

Report No.: 1

Test Time: 25.02.2020 22:39

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 100 44LED 300W 5000K 60x150 gr.

Number of Lamps: 1

Luminous Length (mm): 338

Luminous Width (mm): 335

Luminous Height (mm): 210

Voltage: 229.6 V

Current: 1.336 A

Power: 298.08 W

Power Factor: 0.972

Photometric Results

CIE Class: Direct

Total Rated Lamp Lumens: 46835.3 lm

Measurement Flux: 46835.3 lm

Efficiency: 100%

Downward Ratio: 99%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 106.6, 146.5, 128.6, 127.8

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 49.3, 133.6, 62.7, 60.2

Luminaire Efficacy Rating (LER): 157.17

Central Intensity: 12810.14 cd

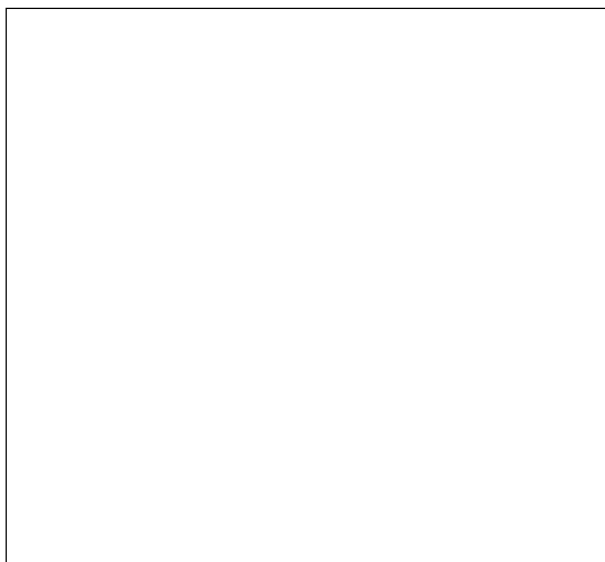
Max. Intensity: 23897.68 cd

Pos of Max. Intensity: H135 V32

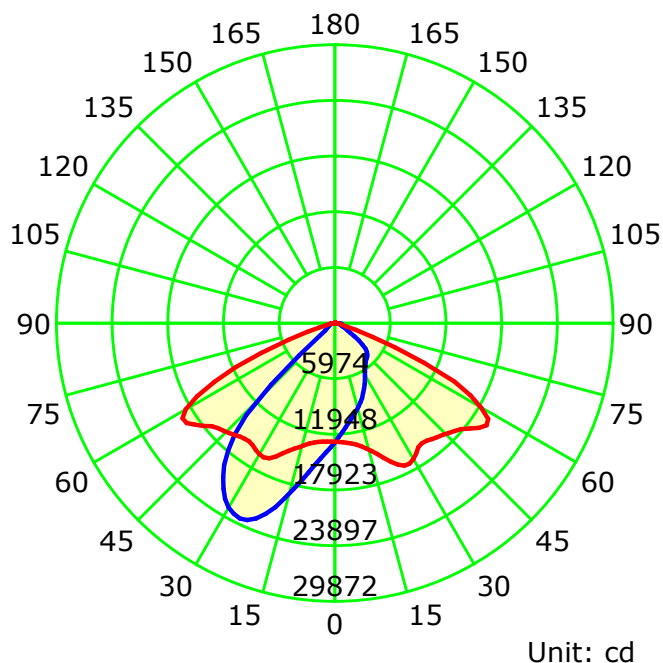
S/MH(C0/C180): 1.51

S/MH(C90/C270): 1.88

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 22.5

Gamma Plane (°):0.0-180.0:2.0

Test Lab:

Test Device: LSG-1800B

Test Type: TYPE C

Distance: 12.677 m

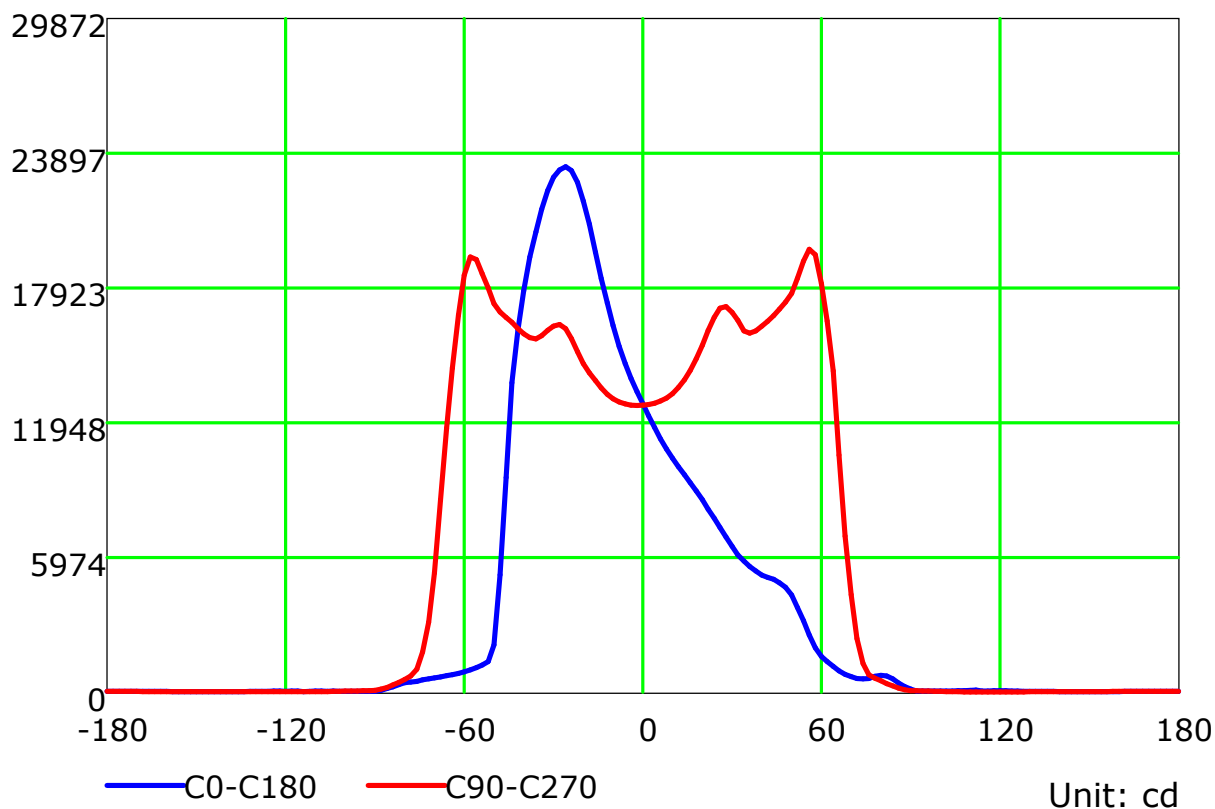
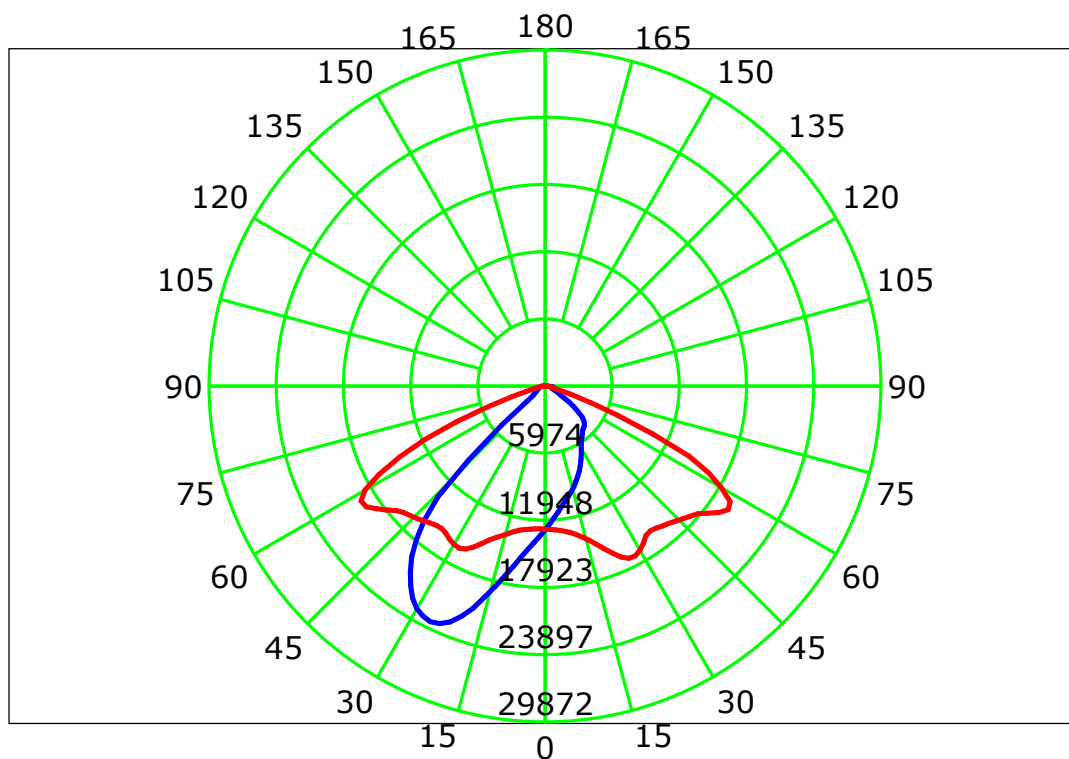
Temperature:

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 (°):0.0-180.0:2.0

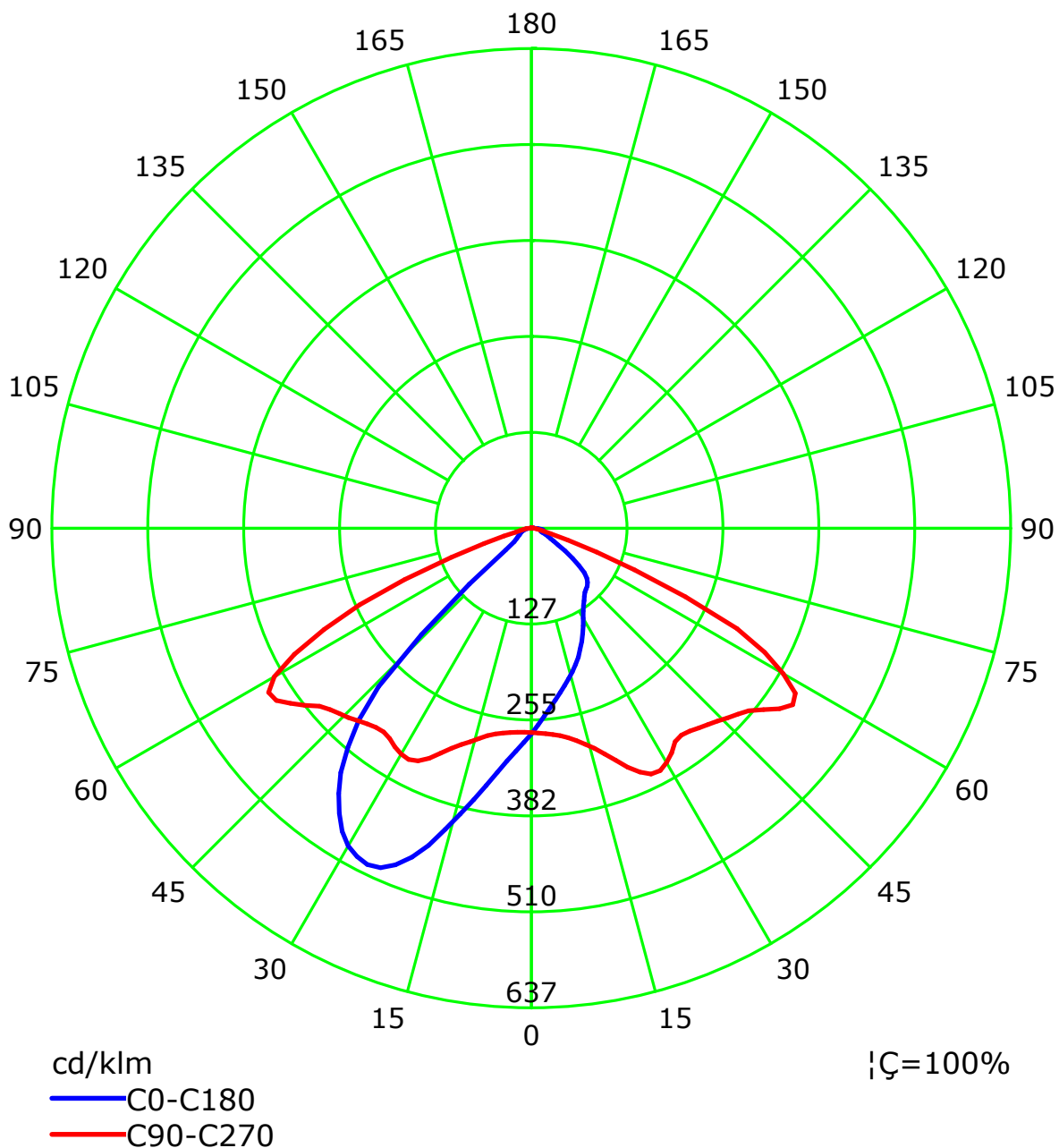
Test Device: LSG-1800B

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

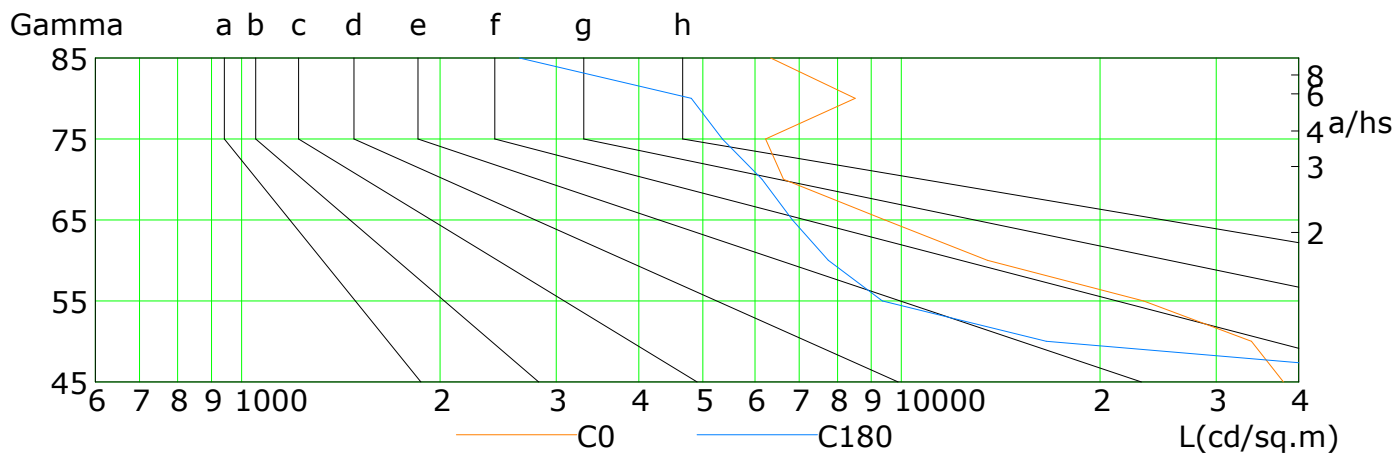
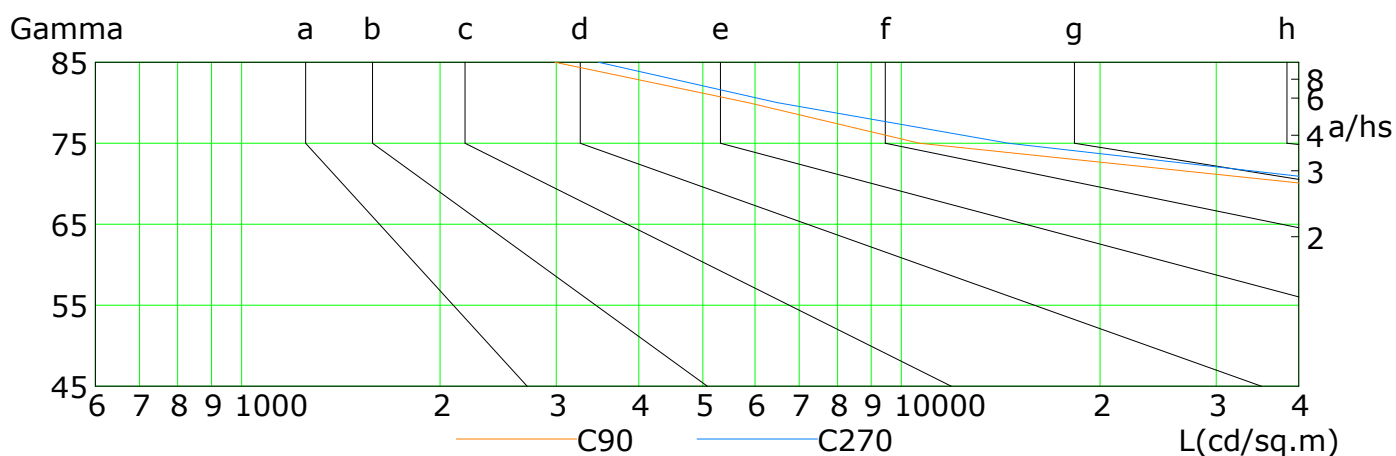
Humidity:

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	37919	33932	23274	13501	9438	6627	6222	8512	6340
C90	129817	139636	158144	154247	111021	41299	10649	5853	2984
C180	89246	16586	9360	7749	6840	6151	5352	4803	2636
C270	127227	136097	153994	157385	116879	50584	14531	6483	3476

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

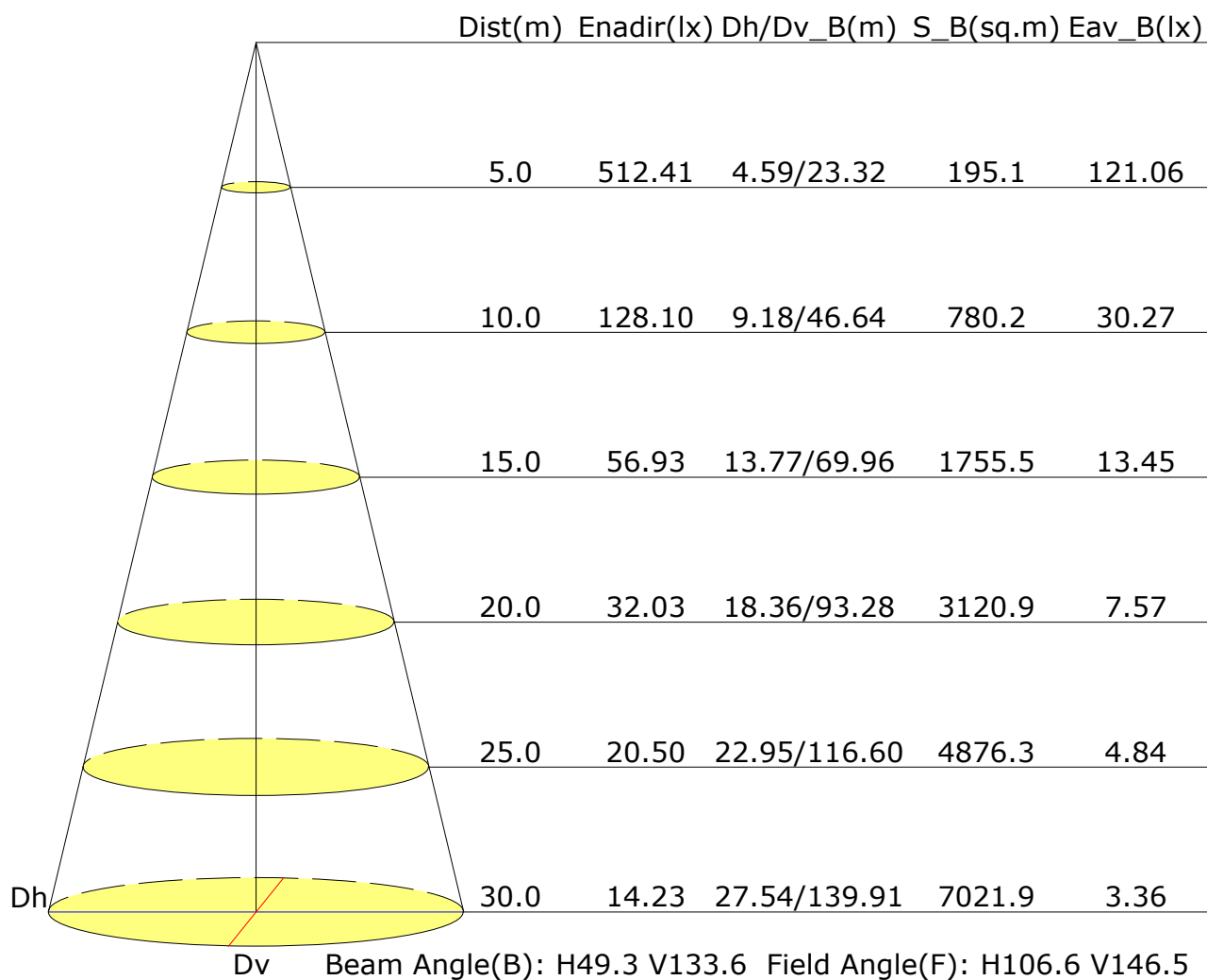
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Illuminance at a Distance



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:

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	21.0	22.3	21.3	22.6	22.8	30.1	31.4	30.4	31.6	31.9
3H	21.1	22.3	21.4	22.6	22.9	30.9	32.1	31.3	32.4	32.7
4H	21.2	22.3	21.5	22.6	22.9	30.9	32.0	31.2	32.3	32.6
6H	21.3	22.3	21.7	22.7	23.0	30.8	31.9	31.2	32.2	32.5
8H	21.4	22.4	21.8	22.8	23.1	30.8	31.8	31.2	32.1	32.4
12H	21.5	22.5	21.9	22.8	23.2	30.7	31.7	31.1	32.0	32.4
X=4H Y=2H	22.5	23.6	22.8	23.9	24.2	30.0	31.1	30.3	31.4	31.7
3H	22.6	23.5	23.0	23.9	24.2	30.8	31.8	31.2	32.1	32.5
4H	22.6	23.5	23.1	23.9	24.2	30.8	31.7	31.2	32.0	32.4
6H	22.8	23.5	23.2	23.9	24.3	30.8	31.5	31.2	31.9	32.3
8H	22.9	23.6	23.4	24.0	24.4	30.7	31.4	31.2	31.8	32.3
12H	23.0	23.6	23.5	24.1	24.5	30.7	31.3	31.2	31.8	32.2
X=8H Y=4H	22.7	23.4	23.2	23.8	24.2	30.7	31.4	31.2	31.8	32.2
6H	22.9	23.5	23.4	23.9	24.4	30.7	31.2	31.2	31.7	32.1
8H	23.1	23.6	23.6	24.0	24.5	30.7	31.1	31.2	31.6	32.1
12H	23.2	23.7	23.8	24.1	24.7	30.6	31.0	31.1	31.5	32.0
X=12H Y=4H	22.7	23.3	23.2	23.7	24.2	30.7	31.3	31.2	31.7	32.2
6H	22.9	23.4	23.4	23.9	24.4	30.7	31.1	31.1	31.6	32.1
8H	23.1	23.5	23.6	24.0	24.5	30.6	31.0	31.1	31.5	32.0
Variations with the observer position at spacings:										
S=1.0H	+0.4/-0.9					+0.4/-0.4				
S=1.5H	+1.3/-3.6					+1.8/-2.3				
S=2.0H	+2.2/-5.4					+3.6/-5.3				

Calculate in accordance with CIE Pub.117. The table is revised with 46835lm ($8\log(F/F_0) = 13.4$).

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:

Utilisation Factor Table(Floor cavity)

Utilisation Factors UF(F)			SHR NOM = 1.50									
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	0.62	0.72	0.79	0.85	0.92	0.96	0.99	1.03	1.06	
	0.30		0.55	0.65	0.73	0.79	0.87	0.92	0.95	1.00	1.03	
	0.20		0.50	0.59	0.68	0.74	0.82	0.88	0.91	0.97	1.00	
0.50	0.50	0.20	0.61	0.70	0.77	0.82	0.89	0.93	0.96	0.99	1.02	
	0.30		0.54	0.63	0.71	0.77	0.84	0.89	0.92	0.96	0.99	
	0.20		0.49	0.59	0.67	0.73	0.80	0.85	0.89	0.94	0.97	
0.30	0.50	0.20	0.59	0.68	0.75	0.80	0.86	0.90	0.92	0.96	0.98	
	0.30		0.53	0.62	0.70	0.75	0.82	0.86	0.89	0.93	0.96	
	0.20		0.49	0.58	0.66	0.72	0.79	0.83	0.87	0.91	0.94	
0.00	0.00	0.00	0.47	0.55	0.63	0.69	0.75	0.80	0.83	0.87	0.89	
Rating:298W 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 = 1.50									
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	0.91	0.76	0.62	0.53	0.42	0.34	0.29	0.22	0.18	
	0.30		0.76	0.65	0.54	0.47	0.38	0.31	0.27	0.21	0.17	
	0.20		0.65	0.56	0.48	0.42	0.34	0.29	0.25	0.20	0.16	
0.50	0.50	0.20	0.88	0.72	0.60	0.51	0.40	0.36	0.27	0.21	0.17	
	0.30		0.74	0.63	0.53	0.46	0.36	0.30	0.26	0.20	0.16	
	0.20		0.65	0.55	0.47	0.41	0.33	0.28	0.24	0.19	0.16	
0.30	0.50	0.20	0.85	0.69	0.57	0.49	0.38	0.31	0.26	0.20	0.16	
	0.30		0.73	0.61	0.51	0.44	0.35	0.29	0.24	0.19	0.15	
	0.20		0.64	0.55	0.46	0.40	0.32	0.27	0.23	0.18	0.15	
0.00	0.00	0.00	0.53	0.44	0.36	0.31	0.24	0.20	0.17	0.13	0.11	
Rating:298W 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 = 1.50									
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	0.16	0.18	0.18	0.19	0.20	0.21	0.21	0.22	0.22	
	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	0.16	0.17	0.18	0.18	0.19	0.20	0.20	0.21	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	0.09	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	0.18	0.19	0.19	0.20	0.20	
	0.30		0.10	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.18	
	0.20		0.05	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:298W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												