

Report No.: 1

Test Time: 11.12.2019 22:41

Luminaire Property

Luminaire Manufacturer:

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

Luminous Length (mm): 1200

Luminous Width (mm): 180

Luminous Height (mm): 35

Voltage: 221.4 V

Current: 0.150 A

Power: 32.13 W

Power Factor: 0.966

Photometric Results

CIE Class: Direct

Measurement Flux: 4682.8 lm

Downward Ratio: 100%

Total Rated Lamp Lumens: 4682.8 lm

Efficiency: 100%

Upward Ratio: 0%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 160.9, 145.0, 152.8, 153.1

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 118.8, 115.6, 118.3, 117.7

Luminaire Efficacy Rating (LER): 145.79

Central Intensity: 1636.2 cd

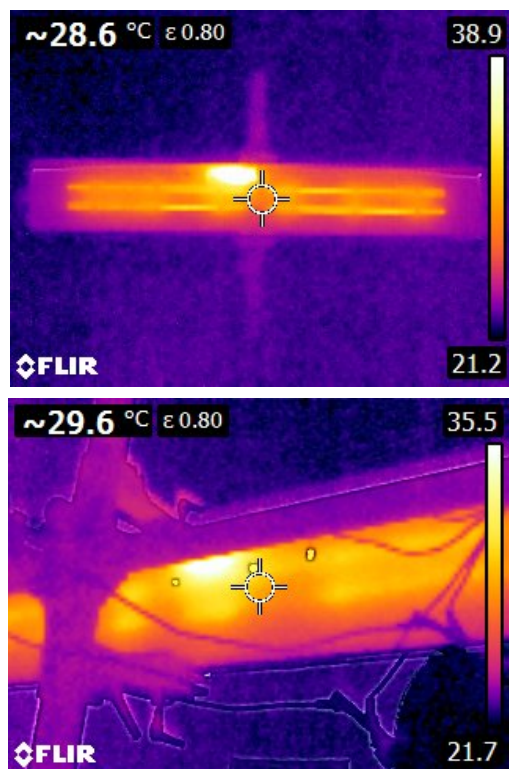
Max. Intensity: 1639.55 cd

Pos of Max. Intensity: H337.5 V1

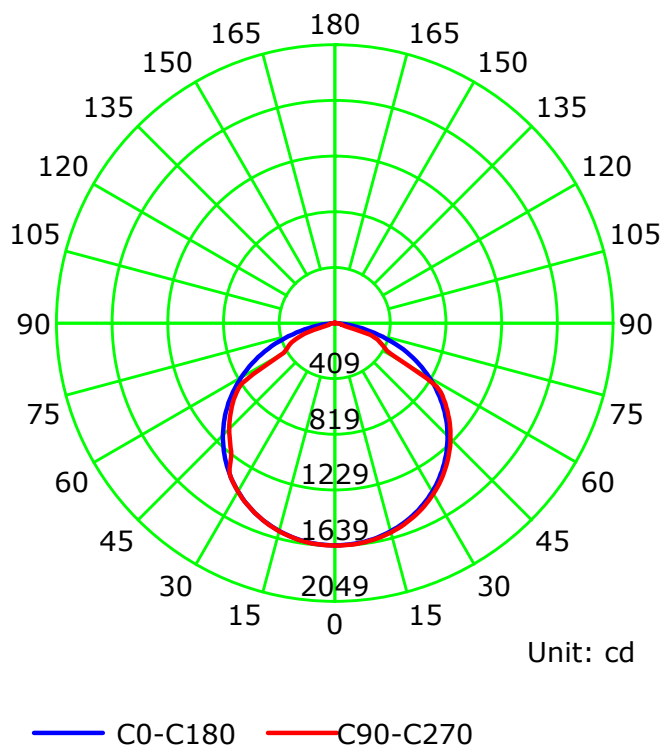
S/MH(C0/C180): 1.30

S/MH(C90/C270): 1.31

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

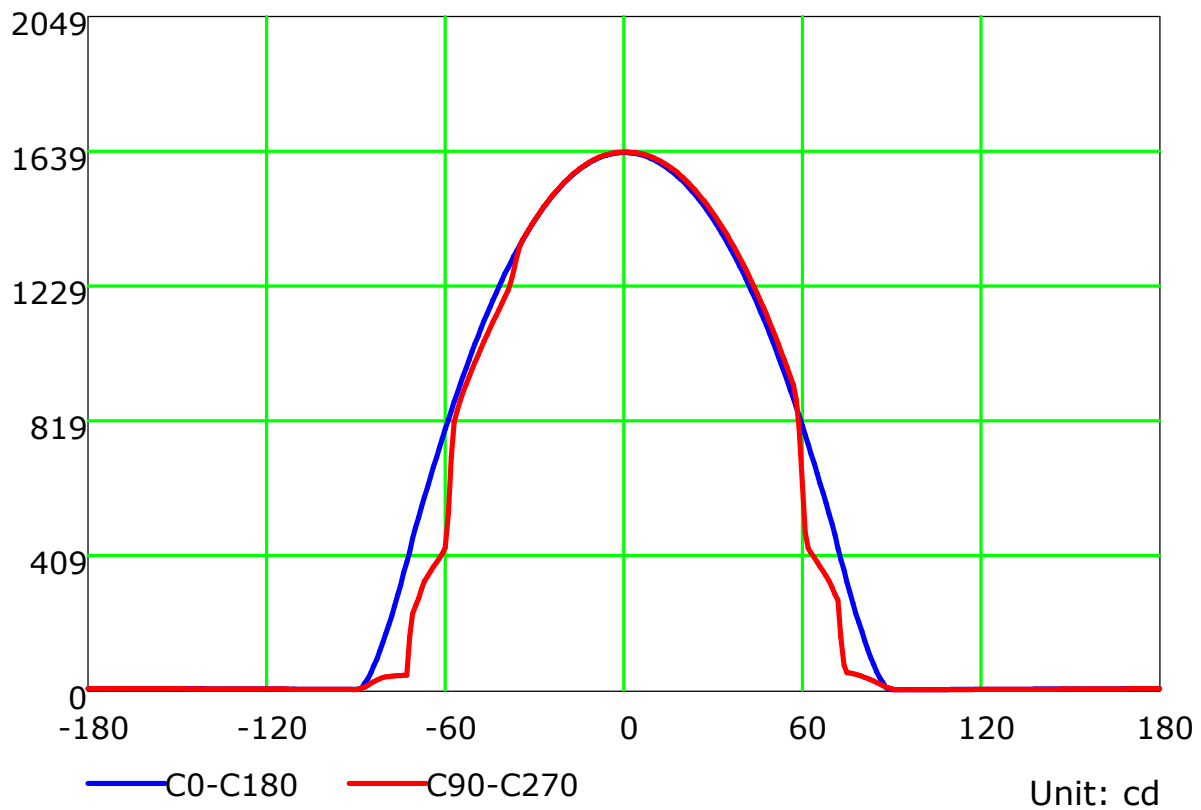
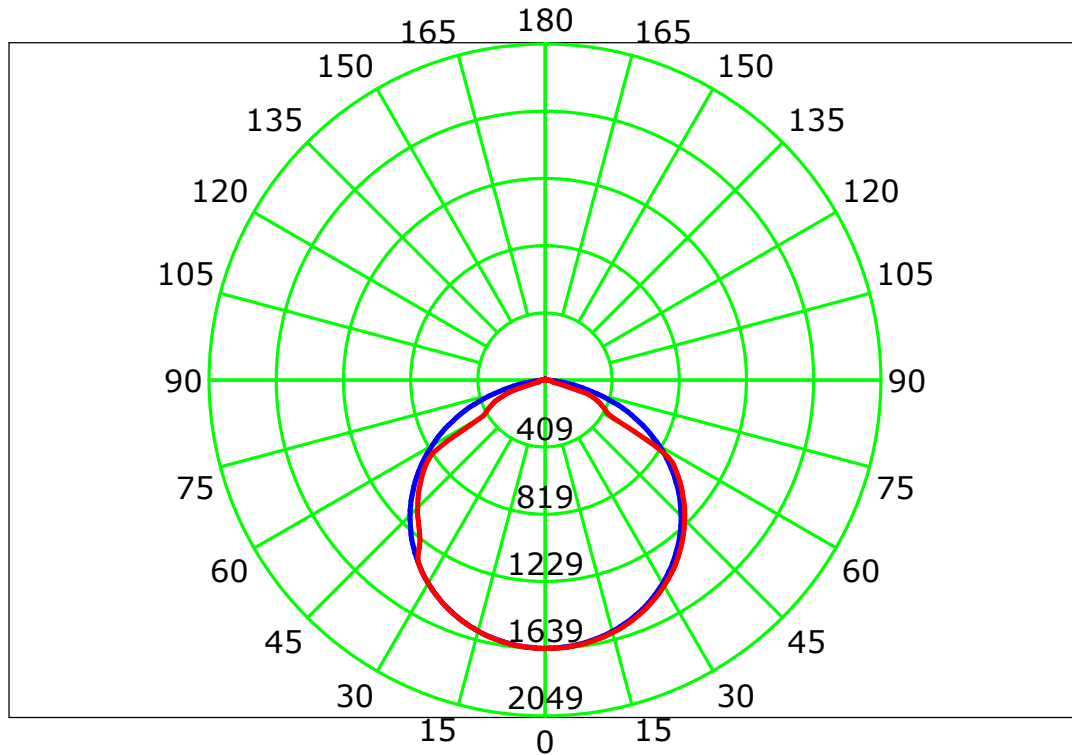
Test Device: LSG-1800B

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

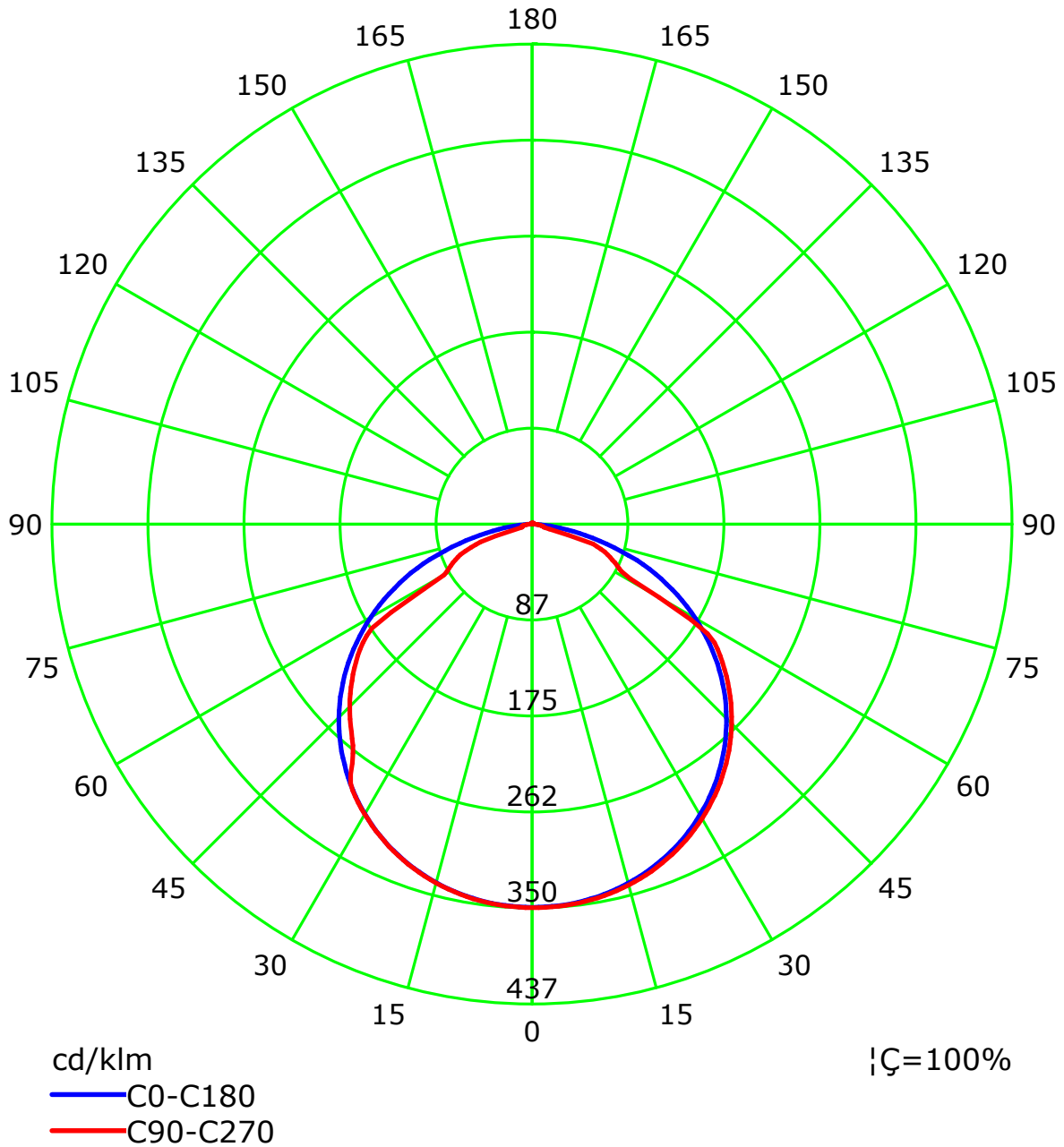
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve(cd/klm)



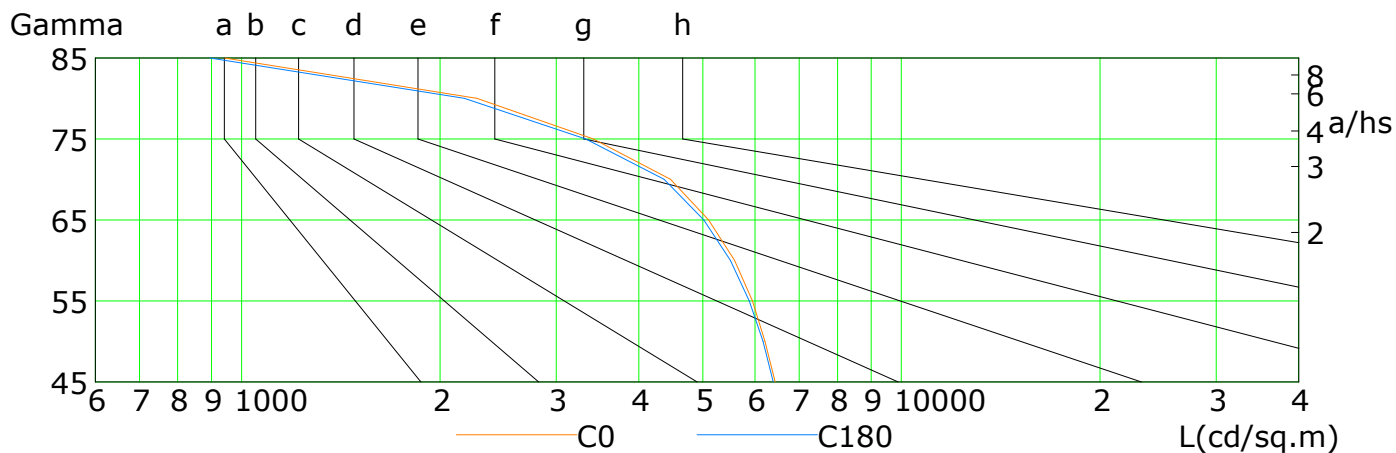
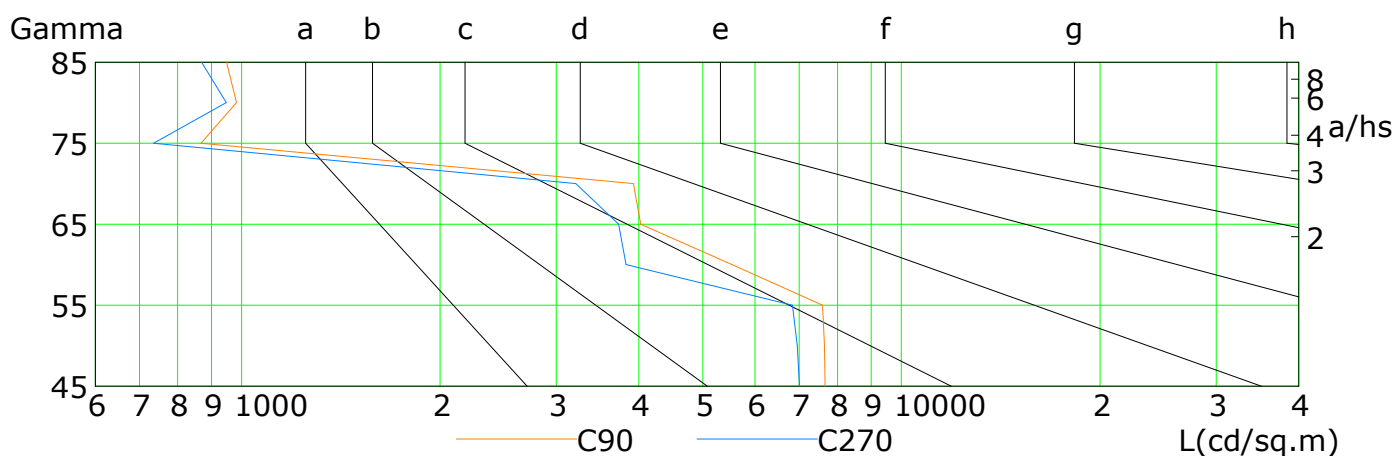
C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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

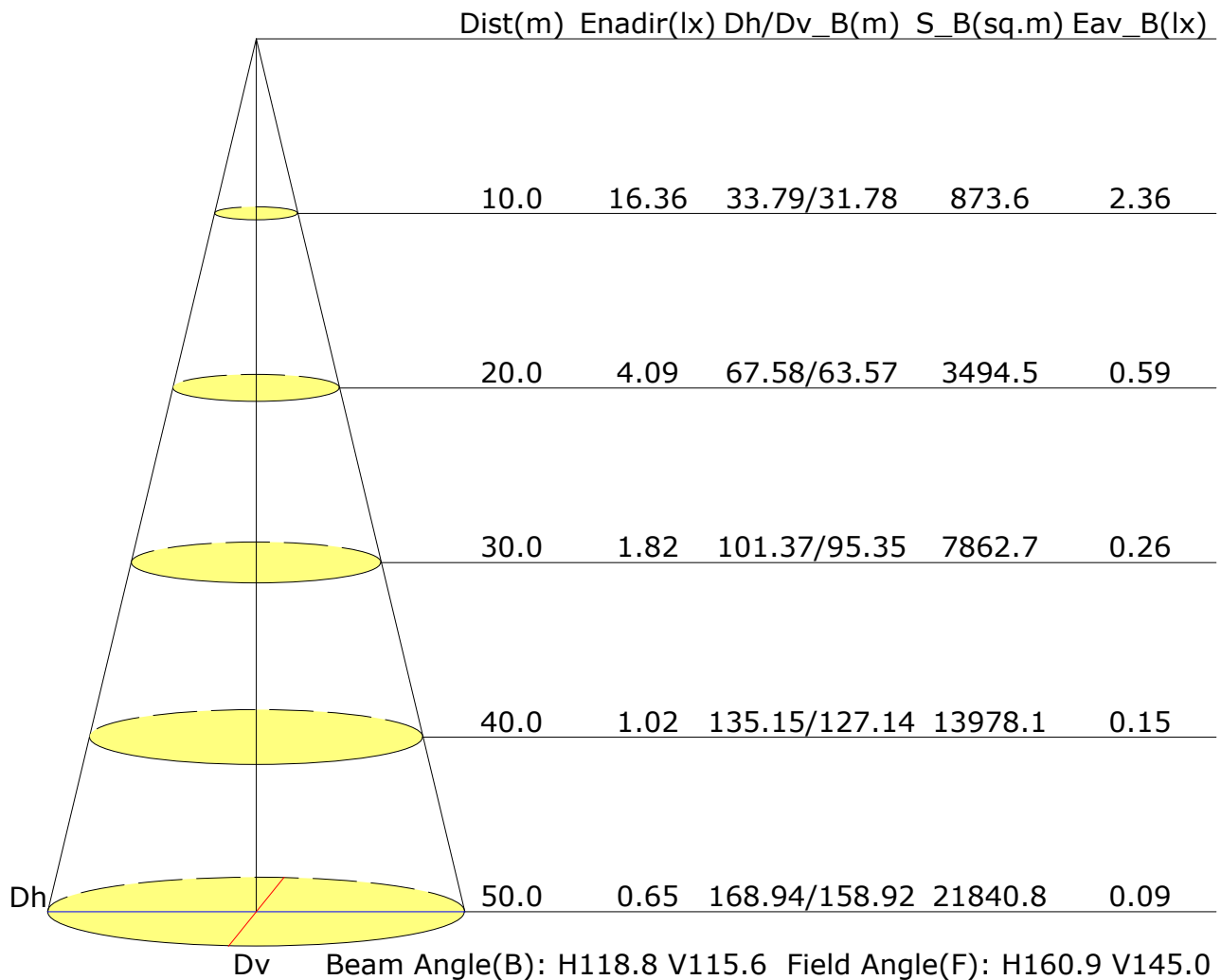


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	6437	6215	5943	5584	5104	4466	3415	2273	943
C90	7665	7642	7598	5535	4029	3925	868	983	949
C180	6393	6168	5883	5507	5016	4368	3322	2177	895
C270	7006	6950	6834	3824	3727	3211	735	948	870

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	19.1	20.5	19.4	20.7	21.0	18.8	20.1	19.1	20.4	20.6
3H	20.5	21.8	20.9	22.0	22.3	19.4	20.7	19.8	20.9	21.2
4H	21.0	22.2	21.4	22.4	22.8	19.5	20.6	19.8	20.9	21.2
6H	21.2	22.3	21.6	22.6	22.9	19.4	20.5	19.8	20.8	21.1
8H	21.2	22.3	21.6	22.6	22.9	19.4	20.4	19.8	20.8	21.1
12H	21.2	22.2	21.6	22.5	22.9	19.4	20.4	19.8	20.7	21.1
X=4H Y=2H	19.7	20.8	20.0	21.1	21.4	19.4	20.5	19.7	20.8	21.1
3H	21.2	22.2	21.6	22.5	22.9	20.1	21.1	20.5	21.4	21.8
4H	21.8	22.6	22.2	23.0	23.4	20.2	21.0	20.6	21.4	21.8
6H	22.0	22.8	22.4	23.2	23.6	20.1	20.9	20.6	21.3	21.7
8H	22.1	22.8	22.5	23.2	23.6	20.1	20.8	20.6	21.2	21.7
12H	22.1	22.7	22.5	23.1	23.6	20.1	20.7	20.6	21.2	21.6
X=8H Y=4H	21.8	22.5	22.2	22.9	23.3	20.3	21.0	20.7	21.4	21.8
6H	22.1	22.6	22.5	23.1	23.5	20.3	20.8	20.7	21.3	21.7
8H	22.1	22.6	22.6	23.1	23.6	20.3	20.8	20.7	21.2	21.7
12H	22.1	22.6	22.6	23.0	23.6	20.3	20.7	20.8	21.2	21.7
X=12H Y=4H	21.8	22.4	22.2	22.8	23.3	20.3	20.9	20.7	21.3	21.8
6H	22.0	22.5	22.5	23.0	23.5	20.2	20.7	20.7	21.2	21.7
8H	22.1	22.5	22.6	23.0	23.5	20.3	20.7	20.8	21.2	21.7
Variations with the observer position at spacings:										
S=1.0H	+0.2/-0.2					+0.5/-0.5				
S=1.5H	+0.4/-0.7					+1.3/-2.2				
S=2.0H	+0.7/-1.2					+1.7/-2.3				

Calculate in accordance with CIE Pub.117. The table is revised with 4683lm ($8\log(F/F_0) = 5.4$).

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 = 1.25									
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	0.57	0.68	0.76	0.81	0.89	0.94	0.97	1.02	1.05	
	0.30		0.50	0.61	0.69	0.75	0.83	0.89	0.93	0.98	1.01	
	0.20		0.44	0.55	0.63	0.69	0.78	0.84	0.88	0.94	0.98	
0.50	0.50	0.20	0.56	0.66	0.74	0.79	0.86	0.90	0.93	0.98	1.00	
	0.30		0.49	0.60	0.67	0.73	0.81	0.86	0.90	0.94	0.97	
	0.20		0.44	0.55	0.62	0.68	0.76	0.82	0.86	0.92	0.95	
0.30	0.50	0.20	0.54	0.64	0.71	0.76	0.83	0.87	0.90	0.94	0.96	
	0.30		0.48	0.59	0.66	0.71	0.79	0.83	0.87	0.91	0.94	
	0.20		0.43	0.54	0.62	0.67	0.75	0.80	0.84	0.89	0.92	
0.00	0.00	0.00	0.41	0.51	0.59	0.64	0.71	0.76	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 = 1.25									
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	0.99	0.81	0.68	0.59	0.46	0.38	0.32	0.25	0.20	
	0.30		0.82	0.69	0.59	0.52	0.42	0.35	0.30	0.23	0.19	
	0.20		0.71	0.60	0.52	0.47	0.38	0.32	0.28	0.22	0.18	
0.50	0.50	0.20	0.95	0.77	0.65	0.56	0.44	0.40	0.31	0.24	0.19	
	0.30		0.81	0.67	0.57	0.50	0.40	0.34	0.29	0.22	0.18	
	0.20		0.70	0.59	0.51	0.45	0.37	0.31	0.27	0.21	0.18	
0.30	0.50	0.20	0.92	0.74	0.62	0.54	0.42	0.34	0.29	0.22	0.18	
	0.30		0.79	0.65	0.56	0.49	0.39	0.32	0.28	0.21	0.17	
	0.20		0.69	0.58	0.50	0.45	0.36	0.30	0.26	0.20	0.17	
0.00	0.00	0.00	0.59	0.48	0.41	0.36	0.28	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 = 1.25									
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	0.19	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	0.08	0.10	0.12	0.13	0.15	0.16	0.17	
0.50	0.50	0.20	0.16	0.17	0.18	0.19	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	0.08	0.10	0.12	0.13	0.14	0.16	0.17	
0.30	0.50	0.20	0.16	0.17	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	0.09	0.11	0.13	0.14	0.15	0.16	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Rating:32W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												