

# S-72901-12W

Report No.: TH-3601A

Test Time: 2022/7/31 09:34

## Luminaire Property

Luminaire Manufacturer:  
 Luminaire Category:  
 Lamp Catalog:  
 Number of Lamps:  
 Luminous Length (mm):  
 Luminous Height (mm):  
 Current: 0.252 A  
 Power Factor: 1.000

Luminaire Description: UT25-FLR12  
 Lamp Description:  
 Lumens per Lamp:  
 Luminous Width (mm):  
 Voltage: 48.0 V  
 Power: 12.09 W

## Photometric Results

CIE Class: Direct  
 Measurement Flux: 617.9 lm  
 Downward Ratio: 99%  
 Horizontal Diffuse Angle(50%): H99.4  
 Vertical Diffuse Angle(50%): V95  
 Luminaire Efficacy Rating (LER): 51.16  
 Max. Intensity: 251.48 cd  
 S/MH(C0/C180): 1.17

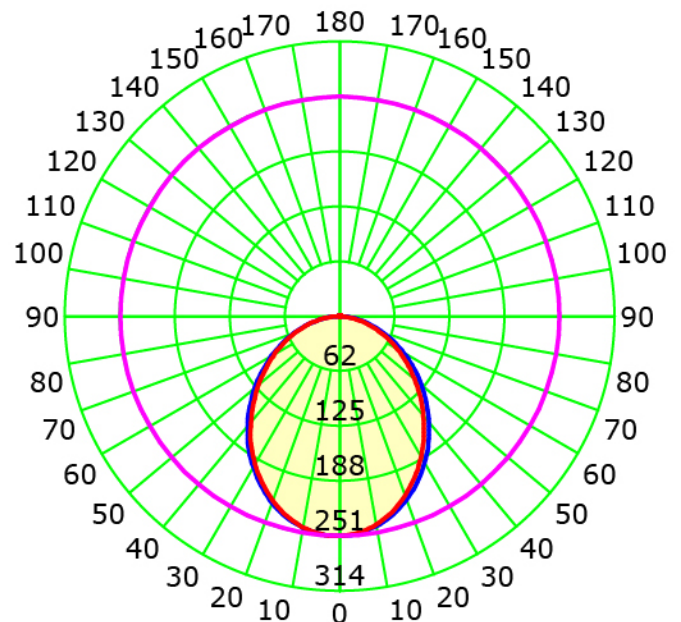
Total Rated Lamp Lumens: 617.9 lm  
 Efficiency: 100%  
 Upward Ratio: 1%

C0r0 Intensity: 251.3 cd  
 Pos of Max. Intensity: H180 V1  
 S/MH(C90/C270): 1.14

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

Average Diffuse Angle(50%): 97.2°

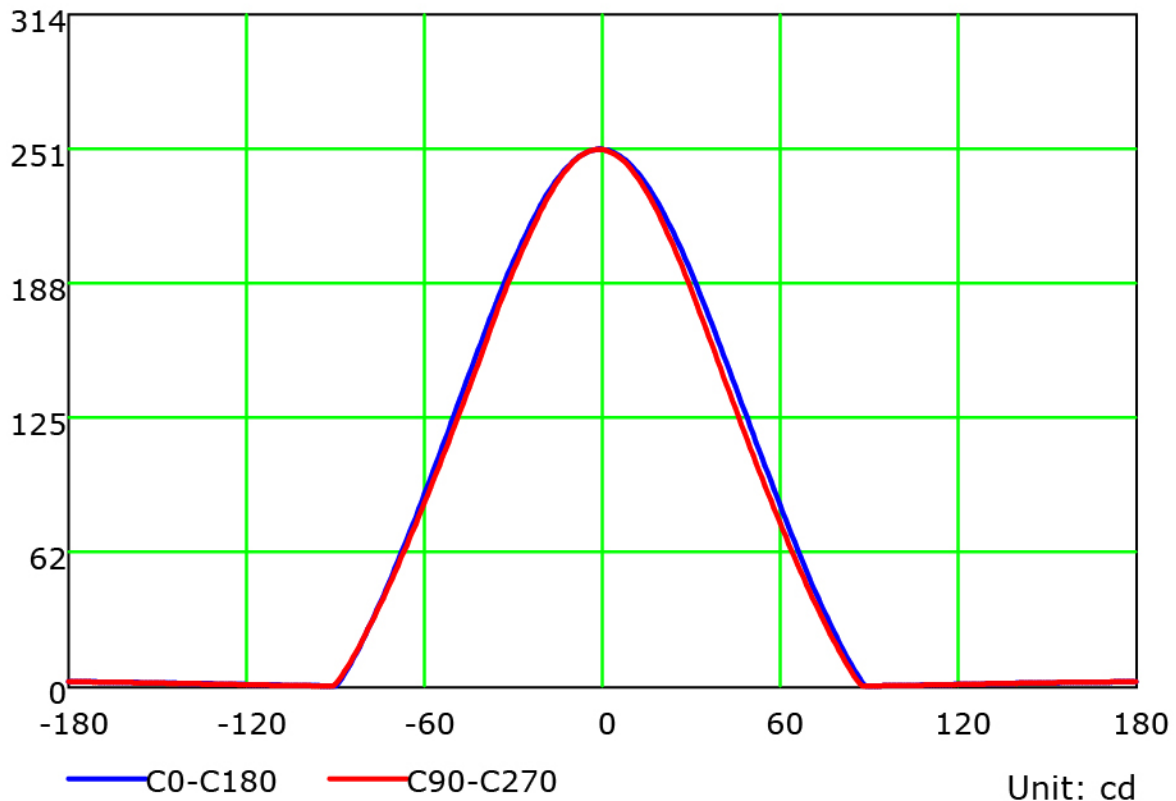
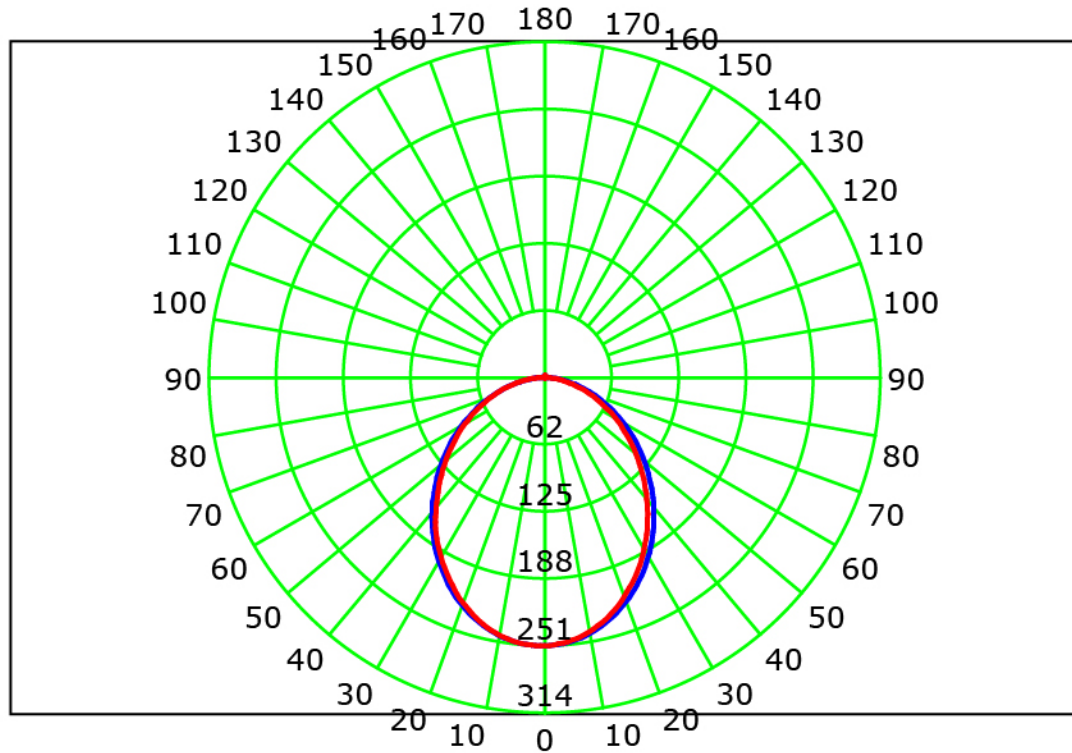
— C0-C180 — C90-C270 — G1

C Plane (°):0.0-360.0: 45.0  
 Test Lab: Inventfine instrument  
 Test Type: TYPE C  
 Temperature: 26  
 Operator: Jacky

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 8.508 m [K=1.0000]  
 Humidity: 65  
 Inspector:

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### Luminous Intensity Distribution Curve



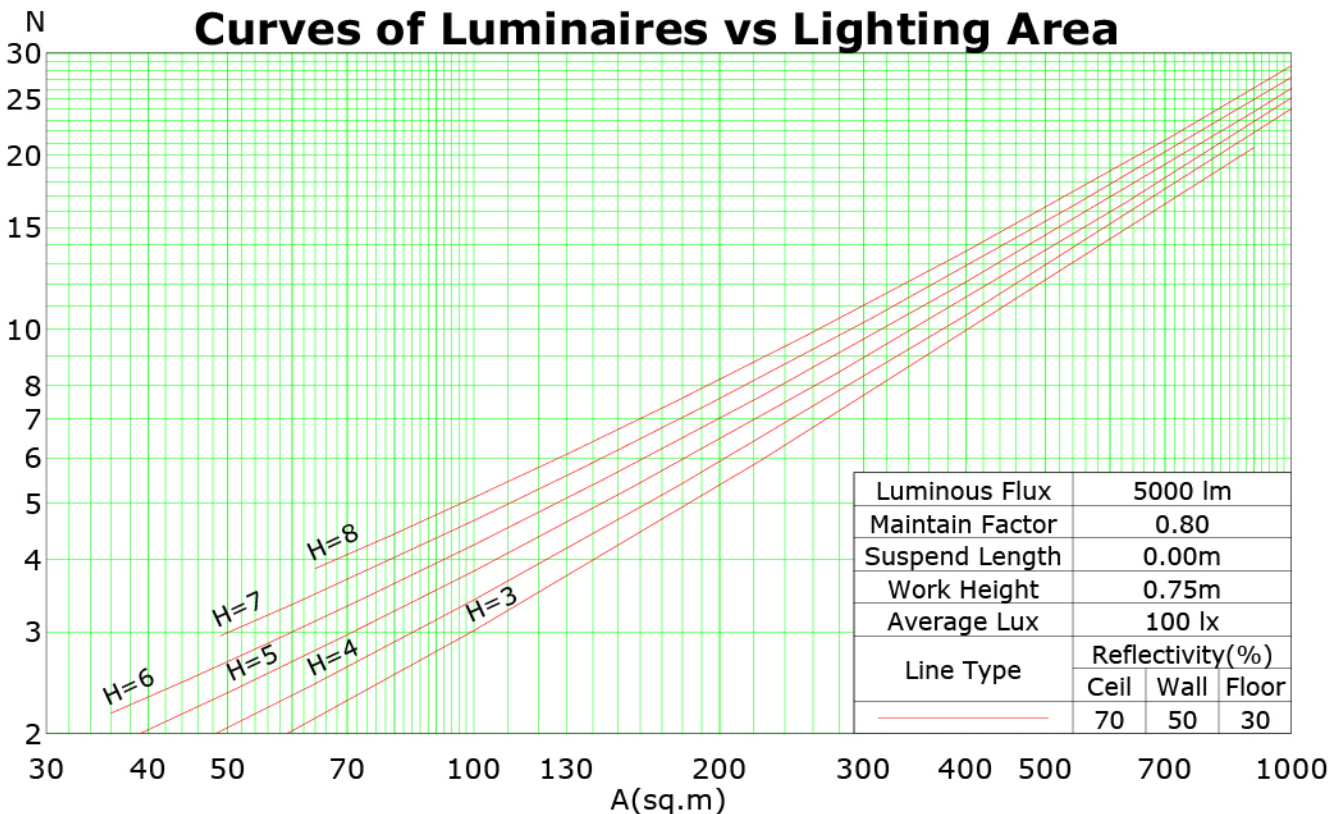
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## Coefficients Of Utilization - Zonal Cavity Method

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	1.19	1.19	1.19	1.19	1.16	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.01	1.01	1.01	0.99
1	1.09	1.04	1.00	0.96	1.06	1.02	0.98	0.95	0.98	0.94	0.92	0.93	0.91	0.89	0.90	0.88	0.86	0.84
2	0.99	0.91	0.85	0.79	0.97	0.89	0.83	0.78	0.86	0.81	0.76	0.82	0.78	0.74	0.79	0.76	0.73	0.70
3	0.91	0.81	0.73	0.66	0.88	0.79	0.72	0.66	0.76	0.70	0.65	0.73	0.68	0.63	0.70	0.66	0.62	0.60
4	0.83	0.72	0.63	0.57	0.81	0.70	0.62	0.56	0.68	0.61	0.55	0.65	0.59	0.55	0.63	0.58	0.54	0.52
5	0.77	0.64	0.56	0.49	0.75	0.63	0.55	0.49	0.61	0.54	0.48	0.59	0.53	0.48	0.57	0.52	0.47	0.45
6	0.71	0.58	0.49	0.43	0.69	0.57	0.49	0.43	0.55	0.48	0.43	0.54	0.47	0.42	0.52	0.46	0.42	0.40
7	0.66	0.53	0.44	0.38	0.64	0.52	0.44	0.38	0.50	0.43	0.38	0.49	0.42	0.37	0.48	0.42	0.37	0.35
8	0.62	0.48	0.40	0.34	0.60	0.48	0.40	0.34	0.46	0.39	0.34	0.45	0.38	0.34	0.44	0.38	0.33	0.32
9	0.58	0.45	0.37	0.31	0.56	0.44	0.36	0.31	0.43	0.36	0.31	0.42	0.35	0.31	0.41	0.35	0.30	0.29
10	0.54	0.41	0.33	0.28	0.53	0.41	0.33	0.28	0.40	0.33	0.28	0.39	0.32	0.28	0.38	0.32	0.28	0.26

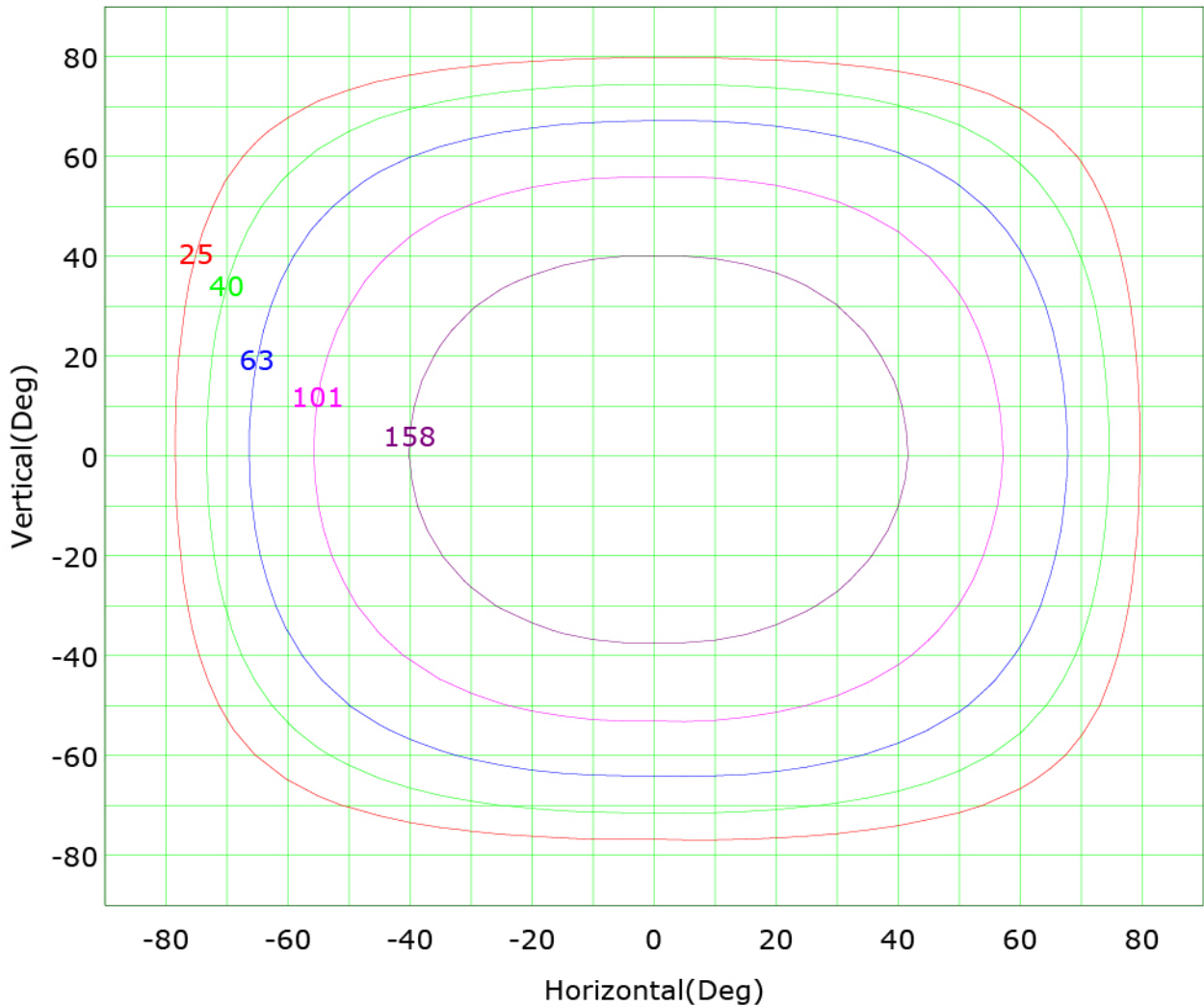
Spacing Criteria (0-180): 1.17  
 Spacing Criteria (90-270): 1.14  
 Spacing Criteria (Diagonal): 1.27

## Curves of Luminaires vs Lighting Area



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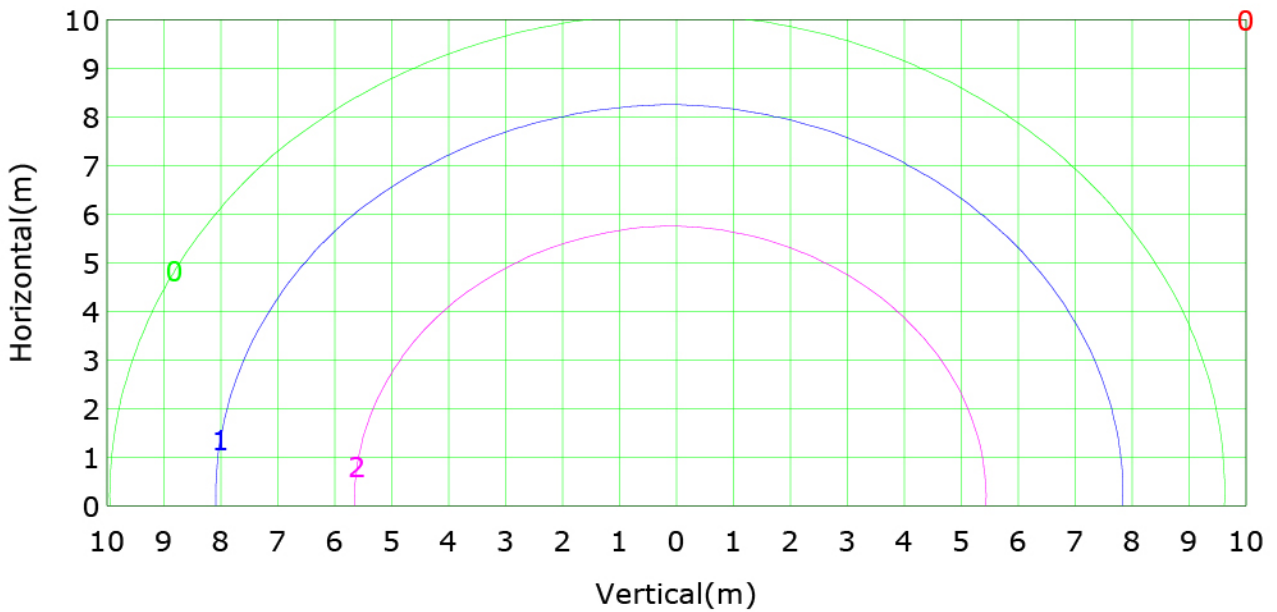
## Isocandela (rectangle)



Imax (100%): 251 cd

— ( 10%):	25 cd	— ( 16%):	40 cd
— ( 25%):	63 cd	— ( 40%):	101 cd
— ( 63%):	158 cd	— (100%):	251 cd

### IsoLux Plot



Mounting Height: 8.0m    Max Lux(100%): 3.9 lx

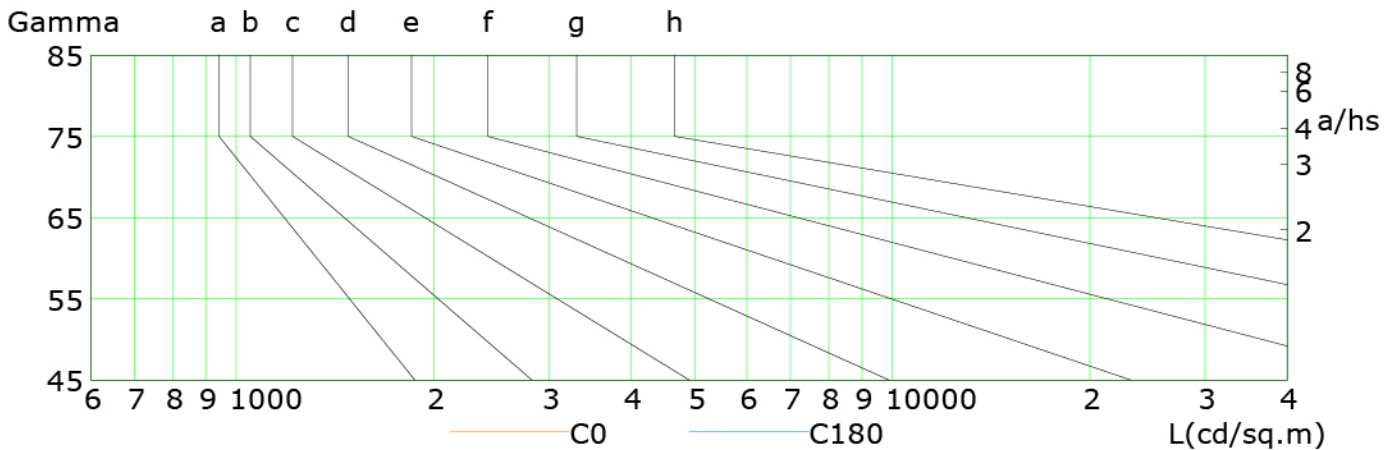
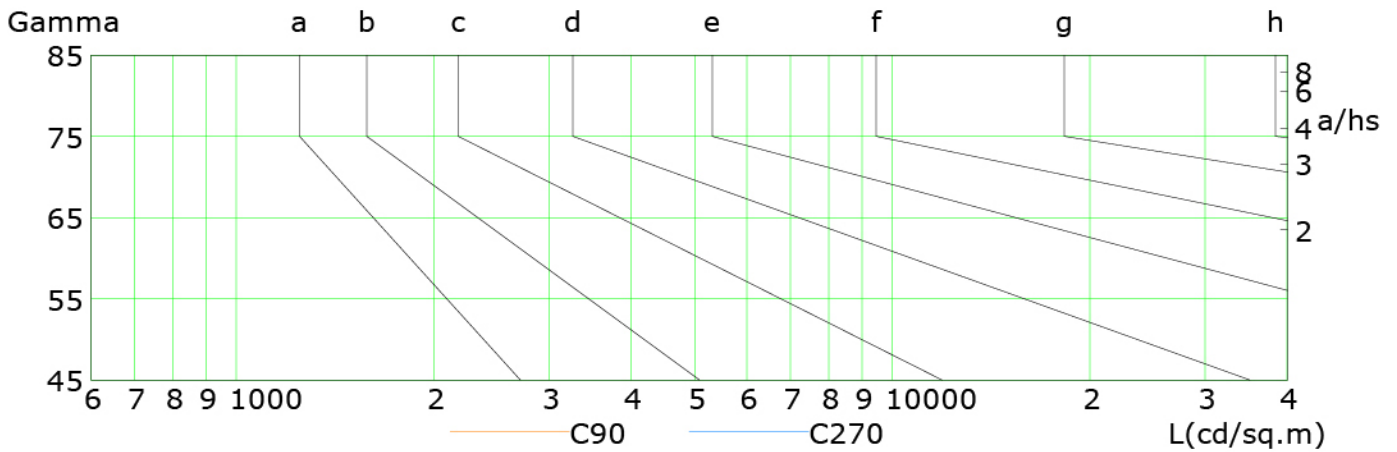
( 4%): 0.2 lx	( 12%): 0.5 lx
( 19%): 0.8 lx	( 38%): 1.5 lx

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### 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

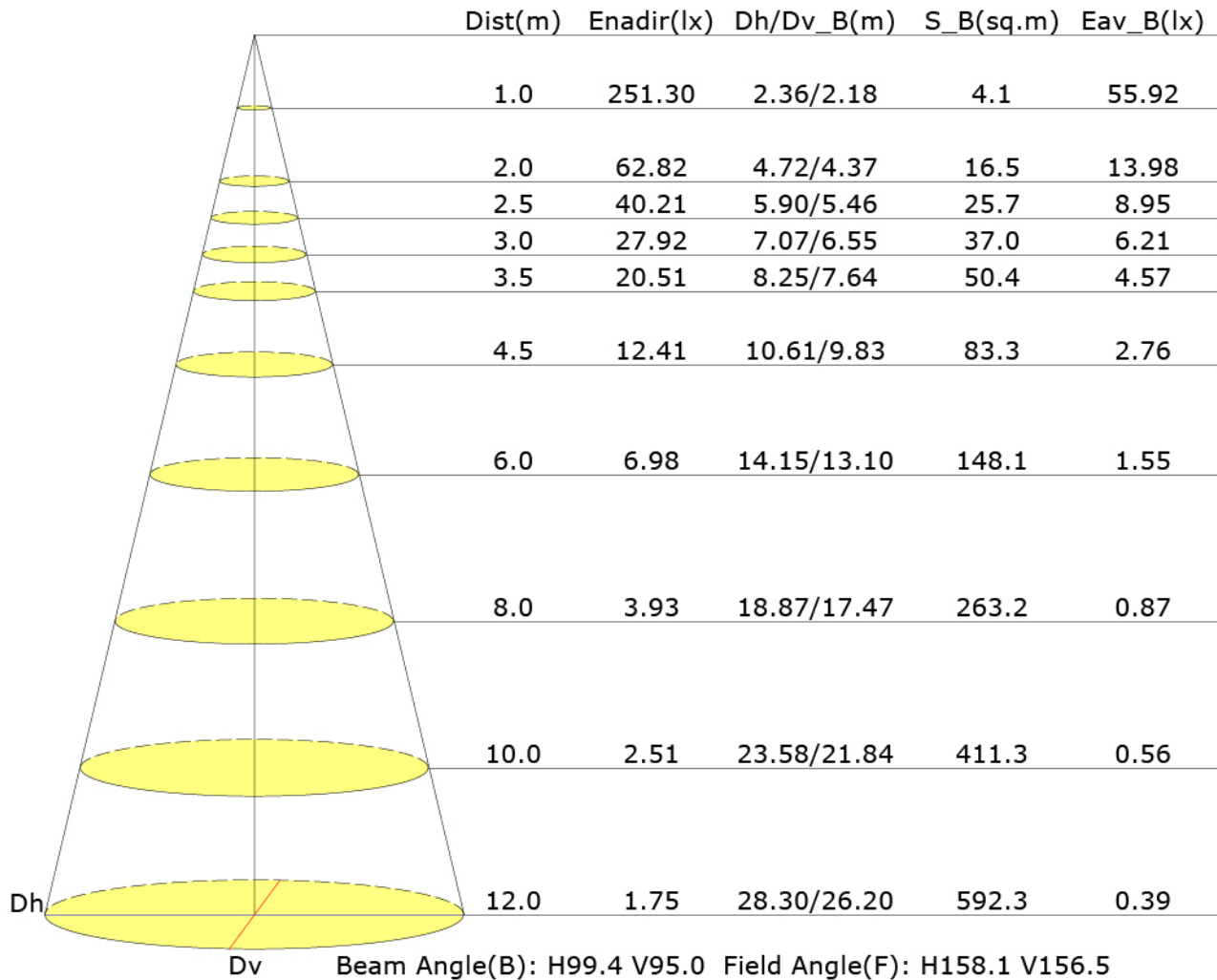


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	141	122	103	85	67	50	35	21	8
C90	130	112	94	77	60	45	30	17	5
C180	146	127	109	90	72	55	39	24	11
C270	140	122	103	86	70	53	38	24	12



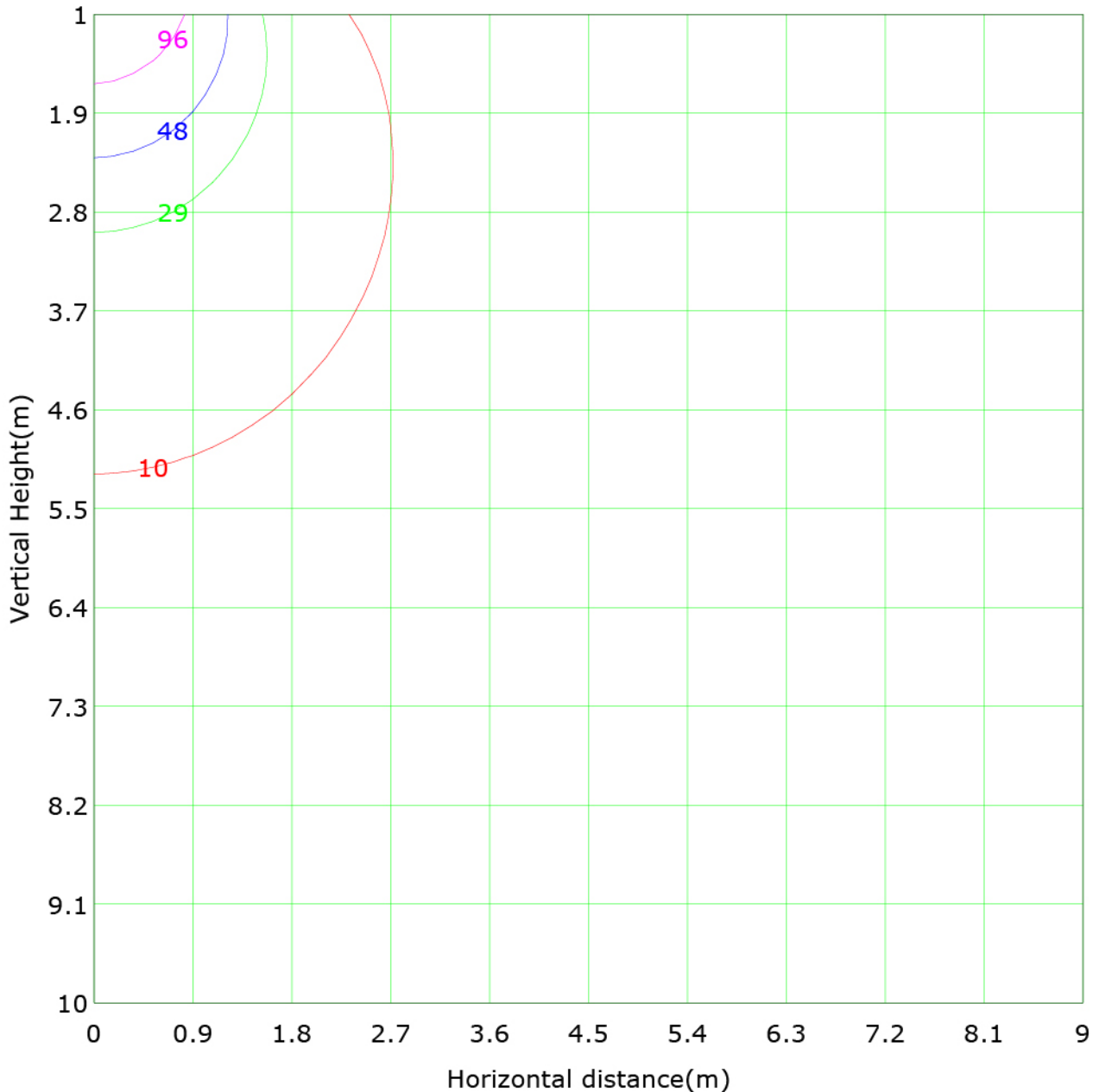
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## Illuminance at a Distance



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### Vertical IsoLux Plot



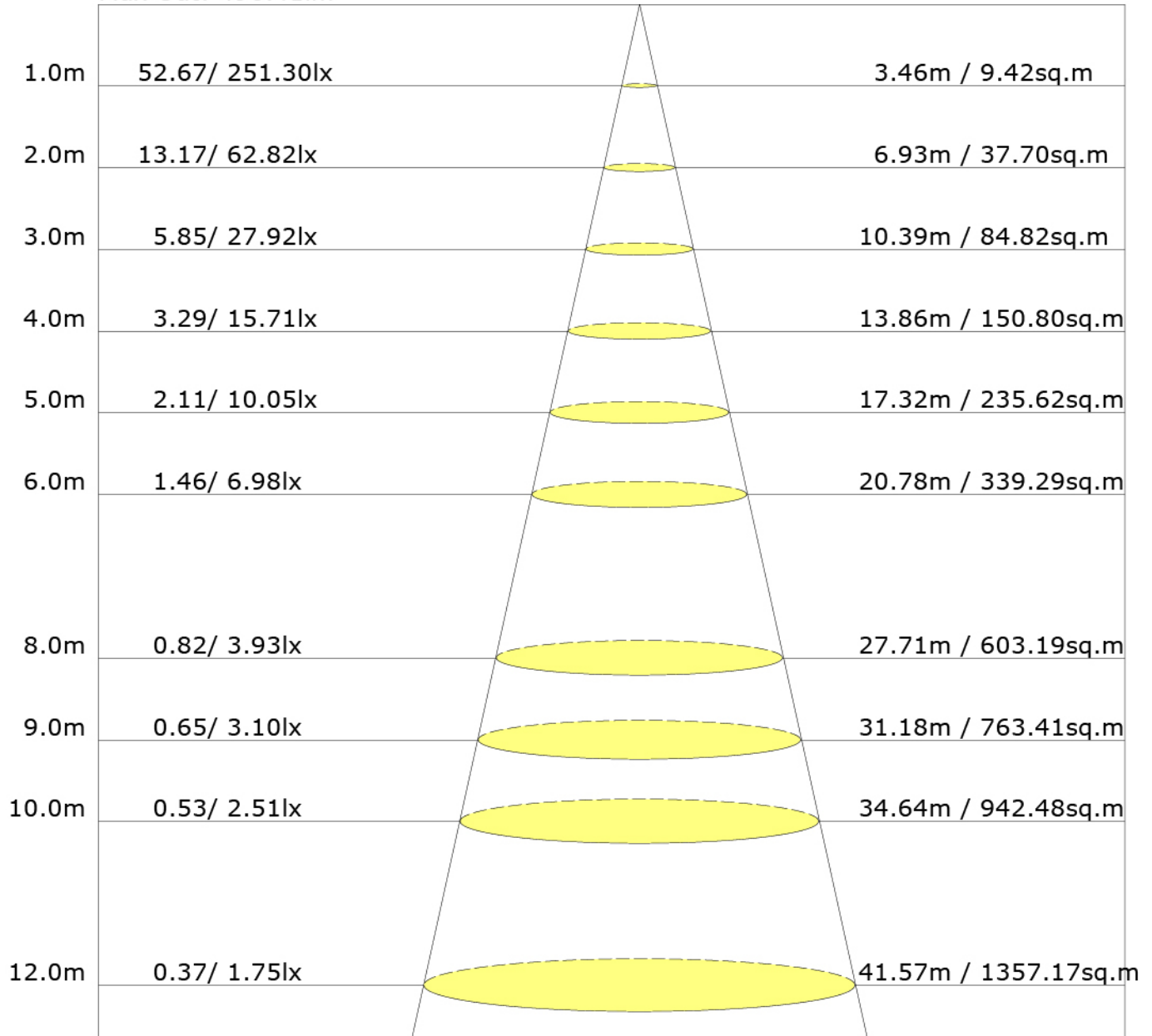
Lowest(m): 1.0m    Highest(m): 10.0m    Max Lux: 251.3 lx  
 ( 4%): 9.6 lx                      ( 12%): 28.9 lx  
 ( 19%): 48.2 lx                      ( 38%): 96.5 lx



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### The Average Illuminance Effective Figure

Flux Out: 496.41lm



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### 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	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
3H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
4H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
6H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
8H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
12H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
X=4H Y=2H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
3H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
4H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
6H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
8H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
12H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
X=8H Y=4H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
6H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
8H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
12H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
X=12H Y=4H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
6H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
8H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
Variations with the observer position at spacings:										
S=1.0H	-1.\$/-1.\$					-1.\$/-1.\$				
S=1.5H	-1.\$/-1.\$					-1.\$/-1.\$				
S=2.0H	-1.\$/-1.\$					-1.\$/-1.\$				

Calculate in accordance with CIE Pub.117. The table is revised with 618lm ( $8\log(F/F_0) = -1.7$ ).

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## Zonal Lumen

Gamma [°]	I <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
0.0-1.0	251.3	0.2	0.2	0.04	0.04
1.0-2.0	251.1	0.7	1.0	0.12	0.16
2.0-3.0	250.8	1.2	2.2	0.19	0.35
3.0-4.0	250.4	1.7	3.8	0.27	0.62
4.0-5.0	249.8	2.1	6.0	0.35	0.97
5.0-6.0	249.1	2.6	8.6	0.42	1.39
6.0-7.0	248.2	3.1	11.7	0.50	1.89
7.0-8.0	247.2	3.5	15.2	0.57	2.46
8.0-9.0	246.0	4.0	19.2	0.65	3.11
9.0-10.0	244.7	4.4	23.6	0.72	3.83
10.0-11.0	243.3	4.9	28.5	0.79	4.61
11.0-12.0	241.7	5.3	33.8	0.86	5.47
12.0-13.0	240.0	5.7	39.5	0.92	6.39
13.0-14.0	238.3	6.1	45.6	0.99	7.38
14.0-15.0	236.3	6.5	52.1	1.05	8.43
15.0-16.0	234.2	6.9	58.9	1.11	9.54
16.0-17.0	232.1	7.2	66.2	1.17	10.71
17.0-18.0	229.8	7.6	73.7	1.23	11.93
18.0-19.0	227.3	7.9	81.7	1.28	13.21
19.0-20.0	224.9	8.2	89.9	1.33	14.55
20.0-21.0	222.2	8.5	98.4	1.38	15.93
21.0-22.0	219.5	8.8	107.2	1.43	17.35
22.0-23.0	216.7	9.1	116.3	1.47	18.83
23.0-24.0	213.9	9.4	125.7	1.51	20.34
24.0-25.0	210.9	9.6	135.3	1.55	21.89
25.0-26.0	207.9	9.8	145.1	1.59	23.48
26.0-27.0	204.8	10.0	155.1	1.62	25.10
27.0-28.0	201.6	10.2	165.3	1.65	26.75
28.0-29.0	198.5	10.4	175.7	1.68	28.43
29.0-30.0	195.2	10.5	186.2	1.71	30.14
30.0-31.0	191.9	10.7	196.9	1.73	31.87
31.0-32.0	188.5	10.8	207.7	1.75	33.62
32.0-33.0	185.1	10.9	218.6	1.77	35.38
33.0-34.0	181.7	11.0	229.6	1.78	37.16
34.0-35.0	178.2	11.1	240.7	1.79	38.95
35.0-36.0	174.6	11.1	251.8	1.80	40.75

C Plane (°):0.0-360.0: 45.0  
 Test Lab: Inventfine instrument  
 Test Type: TYPE C

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 8.508 m [K=1.0000]

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**Zonal Lumen (Continue 1)**

Gamma [°]	Imean [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
36.0-37.0	171.1	11.2	263.0	1.81	42.56
37.0-38.0	167.5	11.2	274.2	1.81	44.37
38.0-39.0	163.8	11.2	285.3	1.81	46.18
39.0-40.0	160.1	11.2	296.5	1.81	47.98
40.0-41.0	156.5	11.1	307.7	1.80	49.79
41.0-42.0	152.9	11.1	318.8	1.80	51.59
42.0-43.0	149.1	11.0	329.8	1.79	53.37
43.0-44.0	145.4	11.0	340.8	1.78	55.15
44.0-45.0	141.8	10.9	351.7	1.76	56.91
45.0-46.0	138.0	10.8	362.5	1.75	58.66
46.0-47.0	134.2	10.7	373.2	1.73	60.39
47.0-48.0	130.5	10.6	383.7	1.71	62.09
48.0-49.0	126.8	10.4	394.1	1.69	63.78
49.0-50.0	123.0	10.3	404.4	1.66	65.44
50.0-51.0	119.3	10.1	414.5	1.63	67.07
51.0-52.0	115.7	9.9	424.4	1.61	68.68
52.0-53.0	112.0	9.7	434.1	1.58	70.26
53.0-54.0	108.3	9.5	443.7	1.54	71.80
54.0-55.0	104.7	9.3	453.0	1.51	73.31
55.0-56.0	101.1	9.1	462.2	1.48	74.79
56.0-57.0	97.4	8.9	471.1	1.44	76.23
57.0-58.0	93.9	8.7	479.8	1.41	77.64
58.0-59.0	90.4	8.4	488.2	1.37	79.01
59.0-60.0	86.8	8.2	496.4	1.33	80.33
60.0-61.0	83.3	7.9	504.4	1.29	81.62
61.0-62.0	79.8	7.7	512.0	1.24	82.86
62.0-63.0	76.3	7.4	519.5	1.20	84.07
63.0-64.0	72.8	7.1	526.6	1.16	85.22
64.0-65.0	69.5	6.9	533.5	1.11	86.33
65.0-66.0	66.1	6.6	540.1	1.07	87.40
66.0-67.0	62.8	6.3	546.4	1.02	88.42
67.0-68.0	59.4	6.0	552.4	0.97	89.40
68.0-69.0	56.1	5.7	558.2	0.93	90.32
69.0-70.0	52.9	5.4	563.6	0.88	91.20
70.0-71.0	49.7	5.1	568.7	0.83	92.04
71.0-72.0	46.6	4.8	573.6	0.78	92.82

C Plane (°):0.0-360.0: 45.0  
 Test Lab: Inventfine instrument  
 Test Type: TYPE C

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 8.508 m [K=1.0000]

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**Zonal Lumen (Continue 2)**

Gamma [°]	I <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
72.0-73.0	43.4	4.5	578.1	0.74	93.55
73.0-74.0	40.4	4.2	582.4	0.69	94.24
74.0-75.0	37.3	3.9	586.3	0.64	94.88
75.0-76.0	34.4	3.7	589.9	0.59	95.47
76.0-77.0	31.5	3.4	593.3	0.54	96.01
77.0-78.0	28.6	3.1	596.4	0.50	96.51
78.0-79.0	25.7	2.8	599.1	0.45	96.96
79.0-80.0	23.0	2.5	601.6	0.40	97.36
80.0-81.0	20.2	2.2	603.8	0.35	97.71
81.0-82.0	17.6	1.9	605.7	0.31	98.02
82.0-83.0	14.9	1.6	607.3	0.26	98.28
83.0-84.0	12.4	1.4	608.7	0.22	98.50
84.0-85.0	10.0	1.1	609.8	0.18	98.68
85.0-86.0	7.7	0.8	610.6	0.14	98.81
86.0-87.0	5.4	0.6	611.2	0.10	98.91
87.0-88.0	3.4	0.4	611.6	0.06	98.97
88.0-89.0	1.9	0.2	611.8	0.03	99.00
89.0-90.0	0.9	0.1	611.9	0.02	99.02
90.0-91.0	0.3	0.0	611.9	0.01	99.03
91.0-92.0	0.2	0.0	611.9	0.00	99.03
92.0-93.0	0.2	0.0	612.0	0.00	99.03
93.0-94.0	0.3	0.0	612.0	0.00	99.04
94.0-95.0	0.3	0.0	612.0	0.00	99.04
95.0-96.0	0.3	0.0	612.1	0.01	99.05
96.0-97.0	0.3	0.0	612.1	0.01	99.05
97.0-98.0	0.3	0.0	612.1	0.01	99.06
98.0-99.0	0.4	0.0	612.2	0.01	99.07
99.0-100.0	0.4	0.0	612.2	0.01	99.07
100.0-101.0	0.4	0.0	612.3	0.01	99.08
101.0-102.0	0.4	0.0	612.3	0.01	99.09
102.0-103.0	0.4	0.0	612.3	0.01	99.09
103.0-104.0	0.5	0.0	612.4	0.01	99.10
104.0-105.0	0.5	0.1	612.4	0.01	99.11
105.0-106.0	0.5	0.1	612.5	0.01	99.12
106.0-107.0	0.5	0.1	612.6	0.01	99.13
107.0-108.0	0.6	0.1	612.6	0.01	99.14

C Plane (°):0.0-360.0: 45.0  
 Test Lab: Inventfine instrument  
 Test Type: TYPE C

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 8.508 m [K=1.0000]

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**Zonal Lumen (Continue 3)**

Gamma [°]	I <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
108.0-109.0	0.6	0.1	612.7	0.01	99.15
109.0-110.0	0.6	0.1	612.7	0.01	99.16
110.0-111.0	0.6	0.1	612.8	0.01	99.17
111.0-112.0	0.7	0.1	612.9	0.01	99.18
112.0-113.0	0.7	0.1	612.9	0.01	99.19
113.0-114.0	0.7	0.1	613.0	0.01	99.20
114.0-115.0	0.7	0.1	613.1	0.01	99.21
115.0-116.0	0.8	0.1	613.2	0.01	99.23
116.0-117.0	0.8	0.1	613.2	0.01	99.24
117.0-118.0	0.8	0.1	613.3	0.01	99.25
118.0-119.0	0.8	0.1	613.4	0.01	99.26
119.0-120.0	0.9	0.1	613.5	0.01	99.28
120.0-121.0	0.9	0.1	613.6	0.01	99.29
121.0-122.0	0.9	0.1	613.6	0.01	99.31
122.0-123.0	1.0	0.1	613.7	0.01	99.32
123.0-124.0	1.0	0.1	613.8	0.01	99.33
124.0-125.0	1.0	0.1	613.9	0.01	99.35
125.0-126.0	1.0	0.1	614.0	0.01	99.36
126.0-127.0	1.1	0.1	614.1	0.02	99.38
127.0-128.0	1.1	0.1	614.2	0.02	99.39
128.0-129.0	1.1	0.1	614.3	0.02	99.41
129.0-130.0	1.1	0.1	614.4	0.02	99.43
130.0-131.0	1.2	0.1	614.5	0.02	99.44
131.0-132.0	1.2	0.1	614.6	0.02	99.46
132.0-133.0	1.2	0.1	614.7	0.02	99.47
133.0-134.0	1.3	0.1	614.8	0.02	99.49
134.0-135.0	1.3	0.1	614.9	0.02	99.51
135.0-136.0	1.3	0.1	615.0	0.02	99.52
136.0-137.0	1.3	0.1	615.1	0.02	99.54
137.0-138.0	1.4	0.1	615.2	0.02	99.56
138.0-139.0	1.4	0.1	615.3	0.02	99.57
139.0-140.0	1.4	0.1	615.4	0.02	99.59
140.0-141.0	1.4	0.1	615.5	0.02	99.60
141.0-142.0	1.5	0.1	615.6	0.02	99.62
142.0-143.0	1.5	0.1	615.7	0.02	99.64
143.0-144.0	1.5	0.1	615.8	0.02	99.65

C Plane (°):0.0-360.0: 45.0  
 Test Lab: Inventfine instrument  
 Test Type: TYPE C

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 8.508 m [K=1.0000]



S-72901-12W

**Zonal Lumen (Continue 4)**

Gamma [°]	I <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
144.0-145.0	1.5	0.1	615.9	0.02	99.67
145.0-146.0	1.6	0.1	616.0	0.02	99.68
146.0-147.0	1.6	0.1	616.1	0.02	99.70
147.0-148.0	1.6	0.1	616.2	0.02	99.71
148.0-149.0	1.6	0.1	616.3	0.02	99.73
149.0-150.0	1.7	0.1	616.4	0.01	99.74
150.0-151.0	1.7	0.1	616.4	0.01	99.76
151.0-152.0	1.7	0.1	616.5	0.01	99.77
152.0-153.0	1.7	0.1	616.6	0.01	99.79
153.0-154.0	1.7	0.1	616.7	0.01	99.80
154.0-155.0	1.8	0.1	616.8	0.01	99.81
155.0-156.0	1.8	0.1	616.9	0.01	99.83
156.0-157.0	1.8	0.1	617.0	0.01	99.84
157.0-158.0	1.8	0.1	617.0	0.01	99.85
158.0-159.0	1.9	0.1	617.1	0.01	99.87
159.0-160.0	1.9	0.1	617.2	0.01	99.88
160.0-161.0	1.9	0.1	617.2	0.01	99.89
161.0-162.0	1.9	0.1	617.3	0.01	99.90
162.0-163.0	1.9	0.1	617.4	0.01	99.91
163.0-164.0	2.0	0.1	617.4	0.01	99.92
164.0-165.0	2.0	0.1	617.5	0.01	99.93
165.0-166.0	2.0	0.1	617.6	0.01	99.94
166.0-167.0	2.0	0.1	617.6	0.01	99.95
167.0-168.0	2.0	0.0	617.7	0.01	99.95
168.0-169.0	2.0	0.0	617.7	0.01	99.96
169.0-170.0	2.1	0.0	617.7	0.01	99.97
170.0-171.0	2.1	0.0	617.8	0.01	99.97
171.0-172.0	2.1	0.0	617.8	0.01	99.98
172.0-173.0	2.1	0.0	617.8	0.00	99.98
173.0-174.0	2.1	0.0	617.9	0.00	99.99
174.0-175.0	2.1	0.0	617.9	0.00	99.99
175.0-176.0	2.1	0.0	617.9	0.00	99.99
176.0-177.0	2.1	0.0	617.9	0.00	100.00
177.0-178.0	2.1	0.0	617.9	0.00	100.00
178.0-179.0	2.1	0.0	617.9	0.00	100.00
179.0-180.0	2.2	0.0	617.9	0.00	100.00

C Plane (°):0.0-360.0: 45.0  
 Test Lab: Inventfine instrument  
 Test Type: TYPE C

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 8.508 m [K=1.0000]

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## Zonal Lumen (Continue 5)

cone flux(90°): 351.69 lm

%lum = 56.9%

%lamp = 56.9%

cone flux(120°): 496.41 lm

%lum = 80.3%

%lamp = 80.3%

# S-72901-12W

## Candlepower Table

Unit: cd

G\C	C0.0	C45.0	C90.0	C135.0	C180.0	C225.0	C270.0	C315.0	C360.0	
G0.0	251.3	251.3	251.3	251.3	251.3	251.3	251.3	251.3	251.3	
G1.0	251.1	251.1	251.0	251.1	251.5	251.4	251.4	251.3	251.1	
G2.0	250.9	250.7	250.5	250.8	251.3	251.4	251.4	251.2	250.9	
G3.0	250.4	250.1	249.9	250.2	251.1	251.1	251.1	251.0	250.4	
G4.0	249.9	249.4	249.3	249.7	250.7	250.7	250.8	250.6	249.9	
G5.0	249.1	248.6	248.3	248.8	250.2	250.3	250.2	250.1	249.1	
G6.0	248.2	247.7	247.4	248.0	249.6	249.7	249.5	249.2	248.2	
G7.0	247.2	246.5	246.2	246.9	248.8	248.8	248.6	248.5	247.2	
G8.0	246.1	245.3	245.0	245.8	247.9	247.9	247.6	247.4	246.1	
G9.0	245.0	243.9	243.5	244.4	246.8	246.7	246.4	246.4	245.0	
G10.0	243.6	242.4	241.8	242.9	245.7	245.6	245.2	245.1	243.6	
G11.0	242.1	240.9	240.0	241.4	244.2	244.4	243.8	243.8	242.1	
G12.0	240.4	239.0	238.0	239.5	242.9	242.9	242.1	242.2	240.4	
G13.0	238.8	237.2	236.1	237.7	241.4	241.3	240.5	240.5	238.8	
G14.0	236.9	235.2	234.0	235.8	239.6	239.6	238.6	238.9	236.9	
G15.0	234.8	232.9	231.7	233.8	237.9	237.6	236.5	236.9	234.8	
G16.0	232.9	230.7	229.1	231.4	236.1	235.7	234.5	234.9	232.9	
G17.0	230.7	228.4	226.7	229.2	233.9	233.7	232.3	232.9	230.7	
G18.0	228.2	225.8	224.2	226.8	232.0	231.4	229.7	230.4	228.2	
G19.0	225.9	223.4	221.3	224.1	229.7	229.1	227.3	228.1	225.9	
G20.0	223.5	220.8	218.5	221.6	227.2	226.5	224.8	225.8	223.5	
G21.0	220.7	217.8	215.3	219.0	224.9	224.0	222.2	223.0	220.7	
G22.0	218.1	215.2	212.4	216.0	222.3	221.5	219.1	220.4	218.1	
G23.0	215.5	212.3	209.5	213.2	219.5	218.8	216.3	217.6	215.5	
G24.0	212.7	209.4	206.5	210.4	216.8	215.8	213.4	214.6	212.7	
G25.0	209.6	206.2	203.0	207.1	214.1	212.9	210.6	211.8	209.6	
G26.0	206.7	203.1	199.8	204.0	211.0	210.1	207.3	208.9	206.7	
G27.0	203.6	199.9	196.5	200.9	208.1	206.7	204.4	205.6	203.6	
G28.0	200.5	196.7	193.1	197.6	205.2	203.7	201.3	202.6	200.5	
G29.0	197.4	193.4	189.7	194.4	201.9	200.6	197.9	199.5	197.4	
G30.0	194.0	189.8	185.9	190.9	198.8	197.6	194.7	196.3	194.0	
G31.0	190.8	186.6	182.4	187.7	195.9	194.4	191.5	192.7	190.8	
G32.0	187.2	182.9	178.6	184.1	192.8	191.2	188.3	189.5	187.2	
G33.0	183.9	179.6	175.1	180.7	189.6	187.6	184.7	186.1	183.9	
G34.0	180.5	176.2	171.4	177.3	185.9	184.4	181.4	182.8	180.5	
G35.0	176.8	172.4	167.5	173.6	182.6	181.1	177.9	179.1	176.8	
G36.0	173.4	168.9	163.9	170.1	179.1	177.7	174.2	175.8	173.4	

C Plane (°):0.0-360.0: 45.0  
 Test Lab: Inventfine instrument  
 Test Type: TYPE C

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 8.508 m [K=1.0000]

S-72901-12W

**Candlepower Table (Continue 1)**

Unit: cd

G\C	C0.0	C45.0	C90.0	C135.0	C180.0	C225.0	C270.0	C315.0	C360.0
G37.0	169.9	165.4	160.2	166.7	175.4	174.0	170.1	172.5	169.9
G38.0	166.0	161.9	156.5	163.2	171.9	170.6	166.3	168.7	166.0
G39.0	162.5	157.9	152.6	159.4	168.4	167.3	162.3	165.3	162.5
G40.0	158.9	154.3	148.9	155.8	164.6	163.6	158.6	161.9	158.9
G41.0	155.3	150.7	145.2	152.1	161.0	160.2	154.9	158.2	155.3
G42.0	151.7	147.0	141.2	148.5	157.5	156.8	150.9	154.7	151.7
G43.0	147.8	143.1	137.6	144.5	153.5	152.9	147.3	151.2	147.8
G44.0	144.1	139.5	133.9	140.9	149.9	149.5	143.7	147.3	144.1
G45.0	140.5	135.8	130.3	137.3	146.2	145.9	139.8	143.6	140.5
G46.0	136.5	131.8	126.3	133.3	142.2	142.2	136.1	140.0	136.5
G47.0	132.9	128.2	122.7	129.7	138.6	138.1	132.6	135.9	132.9
G48.0	129.3	124.6	119.1	126.2	134.9	134.4	129.0	132.2	129.3
G49.0	125.6	120.6	115.2	122.6	130.9	130.4	125.1	128.6	125.6
G50.0	121.6	116.9	111.7	118.6	127.3	126.7	121.6	124.6	121.6
G51.0	118.0	113.3	108.1	114.9	123.7	123.1	118.0	121.0	118.0
G52.0	114.3	109.7	104.6	111.4	119.7	119.2	114.2	117.4	114.3
G53.0	110.8	105.9	100.8	107.5	116.1	115.6	110.7	113.5	110.8
G54.0	106.8	102.3	97.3	103.9	112.5	111.8	107.3	110.0	106.8
G55.0	103.3	98.8	94.0	100.4	108.5	108.2	103.4	106.5	103.3
G56.0	99.7	95.3	90.2	96.6	104.9	104.7	100.0	102.6	99.7
G57.0	95.8	91.5	86.9	93.1	101.0	101.2	96.6	99.0	95.8
G58.0	92.3	88.0	83.5	89.7	97.4	97.4	93.2	95.6	92.3
G59.0	88.7	84.5	80.2	86.2	93.9	93.9	89.5	91.8	88.7
G60.0	84.9	80.8	76.6	82.5	90.3	90.4	86.1	88.3	84.9
G61.0	81.4	77.4	73.3	79.1	86.4	86.9	82.8	84.8	81.4
G62.0	78.0	74.0	70.1	75.7	83.0	83.2	79.6	81.1	78.0
G63.0	74.5	70.3	66.5	72.0	79.2	79.9	76.0	77.7	74.5
G64.0	70.8	67.0	63.3	68.7	75.8	76.5	72.8	74.4	70.8
G65.0	67.4	63.7	60.1	65.3	72.4	72.8	69.6	70.7	67.4
G66.0	64.1	60.4	57.0	62.1	69.1	69.6	66.2	67.4	64.1
G67.0	60.5	56.9	53.9	58.6	65.3	66.2	63.0	64.1	60.5
G68.0	57.2	53.7	50.8	55.4	62.0	62.7	59.9	60.6	57.2
G69.0	53.9	50.5	47.5	52.2	58.7	59.4	56.4	57.3	53.9
G70.0	50.4	47.4	44.5	48.8	55.4	56.2	53.4	54.1	50.4
G71.0	47.3	44.3	41.6	45.7	51.9	53.0	50.3	51.0	47.3
G72.0	44.1	41.3	38.6	42.6	48.7	49.6	47.4	47.8	44.1
G73.0	41.0	37.9	35.8	39.6	45.5	46.5	44.1	44.5	41.0

C Plane (°):0.0-360.0: 45.0  
 Test Lab: Inventfine instrument  
 Test Type: TYPE C

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 8.508 m [K=1.0000]

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**Candlepower Table (Continue 2)**

Unit: cd

G\C	C0.0	C45.0	C90.0	C135.0	C180.0	C225.0	C270.0	C315.0	C360.0
G74.0	38.0	35.0	32.9	36.6	42.1	43.4	41.2	41.4	38.0
G75.0	35.0	32.0	30.1	33.7	39.0	40.1	38.4	38.4	35.0
G76.0	32.0	29.2	27.1	30.8	36.0	37.1	35.5	35.5	32.0
G77.0	29.1	26.4	24.4	27.9	33.1	34.2	32.5	32.3	29.1
G78.0	26.3	23.6	21.8	25.1	29.8	31.3	29.8	29.4	26.3
G79.0	23.5	20.9	19.3	22.2	27.0	28.2	27.0	26.6	23.5
G80.0	20.5	18.2	16.8	19.5	24.1	25.4	24.4	23.8	20.5
G81.0	17.9	15.4	14.3	16.9	21.4	22.7	21.5	21.1	17.9
G82.0	15.3	12.9	11.7	14.4	18.4	19.9	18.9	18.2	15.3
G83.0	12.8	10.5	9.4	11.9	15.8	17.1	16.5	15.6	12.8
G84.0	10.3	8.0	7.1	9.5	13.2	14.5	14.0	13.0	10.3
G85.0	8.0	5.7	5.0	7.2	10.7	12.0	11.6	10.6	8.0
G86.0	5.7	3.6	2.9	4.8	8.1	9.6	9.1	8.2	5.7
G87.0	3.6	1.5	1.1	2.7	5.8	7.3	6.9	5.8	3.6
G88.0	1.5	0.2	0.2	0.9	3.7	4.9	4.9	3.7	1.5
G89.0	0.2	0.2	0.2	0.2	1.7	2.8	2.7	1.8	0.2
G90.0	0.2	0.2	0.2	0.2	0.3	1.1	1.1	0.3	0.2
G91.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
G92.0	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2
G93.0	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3
G94.0	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3
G95.0	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.3
G96.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
G97.0	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3
G98.0	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.4
G99.0	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.4
G100.0	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.4
G101.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
G102.0	0.5	0.5	0.4	0.5	0.4	0.4	0.4	0.4	0.5
G103.0	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.5
G104.0	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.5
G105.0	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.5	0.5
G106.0	0.6	0.6	0.5	0.6	0.5	0.5	0.5	0.5	0.6
G107.0	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.6
G108.0	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.6
G109.0	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.6
G110.0	0.7	0.7	0.6	0.7	0.6	0.6	0.5	0.6	0.7

C Plane (°):0.0-360.0: 45.0  
 Test Lab: Inventfine instrument  
 Test Type: TYPE C

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 8.508 m [K=1.0000]



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**Candlepower Table (Continue 3)**

Unit: cd

G\C	C0.0	C45.0	C90.0	C135.0	C180.0	C225.0	C270.0	C315.0	C360.0
G111.0	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.7
G112.0	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.7
G113.0	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.7
G114.0	0.8	0.8	0.8	0.8	0.7	0.7	0.6	0.7	0.8
G115.0	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.8
G116.0	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.8
G117.0	0.9	0.9	0.8	0.9	0.8	0.7	0.7	0.8	0.9
G118.0	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.9
G119.0	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.9
G120.0	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.9
G121.0	1.0	1.0	0.9	1.0	0.9	0.9	0.8	0.9	1.0
G122.0	1.0	1.0	1.0	1.0	0.9	0.9	0.9	0.9	1.0
G123.0	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.9	1.0
G124.0	1.1	1.0	1.0	1.1	1.0	0.9	0.9	0.9	1.1
G125.0	1.1	1.1	1.1	1.1	1.0	1.0	0.9	1.0	1.1
G126.0	1.1	1.1	1.1	1.1	1.0	1.0	1.0	1.0	1.1
G127.0	1.1	1.1	1.1	1.1	1.1	1.0	1.0	1.0	1.1
G128.0	1.2	1.2	1.1	1.2	1.1	1.0	1.0	1.0	1.2
G129.0	1.2	1.2	1.2	1.2	1.1	1.1	1.0	1.1	1.2
G130.0	1.2	1.2	1.2	1.2	1.1	1.1	1.1	1.1	1.2
G131.0	1.3	1.2	1.2	1.3	1.2	1.1	1.1	1.1	1.3
G132.0	1.3	1.3	1.3	1.3	1.2	1.1	1.1	1.1	1.3
G133.0	1.3	1.3	1.3	1.3	1.2	1.2	1.1	1.2	1.3
G134.0	1.3	1.3	1.3	1.3	1.3	1.2	1.2	1.2	1.3
G135.0	1.4	1.4	1.4	1.4	1.3	1.2	1.2	1.2	1.4
G136.0	1.4	1.4	1.4	1.4	1.3	1.2	1.2	1.2	1.4
G137.0	1.4	1.4	1.4	1.4	1.3	1.3	1.2	1.3	1.4
G138.0	1.4	1.4	1.4	1.4	1.4	1.3	1.3	1.3	1.4
G139.0	1.5	1.5	1.5	1.5	1.4	1.3	1.3	1.3	1.5
G140.0	1.5	1.5	1.5	1.5	1.4	1.3	1.3	1.3	1.5
G141.0	1.5	1.5	1.5	1.5	1.4	1.4	1.3	1.4	1.5
G142.0	1.5	1.5	1.5	1.6	1.4	1.4	1.4	1.4	1.5
G143.0	1.6	1.6	1.6	1.6	1.5	1.4	1.4	1.4	1.6
G144.0	1.6	1.6	1.6	1.6	1.5	1.4	1.4	1.4	1.6
G145.0	1.6	1.6	1.6	1.6	1.5	1.5	1.4	1.5	1.6
G146.0	1.6	1.6	1.6	1.7	1.5	1.5	1.5	1.5	1.6
G147.0	1.7	1.7	1.7	1.7	1.6	1.5	1.5	1.5	1.7

C Plane (°):0.0-360.0: 45.0  
 Test Lab: Inventfine instrument  
 Test Type: TYPE C

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 8.508 m [K=1.0000]



S-72901-12W

### Candlepower Table (Continue 4)

Unit: cd

G\C	C0.0	C45.0	C90.0	C135.0	C180.0	C225.0	C270.0	C315.0	C360.0
G148.0	1.7	1.7	1.7	1.7	1.6	1.5	1.5	1.5	1.7
G149.0	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.7
G150.0	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.7
G151.0	1.7	1.7	1.8	1.8	1.7	1.6	1.6	1.6	1.7
G152.0	1.8	1.8	1.8	1.8	1.7	1.6	1.6	1.6	1.8
G153.0	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.8
G154.0	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.8
G155.0	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.8
G156.0	1.8	1.8	1.9	1.9	1.8	1.7	1.7	1.7	1.8
G157.0	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.9
G158.0	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.9
G159.0	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.9
G160.0	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.9
G161.0	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9
G162.0	1.9	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9
G163.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	2.0
G164.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
G165.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
G166.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
G167.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
G168.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0
G169.0	2.0	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0
G170.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.1
G171.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
G172.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
G173.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
G174.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
G175.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
G176.0	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.1
G177.0	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.1
G178.0	2.1	2.1	2.1	2.1	2.2	2.1	2.2	2.1	2.1
G179.0	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.1	2.1
G180.0	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.1

## LED Average Luminance Report

Avg.L	cd/m <sup>2</sup>
L 0-180(65) av	1.#J
L 0-180(75) av	1.#J
L 0-180(85) av	1.#J
L 90-270(65) av	1.#J
L 90-270(75) av	1.#J
L 90-270(85) av	1.#J
L 45(65) av	1.#J
L 45(75) av	1.#J
L 45(85) av	1.#J

Standard: GB/T 29293-2012