

Report No.: 1

Test Time: 13.12.2019 16:35

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FD 111 Extreme 220W 5000K s linzoy 60 gr.

Luminous Length (mm): 400

Luminous Width (mm): 400

Luminous Height (mm): 120

Voltage: 221.4 V

Current: 1.016 A

Power: 220.51 W

Power Factor: 0.979

Photometric Results

CIE Class: Direct

Measurement Flux: 30418.3 lm

Downward Ratio: 99%

Total Rated Lamp Lumens: 30418.3 lm

Efficiency: 100%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 110.7, 110.9, 117.8, 117.9

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 41.6, 41.6, 41.4, 41.7

Luminaire Efficacy Rating (LER): 138.00

Central Intensity: 30344.04 cd

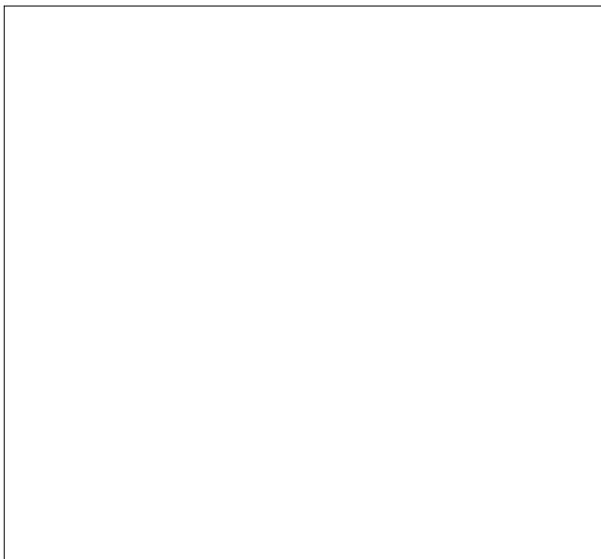
Max. Intensity: 30601.09 cd

Pos of Max. Intensity: H67.5 V2

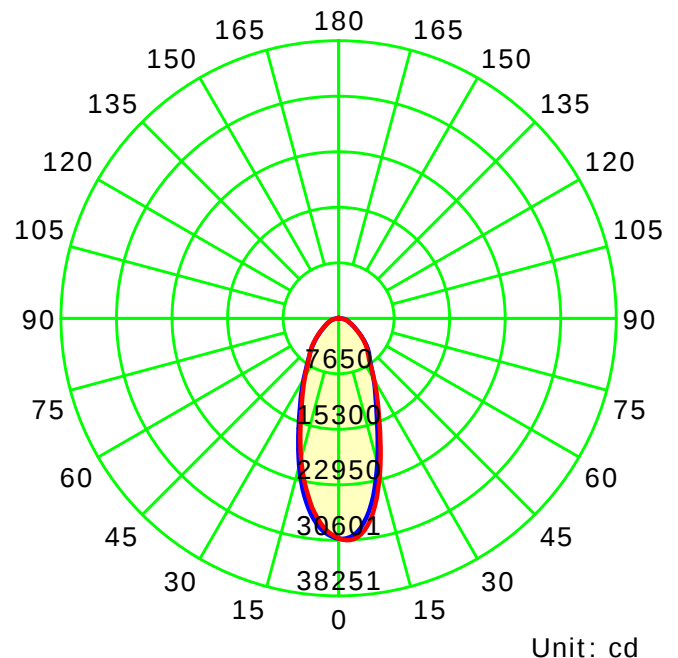
S/MH(C0/C180): 0.65

S/MH(C90/C270): 0.66

Picture Of Luminaire



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

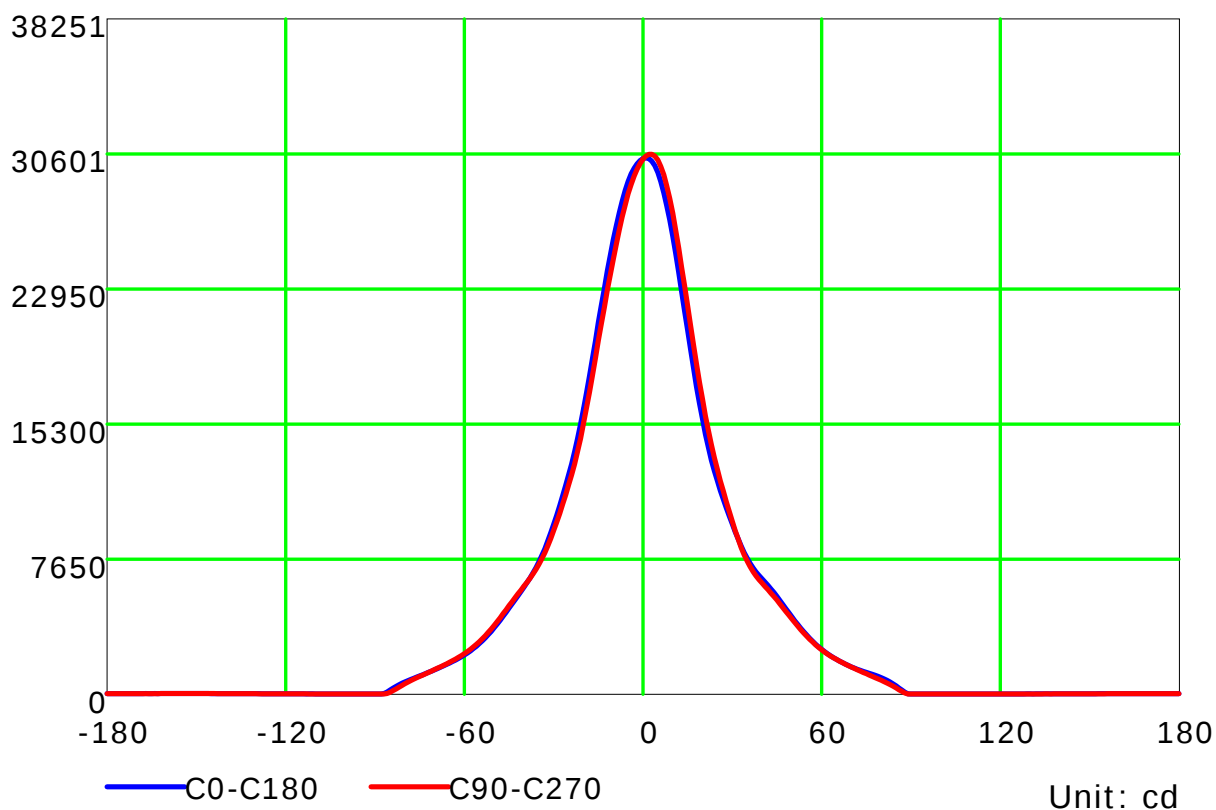
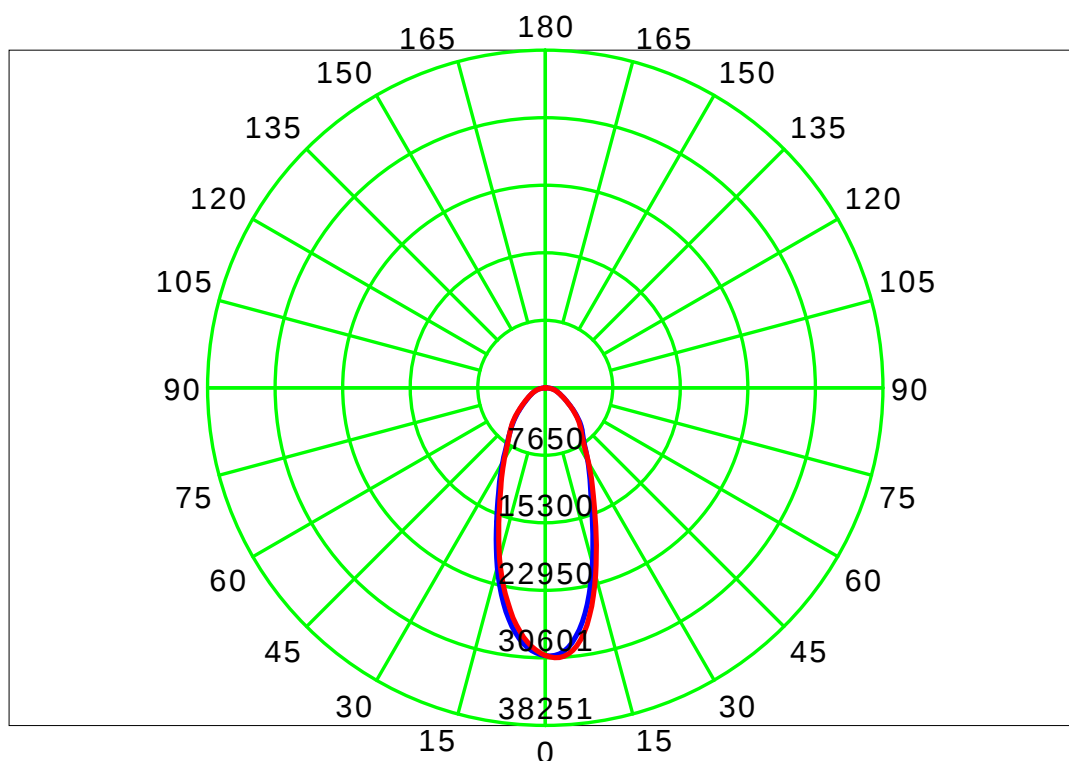
Test Device: LSG-1800B

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

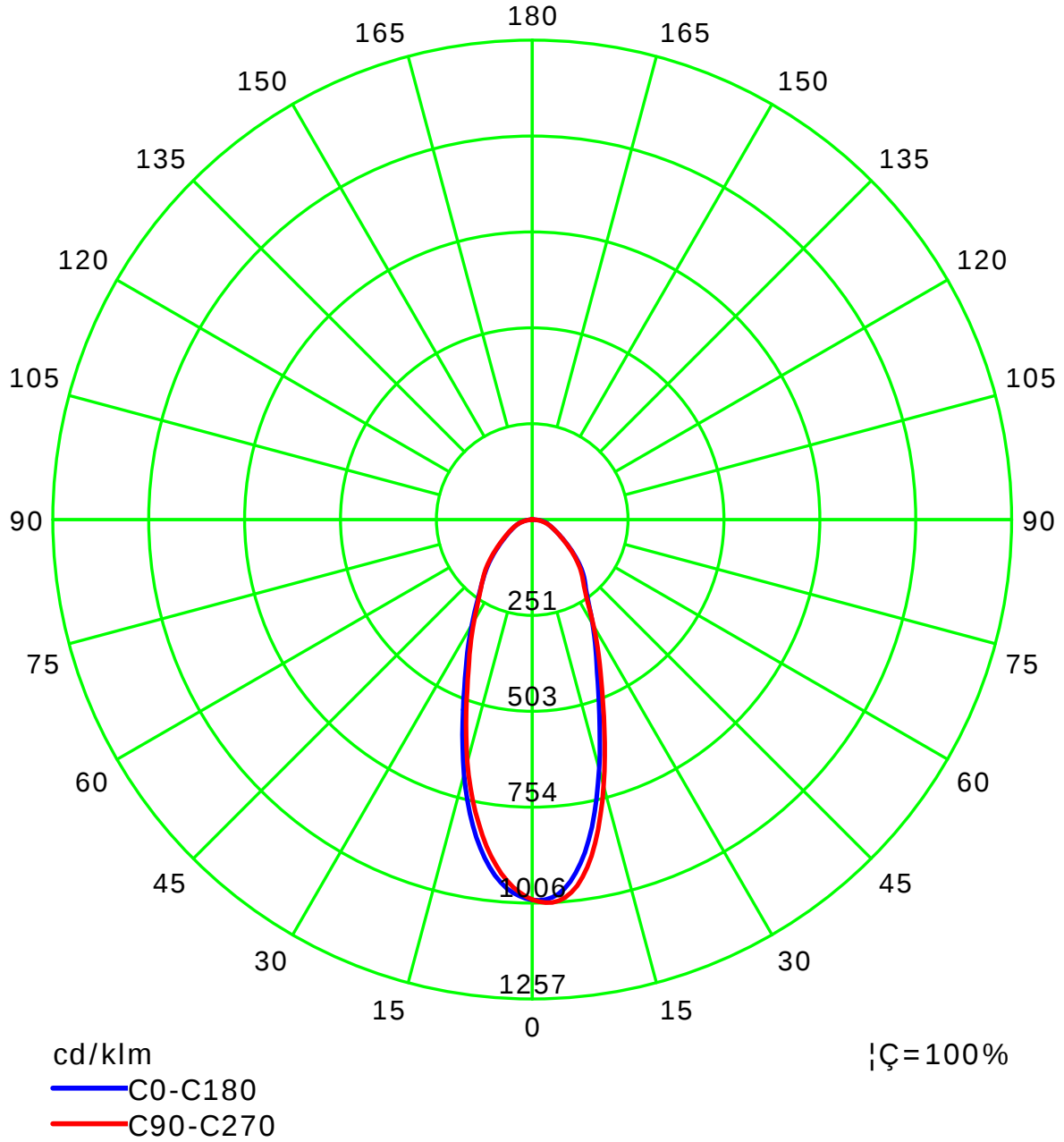
Test Device: LSG-1800B

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

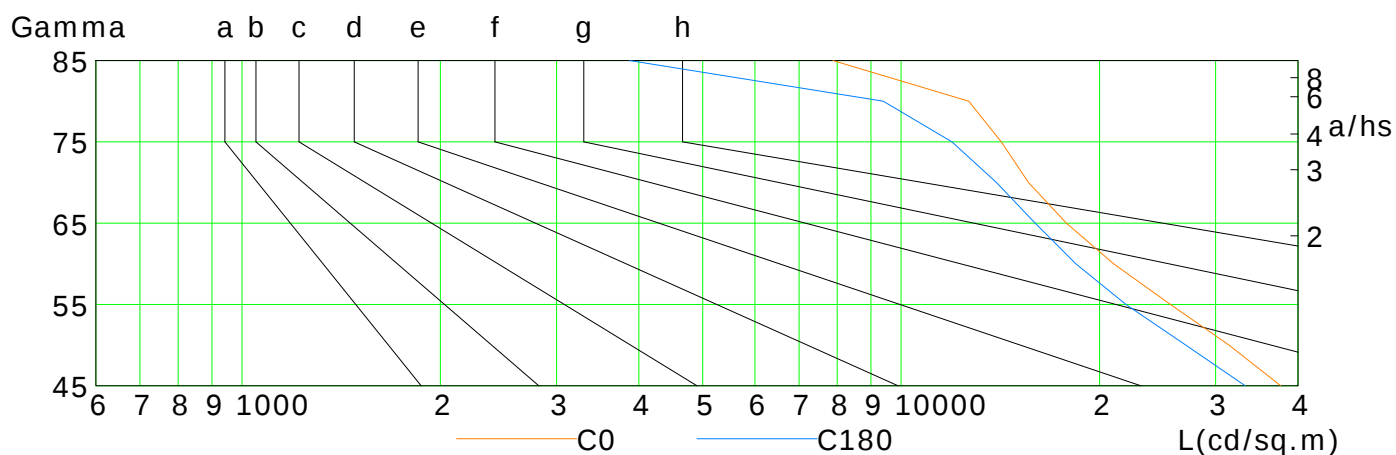
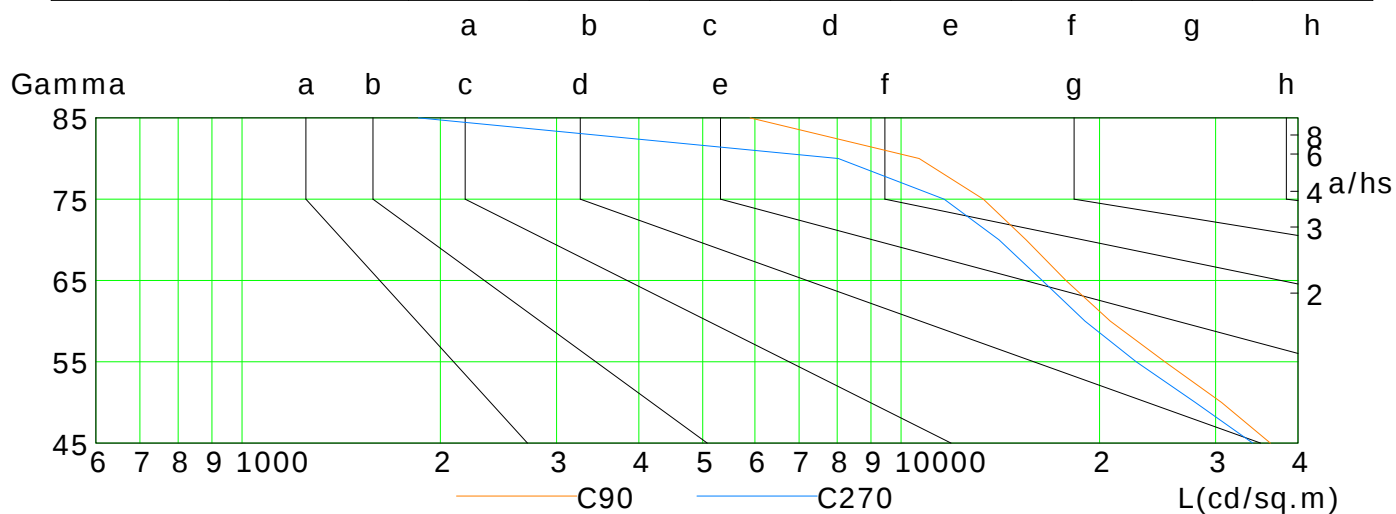
Distance: 12.677 m

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



L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	37663	31450	25616	21008	17816	15603	14185	12662	7885
C90	36324	30623	25131	20766	17784	15473	13326	10651	5899
C180	33278	27033	21937	18409	15969	13949	11942	9395	3876
C270	34160	27945	22738	19010	16373	14079	11620	8028	1852

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

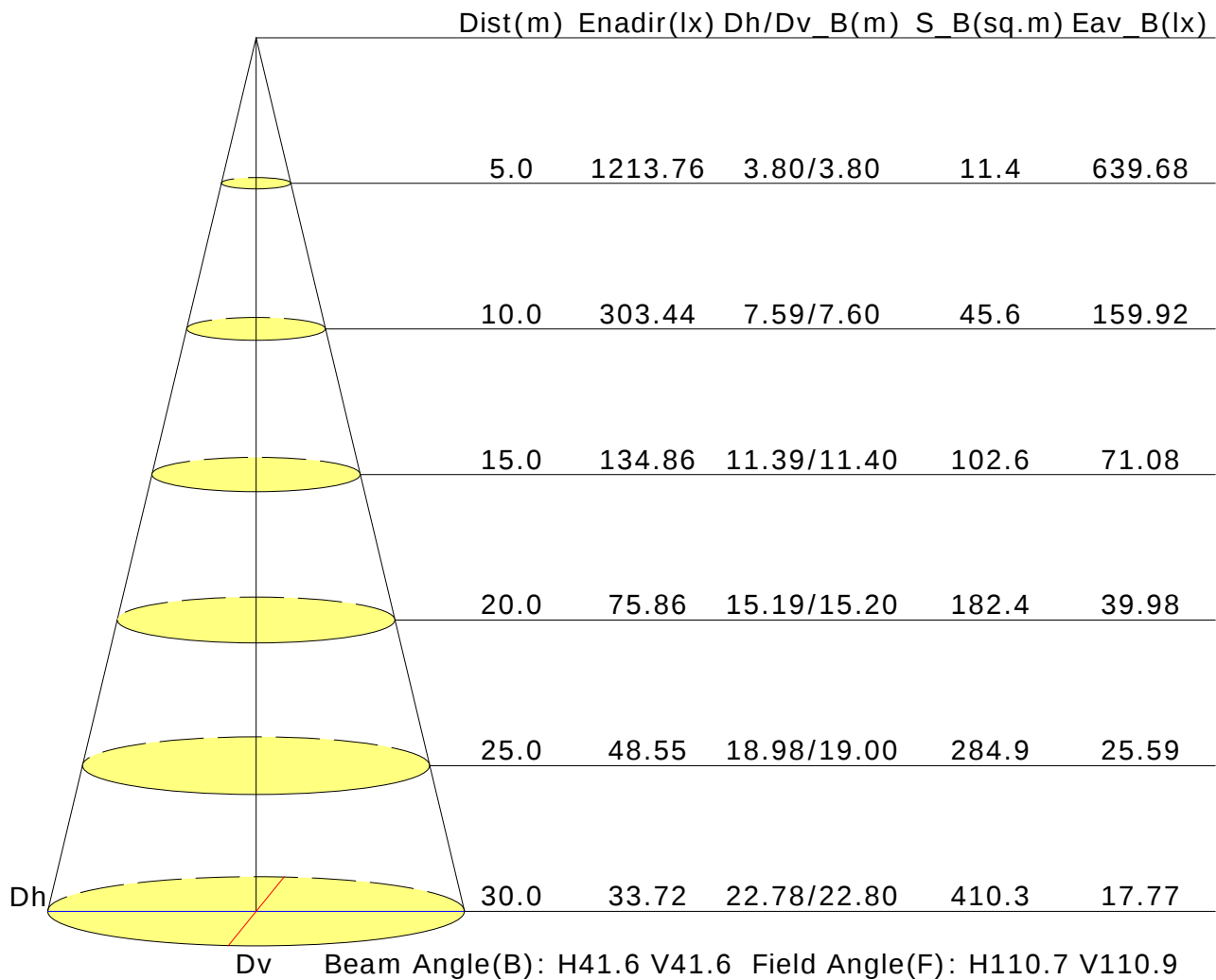
Test Device: LSG-1800B

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	23.1	24.2	23.4	24.5	24.7	22.9	24.1	23.2	24.3	24.5
3H	24.0	25.0	24.3	25.3	25.5	23.8	24.8	24.1	25.1	25.3
4H	24.3	25.3	24.7	25.6	25.9	24.1	25.1	24.4	25.3	25.6
6H	24.6	25.6	25.0	25.9	26.2	24.3	25.2	24.7	25.5	25.8
8H	24.8	25.6	25.1	26.0	26.3	24.3	25.2	24.7	25.6	25.9
12H	24.8	25.7	25.2	26.0	26.3	24.4	25.2	24.7	25.5	25.9
X=4H Y=2H	23.5	24.5	23.8	24.8	25.1	23.3	24.3	23.7	24.6	24.9
3H	24.5	25.4	24.9	25.7	26.1	24.4	25.2	24.8	25.5	25.9
4H	25.0	25.8	25.4	26.1	26.5	24.8	25.5	25.2	25.9	26.3
6H	25.4	26.1	25.8	26.5	26.9	25.1	25.8	25.5	26.2	26.6
8H	25.6	26.2	26.0	26.6	27.0	25.2	25.8	25.6	26.2	26.6
12H	25.7	26.2	26.1	26.6	27.1	25.2	25.8	25.7	26.2	26.6
X=8H Y=4H	25.1	25.7	25.6	26.1	26.6	24.9	25.5	25.4	25.9	26.4
6H	25.6	26.1	26.1	26.5	27.0	25.3	25.8	25.8	26.3	26.7
8H	25.8	26.3	26.3	26.7	27.2	25.4	25.9	25.9	26.3	26.8
12H	26.0	26.3	26.5	26.8	27.3	25.5	25.9	26.0	26.4	26.9
X=12H Y=4H	25.1	25.7	25.6	26.1	26.5	24.9	25.5	25.4	25.9	26.3
6H	25.6	26.1	26.1	26.5	27.0	25.3	25.8	25.8	26.2	26.7
8H	25.8	26.2	26.3	26.7	27.2	25.5	25.9	26.0	26.3	26.8
Variations with the observer position at spacings:										
S=1.0H	+0.3/-0.4					+0.4/-0.5				
S=1.5H	+0.5/-1.2					+0.6/-1.3				
S=2.0H	+1.0/-1.8					+1.0/-2.0				

Calculate in accordance with CIE Pub.117. The table is revised with 30418lm ($8\log(F/F_0) = 11.9$).

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 = 0.75									
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	0.67	0.76	0.82	0.86	0.93	0.97	1.00	1.04	1.06	
	0.30		0.60	0.69	0.76	0.81	0.88	0.92	0.96	1.00	1.03	
	0.20		0.55	0.64	0.71	0.76	0.83	0.88	0.92	0.97	1.01	
0.50	0.50	0.20	0.65	0.74	0.80	0.84	0.90	0.94	0.96	1.00	1.02	
	0.30		0.59	0.68	0.74	0.79	0.85	0.90	0.93	0.97	0.99	
	0.20		0.55	0.63	0.70	0.75	0.82	0.86	0.90	0.94	0.97	
0.30	0.50	0.20	0.64	0.72	0.77	0.81	0.87	0.90	0.93	0.96	0.98	
	0.30		0.59	0.67	0.73	0.77	0.83	0.87	0.90	0.94	0.96	
	0.20		0.55	0.63	0.69	0.74	0.80	0.84	0.87	0.92	0.94	
0.00	0.00	0.00	0.52	0.60	0.66	0.71	0.77	0.81	0.83	0.87	0.89	
Rating:221W 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 = 0.75									
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	0.85	0.70	0.59	0.51	0.41	0.34	0.29	0.22	0.18	
	0.30		0.71	0.60	0.52	0.46	0.37	0.31	0.27	0.21	0.17	
	0.20		0.61	0.52	0.46	0.41	0.34	0.29	0.25	0.20	0.16	
0.50	0.50	0.20	0.82	0.67	0.57	0.49	0.39	0.36	0.27	0.21	0.17	
	0.30		0.69	0.58	0.50	0.44	0.35	0.30	0.25	0.20	0.16	
	0.20		0.60	0.51	0.45	0.40	0.33	0.27	0.24	0.19	0.16	
0.30	0.50	0.20	0.79	0.64	0.54	0.47	0.37	0.30	0.26	0.20	0.16	
	0.30		0.67	0.56	0.48	0.42	0.34	0.28	0.24	0.19	0.16	
	0.20		0.59	0.50	0.44	0.39	0.31	0.27	0.23	0.18	0.15	
0.00	0.00	0.00	0.48	0.40	0.34	0.29	0.23	0.19	0.17	0.13	0.11	
Rating:221W 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 = 0.75									
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	0.20	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		0.06	0.07	0.09	0.10	0.12	0.14	0.15	0.17	0.18	
0.50	0.50	0.20	0.15	0.16	0.17	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		0.06	0.07	0.09	0.10	0.12	0.14	0.15	0.16	0.17	
0.30	0.50	0.20	0.15	0.16	0.17	0.17	0.18	0.19	0.19	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		0.06	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:221W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												