

Report No.: 1

Test Time: 15.11.2019 19:21

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 595 40LED 0,35A 44W 4000K opal Hygiene

Luminous Length (mm): 595

Luminous Width (mm): 595

Luminous Height (mm): 80

Voltage: 221.3 V

Current: 0.199 A

Power: 42.91 W

Power Factor: 0.974

Photometric Results

CIE Class: Direct

Total Rated Lamp Lumens: 4748.3 lm

Measurement Flux: 4748.3 lm

Efficiency: 100%

Downward Ratio: 99%

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

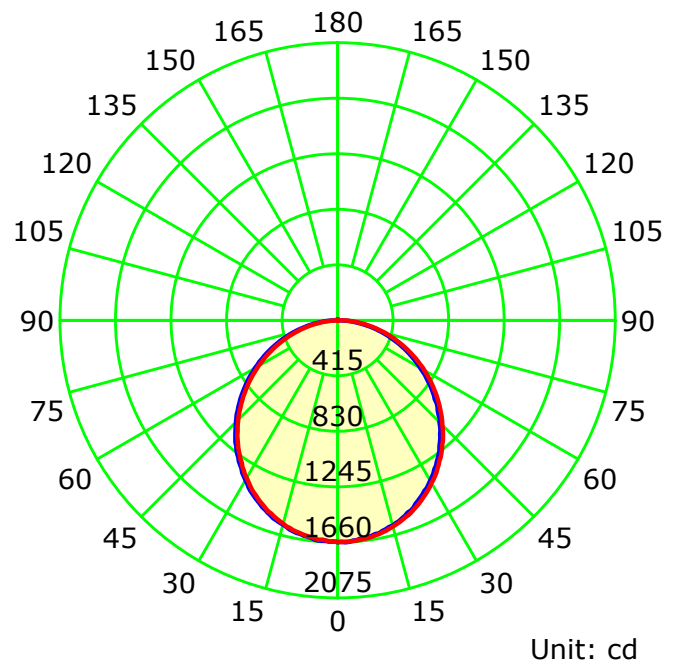
Pos of Max. Intensity: H67.5 V1

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

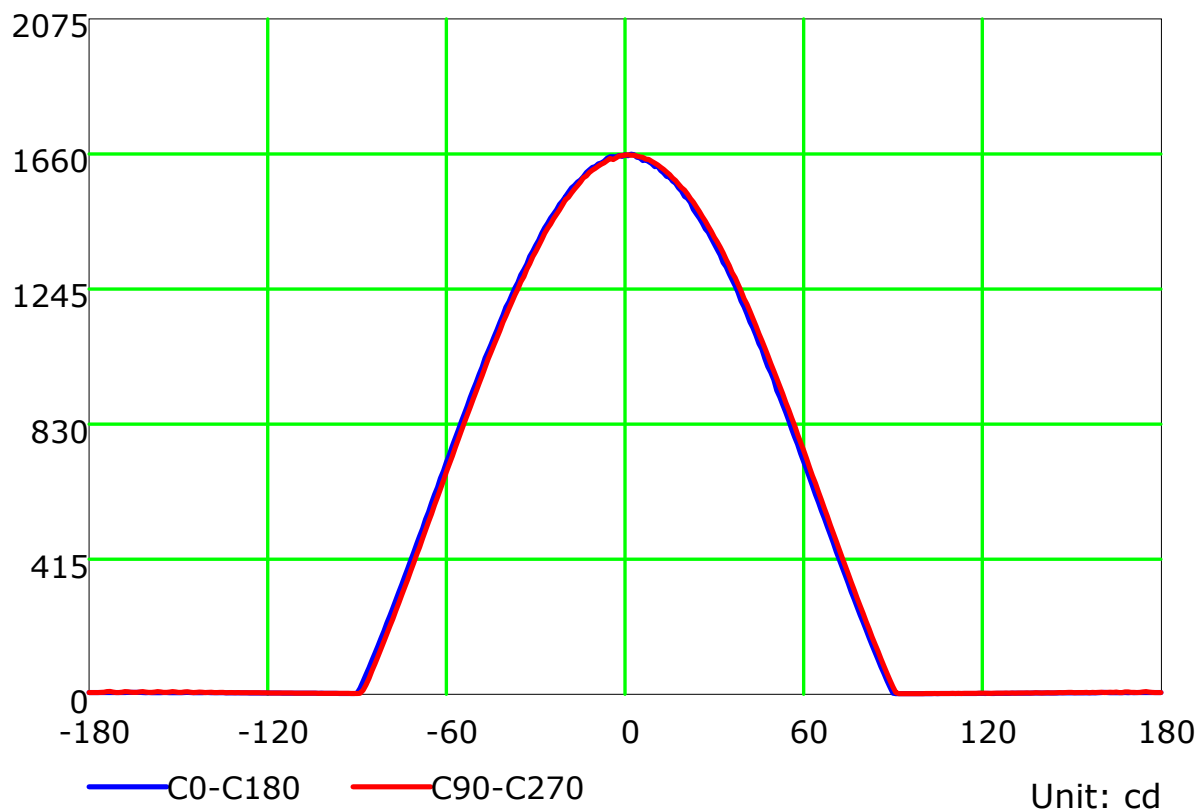
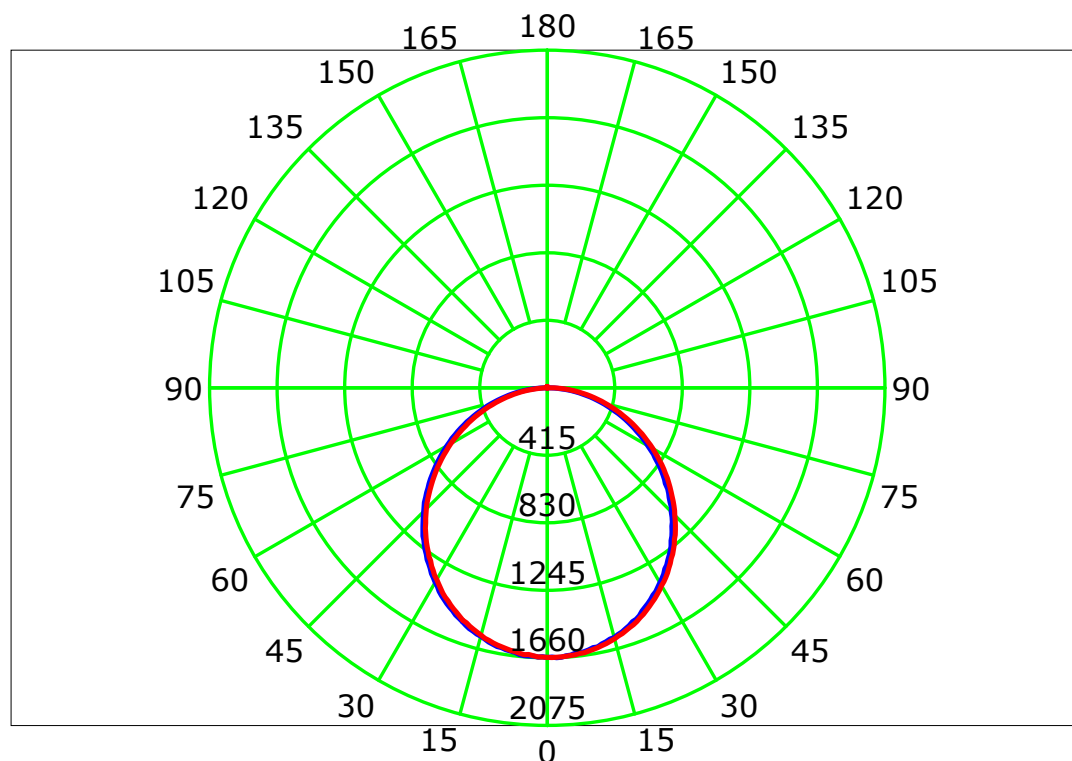
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

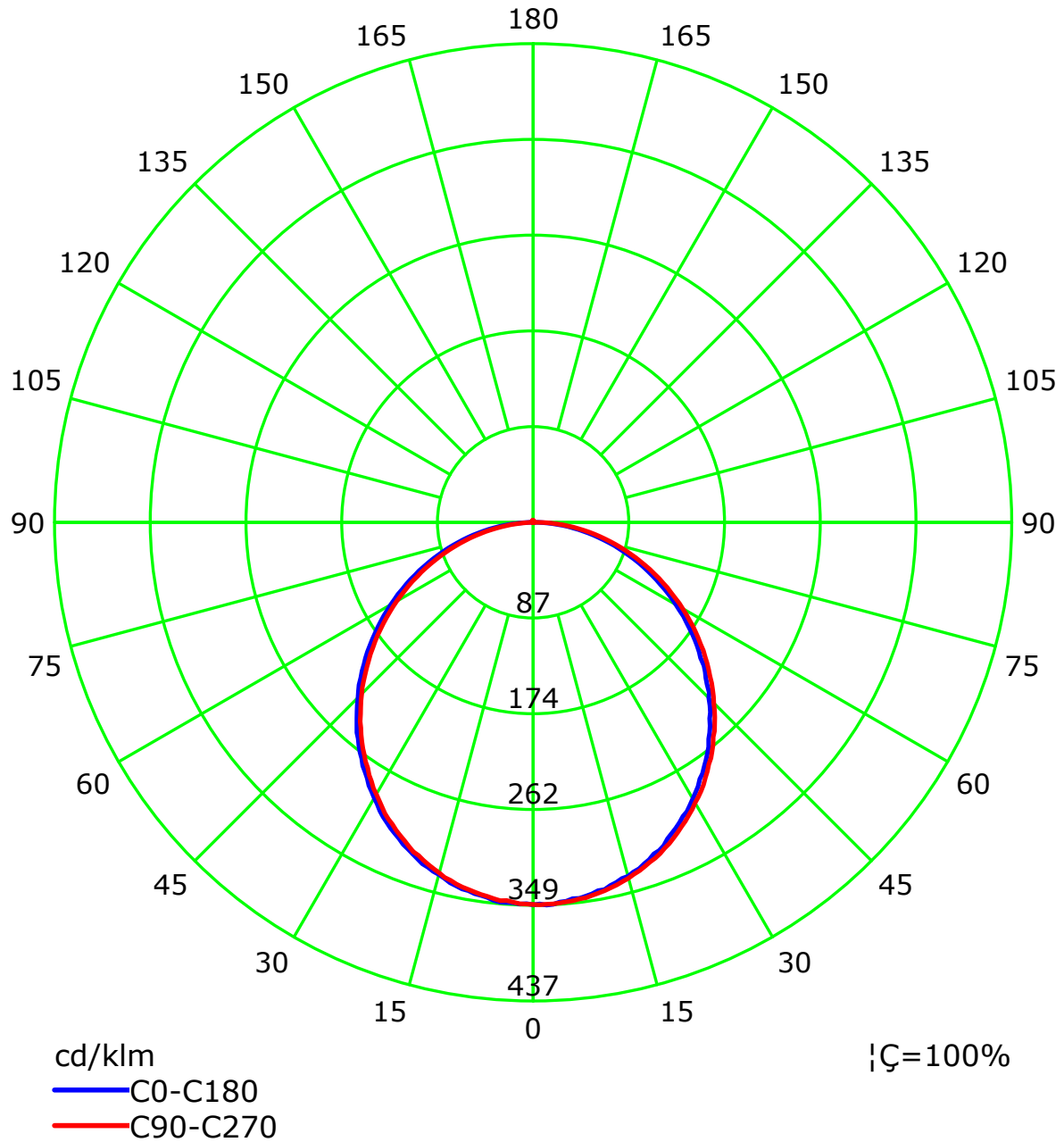
Luminous Intensity Distribution Curve



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

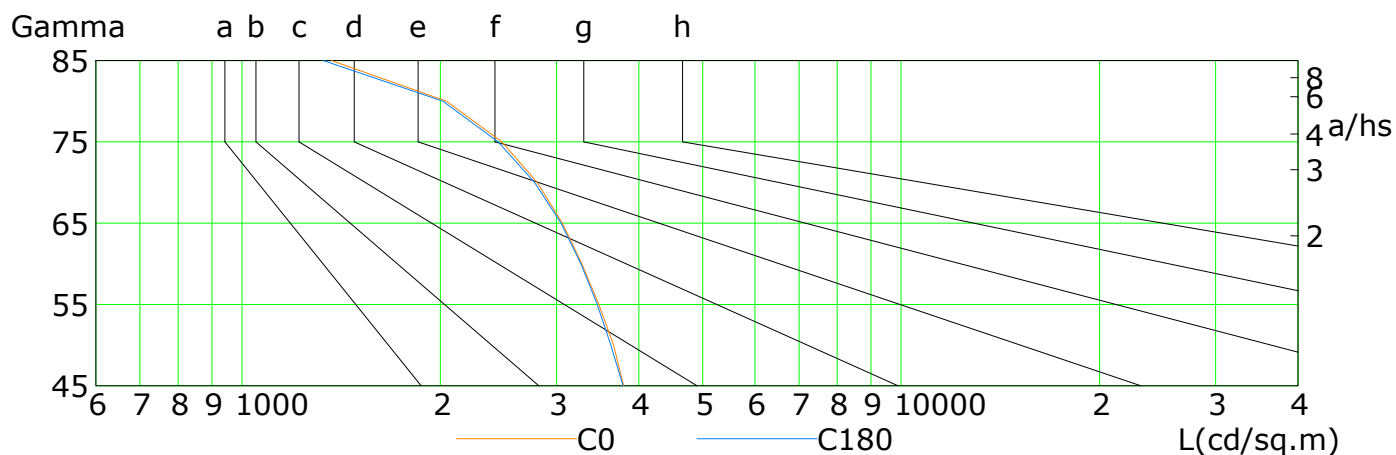
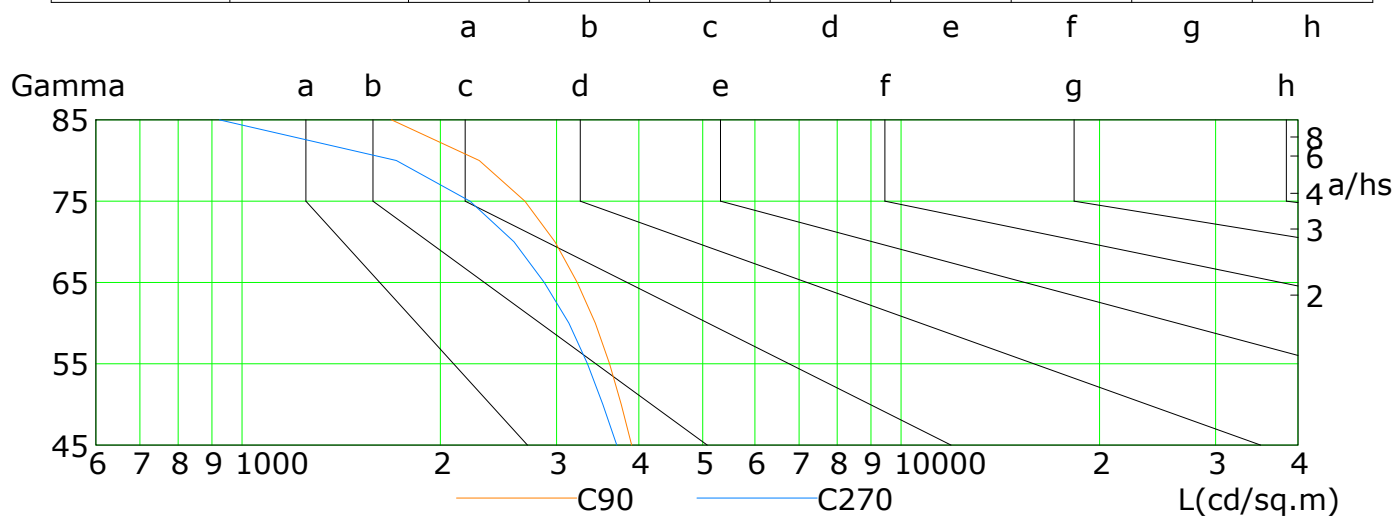
Gamma Plane (°): 0.0-180.0: 1.0
 Test Device: LSG-1800B
 Distance: 12.677 m
 Humidity:
 Inspector:

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	3794	3661	3477	3278	3061	2805	2478	2042	1367
C90	3900	3762	3611	3435	3224	2983	2686	2290	1686
C180	3784	3627	3458	3266	3048	2779	2447	2017	1329
C270	3703	3527	3343	3133	2875	2587	2217	1714	924

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

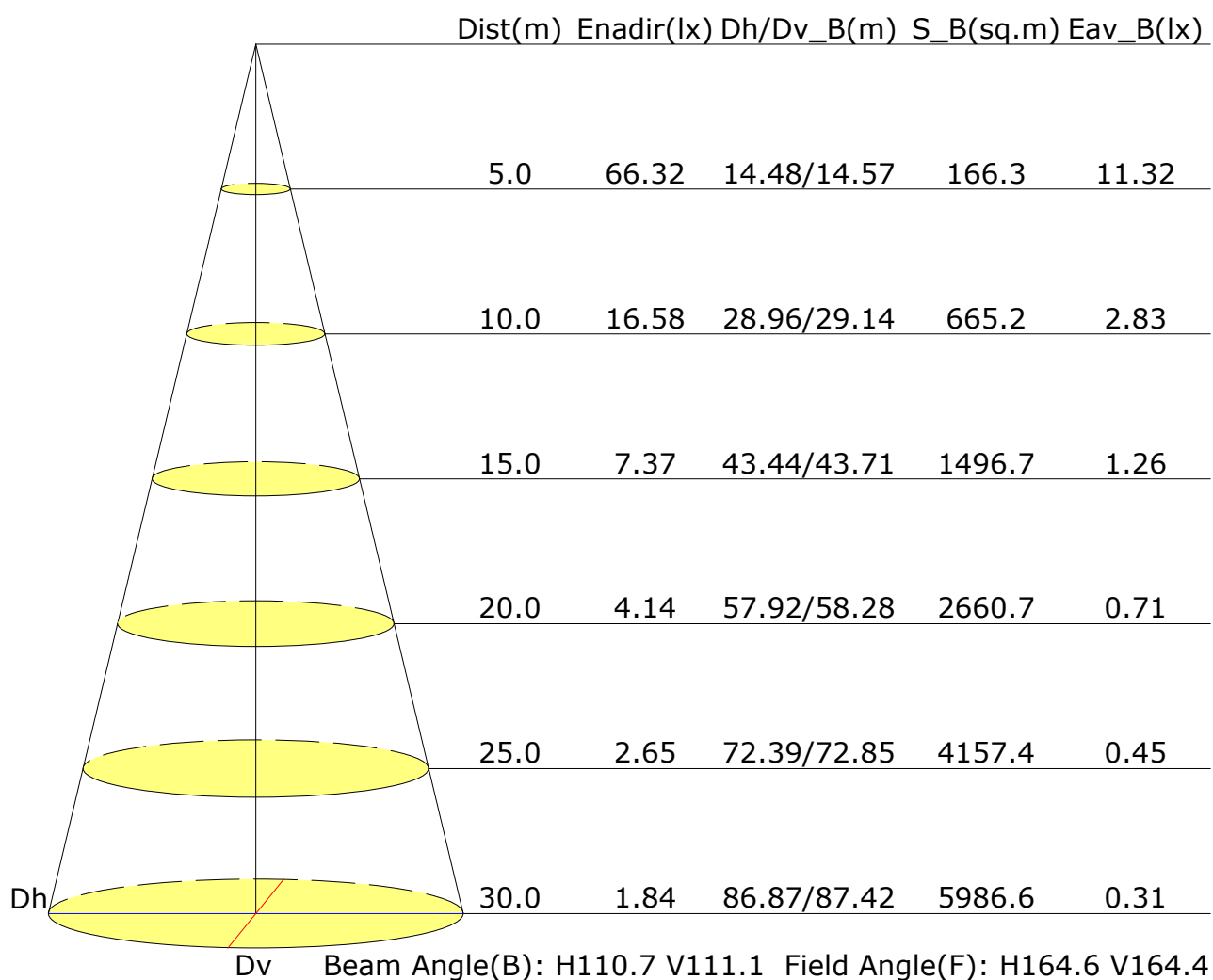
Test Device: LSG-1800B

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	16.7	18.1	17.0	18.3	18.6	16.7	18.1	17.0	18.4	18.6
3H	18.2	19.5	18.5	19.7	20.0	18.2	19.5	18.5	19.8	20.0
4H	18.8	20.0	19.1	20.3	20.6	18.8	20.0	19.2	20.3	20.6
6H	19.2	20.4	19.6	20.7	21.0	19.2	20.4	19.6	20.7	21.0
8H	19.4	20.5	19.8	20.8	21.1	19.4	20.5	19.8	20.8	21.1
12H	19.5	20.5	19.8	20.8	21.2	19.4	20.5	19.8	20.8	21.2
X=4H Y=2H	17.3	18.5	17.7	18.8	19.1	17.3	18.5	17.7	18.8	19.1
3H	19.0	20.0	19.4	20.4	20.7	19.0	20.0	19.4	20.4	20.7
4H	19.7	20.6	20.1	21.0	21.4	19.7	20.6	20.1	21.0	21.4
6H	20.3	21.1	20.7	21.5	21.9	20.3	21.1	20.7	21.5	21.9
8H	20.4	21.2	20.9	21.6	22.1	20.4	21.2	20.9	21.6	22.0
12H	20.6	21.3	21.0	21.7	22.1	20.6	21.2	21.0	21.7	22.1
X=8H Y=4H	20.0	20.7	20.4	21.1	21.6	20.0	20.7	20.4	21.1	21.6
6H	20.6	21.3	21.1	21.7	22.2	20.6	21.3	21.1	21.7	22.2
8H	20.9	21.4	21.4	21.9	22.4	20.9	21.4	21.4	21.9	22.4
12H	21.1	21.6	21.6	22.0	22.6	21.1	21.6	21.6	22.0	22.6
X=12H Y=4H	20.0	20.7	20.4	21.1	21.5	20.0	20.7	20.4	21.1	21.5
6H	20.7	21.2	21.2	21.7	22.2	20.7	21.2	21.2	21.7	22.2
8H	21.0	21.5	21.5	21.9	22.5	21.0	21.5	21.5	21.9	22.5
Variations with the observer position at spacings:										
S=1.0H	+0.2/-0.2					+0.2/-0.2				
S=1.5H	+0.3/-0.5					+0.4/-0.5				
S=2.0H	+0.6/-0.8					+0.5/-1.0				

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

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												