

Report No.: 1

Test Time: 31.10.2019 21:46

Luminaire Property

Luminaire Manufacturer:

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

Luminous Length (mm): 595

Luminous Width (mm): 595

Luminous Height (mm): 35

Voltage: 221.4 V

Current: 0.096 A

Power: 20.70 W

Power Factor: 0.964

Photometric Results

CIE Class: Direct

Measurement Flux: 2227.6 lm

Downward Ratio: 99%

Total Rated Lamp Lumens: 2227.6 lm

Efficiency: 100%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 164.1, 164.2, 164.2, 164.1

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 111.4, 111.5, 111.5, 111.5

Luminaire Efficacy Rating (LER): 107.67

Central Intensity: 771.69 cd

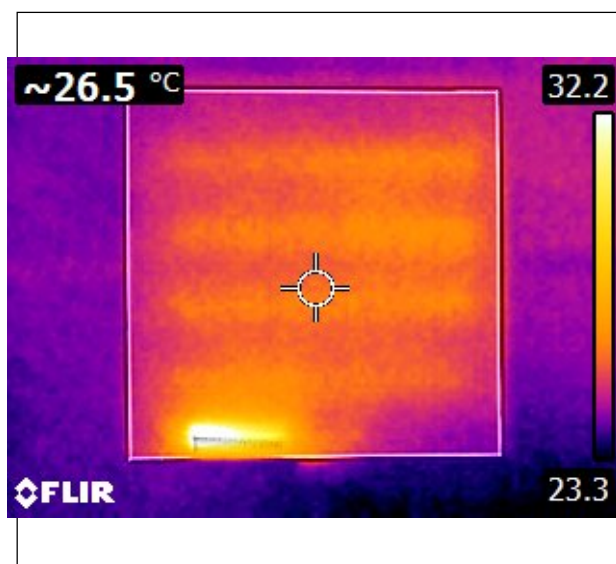
Max. Intensity: 772.74 cd

Pos of Max. Intensity: H135 V1

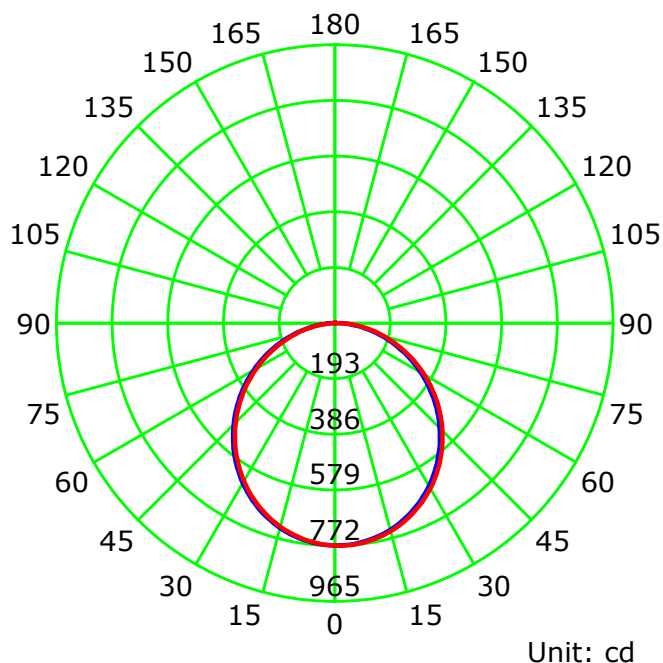
S/MH(C0/C180): 1.25

S/MH(C90/C270): 1.25

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

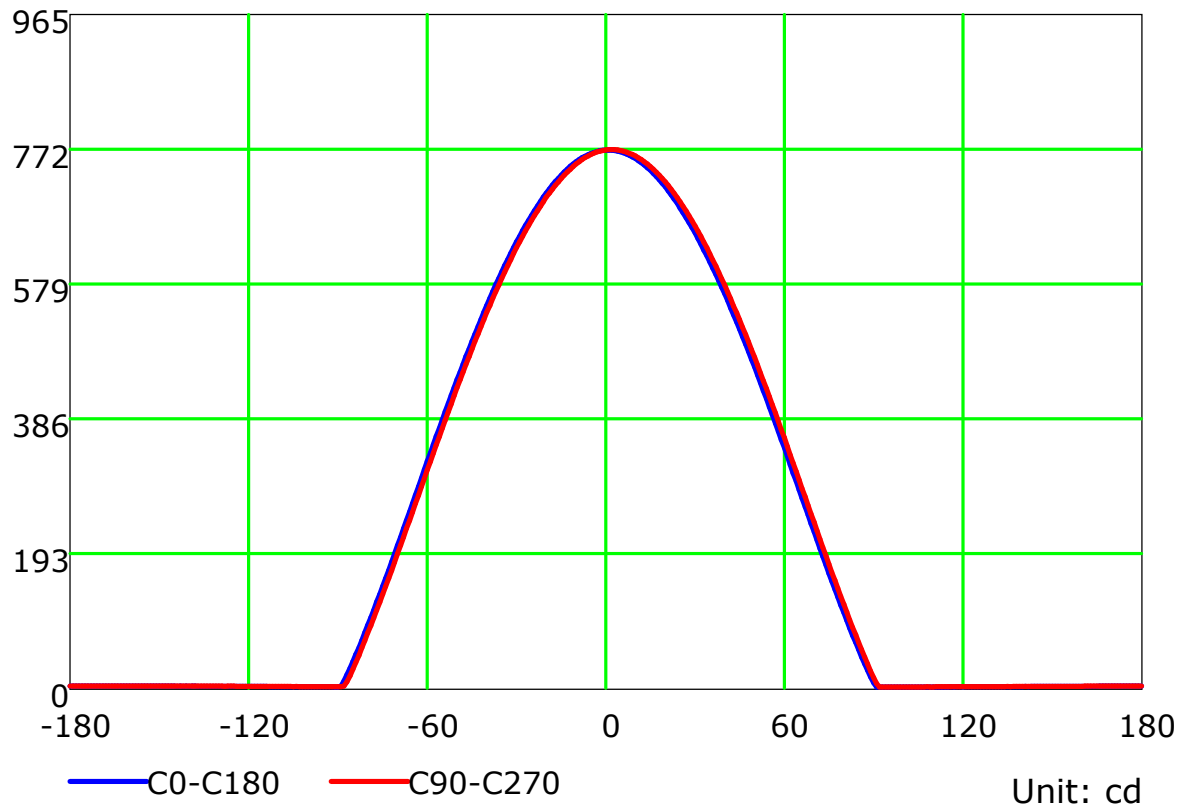
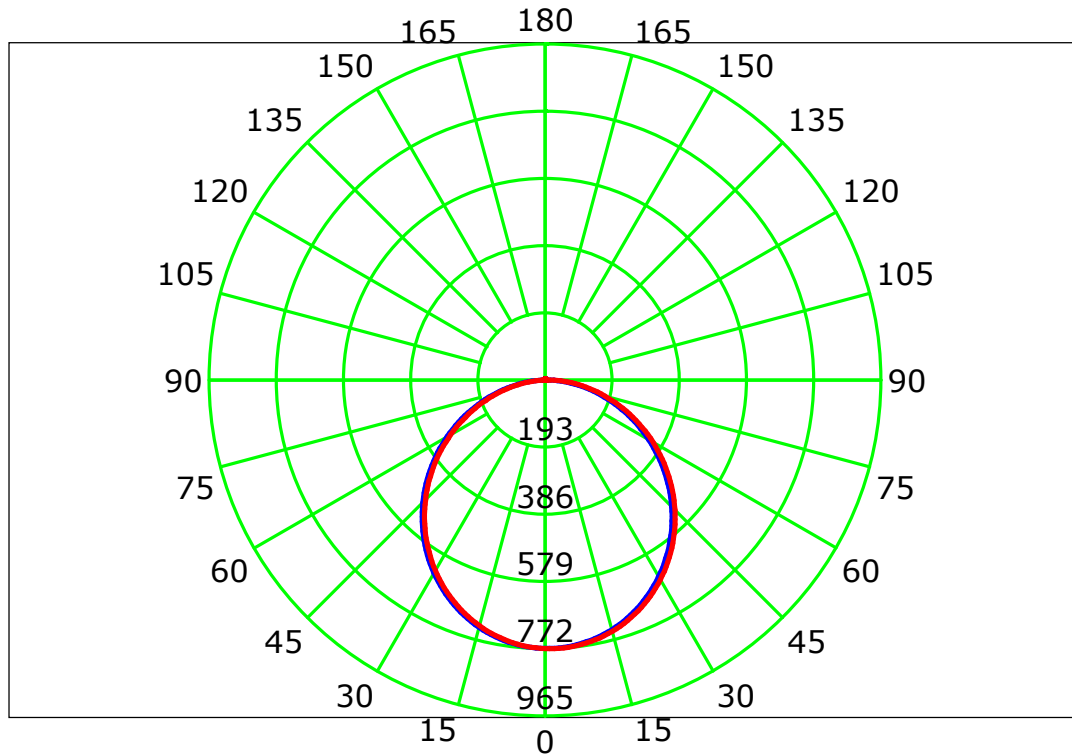
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

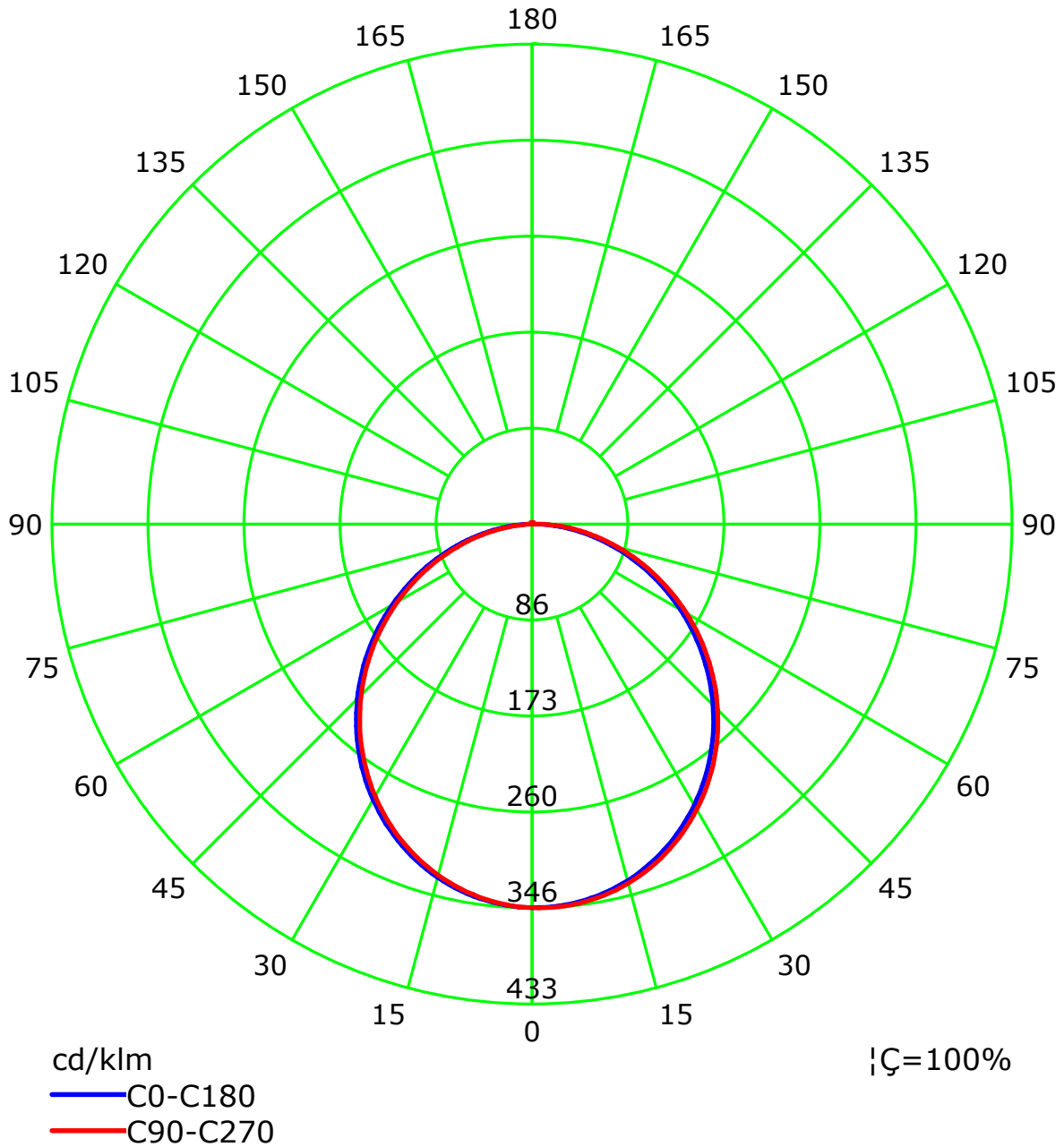
Luminous Intensity Distribution Curve



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)



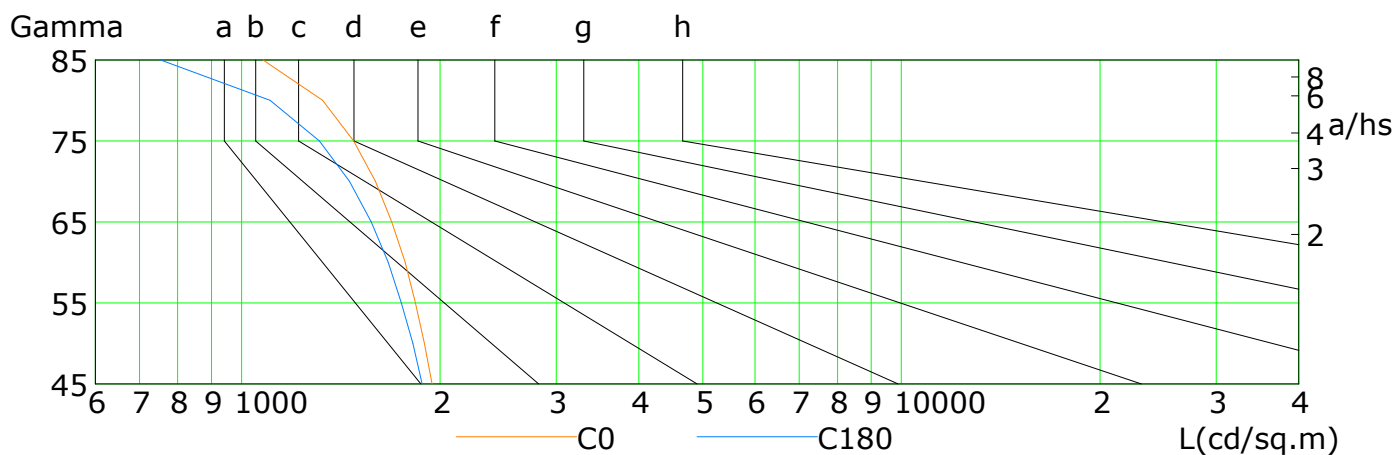
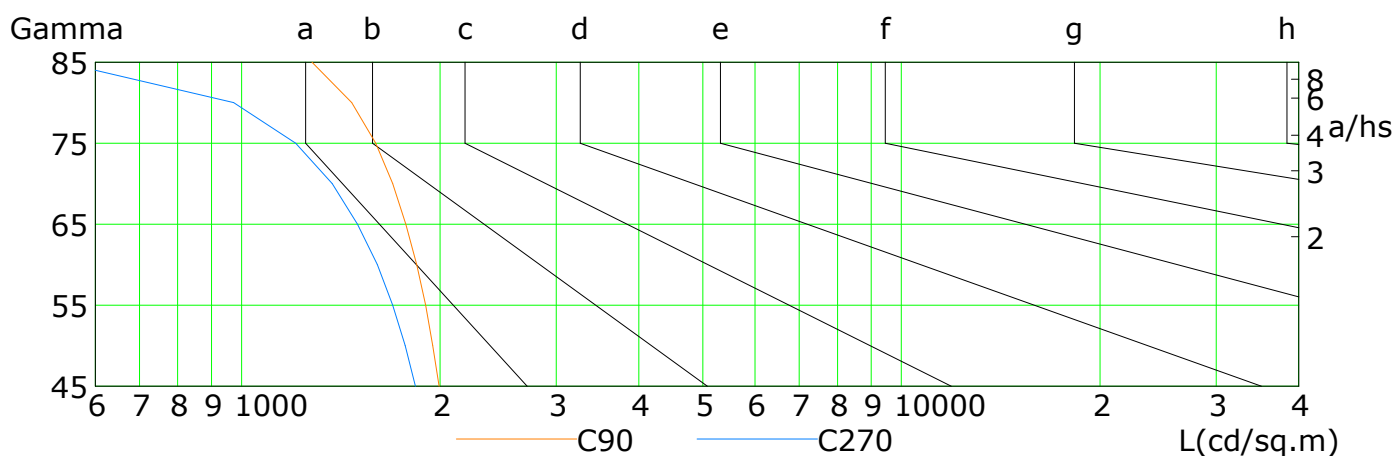
C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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

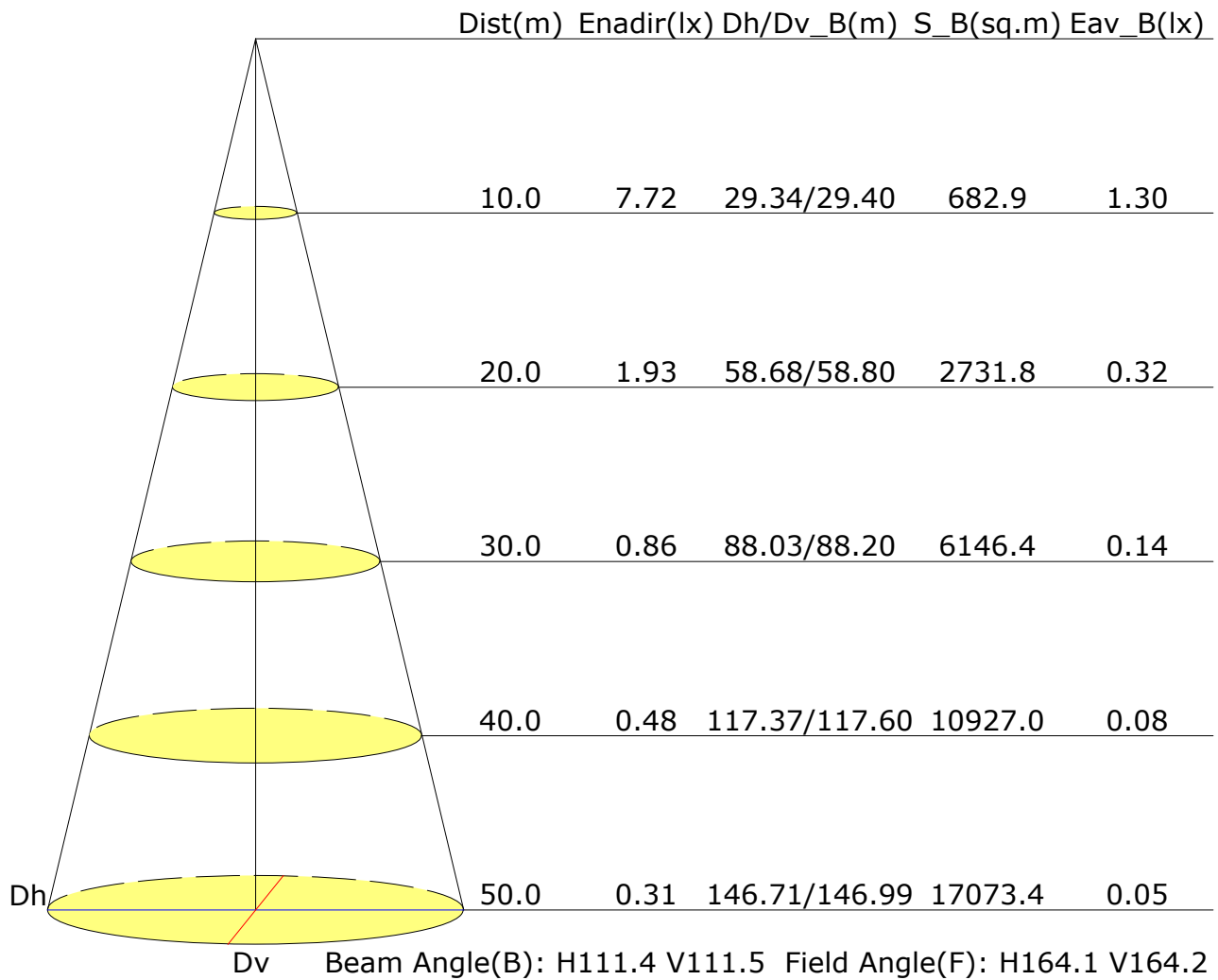


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	1943	1893	1834	1769	1689	1596	1478	1326	1077
C90	1993	1949	1900	1843	1774	1695	1596	1469	1278
C180	1877	1818	1747	1668	1573	1458	1312	1105	754
C270	1835	1770	1694	1607	1499	1372	1208	972	535

C Plane (°):0.0-360.0: 22.5
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 Temperature:
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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	14.6	16.0	14.9	16.3	16.5	14.5	15.9	14.9	16.2	16.4
3H	16.2	17.5	16.6	17.8	18.1	16.1	17.4	16.4	17.6	17.9
4H	16.9	18.1	17.2	18.4	18.7	16.7	17.9	17.1	18.2	18.5
6H	17.4	18.5	17.8	18.8	19.2	17.2	18.3	17.6	18.7	19.0
8H	17.6	18.6	18.0	19.0	19.3	17.4	18.5	17.8	18.8	19.1
12H	17.7	18.7	18.1	19.1	19.4	17.5	18.5	17.9	18.9	19.2
X=4H Y=2H	15.3	16.5	15.6	16.8	17.1	15.2	16.4	15.6	16.7	17.0
3H	17.0	18.1	17.4	18.4	18.8	16.9	18.0	17.3	18.3	18.7
4H	17.8	18.8	18.3	19.1	19.5	17.7	18.6	18.1	19.0	19.4
6H	18.5	19.3	18.9	19.7	20.1	18.3	19.1	18.8	19.5	20.0
8H	18.7	19.5	19.2	19.9	20.3	18.5	19.3	19.0	19.7	20.2
12H	18.9	19.6	19.4	20.0	20.5	18.7	19.4	19.2	19.8	20.3
X=8H Y=4H	18.1	18.9	18.6	19.3	19.7	18.0	18.8	18.5	19.2	19.6
6H	18.9	19.5	19.4	20.0	20.5	18.8	19.4	19.3	19.8	20.3
8H	19.2	19.8	19.7	20.2	20.8	19.1	19.6	19.6	20.1	20.6
12H	19.5	20.0	20.0	20.4	21.0	19.3	19.8	19.8	20.3	20.8
X=12H Y=4H	18.1	18.8	18.6	19.3	19.7	18.0	18.7	18.5	19.2	19.6
6H	19.0	19.5	19.5	20.0	20.5	18.9	19.4	19.3	19.9	20.4
8H	19.3	19.8	19.8	20.3	20.8	19.2	19.7	19.7	20.2	20.7
Variations with the observer position at spacings:										
S=1.0H	+0.2/-0.2					+0.2/-0.2				
S=1.5H	+0.3/-0.4					+0.4/-0.6				
S=2.0H	+0.5/-0.8					+0.5/-1.0				

Calculate in accordance with CIE Pub.117. The table is revised with 2228lm ($8\log(F/F_0) = 2.8$).

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:

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	0.56	0.66	0.74	0.79	0.86	0.91	0.95	1.00	1.03	
	0.30		0.48	0.58	0.66	0.72	0.80	0.86	0.90	0.95	0.99	
	0.20		0.42	0.53	0.60	0.66	0.75	0.81	0.85	0.92	0.96	
0.50	0.50	0.20	0.54	0.64	0.71	0.76	0.83	0.88	0.91	0.95	0.98	
	0.30		0.47	0.57	0.64	0.70	0.78	0.83	0.87	0.92	0.95	
	0.20		0.42	0.52	0.59	0.65	0.73	0.79	0.83	0.89	0.92	
0.30	0.50	0.20	0.53	0.62	0.69	0.73	0.80	0.84	0.88	0.92	0.94	
	0.30		0.46	0.56	0.63	0.68	0.75	0.80	0.84	0.89	0.92	
	0.20		0.41	0.51	0.58	0.64	0.71	0.77	0.81	0.86	0.89	
0.00	0.00	0.00	0.39	0.49	0.56	0.61	0.68	0.73	0.77	0.82	0.85	
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 = 1.25									
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	1.01	0.83	0.71	0.62	0.50	0.41	0.36	0.28	0.23	
	0.30		0.84	0.71	0.62	0.55	0.45	0.38	0.33	0.26	0.22	
	0.20		0.72	0.62	0.55	0.49	0.41	0.35	0.31	0.25	0.21	
0.50	0.50	0.20	0.97	0.80	0.68	0.60	0.48	0.43	0.34	0.26	0.22	
	0.30		0.82	0.70	0.60	0.53	0.44	0.37	0.32	0.25	0.21	
	0.20		0.71	0.61	0.54	0.48	0.40	0.34	0.30	0.24	0.20	
0.30	0.50	0.20	0.94	0.77	0.66	0.57	0.46	0.38	0.32	0.25	0.21	
	0.30		0.80	0.68	0.59	0.52	0.42	0.35	0.30	0.24	0.20	
	0.20		0.70	0.61	0.53	0.47	0.39	0.33	0.29	0.23	0.19	
0.00	0.00	0.00	0.60	0.51	0.44	0.39	0.32	0.26	0.23	0.18	0.15	
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 = 1.25									
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	0.20	0.21	0.21	0.22	0.22	0.23	
	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	0.14	0.16	0.17	
0.50	0.50	0.20	0.17	0.18	0.19	0.19	0.20	0.21	0.21	0.21	0.22	
	0.30		0.10	0.12	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	0.18	0.18	0.19	0.20	0.20	0.20	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	0.09	0.11	0.13	0.14	0.15	0.16	
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												