

Report No.:

Test Time: 25.03.2020 20:39

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FL 58 L 60LED 32W 5000K 104x90 gr.

Number of Lamps: 1

Luminous Length (mm): 1500

Luminous Width (mm): 75

Luminous Height (mm): 60

Voltage: 229.0 V

Current: 0.146 A

Power: 31.92 W

Power Factor: 0.957

Photometric Results

CIE Class: Direct

Total Rated Lamp Lumens: 4368.5 lm

Measurement Flux: 4368.5 lm

Efficiency: 100%

Downward Ratio: 99%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 162.3, 127.3, 136.8, 137.2

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 103.0, 85.2, 85.5, 85.5

Luminaire Efficacy Rating (LER): 136.91

Central Intensity: 2016.7 cd

Max. Intensity: 2085.84 cd

Pos of Max. Intensity: H90 V16

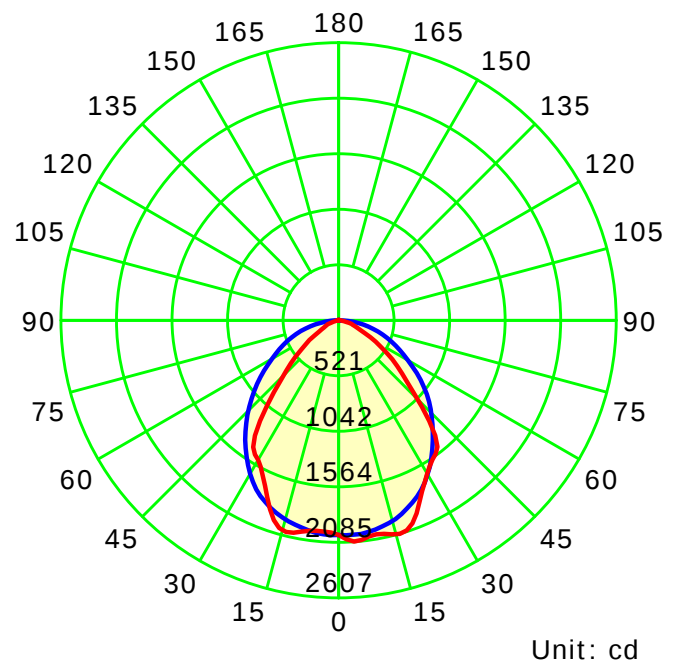
S/MH(C0/C180): 1.22

S/MH(C90/C270): 1.18

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

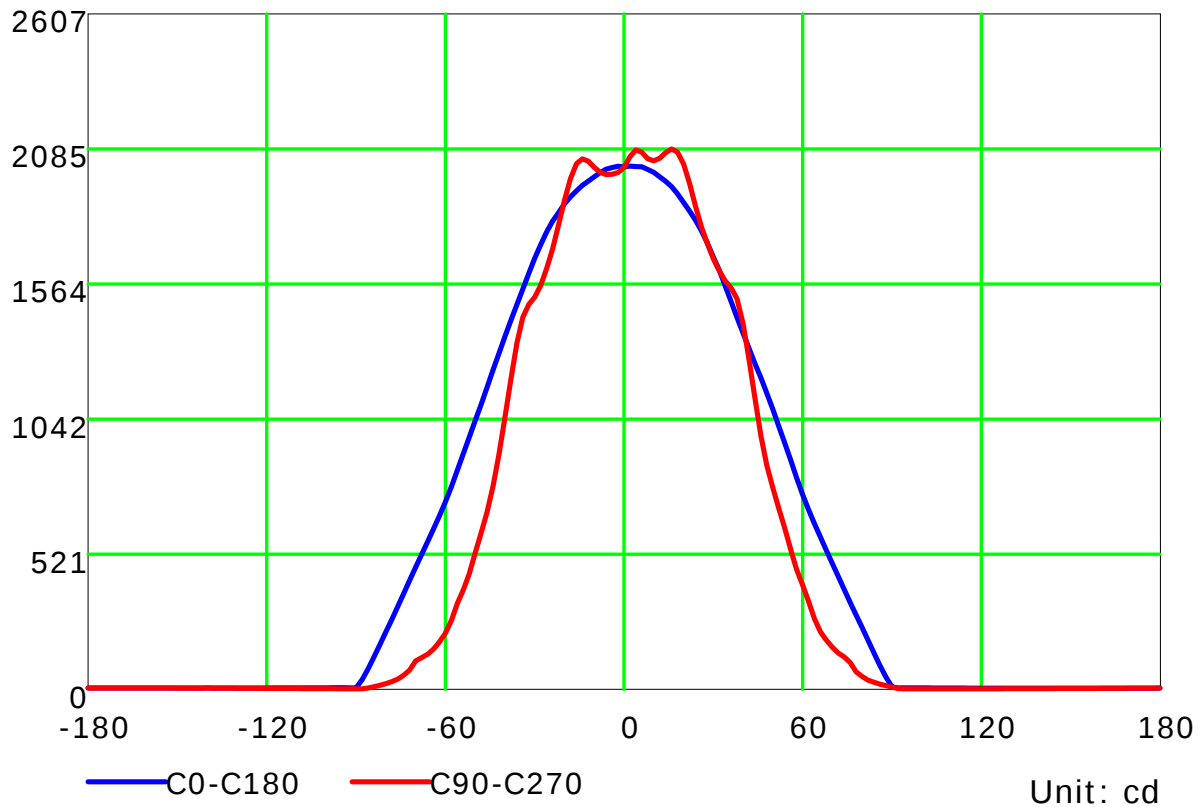
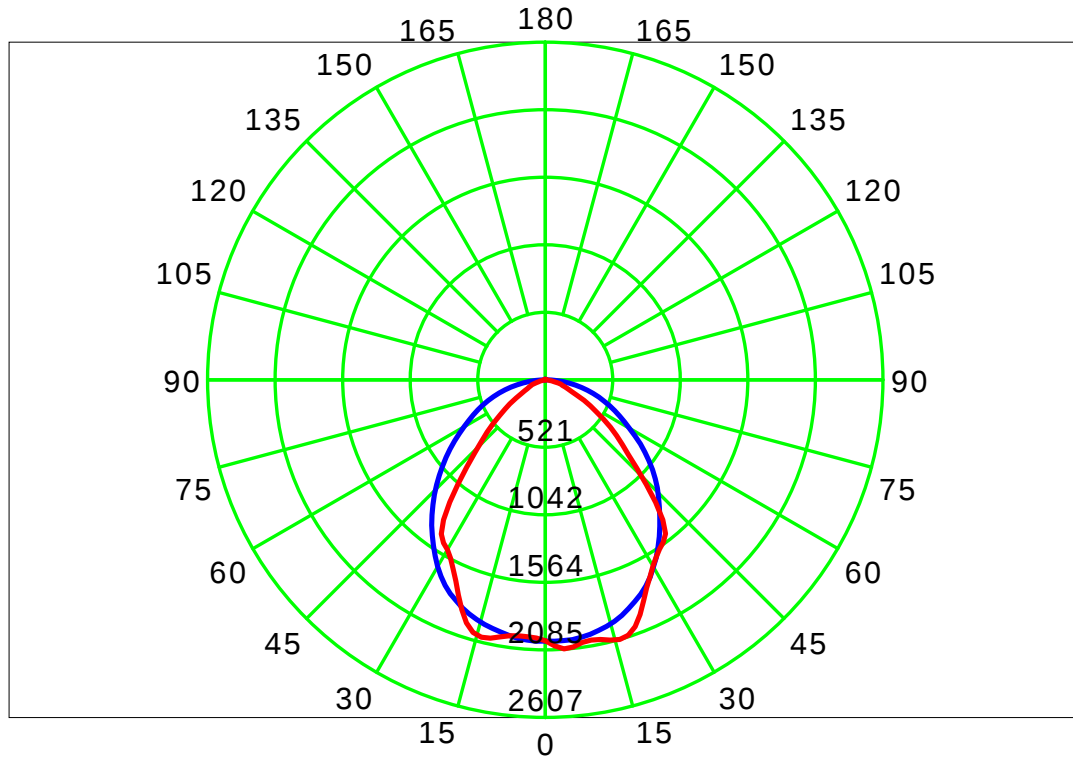
Temperature:

Humidity:

Operator:

Inspector:

Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 22.5

Test Lab:

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Temperature:

Operator:

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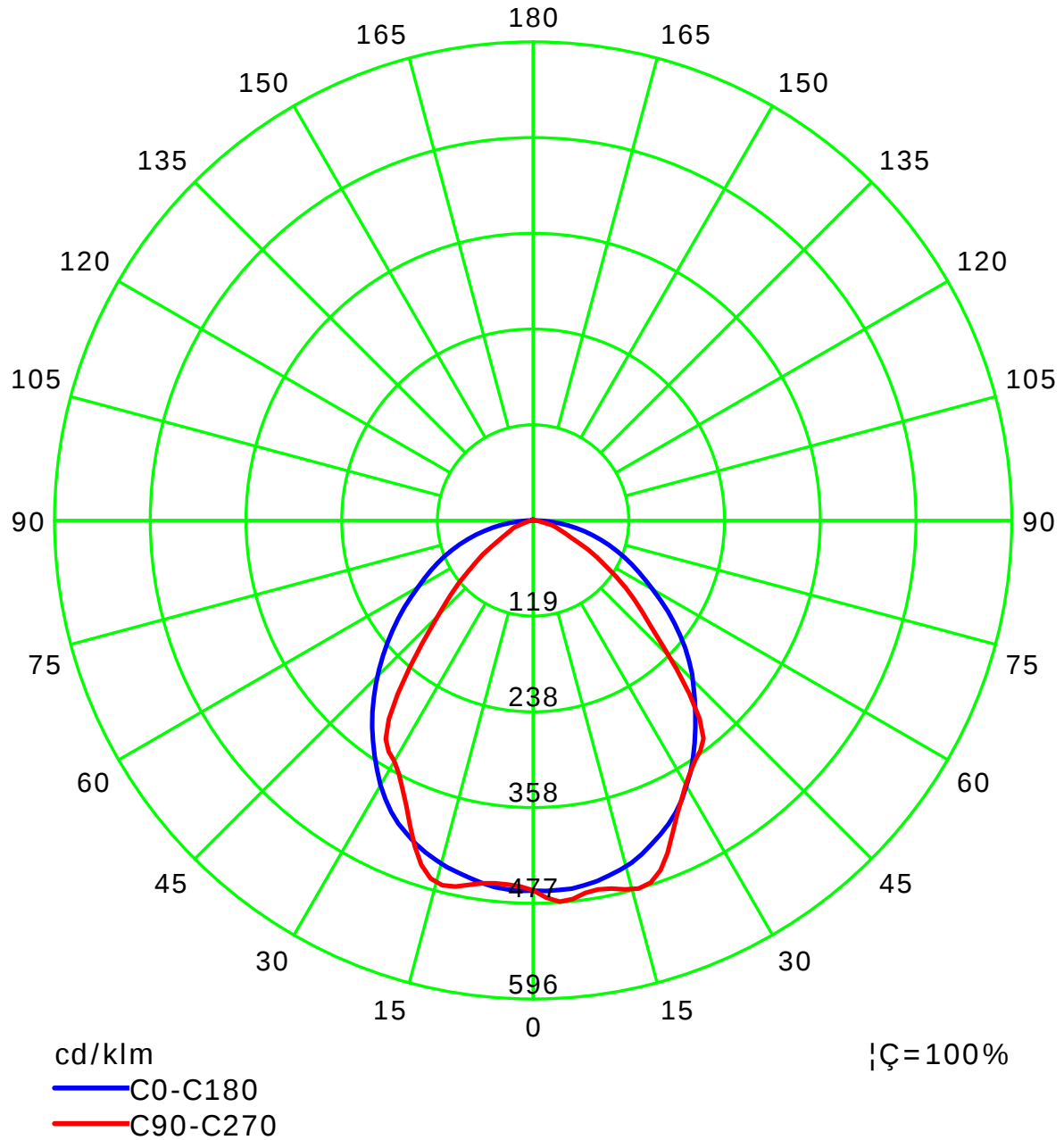
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve(cd / klm)



C Plane (°): 0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°): 0.0-180.0: 2.0

Test Device: LSG-1800B

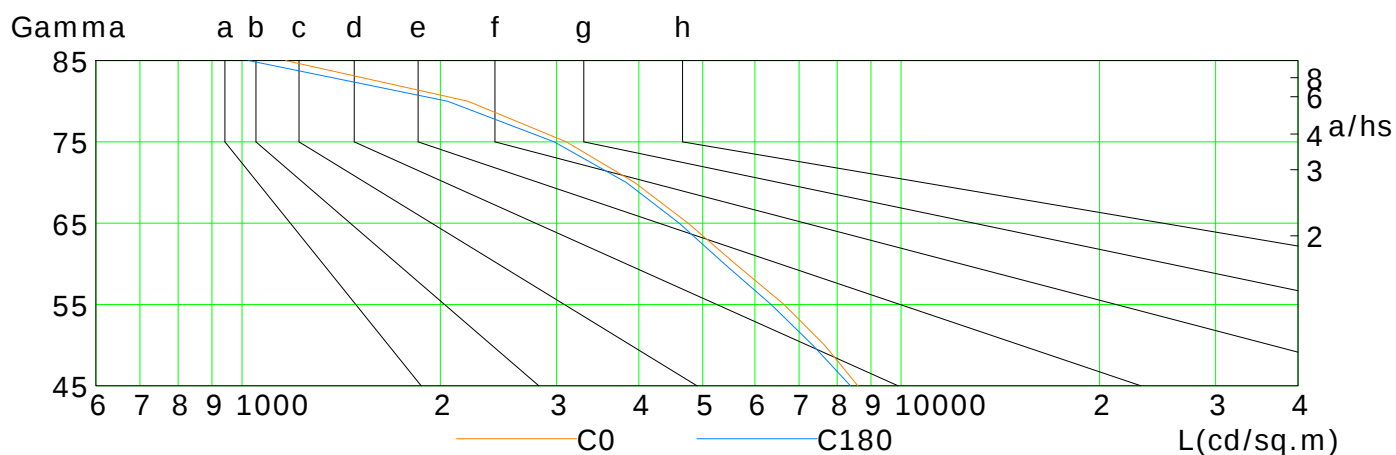
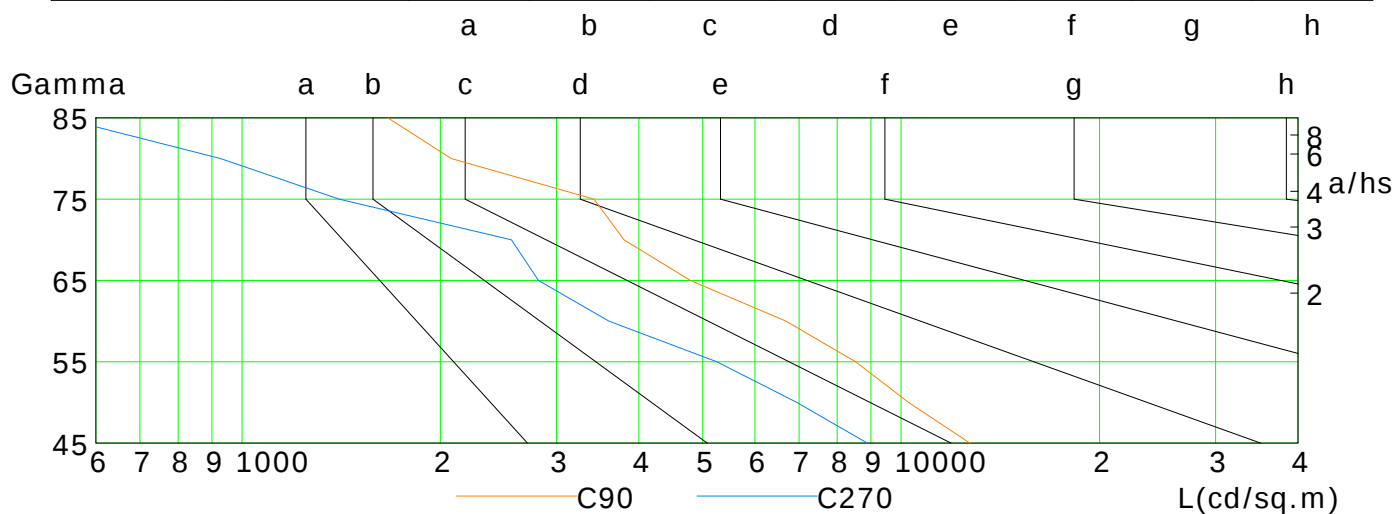
Distance: 12.677 m

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	8594	7654	6643	5601	4752	3943	3105	2201	1165
C90	12715	10261	8527	6687	4788	3798	3420	2077	1664
C180	8380	7342	6350	5391	4606	3829	2976	2050	1023
C270	8885	6948	5251	3602	2816	2563	1404	927	531

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

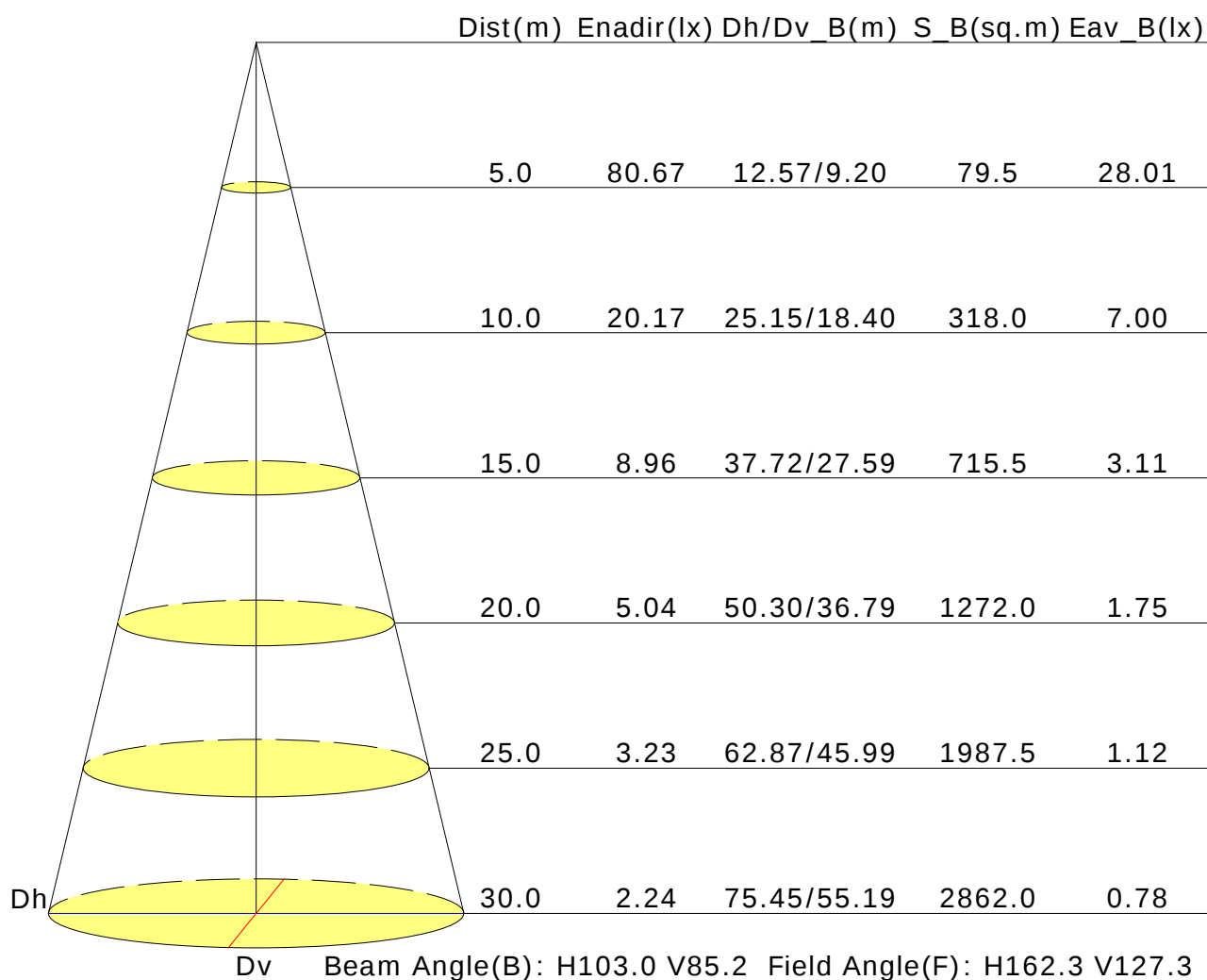
Test Device: LSG-1800B

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	18.4	19.7	18.7	19.9	20.2	17.8	19.1	18.1	19.3	19.6
3H	19.6	20.7	19.9	21.0	21.3	18.2	19.3	18.5	19.6	19.8
4H	20.1	21.1	20.4	21.4	21.7	18.3	19.3	18.6	19.6	19.9
6H	20.4	21.4	20.8	21.7	22.0	18.3	19.3	18.7	19.6	19.9
8H	20.5	21.4	20.9	21.8	22.1	18.3	19.2	18.7	19.6	19.9
12H	20.5	21.4	20.9	21.8	22.1	18.3	19.2	18.7	19.5	19.9
X=4H Y=2H	18.6	19.7	19.0	19.9	20.2	18.1	19.1	18.4	19.4	19.7
3H	19.8	20.7	20.2	21.1	21.4	18.5	19.4	18.9	19.7	20.1
4H	20.4	21.2	20.8	21.6	21.9	18.6	19.4	19.0	19.8	20.2
6H	20.8	21.5	21.3	21.9	22.3	18.7	19.4	19.1	19.8	20.2
8H	21.0	21.6	21.4	22.0	22.4	18.7	19.3	19.1	19.8	20.2
12H	21.0	21.6	21.5	22.1	22.5	18.7	19.3	19.2	19.7	20.2
X=8H Y=4H	20.4	21.0	20.8	21.4	21.9	18.7	19.3	19.1	19.7	20.2
6H	20.8	21.4	21.3	21.8	22.3	18.8	19.3	19.2	19.7	20.2
8H	21.0	21.5	21.5	21.9	22.4	18.8	19.2	19.3	19.7	20.2
12H	21.1	21.5	21.6	22.0	22.5	18.8	19.2	19.3	19.7	20.2
X=12H Y=4H	20.3	20.9	20.8	21.4	21.8	18.7	19.3	19.1	19.7	20.1
6H	20.8	21.3	21.3	21.7	22.2	18.8	19.2	19.3	19.7	20.2
8H	21.0	21.4	21.5	21.9	22.4	18.8	19.2	19.3	19.7	20.2
Variations with the observer position at spacings:										
S=1.0H	+0.3/-0.5					+0.7/-1.1				
S=1.5H	+0.8/-1.1					+1.3/-2.6				
S=2.0H	+1.6/-2.0					+2.8/-3.5				

Calculate in accordance with CIE Pub.117. The table is revised with 4368lm ($8\log(F/F_0) = 5.1$).

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 = 1.25									
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	0.65	0.75	0.82	0.86	0.92	0.97	1.00	1.03	1.06	
	0.30		0.59	0.68	0.75	0.80	0.87	0.92	0.95	1.00	1.03	
	0.20		0.54	0.63	0.70	0.76	0.83	0.88	0.92	0.97	1.00	
0.50	0.50	0.20	0.64	0.73	0.79	0.84	0.89	0.93	0.96	0.99	1.02	
	0.30		0.58	0.67	0.74	0.79	0.85	0.89	0.92	0.97	0.99	
	0.20		0.53	0.63	0.70	0.74	0.81	0.86	0.89	0.94	0.97	
0.30	0.50	0.20	0.62	0.71	0.77	0.81	0.87	0.90	0.93	0.96	0.98	
	0.30		0.57	0.66	0.72	0.77	0.83	0.87	0.90	0.93	0.96	
	0.20		0.53	0.62	0.69	0.73	0.80	0.84	0.87	0.91	0.94	
0.00	0.00	0.00	0.51	0.60	0.66	0.70	0.76	0.80	0.83	0.87	0.89	
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	0.86	0.70	0.59	0.51	0.41	0.34	0.29	0.22	0.18	
	0.30		0.72	0.60	0.52	0.45	0.37	0.31	0.26	0.21	0.17	
	0.20		0.62	0.52	0.46	0.41	0.33	0.28	0.25	0.20	0.16	
0.50	0.50	0.20	0.83	0.67	0.56	0.49	0.38	0.35	0.27	0.21	0.17	
	0.30		0.70	0.58	0.50	0.44	0.35	0.29	0.25	0.20	0.16	
	0.20		0.61	0.51	0.45	0.40	0.32	0.27	0.24	0.19	0.16	
0.30	0.50	0.20	0.80	0.64	0.54	0.46	0.36	0.30	0.26	0.20	0.16	
	0.30		0.69	0.57	0.48	0.42	0.34	0.28	0.24	0.19	0.15	
	0.20		0.60	0.50	0.44	0.39	0.31	0.26	0.23	0.18	0.15	
0.00	0.00	0.00	0.49	0.40	0.34	0.29	0.23	0.19	0.16	0.13	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 = 1.25									
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	0.17	0.18	0.19	0.20	0.20	0.21	0.22	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	0.07	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	0.20	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		0.06	0.07	0.09	0.10	0.12	0.14	0.15	0.16	0.17	
0.30	0.50	0.20	0.15	0.16	0.17	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												