

Report No.: 16

Test Time: 06.09.2017 09:10

Luminaire Property

Luminaire Manufacturer: FAROS

Luminaire Description: FI 135 24LED 0,3A 32W 4000K

Luminous Length (mm): 1280 mm

Luminous Width (mm): 135 mm

Luminous Height (mm): 100 mm

Voltage: 231.8 V

Current: 0.146 A

Power: 32.00 W

Power Factor: 0.982

Photometric Results

CIE Class: Direct

Measurement Flux: 3929 lm

Downward Ratio: 94%

Total Rated Lamp Lumens: 3929.0 lm

Efficiency: 100%

Upward Ratio: 6%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 157.0, 193.2, 181.8, 180.3

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 104.4, 120.7, 113.5, 112.8

Luminaire Efficacy Rating (LER): 122.83

Central Intensity: 1224.75 cd

Max. Intensity: 1234.58 cd

Pos of Max. Intensity: H67.5 V4

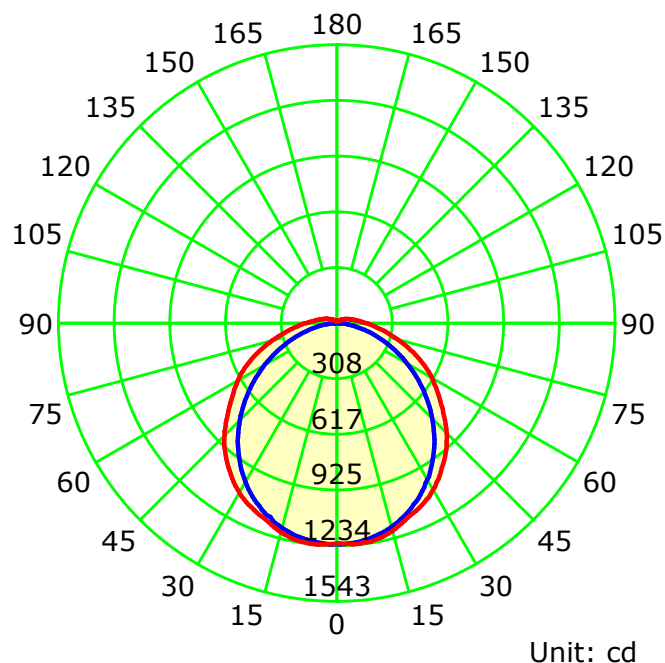
S/MH(C0/C180): 1.23

S/MH(C90/C270): 1.31

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 (°):0.0-180.0:1.0

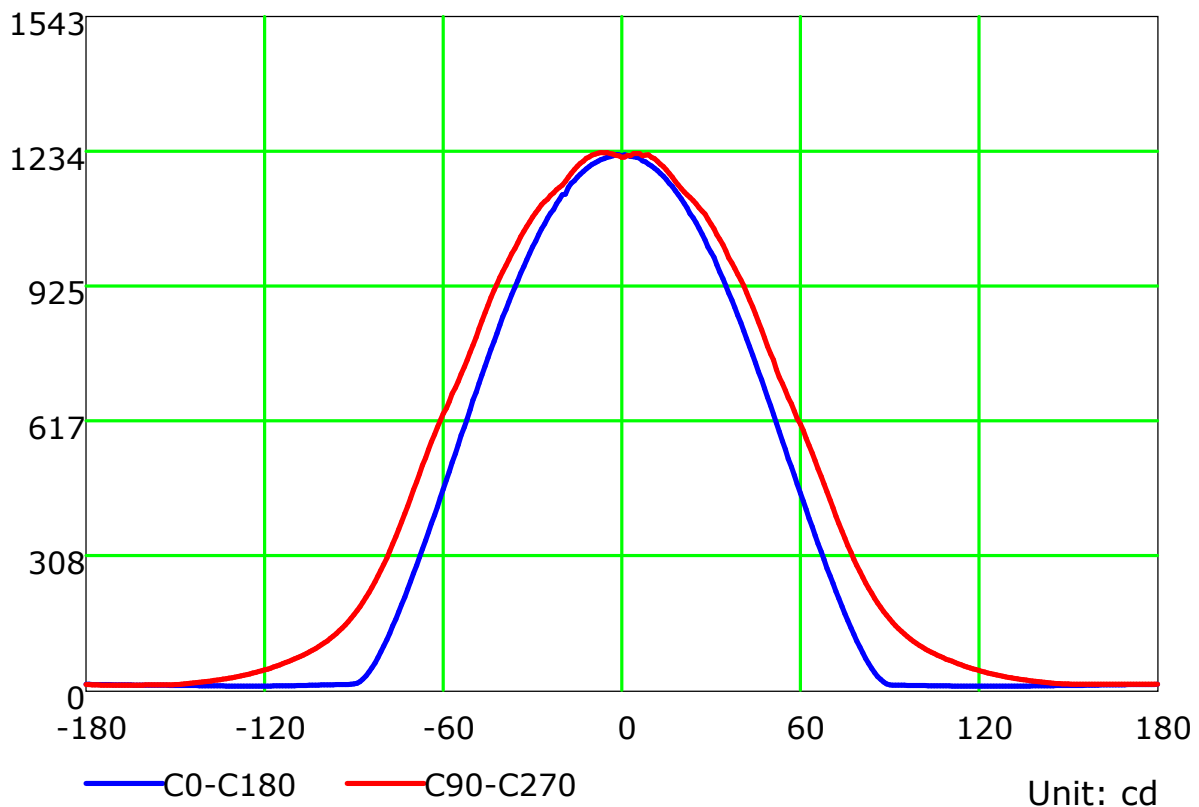
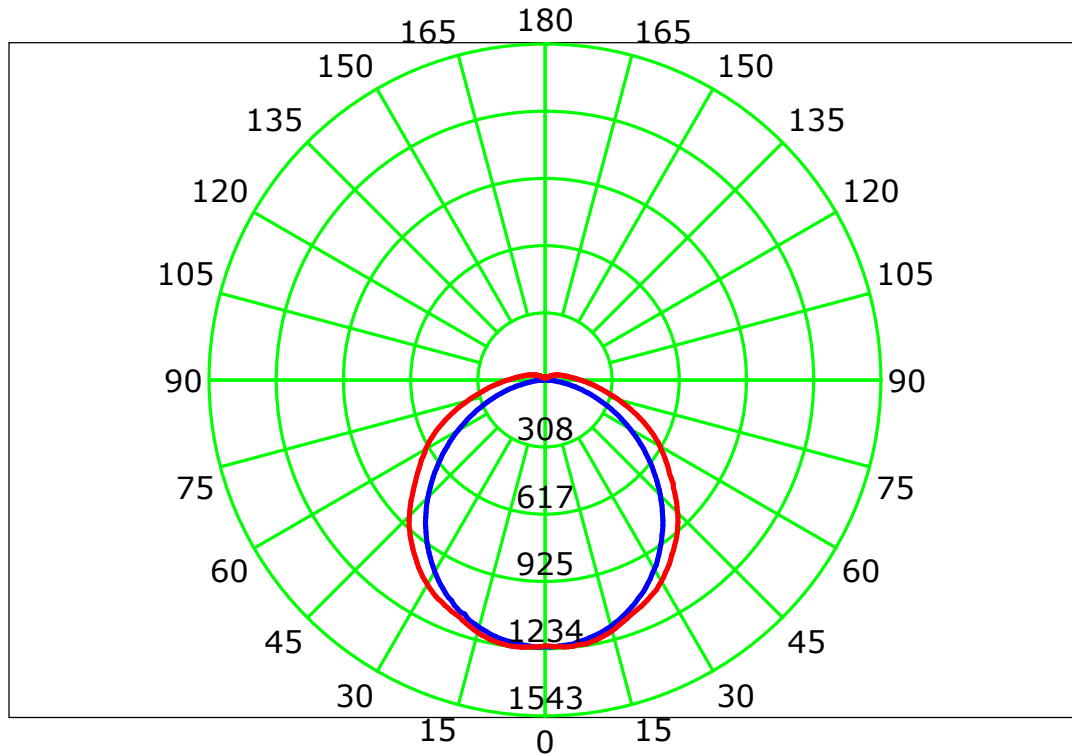
Test Device: LSG-1800B

Distance: 12.606 m

Humidity:

Inspector:

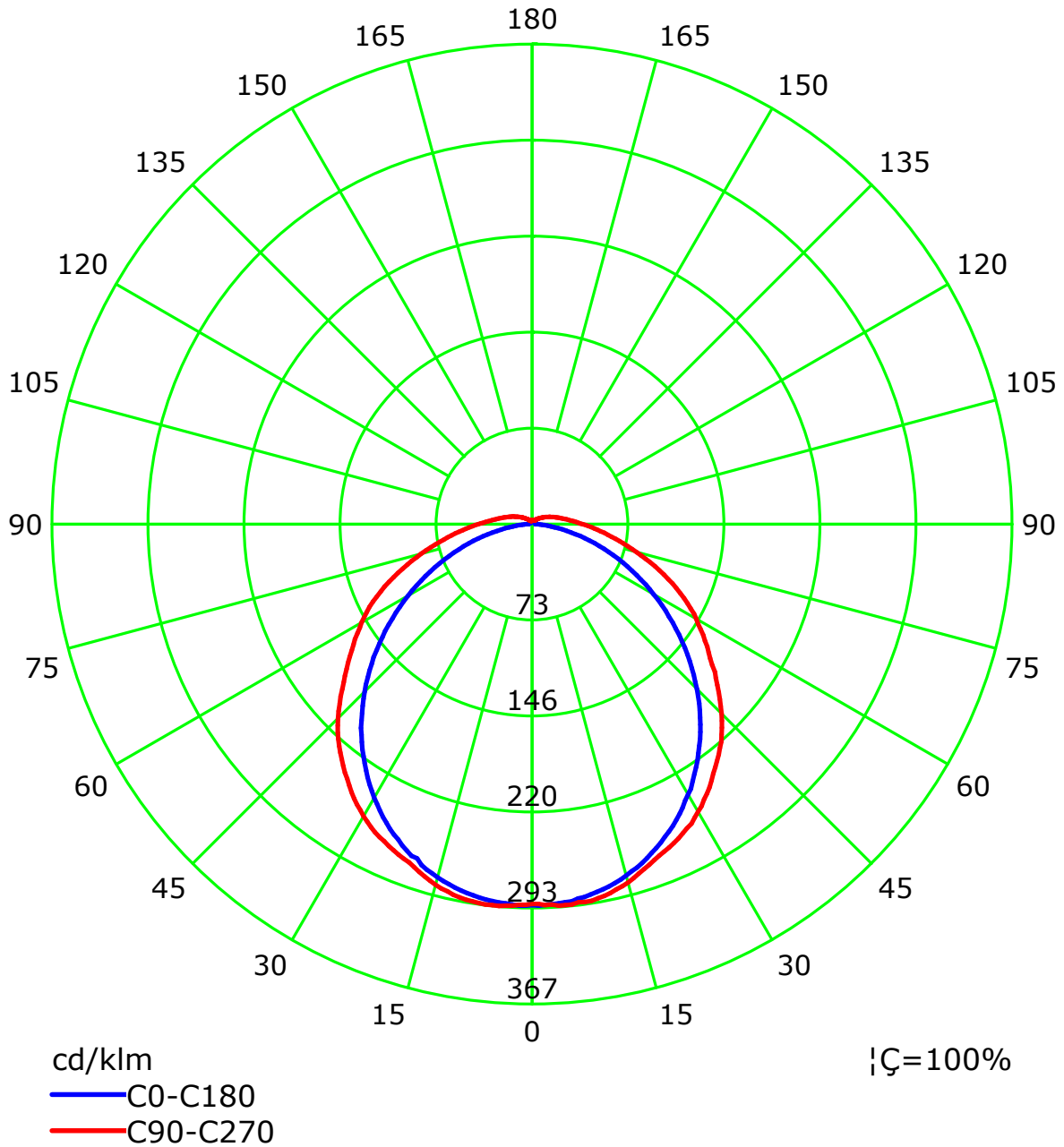
Luminous Intensity Distribution Curve



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

Gamma Plane (°):0.0-180.0:1.0
Test Device: LSG-1800B
Distance: 12.606 m
Humidity:
Inspector:

Luminous Intensity Distribution Curve(cd/klm)



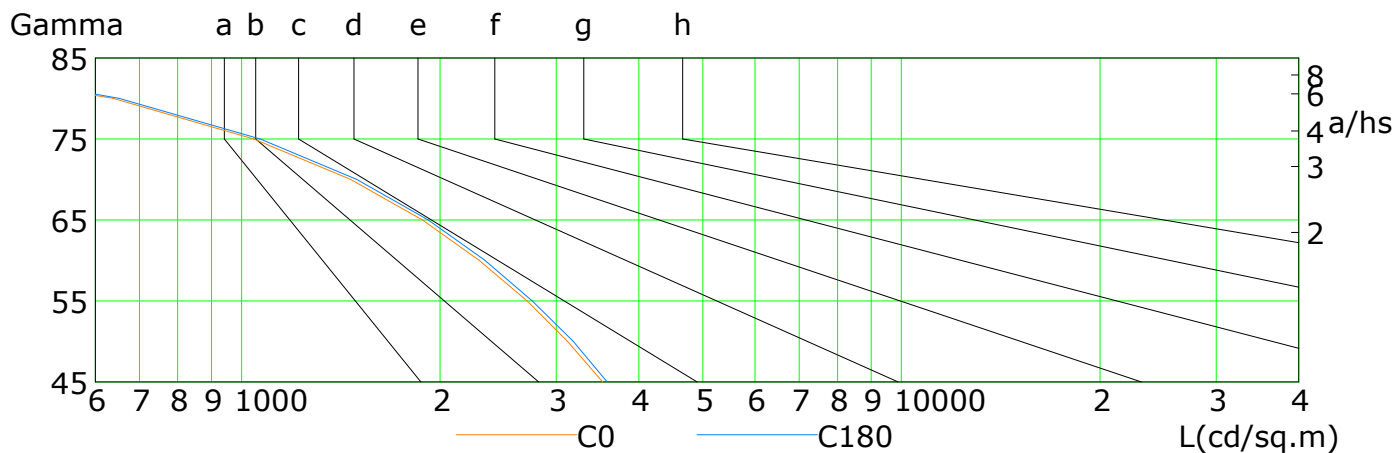
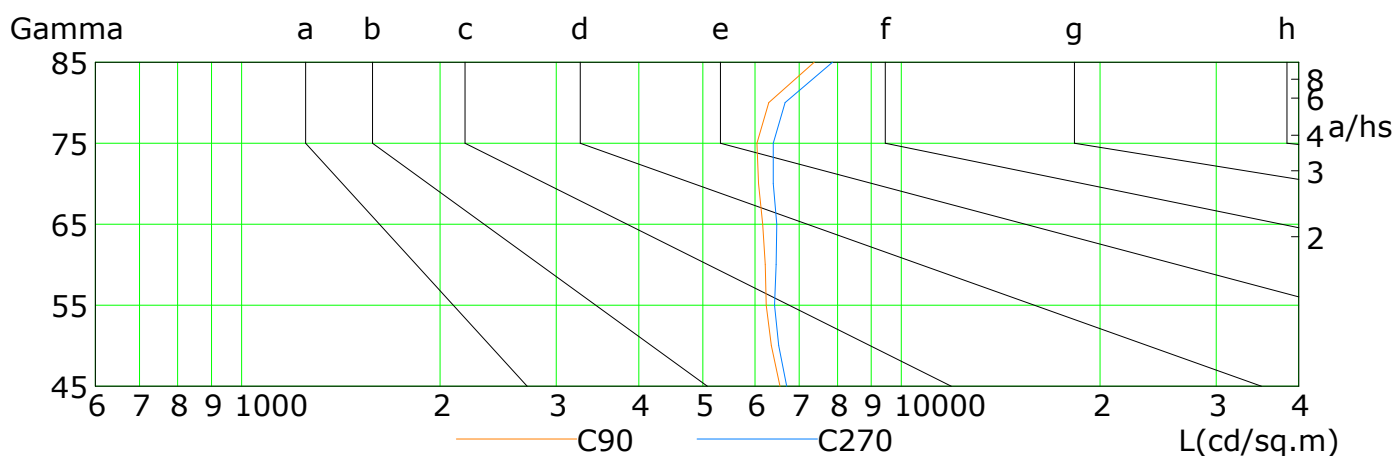
C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-180.0:1.0
Test Device: LSG-1800B
Distance: 12.606 m
Humidity:
Inspector:

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

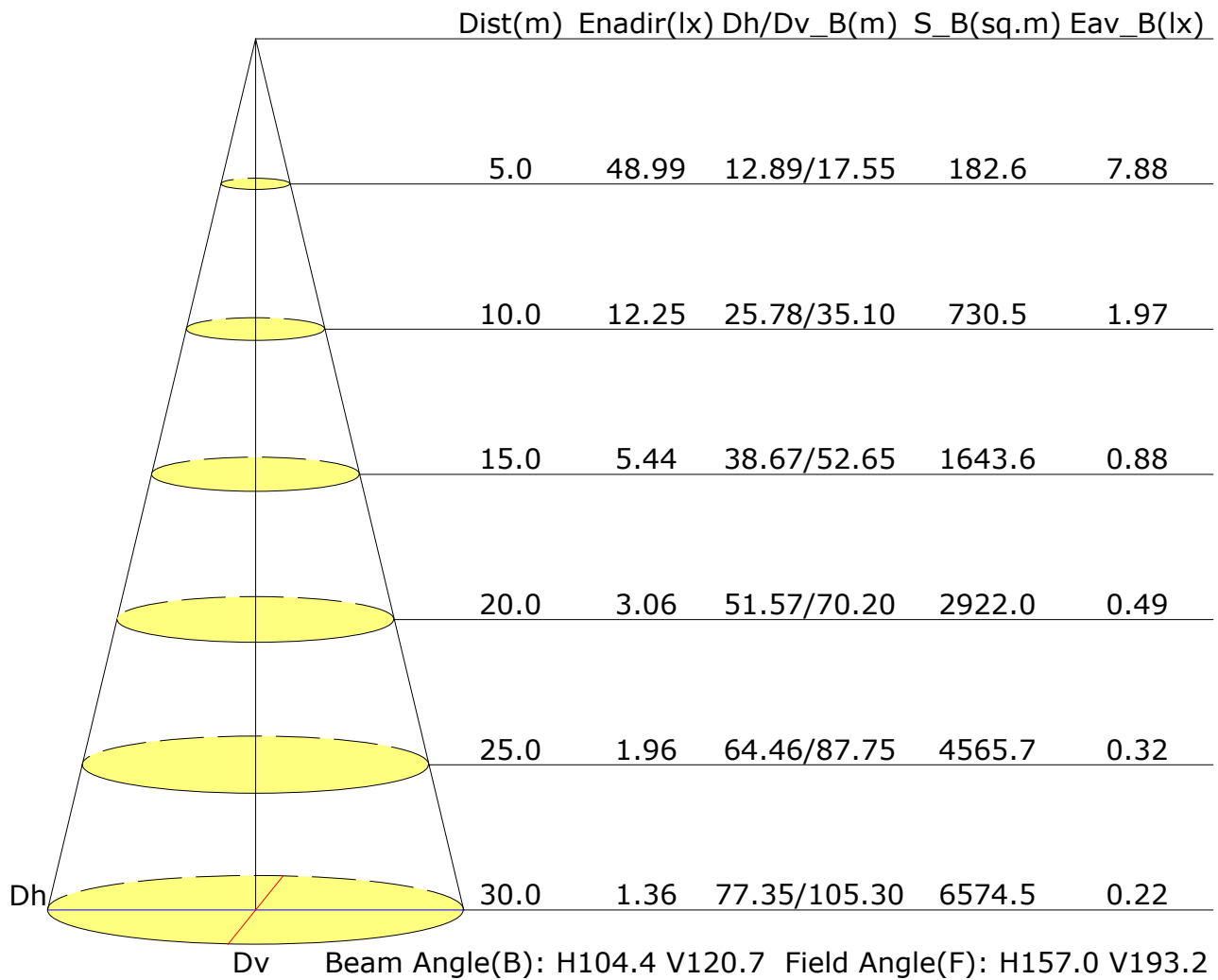


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	3524	3119	2710	2290	1881	1463	1043	638	285
C90	6545	6350	6240	6220	6166	6073	6040	6294	7380
C180	3582	3182	2759	2337	1917	1494	1068	652	294
C270	6700	6514	6426	6460	6472	6395	6393	6666	7864

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

Gamma Plane (°):0.0-180.0:1.0
 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	15.5	16.8	15.9	17.2	17.5	17.9	19.3	18.3	19.6	20.0
3H	16.4	17.7	16.8	18.0	18.4	19.8	21.1	20.2	21.4	21.8
4H	16.7	17.9	17.2	18.3	18.7	20.7	21.9	21.1	22.3	22.7
6H	16.9	18.0	17.3	18.4	18.8	21.5	22.6	22.0	23.0	23.5
8H	16.9	17.9	17.4	18.4	18.8	21.9	23.0	22.4	23.4	23.9
12H	16.9	17.9	17.4	18.3	18.8	22.4	23.4	22.8	23.8	24.3
X=4H Y=2H	16.3	17.5	16.7	17.8	18.3	18.2	19.4	18.7	19.8	20.2
3H	17.4	18.4	17.9	18.9	19.3	20.3	21.3	20.8	21.8	22.2
4H	17.8	18.7	18.3	19.2	19.7	21.3	22.2	21.8	22.7	23.2
6H	18.1	18.9	18.6	19.4	19.9	22.3	23.1	22.8	23.6	24.1
8H	18.1	18.9	18.7	19.4	19.9	22.8	23.5	23.3	24.0	24.6
12H	18.2	18.8	18.7	19.3	19.9	23.3	24.0	23.9	24.5	25.1
X=8H Y=4H	18.3	19.1	18.9	19.6	20.1	21.4	22.2	22.0	22.7	23.2
6H	18.7	19.3	19.3	19.9	20.5	22.6	23.2	23.1	23.7	24.3
8H	18.9	19.4	19.4	20.0	20.6	23.2	23.7	23.7	24.3	24.9
12H	18.9	19.4	19.5	20.0	20.6	23.8	24.3	24.4	24.9	25.5
X=12H Y=4H	18.4	19.1	19.0	19.6	20.2	21.4	22.1	22.0	22.6	23.2
6H	18.9	19.5	19.5	20.0	20.6	22.6	23.1	23.2	23.7	24.3
8H	19.1	19.6	19.7	20.2	20.8	23.2	23.7	23.8	24.3	24.9
Variations with the observer position at spacings:										
S=1.0H	+0.2/-0.3					+0.2/-0.2				
S=1.5H	+0.4/-0.7					+0.4/-0.4				
S=2.0H	+0.6/-1.3					+0.7/-0.9				

Calculate in accordance with CIE Pub.117. The table is revised with 3929lm ($8\log(F/F_0) = 4.8$).

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

Gamma Plane (°):0.0-180.0:1.0
 Test Device: LSG-1800B
 Distance: 12.606 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	0.54	0.64	0.71	0.76	0.83	0.88	0.92	0.96	1.00	
	0.30		0.46	0.56	0.63	0.69	0.77	0.82	0.86	0.92	0.96	
	0.20		0.40	0.50	0.57	0.63	0.71	0.77	0.82	0.88	0.92	
0.50	0.50	0.20	0.51	0.61	0.67	0.72	0.79	0.84	0.87	0.91	0.94	
	0.30		0.44	0.54	0.61	0.66	0.74	0.79	0.82	0.88	0.91	
	0.20		0.39	0.49	0.56	0.61	0.69	0.74	0.79	0.84	0.88	
0.30	0.50	0.20	0.50	0.58	0.65	0.69	0.75	0.80	0.83	0.87	0.89	
	0.30		0.43	0.52	0.59	0.64	0.71	0.76	0.79	0.84	0.87	
	0.20		0.39	0.48	0.54	0.59	0.67	0.72	0.76	0.81	0.84	
0.00	0.00	0.00	0.36	0.44	0.51	0.56	0.62	0.67	0.71	0.75	0.78	
Rating:32W 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	0.84	0.73	0.64	0.52	0.43	0.37	0.29	0.24	
	0.30		0.84	0.72	0.63	0.56	0.47	0.40	0.35	0.28	0.23	
	0.20		0.72	0.63	0.56	0.51	0.43	0.37	0.32	0.26	0.22	
0.50	0.50	0.20	0.96	0.80	0.69	0.60	0.49	0.44	0.35	0.28	0.23	
	0.30		0.82	0.70	0.61	0.54	0.45	0.38	0.33	0.26	0.22	
	0.20		0.71	0.61	0.54	0.49	0.41	0.35	0.31	0.25	0.21	
0.30	0.50	0.20	0.93	0.76	0.65	0.57	0.46	0.39	0.34	0.26	0.22	
	0.30		0.79	0.67	0.59	0.52	0.43	0.36	0.32	0.25	0.21	
	0.20		0.69	0.60	0.53	0.48	0.40	0.34	0.30	0.24	0.20	
0.00	0.00	0.00	0.58	0.50	0.43	0.39	0.32	0.27	0.24	0.19	0.16	
Rating:32W 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	0.22	0.23	0.24	0.25	0.26	0.26	0.27	0.27	0.28	
	0.30		0.15	0.17	0.18	0.19	0.21	0.22	0.23	0.24	0.25	
	0.20		0.10	0.12	0.13	0.14	0.16	0.18	0.19	0.21	0.22	
0.50	0.50	0.20	0.21	0.23	0.23	0.24	0.25	0.25	0.26	0.26	0.26	
	0.30		0.15	0.16	0.18	0.19	0.20	0.21	0.22	0.23	0.24	
	0.20		0.10	0.12	0.13	0.14	0.16	0.17	0.19	0.20	0.21	
0.30	0.50	0.20	0.21	0.22	0.23	0.23	0.24	0.24	0.25	0.25	0.25	
	0.30		0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.22	0.23	
	0.20		0.10	0.12	0.13	0.14	0.16	0.17	0.18	0.20	0.21	
0.00	0.00	0.00	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	
Rating:32W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												