

Report No.:

Test Time: 28.10.2020 13:44

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 180 40LED 38W 5000K opal

Number of Lamps: 1

Luminous Width (mm): 180

Voltage: 221.3 V

Power: 38.14 W

Luminous Length (mm): 1200

Luminous Height (mm): 35

Current: 0.177 A

Power Factor: 0.975

Photometric Results

CIE Class: Direct

Measurement Flux: 4221.1 lm

Downward Ratio: 100%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 164.7, 163.4, 164.1, 163.9

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 111.4, 110.6, 111.0, 111.0

Luminaire Efficacy Rating (LER): 110.72

Max. Intensity: 1479.44 cd

S/MH(C0/C180): 1.24

Total Rated Lamp Lumens: 4221.1 lm

Efficiency: 100%

Upward Ratio: 0%

Central Intensity: 1475.4 cd

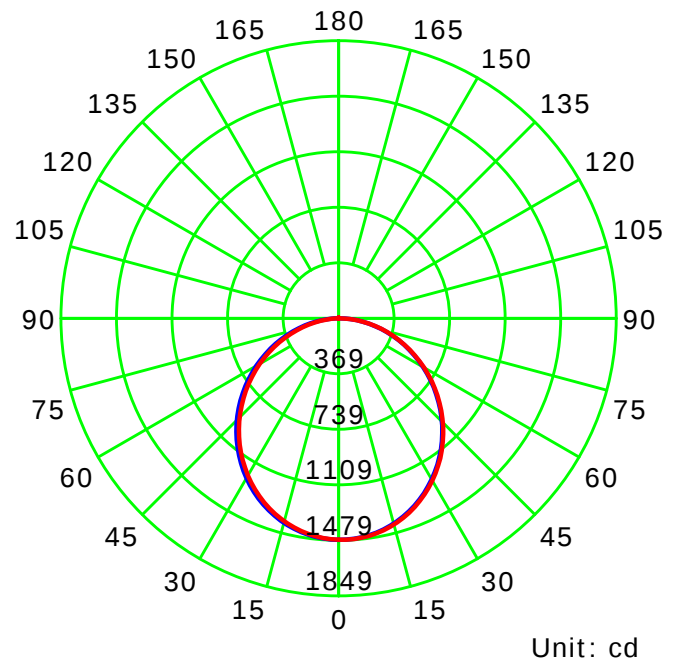
Pos of Max. Intensity: H135 V0

S/MH(C90/C270): 1.24

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

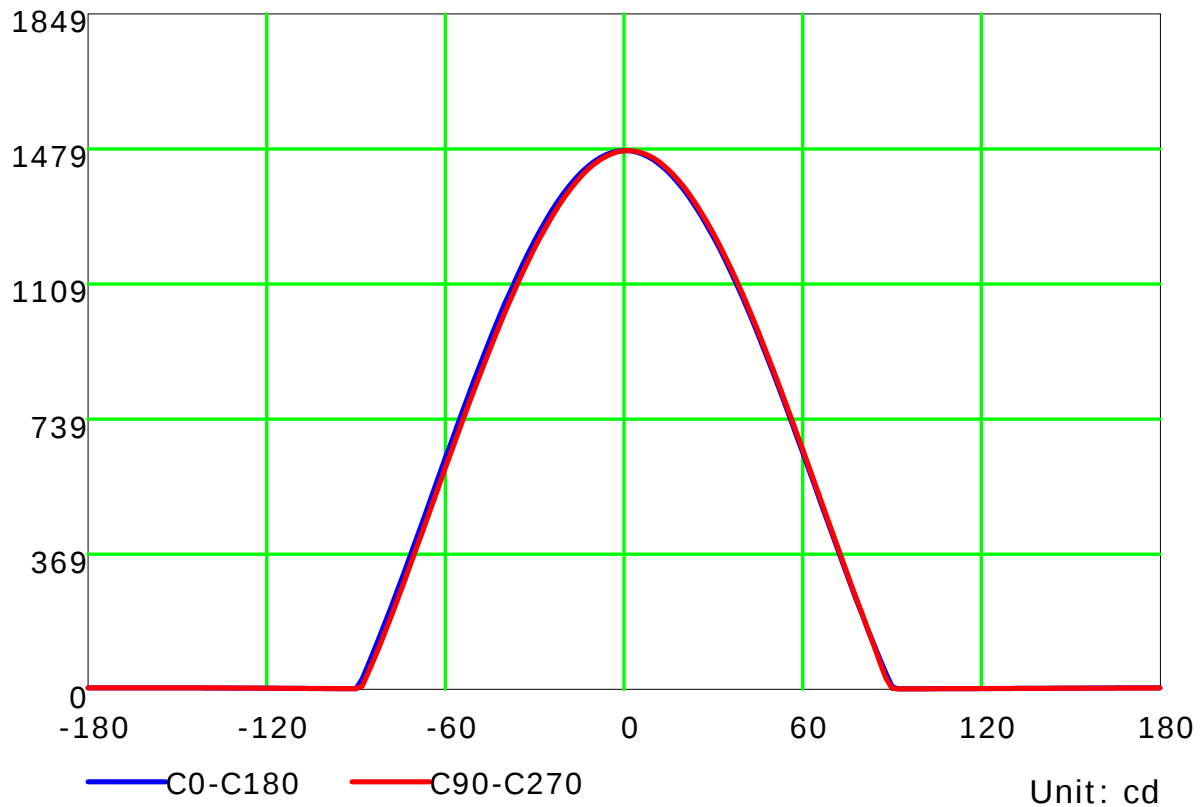
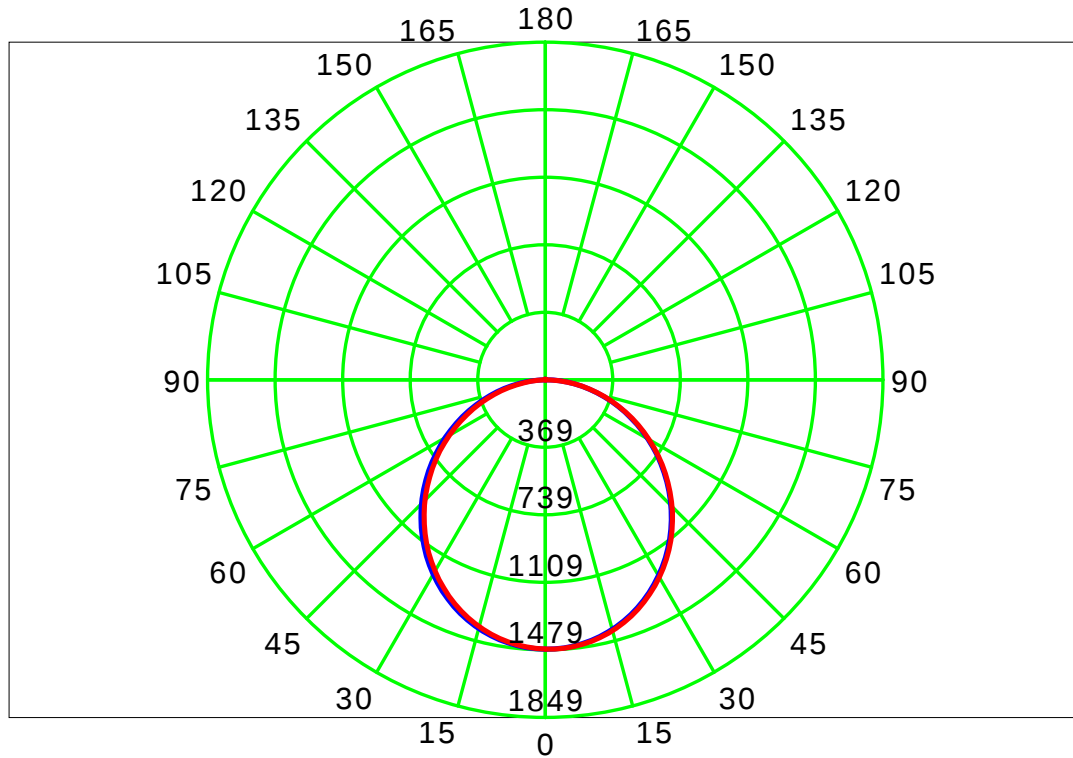
Test Device: LSG-1800B

Distance: 12.682 m

Humidity:

Inspector:

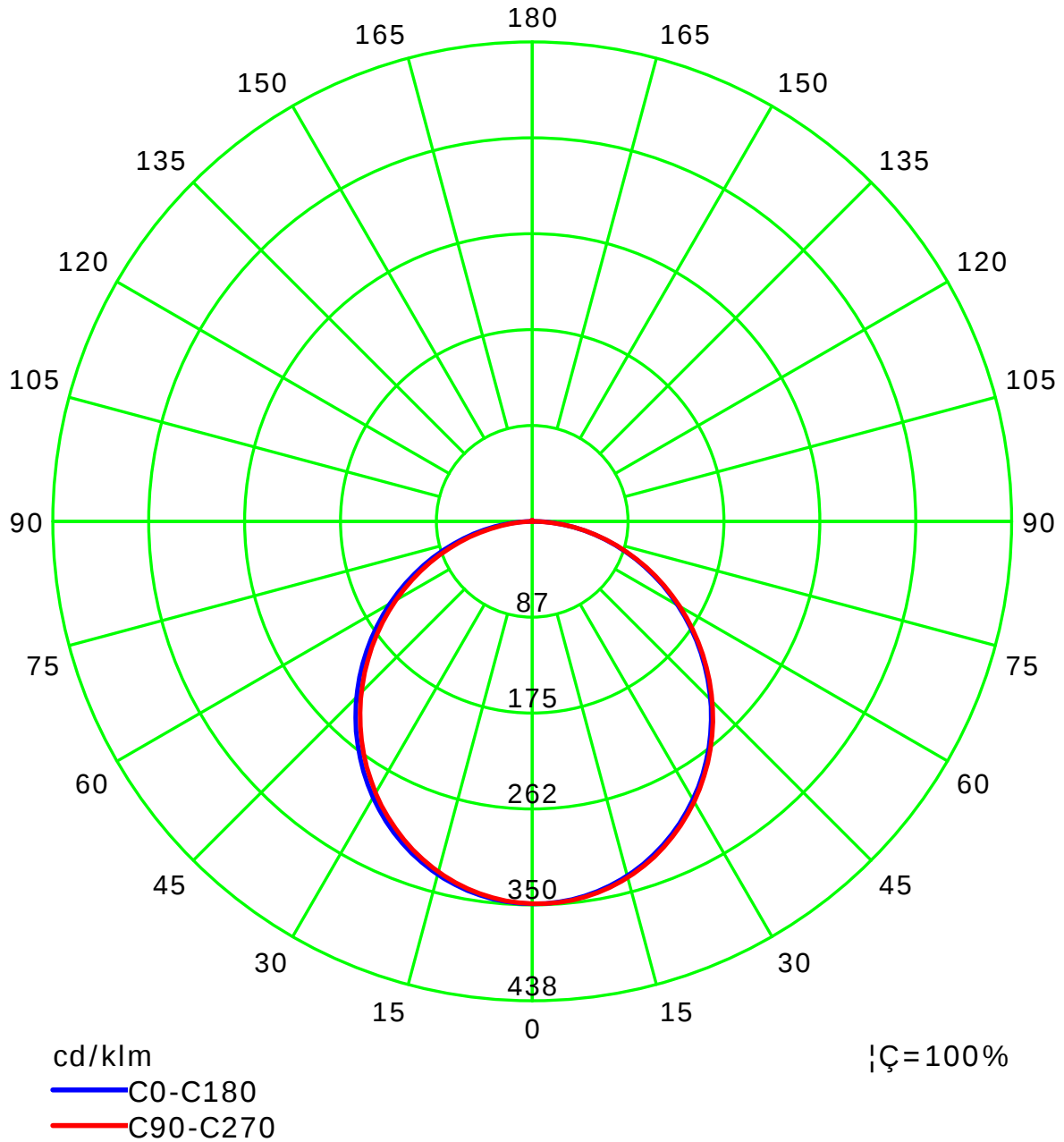
Luminous Intensity Distribution Curve



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Test Lab:
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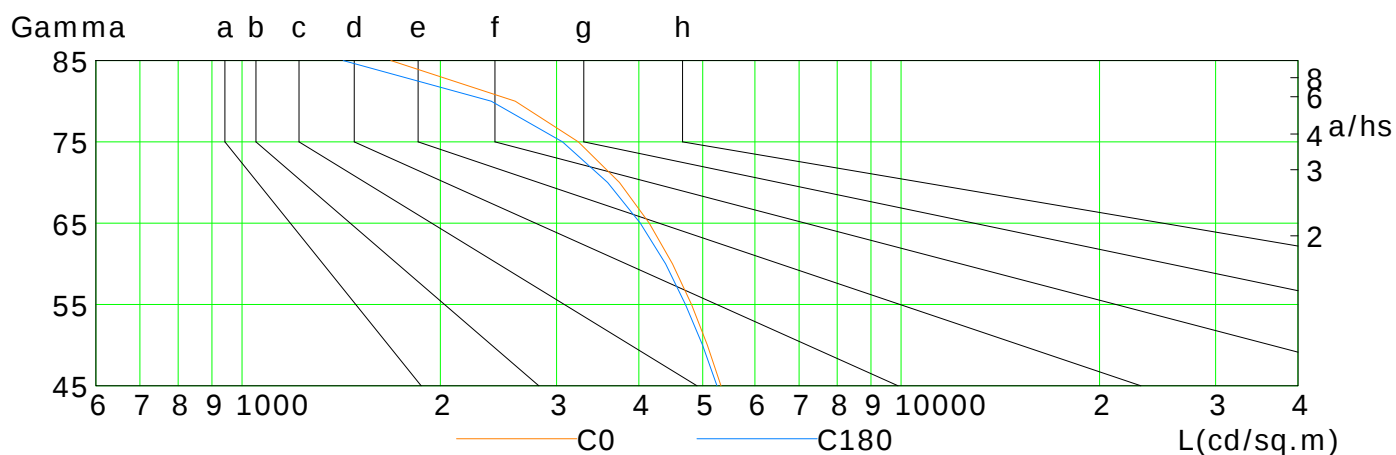
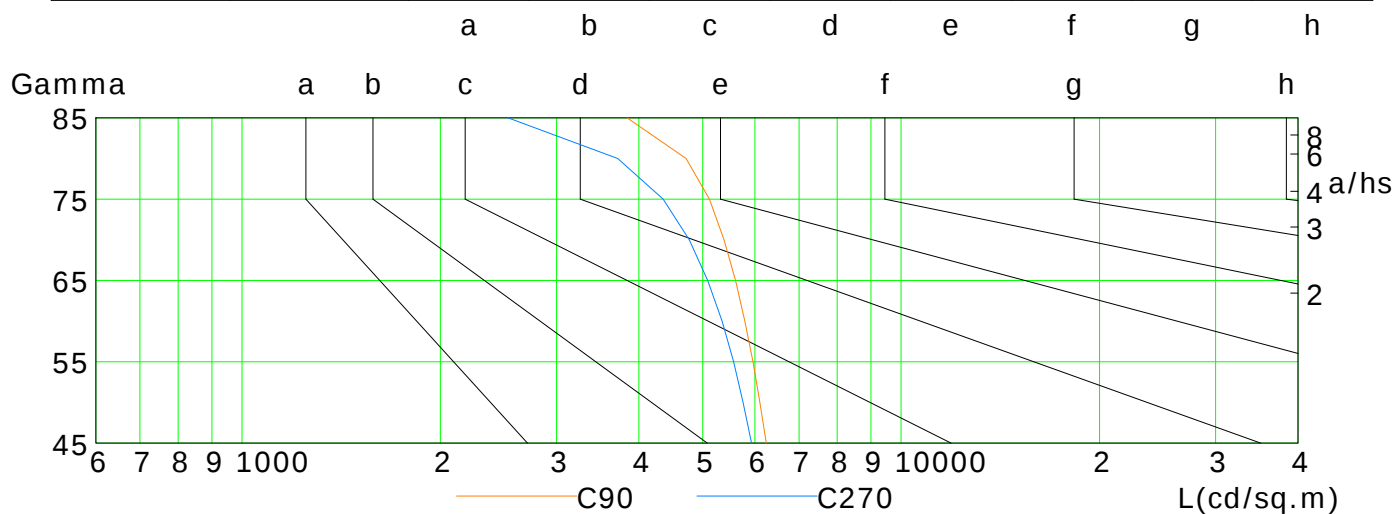
Gamma Plane (°): 0.0-180.0: 2.0
Test Device: LSG-1800B
Distance: 12.682 m
Humidity:
Inspector:

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



L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	5331	5081	4807	4498	4147	3738	3237	2598	1682
C90	6244	6106	5959	5794	5607	5387	5117	4719	3839
C180	5256	4996	4706	4392	4020	3587	3064	2388	1424
C270	5931	5757	5569	5349	5087	4771	4354	3715	2534

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

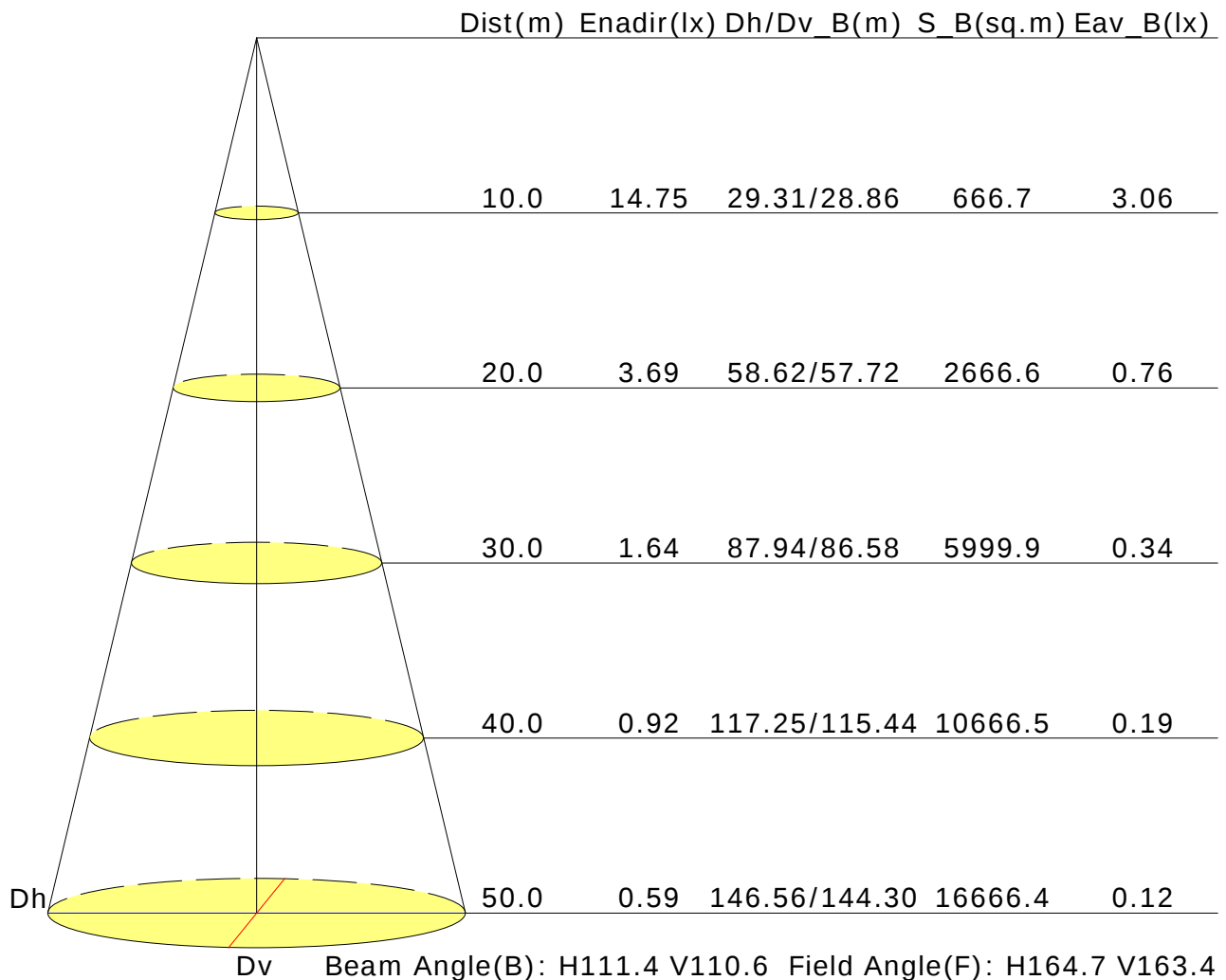
Test Device: LSG-1800B

Distance: 12.682 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	19.9	18.4	19.8	18.7	20.0	20.3
3H	19.5	20.8	19.8	21.1	21.3	20.0	21.2	20.3	21.5	21.8
4H	20.1	21.3	20.4	21.6	21.9	20.6	21.8	21.0	22.1	22.4
6H	20.5	21.6	20.9	21.9	22.3	21.1	22.2	21.5	22.6	22.9
8H	20.6	21.7	21.0	22.0	22.4	21.3	22.4	21.7	22.7	23.0
12H	20.7	21.7	21.1	22.1	22.4	21.4	22.4	21.8	22.8	23.1
X=4H Y=2H	18.7	19.9	19.1	20.2	20.5	19.0	20.2	19.3	20.5	20.8
3H	20.4	21.4	20.7	21.7	22.1	20.7	21.8	21.1	22.1	22.5
4H	21.1	22.0	21.5	22.4	22.7	21.5	22.4	21.9	22.8	23.2
6H	21.6	22.4	22.0	22.8	23.2	22.1	23.0	22.6	23.4	23.8
8H	21.8	22.5	22.2	22.9	23.4	22.3	23.1	22.8	23.5	24.0
12H	21.9	22.6	22.3	23.0	23.5	22.5	23.2	23.0	23.6	24.1
X=8H Y=4H	21.4	22.1	21.8	22.5	23.0	21.8	22.5	22.2	22.9	23.4
6H	22.0	22.6	22.5	23.1	23.6	22.5	23.1	23.0	23.6	24.0
8H	22.3	22.8	22.8	23.3	23.8	22.8	23.3	23.3	23.8	24.3
12H	22.5	22.9	23.0	23.4	23.9	23.0	23.5	23.5	24.0	24.5
X=12H Y=4H	21.4	22.1	21.8	22.5	23.0	21.8	22.5	22.2	22.9	23.3
6H	22.1	22.6	22.6	23.1	23.6	22.6	23.1	23.1	23.6	24.1
8H	22.4	22.9	22.9	23.3	23.8	22.9	23.4	23.4	23.8	24.3
Variations with the observer position at spacings:										
S=1.0H	+0.2/-0.2					+0.2/-0.2				
S=1.5H	+0.3/-0.5					+0.4/-0.5				
S=2.0H	+0.5/-0.9					+0.5/-0.9				

Calculate in accordance with CIE Pub.117. The table is revised with 4221lm ($8\log(F/F_0) = 5.0$).

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Temperature:

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Gamma Plane (°):0.0-180.0:2.0

Test Device: LSG-1800B

Distance: 12.682 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	0.56	0.66	0.74	0.79	0.86	0.92	0.95	1.00	1.03	
	0.30		0.48	0.59	0.66	0.72	0.80	0.86	0.90	0.96	0.99	
	0.20		0.42	0.53	0.60	0.66	0.75	0.81	0.85	0.92	0.96	
0.50	0.50	0.20	0.54	0.64	0.71	0.76	0.83	0.88	0.91	0.96	0.99	
	0.30		0.47	0.57	0.65	0.70	0.78	0.83	0.87	0.92	0.95	
	0.20		0.42	0.52	0.59	0.65	0.73	0.79	0.83	0.89	0.93	
0.30	0.50	0.20	0.53	0.62	0.69	0.74	0.80	0.85	0.88	0.92	0.95	
	0.30		0.47	0.56	0.63	0.68	0.76	0.81	0.84	0.89	0.92	
	0.20		0.42	0.52	0.59	0.64	0.72	0.77	0.81	0.86	0.90	
0.00	0.00	0.00	0.39	0.49	0.56	0.61	0.68	0.73	0.77	0.82	0.85	
Rating:38W 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	1.01	0.83	0.71	0.62	0.50	0.41	0.36	0.28	0.23	
	0.30		0.84	0.71	0.62	0.55	0.45	0.38	0.33	0.26	0.22	
	0.20		0.72	0.62	0.55	0.49	0.41	0.35	0.31	0.25	0.21	
0.50	0.50	0.20	0.97	0.80	0.68	0.60	0.48	0.43	0.34	0.26	0.22	
	0.30		0.82	0.70	0.60	0.53	0.44	0.37	0.32	0.25	0.21	
	0.20		0.71	0.61	0.54	0.48	0.40	0.34	0.30	0.24	0.20	
0.30	0.50	0.20	0.94	0.77	0.66	0.57	0.46	0.38	0.32	0.25	0.21	
	0.30		0.81	0.68	0.59	0.52	0.42	0.35	0.30	0.24	0.20	
	0.20		0.71	0.61	0.53	0.47	0.39	0.33	0.29	0.23	0.19	
0.00	0.00	0.00	0.60	0.51	0.44	0.39	0.32	0.27	0.23	0.18	0.15	
Rating:38W 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	0.20	0.21	0.21	0.21	0.22	0.22	
	0.30		0.10	0.12	0.13	0.14	0.16	0.17	0.18	0.19	0.20	
	0.20		0.05	0.07	0.08	0.09	0.11	0.13	0.14	0.16	0.17	
0.50	0.50	0.20	0.16	0.17	0.18	0.19	0.20	0.20	0.21	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	0.09	0.11	0.13	0.14	0.15	0.17	
0.30	0.50	0.20	0.16	0.17	0.18	0.18	0.19	0.19	0.20	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	0.06	0.08	0.09	0.11	0.12	0.13	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:38W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												