

Report No.: 1

Test Time: 19.11.2018 14:07

Luminaire Property

Luminaire Manufacturer: FAROS

Luminaire Description: FL 80 105LED 0,35A 46W 5000K 2ZT25

Lamp Description: LED

Number of Lamps: 1

Lumens per Lamp: 6587.1 lm

Luminous Length (mm): 1500 mm

Luminous Width (mm): 80 mm

Luminous Height (mm): 75 mm

Voltage: 220.5 V

Current: 0.215 A

Power: 46.61 W

Power Factor: 0.982

Photometric Results

CIE Class: Direct

Total Rated Lamp Lumens: 6587.1 lm

Measurement Flux: 6587.1 lm

Efficiency: 100.00%

Downward Ratio: 96.56%

Upward Ratio: 3.44%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 159.1, 143.4, 148.6, 149.9

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 104.3, 81.9, 93.7, 95.9

Luminaire Efficacy Rating (LER): 141.37

Central Intensity: 2022.21 cd

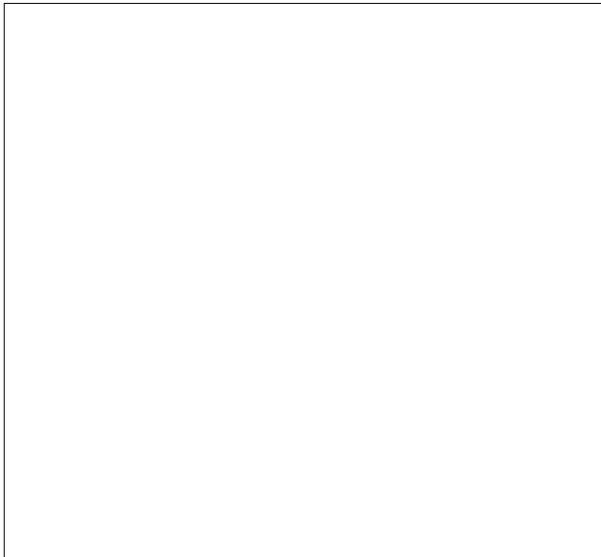
Max. Intensity: 3142.59 cd

Pos of Max. Intensity: H270 V24

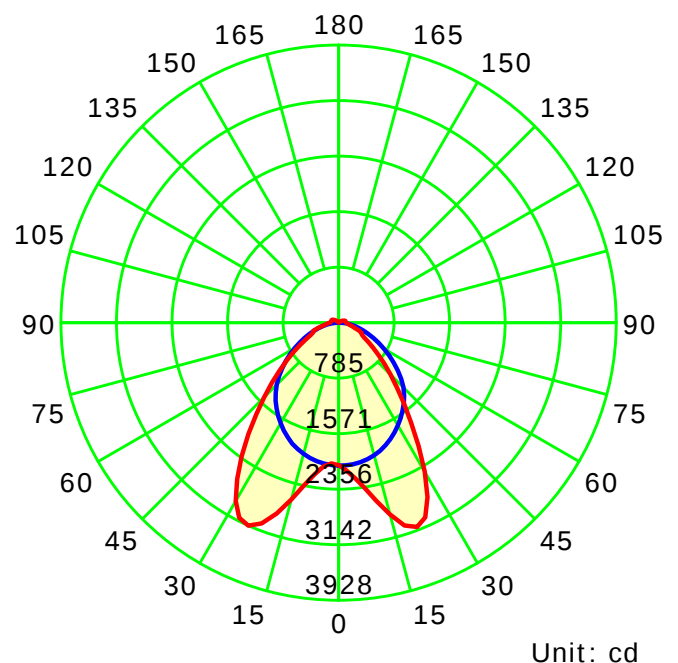
S/MH(C0/C180): 1.22

S/MH(C90/C270): 1.50

Picture Of Luminaire



Luminous Intensity Distribution Curve



— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 10.0

Gamma Plane (°):0.0-180.0:3.0

Test Lab:

Test Device: LSG-1800B

Test Type: TYPE C

Distance: 12.654 m

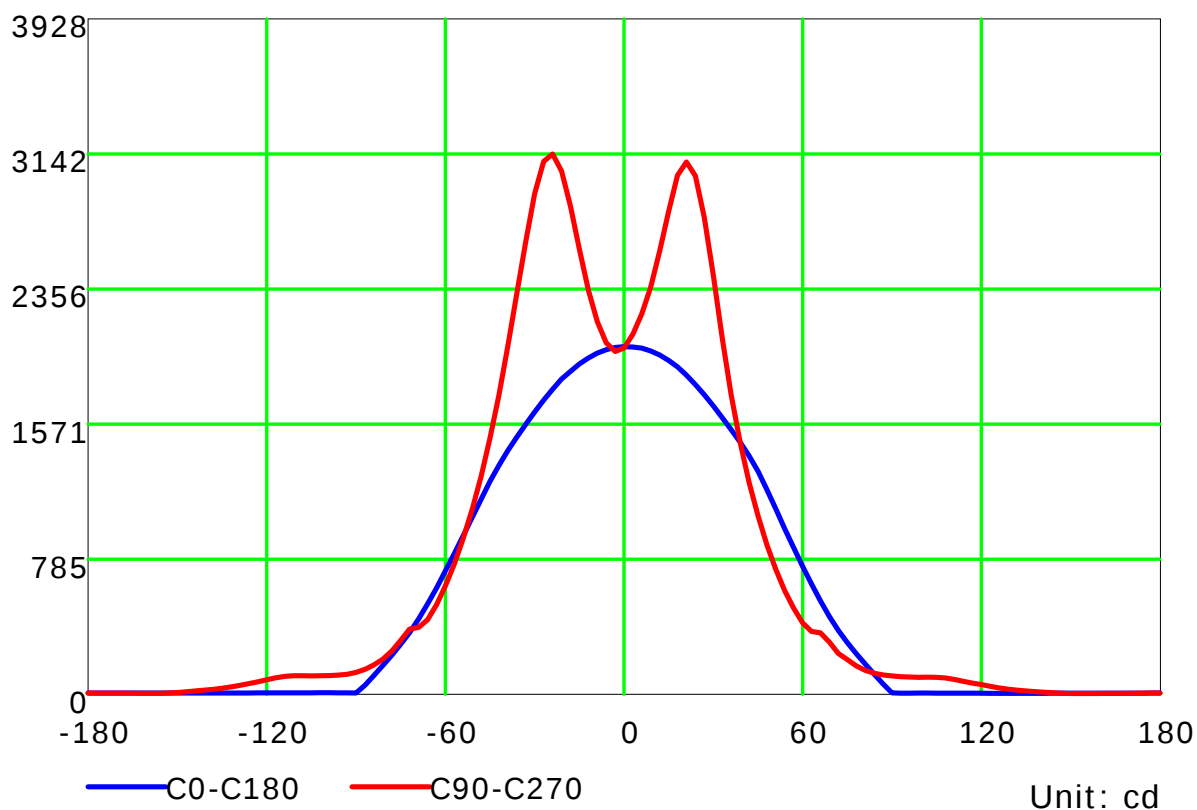
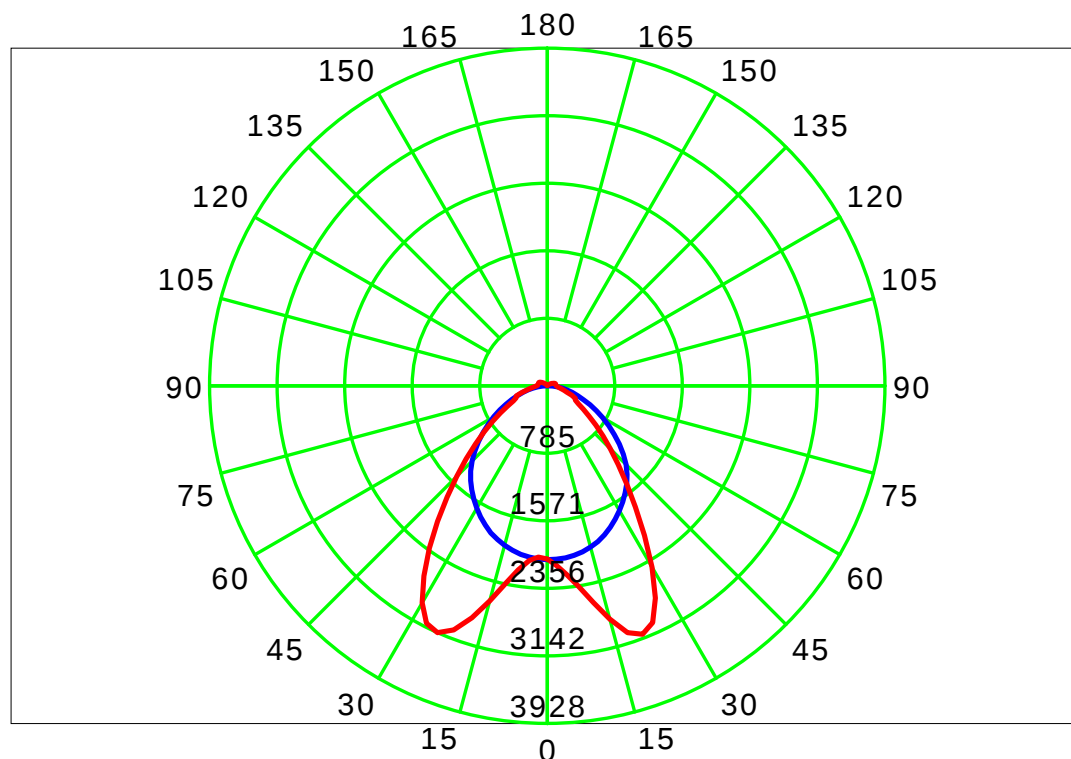
Temperature:

Humidity:

Operator:

Inspector:

Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 10.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:3.0

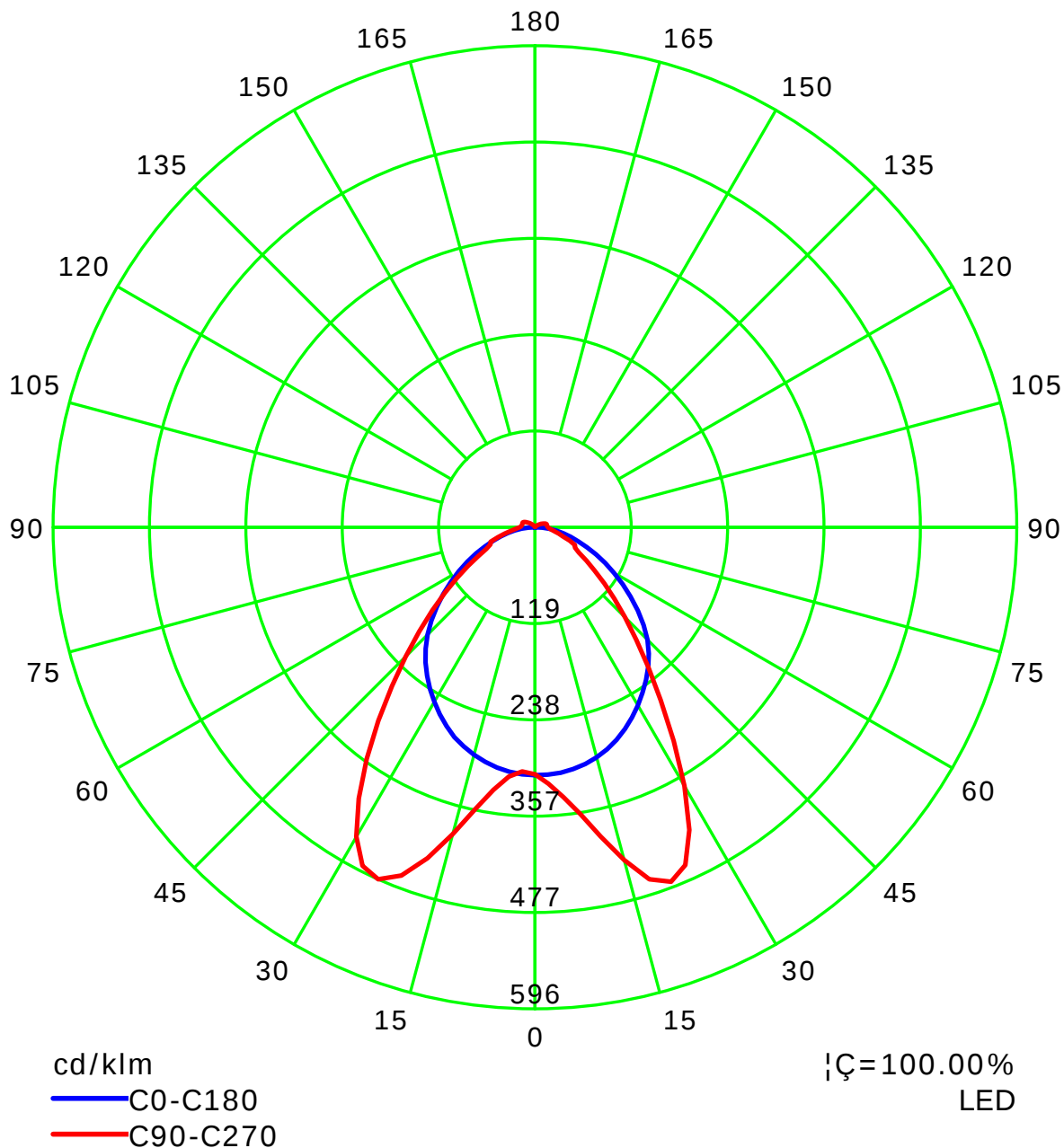
Test Device: LSG-1800B

Distance: 12.654 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve(cd / klm)



C Plane (°):0.0-360.0: 10.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:3.0

Test Device: LSG-1800B

Distance: 12.654 m

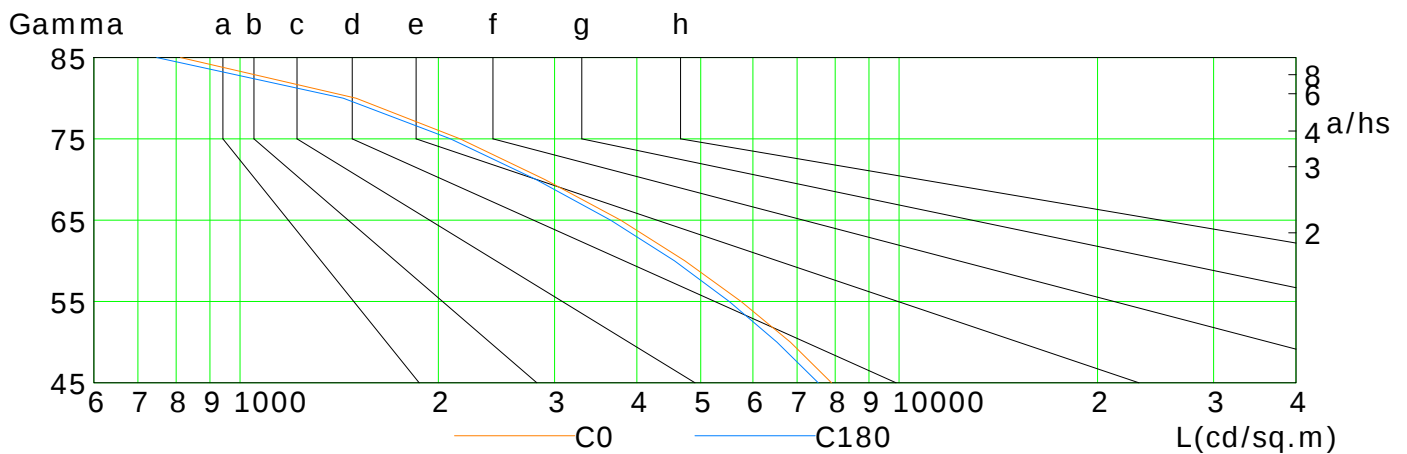
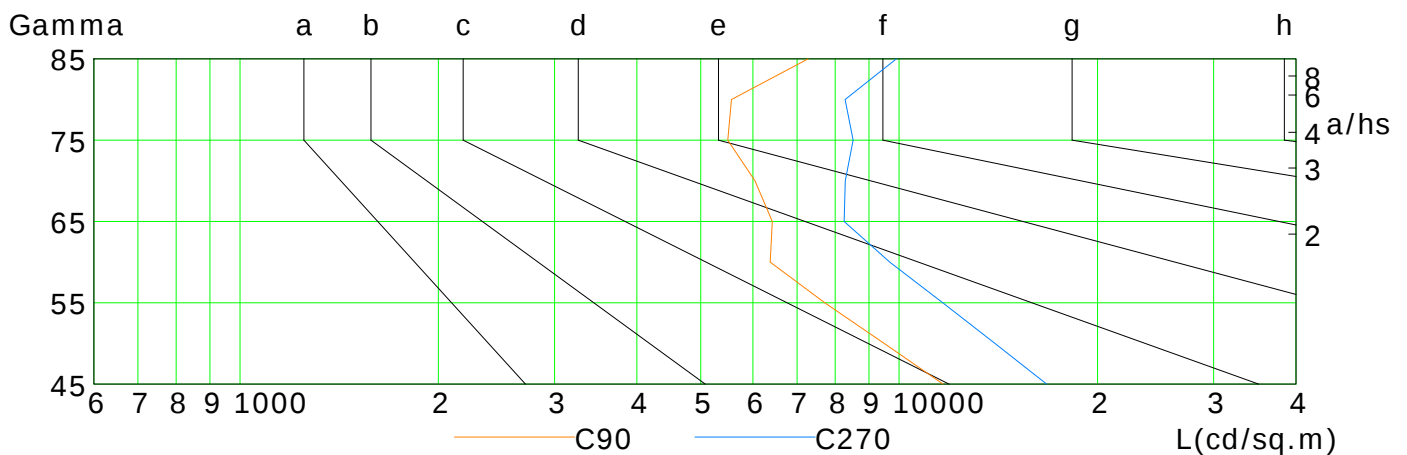
Humidity:

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	7894	6838	5757	4730	3780	2900	2158	1500	813
C90	11660	9491	7712	6373	6420	6045	5495	5567	7277
C180	7537	6526	5522	4563	3650	2812	2086	1434	748
C270	16744	13974	11644	9680	8253	8286	8514	8282	9901

C Plane (°):0.0-360.0: 10.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:3.0

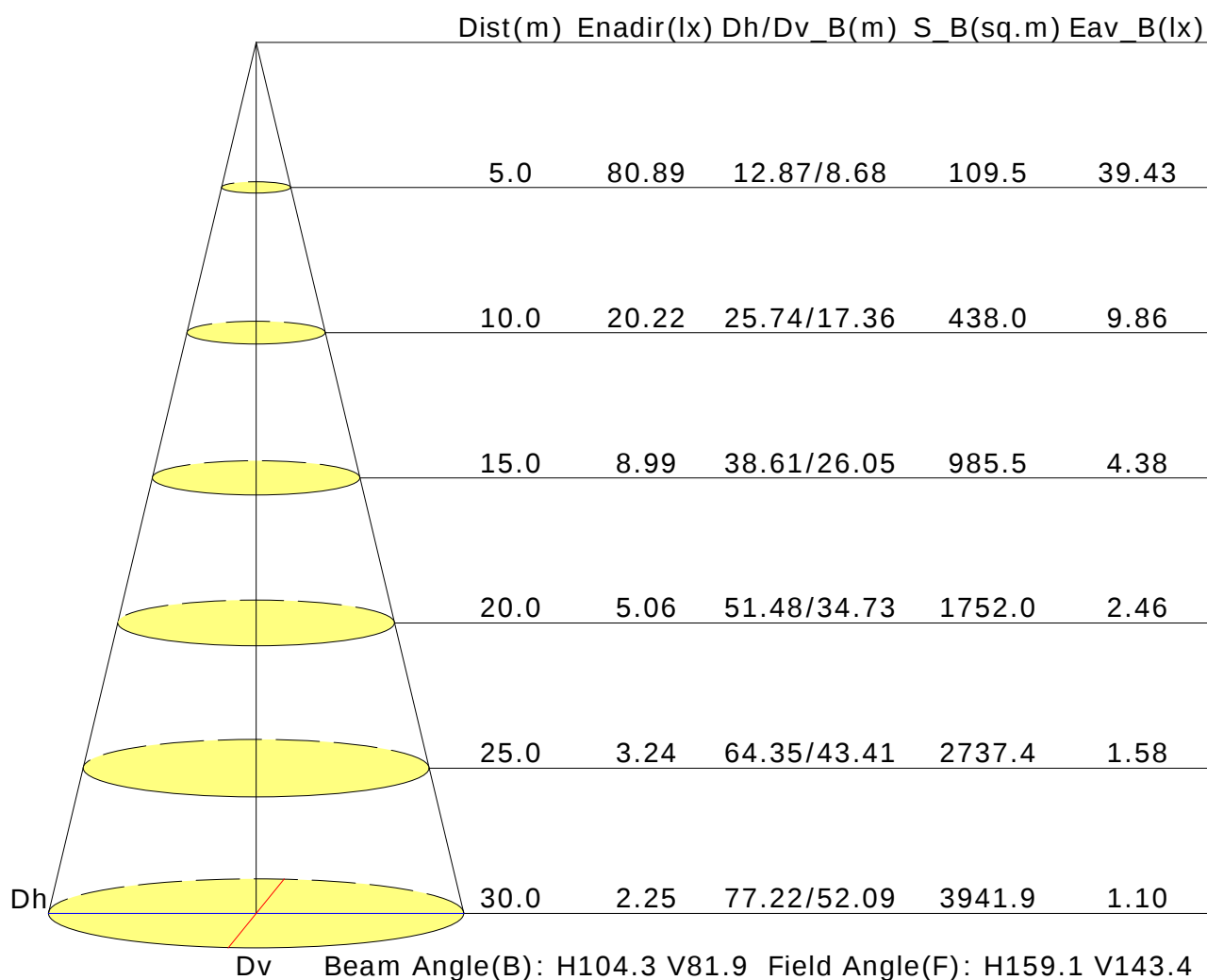
Test Device: LSG-1800B

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	19.2	20.4	19.5	20.7	21.0	18.8	20.1	19.2	20.4	20.7
3H	19.8	20.9	20.2	21.2	21.6	19.7	20.8	20.0	21.1	21.5
4H	20.0	21.0	20.4	21.4	21.8	20.1	21.2	20.5	21.6	21.9
6H	20.1	21.1	20.5	21.5	21.8	20.6	21.6	21.0	21.9	22.3
8H	20.1	21.1	20.5	21.5	21.8	20.8	21.8	21.2	22.1	22.5
12H	20.1	21.0	20.5	21.4	21.8	21.0	22.0	21.5	22.3	22.8
X=4H Y=2H	19.3	20.4	19.7	20.7	21.1	19.1	20.1	19.5	20.5	20.8
3H	20.1	21.0	20.6	21.4	21.8	20.0	21.0	20.5	21.3	21.8
4H	20.4	21.2	20.9	21.7	22.1	20.6	21.4	21.1	21.9	22.3
6H	20.6	21.4	21.1	21.8	22.3	21.2	21.9	21.7	22.4	22.8
8H	20.7	21.4	21.2	21.8	22.3	21.5	22.1	22.0	22.6	23.1
12H	20.7	21.3	21.2	21.8	22.3	21.8	22.4	22.3	22.9	23.4
X=8H Y=4H	20.5	21.2	21.0	21.6	22.1	20.7	21.4	21.2	21.8	22.3
6H	20.8	21.4	21.4	21.9	22.4	21.4	21.9	21.9	22.4	23.0
8H	21.0	21.4	21.5	21.9	22.5	21.8	22.2	22.3	22.7	23.3
12H	21.0	21.4	21.6	22.0	22.5	22.2	22.6	22.7	23.1	23.7
X=12H Y=4H	20.5	21.1	21.0	21.6	22.1	20.7	21.3	21.2	21.8	22.3
6H	20.9	21.3	21.4	21.9	22.4	21.4	21.9	21.9	22.4	23.0
8H	21.0	21.4	21.6	22.0	22.5	21.8	22.2	22.3	22.7	23.3
Variations with the observer position at spacings:										
S=1.0H	+0.7/-0.7					+0.5/-0.7				
S=1.5H	+1.1/-1.5					+1.1/-1.5				
S=2.0H	+2.1/-2.1					+2.0/-2.4				

Calculate in accordance with CIE Pub.117. The table is revised with 6587lm ($8\log(F/F_0) = 6.5$).

C Plane (°):0.0-360.0: 10.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:3.0

Test Device: LSG-1800B

Distance: 12.654 m

Humidity:

Inspector:

Utilisation Factor Table(Floor cavity)

Utilisation Factors UF(F)			SHR NOM = 1.50									
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	0.66	0.74	0.80	0.85	0.91	0.95	0.98	1.02	1.04	
	0.30		0.60	0.67	0.74	0.79	0.86	0.90	0.94	0.98	1.01	
	0.20		0.55	0.62	0.69	0.74	0.81	0.86	0.90	0.95	0.98	
0.50	0.50	0.20	0.64	0.72	0.78	0.82	0.87	0.91	0.94	0.97	0.99	
	0.30		0.58	0.66	0.72	0.77	0.83	0.87	0.90	0.94	0.97	
	0.20		0.54	0.62	0.68	0.73	0.79	0.84	0.87	0.92	0.95	
0.30	0.50	0.20	0.63	0.70	0.75	0.79	0.84	0.87	0.90	0.93	0.95	
	0.30		0.58	0.65	0.71	0.75	0.81	0.84	0.87	0.91	0.93	
	0.20		0.54	0.61	0.67	0.71	0.77	0.81	0.84	0.88	0.91	
0.00	0.00	0.00	0.51	0.58	0.64	0.68	0.74	0.77	0.80	0.83	0.86	
Rating:47W 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 = 1.50									
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	0.83	0.70	0.59	0.51	0.41	0.34	0.29	0.23	0.19	
	0.30		0.70	0.60	0.51	0.45	0.37	0.31	0.27	0.22	0.18	
	0.20		0.60	0.52	0.46	0.41	0.34	0.29	0.25	0.20	0.17	
0.50	0.50	0.20	0.80	0.66	0.56	0.49	0.39	0.36	0.28	0.22	0.18	
	0.30		0.67	0.58	0.49	0.43	0.35	0.30	0.26	0.20	0.17	
	0.20		0.58	0.51	0.44	0.39	0.33	0.28	0.24	0.19	0.16	
0.30	0.50	0.20	0.76	0.63	0.53	0.46	0.36	0.30	0.26	0.20	0.17	
	0.30		0.65	0.56	0.47	0.42	0.34	0.28	0.24	0.19	0.16	
	0.20		0.57	0.50	0.43	0.38	0.31	0.27	0.23	0.18	0.15	
0.00	0.00	0.00	0.45	0.39	0.33	0.29	0.23	0.19	0.17	0.13	0.11	
Rating:47W 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 = 1.50									
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	0.20	0.21	0.21	0.22	0.23	0.24	0.24	0.25	
	0.30		0.13	0.14	0.16	0.17	0.18	0.20	0.20	0.22	0.22	
	0.20		0.08	0.10	0.12	0.13	0.15	0.16	0.18	0.19	0.20	
0.50	0.50	0.20	0.18	0.19	0.20	0.21	0.22	0.22	0.23	0.23	0.24	
	0.30		0.12	0.14	0.15	0.16	0.18	0.19	0.20	0.21	0.22	
	0.20		0.08	0.10	0.11	0.13	0.15	0.16	0.17	0.19	0.20	
0.30	0.50	0.20	0.17	0.18	0.19	0.20	0.21	0.21	0.22	0.22	0.23	
	0.30		0.12	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.21	
	0.20		0.08	0.10	0.11	0.13	0.14	0.16	0.17	0.18	0.19	
0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	
Rating:47W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												