

Report No.: 1

Test Time: 05.11.2019 19:13

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 180 4x40LED 0.3A 38W 3000K microprisma

Luminous Length (mm): 1200

Luminous Width (mm): 180

Luminous Height (mm): 35

Voltage: 221.2 V

Current: 0.179 A

Power: 38.95 W

Power Factor: 0.982

Photometric Results

CIE Class: Direct

Measurement Flux: 4382.6 lm

Downward Ratio: 99%

Total Rated Lamp Lumens: 4382.6 lm

Efficiency: 100%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 159.6, 162.3, 148.7, 148.4

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 78.3, 78.8, 76.0, 75.9

Luminaire Efficacy Rating (LER): 112.57

Central Intensity: 2268.38 cd

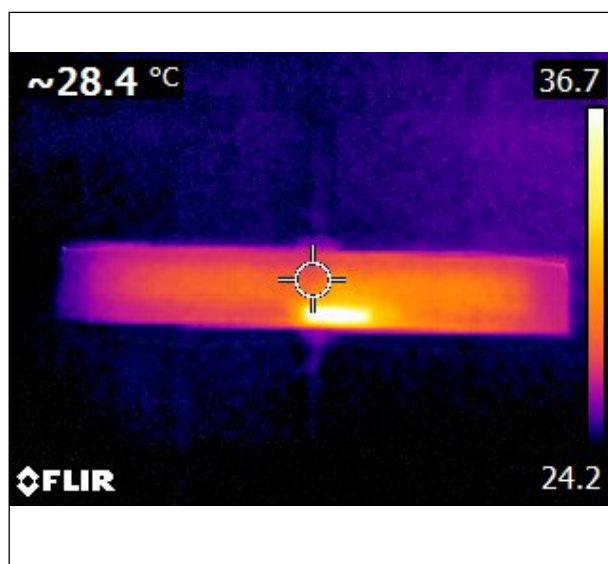
Max. Intensity: 2276.64 cd

Pos of Max. Intensity: H45 V2

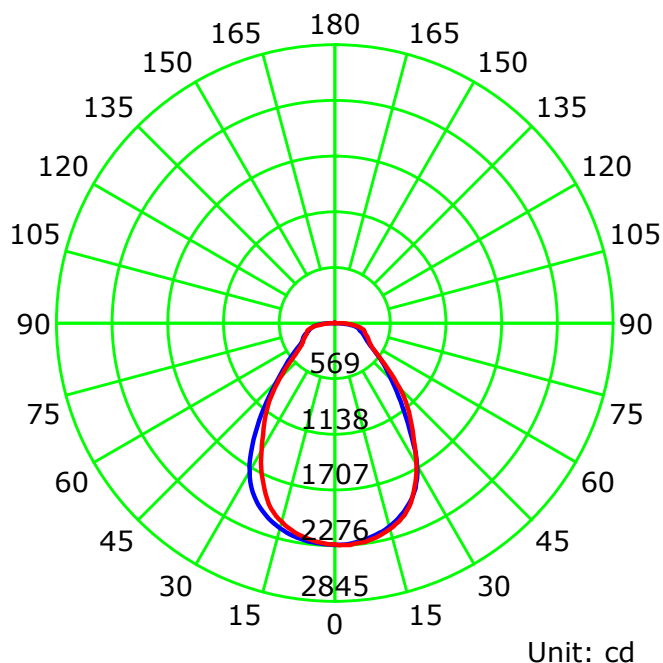
S/MH(C0/C180): 1.14

S/MH(C90/C270): 1.09

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

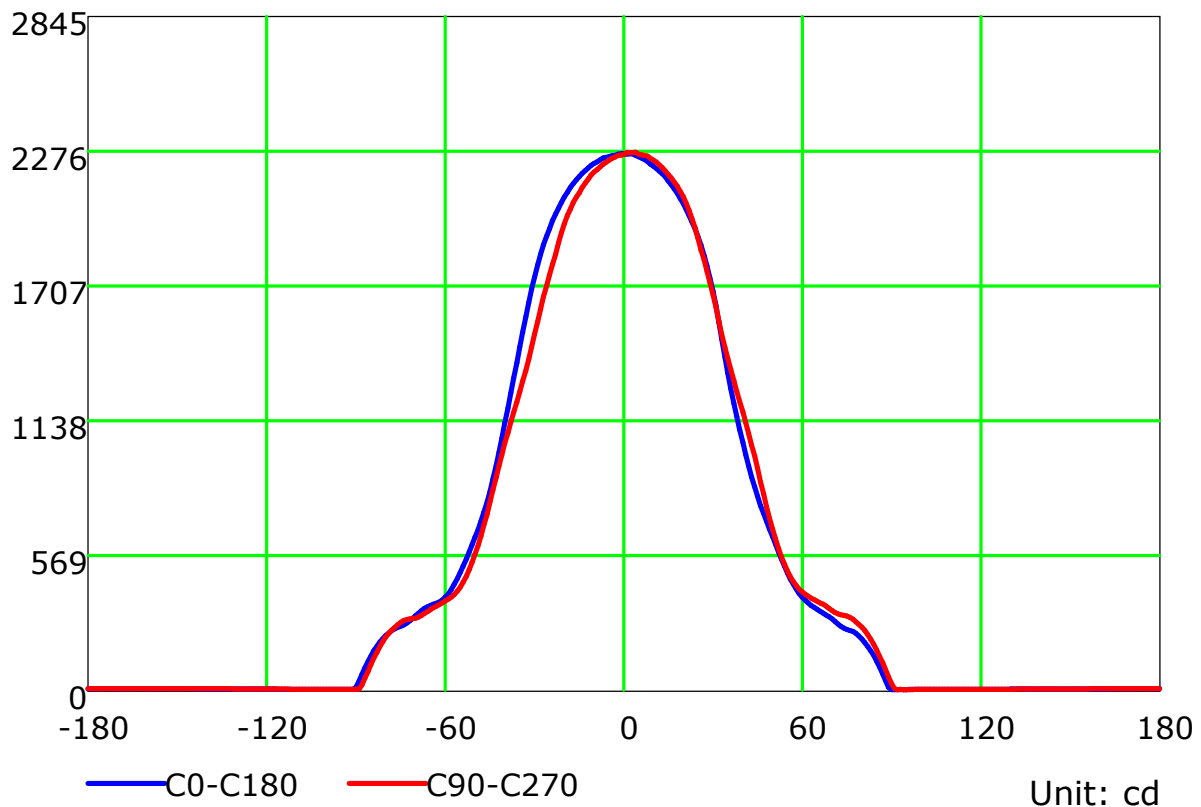
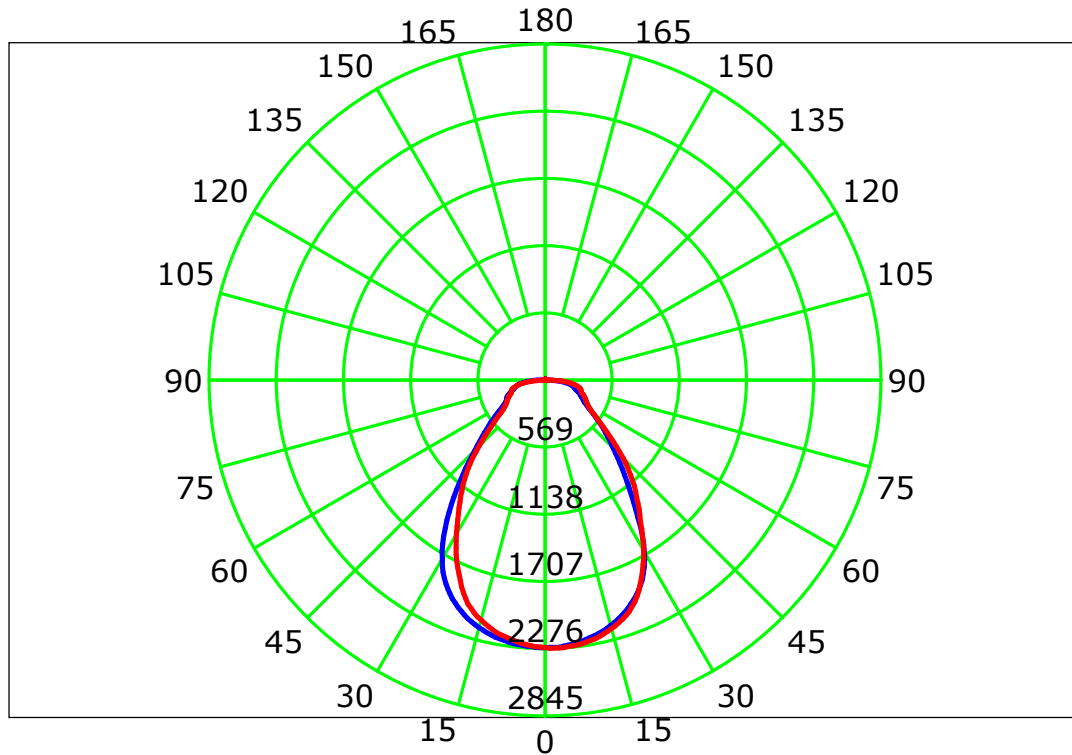
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

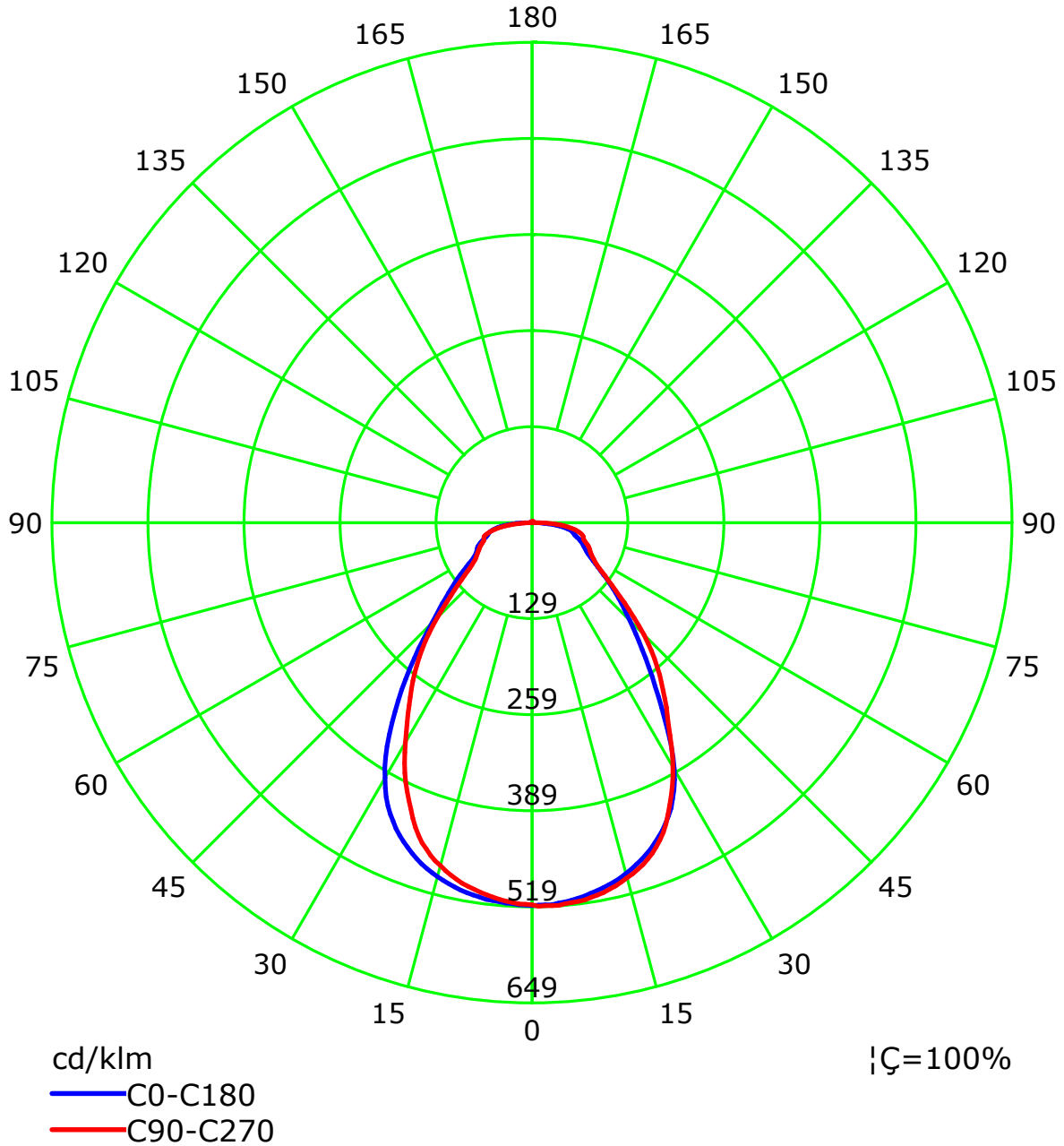
Luminous Intensity Distribution Curve



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)



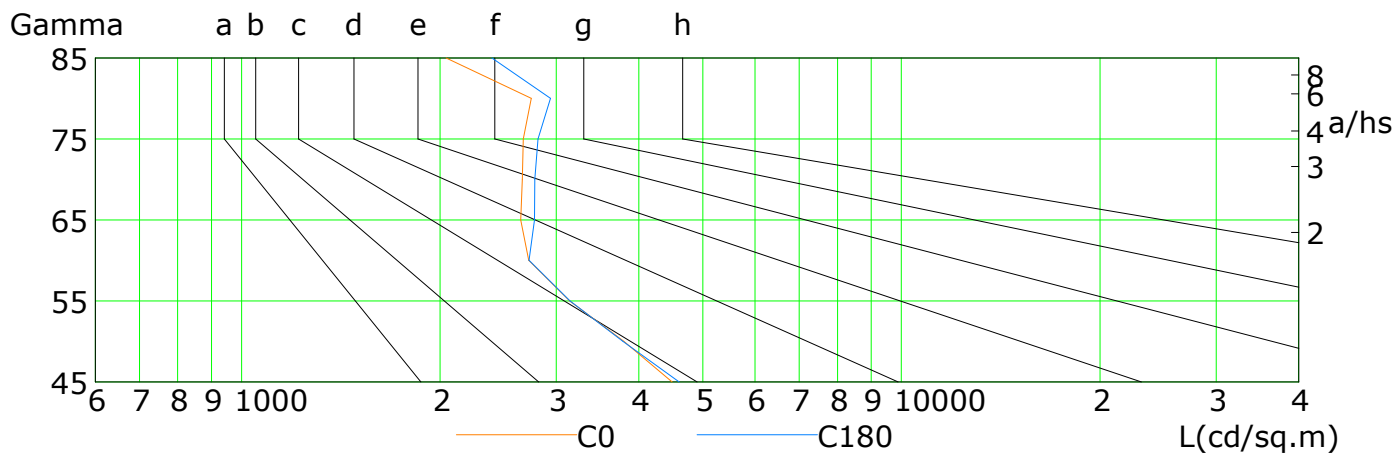
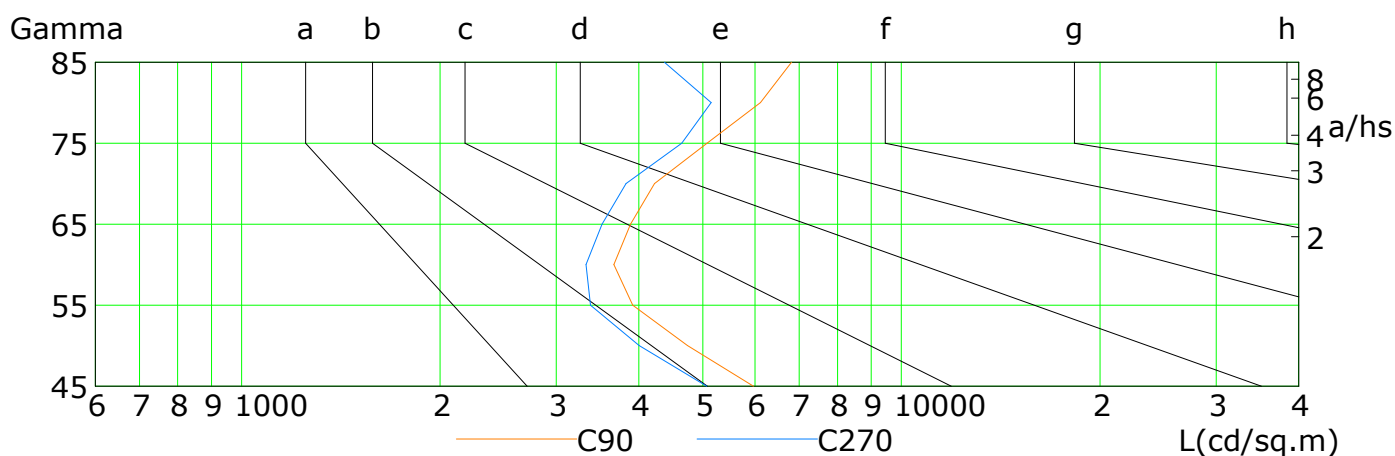
C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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

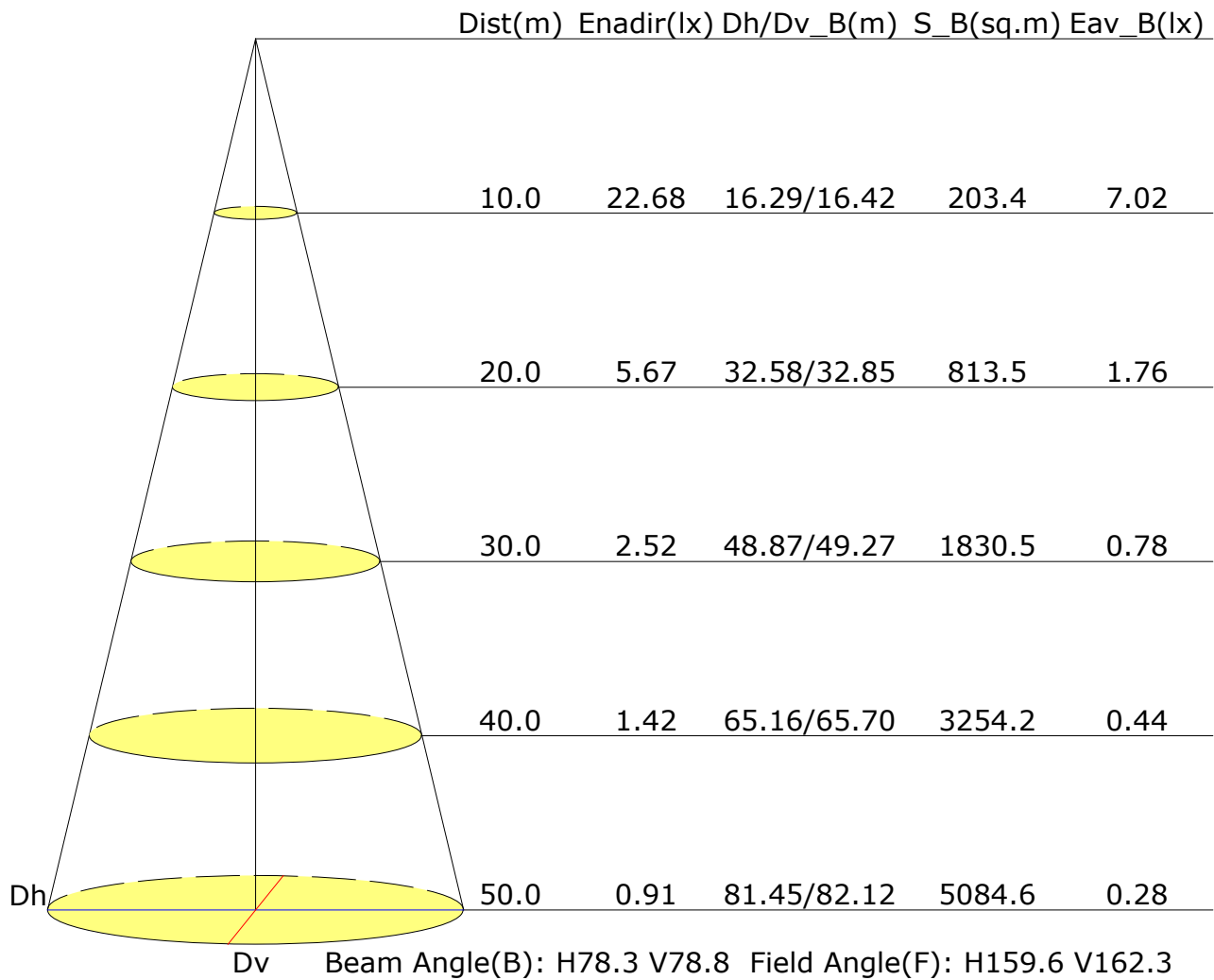


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	4493	3797	3141	2723	2648	2664	2672	2747	2042
C90	5965	4738	3917	3667	3886	4226	5075	6118	6815
C180	4606	3784	3147	2726	2778	2783	2815	2938	2397
C270	5066	4003	3378	3328	3520	3826	4643	5151	4372

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:

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	15.6	16.9	15.9	17.1	17.4	16.0	17.3	16.3	17.5	17.8
3H	17.0	18.1	17.3	18.4	18.7	17.7	18.8	18.0	19.1	19.4
4H	17.7	18.8	18.0	19.1	19.4	18.7	19.8	19.1	20.1	20.4
6H	18.4	19.4	18.8	19.8	20.1	19.9	20.9	20.2	21.2	21.5
8H	18.8	19.7	19.1	20.1	20.4	20.4	21.3	20.8	21.7	22.0
12H	19.0	19.9	19.4	20.2	20.6	20.8	21.7	21.2	22.0	22.4
X=4H Y=2H	16.1	17.2	16.5	17.5	17.8	16.4	17.5	16.8	17.8	18.1
3H	17.7	18.6	18.1	19.0	19.3	18.3	19.2	18.7	19.6	19.9
4H	18.6	19.4	19.0	19.8	20.1	19.5	20.4	20.0	20.7	21.1
6H	19.5	20.2	19.9	20.6	21.0	20.9	21.6	21.3	22.0	22.4
8H	19.9	20.6	20.3	21.0	21.4	21.5	22.2	21.9	22.6	23.0
12H	20.2	20.8	20.6	21.2	21.7	22.0	22.6	22.4	23.0	23.5
X=8H Y=4H	18.9	19.6	19.4	20.0	20.4	19.8	20.5	20.2	20.9	21.3
6H	20.0	20.6	20.5	21.0	21.5	21.3	21.8	21.8	22.3	22.8
8H	20.5	21.0	21.0	21.4	21.9	22.0	22.5	22.5	23.0	23.5
12H	20.9	21.3	21.4	21.8	22.3	22.6	23.0	23.1	23.5	24.0
X=12H Y=4H	19.0	19.6	19.4	20.0	20.5	19.8	20.4	20.3	20.9	21.3
6H	20.1	20.6	20.6	21.1	21.6	21.3	21.8	21.8	22.3	22.8
8H	20.6	21.1	21.1	21.5	22.1	22.1	22.5	22.6	23.0	23.5
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 4383lm ($8\log(F/F_0) = 5.1$).

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	0.72	0.79	0.83	0.90	0.94	0.97	1.01	1.04	
	0.30		0.56	0.65	0.72	0.77	0.84	0.89	0.93	0.97	1.01	
	0.20		0.51	0.60	0.67	0.72	0.79	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	0.97	1.00	
	0.30		0.55	0.64	0.70	0.75	0.82	0.86	0.90	0.94	0.97	
	0.20		0.51	0.59	0.66	0.71	0.78	0.83	0.86	0.91	0.94	
0.30	0.50	0.20	0.60	0.68	0.74	0.78	0.84	0.87	0.90	0.93	0.96	
	0.30		0.54	0.63	0.69	0.73	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	0.91	
0.00	0.00	0.00	0.48	0.56	0.62	0.66	0.73	0.77	0.80	0.84	0.87	
Rating:39W 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	0.56	0.49	0.41	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	0.22	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		0.71	0.60	0.52	0.46	0.38	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:39W 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	0.18	0.19	0.19	0.20	0.21	0.21	0.22	0.23	
	0.30		0.10	0.12	0.13	0.14	0.16	0.17	0.18	0.19	0.20	
	0.20		0.06	0.07	0.09	0.10	0.12	0.14	0.15	0.17	0.18	
0.50	0.50	0.20	0.16	0.17	0.18	0.19	0.20	0.20	0.21	0.21	0.22	
	0.30		0.10	0.12	0.13	0.14	0.15	0.16	0.17	0.19	0.19	
	0.20		0.06	0.07	0.09	0.10	0.12	0.13	0.15	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	0.21	
	0.30		0.10	0.11	0.13	0.14	0.15	0.16	0.17	0.18	0.19	
	0.20		0.06	0.07	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:39W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												