

Report No.:

Test Time: 25.03.2020 20:39

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FL 58 L 60LED 32W 4000K 104x90 gr.

Number of Lamps: 1

Luminous Length (mm): 1500

Luminous Width (mm): 75

Luminous Height (mm): 60

Voltage: 228.9 V

Current: 0.146 A

Power: 31.92 W

Power Factor: 0.956

Photometric Results

CIE Class: Direct

Total Rated Lamp Lumens: 4306.4 lm

Measurement Flux: 4306.4 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): 134.96

Central Intensity: 1988.08 cd

Max. Intensity: 2056.22 cd

Pos of Max. Intensity: H90 V16

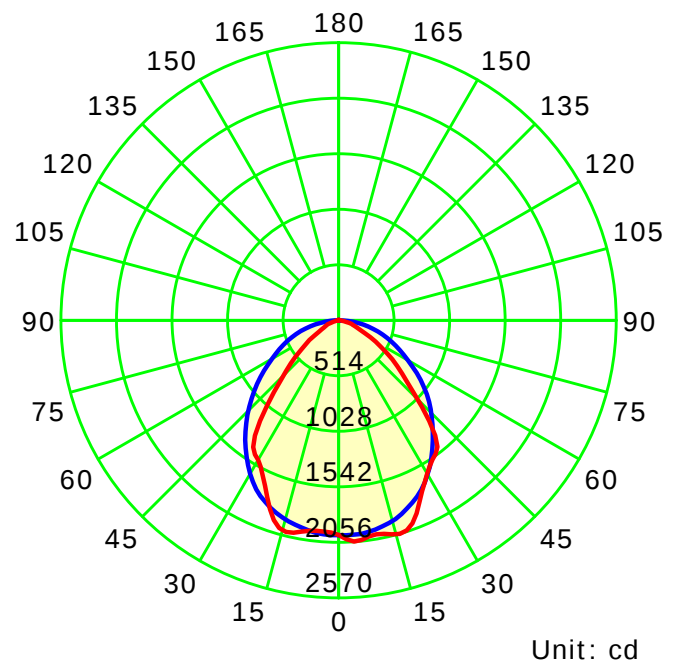
S/MH(C0/C180): 1.22

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

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

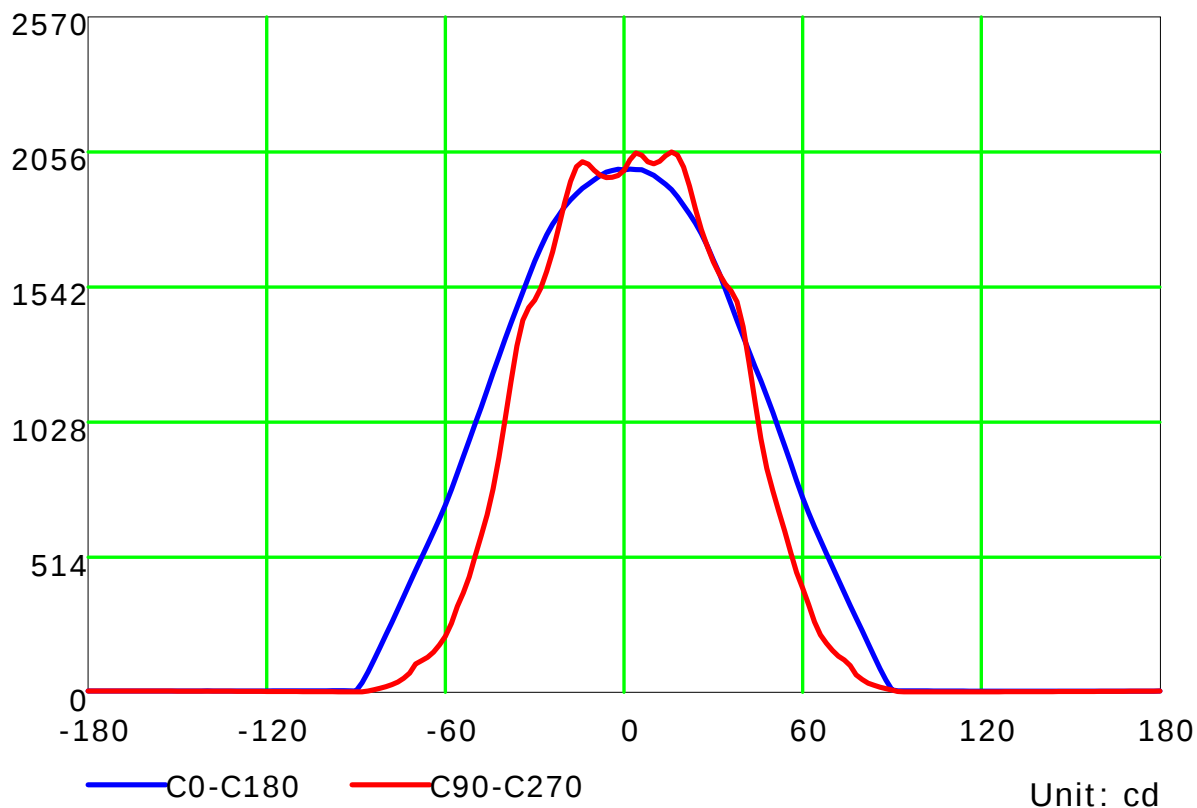
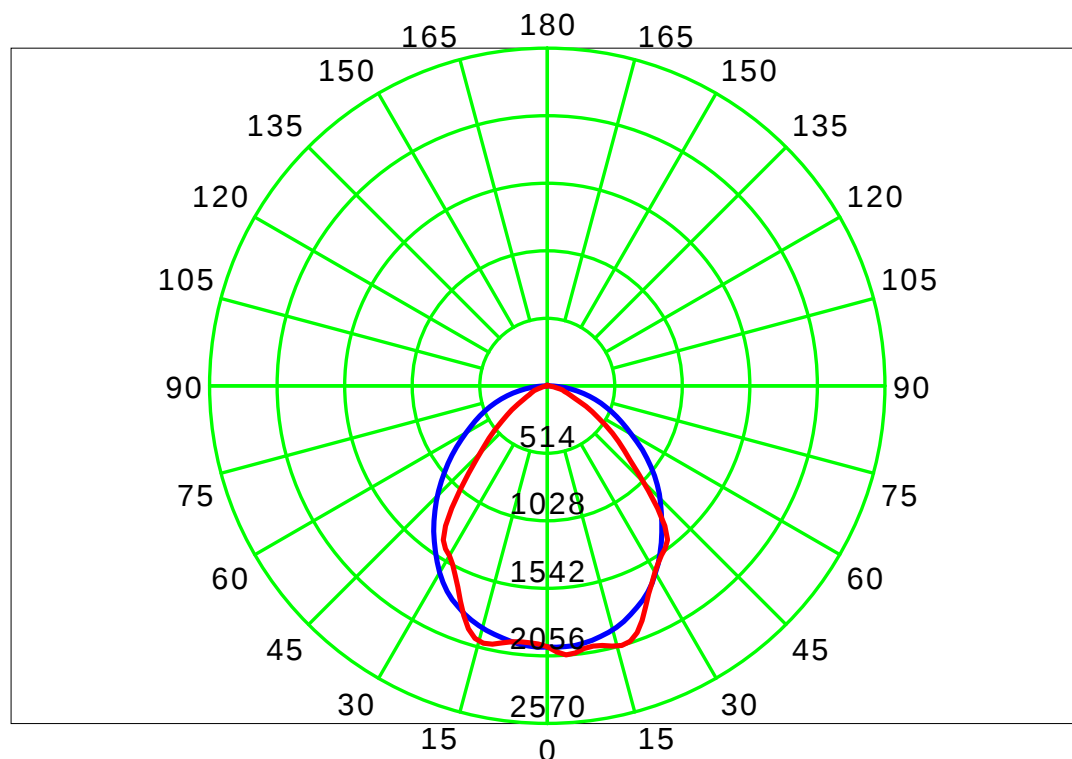
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve



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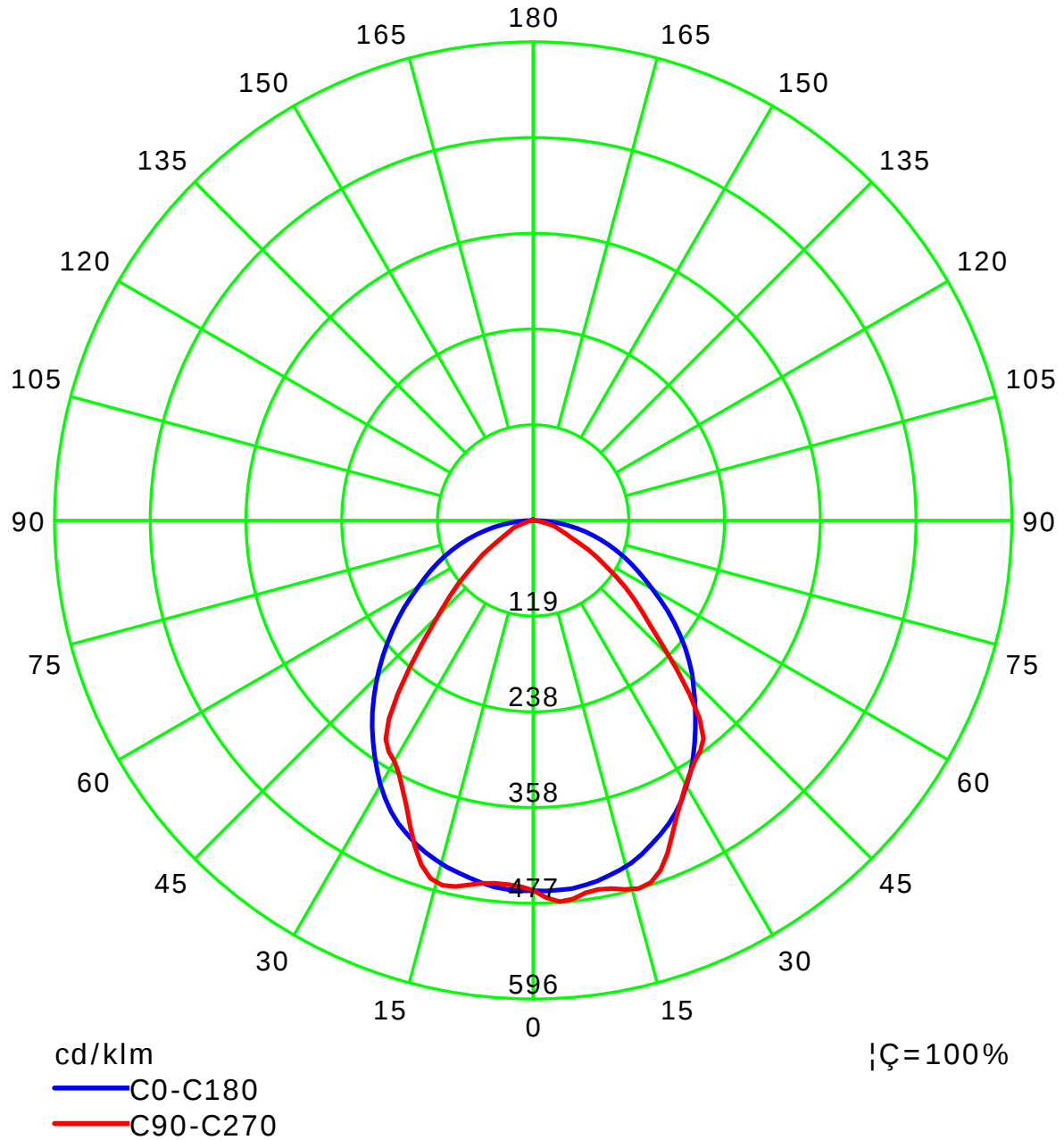
Test Device: LSG-1800B

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

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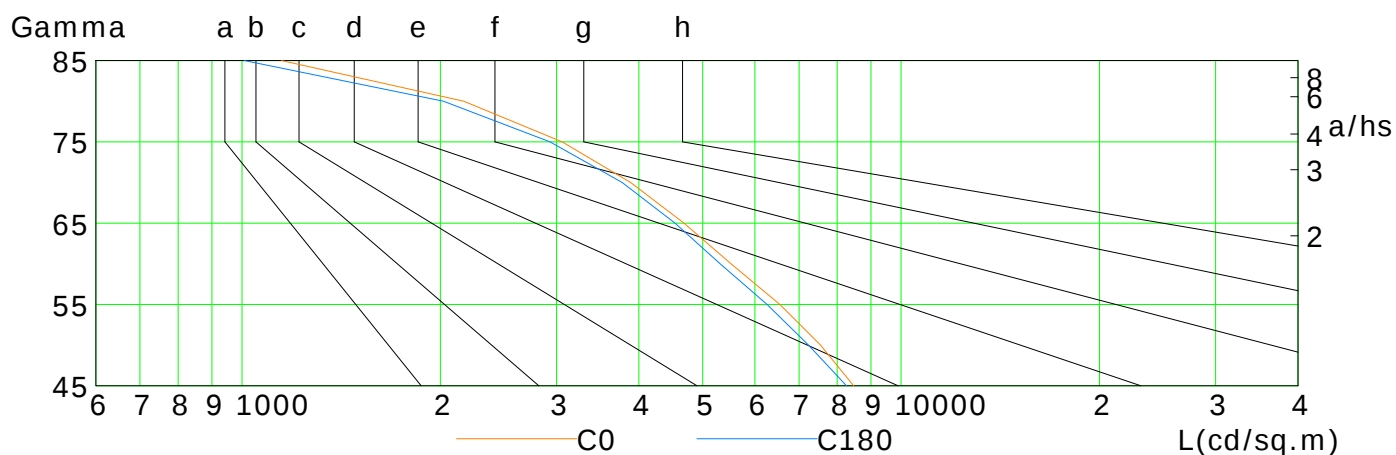
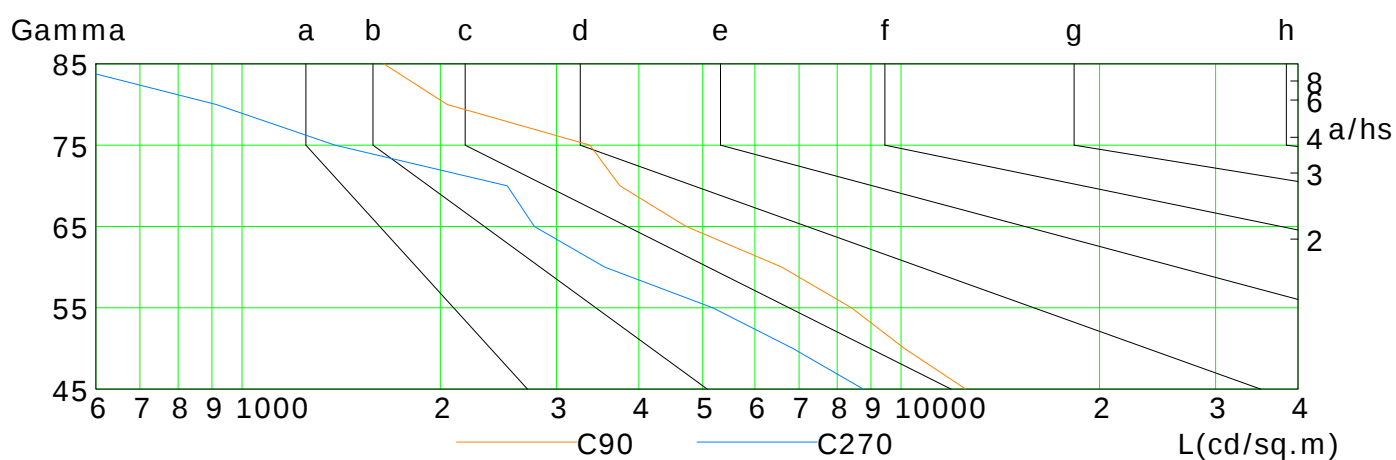
Humidity:

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	8472	7545	6549	5521	4685	3887	3061	2170	1148
C90	12534	10115	8406	6592	4720	3744	3371	2048	1641
C180	8261	7238	6259	5314	4540	3774	2933	2021	1009
C270	8759	6849	5177	3551	2776	2527	1384	914	524

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

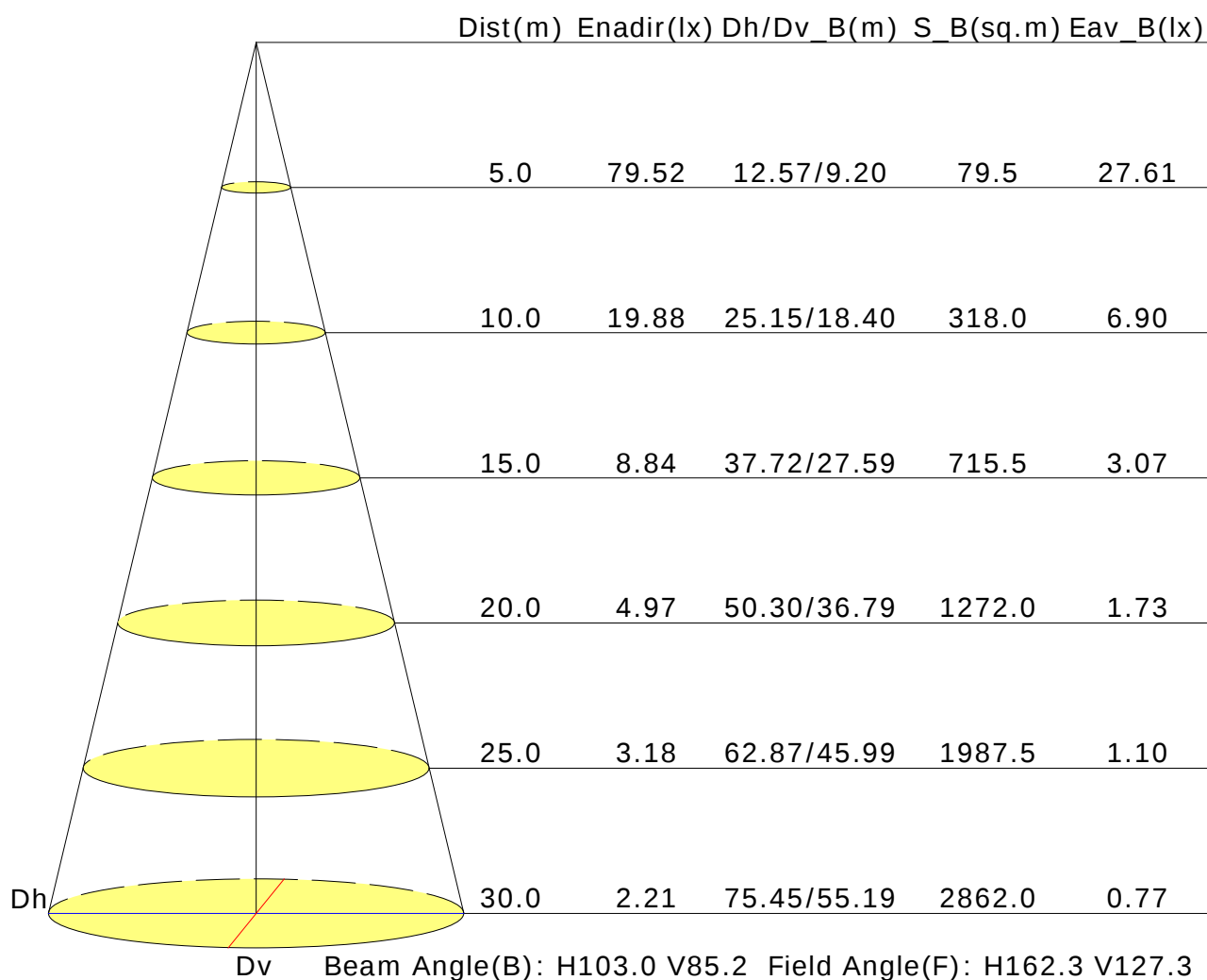
Test Device: LSG-1800B

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	19.6	18.7	19.9	20.1	17.8	19.0	18.1	19.3	19.5
3H	19.5	20.7	19.9	20.9	21.2	18.1	19.2	18.5	19.5	19.8
4H	20.0	21.1	20.4	21.4	21.7	18.2	19.3	18.6	19.6	19.9
6H	20.3	21.3	20.7	21.6	22.0	18.3	19.2	18.6	19.5	19.9
8H	20.4	21.4	20.8	21.7	22.0	18.2	19.2	18.6	19.5	19.8
12H	20.5	21.4	20.9	21.7	22.1	18.2	19.1	18.6	19.5	19.8
X=4H Y=2H	18.6	19.6	18.9	19.9	20.2	18.0	19.1	18.3	19.3	19.6
3H	19.8	20.7	20.2	21.0	21.4	18.4	19.3	18.8	19.7	20.0
4H	20.3	21.2	20.8	21.5	21.9	18.6	19.4	19.0	19.8	20.1
6H	20.8	21.5	21.2	21.9	22.3	18.6	19.4	19.1	19.7	20.2
8H	20.9	21.6	21.4	22.0	22.4	18.6	19.3	19.1	19.7	20.1
12H	21.0	21.6	21.5	22.0	22.5	18.6	19.2	19.1	19.7	20.1
X=8H Y=4H	20.3	21.0	20.8	21.4	21.8	18.6	19.3	19.1	19.7	20.1
6H	20.8	21.3	21.3	21.8	22.2	18.7	19.2	19.2	19.7	20.2
8H	21.0	21.4	21.5	21.9	22.4	18.7	19.2	19.2	19.7	20.2
12H	21.1	21.5	21.6	22.0	22.5	18.7	19.1	19.2	19.6	20.1
X=12H Y=4H	20.3	20.9	20.8	21.3	21.8	18.6	19.2	19.1	19.6	20.1
6H	20.8	21.2	21.3	21.7	22.2	18.7	19.2	19.2	19.6	20.1
8H	21.0	21.4	21.5	21.8	22.3	18.7	19.1	19.2	19.6	20.1
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 4306lm ($8\log(F/F_0) = 5.1$).

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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												