

Report No.:

Test Time: 25.03.2020 23:03

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FL 58 L 105LED 46W 4000K 2x25-90 gr

Number of Lamps: 1

Luminous Length (mm): 1500

Luminous Width (mm): 75

Luminous Height (mm): 60

Voltage: 228.9 V

Current: 0.204 A

Power: 45.53 W

Power Factor: 0.976

Photometric Results

CIE Class: Direct

Total Rated Lamp Lumens: 6458.1 lm

Measurement Flux: 6458.1 lm

Efficiency: 100%

Downward Ratio: 99%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 159.9, 132.0, 133.3, 134.1

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 105.3, 70.6, 84.4, 85.2

Luminaire Efficacy Rating (LER): 141.89

Central Intensity: 1955.79 cd

Max. Intensity: 3853.8 cd

Pos of Max. Intensity: H90 V20

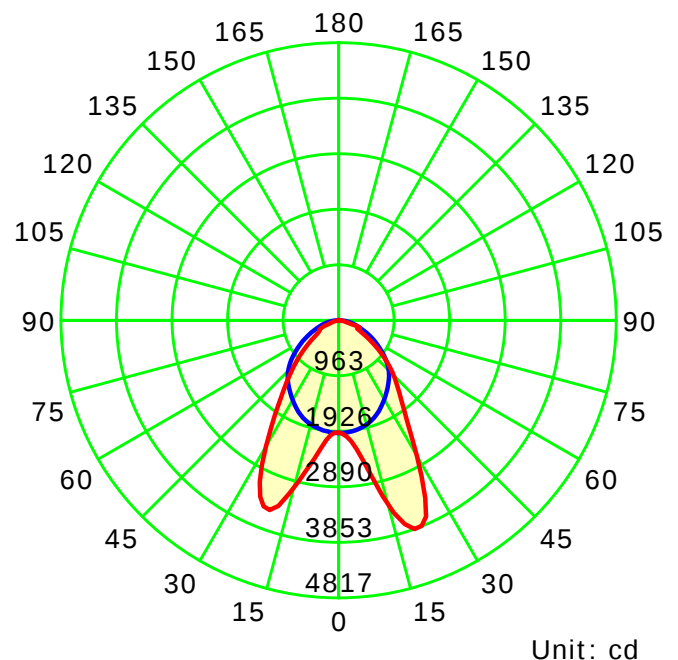
S/MH(C0/C180): 1.21

S/MH(C90/C270): 1.45

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

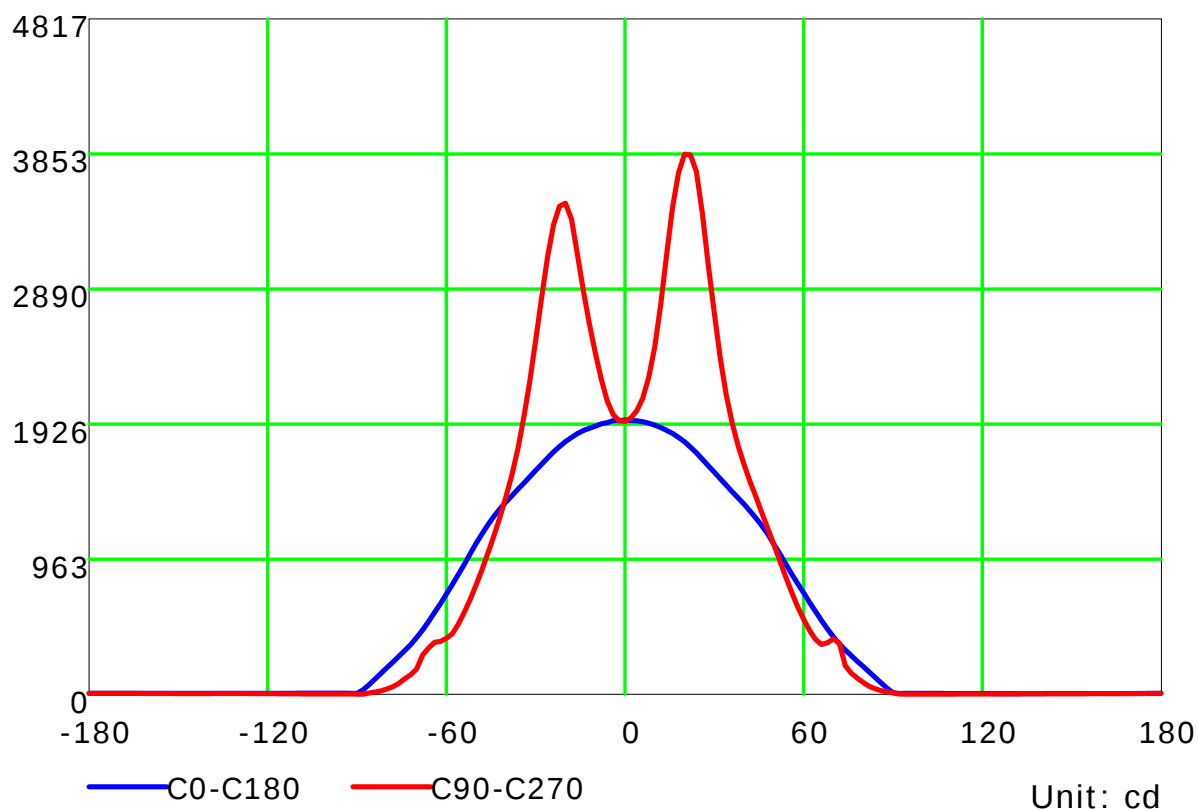
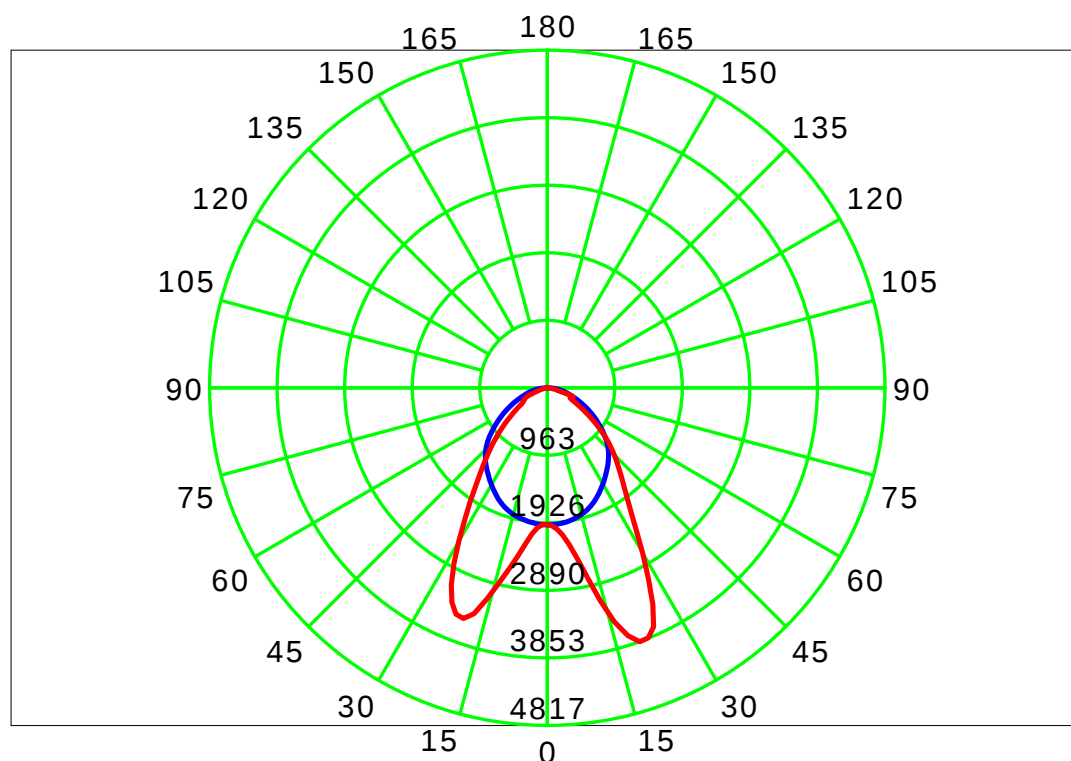
Temperature:

Humidity:

Operator:

Inspector:

Luminous Intensity Distribution Curve



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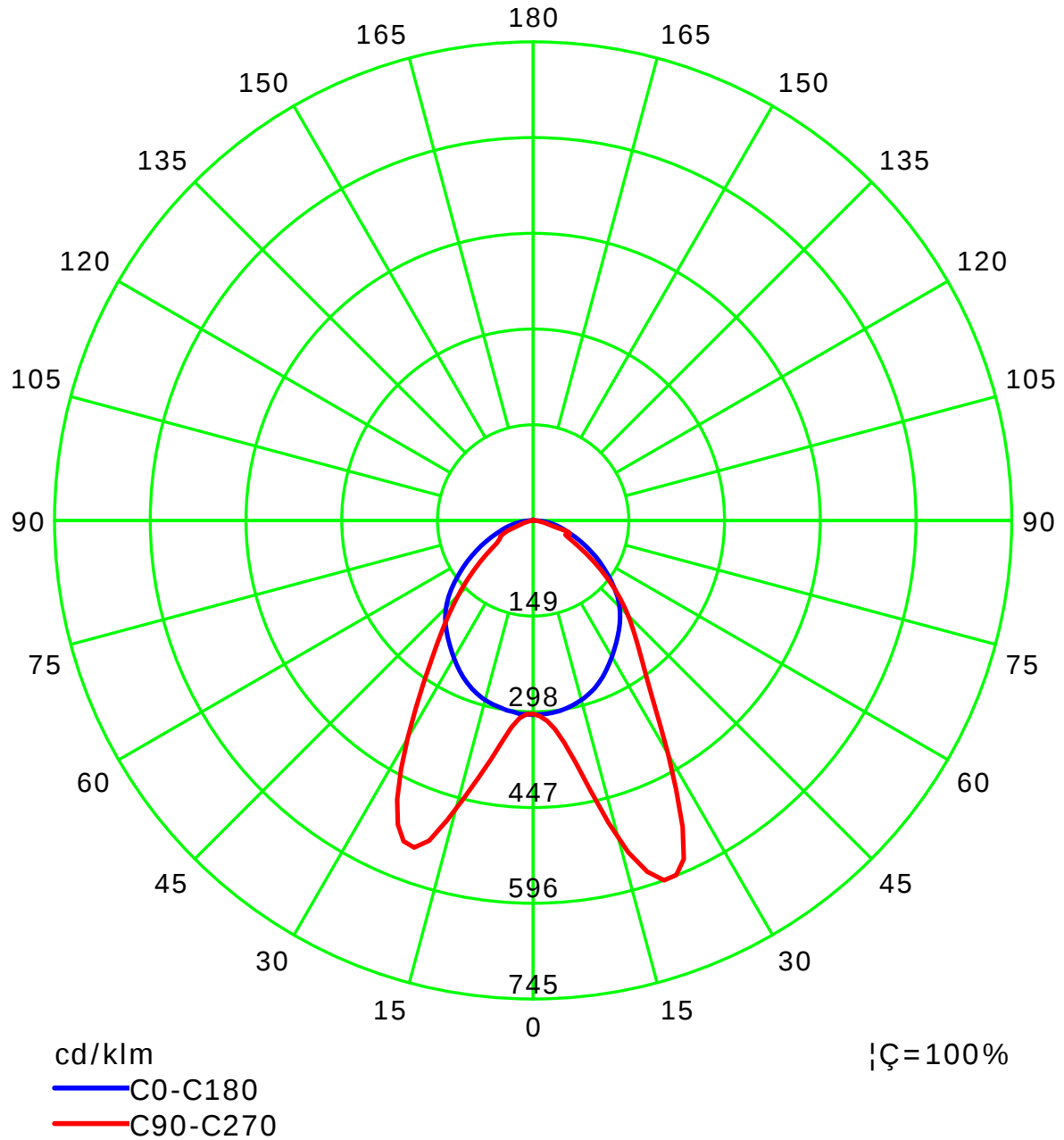
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve(cd / klm)



C Plane (°):0.0-360.0: 22.5

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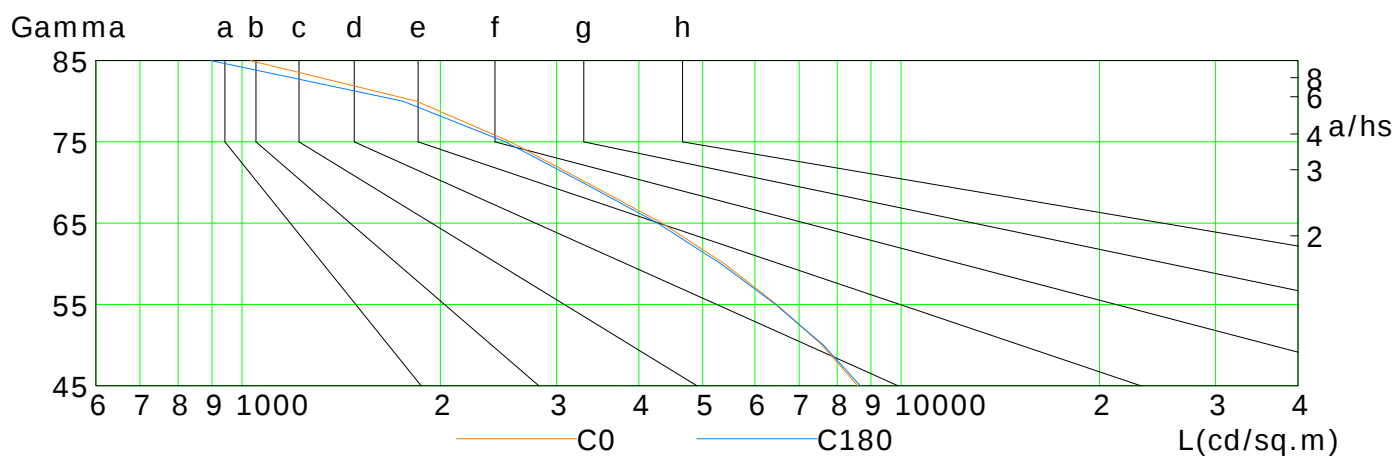
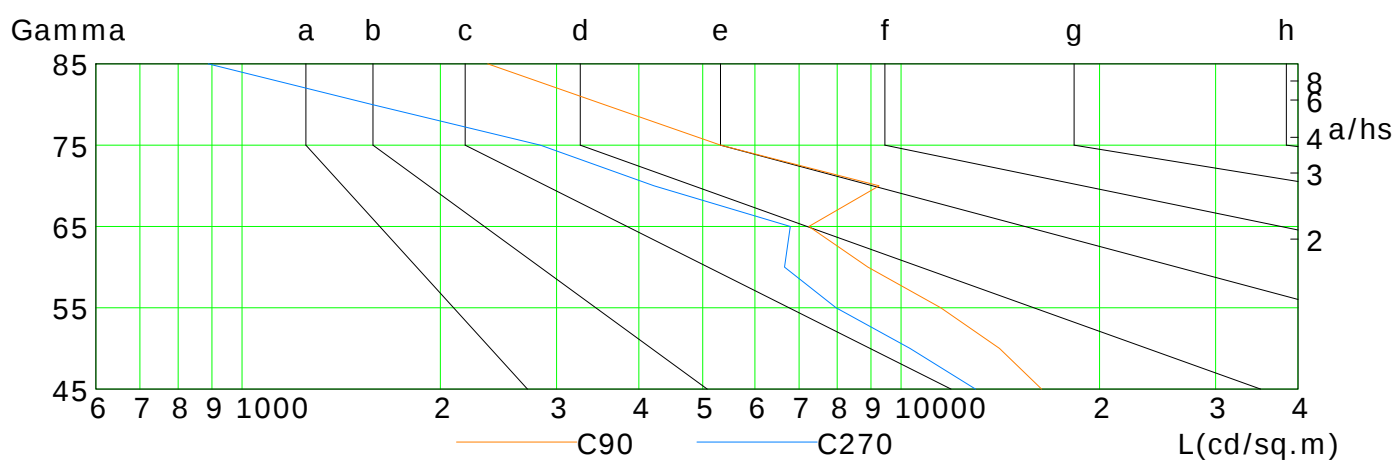
Humidity:

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	8590	7587	6475	5395	4338	3331	2554	1840	1029
C90	16337	14099	11485	8902	7244	9261	5322	3541	2360
C180	8667	7622	6449	5330	4273	3288	2510	1754	897
C270	12968	10312	7968	6655	6790	4219	2836	1575	889

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Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

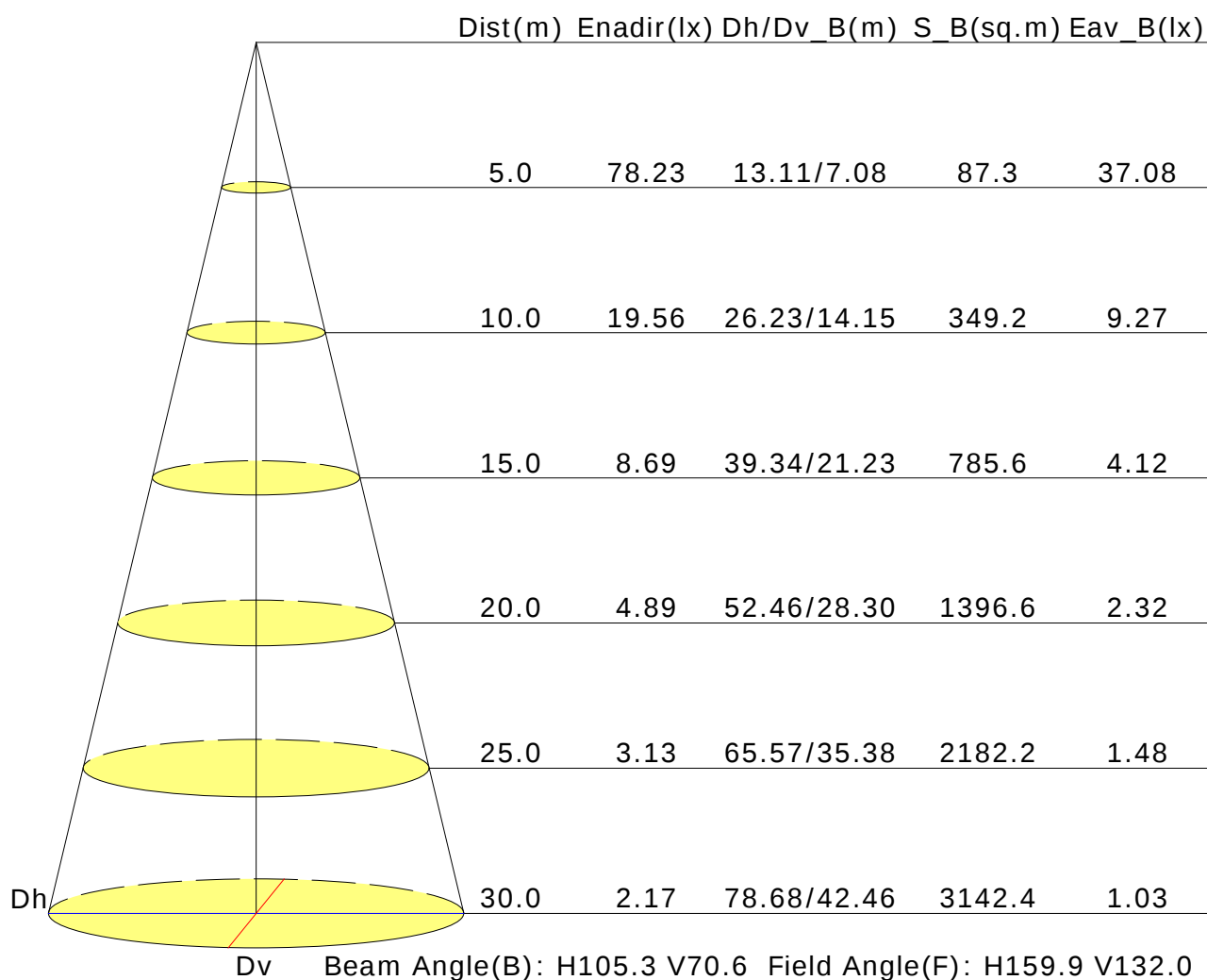
Test Device: LSG-1800B

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	19.9	21.2	20.2	21.4	21.6	18.8	20.1	19.1	20.3	20.6
3H	20.4	21.6	20.8	21.8	22.1	19.6	20.7	19.9	21.0	21.3
4H	20.6	21.7	21.0	22.0	22.3	19.9	20.9	20.2	21.2	21.5
6H	20.8	21.7	21.1	22.1	22.4	19.9	20.9	20.3	21.2	21.5
8H	20.8	21.7	21.2	22.1	22.4	19.9	20.9	20.3	21.2	21.5
12H	20.8	21.7	21.2	22.0	22.4	19.9	20.8	20.3	21.1	21.5
X=4H Y=2H	20.0	21.1	20.3	21.3	21.6	19.1	20.1	19.4	20.4	20.7
3H	20.7	21.6	21.1	21.9	22.3	20.0	20.9	20.4	21.2	21.6
4H	21.0	21.8	21.4	22.2	22.5	20.3	21.1	20.7	21.5	21.9
6H	21.2	21.9	21.6	22.3	22.7	20.4	21.1	20.8	21.5	21.9
8H	21.3	21.9	21.7	22.3	22.8	20.4	21.1	20.9	21.5	21.9
12H	21.3	21.9	21.8	22.3	22.8	20.4	21.0	20.9	21.4	21.9
X=8H Y=4H	21.0	21.7	21.5	22.1	22.5	20.4	21.1	20.8	21.5	21.9
6H	21.3	21.9	21.8	22.3	22.8	20.5	21.1	21.0	21.5	22.0
8H	21.5	21.9	21.9	22.4	22.9	20.6	21.0	21.0	21.5	22.0
12H	21.5	21.9	22.0	22.4	22.9	20.6	21.0	21.1	21.4	22.0
X=12H Y=4H	21.0	21.6	21.5	22.0	22.5	20.4	21.0	20.8	21.4	21.9
6H	21.3	21.8	21.8	22.2	22.7	20.5	21.0	21.0	21.5	22.0
8H	21.5	21.9	22.0	22.3	22.8	20.6	21.0	21.1	21.4	22.0
Variations with the observer position at spacings:										
S=1.0H	+1.1/-1.0					+0.7/-1.0				
S=1.5H	+1.9/-1.8					+1.3/-1.8				
S=2.0H	+3.2/-2.5					+2.4/-1.7				

Calculate in accordance with CIE Pub.117. The table is revised with 6458lm ($8\log(F/F_0) = 6.5$).

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	0.78	0.84	0.88	0.94	0.98	1.01	1.04	1.06	
	0.30		0.64	0.71	0.78	0.83	0.89	0.94	0.97	1.01	1.04	
	0.20		0.59	0.67	0.73	0.78	0.85	0.90	0.93	0.98	1.01	
0.50	0.50	0.20	0.68	0.76	0.82	0.86	0.91	0.95	0.97	1.00	1.02	
	0.30		0.63	0.70	0.76	0.81	0.87	0.91	0.94	0.98	1.00	
	0.20		0.59	0.66	0.73	0.77	0.83	0.88	0.91	0.95	0.98	
0.30	0.50	0.20	0.67	0.74	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	0.72	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	0.79	0.82	0.85	0.88	0.90	
Rating:46W 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	0.79	0.66	0.55	0.48	0.38	0.32	0.27	0.21	0.17	
	0.30		0.66	0.57	0.48	0.42	0.34	0.29	0.25	0.20	0.16	
	0.20		0.57	0.49	0.43	0.38	0.31	0.27	0.23	0.18	0.15	
0.50	0.50	0.20	0.76	0.63	0.53	0.46	0.36	0.33	0.25	0.20	0.16	
	0.30		0.64	0.55	0.47	0.41	0.33	0.27	0.24	0.18	0.15	
	0.20		0.56	0.48	0.42	0.37	0.30	0.26	0.22	0.18	0.15	
0.30	0.50	0.20	0.74	0.60	0.50	0.43	0.34	0.28	0.24	0.18	0.15	
	0.30		0.63	0.53	0.45	0.39	0.31	0.26	0.22	0.18	0.14	
	0.20		0.55	0.47	0.41	0.36	0.29	0.25	0.21	0.17	0.14	
0.00	0.00	0.00	0.43	0.37	0.31	0.26	0.21	0.17	0.15	0.12	0.09	
Rating:46W 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	0.19	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	0.07	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	0.19	0.20	0.20	0.21	
	0.30		0.09	0.11	0.12	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	0.15	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:46W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												