

Report No.: 1

Test Time: 12.12.2019 17:15

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 250 4x40LED 0,3A 15W 5000K microprisma

Luminous Length (mm): 250

Luminous Width (mm): 250

Luminous Height (mm): 76

Voltage: 221.6 V

Current: 0.073 A

Power: 15.23 W

Power Factor: 0.942

Photometric Results

CIE Class: Direct

Measurement Flux: 1592.6 lm

Downward Ratio: 98%

Total Rated Lamp Lumens: 1592.6 lm

Efficiency: 100%

Upward Ratio: 2%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 160.7, 152.5, 144.7, 144.3

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 71.6, 71.0, 71.3, 71.0

Luminaire Efficacy Rating (LER): 104.62

Central Intensity: 896.36 cd

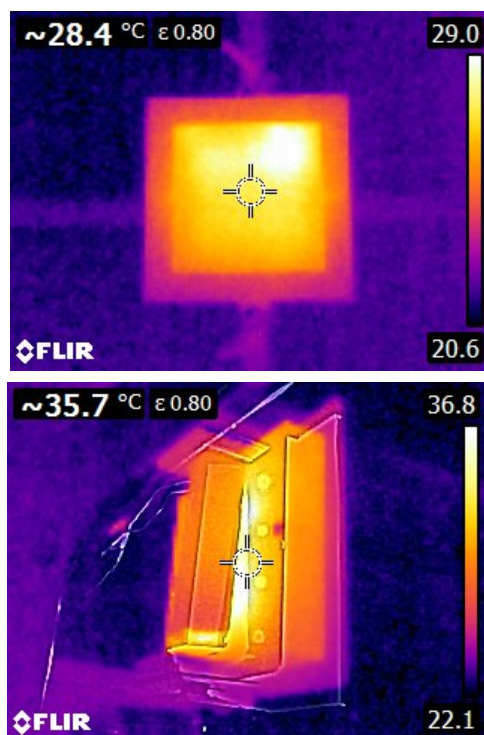
Max. Intensity: 897.95 cd

Pos of Max. Intensity: H157.5 V2

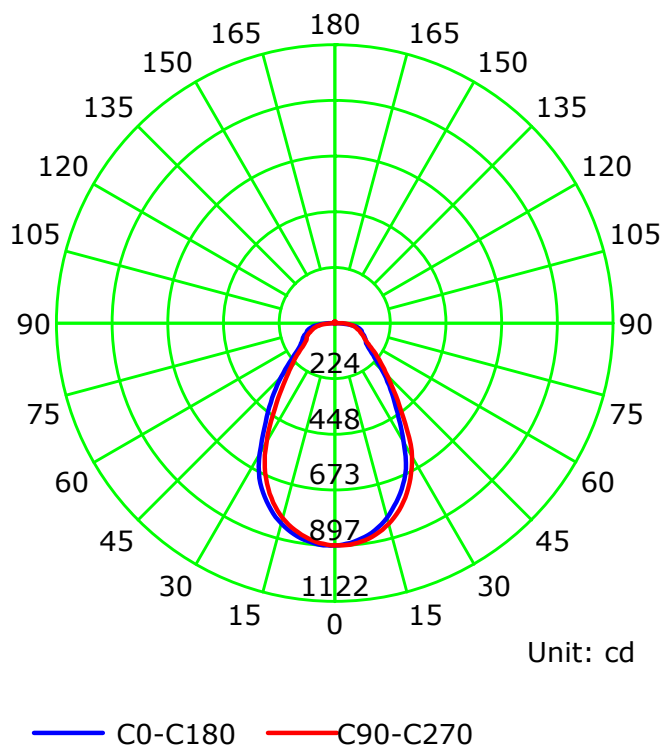
S/MH(C0/C180): 1.04

S/MH(C90/C270): 1.04

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

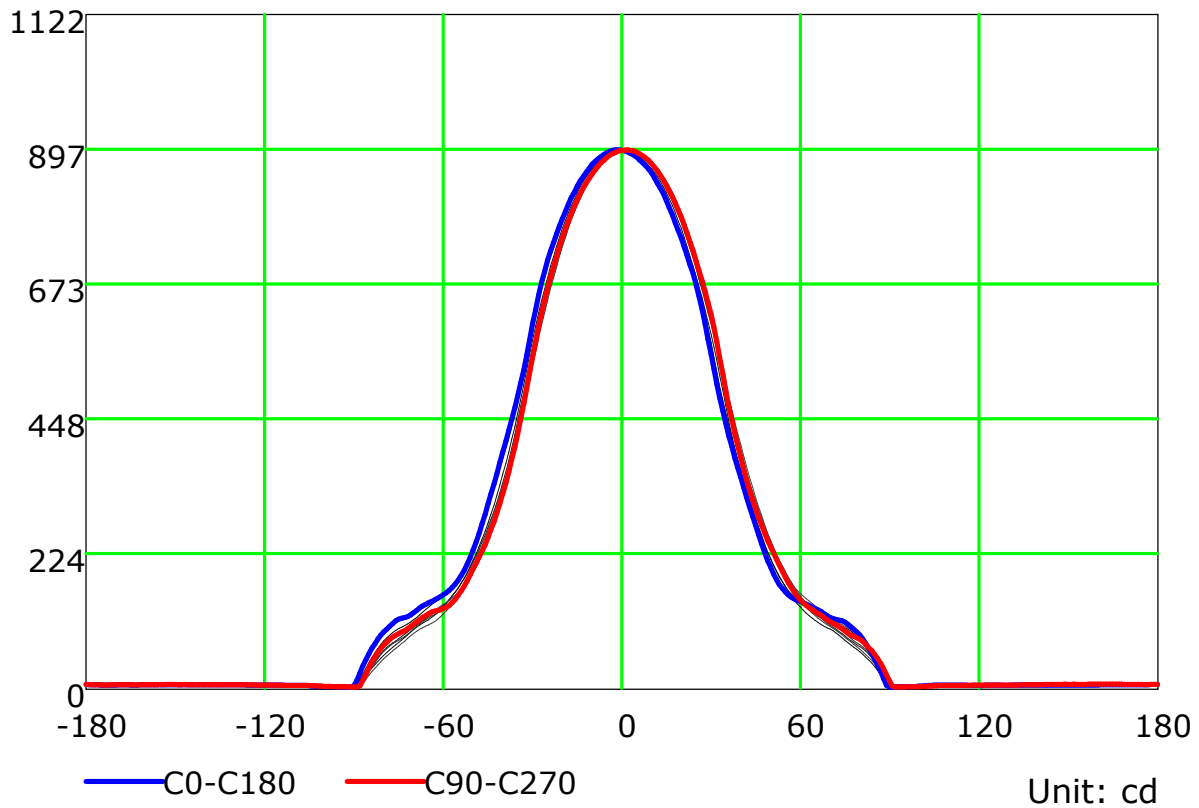
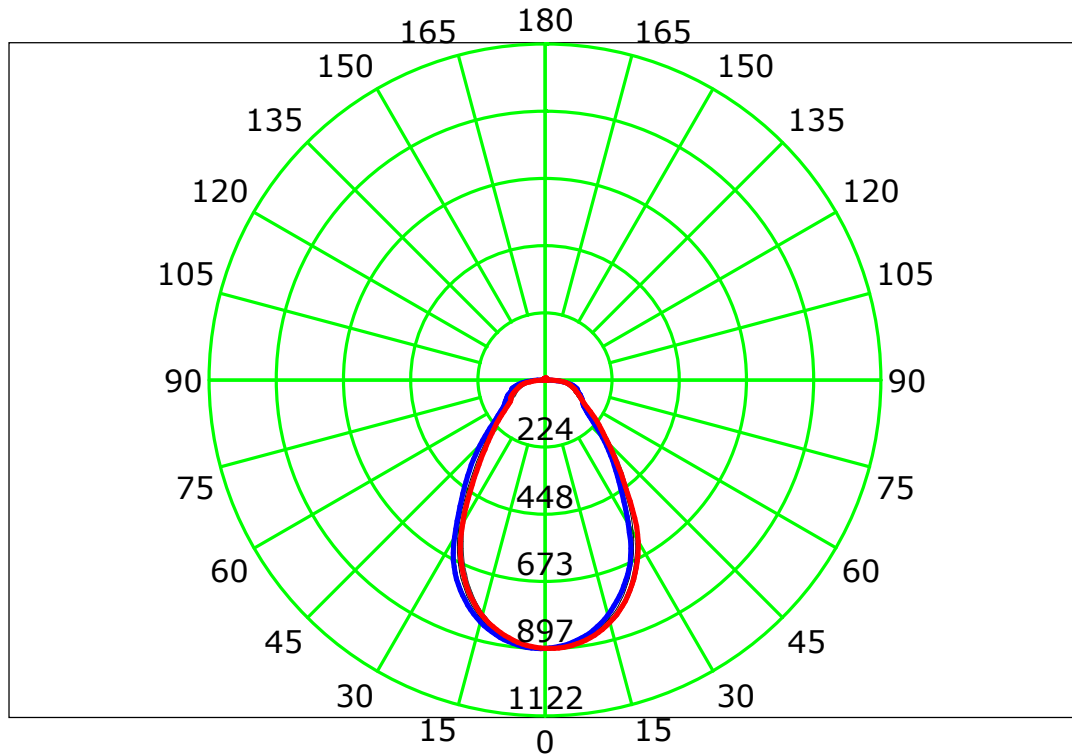
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

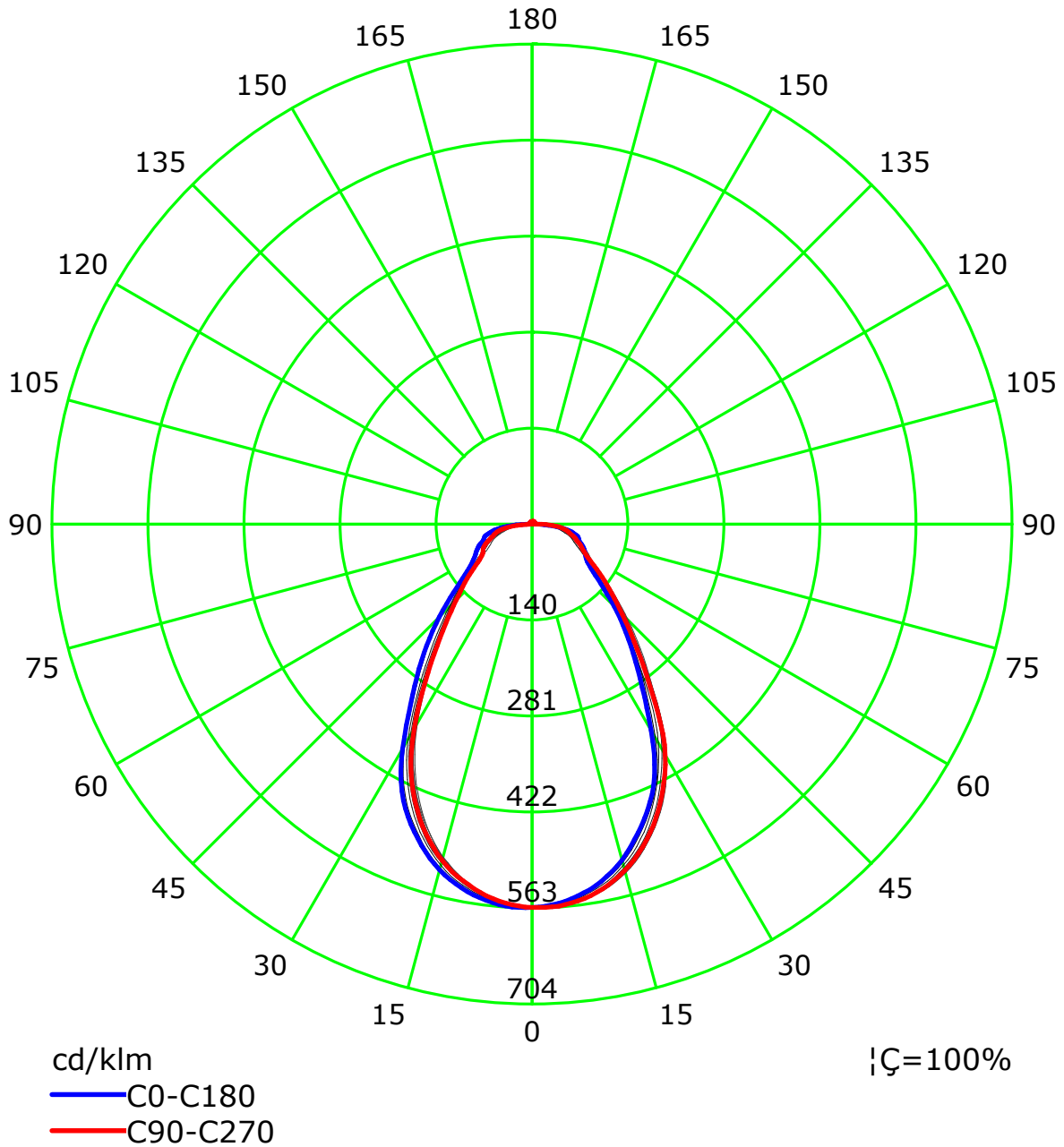
Luminous Intensity Distribution Curve



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)

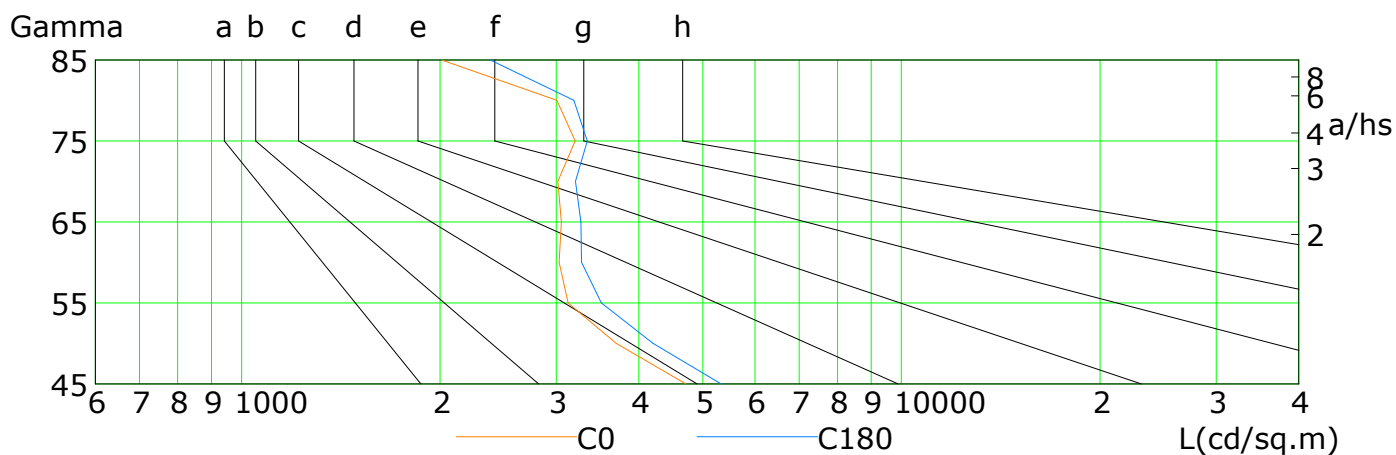
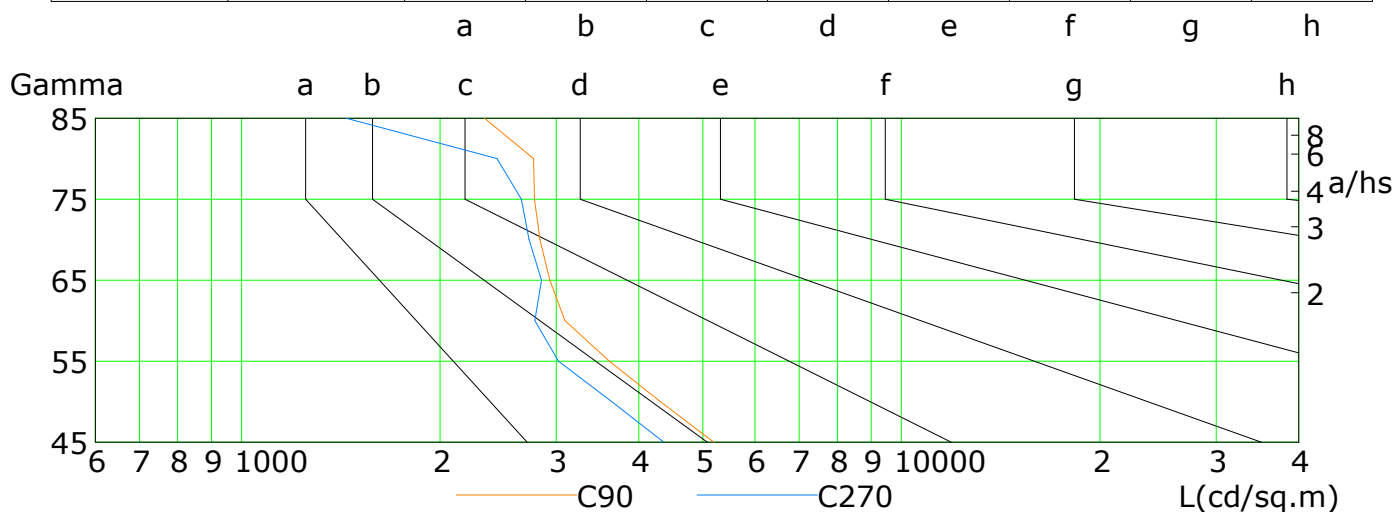


C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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

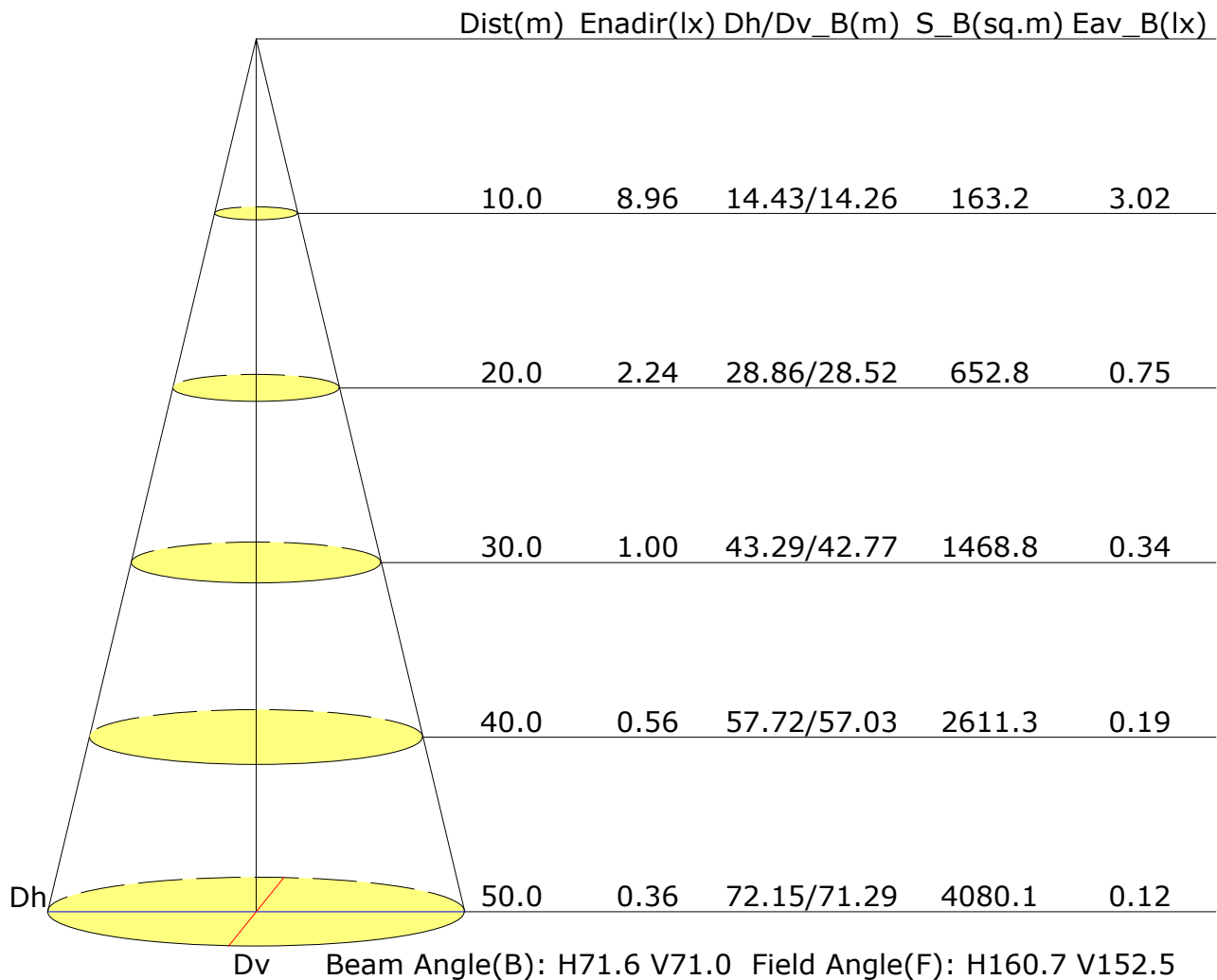


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	4712	3694	3125	3031	3054	3015	3204	3005	2010
C90	5193	4311	3608	3092	2931	2833	2779	2770	2334
C180	5330	4201	3510	3274	3268	3208	3343	3187	2382
C270	4364	3637	3023	2783	2850	2726	2654	2440	1441

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	15.3	16.6	15.7	16.8	17.1	15.4	16.6	15.7	16.9	17.1
3H	16.9	18.0	17.2	18.3	18.6	16.7	17.9	17.1	18.2	18.5
4H	17.8	18.9	18.2	19.2	19.5	17.5	18.5	17.8	18.8	19.2
6H	18.7	19.7	19.1	20.0	20.4	18.2	19.2	18.6	19.5	19.9
8H	19.0	20.0	19.4	20.3	20.7	18.5	19.4	18.9	19.8	20.1
12H	19.2	20.1	19.6	20.5	20.9	18.7	19.6	19.1	20.0	20.3
X=4H Y=2H	15.7	16.8	16.1	17.1	17.4	15.8	16.8	16.1	17.1	17.5
3H	17.5	18.4	17.9	18.8	19.2	17.3	18.3	17.8	18.6	19.0
4H	18.6	19.4	19.0	19.8	20.2	18.2	19.0	18.6	19.4	19.8
6H	19.6	20.4	20.1	20.8	21.2	19.1	19.8	19.5	20.2	20.7
8H	20.0	20.7	20.5	21.1	21.6	19.5	20.1	19.9	20.6	21.0
12H	20.3	20.9	20.8	21.4	21.9	19.7	20.3	20.2	20.8	21.3
X=8H Y=4H	18.8	19.5	19.3	19.9	20.4	18.5	19.1	18.9	19.6	20.0
6H	20.0	20.5	20.5	21.0	21.5	19.5	20.0	20.0	20.5	21.0
8H	20.5	21.0	21.0	21.5	22.0	19.9	20.4	20.4	20.9	21.4
12H	20.9	21.3	21.4	21.8	22.3	20.3	20.7	20.8	21.2	21.8
X=12H Y=4H	18.8	19.4	19.3	19.9	20.4	18.5	19.1	19.0	19.6	20.0
6H	20.0	20.5	20.6	21.0	21.5	19.5	20.0	20.0	20.5	21.0
8H	20.6	21.0	21.1	21.5	22.0	20.0	20.4	20.6	21.0	21.5
Variations with the observer position at spacings:										
S=1.0H	+0.3/-0.3					+0.3/-0.3				
S=1.5H	+0.4/-0.6					+0.4/-0.7				
S=2.0H	+0.7/-0.9					+0.9/-0.8				

Calculate in accordance with CIE Pub.117. The table is revised with 1593lm ($8\log(F/F_0) = 1.6$).

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 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	0.64	0.73	0.79	0.83	0.90	0.94	0.97	1.01	1.04	
	0.30		0.57	0.66	0.72	0.77	0.84	0.89	0.93	0.97	1.01	
	0.20		0.52	0.61	0.67	0.72	0.79	0.85	0.89	0.94	0.97	
0.50	0.50	0.20	0.62	0.70	0.76	0.80	0.86	0.90	0.93	0.97	0.99	
	0.30		0.56	0.64	0.71	0.75	0.82	0.86	0.89	0.94	0.97	
	0.20		0.51	0.60	0.66	0.71	0.78	0.82	0.86	0.91	0.94	
0.30	0.50	0.20	0.61	0.68	0.74	0.78	0.83	0.87	0.89	0.93	0.95	
	0.30		0.55	0.63	0.69	0.73	0.79	0.83	0.86	0.90	0.93	
	0.20		0.51	0.59	0.65	0.69	0.76	0.80	0.84	0.88	0.91	
0.00	0.00	0.00	0.49	0.56	0.62	0.66	0.72	0.76	0.79	0.83	0.86	
Rating:15W 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	0.89	0.73	0.63	0.55	0.44	0.37	0.32	0.25	0.21	
	0.30		0.74	0.63	0.55	0.49	0.40	0.34	0.30	0.24	0.20	
	0.20		0.63	0.55	0.49	0.44	0.37	0.31	0.28	0.22	0.19	
0.50	0.50	0.20	0.85	0.70	0.60	0.52	0.42	0.39	0.30	0.24	0.19	
	0.30		0.72	0.61	0.53	0.47	0.39	0.33	0.28	0.22	0.19	
	0.20		0.62	0.54	0.47	0.43	0.35	0.30	0.27	0.21	0.18	
0.30	0.50	0.20	0.82	0.67	0.57	0.50	0.40	0.33	0.29	0.22	0.19	
	0.30		0.70	0.59	0.51	0.45	0.37	0.31	0.27	0.21	0.18	
	0.20		0.61	0.53	0.46	0.41	0.34	0.29	0.26	0.20	0.17	
0.00	0.00	0.00	0.50	0.42	0.36	0.32	0.26	0.22	0.19	0.15	0.13	
Rating:15W 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	0.17	0.19	0.20	0.20	0.22	0.22	0.23	0.23	0.24	
	0.30		0.11	0.13	0.14	0.15	0.17	0.18	0.19	0.20	0.21	
	0.20		0.07	0.09	0.10	0.11	0.13	0.15	0.16	0.18	0.19	
0.50	0.50	0.20	0.17	0.18	0.19	0.20	0.21	0.21	0.22	0.22	0.23	
	0.30		0.11	0.13	0.14	0.15	0.17	0.18	0.18	0.20	0.20	
	0.20		0.07	0.09	0.10	0.11	0.13	0.15	0.16	0.17	0.18	
0.30	0.50	0.20	0.16	0.17	0.18	0.19	0.20	0.20	0.21	0.21	0.22	
	0.30		0.11	0.12	0.14	0.15	0.16	0.17	0.18	0.19	0.20	
	0.20		0.07	0.08	0.10	0.11	0.13	0.14	0.15	0.17	0.18	
0.00	0.00	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	
Rating:15W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												