

Report No.: 1

Test Time: 30.01.2020 14:48

## Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 100 DALI 36LED 400W 5000K 30gr.

Luminous Length (mm): 440 mm

Luminous Width (mm): 205 mm

Luminous Height (mm): 338 mm

Voltage: 221.2 V

Current: 1.741 A

Power: 399.13 W

Power Factor: 0.982

## Photometric Results

CIE Class: Direct

Measurement Flux: 58181.9 lm

Downward Ratio: 95%

Total Rated Lamp Lumens: 58181.9 lm

Efficiency: 100%

Upward Ratio: 5%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 58.9, 58.3, 61.7, 62.1

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 30.4, 28.7, 30.7, 30.8

Luminaire Efficacy Rating (LER): 145.82

Central Intensity: 126536.98 cd

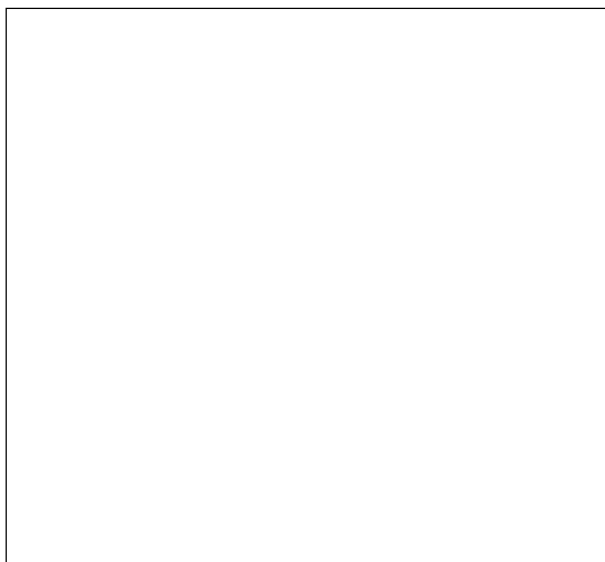
Max. Intensity: 130180.48 cd

Pos of Max. Intensity: H315 V1

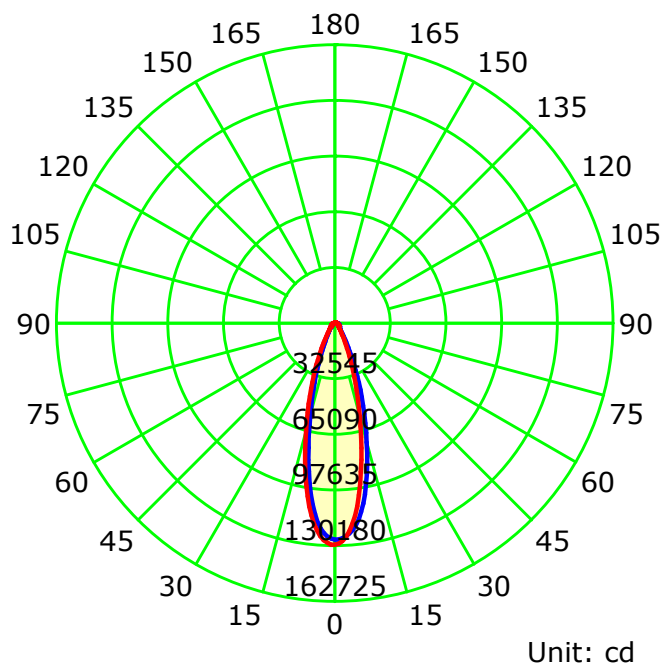
S/MH(C0/C180): 0.50

S/MH(C90/C270): 0.48

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 (°):0.0-180.0:1.0

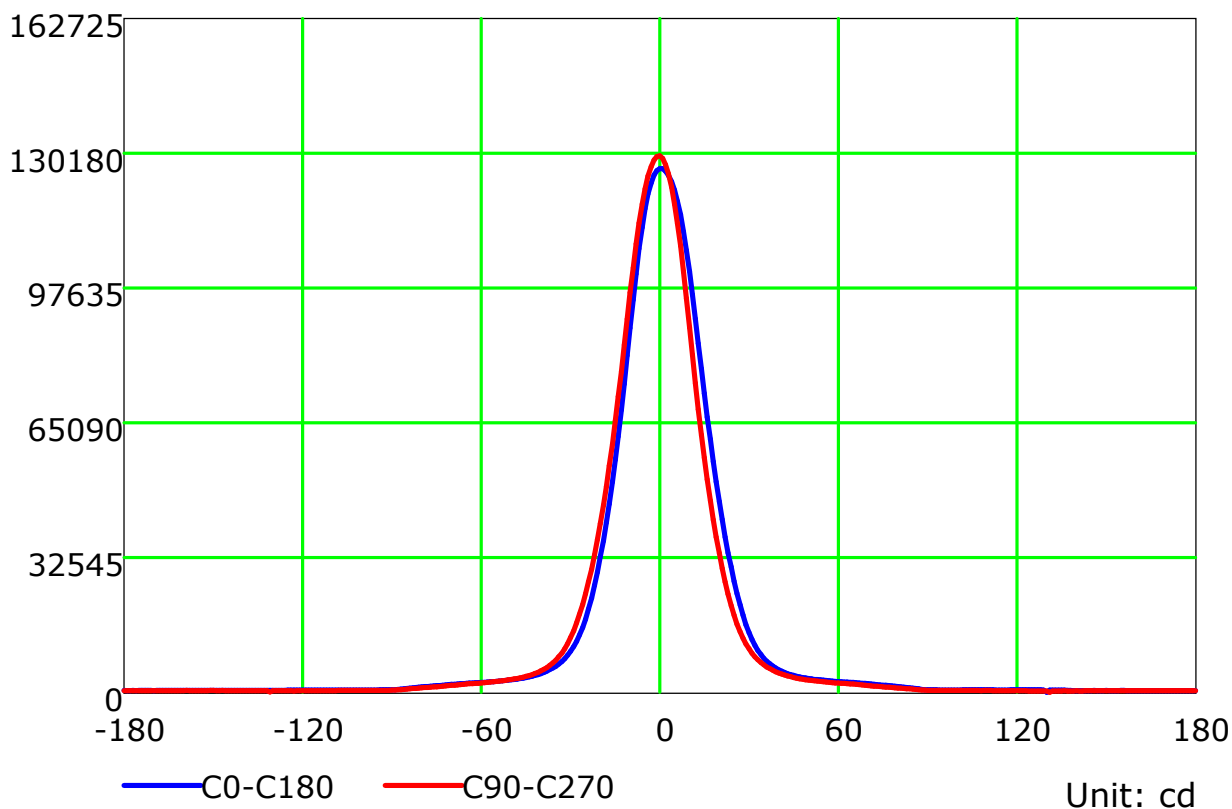
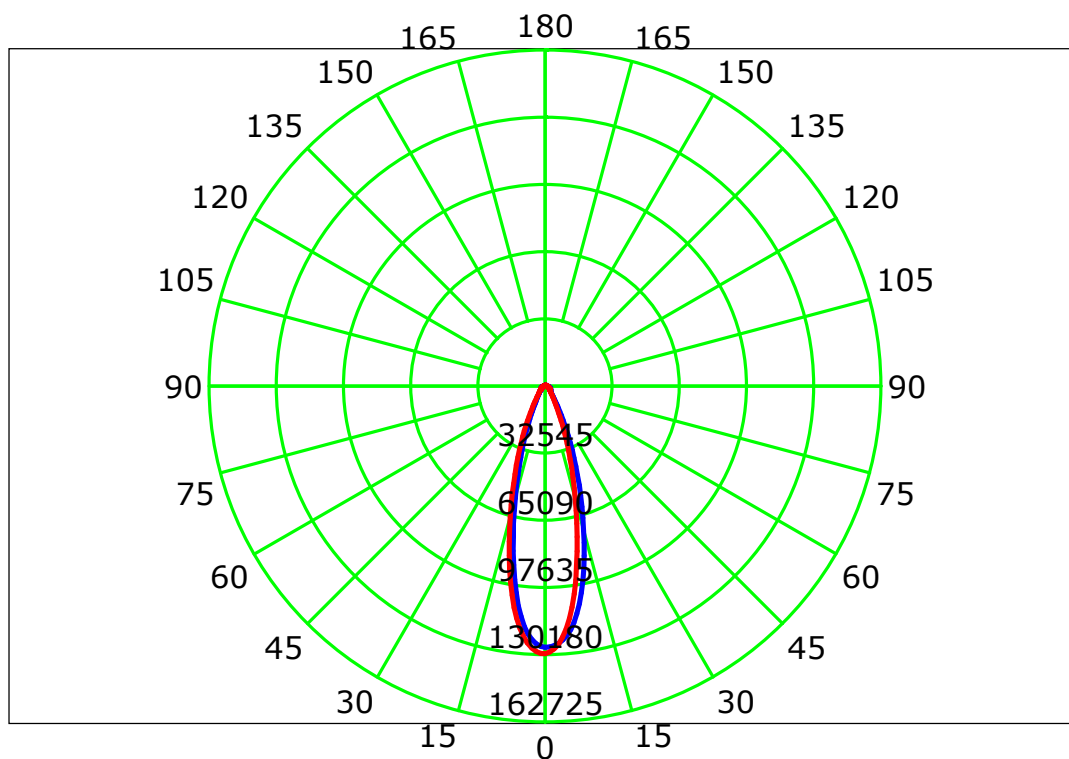
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

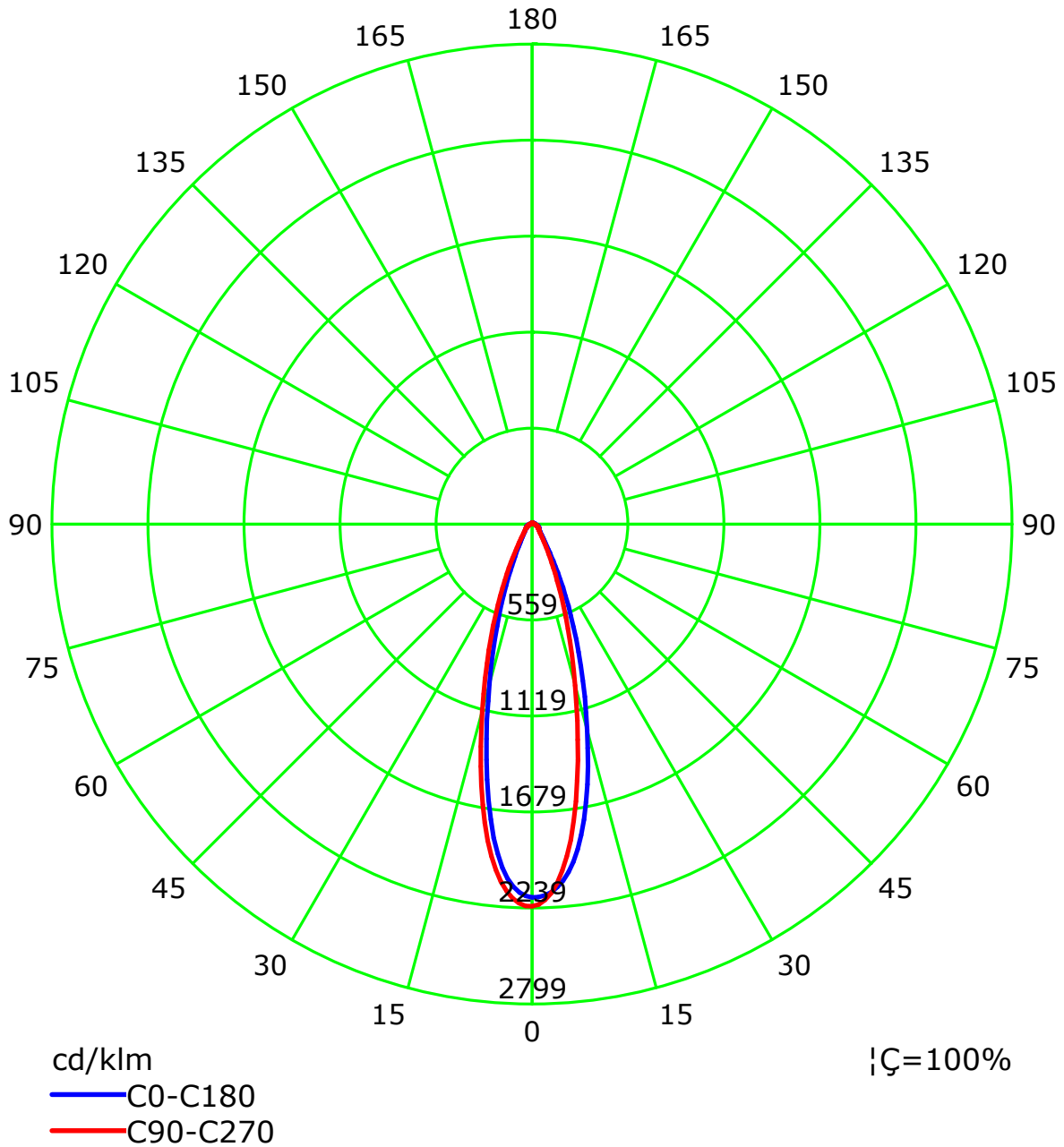
## Luminous Intensity Distribution Curve



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)



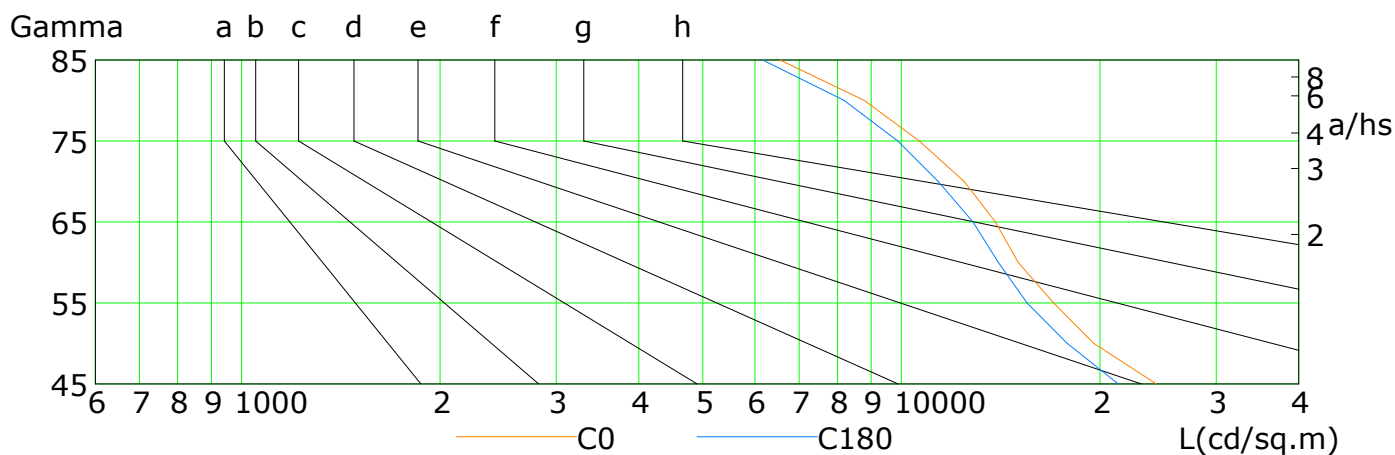
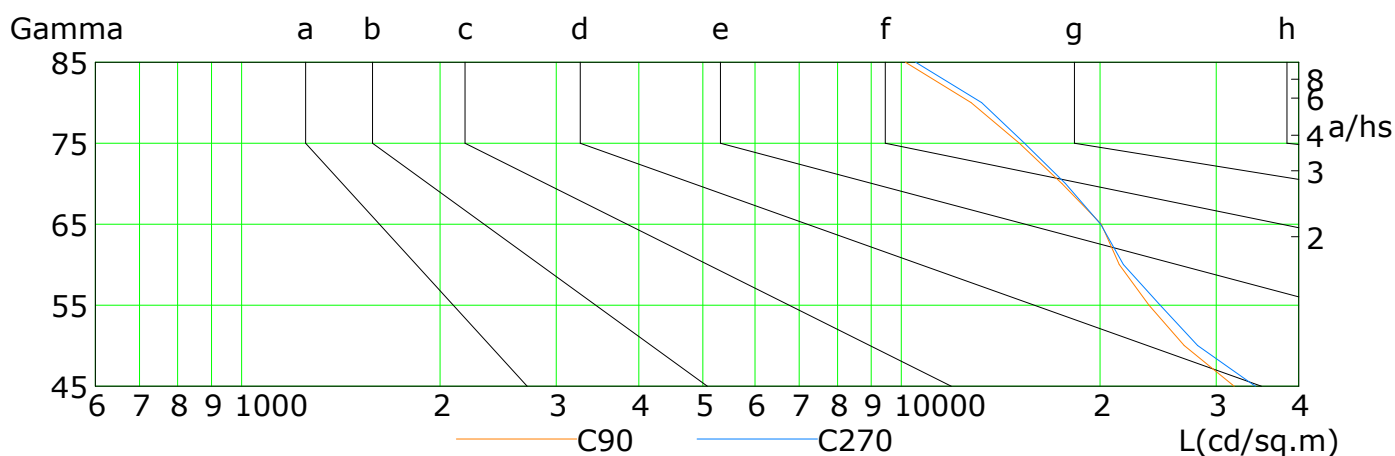
C Plane (°):0.0-360.0: 22.5  
Test Lab:  
Test Type: TYPE C  
Temperature:  
Operator:

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

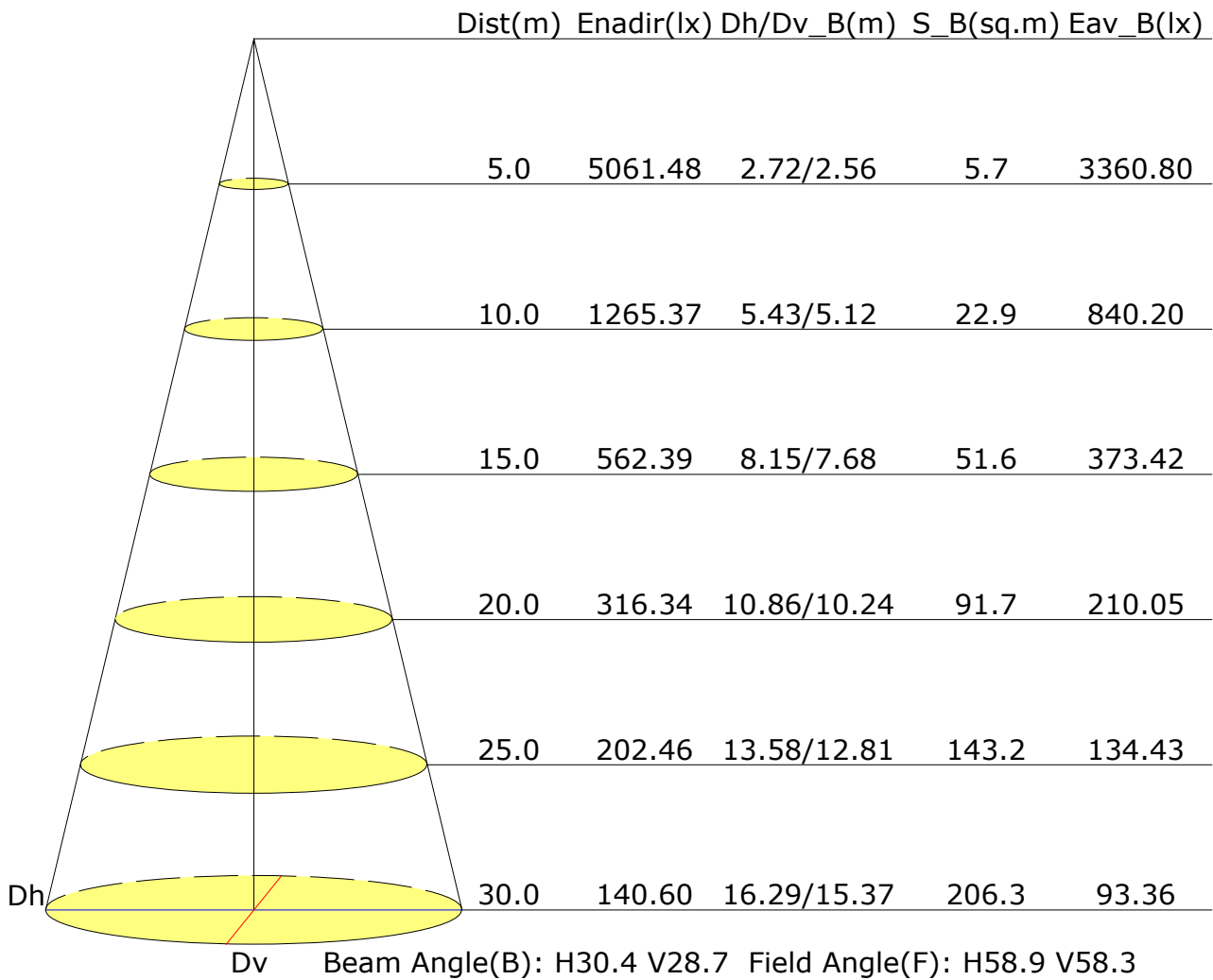


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	24352	19557	17007	15032	13885	12446	10644	8781	6547
C90	31951	26832	23722	21388	20084	17517	15102	12750	10147
C180	21305	17826	15501	14014	12839	11362	9873	8186	6161
C270	34375	28136	24686	21694	20044	17727	15369	13229	10513

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	18.8	19.7	19.2	20.0	20.3	19.1	20.0	19.5	20.3	20.6
3H	20.1	20.9	20.5	21.3	21.6	20.4	21.2	20.8	21.5	21.9
4H	20.7	21.5	21.2	21.9	22.2	21.0	21.7	21.4	22.1	22.5
6H	21.3	22.0	21.7	22.4	22.8	21.5	22.2	22.0	22.6	23.0
8H	21.5	22.2	21.9	22.6	23.0	21.8	22.4	22.2	22.8	23.2
12H	21.7	22.3	22.1	22.7	23.2	21.9	22.6	22.4	23.0	23.4
X=4H Y=2H	19.3	20.0	19.7	20.4	20.8	19.5	20.3	19.9	20.6	21.0
3H	20.8	21.4	21.2	21.8	22.3	21.0	21.6	21.4	22.1	22.5
4H	21.6	22.1	22.0	22.6	23.0	21.7	22.3	22.2	22.7	23.2
6H	22.2	22.8	22.7	23.2	23.7	22.4	22.9	22.9	23.4	23.9
8H	22.5	23.0	23.0	23.5	24.0	22.7	23.2	23.2	23.7	24.2
12H	22.7	23.2	23.3	23.7	24.2	23.0	23.4	23.5	23.9	24.4
X=8H Y=4H	21.8	22.3	22.3	22.8	23.3	22.0	22.5	22.5	22.9	23.5
6H	22.7	23.0	23.2	23.6	24.1	22.8	23.2	23.4	23.7	24.3
8H	23.0	23.4	23.6	23.9	24.5	23.2	23.5	23.8	24.1	24.7
12H	23.4	23.7	23.9	24.2	24.8	23.6	23.9	24.1	24.4	25.0
X=12H Y=4H	21.8	22.3	22.4	22.8	23.3	22.0	22.4	22.5	22.9	23.5
6H	22.7	23.1	23.3	23.6	24.2	22.9	23.2	23.4	23.8	24.4
8H	23.2	23.5	23.7	24.0	24.6	23.3	23.6	23.9	24.2	24.8
Variations with the observer position at spacings:										
S=1.0H	+0.6/-0.4					+0.7/-0.4				
S=1.5H	+1.2/-0.7					+1.5/-0.7				
S=2.0H	+2.1/-0.9					+2.4/-1.1				

Calculate in accordance with CIE Pub.117. The table is revised with 58182lm ( $8\log(F/F_0) = 14.1$ ).

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 = 0.75									
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	0.81	0.86	0.91	0.94	0.98	1.01	1.03	1.06	1.08	
	0.30		0.76	0.82	0.86	0.89	0.94	0.97	1.00	1.03	1.05	
	0.20		0.72	0.78	0.82	0.86	0.91	0.94	0.97	1.01	1.03	
0.50	0.50	0.20	0.79	0.84	0.88	0.91	0.94	0.97	0.99	1.01	1.03	
	0.30		0.74	0.80	0.84	0.87	0.91	0.94	0.96	0.99	1.01	
	0.20		0.71	0.77	0.81	0.84	0.88	0.91	0.94	0.97	0.99	
0.30	0.50	0.20	0.77	0.82	0.85	0.88	0.91	0.93	0.95	0.97	0.98	
	0.30		0.73	0.78	0.82	0.84	0.88	0.91	0.92	0.95	0.96	
	0.20		0.71	0.76	0.79	0.82	0.86	0.88	0.91	0.93	0.95	
0.00	0.00	0.00	0.68	0.73	0.76	0.78	0.82	0.84	0.86	0.88	0.89	
Rating:399W 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 = 0.75									
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	0.53	0.45	0.40	0.32	0.27	0.23	0.18	0.15	
	0.30		0.53	0.45	0.39	0.35	0.29	0.25	0.21	0.17	0.14	
	0.20		0.45	0.39	0.35	0.31	0.26	0.23	0.20	0.16	0.14	
0.50	0.50	0.20	0.59	0.49	0.42	0.37	0.30	0.28	0.21	0.17	0.14	
	0.30		0.50	0.42	0.37	0.33	0.27	0.23	0.20	0.16	0.13	
	0.20		0.43	0.38	0.33	0.30	0.25	0.21	0.19	0.15	0.13	
0.30	0.50	0.20	0.56	0.46	0.39	0.34	0.27	0.23	0.19	0.15	0.13	
	0.30		0.48	0.40	0.35	0.31	0.25	0.21	0.18	0.15	0.12	
	0.20		0.42	0.36	0.32	0.28	0.23	0.20	0.17	0.14	0.12	
0.00	0.00	0.00	0.28	0.23	0.20	0.18	0.14	0.12	0.11	0.08	0.07	
Rating:399W 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 = 0.75									
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	0.19	0.20	0.21	0.22	0.24	0.25	0.25	0.26	0.26	
	0.30		0.14	0.16	0.18	0.19	0.21	0.22	0.23	0.24	0.25	
	0.20		0.11	0.13	0.15	0.16	0.18	0.19	0.20	0.22	0.23	
0.50	0.50	0.20	0.18	0.20	0.21	0.22	0.23	0.24	0.24	0.25	0.25	
	0.30		0.14	0.16	0.17	0.18	0.20	0.21	0.22	0.23	0.24	
	0.20		0.11	0.13	0.14	0.16	0.17	0.19	0.20	0.21	0.22	
0.30	0.50	0.20	0.17	0.19	0.20	0.21	0.22	0.23	0.23	0.24	0.24	
	0.30		0.14	0.15	0.17	0.18	0.19	0.20	0.21	0.22	0.23	
	0.20		0.11	0.13	0.14	0.15	0.17	0.18	0.19	0.21	0.22	
0.00	0.00	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Rating:399W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												