

Report No.: 1

Test Time: 09.12.2019 15:01

## Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 300 4x40LED 0.3A 15W 5000K microprisma (40) Griliyato

Luminous Length (mm): 286

Luminous Width (mm): 286

Luminous Height (mm): 40

Voltage: 221.3 V

Current: 0.072 A

Power: 15.07 W

Power Factor: 0.940

## Photometric Results

CIE Class: Direct

Measurement Flux: 1946.2 lm

Downward Ratio: 99%

Total Rated Lamp Lumens: 1946.2 lm

Efficiency: 100%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 161.6, 156.3, 151.0, 151.2

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 81.9, 77.7, 76.1, 75.9

Luminaire Efficacy Rating (LER): 129.19

Central Intensity: 985.41 cd

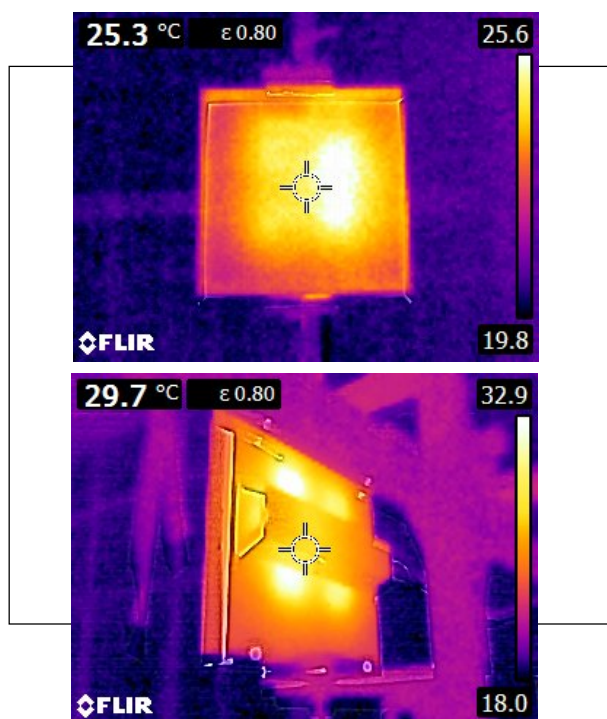
Max. Intensity: 987.22 cd

Pos of Max. Intensity: H157.5 V0

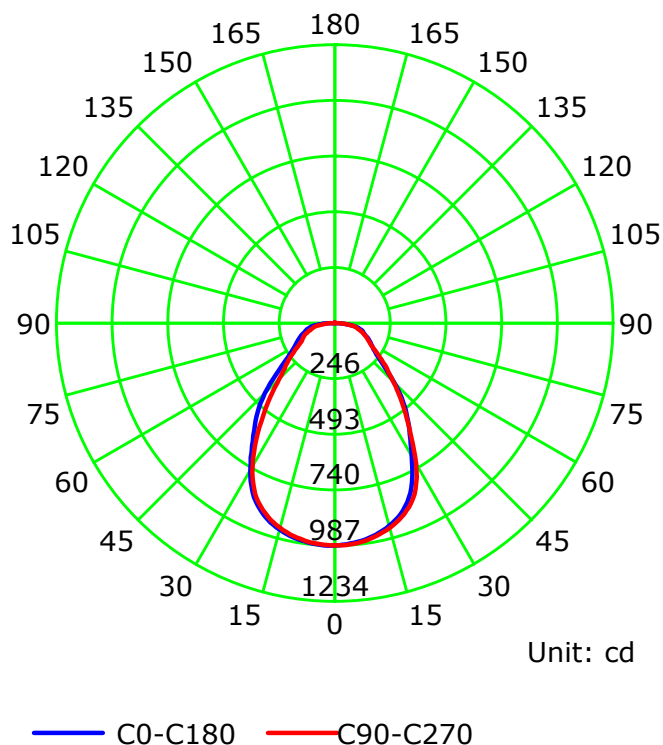
S/MH(C0/C180): 1.11

S/MH(C90/C270): 1.12

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

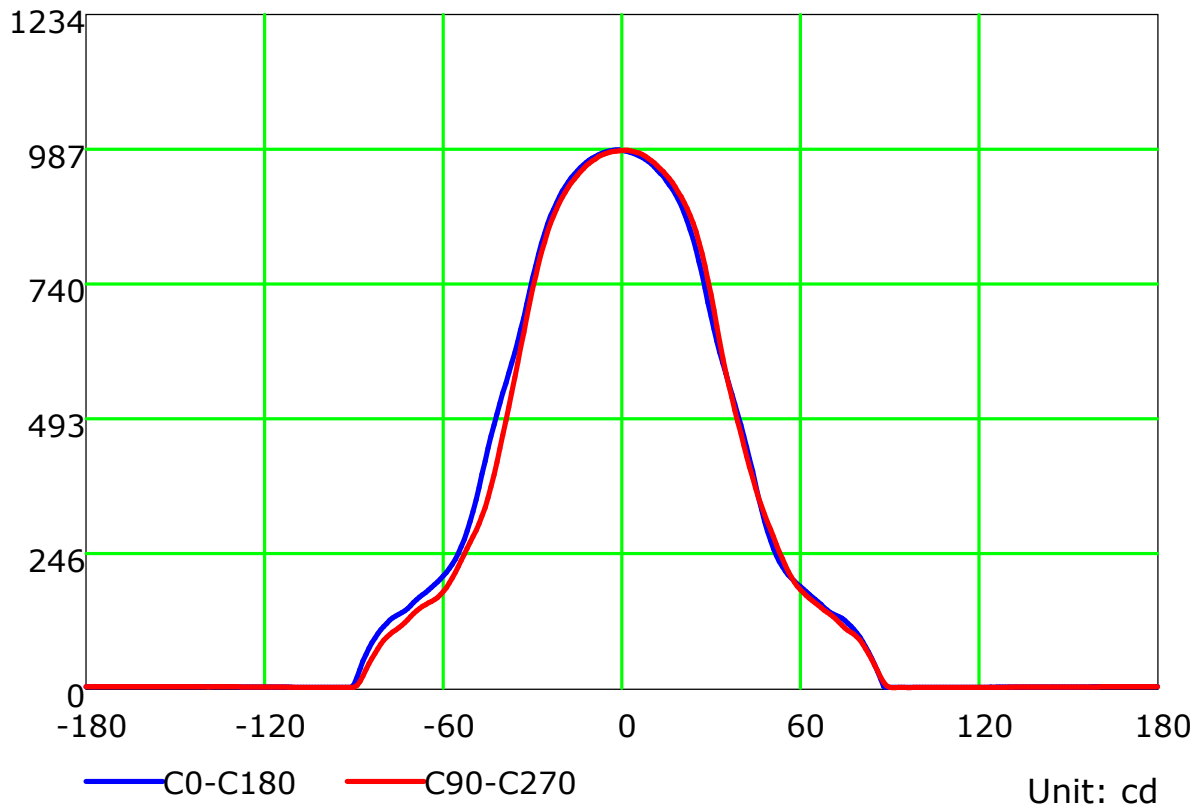
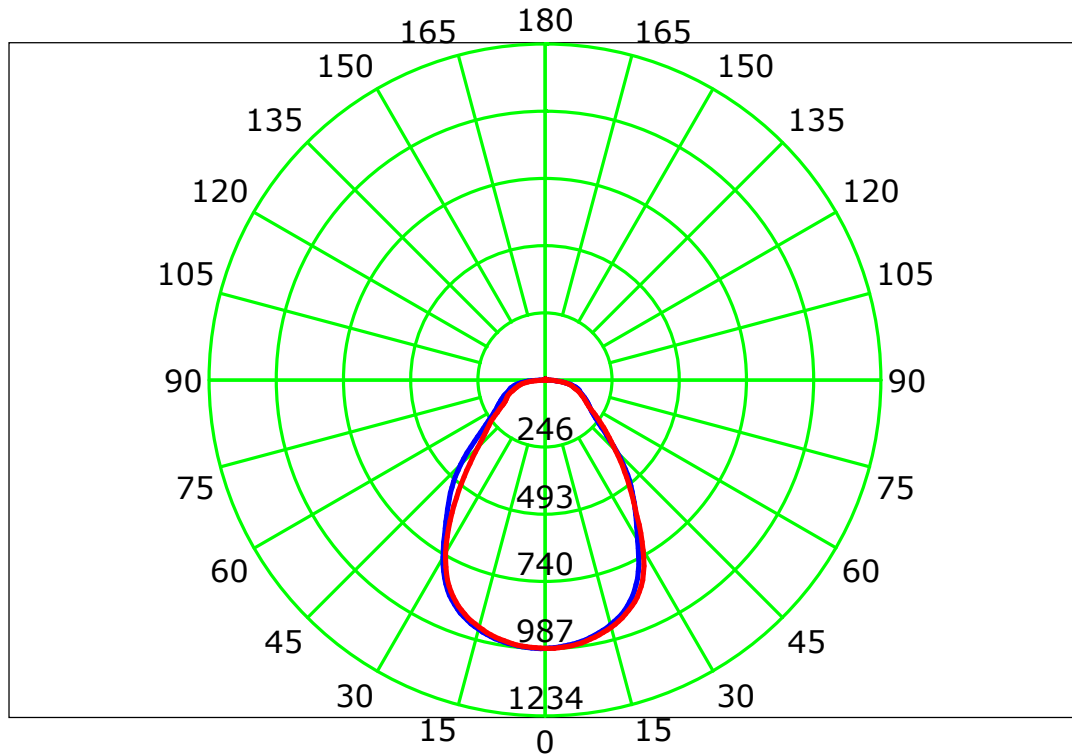
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

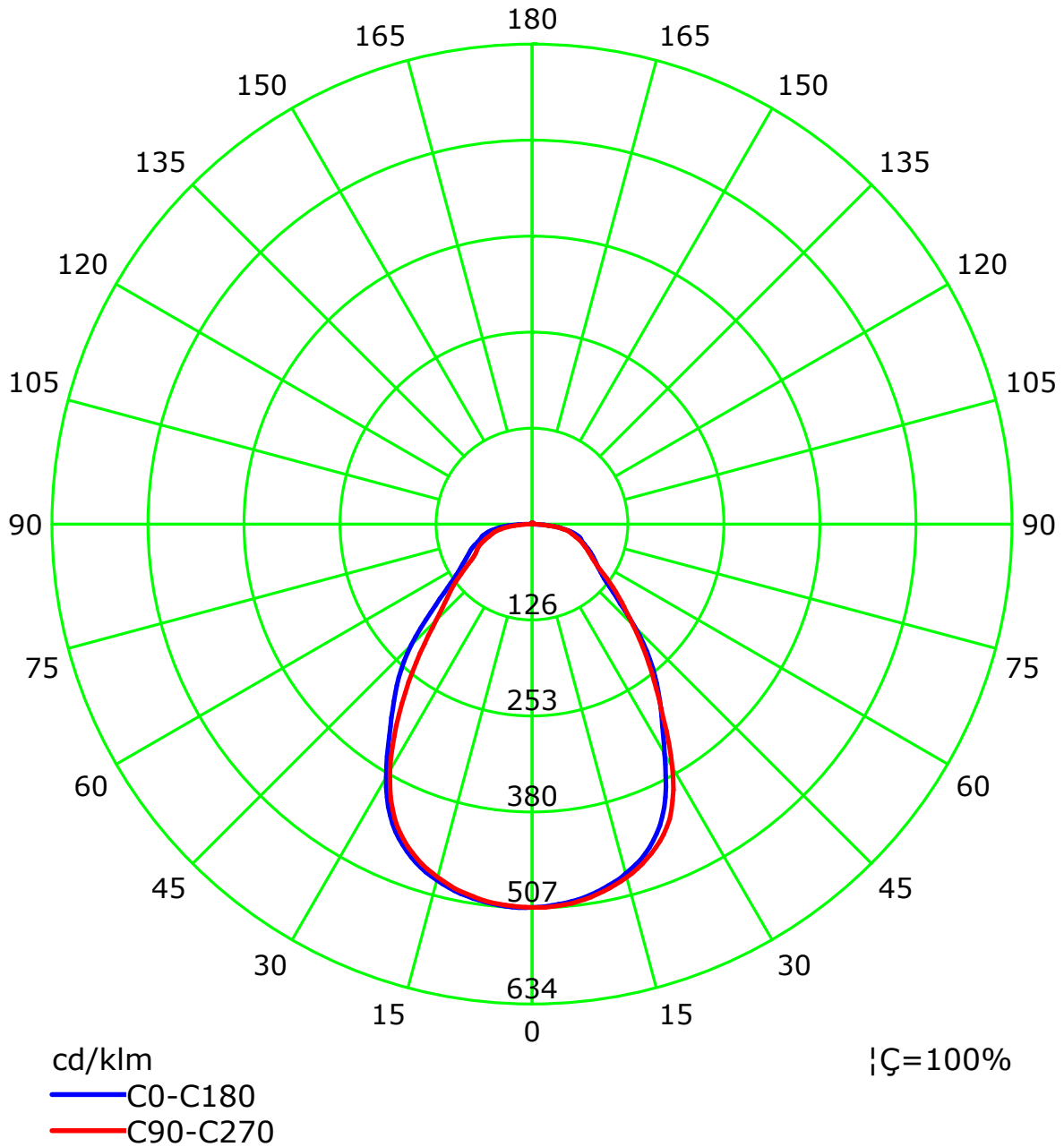
## Luminous Intensity Distribution Curve



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)

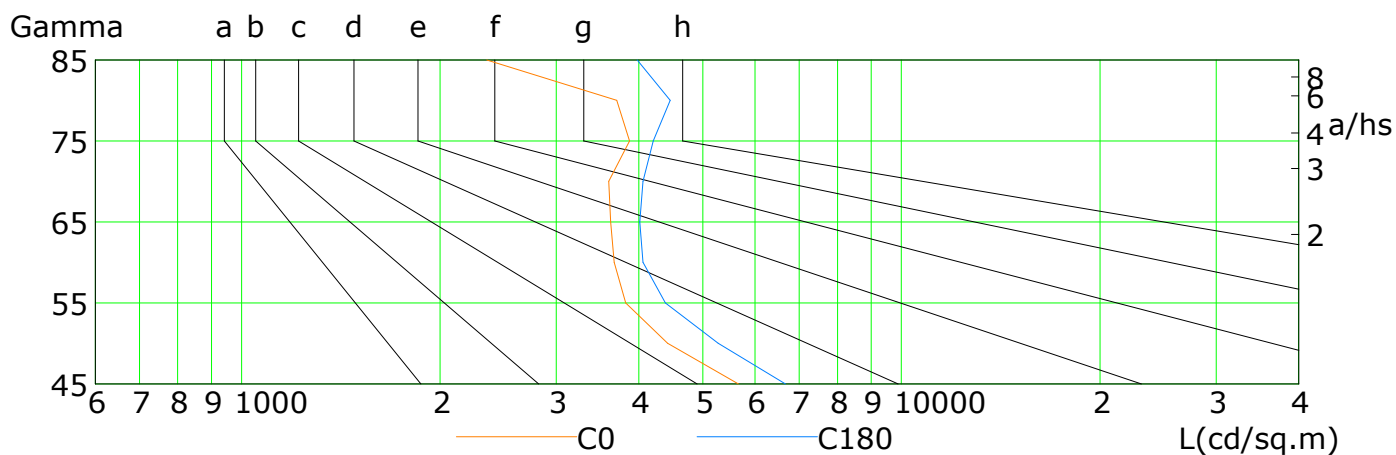
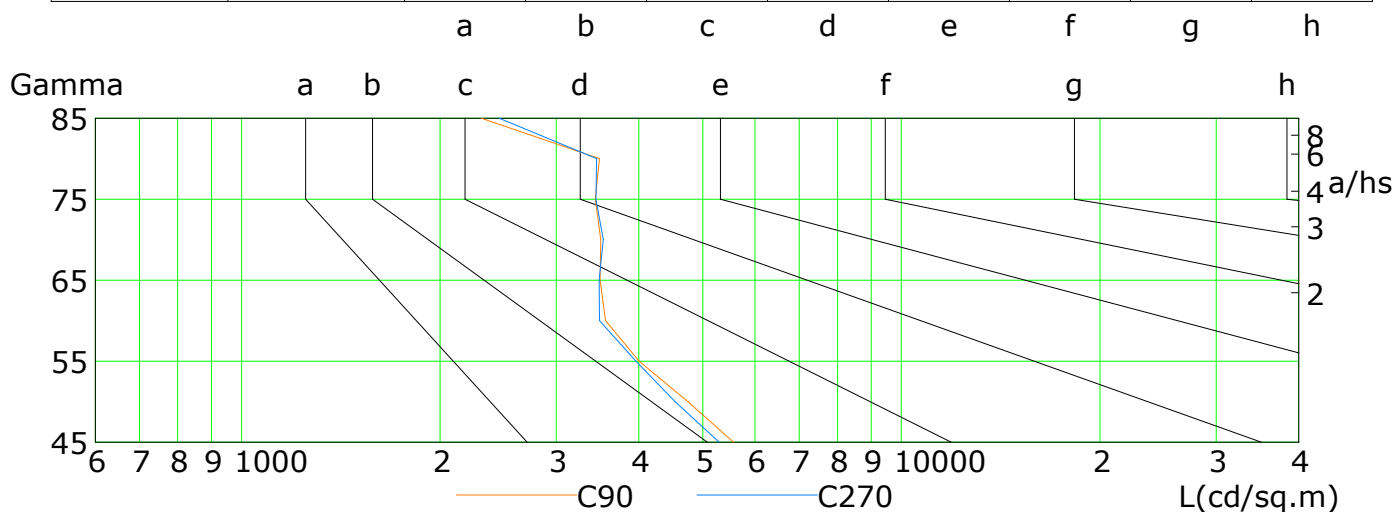


C Plane (°):0.0-360.0: 22.5  
Test Lab:  
Test Type: TYPE C  
Temperature:  
Operator:

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

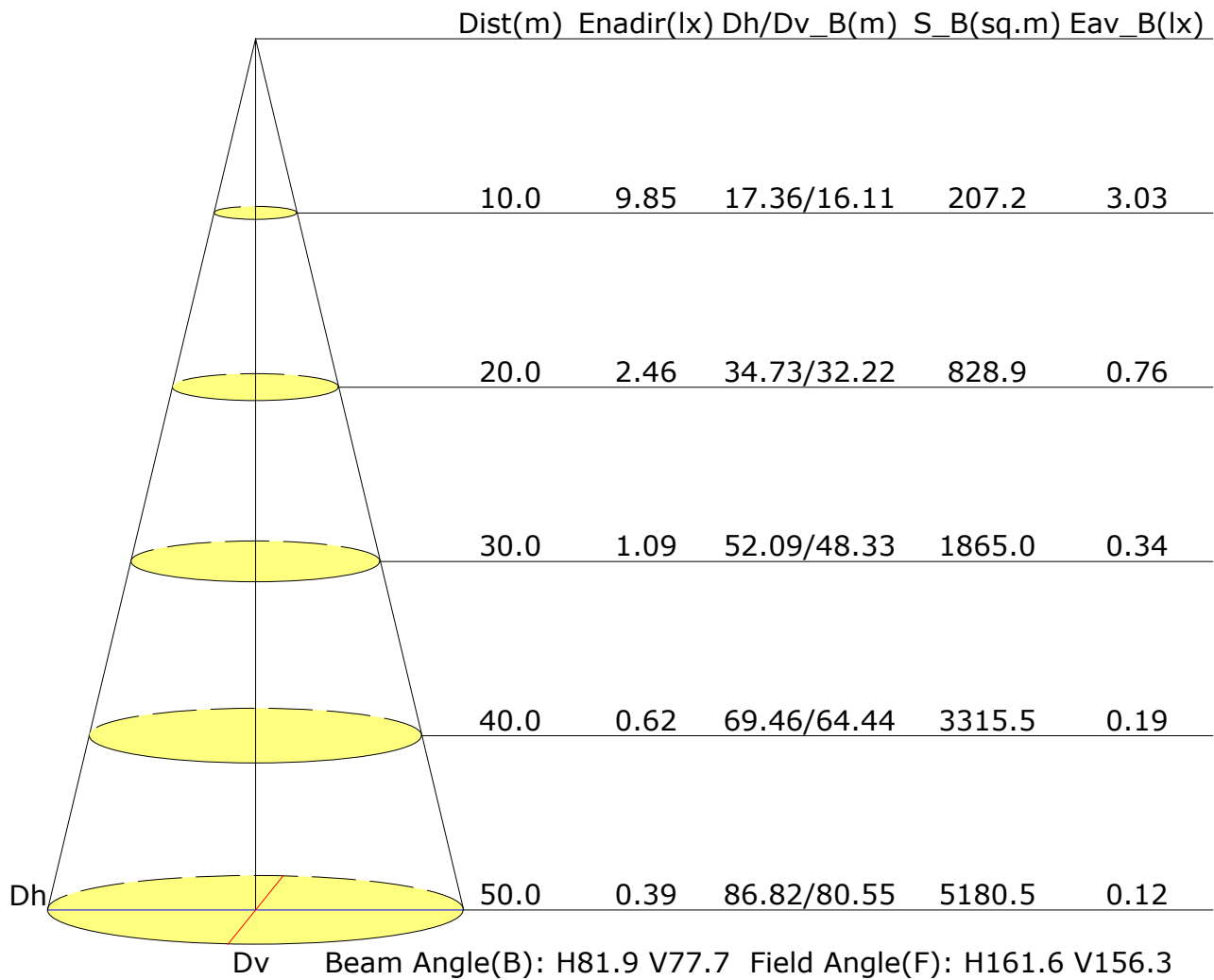


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	5659	4422	3819	3671	3628	3602	3871	3702	2352
C90	5565	4746	4003	3560	3495	3500	3436	3488	2310
C180	6675	5279	4387	4060	4015	4057	4207	4464	3979
C270	5294	4538	3959	3488	3484	3533	3442	3453	2457

C Plane (°):0.0-360.0: 22.5  
 Test Lab:  
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 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	16.3	17.5	16.6	17.8	18.0	16.3	17.5	16.6	17.8	18.0
3H	17.8	18.9	18.1	19.2	19.5	17.7	18.8	18.0	19.1	19.4
4H	18.6	19.7	19.0	20.0	20.3	18.4	19.5	18.8	19.8	20.1
6H	19.4	20.4	19.8	20.7	21.1	19.1	20.1	19.5	20.5	20.8
8H	19.7	20.7	20.1	21.0	21.3	19.4	20.4	19.8	20.7	21.0
12H	19.8	20.8	20.2	21.1	21.5	19.6	20.5	20.0	20.8	21.2
X=4H Y=2H	16.7	17.8	17.1	18.1	18.4	16.7	17.8	17.1	18.1	18.4
3H	18.5	19.4	18.8	19.7	20.1	18.4	19.3	18.8	19.7	20.0
4H	19.5	20.3	19.9	20.7	21.1	19.3	20.1	19.7	20.5	20.9
6H	20.4	21.2	20.9	21.6	22.0	20.1	20.9	20.6	21.3	21.7
8H	20.8	21.5	21.2	21.9	22.3	20.5	21.1	20.9	21.6	22.0
12H	21.0	21.6	21.4	22.0	22.5	20.7	21.3	21.1	21.7	22.2
X=8H Y=4H	19.7	20.4	20.2	20.8	21.3	19.5	20.2	20.0	20.6	21.1
6H	20.8	21.4	21.3	21.8	22.3	20.5	21.1	21.0	21.5	22.0
8H	21.3	21.8	21.8	22.2	22.7	21.0	21.5	21.5	21.9	22.4
12H	21.5	22.0	22.1	22.5	23.0	21.3	21.7	21.8	22.2	22.7
X=12H Y=4H	19.8	20.4	20.2	20.8	21.3	19.6	20.2	20.0	20.6	21.1
6H	20.9	21.4	21.4	21.8	22.3	20.6	21.1	21.1	21.6	22.1
8H	21.3	21.8	21.9	22.3	22.8	21.1	21.5	21.6	22.0	22.5
Variations with the observer position at spacings:										
S=1.0H	+0.3/-0.3					+0.2/-0.3				
S=1.5H	+0.4/-0.6					+0.3/-0.7				
S=2.0H	+0.7/-0.8					+0.7/-0.9				

Calculate in accordance with CIE Pub.117. The table is revised with  $1946lm$  ( $8\log(F/F_0) = 2.3$ ).

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 = 1.00									
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	0.63	0.72	0.78	0.83	0.90	0.94	0.97	1.01	1.04	
	0.30		0.56	0.65	0.72	0.77	0.84	0.89	0.93	0.98	1.01	
	0.20		0.50	0.60	0.66	0.72	0.79	0.85	0.89	0.94	0.98	
0.50	0.50	0.20	0.61	0.70	0.76	0.80	0.86	0.91	0.94	0.97	1.00	
	0.30		0.55	0.64	0.70	0.75	0.82	0.86	0.90	0.94	0.97	
	0.20		0.50	0.59	0.65	0.70	0.78	0.83	0.86	0.91	0.95	
0.30	0.50	0.20	0.60	0.68	0.74	0.78	0.84	0.87	0.90	0.94	0.96	
	0.30		0.54	0.63	0.69	0.73	0.79	0.84	0.87	0.91	0.94	
	0.20		0.50	0.58	0.65	0.69	0.76	0.81	0.84	0.89	0.91	
0.00	0.00	0.00	0.47	0.56	0.62	0.66	0.72	0.77	0.80	0.84	0.87	
Rating:15W 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 = 1.00									
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	0.91	0.75	0.64	0.56	0.45	0.38	0.32	0.25	0.21	
	0.30		0.76	0.64	0.56	0.50	0.41	0.34	0.30	0.24	0.20	
	0.20		0.65	0.56	0.50	0.45	0.37	0.32	0.28	0.22	0.19	
0.50	0.50	0.20	0.87	0.72	0.61	0.53	0.43	0.39	0.31	0.24	0.20	
	0.30		0.74	0.62	0.54	0.48	0.39	0.33	0.29	0.23	0.19	
	0.20		0.64	0.55	0.48	0.43	0.36	0.31	0.27	0.21	0.18	
0.30	0.50	0.20	0.84	0.69	0.59	0.51	0.41	0.34	0.29	0.23	0.19	
	0.30		0.72	0.61	0.52	0.46	0.38	0.32	0.27	0.22	0.18	
	0.20		0.63	0.54	0.47	0.42	0.35	0.30	0.26	0.21	0.17	
0.00	0.00	0.00	0.52	0.44	0.38	0.33	0.27	0.23	0.20	0.16	0.13	
Rating:15W 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 = 1.00									
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	0.18	0.19	0.19	0.20	0.21	0.21	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		0.06	0.07	0.09	0.10	0.12	0.14	0.15	0.17	0.18	
0.50	0.50	0.20	0.16	0.17	0.18	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		0.06	0.07	0.09	0.10	0.12	0.13	0.15	0.16	0.17	
0.30	0.50	0.20	0.15	0.16	0.17	0.18	0.19	0.19	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		0.06	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:15W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												