

Report No.: 1

Test Time: 15.11.2019 19:21

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 595 (50) 4x40LED 0,35A 44W 4000K opal

Luminous Length (mm): 595

Luminous Width (mm): 595

Luminous Height (mm): 50

Voltage: 221.3 V

Current: 0.199 A

Power: 42.91 W

Power Factor: 0.974

Photometric Results

CIE Class: Direct

Measurement Flux: 4748.3 lm

Downward Ratio: 99%

Total Rated Lamp Lumens: 4748.3 lm

Efficiency: 100%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 164.6, 164.4, 164.6, 164.4

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 110.7, 111.1, 111.0, 110.9

Luminaire Efficacy Rating (LER): 110.71

Central Intensity: 1657.92 cd

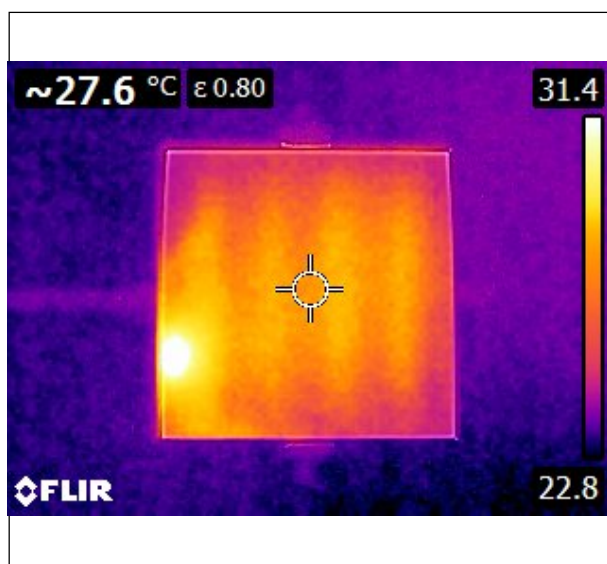
Max. Intensity: 1660.2 cd

Pos of Max. Intensity: H67.5 V1

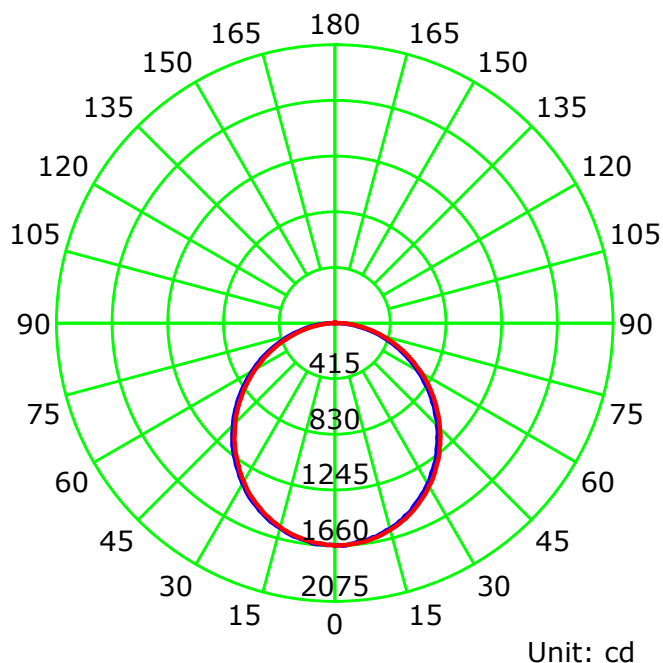
S/MH(C0/C180): 1.24

S/MH(C90/C270): 1.24

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

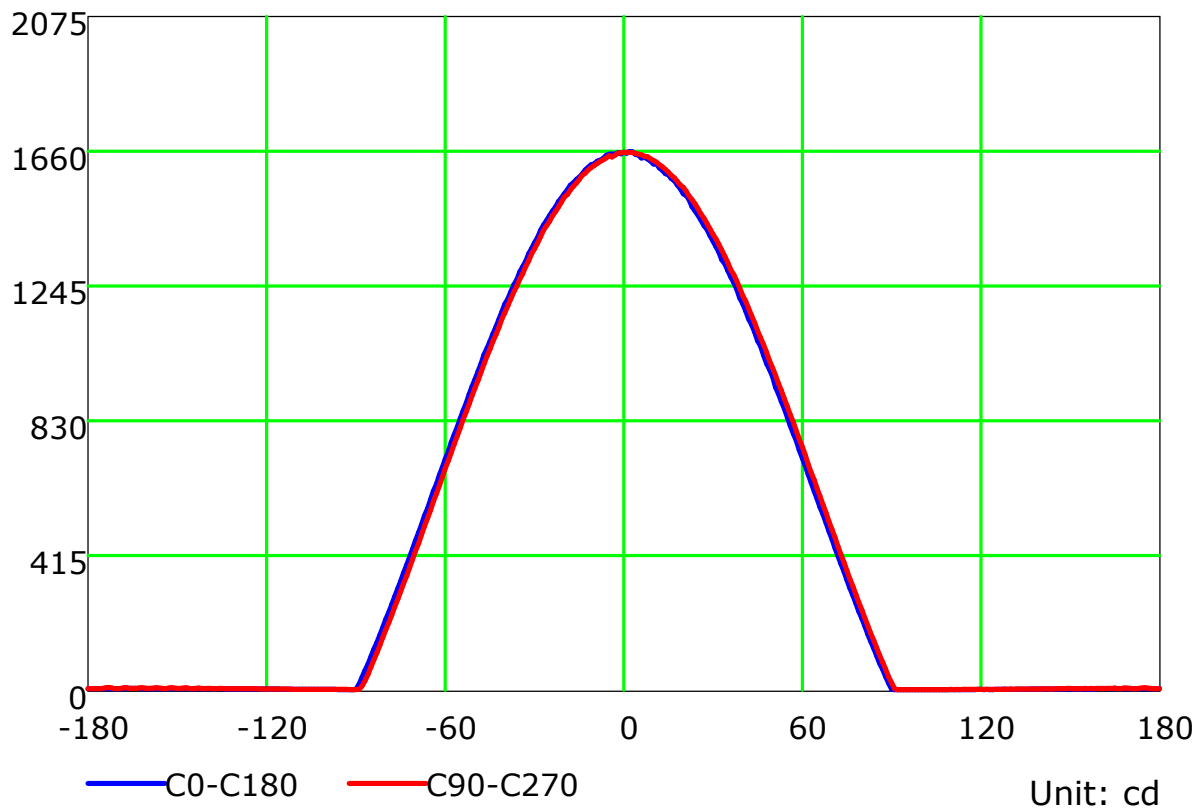
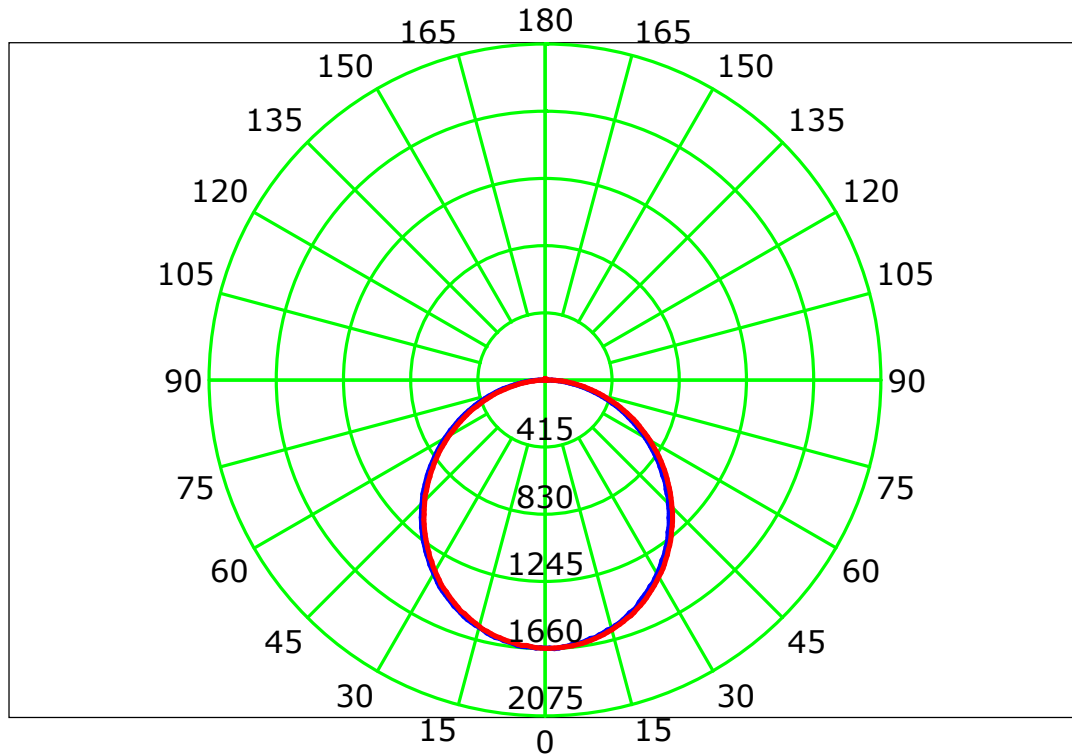
Test Device: LSG-1800B

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

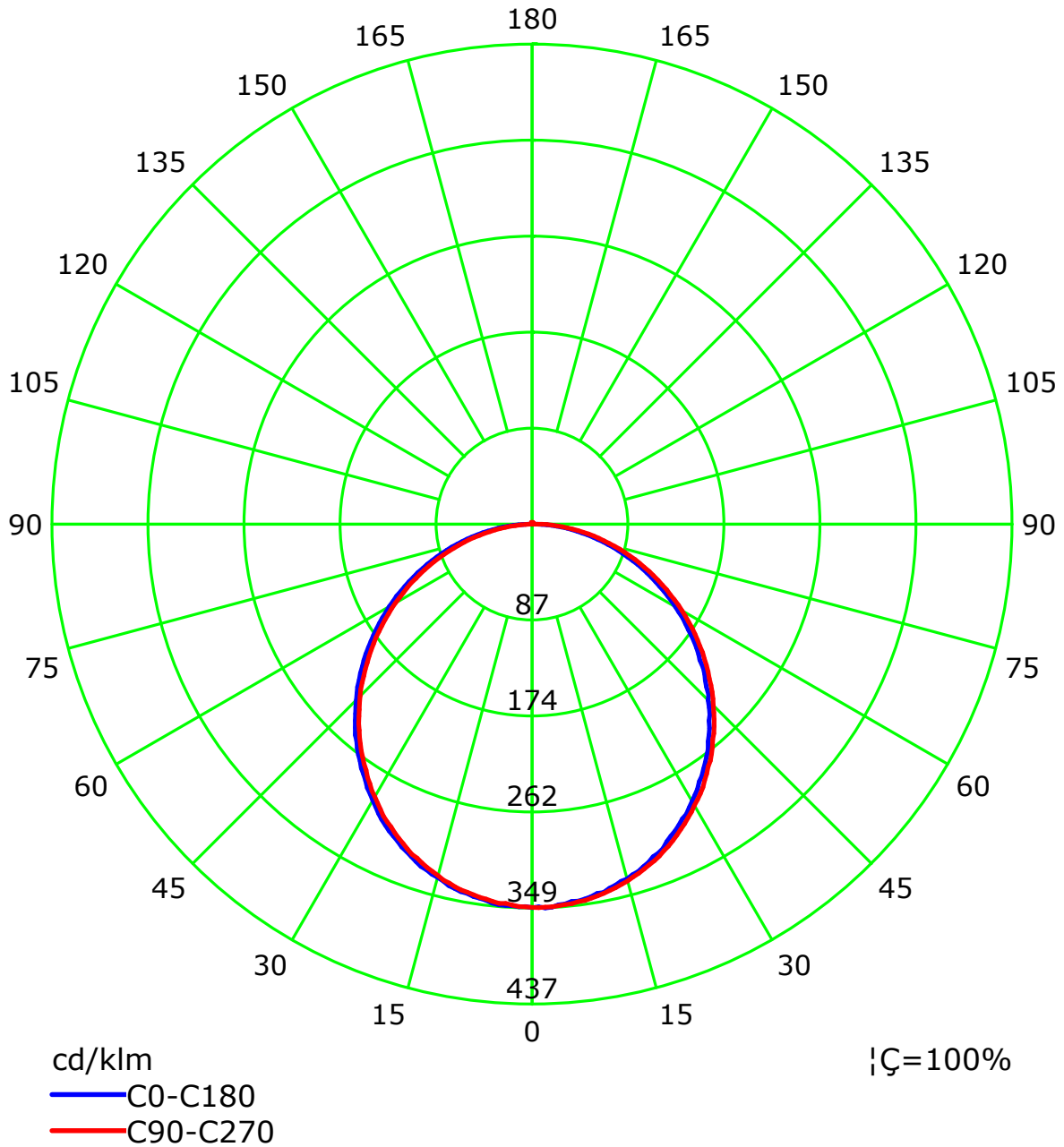
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

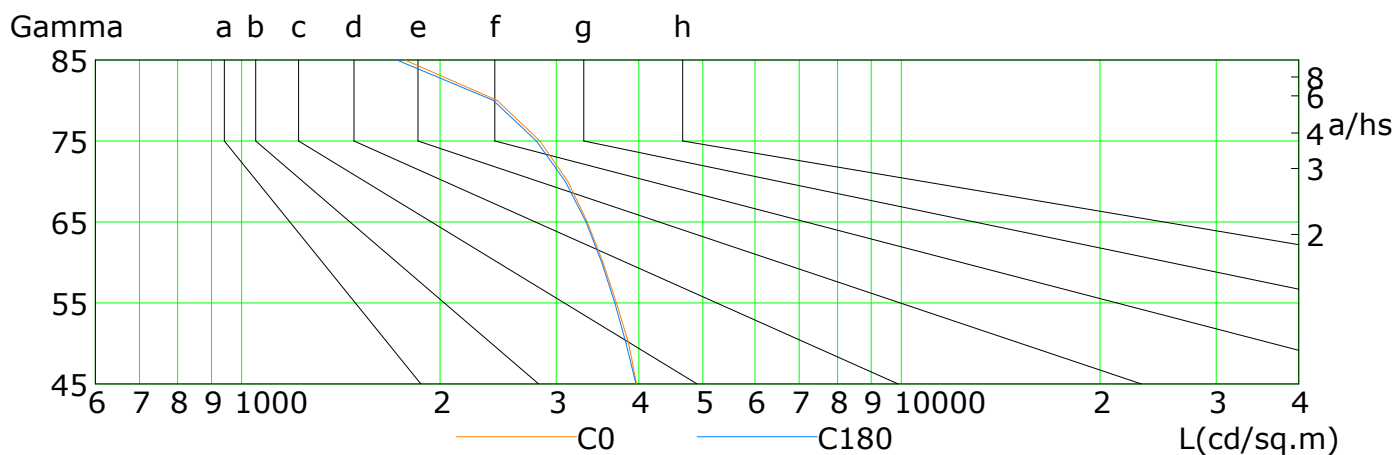
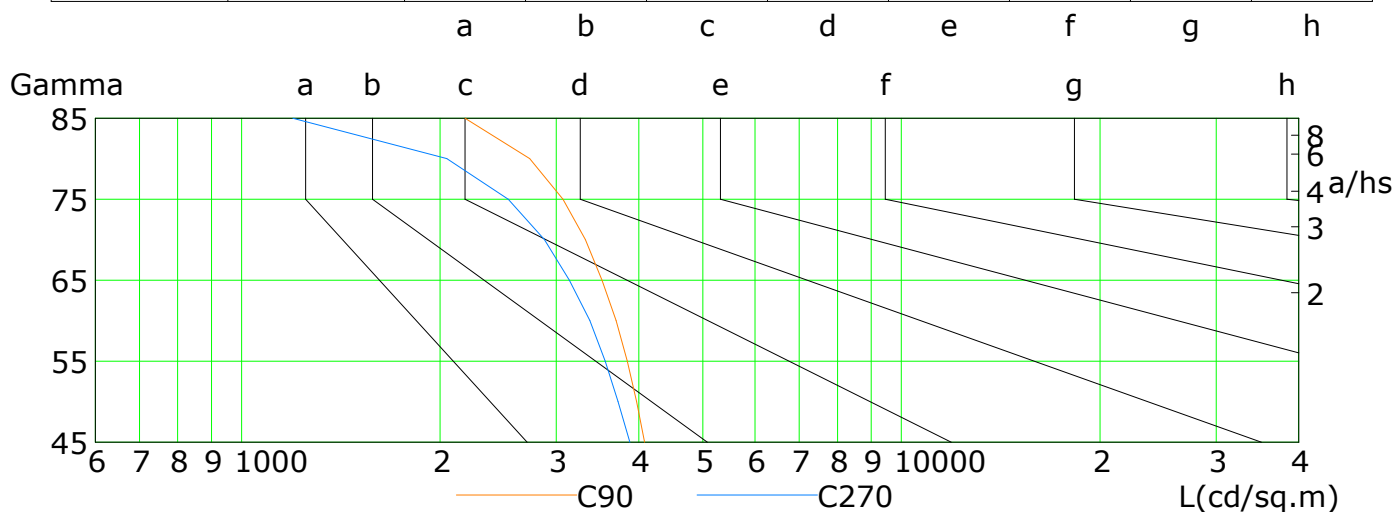
Inspector:

Luminous Intensity Distribution Curve(cd/klm)



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

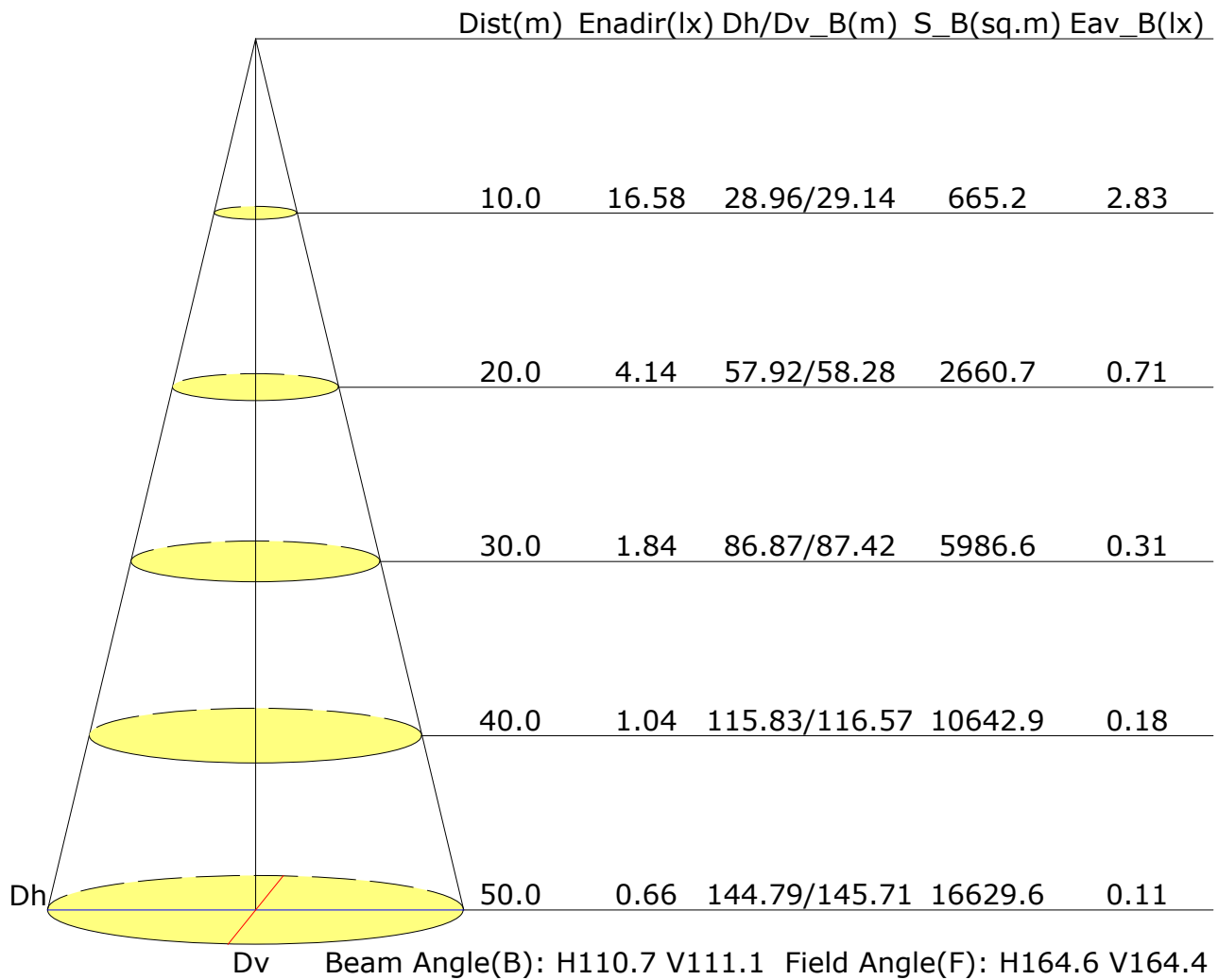


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	3971	3861	3701	3528	3342	3121	2833	2438	1769
C90	4082	3967	3843	3697	3520	3319	3070	2734	2182
C180	3960	3825	3681	3515	3327	3092	2797	2408	1719
C270	3875	3719	3557	3372	3138	2878	2535	2046	1196

C Plane (°):0.0-360.0: 22.5
 Test Lab:
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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	17.0	18.4	17.3	18.6	18.9	17.0	18.4	17.3	18.6	18.9
3H	18.5	19.8	18.8	20.1	20.3	18.5	19.8	18.8	20.1	20.4
4H	19.1	20.3	19.5	20.6	20.9	19.1	20.3	19.5	20.6	21.0
6H	19.6	20.7	20.0	21.1	21.4	19.6	20.7	20.0	21.1	21.4
8H	19.8	20.9	20.2	21.2	21.5	19.8	20.8	20.1	21.2	21.5
12H	19.9	20.9	20.3	21.2	21.6	19.9	20.9	20.2	21.2	21.6
X=4H Y=2H	17.6	18.8	18.0	19.1	19.4	17.6	18.8	18.0	19.1	19.4
3H	19.3	20.4	19.7	20.7	21.1	19.3	20.4	19.7	20.7	21.1
4H	20.1	21.0	20.5	21.4	21.8	20.1	21.0	20.5	21.4	21.8
6H	20.7	21.5	21.1	21.9	22.3	20.7	21.5	21.1	21.9	22.3
8H	20.9	21.6	21.3	22.1	22.5	20.9	21.6	21.3	22.1	22.5
12H	21.0	21.7	21.5	22.1	22.6	21.0	21.7	21.5	22.1	22.6
X=8H Y=4H	20.4	21.1	20.8	21.5	22.0	20.4	21.1	20.8	21.5	22.0
6H	21.1	21.7	21.6	22.2	22.6	21.1	21.7	21.6	22.2	22.6
8H	21.4	21.9	21.9	22.4	22.9	21.4	21.9	21.9	22.4	22.9
12H	21.6	22.1	22.1	22.5	23.1	21.6	22.1	22.1	22.5	23.1
X=12H Y=4H	20.4	21.1	20.8	21.5	21.9	20.4	21.1	20.8	21.5	22.0
6H	21.2	21.7	21.6	22.2	22.7	21.2	21.7	21.6	22.2	22.7
8H	21.5	21.9	22.0	22.4	22.9	21.5	21.9	22.0	22.4	22.9
Variations with the observer position at spacings:										
S=1.0H	+0.2/-0.2					+0.2/-0.2				
S=1.5H	+0.3/-0.4					+0.4/-0.5				
S=2.0H	+0.5/-0.8					+0.5/-0.9				

Calculate in accordance with CIE Pub.117. The table is revised with 4748lm ($8\log(F/F_0) = 5.4$).

C Plane (°):0.0-360.0: 22.5
 Test Lab:
 Test Type: TYPE C
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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 = 1.25									
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	0.56	0.66	0.74	0.79	0.86	0.91	0.95	1.00	1.03	
	0.30		0.48	0.58	0.66	0.72	0.80	0.86	0.90	0.95	0.99	
	0.20		0.42	0.53	0.60	0.66	0.75	0.81	0.85	0.92	0.96	
0.50	0.50	0.20	0.54	0.64	0.71	0.76	0.83	0.88	0.91	0.96	0.98	
	0.30		0.47	0.57	0.64	0.70	0.78	0.83	0.87	0.92	0.95	
	0.20		0.42	0.52	0.59	0.65	0.73	0.79	0.83	0.89	0.93	
0.30	0.50	0.20	0.53	0.62	0.69	0.73	0.80	0.84	0.88	0.92	0.94	
	0.30		0.46	0.56	0.63	0.68	0.75	0.80	0.84	0.89	0.92	
	0.20		0.42	0.51	0.58	0.64	0.72	0.77	0.81	0.86	0.90	
0.00	0.00	0.00	0.39	0.49	0.56	0.61	0.68	0.73	0.77	0.82	0.85	
Rating:43W 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	0.71	0.62	0.50	0.42	0.36	0.28	0.23	
	0.30		0.84	0.71	0.62	0.55	0.45	0.38	0.33	0.26	0.22	
	0.20		0.72	0.62	0.55	0.50	0.41	0.35	0.31	0.25	0.21	
0.50	0.50	0.20	0.97	0.80	0.68	0.60	0.48	0.43	0.34	0.26	0.22	
	0.30		0.82	0.70	0.60	0.54	0.44	0.37	0.32	0.25	0.21	
	0.20		0.71	0.62	0.54	0.48	0.40	0.34	0.30	0.24	0.20	
0.30	0.50	0.20	0.94	0.77	0.66	0.57	0.46	0.38	0.33	0.25	0.21	
	0.30		0.81	0.68	0.59	0.52	0.42	0.36	0.31	0.24	0.20	
	0.20		0.71	0.61	0.53	0.48	0.39	0.33	0.29	0.23	0.19	
0.00	0.00	0.00	0.60	0.51	0.44	0.39	0.32	0.27	0.23	0.18	0.15	
Rating:43W 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	0.17	0.18	0.19	0.20	0.21	0.21	0.22	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	0.08	0.09	0.11	0.13	0.14	0.16	0.17	
0.50	0.50	0.20	0.16	0.18	0.18	0.19	0.20	0.20	0.21	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	0.09	0.11	0.13	0.14	0.16	0.17	
0.30	0.50	0.20	0.16	0.17	0.18	0.18	0.19	0.20	0.20	0.20	0.21	
	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	0.09	0.11	0.12	0.14	0.15	0.16	
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:43W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												