

Report No.: 1

Test Time: 31.10.2019 21:19

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 595 4x24LED 0,4A 20,5W 3000K microprisma

Luminous Length (mm): 595

Luminous Width (mm): 595

Luminous Height (mm): 35

Voltage: 221.4 V

Current: 0.096 A

Power: 20.51 W

Power Factor: 0.964

Photometric Results

CIE Class: Direct

Measurement Flux: 2432.7 lm

Downward Ratio: 99%

Total Rated Lamp Lumens: 2432.7 lm

Efficiency: 100%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 162.4, 156.5, 151.1, 151.8

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 84.0, 81.0, 78.4, 78.6

Luminaire Efficacy Rating (LER): 118.66

Central Intensity: 1194.01 cd

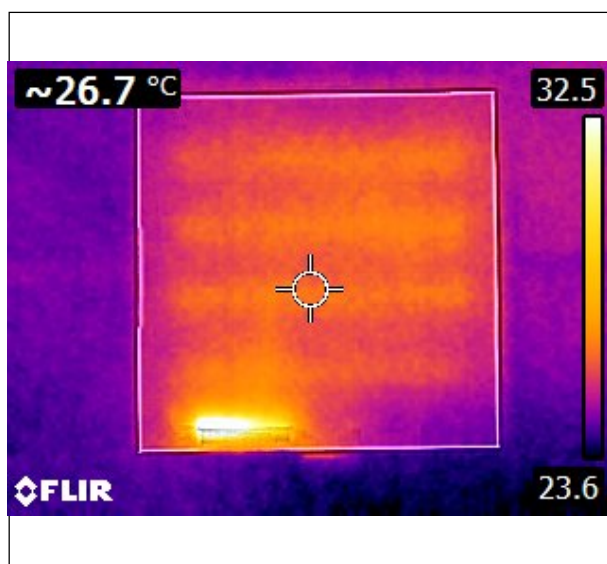
Max. Intensity: 1199.43 cd

Pos of Max. Intensity: H112.5 V1

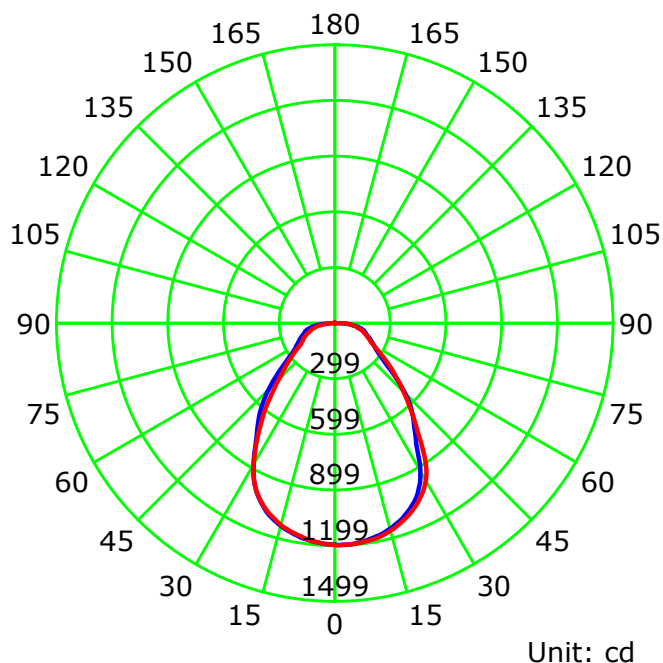
S/MH(C0/C180): 1.14

S/MH(C90/C270): 1.16

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

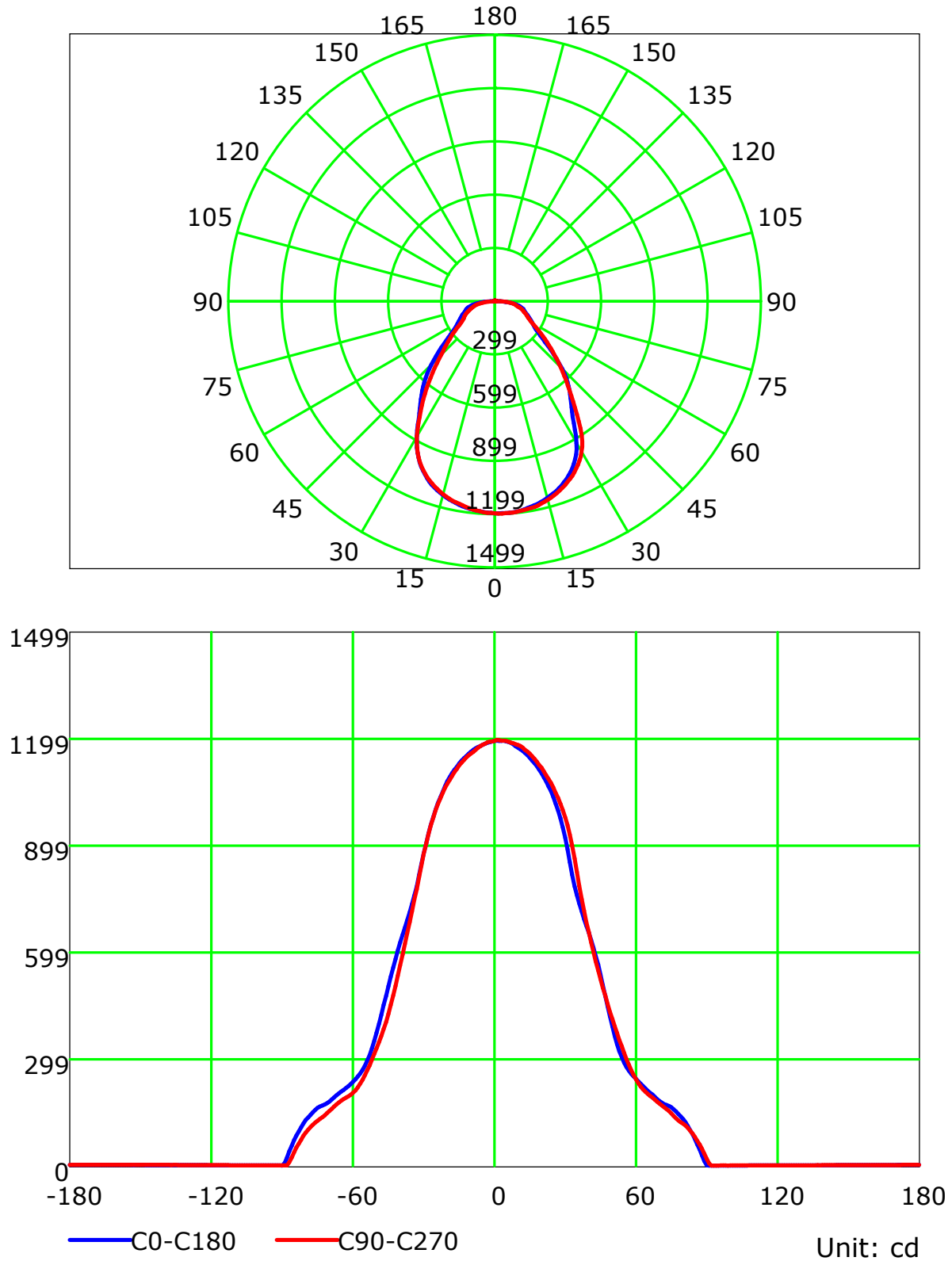
Test Device: LSG-1800B

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

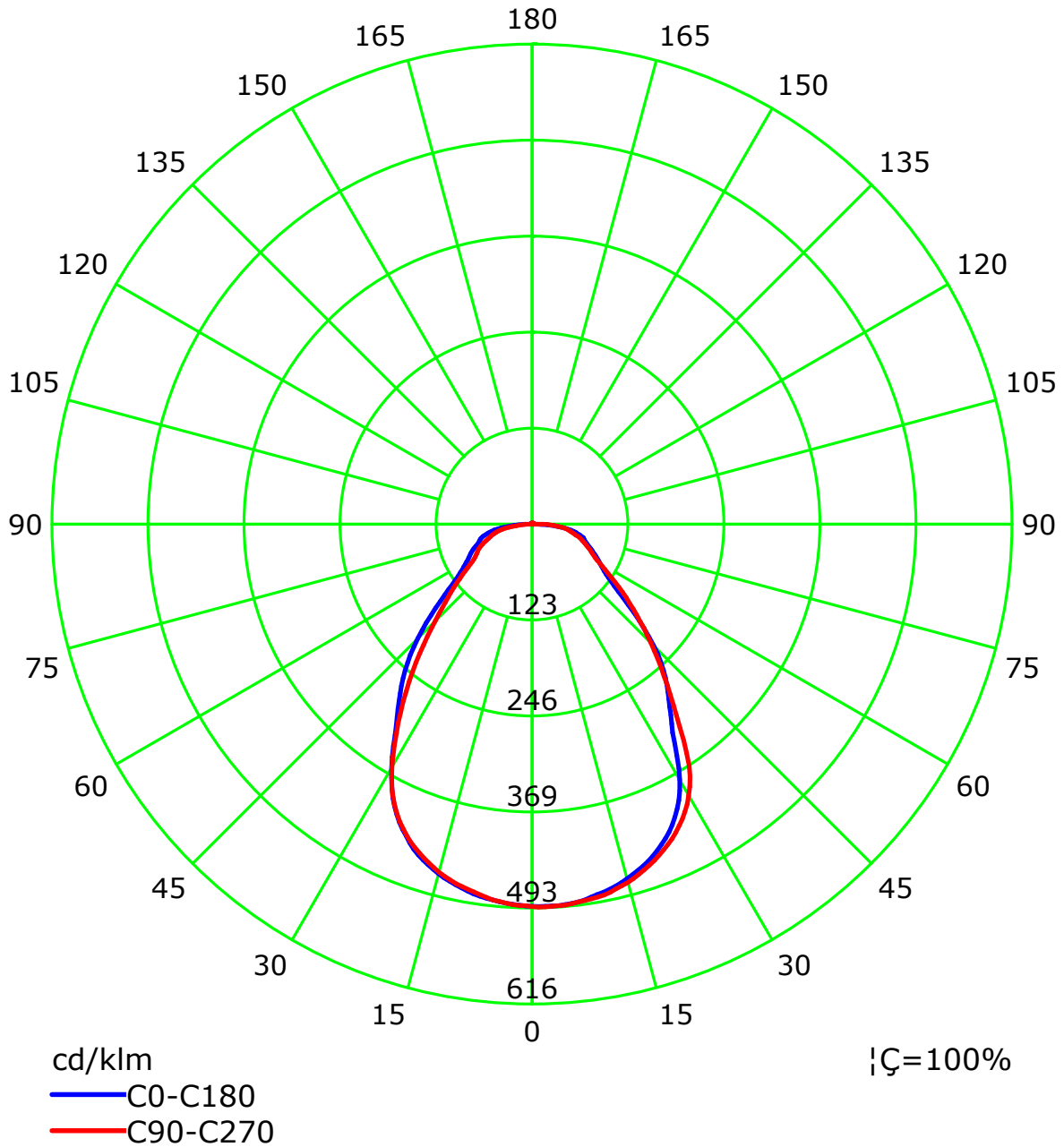
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve(cd/klm)



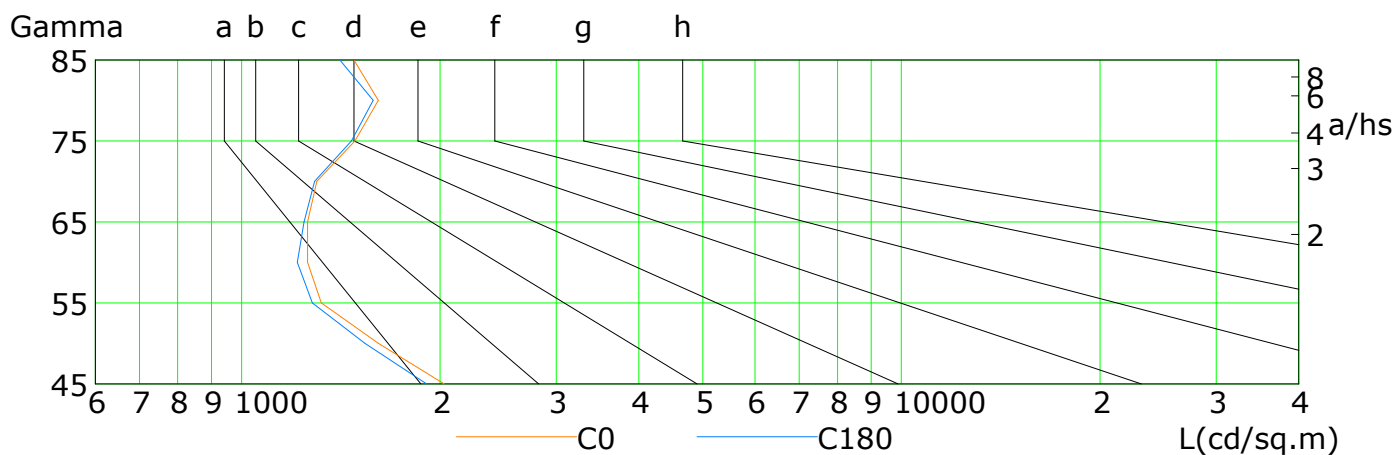
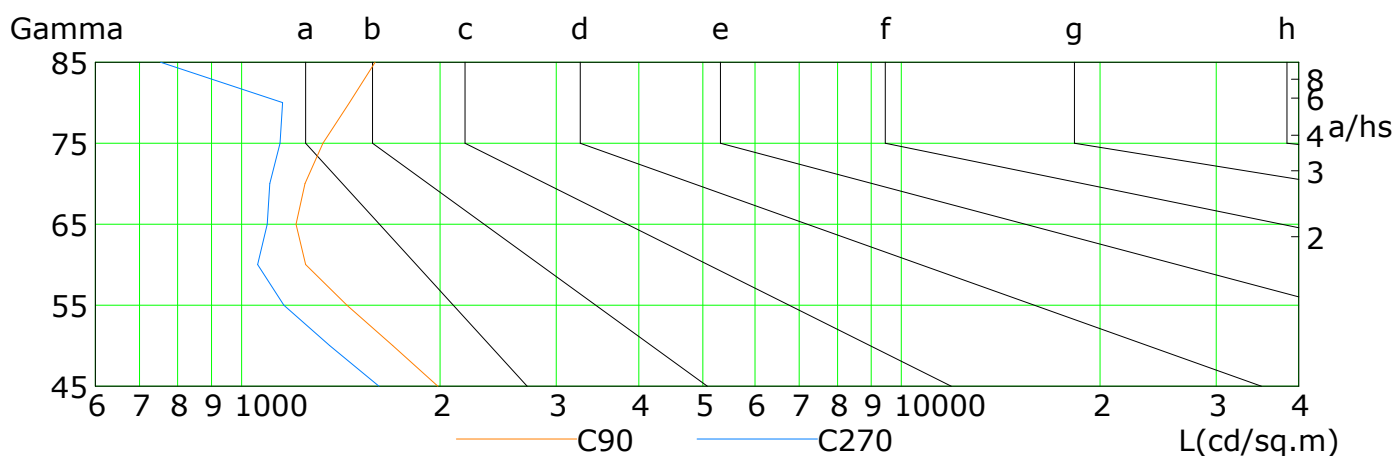
C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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

a b c d e f g h

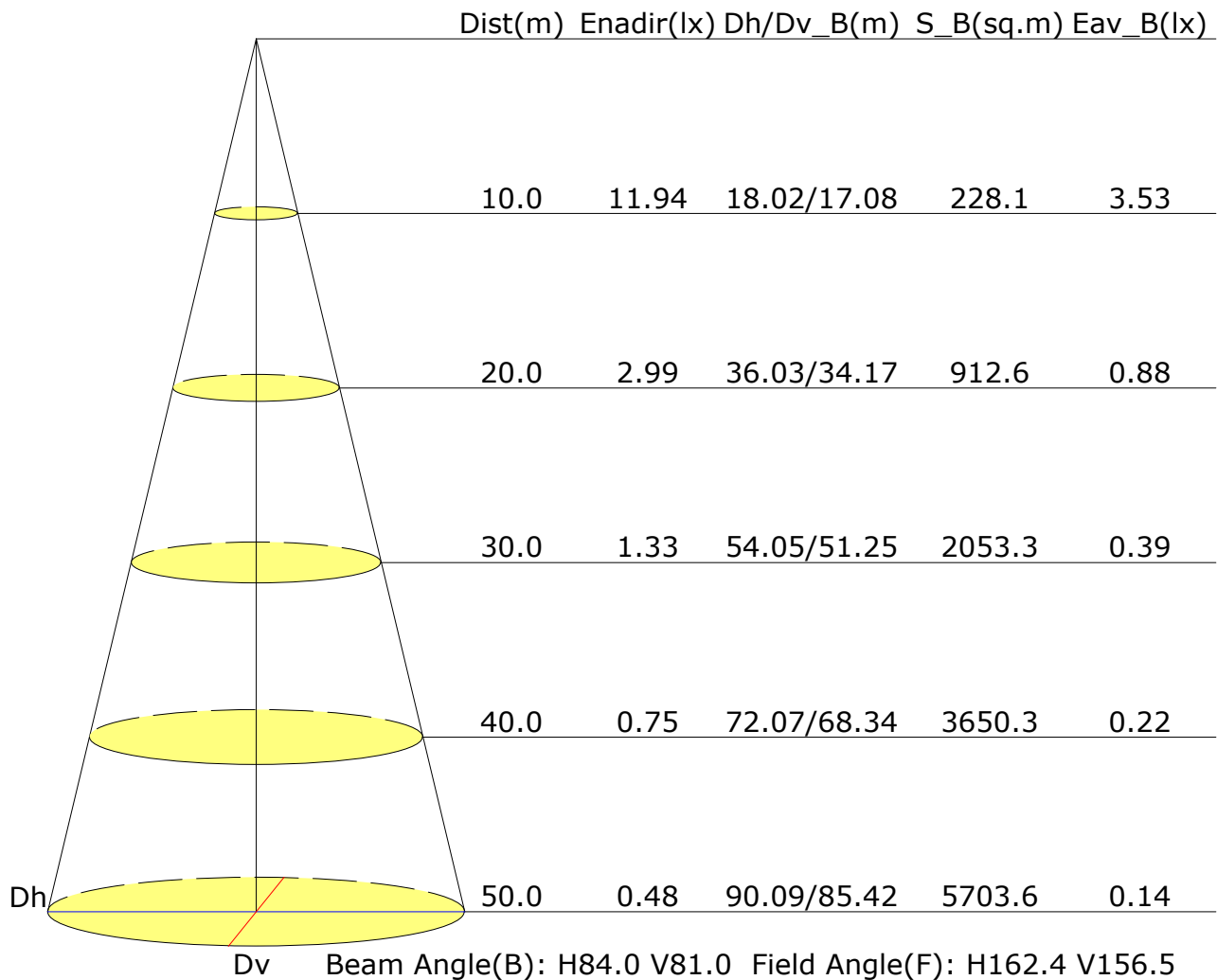


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	2028	1611	1320	1258	1258	1301	1485	1612	1480
C90	1983	1695	1444	1251	1209	1248	1328	1458	1594
C180	1907	1538	1280	1215	1243	1290	1468	1583	1410
C270	1615	1359	1159	1057	1093	1103	1144	1154	754

C Plane (°):0.0-360.0: 22.5
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 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	12.9	14.1	13.2	14.4	14.6	12.6	13.9	12.9	14.1	14.4
3H	14.4	15.5	14.7	15.8	16.1	14.0	15.2	14.3	15.4	15.7
4H	15.3	16.3	15.6	16.6	16.9	14.8	15.8	15.1	16.1	16.5
6H	16.2	17.2	16.6	17.5	17.9	15.5	16.5	15.9	16.8	17.2
8H	16.6	17.6	17.0	17.9	18.3	15.8	16.8	16.2	17.1	17.5
12H	16.9	17.9	17.3	18.2	18.5	16.1	17.0	16.5	17.4	17.7
X=4H Y=2H	13.3	14.4	13.6	14.7	15.0	13.1	14.2	13.4	14.5	14.8
3H	15.0	16.0	15.4	16.3	16.7	14.7	15.7	15.1	16.0	16.4
4H	16.1	17.0	16.5	17.3	17.7	15.7	16.5	16.1	16.9	17.2
6H	17.3	18.0	17.7	18.4	18.8	16.6	17.3	17.0	17.7	18.1
8H	17.8	18.4	18.2	18.9	19.3	17.0	17.7	17.4	18.1	18.5
12H	18.1	18.8	18.6	19.2	19.7	17.3	17.9	17.8	18.4	18.8
X=8H Y=4H	16.4	17.1	16.9	17.5	18.0	16.0	16.7	16.4	17.1	17.5
6H	17.7	18.3	18.2	18.7	19.2	17.1	17.6	17.5	18.1	18.5
8H	18.3	18.8	18.8	19.3	19.8	17.6	18.1	18.1	18.5	19.0
12H	18.8	19.3	19.3	19.7	20.3	18.0	18.5	18.5	18.9	19.5
X=12H Y=4H	16.5	17.1	16.9	17.5	18.0	16.1	16.7	16.5	17.1	17.6
6H	17.8	18.3	18.3	18.8	19.3	17.2	17.7	17.7	18.1	18.6
8H	18.5	18.9	19.0	19.4	19.9	17.7	18.2	18.2	18.6	19.2
Variations with the observer position at spacings:										
S=1.0H	+0.3/-0.3					+0.3/-0.3				
S=1.5H	+0.4/-0.7					+0.4/-0.7				
S=2.0H	+0.7/-0.9					+0.5/-1.0				

Calculate in accordance with CIE Pub.117. The table is revised with 2433lm ($8\log(F/F_0) = 3.1$).

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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	0.62	0.72	0.78	0.83	0.90	0.94	0.97	1.01	1.04	
	0.30		0.55	0.65	0.71	0.76	0.84	0.89	0.92	0.97	1.01	
	0.20		0.50	0.59	0.66	0.71	0.79	0.84	0.88	0.94	0.98	
0.50	0.50	0.20	0.61	0.70	0.76	0.80	0.86	0.91	0.93	0.97	1.00	
	0.30		0.54	0.63	0.70	0.75	0.82	0.86	0.90	0.94	0.97	
	0.20		0.50	0.59	0.65	0.70	0.77	0.82	0.86	0.91	0.94	
0.30	0.50	0.20	0.59	0.68	0.74	0.78	0.83	0.87	0.90	0.93	0.96	
	0.30		0.54	0.62	0.68	0.73	0.79	0.84	0.87	0.91	0.94	
	0.20		0.49	0.58	0.64	0.69	0.76	0.80	0.84	0.88	0.91	
0.00	0.00	0.00	0.47	0.56	0.62	0.66	0.72	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	0.91	0.75	0.64	0.56	0.45	0.38	0.32	0.25	0.21	
	0.30		0.76	0.64	0.56	0.50	0.41	0.35	0.30	0.24	0.20	
	0.20		0.65	0.56	0.50	0.45	0.37	0.32	0.28	0.22	0.19	
0.50	0.50	0.20	0.88	0.72	0.62	0.54	0.43	0.39	0.31	0.24	0.20	
	0.30		0.74	0.63	0.54	0.48	0.39	0.33	0.29	0.23	0.19	
	0.20		0.64	0.55	0.49	0.44	0.36	0.31	0.27	0.22	0.18	
0.30	0.50	0.20	0.85	0.69	0.59	0.51	0.41	0.34	0.29	0.23	0.19	
	0.30		0.73	0.61	0.53	0.47	0.38	0.32	0.28	0.22	0.18	
	0.20		0.64	0.54	0.48	0.43	0.35	0.30	0.26	0.21	0.17	
0.00	0.00	0.00	0.53	0.44	0.38	0.34	0.27	0.23	0.20	0.16	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	0.11	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	0.19	
	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:21W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												