

Report No.: 1

Test Time: 16.12.2019 18:10

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 180 4x24LED 0.48A 26.5W 5000K microprisma

Luminous Length (mm): 1200

Luminous Width (mm): 180

Luminous Height (mm): 35

Voltage: 221.2 V

Current: 0.114 A

Power: 25.00 W

Power Factor: 0.985

Photometric Results

CIE Class: Direct

Measurement Flux: 2922.9 lm

Downward Ratio: 99%

Total Rated Lamp Lumens: 2922.9 lm

Efficiency: 100%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 160.0, 161.1, 149.3, 149.1

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 77.8, 78.3, 75.6, 75.7

Luminaire Efficacy Rating (LER): 116.97

Central Intensity: 1517.68 cd

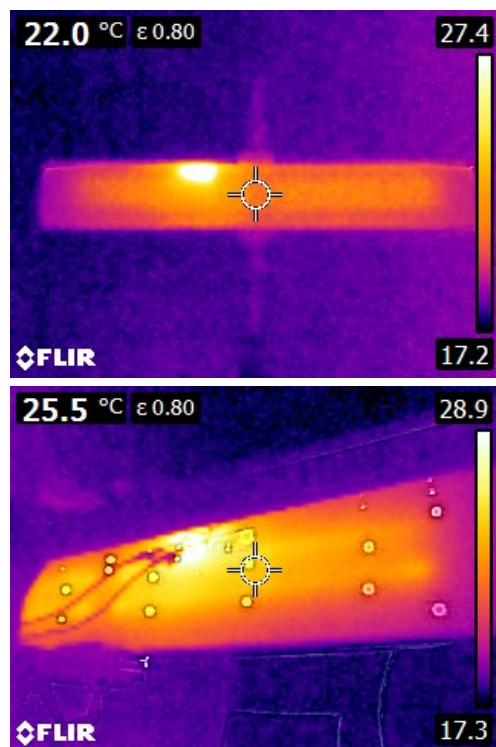
Max. Intensity: 1517.92 cd

Pos of Max. Intensity: H22.5 V0

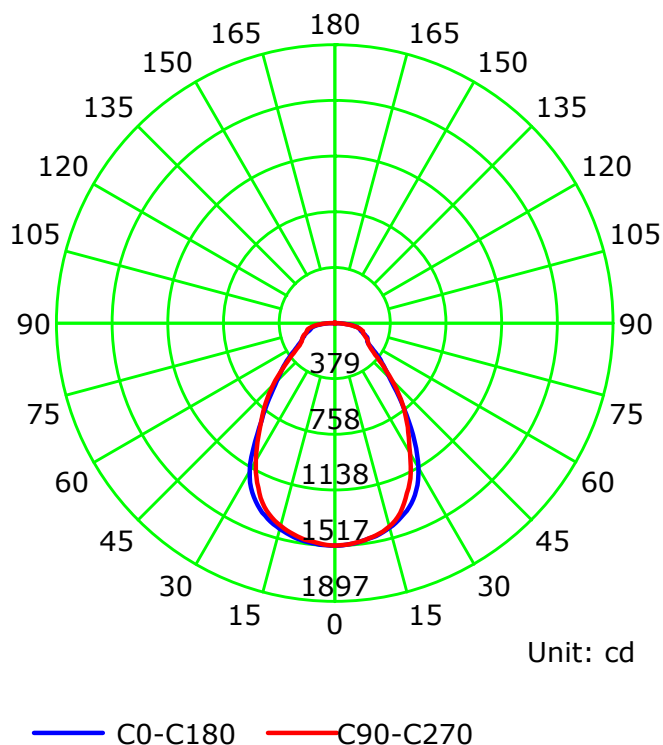
S/MH(C0/C180): 1.14

S/MH(C90/C270): 1.08

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

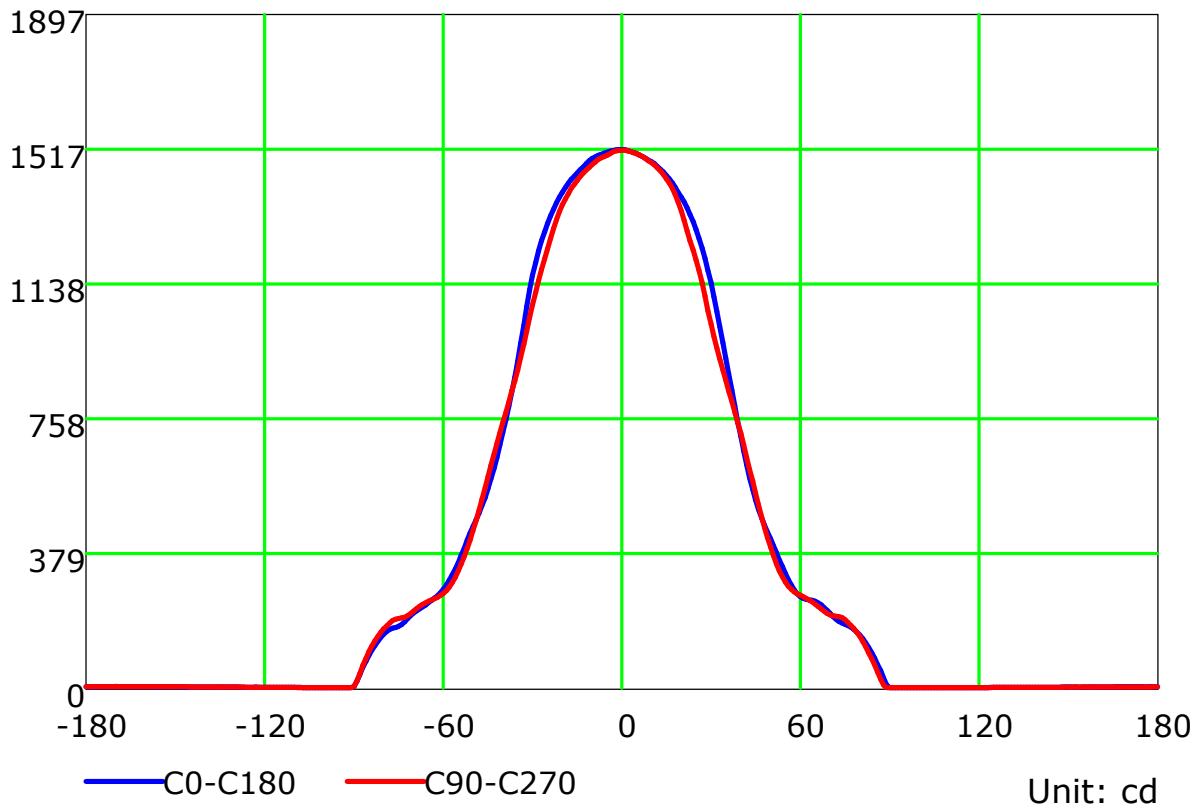
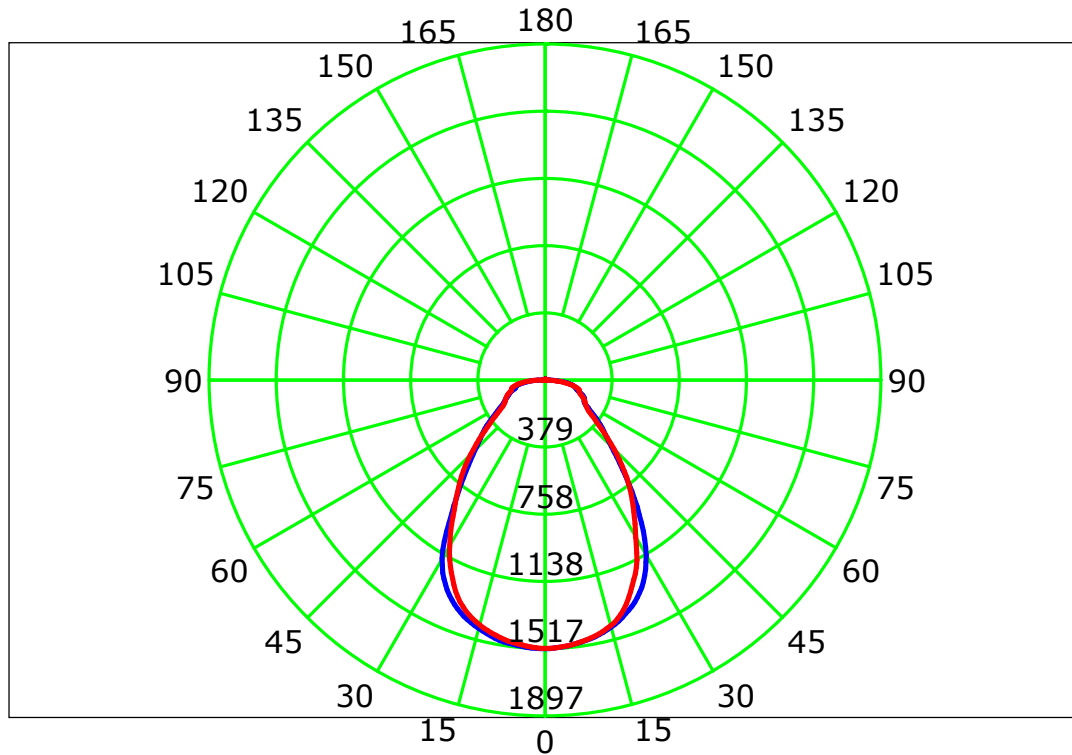
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

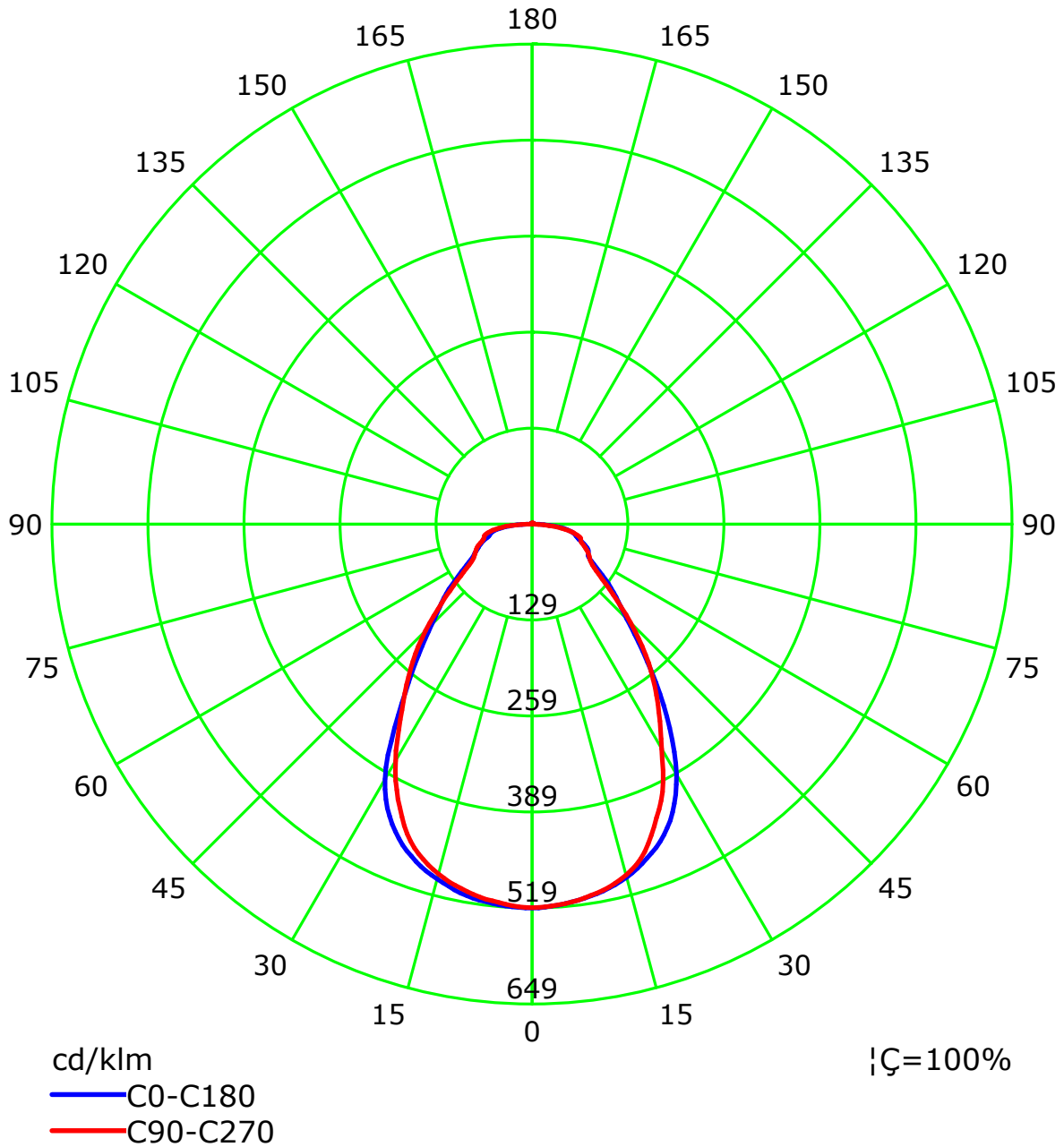
Luminous Intensity Distribution Curve



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)

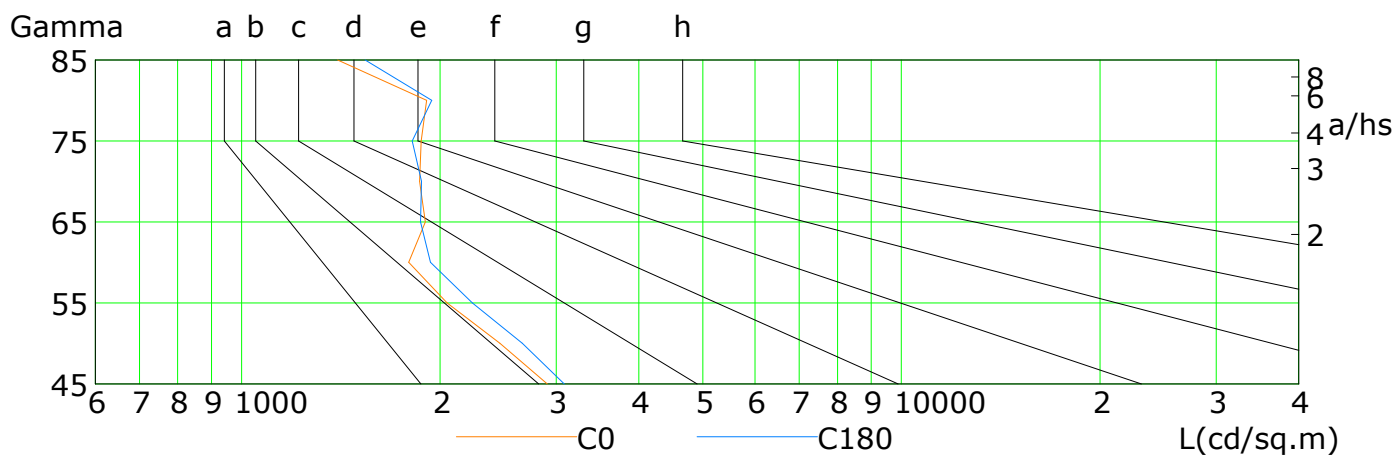
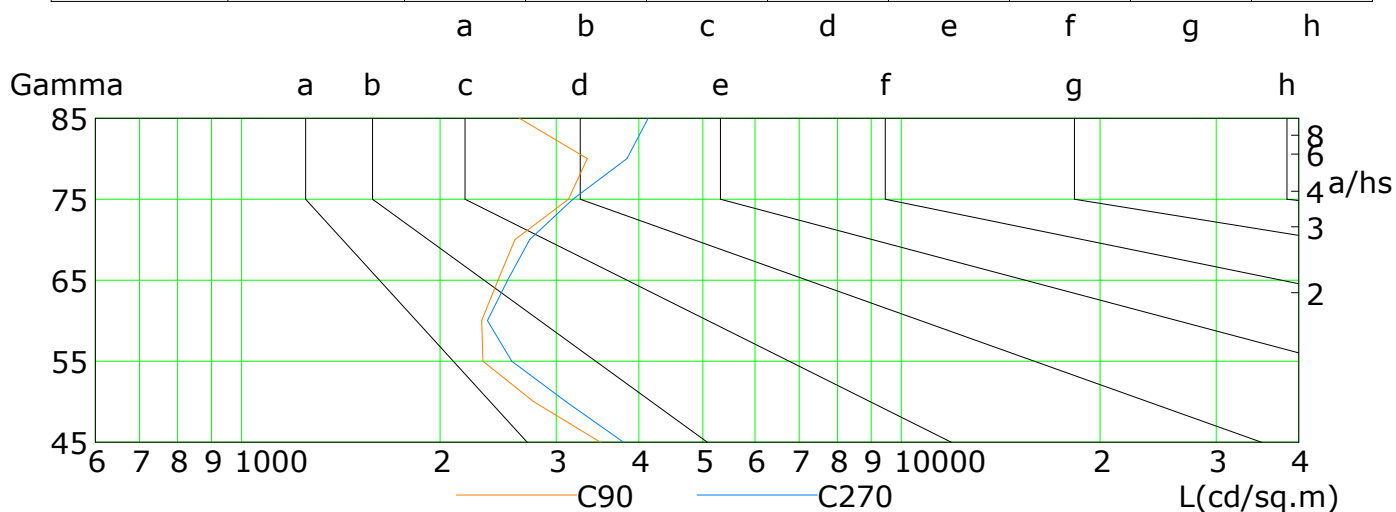


C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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

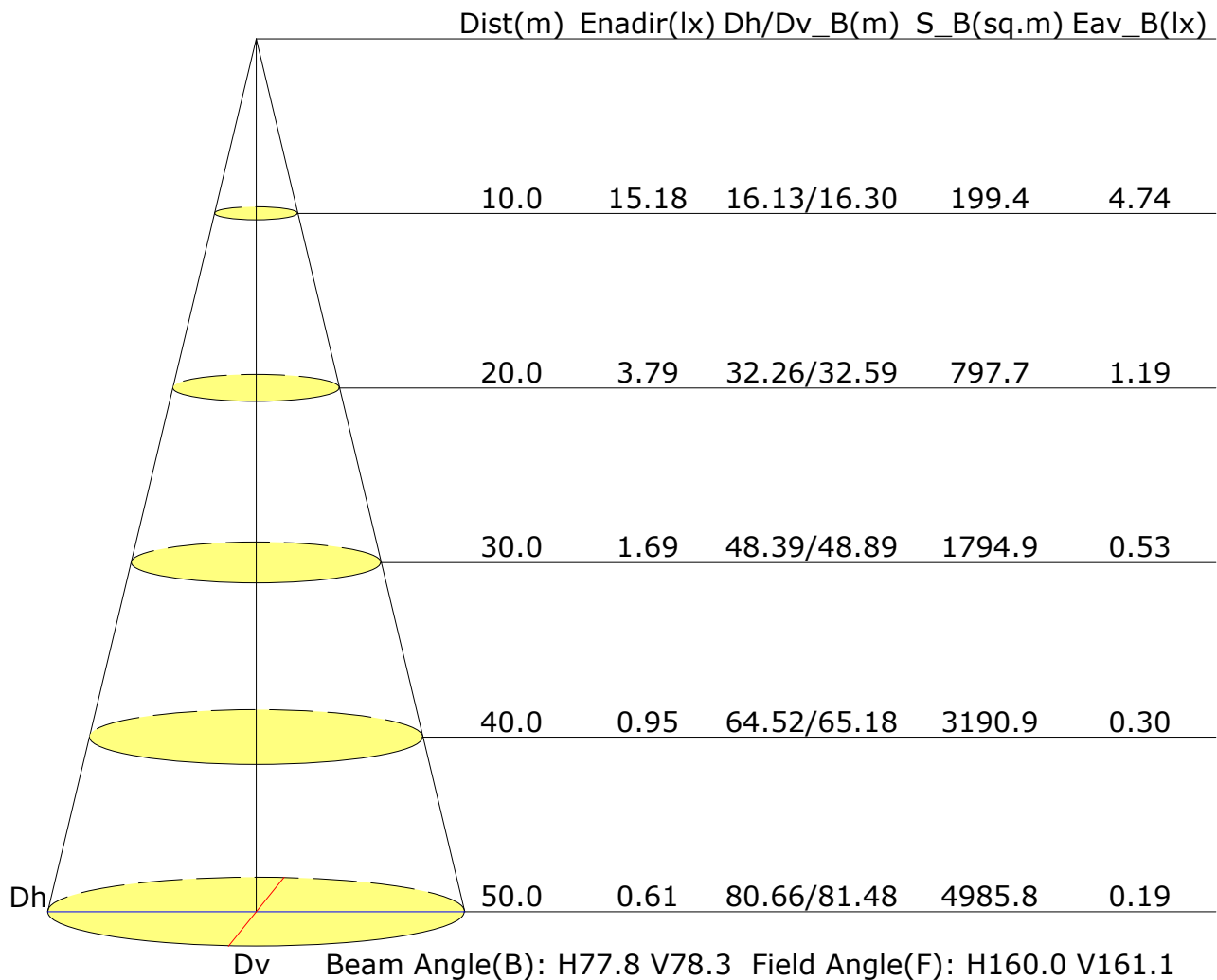


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	2906	2462	2048	1791	1900	1862	1872	1908	1399
C90	3497	2770	2321	2313	2448	2597	3130	3342	2637
C180	3084	2665	2237	1933	1868	1873	1814	1943	1540
C270	3793	3099	2566	2358	2529	2732	3178	3836	4130

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



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	14.3	15.5	14.6	15.8	16.0	14.7	16.0	15.0	16.2	16.4
3H	15.8	16.9	16.1	17.2	17.4	16.3	17.5	16.7	17.7	18.0
4H	16.5	17.6	16.8	17.9	18.2	17.3	18.4	17.7	18.7	19.0
6H	17.3	18.3	17.6	18.6	18.9	18.4	19.4	18.8	19.7	20.0
8H	17.6	18.5	18.0	18.9	19.2	18.8	19.8	19.2	20.1	20.5
12H	17.8	18.7	18.2	19.1	19.4	19.2	20.1	19.6	20.5	20.8
X=4H Y=2H	14.8	15.8	15.1	16.1	16.4	15.1	16.2	15.5	16.5	16.8
3H	16.5	17.4	16.9	17.7	18.1	17.0	17.9	17.4	18.2	18.6
4H	17.4	18.2	17.8	18.6	19.0	18.1	19.0	18.6	19.3	19.7
6H	18.3	19.0	18.7	19.4	19.9	19.4	20.1	19.8	20.5	20.9
8H	18.7	19.4	19.1	19.8	20.2	19.9	20.6	20.4	21.0	21.5
12H	19.0	19.6	19.4	20.0	20.5	20.3	21.0	20.8	21.4	21.8
X=8H Y=4H	17.7	18.4	18.1	18.8	19.2	18.4	19.1	18.8	19.5	19.9
6H	18.8	19.3	19.3	19.8	20.3	19.8	20.3	20.3	20.8	21.3
8H	19.3	19.8	19.8	20.2	20.7	20.4	20.9	20.9	21.4	21.9
12H	19.6	20.0	20.1	20.5	21.0	20.9	21.4	21.4	21.8	22.4
X=12H Y=4H	17.8	18.4	18.2	18.8	19.3	18.4	19.0	18.9	19.5	19.9
6H	18.9	19.4	19.4	19.8	20.3	19.8	20.3	20.3	20.8	21.3
8H	19.4	19.8	19.9	20.3	20.8	20.5	20.9	21.0	21.4	21.9
Variations with the observer position at spacings:										
S=1.0H	+0.3/-0.3					+0.3/-0.2				
S=1.5H	+0.4/-0.7					+0.4/-0.7				
S=2.0H	+0.7/-0.8					+0.7/-0.9				

Calculate in accordance with CIE Pub.117. The table is revised with 2923lm ($8\log(F/F_0) = 3.7$).

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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 = 1.00									
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	0.63	0.72	0.79	0.83	0.90	0.94	0.97	1.02	1.04	
	0.30		0.56	0.65	0.72	0.77	0.84	0.89	0.93	0.98	1.01	
	0.20		0.51	0.60	0.67	0.72	0.79	0.85	0.89	0.94	0.98	
0.50	0.50	0.20	0.62	0.70	0.76	0.81	0.87	0.91	0.94	0.97	1.00	
	0.30		0.55	0.64	0.70	0.75	0.82	0.86	0.90	0.94	0.97	
	0.20		0.51	0.60	0.66	0.71	0.78	0.83	0.86	0.91	0.95	
0.30	0.50	0.20	0.60	0.68	0.74	0.78	0.84	0.87	0.90	0.94	0.96	
	0.30		0.54	0.63	0.69	0.73	0.80	0.84	0.87	0.91	0.94	
	0.20		0.50	0.59	0.65	0.70	0.76	0.81	0.84	0.89	0.92	
0.00	0.00	0.00	0.48	0.56	0.62	0.67	0.73	0.77	0.80	0.84	0.87	
Rating:25W 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 = 1.00									
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	0.90	0.74	0.64	0.56	0.45	0.37	0.32	0.25	0.21	
	0.30		0.75	0.64	0.56	0.49	0.40	0.34	0.30	0.24	0.20	
	0.20		0.64	0.56	0.49	0.44	0.37	0.32	0.28	0.22	0.19	
0.50	0.50	0.20	0.87	0.71	0.61	0.53	0.43	0.39	0.30	0.24	0.20	
	0.30		0.73	0.62	0.54	0.48	0.39	0.33	0.29	0.23	0.19	
	0.20		0.64	0.55	0.48	0.43	0.36	0.31	0.27	0.21	0.18	
0.30	0.50	0.20	0.84	0.68	0.58	0.51	0.41	0.34	0.29	0.23	0.19	
	0.30		0.72	0.60	0.52	0.46	0.37	0.32	0.27	0.22	0.18	
	0.20		0.63	0.54	0.47	0.42	0.35	0.30	0.26	0.21	0.17	
0.00	0.00	0.00	0.52	0.43	0.37	0.33	0.27	0.23	0.20	0.16	0.13	
Rating:25W 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 = 1.00									
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	0.16	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		0.06	0.07	0.09	0.10	0.12	0.14	0.15	0.16	0.18	
0.50	0.50	0.20	0.16	0.17	0.18	0.19	0.20	0.20	0.21	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	0.09	0.10	0.12	0.13	0.14	0.16	0.17	
0.30	0.50	0.20	0.15	0.16	0.17	0.18	0.19	0.19	0.20	0.20	0.21	
	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	0.09	0.10	0.12	0.13	0.14	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:25W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												