

Report No.: 1

Test Time: 05.03.2020 11:56

## Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 100 36LED 300W 5000K 20gr. DALI

Luminous Length (mm): 355

Luminous Width (mm): 210

Luminous Height (mm): 338

Voltage: 229.2 V

Current: 1.302 A

Power: 294.17 W

Power Factor: 0.984

## Photometric Results

CIE Class: Direct

Measurement Flux: 44730.9 lm

Total Rated Lamp Lumens: 44730.9 lm

Efficiency: 100%

Downward Ratio: 96%

Upward Ratio: 4%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 47.6, 44.7, 49.9, 48.7

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 22.8, 22.8, 23.3, 22.4

Luminaire Efficacy Rating (LER): 152.11

Central Intensity: 149813.27 cd

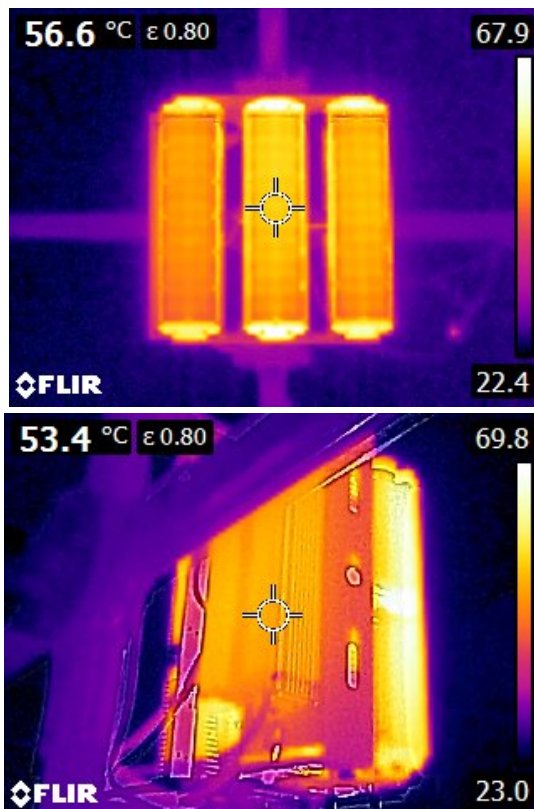
Max. Intensity: 152740.71 cd

Pos of Max. Intensity: H135 V0

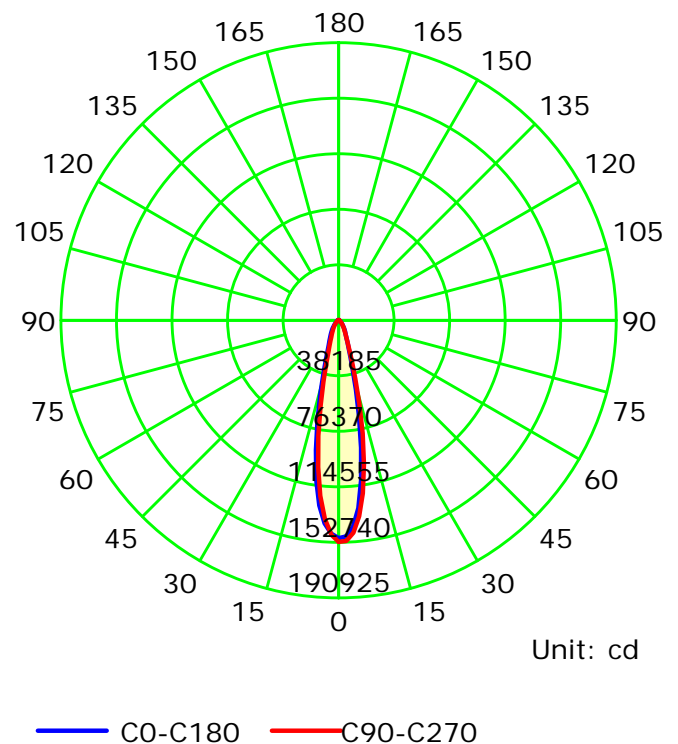
S/MH(C0/C180): 0.39

S/MH(C90/C270): 0.39

Picture Of Luminaire



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

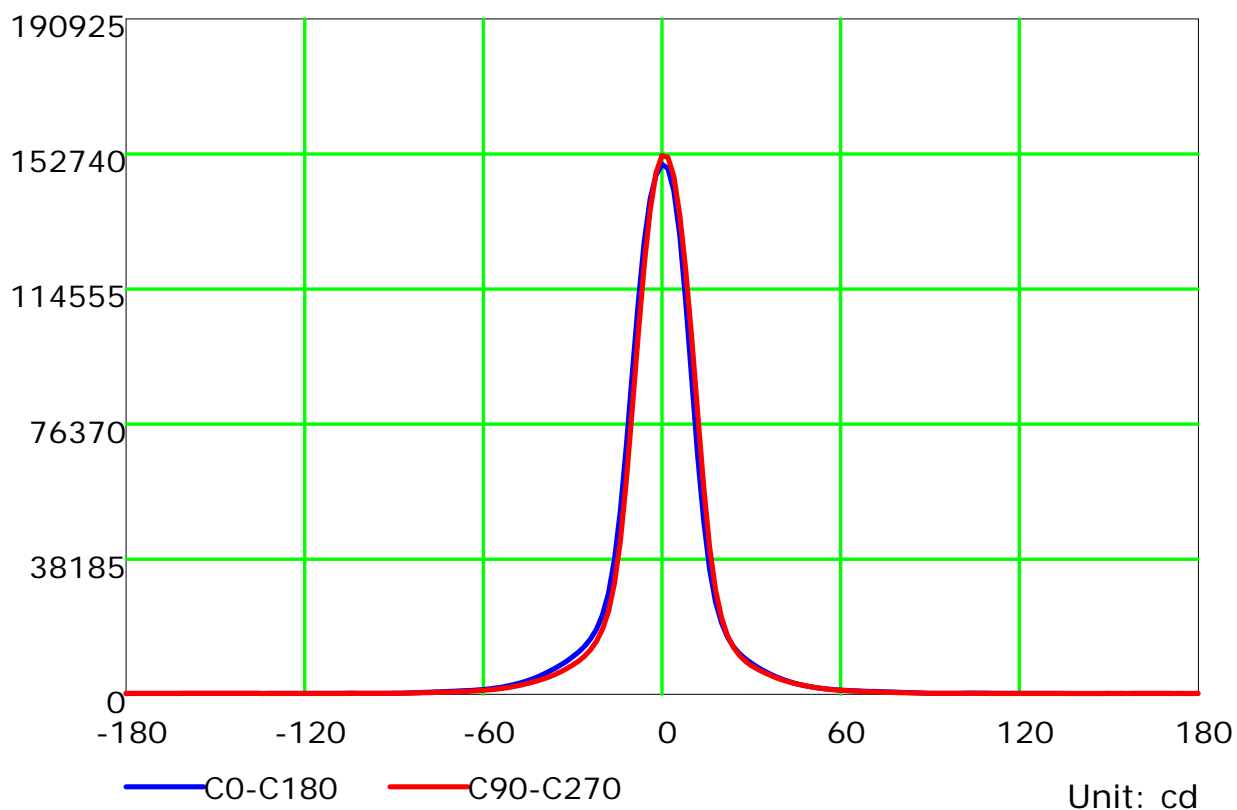
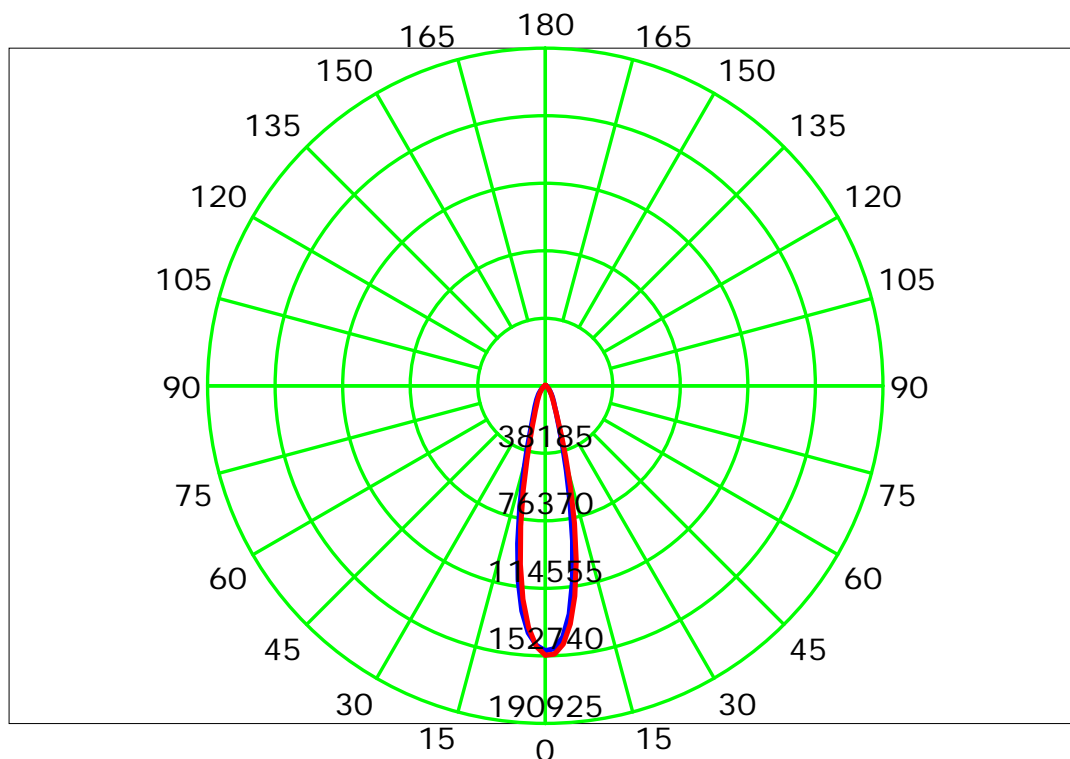
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

## Luminous Intensity Distribution Curve



C Plane (°): 0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°): 0.0-180.0: 2.0

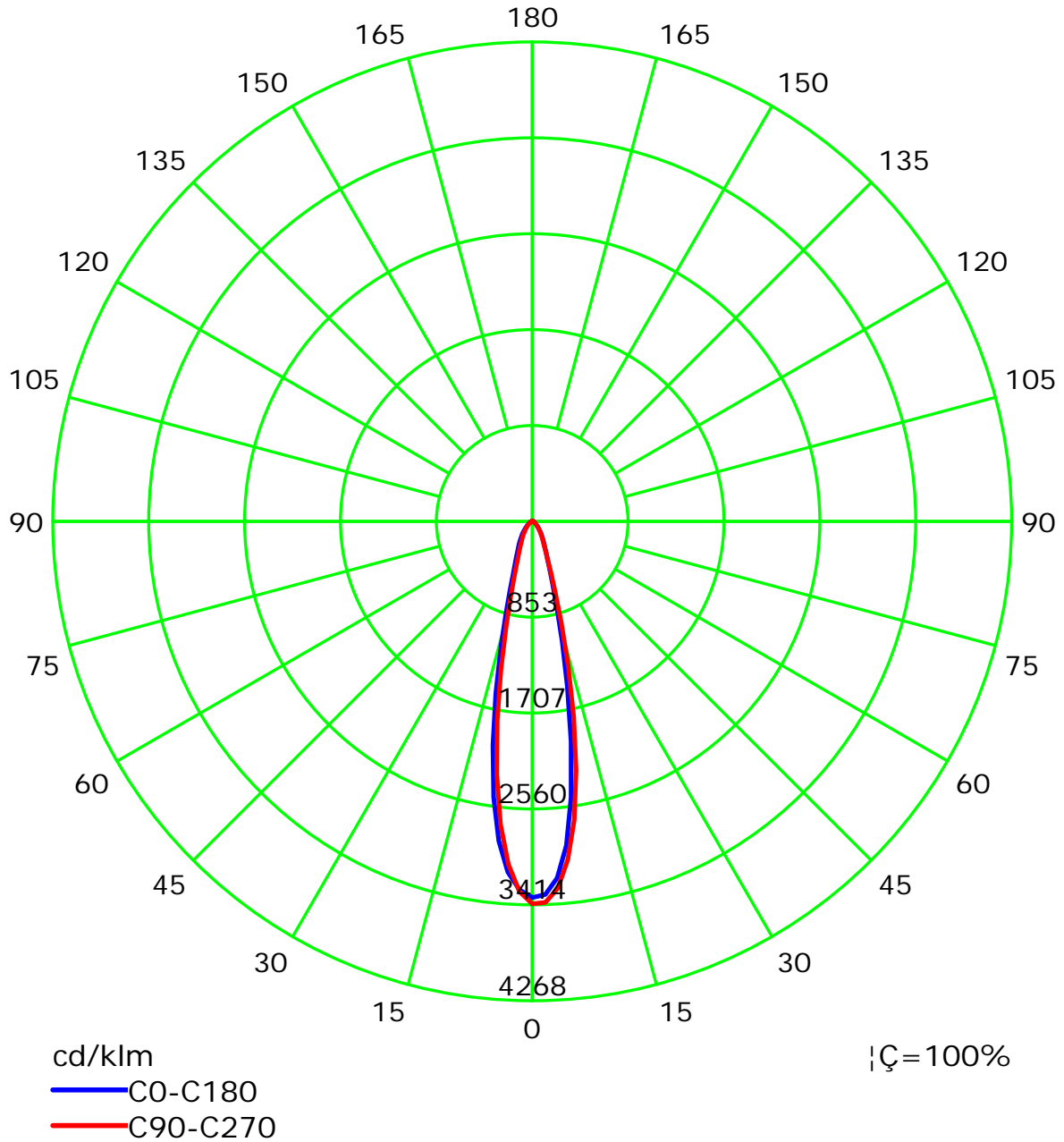
Test Device: LSG-1800B

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

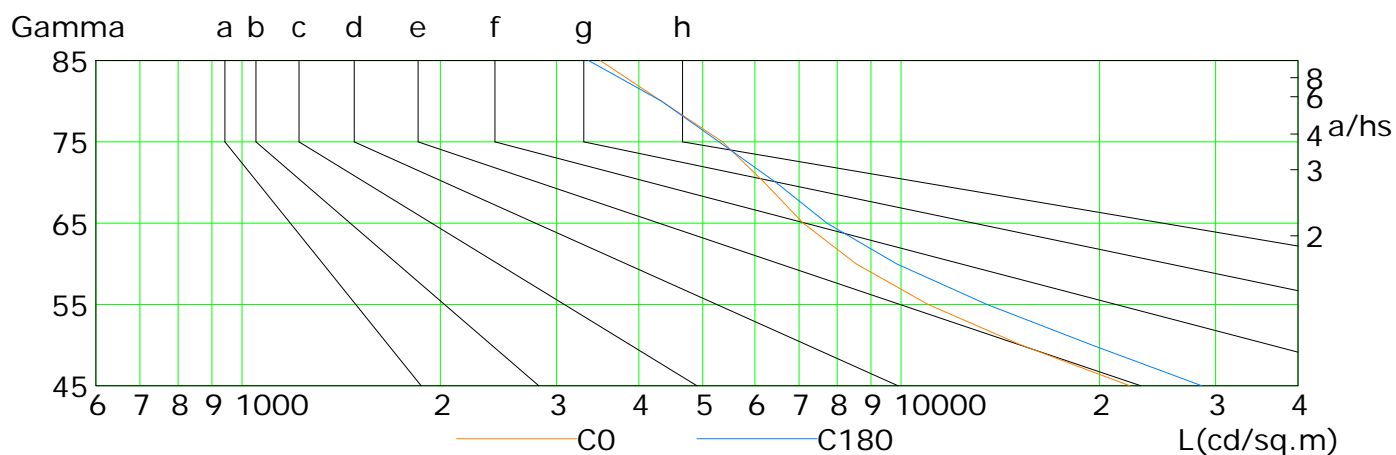
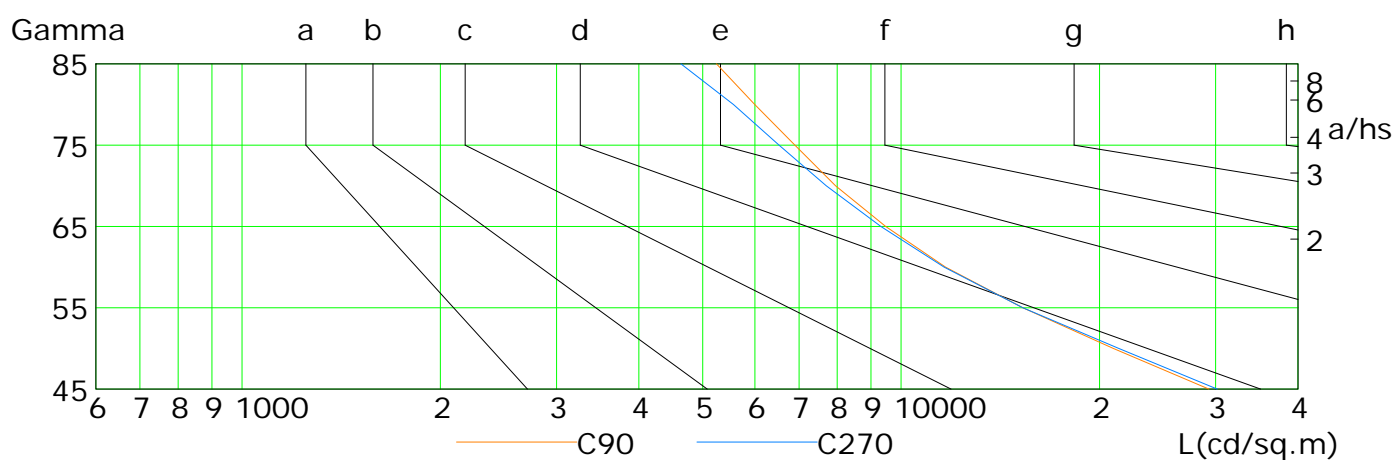
Humidity:

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	22227	15225	10985	8545	7105	6203	5359	4330	3496
C90	29310	20986	15297	11679	9472	7954	6900	5996	5247
C180	28590	19497	13501	9843	7716	6459	5293	4330	3355
C270	30172	21391	15297	11619	9318	7697	6529	5568	4634

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

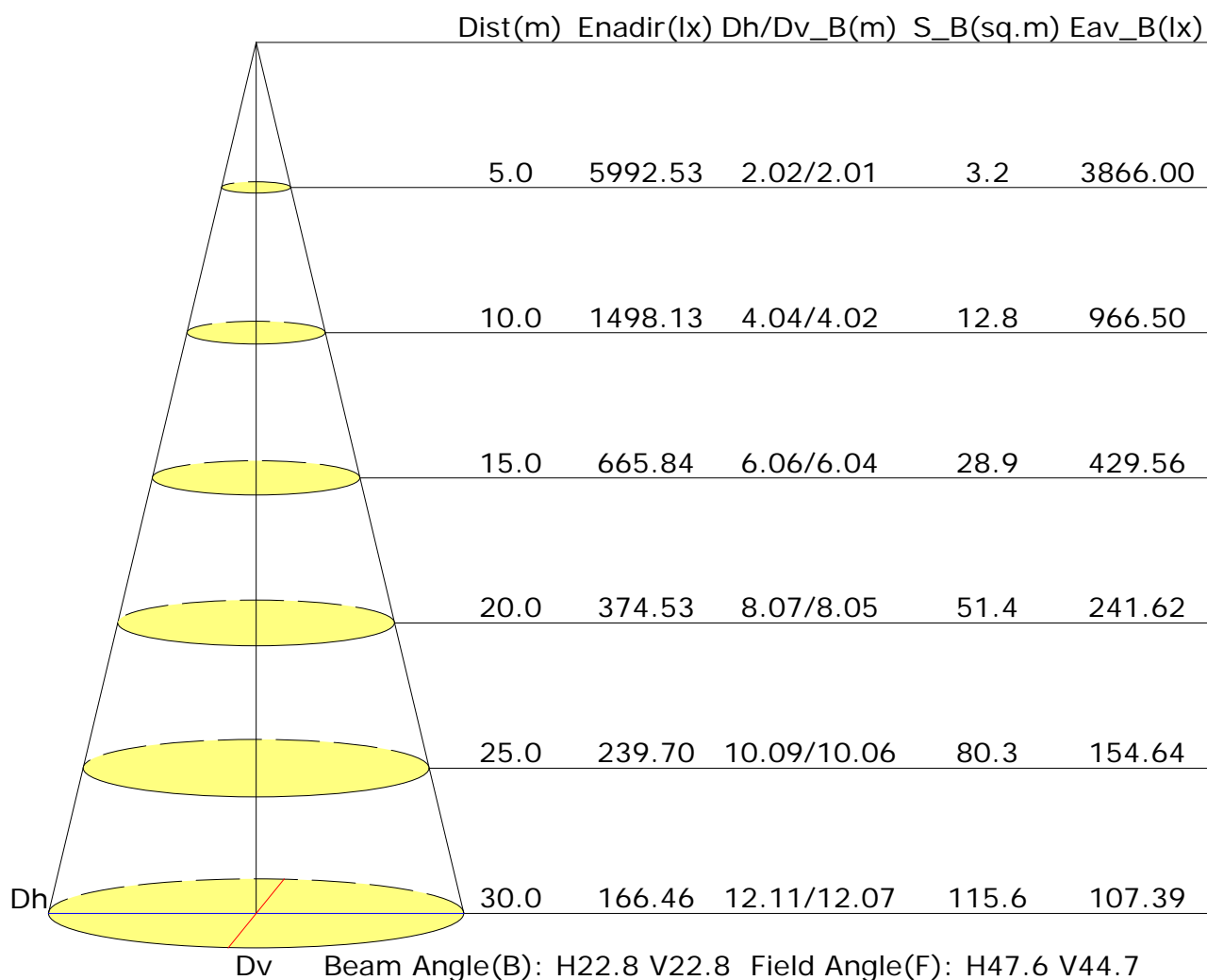
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

## Illuminance at a Distance



## 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	18.1	18.9	18.4	19.1	19.4	18.8	19.6	19.1	19.9	20.1
3H	18.5	19.2	18.8	19.5	19.8	19.2	19.9	19.5	20.2	20.5
4H	18.7	19.4	19.1	19.7	20.1	19.3	20.0	19.7	20.4	20.7
6H	18.9	19.6	19.3	19.9	20.3	19.5	20.2	19.9	20.5	20.9
8H	19.0	19.7	19.4	20.0	20.4	19.6	20.2	20.0	20.6	21.0
12H	19.1	19.7	19.5	20.1	20.5	19.7	20.3	20.1	20.7	21.1
X=4H Y=2H	18.3	19.0	18.7	19.3	19.7	18.9	19.6	19.3	19.9	20.3
3H	18.9	19.5	19.3	19.8	20.2	19.4	20.0	19.9	20.4	20.8
4H	19.2	19.7	19.6	20.1	20.6	19.7	20.3	20.2	20.7	21.1
6H	19.5	20.0	20.0	20.4	20.9	20.0	20.5	20.5	20.9	21.4
8H	19.6	20.1	20.1	20.5	21.0	20.1	20.6	20.6	21.0	21.5
12H	19.8	20.2	20.3	20.6	21.2	20.3	20.7	20.8	21.2	21.7
X=8H Y=4H	19.3	19.7	19.8	20.2	20.7	19.8	20.2	20.3	20.7	21.2
6H	19.7	20.0	20.2	20.5	21.1	20.2	20.5	20.7	21.0	21.5
8H	19.9	20.2	20.4	20.7	21.3	20.4	20.7	20.9	21.2	21.8
12H	20.1	20.4	20.7	20.9	21.5	20.6	20.9	21.2	21.4	22.0
X=12H Y=4H	19.3	19.7	19.8	20.1	20.7	19.7	20.1	20.3	20.6	21.1
6H	19.7	20.0	20.3	20.5	21.1	20.2	20.5	20.7	21.0	21.6
8H	20.0	20.2	20.5	20.8	21.4	20.4	20.7	21.0	21.2	21.8
Variations with the observer position at spacings:										
S=1.0H	+1.1/-1.2					+0.9/-1.3				
S=1.5H	+2.0/-2.0					+1.9/-2.1				
S=2.0H	+3.4/-2.6					+3.3/-2.7				

Calculate in accordance with CIE Pub.117. The table is revised with 44731lm ( $8\log(F/F_0) = 13.2$ ).

C Plane (°):0.0-360.0: 22.5

Test Lab:

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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)

Utilisation Factors UF(F)			SHR NOM = 0.50									
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	0.87	0.92	0.95	1.00	1.03	1.05	1.08	1.10	
	0.30		0.76	0.82	0.87	0.91	0.96	0.99	1.02	1.05	1.07	
	0.20		0.72	0.79	0.84	0.87	0.93	0.96	0.99	1.03	1.05	
0.50	0.50	0.20	0.79	0.85	0.89	0.92	0.96	0.99	1.01	1.03	1.05	
	0.30		0.75	0.81	0.85	0.89	0.93	0.96	0.98	1.01	1.03	
	0.20		0.71	0.78	0.82	0.86	0.90	0.94	0.96	0.99	1.01	
0.30	0.50	0.20	0.78	0.83	0.87	0.90	0.93	0.95	0.97	0.99	1.00	
	0.30		0.74	0.80	0.84	0.87	0.91	0.93	0.95	0.97	0.99	
	0.20		0.71	0.77	0.81	0.84	0.88	0.91	0.93	0.96	0.98	
0.00	0.00	0.00	0.69	0.74	0.78	0.81	0.84	0.87	0.88	0.91	0.92	
Rating: 294W 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 = 0.50									
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	0.65	0.53	0.45	0.39	0.31	0.26	0.22	0.17	0.14	
	0.30		0.54	0.46	0.39	0.35	0.28	0.24	0.21	0.16	0.14	
	0.20		0.46	0.40	0.35	0.31	0.26	0.22	0.19	0.15	0.13	
0.50	0.50	0.20	0.61	0.50	0.42	0.36	0.29	0.28	0.20	0.16	0.13	
	0.30		0.52	0.43	0.37	0.33	0.26	0.22	0.19	0.15	0.12	
	0.20		0.45	0.38	0.33	0.30	0.24	0.21	0.18	0.14	0.12	
0.30	0.50	0.20	0.58	0.47	0.39	0.34	0.27	0.22	0.19	0.15	0.12	
	0.30		0.50	0.41	0.35	0.31	0.25	0.21	0.18	0.14	0.11	
	0.20		0.43	0.37	0.32	0.28	0.23	0.19	0.17	0.13	0.11	
0.00	0.00	0.00	0.30	0.24	0.20	0.18	0.14	0.12	0.10	0.08	0.06	
Rating: 294W 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 = 0.50									
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	0.19	0.20	0.21	0.22	0.23	0.24	0.25	0.25	
	0.30		0.13	0.15	0.16	0.17	0.19	0.20	0.21	0.23	0.23	
	0.20		0.10	0.11	0.13	0.14	0.16	0.18	0.19	0.21	0.22	
0.50	0.50	0.20	0.17	0.18	0.19	0.20	0.21	0.22	0.23	0.23	0.24	
	0.30		0.13	0.14	0.16	0.17	0.18	0.20	0.21	0.22	0.23	
	0.20		0.10	0.11	0.13	0.14	0.16	0.18	0.19	0.20	0.21	
0.30	0.50	0.20	0.16	0.18	0.19	0.19	0.21	0.21	0.22	0.23	0.23	
	0.30		0.12	0.14	0.15	0.16	0.18	0.19	0.20	0.21	0.22	
	0.20		0.09	0.11	0.13	0.14	0.16	0.17	0.18	0.20	0.20	
0.00	0.00	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	
Rating: 294W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												