

Report No.:

Test Time: 31.07.2020 19:34

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FD 111 100W 5000K 120 rp Ex

Number of Lamps: 1

Luminous Length (mm): 400 mm

Luminous Height (mm): 215 mm

Current: 0.461 A

Power Factor: 0.979

Lumens per Lamp: 11293.2 lm

Luminous Width (mm): 400 mm

Voltage: 221.9 V

Power: 100.16 W

Photometric Results

CIE Class: Direct

Measurement Flux: 11292.7 lm

Downward Ratio: 99.61%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 155.7, 155.5, 155.7, 155.6

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 114.8, 114.3, 114.6, 114.5

Luminaire Efficacy Rating (LER): 112.80

Max. Intensity: 3949.55 cd

S/MH(C0/C180): 1.29

Total Rated Lamp Lumens: 11293.2 lm

Efficiency: 100.00%

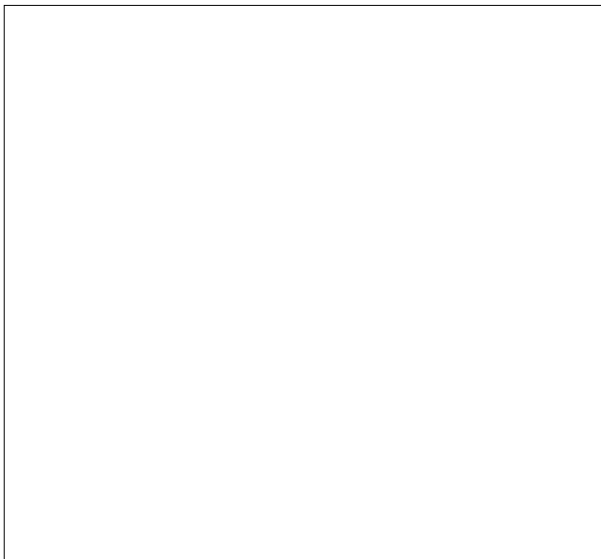
Upward Ratio: 0.39%

Central Intensity: 3945.98 cd

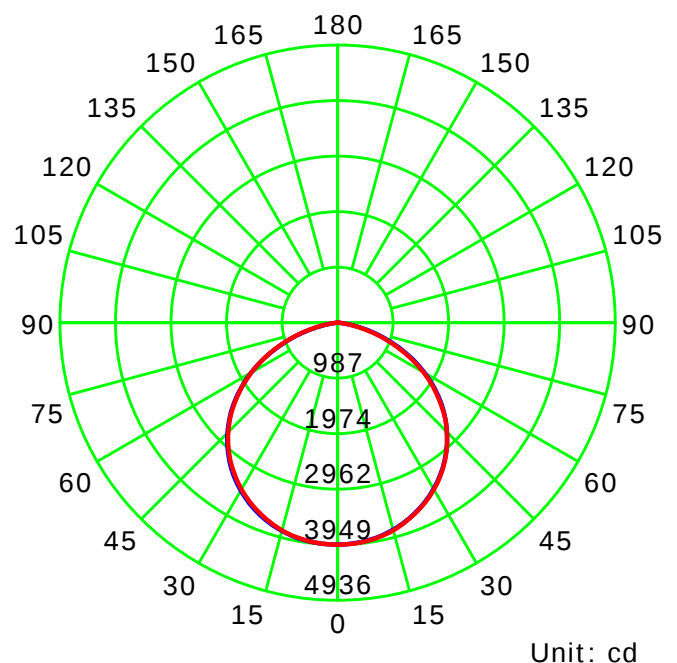
Pos of Max. Intensity: H135 V0

S/MH(C90/C270): 1.29

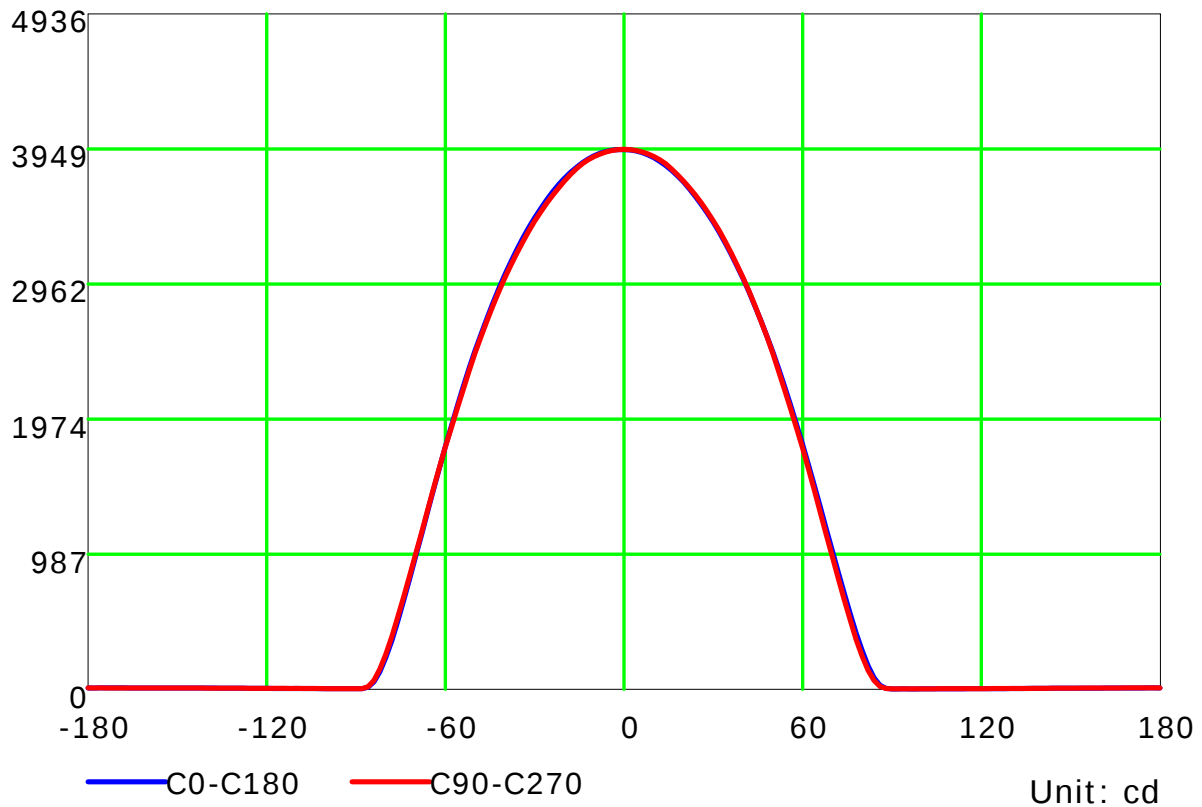
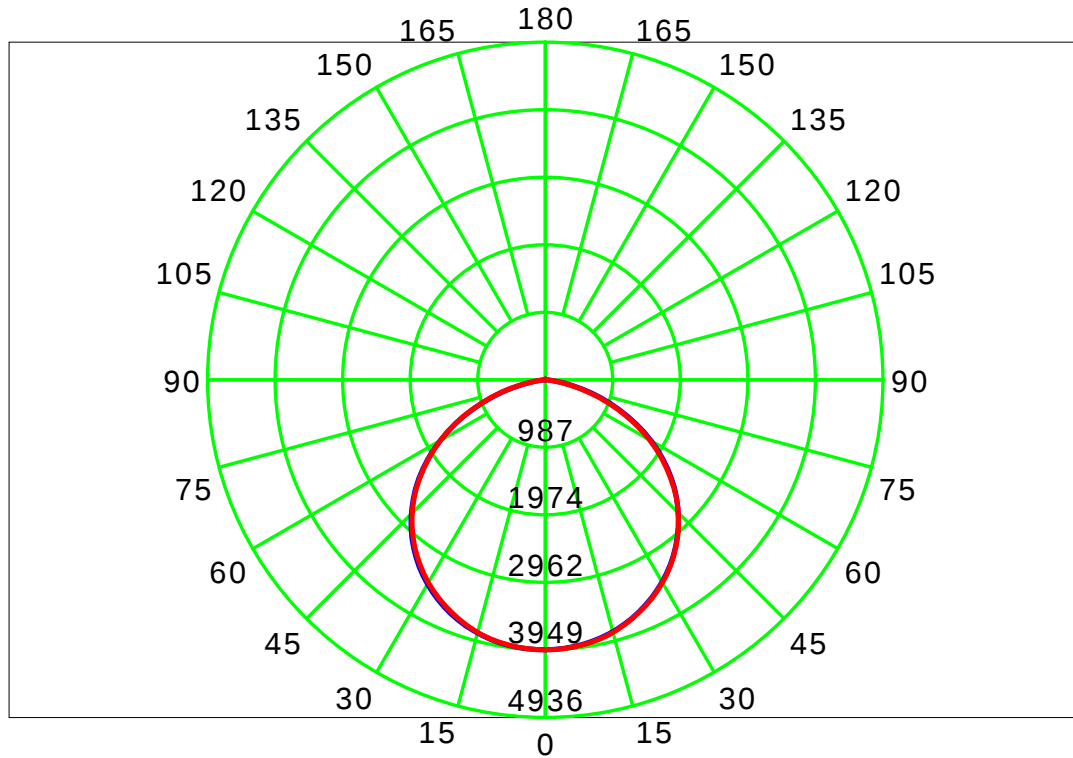
Picture Of Luminaire



Luminous Intensity Distribution Curve



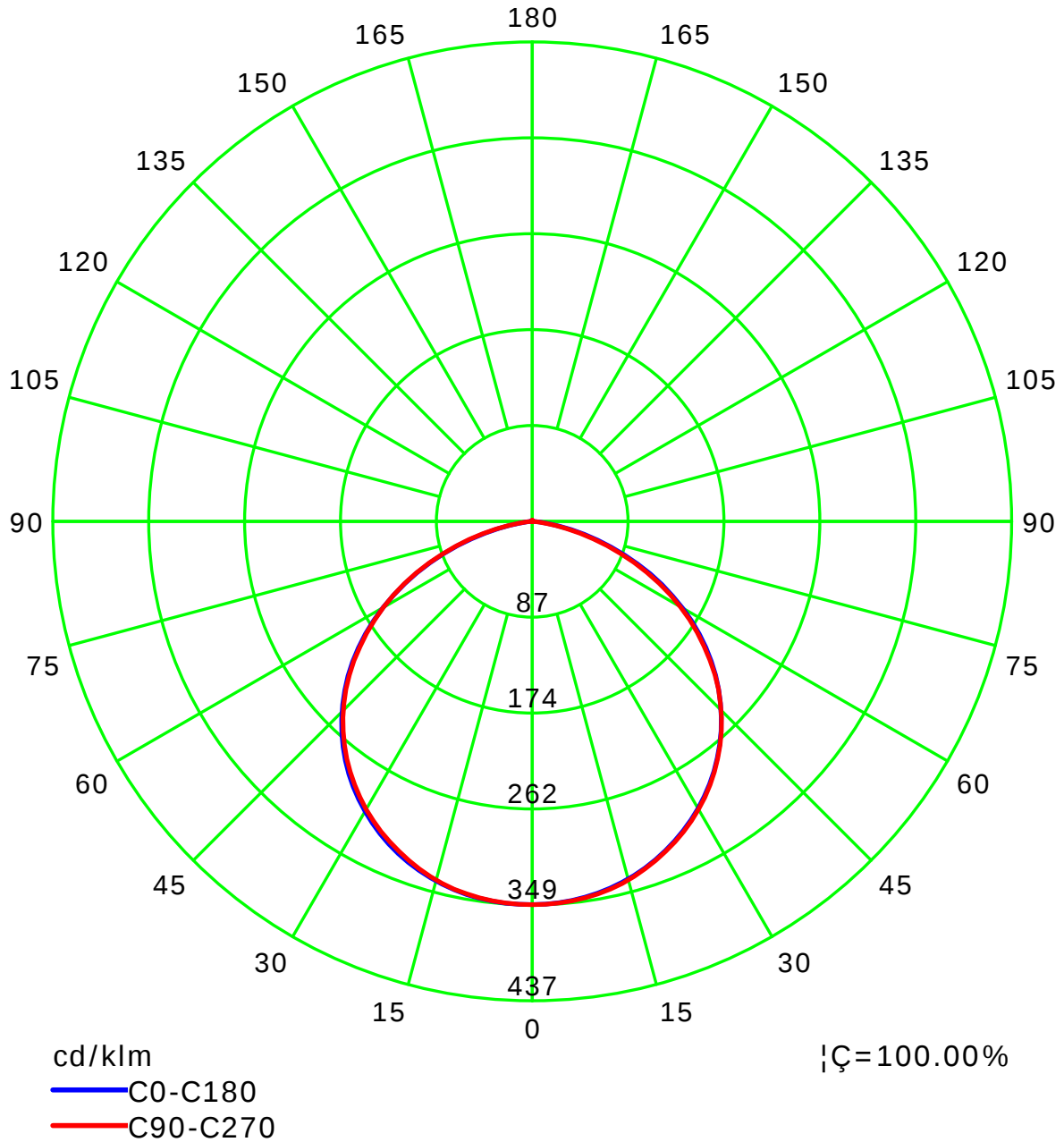
Luminous Intensity Distribution Curve



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:

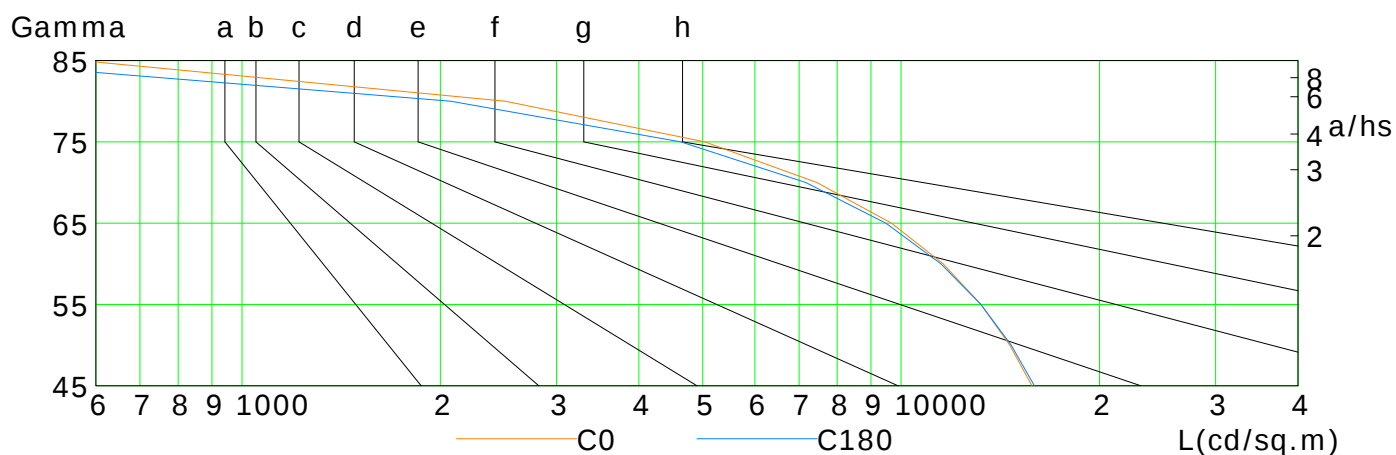
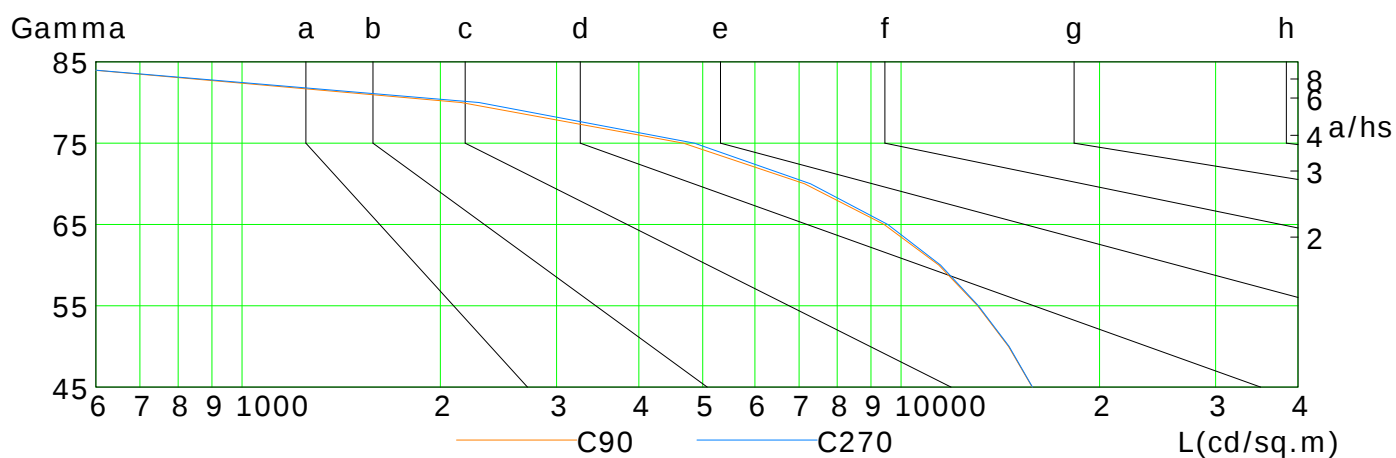
Luminous Intensity Distribution Curve(cd / klm)



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	15800	14611	13213	11583	9669	7449	5035	2509	572
C90	15807	14549	13059	11409	9420	7138	4672	2150	430
C180	15930	14687	13215	11490	9478	7166	4632	2074	360
C270	15824	14583	13099	11478	9543	7287	4856	2288	428

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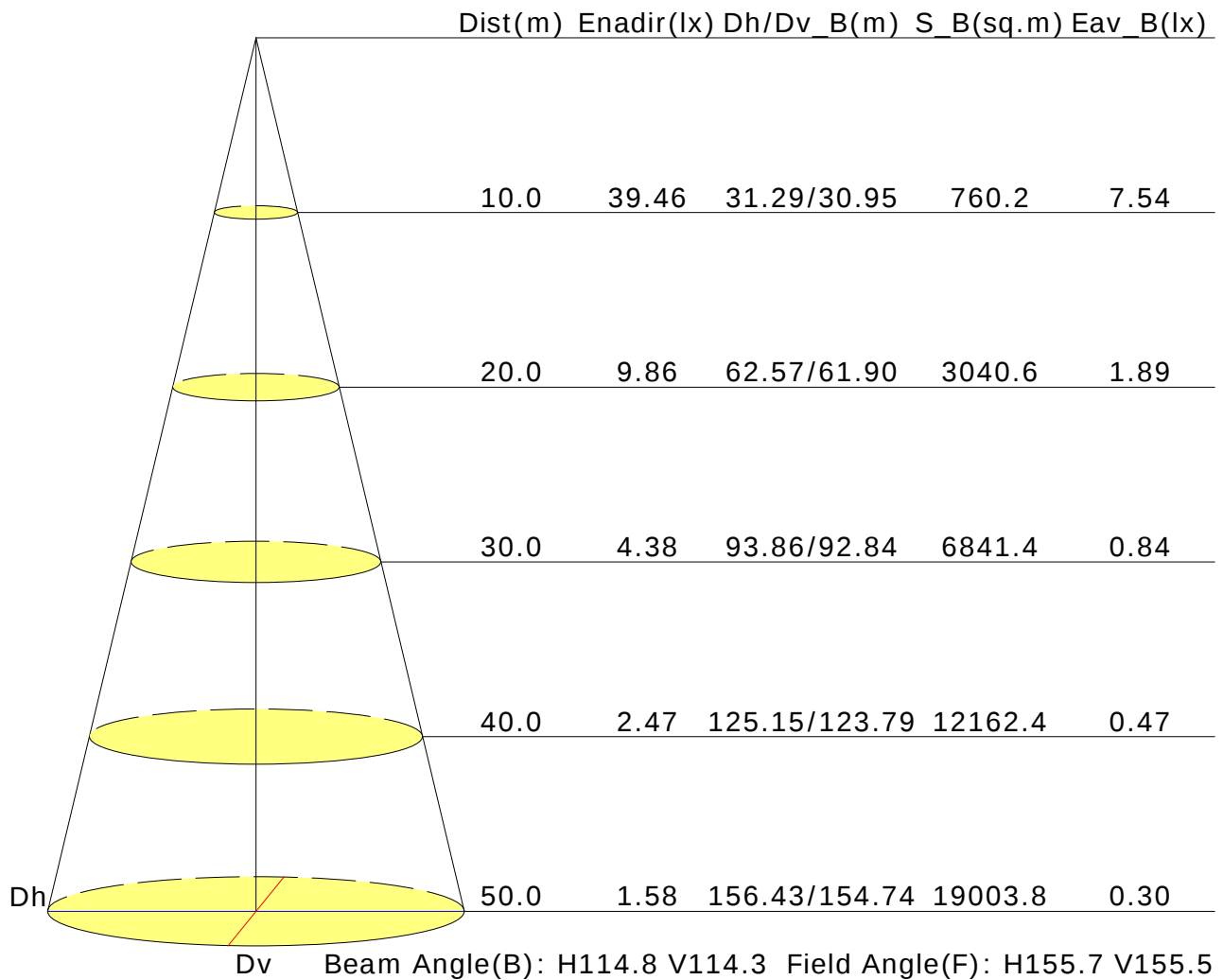
Test Device: LSG-1800B

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	21.3	22.7	21.6	22.9	23.2	21.3	22.7	21.6	22.9	23.2
3H	22.4	23.6	22.7	23.9	24.2	22.3	23.6	22.7	23.8	24.1
4H	22.7	23.8	23.0	24.1	24.4	22.6	23.8	22.9	24.0	24.3
6H	22.8	23.8	23.1	24.2	24.5	22.7	23.7	23.0	24.1	24.4
8H	22.7	23.8	23.1	24.1	24.5	22.6	23.7	23.0	24.0	24.3
12H	22.7	23.7	23.1	24.1	24.4	22.6	23.6	23.0	23.9	24.3
X=4H Y=2H	21.8	22.9	22.1	23.2	23.5	21.8	22.9	22.1	23.2	23.5
3H	23.0	24.0	23.4	24.3	24.7	22.9	23.9	23.3	24.3	24.6
4H	23.3	24.2	23.7	24.6	25.0	23.3	24.1	23.7	24.5	24.9
6H	23.5	24.3	23.9	24.6	25.1	23.4	24.2	23.8	24.5	25.0
8H	23.5	24.2	23.9	24.6	25.0	23.4	24.1	23.8	24.5	24.9
12H	23.5	24.1	23.9	24.5	25.0	23.3	24.0	23.8	24.4	24.9
X=8H Y=4H	23.4	24.1	23.9	24.5	25.0	23.3	24.1	23.8	24.5	24.9
6H	23.6	24.2	24.1	24.6	25.1	23.5	24.1	24.0	24.5	25.0
8H	23.6	24.1	24.1	24.6	25.1	23.5	24.0	24.0	24.5	25.0
12H	23.6	24.0	24.1	24.5	25.0	23.5	23.9	24.0	24.4	24.9
X=12H Y=4H	23.4	24.0	23.9	24.5	24.9	23.3	24.0	23.8	24.4	24.8
6H	23.6	24.1	24.1	24.6	25.1	23.5	24.0	24.0	24.5	25.0
8H	23.6	24.1	24.1	24.5	25.0	23.5	23.9	24.0	24.4	24.9
Variations with the observer position at spacings:										
S=1.0H	+0.2/-0.2					+0.2/-0.2				
S=1.5H	+0.4/-0.6					+0.4/-0.7				
S=2.0H	+0.9/-1.4					+0.9/-1.4				

Calculate in accordance with CIE Pub.117. The table is revised with 11293lm ($8\log(F/F_0) = 8.4$).

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 = 1.25									
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	0.57	0.68	0.75	0.81	0.88	0.93	0.97	1.01	1.04	
	0.30		0.49	0.60	0.68	0.74	0.82	0.88	0.92	0.97	1.01	
	0.20		0.44	0.54	0.62	0.69	0.77	0.83	0.88	0.94	0.98	
0.50	0.50	0.20	0.55	0.66	0.73	0.78	0.85	0.90	0.93	0.97	1.00	
	0.30		0.48	0.59	0.67	0.72	0.80	0.85	0.89	0.94	0.97	
	0.20		0.43	0.54	0.62	0.67	0.76	0.81	0.85	0.91	0.95	
0.30	0.50	0.20	0.54	0.64	0.71	0.75	0.82	0.86	0.89	0.93	0.96	
	0.30		0.48	0.58	0.65	0.70	0.78	0.83	0.86	0.91	0.94	
	0.20		0.43	0.53	0.61	0.66	0.74	0.79	0.83	0.88	0.92	
0.00	0.00	0.00	0.41	0.51	0.58	0.63	0.71	0.76	0.79	0.84	0.87	
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	0.99	0.81	0.68	0.59	0.47	0.39	0.33	0.25	0.20	
	0.30		0.83	0.69	0.60	0.53	0.42	0.35	0.30	0.24	0.19	
	0.20		0.71	0.61	0.53	0.47	0.39	0.33	0.28	0.22	0.19	
0.50	0.50	0.20	0.95	0.78	0.66	0.57	0.45	0.40	0.31	0.24	0.19	
	0.30		0.81	0.68	0.58	0.51	0.41	0.34	0.29	0.23	0.19	
	0.20		0.70	0.60	0.52	0.46	0.38	0.32	0.27	0.22	0.18	
0.30	0.50	0.20	0.93	0.75	0.63	0.54	0.43	0.35	0.30	0.23	0.18	
	0.30		0.79	0.66	0.56	0.49	0.39	0.33	0.28	0.22	0.18	
	0.20		0.69	0.59	0.51	0.45	0.37	0.31	0.26	0.21	0.17	
0.00	0.00	0.00	0.59	0.49	0.42	0.36	0.29	0.24	0.20	0.16	0.13	
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	0.17	0.18	0.19	0.19	0.20	0.21	0.21	0.22	0.22	
	0.30		0.10	0.11	0.13	0.14	0.15	0.17	0.18	0.19	0.20	
	0.20		0.05	0.07	0.08	0.09	0.12	0.13	0.14	0.16	0.17	
0.50	0.50	0.20	0.16	0.17	0.18	0.19	0.19	0.20	0.20	0.21	0.21	
	0.30		0.10	0.11	0.12	0.13	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	0.17	0.18	0.19	0.19	0.19	0.20	0.20	
	0.30		0.09	0.11	0.12	0.13	0.15	0.16	0.16	0.17	0.18	
	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	0.00	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												