

Report No.: 1

Test Time: 15.02.2019 12:22

Luminaire Property

Luminaire Manufacturer: FAROS

Luminaire Description: FG 55 48LED 0,35A 55Wx2 5000K opal

Lamp Description: LED

Number of Lamps: 1

Lumens per Lamp: 13323.1 lm

Luminous Length (mm): 55 mm

Luminous Width (mm): 1245 mm

Luminous Height (mm): 90 mm

Voltage: 221.8 V

Current: 0.493 A

Power: 108.29 W

Power Factor: 0.986

Photometric Results

CIE Class: Direct

Total Rated Lamp Lumens: 13323.1 lm

Measurement Flux: 13315.5 lm

Efficiency: 99.94%

Downward Ratio: 98.53%

Upward Ratio: 1.42%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 160.3, 163.1, 161.9, 161.8

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 109.3, 109.9, 109.8, 109.7

Luminaire Efficacy Rating (LER): 123.01

Central Intensity: 4712.98 cd

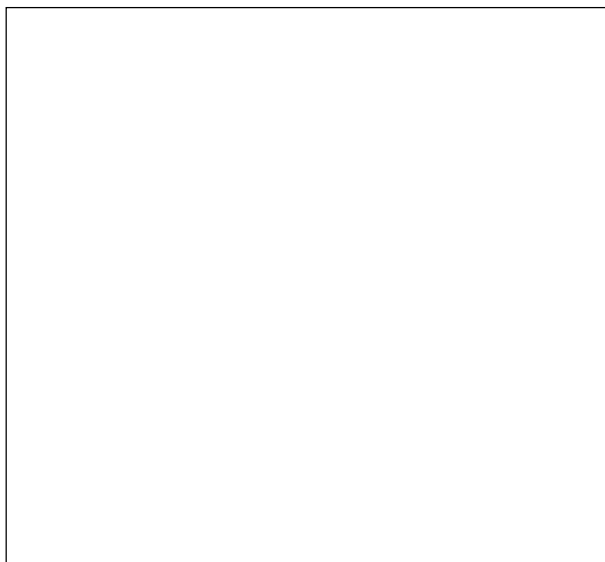
Max. Intensity: 4715.4 cd

Pos of Max. Intensity: H90 V0

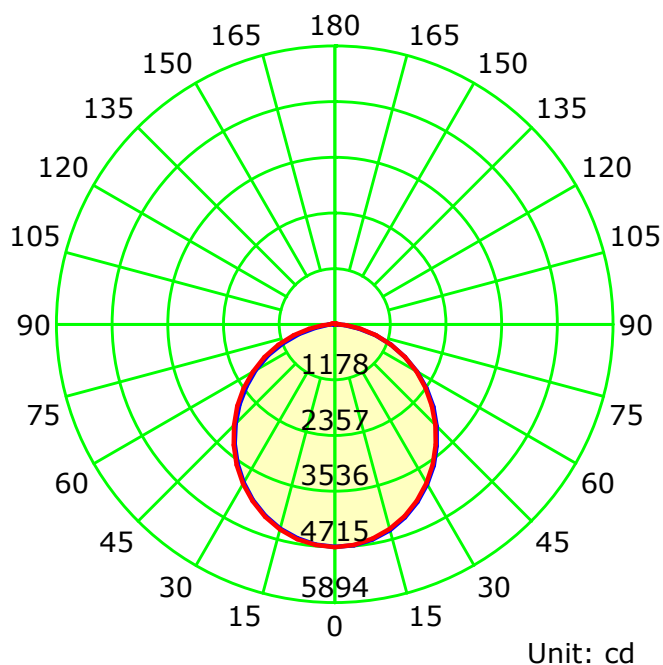
S/MH(C0/C180): 1.23

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

Gamma Plane (°):0.0-180.0:5.0

Test Lab:

Test Device: LSG-1800B

Test Type: TYPE C

Distance: 12.654 m

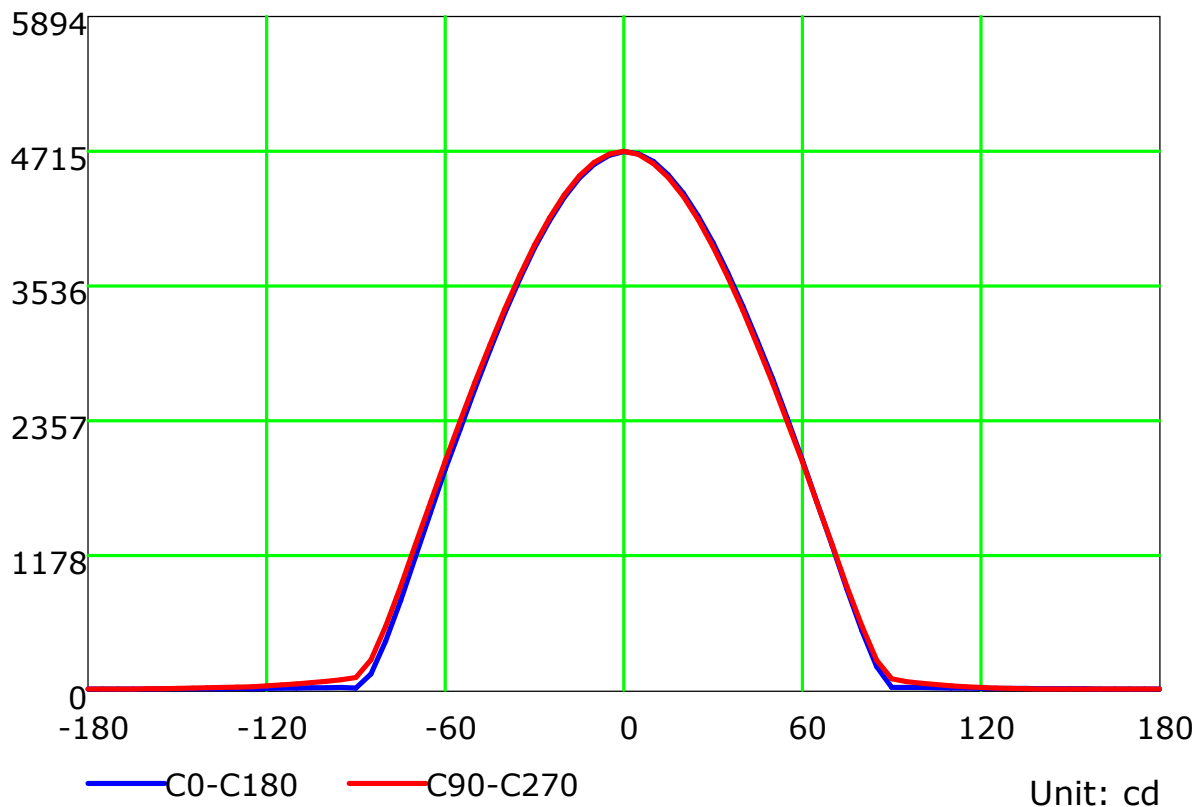
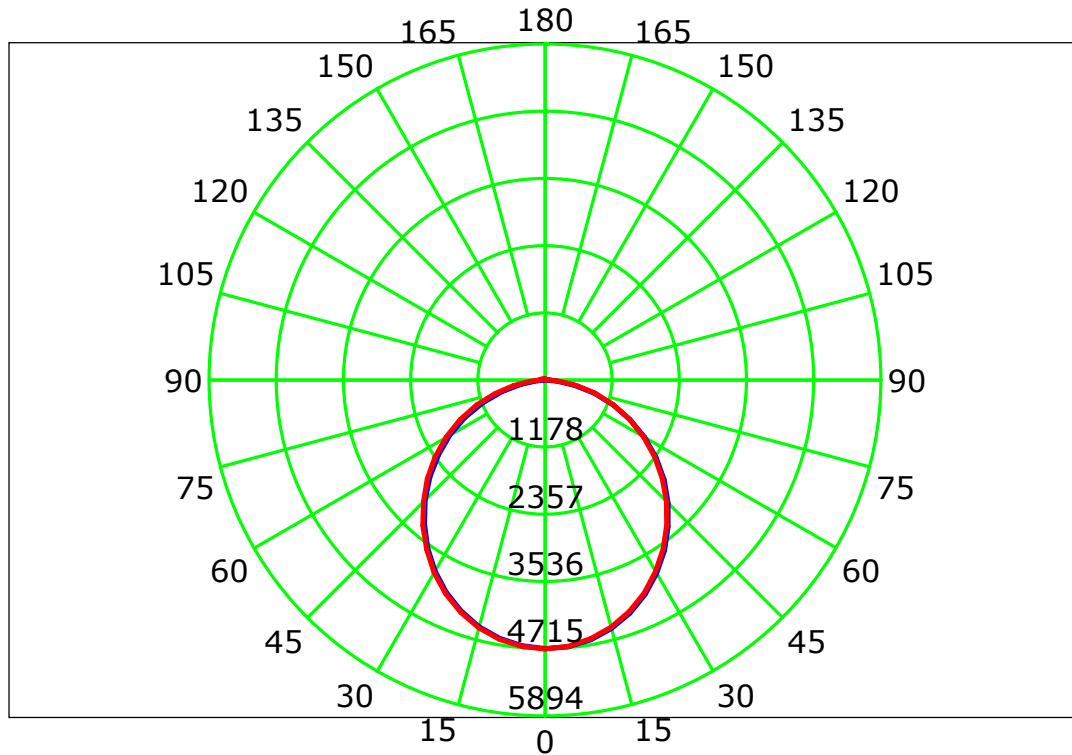
Temperature:

Humidity:

Operator:

Inspector:

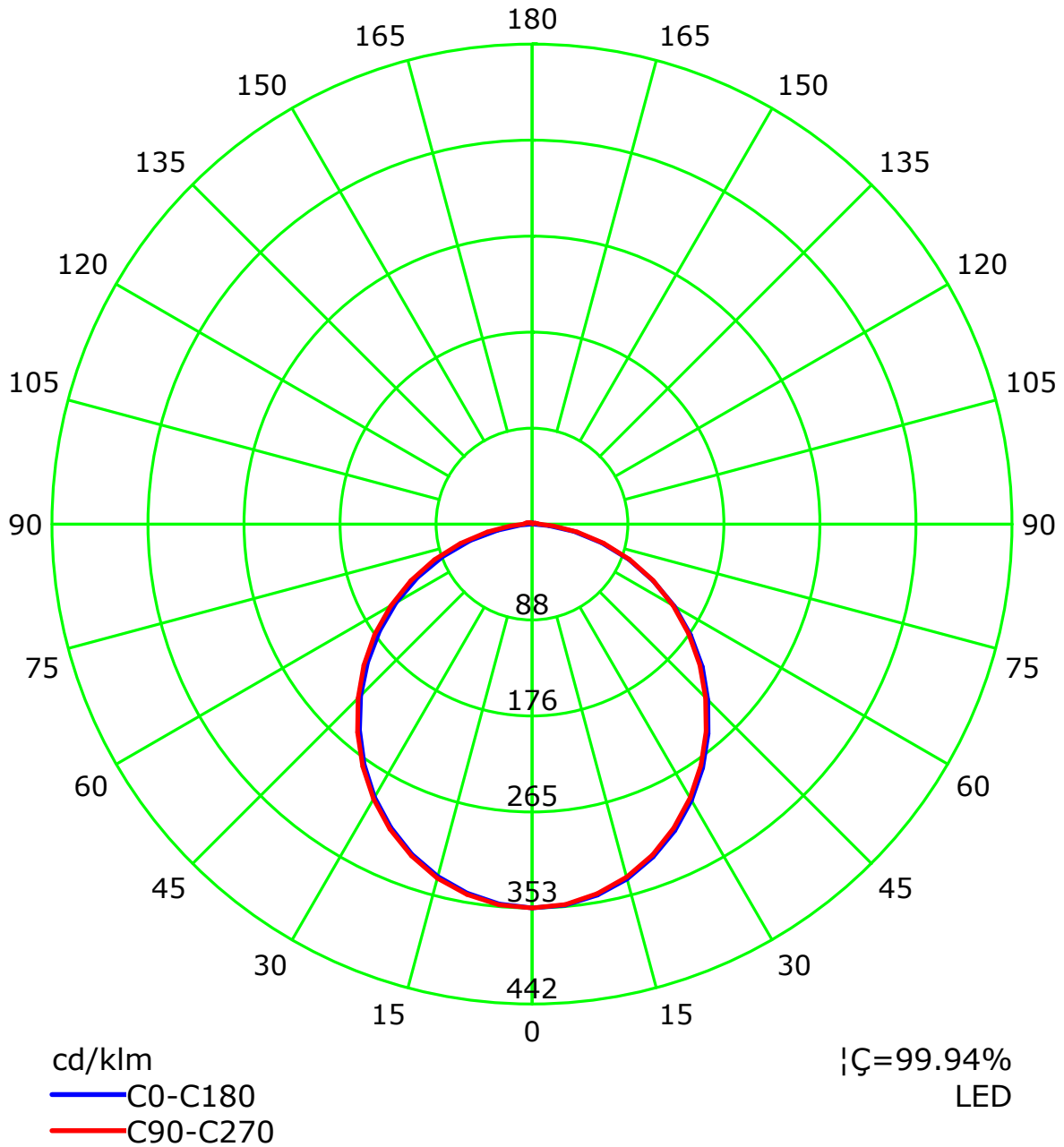
Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-180.0:5.0
Test Device: LSG-1800B
Distance: 12.654 m
Humidity:
Inspector:

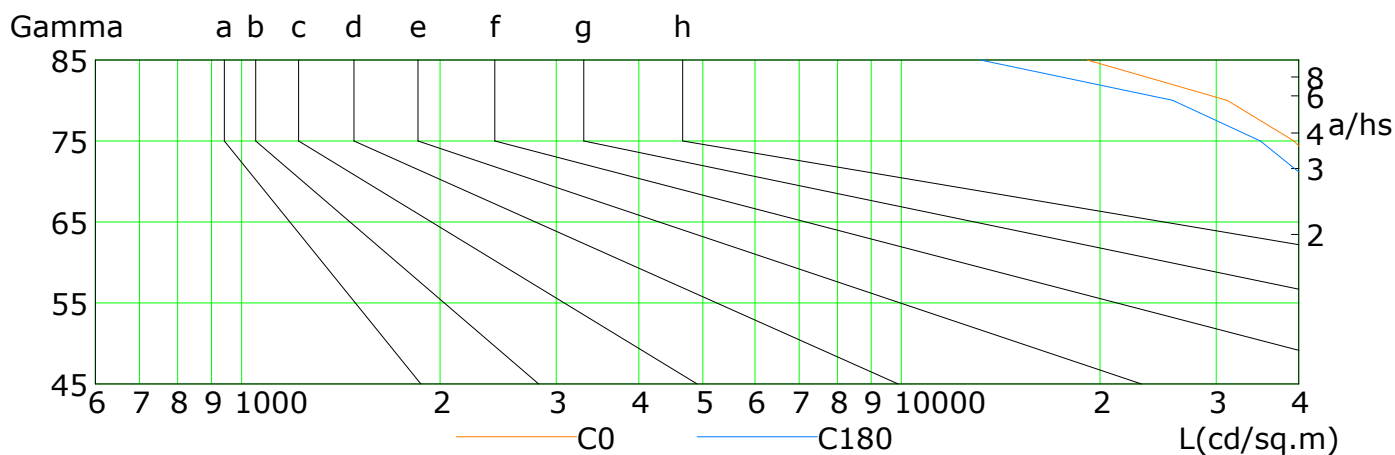
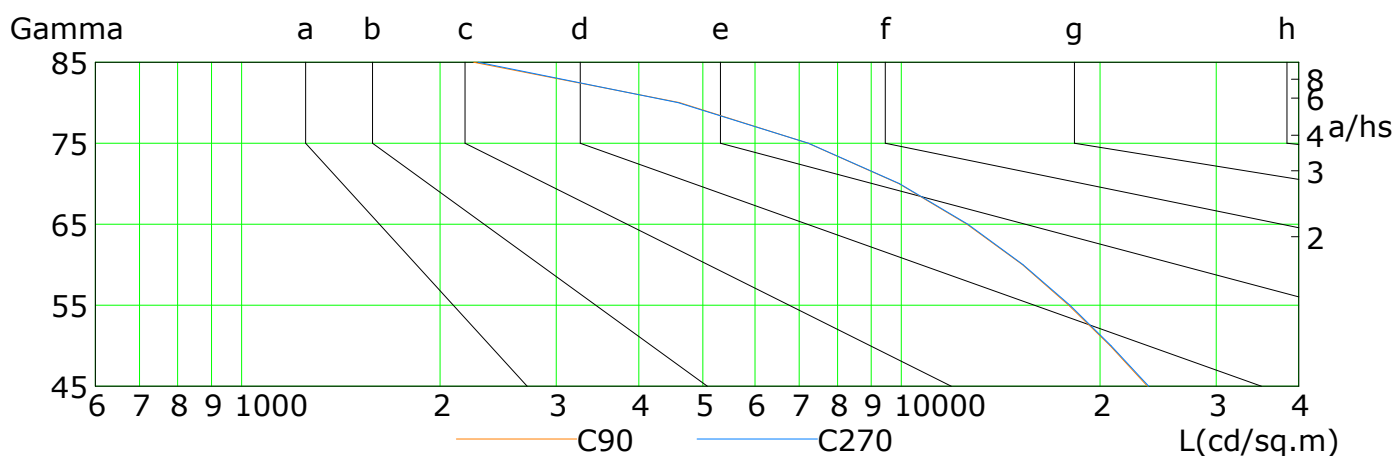
Luminous Intensity Distribution Curve(cd/klm)



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

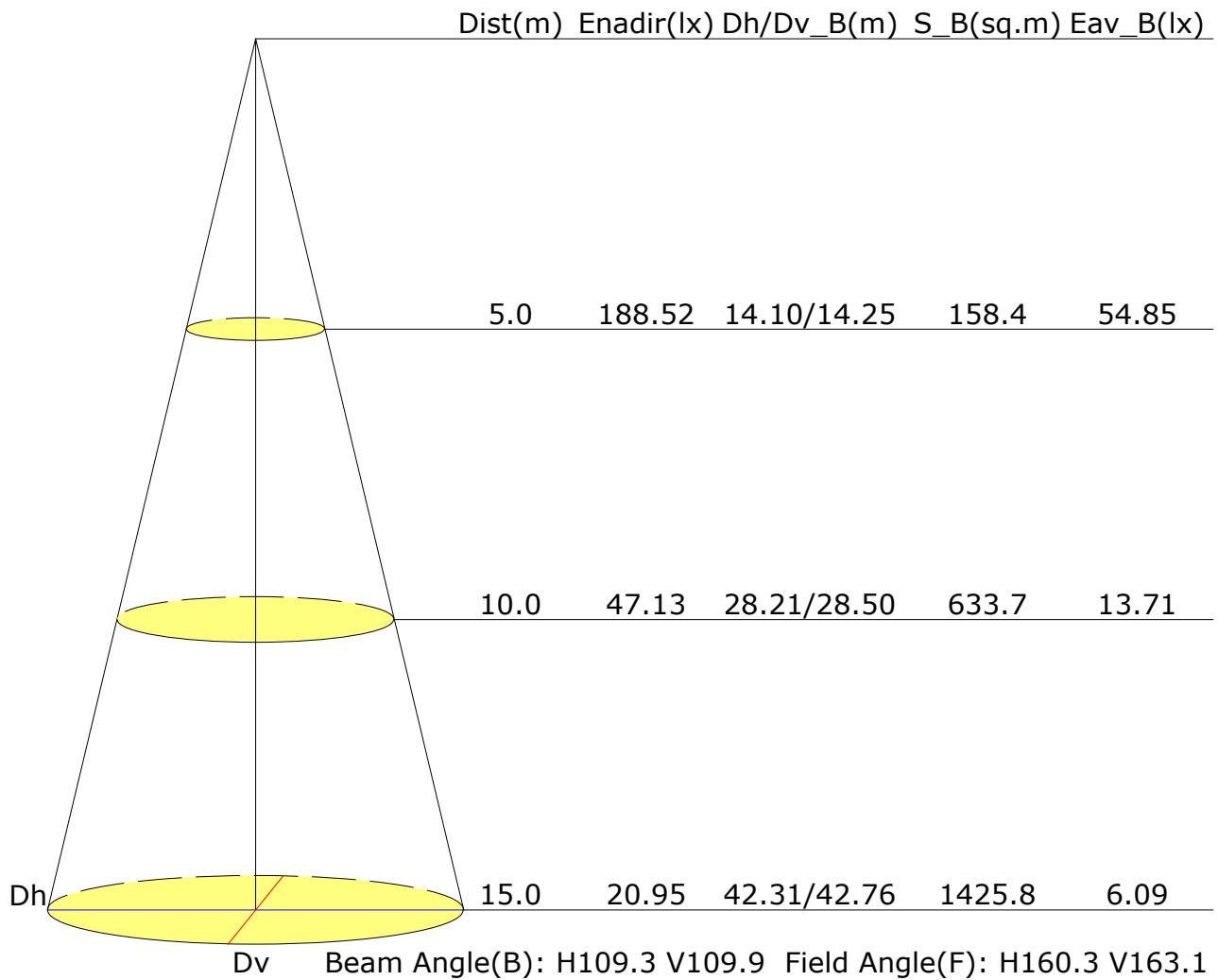


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	58819	57099	54905	52330	49136	45145	39348	31146	19117
C90	23606	20702	17920	15240	12561	9910	7220	4608	2248
C180	57351	55230	52767	50171	46521	41665	35021	25788	13175
C270	23692	20775	18002	15280	12605	9930	7233	4585	2284

C Plane (°):0.0-360.0: 22.5
 Test Lab:
 Test Type: TYPE C
 Temperature:
 Operator:

Gamma Plane (°):0.0-180.0:5.0
 Test Device: LSG-1800B
 Distance: 12.654 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	24.9	26.2	25.2	26.5	26.8	22.8	24.1	23.1	24.4	24.7
3H	26.3	27.6	26.7	27.9	28.2	23.8	25.1	24.2	25.3	25.7
4H	26.9	28.1	27.3	28.4	28.7	24.2	25.3	24.5	25.6	26.0
6H	27.3	28.4	27.7	28.7	29.1	24.4	25.5	24.7	25.8	26.1
8H	27.4	28.5	27.8	28.8	29.2	24.4	25.5	24.8	25.8	26.2
12H	27.5	28.5	27.9	28.9	29.2	24.4	25.4	24.8	25.8	26.1
X=4H Y=2H	25.1	26.3	25.5	26.6	26.9	23.4	24.6	23.8	24.9	25.2
3H	26.7	27.7	27.1	28.1	28.5	24.6	25.6	25.0	26.0	26.4
4H	27.4	28.3	27.8	28.7	29.1	25.1	26.0	25.5	26.3	26.8
6H	27.9	28.7	28.3	29.1	29.5	25.3	26.1	25.8	26.5	27.0
8H	28.0	28.7	28.5	29.2	29.6	25.4	26.1	25.9	26.6	27.0
12H	28.1	28.8	28.6	29.2	29.7	25.4	26.1	25.9	26.5	27.0
X=8H Y=4H	27.4	28.2	27.9	28.6	29.1	25.3	26.0	25.7	26.5	26.9
6H	28.0	28.6	28.5	29.0	29.5	25.7	26.3	26.1	26.7	27.2
8H	28.2	28.7	28.7	29.2	29.7	25.8	26.3	26.3	26.8	27.3
12H	28.3	28.7	28.8	29.2	29.8	25.8	26.3	26.4	26.8	27.3
X=12H Y=4H	27.4	28.1	27.9	28.5	29.0	25.3	26.0	25.8	26.4	26.9
6H	28.0	28.5	28.5	29.0	29.5	25.7	26.2	26.2	26.7	27.2
8H	28.2	28.6	28.7	29.1	29.7	25.8	26.3	26.3	26.8	27.3
Variations with the observer position at spacings:										
S=1.0H	+0.2/-0.2					+0.2/-0.3				
S=1.5H	+0.6/-0.7					+0.4/-0.8				
S=2.0H	+1.3/-1.4					+0.7/-1.3				

Calculate in accordance with CIE Pub.117. The table is revised with 13323lm ($8\log(F/F_0) = 9.0$).

C Plane (°):0.0-360.0: 22.5
 Test Lab:
 Test Type: TYPE C
 Temperature:
 Operator:

Gamma Plane (°):0.0-180.0:5.0
 Test Device: LSG-1800B
 Distance: 12.654 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	0.91	0.95	1.00	1.03	
	0.30		0.48	0.59	0.66	0.72	0.80	0.86	0.90	0.95	0.99	
	0.20		0.43	0.53	0.61	0.67	0.75	0.81	0.86	0.92	0.96	
0.50	0.50	0.20	0.54	0.64	0.71	0.76	0.83	0.88	0.91	0.95	0.98	
	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	0.60	0.65	0.73	0.79	0.83	0.89	0.92	
0.30	0.50	0.20	0.53	0.62	0.69	0.73	0.80	0.84	0.87	0.91	0.94	
	0.30		0.47	0.56	0.63	0.68	0.75	0.80	0.84	0.89	0.92	
	0.20		0.42	0.52	0.59	0.64	0.72	0.77	0.81	0.86	0.89	
0.00	0.00	0.00	0.40	0.49	0.56	0.61	0.68	0.73	0.77	0.81	0.84	
Rating:108W 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	0.99	0.82	0.70	0.61	0.49	0.41	0.35	0.27	0.22	
	0.30		0.83	0.70	0.61	0.54	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	
0.50	0.50	0.20	0.96	0.79	0.67	0.58	0.47	0.42	0.33	0.26	0.21	
	0.30		0.81	0.68	0.59	0.52	0.43	0.36	0.31	0.24	0.20	
	0.20		0.70	0.60	0.53	0.47	0.39	0.33	0.29	0.23	0.19	
0.30	0.50	0.20	0.93	0.76	0.64	0.56	0.44	0.37	0.31	0.24	0.20	
	0.30		0.79	0.67	0.57	0.51	0.41	0.34	0.30	0.23	0.19	
	0.20		0.69	0.59	0.52	0.46	0.38	0.32	0.28	0.22	0.18	
0.00	0.00	0.00	0.59	0.50	0.43	0.38	0.30	0.26	0.22	0.17	0.14	
Rating:108W 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	0.18	0.19	0.20	0.20	0.21	0.22	0.22	0.23	0.23	
	0.30		0.11	0.12	0.14	0.15	0.16	0.18	0.18	0.20	0.20	
	0.20		0.06	0.08	0.09	0.10	0.12	0.14	0.15	0.17	0.18	
0.50	0.50	0.20	0.17	0.18	0.19	0.20	0.20	0.21	0.21	0.22	0.22	
	0.30		0.11	0.12	0.13	0.14	0.16	0.17	0.18	0.19	0.20	
	0.20		0.06	0.07	0.09	0.10	0.12	0.14	0.15	0.16	0.17	
0.30	0.50	0.20	0.17	0.18	0.18	0.19	0.20	0.20	0.21	0.21	0.21	
	0.30		0.10	0.12	0.13	0.14	0.15	0.17	0.17	0.18	0.19	
	0.20		0.06	0.07	0.09	0.10	0.12	0.13	0.14	0.16	0.17	
0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
Rating:108W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												