

Report No.: 1

Test Time: 12.02.2019 15:52

## Luminaire Property

Luminaire Manufacturer: FAROS

Luminaire Description: FG 55 80LED 0,6A 2x75W 5000K

Lamp Description: LED

Number of Lamps: 1

Lumens per Lamp: 21760.7 lm

Luminous Length (mm): 1545 mm

Luminous Width (mm): 55 mm

Luminous Height (mm): 90 mm

Voltage: 221.6 V

Current: 0.687 A

Power: 151.02 W

Power Factor: 0.983

## Photometric Results

CIE Class: Direct

Total Rated Lamp Lumens: 21760.7 lm

Measurement Flux: 21756.3 lm

Efficiency: 99.98%

Downward Ratio: 98.99%

Upward Ratio: 0.99%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 158.3, 160.0, 151.2, 152.4

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 118.2, 124.9, 115.4, 115.6

Luminaire Efficacy Rating (LER): 144.11

Central Intensity: 7438.54 cd

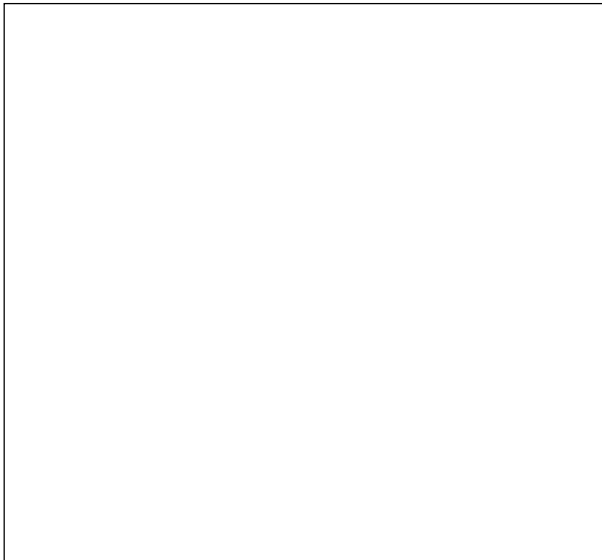
Max. Intensity: 7438.55 cd

Pos of Max. Intensity: H0 V0

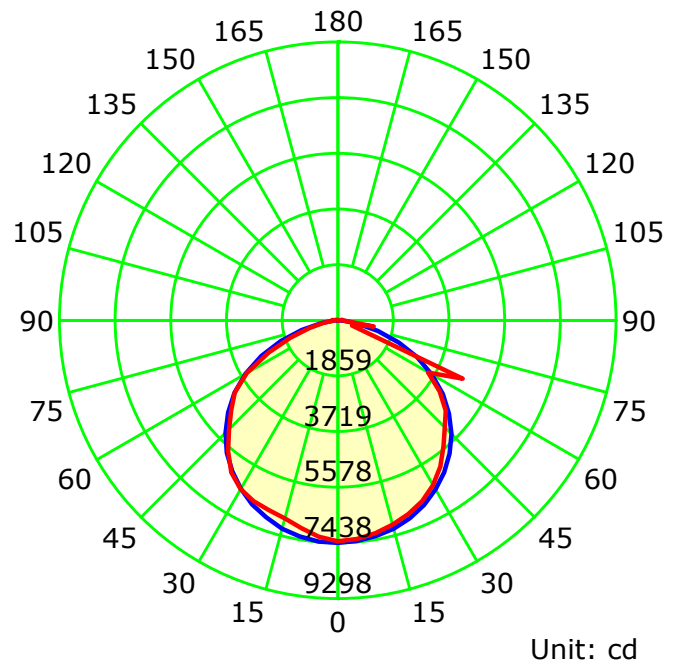
S/MH(C0/C180): 1.30

S/MH(C90/C270): 1.29

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

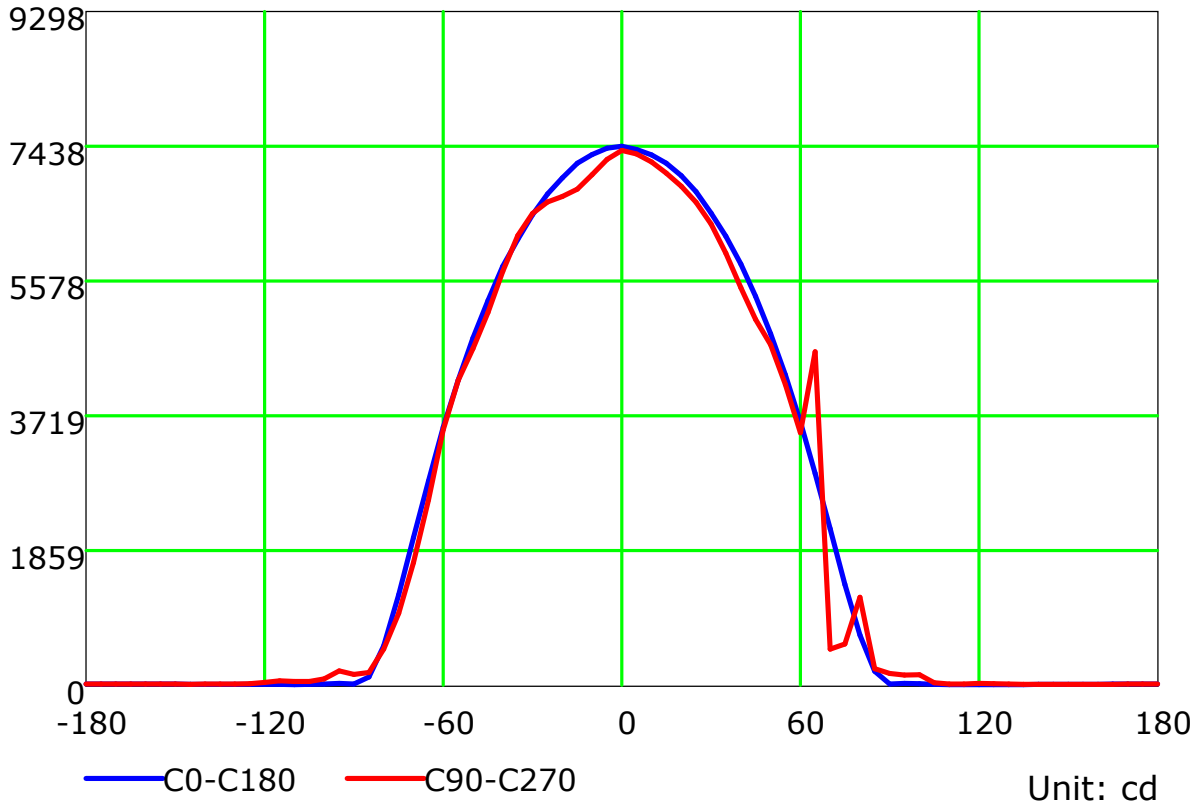
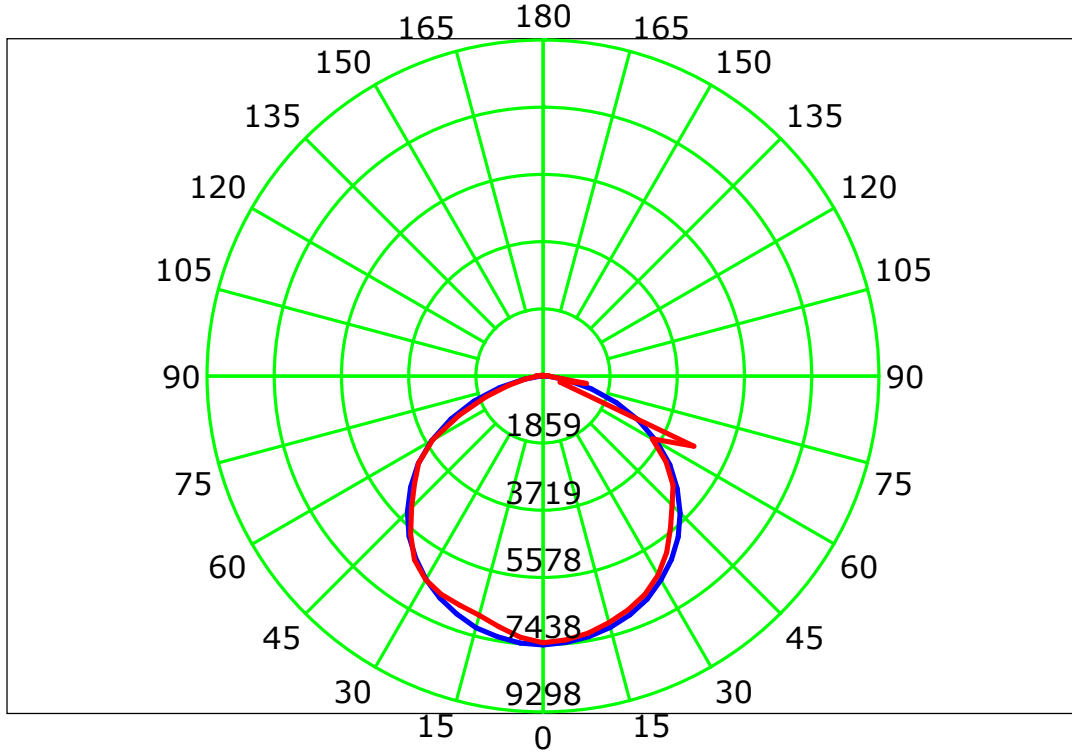
Temperature:

Humidity:

Operator:

Inspector:

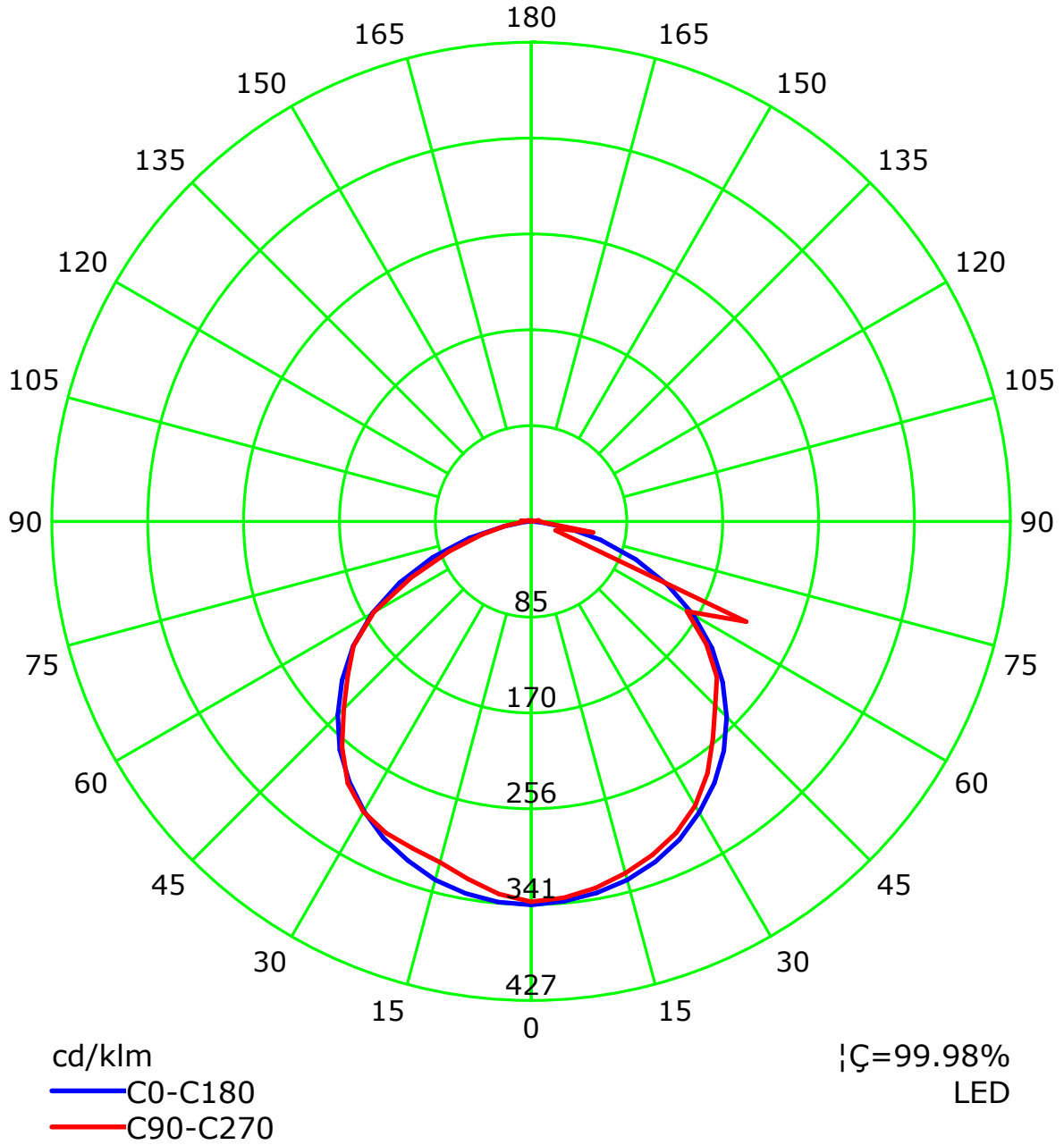
## Luminous Intensity Distribution Curve



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)



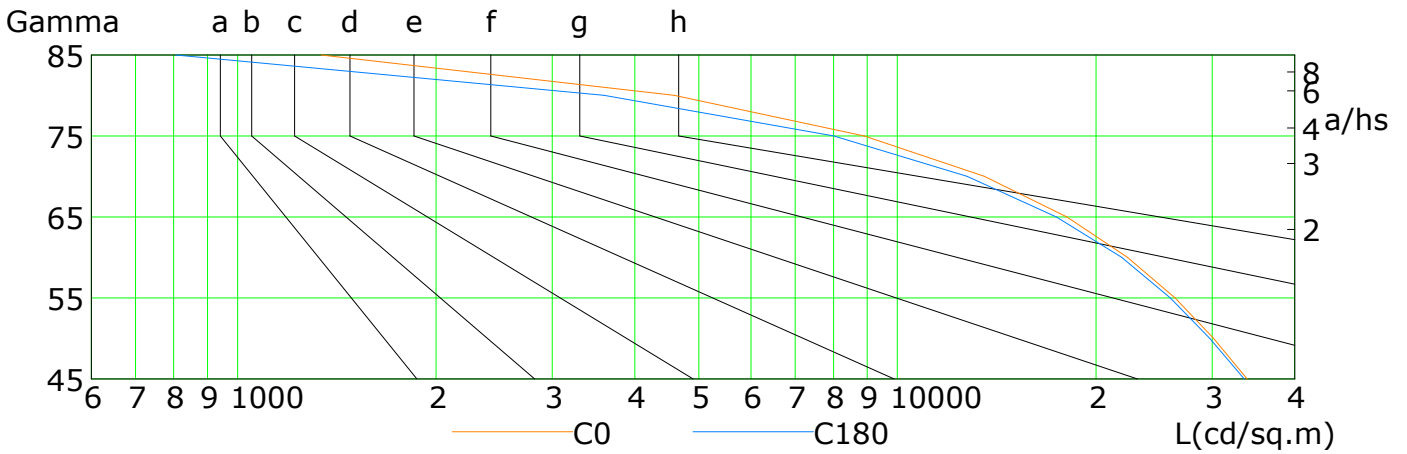
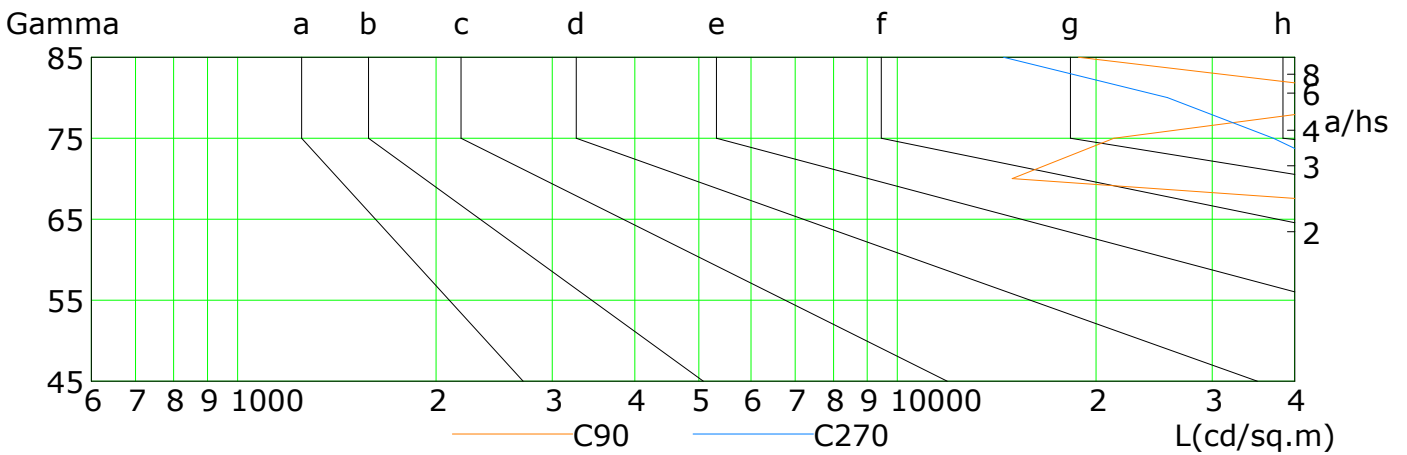
C Plane (°):0.0-360.0: 22.5  
Test Lab:  
Test Type: TYPE C  
Temperature:  
Operator:

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

## Lum Limit Curve

Dazzle	Quality	Illuminance (lx)							
		2000	1000	500	<=300				
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	33893	30125	26370	22317	18062	13549	8914	4587	1339
C90	79465	80522	78653	74556	113990	14932	21290	62024	18819
C180	33537	29749	25928	21862	17423	12757	8014	3595	807
C270	80985	79568	79747	75446	63409	50195	37157	25646	14489

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:5.0

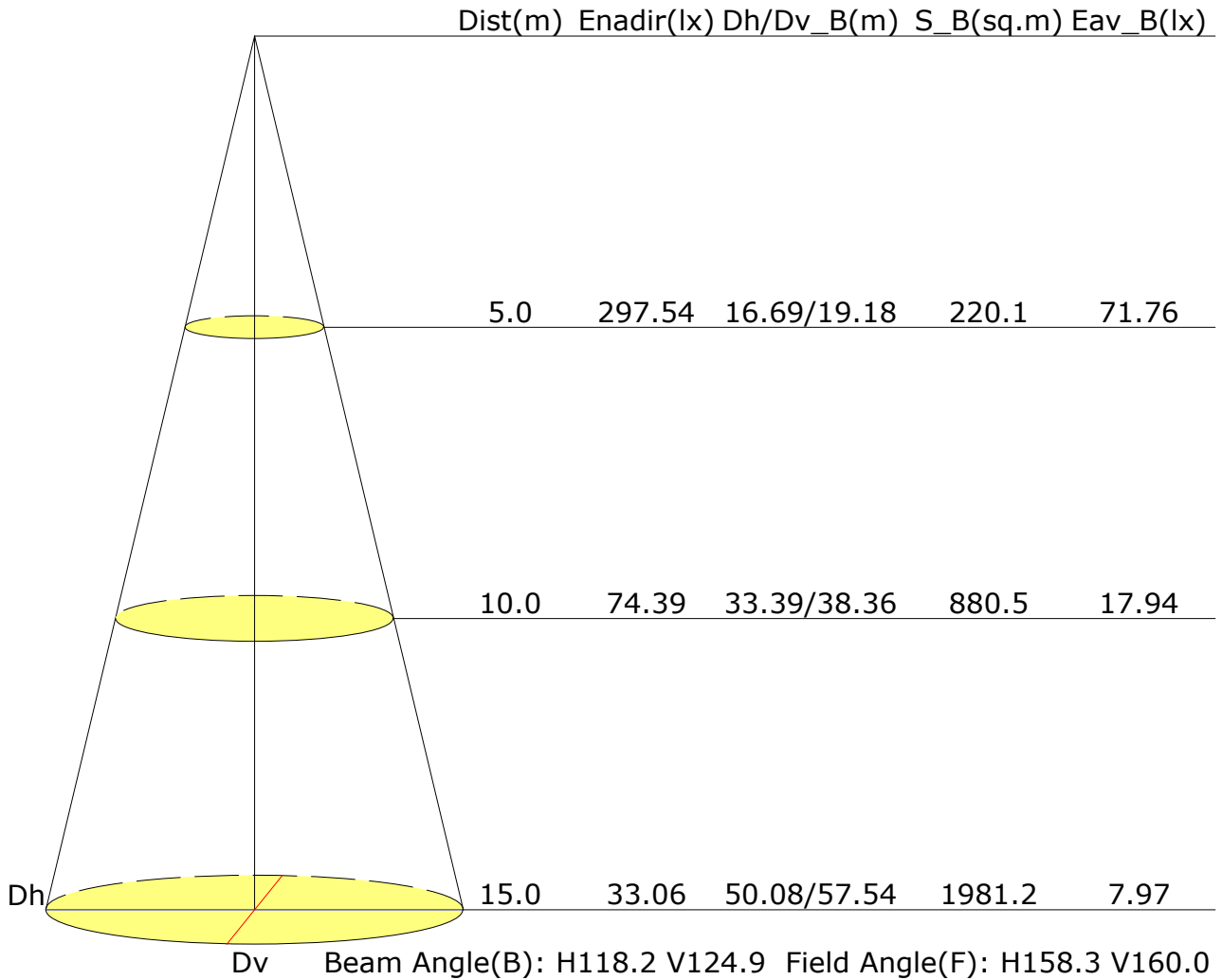
Test Device: LSG-1800B

Distance: 12.654 m

Humidity:

Inspector:

## Illuminance at a Distance



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:

## 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	24.2	25.5	24.5	25.8	26.1	26.3	27.7	26.7	28.0	28.2
3H	25.1	26.4	25.4	26.6	26.9	27.8	29.1	28.1	29.3	29.6
4H	25.4	26.6	25.7	26.9	27.2	28.0	29.2	28.3	29.5	29.8
6H	25.5	26.6	25.9	26.9	27.2	28.2	29.3	28.6	29.6	30.0
8H	25.5	26.5	25.9	26.9	27.2	28.3	29.4	28.7	29.7	30.1
12H	25.4	26.5	25.8	26.8	27.2	28.3	29.4	28.7	29.7	30.1
X=4H Y=2H	24.8	26.0	25.2	26.3	26.6	26.6	27.8	27.0	28.1	28.4
3H	25.9	26.9	26.3	27.2	27.6	28.2	29.2	28.6	29.6	29.9
4H	26.2	27.1	26.6	27.5	27.9	28.4	29.3	28.8	29.7	30.1
6H	26.4	27.2	26.8	27.6	28.0	28.7	29.5	29.1	29.9	30.3
8H	26.4	27.1	26.8	27.5	28.0	28.8	29.6	29.3	30.0	30.4
12H	26.4	27.0	26.8	27.5	27.9	28.9	29.5	29.3	30.0	30.4
X=8H Y=4H	26.3	27.1	26.8	27.5	27.9	28.4	29.1	28.9	29.6	30.0
6H	26.5	27.1	27.0	27.6	28.1	28.7	29.3	29.2	29.8	30.3
8H	26.6	27.1	27.1	27.6	28.1	28.9	29.4	29.4	29.9	30.4
12H	26.6	27.0	27.1	27.5	28.0	28.9	29.4	29.4	29.9	30.4
X=12H Y=4H	26.3	27.0	26.8	27.4	27.9	28.4	29.0	28.9	29.5	30.0
6H	26.5	27.1	27.0	27.5	28.0	28.7	29.2	29.2	29.7	30.2
8H	26.6	27.0	27.1	27.5	28.0	28.9	29.3	29.4	29.8	30.3
Variations with the observer position at spacings:										
S=1.0H	+0.2/-0.3					+0.2/-0.2				
S=1.5H	+0.4/-0.7					+0.6/-0.5				
S=2.0H	+0.9/-1.7					+1.3/-1.0				

Calculate in accordance with CIE Pub.117. The table is revised with 21761lm ( $8\log(F/F_0) = 10.7$ ).

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	0.66	0.74	0.80	0.87	0.92	0.96	1.00	1.03	
		0.30	0.48	0.59	0.67	0.73	0.81	0.87	0.91	0.96	1.00	
		0.20	0.42	0.53	0.61	0.67	0.76	0.82	0.87	0.93	0.97	
0.50	0.50	0.20	0.54	0.64	0.71	0.77	0.84	0.89	0.92	0.96	0.99	
		0.30	0.47	0.57	0.65	0.71	0.79	0.84	0.88	0.93	0.96	
		0.20	0.42	0.52	0.60	0.66	0.74	0.80	0.84	0.90	0.93	
0.30	0.50	0.20	0.52	0.62	0.69	0.74	0.81	0.85	0.88	0.92	0.95	
		0.30	0.46	0.56	0.64	0.69	0.76	0.81	0.85	0.90	0.92	
		0.20	0.41	0.52	0.59	0.65	0.73	0.78	0.82	0.87	0.90	
0.00	0.00	0.00	0.39	0.49	0.56	0.62	0.69	0.74	0.78	0.83	0.85	
<p>Rating:151W Photometrically tested without ceiling board.                      Multiply UF values by service correction factors                      Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>												

## 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	1.00	0.82	0.69	0.60	0.48	0.39	0.33	0.26	0.21	
	0.30		0.83	0.70	0.61	0.53	0.43	0.36	0.31	0.24	0.20	
	0.20		0.71	0.61	0.54	0.48	0.39	0.33	0.29	0.23	0.19	
0.50	0.50	0.20	0.96	0.79	0.66	0.57	0.45	0.41	0.32	0.24	0.20	
	0.30		0.81	0.68	0.59	0.52	0.41	0.35	0.30	0.23	0.19	
	0.20		0.71	0.60	0.53	0.47	0.38	0.32	0.28	0.22	0.18	
0.30	0.50	0.20	0.93	0.76	0.64	0.55	0.43	0.36	0.30	0.23	0.19	
	0.30		0.80	0.67	0.57	0.50	0.40	0.33	0.28	0.22	0.18	
	0.20		0.70	0.59	0.52	0.46	0.37	0.31	0.27	0.21	0.18	
0.00	0.00	0.00	0.60	0.50	0.42	0.37	0.30	0.24	0.21	0.16	0.13	
<p>Rating:151W Photometrically tested without ceiling board.            Multiply UF values by service correction factors            Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>												

## 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	0.23
	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	0.09	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	0.20	0.21	0.21	0.22
	0.30		0.10	0.12	0.13	0.14	0.15	0.17	0.17	0.19	0.19
	0.20		0.05	0.07	0.09	0.10	0.12	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	0.13	0.14	0.15	0.16	0.17	0.18	0.19
	0.20		0.05	0.07	0.08	0.10	0.11	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
<p>Rating:151W Photometrically tested without ceiling board.                      Multiply UF values by service correction factors                      Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>											