

Report No.:

Test Time: 30.10.2020 15:47

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 50 30LED 0.78A 100Wx2 5000K opal

Number of Lamps: 1

Lumens per Lamp: 15659.5 lm

Luminous Length (mm): 55 mm

Luminous Width (mm): 1245 mm

Luminous Height (mm): 80 mm

Voltage: 221.5 V

Current: 0.911 A

Power: 197.89 W

Power Factor: 0.981

Photometric Results

CIE Class: Direct

Total Rated Lamp Lumens: 15659.5 lm

Measurement Flux: 15659.4 lm

Efficiency: 100.00%

Downward Ratio: 99.67%

Upward Ratio: 0.33%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 164.5, 160.0, 161.9, 162.0

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 111.5, 109.1, 110.2, 110.3

Luminaire Efficacy Rating (LER): 79.18

Central Intensity: 5573.38 cd

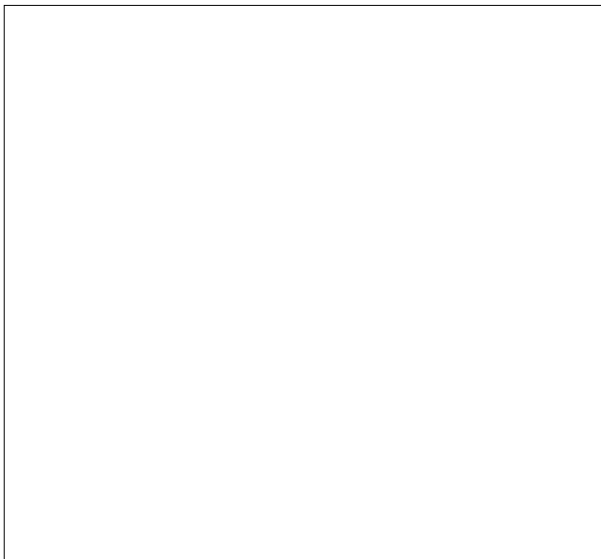
Max. Intensity: 5574.4 cd

Pos of Max. Intensity: H22.5 V0

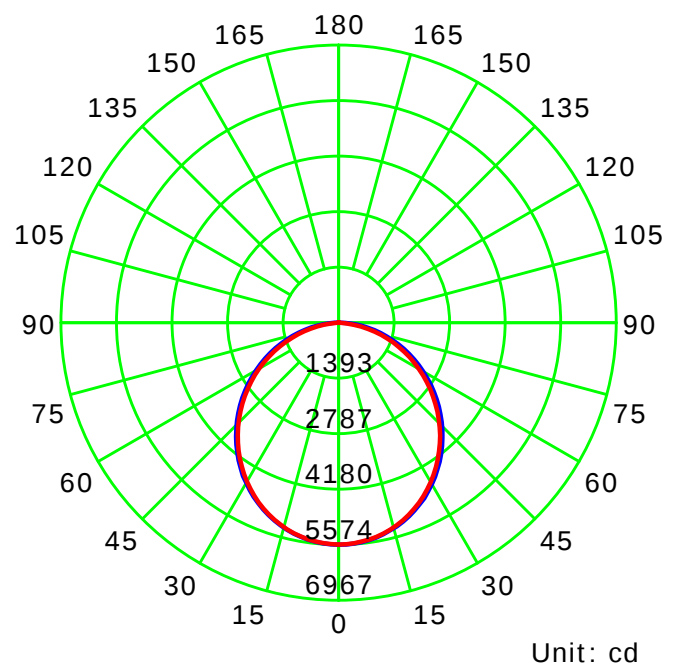
S/MH(C0/C180): 1.24

S/MH(C90/C270): 1.23

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

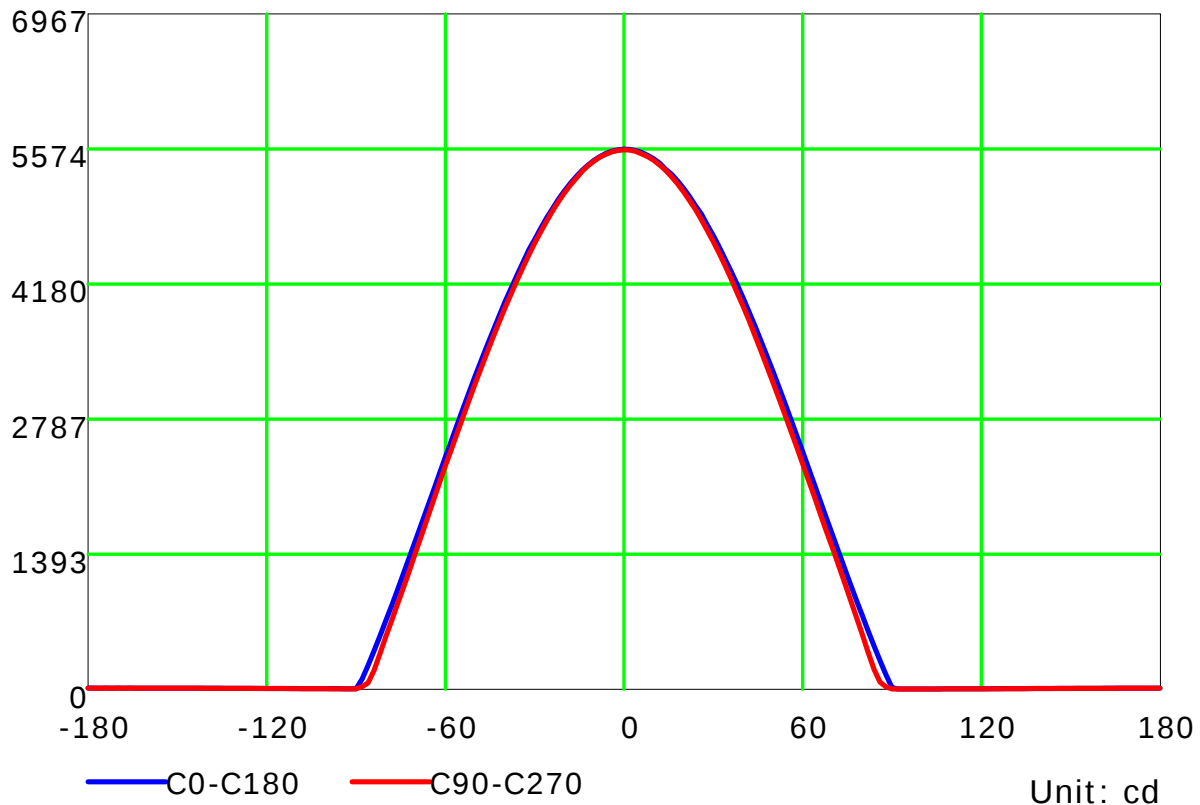
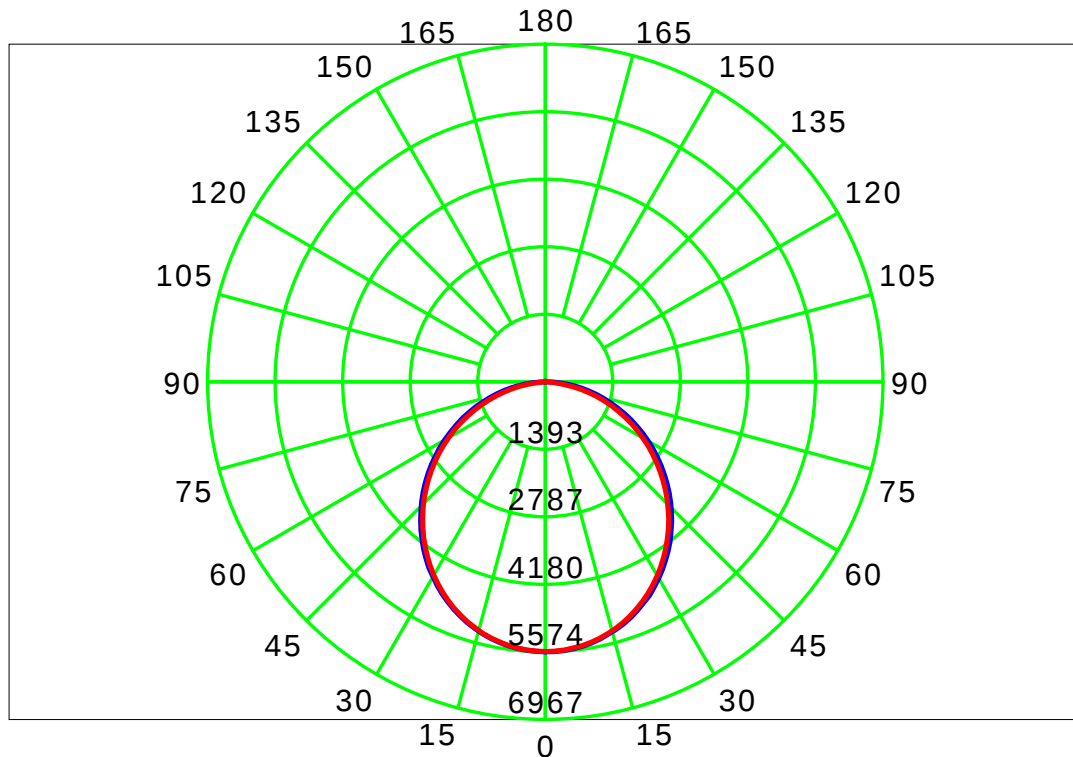
Test Device: LSG-1800B

Distance: 12.682 m

Humidity:

Inspector:

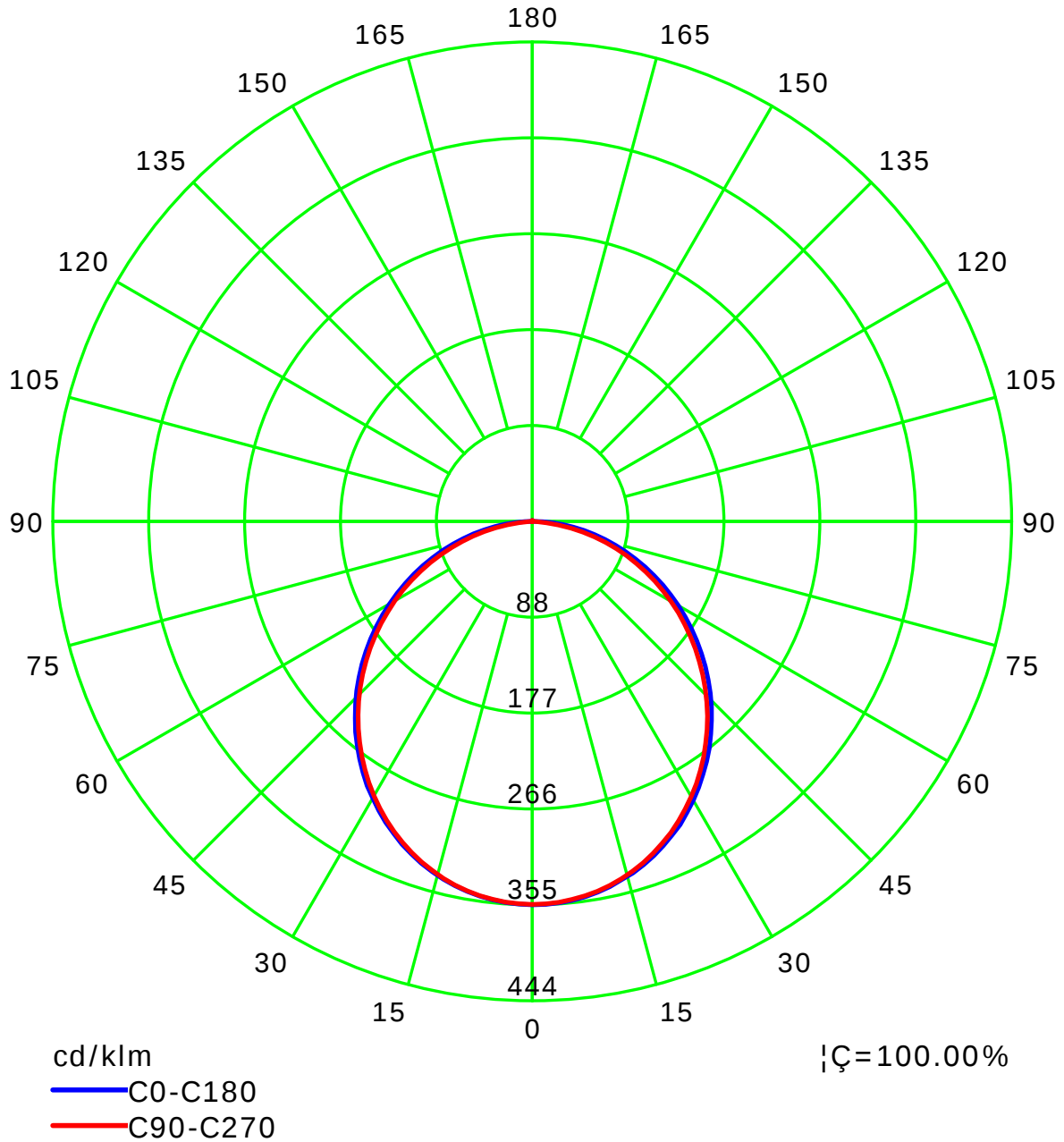
Luminous Intensity Distribution Curve



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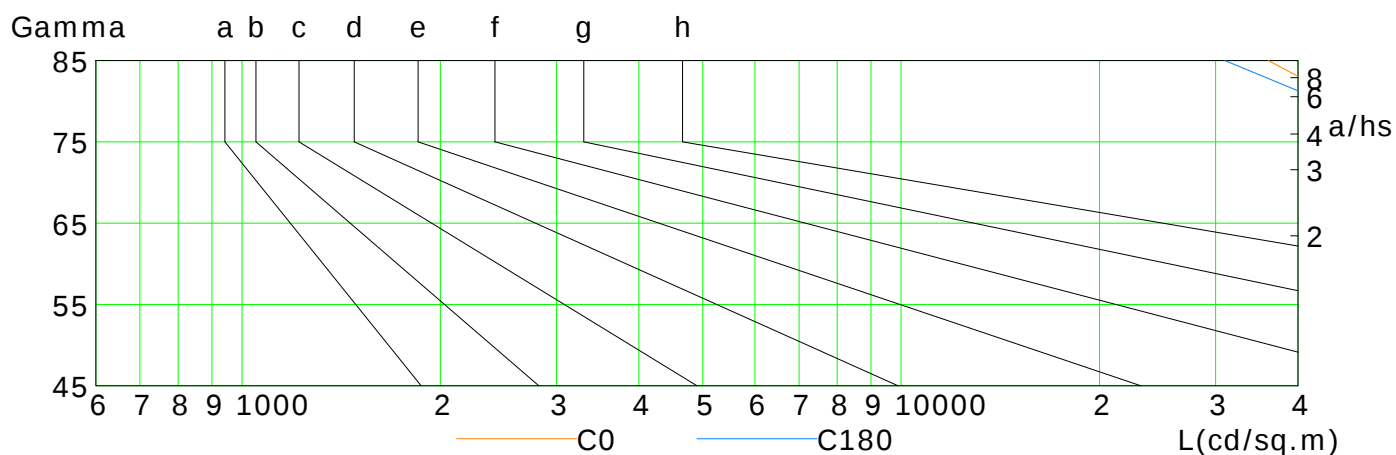
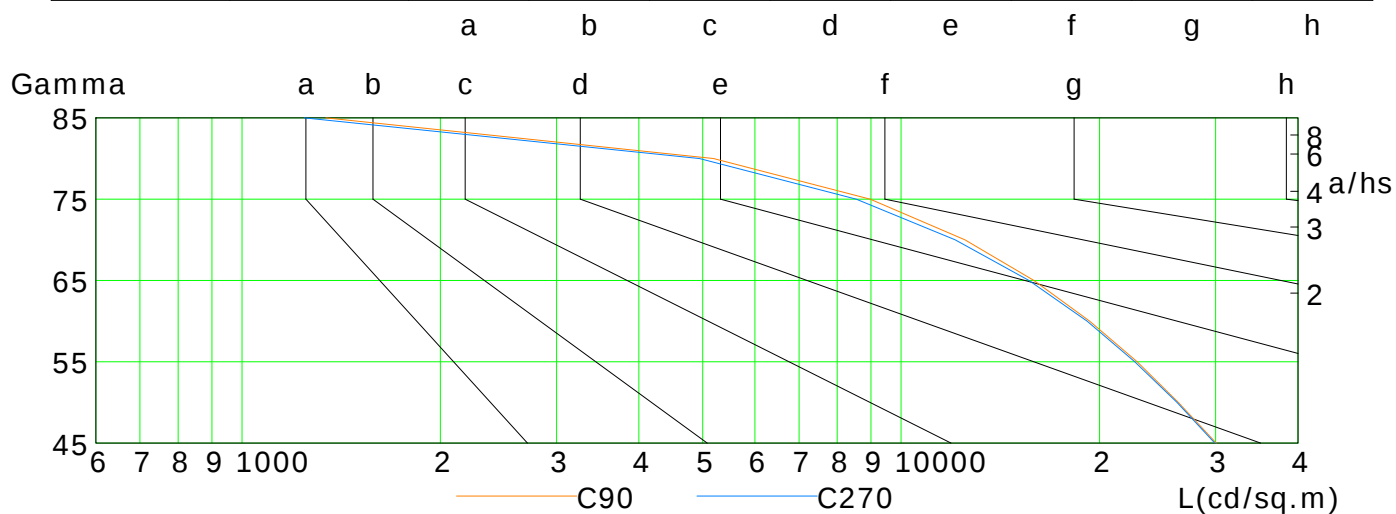
Gamma Plane (°): 0.0-180.0: 2.0
Test Device: LSG-1800B
Distance: 12.682 m
Humidity:
Inspector:

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	71283	69289	67055	64476	61500	57897	53427	47151	36085
C90	30060	26338	22803	19320	15905	12493	8973	5192	1341
C180	70310	68196	65754	62984	59759	55901	50896	43700	30995
C270	29912	26216	22624	19146	15625	12081	8547	4943	1243

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

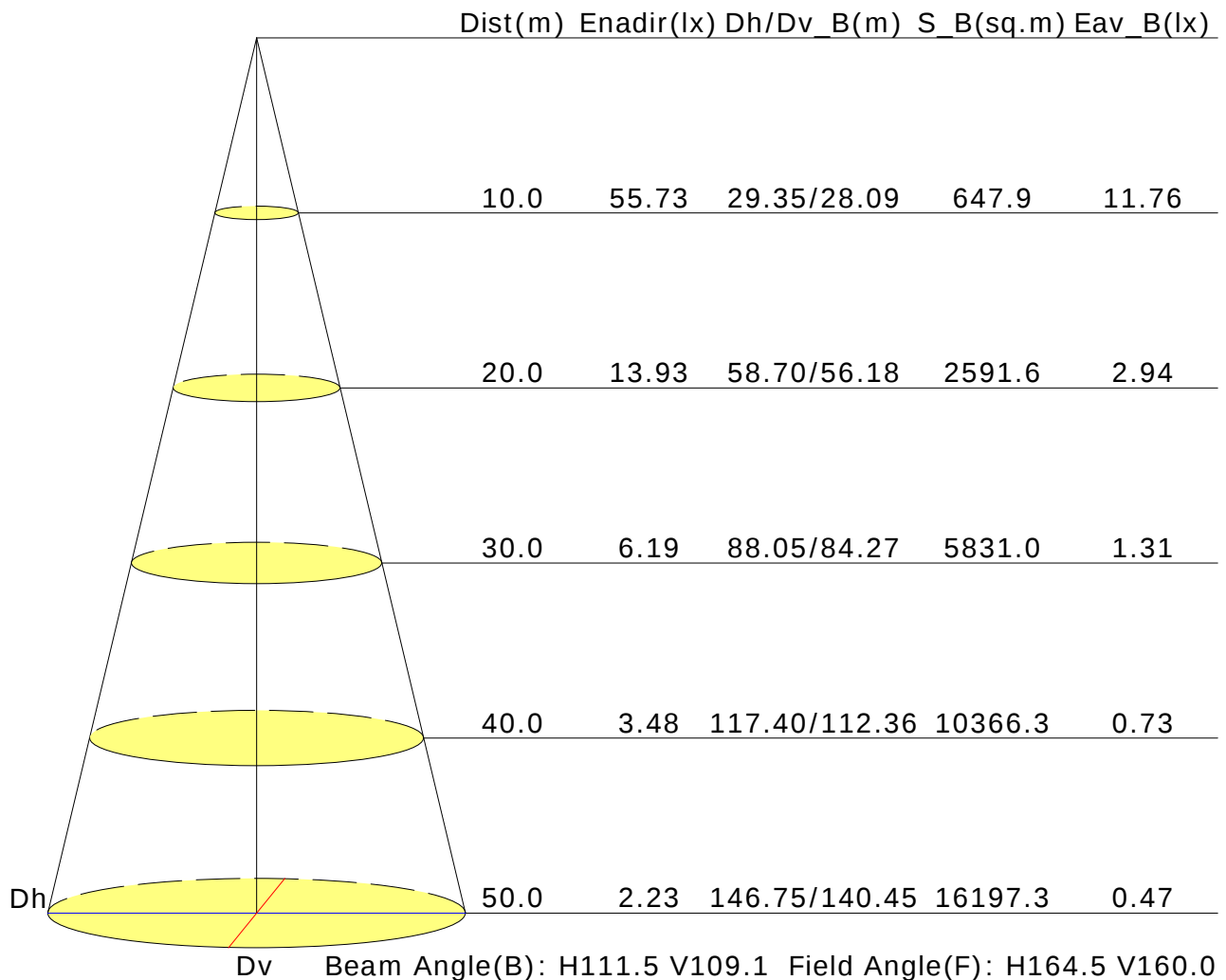
Test Device: LSG-1800B

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	25.8	27.2	26.1	27.4	27.6	23.6	25.0	23.9	25.2	25.5
3H	27.3	28.6	27.7	28.9	29.2	24.6	25.9	24.9	26.2	26.4
4H	28.0	29.2	28.4	29.5	29.8	24.9	26.1	25.3	26.4	26.7
6H	28.5	29.6	28.9	30.0	30.3	25.1	26.2	25.5	26.5	26.8
8H	28.7	29.8	29.1	30.1	30.4	25.1	26.2	25.5	26.5	26.8
12H	28.8	29.8	29.2	30.2	30.5	25.1	26.1	25.5	26.4	26.8
X=4H Y=2H	26.0	27.2	26.4	27.5	27.8	24.3	25.5	24.6	25.8	26.1
3H	27.7	28.8	28.1	29.1	29.5	25.4	26.5	25.8	26.8	27.2
4H	28.5	29.4	28.9	29.8	30.2	25.8	26.8	26.3	27.1	27.5
6H	29.1	29.9	29.5	30.3	30.7	26.1	26.9	26.5	27.3	27.7
8H	29.3	30.1	29.8	30.5	30.9	26.1	26.9	26.5	27.3	27.7
12H	29.5	30.2	29.9	30.6	31.0	26.1	26.8	26.5	27.2	27.6
X=8H Y=4H	28.6	29.3	29.0	29.7	30.1	26.1	26.9	26.5	27.3	27.7
6H	29.2	29.8	29.7	30.3	30.8	26.4	27.0	26.9	27.5	27.9
8H	29.5	30.0	30.0	30.5	31.0	26.5	27.0	27.0	27.5	28.0
12H	29.7	30.2	30.2	30.6	31.2	26.5	26.9	27.0	27.4	27.9
X=12H Y=4H	28.5	29.2	29.0	29.6	30.1	26.1	26.8	26.6	27.2	27.7
6H	29.2	29.8	29.7	30.2	30.7	26.5	27.0	26.9	27.5	27.9
8H	29.5	30.0	30.0	30.5	31.0	26.5	27.0	27.0	27.5	28.0
Variations with the observer position at spacings:										
S=1.0H	+0.2/-0.2					+0.2/-0.3				
S=1.5H	+0.6/-0.6					+0.4/-0.8				
S=2.0H	+1.2/-1.4					+0.7/-1.4				

Calculate in accordance with CIE Pub.117. The table is revised with 15660lm ($8\log(F/F_0) = 9.6$).

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Temperature:

Operator:

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	0.67	0.74	0.80	0.87	0.92	0.96	1.00	1.03	
	0.30		0.49	0.59	0.67	0.72	0.81	0.86	0.90	0.96	1.00	
	0.20		0.43	0.53	0.61	0.67	0.75	0.82	0.86	0.92	0.96	
0.50	0.50	0.20	0.55	0.65	0.72	0.77	0.84	0.88	0.92	0.96	0.99	
	0.30		0.48	0.58	0.65	0.71	0.78	0.84	0.88	0.93	0.96	
	0.20		0.43	0.53	0.60	0.66	0.74	0.80	0.84	0.90	0.93	
0.30	0.50	0.20	0.53	0.63	0.69	0.74	0.81	0.85	0.88	0.92	0.95	
	0.30		0.47	0.57	0.64	0.69	0.76	0.81	0.85	0.90	0.93	
	0.20		0.42	0.52	0.59	0.65	0.72	0.78	0.82	0.87	0.90	
0.00	0.00	0.00	0.40	0.50	0.57	0.62	0.69	0.74	0.78	0.83	0.86	
Rating:198W 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	1.00	0.83	0.70	0.61	0.49	0.41	0.35	0.27	0.22	
	0.30		0.83	0.71	0.61	0.54	0.44	0.37	0.32	0.25	0.21	
	0.20		0.71	0.62	0.54	0.49	0.40	0.34	0.30	0.24	0.20	
0.50	0.50	0.20	0.96	0.79	0.67	0.59	0.47	0.42	0.33	0.26	0.21	
	0.30		0.82	0.69	0.60	0.53	0.43	0.36	0.31	0.24	0.20	
	0.20		0.71	0.61	0.53	0.48	0.39	0.33	0.29	0.23	0.19	
0.30	0.50	0.20	0.94	0.76	0.65	0.56	0.45	0.37	0.32	0.24	0.20	
	0.30		0.80	0.67	0.58	0.51	0.41	0.35	0.30	0.23	0.19	
	0.20		0.70	0.60	0.52	0.47	0.38	0.32	0.28	0.22	0.18	
0.00	0.00	0.00	0.60	0.50	0.43	0.38	0.31	0.26	0.22	0.17	0.14	
Rating:198W 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	0.15	0.17	0.17	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	0.20	0.21	0.21	
	0.30		0.10	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.19	
	0.20		0.05	0.06	0.08	0.09	0.11	0.13	0.14	0.15	0.17	
0.30	0.50	0.20	0.16	0.17	0.17	0.18	0.19	0.19	0.20	0.20	0.20	
	0.30		0.09	0.11	0.12	0.13	0.15	0.16	0.16	0.17	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:198W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												