

Report No.:

Test Time: 18.12.2019 13:22

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 180 4x18LED 0,3A 36W 4000K закаленное стекло IP65 N

Number of Lamps: 1

Luminous Length (mm): 1200

Luminous Width (mm): 180

Luminous Height (mm): 76

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: 4742.5 lm

Measurement Flux: 4742.5 lm

Efficiency: 100%

Downward Ratio: 100%

Upward Ratio: 0%

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): 131.27

Central Intensity: 1681.48 cd

Max. Intensity: 1682.19 cd

Pos of Max. Intensity: H22.5 V0

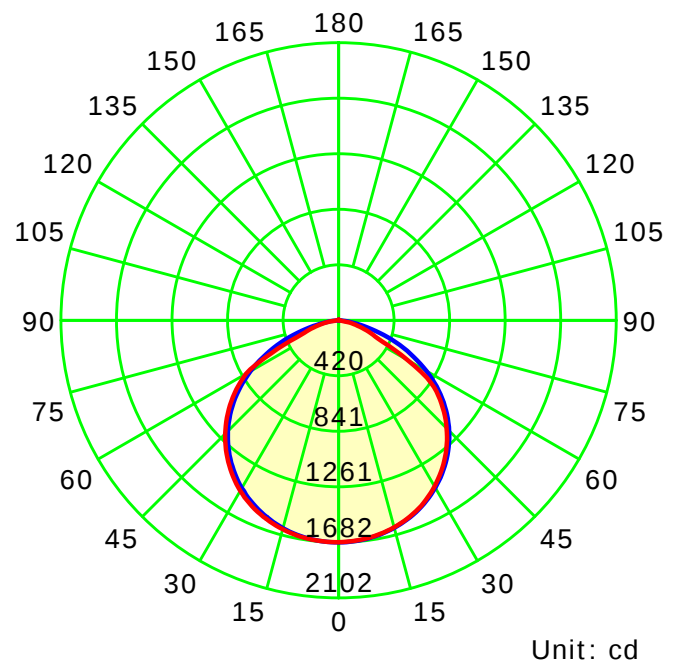
S/MH(C0/C180): 1.29

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

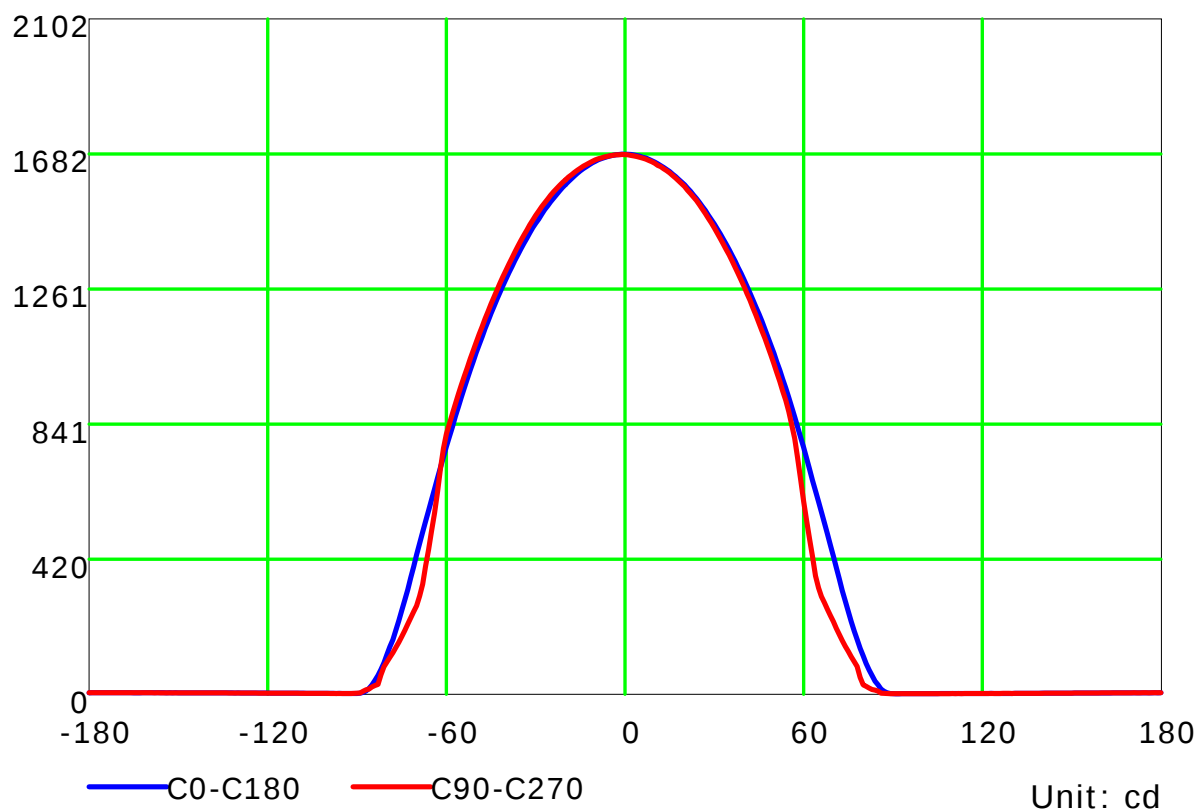
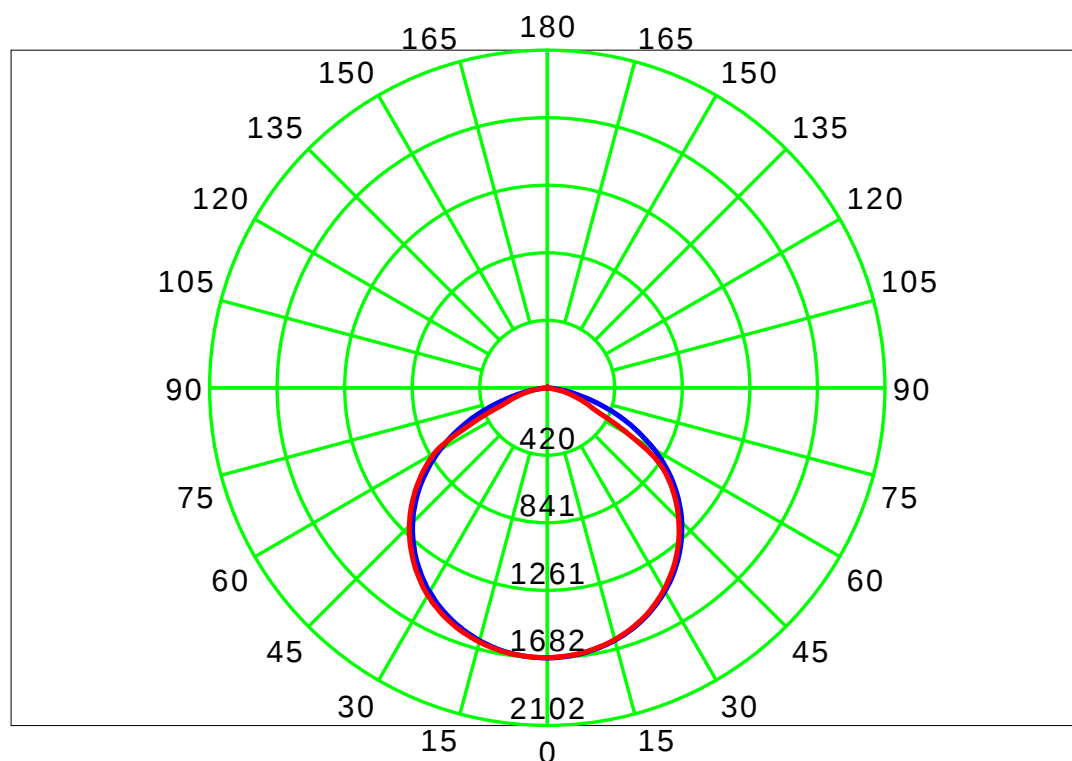
Temperature:

Humidity:

Operator:

Inspector:

Luminous Intensity Distribution Curve



Unit: cd

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

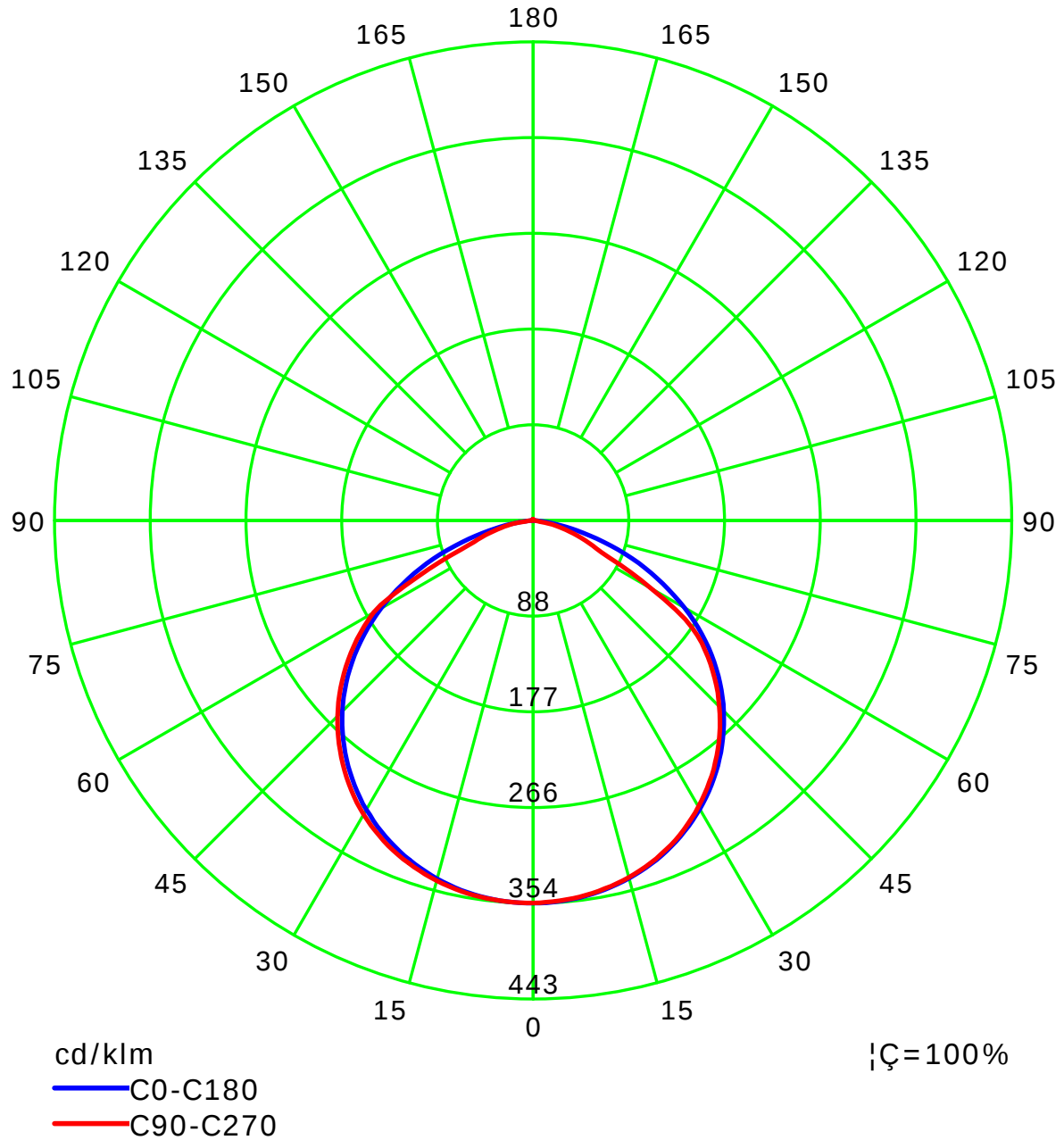
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve(cd / klm)



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

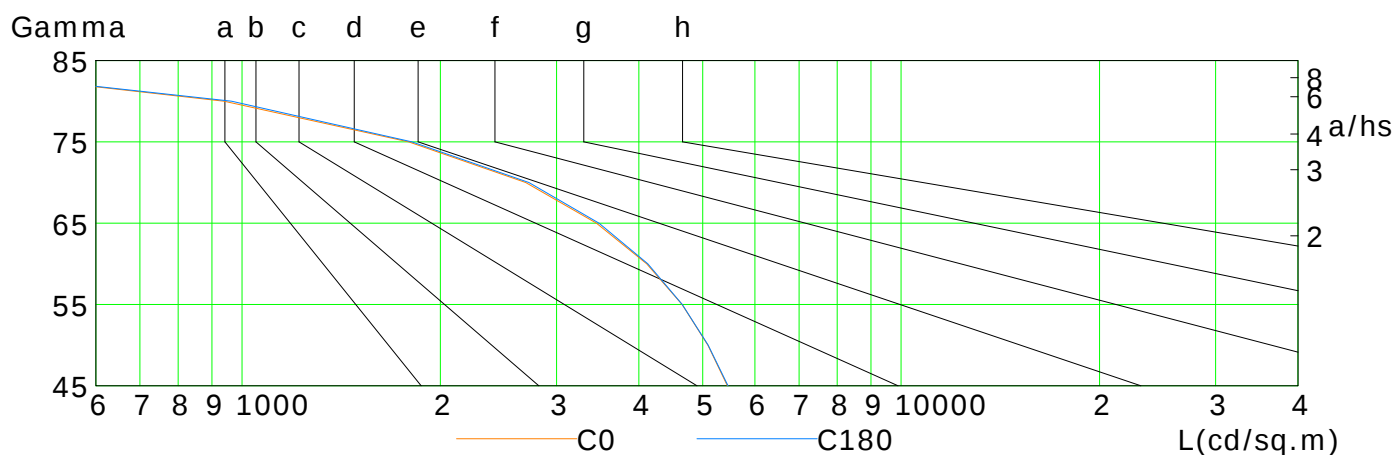
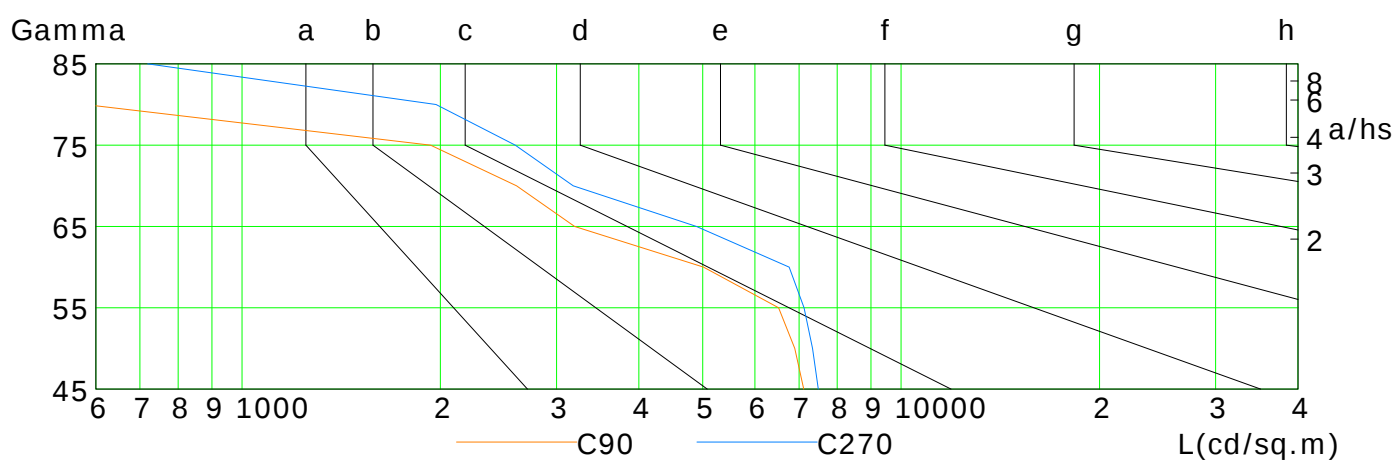
Humidity:

Inspector:

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	5450	5091	4652	4111	3450	2694	1790	940	268
C90	7117	6896	6519	5013	3197	2609	1933	579	314
C180	5461	5096	4655	4127	3480	2724	1810	964	265
C270	7485	7338	7123	6764	4892	3181	2598	1970	719

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

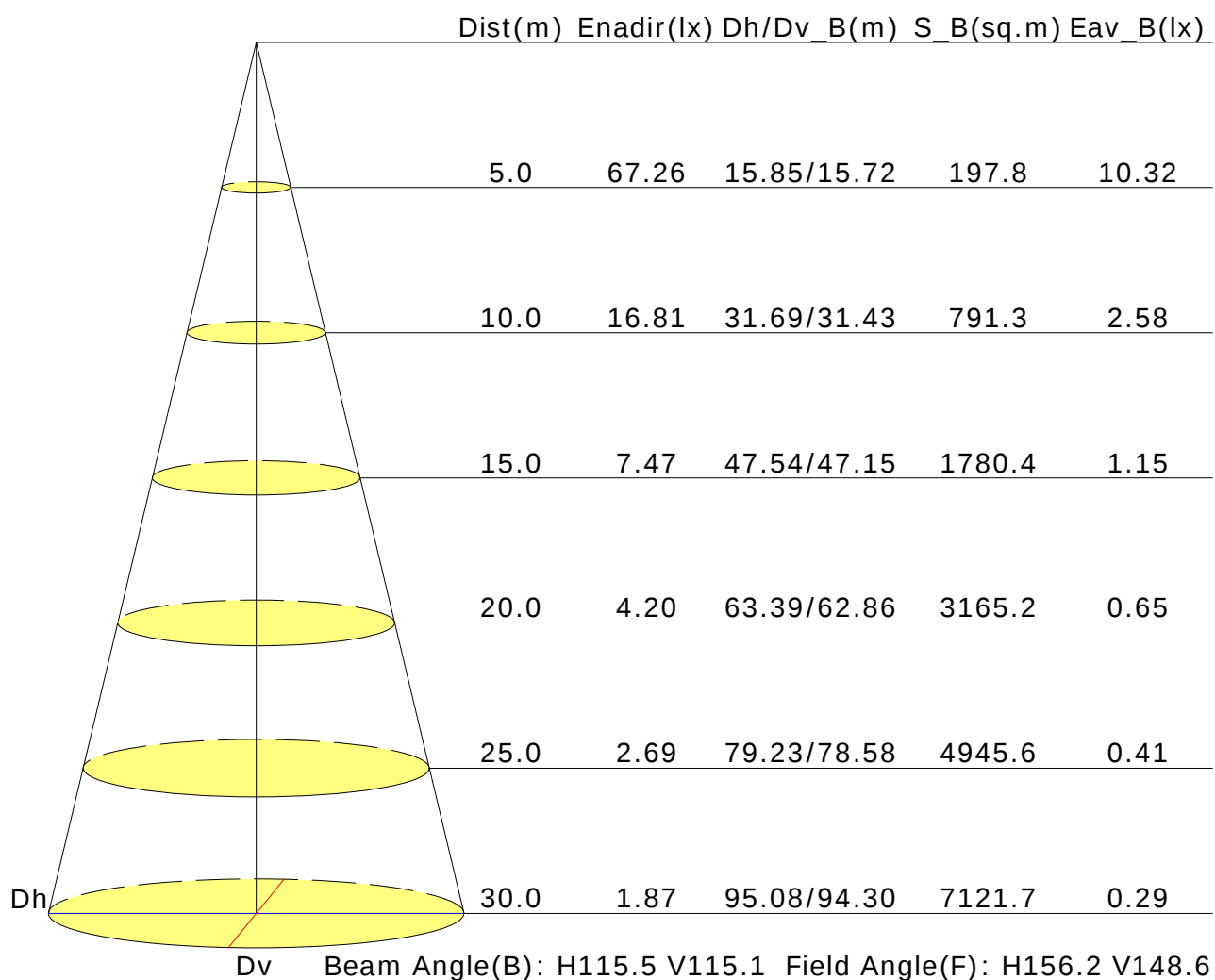
Test Device: LSG-1800B

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	18.1	19.5	18.4	19.7	20.0	18.7	20.1	19.0	20.3	20.5
3H	19.2	20.4	19.5	20.7	21.0	19.3	20.5	19.6	20.8	21.1
4H	19.4	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	20.5	19.8	20.9	21.2
8H	19.5	20.5	19.9	20.9	21.2	19.5	20.5	19.8	20.8	21.2
12H	19.5	20.5	19.9	20.8	21.1	19.4	20.4	19.8	20.7	21.1
X=4H Y=2H	18.7	19.8	19.0	20.1	20.4	19.1	20.3	19.5	20.6	20.9
3H	19.8	20.8	20.2	21.1	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	21.0	20.7	21.4	21.8	20.1	20.8	20.5	21.2	21.6
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	21.3	21.8	20.1	20.7	20.6	21.2	21.6
8H	20.3	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	21.7	20.1	20.6	20.6	21.1	21.6
X=12H Y=4H	20.1	20.8	20.6	21.2	21.7	20.0	20.6	20.4	21.0	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	20.7	20.8	21.2	21.7	20.1	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 4742lm ($8\log(F/F_0) = 5.4$).

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												