

Report No.: 1

Test Time: 17.01.2020 15:22

## Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 100 DALI 44LED 500W 5000K 60x150gr.

Luminous Length (mm): 545 mm

Luminous Width (mm): 210 mm

Luminous Height (mm): 338 mm

Voltage: 220.7 V

Current: 2.279 A

Power: 501.70 W

Power Factor: 0.988

## Photometric Results

CIE Class: Direct

Total Rated Lamp Lumens: 72955.8 lm

Measurement Flux: 72955.8 lm

Efficiency: 100%

Downward Ratio: 99%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 104.9, 141.7, 126.7, 125.4

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 44.3, 131.2, 82.4, 58.1

Luminaire Efficacy Rating (LER): 145.47

Central Intensity: 19481.36 cd

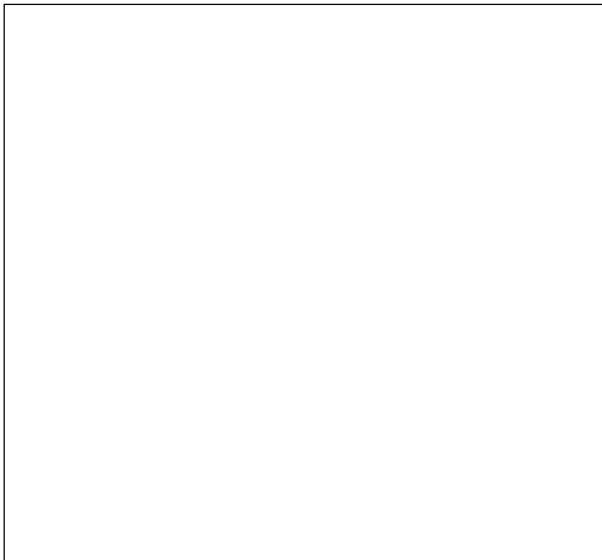
Max. Intensity: 42136.06 cd

Pos of Max. Intensity: H135 V35

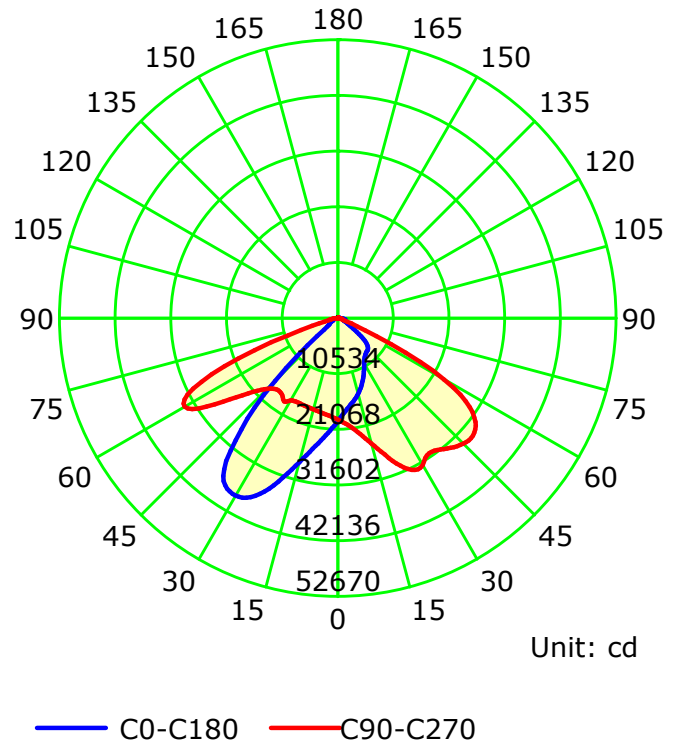
S/MH(C0/C180): 1.61

S/MH(C90/C270): 1.94

Picture Of Luminaire



Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 22.5

Gamma Plane (°):0.0-180.0:1.0

Test Lab:

Test Device: LSG-1800B

Test Type: TYPE C

Distance: 12.677 m

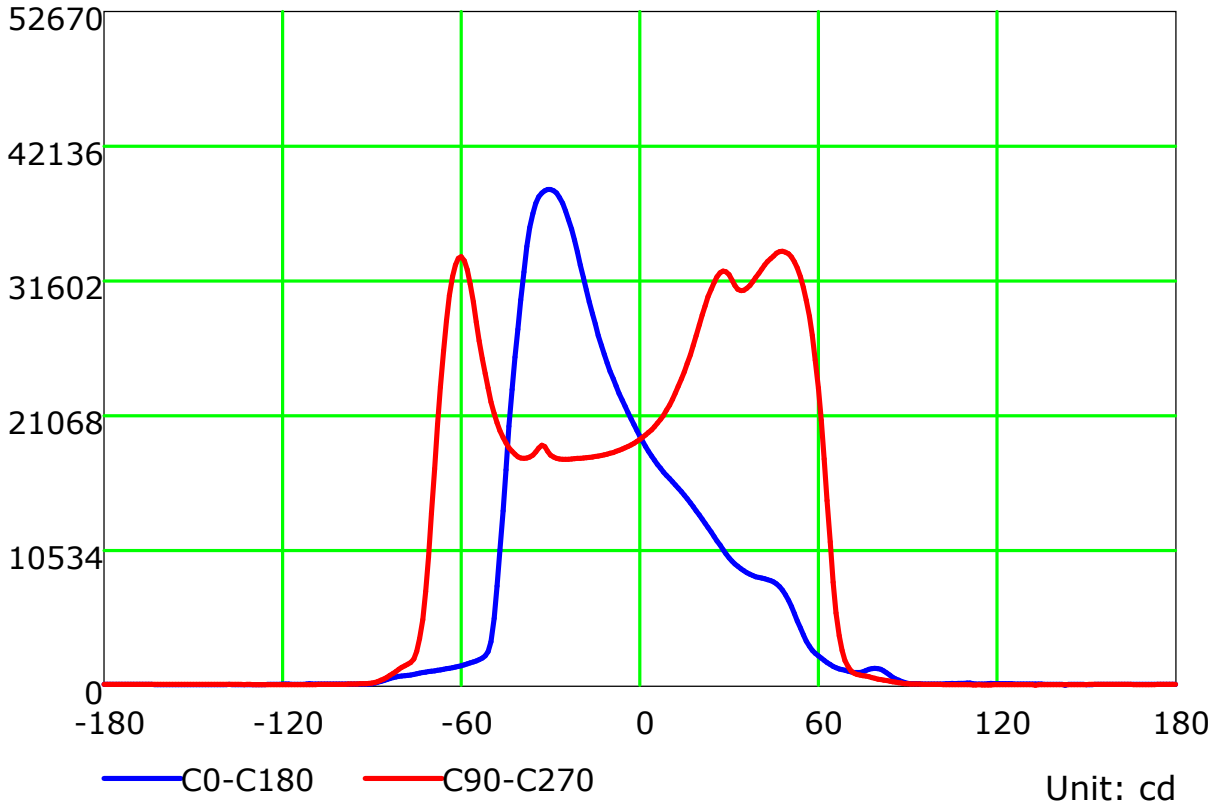
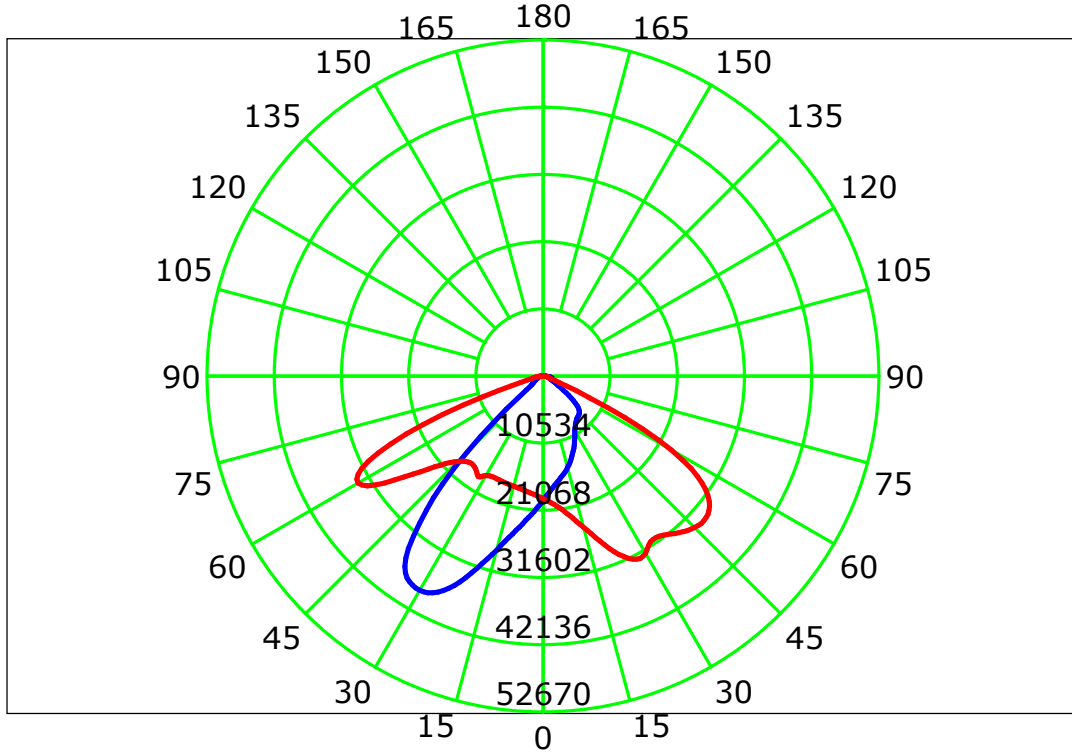
Temperature:

Humidity:

Operator:

Inspector:

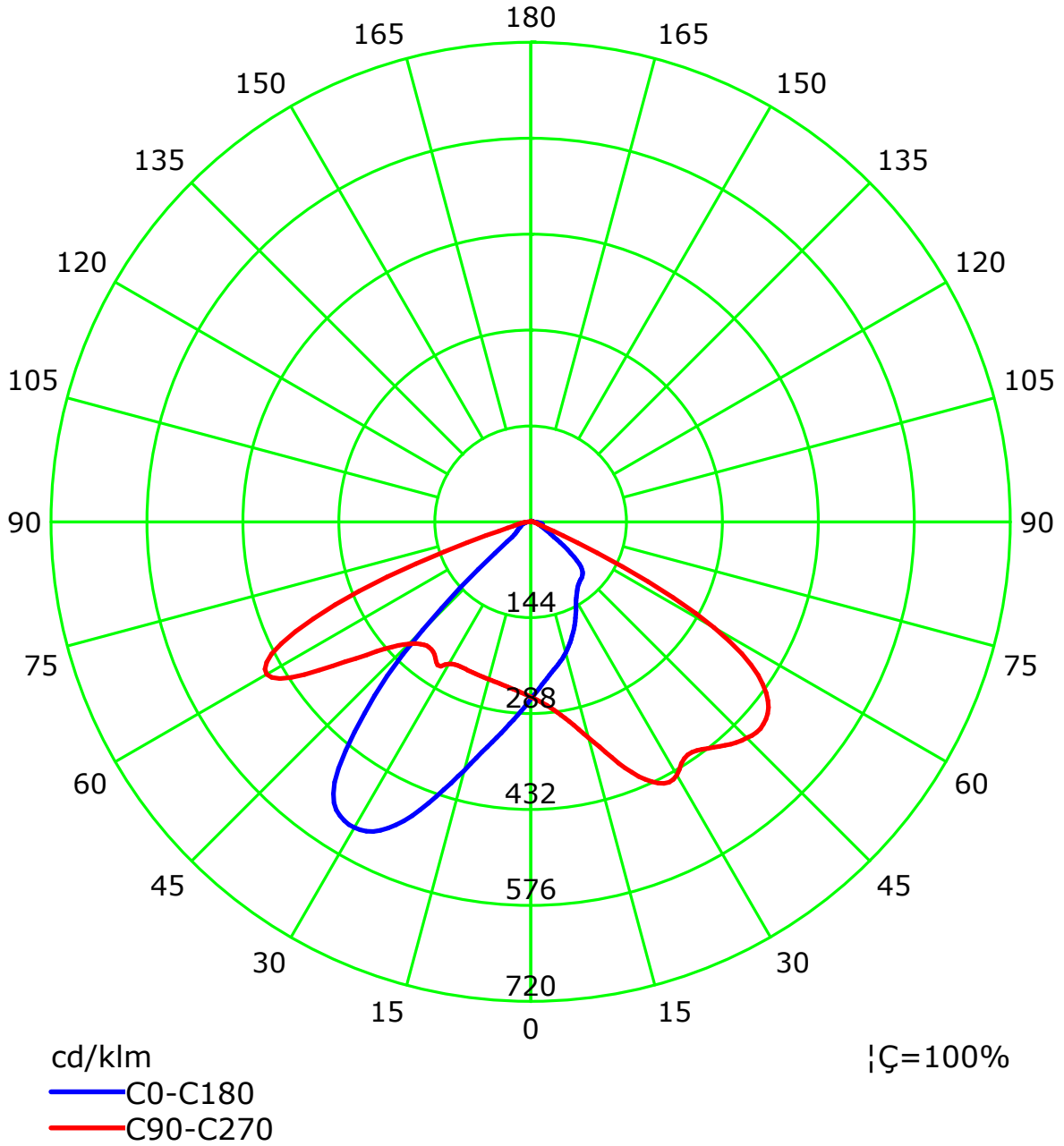
## Luminous Intensity Distribution Curve



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

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: LSG-1800B  
 Distance: 12.677 m  
 Humidity:  
 Inspector:

## Luminous Intensity Distribution Curve(cd/klm)



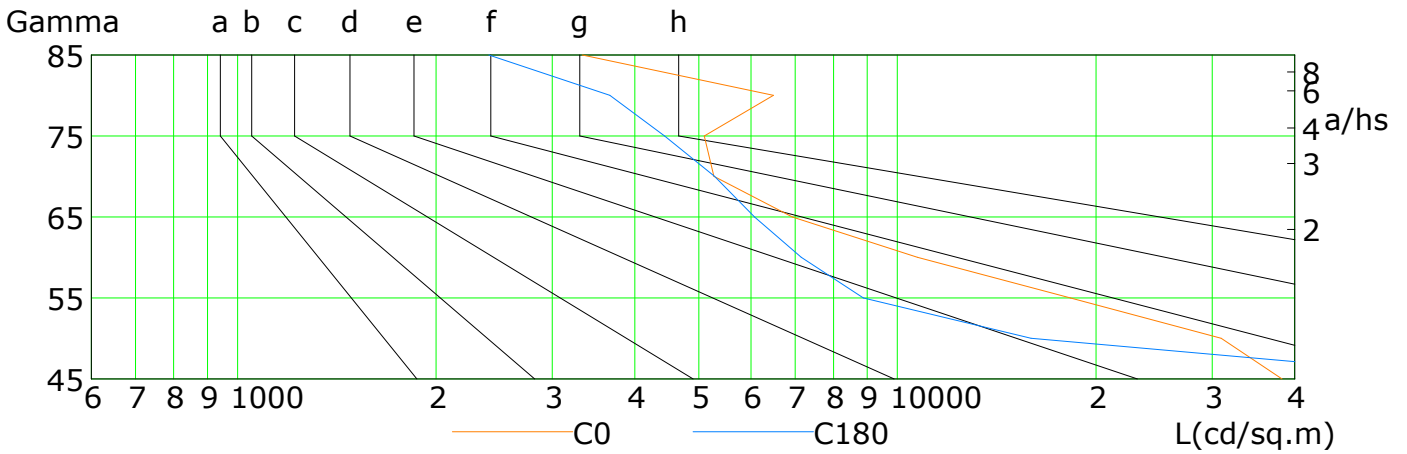
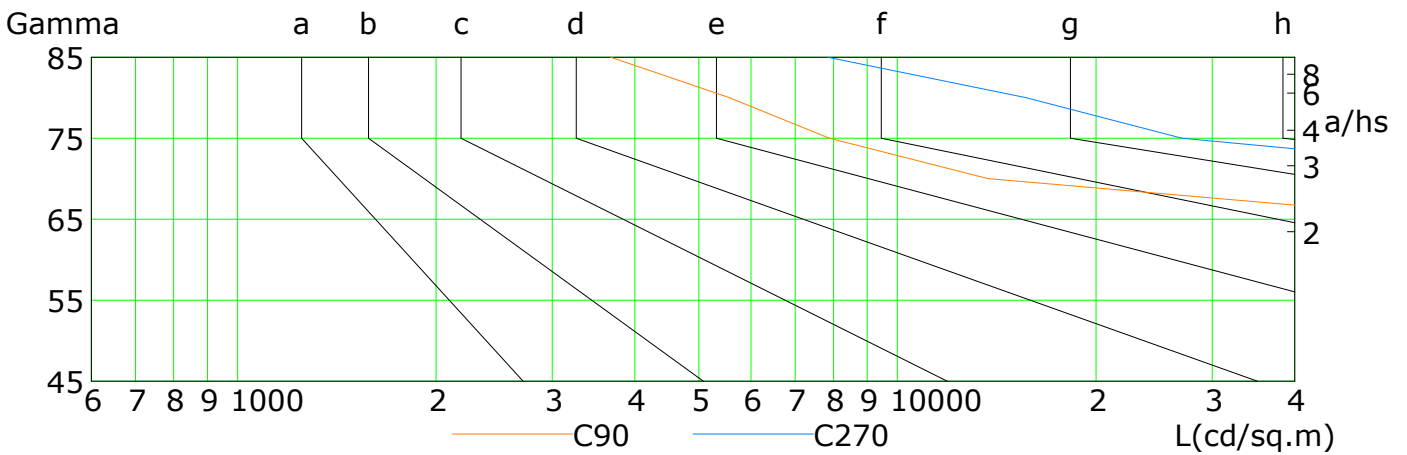
C Plane (°):0.0-360.0: 22.5  
Test Lab:  
Test Type: TYPE C  
Temperature:  
Operator:

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)							
		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

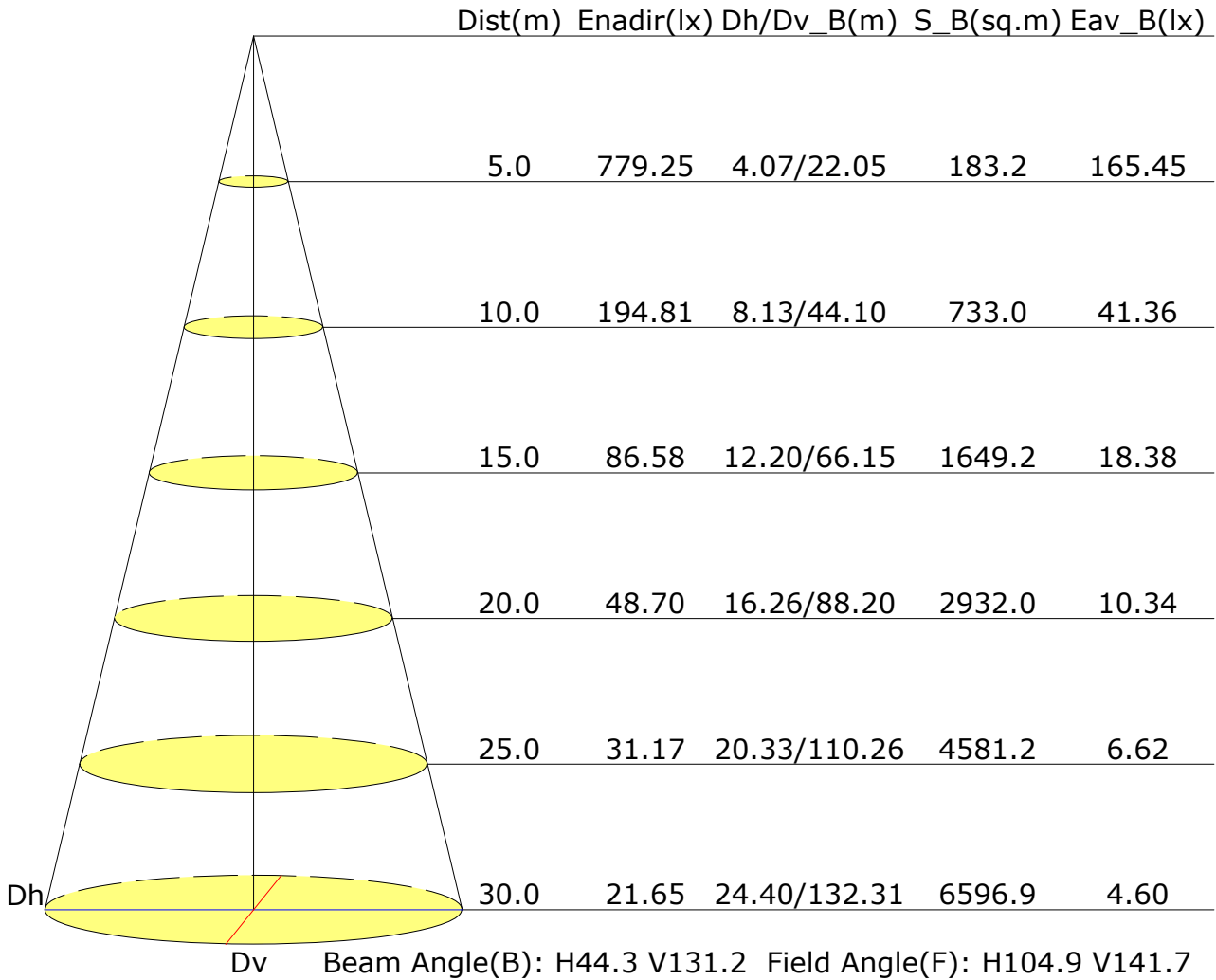


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	38290	30956	18285	10724	6932	5272	5098	6484	3332
C90	256016	263653	251448	196001	71698	13715	7885	5560	3680
C180	79760	15942	8876	7148	6071	5281	4435	3668	2405
C270	144498	173092	229515	282309	253084	126948	27023	15648	7841

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



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:

## 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	20.9	22.2	21.2	22.5	22.7	31.0	32.3	31.3	32.6	32.8
3H	20.9	22.1	21.3	22.4	22.7	32.1	33.2	32.4	33.5	33.8
4H	21.0	22.1	21.3	22.4	22.7	32.0	33.1	32.4	33.4	33.8
6H	21.1	22.2	21.5	22.5	22.8	32.0	33.0	32.3	33.3	33.6
8H	21.2	22.2	21.6	22.5	22.9	31.9	32.9	32.3	33.3	33.6
12H	21.3	22.2	21.7	22.6	22.9	31.9	32.8	32.3	33.2	33.5
X=4H Y=2H	22.3	23.5	22.7	23.8	24.1	30.9	32.0	31.2	32.3	32.6
3H	22.4	23.3	22.8	23.7	24.0	31.9	32.9	32.3	33.2	33.6
4H	22.5	23.3	22.9	23.7	24.0	31.9	32.8	32.3	33.1	33.5
6H	22.6	23.3	23.0	23.7	24.2	31.9	32.6	32.3	33.0	33.4
8H	22.7	23.4	23.1	23.8	24.2	31.8	32.5	32.3	32.9	33.4
12H	22.8	23.4	23.2	23.8	24.2	31.8	32.4	32.3	32.8	33.3
X=8H Y=4H	22.6	23.2	23.0	23.6	24.1	31.8	32.5	32.3	32.9	33.3
6H	22.8	23.3	23.2	23.7	24.2	31.8	32.3	32.3	32.8	33.2
8H	22.9	23.4	23.4	23.8	24.3	31.8	32.2	32.2	32.7	33.2
12H	23.0	23.4	23.5	23.9	24.4	31.7	32.1	32.2	32.6	33.1
X=12H Y=4H	22.5	23.1	23.0	23.6	24.0	31.8	32.4	32.2	32.8	33.3
6H	22.8	23.2	23.2	23.7	24.2	31.7	32.2	32.2	32.7	33.2
8H	22.9	23.3	23.4	23.8	24.3	31.7	32.1	32.2	32.6	33.1
Variations with the observer position at spacings:										
S=1.0H	+0.6/-1.3					+0.7/-0.8				
S=1.5H	+1.6/-3.9					+2.5/-2.8				
S=2.0H	+2.4/-5.7					+4.3/-6.1				

Calculate in accordance with CIE Pub.117. The table is revised with 72956lm ( $8\log(F/F_0) = 14.9$ ).

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 = 1.75									
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	NA	0.75	0.82	0.87	0.94	0.98	1.01	1.04	1.06	
	0.30		NA	0.69	0.76	0.81	0.89	0.93	0.97	1.01	1.04	
	0.20		NA	0.64	0.71	0.77	0.85	0.90	0.93	0.98	1.01	
0.50	0.50	0.20	NA	0.73	0.80	0.85	0.91	0.94	0.97	1.00	1.02	
	0.30		NA	0.68	0.75	0.80	0.87	0.91	0.94	0.97	1.00	
	0.20		NA	0.63	0.70	0.76	0.83	0.88	0.91	0.95	0.98	
0.30	0.50	0.20	NA	0.71	0.78	0.82	0.88	0.91	0.93	0.96	0.98	
	0.30		NA	0.67	0.73	0.78	0.84	0.88	0.91	0.94	0.96	
	0.20		NA	0.63	0.69	0.75	0.81	0.86	0.88	0.92	0.95	
0.00	0.00	0.00	NA	0.60	0.67	0.72	0.78	0.82	0.84	0.88	0.90	
<p>Rating:502W 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 = 1.75									
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	NA	0.69	0.58	0.50	0.38	0.32	0.27	0.21	0.17	
	0.30		NA	0.59	0.51	0.44	0.35	0.29	0.25	0.20	0.16	
	0.20		NA	0.52	0.45	0.39	0.32	0.27	0.23	0.18	0.15	
0.50	0.50	0.20	NA	0.66	0.55	0.47	0.36	0.34	0.25	0.19	0.16	
	0.30		NA	0.58	0.49	0.42	0.33	0.28	0.24	0.18	0.15	
	0.20		NA	0.51	0.44	0.38	0.31	0.26	0.22	0.18	0.15	
0.30	0.50	0.20	NA	0.63	0.53	0.45	0.34	0.28	0.24	0.18	0.15	
	0.30		NA	0.56	0.47	0.41	0.32	0.26	0.23	0.17	0.14	
	0.20		NA	0.50	0.43	0.37	0.30	0.25	0.21	0.17	0.14	
0.00	0.00	0.00	0.99	0.39	0.33	0.28	0.21	0.18	0.15	0.12	0.09	
<p>Rating:502W 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 = 1.75								
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	NA	0.17	0.18	0.19	0.20	0.20	0.21	0.22	0.22
	0.30		NA	0.12	0.13	0.14	0.16	0.17	0.18	0.19	0.20
	0.20		NA	0.08	0.09	0.11	0.13	0.14	0.15	0.17	0.18
0.50	0.50	0.20	NA	0.17	0.17	0.18	0.19	0.20	0.20	0.21	0.21
	0.30		NA	0.11	0.13	0.14	0.15	0.16	0.17	0.18	0.19
	0.20		NA	0.07	0.09	0.10	0.12	0.14	0.15	0.17	0.18
0.30	0.50	0.20	NA	0.16	0.17	0.17	0.18	0.19	0.19	0.20	0.20
	0.30		NA	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.19
	0.20		NA	0.07	0.09	0.10	0.12	0.14	0.15	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:502W Photometrically tested without ceiling board.                      Multiply UF values by service correction factors                      Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>											