

Report No.: 7010

Test Time: 2024/9/14 11:42

## Luminaire Property

Luminaire Manufacturer: BBT LIGHTING  
 Luminaire Category: OUTDOOR LAMP  
 Luminaire Description: TATTO 334100

Voltage: 220.3 V  
 Power: 61.93 W

Current: 0.286 A  
 Power Factor: 0.983

## Photometric Results

CIE Class: General Diffuse  
 Measurement Flux: 3533.5 lm  
 Downward Ratio: 55%  
 Horizontal Diffuse Angle(50%): H272.2  
 Vertical Diffuse Angle(50%): V272.4  
 Luminaire Efficacy Rating (LER): 57.11  
 Max. Intensity: 531.99 cd  
 S/MH(C0/C180): 6.69

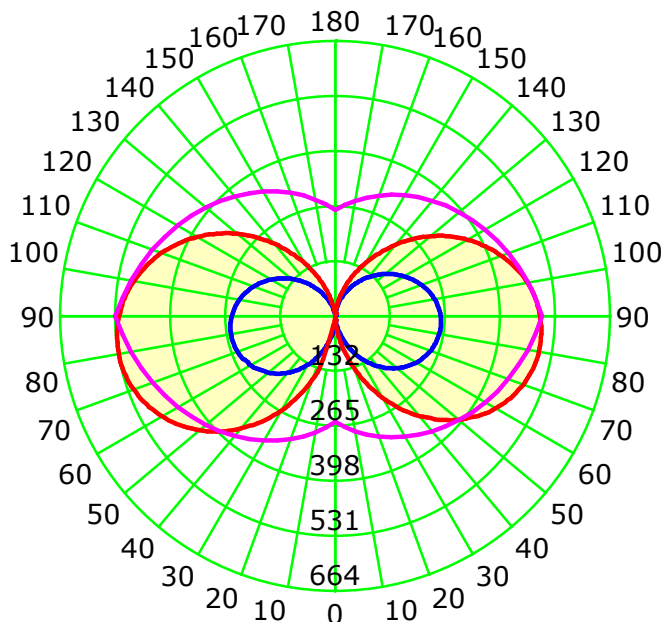
Total Rated Lamp Lumens: 3533.5 lm  
 Efficiency: 100%  
 Upward Ratio: 45%

C0r0 Intensity: 11.9 cd  
 Pos of Max. Intensity: H270 V80  
 S/MH(C90/C270): 8.62

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

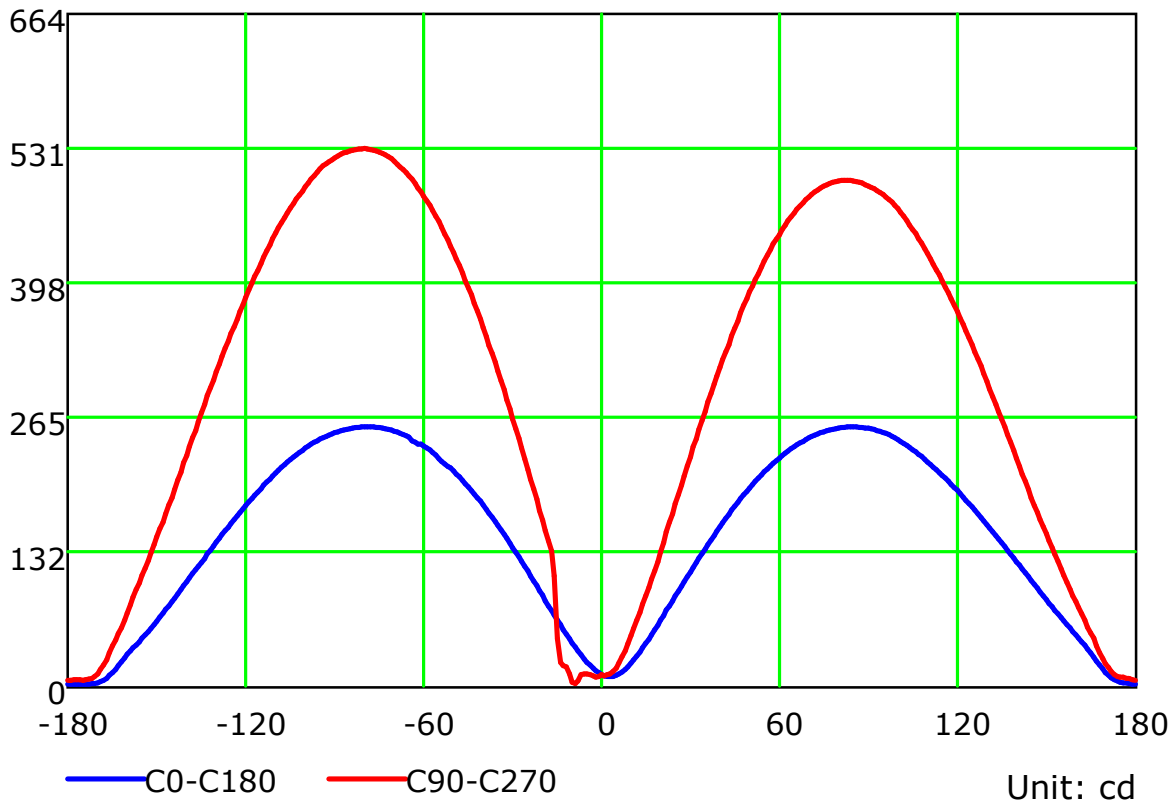
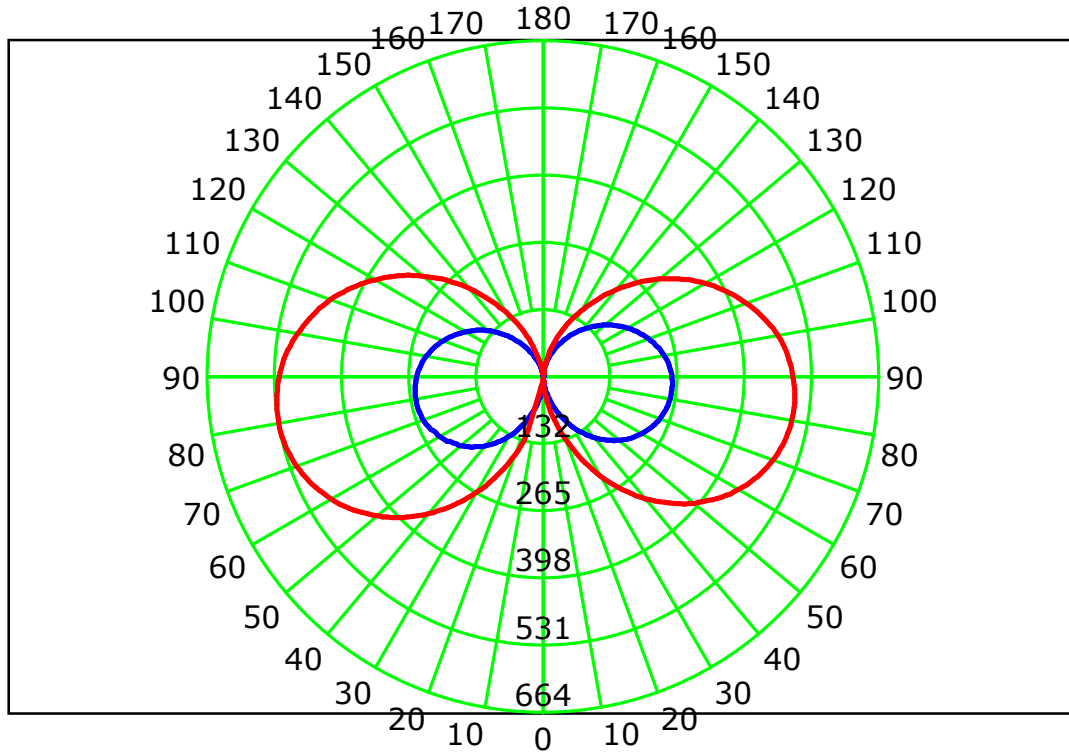
Average Diffuse Angle(50%): 271.3°

— C0-C180 — C90-C270 — G80

C Plane (°):0.0-360.0: 90.0  
 Test Lab: Inventfine instruments  
 Test Type: TYPE C  
 Temperature: 26  
 Operator: Carlos

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 8.684 m [K=1.0000]  
 Humidity: 65  
 Inspector:

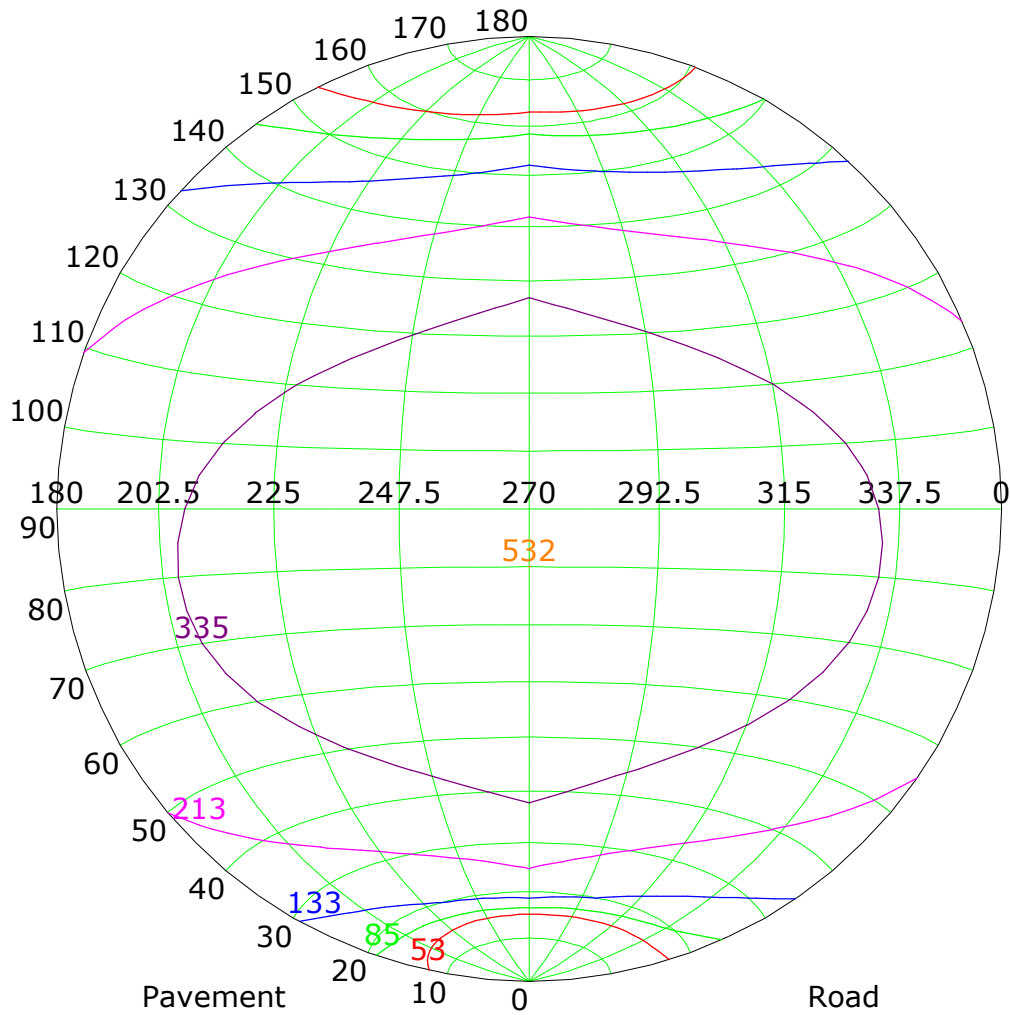
## Luminous Intensity Distribution Curve



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## Isocandela (sphere)



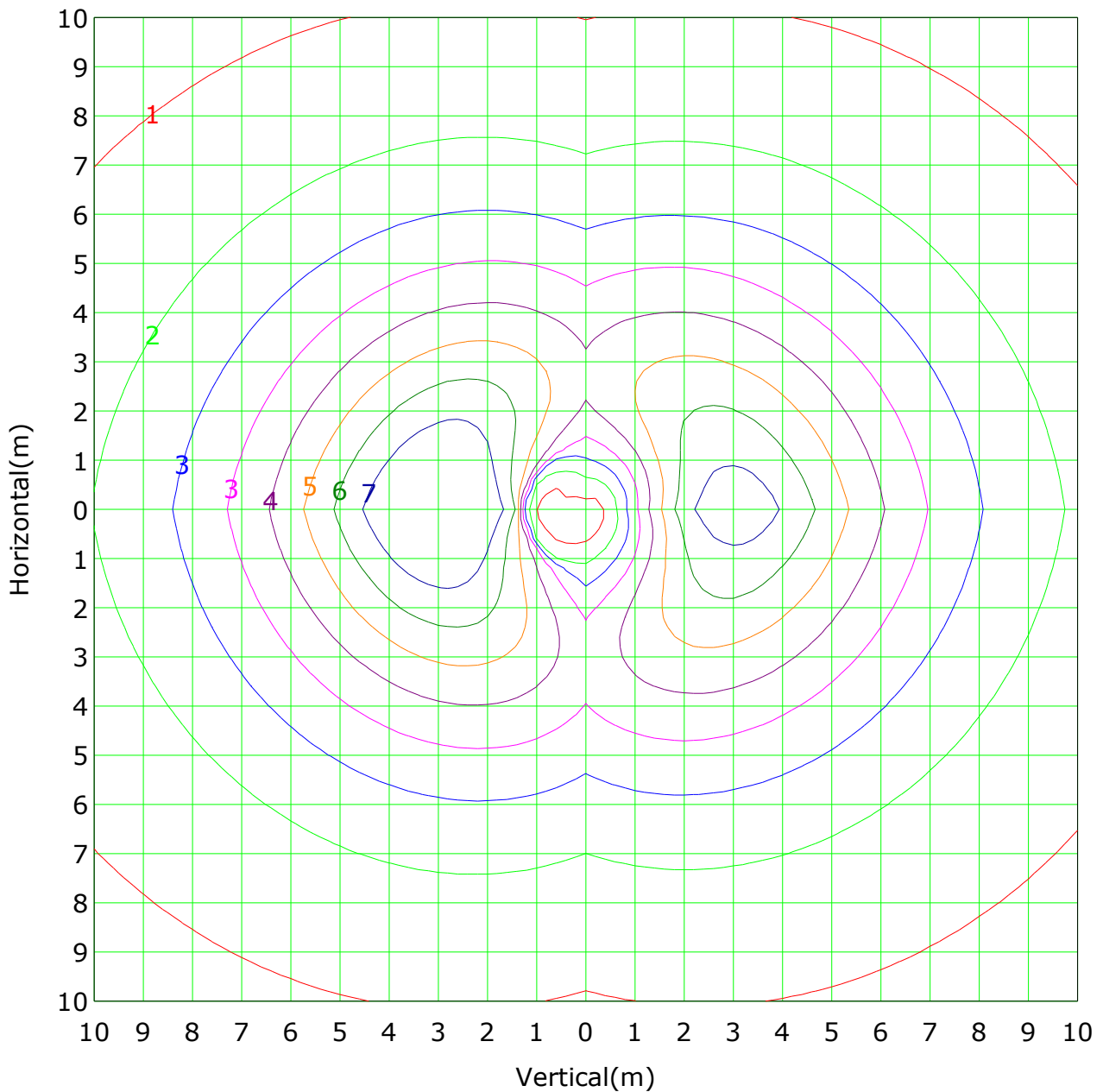
Imax (100%): 532 cd

— ( 10%): 53 cd	— ( 16%): 85 cd
— ( 25%): 133 cd	— ( 40%): 213 cd
— ( 63%): 335 cd	— (100%): 532 cd

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## IsoLux Plot



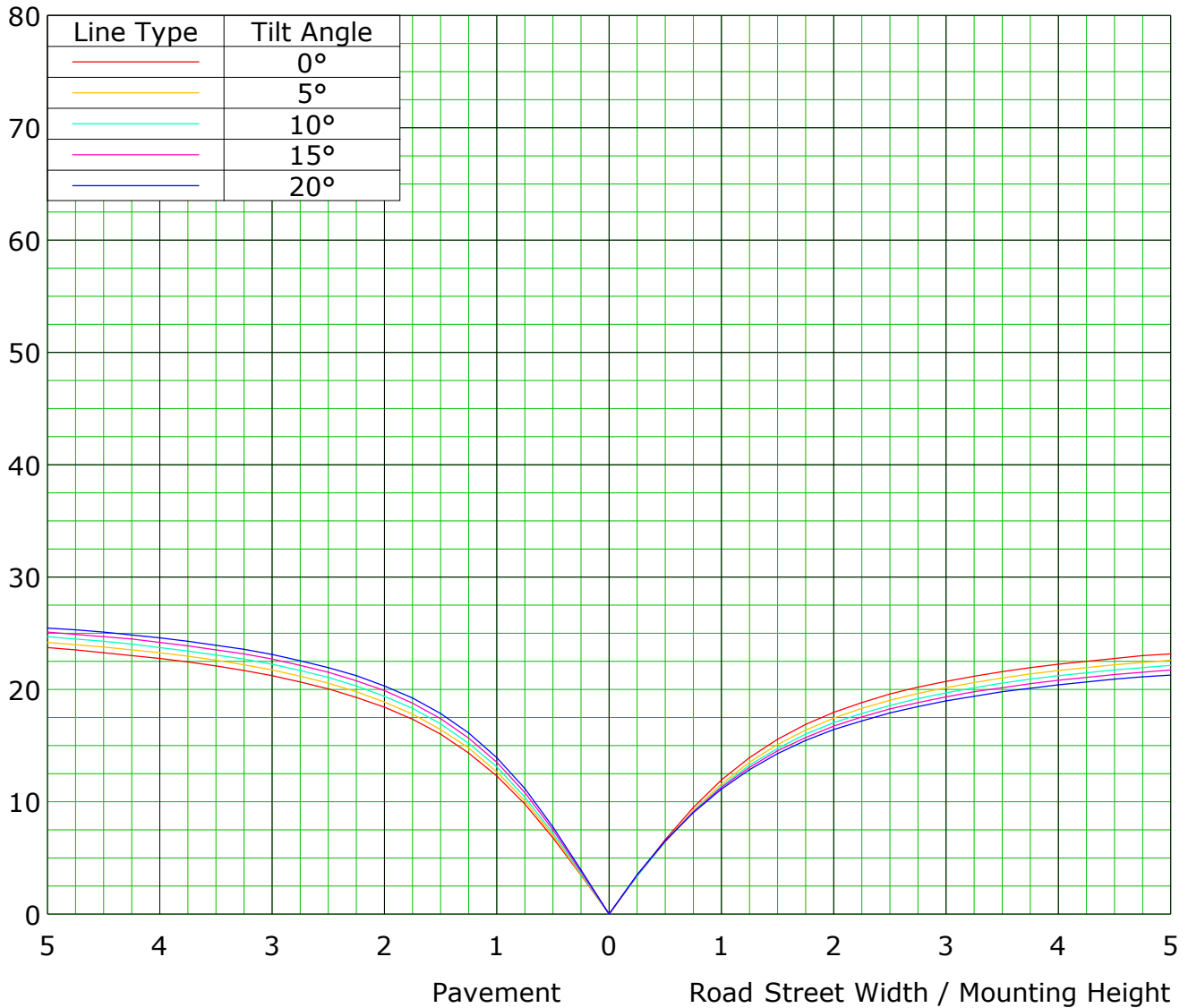
<b>Mounting Height: 4.5m</b>		<b>Max Lux(100%): 8.5 lx</b>	
<ul style="list-style-type: none"> <li><span style="color: red;">—</span> ( 10%): 0.9 lx</li> <li><span style="color: blue;">—</span> ( 30%): 2.6 lx</li> <li><span style="color: purple;">—</span> ( 50%): 4.3 lx</li> <li><span style="color: green;">—</span> ( 70%): 6.0 lx</li> </ul>	<ul style="list-style-type: none"> <li><span style="color: green;">—</span> ( 20%): 1.7 lx</li> <li><span style="color: pink;">—</span> ( 40%): 3.4 lx</li> <li><span style="color: orange;">—</span> ( 60%): 5.1 lx</li> <li><span style="color: blue;">—</span> ( 80%): 6.8 lx</li> </ul>		

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## Roadway CU Curve

Efficiency(%)



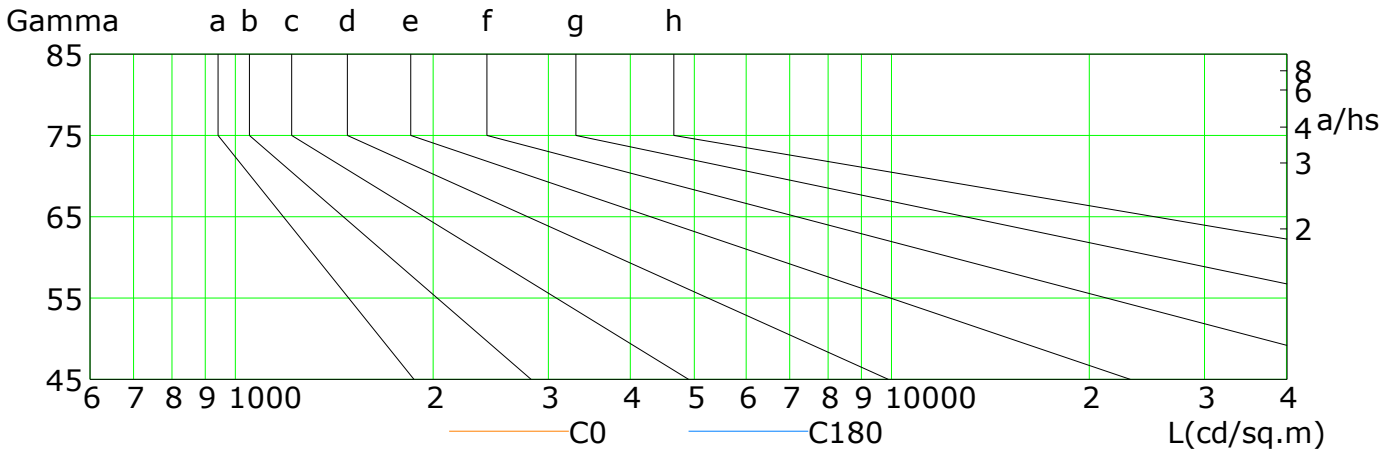
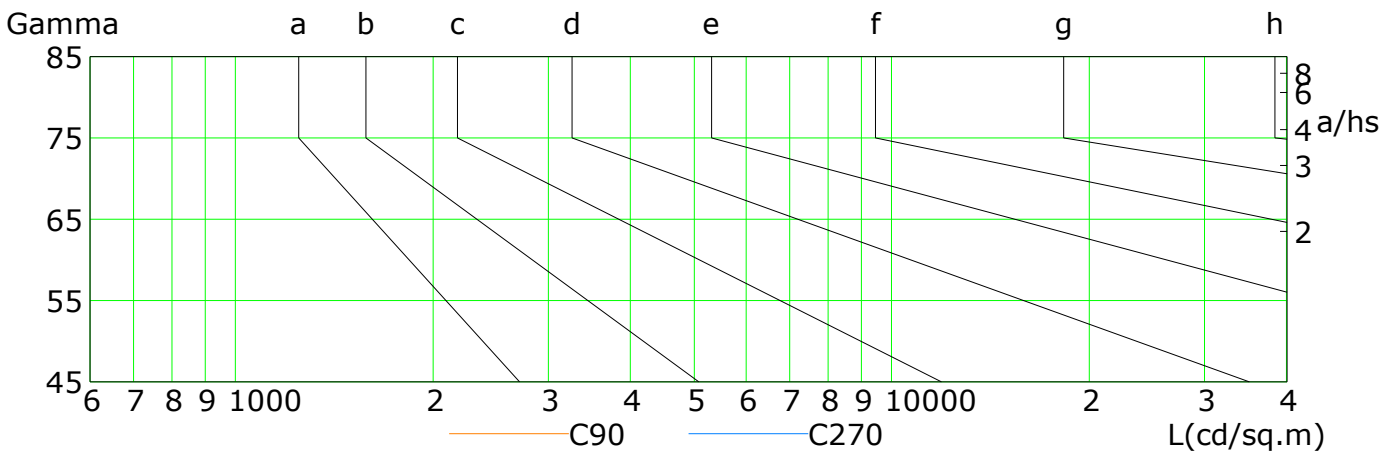
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 Test Type: TYPE C  
 Temperature: 26  
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## Lum Limit Curve

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

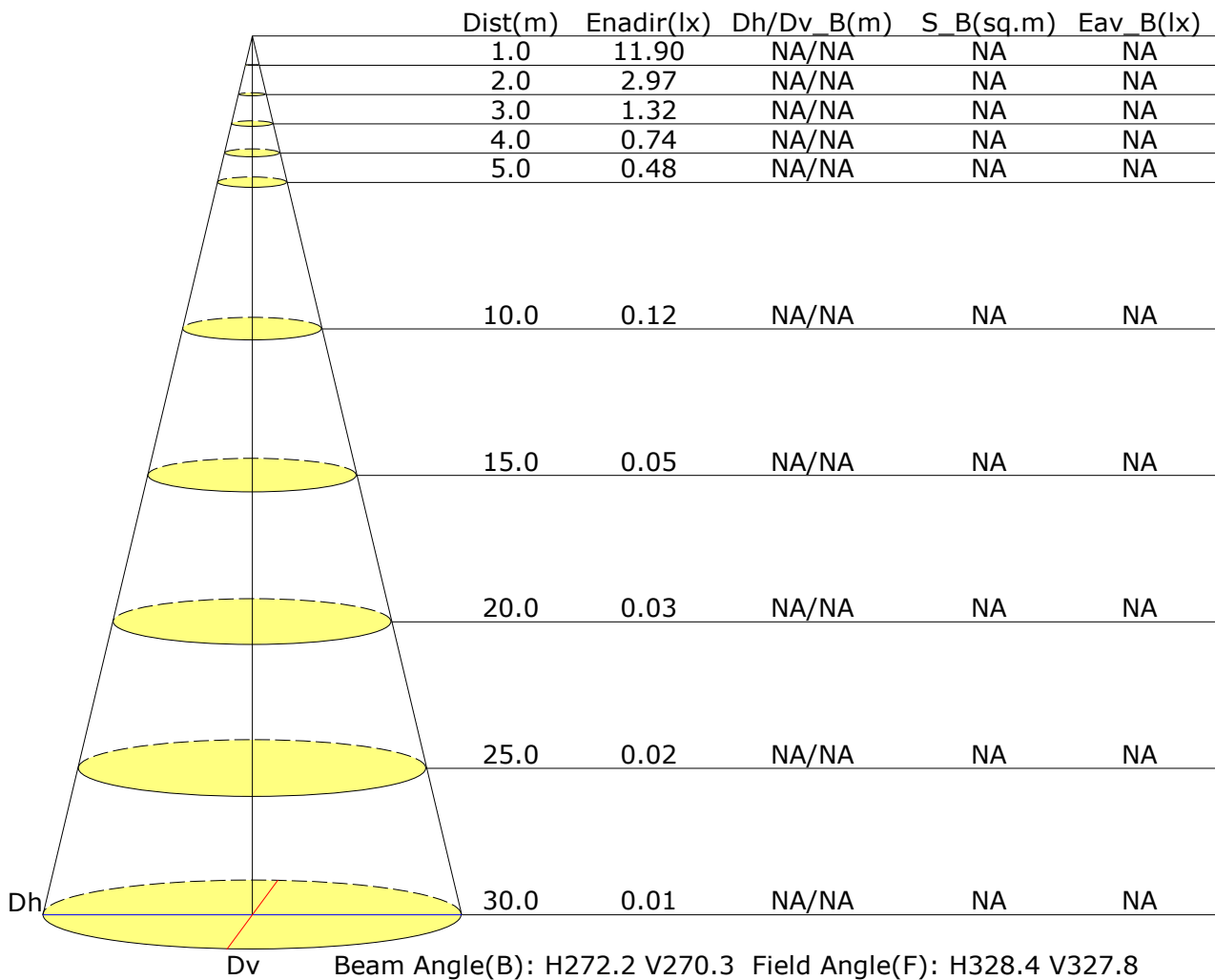


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	178	196	212	226	237	246	252	256	257
C90	354	390	421	447	469	484	495	500	500
C180	197	213	225	238	246	253	256	257	255
C270	394	429	460	485	505	520	529	532	530

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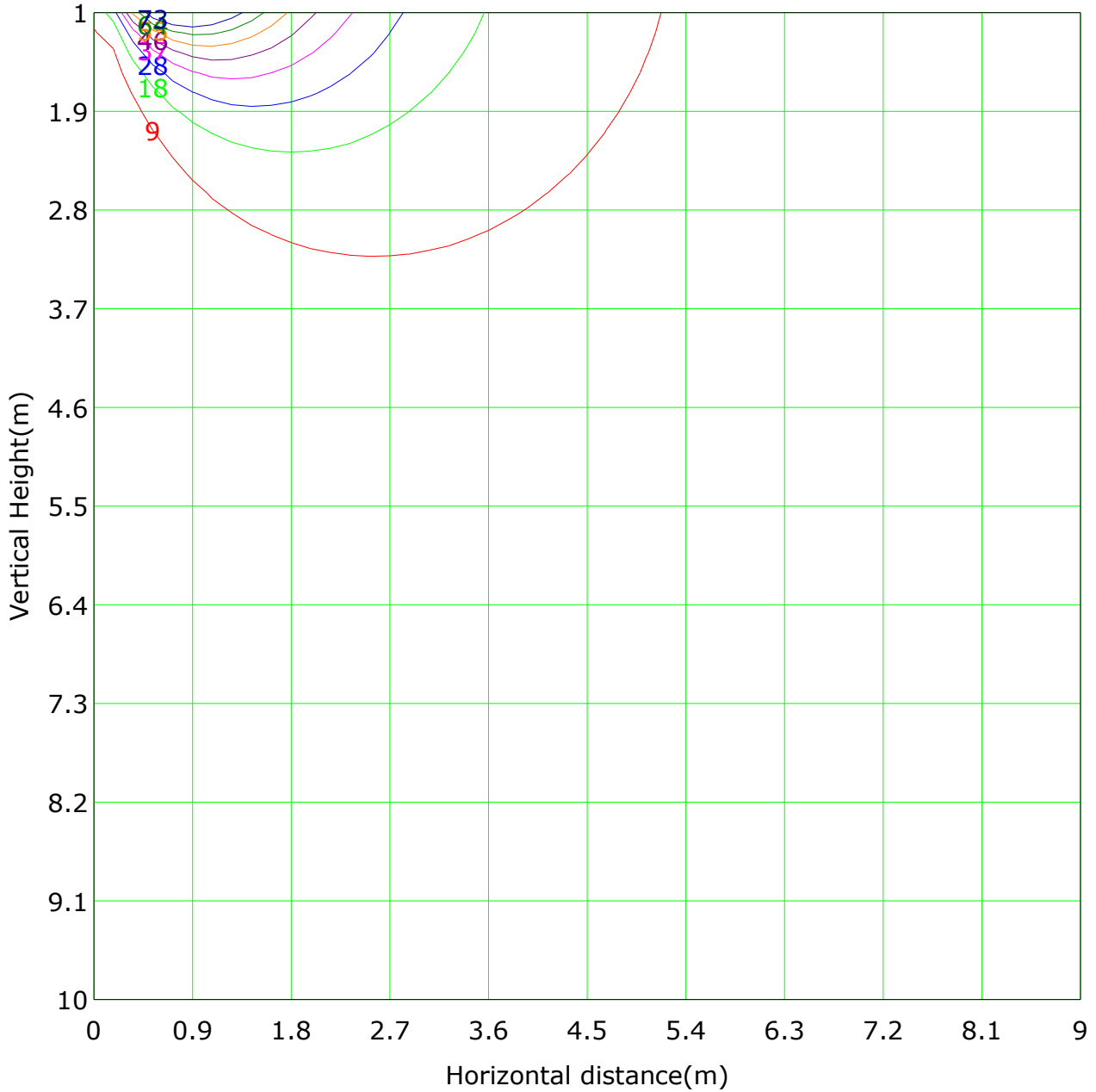
## Illuminance at a Distance



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## Vertical IsoLux Plot



Lowest(m): 1.0m	Highest(m): 10.0m	Max Lux: 91.8 lx
— ( 10%): 9.2 lx	— ( 20%): 18.4 lx	— ( 40%): 36.7 lx
— ( 30%): 27.5 lx	— ( 50%): 45.9 lx	— ( 60%): 55.1 lx
— ( 70%): 64.3 lx	— ( 80%): 73.4 lx	

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## Area Flux Table

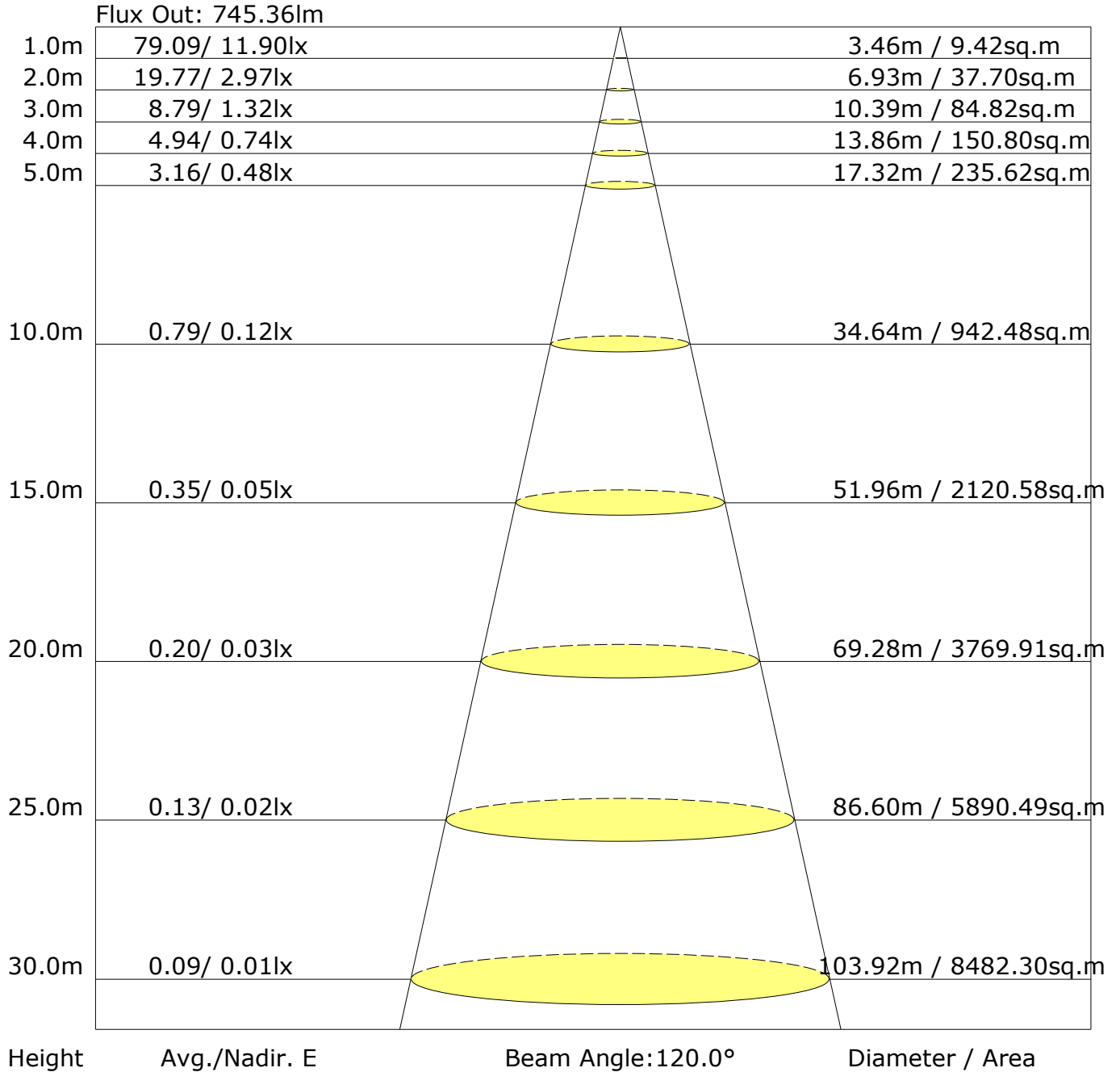
Unit: lm

		Vertical plane																				
		-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90	Flux(T)	Flux(E)
Horizontal plane	-90	0.7	2.4	4.2	6.3	8.4	10.5	12.5	14.2	15.6	15.6	14.2	12.5	10.5	8.4	6.3	4.3	2.4	0.7	149.6	149.6	
	-80	0.7	2.4	4.2	6.3	8.4	10.5	12.4	14.1	15.5	15.5	14.1	12.4	10.5	8.4	6.3	4.3	2.4	0.7	149.3	149.3	
	-70	0.7	2.4	4.2	6.2	8.2	10.1	11.9	13.5	14.8	14.8	13.5	11.9	10.1	8.1	6.2	4.2	2.4	0.7	143.8	143.8	
	-60	0.7	2.3	4.1	6.0	7.8	9.5	11.0	12.3	13.5	13.4	12.2	10.9	9.3	7.7	5.9	4.1	2.3	0.7	133.7	133.7	
	-50	0.7	2.3	4.0	5.7	7.2	8.5	9.6	10.6	11.5	11.5	10.5	9.5	8.3	7.0	5.5	3.9	2.3	0.7	119.4	119.4	
	-40	0.7	2.2	3.8	5.3	6.5	7.4	8.0	8.5	9.1	9.0	8.3	7.8	7.2	6.3	5.1	3.7	2.2	0.7	102.0	102.0	
	-30	0.7	2.2	3.6	4.9	5.8	6.2	6.3	6.2	6.3	6.2	5.9	6.0	5.9	5.5	4.7	3.5	2.2	0.7	82.8	82.8	
	-20	0.7	2.1	3.4	4.5	5.1	5.2	4.7	4.0	2.7	2.5	3.6	4.3	4.7	4.8	4.3	3.3	2.1	0.7	62.6	61.9	
	-10	0.7	2.0	3.2	4.1	4.5	4.3	3.6	2.2	0.7	0.4	1.6	3.0	3.8	4.1	3.9	3.1	2.0	0.7	47.8	45.9	
	0	0.7	2.0	3.2	4.1	4.4	4.2	3.4	2.2	1.1	0.8	1.7	2.8	3.7	4.0	3.8	3.1	2.0	0.7	48.2	45.9	
	10	0.7	2.1	3.4	4.4	4.9	4.9	4.4	3.5	2.8	2.7	3.2	4.0	4.5	4.6	4.2	3.3	2.1	0.7	60.4	60.3	
	20	0.7	2.2	3.6	4.7	5.5	5.9	5.8	5.5	5.4	5.3	5.2	5.5	5.6	5.3	4.6	3.5	2.1	0.7	77.0	77.0	
	30	0.7	2.2	3.7	5.1	6.2	7.0	7.4	7.7	8.0	8.0	7.5	7.2	6.7	6.0	5.0	3.7	2.2	0.7	95.0	95.0	
	40	0.7	2.3	3.9	5.5	6.9	8.0	9.0	9.7	10.4	10.4	9.6	8.8	7.9	6.7	5.4	3.8	2.2	0.7	111.8	111.8	
	50	0.7	2.3	4.0	5.8	7.4	8.9	10.3	11.4	12.4	12.3	11.3	10.2	8.8	7.3	5.7	4.0	2.3	0.7	125.9	125.9	
	60	0.7	2.3	4.1	6.0	7.9	9.6	11.2	12.6	13.8	13.8	12.6	11.2	9.6	7.8	5.9	4.1	2.3	0.7	136.2	136.2	
	70	0.7	2.3	4.1	6.1	8.1	10.0	11.8	13.3	14.6	14.6	13.3	11.8	10.0	8.1	6.1	4.2	2.3	0.7	142.0	142.0	
	80	0.7	2.3	4.1	6.1	8.1	10.1	11.9	13.5	14.7	14.7	13.5	11.9	10.1	8.1	6.1	4.2	2.3	0.7	143.1	143.1	
90	12.7	40.3	69.1	96.8	121.3	140.9	155.3	165.1	172.7	171.4	161.9	151.3	137.2	118.3	94.9	68.2	40.1	12.8	1930	1930		
	12.7	40.3	69.1	96.8	121.3	140.9	155.3	164.7	170.8	169.8	160.9	151.3	137.2	118.3	94.9	68.2	40.1	12.8		1926		

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## The Average Illuminance Effective Figure



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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 3533lm ( $8\log(F/F_0) = 4.4$ ).

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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	11.6	0.0	0.0	0.00	0.00
1.0-2.0	11.5	0.0	0.0	0.00	0.00
2.0-3.0	12.2	0.1	0.1	0.00	0.00
3.0-4.0	13.6	0.1	0.2	0.00	0.01
4.0-5.0	15.4	0.1	0.3	0.00	0.01
5.0-6.0	17.6	0.2	0.5	0.01	0.01
6.0-7.0	20.3	0.3	0.8	0.01	0.02
7.0-8.0	22.4	0.3	1.1	0.01	0.03
8.0-9.0	24.5	0.4	1.5	0.01	0.04
9.0-10.0	28.0	0.5	2.0	0.01	0.06
10.0-11.0	32.9	0.7	2.6	0.02	0.07
11.0-12.0	38.8	0.8	3.5	0.02	0.10
12.0-13.0	43.9	1.0	4.5	0.03	0.13
13.0-14.0	48.5	1.2	5.8	0.04	0.16
14.0-15.0	56.2	1.5	7.3	0.04	0.21
15.0-16.0	71.3	2.1	9.4	0.06	0.27
16.0-17.0	86.4	2.7	12.1	0.08	0.34
17.0-18.0	95.0	3.1	15.2	0.09	0.43
18.0-19.0	102.1	3.6	18.8	0.10	0.53
19.0-20.0	109.5	4.0	22.8	0.11	0.64
20.0-21.0	116.8	4.5	27.3	0.13	0.77
21.0-22.0	124.3	5.0	32.3	0.14	0.91
22.0-23.0	131.8	5.5	37.8	0.16	1.07
23.0-24.0	138.9	6.1	43.9	0.17	1.24
24.0-25.0	146.0	6.6	50.5	0.19	1.43
25.0-26.0	153.3	7.2	57.7	0.20	1.63
26.0-27.0	160.6	7.9	65.6	0.22	1.86
27.0-28.0	167.9	8.5	74.1	0.24	2.10
28.0-29.0	175.0	9.2	83.3	0.26	2.36
29.0-30.0	182.0	9.8	93.1	0.28	2.63
30.0-31.0	189.1	10.5	103.6	0.30	2.93
31.0-32.0	196.1	11.2	114.8	0.32	3.25
32.0-33.0	202.8	12.0	126.8	0.34	3.59
33.0-34.0	209.7	12.7	139.5	0.36	3.95
34.0-35.0	216.4	13.4	152.9	0.38	4.33
35.0-36.0	223.1	14.2	167.1	0.40	4.73

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### Zonal Lumen (Continue 1)

Gamma [°]	I <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
36.0-37.0	229.7	15.0	182.1	0.42	5.15
37.0-38.0	236.1	15.8	197.9	0.45	5.60
38.0-39.0	242.4	16.5	214.4	0.47	6.07
39.0-40.0	248.7	17.4	231.8	0.49	6.56
40.0-41.0	255.0	18.2	249.9	0.51	7.07
41.0-42.0	260.8	19.0	268.9	0.54	7.61
42.0-43.0	266.5	19.7	288.6	0.56	8.17
43.0-44.0	272.4	20.6	309.2	0.58	8.75
44.0-45.0	278.3	21.4	330.6	0.61	9.36
45.0-46.0	283.7	22.2	352.8	0.63	9.98
46.0-47.0	289.1	23.0	375.8	0.65	10.64
47.0-48.0	294.7	23.8	399.6	0.67	11.31
48.0-49.0	299.9	24.6	424.3	0.70	12.01
49.0-50.0	304.8	25.4	449.7	0.72	12.73
50.0-51.0	309.6	26.2	475.9	0.74	13.47
51.0-52.0	314.1	27.0	502.8	0.76	14.23
52.0-53.0	318.4	27.7	530.5	0.78	15.01
53.0-54.0	322.9	28.5	559.0	0.81	15.82
54.0-55.0	327.4	29.2	588.2	0.83	16.65
55.0-56.0	331.9	30.0	618.2	0.85	17.50
56.0-57.0	336.1	30.7	649.0	0.87	18.37
57.0-58.0	340.1	31.5	680.4	0.89	19.26
58.0-59.0	343.8	32.1	712.6	0.91	20.17
59.0-60.0	347.2	32.8	745.4	0.93	21.09
60.0-61.0	350.6	33.5	778.8	0.95	22.04
61.0-62.0	353.7	34.1	812.9	0.96	23.01
62.0-63.0	356.6	34.7	847.6	0.98	23.99
63.0-64.0	359.6	35.3	882.9	1.00	24.99
64.0-65.0	362.7	35.9	918.8	1.02	26.00
65.0-66.0	365.5	36.5	955.3	1.03	27.03
66.0-67.0	368.1	37.0	992.3	1.05	28.08
67.0-68.0	370.3	37.5	1029.8	1.06	29.14
68.0-69.0	372.5	38.0	1067.8	1.08	30.22
69.0-70.0	374.6	38.5	1106.3	1.09	31.31
70.0-71.0	376.5	38.9	1145.2	1.10	32.41
71.0-72.0	378.2	39.3	1184.5	1.11	33.52

C Plane (°):0.0-360.0: 90.0  
 Test Lab: Inventfine instruments  
 Test Type: TYPE C  
 Temperature: 26  
 Operator: Carlos

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 8.684 m [K=1.0000]  
 Humidity: 65  
 Inspector:

## Zonal Lumen (Continue 2)

Gamma [°]	Imean [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
72.0-73.0	379.7	39.7	1224.2	1.12	34.65
73.0-74.0	381.1	40.1	1264.3	1.13	35.78
74.0-75.0	382.3	40.4	1304.7	1.14	36.92
75.0-76.0	383.3	40.7	1345.4	1.15	38.08
76.0-77.0	384.2	41.0	1386.4	1.16	39.24
77.0-78.0	384.9	41.2	1427.6	1.17	40.40
78.0-79.0	385.5	41.4	1469.0	1.17	41.57
79.0-80.0	385.9	41.6	1510.6	1.18	42.75
80.0-81.0	386.2	41.8	1552.4	1.18	43.93
81.0-82.0	386.3	41.9	1594.3	1.19	45.12
82.0-83.0	386.2	42.0	1636.3	1.19	46.31
83.0-84.0	386.0	42.1	1678.3	1.19	47.50
84.0-85.0	385.6	42.1	1720.4	1.19	48.69
85.0-86.0	385.1	42.1	1762.5	1.19	49.88
86.0-87.0	384.5	42.1	1804.6	1.19	51.07
87.0-88.0	383.7	42.0	1846.6	1.19	52.26
88.0-89.0	382.7	42.0	1888.6	1.19	53.45
89.0-90.0	381.6	41.8	1930.4	1.18	54.63
90.0-91.0	380.5	41.7	1972.2	1.18	55.81
91.0-92.0	379.2	41.6	2013.7	1.18	56.99
92.0-93.0	377.8	41.4	2055.1	1.17	58.16
93.0-94.0	376.3	41.2	2096.3	1.17	59.33
94.0-95.0	374.5	40.9	2137.2	1.16	60.49
95.0-96.0	372.6	40.7	2177.9	1.15	61.64
96.0-97.0	370.5	40.4	2218.3	1.14	62.78
97.0-98.0	368.2	40.0	2258.3	1.13	63.91
98.0-99.0	365.7	39.7	2298.0	1.12	65.03
99.0-100.0	363.1	39.3	2337.2	1.11	66.15
100.0-101.0	360.2	38.8	2376.1	1.10	67.25
101.0-102.0	357.2	38.4	2414.5	1.09	68.33
102.0-103.0	354.2	37.9	2452.4	1.07	69.40
103.0-104.0	351.0	37.4	2489.8	1.06	70.46
104.0-105.0	347.6	36.9	2526.7	1.04	71.51
105.0-106.0	344.2	36.4	2563.1	1.03	72.54
106.0-107.0	340.8	35.8	2598.9	1.01	73.55
107.0-108.0	337.1	35.3	2634.2	1.00	74.55

C Plane (°):0.0-360.0: 90.0  
 Test Lab: Inventfine instruments  
 Test Type: TYPE C  
 Temperature: 26  
 Operator: Carlos

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 8.684 m [K=1.0000]  
 Humidity: 65  
 Inspector:

### 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	333.3	34.7	2668.8	0.98	75.53
109.0-110.0	329.5	34.1	2702.9	0.96	76.49
110.0-111.0	325.4	33.4	2736.3	0.95	77.44
111.0-112.0	321.2	32.8	2769.1	0.93	78.37
112.0-113.0	316.9	32.1	2801.2	0.91	79.28
113.0-114.0	312.7	31.4	2832.7	0.89	80.17
114.0-115.0	308.2	30.8	2863.4	0.87	81.04
115.0-116.0	303.5	30.0	2893.4	0.85	81.89
116.0-117.0	298.9	29.3	2922.8	0.83	82.72
117.0-118.0	294.4	28.6	2951.4	0.81	83.53
118.0-119.0	289.6	27.9	2979.3	0.79	84.32
119.0-120.0	284.7	27.2	3006.5	0.77	85.09
120.0-121.0	279.7	26.4	3032.9	0.75	85.83
121.0-122.0	274.7	25.7	3058.6	0.73	86.56
122.0-123.0	269.6	24.9	3083.5	0.71	87.27
123.0-124.0	264.3	24.2	3107.7	0.68	87.95
124.0-125.0	259.1	23.4	3131.1	0.66	88.61
125.0-126.0	253.8	22.7	3153.8	0.64	89.25
126.0-127.0	248.5	21.9	3175.7	0.62	89.87
127.0-128.0	243.0	21.1	3196.8	0.60	90.47
128.0-129.0	237.4	20.4	3217.2	0.58	91.05
129.0-130.0	231.8	19.6	3236.8	0.56	91.61
130.0-131.0	226.1	18.9	3255.7	0.53	92.14
131.0-132.0	220.3	18.1	3273.8	0.51	92.65
132.0-133.0	214.7	17.4	3291.1	0.49	93.14
133.0-134.0	208.8	16.6	3307.7	0.47	93.61
134.0-135.0	202.9	15.9	3323.6	0.45	94.06
135.0-136.0	196.9	15.1	3338.7	0.43	94.49
136.0-137.0	191.0	14.4	3353.2	0.41	94.90
137.0-138.0	185.4	13.7	3366.9	0.39	95.29
138.0-139.0	179.4	13.0	3379.9	0.37	95.66
139.0-140.0	173.3	12.3	3392.3	0.35	96.00
140.0-141.0	167.5	11.7	3404.0	0.33	96.34
141.0-142.0	161.6	11.0	3415.0	0.31	96.65
142.0-143.0	155.7	10.4	3425.4	0.29	96.94
143.0-144.0	149.7	9.8	3435.1	0.28	97.22

C Plane (°):0.0-360.0: 90.0  
 Test Lab: Inventfine instruments  
 Test Type: TYPE C  
 Temperature: 26  
 Operator: Carlos

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 8.684 m [K=1.0000]  
 Humidity: 65  
 Inspector:

### Zonal Lumen (Continue 4)

Gamma [°]	Imean [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
144.0-145.0	143.5	9.1	3444.3	0.26	97.48
145.0-146.0	137.7	8.6	3452.8	0.24	97.72
146.0-147.0	132.0	8.0	3460.8	0.23	97.94
147.0-148.0	126.2	7.4	3468.3	0.21	98.16
148.0-149.0	120.6	6.9	3475.2	0.20	98.35
149.0-150.0	115.1	6.4	3481.6	0.18	98.53
150.0-151.0	109.5	5.9	3487.5	0.17	98.70
151.0-152.0	104.0	5.4	3492.9	0.15	98.85
152.0-153.0	98.6	5.0	3497.9	0.14	98.99
153.0-154.0	93.5	4.6	3502.5	0.13	99.12
154.0-155.0	88.1	4.2	3506.7	0.12	99.24
155.0-156.0	82.8	3.8	3510.4	0.11	99.35
156.0-157.0	77.7	3.4	3513.8	0.10	99.44
157.0-158.0	72.6	3.0	3516.9	0.09	99.53
158.0-159.0	67.5	2.7	3519.6	0.08	99.61
159.0-160.0	62.4	2.4	3522.0	0.07	99.68
160.0-161.0	57.3	2.1	3524.1	0.06	99.74
161.0-162.0	52.2	1.8	3525.9	0.05	99.79
162.0-163.0	47.1	1.6	3527.5	0.04	99.83
163.0-164.0	42.2	1.3	3528.8	0.04	99.87
164.0-165.0	37.4	1.1	3529.9	0.03	99.90
165.0-166.0	32.6	0.9	3530.8	0.03	99.92
166.0-167.0	27.5	0.7	3531.5	0.02	99.94
167.0-168.0	22.7	0.5	3532.0	0.02	99.96
168.0-169.0	18.6	0.4	3532.4	0.01	99.97
169.0-170.0	14.8	0.3	3532.7	0.01	99.98
170.0-171.0	11.8	0.2	3532.9	0.01	99.99
171.0-172.0	9.5	0.2	3533.1	0.00	99.99
172.0-173.0	7.7	0.1	3533.2	0.00	99.99
173.0-174.0	6.5	0.1	3533.3	0.00	99.99
174.0-175.0	5.8	0.1	3533.3	0.00	100.00
175.0-176.0	5.5	0.0	3533.4	0.00	100.00
176.0-177.0	5.2	0.0	3533.4	0.00	100.00
177.0-178.0	4.9	0.0	3533.4	0.00	100.00
178.0-179.0	4.6	0.0	3533.4	0.00	100.00
179.0-180.0	4.3	0.0	3533.4	0.00	100.00

C Plane (°):0.0-360.0: 90.0  
 Test Lab: Inventfine instruments  
 Test Type: TYPE C  
 Temperature: 26  
 Operator: Carlos

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 8.684 m [K=1.0000]  
 Humidity: 65  
 Inspector:



## Zonal Lumen (Continue 5)

cone flux(90°): 330.60 lm

%lum = 9.4%

%lamp = 9.4%

cone flux(120°): 745.36 lm

%lum = 21.1%

%lamp = 21.1%

## Candlepower Table

Unit: cd

G\C	C0.0	C90.0	C180.0	C270.0	C360.0					
G0.0	11.9	11.9	11.9	11.9	11.9					
G1.0	10.7	10.5	13.7	10.0	10.7					
G2.0	9.9	11.9	15.7	9.4	9.9					
G3.0	9.7	12.6	18.1	10.7	9.7					
G4.0	10.1	14.7	21.0	11.8	10.1					
G5.0	11.0	18.2	24.0	12.3	11.0					
G6.0	12.4	23.3	27.2	12.6	12.4					
G7.0	14.2	29.7	31.0	11.6	14.2					
G8.0	16.6	35.3	34.8	5.5	16.6					
G9.0	19.6	42.3	38.7	2.9	19.6					
G10.0	22.9	50.5	42.8	4.1	22.9					
G11.0	26.3	57.3	47.5	12.1	26.3					
G12.0	30.3	65.4	51.8	19.6	30.3					
G13.0	34.1	72.8	56.2	20.6	34.1					
G14.0	38.1	81.4	61.2	23.6	38.1					
G15.0	42.7	89.7	65.8	47.1	42.7					
G16.0	46.6	98.1	70.9	109.2	46.6					
G17.0	51.0	106.3	75.1	133.6	51.0					
G18.0	55.9	114.1	79.8	144.2	55.9					
G19.0	60.5	123.3	84.4	154.3	60.5					
G20.0	65.6	132.9	90.2	164.6	65.6					
G21.0	70.2	142.2	95.0	174.1	70.2					
G22.0	75.4	152.9	99.7	185.0	75.4					
G23.0	79.5	162.1	104.4	195.6	79.5					
G24.0	84.7	170.5	109.5	204.6	84.7					
G25.0	89.3	180.8	114.2	214.6	89.3					
G26.0	93.9	189.8	118.8	225.1	93.9					
G27.0	99.0	198.9	123.7	235.7	99.0					
G28.0	103.7	208.3	128.2	245.3	103.7					
G29.0	108.3	218.2	132.8	255.2	108.3					
G30.0	113.1	226.9	137.2	264.3	113.1					
G31.0	117.6	237.4	141.6	274.4	117.6					
G32.0	122.6	245.0	146.4	283.5	122.6					
G33.0	126.9	254.3	150.7	293.4	126.9					
G34.0	131.7	263.2	154.9	302.5	131.7					
G35.0	136.1	272.3	159.1	311.8	136.1					
G36.0	140.5	281.4	163.2	320.8	140.5					

C Plane (°):0.0-360.0: 90.0  
 Test Lab: Inventfine instruments  
 Test Type: TYPE C  
 Temperature: 26  
 Operator: Carlos

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 8.684 m [K=1.0000]  
 Humidity: 65  
 Inspector:

## Candlepower Table (Continue 1)

Unit: cd

G\C	C0.0	C90.0	C180.0	C270.0	C360.0					
G37.0	144.7	289.9	167.5	329.5	144.7					
G38.0	149.4	299.3	171.4	337.4	149.4					
G39.0	153.6	307.1	175.2	346.1	153.6					
G40.0	157.7	315.9	179.4	355.0	157.7					
G41.0	161.8	323.6	183.1	363.2	161.8					
G42.0	166.2	330.8	186.7	371.2	166.2					
G43.0	170.4	338.0	190.2	378.9	170.4					
G44.0	174.2	346.8	193.7	387.1	174.2					
G45.0	178.3	354.5	197.4	394.2	178.3					
G46.0	182.0	361.5	200.7	401.1	182.0					
G47.0	185.6	369.5	203.9	408.8	185.6					
G48.0	189.5	376.9	207.2	416.3	189.5					
G49.0	193.0	383.5	210.2	422.9	193.0					
G50.0	196.3	390.3	213.1	429.2	196.3					
G51.0	199.6	396.4	216.2	435.5	199.6					
G52.0	203.2	402.2	217.7	442.0	203.2					
G53.0	206.3	408.1	220.2	447.8	206.3					
G54.0	209.3	415.1	222.7	454.1	209.3					
G55.0	212.2	421.1	225.1	460.0	212.2					
G56.0	215.3	426.7	229.2	465.2	215.3					
G57.0	218.0	432.4	231.7	470.6	218.0					
G58.0	220.6	437.8	233.9	475.8	220.6					
G59.0	223.4	442.3	235.9	480.4	223.4					
G60.0	225.9	446.9	238.1	484.9	225.9					
G61.0	228.3	451.9	239.9	489.3	228.3					
G62.0	230.8	456.4	239.8	493.3	230.8					
G63.0	232.9	460.6	241.7	497.2	232.9					
G64.0	235.0	464.5	243.2	501.6	235.0					
G65.0	237.0	468.6	246.5	504.9	237.0					
G66.0	238.9	472.3	248.0	508.1	238.9					
G67.0	240.9	475.4	249.3	511.5	240.9					
G68.0	242.6	478.6	250.4	514.1	242.6					
G69.0	244.3	481.5	251.6	516.7	244.3					
G70.0	245.8	484.4	252.6	519.8	245.8					
G71.0	247.2	486.7	253.4	522.0	247.2					
G72.0	248.5	489.3	254.3	523.9	248.5					
G73.0	249.7	491.3	254.9	525.7	249.7					

C Plane (°):0.0-360.0: 90.0  
 Test Lab: Inventfine instruments  
 Test Type: TYPE C  
 Temperature: 26  
 Operator: Carlos

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 8.684 m [K=1.0000]  
 Humidity: 65  
 Inspector:

## Candlepower Table (Continue 2)

Unit: cd

G\C	C0.0	C90.0	C180.0	C270.0	C360.0					
G74.0	250.9	493.2	255.5	527.3	250.9					
G75.0	251.9	494.9	256.0	528.6	251.9					
G76.0	252.9	496.3	256.3	529.7	252.9					
G77.0	253.7	497.5	256.6	530.6	253.7					
G78.0	254.4	498.6	256.7	531.3	254.4					
G79.0	255.0	499.6	256.8	531.9	255.0					
G80.0	255.5	500.2	256.7	532.0	255.5					
G81.0	255.9	500.6	256.6	531.9	255.9					
G82.0	256.3	500.8	256.4	531.7	256.3					
G83.0	256.5	500.9	256.0	531.1	256.5					
G84.0	256.6	500.7	255.5	530.5	256.6					
G85.0	256.6	500.2	255.0	529.6	256.6					
G86.0	256.6	499.6	254.4	528.7	256.6					
G87.0	256.4	498.8	253.6	527.6	256.4					
G88.0	256.2	497.8	252.8	526.3	256.2					
G89.0	255.8	496.5	251.9	524.6	255.8					
G90.0	255.3	495.2	250.9	523.0	255.3					
G91.0	254.7	493.8	249.8	521.0	254.7					
G92.0	254.1	492.3	248.6	519.1	254.1					
G93.0	253.3	490.6	247.4	517.1	253.3					
G94.0	252.4	488.7	245.9	514.9	252.4					
G95.0	251.4	486.6	244.5	511.9	251.4					
G96.0	250.3	484.2	242.9	509.0	250.3					
G97.0	249.1	481.7	241.3	505.3	249.1					
G98.0	247.6	478.9	239.4	501.9	247.6					
G99.0	246.0	476.0	237.6	498.2	246.0					
G100.0	244.3	472.5	235.7	494.4	244.3					
G101.0	242.5	468.9	233.5	490.0	242.5					
G102.0	240.6	465.0	231.3	486.0	240.6					
G103.0	238.6	460.6	229.1	482.1	238.6					
G104.0	236.5	456.4	226.8	477.7	236.5					
G105.0	234.1	451.8	224.4	473.3	234.1					
G106.0	231.9	447.8	221.7	468.6	231.9					
G107.0	229.8	443.2	219.3	463.7	229.8					
G108.0	227.4	438.4	216.7	458.7	227.4					
G109.0	224.7	433.1	214.0	453.6	224.7					
G110.0	222.2	428.5	211.0	448.6	222.2					

C Plane (°):0.0-360.0: 90.0  
 Test Lab: Inventfine instruments  
 Test Type: TYPE C  
 Temperature: 26  
 Operator: Carlos

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 8.684 m [K=1.0000]  
 Humidity: 65  
 Inspector:

### Candlepower Table (Continue 3)

Unit: cd

G\C	C0.0	C90.0	C180.0	C270.0	C360.0					
G111.0	219.6	422.7	208.1	442.8	219.6					
G112.0	217.1	417.6	205.1	436.6	217.1					
G113.0	214.4	412.0	202.1	430.7	214.4					
G114.0	211.4	406.6	199.0	424.9	211.4					
G115.0	208.7	401.4	195.6	418.0	208.7					
G116.0	205.8	394.8	192.4	411.4	205.8					
G117.0	202.8	389.2	189.1	405.7	202.8					
G118.0	199.8	383.3	185.9	399.1	199.8					
G119.0	196.9	377.1	182.6	392.3	196.9					
G120.0	193.9	371.0	178.9	384.7	193.9					
G121.0	190.8	364.6	175.5	377.9	190.8					
G122.0	187.4	358.0	172.1	371.0	187.4					
G123.0	184.2	351.6	168.6	363.5	184.2					
G124.0	180.9	344.6	165.2	355.9	180.9					
G125.0	177.6	337.6	161.3	349.5	177.6					
G126.0	174.3	330.7	157.7	342.0	174.3					
G127.0	170.9	323.8	154.1	334.7	170.9					
G128.0	167.1	316.7	150.4	326.6	167.1					
G129.0	163.7	309.1	146.6	319.0	163.7					
G130.0	160.2	301.8	142.8	311.3	160.2					
G131.0	156.7	294.2	139.0	302.7	156.7					
G132.0	153.2	286.7	134.9	295.2	153.2					
G133.0	149.4	279.1	131.1	287.6	149.4					
G134.0	145.9	271.9	126.4	279.2	145.9					
G135.0	142.1	264.1	122.6	271.0	142.1					
G136.0	138.6	257.0	118.5	261.6	138.6					
G137.0	134.9	249.0	115.6	253.1	134.9					
G138.0	131.0	241.7	111.8	245.8	131.0					
G139.0	126.9	233.7	107.6	237.1	126.9					
G140.0	123.3	225.9	103.7	228.5	123.3					
G141.0	119.7	217.8	99.9	221.1	119.7					
G142.0	116.1	209.7	96.1	211.9	116.1					
G143.0	112.5	203.0	91.4	204.4	112.5					
G144.0	108.9	195.1	87.3	195.0	108.9					
G145.0	105.1	186.7	83.6	186.7	105.1					
G146.0	101.2	179.2	79.7	179.3	101.2					
G147.0	97.4	171.9	76.6	170.9	97.4					

C Plane (°):0.0-360.0: 90.0  
 Test Lab: Inventfine instruments  
 Test Type: TYPE C  
 Temperature: 26  
 Operator: Carlos

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 8.684 m [K=1.0000]  
 Humidity: 65  
 Inspector:

### Candlepower Table (Continue 4)

Unit: cd

G\C	C0.0	C90.0	C180.0	C270.0	C360.0					
G148.0	93.2	164.7	72.4	162.8	93.2					
G149.0	89.5	157.8	68.6	155.8	89.5					
G150.0	85.7	151.0	64.5	147.8	85.7					
G151.0	82.1	144.2	60.9	140.0	82.1					
G152.0	78.6	136.8	57.2	132.3	78.6					
G153.0	75.1	130.7	54.2	124.3	75.1					
G154.0	71.8	123.5	50.9	117.1	71.8					
G155.0	68.1	116.2	47.6	109.9	68.1					
G156.0	64.7	109.6	44.1	102.5	64.7					
G157.0	61.3	102.9	40.9	95.7	61.3					
G158.0	57.6	96.2	38.0	88.4	57.6					
G159.0	54.0	89.6	35.3	81.0	54.0					
G160.0	50.9	84.0	31.8	72.6	50.9					
G161.0	47.6	78.1	28.1	65.5	47.6					
G162.0	44.1	71.7	24.3	58.1	44.1					
G163.0	40.6	65.5	20.7	52.0	40.6					
G164.0	37.1	58.8	17.1	46.1	37.1					
G165.0	33.2	53.0	13.7	40.0	33.2					
G166.0	28.6	47.9	11.0	33.1	28.6					
G167.0	24.7	40.2	8.1	26.4	24.7					
G168.0	21.2	33.4	6.3	21.4	21.2					
G169.0	17.5	27.5	4.8	16.5	17.5					
G170.0	13.7	22.3	3.8	12.4	13.7					
G171.0	10.8	18.6	3.0	9.5	10.8					
G172.0	8.4	14.8	2.7	8.0	8.4					
G173.0	6.5	11.8	2.4	7.2	6.5					
G174.0	5.2	9.9	2.2	6.7	5.2					
G175.0	4.2	9.4	2.2	6.3	4.2					
G176.0	3.7	9.2	2.3	6.4	3.7					
G177.0	3.3	8.0	2.3	6.6	3.3					
G178.0	2.8	7.7	2.3	6.5	2.8					
G179.0	2.5	6.7	2.4	6.3	2.5					
G180.0	2.4	5.9	2.4	6.1	2.4					

C Plane (°):0.0-360.0: 90.0  
 Test Lab: Inventfine instruments  
 Test Type: TYPE C  
 Temperature: 26  
 Operator: Carlos

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 8.684 m [K=1.0000]  
 Humidity: 65  
 Inspector: