

Report No.: 1

Test Time: 05.11.2019 21:51

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 180 4x40LED 0,35A 44W 3000K microprisma

Luminous Length (mm): 1200

Luminous Width (mm): 180

Luminous Height (mm): 35

Voltage: 221.5 V

Current: 0.211 A

Power: 46.05 W

Power Factor: 0.982

Photometric Results

CIE Class: Direct

Measurement Flux: 5146.2 lm

Downward Ratio: 99%

Total Rated Lamp Lumens: 5146.2 lm

Efficiency: 100%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 159.4, 162.1, 148.8, 148.3

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 78.4, 79.2, 76.2, 76.0

Luminaire Efficacy Rating (LER): 111.80

Central Intensity: 2668.85 cd

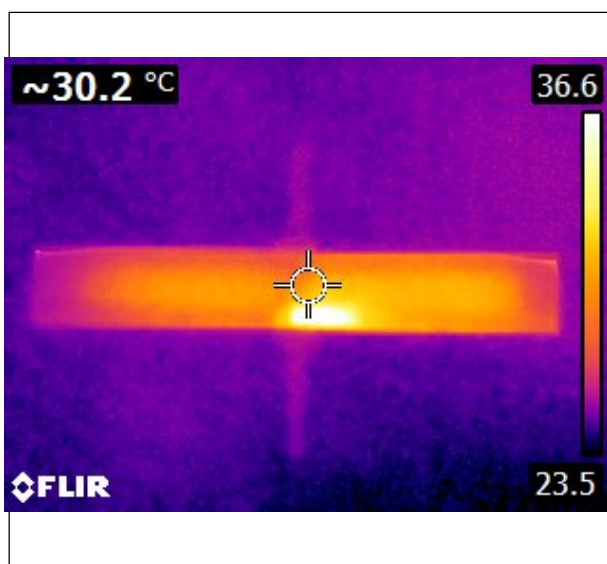
Max. Intensity: 2674.7 cd

Pos of Max. Intensity: H135 V3

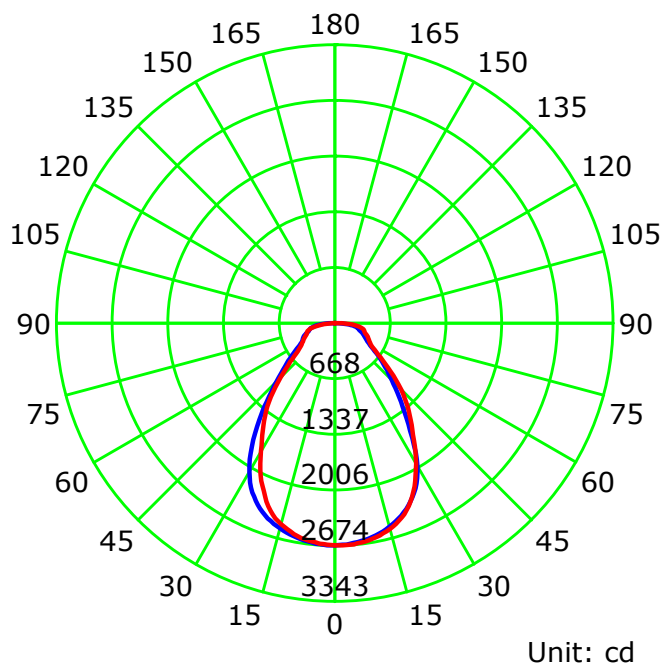
S/MH(C0/C180): 1.14

S/MH(C90/C270): 1.08

Termogramma



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

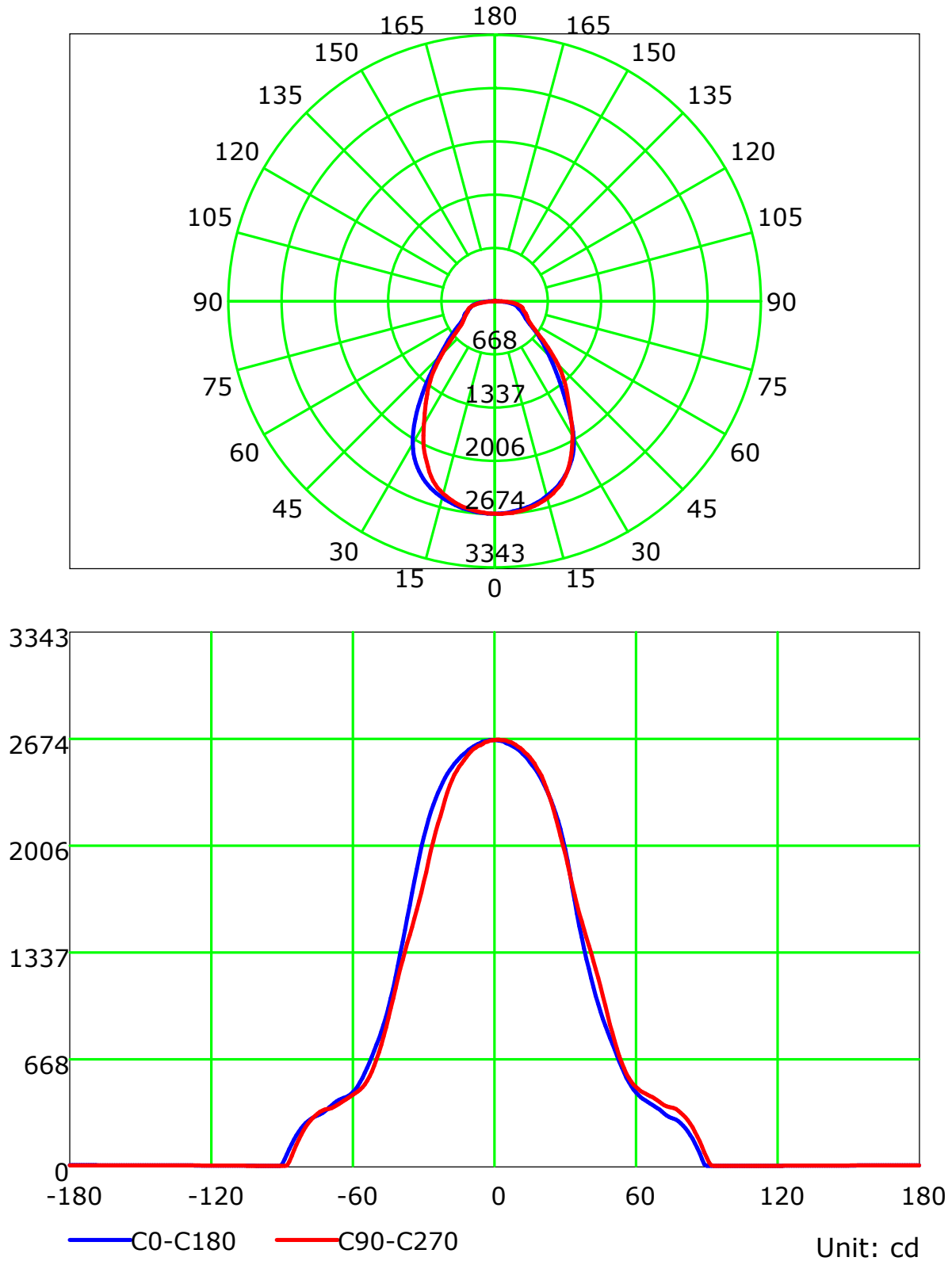
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

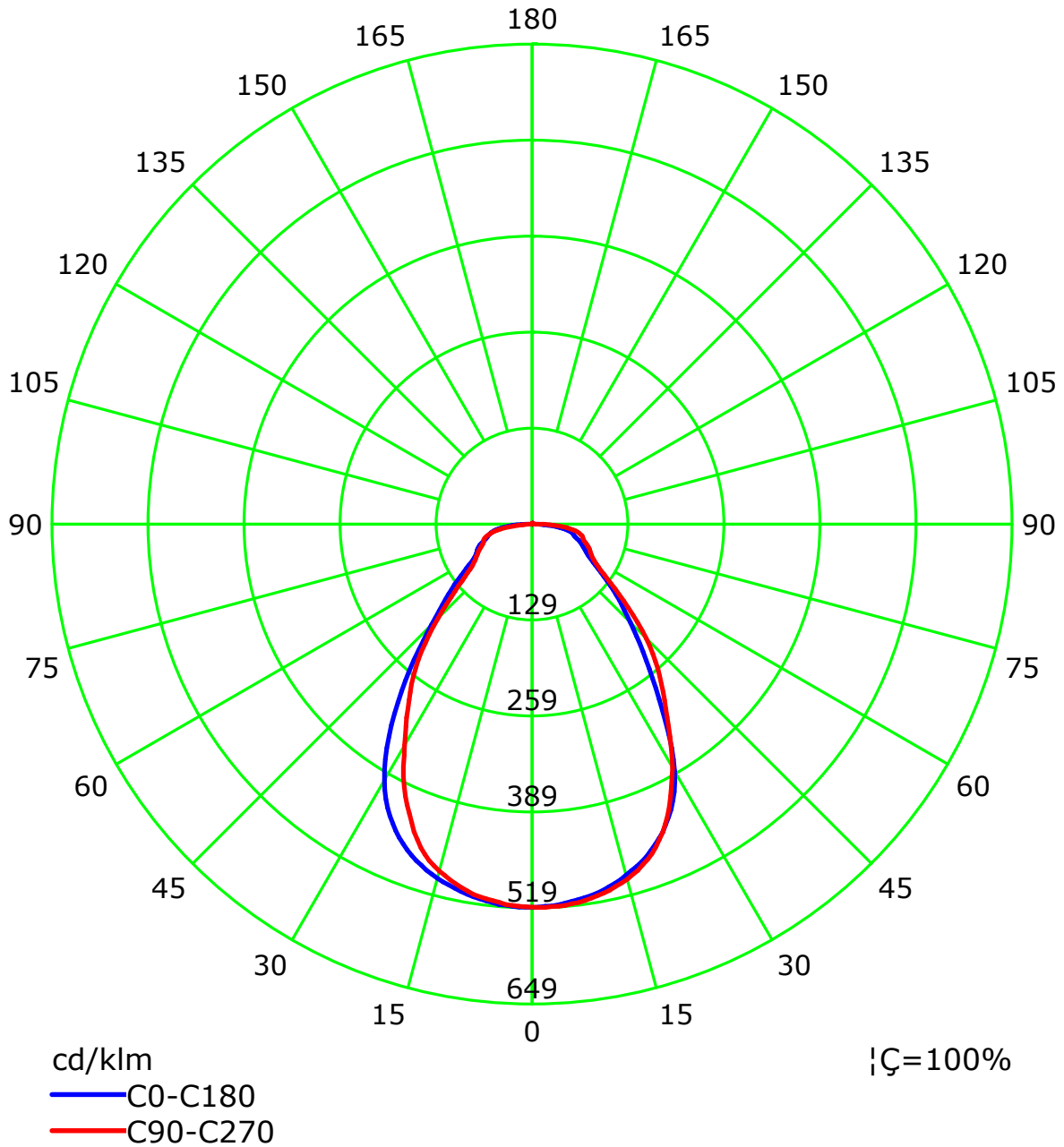
Luminous Intensity Distribution Curve



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: 12.677 m
Humidity:
Inspector:

Luminous Intensity Distribution Curve(cd/klm)



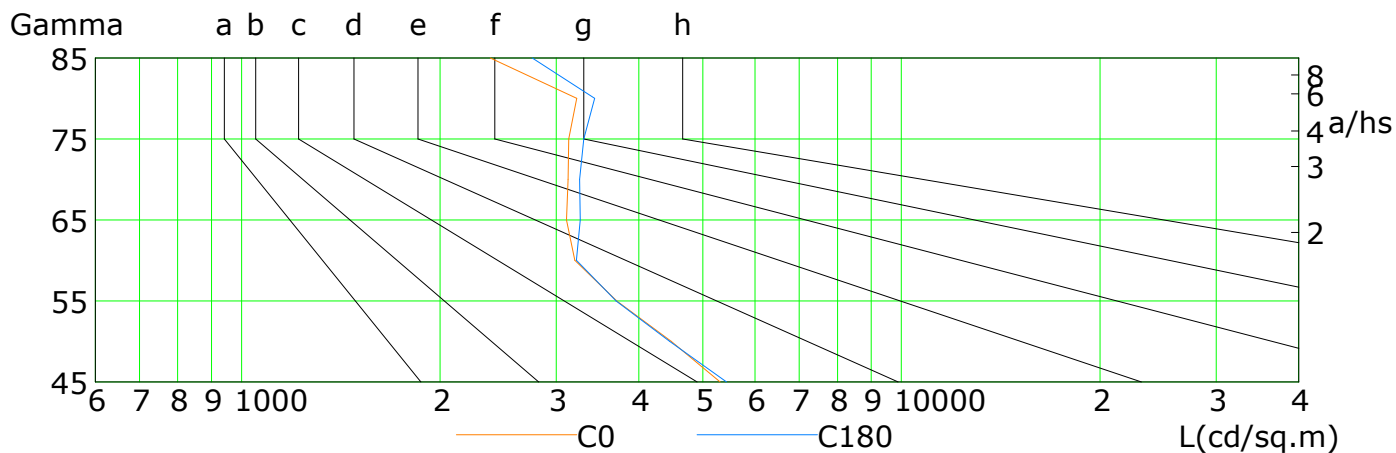
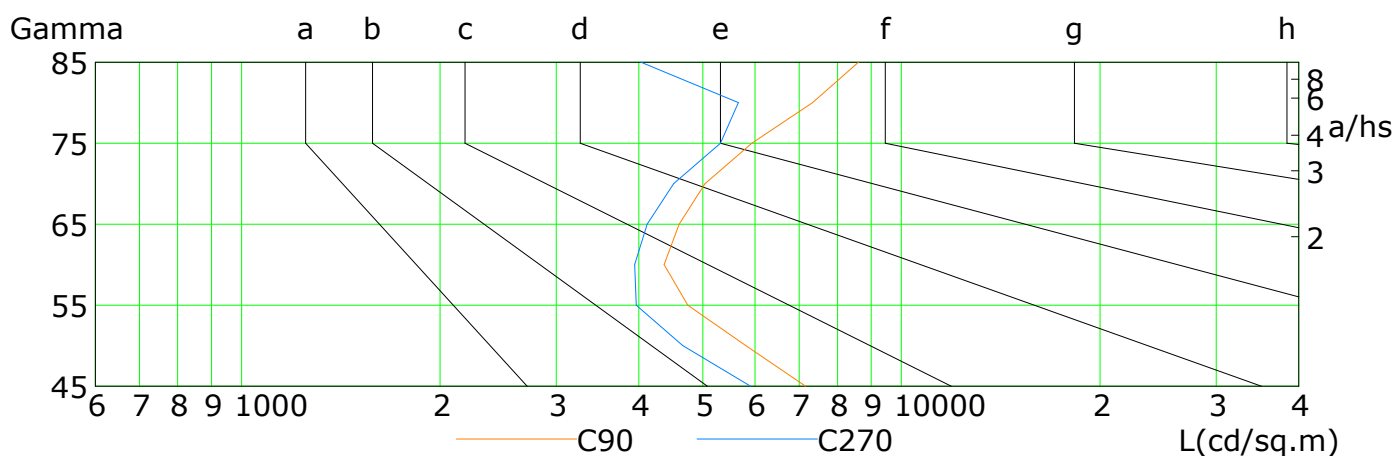
C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-180.0:1.0
Test Device: LSG-1800B
Distance: 12.677 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

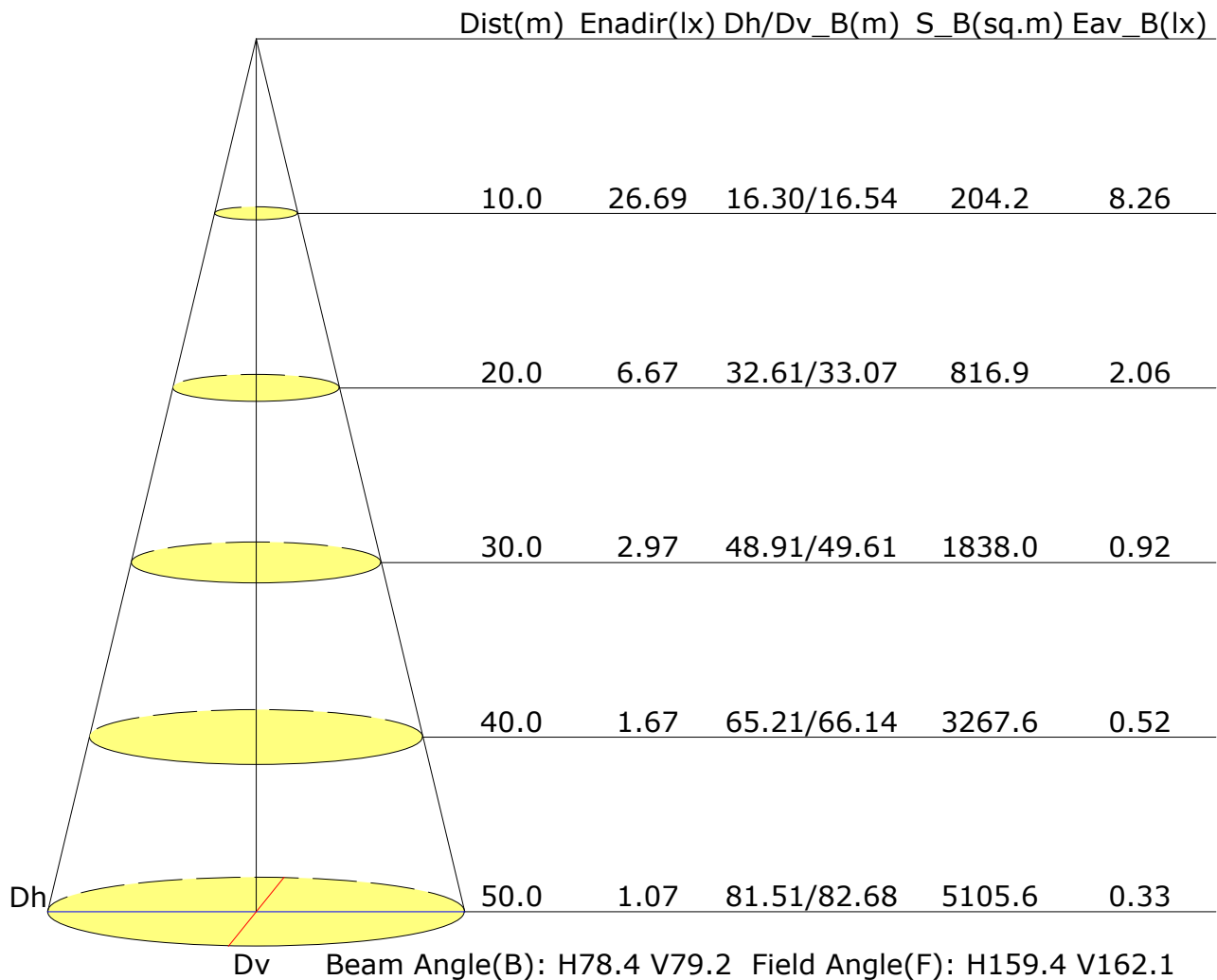


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	5310	4477	3703	3198	3107	3125	3132	3222	2381
C90	7157	5809	4744	4371	4604	5043	5930	7338	8602
C180	5434	4451	3694	3217	3262	3252	3300	3428	2756
C270	5906	4662	3964	3944	4117	4518	5320	5659	4029

C Plane (°):0.0-360.0: 22.5
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 Temperature:
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 Test Device: LSG-1800B
 Distance: 12.677 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	16.2	17.5	16.5	17.7	18.0	16.6	17.9	16.9	18.1	18.4
3H	17.5	18.7	17.9	19.0	19.2	18.3	19.4	18.6	19.7	20.0
4H	18.3	19.3	18.6	19.6	19.9	19.3	20.4	19.7	20.7	21.0
6H	19.0	20.0	19.4	20.3	20.7	20.4	21.4	20.8	21.7	22.1
8H	19.3	20.3	19.7	20.6	21.0	20.9	21.9	21.3	22.2	22.6
12H	19.5	20.5	19.9	20.8	21.2	21.3	22.3	21.7	22.6	22.9
X=4H Y=2H	16.7	17.8	17.0	18.1	18.4	17.0	18.1	17.4	18.4	18.7
3H	18.3	19.2	18.7	19.5	19.9	18.9	19.8	19.3	20.2	20.5
4H	19.1	20.0	19.5	20.3	20.7	20.1	21.0	20.5	21.3	21.7
6H	20.1	20.8	20.5	21.2	21.6	21.5	22.2	21.9	22.6	23.0
8H	20.4	21.1	20.9	21.5	22.0	22.0	22.7	22.5	23.1	23.6
12H	20.7	21.3	21.2	21.8	22.2	22.5	23.1	23.0	23.6	24.0
X=8H Y=4H	19.5	20.2	19.9	20.6	21.0	20.4	21.1	20.8	21.5	21.9
6H	20.6	21.1	21.0	21.6	22.0	21.9	22.4	22.3	22.9	23.3
8H	21.0	21.5	21.5	22.0	22.5	22.6	23.0	23.0	23.5	24.0
12H	21.4	21.8	21.9	22.3	22.8	23.1	23.6	23.6	24.1	24.6
X=12H Y=4H	19.6	20.2	20.0	20.6	21.0	20.4	21.0	20.9	21.4	21.9
6H	20.7	21.2	21.2	21.6	22.1	21.9	22.4	22.4	22.9	23.4
8H	21.2	21.6	21.7	22.1	22.6	22.6	23.1	23.1	23.6	24.1
Variations with the observer position at spacings:										
S=1.0H	+0.3/-0.3					+0.3/-0.3				
S=1.5H	+0.4/-0.7					+0.3/-0.7				
S=2.0H	+0.7/-1.0					+0.6/-0.9				

Calculate in accordance with CIE Pub.117. The table is revised with 5146lm ($8\log(F/F_0) = 5.7$).

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: 12.677 m
 Humidity:
 Inspector:

Utilisation Factor Table(Floor cavity)

Utilisation Factors UF(F)			SHR NOM = 1.00									
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	0.63	0.73	0.79	0.83	0.90	0.94	0.98	1.02	1.04	
	0.30		0.56	0.66	0.72	0.77	0.84	0.89	0.93	0.98	1.01	
	0.20		0.51	0.60	0.67	0.72	0.80	0.85	0.89	0.94	0.98	
0.50	0.50	0.20	0.62	0.70	0.76	0.81	0.87	0.91	0.94	0.98	1.00	
	0.30		0.55	0.64	0.71	0.75	0.82	0.87	0.90	0.94	0.97	
	0.20		0.51	0.60	0.66	0.71	0.78	0.83	0.86	0.91	0.95	
0.30	0.50	0.20	0.60	0.69	0.74	0.78	0.84	0.88	0.90	0.94	0.96	
	0.30		0.55	0.63	0.69	0.74	0.80	0.84	0.87	0.91	0.94	
	0.20		0.50	0.59	0.65	0.70	0.76	0.81	0.84	0.89	0.92	
0.00	0.00	0.00	0.48	0.57	0.62	0.67	0.73	0.77	0.80	0.84	0.87	
Rating:46W 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 = 1.00									
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	0.90	0.74	0.64	0.56	0.45	0.37	0.32	0.25	0.21	
	0.30		0.75	0.64	0.55	0.49	0.40	0.34	0.30	0.24	0.20	
	0.20		0.64	0.56	0.49	0.44	0.37	0.32	0.28	0.22	0.19	
0.50	0.50	0.20	0.87	0.71	0.61	0.53	0.43	0.39	0.31	0.24	0.20	
	0.30		0.73	0.62	0.54	0.48	0.39	0.33	0.29	0.23	0.19	
	0.20		0.64	0.55	0.48	0.43	0.36	0.31	0.27	0.21	0.18	
0.30	0.50	0.20	0.84	0.68	0.58	0.51	0.41	0.34	0.29	0.23	0.19	
	0.30		0.72	0.60	0.52	0.46	0.37	0.32	0.27	0.22	0.18	
	0.20		0.63	0.54	0.47	0.42	0.35	0.30	0.26	0.21	0.17	
0.00	0.00	0.00	0.52	0.43	0.37	0.33	0.27	0.23	0.20	0.16	0.13	
Rating:46W 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 = 1.00									
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	0.16	0.17	0.18	0.19	0.20	0.21	0.21	0.22	0.22	
	0.30		0.10	0.11	0.13	0.14	0.16	0.17	0.18	0.19	0.20	
	0.20		0.05	0.07	0.09	0.10	0.12	0.13	0.15	0.16	0.17	
0.50	0.50	0.20	0.15	0.17	0.18	0.18	0.19	0.20	0.20	0.21	0.21	
	0.30		0.10	0.11	0.13	0.14	0.15	0.16	0.17	0.18	0.19	
	0.20		0.05	0.07	0.08	0.10	0.12	0.13	0.14	0.16	0.17	
0.30	0.50	0.20	0.15	0.16	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	0.17	0.18	0.18	
	0.20		0.05	0.07	0.08	0.10	0.11	0.13	0.14	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:46W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												