

Report No.:

Test Time: 06.05.2020 17:41

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FL 58 L 200LED 55W Refond 3N 5000K 96x55 rp

Number of Lamps: 1

Luminous Length (mm): 1500

Luminous Width (mm): 75

Luminous Height (mm): 60

Voltage: 229.4 V

Current: 0.226 A

Power: 51.11 W

Power Factor: 0.987

Photometric Results

CIE Class: Direct

Total Rated Lamp Lumens: 8216.7 lm

Measurement Flux: 8216.7 lm

Efficiency: 100%

Downward Ratio: 100%

Upward Ratio: 0%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 134.6, 96.4, 113.3, 113.3

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 95.1, 54.5, 63.2, 63.2

Luminaire Efficacy Rating (LER): 160.82

Central Intensity: 5693.76 cd

Max. Intensity: 5732.3 cd

Pos of Max. Intensity: H157.5 V2

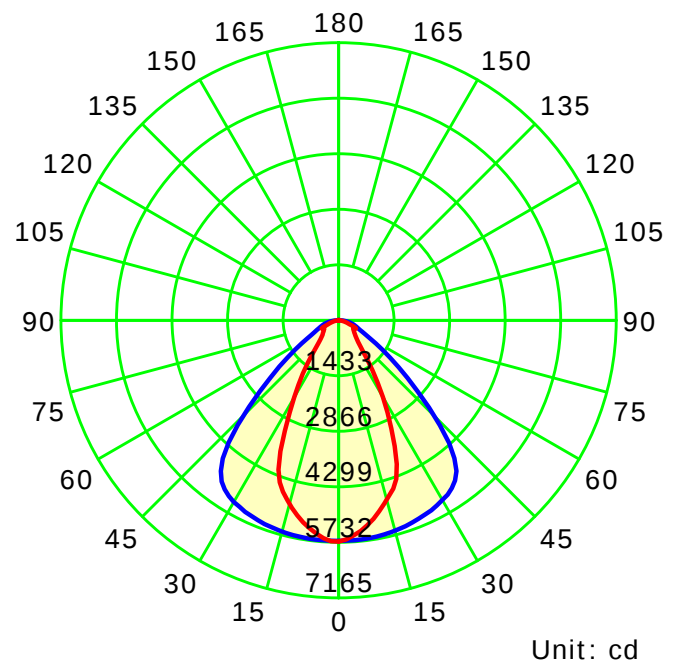
S/MH(C0/C180): 1.40

S/MH(C90/C270): 0.87

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

— 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

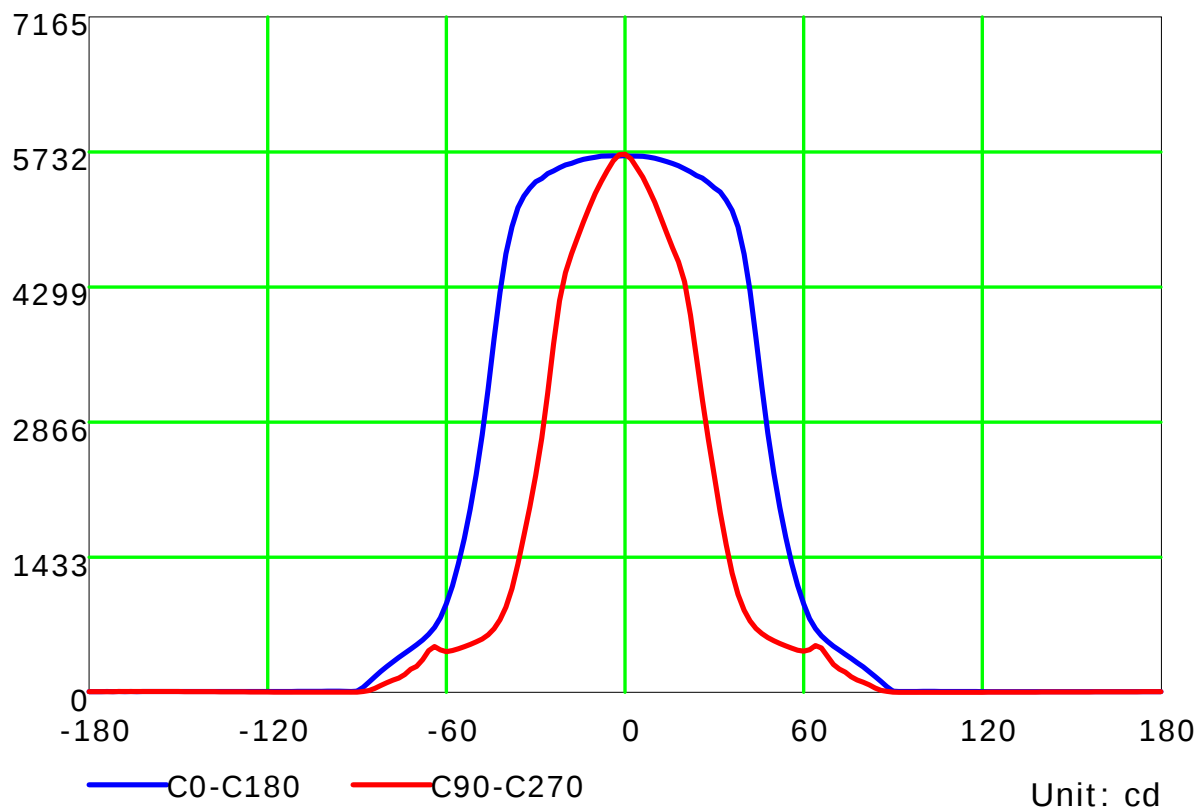
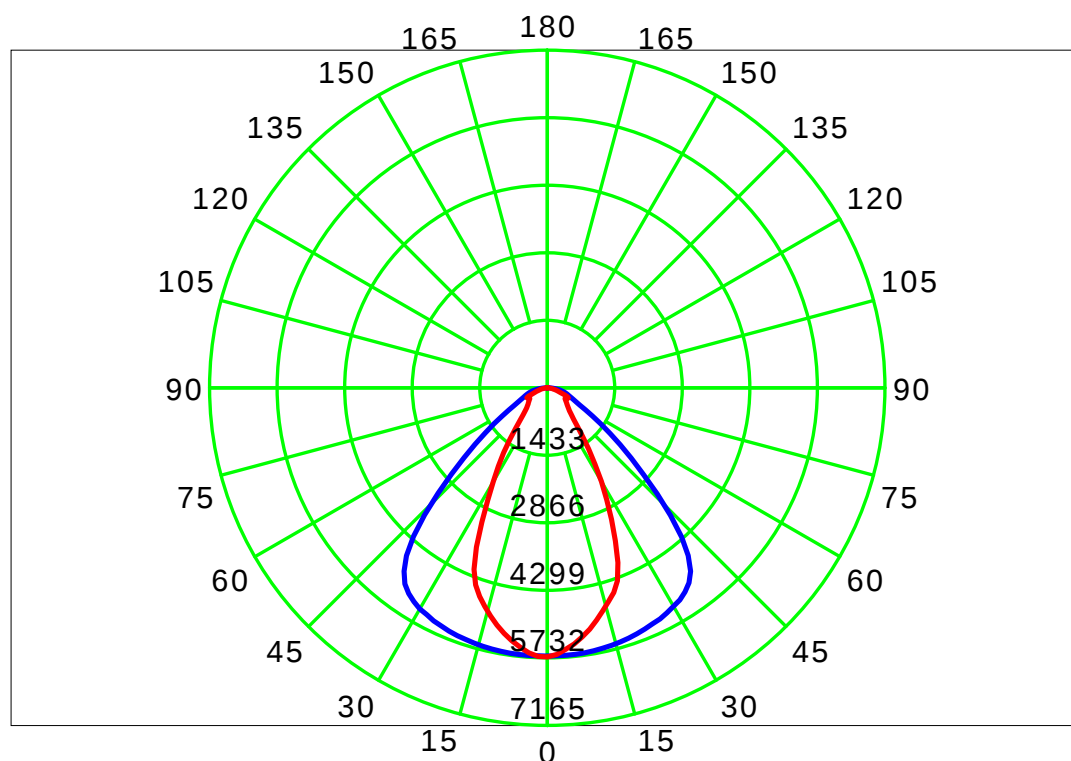
Temperature:

Humidity:

Operator:

Inspector:

Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

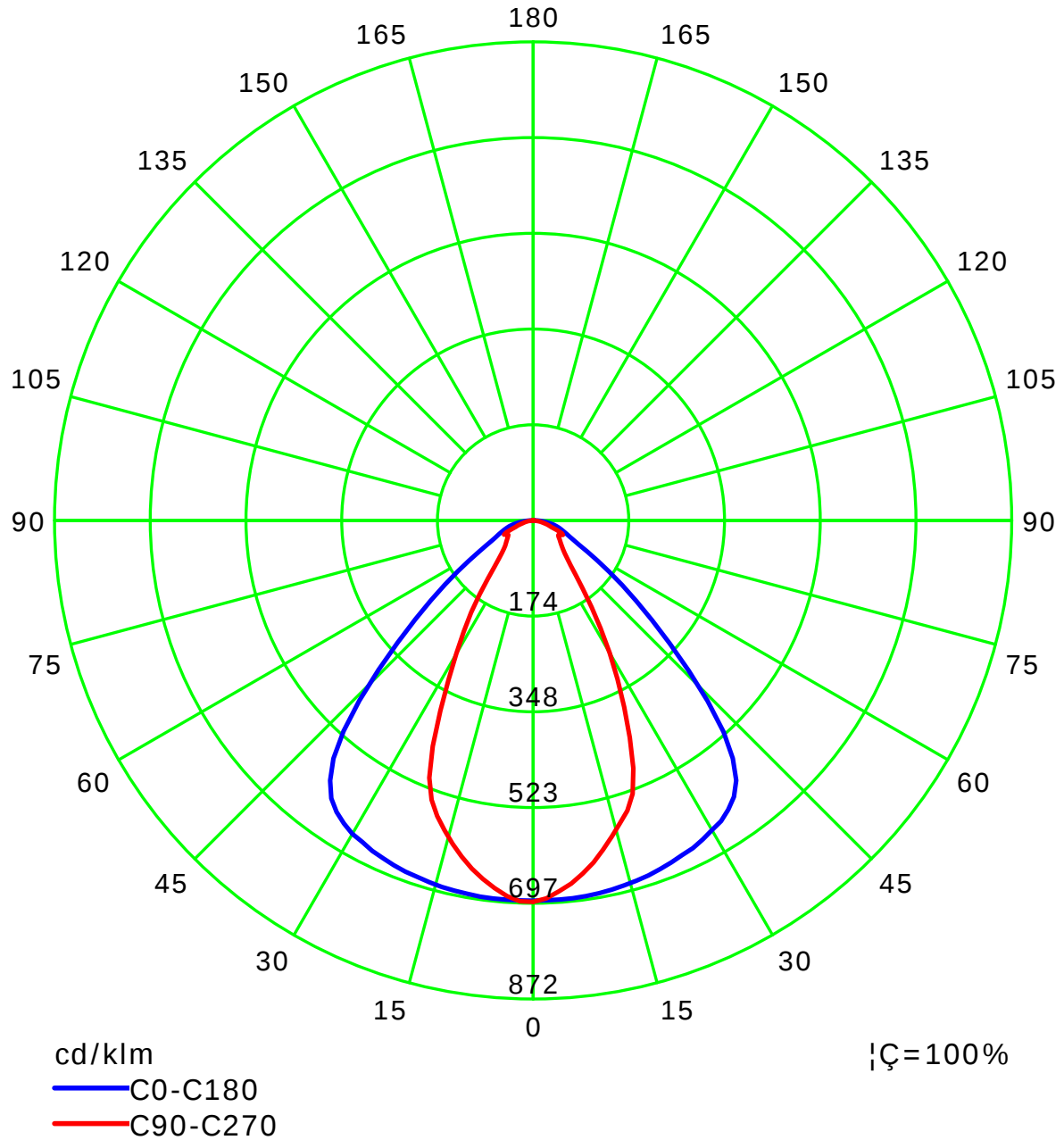
Test Device: LSG-1800B

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

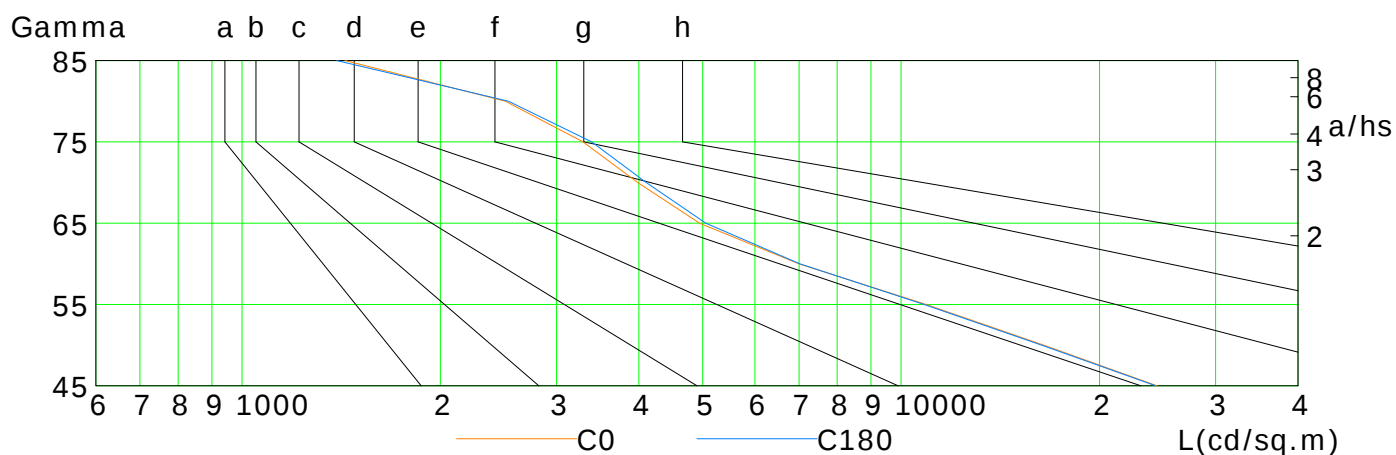
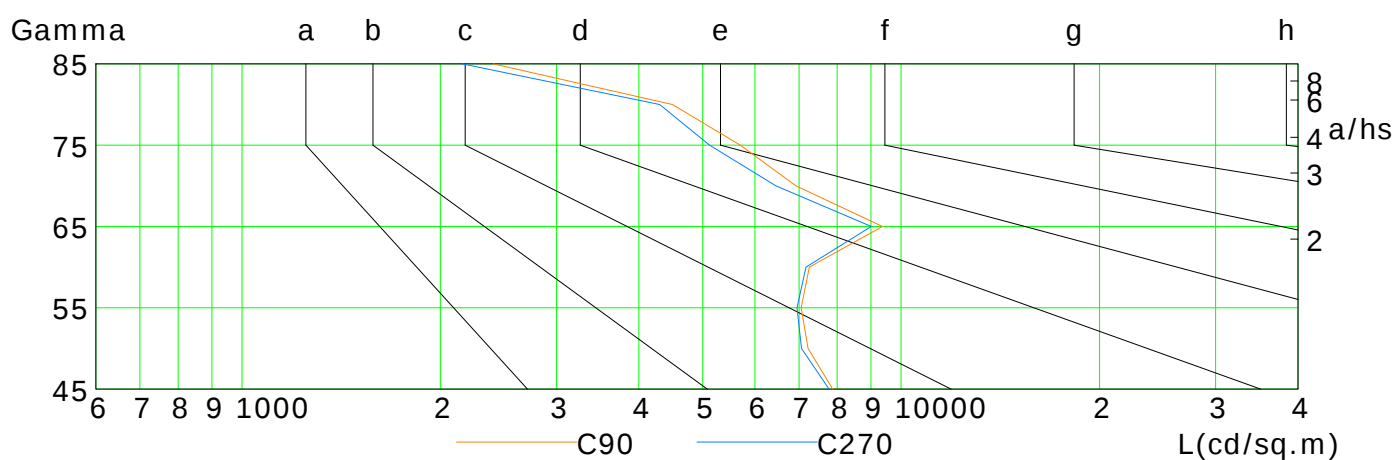
Humidity:

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	24447	16453	10915	6998	4945	3985	3291	2509	1434
C90	7873	7222	7051	7255	9370	6922	5702	4497	2405
C180	24339	16333	10835	7021	5053	4105	3391	2536	1392
C270	7775	7061	6949	7173	9010	6456	5121	4301	2158

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

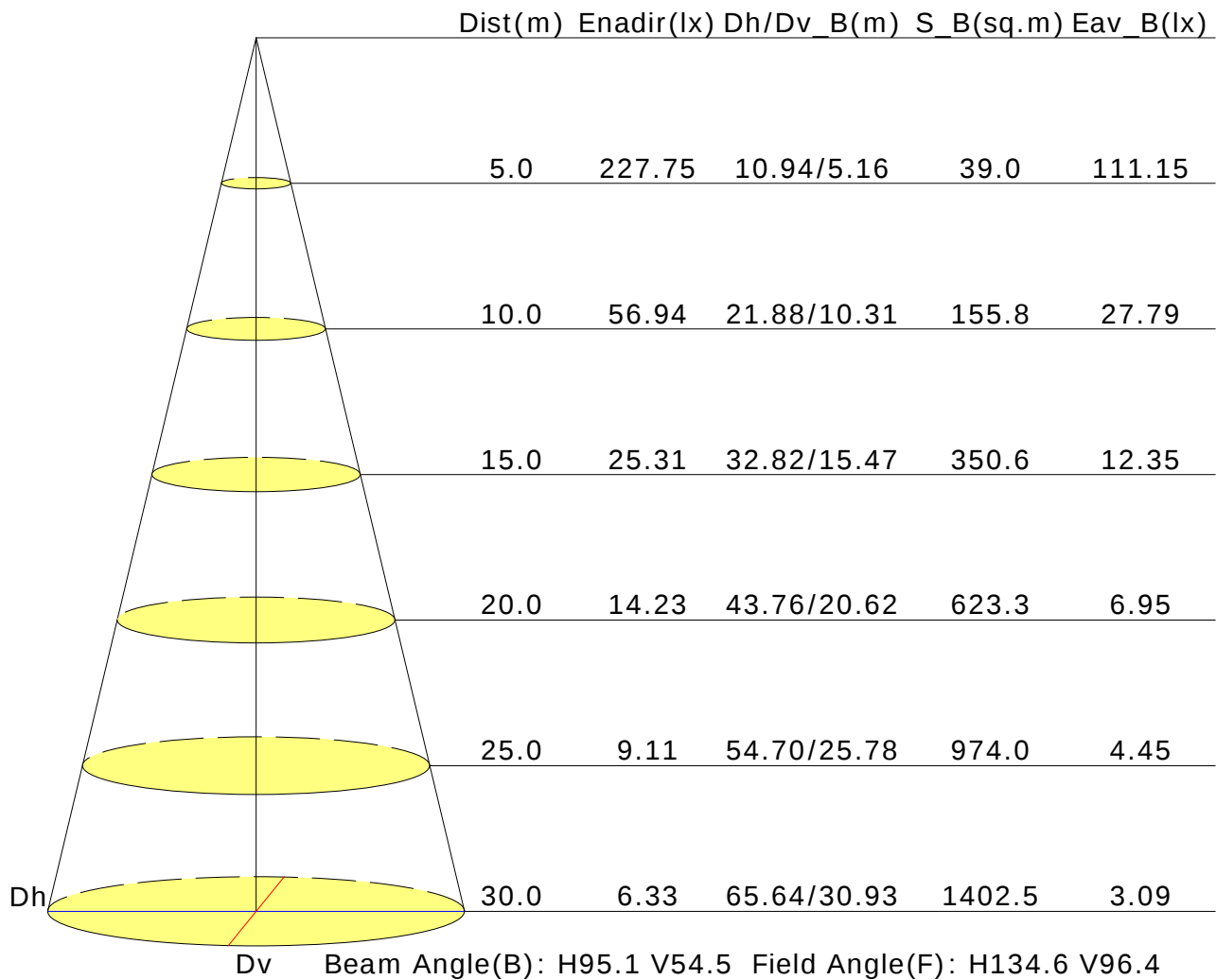
Test Device: LSG-1800B

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	19.9	21.0	20.2	21.3	21.5	16.0	17.2	16.3	17.4	17.6
3H	20.4	21.4	20.7	21.7	22.0	17.8	18.8	18.1	19.0	19.3
4H	20.7	21.6	21.0	21.9	22.2	18.2	19.2	18.5	19.4	19.7
6H	20.9	21.8	21.2	22.1	22.4	18.5	19.3	18.8	19.7	20.0
8H	20.9	21.8	21.3	22.1	22.4	18.5	19.4	18.9	19.7	20.0
12H	20.9	21.8	21.3	22.1	22.4	18.5	19.4	18.9	19.7	20.0
X=4H Y=2H	19.9	20.9	20.3	21.2	21.5	16.6	17.5	16.9	17.8	18.1
3H	20.6	21.4	21.0	21.8	22.1	18.4	19.2	18.8	19.5	19.9
4H	21.0	21.7	21.4	22.1	22.4	18.9	19.6	19.3	20.0	20.4
6H	21.3	21.9	21.7	22.3	22.7	19.2	19.9	19.6	20.3	20.7
8H	21.4	22.0	21.8	22.4	22.8	19.3	19.9	19.8	20.3	20.7
12H	21.4	22.0	21.9	22.4	22.9	19.3	19.9	19.8	20.3	20.8
X=8H Y=4H	21.0	21.6	21.5	22.0	22.4	19.1	19.7	19.5	20.1	20.5
6H	21.4	21.9	21.9	22.3	22.8	19.5	19.9	19.9	20.4	20.9
8H	21.6	22.0	22.1	22.5	22.9	19.6	20.0	20.1	20.5	21.0
12H	21.7	22.0	22.2	22.5	23.0	19.6	20.0	20.1	20.5	21.0
X=12H Y=4H	21.0	21.5	21.5	22.0	22.4	19.1	19.6	19.5	20.0	20.5
6H	21.4	21.8	21.9	22.3	22.8	19.5	19.9	20.0	20.4	20.9
8H	21.6	21.9	22.1	22.4	22.9	19.6	20.0	20.1	20.5	21.0
Variations with the observer position at spacings:										
S=1.0H	+1.2/-1.1					+0.4/-0.3				
S=1.5H	+2.9/-1.8					+1.5/-0.7				
S=2.0H	+4.4/-2.4					+1.9/-0.7				

Calculate in accordance with CIE Pub.117. The table is revised with 8217lm ($8\log(F/F_0) = 7.3$).

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 = 1.00									
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	0.71	0.79	0.85	0.89	0.95	0.99	1.01	1.05	1.07	
	0.30		0.64	0.73	0.79	0.84	0.90	0.94	0.97	1.02	1.04	
	0.20		0.60	0.68	0.75	0.79	0.86	0.91	0.94	0.99	1.02	
0.50	0.50	0.20	0.69	0.77	0.83	0.86	0.92	0.95	0.98	1.01	1.03	
	0.30		0.63	0.72	0.78	0.82	0.88	0.92	0.94	0.98	1.00	
	0.20		0.59	0.68	0.74	0.78	0.84	0.89	0.92	0.96	0.99	
0.30	0.50	0.20	0.68	0.75	0.80	0.84	0.89	0.92	0.94	0.97	0.99	
	0.30		0.63	0.71	0.76	0.80	0.86	0.89	0.92	0.95	0.97	
	0.20		0.59	0.67	0.73	0.77	0.83	0.87	0.89	0.93	0.95	
0.00	0.00	0.00	0.57	0.65	0.70	0.74	0.79	0.83	0.85	0.89	0.91	
Rating:51W 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 = 1.00									
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	0.65	0.55	0.47	0.38	0.31	0.27	0.21	0.17	
	0.30		0.66	0.55	0.48	0.42	0.34	0.29	0.25	0.19	0.16	
	0.20		0.57	0.48	0.42	0.38	0.31	0.26	0.23	0.18	0.15	
0.50	0.50	0.20	0.76	0.62	0.52	0.45	0.36	0.33	0.25	0.19	0.16	
	0.30		0.64	0.53	0.46	0.40	0.33	0.27	0.23	0.18	0.15	
	0.20		0.56	0.47	0.41	0.37	0.30	0.25	0.22	0.17	0.14	
0.30	0.50	0.20	0.73	0.59	0.50	0.43	0.34	0.28	0.24	0.18	0.15	
	0.30		0.63	0.52	0.44	0.39	0.31	0.26	0.22	0.17	0.14	
	0.20		0.55	0.46	0.40	0.36	0.29	0.24	0.21	0.17	0.14	
0.00	0.00	0.00	0.43	0.35	0.30	0.26	0.21	0.17	0.15	0.11	0.09	
Rating:51W 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 = 1.00									
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	0.17	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	0.08	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Rating:51W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												