

Report No.: 1

Test Time: 21.11.2019 13:53

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 50 (1500) 4x30LED 0.55A 70W $\hat{E}$ $\hat{A}$ opal

Luminous Length (mm): 1550

Luminous Width (mm): 60

Luminous Height (mm): 83

Voltage: 221.4 V

Current: 0.323 A

Power: 71.09 W

Power Factor: 0.992

Photometric Results

CIE Class: Direct

Measurement Flux: 5901.2 lm

Downward Ratio: 100%

Total Rated Lamp Lumens: 5901.2 lm

Efficiency: 100%

Upward Ratio: 0%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 164.9, 161.1, 162.9, 162.9

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 113.2, 110.8, 111.9, 111.9

Luminaire Efficacy Rating (LER): 83.06

Central Intensity: 2054.52 cd

Max. Intensity: 2061.61 cd

Pos of Max. Intensity: H292.5 V1

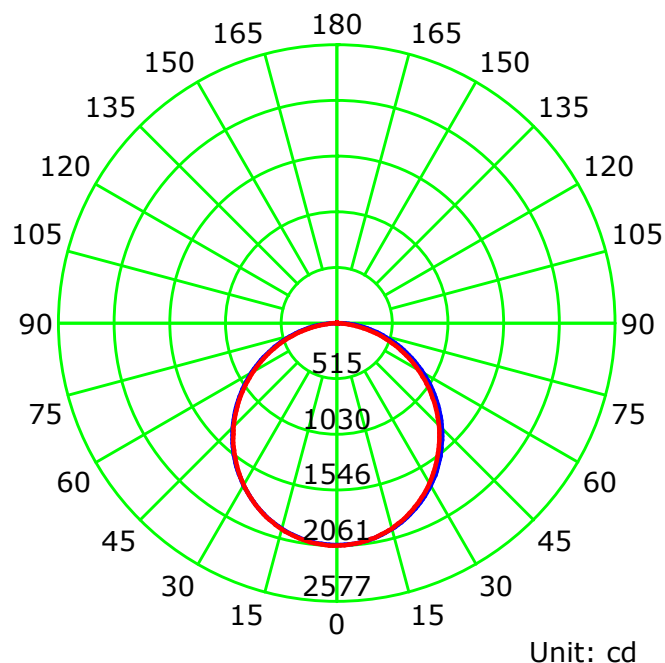
S/MH(C0/C180): 1.26

S/MH(C90/C270): 1.24

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

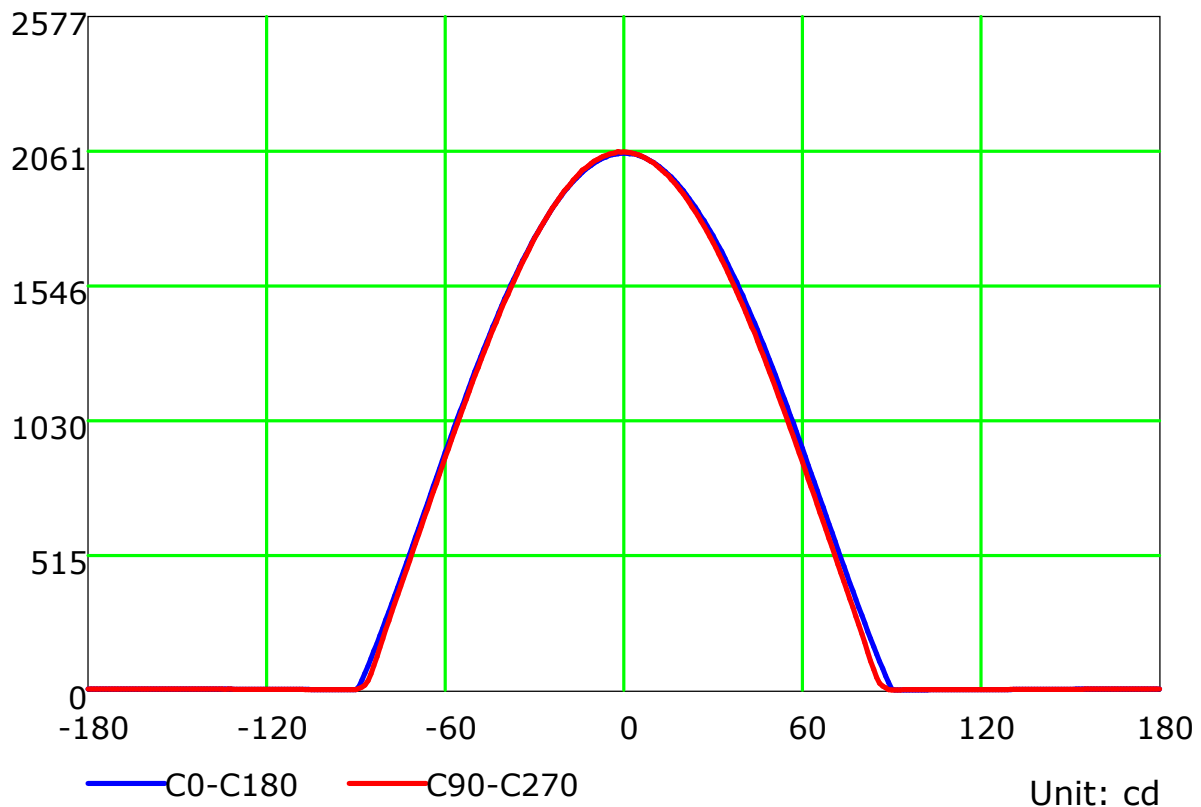
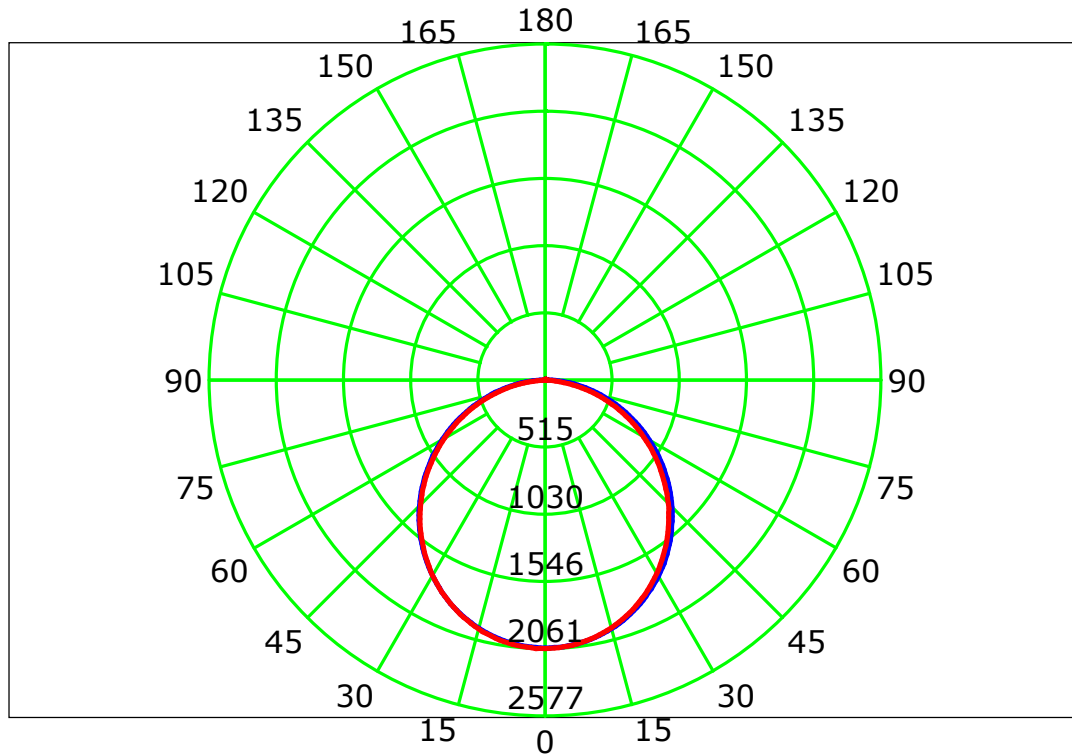
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

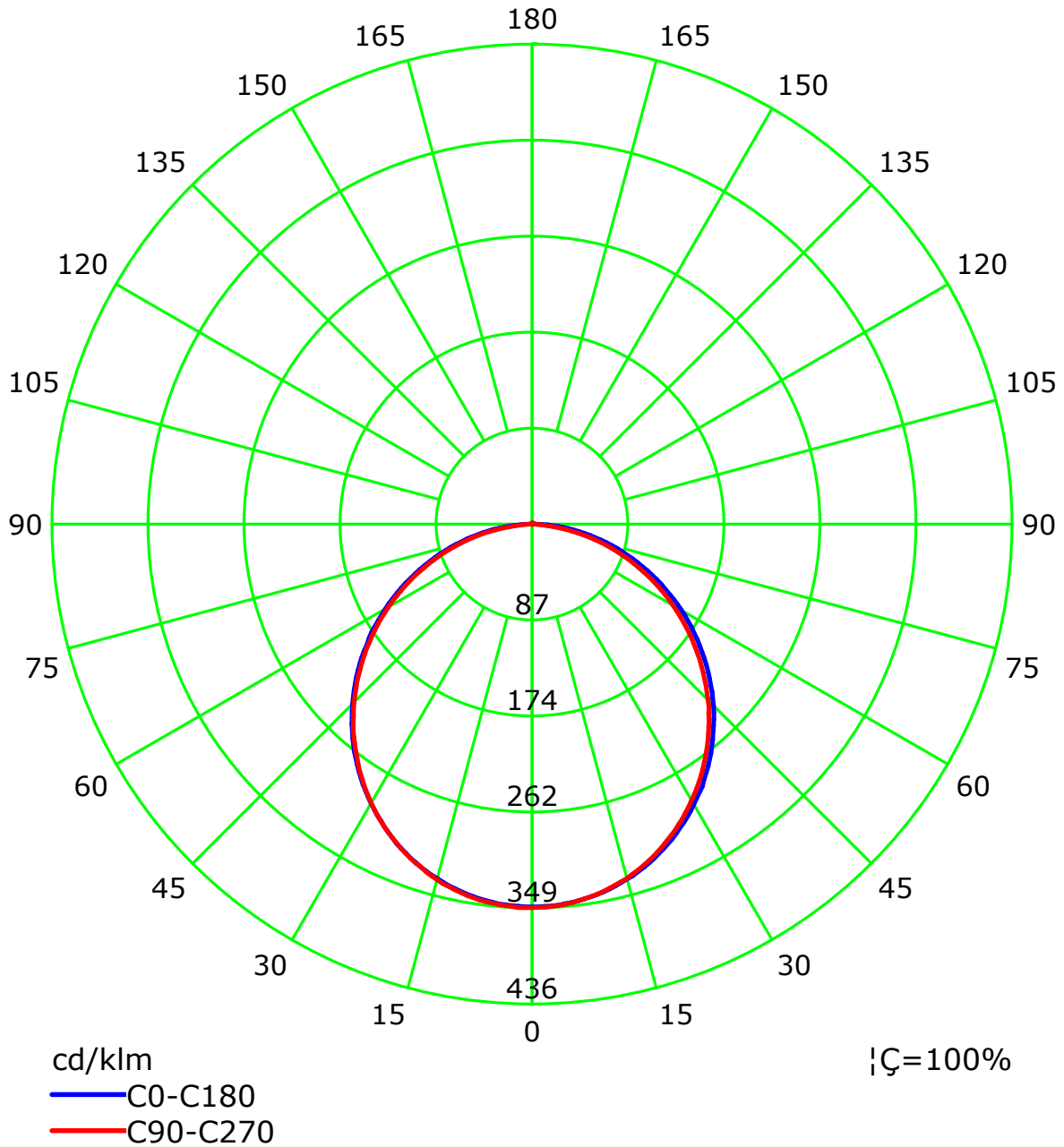
Luminous Intensity Distribution Curve



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:

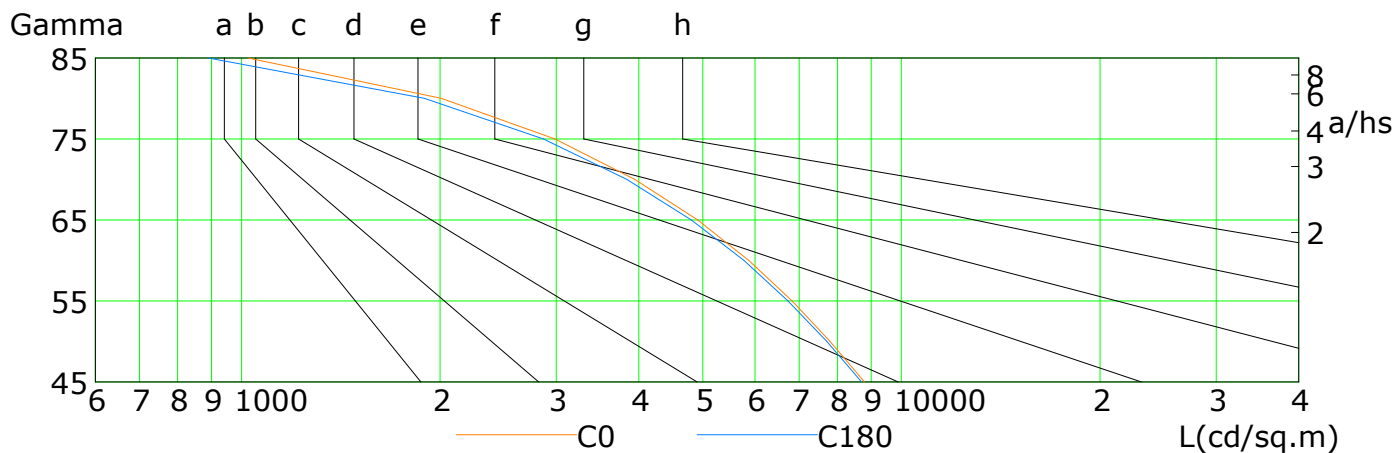
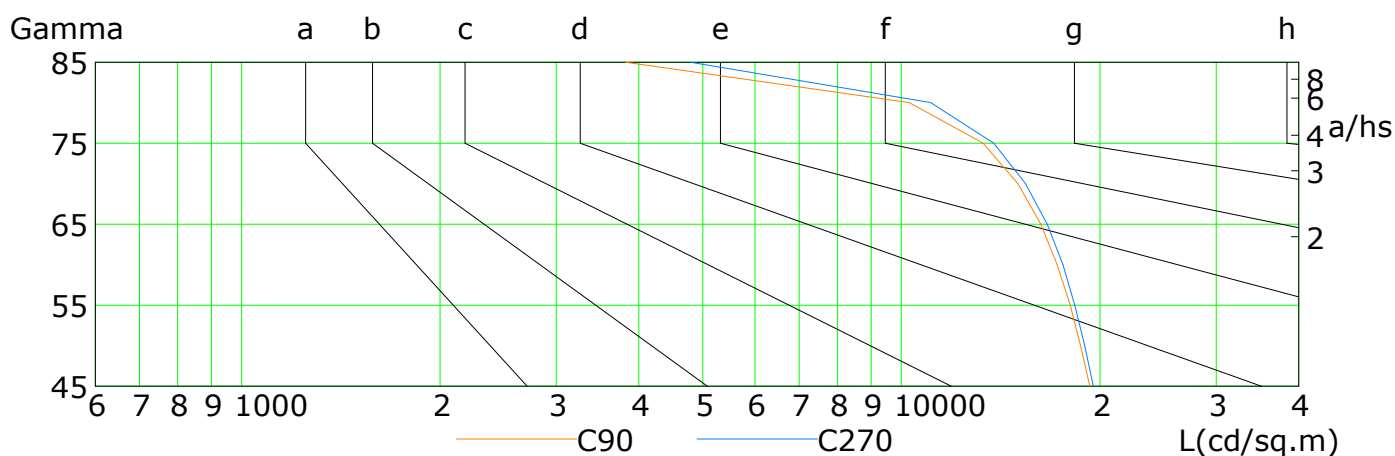
Luminous Intensity Distribution Curve(cd/klm)



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

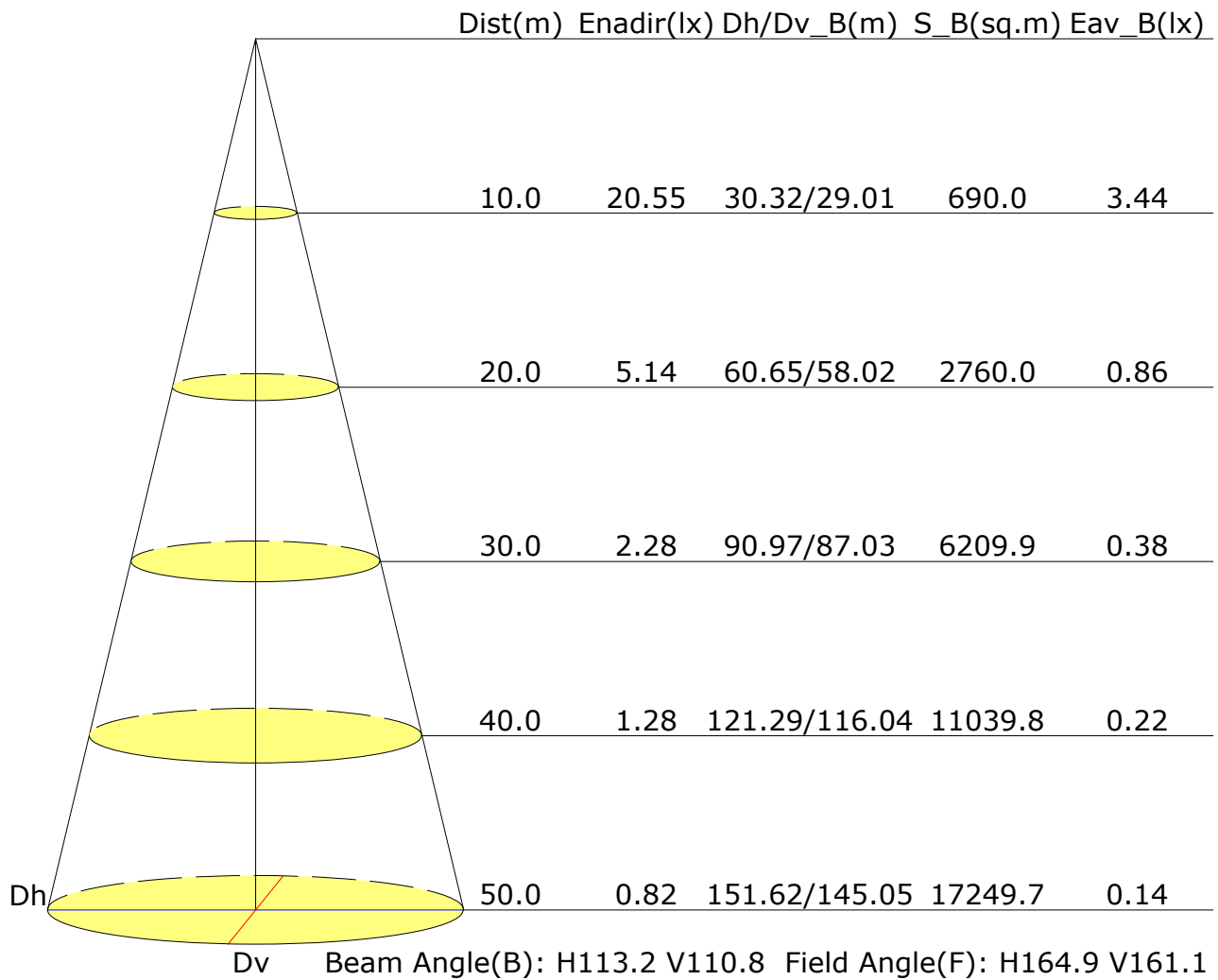


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	8791	7791	6830	5865	4914	3945	2987	2009	1023
C90	19291	18677	18032	17215	16259	15005	13305	10283	3821
C180	8699	7709	6734	5769	4805	3835	2869	1892	891
C270	19534	18947	18304	17562	16631	15425	13797	11073	4793

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	19.5	20.9	19.8	21.1	21.4	21.2	22.6	21.5	22.9	23.1
3H	20.6	21.9	20.9	22.1	22.4	22.7	24.0	23.1	24.3	24.6
4H	21.0	22.2	21.3	22.5	22.8	23.3	24.5	23.7	24.8	25.1
6H	21.2	22.4	21.6	22.7	23.0	23.7	24.8	24.1	25.2	25.5
8H	21.3	22.4	21.7	22.7	23.0	23.8	24.9	24.2	25.2	25.6
12H	21.3	22.3	21.7	22.7	23.0	23.8	24.9	24.2	25.2	25.5
X=4H Y=2H	20.1	21.3	20.5	21.6	21.9	21.5	22.7	21.9	23.0	23.3
3H	21.4	22.4	21.8	22.8	23.1	23.2	24.2	23.6	24.5	24.9
4H	21.9	22.8	22.3	23.2	23.6	23.8	24.8	24.3	25.1	25.5
6H	22.2	23.0	22.7	23.4	23.9	24.3	25.1	24.8	25.5	26.0
8H	22.3	23.1	22.8	23.5	23.9	24.4	25.2	24.9	25.6	26.0
12H	22.4	23.0	22.8	23.5	23.9	24.5	25.2	24.9	25.6	26.0
X=8H Y=4H	22.1	22.9	22.6	23.3	23.7	23.9	24.7	24.4	25.1	25.5
6H	22.6	23.2	23.0	23.6	24.1	24.5	25.1	25.0	25.5	26.0
8H	22.7	23.2	23.2	23.7	24.2	24.6	25.2	25.1	25.6	26.1
12H	22.8	23.3	23.3	23.7	24.3	24.7	25.2	25.2	25.6	26.2
X=12H Y=4H	22.1	22.8	22.6	23.2	23.7	23.9	24.6	24.4	25.0	25.5
6H	22.6	23.1	23.1	23.6	24.1	24.5	25.0	25.0	25.5	26.0
8H	22.8	23.2	23.3	23.7	24.2	24.7	25.1	25.2	25.6	26.1
Variations with the observer position at spacings:										
S=1.0H	+0.2/-0.3					+0.2/-0.2				
S=1.5H	+0.4/-0.7					+0.5/-0.6				
S=2.0H	+0.7/-1.2					+1.2/-1.3				

Calculate in accordance with CIE Pub.117. The table is revised with 5901lm ($8\log(F/F_0) = 6.2$).

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	0.87	0.92	0.95	1.00	1.03	
	0.30		0.48	0.59	0.66	0.72	0.80	0.86	0.90	0.96	0.99	
	0.20		0.42	0.53	0.61	0.67	0.75	0.81	0.86	0.92	0.96	
0.50	0.50	0.20	0.54	0.64	0.71	0.76	0.83	0.88	0.92	0.96	0.99	
	0.30		0.47	0.57	0.65	0.70	0.78	0.83	0.87	0.92	0.96	
	0.20		0.42	0.52	0.60	0.65	0.74	0.79	0.84	0.89	0.93	
0.30	0.50	0.20	0.53	0.62	0.69	0.74	0.80	0.85	0.88	0.92	0.95	
	0.30		0.47	0.56	0.63	0.69	0.76	0.81	0.85	0.89	0.92	
	0.20		0.42	0.52	0.59	0.64	0.72	0.77	0.81	0.87	0.90	
0.00	0.00	0.00	0.39	0.49	0.56	0.61	0.69	0.74	0.77	0.82	0.85	
Rating:71W 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	1.00	0.83	0.71	0.62	0.49	0.41	0.35	0.27	0.22	
	0.30		0.84	0.71	0.62	0.55	0.45	0.38	0.32	0.26	0.21	
	0.20		0.72	0.62	0.55	0.49	0.41	0.35	0.30	0.24	0.20	
0.50	0.50	0.20	0.97	0.80	0.68	0.59	0.47	0.42	0.33	0.26	0.21	
	0.30		0.82	0.69	0.60	0.53	0.43	0.36	0.31	0.24	0.20	
	0.20		0.71	0.61	0.54	0.48	0.40	0.34	0.29	0.23	0.19	
0.30	0.50	0.20	0.94	0.77	0.65	0.57	0.45	0.37	0.32	0.25	0.20	
	0.30		0.80	0.68	0.58	0.51	0.42	0.35	0.30	0.24	0.19	
	0.20		0.70	0.60	0.53	0.47	0.39	0.33	0.28	0.22	0.19	
0.00	0.00	0.00	0.60	0.51	0.44	0.39	0.31	0.26	0.22	0.17	0.14	
Rating:71W 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	0.20	0.21	0.21	0.22	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	0.08	0.09	0.11	0.13	0.14	0.16	0.17	
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	0.12	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	0.16	0.17	
0.30	0.50	0.20	0.16	0.17	0.18	0.18	0.19	0.19	0.20	0.20	0.20	
	0.30		0.10	0.11	0.12	0.13	0.15	0.16	0.16	0.17	0.18	
	0.20		0.05	0.06	0.08	0.09	0.11	0.12	0.14	0.15	0.16	
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:71W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												