

Report No.: 1

Test Time: 01.11.2019 18:20

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 180 4x24LED 0,4A 20,5W 3000K microprisma

Luminous Length (mm): 1200

Luminous Width (mm): 180

Luminous Height (mm): 35

Voltage: 220.7 V

Current: 0.096 A

Power: 20.53 W

Power Factor: 0.965

Photometric Results

CIE Class: Direct

Measurement Flux: 2250 lm

Downward Ratio: 99%

Total Rated Lamp Lumens: 2250.0 lm

Efficiency: 100%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 159.7, 161.7, 149.1, 148.3

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 78.2, 79.3, 76.3, 75.9

Luminaire Efficacy Rating (LER): 109.64

Central Intensity: 1159.42 cd

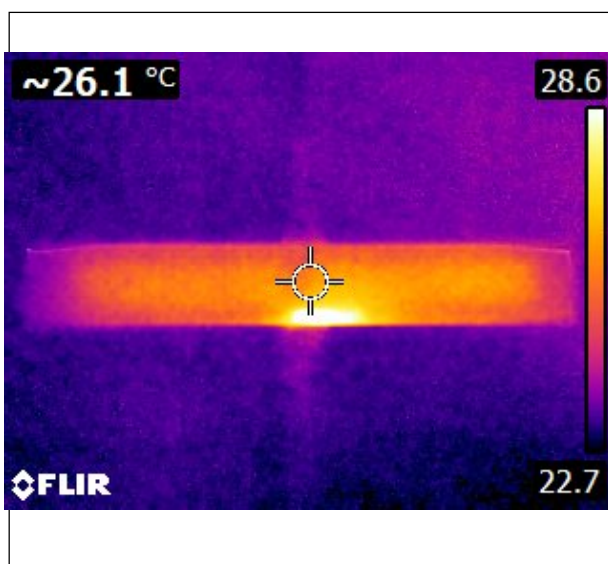
Max. Intensity: 1166.8 cd

Pos of Max. Intensity: H112.5 V6

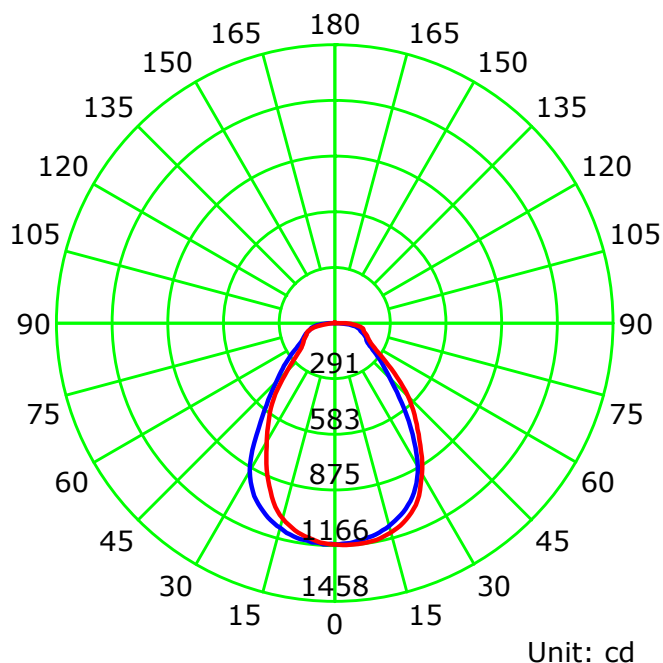
S/MH(C0/C180): 1.14

S/MH(C90/C270): 1.08

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

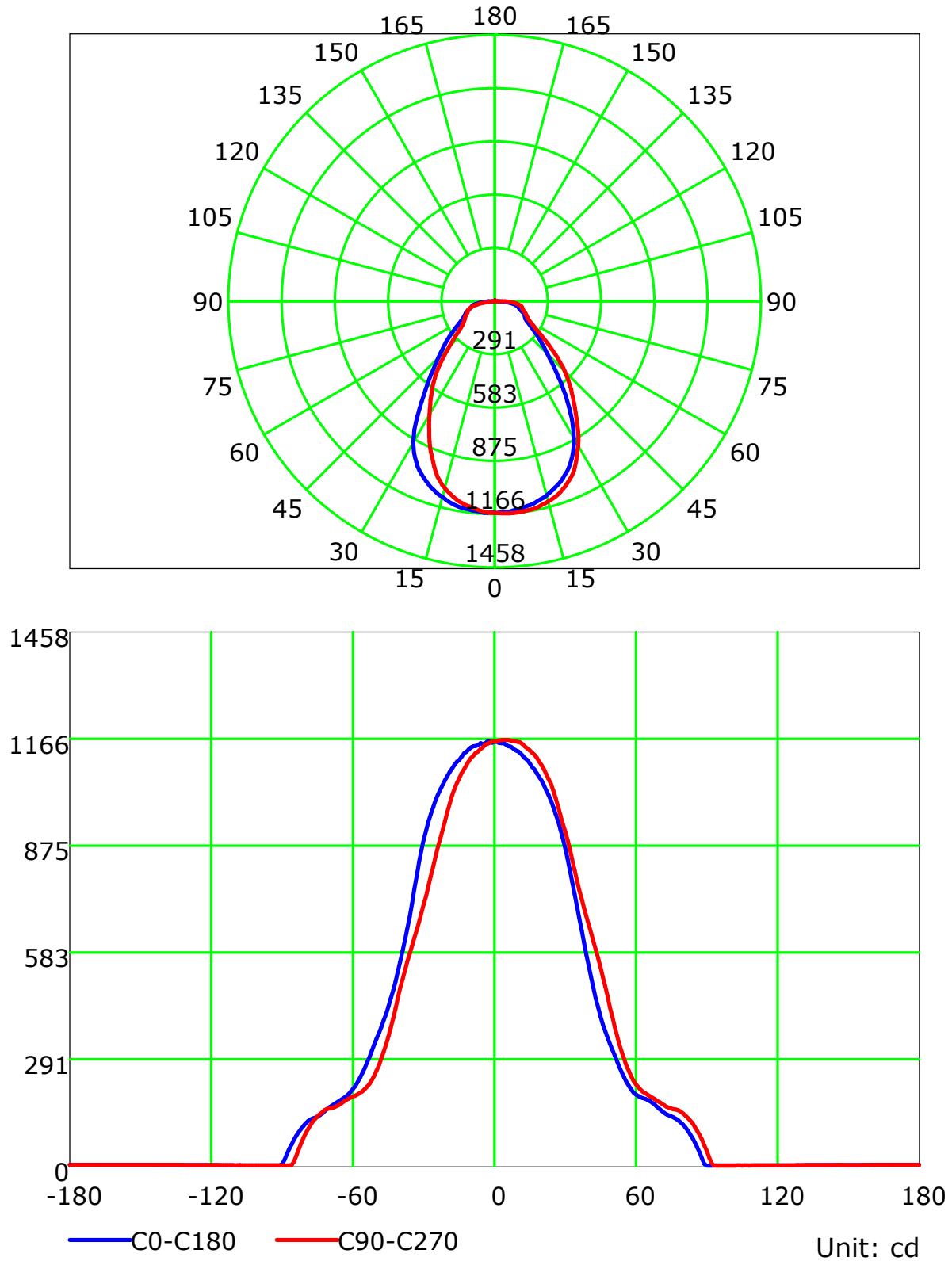
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

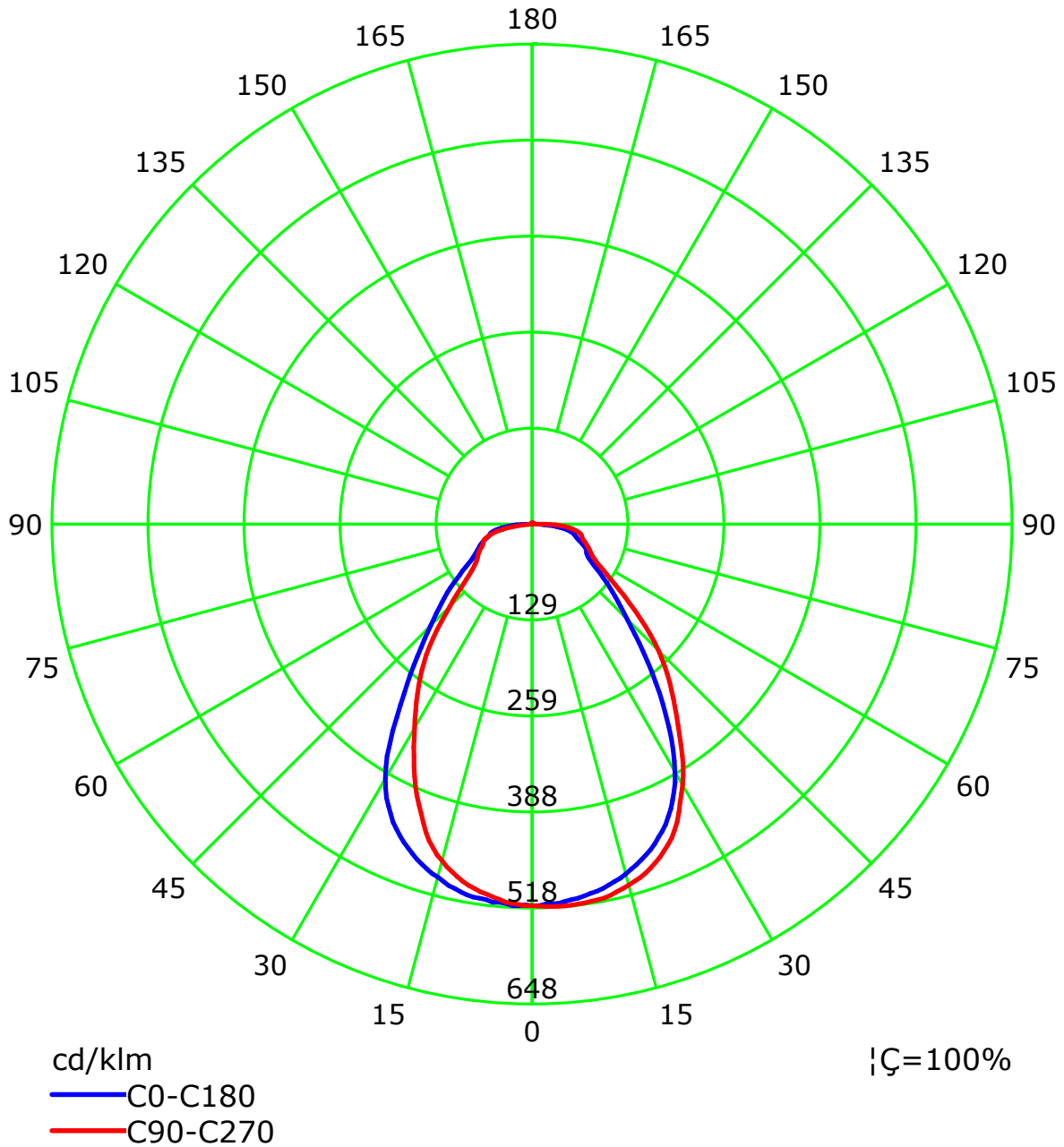
Luminous Intensity Distribution Curve



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)

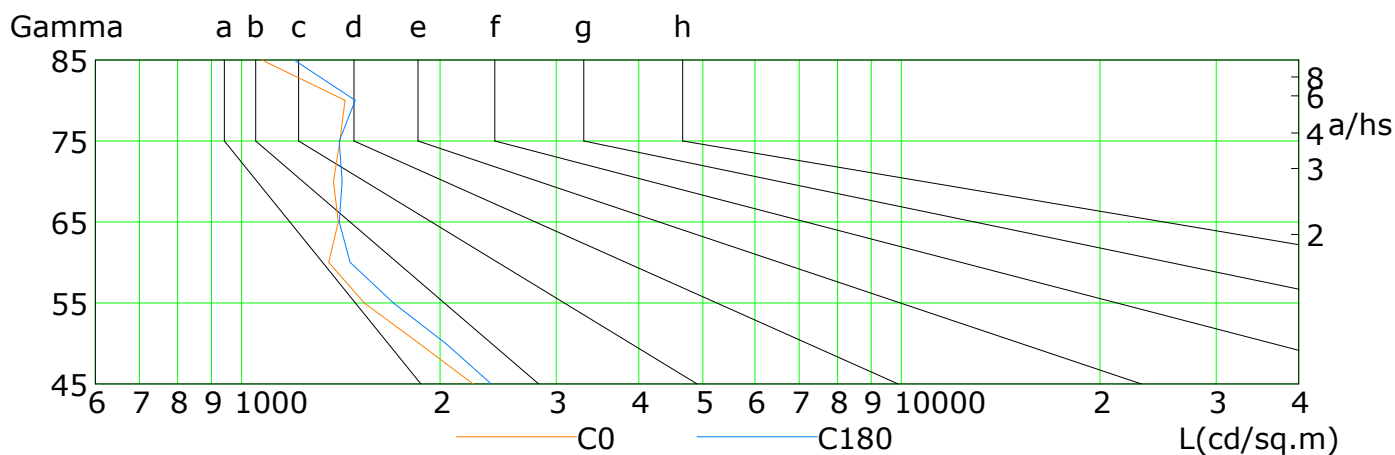
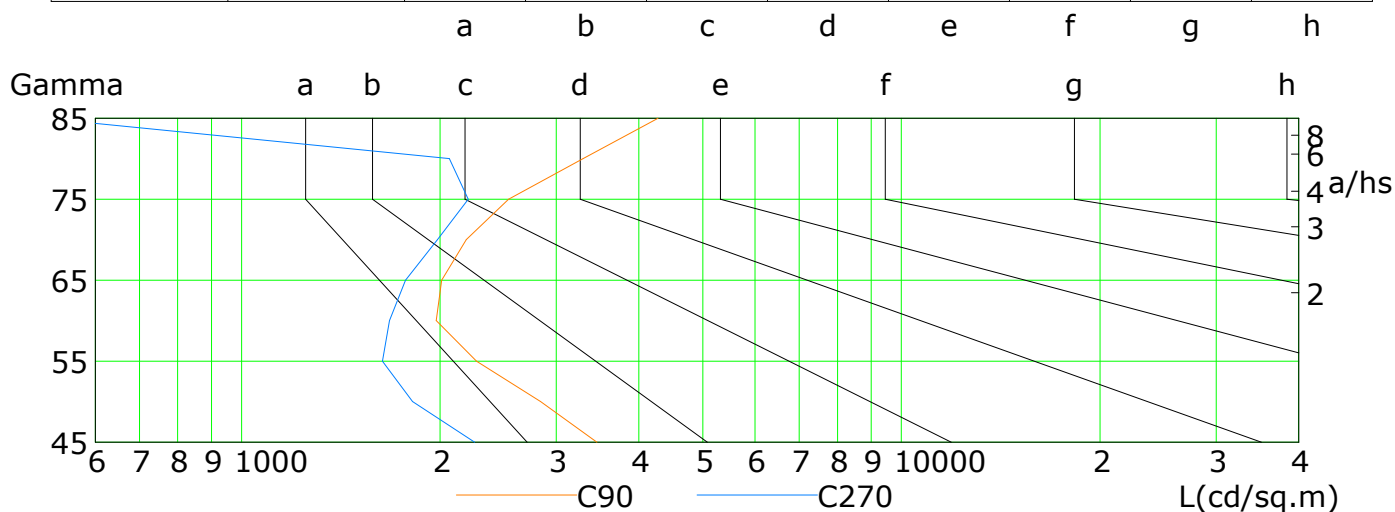


C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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

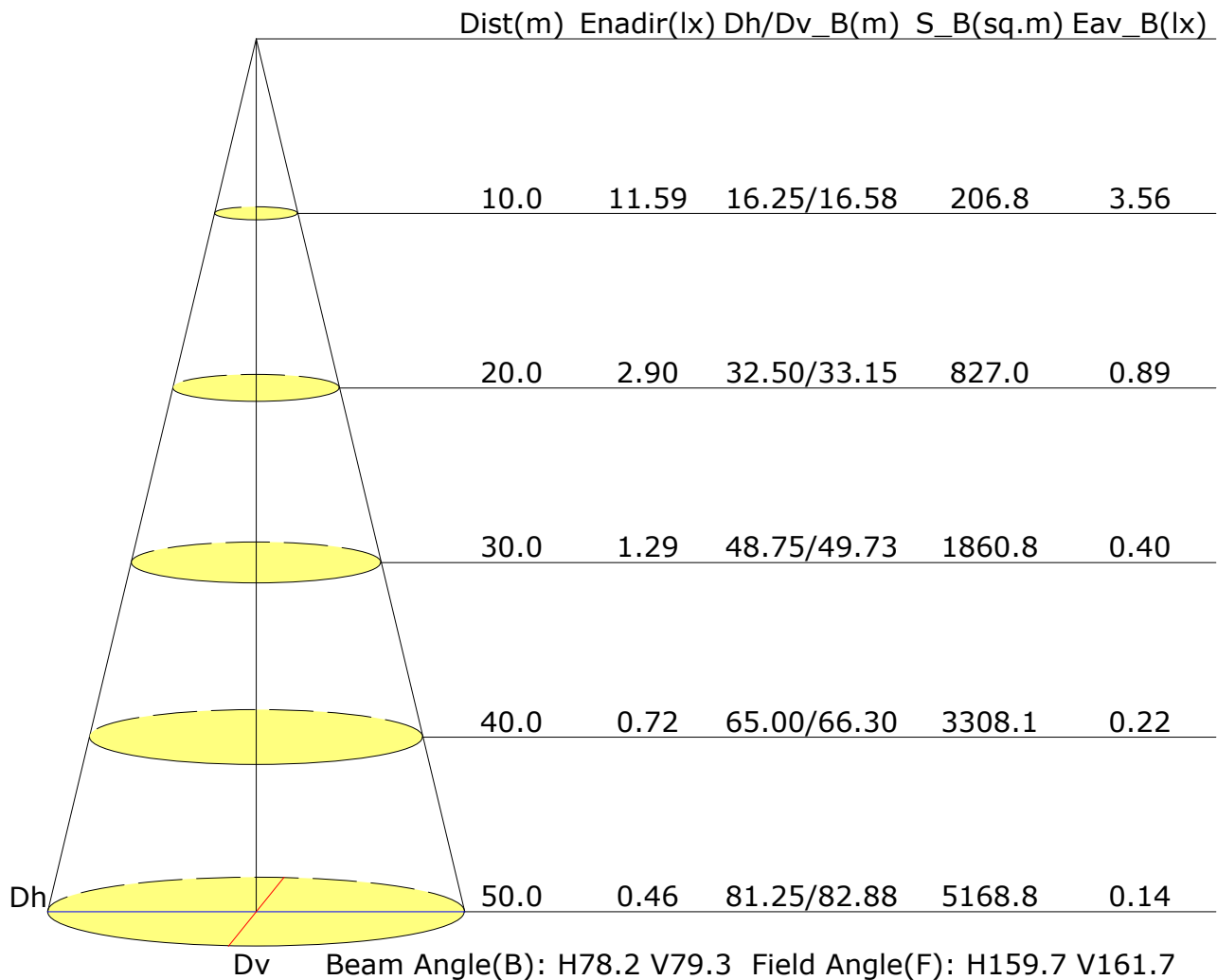


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	2243	1858	1534	1355	1401	1378	1410	1435	1073
C90	3457	2838	2271	1972	2009	2192	2539	3294	4277
C180	2391	2036	1698	1460	1406	1421	1407	1486	1201
C270	2255	1817	1635	1675	1771	1981	2205	2066	506

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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	13.3	14.6	13.6	14.8	15.0	13.9	15.2	14.2	15.4	15.7
3H	14.7	15.8	15.0	16.1	16.4	15.5	16.6	15.8	16.9	17.2
4H	15.4	16.5	15.8	16.8	17.1	16.4	17.5	16.8	17.8	18.1
6H	16.2	17.2	16.5	17.5	17.8	17.5	18.5	17.8	18.8	19.1
8H	16.5	17.5	16.9	17.8	18.1	17.9	18.9	18.3	19.2	19.6
12H	16.7	17.6	17.1	18.0	18.3	18.3	19.3	18.7	19.6	20.0
X=4H Y=2H	13.8	14.8	14.1	15.1	15.5	14.3	15.3	14.6	15.6	16.0
3H	15.4	16.3	15.8	16.7	17.0	16.1	17.0	16.5	17.4	17.7
4H	16.3	17.1	16.7	17.5	17.9	17.2	18.1	17.6	18.4	18.8
6H	17.2	17.9	17.6	18.3	18.8	18.4	19.2	18.9	19.6	20.0
8H	17.6	18.3	18.1	18.7	19.1	19.0	19.7	19.5	20.1	20.5
12H	17.9	18.5	18.3	18.9	19.4	19.5	20.1	20.0	20.5	21.0
X=8H Y=4H	16.6	17.3	17.1	17.7	18.1	17.5	18.1	17.9	18.6	19.0
6H	17.7	18.2	18.2	18.7	19.2	18.8	19.4	19.3	19.8	20.3
8H	18.2	18.7	18.7	19.1	19.6	19.5	20.0	20.0	20.5	21.0
12H	18.5	19.0	19.1	19.5	20.0	20.1	20.6	20.6	21.0	21.6
X=12H Y=4H	16.7	17.3	17.1	17.7	18.2	17.5	18.1	17.9	18.5	19.0
6H	17.8	18.3	18.3	18.7	19.2	18.9	19.4	19.4	19.8	20.3
8H	18.3	18.7	18.8	19.2	19.7	19.6	20.0	20.1	20.5	21.0
Variations with the observer position at spacings:										
S=1.0H	+0.3/-0.3					+0.4/-0.3				
S=1.5H	+0.4/-0.8					+0.4/-0.7				
S=2.0H	+0.8/-1.0					+0.5/-0.9				

Calculate in accordance with CIE Pub.117. The table is revised with 2250lm ($8\log(F/F_0) = 2.8$).

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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	0.63	0.72	0.79	0.83	0.90	0.94	0.97	1.01	1.04	
	0.30		0.56	0.65	0.72	0.77	0.84	0.89	0.93	0.97	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	0.61	0.70	0.76	0.81	0.87	0.91	0.93	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		0.50	0.59	0.66	0.71	0.78	0.83	0.86	0.91	0.94	
0.30	0.50	0.20	0.60	0.68	0.74	0.78	0.84	0.87	0.90	0.93	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	0.69	0.76	0.81	0.84	0.89	0.91	
0.00	0.00	0.00	0.48	0.56	0.62	0.66	0.73	0.77	0.80	0.84	0.87	
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 = 1.00									
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	0.55	0.49	0.40	0.34	0.30	0.24	0.20	
	0.20		0.64	0.55	0.49	0.44	0.37	0.32	0.28	0.22	0.19	
0.50	0.50	0.20	0.86	0.71	0.61	0.53	0.42	0.39	0.30	0.24	0.19	
	0.30		0.73	0.62	0.54	0.47	0.39	0.33	0.28	0.22	0.19	
	0.20		0.63	0.54	0.48	0.43	0.36	0.30	0.27	0.21	0.18	
0.30	0.50	0.20	0.84	0.68	0.58	0.51	0.40	0.34	0.29	0.22	0.19	
	0.30		0.71	0.60	0.52	0.46	0.37	0.31	0.27	0.21	0.18	
	0.20		0.63	0.54	0.47	0.42	0.35	0.29	0.26	0.20	0.17	
0.00	0.00	0.00	0.52	0.43	0.37	0.33	0.27	0.23	0.20	0.15	0.13	
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 = 1.00									
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	0.17	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	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	
	0.20		0.06	0.07	0.09	0.10	0.12	0.13	0.15	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	0.14	0.15	0.16	0.17	0.18	0.19	
	0.20		0.06	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:21W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												