

Report No.: 1

Test Time: 18.12.2019 13:22

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 180 4x18LED 0,3A 36W 5000K закаленное стекло IP65 N

Number of Lamps: 1

Lumens per Lamp: 4766.3 lm

Luminous Length (mm): 1200 mm

Luminous Width (mm): 180 mm

Luminous Height (mm): 76 mm

Voltage: 221.3 V

Current: 0.168 A

Power: 36.14 W

Power Factor: 0.971

Photometric Results

CIE Class: Direct

Total Rated Lamp Lumens: 4766.3 lm

Measurement Flux: 4766.3 lm

Efficiency: 100.00%

Downward Ratio: 99.54%

Upward Ratio: 0.46%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 156.2, 148.6, 149.2, 149.1

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 115.5, 115.1, 115.4, 115.4

Luminaire Efficacy Rating (LER): 131.93

Central Intensity: 1689.93 cd

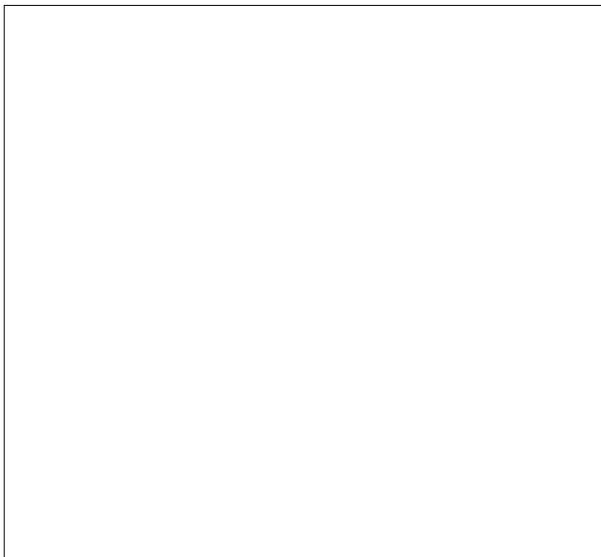
Max. Intensity: 1690.65 cd

Pos of Max. Intensity: H22.5 V0

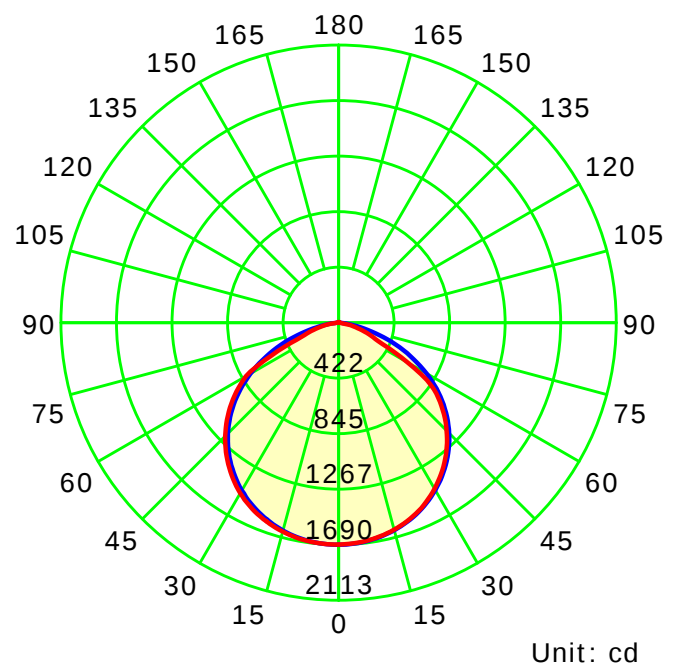
S/MH(C0/C180): 1.29

S/MH(C90/C270): 1.30

Picture Of Luminaire



Luminous Intensity Distribution Curve



— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 22.5

Gamma Plane (°):0.0-180.0:1.0

Test Lab:

Test Device: LSG-1800B

Test Type: TYPE C

Distance: 12.677 m

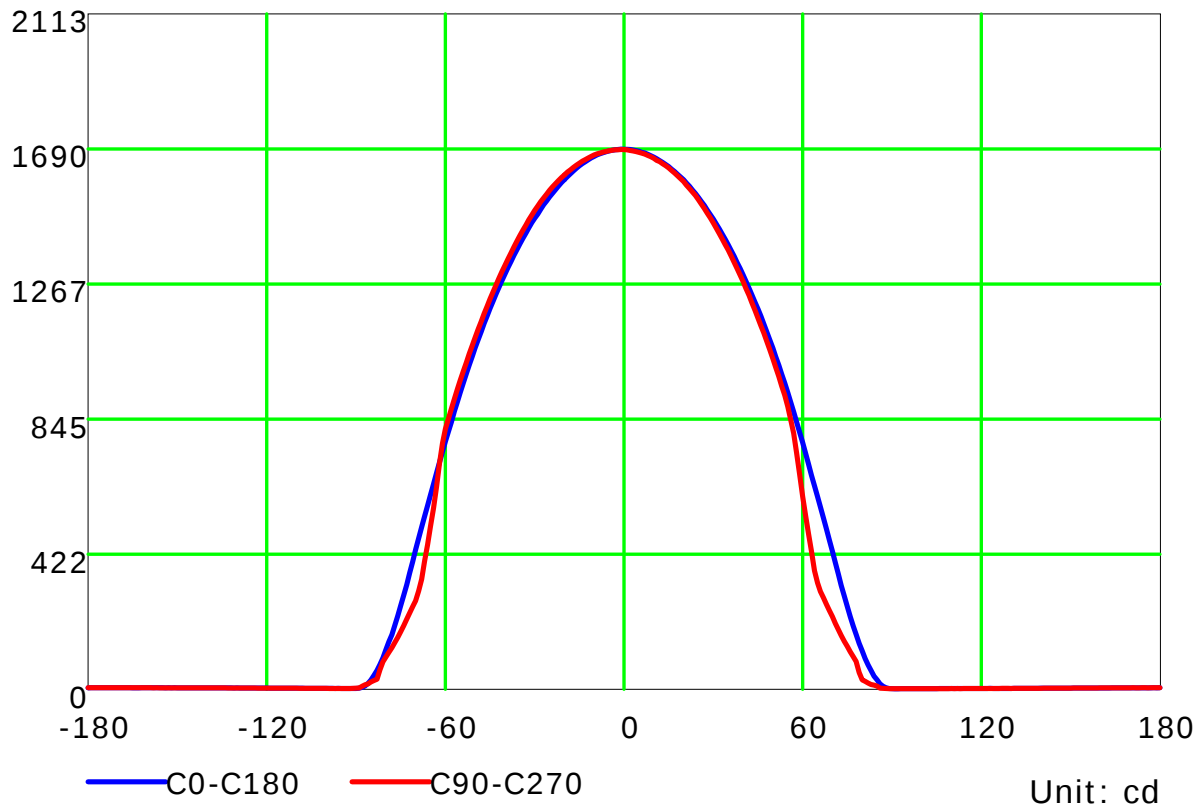
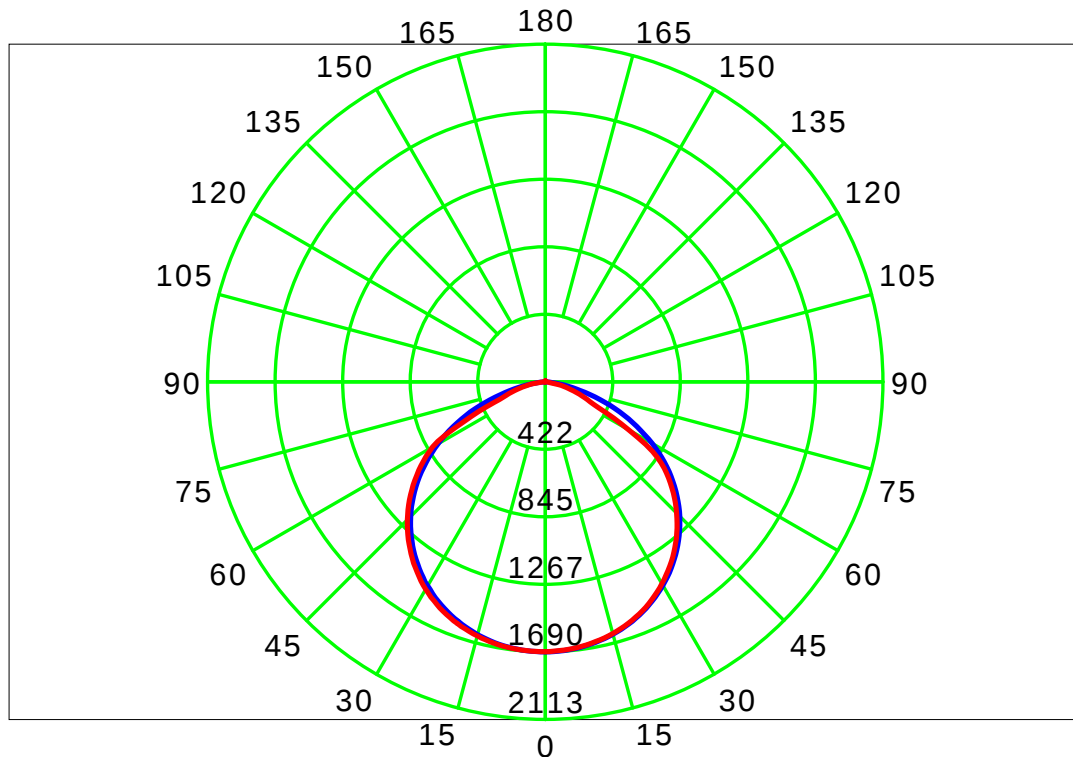
Temperature:

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: 1.0

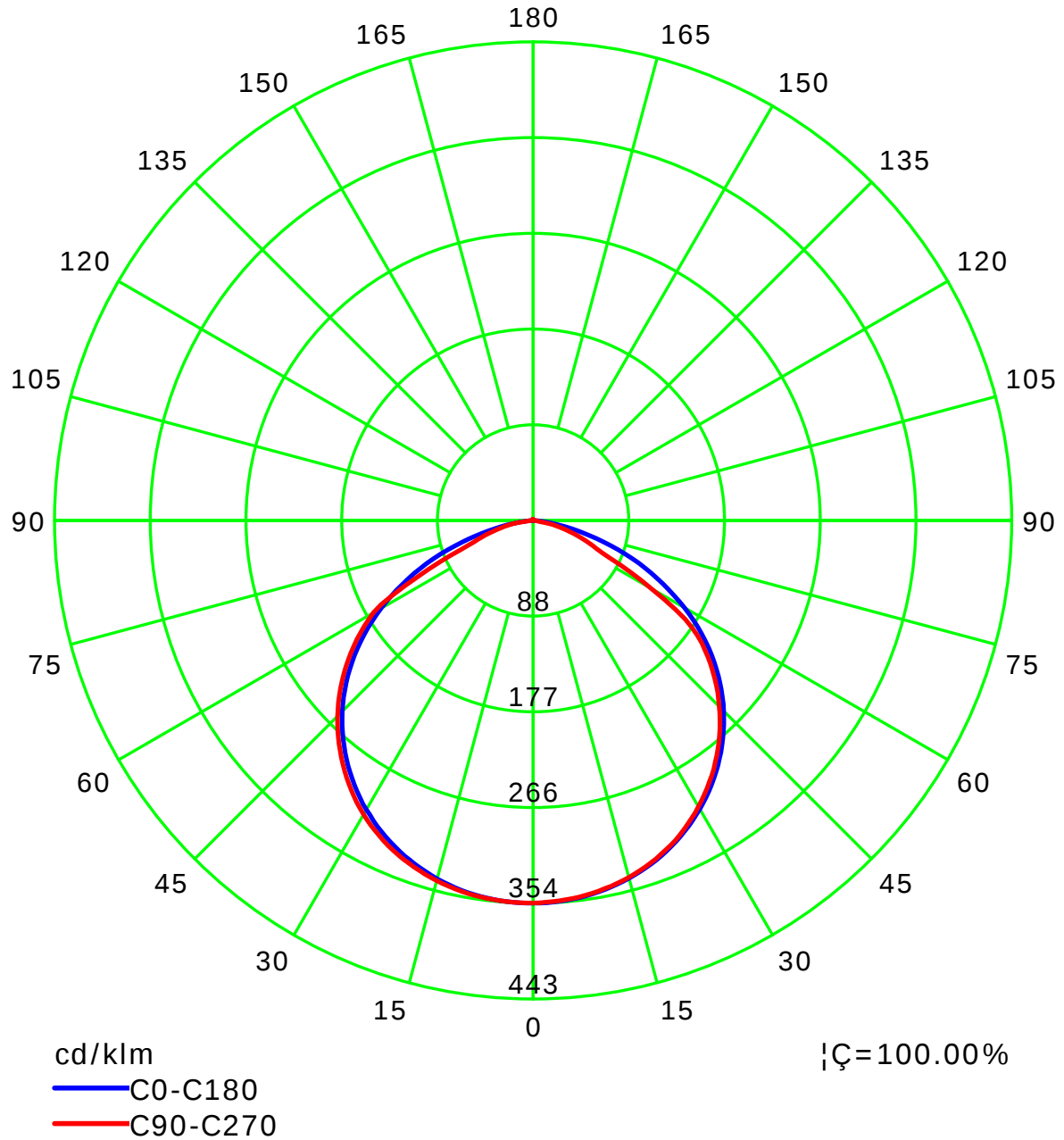
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

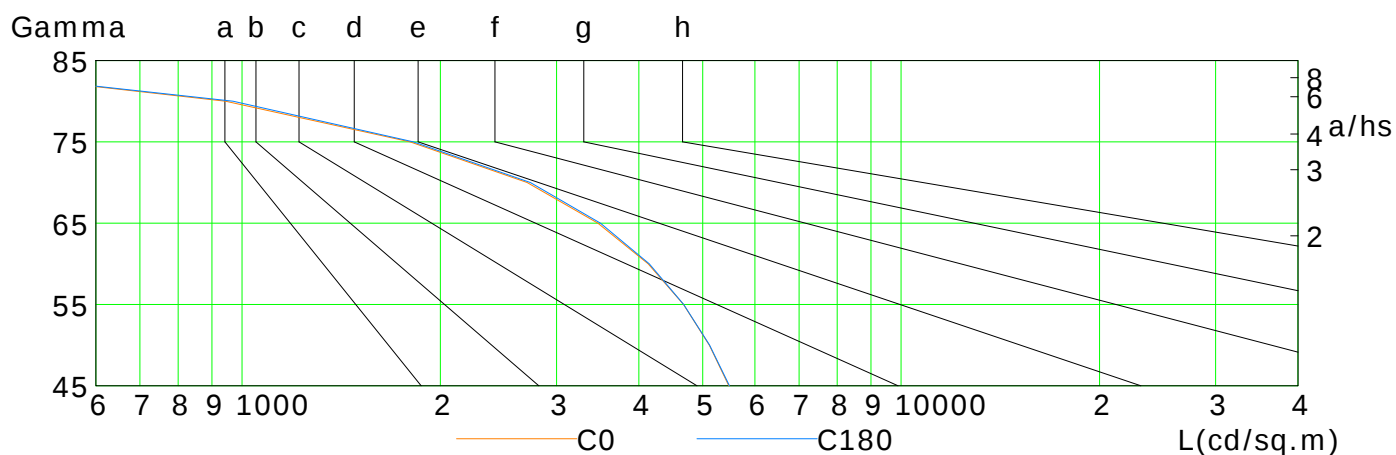
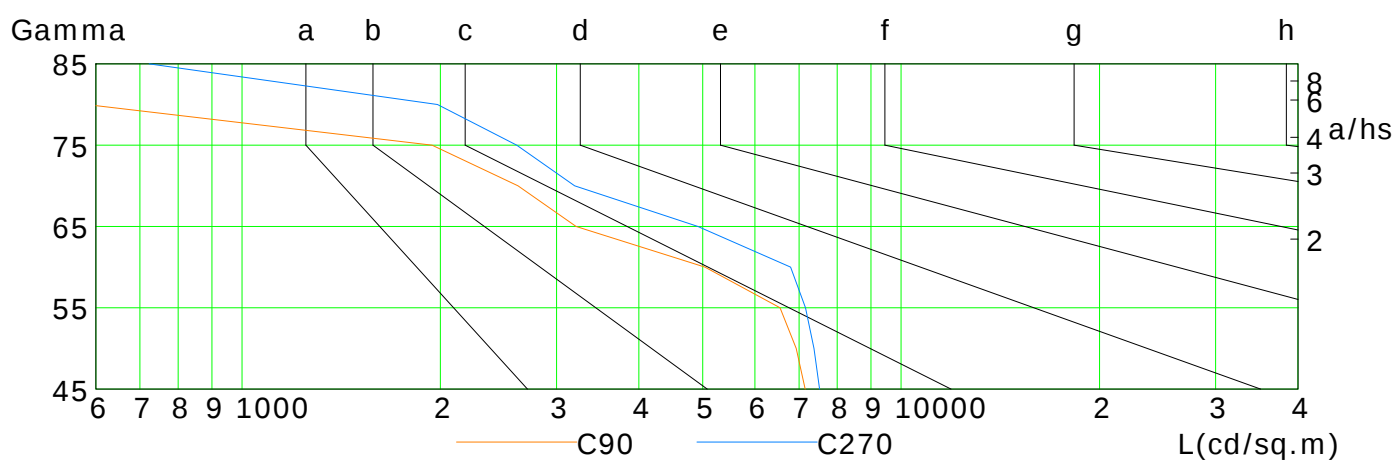
Luminous Intensity Distribution Curve(cd / klm)



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	5478	5117	4675	4132	3467	2708	1799	944	270
C90	7153	6931	6552	5038	3213	2622	1943	582	316
C180	5488	5122	4678	4148	3498	2738	1819	969	266
C270	7523	7375	7159	6798	4917	3197	2611	1979	723

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

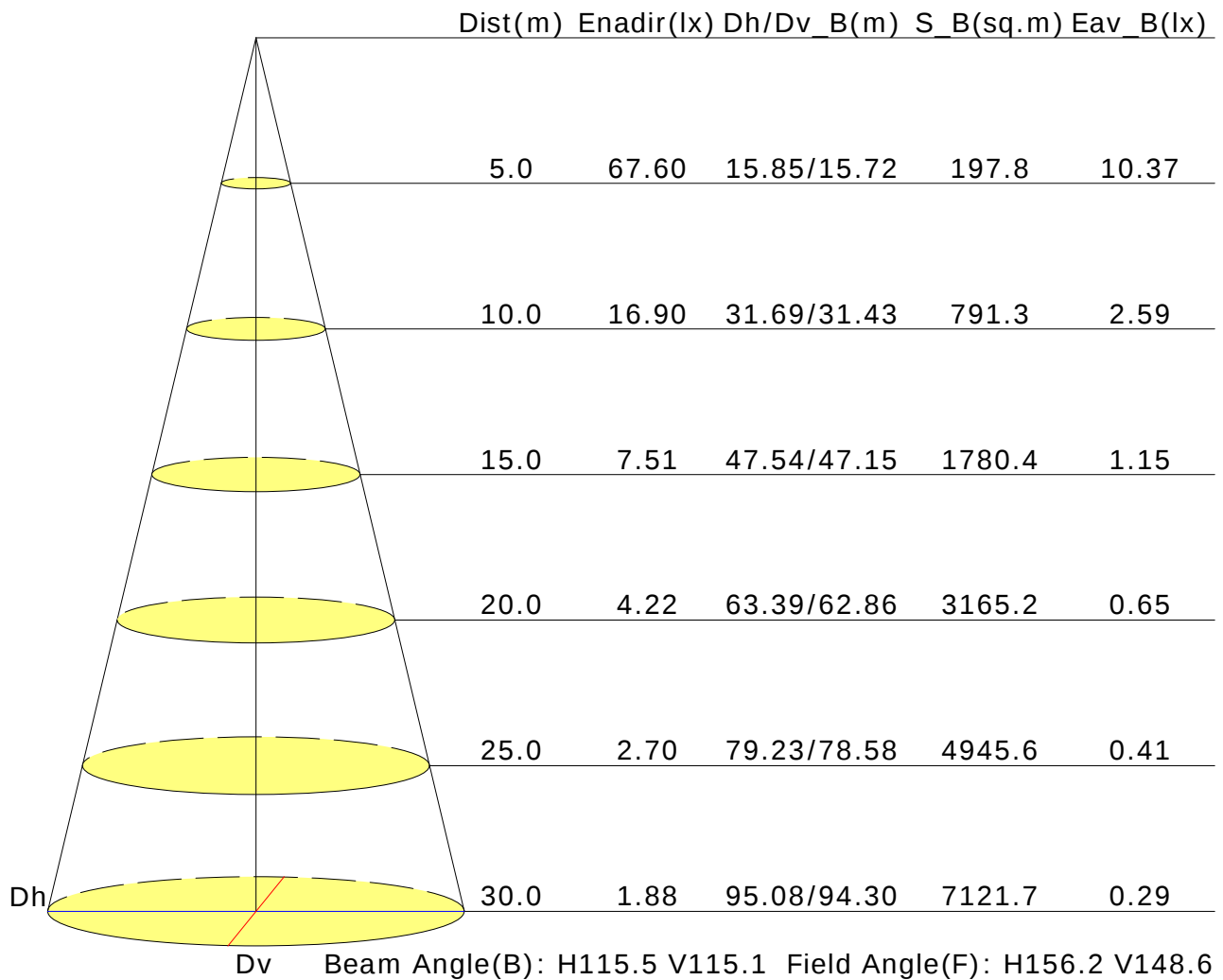
Test Device: LSG-1800B

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	18.2	19.5	18.5	19.7	20.0	18.7	20.1	19.0	20.3	20.6
3H	19.2	20.4	19.5	20.7	21.0	19.3	20.5	19.6	20.8	21.1
4H	19.5	20.6	19.8	20.9	21.2	19.4	20.6	19.8	20.9	21.2
6H	19.5	20.6	19.9	20.9	21.2	19.5	20.6	19.9	20.9	21.2
8H	19.5	20.5	19.9	20.9	21.2	19.5	20.5	19.9	20.8	21.2
12H	19.5	20.5	19.9	20.8	21.2	19.4	20.4	19.8	20.8	21.1
X=4H Y=2H	18.7	19.8	19.1	20.1	20.4	19.1	20.3	19.5	20.6	20.9
3H	19.8	20.8	20.2	21.2	21.5	19.8	20.8	20.2	21.1	21.5
4H	20.2	21.0	20.6	21.4	21.8	20.0	20.9	20.4	21.2	21.6
6H	20.3	21.1	20.7	21.5	21.9	20.1	20.9	20.5	21.3	21.7
8H	20.3	21.0	20.7	21.4	21.8	20.1	20.8	20.5	21.2	21.6
12H	20.3	20.9	20.7	21.3	21.8	20.1	20.7	20.5	21.1	21.6
X=8H Y=4H	20.2	20.9	20.6	21.3	21.7	20.0	20.7	20.5	21.1	21.6
6H	20.3	20.9	20.8	21.4	21.8	20.2	20.7	20.6	21.2	21.6
8H	20.4	20.8	20.8	21.3	21.8	20.2	20.7	20.7	21.1	21.6
12H	20.3	20.8	20.8	21.2	21.8	20.2	20.6	20.7	21.1	21.6
X=12H Y=4H	20.2	20.8	20.6	21.2	21.7	20.0	20.6	20.5	21.1	21.5
6H	20.3	20.8	20.8	21.3	21.8	20.1	20.6	20.6	21.1	21.6
8H	20.3	20.8	20.8	21.2	21.8	20.2	20.6	20.7	21.1	21.6
Variations with the observer position at spacings:										
S=1.0H	+0.2/-0.3					+0.1/-0.2				
S=1.5H	+0.4/-0.7					+0.5/-0.8				
S=2.0H	+0.9/-1.6					+1.5/-2.9				

Calculate in accordance with CIE Pub.117. The table is revised with 4766lm ($8\log(F/F_0) = 5.4$).

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

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	0.58	0.69	0.76	0.82	0.89	0.94	0.97	1.02	1.04	
	0.30		0.50	0.61	0.69	0.75	0.83	0.89	0.93	0.98	1.01	
	0.20		0.44	0.55	0.64	0.70	0.78	0.84	0.89	0.94	0.98	
0.50	0.50	0.20	0.56	0.66	0.74	0.79	0.86	0.90	0.93	0.98	1.00	
	0.30		0.49	0.60	0.67	0.73	0.81	0.86	0.90	0.94	0.97	
	0.20		0.44	0.55	0.63	0.68	0.77	0.82	0.86	0.92	0.95	
0.30	0.50	0.20	0.55	0.65	0.71	0.76	0.83	0.87	0.90	0.94	0.96	
	0.30		0.48	0.59	0.66	0.71	0.79	0.84	0.87	0.91	0.94	
	0.20		0.44	0.54	0.62	0.67	0.75	0.80	0.84	0.89	0.92	
0.00	0.00	0.00	0.41	0.52	0.59	0.64	0.72	0.77	0.80	0.85	0.87	
Rating:36W 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	0.98	0.80	0.67	0.58	0.46	0.38	0.32	0.25	0.20	
	0.30		0.82	0.68	0.59	0.51	0.41	0.35	0.30	0.23	0.19	
	0.20		0.70	0.60	0.52	0.46	0.38	0.32	0.28	0.22	0.18	
0.50	0.50	0.20	0.94	0.77	0.64	0.56	0.44	0.39	0.30	0.23	0.19	
	0.30		0.80	0.66	0.57	0.50	0.40	0.33	0.28	0.22	0.18	
	0.20		0.69	0.59	0.51	0.45	0.37	0.31	0.27	0.21	0.17	
0.30	0.50	0.20	0.92	0.74	0.62	0.53	0.42	0.34	0.29	0.22	0.18	
	0.30		0.78	0.65	0.55	0.48	0.38	0.32	0.27	0.21	0.17	
	0.20		0.69	0.58	0.50	0.44	0.36	0.30	0.26	0.20	0.17	
0.00	0.00	0.00	0.58	0.48	0.41	0.35	0.28	0.23	0.20	0.15	0.12	
Rating:36W 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	0.17	0.18	0.19	0.19	0.20	0.21	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		0.05	0.07	0.08	0.10	0.12	0.13	0.15	0.16	0.17	
0.50	0.50	0.20	0.16	0.17	0.18	0.19	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	0.08	0.10	0.11	0.13	0.14	0.16	0.17	
0.30	0.50	0.20	0.16	0.17	0.17	0.18	0.19	0.19	0.19	0.20	0.20	
	0.30		0.10	0.11	0.12	0.13	0.15	0.16	0.16	0.18	0.18	
	0.20		0.05	0.07	0.08	0.09	0.11	0.13	0.14	0.15	0.16	
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:36W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												