

Report No.:

Test Time: 28.10.2020 13:44

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 180 40LED 44W 5000K opal

Number of Lamps: 1

Luminous Width (mm): 180

Voltage: 221.3 V

Power: 45.11 W

Luminous Length (mm): 1200

Luminous Height (mm): 35

Current: 0.209 A

Power Factor: 0.975

Photometric Results

CIE Class: Direct

Measurement Flux: 4999.8 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): 110.89

Max. Intensity: 1752.39 cd

S/MH(C0/C180): 1.24

Total Rated Lamp Lumens: 4999.8 lm

Efficiency: 100%

Upward Ratio: 0%

Central Intensity: 1747.62 cd

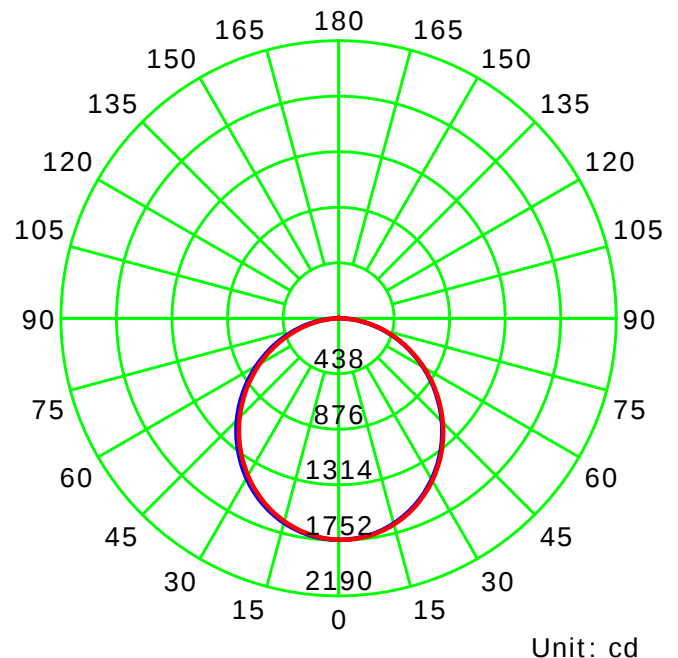
Pos of Max. Intensity: H135 V0

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

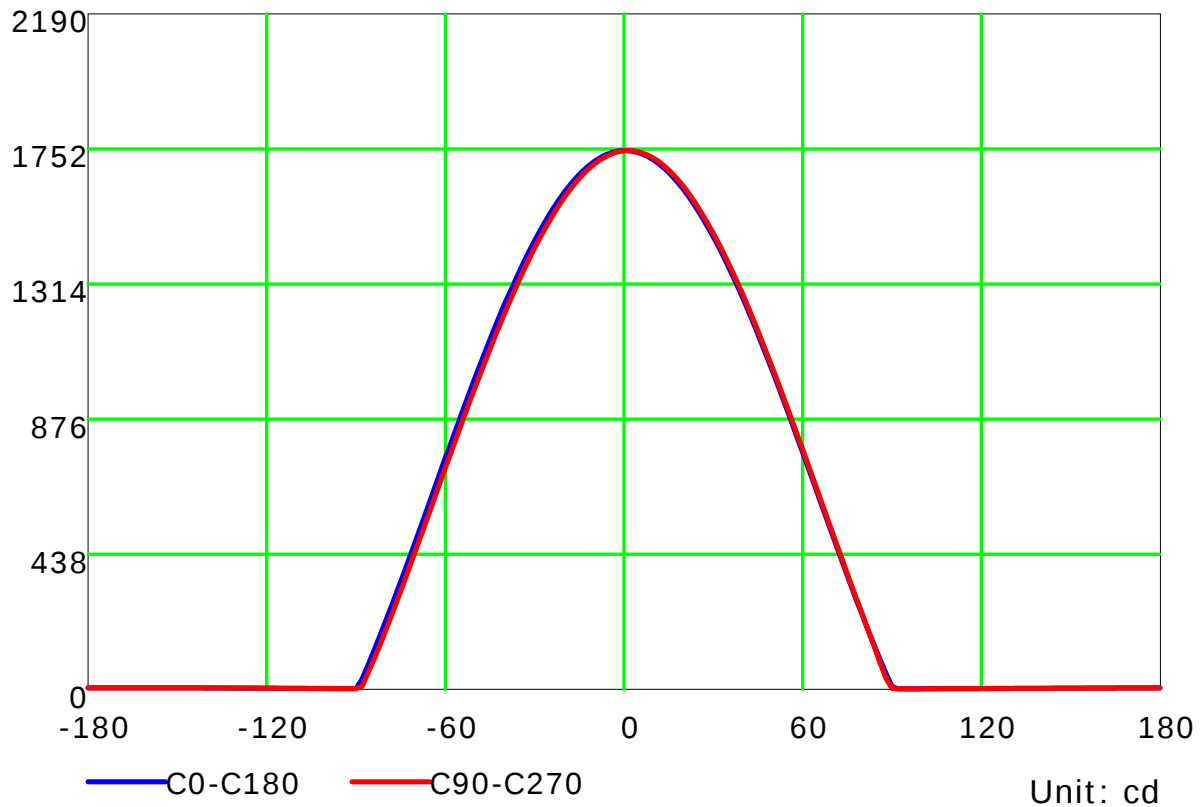
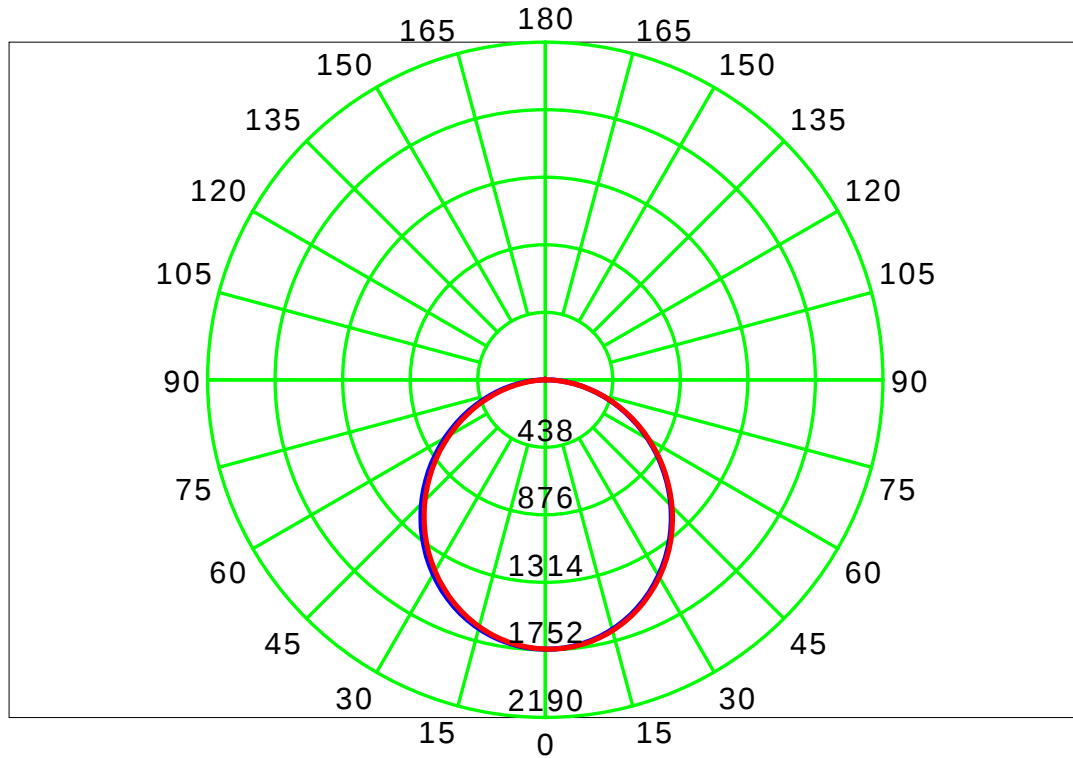
Test Device: LSG-1800B

Distance: 12.682 m

Humidity:

Inspector:

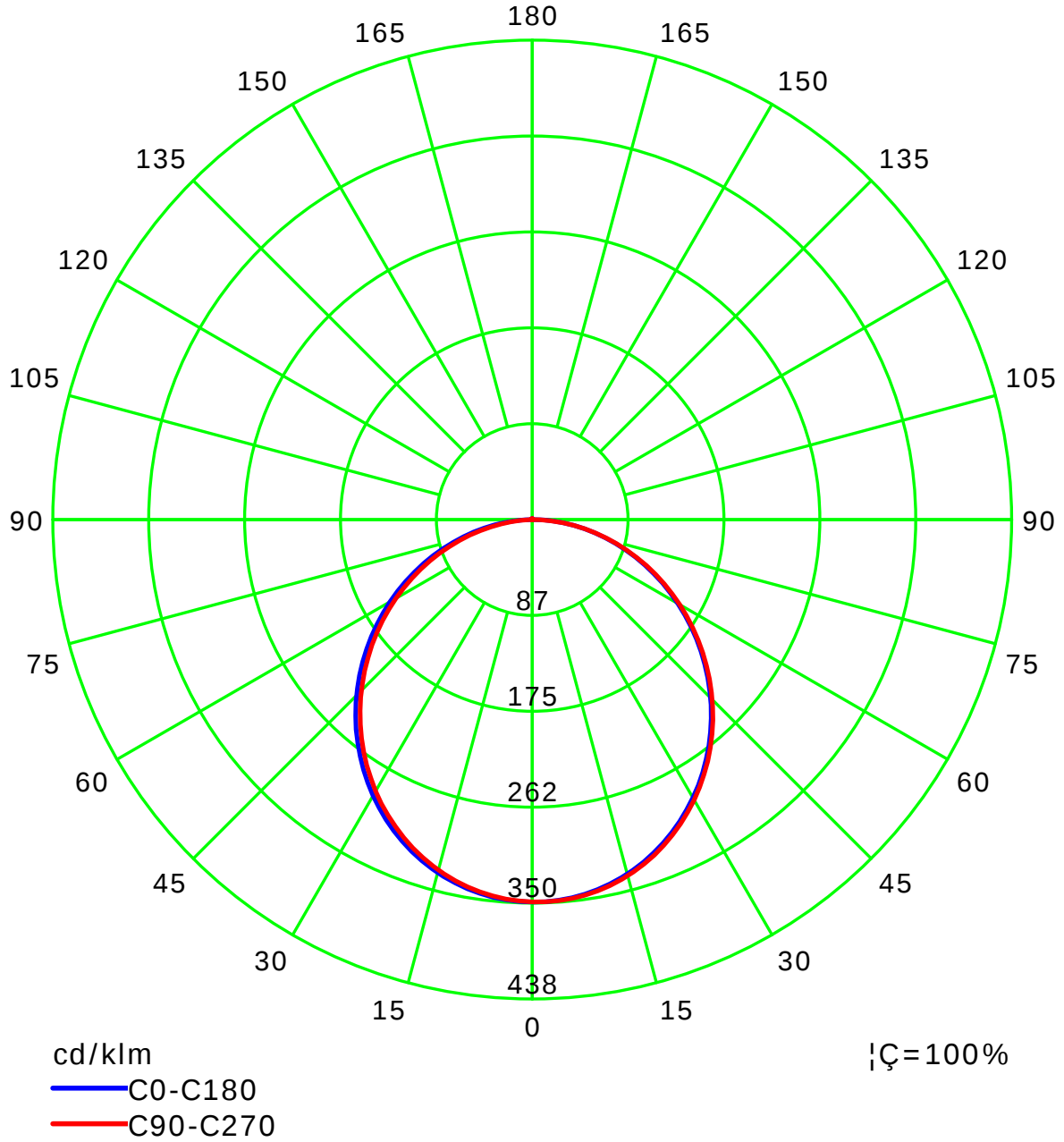
Luminous Intensity Distribution Curve



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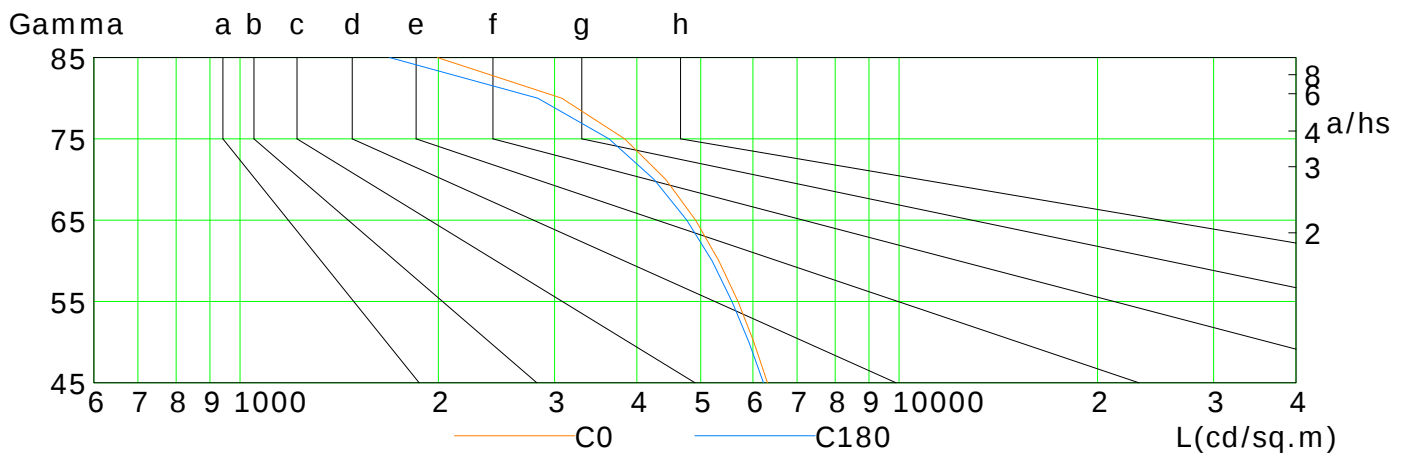
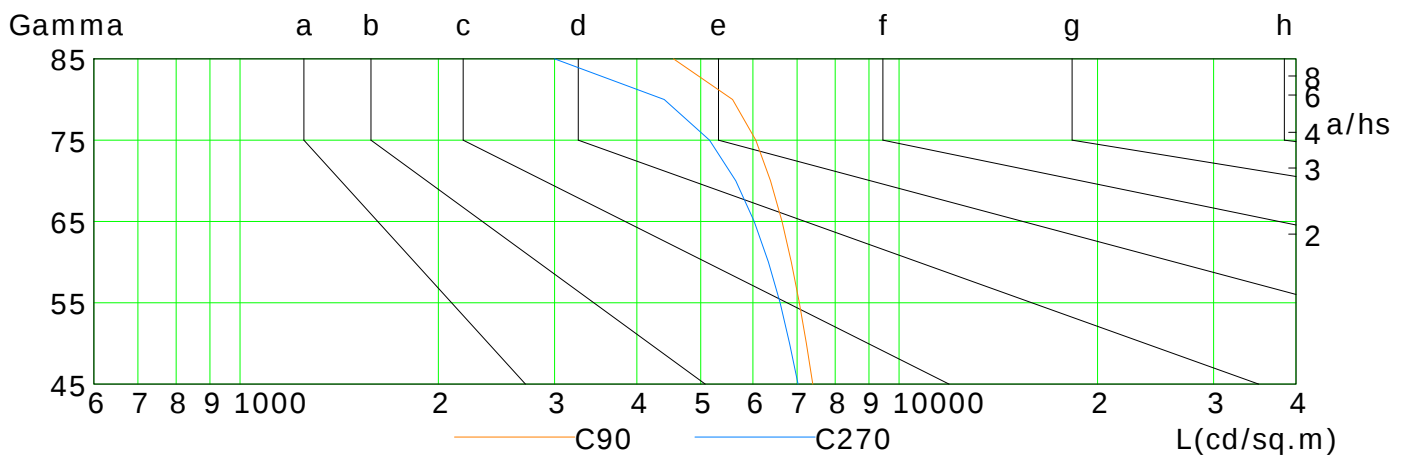
Luminous Intensity Distribution Curve(cd / klm)



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	6314	6019	5694	5328	4912	4427	3835	3077	1993
C90	7397	7233	7058	6863	6642	6381	6062	5589	4548
C180	6226	5918	5575	5203	4762	4249	3629	2829	1687
C270	7025	6819	6597	6336	6025	5651	5157	4401	3001

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

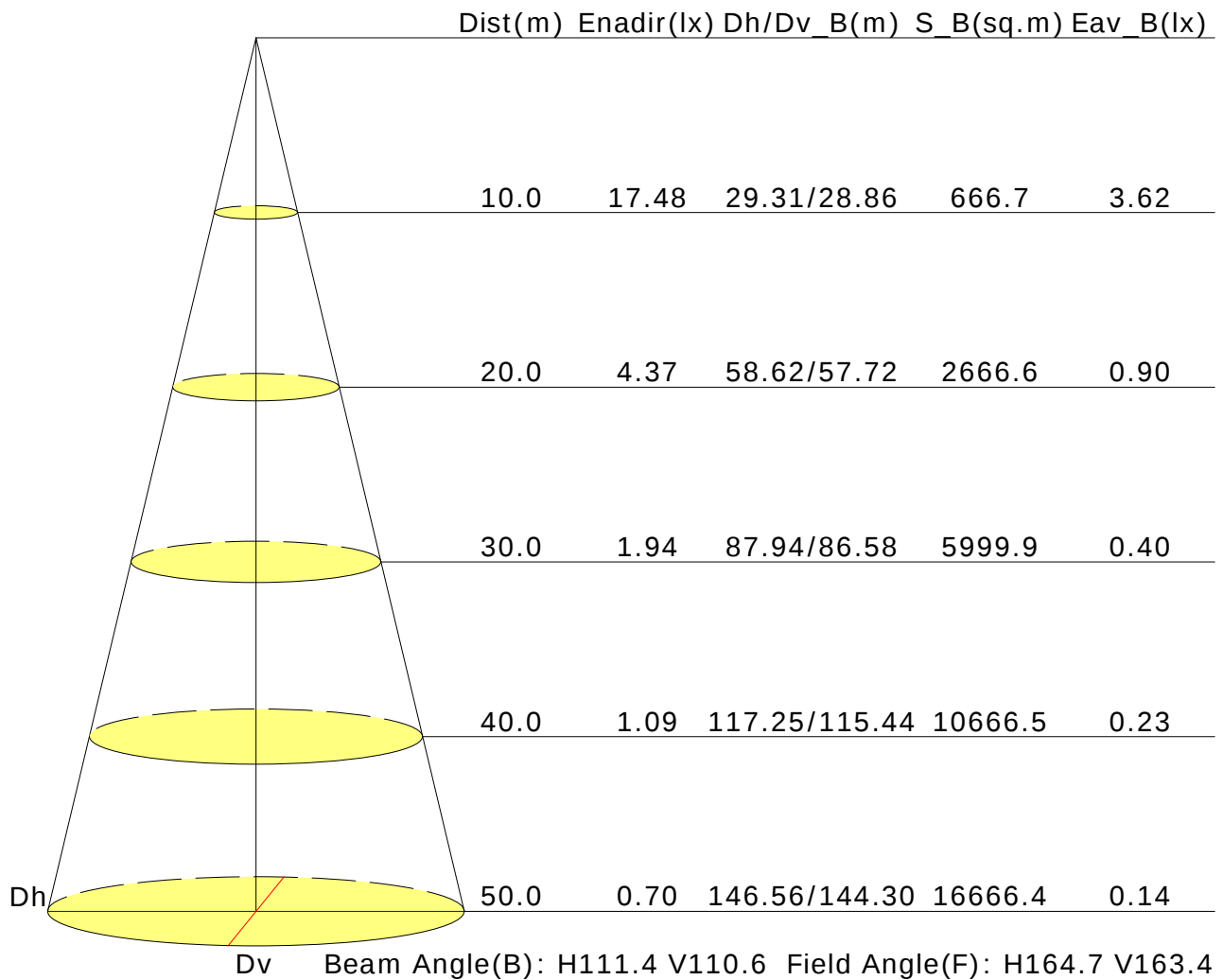
Test Device: LSG-1800B

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	18.6	20.0	19.0	20.3	20.5	19.0	20.4	19.3	20.6	20.9
3H	20.1	21.4	20.4	21.7	21.9	20.6	21.8	20.9	22.1	22.4
4H	20.7	21.9	21.0	22.2	22.5	21.2	22.4	21.6	22.7	23.0
6H	21.1	22.2	21.5	22.5	22.9	21.7	22.8	22.1	23.2	23.5
8H	21.2	22.3	21.6	22.6	23.0	21.9	23.0	22.3	23.3	23.6
12H	21.3	22.3	21.7	22.7	23.0	22.0	23.0	22.4	23.3	23.7
X=4H Y=2H	19.3	20.5	19.7	20.8	21.1	19.6	20.8	19.9	21.1	21.4
3H	20.9	22.0	21.3	22.3	22.7	21.3	22.4	21.7	22.7	23.1
4H	21.6	22.6	22.1	22.9	23.3	22.1	23.0	22.5	23.4	23.8
6H	22.2	23.0	22.6	23.4	23.8	22.7	23.5	23.2	23.9	24.4
8H	22.4	23.1	22.8	23.5	24.0	22.9	23.7	23.4	24.1	24.5
12H	22.5	23.2	22.9	23.6	24.0	23.1	23.8	23.5	24.2	24.6
X=8H Y=4H	21.9	22.7	22.4	23.1	23.5	22.4	23.1	22.8	23.5	24.0
6H	22.6	23.2	23.1	23.7	24.2	23.1	23.7	23.6	24.2	24.6
8H	22.9	23.4	23.4	23.9	24.4	23.4	23.9	23.9	24.4	24.9
12H	23.0	23.5	23.5	24.0	24.5	23.6	24.1	24.1	24.5	25.1
X=12H Y=4H	22.0	22.7	22.4	23.1	23.5	22.4	23.1	22.8	23.5	23.9
6H	22.7	23.2	23.2	23.7	24.2	23.2	23.7	23.6	24.2	24.7
8H	23.0	23.4	23.5	23.9	24.4	23.5	23.9	24.0	24.4	24.9
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 5000lm ($8\log(F/F_0) = 5.6$).

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Temperature:

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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:45W 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:45W 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:45W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												