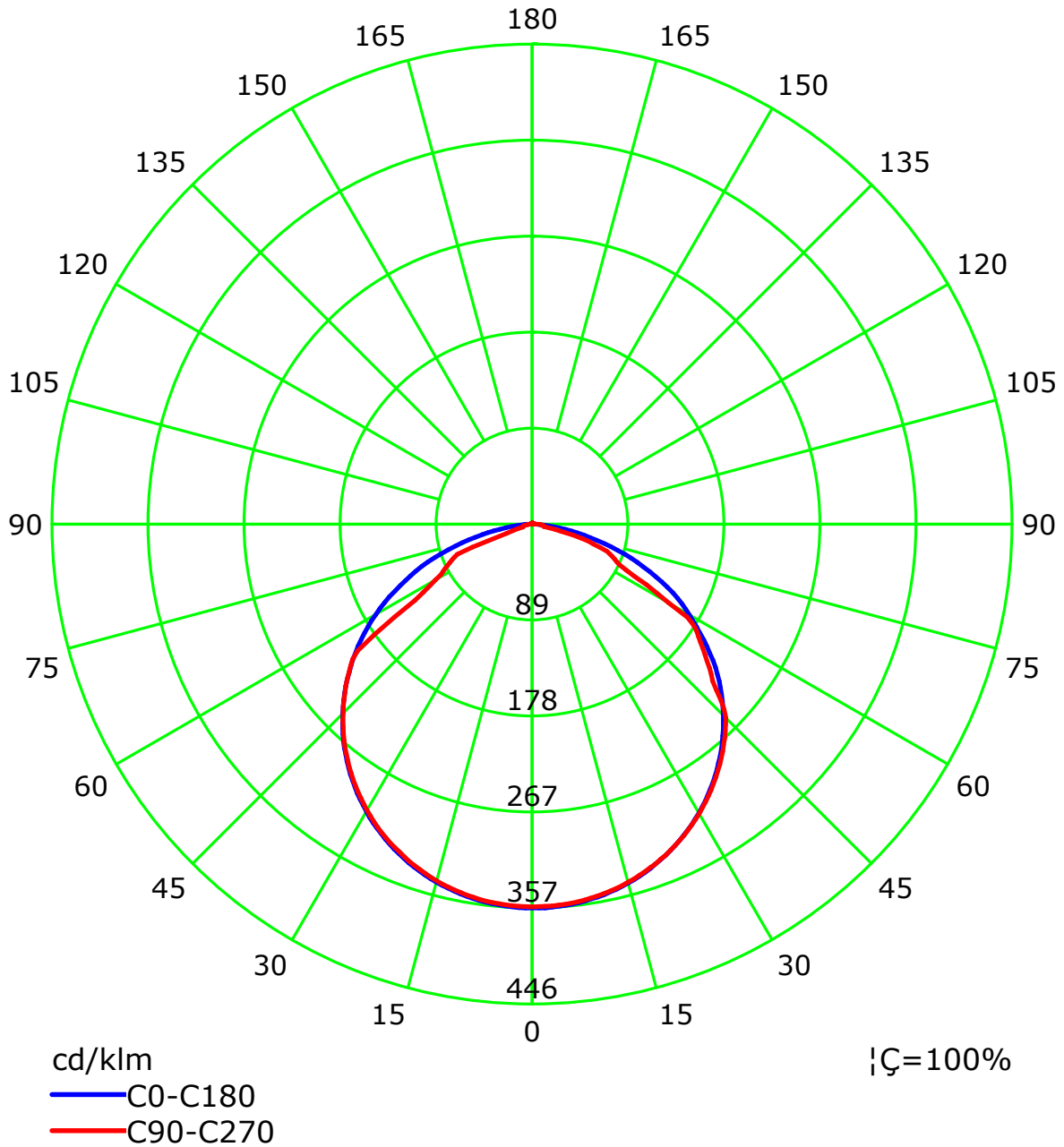
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

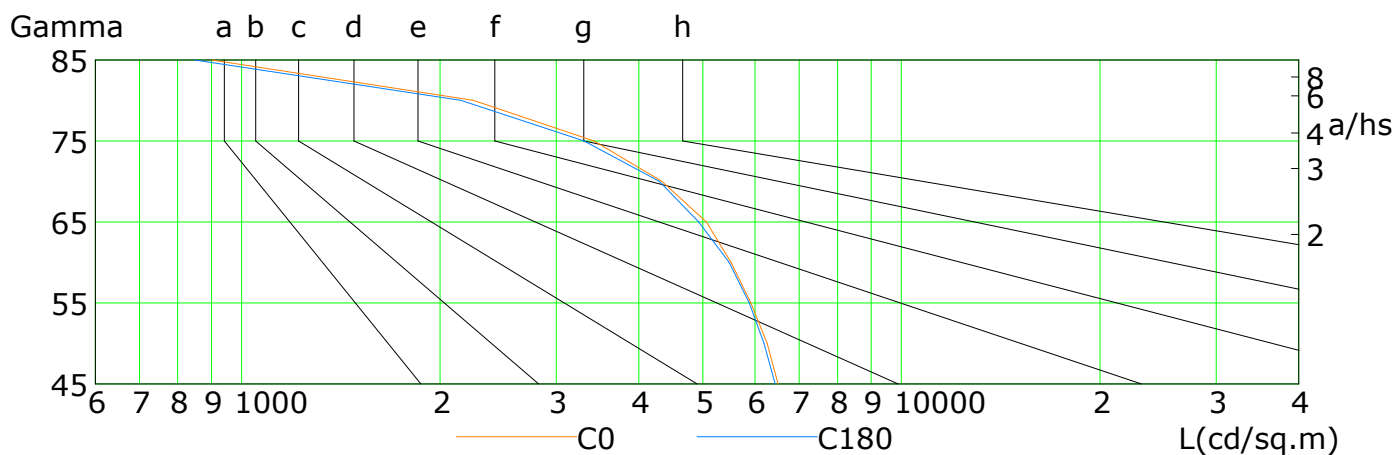
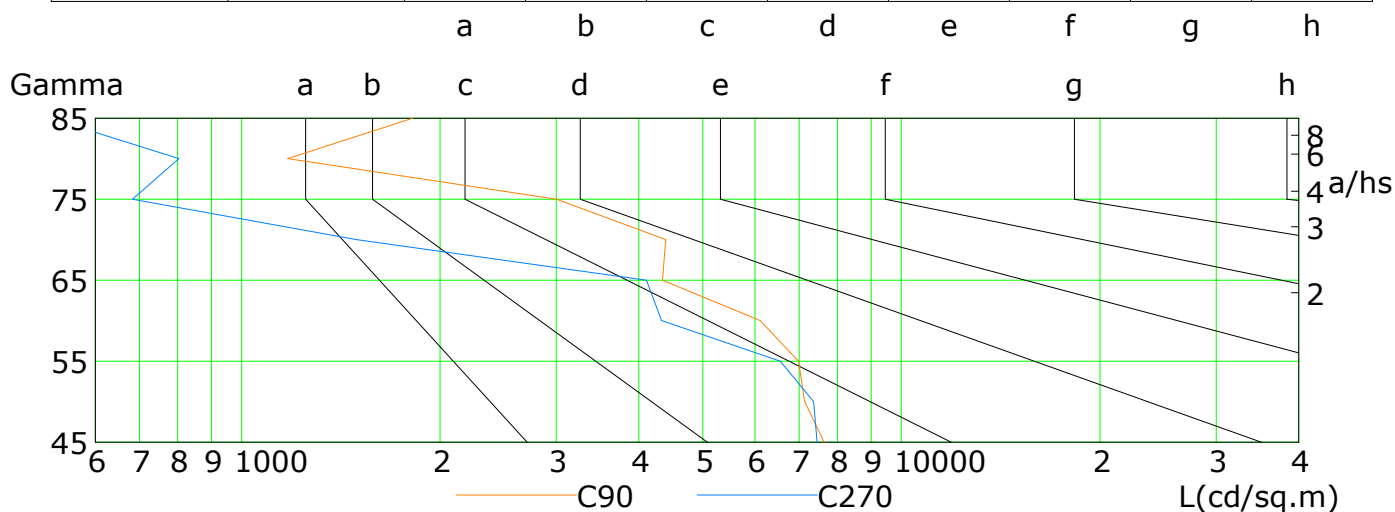
Inspector:

Luminous Intensity Distribution Curve(cd/klm)



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

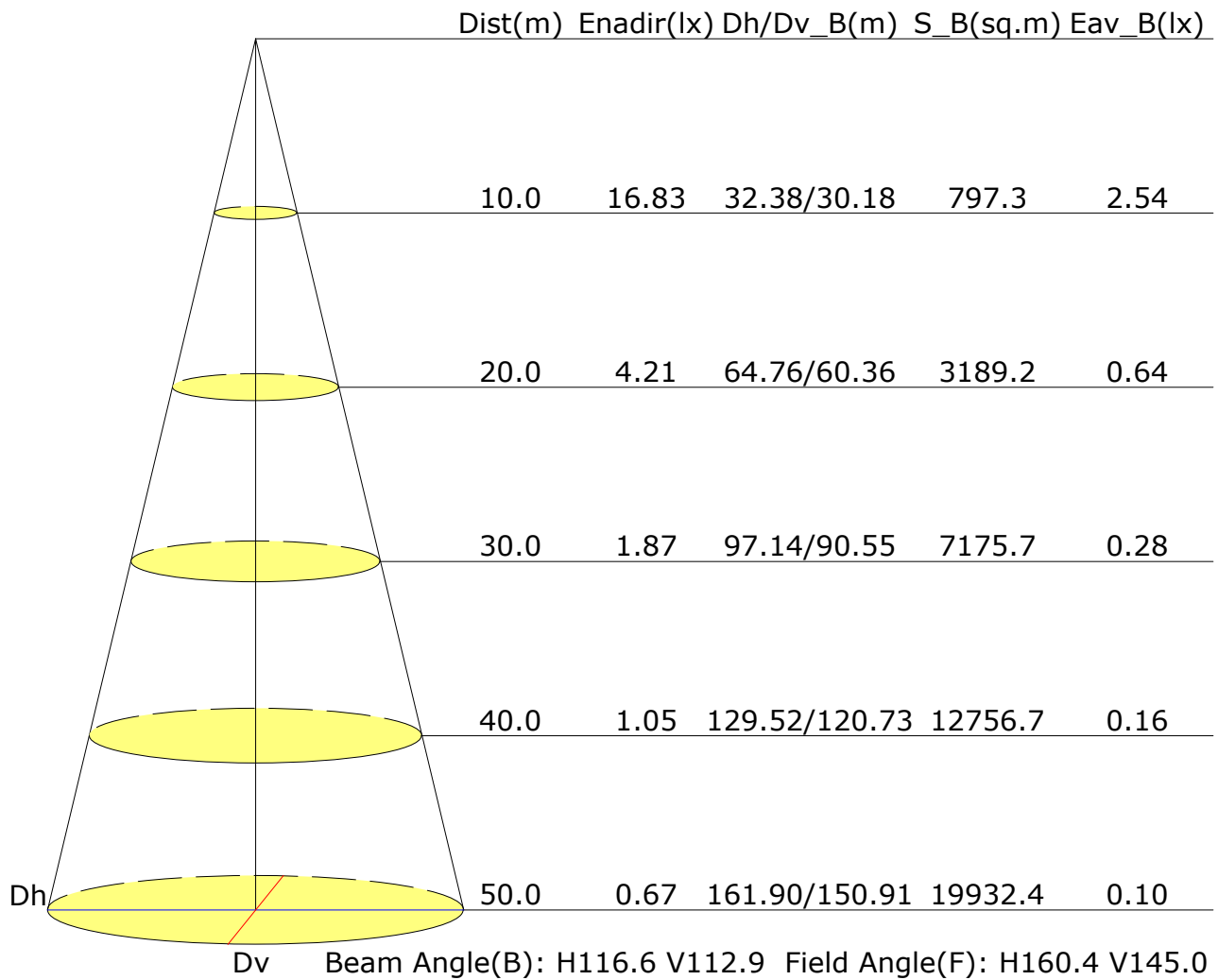


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	6501	6262	5911	5518	5063	4337	3422	2245	901
C90	7640	7133	6985	6108	4345	4394	3002	1174	1816
C180	6439	6188	5879	5484	4932	4295	3306	2151	850
C270	7455	7362	6555	4331	4109	1491	684	803	513

C Plane (°):0.0-360.0: 22.5
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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	19.2	20.5	19.5	20.8	21.0	18.8	20.2	19.1	20.4	20.7
3H	20.6	21.8	20.9	22.1	22.3	19.6	20.8	19.9	21.1	21.4
4H	21.0	22.2	21.4	22.5	22.8	19.7	20.9	20.1	21.2	21.5
6H	21.2	22.3	21.6	22.6	22.9	19.7	20.8	20.1	21.1	21.4
8H	21.2	22.3	21.6	22.6	22.9	19.7	20.7	20.0	21.0	21.4
12H	21.2	22.2	21.6	22.6	22.9	19.6	20.6	20.0	21.0	21.3
X=4H Y=2H	19.7	20.9	20.1	21.2	21.5	19.4	20.6	19.8	20.9	21.2
3H	21.2	22.2	21.6	22.6	22.9	20.3	21.2	20.6	21.6	21.9
4H	21.8	22.7	22.2	23.0	23.4	20.4	21.3	20.9	21.7	22.1
6H	22.0	22.8	22.5	23.2	23.6	20.4	21.2	20.9	21.6	22.0
8H	22.1	22.8	22.5	23.2	23.6	20.4	21.1	20.9	21.6	22.0
12H	22.1	22.7	22.6	23.2	23.6	20.4	21.1	20.9	21.5	22.0
X=8H Y=4H	21.8	22.5	22.3	22.9	23.4	20.6	21.3	21.0	21.7	22.1
6H	22.1	22.7	22.6	23.2	23.6	20.6	21.2	21.1	21.6	22.1
8H	22.2	22.7	22.7	23.2	23.7	20.6	21.1	21.1	21.6	22.1
12H	22.2	22.7	22.7	23.1	23.7	20.6	21.1	21.1	21.5	22.1
X=12H Y=4H	21.8	22.4	22.3	22.9	23.3	20.6	21.2	21.0	21.6	22.1
6H	22.1	22.6	22.6	23.1	23.6	20.6	21.1	21.1	21.6	22.1
8H	22.2	22.6	22.7	23.1	23.6	20.6	21.0	21.1	21.5	22.0
Variations with the observer position at spacings:										
S=1.0H	+0.1/-0.2					+0.3/-0.4				
S=1.5H	+0.4/-0.6					+0.9/-1.6				
S=2.0H	+0.7/-1.2					+1.7/-1.8				

Calculate in accordance with CIE Pub.117. The table is revised with 4711lm ($8\log(F/F_0) = 5.4$).

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 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 = 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	0.57	0.68	0.76	0.81	0.89	0.94	0.97	1.02	1.04	
	0.30		0.50	0.61	0.69	0.75	0.83	0.88	0.92	0.98	1.01	
	0.20		0.44	0.55	0.63	0.69	0.78	0.84	0.88	0.94	0.98	
0.50	0.50	0.20	0.56	0.66	0.74	0.79	0.86	0.90	0.93	0.98	1.00	
	0.30		0.49	0.60	0.67	0.73	0.81	0.86	0.89	0.94	0.97	
	0.20		0.44	0.55	0.62	0.68	0.76	0.82	0.86	0.92	0.95	
0.30	0.50	0.20	0.54	0.64	0.71	0.76	0.83	0.87	0.90	0.94	0.96	
	0.30		0.48	0.59	0.66	0.71	0.78	0.83	0.87	0.91	0.94	
	0.20		0.43	0.54	0.62	0.67	0.75	0.80	0.84	0.89	0.92	
0.00	0.00	0.00	0.41	0.51	0.59	0.64	0.71	0.76	0.80	0.84	0.87	
Rating:38W 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	0.99	0.80	0.68	0.59	0.46	0.38	0.32	0.25	0.20	
	0.30		0.82	0.69	0.59	0.52	0.42	0.35	0.30	0.24	0.19	
	0.20		0.71	0.60	0.52	0.47	0.38	0.32	0.28	0.22	0.18	
0.50	0.50	0.20	0.95	0.77	0.65	0.56	0.44	0.40	0.31	0.24	0.19	
	0.30		0.80	0.67	0.57	0.50	0.40	0.34	0.29	0.22	0.18	
	0.20		0.70	0.59	0.51	0.46	0.37	0.31	0.27	0.21	0.18	
0.30	0.50	0.20	0.92	0.74	0.62	0.54	0.42	0.35	0.29	0.22	0.18	
	0.30		0.79	0.65	0.56	0.49	0.39	0.32	0.28	0.21	0.18	
	0.20		0.69	0.58	0.51	0.45	0.36	0.30	0.26	0.20	0.17	
0.00	0.00	0.00	0.59	0.48	0.41	0.36	0.28	0.24	0.20	0.15	0.13	
Rating:38W 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	0.17	0.18	0.19	0.19	0.20	0.21	0.21	0.22	0.22	
	0.30		0.10	0.12	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	0.19	0.19	0.20	0.20	0.21	0.21	
	0.30		0.10	0.11	0.13	0.14	0.15	0.16	0.17	0.18	0.19	
	0.20		0.05	0.07	0.08	0.10	0.11	0.13	0.14	0.16	0.17	
0.30	0.50	0.20	0.16	0.17	0.17	0.18	0.19	0.19	0.20	0.20	0.20	
	0.30		0.10	0.11	0.12	0.13	0.15	0.16	0.17	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:38W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												