

Report No.: 1

Test Time: 25.02.2020 22:39

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 100 44LED 500W 5000K 60x150 gr.

Number of Lamps: 1

Luminous Length (mm): 210

Luminous Width (mm): 545

Luminous Height (mm): 338

Voltage: 228.9 V

Current: 2.234 A

Power: 501.20 W

Power Factor: 0.980

Photometric Results

CIE Class: Direct

Total Rated Lamp Lumens: 77218.0 lm

Measurement Flux: 77218 lm

Efficiency: 100%

Downward Ratio: 99%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 106.6, 146.5, 128.6, 127.8

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 49.3, 133.6, 62.7, 60.2

Luminaire Efficacy Rating (LER): 154.12

Central Intensity: 21120.27 cd

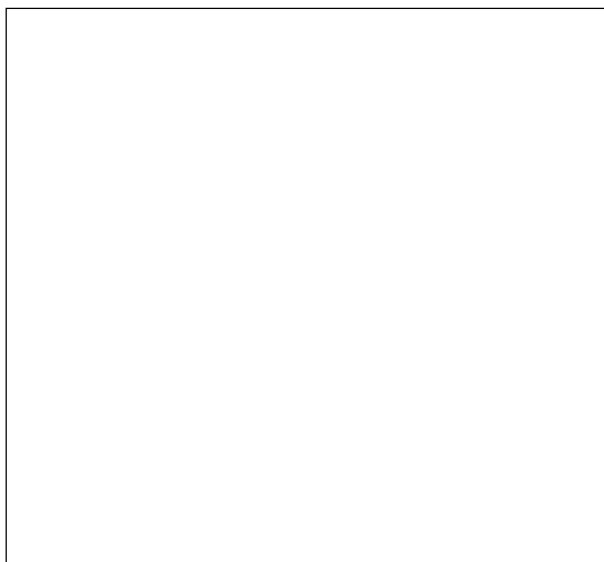
Max. Intensity: 39400.47 cd

Pos of Max. Intensity: H135 V32

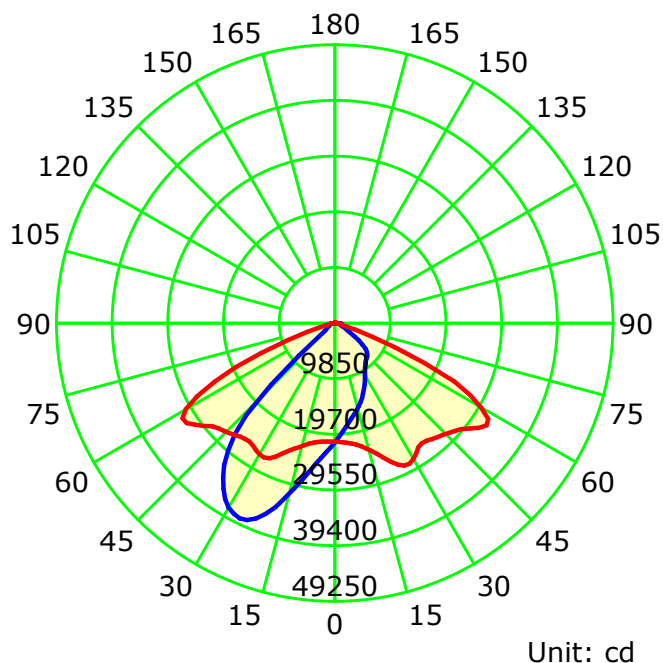
S/MH(C0/C180): 1.51

S/MH(C90/C270): 1.88

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 22.5

Gamma Plane (°):0.0-180.0:2.0

Test Lab:

Test Device: LSG-1800B

Test Type: TYPE C

Distance: 12.677 m

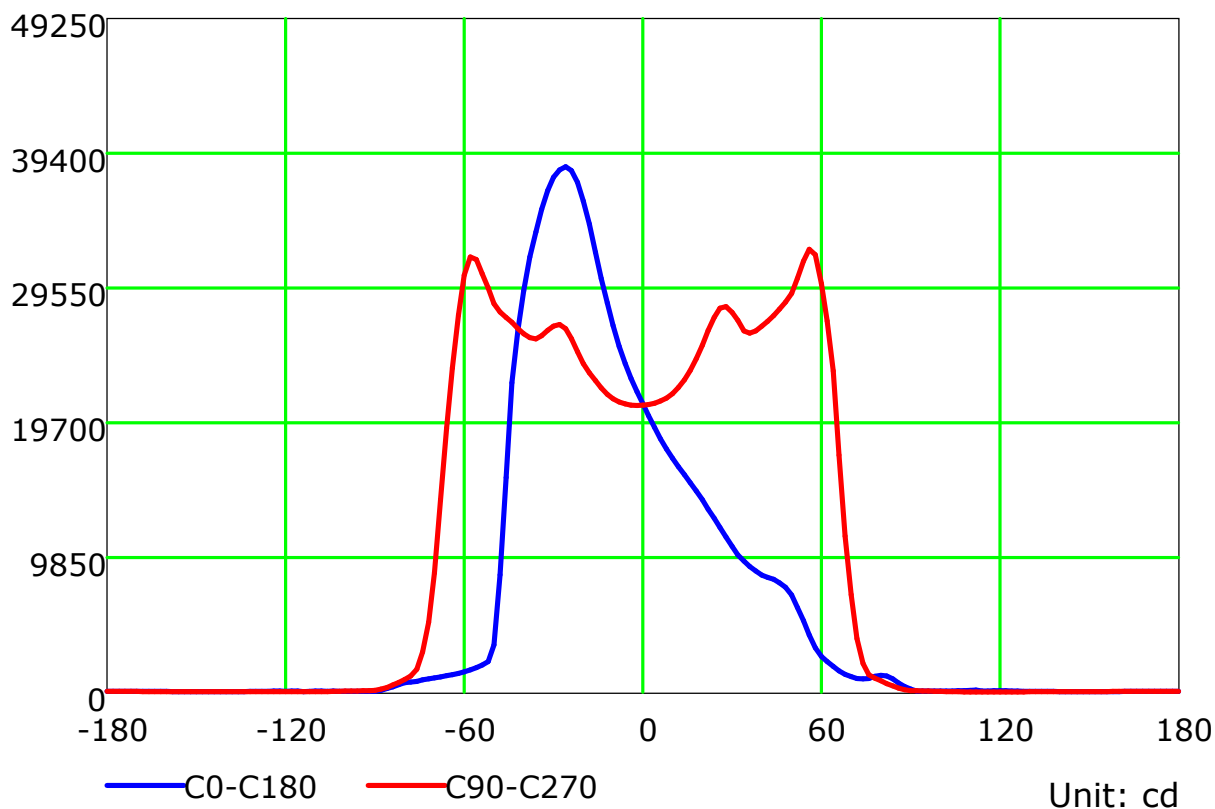
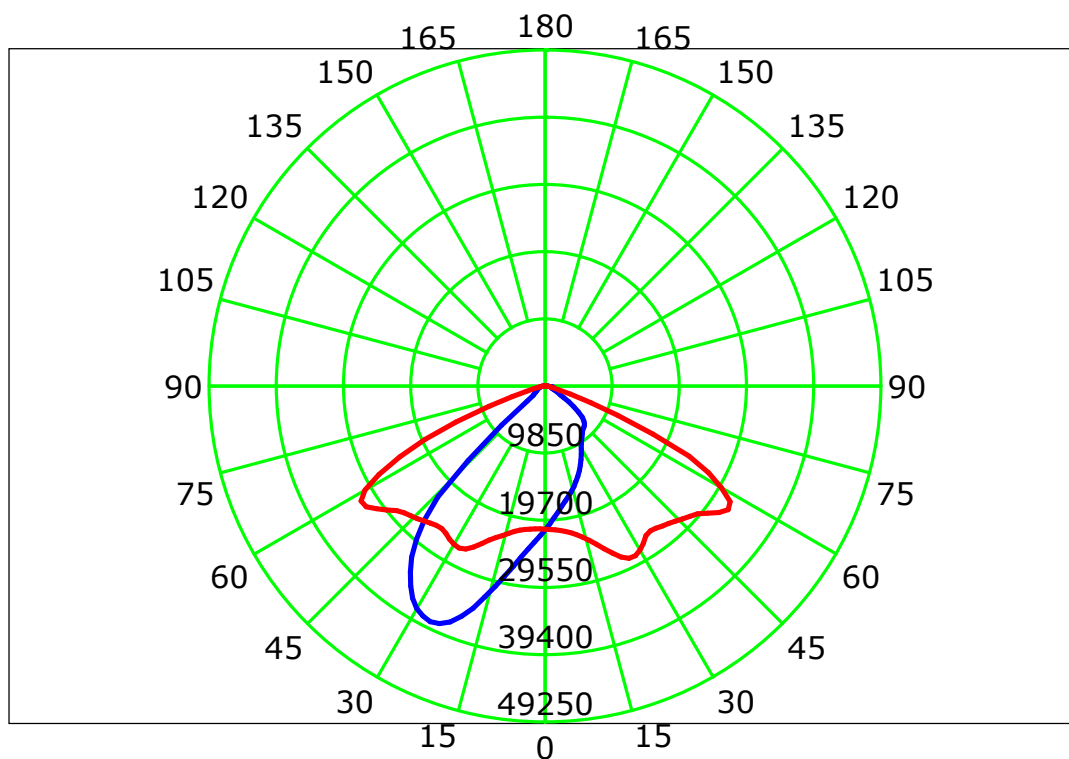
Temperature:

Humidity:

Operator:

Inspector:

Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

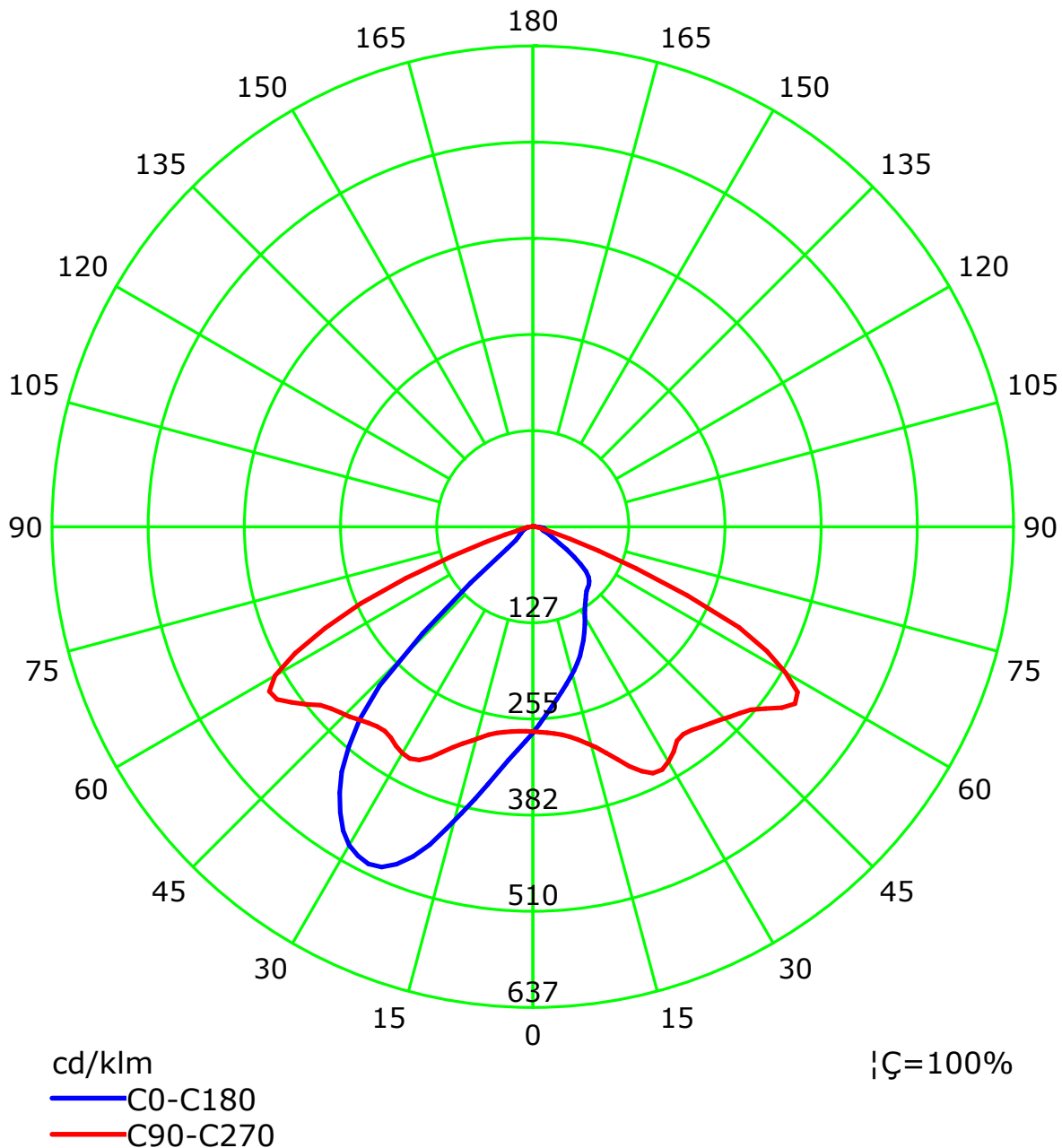
Test Device: LSG-1800B

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 (°):0.0-180.0:2.0

Test Device: LSG-1800B

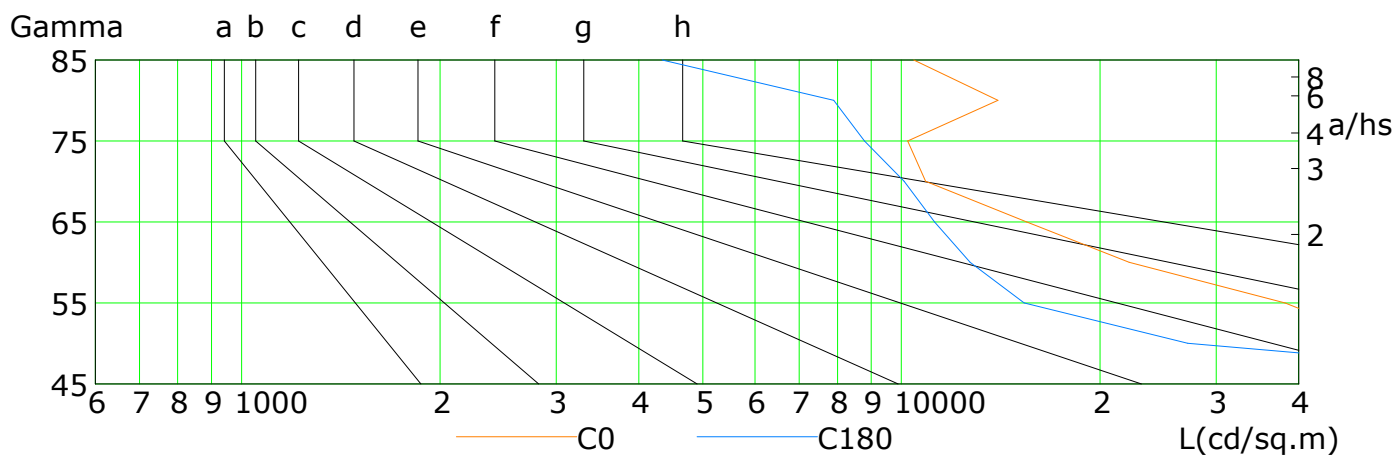
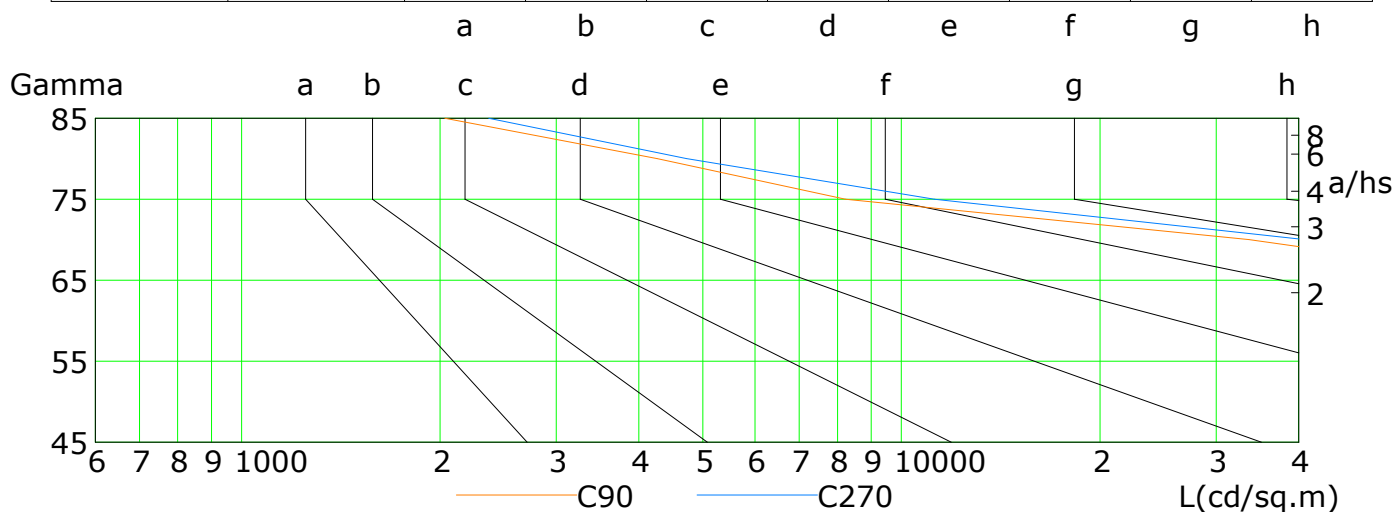
Distance: 12.677 m

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	62106	55601	38155	22145	15489	10882	10225	14000	10439
C90	131560	135844	147588	137905	94880	33632	8227	4264	2033
C180	146173	27177	15344	12711	11225	10101	8795	7900	4340
C270	128936	132401	143716	140709	99887	41193	11226	4723	2368

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

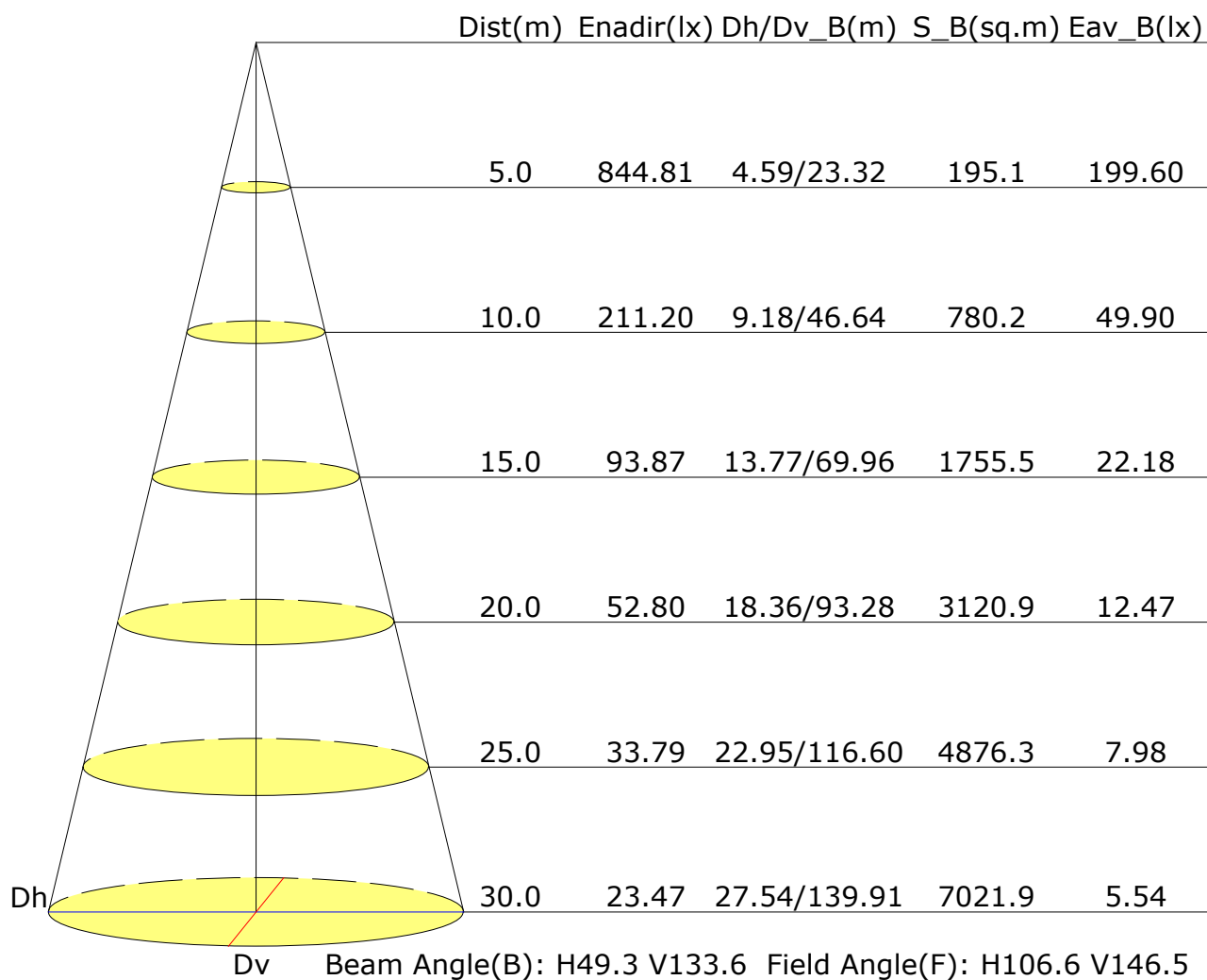
Test Device: LSG-1800B

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	22.0	23.3	22.3	23.6	23.8	30.0	31.3	30.3	31.5	31.8
3H	22.1	23.3	22.5	23.6	23.9	30.7	31.9	31.1	32.2	32.5
4H	22.2	23.3	22.5	23.6	23.9	30.7	31.8	31.1	32.1	32.4
6H	22.4	23.4	22.7	23.7	24.1	30.6	31.7	31.0	32.0	32.3
8H	22.5	23.5	22.9	23.8	24.2	30.6	31.6	31.0	31.9	32.3
12H	22.6	23.6	23.0	23.9	24.3	30.6	31.5	30.9	31.8	32.2
X=4H Y=2H	23.2	24.3	23.6	24.6	24.9	29.9	31.0	30.2	31.3	31.6
3H	23.3	24.3	23.7	24.6	25.0	30.7	31.6	31.1	32.0	32.3
4H	23.4	24.2	23.8	24.6	25.0	30.7	31.5	31.1	31.9	32.2
6H	23.6	24.3	24.0	24.7	25.1	30.6	31.3	31.0	31.7	32.1
8H	23.7	24.4	24.2	24.8	25.2	30.6	31.2	31.0	31.7	32.1
12H	23.9	24.5	24.3	24.9	25.3	30.5	31.1	31.0	31.6	32.0
X=8H Y=4H	23.4	24.1	23.9	24.5	25.0	30.6	31.2	31.0	31.6	32.1
6H	23.7	24.2	24.1	24.6	25.1	30.5	31.0	31.0	31.5	32.0
8H	23.8	24.3	24.3	24.8	25.3	30.5	31.0	31.0	31.4	31.9
12H	24.0	24.4	24.5	24.9	25.4	30.5	30.9	31.0	31.3	31.9
X=12H Y=4H	23.4	24.0	23.9	24.4	24.9	30.5	31.1	31.0	31.6	32.0
6H	23.6	24.1	24.1	24.6	25.1	30.5	30.9	31.0	31.4	31.9
8H	23.8	24.2	24.3	24.7	25.2	30.5	30.9	31.0	31.3	31.9
Variations with the observer position at spacings:										
S=1.0H	+0.3/-0.8					+0.4/-0.4				
S=1.5H	+1.5/-3.5					+1.7/-2.2				
S=2.0H	+2.2/-5.4					+3.5/-5.1				

Calculate in accordance with CIE Pub.117. The table is revised with 77218lm ($8\log(F/F_0) = 15.1$).

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Utilisation Factor Table(Floor cavity)

Utilisation Factors UF(F)			SHR NOM = 1.50									
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	0.79	0.85	0.92	0.96	0.99	1.03	1.06	
	0.30		0.55	0.65	0.73	0.79	0.87	0.92	0.95	1.00	1.03	
	0.20		0.50	0.59	0.68	0.74	0.82	0.88	0.91	0.97	1.00	
0.50	0.50	0.20	0.61	0.70	0.77	0.82	0.89	0.93	0.96	0.99	1.02	
	0.30		0.54	0.63	0.71	0.77	0.84	0.89	0.92	0.96	0.99	
	0.20		0.49	0.59	0.67	0.73	0.80	0.85	0.89	0.94	0.97	
0.30	0.50	0.20	0.59	0.68	0.75	0.80	0.86	0.90	0.92	0.96	0.98	
	0.30		0.53	0.62	0.70	0.75	0.82	0.86	0.89	0.93	0.96	
	0.20		0.49	0.58	0.66	0.72	0.79	0.83	0.87	0.91	0.94	
0.00	0.00	0.00	0.47	0.55	0.63	0.69	0.75	0.80	0.83	0.87	0.89	
Rating:501W 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 = 1.50									
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	0.76	0.62	0.53	0.42	0.34	0.29	0.22	0.18	
	0.30		0.76	0.65	0.54	0.47	0.38	0.31	0.27	0.21	0.17	
	0.20		0.65	0.56	0.48	0.42	0.34	0.29	0.25	0.20	0.16	
0.50	0.50	0.20	0.88	0.72	0.60	0.51	0.40	0.36	0.27	0.21	0.17	
	0.30		0.74	0.63	0.53	0.46	0.36	0.30	0.26	0.20	0.16	
	0.20		0.65	0.55	0.47	0.41	0.33	0.28	0.24	0.19	0.16	
0.30	0.50	0.20	0.85	0.69	0.57	0.49	0.38	0.31	0.26	0.20	0.16	
	0.30		0.73	0.61	0.51	0.44	0.35	0.29	0.24	0.19	0.15	
	0.20		0.64	0.55	0.46	0.40	0.32	0.27	0.23	0.18	0.15	
0.00	0.00	0.00	0.53	0.44	0.36	0.31	0.24	0.20	0.17	0.13	0.11	
Rating:501W 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 = 1.50									
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	0.18	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		0.05	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	0.18	0.19	0.20	0.20	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	0.15	0.16	0.17	
0.30	0.50	0.20	0.15	0.16	0.17	0.18	0.18	0.19	0.19	0.20	0.20	
	0.30		0.10	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.18	
	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:501W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												