

Report No.:

Test Time: 25.03.2020 19:40

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FL 58 L 60LED 32W 4000K 2x25-90 rp

Number of Lamps: 1

Luminous Length (mm): 1500

Luminous Width (mm): 75

Luminous Height (mm): 60

Voltage: 229.3 V

Current: 0.146 A

Power: 31.98 W

Power Factor: 0.957

Photometric Results

CIE Class: Direct

Total Rated Lamp Lumens: 4383.6 lm

Measurement Flux: 4383.6 lm

Efficiency: 100%

Downward Ratio: 99%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 159.8, 130.4, 134.8, 134.9

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 104.1, 71.2, 86.1, 86.0

Luminaire Efficacy Rating (LER): 137.12

Central Intensity: 1331.92 cd

Max. Intensity: 2572.38 cd

Pos of Max. Intensity: H90 V24

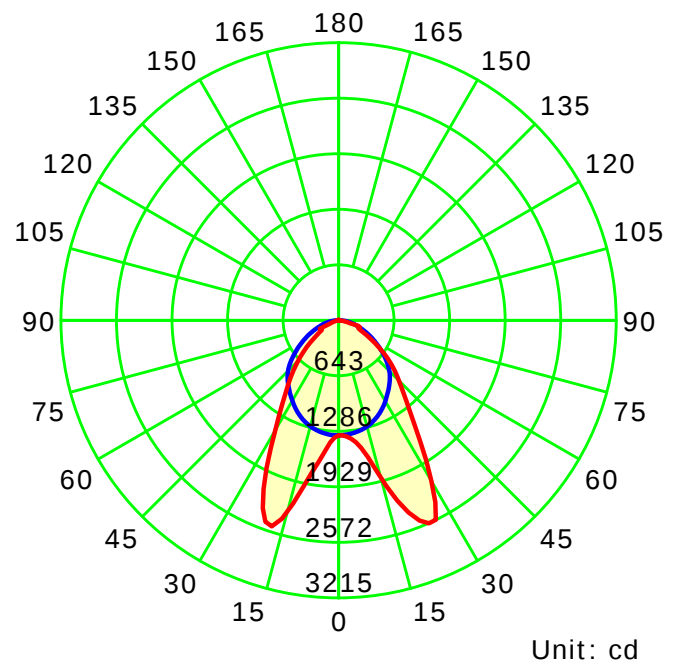
S/MH(C0/C180): 1.21

S/MH(C90/C270): 1.46

Picture Of Luminaire



Luminous Intensity Distribution Curve



— 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

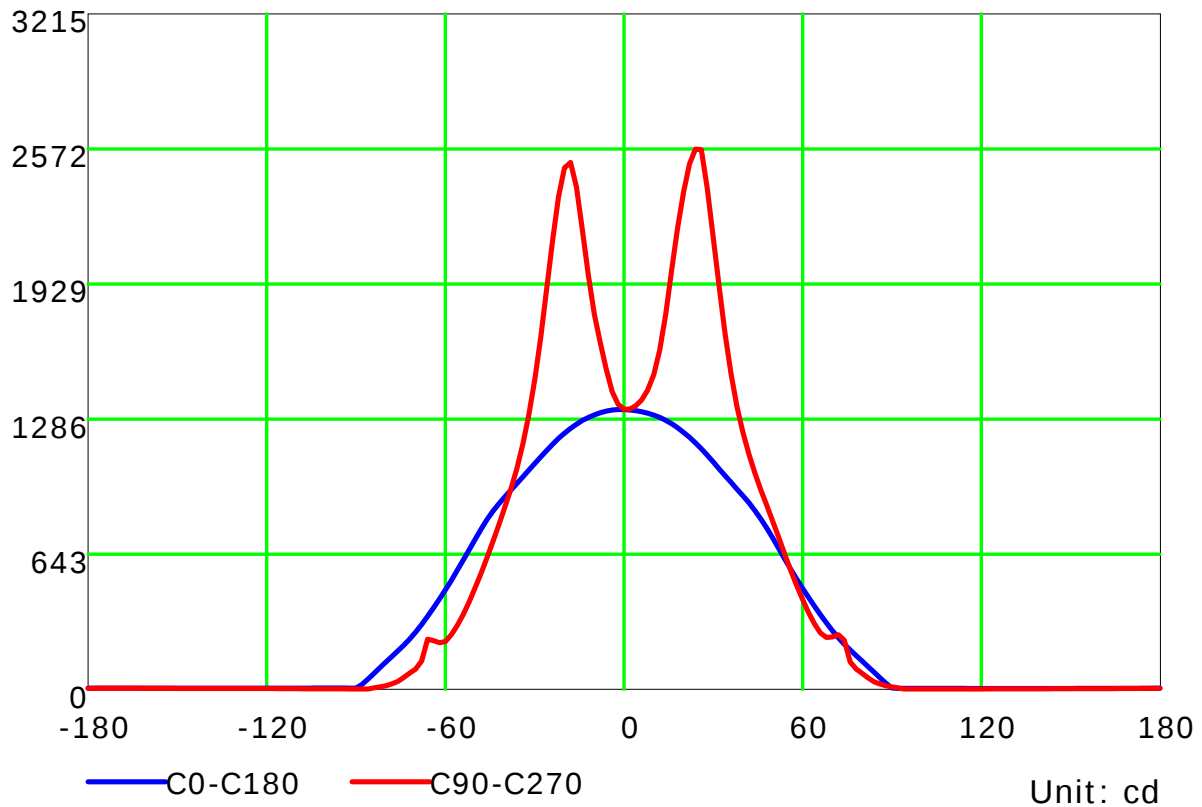
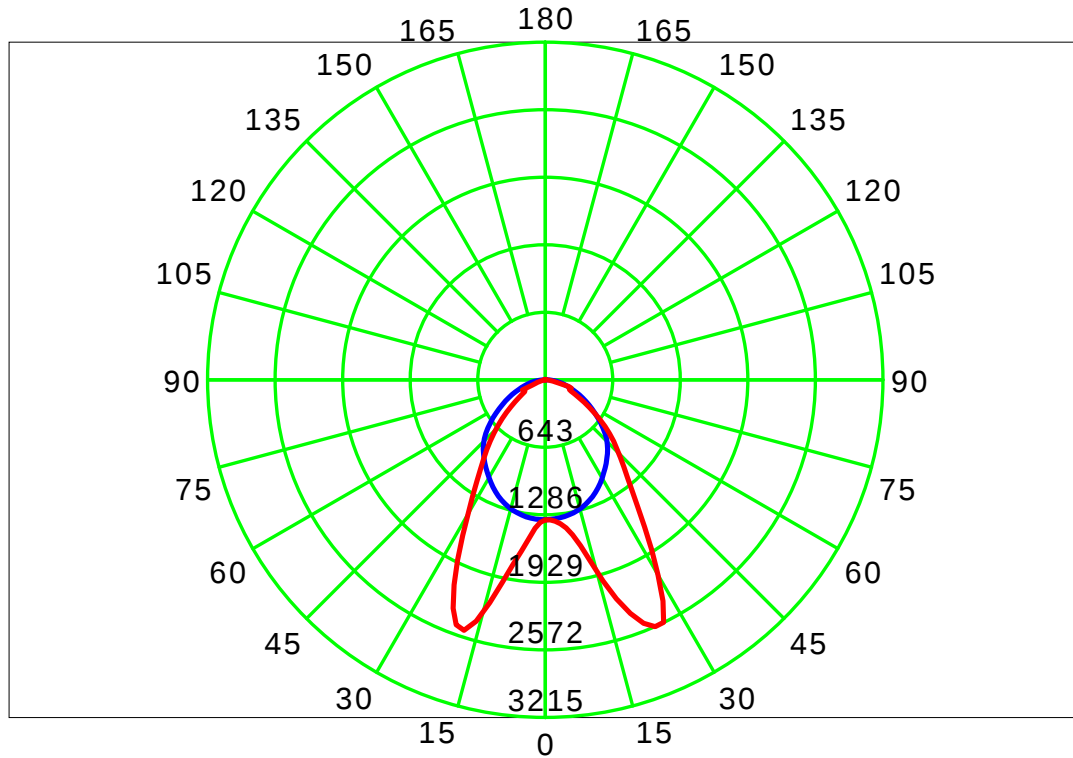
Temperature:

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

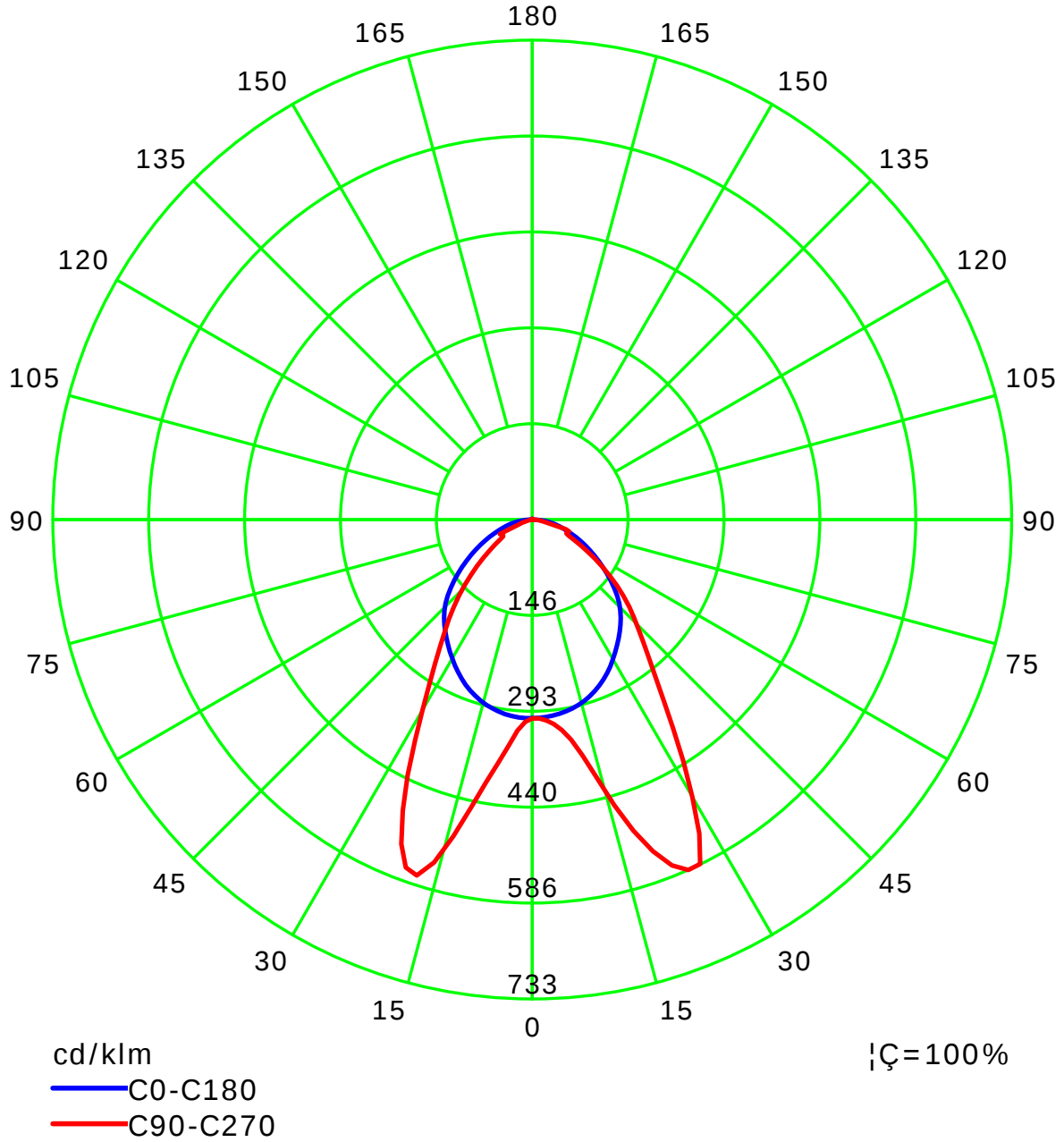
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

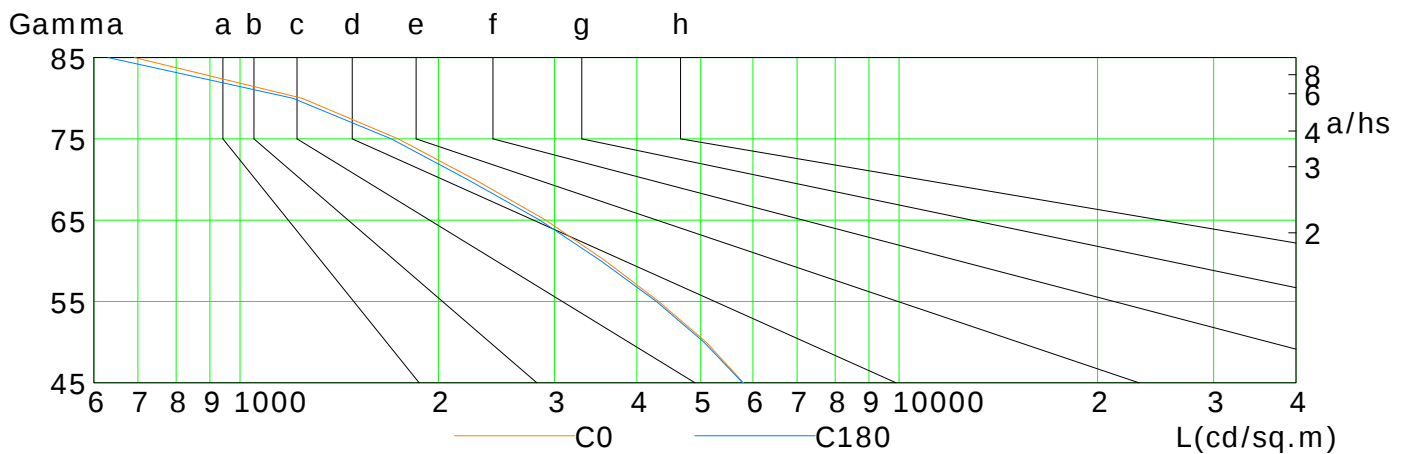
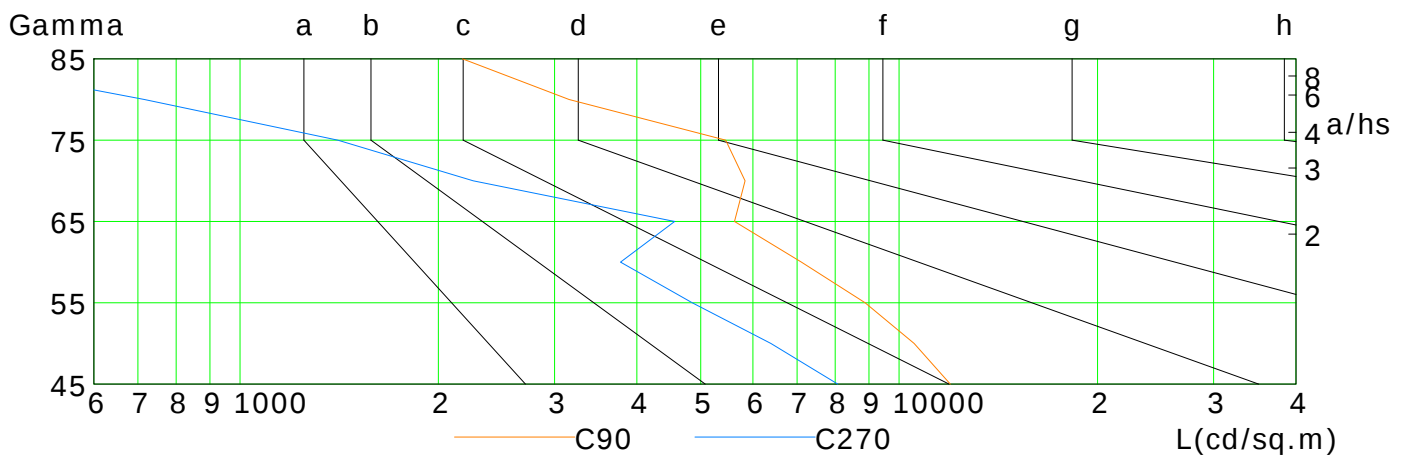
Luminous Intensity Distribution Curve(cd / klm)



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	5805	5095	4315	3583	2910	2270	1738	1242	692
C90	11954	10539	8878	7109	5625	5838	5455	3157	2176
C180	5790	5057	4281	3527	2850	2214	1696	1202	631
C270	8069	6387	4854	3777	4564	2258	1407	716	340

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

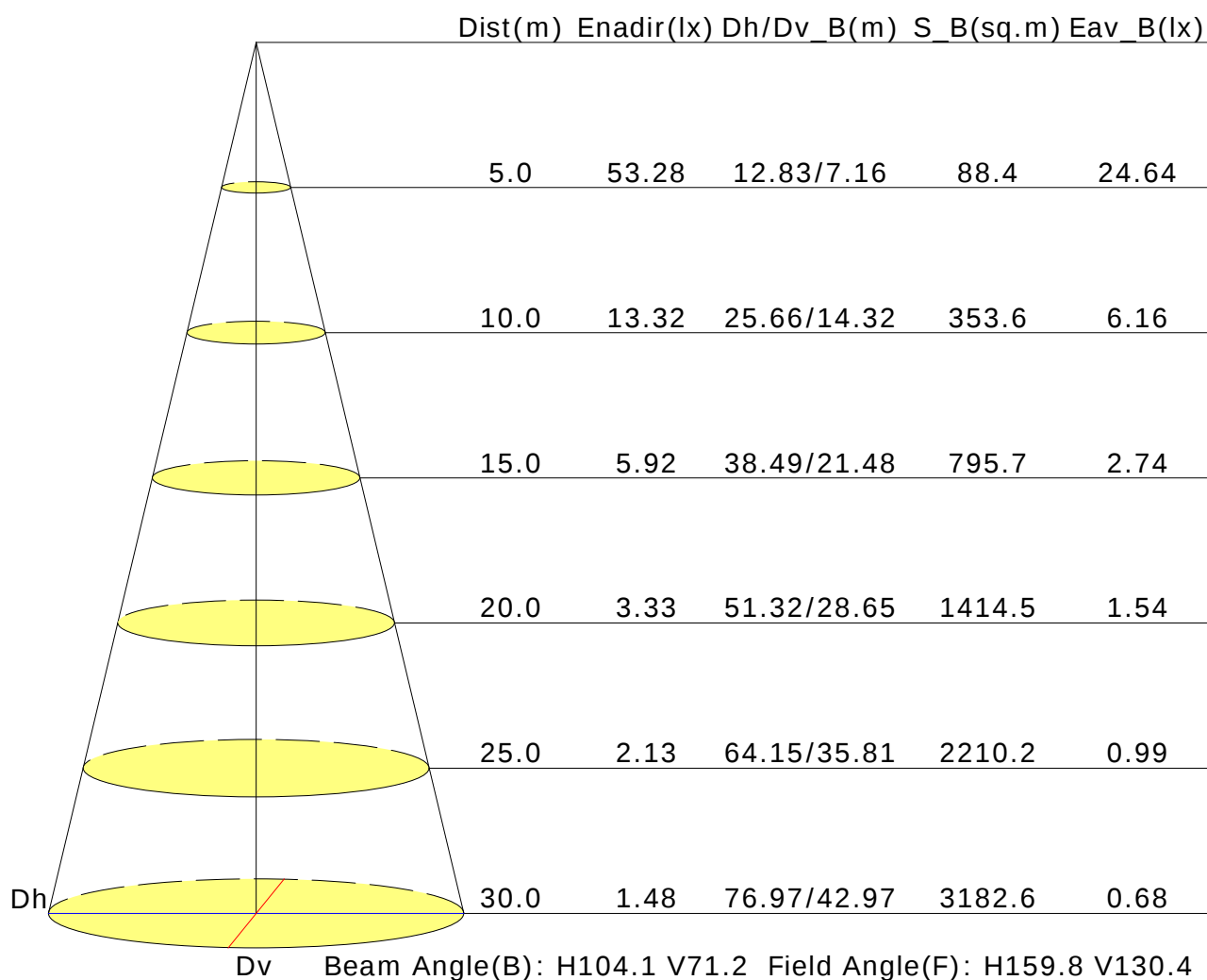
Test Device: LSG-1800B

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	18.6	19.9	18.9	20.1	20.4	17.8	19.0	18.1	19.3	19.5
3H	19.2	20.3	19.5	20.6	20.8	18.5	19.6	18.8	19.9	20.1
4H	19.3	20.4	19.7	20.7	21.0	18.8	19.9	19.2	20.2	20.5
6H	19.5	20.5	19.8	20.8	21.1	18.9	19.9	19.3	20.2	20.5
8H	19.5	20.4	19.9	20.8	21.1	18.9	19.9	19.3	20.2	20.5
12H	19.5	20.4	19.9	20.7	21.1	18.9	19.8	19.3	20.2	20.5
X=4H Y=2H	18.7	19.8	19.1	20.1	20.4	18.0	19.1	18.3	19.4	19.7
3H	19.4	20.3	19.8	20.7	21.0	18.8	19.7	19.2	20.1	20.4
4H	19.7	20.5	20.1	20.9	21.3	19.3	20.1	19.7	20.5	20.8
6H	19.9	20.6	20.4	21.0	21.5	19.4	20.1	19.8	20.5	20.9
8H	20.0	20.7	20.4	21.1	21.5	19.4	20.1	19.9	20.5	20.9
12H	20.0	20.6	20.5	21.0	21.5	19.5	20.0	19.9	20.5	20.9
X=8H Y=4H	19.8	20.4	20.2	20.8	21.3	19.4	20.0	19.8	20.4	20.9
6H	20.1	20.6	20.5	21.0	21.5	19.5	20.1	20.0	20.5	21.0
8H	20.2	20.6	20.7	21.1	21.6	19.6	20.1	20.1	20.5	21.0
12H	20.3	20.7	20.8	21.1	21.6	19.6	20.0	20.1	20.5	21.0
X=12H Y=4H	19.7	20.3	20.2	20.8	21.2	19.3	19.9	19.8	20.4	20.8
6H	20.1	20.5	20.5	21.0	21.5	19.5	20.0	20.0	20.5	21.0
8H	20.2	20.6	20.7	21.1	21.6	19.6	20.0	20.1	20.5	21.0
Variations with the observer position at spacings:										
S=1.0H	+0.9/-0.9					+0.8/-0.9				
S=1.5H	+1.6/-1.9					+1.1/-1.7				
S=2.0H	+2.8/-2.6					+1.6/-2.0				

Calculate in accordance with CIE Pub.117. The table is revised with 4384lm ($8\log(F/F_0) = 5.1$).

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	0.70	0.77	0.84	0.88	0.94	0.98	1.01	1.04	1.06	
	0.30		0.63	0.71	0.78	0.82	0.89	0.93	0.97	1.01	1.04	
	0.20		0.59	0.66	0.73	0.78	0.85	0.90	0.93	0.98	1.01	
0.50	0.50	0.20	0.68	0.75	0.81	0.85	0.91	0.94	0.97	1.00	1.02	
	0.30		0.62	0.70	0.76	0.81	0.87	0.91	0.94	0.97	1.00	
	0.20		0.58	0.66	0.72	0.77	0.83	0.88	0.91	0.95	0.98	
0.30	0.50	0.20	0.67	0.73	0.79	0.83	0.88	0.91	0.94	0.96	0.98	
	0.30		0.62	0.69	0.75	0.79	0.85	0.88	0.91	0.94	0.97	
	0.20		0.58	0.65	0.71	0.76	0.82	0.86	0.89	0.92	0.95	
0.00	0.00	0.00	0.56	0.63	0.69	0.73	0.78	0.82	0.84	0.88	0.90	
Rating:32W 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	0.80	0.67	0.56	0.48	0.38	0.32	0.27	0.21	0.17	
	0.30		0.67	0.57	0.49	0.43	0.35	0.29	0.25	0.20	0.16	
	0.20		0.57	0.50	0.43	0.38	0.32	0.27	0.23	0.19	0.16	
0.50	0.50	0.20	0.77	0.64	0.53	0.46	0.36	0.34	0.26	0.20	0.16	
	0.30		0.65	0.55	0.47	0.41	0.33	0.28	0.24	0.19	0.15	
	0.20		0.56	0.49	0.42	0.37	0.31	0.26	0.23	0.18	0.15	
0.30	0.50	0.20	0.74	0.61	0.51	0.44	0.34	0.28	0.24	0.19	0.15	
	0.30		0.63	0.54	0.46	0.40	0.32	0.27	0.23	0.18	0.15	
	0.20		0.56	0.48	0.41	0.36	0.30	0.25	0.21	0.17	0.14	
0.00	0.00	0.00	0.44	0.37	0.31	0.27	0.21	0.18	0.15	0.12	0.10	
Rating:32W 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	0.15	0.17	0.18	0.18	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		0.06	0.08	0.09	0.10	0.12	0.14	0.15	0.17	0.18	
0.50	0.50	0.20	0.15	0.16	0.17	0.18	0.19	0.19	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		0.06	0.07	0.09	0.10	0.12	0.14	0.15	0.16	0.17	
0.30	0.50	0.20	0.14	0.16	0.16	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	0.17	0.18	0.18	
	0.20		0.06	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:32W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												