

Report No.: 1

Test Time: 14.02.2019 09:28

Luminaire Property

Luminaire Manufacturer: FAROS

Luminaire Description: FG 55 80LED 0,764A 100Wx2 5000K opal

Lamp Description: LED

Number of Lamps: 1

Lumens per Lamp: 23919.5 lm

Luminous Length (mm): 1550 mm

Luminous Width (mm): 60 mm

Luminous Height (mm): 83 mm

Voltage: 220.4 V

Current: 0.904 A

Power: 196.40 W

Power Factor: 0.984

Photometric Results

CIE Class: Direct

Total Rated Lamp Lumens: 23919.5 lm

Measurement Flux: 23913.7 lm

Efficiency: 99.98%

Downward Ratio: 98.86%

Upward Ratio: 1.12%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 159.5, 162.9, 161.6, 161.5

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 109.0, 110.0, 109.5, 109.5

Luminaire Efficacy Rating (LER): 121.81

Central Intensity: 8545.8 cd

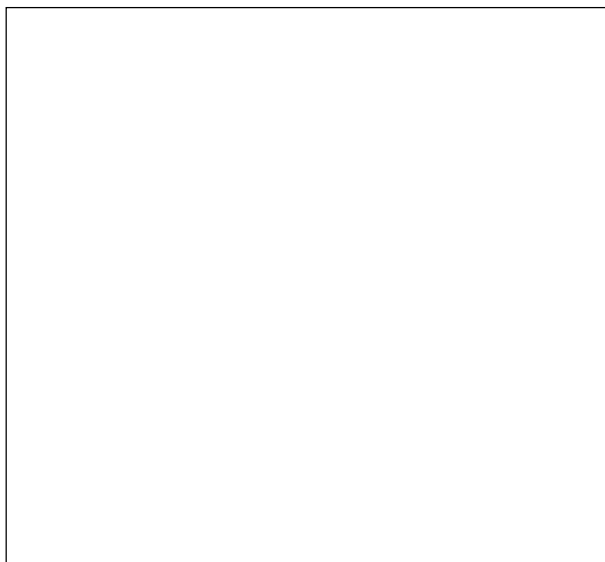
Max. Intensity: 8545.8 cd

Pos of Max. Intensity: H0 V0

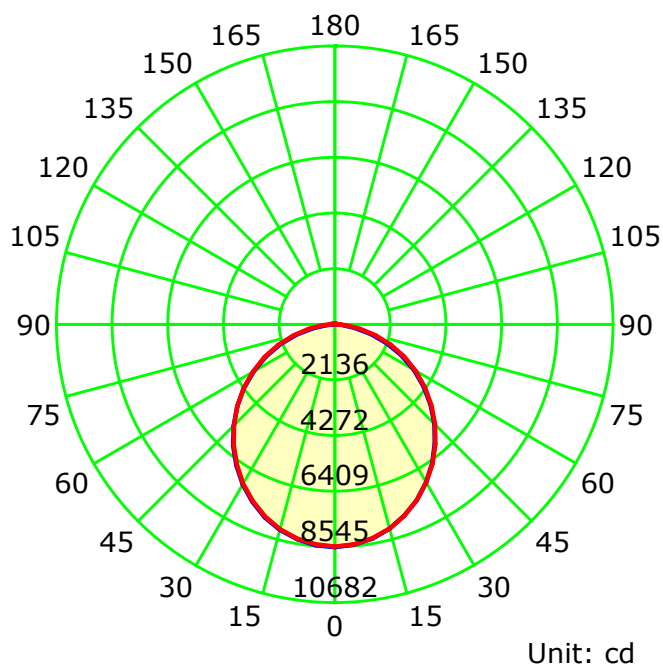
S/MH(C0/C180): 1.23

S/MH(C90/C270): 1.23

Picture Of Luminaire



Luminous Intensity Distribution Curve



— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 22.5

Gamma Plane (°):0.0-180.0:5.0

Test Lab:

Test Device: LSG-1800B

Test Type: TYPE C

Distance: 12.654 m

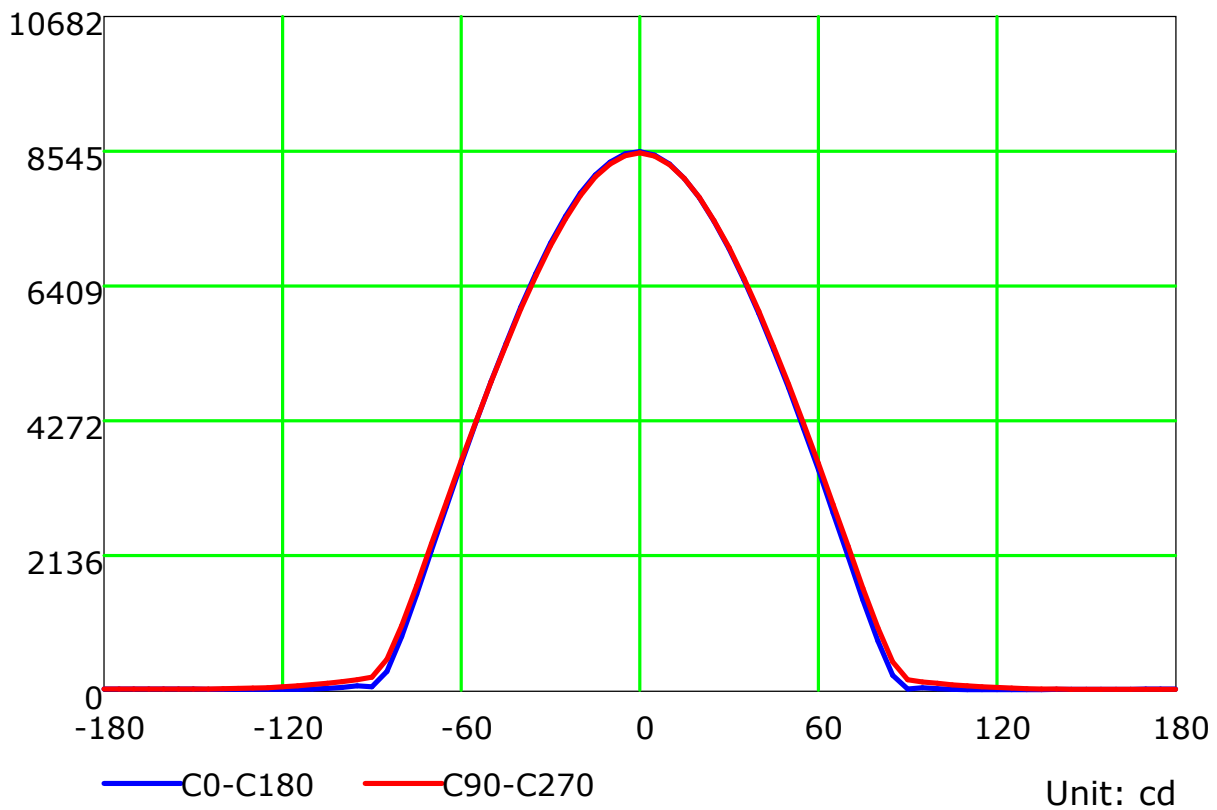
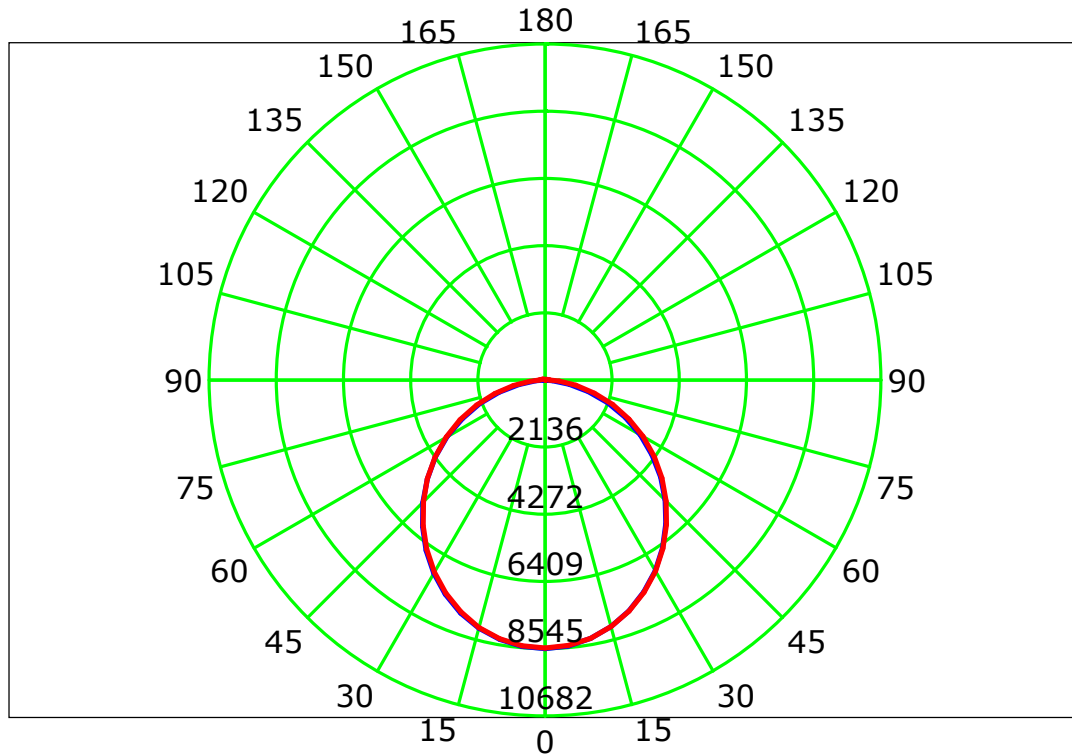
Temperature:

Humidity:

Operator:

Inspector:

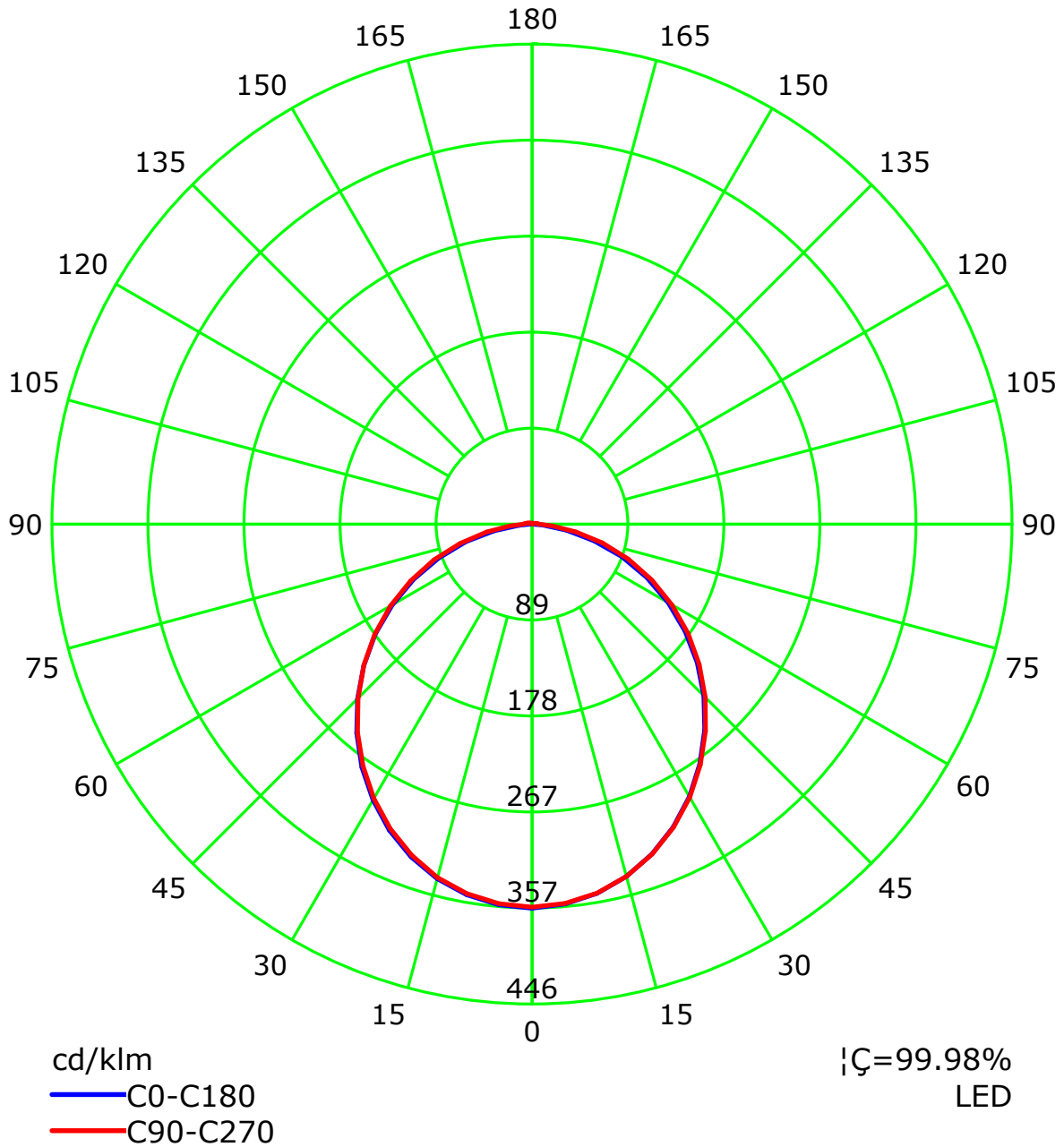
Luminous Intensity Distribution Curve



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

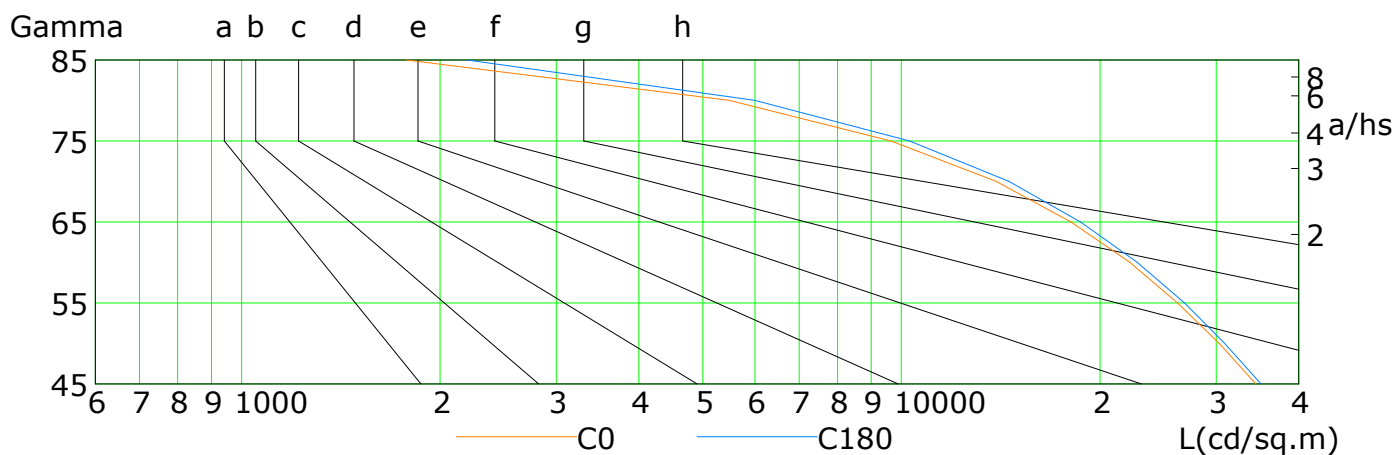
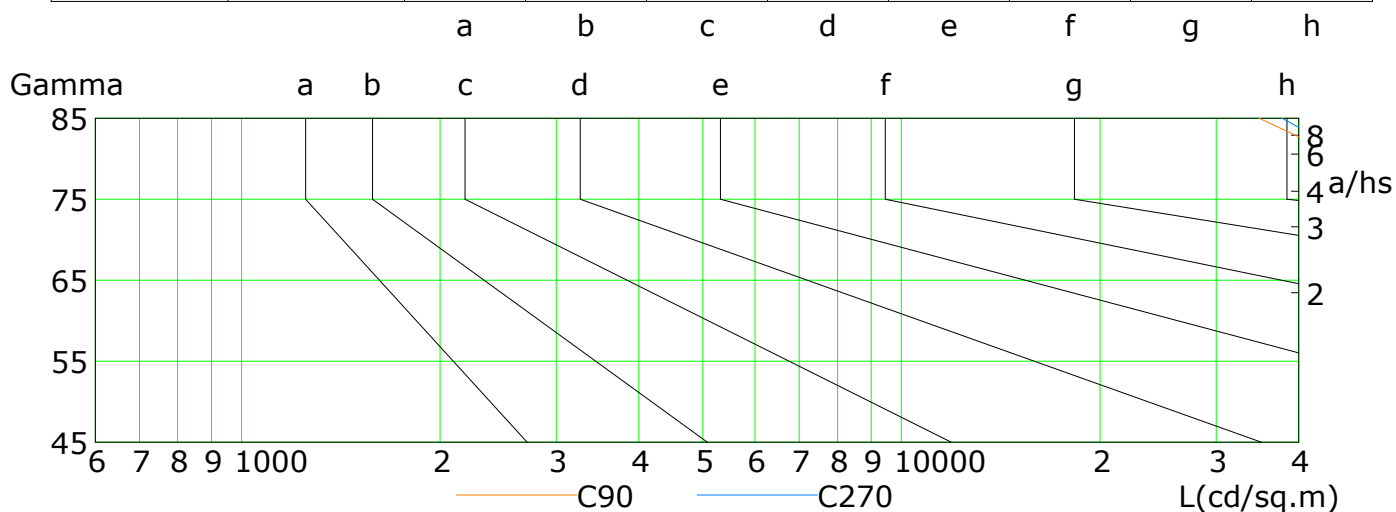
Gamma Plane (°):0.0-180.0:5.0
Test Device: LSG-1800B
Distance: 12.654 m
Humidity:
Inspector:

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

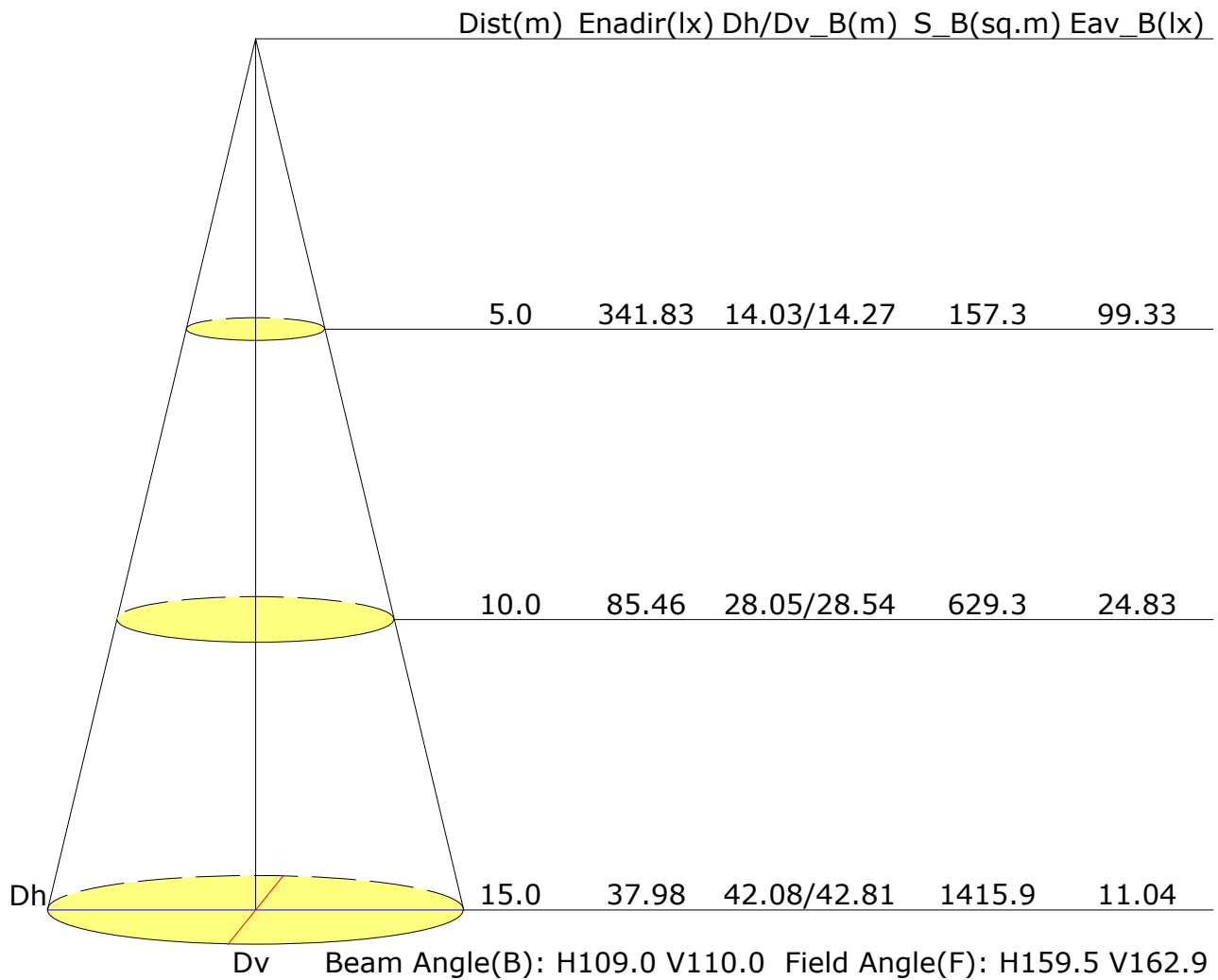


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	34476	30289	26200	22185	18064	13915	9650	5478	1779
C90	78650	76354	73836	70865	67260	62619	56163	47122	34829
C180	35096	30903	26859	22778	18693	14543	10289	5996	2198
C270	79091	76896	74477	71653	68194	63709	57525	48780	37750

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

Gamma Plane (°):0.0-180.0:5.0
 Test Device: LSG-1800B
 Distance: 12.654 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	24.0	25.3	24.3	25.6	25.9	26.0	27.4	26.3	27.7	27.9
3H	25.0	26.2	25.3	26.5	26.8	27.6	28.8	27.9	29.1	29.4
4H	25.2	26.4	25.6	26.7	27.1	28.2	29.4	28.5	29.7	30.0
6H	25.4	26.5	25.8	26.8	27.2	28.6	29.7	29.0	30.1	30.4
8H	25.4	26.4	25.8	26.8	27.1	28.8	29.8	29.2	30.2	30.5
12H	25.4	26.4	25.8	26.7	27.1	28.9	29.9	29.3	30.2	30.6
X=4H Y=2H	24.6	25.8	25.0	26.1	26.4	26.3	27.5	26.7	27.8	28.1
3H	25.7	26.8	26.1	27.1	27.5	28.0	29.0	28.4	29.3	29.7
4H	26.1	27.0	26.5	27.4	27.8	28.7	29.6	29.1	29.9	30.3
6H	26.3	27.1	26.8	27.5	28.0	29.2	30.0	29.6	30.4	30.8
8H	26.3	27.1	26.8	27.5	28.0	29.4	30.1	29.8	30.5	31.0
12H	26.3	27.0	26.8	27.4	27.9	29.5	30.2	30.0	30.6	31.1
X=8H Y=4H	26.3	27.1	26.8	27.5	28.0	28.7	29.4	29.2	29.9	30.3
6H	26.6	27.2	27.1	27.7	28.2	29.3	29.9	29.8	30.4	30.8
8H	26.7	27.2	27.2	27.7	28.2	29.5	30.1	30.0	30.5	31.0
12H	26.7	27.2	27.2	27.6	28.2	29.7	30.2	30.2	30.6	31.2
X=12H Y=4H	26.4	27.0	26.8	27.5	27.9	28.7	29.4	29.2	29.8	30.3
6H	26.7	27.2	27.2	27.7	28.2	29.3	29.8	29.8	30.3	30.8
8H	26.7	27.2	27.2	27.7	28.2	29.5	30.0	30.0	30.5	31.0
Variations with the observer position at spacings:										
S=1.0H	+0.2/-0.3					+0.2/-0.2				
S=1.5H	+0.4/-0.8					+0.6/-0.6				
S=2.0H	+0.8/-1.4					+1.2/-1.4				

Calculate in accordance with CIE Pub.117. The table is revised with 23920lm ($8\log(F/F_0) = 11.0$).

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

Gamma Plane (°):0.0-180.0:5.0
 Test Device: LSG-1800B
 Distance: 12.654 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	0.67	0.74	0.79	0.87	0.92	0.95	1.00	1.03	
	0.30		0.49	0.59	0.67	0.72	0.80	0.86	0.90	0.96	0.99	
	0.20		0.43	0.53	0.61	0.67	0.75	0.81	0.86	0.92	0.96	
0.50	0.50	0.20	0.55	0.65	0.71	0.76	0.83	0.88	0.91	0.96	0.98	
	0.30		0.48	0.58	0.65	0.70	0.78	0.83	0.87	0.92	0.95	
	0.20		0.42	0.53	0.60	0.66	0.74	0.79	0.83	0.89	0.93	
0.30	0.50	0.20	0.53	0.62	0.69	0.74	0.80	0.85	0.88	0.92	0.94	
	0.30		0.47	0.57	0.64	0.69	0.76	0.81	0.84	0.89	0.92	
	0.20		0.42	0.52	0.59	0.64	0.72	0.77	0.81	0.86	0.90	
0.00	0.00	0.00	0.40	0.49	0.56	0.61	0.68	0.73	0.77	0.82	0.85	
Rating:196W 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	0.82	0.70	0.61	0.49	0.40	0.35	0.27	0.22	
	0.30		0.83	0.70	0.61	0.54	0.44	0.37	0.32	0.25	0.21	
	0.20		0.71	0.61	0.54	0.48	0.40	0.34	0.30	0.24	0.20	
0.50	0.50	0.20	0.96	0.79	0.67	0.58	0.46	0.42	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		0.70	0.60	0.53	0.47	0.39	0.33	0.29	0.23	0.19	
0.30	0.50	0.20	0.93	0.76	0.64	0.56	0.44	0.37	0.31	0.24	0.20	
	0.30		0.79	0.67	0.57	0.51	0.41	0.34	0.29	0.23	0.19	
	0.20		0.69	0.59	0.52	0.46	0.38	0.32	0.28	0.22	0.18	
0.00	0.00	0.00	0.59	0.50	0.43	0.38	0.30	0.25	0.22	0.17	0.14	
Rating:196W 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	0.19	0.19	0.20	0.21	0.22	0.22	0.22	0.23	
	0.30		0.11	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	0.17	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	0.19	
	0.20		0.06	0.07	0.09	0.10	0.12	0.13	0.15	0.16	0.17	
0.30	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	0.12	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	0.13	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:196W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												