

Report No.: 5

Test Time: 06.12.2017 14:53

Luminaire Property

Luminaire Manufacturer: FAROS

Luminaire Description: FP 150 50W 5000K 40x90gr. NEMA

Number of Lamps: 1

Luminous Width (mm): 153 mm

Voltage: 231.6 V

Power: 48.20 W

Luminous Length (mm): 396 mm

Luminous Height (mm): 80 mm

Current: 0.213 A

Power Factor: 0.976

Photometric Results

CIE Class: Direct

Measurement Flux: 5567.7 lm

Downward Ratio: 99%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 43.8, 145.8, 57.5, 57.8

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 27.9, 86.1, 37.2, 37.3

Luminaire Efficacy Rating (LER): 115.56

Max. Intensity: 7094.96 cd

S/MH(C0/C180): 0.47

Total Rated Lamp Lumens: 5567.7 lm

Efficiency: 100%

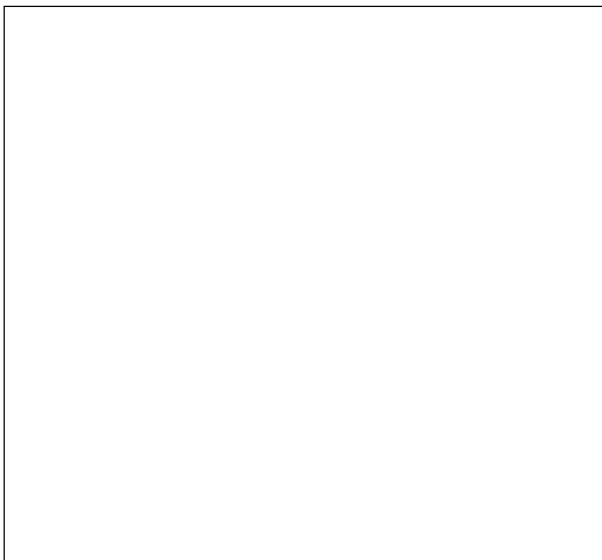
Upward Ratio: 1%

Central Intensity: 6493.62 cd

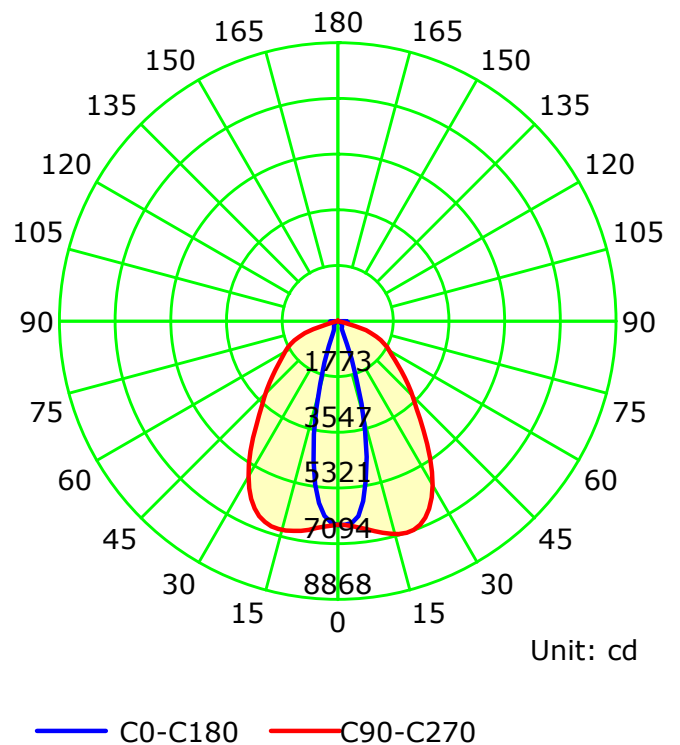
Pos of Max. Intensity: H90 V18

S/MH(C90/C270): 1.27

Picture Of Luminaire



Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

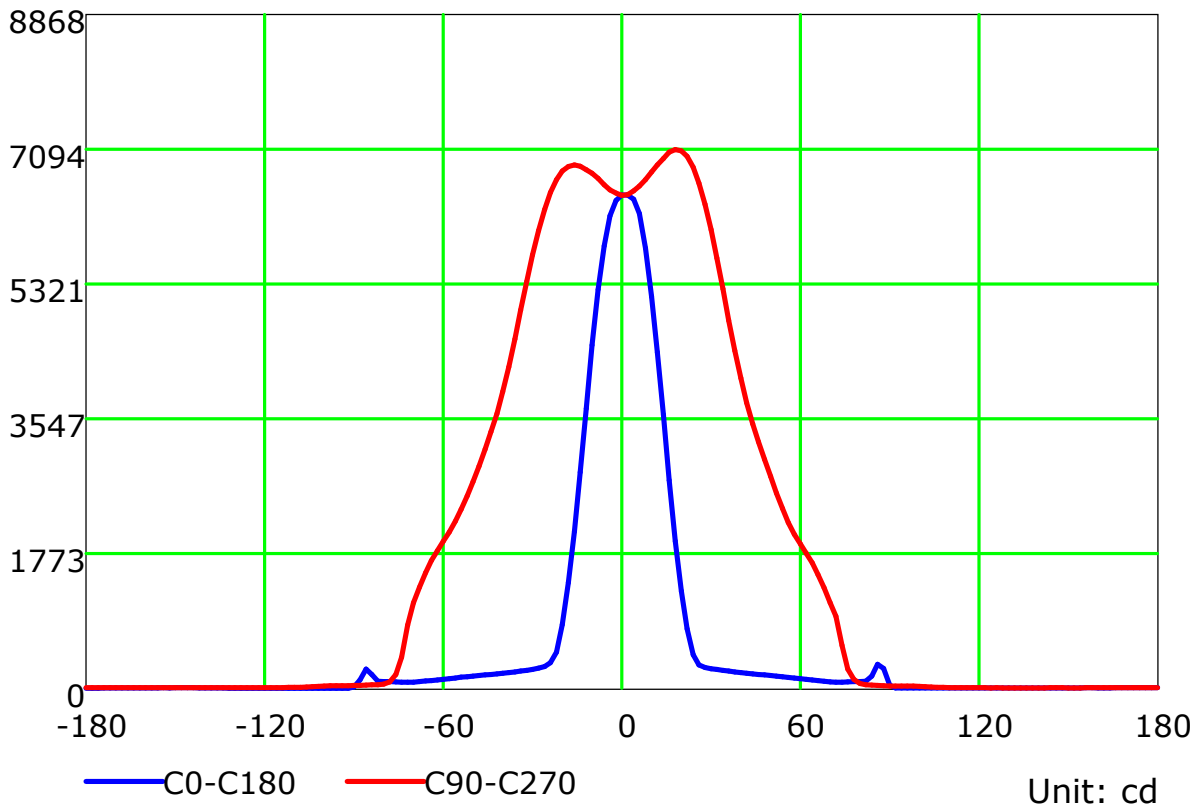
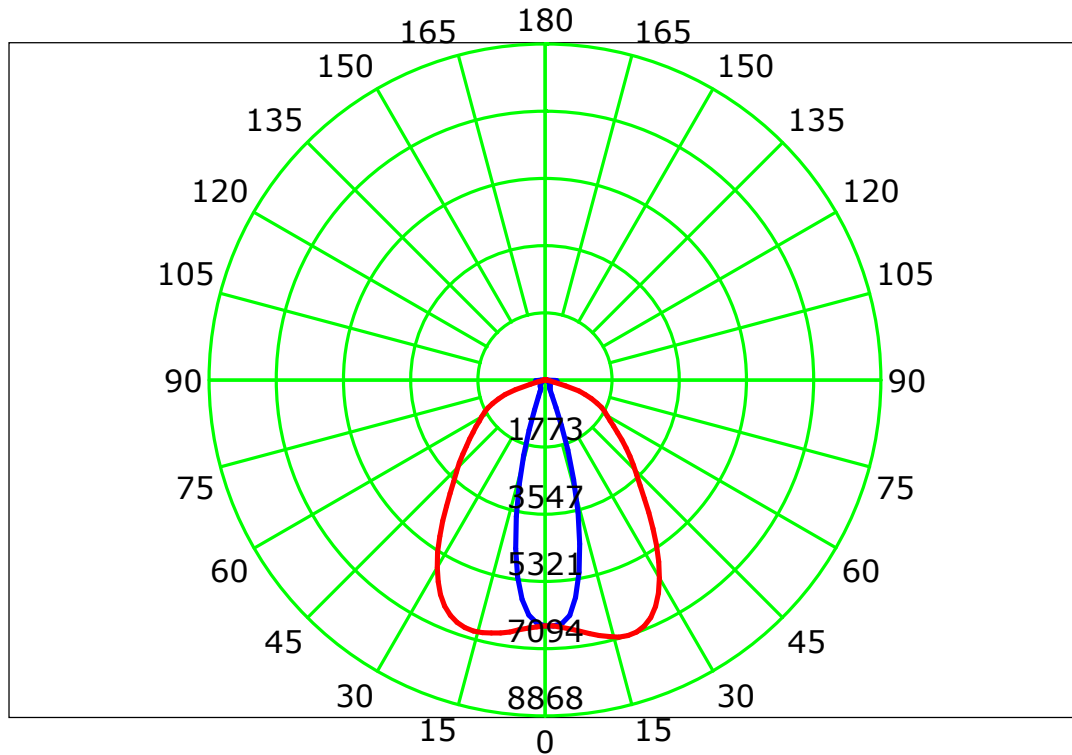
Test Device: LSG-1800B

Distance: 12.606 m

Humidity:

Inspector:

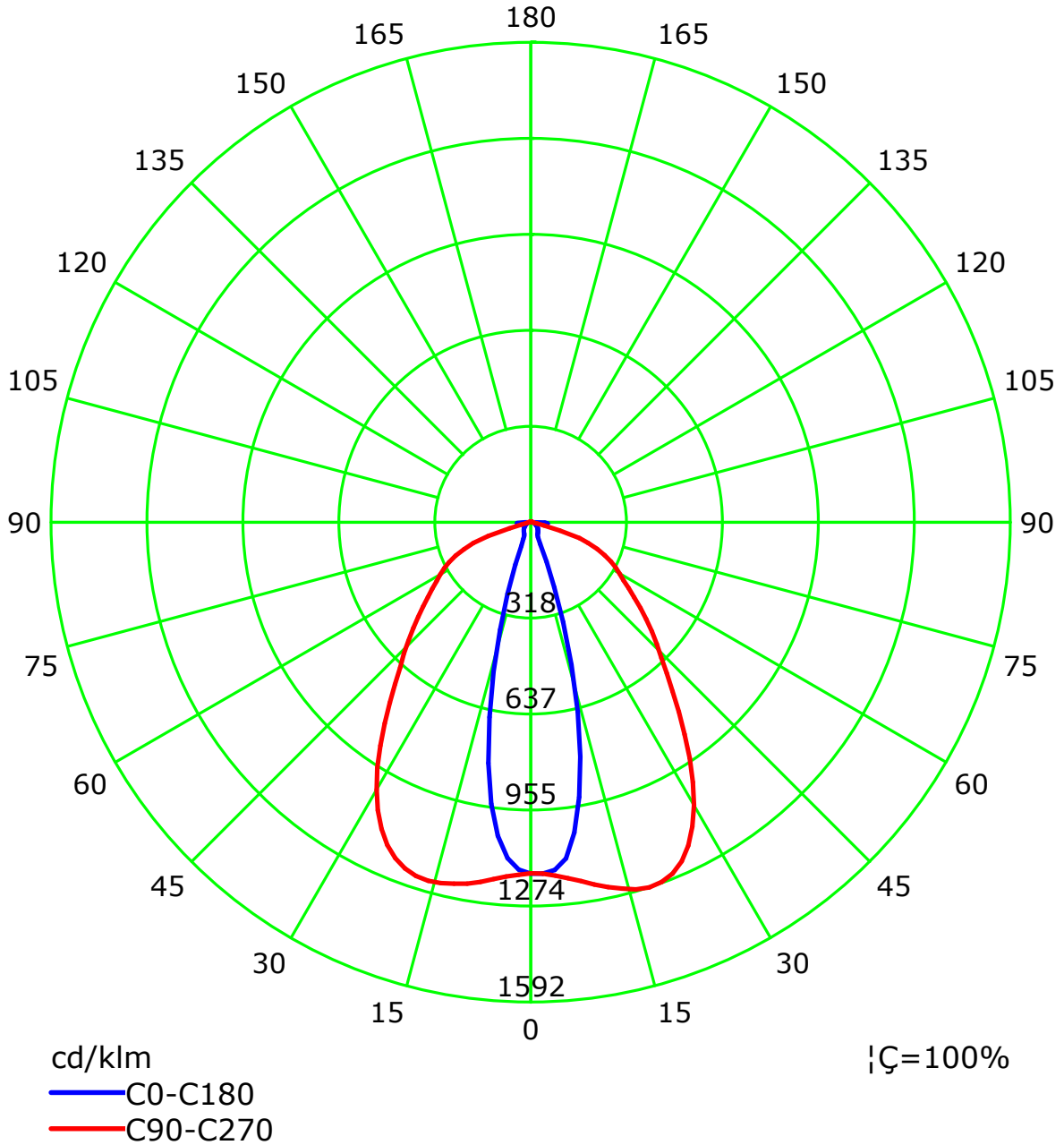
Luminous Intensity Distribution Curve



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

Gamma Plane (°):0.0-180.0:2.0
 Test Device: LSG-1800B
 Distance: 12.606 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 (°):0.0-180.0:2.0

Test Device: LSG-1800B

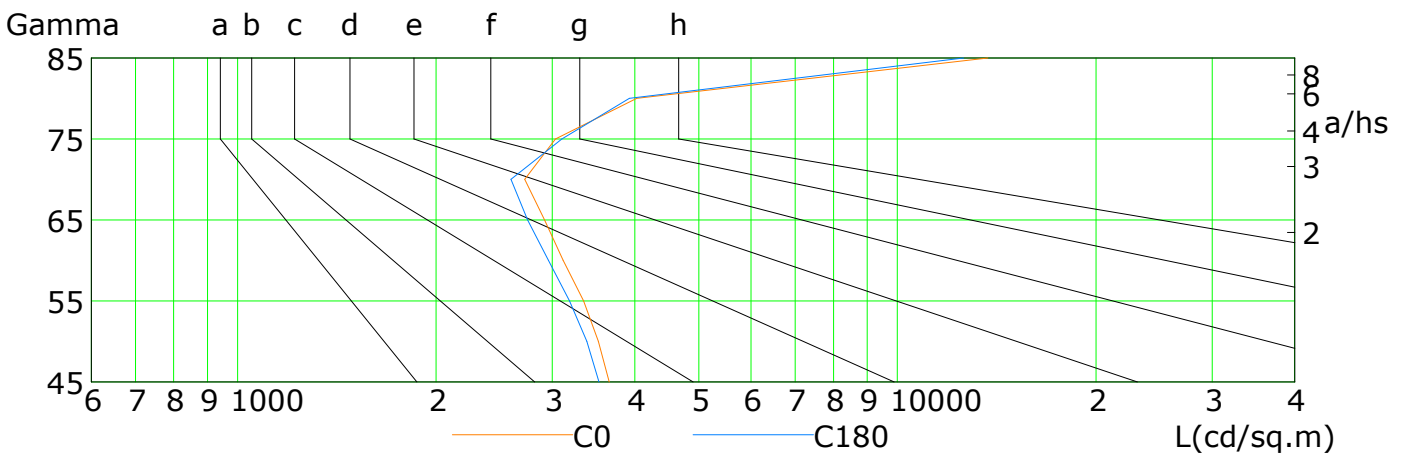
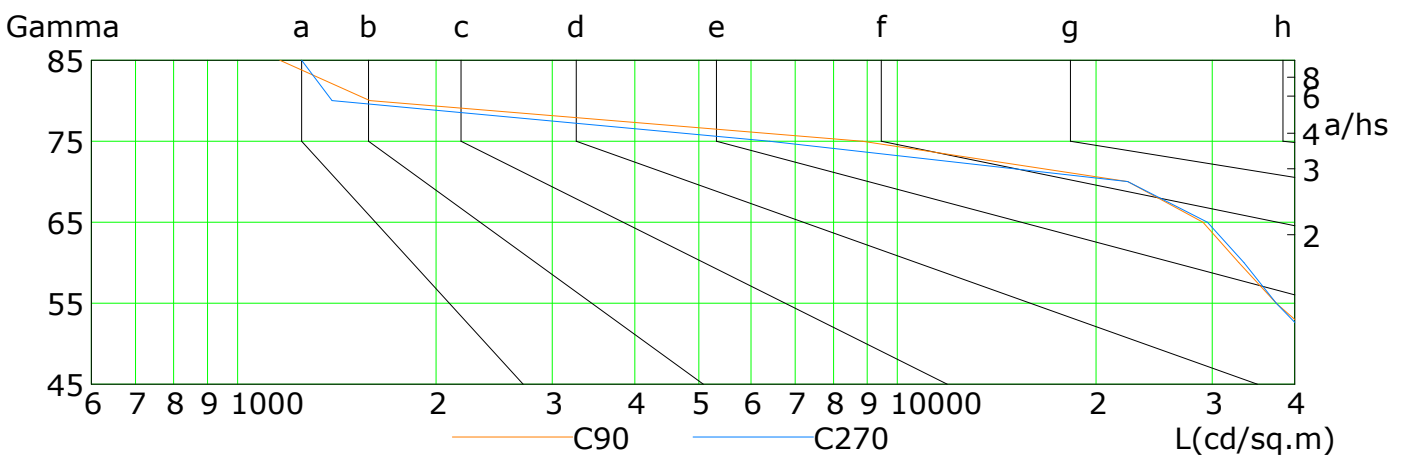
Distance: 12.606 m

Humidity:

Inspector:

Lum Limit Curve

Dazzle	Quality	Illuminance (lx)							
		a	b	c	d	e	f	g	h
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	3657	3523	3346	3115	2919	2723	3031	4028	13712
C90	51563	44160	37505	32915	29039	22341	8849	1586	1159
C180	3529	3384	3186	2958	2752	2596	3100	3925	12594
C270	50006	43053	37528	33521	29517	22329	6405	1390	1250

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

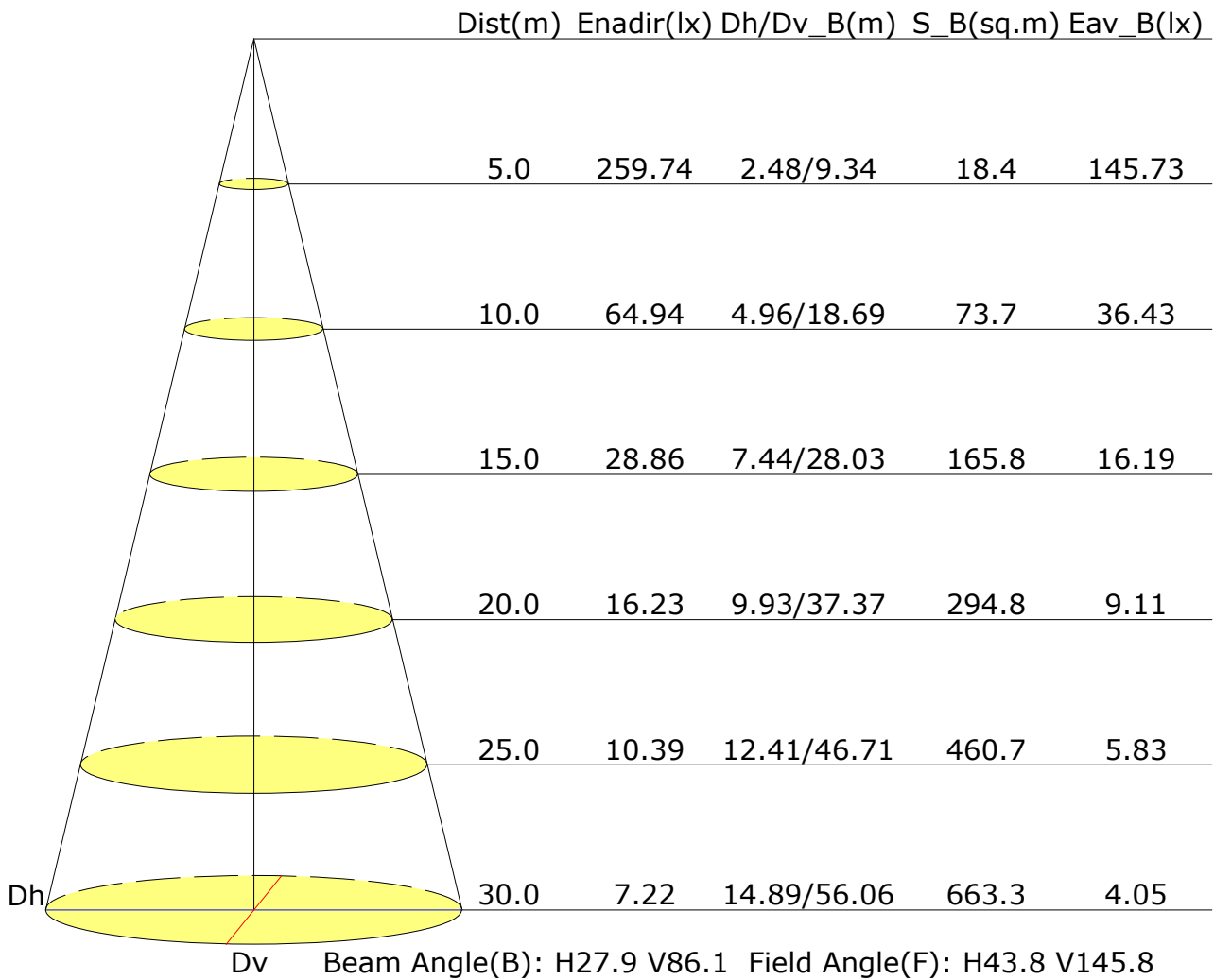
Test Device: LSG-1800B

Distance: 12.606 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	10.2	11.2	10.4	11.4	11.7	24.4	25.5	24.7	25.7	25.9
3H	11.6	12.5	11.9	12.8	13.1	25.8	26.8	26.1	27.0	27.3
4H	12.4	13.3	12.7	13.6	13.9	26.0	26.9	26.4	27.2	27.5
6H	13.5	14.3	13.8	14.6	15.0	26.0	26.8	26.3	27.1	27.4
8H	14.3	15.1	14.6	15.4	15.7	25.9	26.7	26.3	27.1	27.4
12H	16.7	17.4	17.1	17.8	18.1	25.9	26.7	26.3	27.0	27.4
X=4H Y=2H	11.9	12.8	12.2	13.1	13.4	24.2	25.1	24.5	25.4	25.7
3H	13.0	13.8	13.4	14.1	14.5	25.6	26.4	26.0	26.7	27.1
4H	13.7	14.4	14.1	14.8	15.2	25.8	26.5	26.3	26.9	27.3
6H	14.7	15.3	15.2	15.7	16.1	25.8	26.4	26.2	26.8	27.2
8H	15.5	16.0	15.9	16.4	16.9	25.8	26.3	26.2	26.8	27.2
12H	17.9	18.4	18.3	18.8	19.3	25.7	26.3	26.2	26.7	27.1
X=8H Y=4H	14.1	14.6	14.5	15.0	15.5	25.7	26.3	26.2	26.7	27.1
6H	15.1	15.5	15.5	16.0	16.4	25.7	26.2	26.2	26.6	27.1
8H	15.8	16.2	16.3	16.7	17.2	25.7	26.1	26.2	26.5	27.1
12H	18.3	18.6	18.8	19.1	19.6	25.7	26.0	26.2	26.5	27.0
X=12H Y=4H	14.1	14.6	14.5	15.0	15.5	25.7	26.2	26.2	26.6	27.1
6H	15.1	15.5	15.6	15.9	16.5	25.7	26.1	26.2	26.5	27.0
8H	15.8	16.2	16.3	16.7	17.2	25.6	26.0	26.2	26.5	27.0
Variations with the observer position at spacings:										
S=1.0H	+0.7/-0.5					+1.1/-1.2				
S=1.5H	+1.0/-1.0					+2.5/-3.5				
S=2.0H	+1.8/-1.6					+3.6/-6.2				

Calculate in accordance with CIE Pub.117. The table is revised with 5568lm ($8\log(F/F_0) = 6.0$).

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: 12.606 m
 Humidity:
 Inspector:

Utilisation Factor Table(Floor cavity)

Utilisation Factors UF(F)			SHR NOM = 0.75									
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	0.71	0.80	0.85	0.90	0.95	0.99	1.02	1.05	1.07	
		0.30	0.65	0.74	0.80	0.84	0.90	0.95	0.98	1.02	1.04	
		0.20	0.61	0.69	0.75	0.80	0.87	0.91	0.94	0.99	1.02	
0.50	0.50	0.20	0.70	0.78	0.83	0.87	0.92	0.95	0.98	1.01	1.03	
		0.30	0.64	0.72	0.78	0.82	0.88	0.92	0.95	0.98	1.01	
		0.20	0.60	0.68	0.74	0.79	0.85	0.89	0.92	0.96	0.99	
0.30	0.50	0.20	0.69	0.76	0.81	0.84	0.89	0.92	0.94	0.97	0.99	
		0.30	0.64	0.71	0.77	0.80	0.86	0.89	0.92	0.95	0.97	
		0.20	0.60	0.68	0.73	0.77	0.83	0.87	0.90	0.93	0.95	
0.00	0.00	0.00	0.58	0.65	0.70	0.74	0.80	0.83	0.85	0.89	0.91	
<p>Rating:48W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>												

Utilisation Factor Table(Wall)

Utilisation Factors UF(W)			SHR NOM = 0.75									
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	0.78	0.64	0.54	0.47	0.37	0.31	0.26	0.20	0.17	
		0.30	0.65	0.55	0.47	0.41	0.34	0.28	0.24	0.19	0.16	
		0.20	0.56	0.48	0.42	0.37	0.31	0.26	0.23	0.18	0.15	
0.50	0.50	0.20	0.75	0.61	0.51	0.44	0.35	0.33	0.25	0.19	0.15	
		0.30	0.63	0.53	0.45	0.40	0.32	0.27	0.23	0.18	0.15	
		0.20	0.55	0.47	0.41	0.36	0.29	0.25	0.22	0.17	0.14	
0.30	0.50	0.20	0.72	0.58	0.49	0.42	0.33	0.27	0.23	0.18	0.15	
		0.30	0.61	0.51	0.44	0.38	0.30	0.25	0.22	0.17	0.14	
		0.20	0.54	0.46	0.40	0.35	0.28	0.24	0.21	0.16	0.13	
0.00	0.00	0.00	0.42	0.34	0.29	0.25	0.20	0.17	0.14	0.11	0.09	
<p>Rating:48W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>												

Utilisation Factor Table(Ceiling cavity)

Utilisation Factors UF(C)			SHR NOM = 0.75									
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	0.15	0.17	0.18	0.19	0.20	0.21	0.21	0.22	0.22	
	0.30		0.10	0.12	0.13	0.14	0.16	0.17	0.18	0.20	0.20	
	0.20		0.06	0.08	0.10	0.11	0.13	0.15	0.16	0.17	0.18	
0.50	0.50	0.20	0.15	0.16	0.17	0.18	0.19	0.20	0.20	0.21	0.21	
	0.30		0.10	0.12	0.13	0.14	0.16	0.17	0.18	0.19	0.20	
	0.20		0.06	0.08	0.10	0.11	0.13	0.14	0.15	0.17	0.18	
0.30	0.50	0.20	0.14	0.16	0.17	0.17	0.18	0.19	0.19	0.20	0.20	
	0.30		0.10	0.11	0.13	0.14	0.15	0.16	0.17	0.18	0.19	
	0.20		0.06	0.08	0.09	0.11	0.12	0.14	0.15	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	
<p>Rating:48W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>												