

Report No.: 1

Test Time: 29.08.2019 09:12

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 595 8x18LED 36W 4000K (50) 1-10

Luminous Length (mm): 595

Luminous Width (mm): 595

Luminous Height (mm): 50

Voltage: 221.9 V

Current: 0.160 A

Power: 34.72 W

Power Factor: 0.976

Photometric Results

CIE Class: Direct

Measurement Flux: 3633.5 lm

Downward Ratio: 100%

Total Rated Lamp Lumens: 3633.5 lm

Efficiency: 100%

Upward Ratio: 0%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 164.6, 164.1, 164.2, 164.3

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 113.1, 112.9, 113.0, 113.0

Luminaire Efficacy Rating (LER): 104.70

Central Intensity: 1245.93 cd

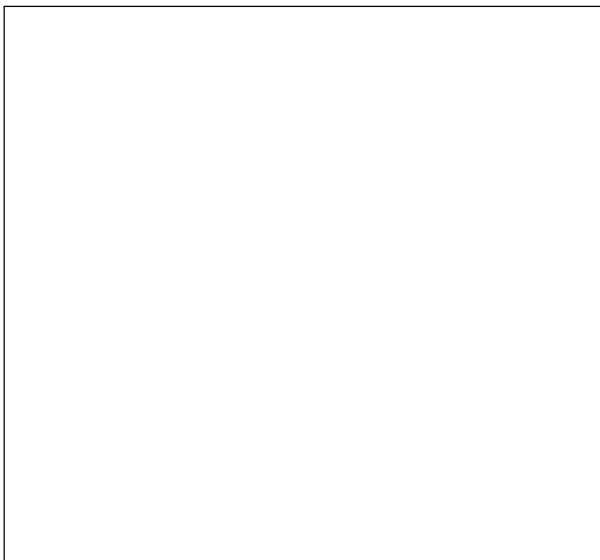
Max. Intensity: 1246.29 cd

Pos of Max. Intensity: H45 V0

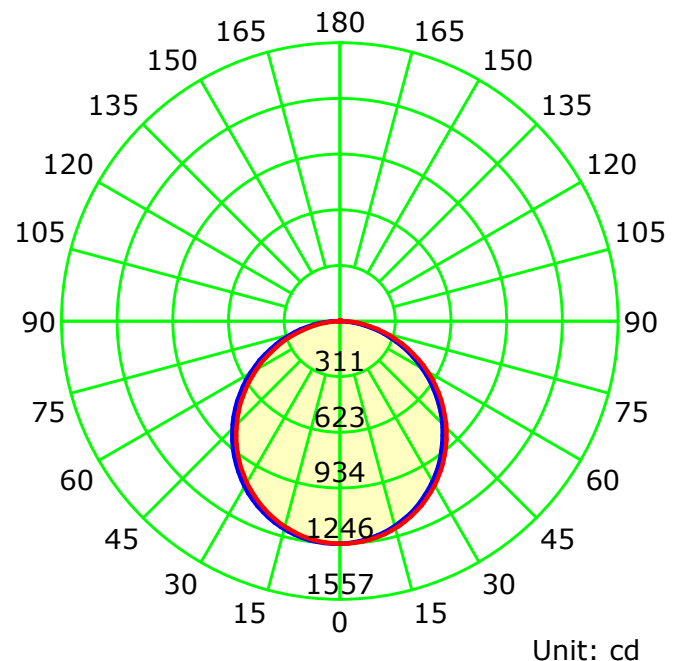
S/MH(C0/C180): 1.26

S/MH(C90/C270): 1.26

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 (°):0.0-180.0:2.0

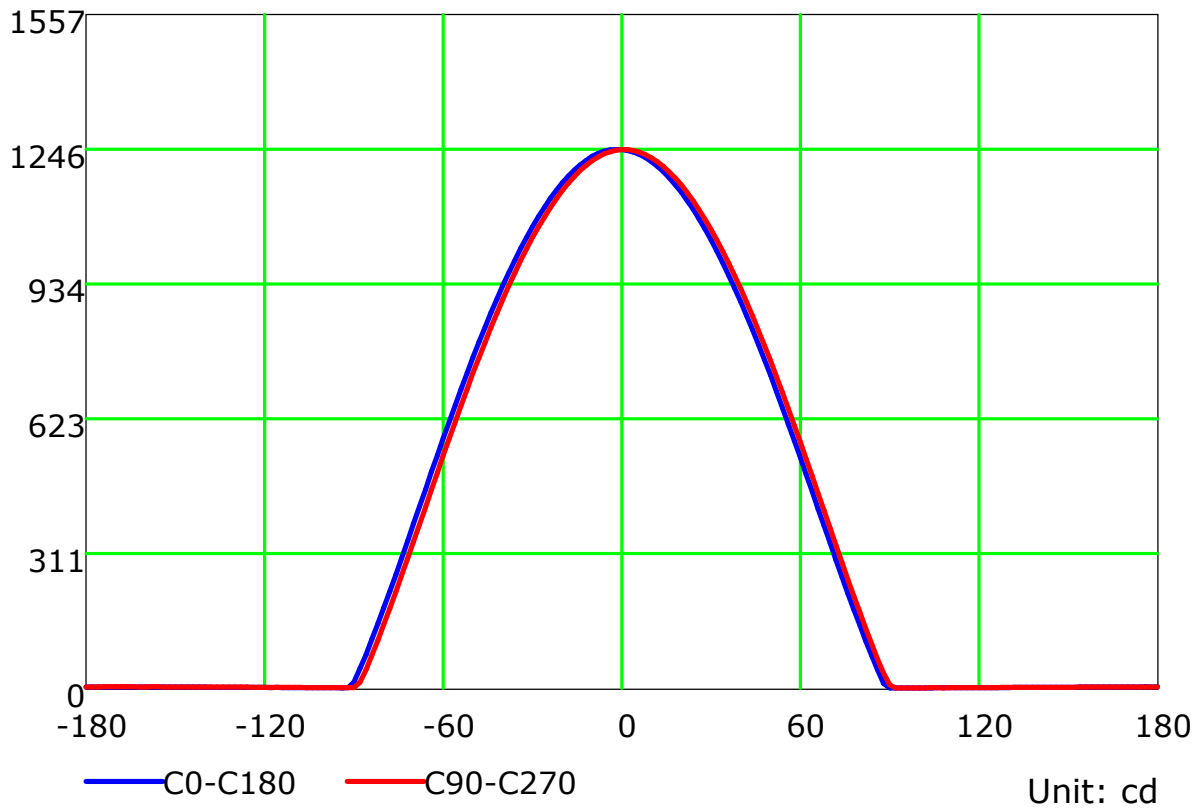
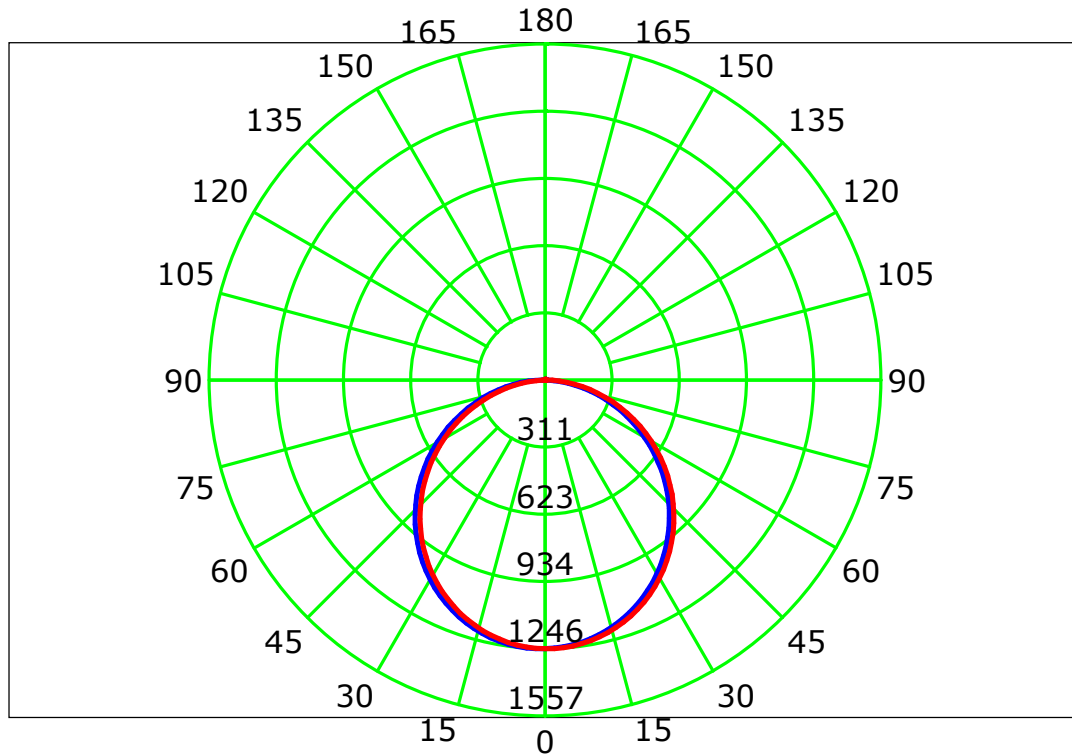
Test Device: LSG-1800B

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 (°):0.0-180.0:2.0

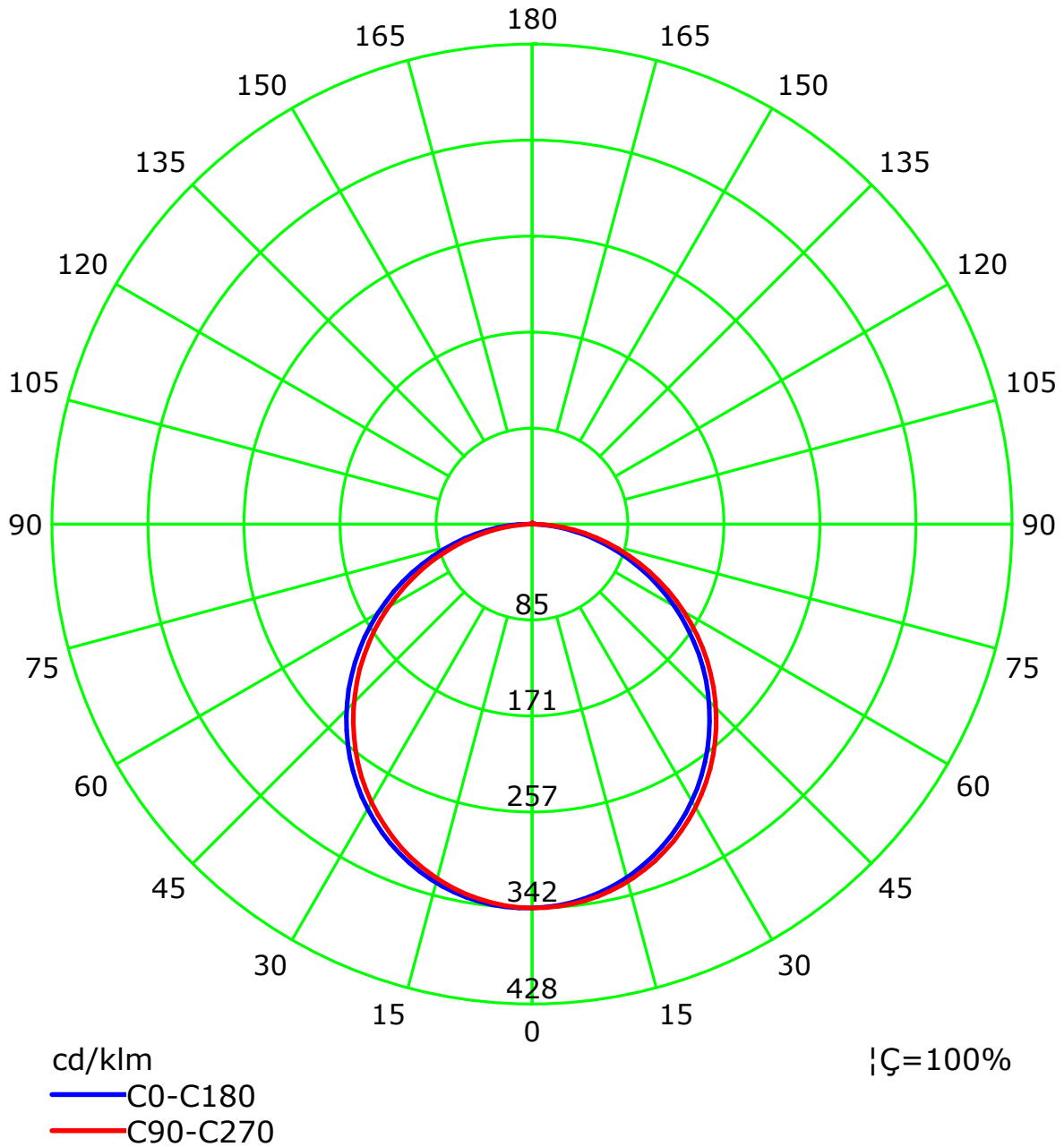
Test Device: LSG-1800B

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 (°):0.0-180.0:2.0

Test Device: LSG-1800B

Distance: 12.677 m

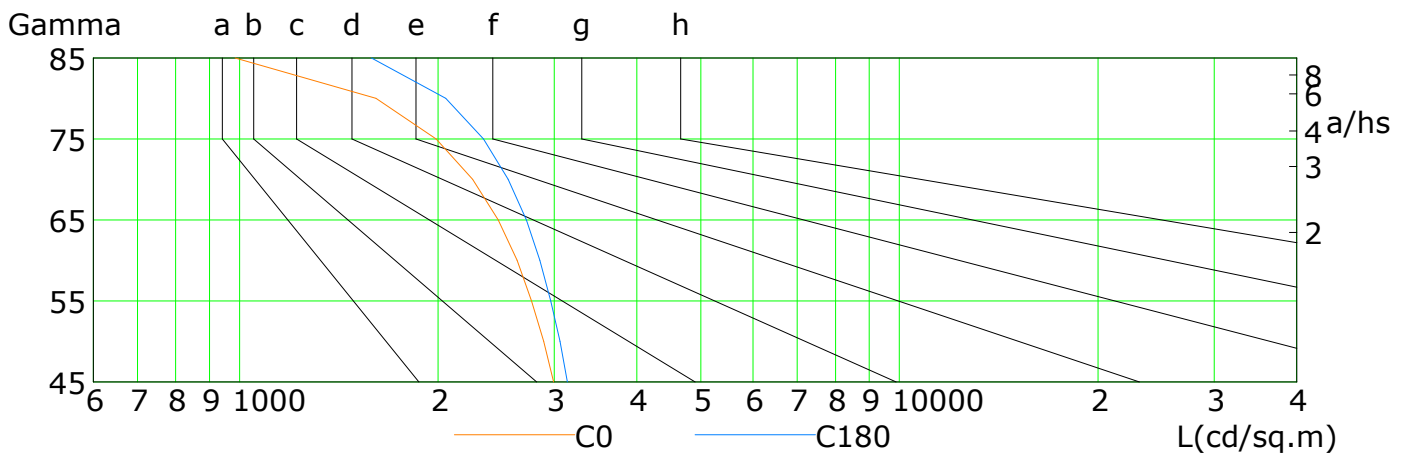
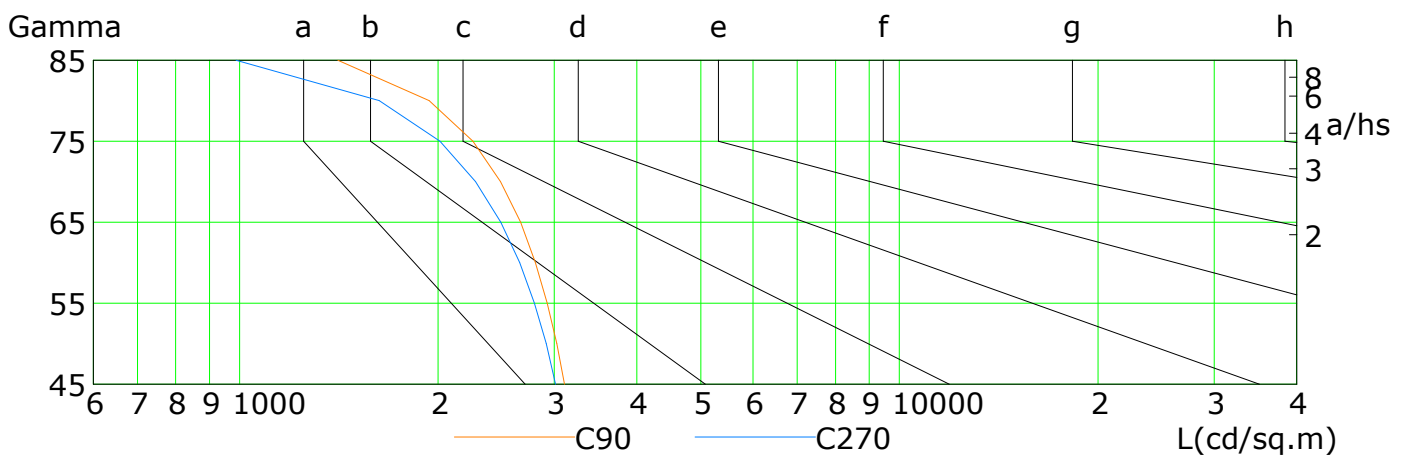
Humidity:

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	2991	2891	2771	2634	2466	2255	1986	1609	984
C90	3109	3024	2927	2808	2666	2487	2258	1939	1409
C180	3139	3059	2963	2853	2720	2554	2341	2053	1585
C270	3012	2915	2796	2658	2488	2278	2013	1628	988

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

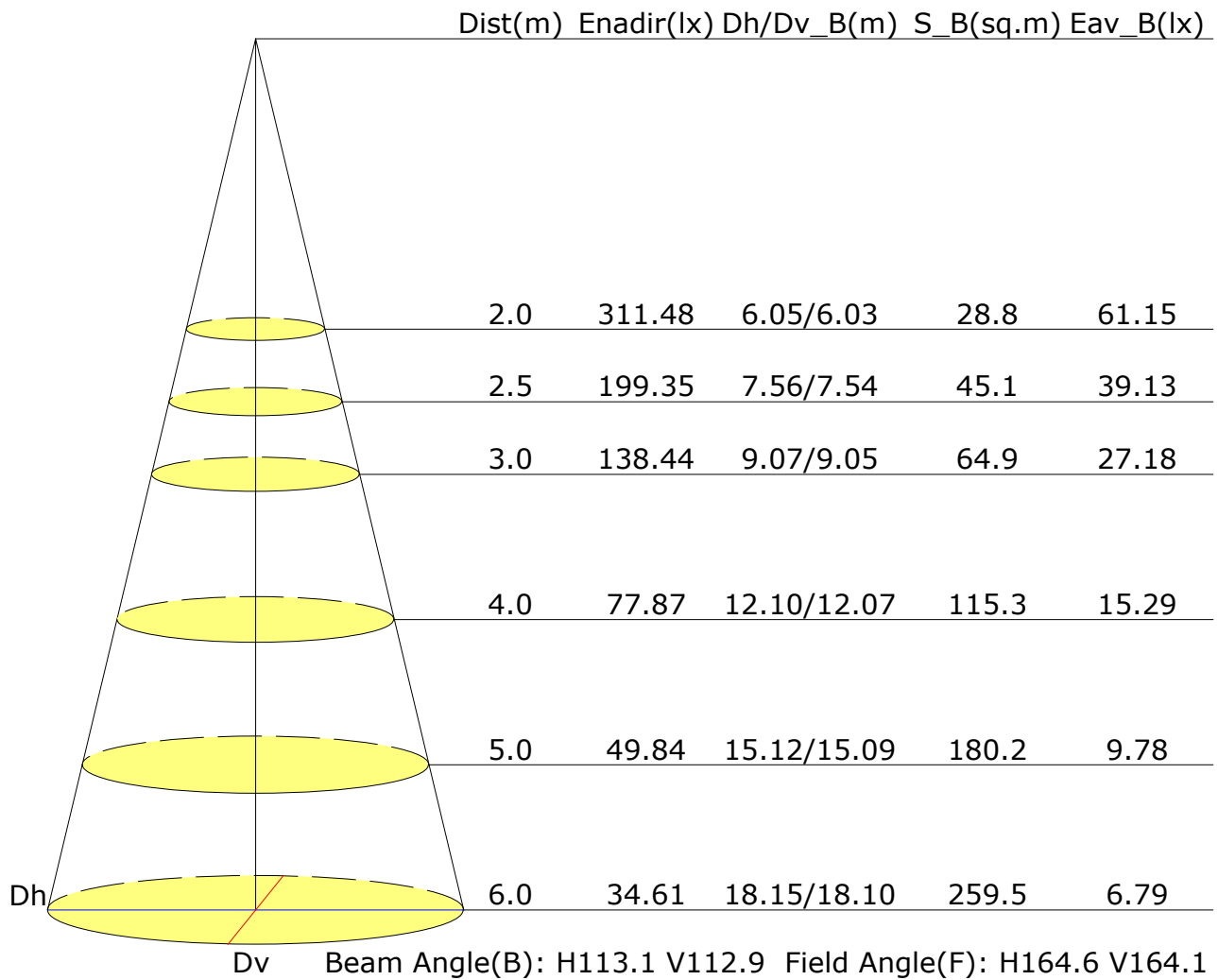
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Illuminance at a Distance



C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

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	15.9	17.3	16.2	17.5	17.8	16.0	17.4	16.3	17.7	17.9
3H	17.4	18.6	17.7	18.9	19.2	17.6	18.8	17.9	19.1	19.4
4H	17.9	19.1	18.3	19.4	19.7	18.2	19.4	18.5	19.7	20.0
6H	18.3	19.5	18.7	19.8	20.1	18.6	19.7	19.0	20.1	20.4
8H	18.4	19.5	18.8	19.9	20.2	18.7	19.8	19.1	20.2	20.5
12H	18.5	19.5	18.9	19.9	20.2	18.8	19.9	19.2	20.2	20.6
X=4H Y=2H	16.5	17.7	16.9	18.0	18.3	16.6	17.8	17.0	18.1	18.4
3H	18.2	19.2	18.6	19.5	19.9	18.3	19.4	18.7	19.7	20.1
4H	18.8	19.8	19.3	20.2	20.5	19.1	20.0	19.5	20.4	20.7
6H	19.3	20.2	19.8	20.6	21.0	19.6	20.4	20.0	20.8	21.2
8H	19.5	20.3	20.0	20.7	21.1	19.8	20.6	20.2	21.0	21.4
12H	19.6	20.3	20.1	20.7	21.2	19.9	20.6	20.4	21.0	21.5
X=8H Y=4H	19.1	19.9	19.6	20.3	20.7	19.3	20.1	19.7	20.5	20.9
6H	19.7	20.3	20.2	20.8	21.3	20.0	20.6	20.4	21.0	21.5
8H	19.9	20.5	20.4	21.0	21.5	20.2	20.8	20.7	21.2	21.7
12H	20.1	20.6	20.6	21.0	21.5	20.4	20.9	20.9	21.3	21.9
X=12H Y=4H	19.1	19.8	19.6	20.2	20.7	19.3	20.0	19.8	20.4	20.9
6H	19.8	20.3	20.3	20.8	21.3	20.0	20.6	20.5	21.0	21.5
8H	20.0	20.5	20.5	21.0	21.5	20.3	20.8	20.8	21.2	21.8
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/-0.9					+0.5/-0.9				

Calculate in accordance with CIE Pub.117. The table is revised with 3634lm ($8\log(F/F_0) = 4.5$).

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

Gamma Plane (°):0.0-180.0:2.0
 Test Device: LSG-1800B
 Distance: 12.677 m
 Humidity:
 Inspector:

Utilisation Factor Table(Floor cavity)

Utilance U(F)												
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	0.51	0.62	0.70	0.76	0.84	0.89	0.93	0.98	1.02	
	0.30		0.43	0.54	0.62	0.68	0.77	0.83	0.88	0.94	0.98	
	0.20		0.37	0.47	0.55	0.62	0.71	0.78	0.83	0.90	0.94	
0.50	0.50	0.20	0.50	0.60	0.67	0.73	0.81	0.86	0.89	0.94	0.97	
	0.30		0.42	0.52	0.60	0.66	0.75	0.81	0.85	0.90	0.94	
	0.20		0.37	0.47	0.55	0.61	0.70	0.76	0.81	0.87	0.91	
0.30	0.50	0.20	0.48	0.58	0.65	0.70	0.78	0.82	0.86	0.91	0.93	
	0.30		0.41	0.51	0.59	0.65	0.73	0.78	0.82	0.87	0.91	
	0.20		0.36	0.46	0.54	0.60	0.68	0.74	0.79	0.85	0.88	
0.00	0.00	0.00	0.34	0.44	0.51	0.57	0.65	0.71	0.75	0.80	0.84	
Luminous ceiling reflectance(into room):0.30 Luminous ceiling reflectance(into void):0.20 Luminous ceiling transmittance:0.40 Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												

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

Gamma Plane (°):0.0-180.0:2.0
 Test Device: LSG-1800B
 Distance: 12.677 m
 Humidity:
 Inspector:

Utilisation Factor Table(Wall)

Utilance U(W)											
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	1.08	0.90	0.77	0.67	0.54	0.45	0.38	0.30	0.24
	0.30		0.90	0.77	0.67	0.59	0.49	0.41	0.35	0.28	0.23
	0.20		0.77	0.67	0.60	0.53	0.44	0.38	0.33	0.26	0.22
0.50	0.50	0.20	1.04	0.87	0.74	0.65	0.51	0.46	0.36	0.28	0.23
	0.30		0.88	0.75	0.65	0.58	0.47	0.40	0.34	0.27	0.22
	0.20		0.76	0.66	0.59	0.52	0.43	0.37	0.32	0.25	0.21
0.30	0.50	0.20	1.01	0.83	0.71	0.62	0.49	0.41	0.35	0.27	0.22
	0.30		0.86	0.74	0.64	0.56	0.46	0.38	0.33	0.26	0.21
	0.20		0.76	0.66	0.58	0.52	0.42	0.36	0.31	0.25	0.21
0.00	0.00	0.00	0.66	0.56	0.49	0.43	0.35	0.29	0.25	0.20	0.16
Luminous ceiling reflectance(into room):0.30 Luminous ceiling reflectance(into void):0.20 Luminous ceiling transmittance:0.40 Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980											

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

Gamma Plane (°):0.0-180.0:2.0
 Test Device: LSG-1800B
 Distance: 12.677 m
 Humidity:
 Inspector:

Utilisation Factor Table(Ceiling cavity)

Utilance U(C)											
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	0.20	0.21	0.21	0.22	0.22
	0.30		0.10	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.19
	0.20		0.04	0.06	0.07	0.09	0.11	0.12	0.13	0.15	0.16
0.50	0.50	0.20	0.16	0.18	0.18	0.19	0.20	0.20	0.20	0.21	0.21
	0.30		0.09	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.18
	0.20		0.04	0.06	0.07	0.08	0.10	0.12	0.13	0.15	0.16
0.30	0.50	0.20	0.16	0.17	0.18	0.18	0.19	0.19	0.20	0.20	0.20
	0.30		0.09	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18
	0.20		0.04	0.06	0.07	0.08	0.10	0.12	0.13	0.14	0.16
0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA
Luminous ceiling reflectance(into room):0.30 Luminous ceiling reflectance(into void):0.20 Luminous ceiling transmittance:0.40 Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980											

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

Gamma Plane (°):0.0-180.0:2.0
 Test Device: LSG-1800B
 Distance: 12.677 m
 Humidity:
 Inspector: