

Report No.: 1

Test Time: 12.12.2019 18:32

Luminaire Property

Luminaire Manufacturer:

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

Luminous Length (mm): 250

Luminous Width (mm): 250

Luminous Height (mm): 76

Voltage: 221.5 V

Current: 0.073 A

Power: 15.25 W

Power Factor: 0.942

Photometric Results

CIE Class: Direct

Measurement Flux: 1801.3 lm

Downward Ratio: 98%

Total Rated Lamp Lumens: 1801.3 lm

Efficiency: 100%

Upward Ratio: 2%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 140.9, 140.7, 140.1, 139.7

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 89.5, 90.3, 90.8, 90.1

Luminaire Efficacy Rating (LER): 118.17

Central Intensity: 830.57 cd

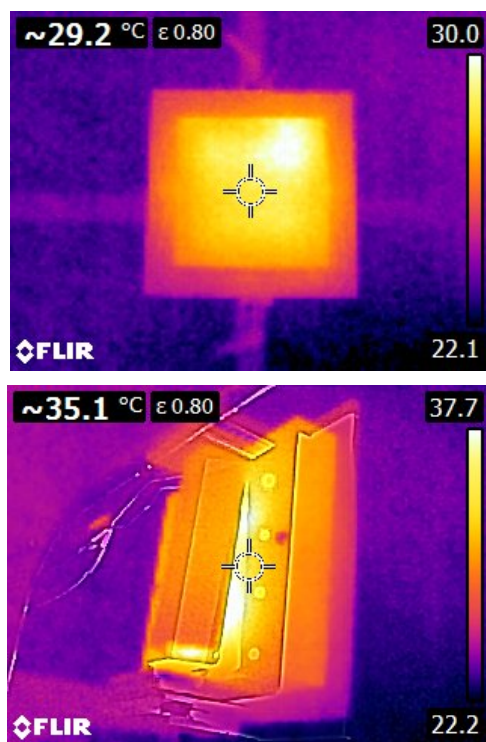
Max. Intensity: 831.36 cd

Pos of Max. Intensity: H135 V1

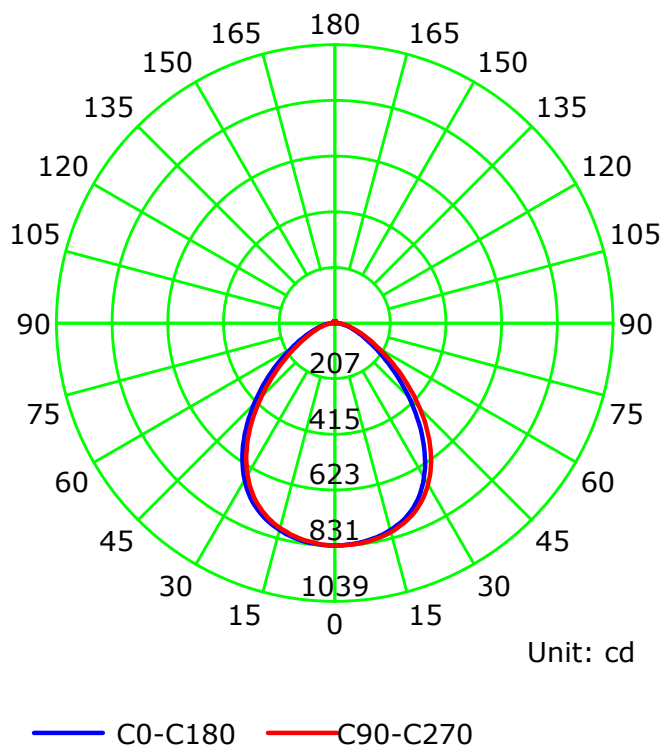
S/MH(C0/C180): 1.20

S/MH(C90/C270): 1.20

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

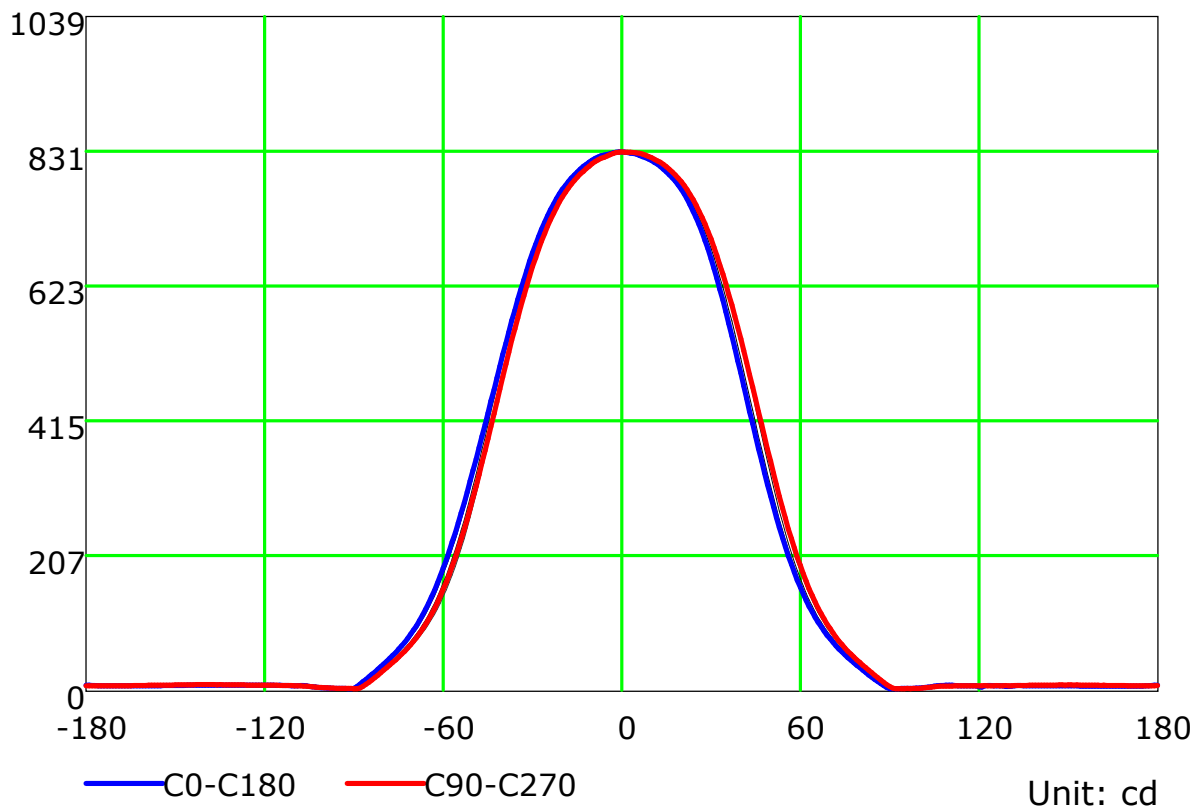
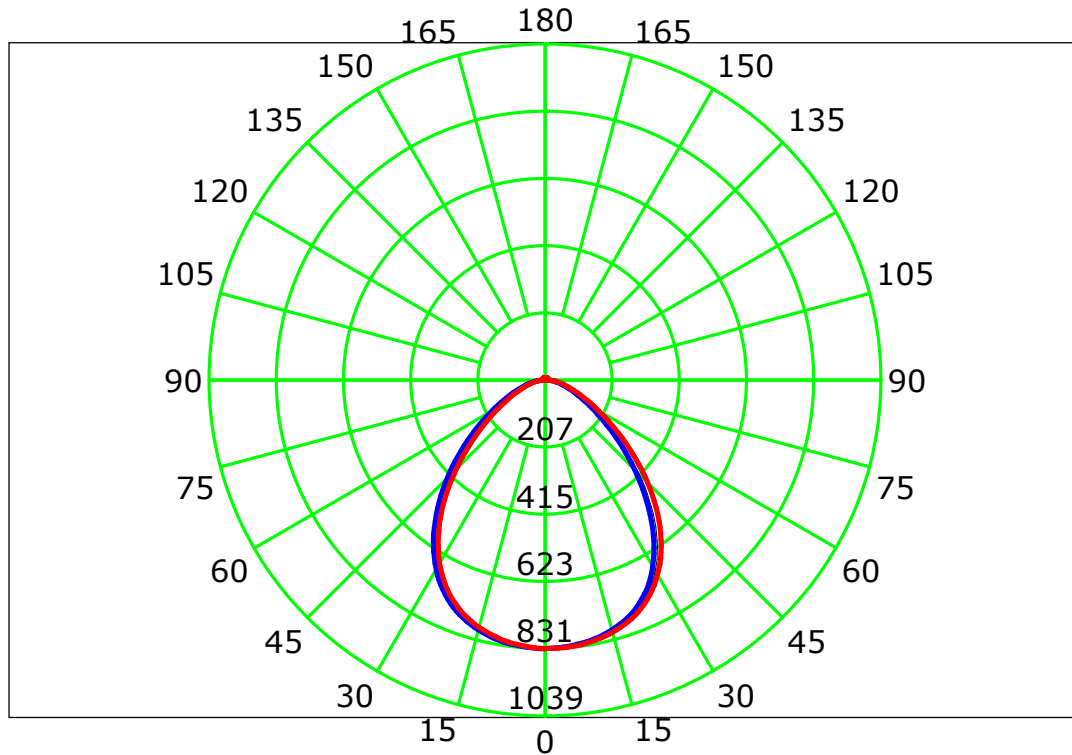
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

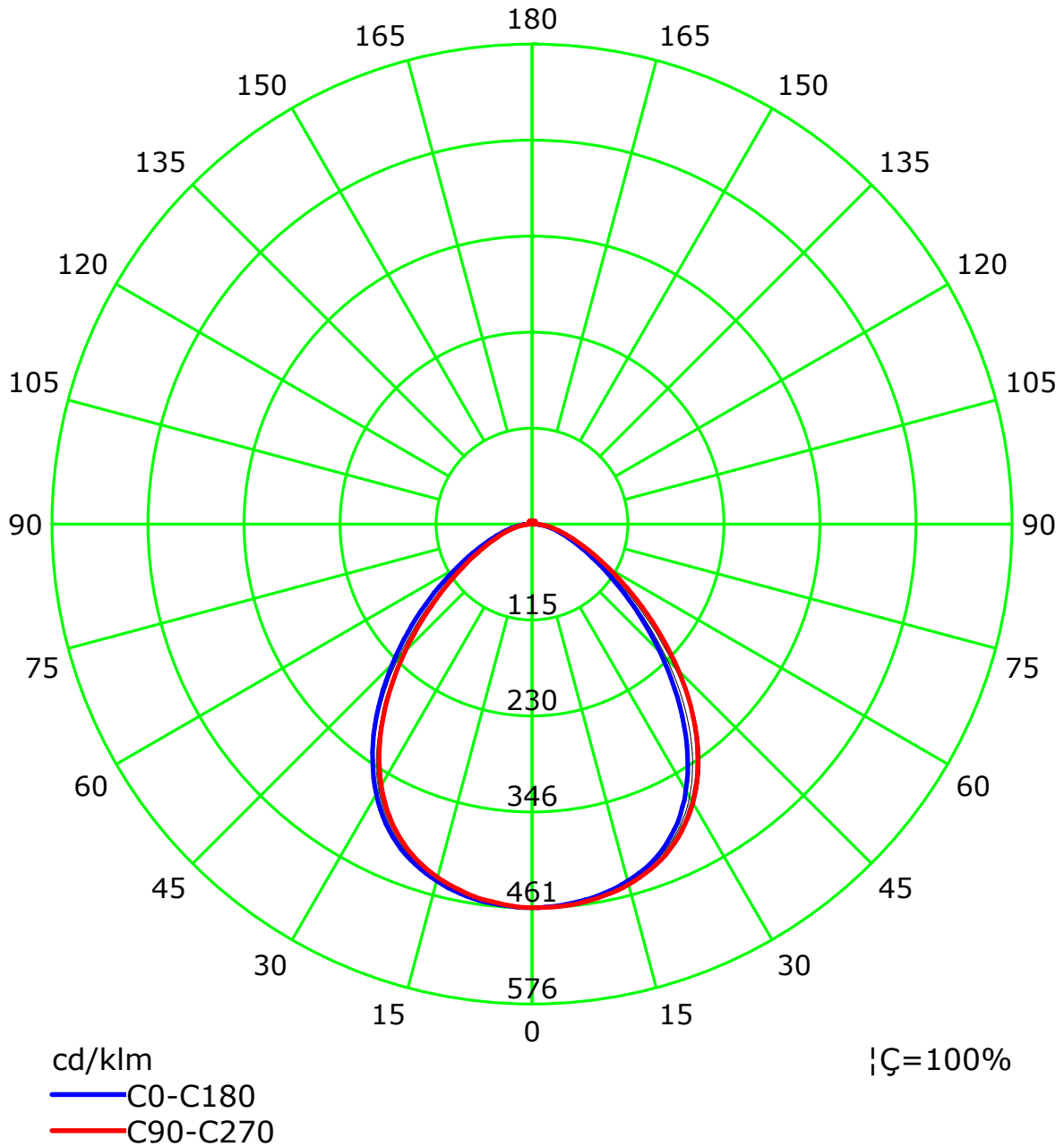
Luminous Intensity Distribution Curve



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)



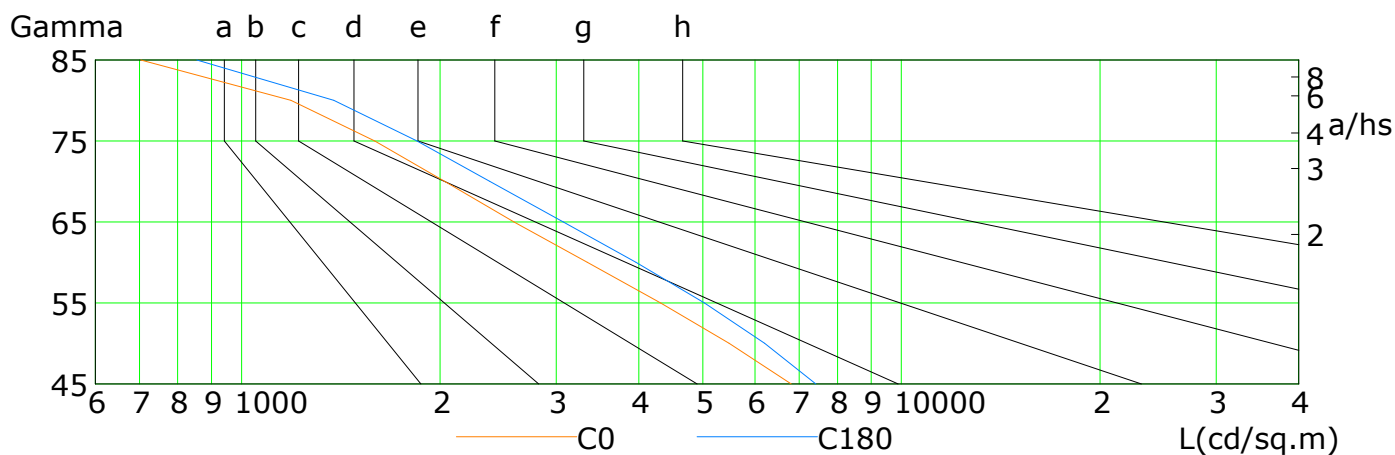
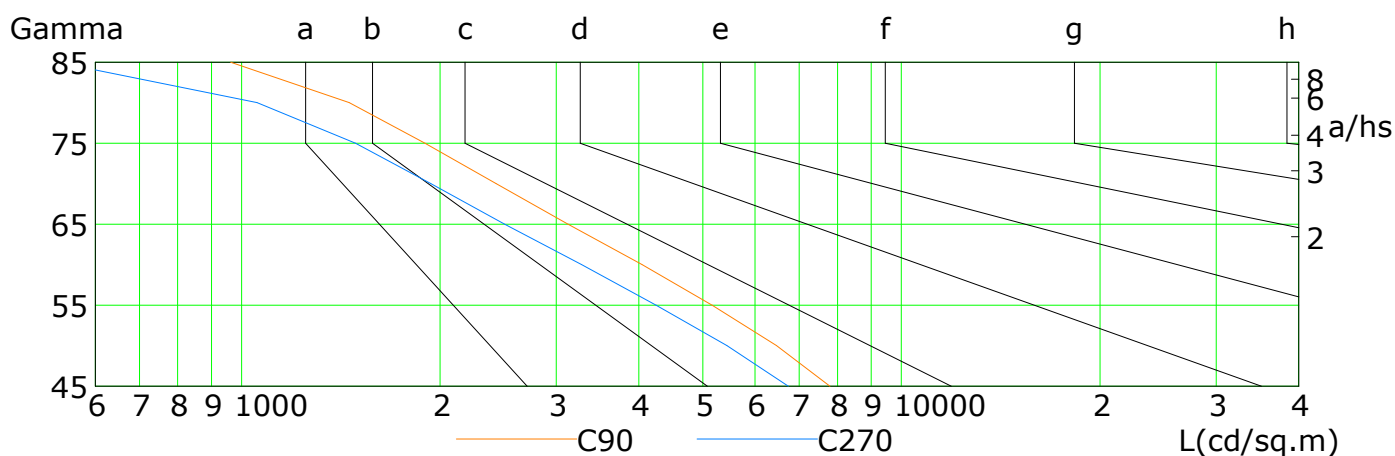
C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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

a b c d e f g h

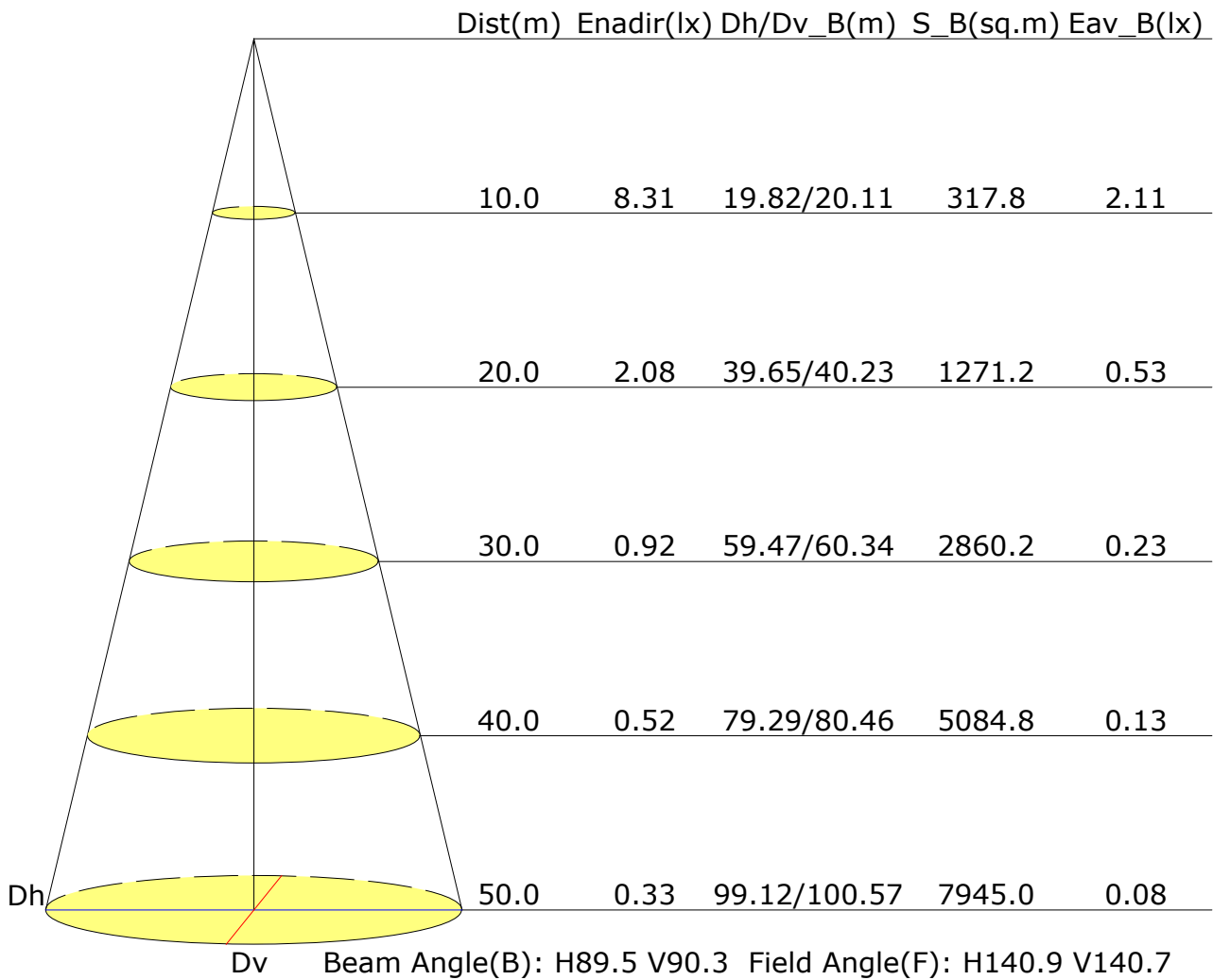


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	6809	5482	4314	3340	2587	2031	1593	1188	704
C90	7788	6463	5166	4043	3125	2431	1898	1456	963
C180	7420	6205	5027	3958	3073	2376	1845	1379	855
C270	6742	5437	4247	3275	2506	1936	1488	1055	526

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	16.7	17.9	17.0	18.2	18.5	17.1	18.3	17.4	18.5	18.8
3H	17.2	18.3	17.6	18.6	18.9	17.6	18.7	17.9	19.0	19.3
4H	17.4	18.4	17.8	18.7	19.1	17.8	18.8	18.1	19.1	19.5
6H	17.5	18.5	17.9	18.8	19.2	17.9	18.8	18.3	19.2	19.5
8H	17.6	18.5	18.0	18.8	19.2	17.9	18.8	18.3	19.2	19.6
12H	17.6	18.4	18.0	18.8	19.2	17.9	18.8	18.3	19.2	19.6
X=4H Y=2H	16.9	17.9	17.3	18.3	18.6	17.2	18.2	17.6	18.6	18.9
3H	17.6	18.4	18.0	18.8	19.2	17.9	18.8	18.3	19.1	19.5
4H	17.8	18.6	18.3	19.0	19.4	18.1	18.9	18.6	19.3	19.7
6H	18.0	18.7	18.5	19.1	19.6	18.4	19.0	18.8	19.5	19.9
8H	18.1	18.7	18.6	19.2	19.6	18.4	19.1	18.9	19.5	20.0
12H	18.1	18.7	18.6	19.1	19.6	18.5	19.0	18.9	19.5	20.0
X=8H Y=4H	17.9	18.5	18.4	19.0	19.4	18.2	18.8	18.7	19.3	19.7
6H	18.2	18.7	18.7	19.1	19.7	18.5	19.0	19.0	19.5	20.0
8H	18.3	18.7	18.8	19.2	19.7	18.6	19.0	19.1	19.5	20.0
12H	18.3	18.7	18.9	19.2	19.8	18.7	19.0	19.2	19.5	20.1
X=12H Y=4H	17.9	18.4	18.4	18.9	19.4	18.2	18.7	18.7	19.2	19.7
6H	18.2	18.6	18.7	19.1	19.6	18.5	18.9	19.0	19.4	19.9
8H	18.3	18.7	18.8	19.2	19.7	18.6	19.0	19.1	19.5	20.0
Variations with the observer position at spacings:										
S=1.0H	+0.5/-0.7					+0.5/-0.8				
S=1.5H	+1.0/-1.6					+0.9/-1.6				
S=2.0H	+2.0/-2.5					+2.0/-2.4				

Calculate in accordance with CIE Pub.117. The table is revised with 1801lm ($8\log(F/F_0) = 2.0$).

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	0.65	0.75	0.81	0.86	0.92	0.96	0.99	1.03	1.05	
	0.30		0.58	0.68	0.75	0.80	0.87	0.92	0.95	0.99	1.02	
	0.20		0.53	0.63	0.70	0.76	0.83	0.88	0.91	0.96	1.00	
0.50	0.50	0.20	0.63	0.73	0.79	0.83	0.89	0.93	0.95	0.99	1.01	
	0.30		0.57	0.67	0.73	0.78	0.84	0.89	0.92	0.96	0.98	
	0.20		0.53	0.63	0.69	0.74	0.81	0.85	0.89	0.93	0.96	
0.30	0.50	0.20	0.62	0.71	0.76	0.80	0.86	0.89	0.91	0.95	0.97	
	0.30		0.57	0.66	0.72	0.76	0.82	0.86	0.89	0.92	0.95	
	0.20		0.52	0.62	0.68	0.73	0.79	0.83	0.86	0.90	0.93	
0.00	0.00	0.00	0.50	0.59	0.65	0.69	0.75	0.79	0.82	0.85	0.88	
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 = 1.25									
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	0.86	0.70	0.59	0.51	0.40	0.33	0.28	0.22	0.18	
	0.30		0.72	0.60	0.51	0.45	0.36	0.31	0.26	0.21	0.17	
	0.20		0.61	0.52	0.45	0.40	0.33	0.28	0.24	0.19	0.16	
0.50	0.50	0.20	0.82	0.66	0.56	0.48	0.38	0.35	0.27	0.21	0.17	
	0.30		0.70	0.57	0.49	0.43	0.35	0.29	0.25	0.19	0.16	
	0.20		0.60	0.51	0.44	0.39	0.32	0.27	0.23	0.19	0.15	
0.30	0.50	0.20	0.79	0.63	0.53	0.46	0.36	0.29	0.25	0.19	0.16	
	0.30		0.68	0.56	0.47	0.41	0.33	0.28	0.24	0.18	0.15	
	0.20		0.59	0.50	0.43	0.38	0.31	0.26	0.22	0.18	0.15	
0.00	0.00	0.00	0.48	0.39	0.33	0.28	0.23	0.19	0.16	0.12	0.10	
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 = 1.25									
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	0.19	0.20	0.20	0.21	0.22	0.23	0.23	0.24	
	0.30		0.12	0.13	0.15	0.16	0.17	0.19	0.19	0.21	0.22	
	0.20		0.07	0.09	0.11	0.12	0.14	0.16	0.17	0.18	0.20	
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	0.19	0.20	0.21	
	0.20		0.07	0.09	0.11	0.12	0.14	0.15	0.16	0.18	0.19	
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	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20	
	0.20		0.07	0.09	0.10	0.12	0.13	0.15	0.16	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												