

Report No.: 1

Test Time: 11.12.2019 09:40

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 50 (1500) 2x55LED 0.7A 100W $\hat{E}$ $\hat{A}$

Luminous Length (mm): 1500

Luminous Width (mm): 55

Luminous Height (mm): 90

Voltage: 221.8 V

Current: 0.462 A

Power: 100.25 W

Power Factor: 0.977

Photometric Results

CIE Class: Direct

Measurement Flux: 10898.2 lm

Downward Ratio: 100%

Total Rated Lamp Lumens: 10898.2 lm

Efficiency: 100%

Upward Ratio: 0%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 156.0, 124.0, 136.2, 135.7

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 115.8, 109.0, 115.2, 115.3

Luminaire Efficacy Rating (LER): 108.76

Central Intensity: 4175.52 cd

Max. Intensity: 4175.53 cd

Pos of Max. Intensity: H0 V0

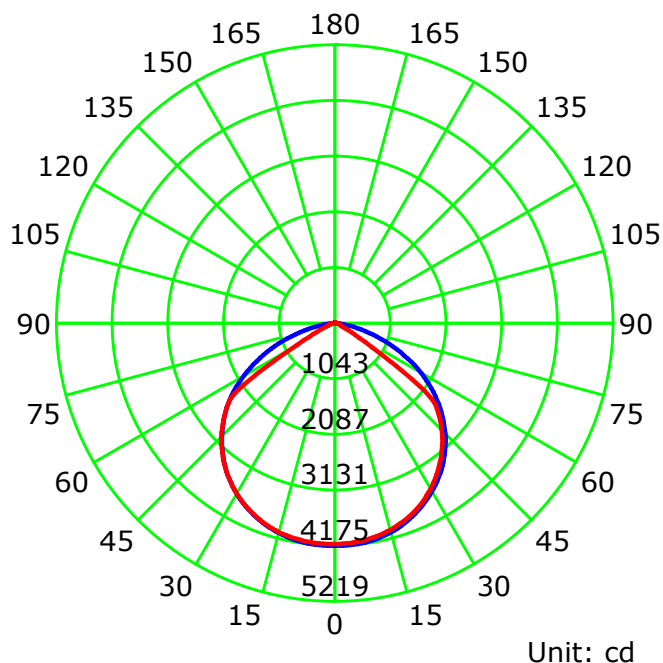
S/MH(C0/C180): 1.30

S/MH(C90/C270): 1.30

Picture Of Luminaire



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

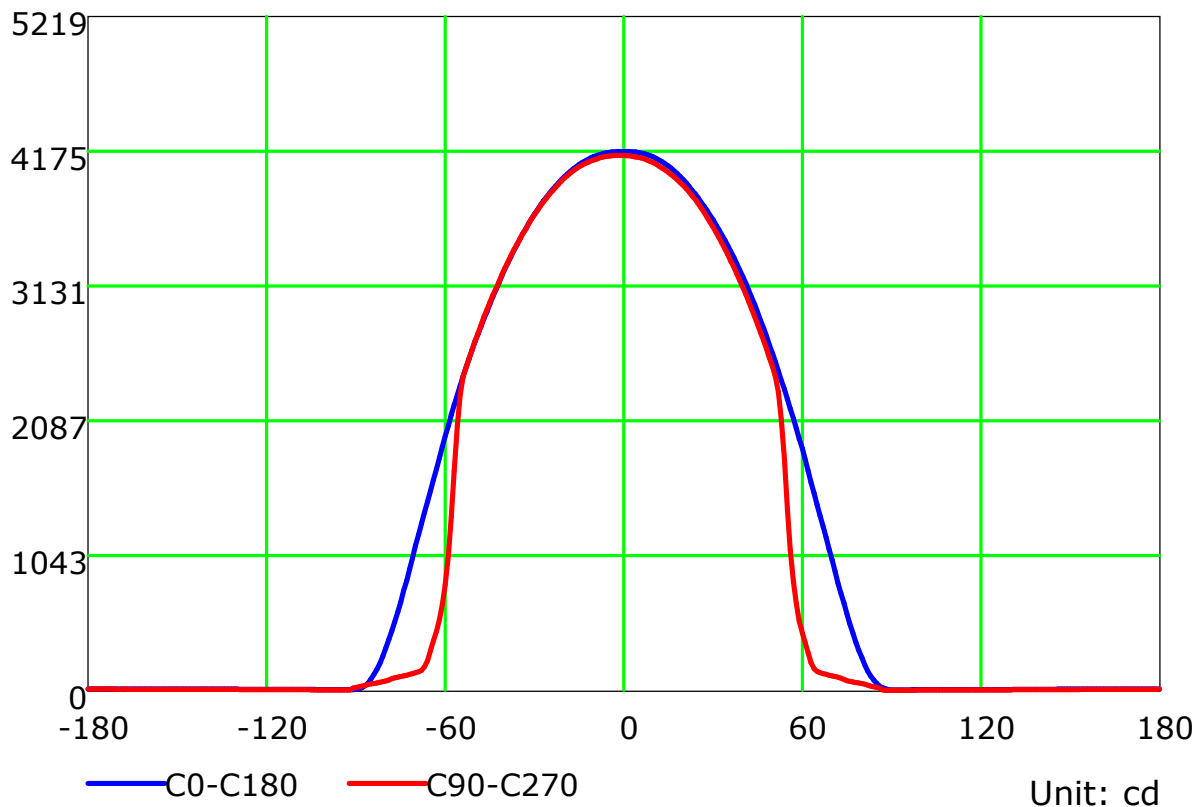
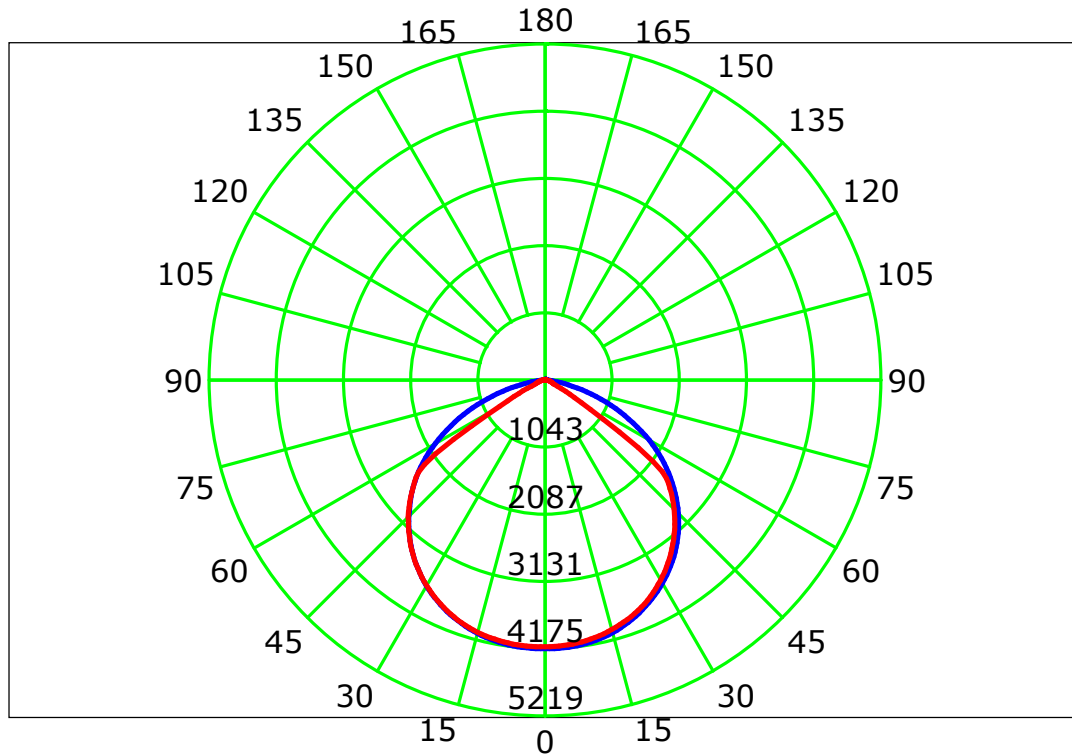
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

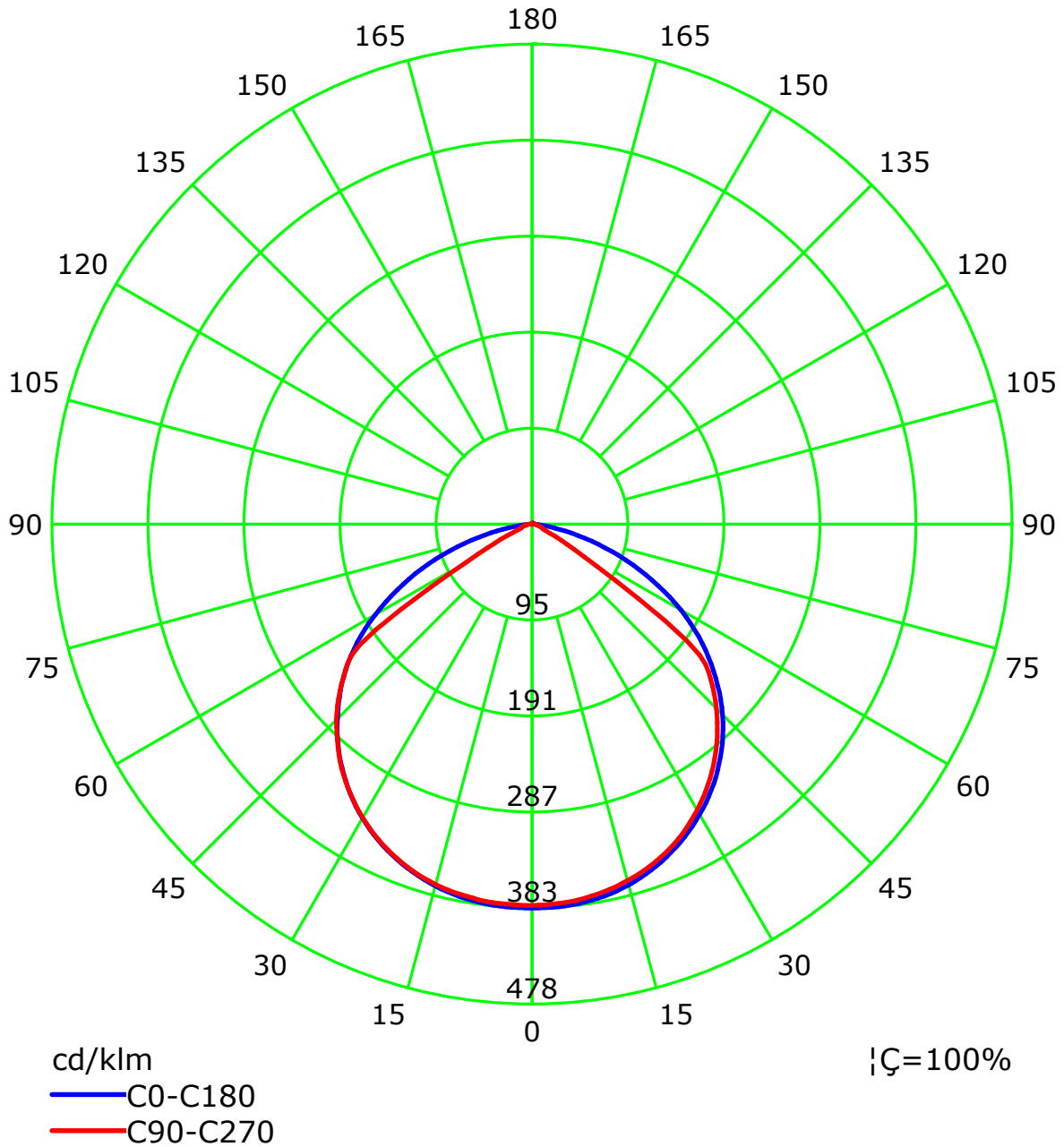
Luminous Intensity Distribution Curve



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)

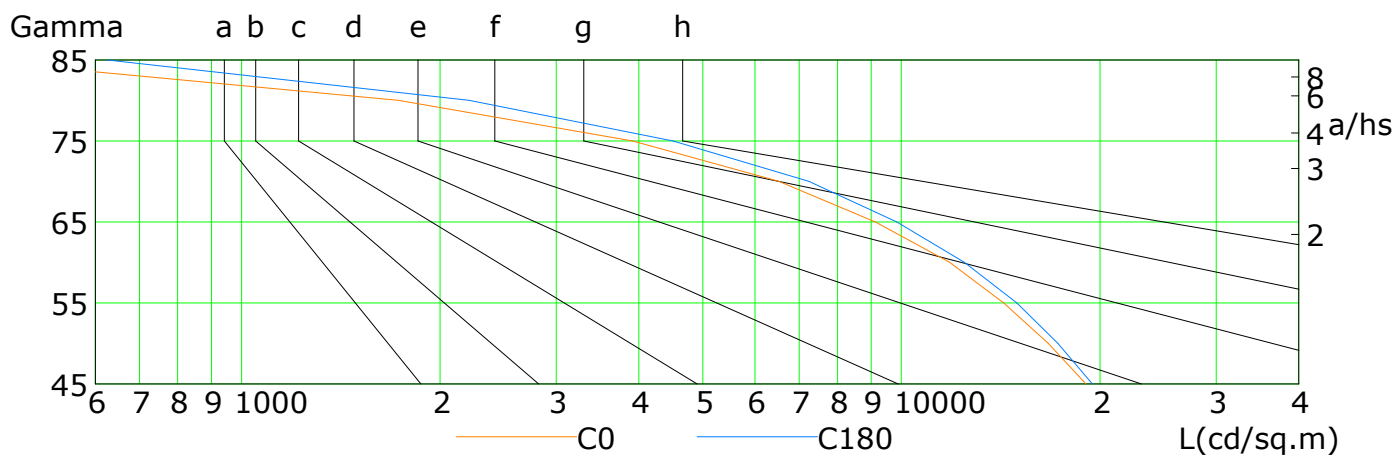
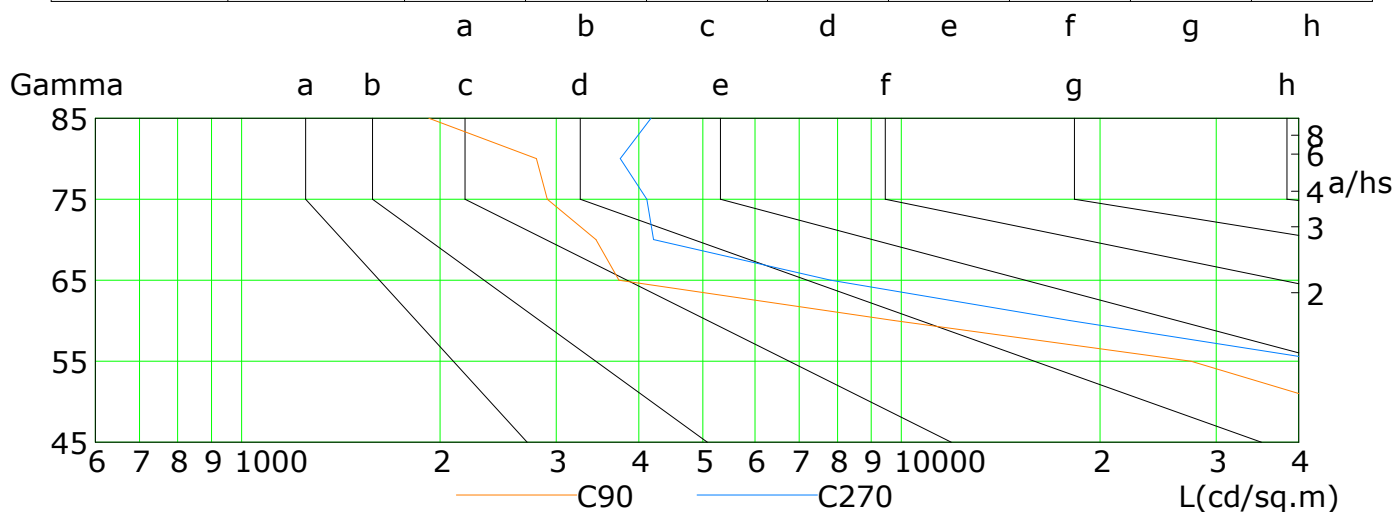


C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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

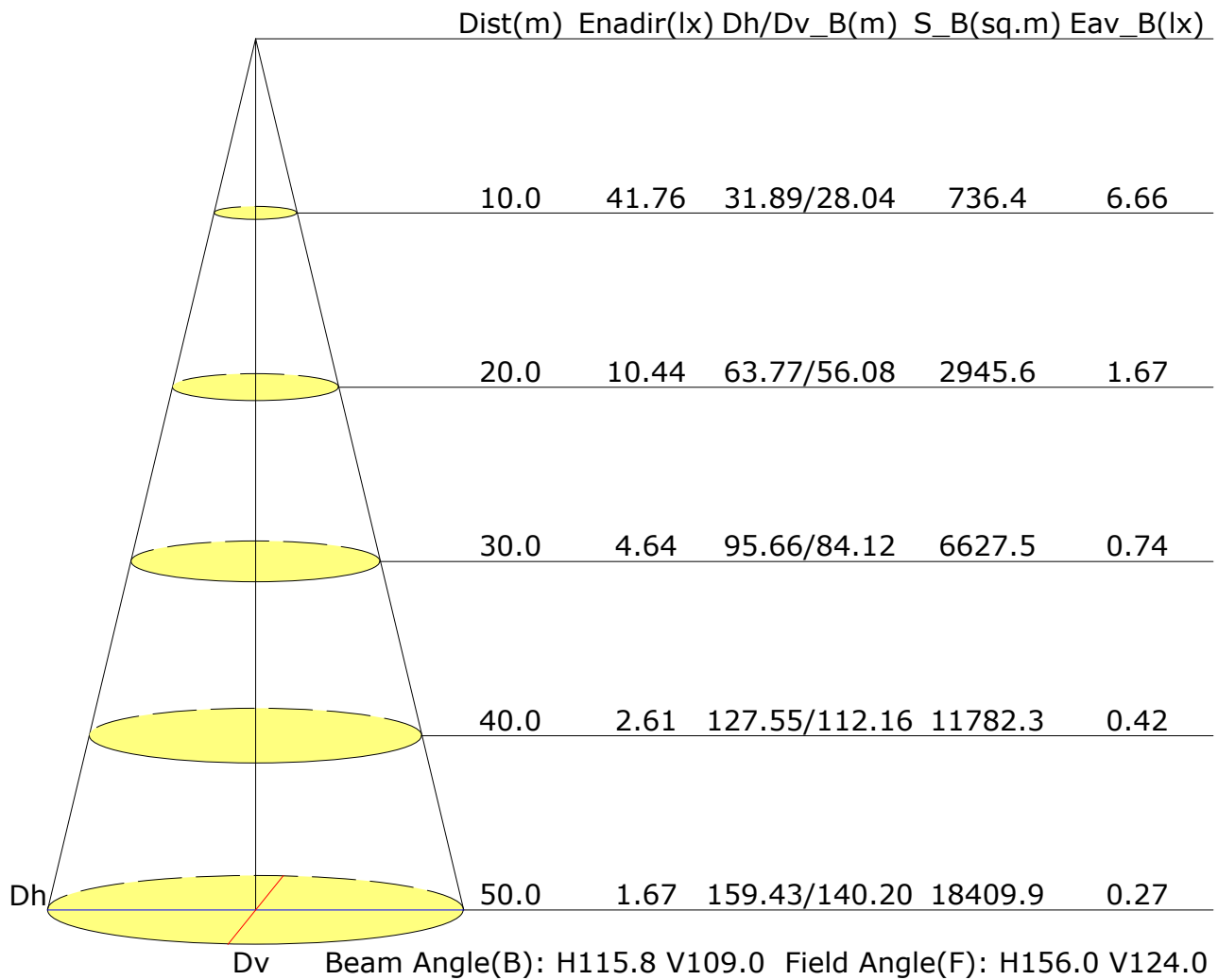


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	19046	16687	14299	11837	9134	6517	3916	1730	388
C90	45838	44103	27468	9751	3733	3444	2907	2798	1921
C180	19476	17268	14953	12453	9839	7237	4509	2214	626
C270	48674	47609	44639	18000	7820	4210	4112	3749	4172

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	22.4	23.7	22.7	23.9	24.1	22.9	24.2	23.2	24.5	24.7
3H	23.1	24.3	23.5	24.6	24.9	22.8	24.0	23.1	24.2	24.5
4H	23.3	24.4	23.6	24.7	25.0	22.7	23.8	23.1	24.1	24.4
6H	23.3	24.3	23.7	24.6	24.9	22.7	23.7	23.1	24.0	24.3
8H	23.3	24.2	23.6	24.6	24.9	22.7	23.6	23.0	24.0	24.3
12H	23.2	24.2	23.6	24.5	24.8	22.6	23.6	23.0	23.9	24.2
X=4H Y=2H	22.7	23.8	23.0	24.0	24.3	23.1	24.2	23.4	24.5	24.8
3H	23.5	24.4	23.9	24.8	25.1	23.0	23.9	23.4	24.3	24.6
4H	23.7	24.5	24.1	24.9	25.3	23.0	23.8	23.4	24.1	24.5
6H	23.7	24.4	24.1	24.8	25.2	22.9	23.6	23.3	24.0	24.4
8H	23.7	24.3	24.1	24.7	25.2	22.9	23.6	23.3	24.0	24.4
12H	23.6	24.2	24.1	24.7	25.1	22.9	23.5	23.3	23.9	24.3
X=8H Y=4H	23.6	24.3	24.0	24.7	25.1	22.9	23.6	23.3	24.0	24.4
6H	23.6	24.1	24.1	24.6	25.1	22.9	23.4	23.3	23.8	24.3
8H	23.6	24.1	24.1	24.5	25.0	22.8	23.3	23.3	23.8	24.3
12H	23.6	24.0	24.1	24.4	25.0	22.8	23.2	23.3	23.7	24.2
X=12H Y=4H	23.6	24.2	24.0	24.6	25.0	22.9	23.5	23.3	23.9	24.3
6H	23.6	24.0	24.1	24.5	25.0	22.8	23.3	23.3	23.7	24.2
8H	23.6	24.0	24.1	24.4	25.0	22.8	23.2	23.3	23.7	24.2
Variations with the observer position at spacings:										
S=1.0H	+0.2/-0.3					+0.6/-0.8				
S=1.5H	+0.7/-1.5					+2.6/-6.7				
S=2.0H	+1.2/-2.3					+4.3/-11.5				

Calculate in accordance with CIE Pub.117. The table is revised with $10898 \ln(8 \log(F/F_0) = 8.3)$.

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	0.60	0.72	0.79	0.84	0.91	0.96	0.99	1.03	1.06	
	0.30		0.53	0.65	0.72	0.78	0.86	0.91	0.95	1.00	1.03	
	0.20		0.47	0.59	0.67	0.73	0.81	0.87	0.91	0.97	1.00	
0.50	0.50	0.20	0.59	0.70	0.77	0.82	0.88	0.93	0.96	0.99	1.02	
	0.30		0.52	0.63	0.71	0.76	0.84	0.89	0.92	0.96	0.99	
	0.20		0.47	0.59	0.66	0.72	0.80	0.85	0.89	0.94	0.97	
0.30	0.50	0.20	0.57	0.68	0.75	0.79	0.85	0.89	0.92	0.96	0.98	
	0.30		0.51	0.62	0.70	0.75	0.82	0.86	0.89	0.93	0.96	
	0.20		0.47	0.58	0.65	0.71	0.78	0.83	0.87	0.91	0.94	
0.00	0.00	0.00	0.45	0.55	0.63	0.68	0.75	0.79	0.83	0.87	0.89	
Rating:100W 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	0.95	0.76	0.64	0.55	0.43	0.35	0.30	0.23	0.19	
	0.30		0.79	0.65	0.55	0.48	0.39	0.32	0.28	0.22	0.18	
	0.20		0.68	0.57	0.49	0.43	0.35	0.30	0.26	0.20	0.17	
0.50	0.50	0.20	0.91	0.73	0.61	0.52	0.41	0.37	0.28	0.22	0.17	
	0.30		0.77	0.63	0.54	0.47	0.37	0.31	0.26	0.20	0.17	
	0.20		0.67	0.56	0.48	0.42	0.34	0.29	0.25	0.19	0.16	
0.30	0.50	0.20	0.89	0.70	0.58	0.50	0.39	0.32	0.27	0.20	0.17	
	0.30		0.76	0.62	0.52	0.45	0.36	0.30	0.25	0.19	0.16	
	0.20		0.66	0.55	0.47	0.41	0.33	0.28	0.24	0.19	0.15	
0.00	0.00	0.00	0.56	0.45	0.37	0.32	0.25	0.21	0.18	0.13	0.11	
Rating:100W 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	0.16	0.17	0.18	0.19	0.20	0.20	0.21	0.21	0.22	
	0.30		0.10	0.11	0.13	0.14	0.16	0.17	0.18	0.19	0.20	
	0.20		0.05	0.07	0.09	0.10	0.12	0.14	0.15	0.16	0.18	
0.50	0.50	0.20	0.16	0.17	0.18	0.18	0.19	0.20	0.20	0.21	0.21	
	0.30		0.10	0.11	0.12	0.14	0.15	0.16	0.17	0.18	0.19	
	0.20		0.05	0.07	0.08	0.10	0.12	0.13	0.14	0.16	0.17	
0.30	0.50	0.20	0.15	0.16	0.17	0.17	0.18	0.19	0.19	0.20	0.20	
	0.30		0.09	0.11	0.12	0.13	0.15	0.16	0.16	0.18	0.18	
	0.20		0.05	0.07	0.08	0.10	0.11	0.13	0.14	0.16	0.17	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Rating:100W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												