

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: STREETWORKS

Report Number: P237235

Luminaire Tested: **ARCH-L-AF72-220-D-U-T3-7050-HSS**

Issue Date: 2/14/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P237235  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 2/14/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-220-D-U-T3-7050-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 945mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19021 lumens  
Efficiency: N/A  
Efficacy: 85.7 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B2 - U0 - G4

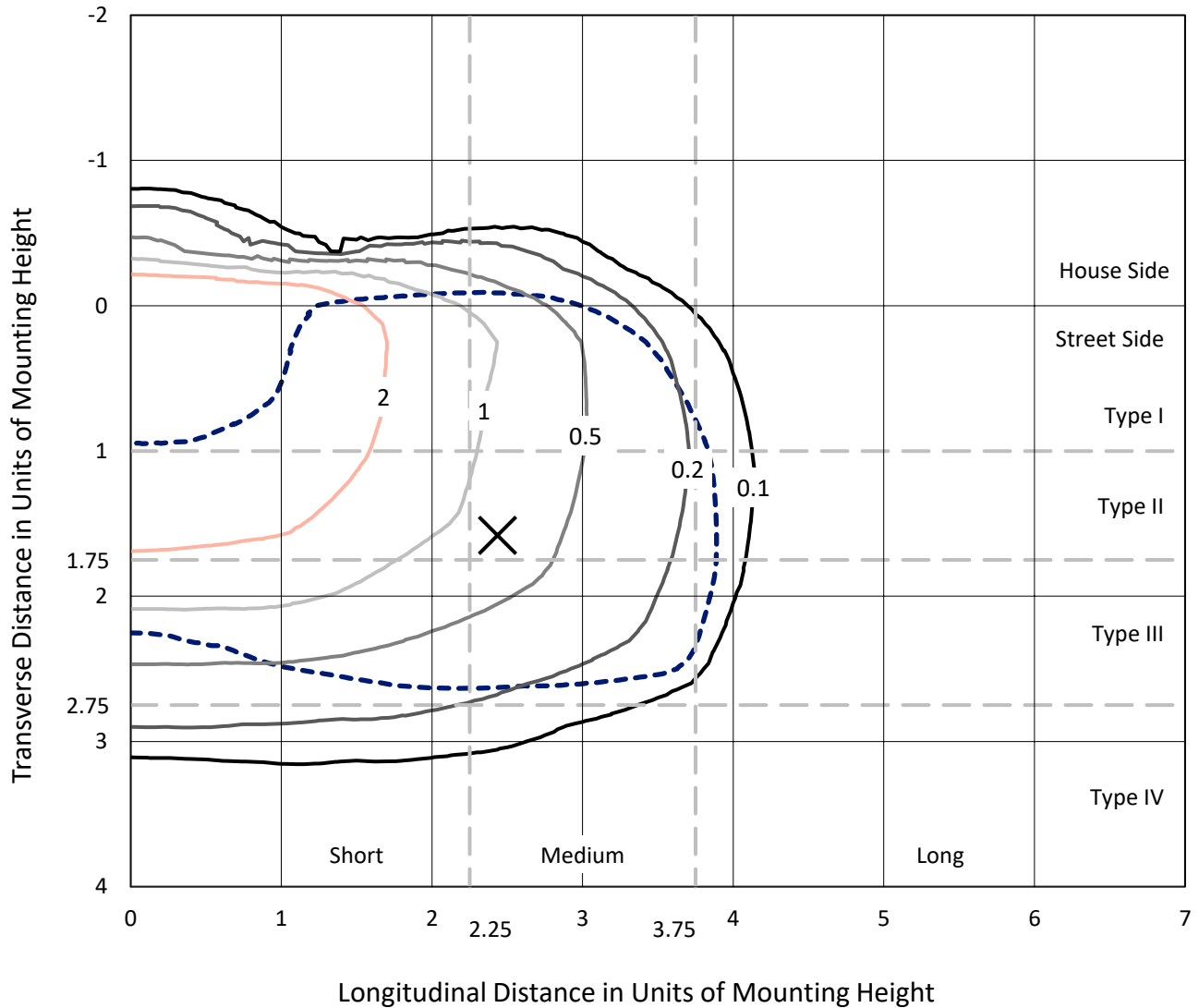
Input Watts (W): 222  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

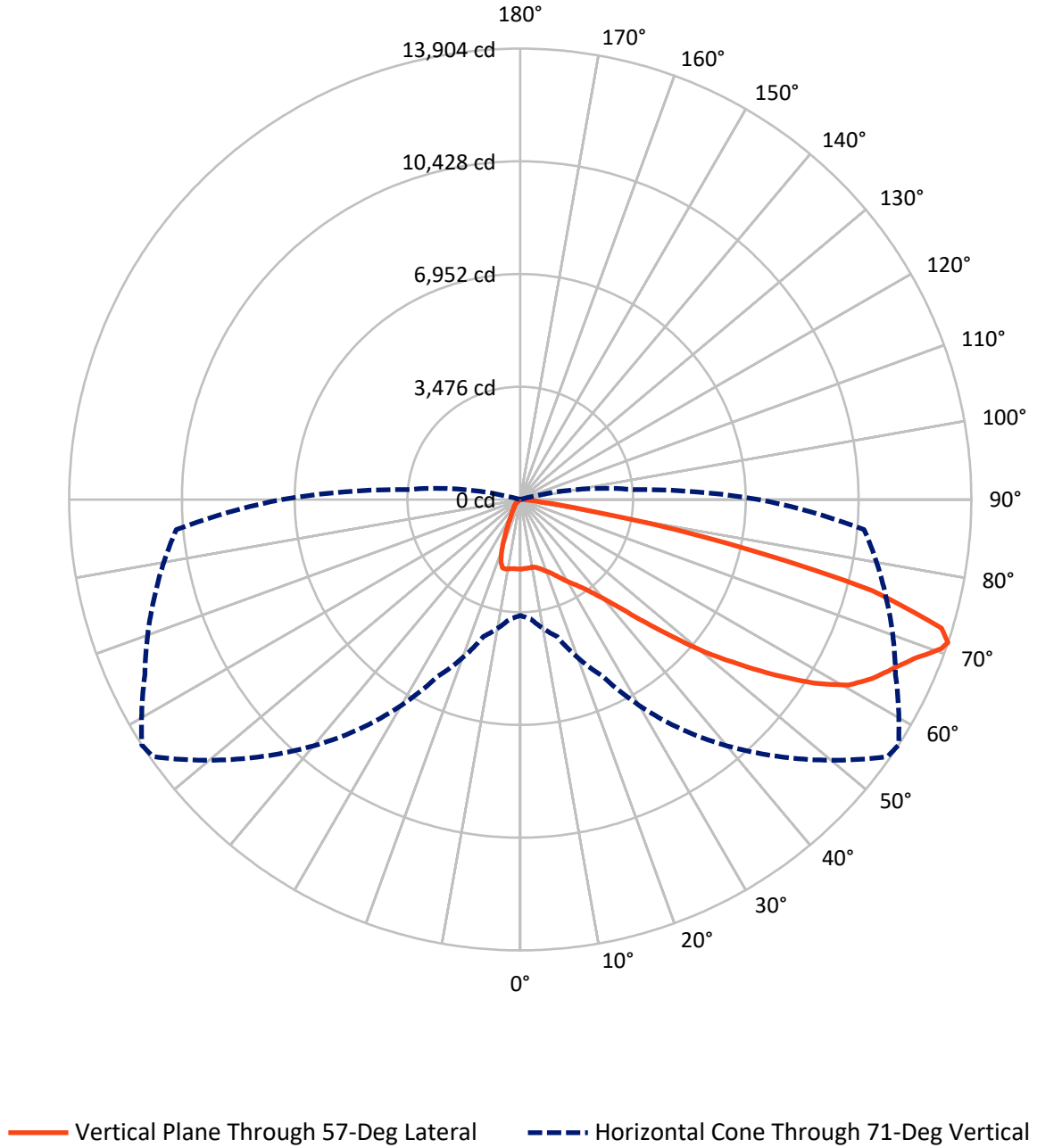
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.3 fc  
 Type III - Medium - N/A

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### Luminous Intensity Polar Plot



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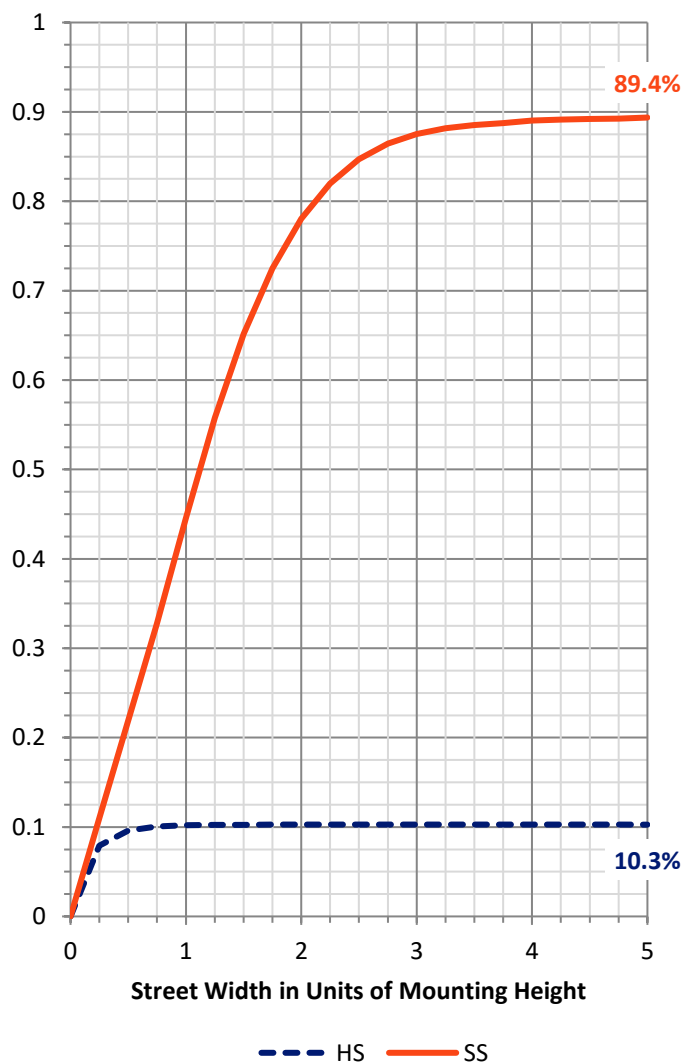
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1971.2	0.0	1971.2
	% Fixture	10.4	0.0	10.4
<b>Street Side</b>	Lumens	17049.8	0.0	17049.8
	% Fixture	89.6	0.0	89.6
<b>Total</b>	Lumens	19021.0	0.0	19021.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	201.9	1.1
10°-20°	539.8	2.8
20°-30°	842.1	4.4
30°-40°	1423.2	7.5
40°-50°	2764.2	14.5
50°-60°	4642.0	24.4
60°-70°	5539.8	29.1
70°-80°	2919.6	15.3
80°-90°	148.4	0.8
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°	19021.0	100.0
0°-180°	19021.0	100.0

**Coefficient of Utilization**



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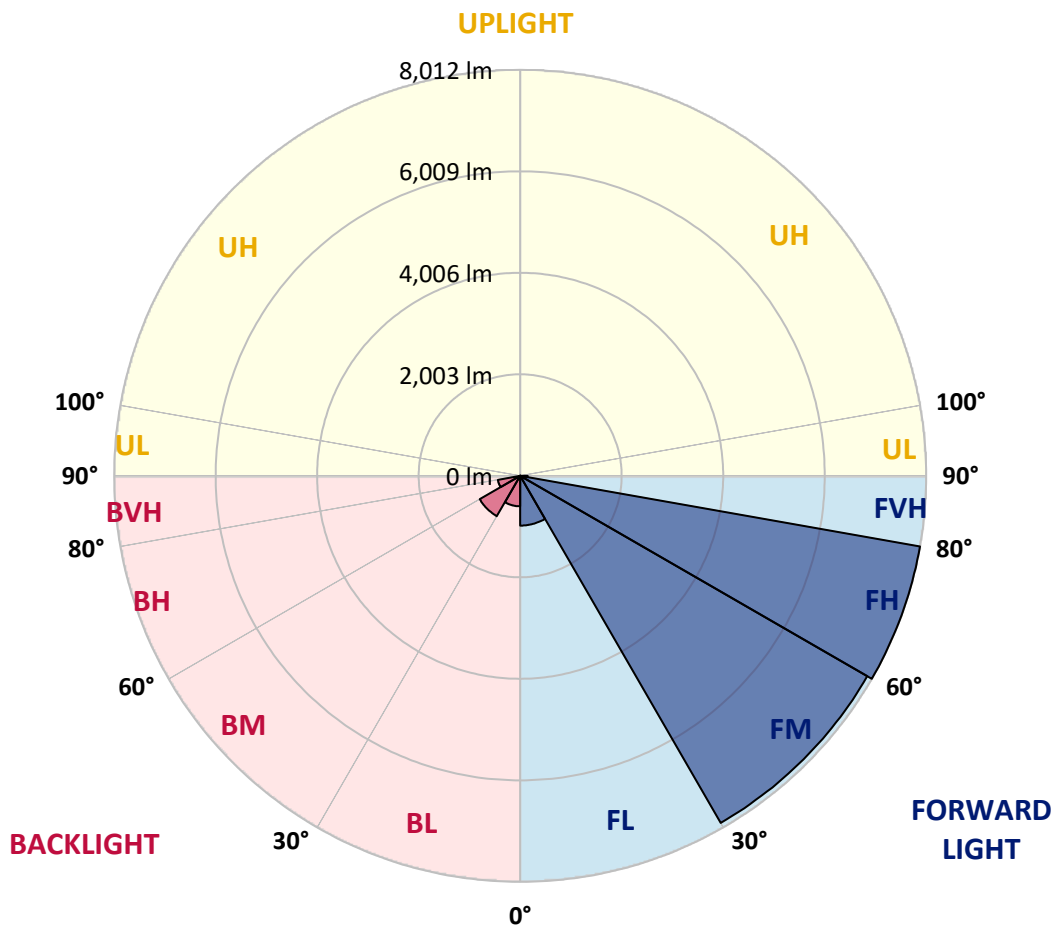
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	982.0	5.2			
FM (30°-60°)	7909.1	41.6			
FH (60°-80°)	8011.8	42.1			G4/12000
FVH (80°-90°)	146.9	0.8			G2/225
BL (0°-30°)	601.7	3.2	B2/1000		
BM (30°-60°)	920.4	4.8	B1/1000		
BH (60°-80°)	447.6	2.4	B1/500		G1/500
BVH (80°-90°)	1.4	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G4**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	2149.7	2149.7	2149.7	2149.7	2149.7	2149.7	2149.7	2149.7	2149.7	2149.7	2149.7
2.5°	2118.6	2118.6	2118.6	2123.1	2127.5	2127.5	2136.4	2131.9	2131.9	2131.9	2140.8
5°	2061.0	2065.4	2069.9	2078.7	2096.5	2109.8	2131.9	2131.9	2136.4	2145.2	2149.7
7.5°	1981.2	1985.7	1999.0	2016.7	2052.2	2083.2	2118.6	2127.5	2140.8	2163.0	2171.8
10°	1932.5	1941.3	1959.1	1981.2	2021.1	2061.0	2105.3	2118.6	2158.5	2198.4	2220.6
12.5°	1919.2	1923.6	1941.3	1976.8	2025.6	2074.3	2131.9	2145.2	2202.8	2264.9	2300.4
15°	1941.3	1945.8	1954.6	1994.5	2052.2	2114.2	2189.6	2207.3	2278.2	2349.1	2393.4
17.5°	1981.2	1981.2	1990.1	2025.6	2087.6	2158.5	2256.0	2282.6	2362.4	2442.2	2490.9
20°	2007.8	2007.8	2021.1	2056.6	2127.5	2220.6	2335.8	2371.3	2459.9	2548.6	2592.9
22.5°	2034.4	2038.9	2052.2	2092.0	2171.8	2300.4	2433.3	2468.8	2570.7	2663.8	2708.1
25°	2109.8	2105.3	2109.8	2145.2	2238.3	2397.9	2566.3	2610.6	2717.0	2818.9	2841.1
27.5°	2318.1	2309.2	2251.6	2229.4	2300.4	2499.8	2734.7	2779.0	2903.2	3005.1	3005.1
30°	2796.8	2779.0	2637.2	2455.5	2397.9	2592.9	2894.3	2956.3	3115.9	3204.5	3178.0
32.5°	3404.0	3364.1	3182.4	2872.1	2641.6	2717.0	3062.7	3133.6	3337.5	3412.9	3355.2
35°	4068.8	4064.4	3838.4	3439.5	3111.5	2974.1	3279.9	3364.1	3621.2	3687.7	3594.6
37.5°	4773.6	4791.3	4640.6	4091.0	3705.4	3395.1	3568.0	3665.5	3980.2	4060.0	3971.3
40°	5558.1	5553.7	5496.0	4844.5	4419.0	3993.5	3984.6	4073.3	4454.5	4578.6	4454.5
42.5°	6550.9	6542.1	6333.7	5748.7	5283.3	4773.6	4591.9	4622.9	5048.4	5252.3	5070.5
45°	7561.5	7499.4	7260.1	6754.8	6342.6	5739.8	5394.1	5394.1	5757.5	6036.8	5753.1
47.5°	8124.4	8062.3	7964.8	7685.6	7561.5	6887.8	6378.1	6316.0	6599.7	6883.3	6484.4
50°	8864.6	8864.6	8620.8	8514.4	8727.2	8252.9	7464.0	7401.9	7539.3	7765.4	7242.4
52.5°	9449.6	9343.3	9170.4	9263.5	9870.7	9653.5	8549.9	8430.2	8536.6	8594.2	7902.8
55°	9693.4	9591.5	9578.2	9919.5	10859.1	10557.7	9662.4	9556.0	9547.2	9263.5	8479.0
57.5°	9742.2	9653.5	9822.0	10420.3	11820.9	11297.9	10770.5	10690.7	10442.5	9733.3	9068.5
60°	9330.0	9374.3	9782.1	10695.1	12388.3	11940.6	11705.7	11621.5	11049.7	10132.2	9724.4
62.5°	8483.4	8589.8	9352.1	10721.7	12179.9	12202.1	12224.3	12166.6	11519.5	10495.7	10384.9
65°	7481.7	7512.7	8430.2	10353.8	11816.5	12122.3	12605.4	12601.0	11878.5	10903.4	11129.5
67.5°	6165.3	6218.5	7011.9	9112.8	11089.6	12086.9	13106.3	13093.0	12286.3	11368.8	11572.7
70°	4587.4	4653.9	5296.6	7087.2	9467.4	11643.6	13762.3	13771.1	12716.2	11723.4	11266.9
71°	3576.9	3696.5	4370.2	6019.1	8638.5	11196.0	13824.3	13904.1	12765.0	11674.7	10637.5
72.5°	1755.2	1897.0	2743.6	4237.3	7109.4	10194.3	13416.5	13571.7	12459.2	11067.4	9095.1
75°	456.5	483.1	820.0	1733.0	3811.8	6754.8	10819.2	11213.7	10185.4	8425.8	5558.1
77.5°	288.1	297.0	385.6	673.7	1427.2	2566.3	6355.9	6550.9	5819.6	4268.3	1959.1
80°	203.9	208.3	243.8	434.4	833.3	749.1	2287.1	2371.3	2105.3	1130.2	350.2
82.5°	124.1	124.1	177.3	279.2	514.1	407.8	602.8	642.7	567.3	314.7	115.2
85°	70.9	75.3	110.8	190.6	243.8	199.5	226.0	239.3	243.8	208.3	48.8
87.5°	57.6	62.1	97.5	159.6	133.0	97.5	97.5	101.9	106.4	124.1	22.2
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°	2149.7	2149.7	2149.7	2149.7	2149.7	2149.7	2149.7	2149.7	2149.7	2149.7	2149.7
2.5°	2140.8	2140.8	2145.2	2140.8	2140.8	2140.8	2145.2	2145.2	2145.2	2154.1	2158.5
5°	2149.7	2149.7	2149.7	2145.2	2140.8	2140.8	2149.7	2154.1	2154.1	2167.4	2167.4
7.5°	2171.8	2171.8	2163.0	2154.1	2145.2	2131.9	2136.4	2140.8	2136.4	2140.8	2140.8
10°	2220.6	2220.6	2207.3	2189.6	2163.0	2123.1	2069.9	2003.4	1941.3	1919.2	1910.3
12.5°	2300.4	2295.9	2269.3	2238.3	2180.7	2043.3	1843.8	1608.9	1413.9	1360.7	1343.0
15°	2389.0	2380.1	2349.1	2295.9	2140.8	1777.3	1360.7	1059.3	873.2	828.8	820.0
17.5°	2482.1	2468.8	2424.5	2318.1	1959.1	1320.8	877.6	664.8	562.9	554.0	558.5
20°	2579.6	2561.9	2499.8	2273.8	1582.3	882.0	567.3	514.1	505.3	505.3	509.7
22.5°	2690.4	2668.2	2584.0	2114.2	1152.4	585.1	487.6	483.1	478.7	474.3	474.3
25°	2818.9	2792.3	2663.8	1826.1	793.4	478.7	465.4	452.1	443.2	434.4	429.9
27.5°	2974.1	2938.6	2725.9	1471.5	545.2	447.7	438.8	416.6	398.9	381.2	381.2
30°	3129.2	3084.9	2708.1	1108.1	443.2	416.6	398.9	372.3	345.7	328.0	323.6
32.5°	3293.2	3248.9	2592.9	744.6	403.3	381.2	359.0	319.1	288.1	265.9	261.5
35°	3537.0	3501.5	2366.8	492.0	363.4	336.9	305.8	265.9	226.0	203.9	199.5
37.5°	3900.4	3856.1	2087.6	376.7	319.1	279.2	252.6	208.3	168.4	146.3	141.8
40°	4388.0	4255.0	1755.2	332.4	279.2	230.5	195.0	150.7	119.7	106.4	106.4
42.5°	4955.3	4640.6	1396.2	301.4	248.2	190.6	141.8	101.9	84.2	79.8	79.8
45°	5558.1	4999.6	1037.2	279.2	217.2	150.7	101.9	70.9	62.1	57.6	57.6
47.5°	6178.6	5292.2	722.5	252.6	181.7	115.2	70.9	53.2	44.3	39.9	39.9
50°	6759.2	5482.7	509.7	226.0	155.1	84.2	53.2	39.9	31.0	31.0	31.0
52.5°	7162.6	5465.0	367.9	195.0	119.7	57.6	35.5	26.6	26.6	26.6	26.6
55°	7517.2	5398.5	288.1	168.4	93.1	39.9	26.6	22.2	22.2	17.7	17.7
57.5°	7818.6	5292.2	243.8	137.4	66.5	31.0	17.7	17.7	13.3	13.3	13.3
60°	8075.6	5159.2	203.9	115.2	44.3	22.2	13.3	8.9	8.9	4.4	8.9
62.5°	8425.8	5075.0	177.3	88.6	31.0	13.3	8.9	4.4	4.4	0.0	0.0
65°	8682.9	4915.4	150.7	62.1	17.7	8.9	4.4	4.4	0.0	0.0	0.0
67.5°	8691.7	4627.3	110.8	35.5	13.3	8.9	4.4	0.0	0.0	0.0	0.0
70°	7991.4	3944.7	70.9	17.7	8.9	4.4	4.4	0.0	0.0	0.0	0.0
71°	7348.7	3492.6	57.6	13.3	8.9	4.4	0.0	0.0	0.0	0.0	0.0
72.5°	6054.5	2566.3	44.3	13.3	4.4	4.4	0.0	0.0	0.0	0.0	0.0
75°	3337.5	930.8	22.2	8.9	4.4	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	1068.2	283.7	13.3	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	181.7	44.3	8.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	62.1	17.7	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	17.7	8.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.9	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)