

Report No.: 1

Test Time: 11.12.2019 21:35

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 180 4x24LED 0.3A 32W 5000K microprisma

Luminous Length (mm): 1200

Luminous Width (mm): 180

Luminous Height (mm): 35

Voltage: 221.5 V

Current: 0.149 A

Power: 32.11 W

Power Factor: 0.968

Photometric Results

CIE Class: Direct

Measurement Flux: 3824.1 lm

Downward Ratio: 99%

Total Rated Lamp Lumens: 3824.1 lm

Efficiency: 100%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 159.9, 160.6, 149.3, 149.1

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 77.9, 78.9, 76.0, 75.8

Luminaire Efficacy Rating (LER): 119.14

Central Intensity: 1978.31 cd

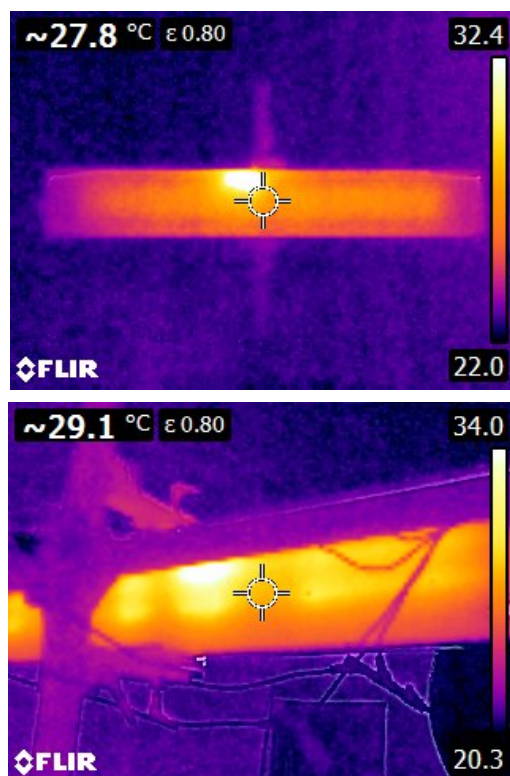
Max. Intensity: 1983.75 cd

Pos of Max. Intensity: H157.5 V1

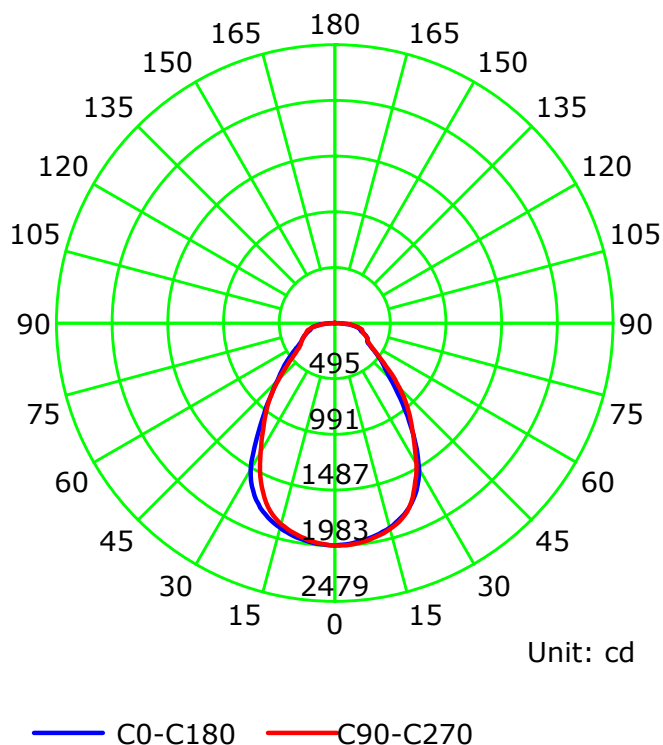
S/MH(C0/C180): 1.14

S/MH(C90/C270): 1.09

Termogramma



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

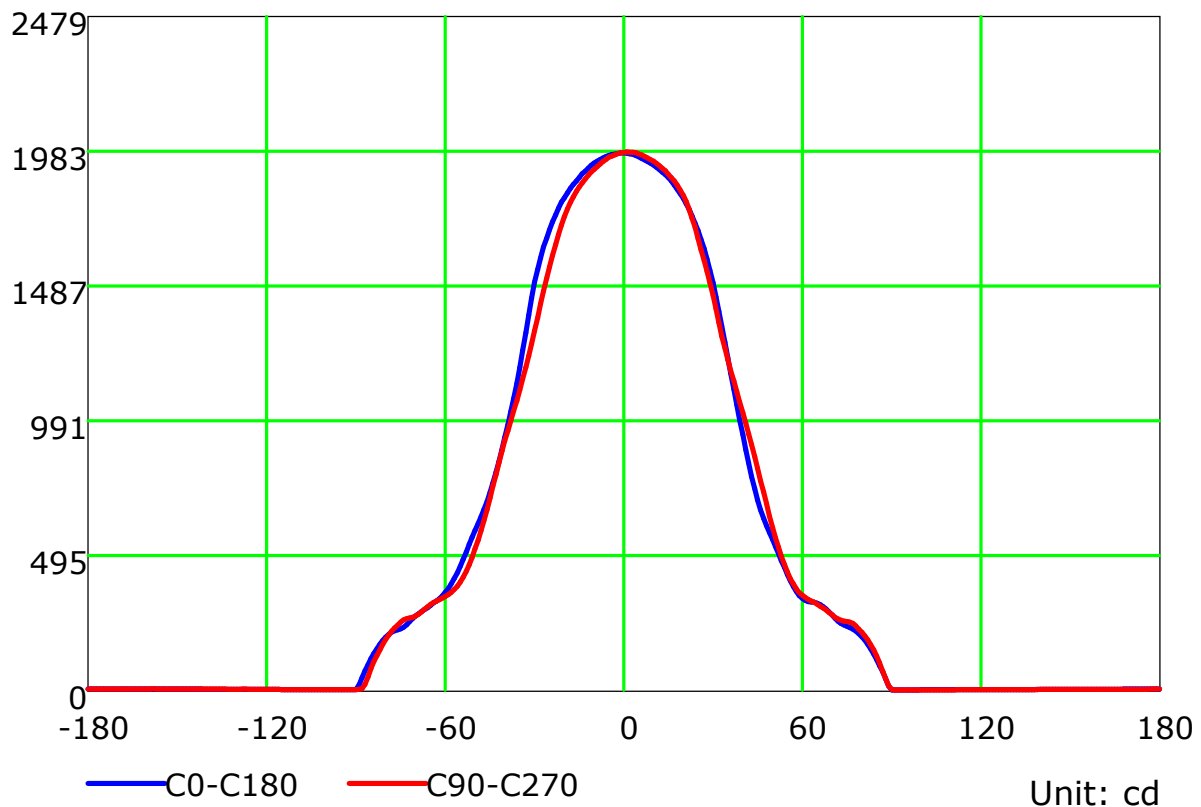
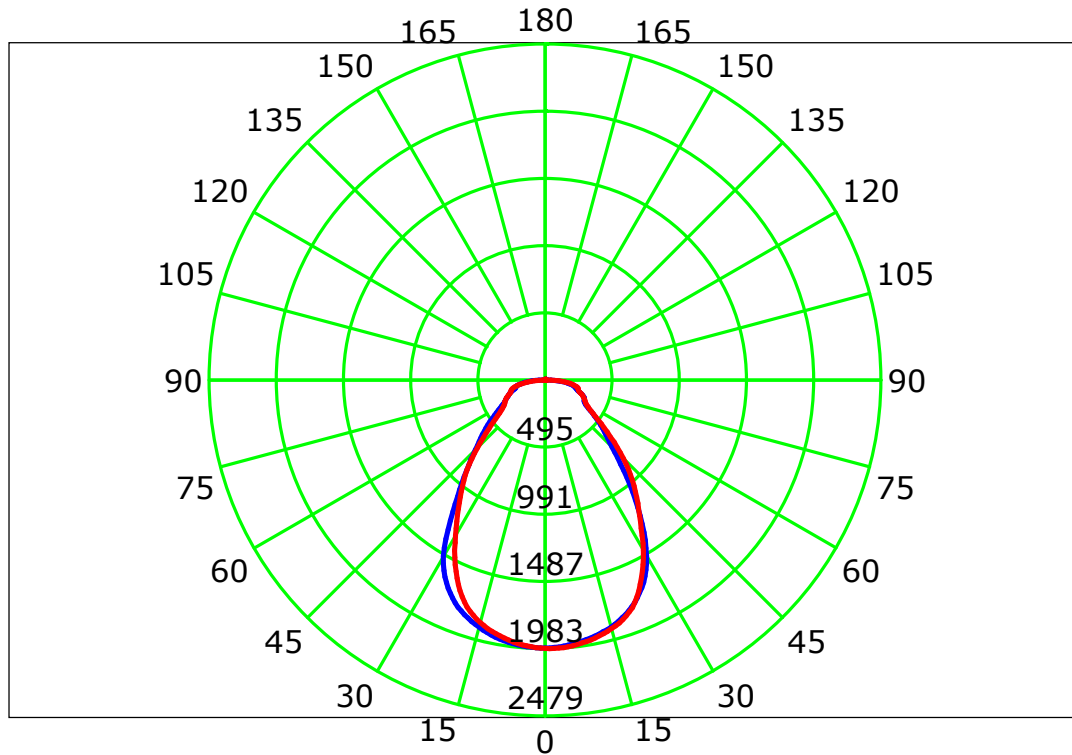
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

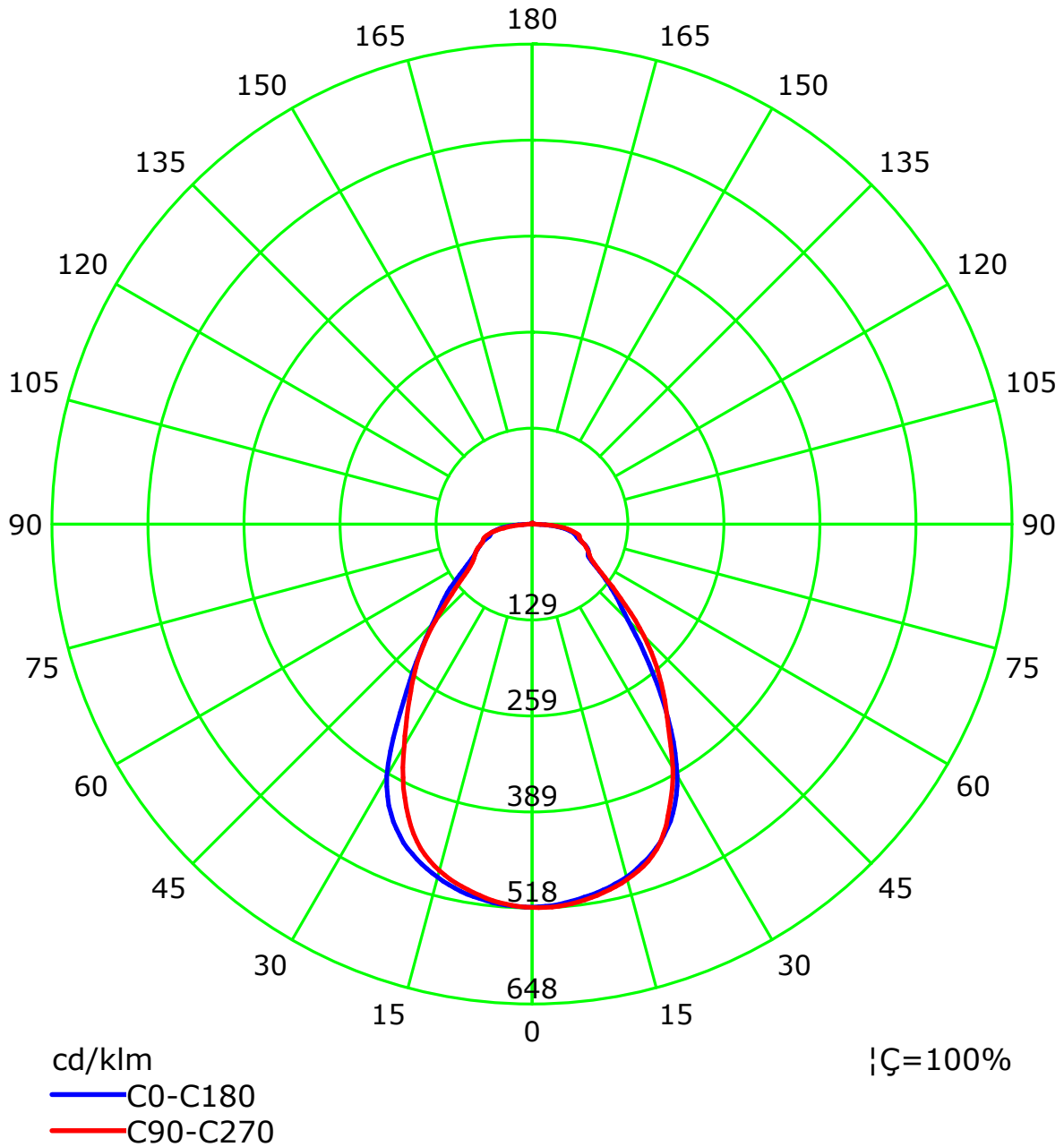
Luminous Intensity Distribution Curve



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)



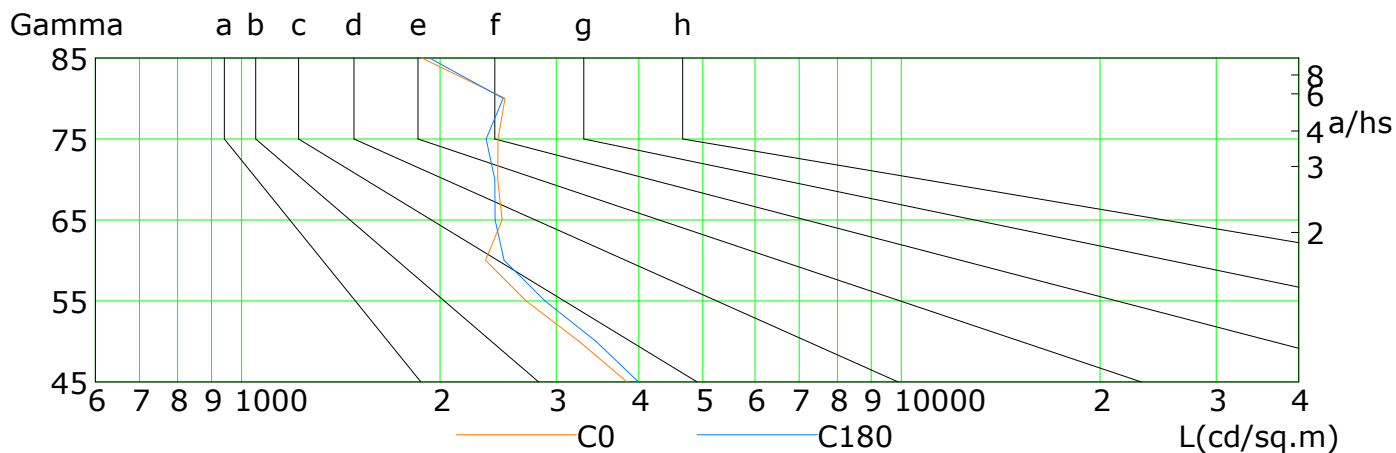
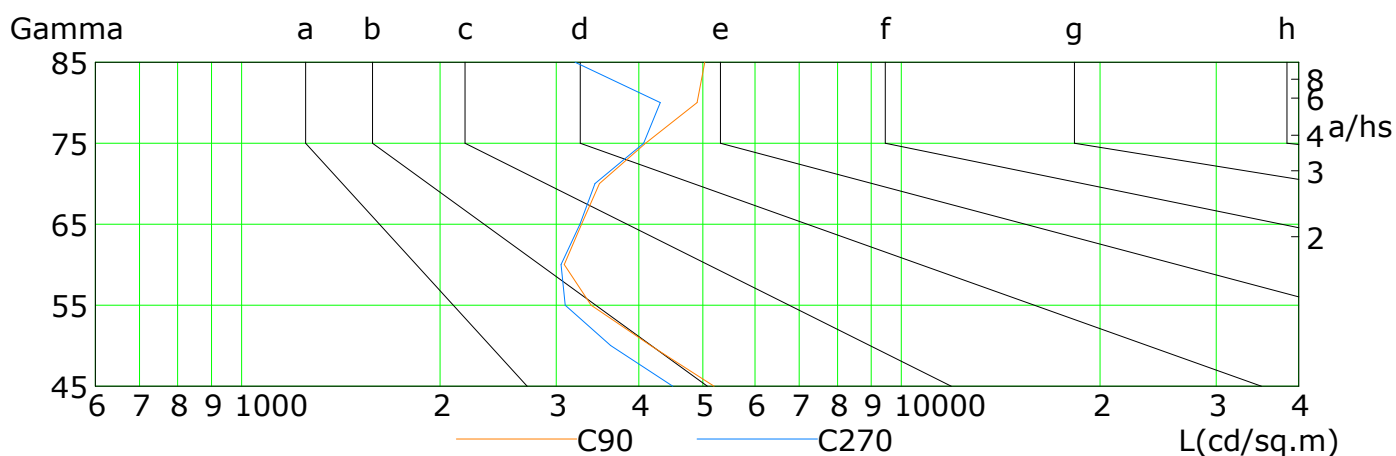
C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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

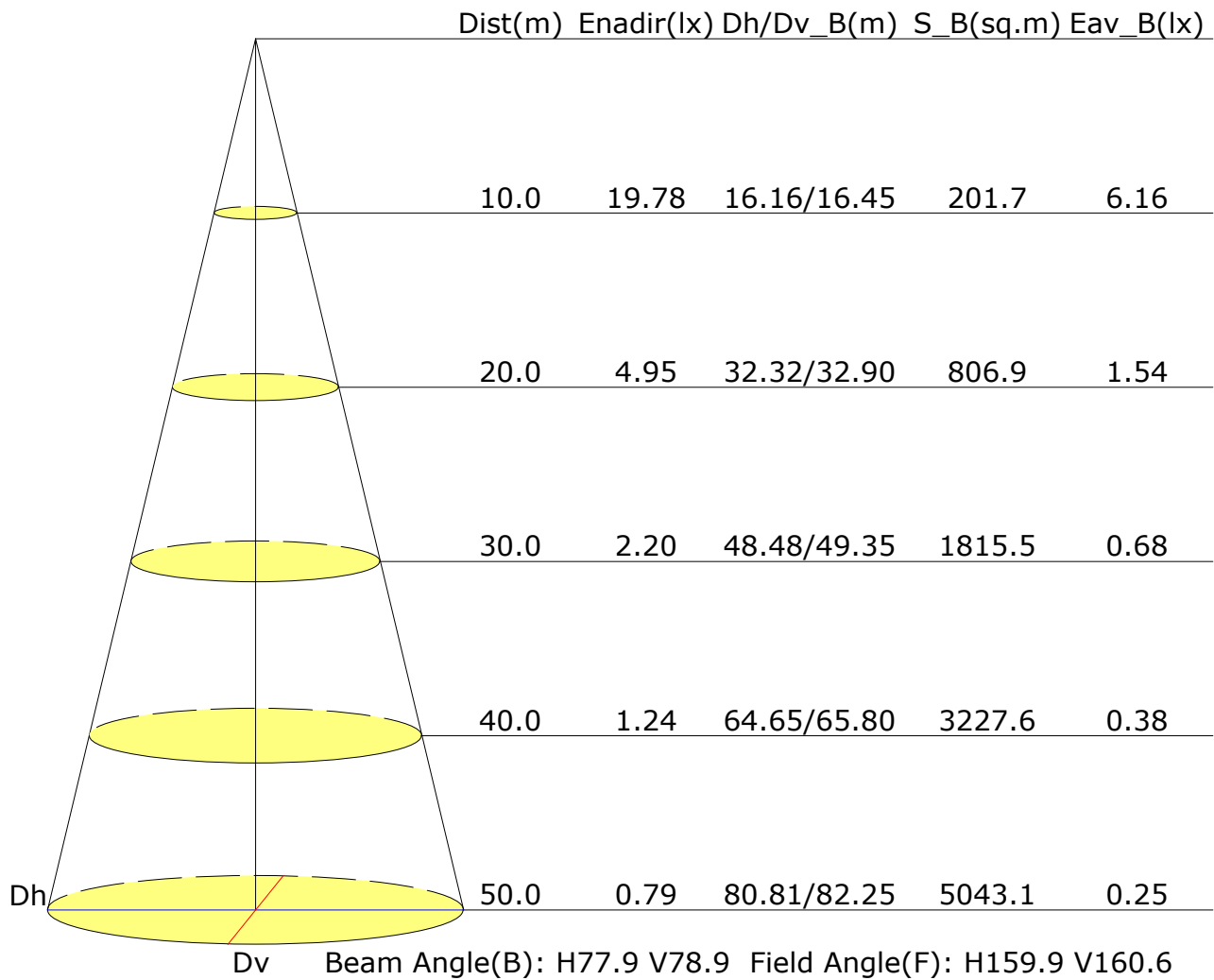


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	3840	3246	2698	2344	2482	2444	2447	2509	1877
C90	5199	4167	3386	3085	3277	3488	4094	4902	5034
C180	3993	3442	2882	2499	2422	2419	2348	2492	1928
C270	4501	3627	3093	3050	3259	3431	4066	4310	3201

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	15.3	16.5	15.6	16.8	17.0	15.7	16.9	16.0	17.2	17.4
3H	16.7	17.9	17.1	18.1	18.4	17.3	18.4	17.6	18.7	19.0
4H	17.5	18.5	17.8	18.8	19.1	18.3	19.3	18.6	19.6	19.9
6H	18.2	19.2	18.6	19.5	19.9	19.3	20.3	19.7	20.6	20.9
8H	18.5	19.5	18.9	19.8	20.2	19.7	20.7	20.1	21.0	21.4
12H	18.8	19.7	19.1	20.0	20.4	20.0	21.0	20.4	21.3	21.7
X=4H Y=2H	15.8	16.8	16.1	17.1	17.4	16.1	17.2	16.4	17.5	17.8
3H	17.4	18.4	17.8	18.7	19.1	17.9	18.9	18.3	19.2	19.5
4H	18.3	19.2	18.7	19.5	19.9	19.1	19.9	19.5	20.3	20.7
6H	19.3	20.0	19.7	20.4	20.8	20.3	21.0	20.7	21.4	21.8
8H	19.7	20.3	20.1	20.8	21.2	20.8	21.5	21.3	21.9	22.3
12H	19.9	20.6	20.4	21.0	21.4	21.2	21.8	21.6	22.2	22.7
X=8H Y=4H	18.7	19.3	19.1	19.7	20.2	19.3	20.0	19.8	20.4	20.8
6H	19.7	20.3	20.2	20.7	21.2	20.7	21.2	21.2	21.7	22.2
8H	20.2	20.7	20.7	21.2	21.7	21.3	21.8	21.8	22.2	22.7
12H	20.6	21.0	21.1	21.5	22.0	21.8	22.2	22.3	22.7	23.2
X=12H Y=4H	18.7	19.3	19.2	19.8	20.2	19.3	20.0	19.8	20.4	20.8
6H	19.8	20.3	20.3	20.8	21.3	20.7	21.2	21.2	21.7	22.2
8H	20.3	20.8	20.8	21.3	21.8	21.4	21.8	21.9	22.3	22.8
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/-0.6				
S=2.0H	+0.7/-0.9					+0.6/-0.8				

Calculate in accordance with CIE Pub.117. The table is revised with 3824lm ($8\log(F/F_0) = 4.7$).

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	0.72	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	0.92	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: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 = 1.00									
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	0.42	0.39	0.30	0.24	0.19	
	0.30		0.73	0.62	0.54	0.48	0.39	0.33	0.28	0.22	0.19	
	0.20		0.64	0.55	0.48	0.43	0.36	0.30	0.27	0.21	0.18	
0.30	0.50	0.20	0.84	0.68	0.58	0.51	0.40	0.34	0.29	0.22	0.19	
	0.30		0.71	0.60	0.52	0.46	0.37	0.32	0.27	0.21	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	0.15	0.13	
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 = 1.00									
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	0.12	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	0.14	0.15	0.16	0.18	
0.50	0.50	0.20	0.16	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	0.09	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		0.10	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	0.17	
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:32W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												