

Report No.:

Test Time: 25.03.2020 18:24

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FL 58 L 60LED 32W 5000K 20-90 gr.

Number of Lamps: 1

Luminous Width (mm): 75

Voltage: 229.1 V

Power: 32.04 W

Luminous Length (mm): 1500

Luminous Height (mm): 60

Current: 0.146 A

Power Factor: 0.960

Photometric Results

CIE Class: Direct

Measurement Flux: 4227.5 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): 131.99

Max. Intensity: 2795.27 cd

S/MH(C0/C180): 1.07

Total Rated Lamp Lumens: 4227.5 lm

Efficiency: 100%

Upward Ratio: 1%

Central Intensity: 1609.61 cd

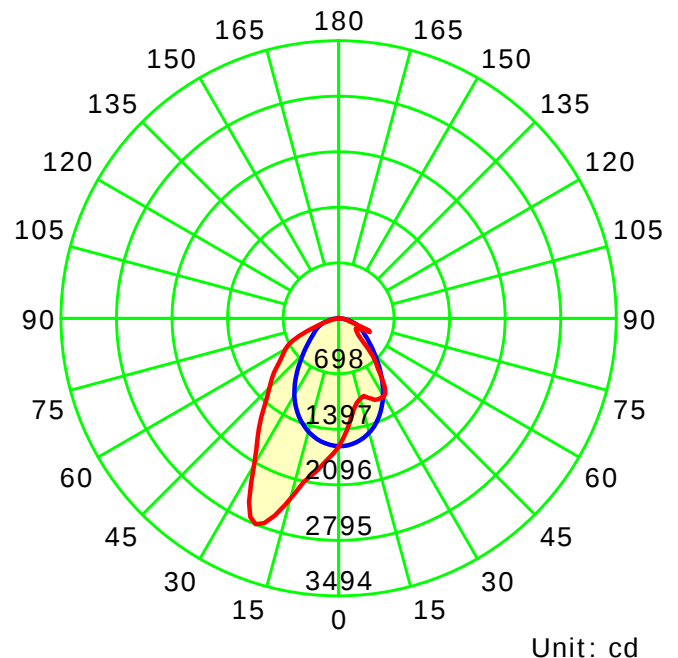
Pos of Max. Intensity: H270 V22

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

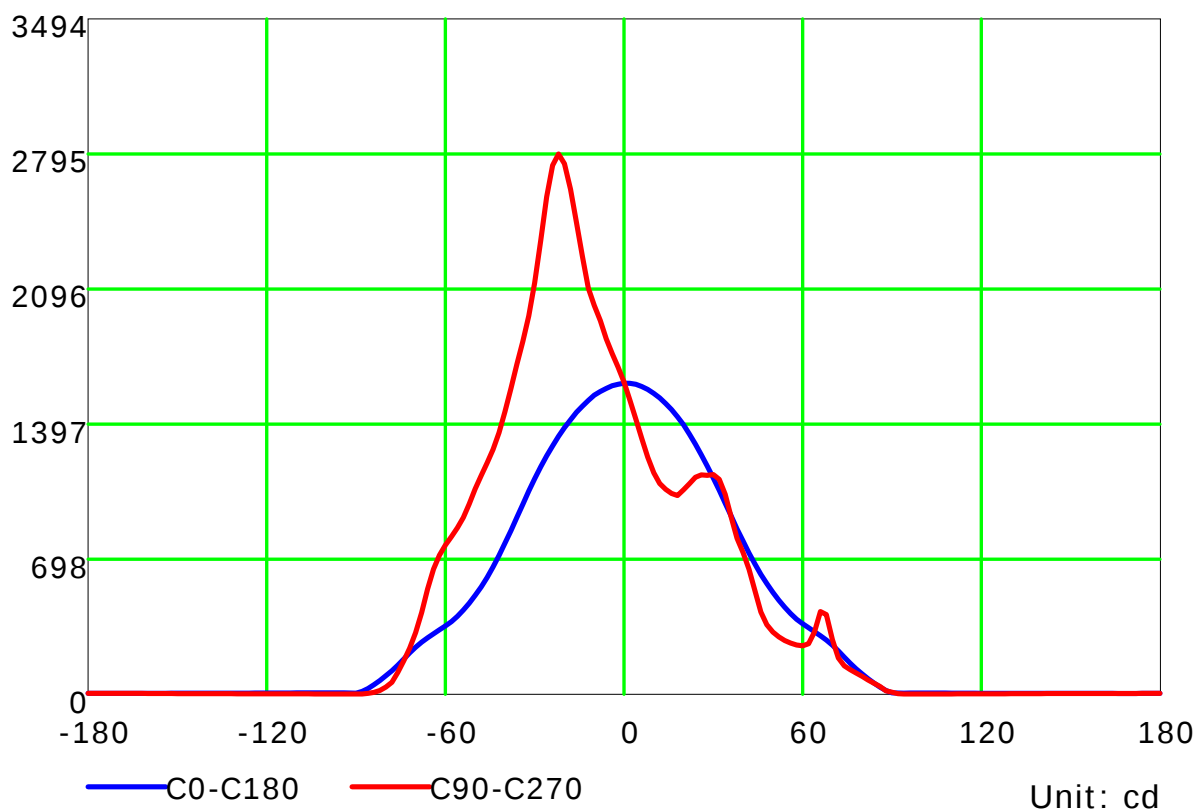
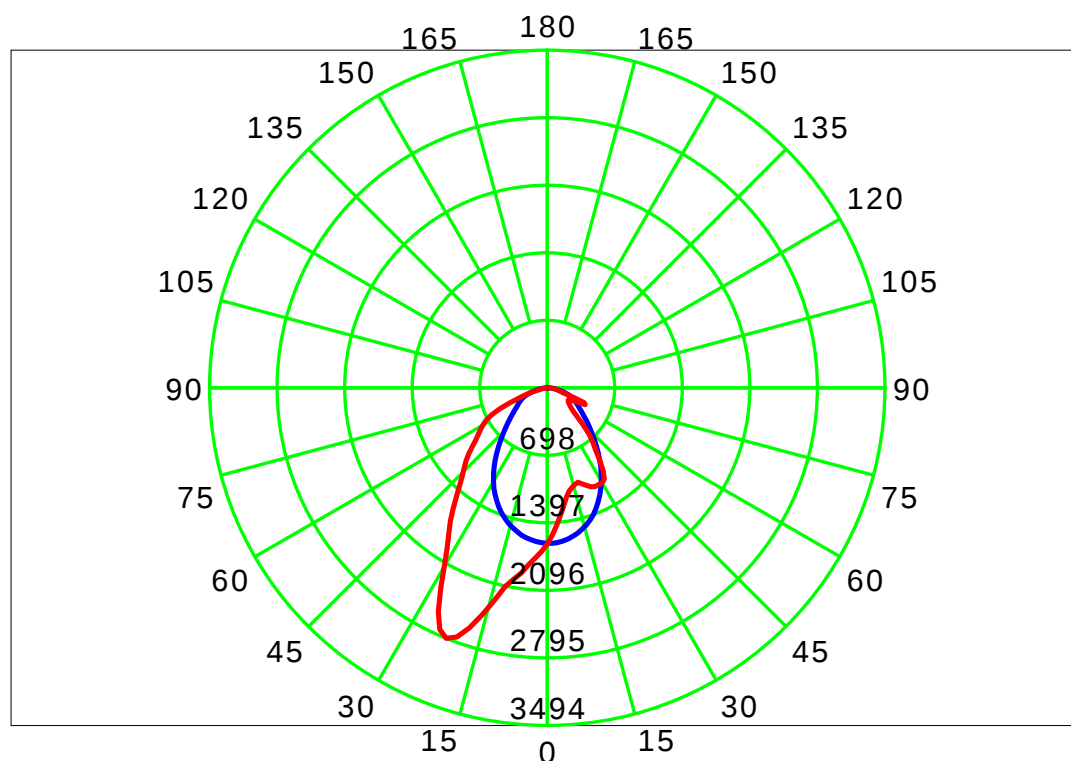
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 22.5

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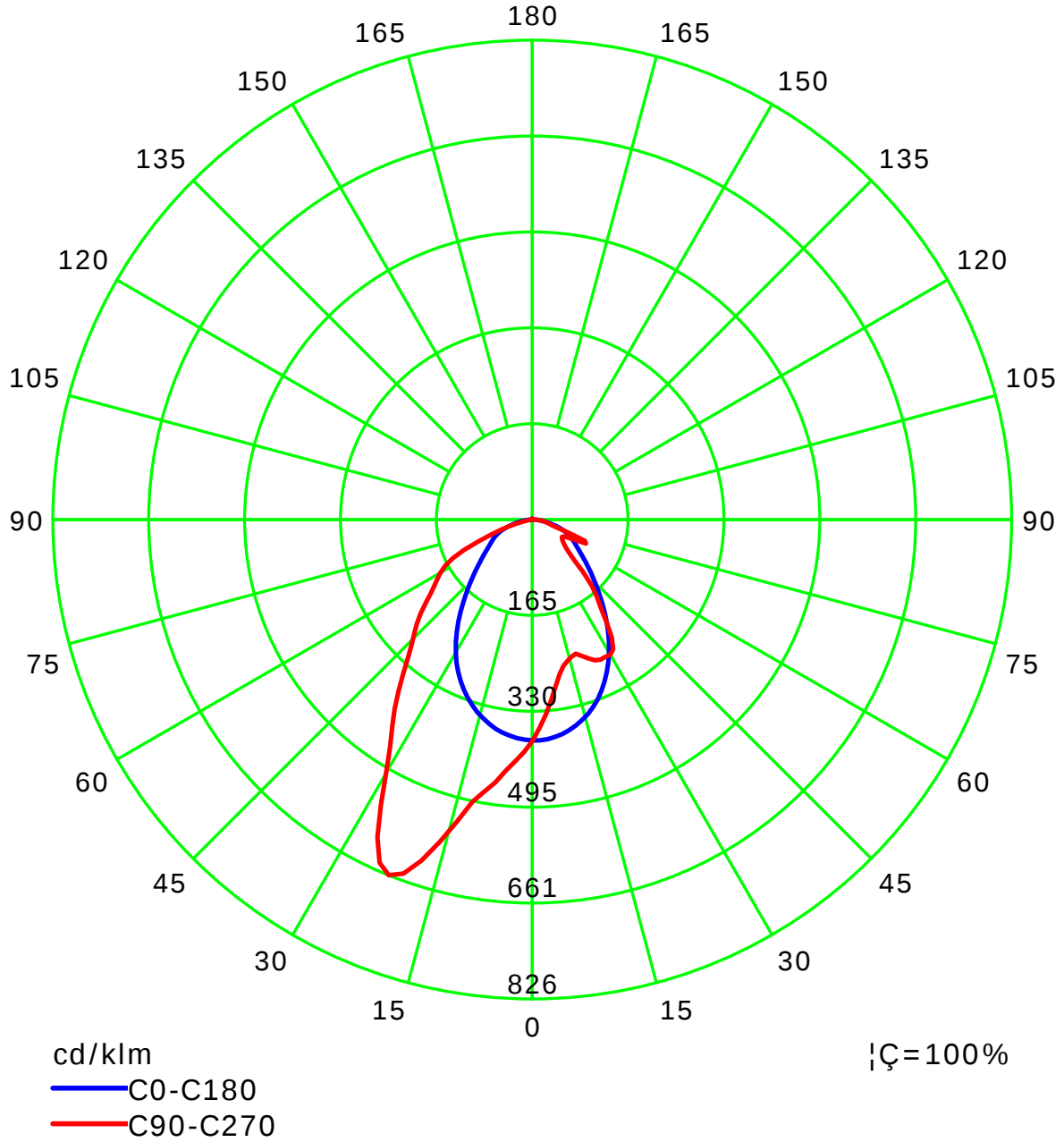
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve(cd / klm)



C Plane (°):0.0-360.0: 22.5

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Test Device: LSG-1800B

Distance: 12.677 m

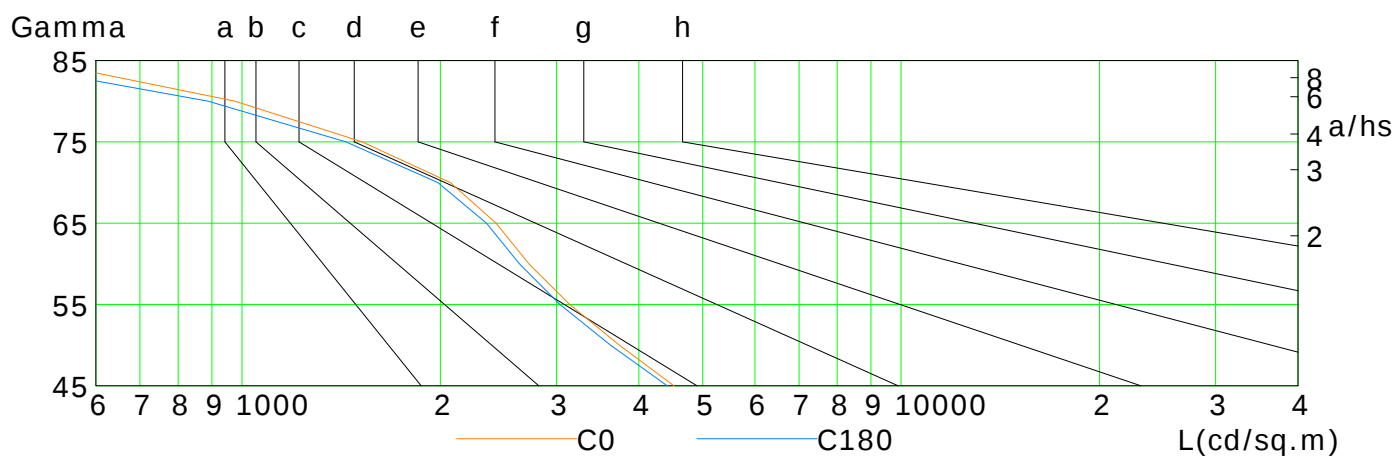
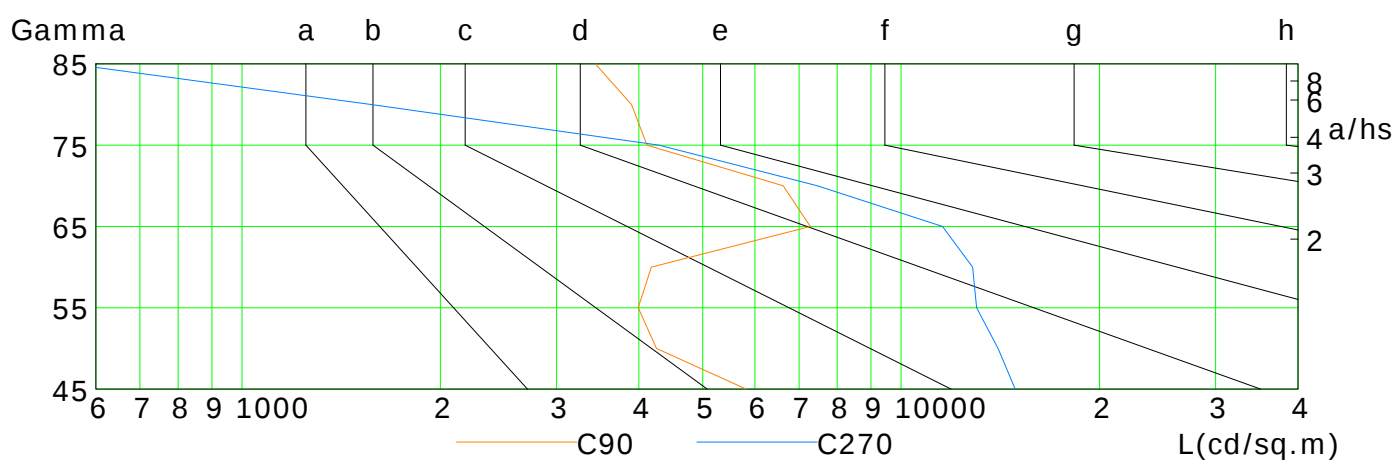
Humidity:

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	4522	3736	3142	2725	2429	2071	1521	976	486
C90	5817	4253	3991	4179	7280	6623	4116	3899	3436
C180	4416	3624	3037	2635	2349	1982	1438	889	405
C270	14895	14032	13019	12838	11554	7465	4291	1570	548

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Temperature:

Operator:

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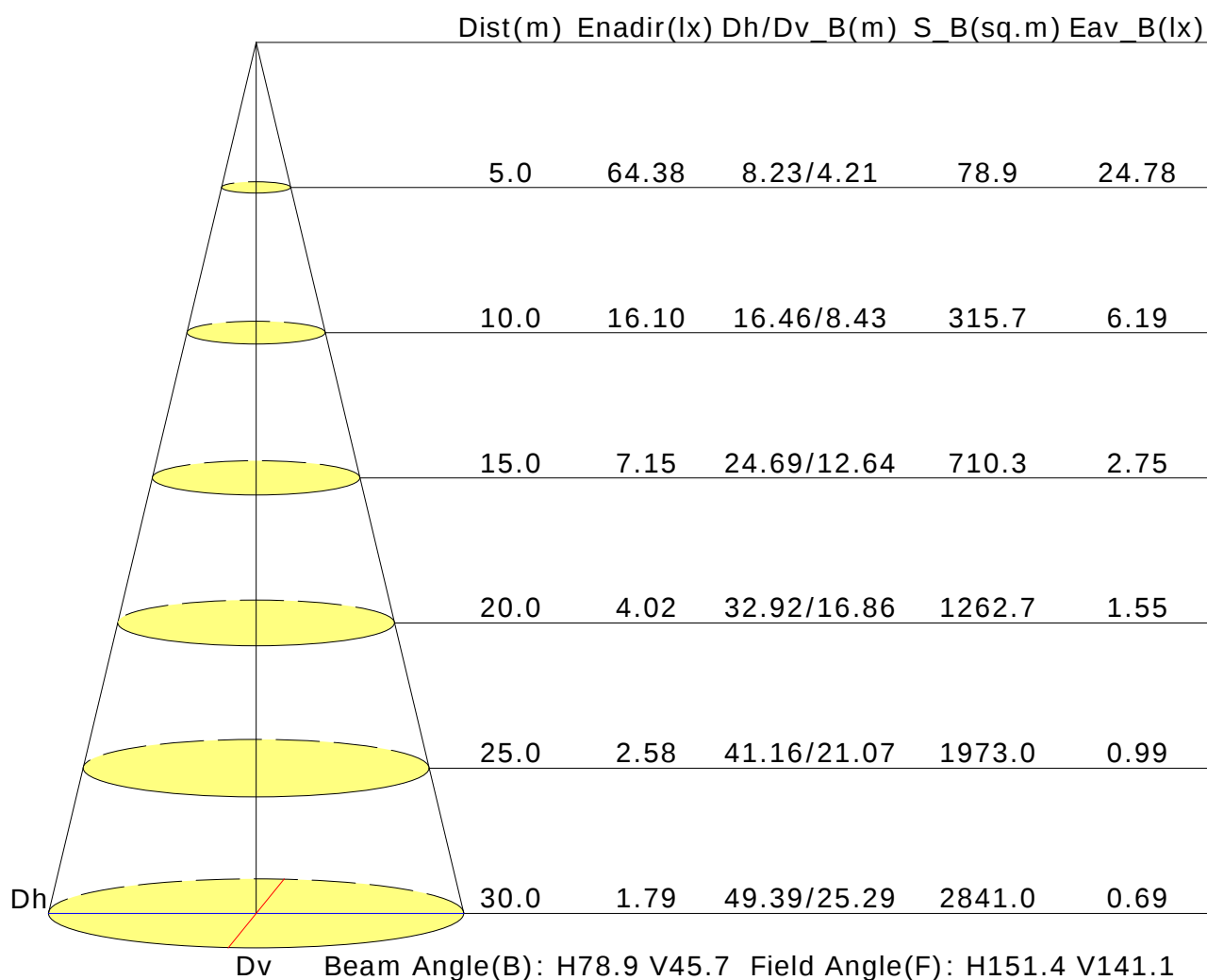
Test Device: LSG-1800B

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	18.2	19.5	18.5	19.8	20.0	19.6	20.9	19.9	21.2	21.4
3H	18.8	20.0	19.2	20.3	20.6	21.0	22.2	21.3	22.5	22.7
4H	19.0	20.1	19.4	20.4	20.7	21.2	22.3	21.5	22.6	22.9
6H	19.1	20.2	19.5	20.5	20.8	21.2	22.3	21.6	22.6	22.9
8H	19.1	20.1	19.5	20.5	20.8	21.3	22.2	21.6	22.6	22.9
12H	19.1	20.1	19.5	20.4	20.8	21.2	22.2	21.6	22.5	22.9
X=4H Y=2H	18.7	19.8	19.1	20.1	20.4	19.9	21.0	20.3	21.3	21.7
3H	19.6	20.5	20.0	20.9	21.2	21.4	22.4	21.8	22.7	23.1
4H	19.9	20.7	20.3	21.1	21.5	21.7	22.5	22.1	22.9	23.3
6H	20.0	20.8	20.5	21.2	21.6	21.8	22.5	22.2	22.9	23.3
8H	20.1	20.8	20.5	21.2	21.6	21.8	22.5	22.3	22.9	23.3
12H	20.1	20.7	20.5	21.1	21.6	21.8	22.4	22.3	22.9	23.3
X=8H Y=4H	20.1	20.8	20.5	21.2	21.6	21.8	22.4	22.2	22.9	23.3
6H	20.3	20.9	20.8	21.3	21.8	21.9	22.4	22.4	22.9	23.4
8H	20.4	20.9	20.9	21.4	21.9	21.9	22.4	22.4	22.9	23.4
12H	20.5	20.9	21.0	21.4	21.9	22.0	22.4	22.5	22.9	23.4
X=12H Y=4H	20.1	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	21.9	22.4	22.4	22.8	23.3
8H	20.4	20.9	20.9	21.3	21.9	21.9	22.4	22.4	22.8	23.4
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 4227lm ($8\log(F/F_0) = 5.0$).

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												

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(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												