

Report No.:

Test Time: 25.03.2020 18:24

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FL 58 L 60LED 32W 4000K 20-90 gr.

Number of Lamps: 1

Luminous Width (mm): 75

Voltage: 229.0 V

Power: 32.04 W

Luminous Length (mm): 1500

Luminous Height (mm): 60

Current: 0.146 A

Power Factor: 0.959

Photometric Results

CIE Class: Direct

Measurement Flux: 4167.5 lm

Downward Ratio: 99%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 151.4, 141.1, 136.5, 136.9

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 78.9, 45.7, 59.0, 58.9

Luminaire Efficacy Rating (LER): 130.12

Max. Intensity: 2755.6 cd

S/MH(C0/C180): 1.07

Total Rated Lamp Lumens: 4167.5 lm

Efficiency: 100%

Upward Ratio: 1%

Central Intensity: 1586.77 cd

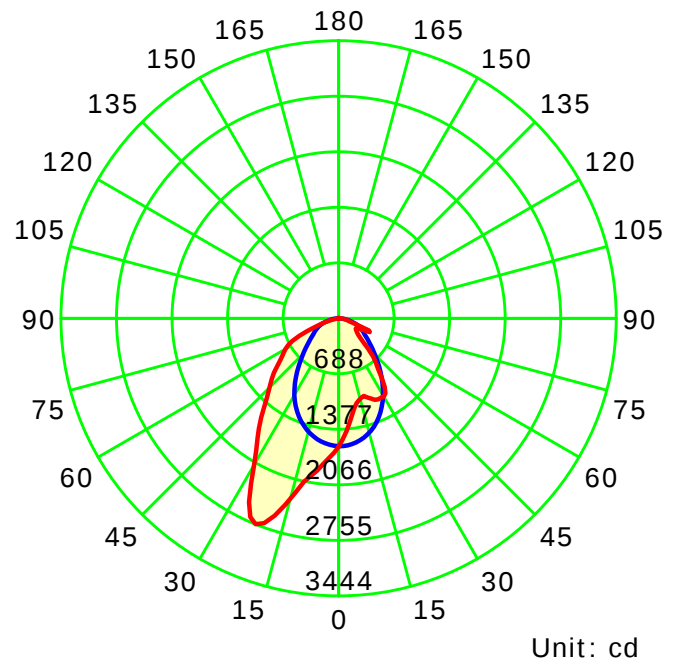
Pos of Max. Intensity: H270 V22

S/MH(C90/C270): 1.36

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

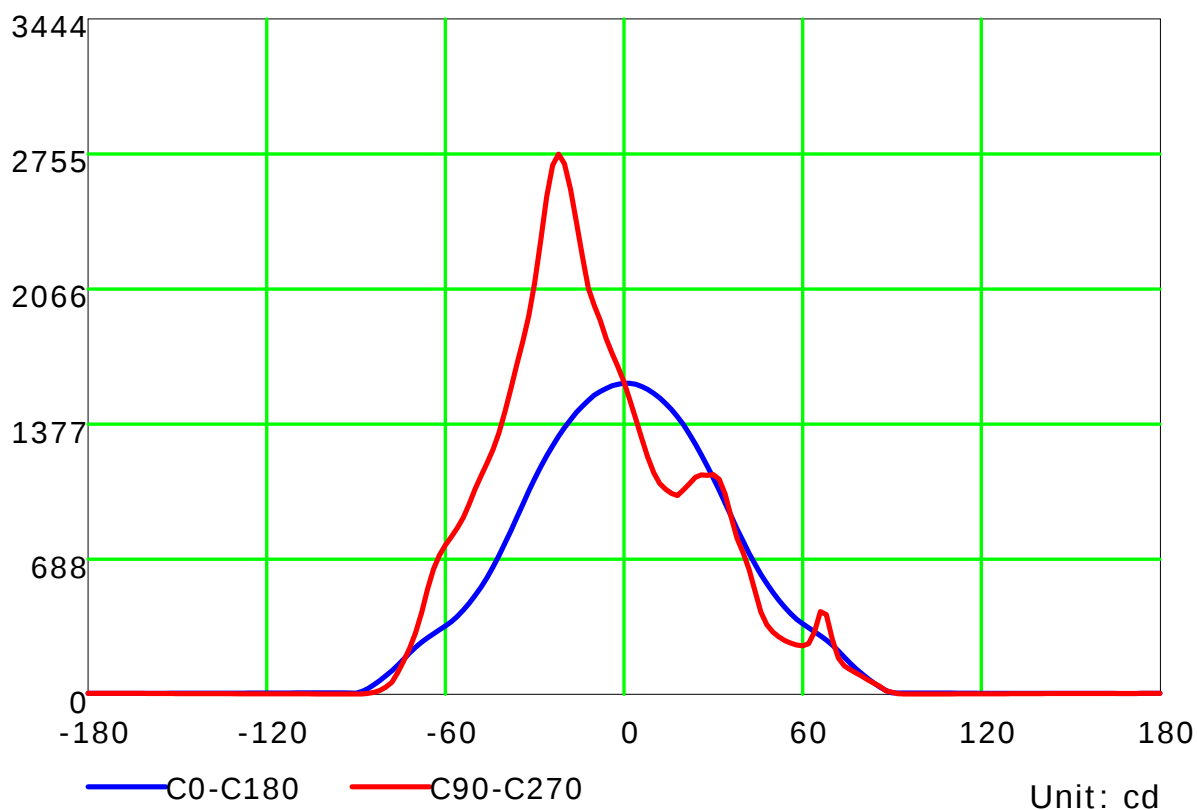
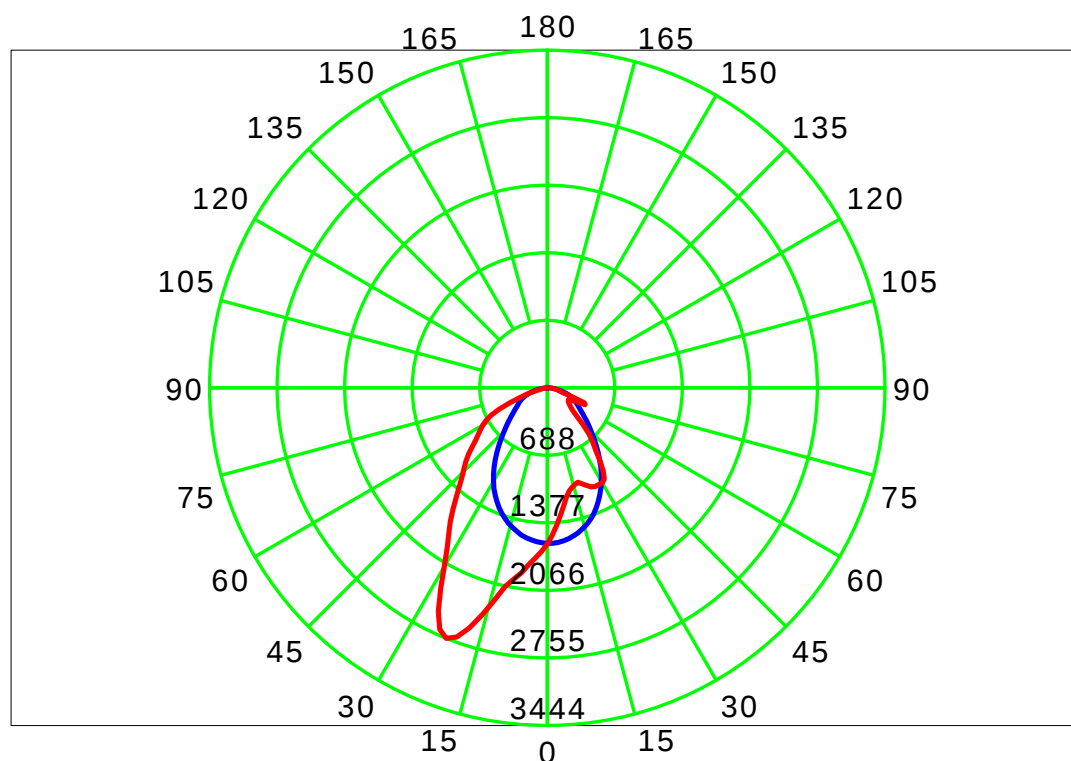
Test Device: LSG-1800B

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: 2.0

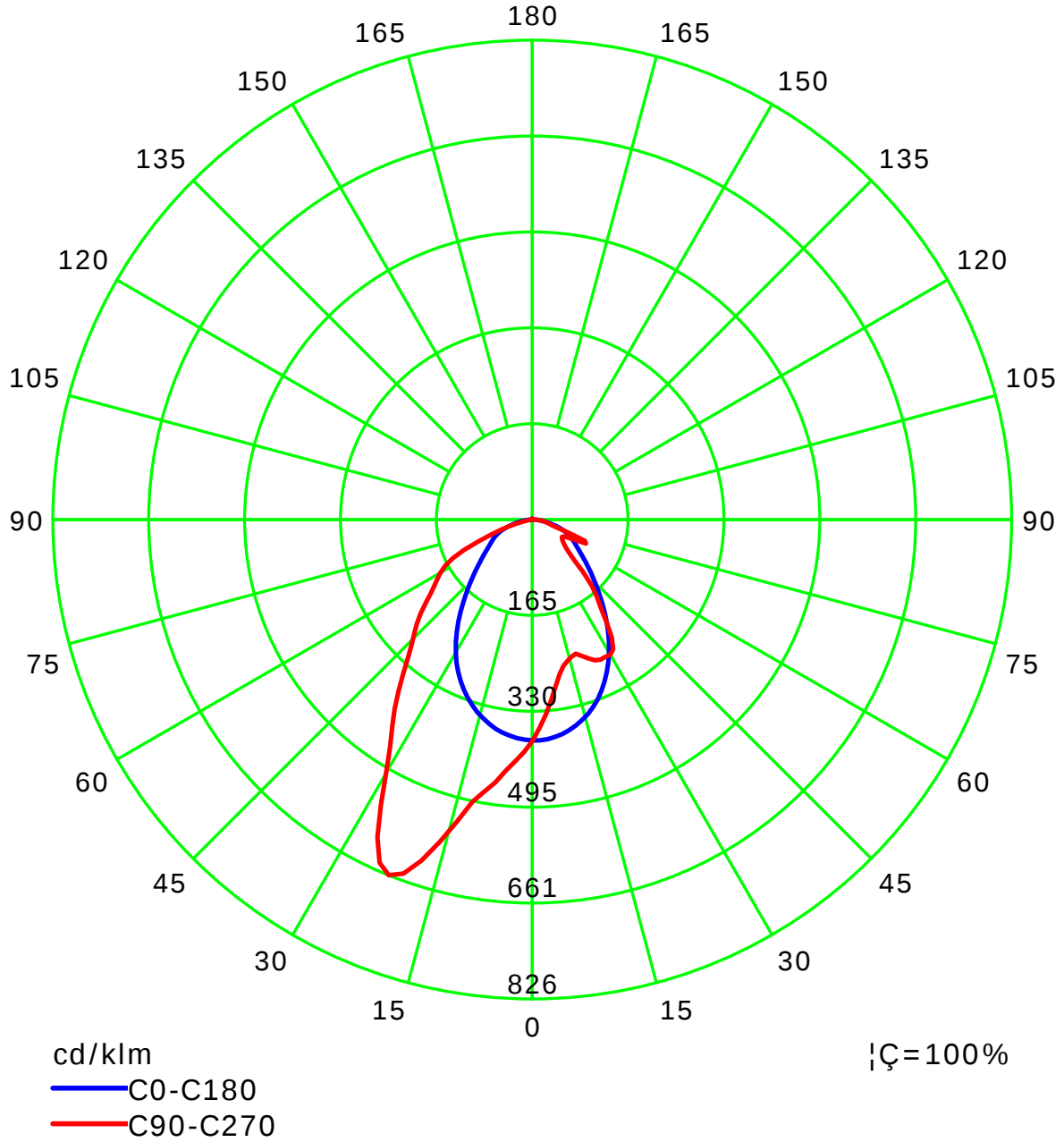
Test Device: LSG-1800B

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

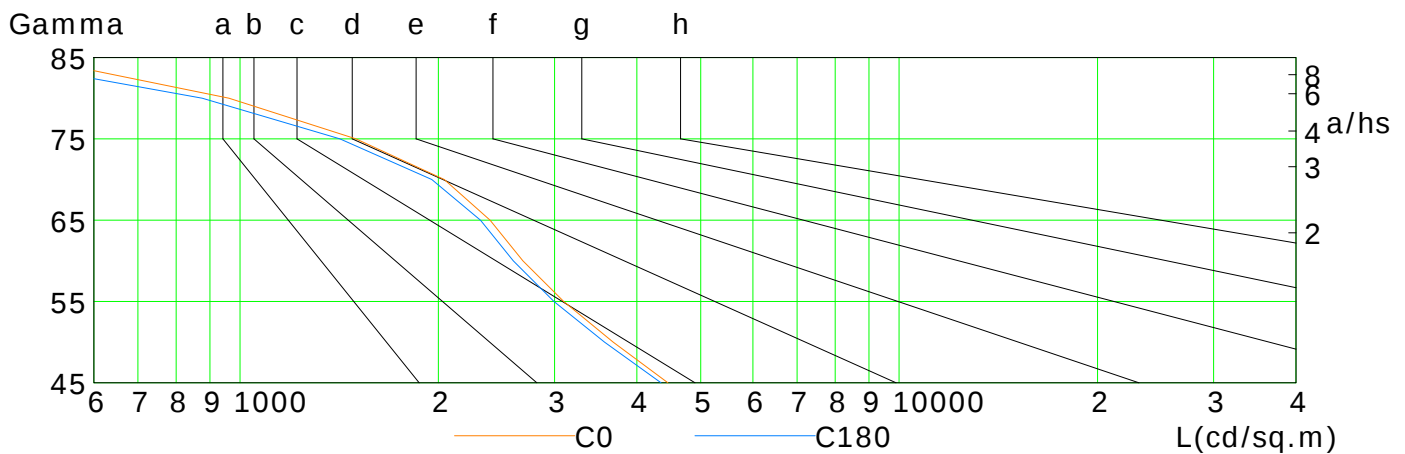
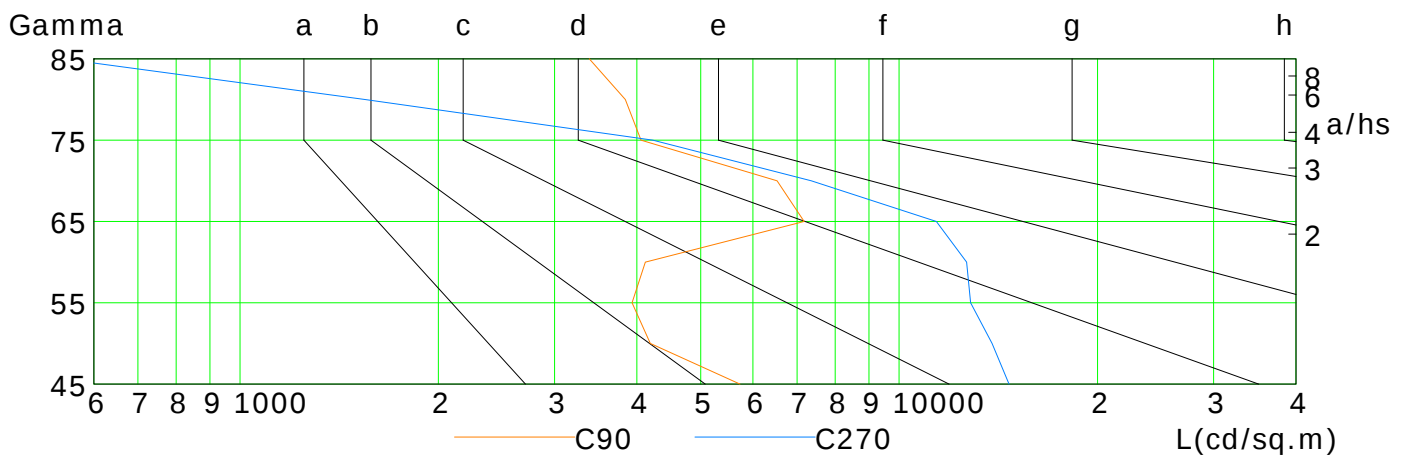
Humidity:

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

a b c d e f g h



L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	4458	3683	3097	2686	2395	2041	1499	962	479
C90	5735	4193	3934	4120	7177	6529	4058	3843	3387
C180	4354	3572	2994	2598	2316	1954	1417	876	399
C270	14684	13833	12835	12656	11390	7359	4230	1548	540

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

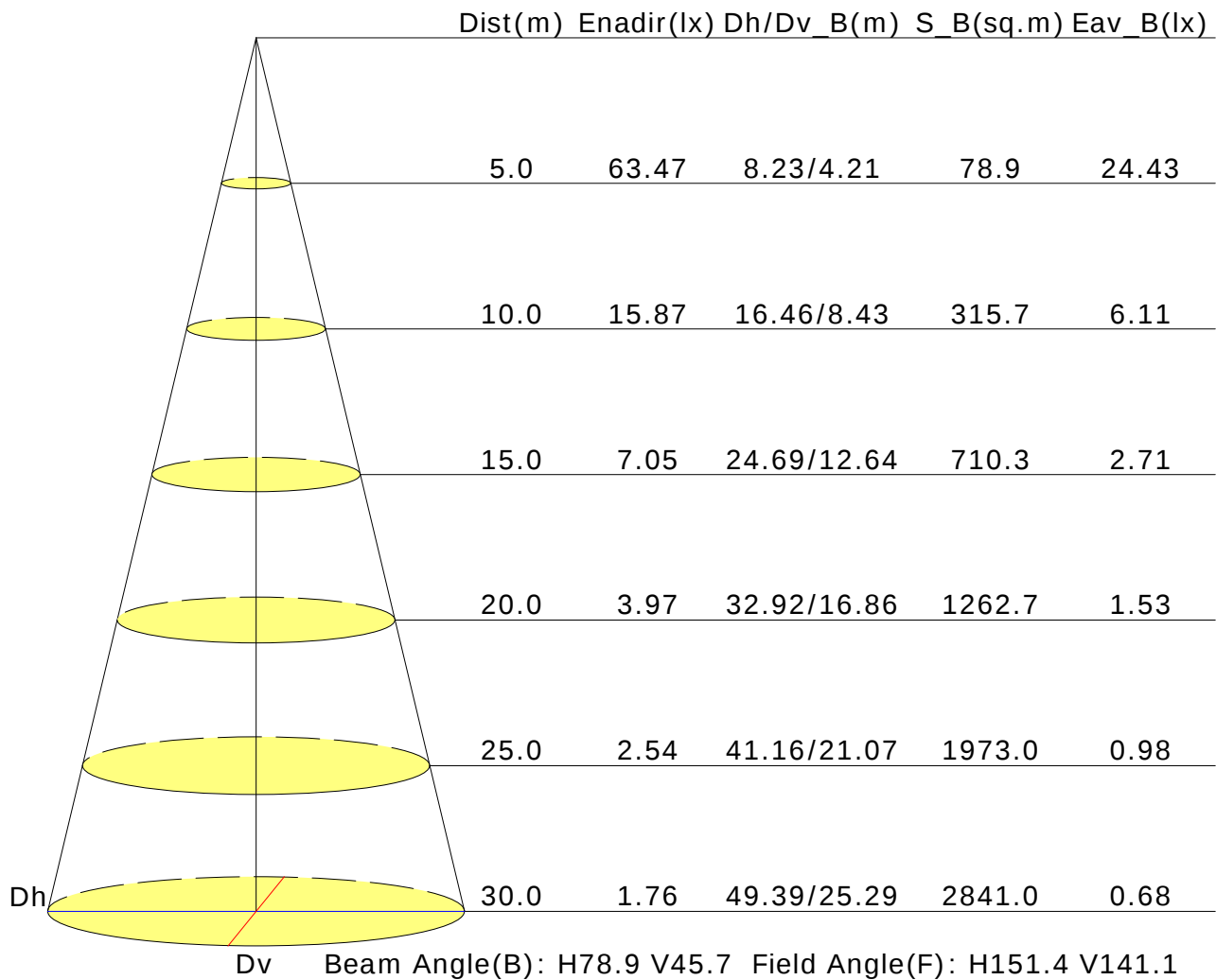
Test Device: LSG-1800B

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	18.2	19.5	18.5	19.7	20.0	19.6	20.9	19.9	21.1	21.4
3H	18.8	20.0	19.1	20.2	20.5	21.0	22.1	21.3	22.4	22.7
4H	19.0	20.1	19.3	20.4	20.7	21.1	22.3	21.5	22.6	22.9
6H	19.1	20.1	19.4	20.4	20.8	21.2	22.2	21.6	22.5	22.9
8H	19.1	20.1	19.5	20.4	20.7	21.2	22.2	21.6	22.5	22.9
12H	19.1	20.0	19.5	20.4	20.7	21.2	22.1	21.6	22.5	22.8
X=4H Y=2H	18.7	19.8	19.0	20.1	20.4	19.9	21.0	20.2	21.3	21.6
3H	19.5	20.5	19.9	20.8	21.2	21.4	22.3	21.8	22.7	23.0
4H	19.8	20.7	20.2	21.0	21.4	21.6	22.5	22.1	22.9	23.2
6H	20.0	20.7	20.4	21.1	21.5	21.7	22.5	22.2	22.9	23.3
8H	20.0	20.7	20.5	21.1	21.6	21.8	22.4	22.2	22.9	23.3
12H	20.0	20.7	20.5	21.1	21.5	21.8	22.4	22.2	22.8	23.3
X=8H Y=4H	20.0	20.7	20.5	21.1	21.6	21.7	22.4	22.2	22.8	23.2
6H	20.3	20.8	20.8	21.3	21.8	21.8	22.4	22.3	22.8	23.3
8H	20.4	20.8	20.9	21.3	21.8	21.9	22.4	22.4	22.8	23.3
12H	20.4	20.8	20.9	21.3	21.8	21.9	22.3	22.4	22.8	23.3
X=12H Y=4H	20.0	20.6	20.5	21.1	21.5	21.7	22.3	22.2	22.7	23.2
6H	20.3	20.8	20.8	21.2	21.7	21.8	22.3	22.3	22.8	23.3
8H	20.4	20.8	20.9	21.3	21.8	21.9	22.3	22.4	22.8	23.3
Variations with the observer position at spacings:										
S=1.0H	+0.5/-0.7					+0.4/-0.5				
S=1.5H	+1.0/-1.3					+0.9/-1.2				
S=2.0H	+1.1/-1.7					+1.2/-1.6				

Calculate in accordance with CIE Pub.117. The table is revised with 4167lm ($8\log(F/F_0) = 5.0$).

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	0.62	0.72	0.79	0.84	0.90	0.95	0.98	1.02	1.05	
	0.30		0.54	0.65	0.72	0.77	0.85	0.90	0.94	0.98	1.02	
	0.20		0.49	0.59	0.67	0.72	0.80	0.86	0.90	0.95	0.99	
0.50	0.50	0.20	0.60	0.70	0.76	0.81	0.87	0.91	0.94	0.98	1.01	
	0.30		0.53	0.63	0.70	0.75	0.82	0.87	0.91	0.95	0.98	
	0.20		0.49	0.59	0.66	0.71	0.78	0.84	0.87	0.92	0.96	
0.30	0.50	0.20	0.59	0.68	0.74	0.78	0.84	0.88	0.91	0.94	0.97	
	0.30		0.53	0.62	0.69	0.74	0.80	0.85	0.88	0.92	0.94	
	0.20		0.48	0.58	0.65	0.70	0.77	0.82	0.85	0.90	0.93	
0.00	0.00	0.00	0.46	0.56	0.62	0.67	0.73	0.78	0.81	0.85	0.88	
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 = 1.25									
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	0.92	0.75	0.64	0.55	0.44	0.36	0.31	0.24	0.19	
	0.30		0.77	0.64	0.55	0.49	0.40	0.33	0.29	0.22	0.18	
	0.20		0.66	0.56	0.49	0.44	0.36	0.31	0.27	0.21	0.18	
0.50	0.50	0.20	0.88	0.72	0.61	0.53	0.42	0.38	0.29	0.22	0.18	
	0.30		0.75	0.62	0.54	0.47	0.38	0.32	0.27	0.21	0.17	
	0.20		0.65	0.55	0.48	0.43	0.35	0.30	0.26	0.20	0.17	
0.30	0.50	0.20	0.86	0.69	0.58	0.50	0.40	0.33	0.28	0.21	0.17	
	0.30		0.73	0.61	0.52	0.45	0.37	0.30	0.26	0.20	0.17	
	0.20		0.64	0.54	0.47	0.42	0.34	0.29	0.25	0.19	0.16	
0.00	0.00	0.00	0.53	0.44	0.37	0.33	0.26	0.22	0.18	0.14	0.12	
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 = 1.25									
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	0.18	0.19	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	0.19	0.19	0.20	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:32W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												