

Report No.: 1809271128

Test Time: 2018-09-27 11:40

## Luminaire Property

Luminaire Manufacturer:

Number of Lamps: 1

Luminous Width (mm): 110

Voltage: 220.6 V

Power: 25.55 W

Luminous Length (mm): 1525

Luminous Height (mm): 90

Current: 0.118 A

Power Factor: 0.979

## Photometric Results

CIE Class: Direct

Measurement Flux: 2920.3 lm

Downward Ratio: 99%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 158.4, 181.8, 179.8, 179.9

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 109.1, 108.8, 112.7, 113.3

Luminaire Efficacy Rating (LER): 114.35

Max. Intensity: 356.86 cd/klm

S/MH(C0/C180): 1.24

Total Rated Lamp Lumens: 2920.3 lm

Efficiency: 100%

Upward Ratio: 1%

Central Intensity: 274.18 cd/klm

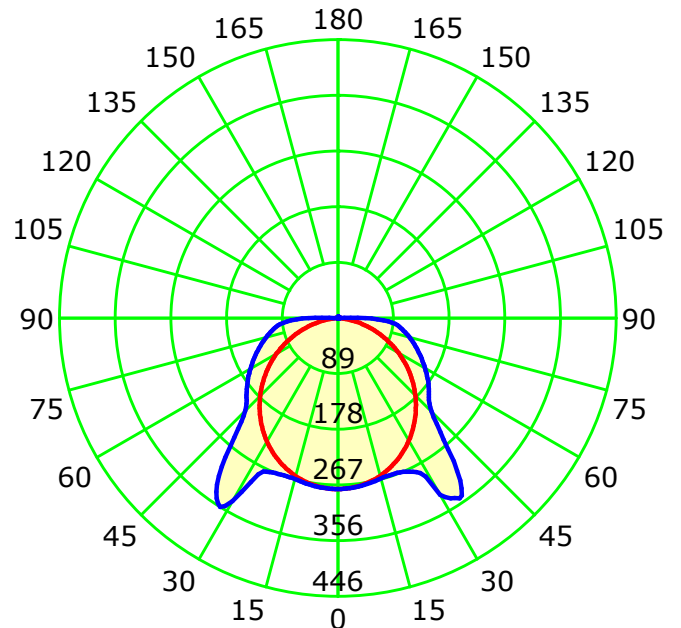
Pos of Max. Intensity: H270 V32

S/MH(C90/C270): 1.62

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd/klm

Average Diffuse Angle(50%): 109.0°

— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 22.5

Test Lab: KARMA

Test Type: TYPE C

Temperature: 24

Operator: S.DURDURAN

Gamma Plane (°):0.0-180.0:1.0

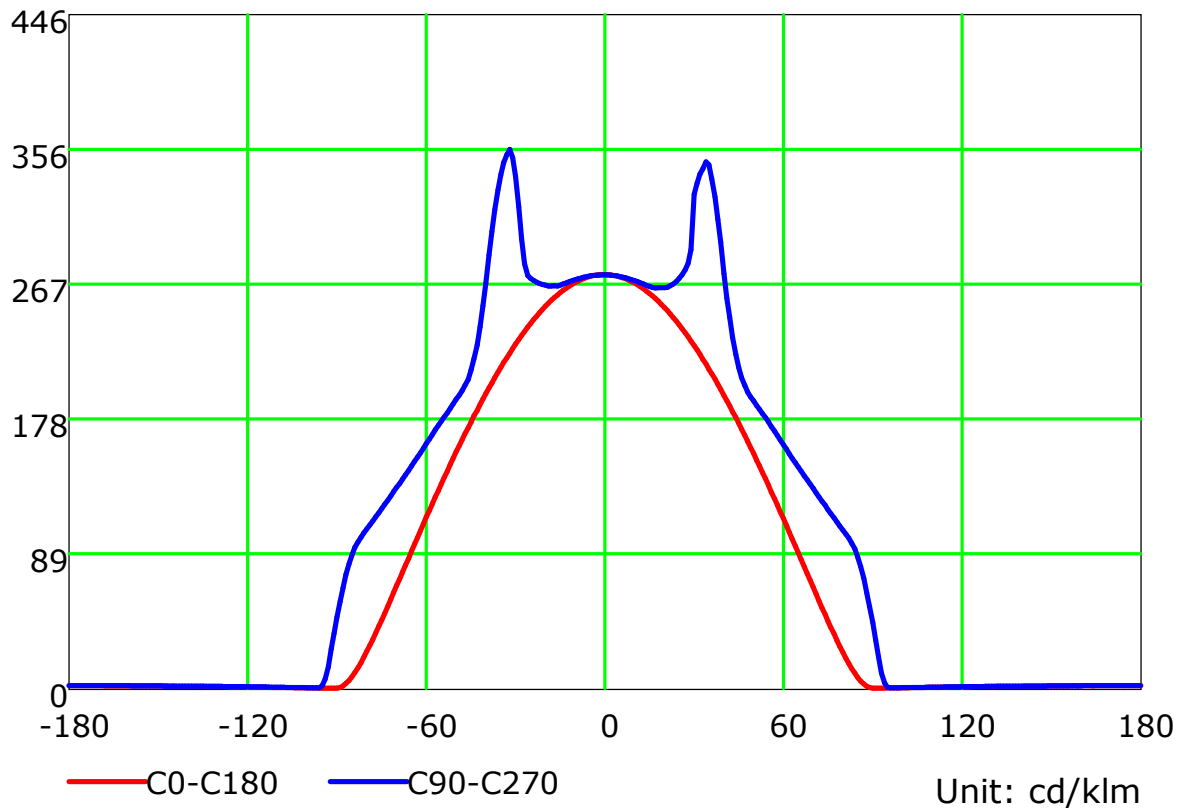
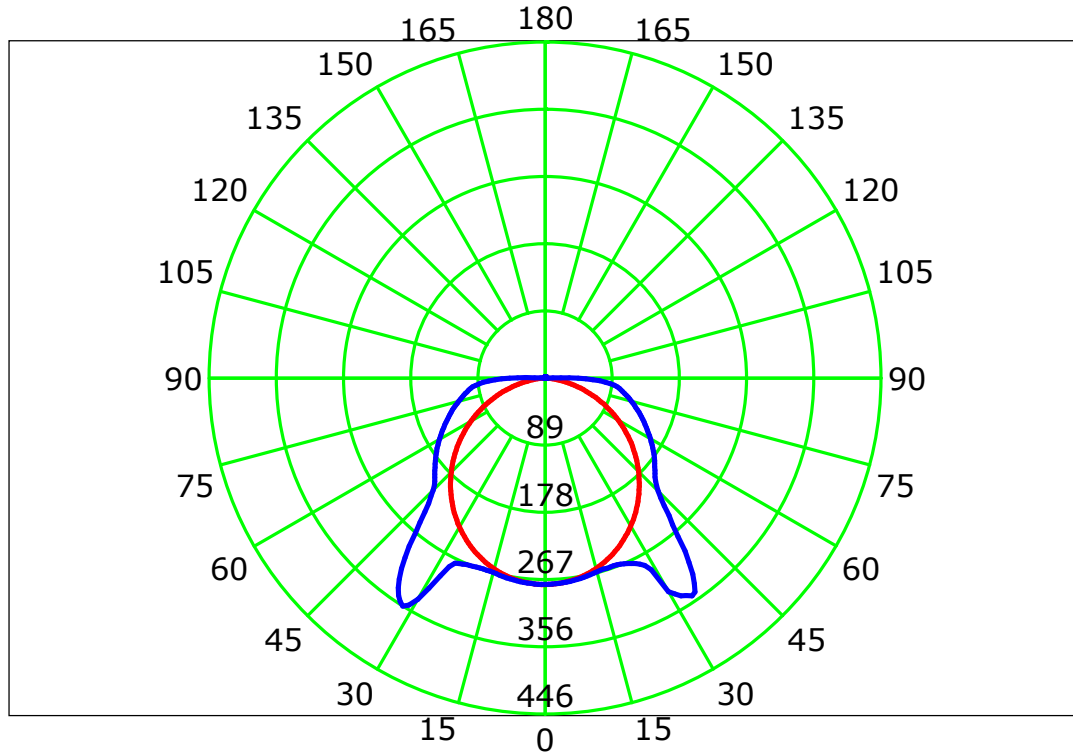
Test Device: LSG-1700B

Distance: 8.942 m

Humidity:

Inspector:

## Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 22.5

Test Lab: KARMA

Test Type: TYPE C

Temperature: 24

Operator: S.DURDURAN

Gamma Plane (°):0.0-180.0:1.0

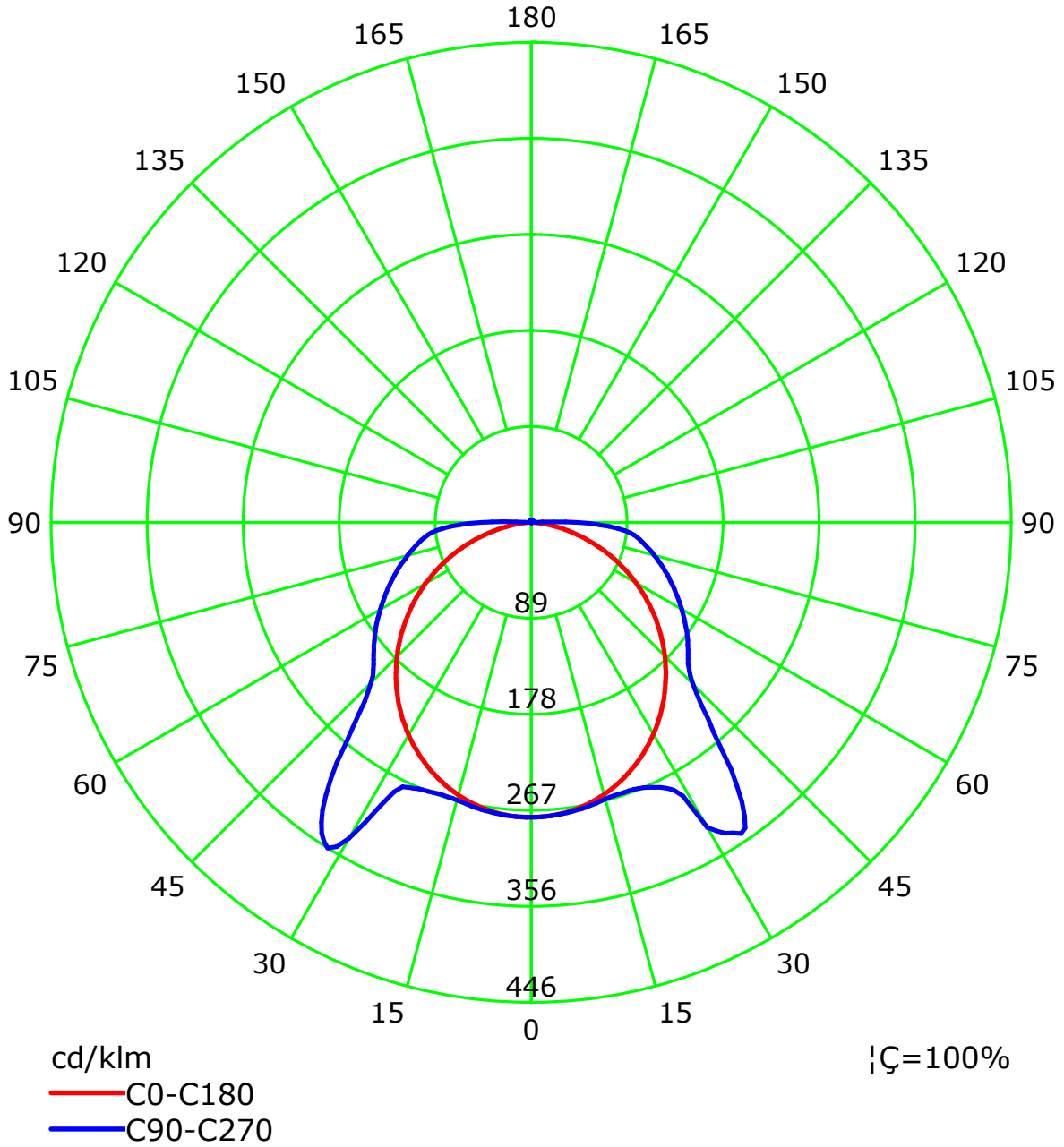
Test Device: LSG-1700B

Distance: 8.942 m

Humidity:

Inspector:

## Luminous Intensity Distribution Curve(cd/klm)



C Plane (°):0.0-360.0: 22.5

Test Lab: KARMA

Test Type: TYPE C

Temperature: 24

Operator: S.DURDURAN

Gamma Plane (°):0.0-180.0:1.0

Test Device: LSG-1700B

Distance: 8.942 m

Humidity:

Inspector:



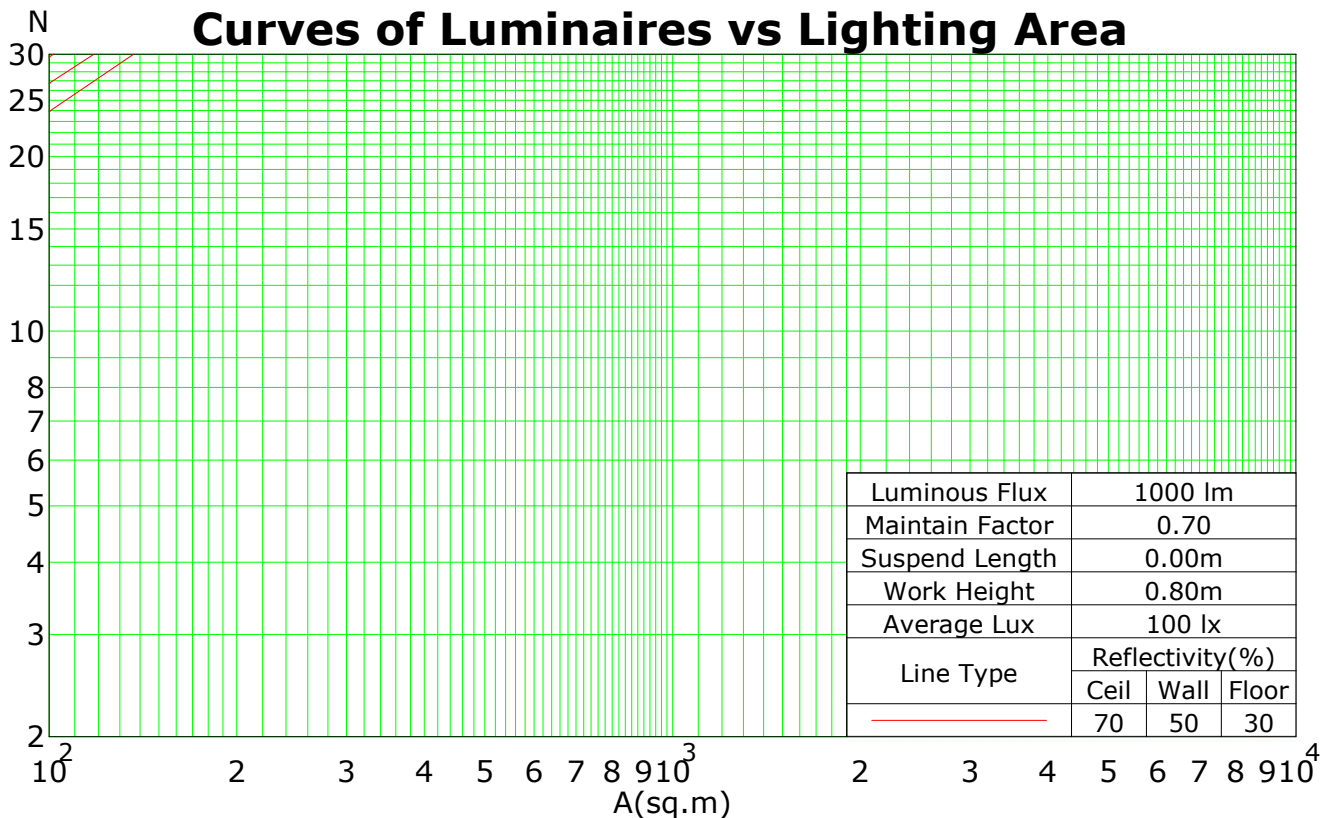
## Coefficients Of Utilization - Zonal Cavity Method

RC	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.5	0.5	0.5	0.3	0.3	0.3	0.1	0.1	0.1	0
RW	0.7	0.5	0.3	0.1	0.7	0.5	0.3	0.1	0.5	0.3	0.1	0.5	0.3	0.1	0.5	0.3	0.1	0
RCR	RF = 0.2																	
0	119	119	119	119	116	116	116	116	110	110	110	105	105	105	101	101	101	99
1	106	101	96	91	103	98	94	89	94	90	86	89	86	83	85	83	81	78
2	96	87	79	72	93	85	77	71	81	75	70	77	72	68	74	70	66	64
3	87	75	66	59	84	74	65	59	70	63	57	67	61	56	65	59	55	53
4	79	66	57	50	77	65	56	49	62	54	48	60	53	48	57	51	47	44
5	73	59	49	42	70	58	49	42	55	47	41	53	46	41	51	45	40	38
6	67	53	43	37	65	52	43	36	50	42	36	48	41	36	46	40	35	33
7	62	48	39	32	60	47	38	32	45	37	32	44	37	31	42	36	31	29
8	58	43	35	28	56	43	34	28	41	34	28	40	33	28	39	32	27	25
9	54	40	31	25	52	39	31	25	38	30	25	37	30	25	35	29	25	23
10	50	37	28	23	49	36	28	23	35	28	23	34	27	22	33	27	22	20

Spacing Criteria (0-180): 1.24

Spacing Criteria (90-270): 1.62

Spacing Criteria (Diagonal): 1.61



C Plane (°):0.0-360.0: 22.5

Test Lab: KARMA

Test Type: TYPE C

Temperature: 24

Operator: S.DURDURAN

Gamma Plane (°):0.0-180.0:1.0

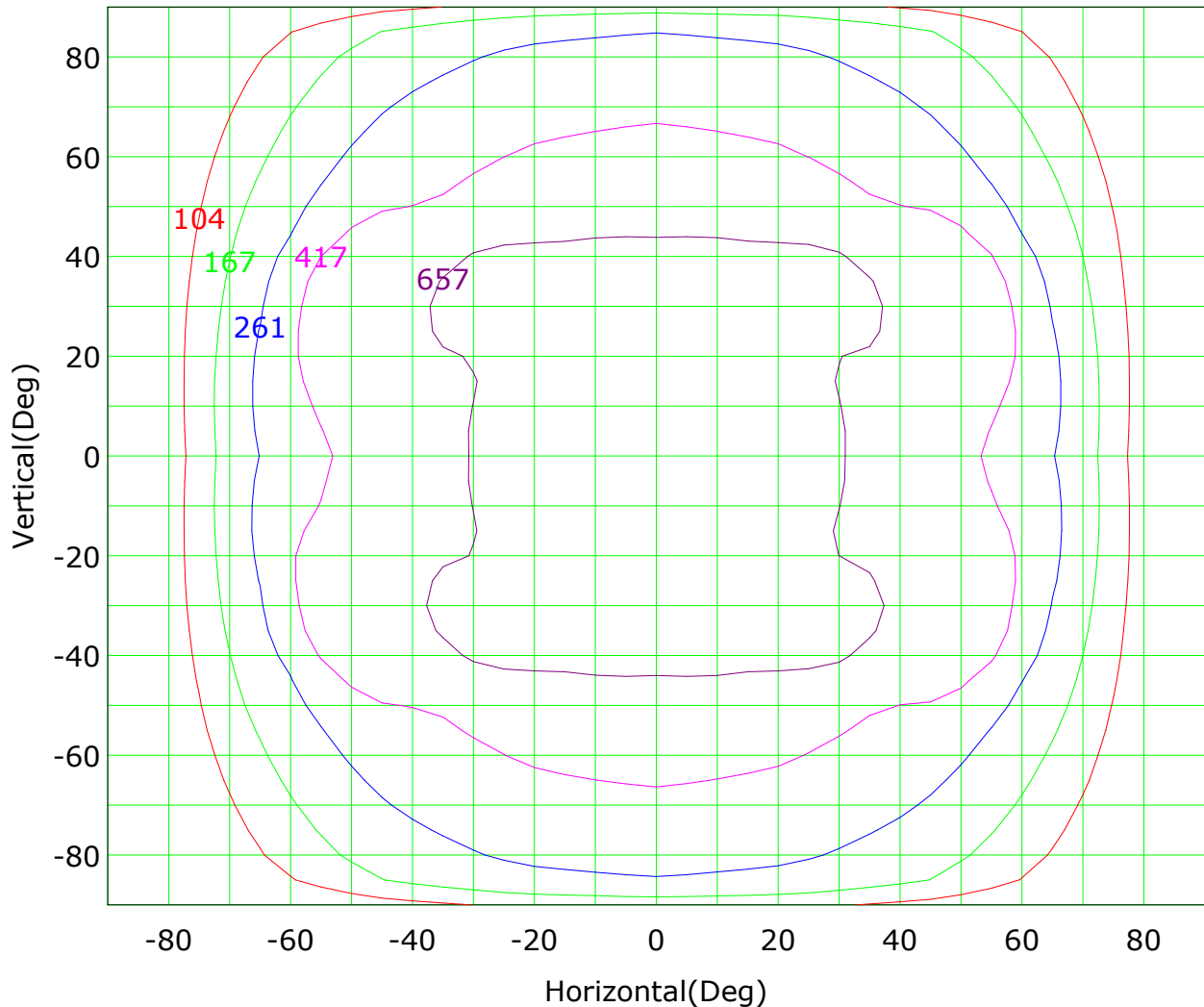
Test Device: LSG-1700B

Distance: 8.942 m

Humidity:

Inspector:

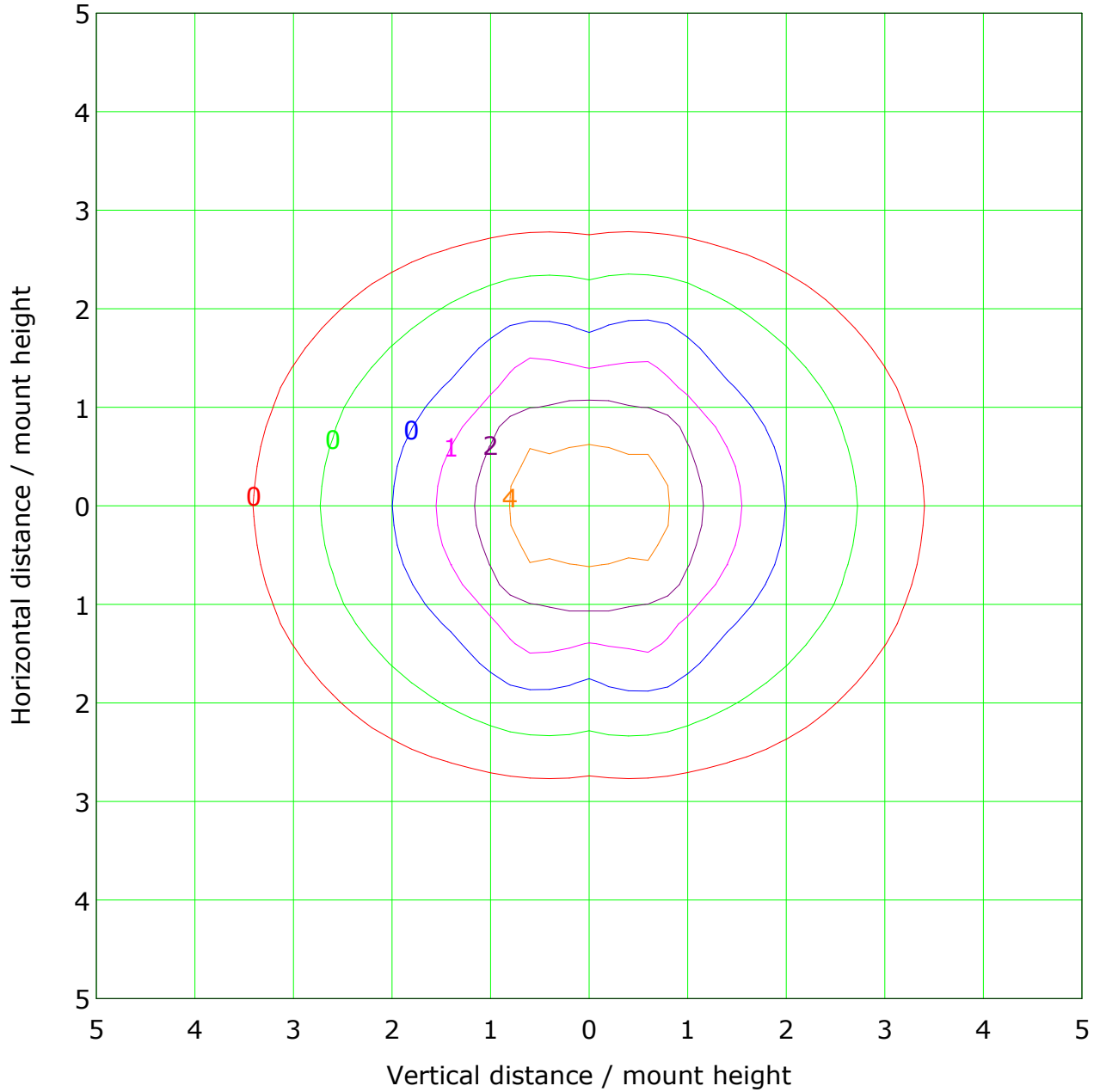
## Isocandela (rectangle)



Imax (100%): 1042 cd

( 10%): 104 cd	( 16%): 167 cd
( 25%): 261 cd	( 40%): 417 cd
( 63%): 657 cd	(100%): 1042 cd

## IsoLux Plot



Mounting Height: 10.0m Max Lux(100%): 8.0 lx

( 1%): 0.1 lx	( 2%): 0.2 lx
( 5%): 0.4 lx	( 10%): 0.8 lx
( 20%): 1.6 lx	( 50%): 4.0 lx
(100%): 8.0 lx	

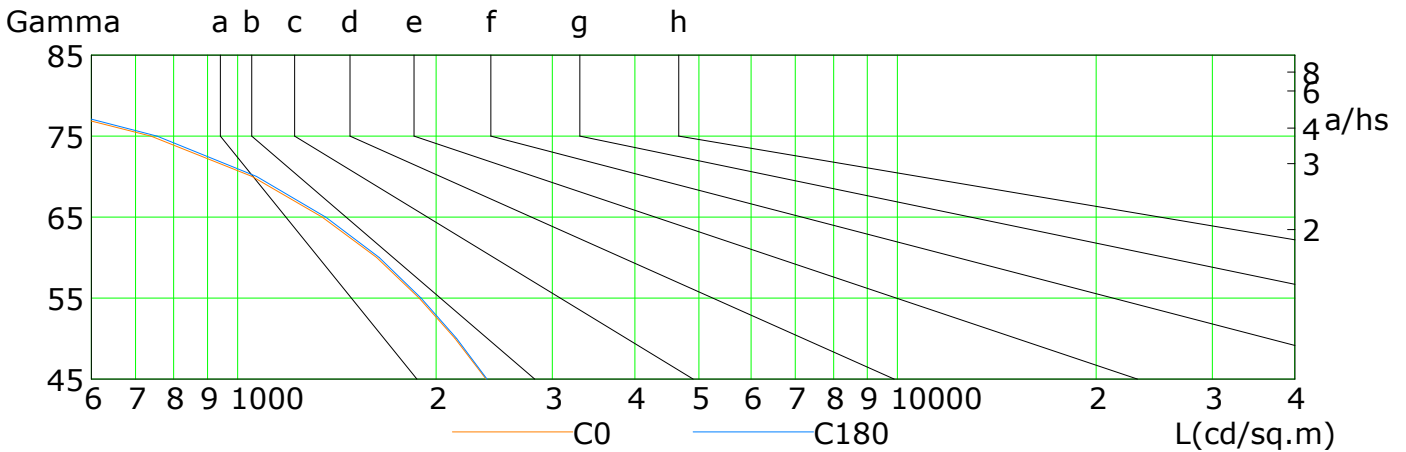
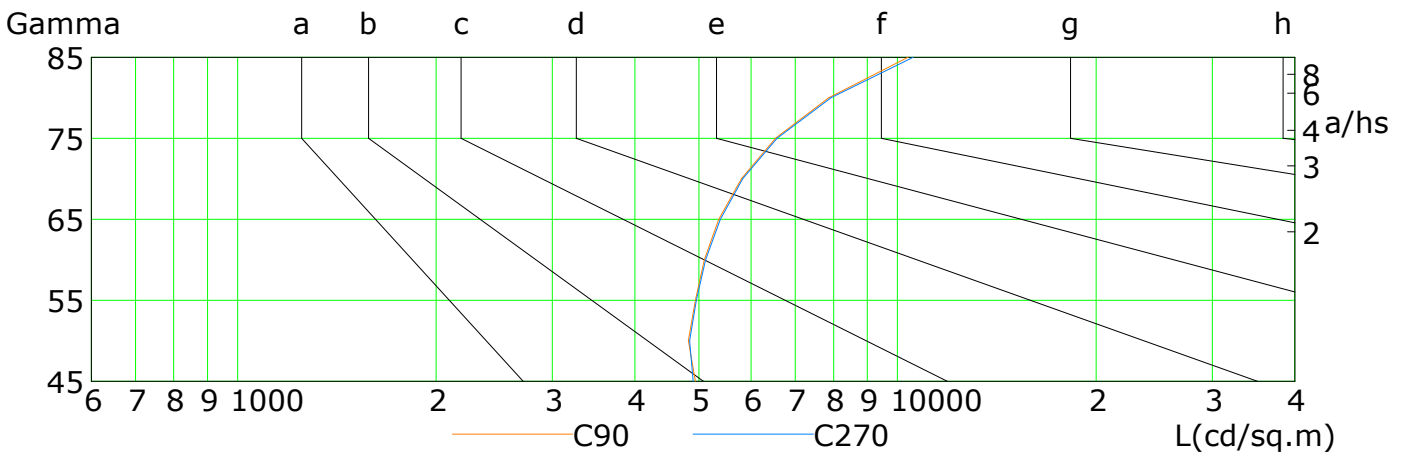
C Plane (°):0.0-360.0: 22.5  
 Test Lab: KARMA  
 Test Type: TYPE C  
 Temperature: 24  
 Operator: S.DURDURAN

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: LSG-1700B  
 Distance: 8.942 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

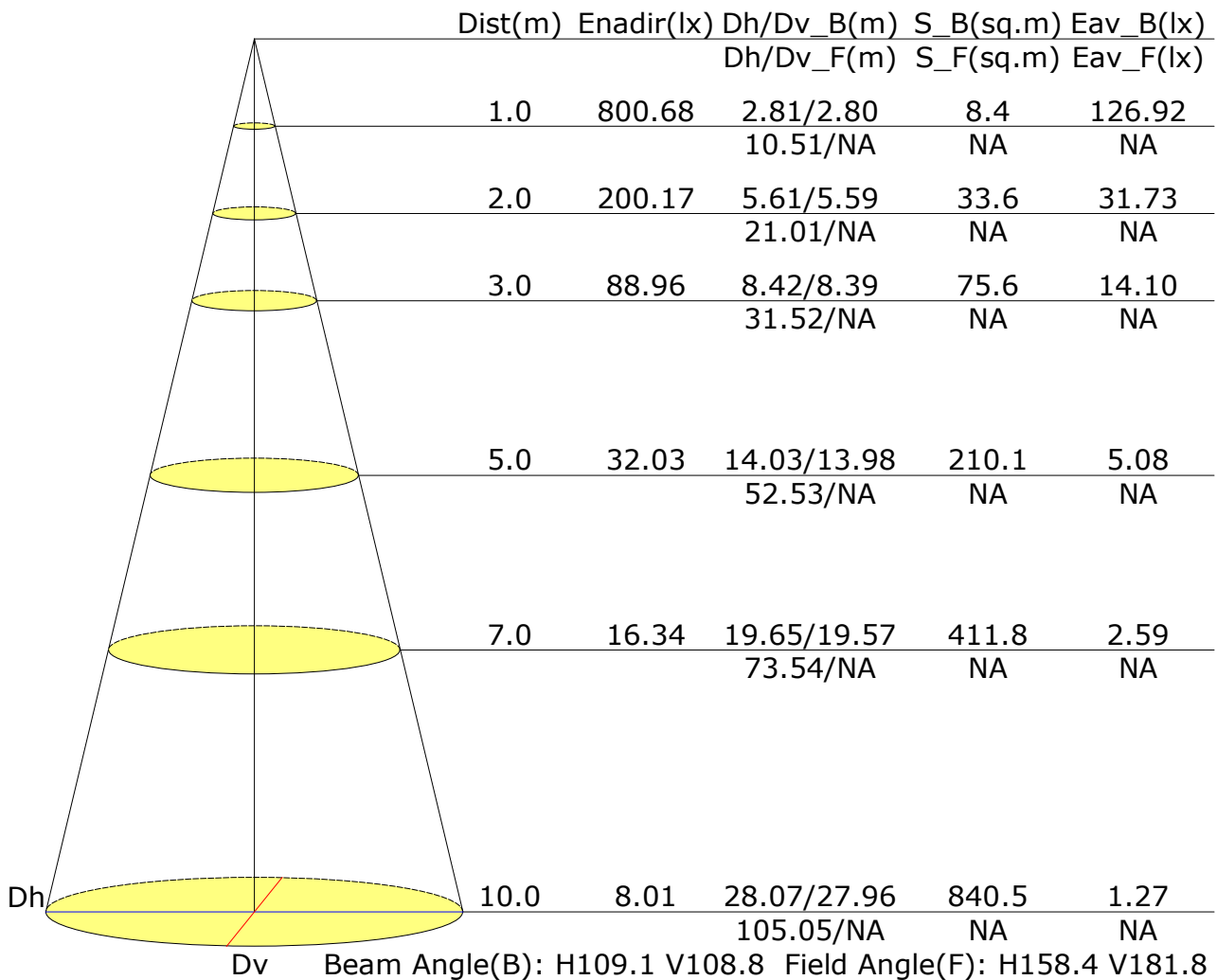


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	2380	2134	1884	1623	1344	1051	739	424	141
C90	4942	4820	4942	5100	5362	5802	6529	7874	10373
C180	2389	2148	1897	1639	1360	1068	755	437	153
C270	4902	4844	4957	5123	5391	5829	6567	7930	10558

C Plane (°):0.0-360.0: 22.5  
 Test Lab: KARMA  
 Test Type: TYPE C  
 Temperature: 24  
 Operator: S.DURDURAN

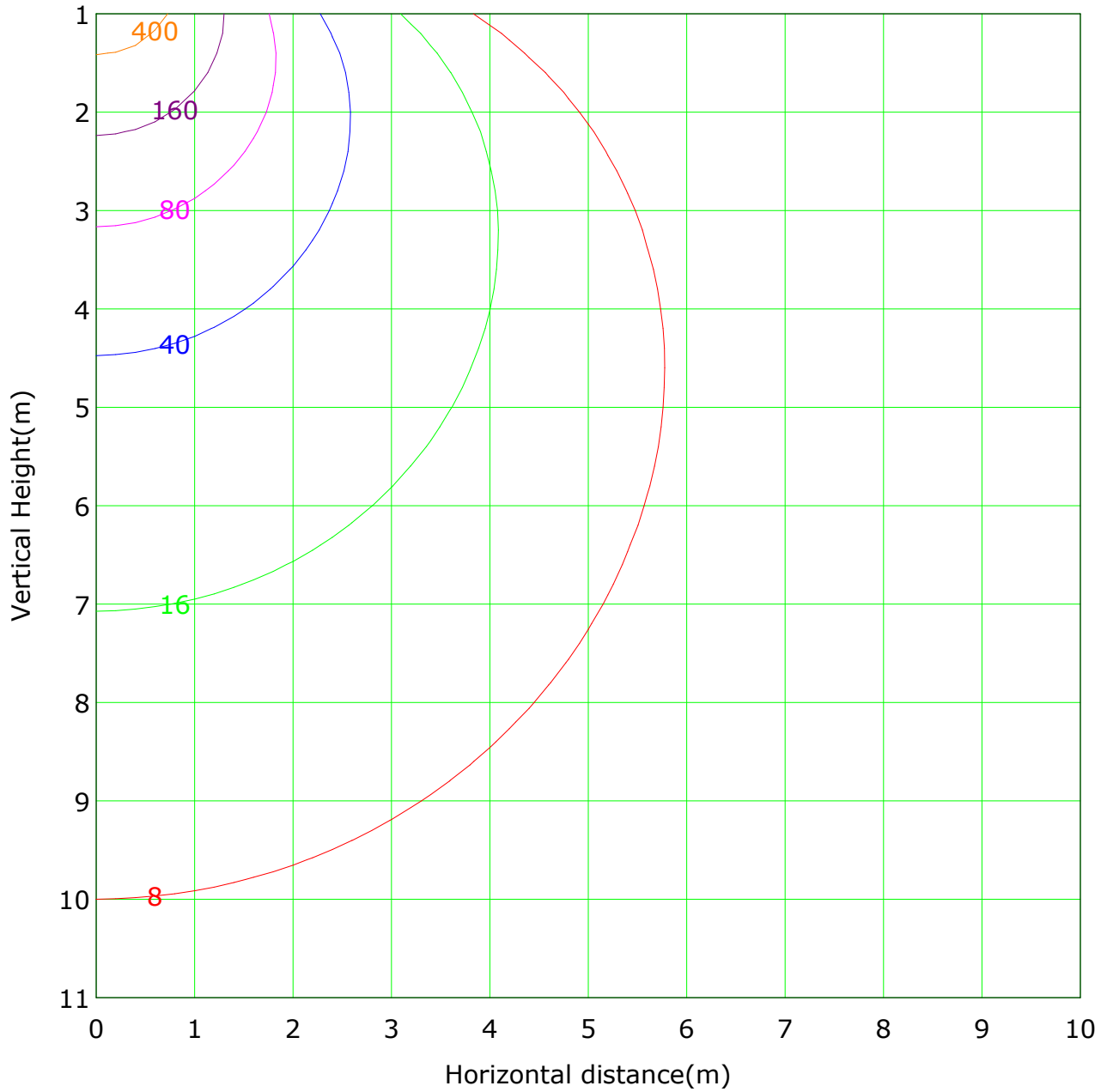
Gamma Plane (°):0.0-180.0:1.0  
 Test Device: LSG-1700B  
 Distance: 8.942 m  
 Humidity:  
 Inspector:

## Illuminance at a Distance





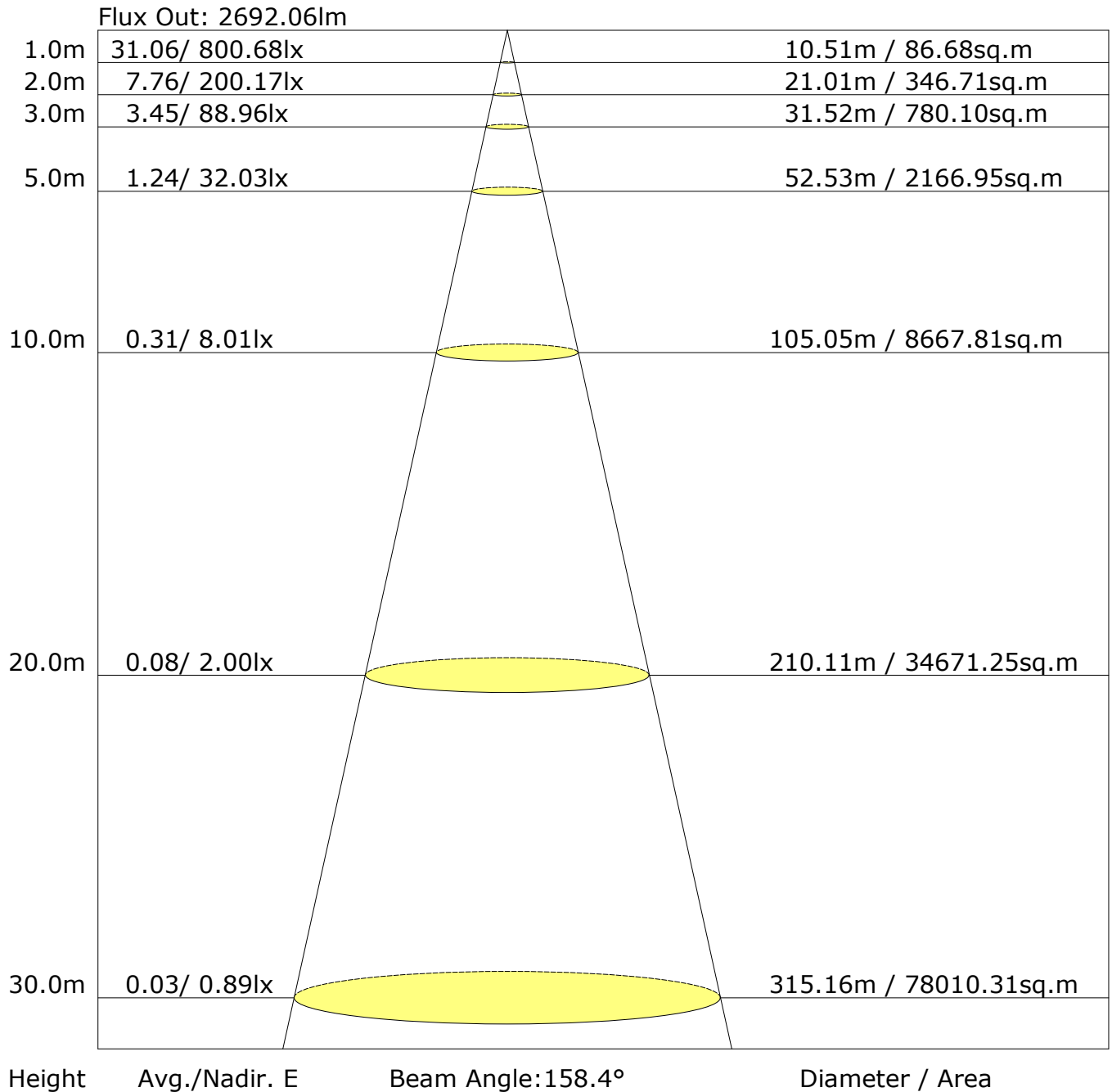
## Vertical IsoLux Plot



Lowest(m): 1.0m    Highest(m): 11.0m    Max Lux: 800.7 lx

— ( 1%): 8.0 lx	— ( 2%): 16.0 lx
— ( 5%): 40.0 lx	— ( 10%): 80.1 lx
— ( 20%): 160.1 lx	— ( 50%): 400.3 lx
— (100%): 800.7 lx	

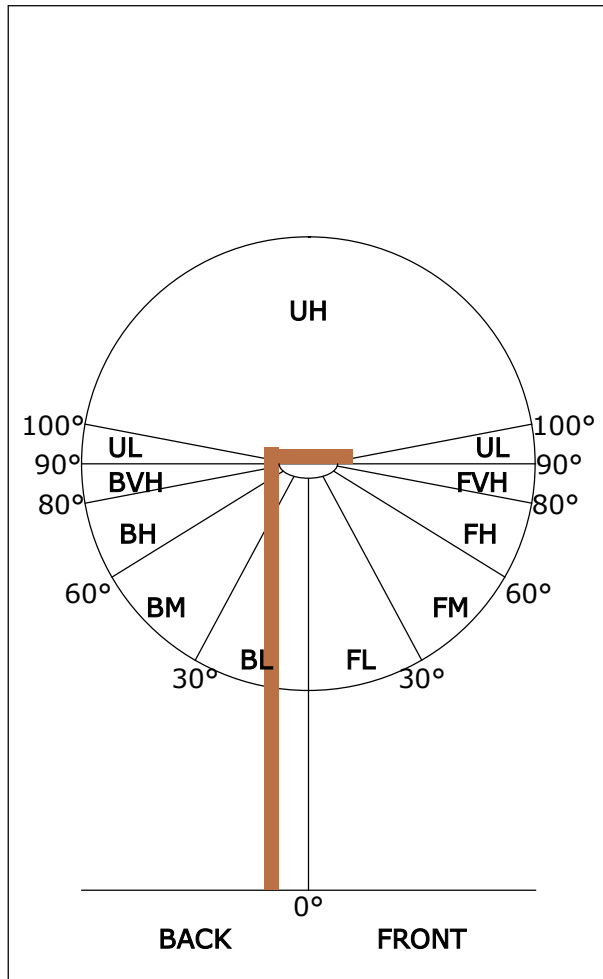
## The Average Illuminance Effective Figure



## 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	15.5	17.0	15.8	17.2	17.5	17.4	18.8	17.7	19.1	19.4
3H	16.3	17.7	16.7	18.0	18.3	19.5	20.9	19.9	21.2	21.5
4H	16.6	17.8	16.9	18.2	18.5	20.8	22.0	21.1	22.3	22.7
6H	16.7	17.9	17.1	18.2	18.6	22.0	23.2	22.4	23.6	23.9
8H	16.7	17.9	17.1	18.2	18.6	22.7	23.9	23.1	24.2	24.6
12H	16.7	17.8	17.1	18.1	18.5	23.4	24.6	23.9	24.9	25.3
X=4H Y=2H	16.2	17.5	16.6	17.8	18.1	17.7	19.0	18.1	19.3	19.6
3H	17.3	18.4	17.7	18.8	19.1	20.1	21.2	20.5	21.6	21.9
4H	17.7	18.7	18.1	19.1	19.5	21.5	22.5	21.9	22.8	23.2
6H	17.9	18.8	18.3	19.2	19.6	22.9	23.8	23.4	24.2	24.7
8H	18.0	18.8	18.4	19.2	19.7	23.7	24.5	24.2	25.0	25.4
12H	18.0	18.7	18.4	19.2	19.6	24.5	25.3	25.0	25.7	26.2
X=8H Y=4H	18.3	19.1	18.7	19.5	20.0	21.6	22.4	22.1	22.9	23.3
6H	18.7	19.4	19.2	19.9	20.4	23.3	23.9	23.7	24.4	24.9
8H	18.9	19.5	19.4	20.0	20.5	24.2	24.8	24.7	25.3	25.8
12H	18.9	19.5	19.5	20.0	20.5	25.2	25.7	25.7	26.2	26.7
X=12H Y=4H	18.5	19.2	18.9	19.7	20.1	21.6	22.4	22.1	22.8	23.3
6H	19.0	19.6	19.5	20.1	20.6	23.3	23.9	23.8	24.4	24.9
8H	19.3	19.8	19.8	20.3	20.8	24.2	24.8	24.8	25.3	25.8
Variations with the observer position at spacings:										
S=1.0H	+0.4/-0.3					+0.3/-0.3				
S=1.5H	+0.7/-0.8					+0.5/-0.6				
S=2.0H	+1.3/-1.5					+0.8/-1.1				

Calculate in accordance with CIE Pub.117. The table is revised with  $2920\text{lm}$  ( $8\log(F/F_0) = 3.7$ ).

**FLUX DISTRIBUTION TABLE BASED ON THE IESNA LUMINAIRE CLASSIFICATION SYSTEM**


ZONE	LUMENS	% LAMP LUMENS
FORWARD LIGHT	1443	49.4
FL ( 0°-30°)	319	10.9
FM (30°-60°)	716	24.5
FH (60°-80°)	321	11.0
FVH (80°-90°)	86	2.9
BACK LIGHT	1440	49.3
BL ( 0°-30°)	319	10.9
BM (30°-60°)	713	24.4
BH (60°-80°)	322	11.0
BVH (80°-90°)	86	3.0
UP LIGHT	38	1.3
UL (90°-100°)	17	0.6
UH (100°-180°)	21	0.7
TRAPPED LIGHT	NA	NA

BUG(Backlight,Uplight,Glare) Rating Base On TM-15-07	
Asymmetrical Luminaire Types (Type I,II,III,IV)	B1 U2 G1
Quadrilateral Symmetrical Luminaire Types (Type V,Area Light)	B1 U2 G1

C Plane (°):0.0-360.0: 22.5

Test Lab: KARMA

Test Type: TYPE C

Temperature: 24

Operator: S.DURDURAN

Gamma Plane (°):0.0-180.0:1.0

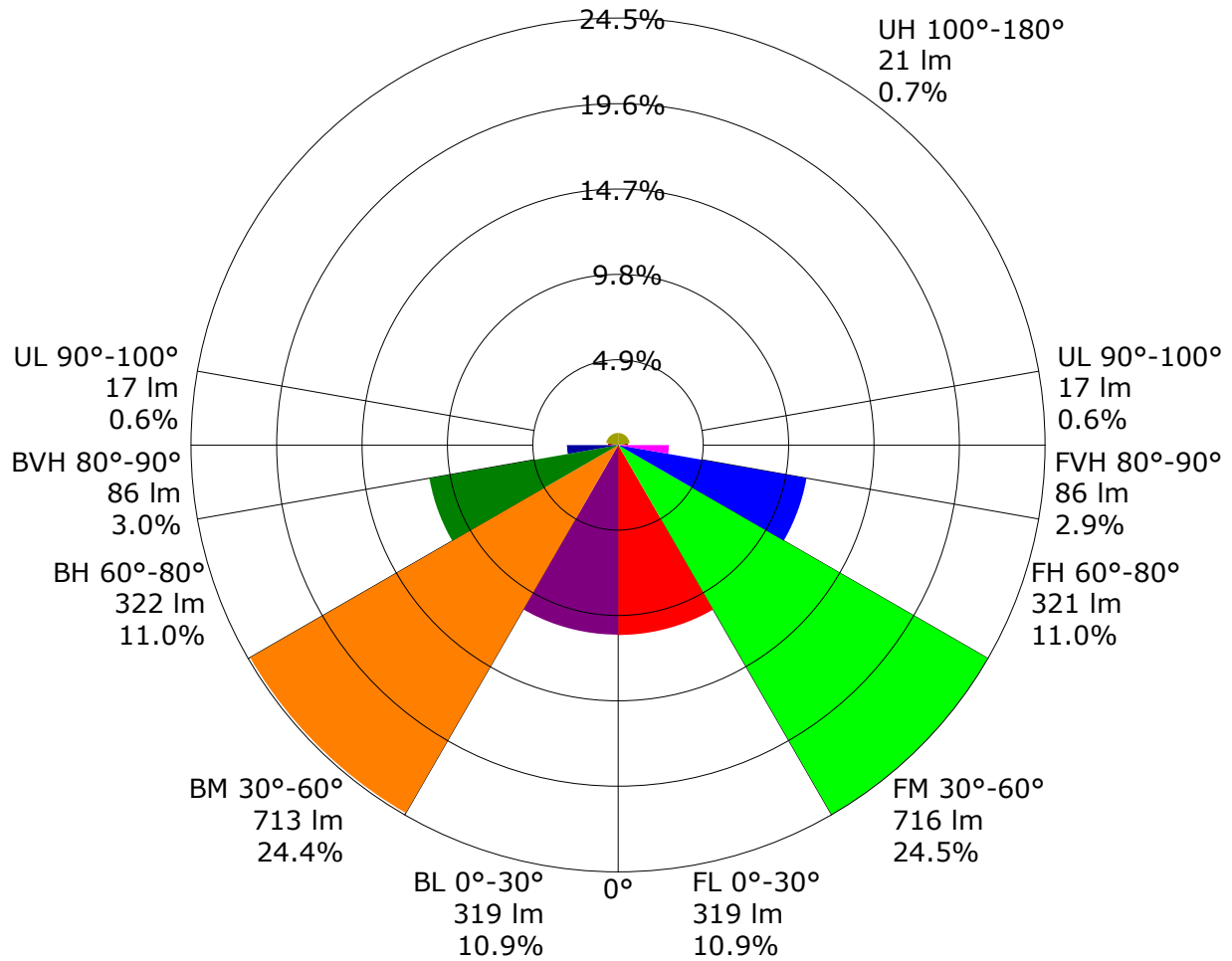
Test Device: LSG-1700B

Distance: 8.942 m

Humidity:

Inspector:

## LCS Graph



**Back Light**

**Forward Light**

Scale= MAX LCS%

Trapped Light:NA,NA



## 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	0.55	0.63	0.71	0.76	0.83	0.88	0.92	0.97	1.00	
	0.30		0.47	0.55	0.63	0.68	0.76	0.82	0.86	0.92	0.96	
	0.20		0.41	0.49	0.57	0.62	0.71	0.77	0.81	0.87	0.92	
0.50	0.50	0.20	0.53	0.61	0.68	0.73	0.80	0.84	0.88	0.92	0.95	
	0.30		0.46	0.54	0.61	0.67	0.74	0.79	0.83	0.88	0.92	
	0.20		0.41	0.48	0.56	0.61	0.69	0.75	0.79	0.85	0.89	
0.30	0.50	0.20	0.52	0.59	0.66	0.70	0.77	0.81	0.84	0.88	0.91	
	0.30		0.46	0.53	0.60	0.65	0.72	0.77	0.80	0.85	0.88	
	0.20		0.41	0.48	0.55	0.60	0.68	0.73	0.77	0.82	0.86	
0.00	0.00	0.00	0.38	0.45	0.52	0.57	0.64	0.69	0.72	0.77	0.81	
<p>Rating:26W Photometrically tested without ceiling board.</p> <p>Multiply UF values by service correction factors</p> <p>Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>												



## 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	1.01	0.87	0.75	0.66	0.54	0.46	0.40	0.32	0.26	
	0.30		0.84	0.74	0.65	0.58	0.49	0.42	0.37	0.30	0.25	
	0.20		0.72	0.65	0.58	0.52	0.44	0.39	0.34	0.28	0.24	
0.50	0.50	0.20	0.97	0.84	0.72	0.63	0.52	0.47	0.38	0.30	0.25	
	0.30		0.82	0.73	0.63	0.57	0.47	0.40	0.35	0.29	0.24	
	0.20		0.72	0.64	0.57	0.51	0.43	0.38	0.33	0.27	0.23	
0.30	0.50	0.20	0.95	0.80	0.69	0.61	0.49	0.42	0.36	0.29	0.24	
	0.30		0.81	0.71	0.62	0.55	0.46	0.39	0.34	0.28	0.23	
	0.20		0.71	0.63	0.56	0.50	0.42	0.37	0.32	0.26	0.22	
0.00	0.00	0.00	0.61	0.54	0.47	0.42	0.35	0.30	0.27	0.22	0.18	
<p>Rating:26W Photometrically tested without ceiling board.</p> <p>Multiply UF values by service correction factors</p> <p>Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>												



## 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	0.17	0.19	0.20	0.20	0.21	0.22	0.22	0.23	0.23	
	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	0.08	0.09	0.11	0.13	0.14	0.16	0.17	
0.50	0.50	0.20	0.17	0.18	0.19	0.20	0.20	0.21	0.21	0.22	0.22	
	0.30		0.10	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	
	0.20		0.05	0.07	0.08	0.09	0.11	0.13	0.14	0.15	0.16	
0.30	0.50	0.20	0.16	0.17	0.18	0.19	0.20	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	0.18	
	0.20		0.05	0.07	0.08	0.09	0.11	0.12	0.13	0.15	0.16	
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:26W Photometrically tested without ceiling board.</p> <p>Multiply UF values by service correction factors</p> <p>Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>												



## Zonal Lumen

Gamma [°]	I <sub>mean</sub> [cd/klm]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
0.0-1.0	273.7	0.8	0.8	0.03	0.03
1.0-2.0	273.6	2.3	3.1	0.08	0.10
2.0-3.0	273.4	3.8	6.9	0.13	0.24
3.0-4.0	273.1	5.3	12.2	0.18	0.42
4.0-5.0	272.8	6.9	19.1	0.23	0.65
5.0-6.0	272.3	8.4	27.4	0.29	0.94
6.0-7.0	271.8	9.9	37.3	0.34	1.28
7.0-8.0	271.2	11.3	48.6	0.39	1.66
8.0-9.0	270.4	12.8	61.4	0.44	2.10
9.0-10.0	269.7	14.3	75.7	0.49	2.59
10.0-11.0	268.8	15.7	91.4	0.54	3.13
11.0-12.0	267.9	17.1	108.5	0.59	3.71
12.0-13.0	266.9	18.5	127.0	0.63	4.35
13.0-14.0	265.8	19.9	146.8	0.68	5.03
14.0-15.0	264.6	21.2	168.1	0.73	5.75
15.0-16.0	263.5	22.5	190.6	0.77	6.53
16.0-17.0	262.2	23.9	214.5	0.82	7.34
17.0-18.0	261.1	25.1	239.6	0.86	8.20
18.0-19.0	260.0	26.4	266.0	0.90	9.11
19.0-20.0	258.8	27.7	293.7	0.95	10.06
20.0-21.0	257.7	28.9	322.6	0.99	11.05
21.0-22.0	256.6	30.1	352.7	1.03	12.08
22.0-23.0	255.6	31.3	384.0	1.07	13.15
23.0-24.0	254.7	32.5	416.5	1.11	14.26
24.0-25.0	253.9	33.7	450.2	1.15	15.42
25.0-26.0	253.1	34.9	485.1	1.20	16.61
26.0-27.0	252.7	36.1	521.3	1.24	17.85
27.0-28.0	252.9	37.4	558.6	1.28	19.13
28.0-29.0	254.2	38.8	597.5	1.33	20.46
29.0-30.0	257.7	40.6	638.1	1.39	21.85
30.0-31.0	261.9	42.6	680.7	1.46	23.31
31.0-32.0	266.6	44.6	725.3	1.53	24.84
32.0-33.0	270.2	46.5	771.8	1.59	26.43
33.0-34.0	271.0	47.9	819.7	1.64	28.07
34.0-35.0	270.2	49.0	868.7	1.68	29.75
35.0-36.0	268.6	49.9	918.7	1.71	31.46

C Plane (°):0.0-360.0: 22.5

Test Lab: KARMA

Test Type: TYPE C

Temperature: 24

Operator: S.DURDURAN

Gamma Plane (°):0.0-180.0:1.0

Test Device: LSG-1700B

Distance: 8.942 m

Humidity:

Inspector:

## Zonal Lumen (Continue 1)

Gamma [°]	Imean [cd/klm]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
36.0-37.0	266.8	50.8	969.5	1.74	33.20
37.0-38.0	264.3	51.5	1021.0	1.76	34.96
38.0-39.0	262.1	52.3	1073.3	1.79	36.75
39.0-40.0	259.1	52.8	1126.1	1.81	38.56
40.0-41.0	253.9	52.8	1178.9	1.81	40.37
41.0-42.0	247.5	52.5	1231.4	1.80	42.17
42.0-43.0	240.0	51.9	1283.3	1.78	43.94
43.0-44.0	232.8	51.3	1334.6	1.76	45.70
44.0-45.0	225.9	50.7	1385.3	1.74	47.44
45.0-46.0	218.5	49.9	1435.3	1.71	49.15
46.0-47.0	211.4	49.1	1484.4	1.68	50.83
47.0-48.0	204.4	48.3	1532.6	1.65	52.48
48.0-49.0	197.7	47.4	1580.1	1.62	54.11
49.0-50.0	191.4	46.6	1626.7	1.60	55.70
50.0-51.0	185.0	45.7	1672.4	1.57	57.27
51.0-52.0	179.3	44.9	1717.3	1.54	58.81
52.0-53.0	174.5	44.3	1761.7	1.52	60.32
53.0-54.0	170.3	43.8	1805.5	1.50	61.83
54.0-55.0	167.1	43.6	1849.1	1.49	63.32
55.0-56.0	165.1	43.6	1892.6	1.49	64.81
56.0-57.0	164.0	43.8	1936.4	1.50	66.31
57.0-58.0	162.3	43.8	1980.3	1.50	67.81
58.0-59.0	159.6	43.6	2023.8	1.49	69.30
59.0-60.0	156.2	43.1	2066.9	1.48	70.78
60.0-61.0	152.5	42.5	2109.4	1.46	72.23
61.0-62.0	148.1	41.7	2151.1	1.43	73.66
62.0-63.0	143.1	40.6	2191.8	1.39	75.05
63.0-64.0	137.6	39.4	2231.2	1.35	76.40
64.0-65.0	131.9	38.1	2269.3	1.31	77.71
65.0-66.0	126.1	36.8	2306.1	1.26	78.97
66.0-67.0	120.4	35.4	2341.4	1.21	80.18
67.0-68.0	115.2	34.1	2375.5	1.17	81.35
68.0-69.0	110.5	32.9	2408.5	1.13	82.47
69.0-70.0	106.2	31.8	2440.3	1.09	83.56
70.0-71.0	102.3	30.9	2471.2	1.06	84.62
71.0-72.0	98.7	30.0	2501.2	1.03	85.65

C Plane (°):0.0-360.0: 22.5  
 Test Lab: KARMA  
 Test Type: TYPE C  
 Temperature: 24  
 Operator: S.DURDURAN

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: LSG-1700B  
 Distance: 8.942 m  
 Humidity:  
 Inspector:

## Zonal Lumen (Continue 2)

Gamma [°]	Imean [cd/klm]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
72.0-73.0	95.3	29.1	2530.3	1.00	86.64
73.0-74.0	92.1	28.3	2558.6	0.97	87.61
74.0-75.0	88.8	27.4	2586.0	0.94	88.55
75.0-76.0	85.6	26.6	2612.5	0.91	89.46
76.0-77.0	82.5	25.7	2638.2	0.88	90.34
77.0-78.0	79.3	24.8	2663.0	0.85	91.19
78.0-79.0	76.3	23.9	2687.0	0.82	92.01
79.0-80.0	73.3	23.1	2710.1	0.79	92.80
80.0-81.0	70.3	22.2	2732.3	0.76	93.56
81.0-82.0	67.5	21.4	2753.7	0.73	94.29
82.0-83.0	64.6	20.5	2774.2	0.70	95.00
83.0-84.0	61.7	19.6	2793.8	0.67	95.67
84.0-85.0	58.5	18.6	2812.5	0.64	96.31
85.0-86.0	54.7	17.5	2829.9	0.60	96.90
86.0-87.0	50.4	16.1	2846.0	0.55	97.46
87.0-88.0	44.9	14.4	2860.4	0.49	97.95
88.0-89.0	38.4	12.3	2872.7	0.42	98.37
89.0-90.0	31.0	9.9	2882.6	0.34	98.71
90.0-91.0	22.7	7.3	2889.9	0.25	98.96
91.0-92.0	14.6	4.7	2894.6	0.16	99.12
92.0-93.0	7.9	2.5	2897.1	0.09	99.21
93.0-94.0	3.5	1.1	2898.2	0.04	99.24
94.0-95.0	1.4	0.5	2898.7	0.02	99.26
95.0-96.0	0.8	0.3	2898.9	0.01	99.27
96.0-97.0	0.7	0.2	2899.1	0.01	99.28
97.0-98.0	0.7	0.2	2899.4	0.01	99.28
98.0-99.0	0.7	0.2	2899.6	0.01	99.29
99.0-100.0	0.7	0.2	2899.8	0.01	99.30
100.0-101.0	0.7	0.2	2900.0	0.01	99.31
101.0-102.0	0.7	0.2	2900.2	0.01	99.31
102.0-103.0	0.7	0.2	2900.5	0.01	99.32
103.0-104.0	0.7	0.2	2900.7	0.01	99.33
104.0-105.0	0.8	0.2	2900.9	0.01	99.34
105.0-106.0	0.8	0.2	2901.2	0.01	99.34
106.0-107.0	0.8	0.3	2901.4	0.01	99.35
107.0-108.0	0.9	0.3	2901.7	0.01	99.36

C Plane (°):0.0-360.0: 22.5  
 Test Lab: KARMA  
 Test Type: TYPE C  
 Temperature: 24  
 Operator: S.DURDURAN

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: LSG-1700B  
 Distance: 8.942 m  
 Humidity:  
 Inspector:

## Zonal Lumen (Continue 3)

Gamma [°]	Imean [cd/klm]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
108.0-109.0	0.9	0.3	2902.0	0.01	99.37
109.0-110.0	0.9	0.3	2902.2	0.01	99.38
110.0-111.0	0.9	0.3	2902.5	0.01	99.39
111.0-112.0	1.0	0.3	2902.8	0.01	99.40
112.0-113.0	1.0	0.3	2903.1	0.01	99.41
113.0-114.0	1.0	0.3	2903.4	0.01	99.42
114.0-115.0	1.1	0.3	2903.7	0.01	99.43
115.0-116.0	1.1	0.3	2904.0	0.01	99.44
116.0-117.0	1.1	0.3	2904.3	0.01	99.45
117.0-118.0	1.1	0.3	2904.7	0.01	99.46
118.0-119.0	1.2	0.3	2905.0	0.01	99.48
119.0-120.0	1.2	0.3	2905.3	0.01	99.49
120.0-121.0	1.2	0.3	2905.7	0.01	99.50
121.0-122.0	1.3	0.3	2906.0	0.01	99.51
122.0-123.0	1.3	0.4	2906.4	0.01	99.52
123.0-124.0	1.3	0.4	2906.7	0.01	99.54
124.0-125.0	1.4	0.4	2907.1	0.01	99.55
125.0-126.0	1.4	0.4	2907.5	0.01	99.56
126.0-127.0	1.4	0.4	2907.8	0.01	99.57
127.0-128.0	1.4	0.4	2908.2	0.01	99.58
128.0-129.0	1.4	0.4	2908.5	0.01	99.60
129.0-130.0	1.5	0.4	2908.9	0.01	99.61
130.0-131.0	1.5	0.4	2909.3	0.01	99.62
131.0-132.0	1.5	0.4	2909.6	0.01	99.63
132.0-133.0	1.5	0.4	2910.0	0.01	99.65
133.0-134.0	1.5	0.4	2910.3	0.01	99.66
134.0-135.0	1.6	0.4	2910.7	0.01	99.67
135.0-136.0	1.6	0.4	2911.1	0.01	99.68
136.0-137.0	1.6	0.3	2911.4	0.01	99.70
137.0-138.0	1.6	0.3	2911.8	0.01	99.71
138.0-139.0	1.6	0.3	2912.1	0.01	99.72
139.0-140.0	1.6	0.3	2912.4	0.01	99.73
140.0-141.0	1.6	0.3	2912.8	0.01	99.74
141.0-142.0	1.7	0.3	2913.1	0.01	99.75
142.0-143.0	1.7	0.3	2913.4	0.01	99.76
143.0-144.0	1.7	0.3	2913.8	0.01	99.78

C Plane (°):0.0-360.0: 22.5  
 Test Lab: KARMA  
 Test Type: TYPE C  
 Temperature: 24  
 Operator: S.DURDURAN

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: LSG-1700B  
 Distance: 8.942 m  
 Humidity:  
 Inspector:



**KARMA Lighting**

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## Zonal Lumen (Continue 4)

Gamma [°]	Imean [cd/klm]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
144.0-145.0	1.7	0.3	2914.1	0.01	99.79
145.0-146.0	1.7	0.3	2914.4	0.01	99.80
146.0-147.0	1.7	0.3	2914.7	0.01	99.81
147.0-148.0	1.8	0.3	2915.0	0.01	99.82
148.0-149.0	1.8	0.3	2915.3	0.01	99.83
149.0-150.0	1.8	0.3	2915.6	0.01	99.84
150.0-151.0	1.8	0.3	2915.9	0.01	99.85
151.0-152.0	1.8	0.3	2916.1	0.01	99.86
152.0-153.0	1.8	0.3	2916.4	0.01	99.87
153.0-154.0	1.8	0.3	2916.7	0.01	99.88
154.0-155.0	1.9	0.3	2916.9	0.01	99.88
155.0-156.0	1.9	0.2	2917.2	0.01	99.89
156.0-157.0	1.9	0.2	2917.4	0.01	99.90
157.0-158.0	1.9	0.2	2917.7	0.01	99.91
158.0-159.0	1.9	0.2	2917.9	0.01	99.92
159.0-160.0	1.9	0.2	2918.1	0.01	99.92
160.0-161.0	2.0	0.2	2918.3	0.01	99.93
161.0-162.0	2.0	0.2	2918.5	0.01	99.94
162.0-163.0	2.0	0.2	2918.7	0.01	99.94
163.0-164.0	2.0	0.2	2918.9	0.01	99.95
164.0-165.0	2.0	0.2	2919.0	0.01	99.96
165.0-166.0	2.0	0.2	2919.2	0.01	99.96
166.0-167.0	2.0	0.1	2919.4	0.01	99.97
167.0-168.0	2.0	0.1	2919.5	0.00	99.97
168.0-169.0	2.0	0.1	2919.6	0.00	99.98
169.0-170.0	2.0	0.1	2919.7	0.00	99.98
170.0-171.0	2.0	0.1	2919.9	0.00	99.98
171.0-172.0	2.0	0.1	2919.9	0.00	99.99
172.0-173.0	2.0	0.1	2920.0	0.00	99.99
173.0-174.0	2.0	0.1	2920.1	0.00	99.99
174.0-175.0	2.0	0.1	2920.2	0.00	100.00
175.0-176.0	2.0	0.1	2920.2	0.00	100.00
176.0-177.0	2.0	0.0	2920.3	0.00	100.00
177.0-178.0	2.0	0.0	2920.3	0.00	100.00
178.0-179.0	2.0	0.0	2920.3	0.00	100.00
179.0-180.0	2.0	0.0	2920.3	0.00	100.00

C Plane (°):0.0-360.0: 22.5

Test Lab: KARMA

Test Type: TYPE C

Temperature: 24

Operator: S.DURDURAN

Gamma Plane (°):0.0-180.0:1.0

Test Device: LSG-1700B

Distance: 8.942 m

Humidity:

Inspector:

## Candlepower Table

Unit: cd/klm

G\C	C0.0	C22.5	C45.0	C67.5	C90.0	C112.5	C135.0	C157.5	C180.0	C202.5
G0.0	274.2	274.2	273.9	273.6	273.9	273.0	273.1	273.5	274.2	274.2
G1.0	274.0	274.2	273.8	273.6	273.9	272.8	273.1	273.5	274.1	274.2
G2.0	273.9	274.0	273.7	273.5	273.7	272.7	273.0	273.4	274.0	274.1
G3.0	273.5	273.7	273.4	273.2	273.4	272.4	272.7	273.0	273.7	273.8
G4.0	273.2	273.3	273.2	272.9	273.2	272.2	272.4	272.7	273.4	273.5
G5.0	272.7	272.8	272.8	272.5	272.9	271.8	271.9	272.3	272.9	273.1
G6.0	272.0	272.3	272.1	272.1	272.4	271.3	271.4	271.7	272.3	272.5
G7.0	271.3	271.6	271.7	271.6	272.0	270.8	270.8	271.1	271.6	271.9
G8.0	270.5	270.9	270.9	271.1	271.4	270.2	270.1	270.3	270.8	271.0
G9.0	269.4	269.9	270.1	270.4	270.7	269.6	269.3	269.4	269.9	270.3
G10.0	268.5	268.9	269.3	269.8	270.1	269.0	268.6	268.5	268.9	269.3
G11.0	267.2	267.8	268.3	269.1	269.5	268.2	267.7	267.4	267.8	268.2
G12.0	266.1	266.6	267.4	268.3	268.7	267.4	266.6	266.3	266.6	267.1
G13.0	264.8	265.3	266.4	267.6	267.9	266.5	265.6	265.1	265.2	265.8
G14.0	263.2	263.9	265.2	266.6	267.0	265.4	264.4	263.5	263.8	264.5
G15.0	261.7	262.4	264.0	265.8	266.2	264.5	263.1	262.2	262.3	263.1
G16.0	260.1	260.9	262.8	264.9	265.6	263.5	261.9	260.7	260.6	261.5
G17.0	258.3	259.1	261.5	264.1	265.2	262.6	260.4	258.9	258.9	259.9
G18.0	256.5	257.4	260.1	263.3	265.3	262.0	258.9	257.2	257.1	258.2
G19.0	254.4	255.5	258.6	263.3	265.4	261.6	257.2	255.4	255.1	256.3
G20.0	252.4	253.7	257.2	263.1	265.4	261.3	255.6	253.5	253.1	254.3
G21.0	250.3	251.6	255.8	263.2	265.7	260.9	254.1	251.7	251.0	252.4
G22.0	248.1	249.5	254.2	263.1	266.7	260.6	252.5	249.5	248.9	250.2
G23.0	245.8	247.4	252.8	263.4	267.8	260.8	251.3	247.4	246.6	248.1
G24.0	243.4	245.3	251.8	264.0	269.4	261.3	250.0	245.2	244.2	245.9
G25.0	240.8	242.8	250.9	265.0	271.6	262.3	248.5	242.7	241.6	243.5
G26.0	238.3	240.4	249.7	266.3	274.0	263.6	247.1	240.4	239.3	241.2
G27.0	235.5	237.9	248.9	268.0	277.4	265.3	245.6	237.9	236.3	238.5
G28.0	232.9	235.4	247.9	269.9	281.6	267.4	244.5	235.5	233.8	236.1
G29.0	230.1	233.0	247.1	272.4	290.7	270.2	243.7	232.6	231.0	233.4
G30.0	227.1	230.3	246.5	276.4	327.3	274.7	243.0	229.8	228.0	230.7
G31.0	224.3	227.5	246.1	284.4	334.5	286.9	242.7	227.1	225.3	228.0
G32.0	221.3	224.8	245.9	316.9	340.7	316.6	242.3	224.5	222.0	224.9
G33.0	218.0	222.0	245.9	329.2	344.0	322.2	242.4	221.3	219.1	222.0
G34.0	215.0	219.1	246.1	334.8	348.8	326.9	242.7	218.3	216.0	219.2
G35.0	211.4	215.9	246.8	337.9	346.8	329.6	243.5	215.3	212.6	216.0
G36.0	208.3	213.1	247.7	341.3	337.2	333.4	244.7	212.4	209.4	213.2

C Plane (°):0.0-360.0: 22.5  
 Test Lab: KARMA  
 Test Type: TYPE C  
 Temperature: 24  
 Operator: S.DURDURAN

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: LSG-1700B  
 Distance: 8.942 m  
 Humidity:  
 Inspector:

## Candlepower Table (Continue 1)

Unit: cd/klm

G\C	C0.0	C22.5	C45.0	C67.5	C90.0	C112.5	C135.0	C157.5	C180.0	C202.5
G37.0	204.9	210.3	249.5	338.9	325.7	335.3	246.9	209.5	205.8	210.1
G38.0	201.4	207.2	254.2	329.1	310.5	326.2	256.7	206.6	202.4	207.3
G39.0	198.0	204.4	273.7	317.0	295.3	315.4	279.9	203.6	199.0	204.4
G40.0	194.1	201.5	294.1	302.8	274.8	301.1	283.6	200.3	195.2	200.9
G41.0	190.5	198.8	299.3	287.6	258.4	286.8	285.0	197.3	191.7	198.0
G42.0	187.2	196.2	300.6	270.8	245.8	269.0	287.1	194.4	188.0	195.2
G43.0	183.1	193.4	300.8	251.6	232.3	251.2	287.8	191.1	184.1	192.2
G44.0	179.6	190.7	299.6	236.9	221.3	238.6	294.3	188.2	180.6	189.2
G45.0	175.7	187.9	291.8	224.6	212.6	226.1	288.7	185.4	176.4	186.2
G46.0	171.7	185.0	280.1	212.5	205.8	213.7	277.9	182.6	172.6	183.5
G47.0	167.8	182.5	267.1	203.1	200.8	204.0	266.6	180.0	168.7	180.9
G48.0	163.7	179.9	251.8	196.1	196.3	196.4	252.0	177.3	164.7	178.1
G49.0	159.7	177.6	237.5	191.3	193.2	191.0	237.4	175.1	160.7	175.6
G50.0	155.6	175.3	221.4	187.0	190.5	186.2	220.9	173.0	156.6	173.2
G51.0	151.3	173.1	203.7	183.0	187.5	182.3	206.4	170.7	152.4	170.6
G52.0	147.4	171.1	190.5	180.2	184.9	179.2	194.2	168.9	148.3	168.3
G53.0	143.2	169.5	179.8	177.2	182.2	176.5	182.6	167.5	143.9	167.2
G54.0	138.9	168.0	168.7	174.2	179.4	173.2	171.3	166.5	139.8	170.6
G55.0	134.6	167.9	161.6	171.2	176.6	170.6	163.1	168.0	135.6	175.8
G56.0	130.1	172.7	155.6	168.3	173.5	167.6	156.2	181.6	131.1	184.9
G57.0	125.8	188.8	151.1	165.3	170.5	164.6	150.7	181.5	126.8	192.3
G58.0	121.5	194.2	147.2	162.4	167.5	161.6	146.6	179.4	122.3	195.6
G59.0	116.8	193.0	143.4	159.2	164.5	158.3	142.7	177.5	117.9	192.8
G60.0	112.7	190.0	140.2	156.1	161.4	155.3	139.4	176.6	113.8	186.2
G61.0	108.2	183.6	137.0	153.2	158.6	152.1	136.3	179.6	109.0	177.4
G62.0	103.6	172.8	133.5	149.7	155.4	148.9	132.9	171.7	104.7	167.8
G63.0	99.1	160.7	130.4	146.8	152.5	146.0	129.7	162.2	100.1	157.7
G64.0	94.3	147.3	127.0	143.5	149.5	142.7	126.0	150.3	95.4	145.4
G65.0	89.9	134.5	123.5	140.6	146.6	139.7	122.8	136.5	91.0	132.7
G66.0	85.6	120.8	120.3	137.7	143.9	136.9	119.4	123.9	86.2	119.5
G67.0	80.7	106.6	116.8	134.4	140.9	133.8	116.0	112.1	81.7	107.7
G68.0	76.2	97.3	113.4	131.8	138.2	131.0	112.8	101.6	77.2	98.1
G69.0	72.0	89.0	110.5	129.0	135.5	128.0	109.4	92.2	72.6	90.1
G70.0	67.1	82.9	107.0	125.8	132.5	125.1	106.1	85.0	68.1	83.8
G71.0	62.6	78.5	103.9	123.1	129.7	122.2	103.0	79.2	63.6	79.3
G72.0	57.9	74.6	100.5	120.0	126.8	119.3	99.6	74.7	59.0	74.9
G73.0	53.5	71.1	97.6	117.4	124.1	116.7	96.7	71.2	54.5	71.3

C Plane (°):0.0-360.0: 22.5

Test Lab: KARMA

Test Type: TYPE C

Temperature: 24

Operator: S.DURDURAN

Gamma Plane (°):0.0-180.0:1.0

Test Device: LSG-1700B

Distance: 8.942 m

Humidity:

Inspector:





## Candlepower Table (Continue 2)

Unit: cd/klm

G\C	C0.0	C22.5	C45.0	C67.5	C90.0	C112.5	C135.0	C157.5	C180.0	C202.5
G74.0	49.2	67.6	94.7	114.5	121.4	113.8	93.7	67.7	49.8	67.4
G75.0	44.5	63.8	91.5	111.7	118.4	110.8	90.7	64.1	45.5	64.2
G76.0	40.3	60.5	88.8	108.9	115.9	108.1	87.8	60.6	41.4	60.7
G77.0	36.3	57.1	85.9	106.2	113.1	105.4	85.1	57.2	36.8	57.2
G78.0	31.8	53.5	82.8	103.2	110.2	102.5	81.9	53.8	32.6	53.9
G79.0	27.9	50.5	80.1	100.7	107.5	99.8	79.3	50.6	28.8	50.8
G80.0	23.8	47.2	77.2	97.8	104.8	97.0	76.4	47.3	24.6	47.6
G81.0	20.1	44.3	74.5	95.3	102.2	94.5	73.8	44.5	20.8	44.7
G82.0	16.7	41.6	71.8	92.6	99.7	92.0	71.0	41.8	17.1	41.7
G83.0	13.1	38.7	69.3	89.7	96.4	89.0	68.3	38.8	13.9	38.9
G84.0	10.2	36.1	66.6	86.1	92.5	85.7	65.8	36.2	10.8	36.5
G85.0	7.3	33.6	63.4	81.3	87.0	81.2	62.9	33.6	7.9	33.9
G86.0	5.0	31.2	59.3	75.3	80.8	75.5	59.3	31.2	5.5	31.5
G87.0	3.1	28.8	53.9	68.0	73.0	68.8	54.5	29.0	3.5	29.2
G88.0	1.5	24.9	46.0	59.0	63.4	59.7	47.1	25.7	1.8	26.1
G89.0	0.7	19.4	37.4	49.5	54.1	50.8	38.8	20.6	0.8	21.6
G90.0	0.3	12.1	28.3	39.7	43.8	40.6	29.9	14.0	0.2	14.8
G91.0	0.3	4.2	17.4	27.7	32.2	29.3	19.1	5.7	0.3	7.0
G92.0	0.3	1.6	7.7	17.1	20.8	18.5	8.8	1.8	0.3	2.3
G93.0	0.4	1.4	1.5	7.5	10.3	8.0	2.2	1.5	0.3	1.5
G94.0	0.4	1.3	0.8	1.7	3.7	2.5	0.7	1.2	0.3	1.3
G95.0	0.4	1.1	0.8	0.6	0.7	0.6	0.7	1.1	0.3	1.1
G96.0	0.5	1.0	0.7	0.7	0.6	0.6	0.7	1.0	0.4	1.0
G97.0	0.5	0.9	0.7	0.7	0.6	0.6	0.7	0.9	0.4	0.9
G98.0	0.5	0.9	0.7	0.7	0.6	0.7	0.7	0.8	0.4	0.8
G99.0	0.6	0.8	0.7	0.7	0.6	0.6	0.7	0.8	0.5	0.8
G100.0	0.6	0.8	0.7	0.7	0.7	0.7	0.7	0.8	0.5	0.8
G101.0	0.6	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.5	0.7
G102.0	0.6	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.7
G103.0	0.7	0.8	0.8	0.8	0.7	0.7	0.8	0.8	0.5	0.7
G104.0	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.6	0.7
G105.0	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.6	0.8
G106.0	0.8	0.8	0.9	0.8	0.8	0.9	0.8	0.8	0.7	0.8
G107.0	0.8	0.8	0.9	0.9	0.8	0.9	0.9	0.8	0.7	0.8
G108.0	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.7	0.8
G109.0	0.9	0.9	0.9	1.0	0.9	0.9	0.9	0.9	0.8	0.8
G110.0	0.9	0.9	1.0	1.0	0.9	1.0	0.9	0.9	0.8	0.9

C Plane (°):0.0-360.0: 22.5

Test Lab: KARMA

Test Type: TYPE C

Temperature: 24

Operator: S.DURDURAN

Gamma Plane (°):0.0-180.0:1.0

Test Device: LSG-1700B

Distance: 8.942 m

Humidity:

Inspector:



## Candlepower Table (Continue 3)

Unit: cd/klm

G\C	C0.0	C22.5	C45.0	C67.5	C90.0	C112.5	C135.0	C157.5	C180.0	C202.5
G111.0	0.9	0.9	1.0	1.0	1.0	1.0	1.0	0.9	0.8	0.9
G112.0	0.9	0.9	1.0	1.0	1.0	1.0	1.0	0.9	0.8	0.9
G113.0	1.0	1.0	1.1	1.1	1.0	1.1	1.0	1.0	0.9	0.9
G114.0	1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.0	0.9	1.0
G115.0	1.0	1.0	1.1	1.2	1.1	1.1	1.1	1.0	0.9	1.0
G116.0	1.1	1.1	1.2	1.2	1.1	1.2	1.1	1.0	1.0	1.0
G117.0	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.1	1.0	1.0
G118.0	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.1	1.0	1.0
G119.0	1.2	1.1	1.3	1.3	1.2	1.3	1.2	1.1	1.0	1.1
G120.0	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.1	1.1	1.1
G121.0	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.2	1.1	1.1
G122.0	1.2	1.2	1.3	1.3	1.4	1.4	1.3	1.2	1.2	1.2
G123.0	1.3	1.2	1.4	1.4	1.4	1.4	1.3	1.2	1.1	1.2
G124.0	1.3	1.3	1.4	1.4	1.4	1.4	1.3	1.2	1.2	1.2
G125.0	1.3	1.3	1.4	1.4	1.4	1.5	1.4	1.3	1.2	1.2
G126.0	1.3	1.3	1.4	1.5	1.5	1.5	1.4	1.3	1.3	1.3
G127.0	1.4	1.3	1.4	1.5	1.5	1.5	1.4	1.3	1.3	1.3
G128.0	1.4	1.4	1.4	1.5	1.5	1.5	1.4	1.4	1.3	1.3
G129.0	1.4	1.4	1.4	1.6	1.5	1.6	1.4	1.4	1.3	1.4
G130.0	1.4	1.4	1.4	1.6	1.6	1.6	1.5	1.4	1.4	1.4
G131.0	1.4	1.5	1.5	1.6	1.6	1.6	1.5	1.4	1.4	1.4
G132.0	1.5	1.5	1.5	1.7	1.6	1.6	1.5	1.5	1.4	1.4
G133.0	1.5	1.5	1.5	1.7	1.7	1.6	1.5	1.5	1.4	1.4
G134.0	1.6	1.5	1.5	1.6	1.6	1.6	1.5	1.5	1.4	1.5
G135.0	1.6	1.5	1.5	1.7	1.7	1.6	1.5	1.5	1.5	1.5
G136.0	1.6	1.6	1.5	1.7	1.6	1.6	1.5	1.6	1.5	1.5
G137.0	1.6	1.6	1.5	1.7	1.7	1.6	1.6	1.6	1.5	1.5
G138.0	1.7	1.7	1.6	1.7	1.7	1.7	1.6	1.6	1.5	1.6
G139.0	1.7	1.6	1.6	1.7	1.6	1.6	1.6	1.6	1.6	1.6
G140.0	1.7	1.7	1.6	1.7	1.7	1.6	1.6	1.6	1.6	1.6
G141.0	1.7	1.7	1.6	1.7	1.7	1.7	1.6	1.7	1.6	1.6
G142.0	1.7	1.7	1.6	1.7	1.7	1.6	1.7	1.7	1.7	1.6
G143.0	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.7	1.6	1.7
G144.0	1.7	1.7	1.7	1.7	1.6	1.7	1.7	1.7	1.7	1.7
G145.0	1.8	1.7	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7
G146.0	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.8	1.7	1.7
G147.0	1.8	1.8	1.8	1.7	1.7	1.7	1.8	1.8	1.7	1.8

C Plane (°):0.0-360.0: 22.5

Test Lab: KARMA

Test Type: TYPE C

Temperature: 24

Operator: S.DURDURAN

Gamma Plane (°):0.0-180.0:1.0

Test Device: LSG-1700B

Distance: 8.942 m

Humidity:

Inspector:

**Candlepower Table (Continue 4)**

Unit: cd/klm

G\C	C0.0	C22.5	C45.0	C67.5	C90.0	C112.5	C135.0	C157.5	C180.0	C202.5
G148.0	1.8	1.8	1.8	1.8	1.7	1.8	1.8	1.8	1.7	1.8
G149.0	1.8	1.8	1.8	1.8	1.7	1.8	1.8	1.8	1.7	1.8
G150.0	1.8	1.8	1.8	1.8	1.7	1.8	1.8	1.8	1.7	1.8
G151.0	1.8	1.9	1.8	1.8	1.7	1.8	1.8	1.9	1.8	1.8
G152.0	1.9	1.9	1.9	1.8	1.7	1.8	1.8	1.9	1.8	1.8
G153.0	1.9	1.9	1.9	1.9	1.7	1.8	1.9	1.9	1.8	1.8
G154.0	1.9	1.9	1.9	1.9	1.8	1.8	1.9	1.9	1.8	1.9
G155.0	1.9	1.9	1.9	1.9	1.8	1.8	1.9	1.9	1.8	1.9
G156.0	1.9	1.9	2.0	1.9	1.8	1.9	1.9	1.9	1.8	1.9
G157.0	1.9	1.9	1.9	2.0	1.8	1.9	1.9	1.9	1.8	1.9
G158.0	1.9	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.8	1.9
G159.0	1.9	2.0	2.0	2.0	1.9	1.9	2.0	2.0	1.8	1.9
G160.0	1.9	2.0	2.0	2.0	1.9	1.9	1.9	2.0	1.9	1.9
G161.0	1.9	2.0	2.0	2.0	1.9	1.9	2.0	2.0	1.8	1.9
G162.0	1.9	2.0	2.0	2.0	1.9	1.9	2.0	2.0	1.9	2.0
G163.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9
G164.0	1.9	2.0	2.0	2.1	1.9	2.0	2.0	2.0	1.9	1.9
G165.0	1.9	2.0	2.0	2.1	2.0	2.0	2.0	2.0	1.9	1.9
G166.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	1.9	2.0
G167.0	1.9	2.0	2.1	2.1	2.0	2.0	2.0	2.0	1.9	2.0
G168.0	2.0	2.0	2.1	2.1	2.0	2.1	2.0	2.0	1.9	2.0
G169.0	1.9	2.0	2.0	2.1	2.0	2.0	2.1	2.0	1.9	2.0
G170.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	1.9	2.0
G171.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0	1.9	2.0
G172.0	2.0	2.0	2.0	2.1	2.0	2.0	2.1	2.0	1.9	2.0
G173.0	2.0	2.0	2.1	2.1	2.1	2.0	2.1	2.0	1.9	2.0
G174.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.1	1.9	2.0
G175.0	2.0	2.0	2.0	2.1	2.1	2.0	2.1	2.1	1.9	2.0
G176.0	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.0	2.0	2.0
G177.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.0	2.0	2.0
G178.0	2.0	2.1	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0
G179.0	2.0	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.0	2.0
G180.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.0	2.0

C Plane (°):0.0-360.0: 22.5

Test Lab: KARMA

Test Type: TYPE C

Temperature: 24

Operator: S.DURDURAN

Gamma Plane (°):0.0-180.0:1.0

Test Device: LSG-1700B

Distance: 8.942 m

Humidity:

Inspector:

## Candlepower Table (Continue 5)

Unit: cd/klm

G\C	C225.0	C247.5	C270.0	C292.5	C315.0	C337.5	C360.0			
G0.0	273.9	273.6	273.9	273.0	273.1	273.5	274.2			
G1.0	273.9	273.6	274.0	273.0	273.2	273.5	274.0			
G2.0	273.8	273.5	273.8	272.8	273.1	273.3	273.9			
G3.0	273.7	273.3	273.7	272.6	272.8	273.0	273.5			
G4.0	273.4	273.2	273.4	272.5	272.5	272.7	273.2			
G5.0	273.0	272.8	273.2	272.2	272.1	272.2	272.7			
G6.0	272.5	272.4	272.8	271.8	271.8	271.6	272.0			
G7.0	271.9	271.9	272.4	271.3	271.2	270.9	271.3			
G8.0	271.2	271.4	271.9	270.7	270.5	270.2	270.5			
G9.0	270.6	270.7	271.4	270.3	269.8	269.3	269.4			
G10.0	269.8	270.2	270.7	269.6	269.0	268.4	268.5			
G11.0	268.7	269.5	270.1	269.0	267.9	267.3	267.2			
G12.0	267.8	268.8	269.4	268.3	267.2	266.2	266.1			
G13.0	266.8	267.9	268.7	267.6	266.0	264.7	264.8			
G14.0	265.7	267.1	267.9	266.8	265.0	263.4	263.2			
G15.0	264.4	266.2	267.2	266.1	263.9	262.0	261.7			
G16.0	263.1	265.1	266.6	265.3	262.7	260.3	260.1			
G17.0	261.7	264.3	266.7	264.7	261.4	258.7	258.3			
G18.0	260.4	263.9	266.5	264.4	260.3	257.1	256.5			
G19.0	258.8	263.5	266.5	264.3	258.8	255.1	254.4			
G20.0	257.2	263.0	267.1	263.9	257.6	253.1	252.4			
G21.0	255.6	263.1	267.6	263.8	256.1	251.1	250.3			
G22.0	254.1	263.1	268.1	264.3	254.9	249.2	248.1			
G23.0	253.0	263.2	269.0	264.7	253.6	247.0	245.8			
G24.0	251.6	263.6	270.3	265.0	252.7	244.7	243.4			
G25.0	250.1	264.3	271.6	265.7	251.8	242.4	240.8			
G26.0	249.0	265.1	273.4	266.4	250.5	240.1	238.3			
G27.0	247.9	266.2	281.2	267.4	249.6	237.6	235.5			
G28.0	246.8	267.5	297.4	270.2	248.9	235.1	232.9			
G29.0	245.8	275.1	318.8	279.9	248.4	232.4	230.1			
G30.0	245.1	290.3	339.0	296.3	247.6	229.9	227.1			
G31.0	244.4	309.3	351.5	312.8	246.8	227.3	224.3			
G32.0	243.9	330.3	356.9	330.3	246.0	224.4	221.3			
G33.0	243.5	342.1	353.6	341.9	245.5	221.8	218.0			
G34.0	243.2	347.9	348.3	346.0	245.6	219.1	215.0			
G35.0	243.1	344.2	340.2	342.8	248.7	216.1	211.4			
G36.0	247.8	338.8	330.0	337.2	256.5	213.2	208.3			

C Plane (°):0.0-360.0: 22.5

Test Lab: KARMA

Test Type: TYPE C

Temperature: 24

Operator: S.DURDURAN

Gamma Plane (°):0.0-180.0:1.0

Test Device: LSG-1700B

Distance: 8.942 m

Humidity:

Inspector:

## Candlepower Table (Continue 6)

Unit: cd/klm

G\C	C225.0	C247.5	C270.0	C292.5	C315.0	C337.5	C360.0			
G37.0	259.9	330.9	317.0	329.2	268.6	210.1	204.9			
G38.0	273.2	320.9	302.5	319.3	280.5	207.5	201.4			
G39.0	289.6	308.9	287.1	308.1	292.3	204.8	198.0			
G40.0	302.4	294.1	268.3	293.3	302.2	201.9	194.1			
G41.0	308.2	278.6	253.4	277.9	305.3	199.0	190.5			
G42.0	306.0	263.0	239.3	261.7	303.4	196.2	187.2			
G43.0	299.6	245.8	227.2	245.3	297.5	193.1	183.1			
G44.0	292.5	231.8	218.4	231.3	290.5	190.5	179.6			
G45.0	282.5	219.2	210.9	218.9	280.6	187.7	175.7			
G46.0	272.2	209.9	204.7	209.9	270.5	185.2	171.7			
G47.0	259.8	202.6	200.8	202.2	258.3	182.6	167.8			
G48.0	245.6	195.4	197.3	195.7	244.1	179.5	163.7			
G49.0	231.0	191.0	194.3	190.7	229.5	177.0	159.7			
G50.0	216.0	187.3	191.5	187.0	214.8	174.3	155.6			
G51.0	201.2	183.8	188.4	183.4	200.2	172.3	151.3			
G52.0	188.6	180.8	185.6	180.5	187.8	172.0	147.4			
G53.0	177.0	177.4	182.6	177.3	176.8	173.9	143.2			
G54.0	169.3	174.5	179.8	174.3	168.6	177.8	138.9			
G55.0	162.0	171.7	177.1	171.4	161.8	182.3	134.6			
G56.0	155.7	168.3	174.2	168.3	155.5	188.5	130.1			
G57.0	151.4	165.6	171.3	165.3	151.1	192.4	125.8			
G58.0	147.4	162.4	168.1	162.3	147.1	194.0	121.5			
G59.0	143.8	159.4	165.3	159.4	143.6	190.3	116.8			
G60.0	140.5	156.5	162.2	156.3	140.3	183.7	112.7			
G61.0	136.8	153.0	159.0	153.0	136.8	174.9	108.2			
G62.0	133.5	150.0	156.1	149.9	133.5	166.0	103.6			
G63.0	130.2	147.0	153.3	146.9	130.3	155.3	99.1			
G64.0	126.8	143.7	150.2	143.8	126.8	143.0	94.3			
G65.0	123.7	140.8	147.4	140.8	123.5	130.5	89.9			
G66.0	120.0	137.6	144.4	137.5	120.1	117.6	85.6			
G67.0	116.6	134.7	141.5	134.7	117.0	107.1	80.7			
G68.0	113.3	131.9	138.8	131.9	113.8	97.0	76.2			
G69.0	109.9	128.8	135.8	128.9	110.2	89.2	72.0			
G70.0	106.8	126.0	133.1	126.0	107.1	83.4	67.1			
G71.0	103.7	123.3	130.4	123.3	103.9	78.6	62.6			
G72.0	100.4	120.2	127.5	120.3	100.8	74.4	57.9			
G73.0	97.4	117.6	124.7	117.5	97.7	70.8	53.5			

C Plane (°):0.0-360.0: 22.5

Test Lab: KARMA

Test Type: TYPE C

Temperature: 24

Operator: S.DURDURAN

Gamma Plane (°):0.0-180.0:1.0

Test Device: LSG-1700B

Distance: 8.942 m

Humidity:

Inspector:



**KARMA Lighting**

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## Candlepower Table (Continue 7)

Unit: cd/klm

G\C	C225.0	C247.5	C270.0	C292.5	C315.0	C337.5	C360.0			
G74.0	94.2	114.6	121.9	114.6	94.6	67.2	49.2			
G75.0	91.3	111.9	119.1	111.9	91.8	63.8	44.5			
G76.0	88.4	109.2	116.4	109.2	88.9	60.5	40.3			
G77.0	85.5	106.2	113.6	106.3	85.9	56.8	36.3			
G78.0	82.7	103.6	111.0	103.8	83.0	53.6	31.8			
G79.0	80.1	101.0	108.4	101.1	80.4	50.6	27.9			
G80.0	77.2	98.0	105.6	98.2	77.6	47.4	23.8			
G81.0	74.5	95.5	103.1	95.8	74.9	44.5	20.1			
G82.0	71.7	92.8	100.1	92.9	72.0	41.6	16.7			
G83.0	69.2	90.1	97.2	90.2	69.7	39.0	13.1			
G84.0	66.6	87.0	93.5	86.7	67.1	36.5	10.2			
G85.0	63.7	82.4	88.5	82.3	63.9	33.9	7.3			
G86.0	60.4	77.3	82.7	76.7	59.9	31.5	5.0			
G87.0	55.6	70.8	75.6	70.3	55.0	29.3	3.1			
G88.0	49.1	62.5	66.6	61.5	48.0	25.7	1.5			
G89.0	41.3	54.0	57.8	53.0	40.0	20.3	0.7			
G90.0	31.9	43.9	47.3	42.7	30.4	13.0	0.3			
G91.0	22.5	33.3	36.6	32.2	20.5	5.3	0.3			
G92.0	12.2	22.4	26.1	21.8	10.8	1.7	0.3			
G93.0	4.3	11.3	14.2	10.6	3.2	1.4	0.4			
G94.0	0.9	4.5	6.3	3.9	0.9	1.2	0.4			
G95.0	0.7	1.2	2.0	0.9	0.8	1.1	0.4			
G96.0	0.7	0.6	0.6	0.6	0.7	1.0	0.5			
G97.0	0.7	0.6	0.6	0.6	0.7	0.9	0.5			
G98.0	0.7	0.6	0.6	0.6	0.7	0.9	0.5			
G99.0	0.7	0.7	0.6	0.7	0.7	0.8	0.6			
G100.0	0.7	0.7	0.6	0.7	0.7	0.8	0.6			
G101.0	0.7	0.7	0.7	0.7	0.7	0.8	0.6			
G102.0	0.7	0.7	0.7	0.7	0.7	0.8	0.6			
G103.0	0.7	0.8	0.7	0.8	0.8	0.8	0.7			
G104.0	0.8	0.8	0.8	0.8	0.8	0.8	0.7			
G105.0	0.8	0.8	0.8	0.8	0.8	0.8	0.7			
G106.0	0.8	0.9	0.8	0.8	0.9	0.8	0.8			
G107.0	0.8	0.9	0.8	0.9	0.9	0.8	0.8			
G108.0	0.9	0.9	0.9	0.9	0.9	0.9	0.8			
G109.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9			
G110.0	0.9	1.0	0.9	1.0	0.9	0.9	0.9			

C Plane (°):0.0-360.0: 22.5

Test Lab: KARMA

Test Type: TYPE C

Temperature: 24

Operator: S.DURDURAN

Gamma Plane (°):0.0-180.0:1.0

Test Device: LSG-1700B

Distance: 8.942 m

Humidity:

Inspector:



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## Candlepower Table (Continue 8)

Unit: cd/klm

G\C	C225.0	C247.5	C270.0	C292.5	C315.0	C337.5	C360.0			
G111.0	0.9	1.0	1.0	1.0	1.0	0.9	0.9			
G112.0	1.0	1.1	1.0	1.0	1.0	1.0	0.9			
G113.0	1.0	1.1	1.0	1.1	1.1	1.0	1.0			
G114.0	1.1	1.1	1.1	1.1	1.1	1.0	1.0			
G115.0	1.1	1.2	1.1	1.1	1.1	1.1	1.0			
G116.0	1.1	1.2	1.1	1.2	1.1	1.1	1.1			
G117.0	1.1	1.2	1.2	1.2	1.2	1.1	1.1			
G118.0	1.2	1.2	1.2	1.2	1.2	1.1	1.1			
G119.0	1.2	1.3	1.2	1.3	1.3	1.2	1.2			
G120.0	1.2	1.3	1.3	1.3	1.3	1.2	1.2			
G121.0	1.3	1.3	1.3	1.3	1.3	1.2	1.2			
G122.0	1.3	1.4	1.3	1.3	1.3	1.3	1.2			
G123.0	1.3	1.4	1.4	1.4	1.4	1.3	1.3			
G124.0	1.3	1.4	1.4	1.4	1.4	1.3	1.3			
G125.0	1.4	1.4	1.4	1.4	1.4	1.3	1.3			
G126.0	1.4	1.5	1.4	1.5	1.4	1.3	1.3			
G127.0	1.4	1.5	1.5	1.5	1.4	1.4	1.4			
G128.0	1.4	1.5	1.5	1.5	1.4	1.4	1.4			
G129.0	1.4	1.6	1.5	1.5	1.5	1.4	1.4			
G130.0	1.4	1.6	1.6	1.6	1.5	1.4	1.4			
G131.0	1.4	1.6	1.5	1.6	1.5	1.4	1.4			
G132.0	1.4	1.6	1.6	1.6	1.5	1.5	1.5			
G133.0	1.5	1.6	1.6	1.6	1.5	1.5	1.5			
G134.0	1.5	1.6	1.6	1.6	1.5	1.5	1.6			
G135.0	1.5	1.7	1.6	1.6	1.5	1.6	1.6			
G136.0	1.5	1.6	1.6	1.6	1.5	1.6	1.6			
G137.0	1.5	1.6	1.6	1.6	1.6	1.6	1.6			
G138.0	1.6	1.7	1.6	1.6	1.6	1.6	1.7			
G139.0	1.6	1.7	1.6	1.6	1.6	1.6	1.7			
G140.0	1.6	1.7	1.6	1.6	1.6	1.7	1.7			
G141.0	1.6	1.6	1.6	1.6	1.6	1.7	1.7			
G142.0	1.6	1.7	1.7	1.6	1.6	1.7	1.7			
G143.0	1.6	1.7	1.6	1.6	1.7	1.8	1.7			
G144.0	1.7	1.7	1.7	1.7	1.7	1.7	1.7			
G145.0	1.7	1.7	1.7	1.7	1.7	1.8	1.8			
G146.0	1.7	1.7	1.7	1.7	1.7	1.8	1.8			
G147.0	1.7	1.7	1.7	1.7	1.8	1.8	1.8			

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Gamma Plane (°):0.0-180.0:1.0

Test Device: LSG-1700B

Distance: 8.942 m

Humidity:

Inspector:

**Candlepower Table (Continue 9)**

Unit: cd/klm

G\C	C225.0	C247.5	C270.0	C292.5	C315.0	C337.5	C360.0			
G148.0	1.7	1.8	1.7	1.7	1.8	1.8	1.8			
G149.0	1.7	1.8	1.7	1.8	1.8	1.8	1.8			
G150.0	1.8	1.8	1.7	1.8	1.8	1.8	1.8			
G151.0	1.8	1.8	1.7	1.8	1.8	1.9	1.8			
G152.0	1.8	1.8	1.7	1.8	1.9	1.9	1.9			
G153.0	1.8	1.8	1.7	1.8	1.9	1.9	1.9			
G154.0	1.8	1.8	1.8	1.9	1.9	1.9	1.9			
G155.0	1.8	1.8	1.8	1.9	1.9	1.9	1.9			
G156.0	1.8	1.9	1.8	1.9	1.9	1.9	1.9			
G157.0	1.9	1.9	1.8	1.9	1.9	1.9	1.9			
G158.0	1.9	1.9	1.8	2.0	2.0	1.9	1.9			
G159.0	1.9	1.9	1.9	2.0	2.0	2.0	1.9			
G160.0	1.9	1.9	1.9	2.0	2.0	2.0	1.9			
G161.0	1.9	2.0	1.9	2.0	2.0	2.0	1.9			
G162.0	2.0	2.0	1.9	2.0	2.0	2.0	1.9			
G163.0	2.0	2.0	1.9	2.0	2.0	2.0	1.9			
G164.0	2.0	2.0	2.0	2.1	2.0	2.0	1.9			
G165.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9			
G166.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0			
G167.0	2.0	2.0	2.0	2.1	2.0	2.0	1.9			
G168.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0			
G169.0	2.0	2.1	2.0	2.1	2.1	2.0	1.9			
G170.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0			
G171.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0			
G172.0	2.0	2.1	2.0	2.1	2.0	2.0	2.0			
G173.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0			
G174.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0			
G175.0	2.0	2.1	2.0	2.1	2.0	2.0	2.0			
G176.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0			
G177.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0			
G178.0	2.0	2.1	2.1	2.0	2.0	2.1	2.0			
G179.0	2.0	2.1	2.1	2.1	2.1	2.0	2.0			
G180.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0			

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