

Report No.: 1

Test Time: 19.02.2020 14:30

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 100 36 LED 200W 5000K 20 gr.

Luminous Length (mm): 174

Luminous Width (mm): 220

Luminous Height (mm): 338

Voltage: 221.8 V

Current: 0.920 A

Power: 200.19 W

Power Factor: 0.980

Photometric Results

CIE Class: Direct

Measurement Flux: 32605.2 lm

Downward Ratio: 94%

Total Rated Lamp Lumens: 32605.2 lm

Efficiency: 100%

Upward Ratio: 6%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 43.8, 40.3, 42.4, 41.2

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 19.7, 20.1, 20.4, 19.3

Luminaire Efficacy Rating (LER): 162.92

Central Intensity: 130016.18 cd

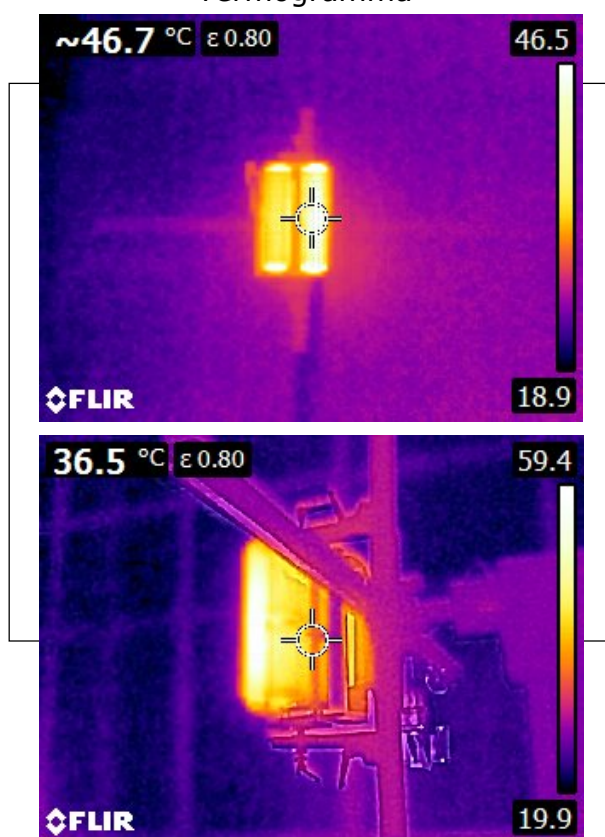
Max. Intensity: 133174.25 cd

Pos of Max. Intensity: H135 V0

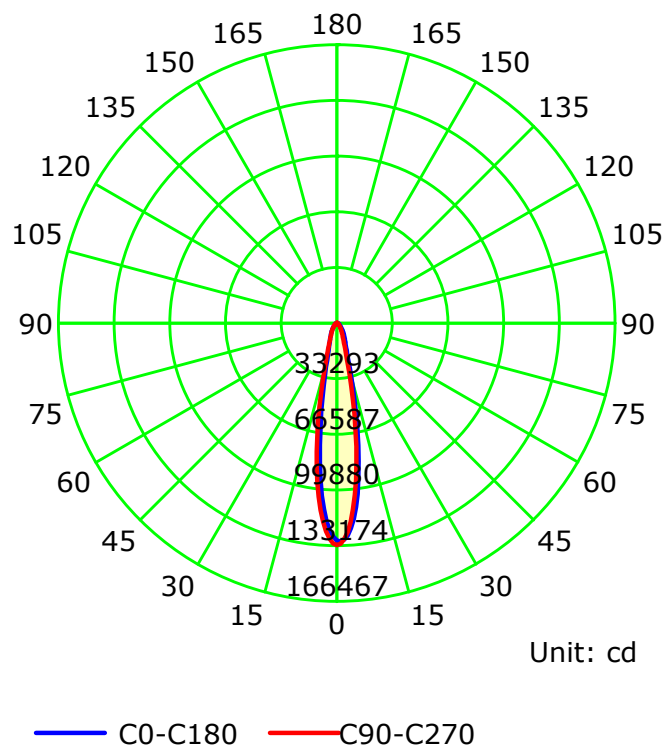
S/MH(C0/C180): 0.34

S/MH(C90/C270): 0.34

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

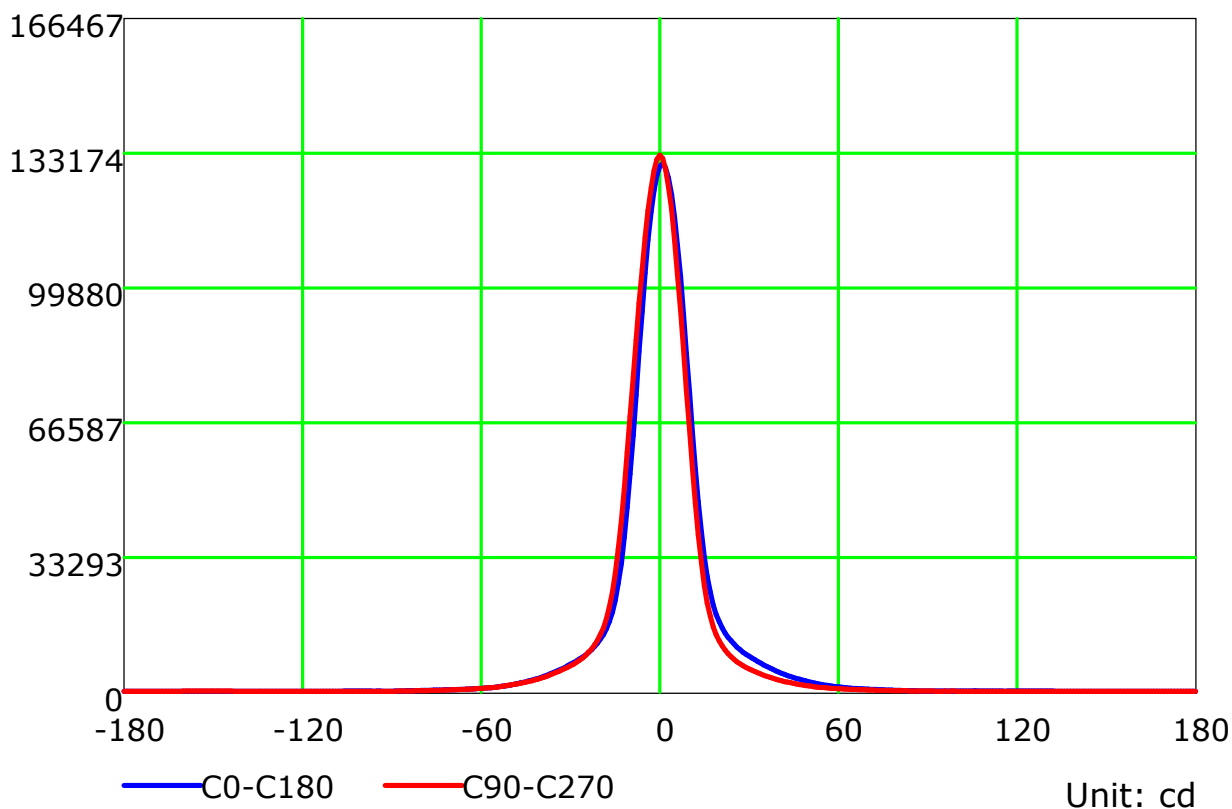
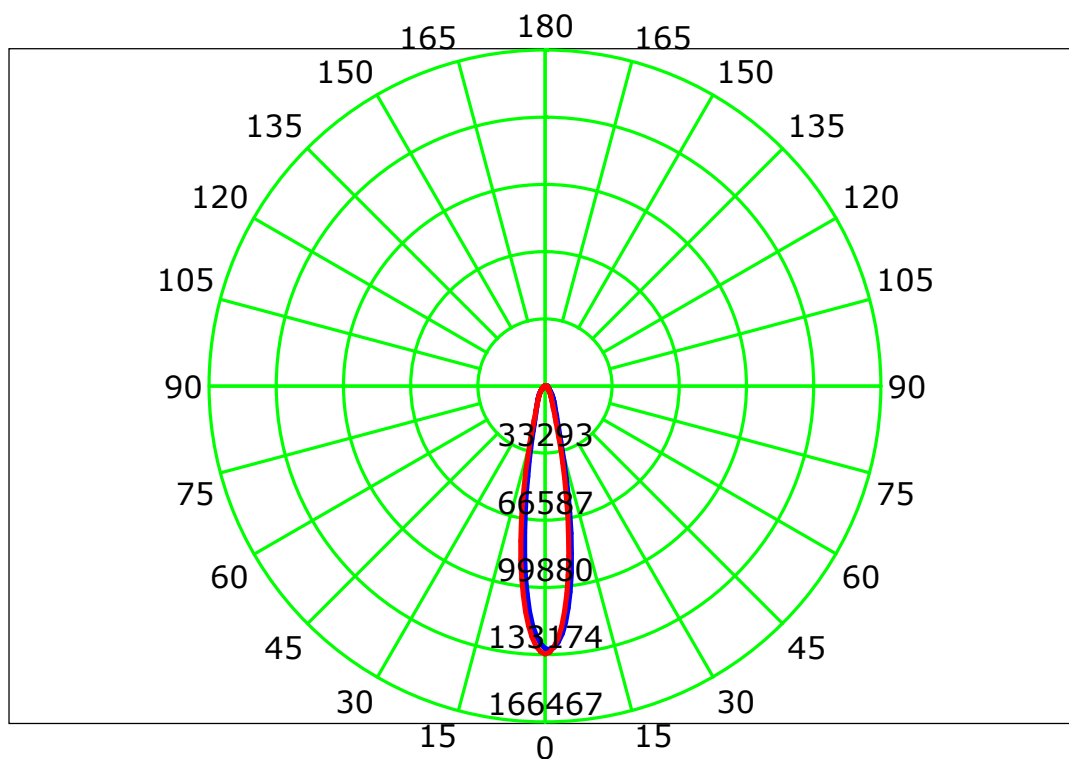
Test Device: LSG-1800B

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

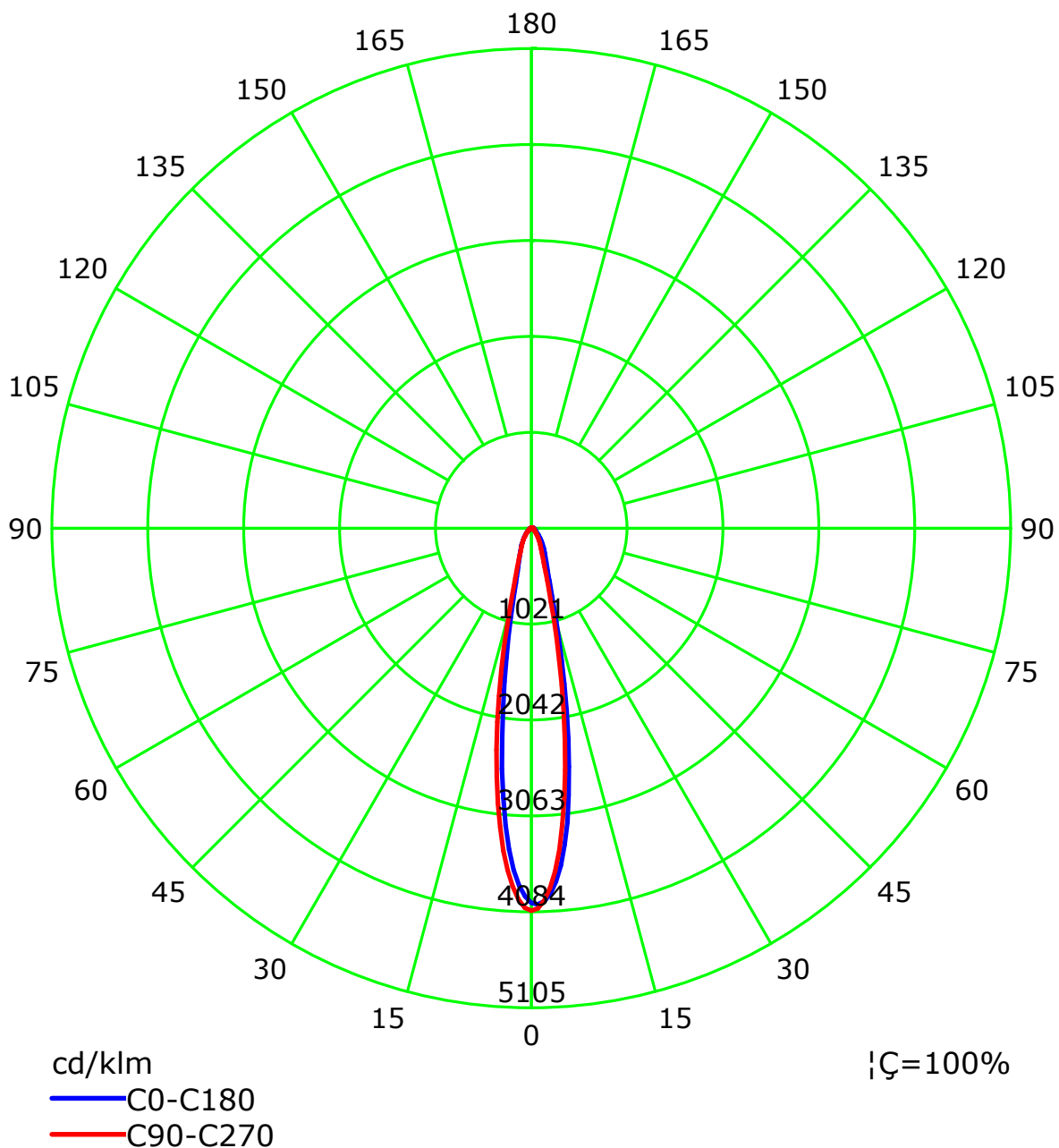
Test Device: LSG-1800B

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

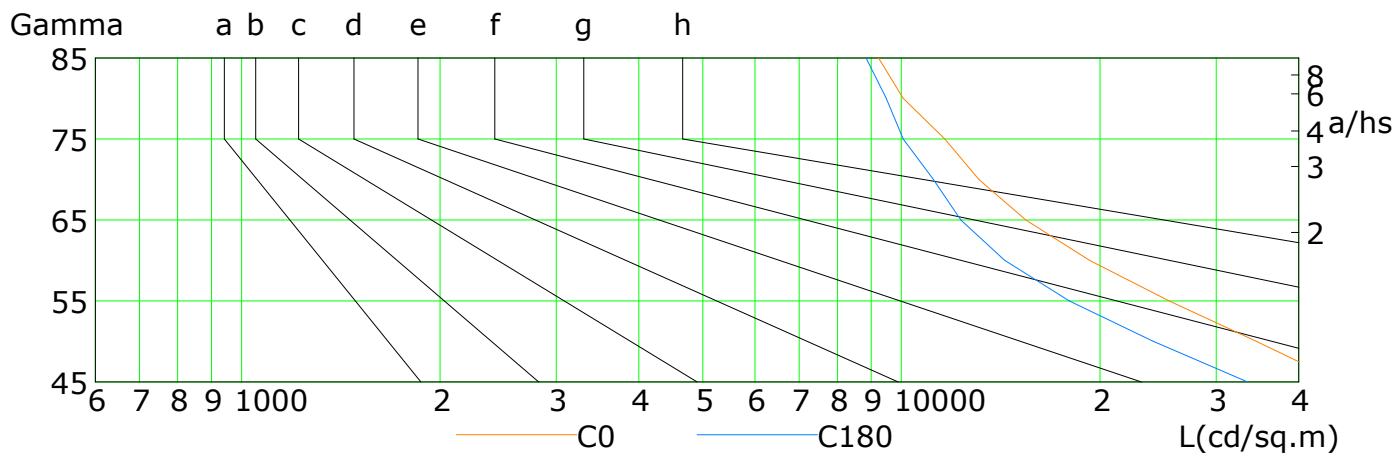
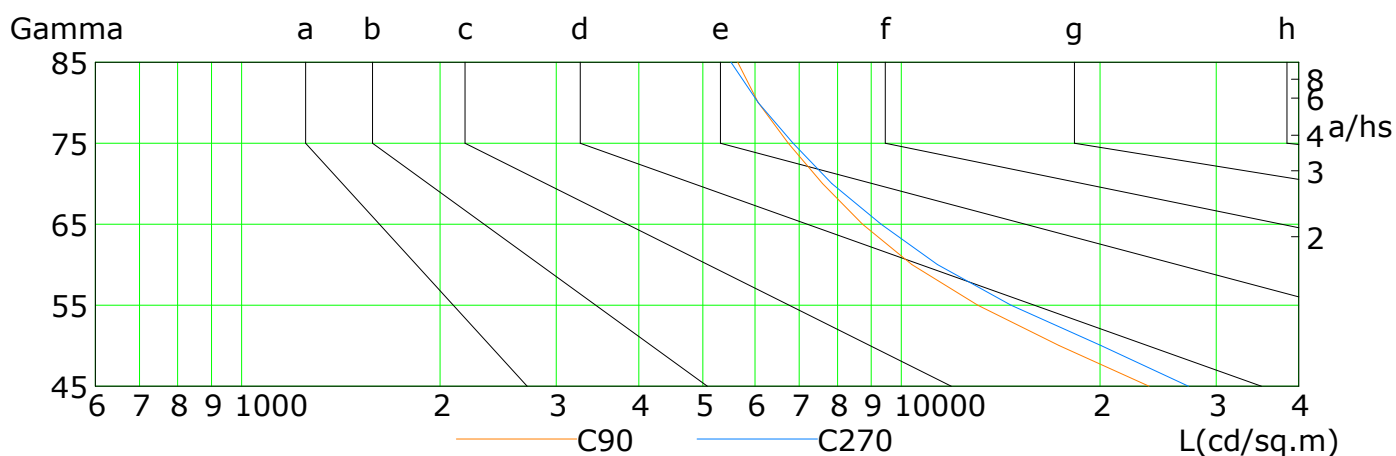
Humidity:

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

a b c d e f g h



L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	46354	34509	25469	19288	15427	13103	11632	10065	9234
C90	23742	17340	13048	10369	8728	7592	6736	6067	5651
C180	33459	24064	17976	14340	12306	11183	10060	9483	8838
C270	27219	20071	14671	11339	9320	7847	6852	6067	5516

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

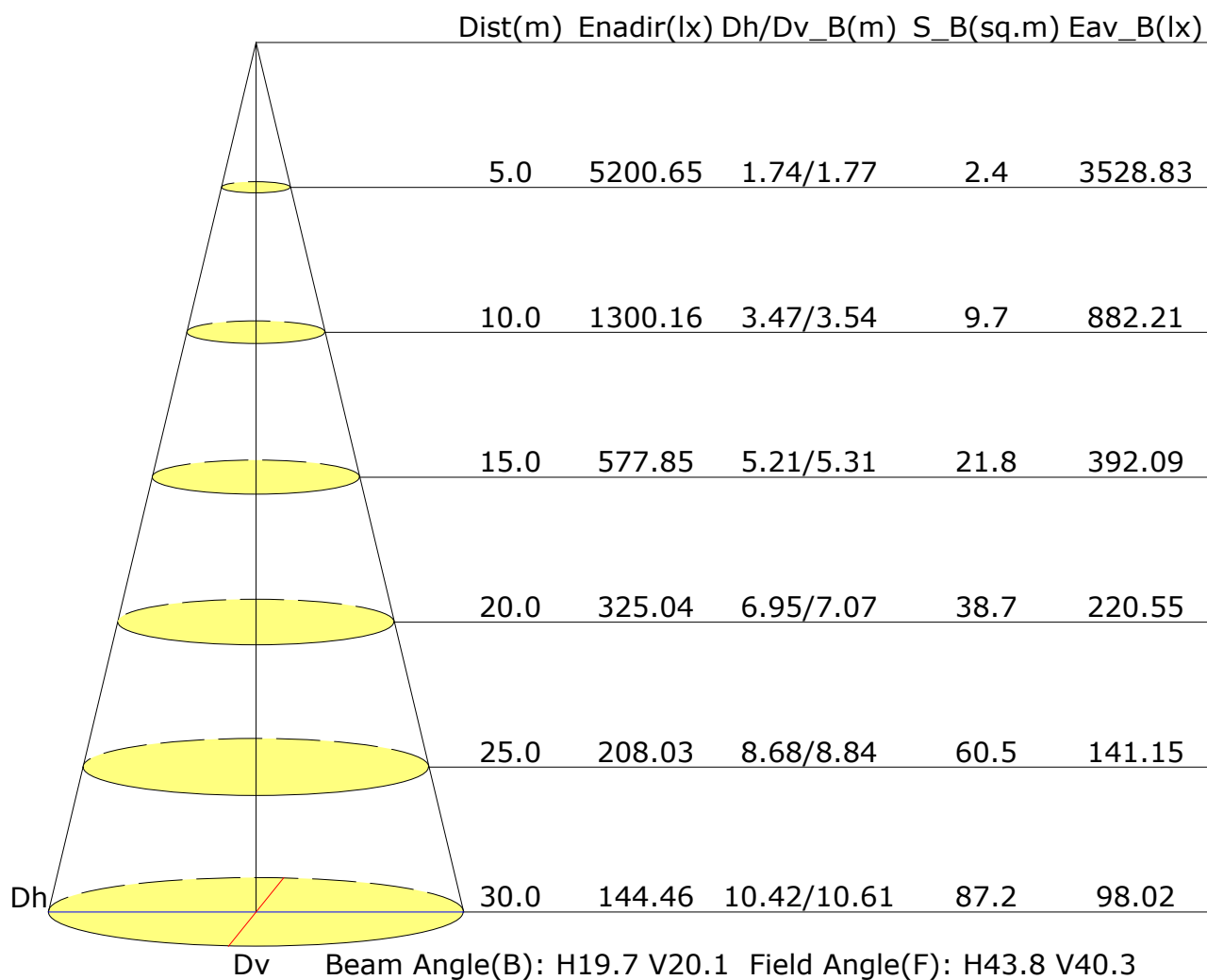
Test Device: LSG-1800B

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	20.3	21.1	20.6	21.4	21.7	18.2	19.0	18.6	19.3	19.6
3H	20.8	21.6	21.2	21.9	22.3	18.8	19.5	19.2	19.8	20.2
4H	21.1	21.8	21.5	22.2	22.6	19.1	19.7	19.5	20.1	20.5
6H	21.4	22.1	21.9	22.5	22.9	19.4	20.0	19.8	20.4	20.8
8H	21.6	22.2	22.0	22.6	23.0	19.5	20.1	19.9	20.5	20.9
12H	21.7	22.3	22.2	22.7	23.2	19.7	20.2	20.1	20.7	21.1
X=4H Y=2H	20.3	21.0	20.7	21.4	21.7	18.5	19.2	18.9	19.5	19.9
3H	21.0	21.6	21.5	22.0	22.5	19.2	19.8	19.7	20.2	20.7
4H	21.4	22.0	21.9	22.4	22.9	19.6	20.2	20.1	20.6	21.1
6H	21.9	22.3	22.4	22.8	23.3	20.1	20.5	20.6	21.0	21.5
8H	22.1	22.5	22.6	23.0	23.5	20.3	20.7	20.8	21.2	21.7
12H	22.3	22.7	22.8	23.2	23.8	20.5	20.9	21.0	21.4	21.9
X=8H Y=4H	21.5	21.9	22.0	22.4	22.9	19.8	20.2	20.3	20.7	21.2
6H	22.0	22.4	22.6	22.9	23.5	20.4	20.7	20.9	21.3	21.8
8H	22.3	22.7	22.9	23.2	23.8	20.7	21.0	21.3	21.6	22.2
12H	22.7	22.9	23.3	23.5	24.1	21.0	21.3	21.6	21.9	22.5
X=12H Y=4H	21.5	21.9	22.0	22.4	22.9	19.8	20.2	20.3	20.7	21.3
6H	22.0	22.4	22.6	22.9	23.5	20.4	20.8	21.0	21.3	21.9
8H	22.4	22.7	23.0	23.2	23.9	20.8	21.1	21.4	21.7	22.3
Variations with the observer position at spacings:										
S=1.0H	+0.8/-0.8					+0.7/-0.9				
S=1.5H	+2.0/-1.5					+1.6/-1.6				
S=2.0H	+3.3/-2.2					+2.8/-2.1				

Calculate in accordance with CIE Pub.117. The table is revised with 32605lm ($8\log(F/F_0) = 12.1$).

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 = 0.50									
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	0.88	0.92	0.95	1.00	1.03	1.05	1.08	1.10	
	0.30		0.76	0.83	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	1.00	1.03	1.04	
	0.30		0.75	0.81	0.85	0.88	0.93	0.96	0.98	1.01	1.02	
	0.20		0.72	0.78	0.82	0.85	0.90	0.93	0.95	0.99	1.01	
0.30	0.50	0.20	0.78	0.83	0.87	0.89	0.93	0.95	0.96	0.98	1.00	
	0.30		0.74	0.79	0.83	0.86	0.90	0.92	0.94	0.97	0.98	
	0.20		0.71	0.77	0.81	0.84	0.88	0.90	0.92	0.95	0.97	
0.00	0.00	0.00	0.69	0.74	0.77	0.80	0.83	0.86	0.87	0.89	0.91	
Rating:200W 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	0.40	0.32	0.26	0.23	0.18	0.14	
	0.30		0.54	0.46	0.40	0.35	0.29	0.24	0.21	0.17	0.14	
	0.20		0.46	0.40	0.35	0.31	0.26	0.22	0.20	0.16	0.13	
0.50	0.50	0.20	0.61	0.50	0.42	0.36	0.29	0.28	0.21	0.16	0.13	
	0.30		0.51	0.43	0.37	0.33	0.26	0.22	0.19	0.15	0.13	
	0.20		0.44	0.38	0.33	0.30	0.24	0.21	0.18	0.15	0.12	
0.30	0.50	0.20	0.57	0.46	0.39	0.34	0.27	0.22	0.19	0.15	0.12	
	0.30		0.49	0.41	0.35	0.30	0.25	0.21	0.18	0.14	0.12	
	0.20		0.43	0.36	0.32	0.28	0.23	0.19	0.17	0.13	0.11	
0.00	0.00	0.00	0.29	0.23	0.20	0.17	0.14	0.12	0.10	0.08	0.06	
Rating:200W 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	0.19	0.21	0.22	0.23	0.24	0.25	0.26	0.26	0.27	
	0.30		0.15	0.17	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	0.20	0.21	0.23	0.24	
0.50	0.50	0.20	0.18	0.20	0.21	0.22	0.23	0.24	0.25	0.25	0.26	
	0.30		0.14	0.16	0.18	0.19	0.20	0.21	0.22	0.24	0.24	
	0.20		0.11	0.13	0.15	0.16	0.18	0.19	0.20	0.22	0.23	
0.30	0.50	0.20	0.18	0.19	0.20	0.21	0.22	0.23	0.24	0.24	0.25	
	0.30		0.14	0.16	0.17	0.18	0.20	0.21	0.22	0.23	0.23	
	0.20		0.11	0.13	0.15	0.16	0.18	0.19	0.20	0.21	0.22	
0.00	0.00	0.00	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	
Rating:200W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												