

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P300915

Luminaire Tested: **GLNA-AF-03-LED-E1-SL4-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300915  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24301)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-03-LED-E1-SL4-800  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(3) 70 CRI, 4000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V  
Square Wide OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13901.4 lumens  
Efficiency: N/A  
Efficacy: 112.1 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G3

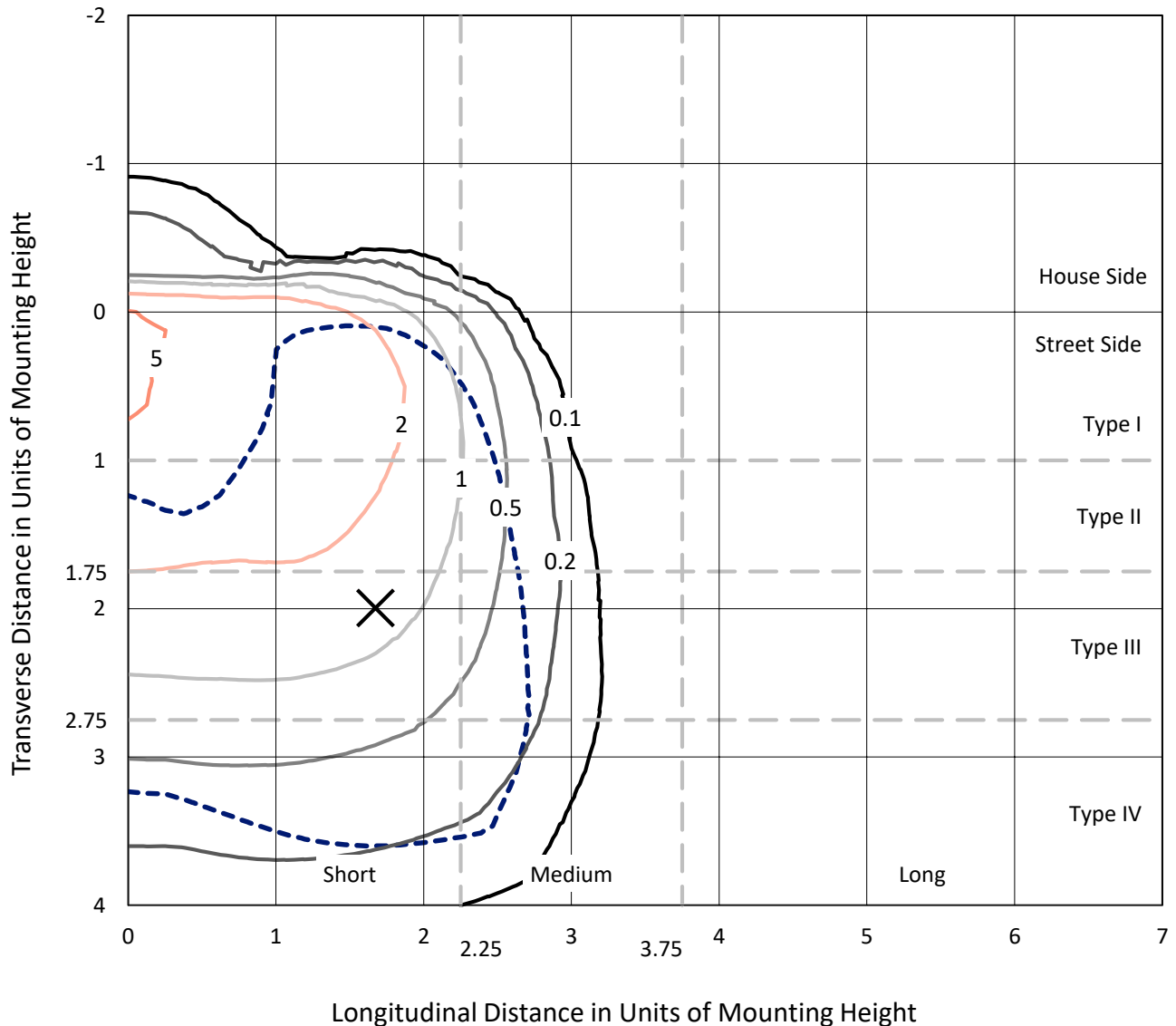
Input Watts (W): 124  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

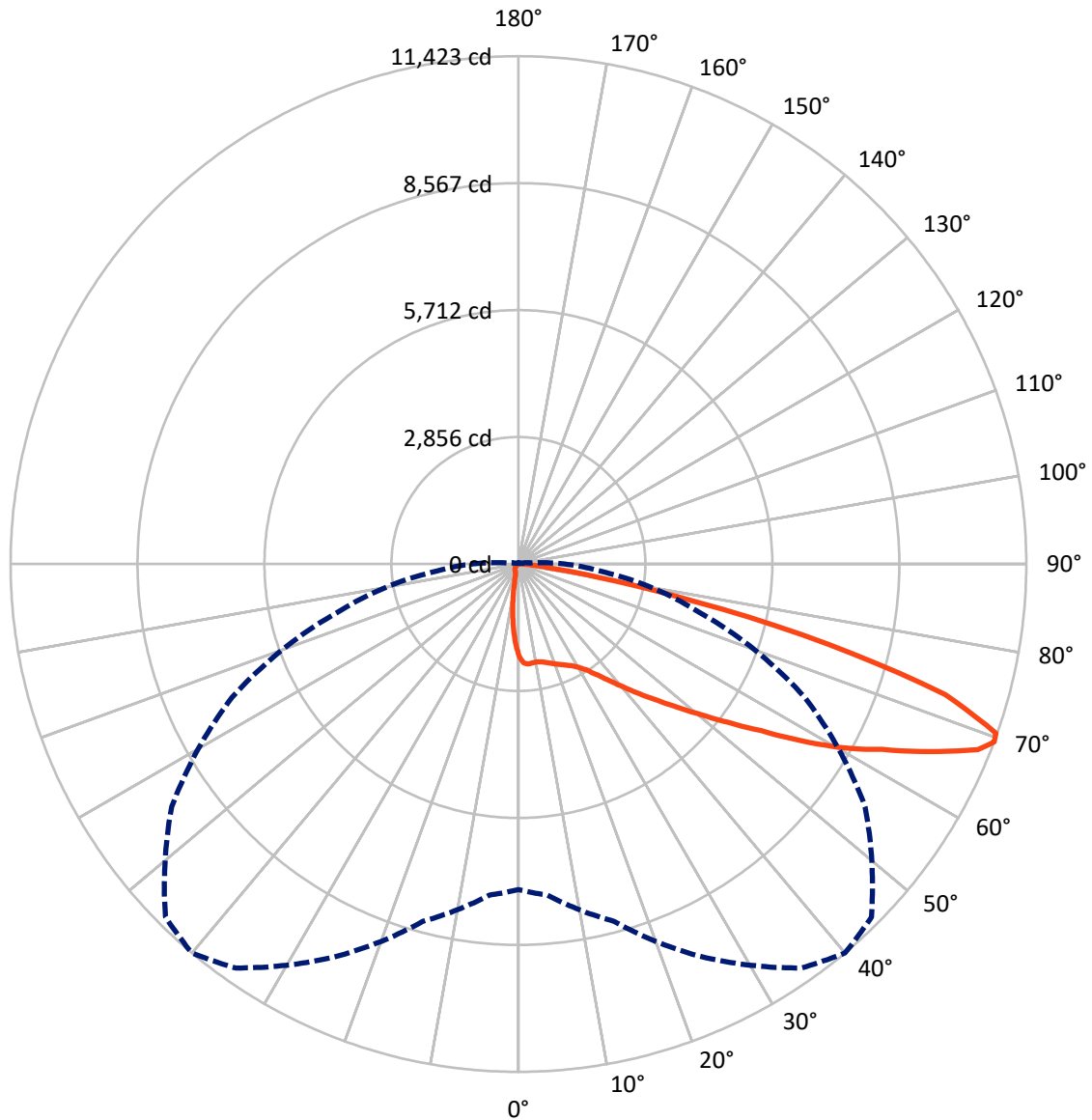
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 5.7 fc  
 Type IV - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical

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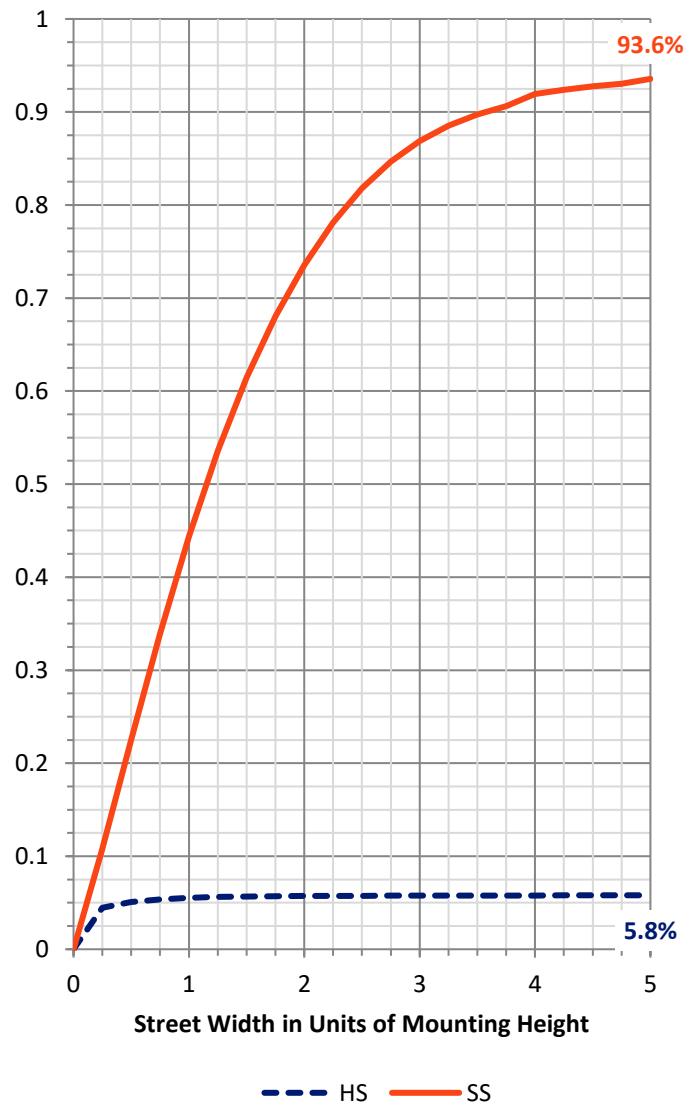
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	813.3	0.0	813.3
	% Fixture	5.9	0.0	5.9
<b>Street Side</b>	Lumens	13088.1	0.0	13088.1
	% Fixture	94.1	0.0	94.1
<b>Total</b>	Lumens	13901.4	0.0	13901.4
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	168.4	1.2
10°-20°	414.1	3.0
20°-30°	697.5	5.0
30°-40°	1141.9	8.2
40°-50°	1977.1	14.2
50°-60°	3114.2	22.4
60°-70°	4067.0	29.3
70°-80°	2094.7	15.1
80°-90°	226.6	1.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	13901.4	100.0
0°-180°	13901.4	100.0



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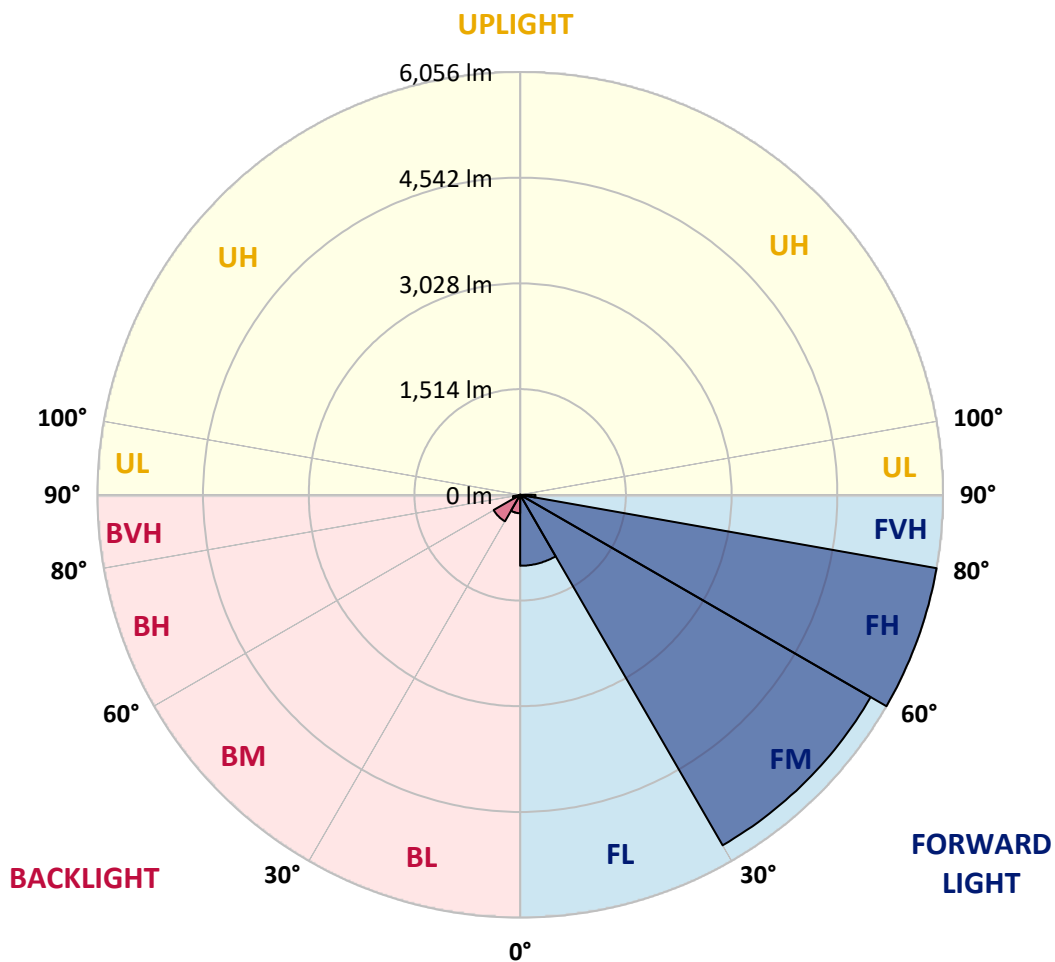
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1016.6	7.3			
FM	(30°-60°)	5796.0	41.7			
FH	(60°-80°)	6056.0	43.6			G3/7500
FVH	(80°-90°)	219.5	1.6			G2/225
BL	(0°-30°)	263.5	1.9	B1/500		
BM	(30°-60°)	437.1	3.1	B1/1000		
BH	(60°-80°)	105.6	0.8	B0/110		G0/110
BVH	(80°-90°)	7.1	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G3**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	2076.9	2076.9	2076.9	2076.9	2076.9	2076.9	2076.9	2076.9	2076.9	2076.9	2076.9
2.5°	2280.5	2268.1	2260.6	2250.7	2238.3	2227.5	2223.4	2192.8	2163.8	2124.1	2078.6
5°	2322.7	2318.6	2305.3	2292.1	2277.2	2260.6	2251.5	2215.1	2173.7	2115.8	2036.4
7.5°	2326.8	2321.9	2305.3	2287.1	2266.4	2246.6	2230.8	2194.4	2156.4	2097.6	2000.8
10°	2320.2	2314.4	2302.0	2282.1	2256.5	2237.5	2221.7	2187.0	2154.7	2101.8	1994.2
12.5°	2312.8	2307.0	2301.2	2291.2	2268.9	2255.7	2242.4	2209.3	2180.4	2135.7	2018.2
15°	2320.2	2316.9	2323.5	2319.4	2307.0	2295.4	2282.1	2252.4	2225.9	2188.6	2062.0
17.5°	2351.7	2351.7	2372.3	2374.8	2363.2	2346.7	2327.7	2297.9	2275.5	2244.1	2114.2
20°	2425.3	2422.8	2449.3	2454.3	2426.1	2400.5	2372.3	2335.9	2318.6	2298.7	2165.5
22.5°	2551.9	2540.3	2556.0	2551.1	2495.6	2455.9	2421.2	2376.5	2367.4	2358.3	2222.6
25°	2716.6	2709.9	2720.7	2671.9	2574.2	2520.5	2479.1	2428.6	2428.6	2437.7	2287.1
27.5°	2955.7	2930.9	2894.5	2808.4	2662.0	2593.3	2548.6	2494.8	2508.9	2542.8	2372.3
30°	3200.6	3173.3	3089.7	2957.4	2768.7	2696.7	2644.6	2588.3	2621.4	2683.5	2486.5
32.5°	3442.2	3411.6	3293.3	3126.2	2921.8	2849.8	2799.3	2737.2	2792.7	2897.0	2653.7
35°	3676.4	3649.1	3512.6	3315.6	3125.3	3065.8	3019.4	2965.6	3036.8	3182.4	2889.5
37.5°	3939.6	3909.8	3743.4	3530.0	3372.7	3329.7	3295.8	3242.0	3366.1	3579.6	3218.0
40°	4263.1	4212.6	3988.4	3775.7	3659.0	3638.4	3615.2	3607.7	3800.5	4095.9	3655.7
42.5°	4633.8	4551.1	4244.9	4034.7	3973.5	3988.4	3982.6	4015.7	4344.2	4738.1	4188.6
45°	5004.5	4897.8	4530.4	4311.1	4319.4	4371.5	4403.8	4536.2	5025.2	5474.5	4762.1
47.5°	5318.9	5213.8	4804.3	4609.8	4709.1	4811.7	4899.4	5150.1	5725.2	6199.4	5208.1
50°	5587.9	5488.6	5094.7	4938.3	5161.7	5327.2	5469.5	5841.1	6478.2	6751.3	5520.8
52.5°	5808.0	5741.8	5395.9	5314.8	5678.9	5921.3	6129.9	6575.0	7145.1	7199.8	5764.1
55°	6022.3	5975.1	5719.4	5762.5	6286.2	6616.4	6880.4	7353.7	7719.4	7573.8	5997.5
57.5°	6268.9	6225.8	6088.5	6330.1	7084.7	7500.1	7788.1	8043.8	8225.0	7956.1	6217.6
60°	6520.4	6495.6	6498.9	6960.6	8001.6	8400.4	8559.3	8625.5	8721.5	8316.0	6230.0
62.5°	6760.4	6807.5	6968.1	7662.3	8879.5	9185.7	9265.9	9331.3	9218.8	8373.1	5755.8
65°	7166.7	7243.6	7626.7	8601.5	9845.2	10172.8	10255.6	10031.3	9297.4	7635.0	4681.8
67.5°	7365.3	7505.9	8189.4	9476.9	10781.9	11145.9	11115.3	10076.9	8343.3	5822.0	3004.5
69°	7323.9	7473.7	8319.3	9745.0	11093.0	11423.1	11228.7	9520.0	7107.9	4217.6	1844.4
70°	7160.0	7311.5	8252.3	9735.1	11132.7	11394.2	11018.5	8832.3	6009.9	3084.0	1153.5
72.5°	5979.3	6110.0	7326.4	8799.2	10255.6	10042.9	9217.9	6119.1	2928.4	839.9	259.8
75°	3680.6	3753.4	5256.9	6628.8	7745.9	7199.8	6141.4	3044.2	873.0	237.5	144.0
77.5°	1944.5	1977.6	2877.9	3907.3	4910.2	4062.8	3147.7	1187.4	402.1	148.9	104.3
80°	1149.3	1174.2	1549.8	1786.5	2124.9	1774.9	1258.6	729.0	288.0	93.5	92.7
82.5°	657.8	673.6	1123.7	993.0	837.4	714.9	626.4	690.9	172.9	62.9	96.0
85°	241.6	244.9	632.2	755.5	498.1	296.2	311.1	572.6	46.3	39.7	75.3
87.5°	112.5	110.1	325.2	462.6	291.3	187.8	242.4	125.8	18.2	25.7	20.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2076.9	2076.9	2076.9	2076.9	2076.9	2076.9	2076.9	2076.9	2076.9	2076.9	2076.9
2.5°	2052.1	2021.5	1966.1	1909.0	1851.0	1806.4	1762.5	1727.7	1716.2	1694.6	1696.3
5°	1989.2	1933.0	1817.1	1699.6	1577.1	1476.2	1381.0	1304.1	1266.8	1228.8	1228.8
7.5°	1934.6	1852.7	1671.5	1480.3	1282.6	1116.2	966.5	853.9	791.9	742.2	741.4
10°	1913.9	1803.0	1549.8	1275.9	1000.4	773.7	595.8	481.6	422.8	384.8	383.1
12.5°	1923.0	1785.7	1456.3	1087.3	741.4	497.3	345.1	271.4	246.6	235.0	235.0
15°	1949.5	1780.7	1362.8	902.8	523.8	311.1	229.2	209.3	207.7	207.7	207.7
17.5°	1981.8	1782.4	1266.8	723.2	356.6	222.6	197.8	195.3	196.9	196.9	196.9
20°	2014.9	1783.2	1163.4	556.9	251.5	193.6	186.2	185.4	187.0	187.0	187.8
22.5°	2055.4	1787.3	1060.0	416.2	207.7	182.9	177.1	177.1	177.9	177.9	177.1
25°	2101.8	1795.6	952.4	308.6	189.5	175.4	170.5	169.6	170.5	169.6	168.8
27.5°	2159.7	1807.2	832.4	241.6	181.2	168.0	163.8	163.8	163.0	162.2	161.4
30°	2232.5	1820.4	697.6	205.2	172.9	161.4	157.2	156.4	155.6	153.9	153.9
32.5°	2343.4	1849.4	564.3	186.2	163.8	152.3	148.9	148.9	147.3	145.6	144.8
35°	2513.8	1906.5	445.2	174.6	153.9	142.3	138.2	138.2	136.5	135.7	134.9
37.5°	2749.7	1993.4	345.9	163.8	144.0	131.6	127.4	126.6	124.9	123.3	122.5
40°	3063.3	2100.9	272.2	153.9	134.0	120.8	117.5	115.8	112.5	110.1	110.1
42.5°	3457.1	2223.4	220.9	143.2	122.5	110.9	108.4	105.9	100.1	97.6	96.8
45°	3869.2	2333.4	187.0	130.7	110.9	101.0	99.3	95.2	87.7	85.2	85.2
47.5°	4166.3	2359.1	164.7	119.2	100.1	90.2	89.4	81.9	75.3	73.6	72.8
50°	4351.6	2308.6	146.5	107.6	90.2	80.3	77.8	68.7	64.5	62.9	62.1
52.5°	4476.6	2218.4	131.6	97.6	81.1	71.2	65.4	58.7	55.4	53.8	53.8
55°	4576.7	2091.0	116.7	88.5	73.6	63.7	55.4	50.5	47.2	45.5	45.5
57.5°	4604.8	1918.1	101.8	81.1	66.2	56.3	47.2	43.9	39.7	38.9	38.9
60°	4400.5	1606.1	90.2	72.0	59.6	48.8	41.4	37.2	33.1	32.3	31.4
62.5°	3861.8	1242.9	79.4	63.7	52.1	42.2	35.6	30.6	27.3	27.3	27.3
65°	2945.8	833.3	69.5	55.4	45.5	35.6	30.6	24.8	23.2	23.2	24.0
67.5°	1763.3	453.5	59.6	47.2	38.9	29.8	25.7	21.5	20.7	21.5	21.5
69°	1033.5	266.4	53.8	42.2	33.9	26.5	22.3	19.0	20.7	21.5	21.5
70°	638.0	179.6	49.6	38.1	30.6	24.0	20.7	18.2	19.9	20.7	20.7
72.5°	177.9	92.7	39.7	29.8	24.8	19.9	16.5	16.5	19.0	19.9	19.9
75°	115.8	68.7	30.6	22.3	19.0	15.7	14.1	15.7	18.2	19.0	19.0
77.5°	96.0	56.3	24.8	18.2	15.7	14.9	13.2	14.1	16.5	17.4	17.4
80°	87.7	39.7	19.9	16.5	14.1	13.2	12.4	11.6	14.9	15.7	15.7
82.5°	83.6	31.4	17.4	14.9	13.2	11.6	10.8	11.6	13.2	14.1	14.9
85°	52.1	20.7	15.7	14.1	11.6	10.8	10.8	10.8	12.4	13.2	13.2
87.5°	19.0	16.5	14.1	11.6	9.9	9.9	9.9	9.9	10.8	12.4	12.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)