

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: P236949

Luminaire Tested: **ARCH-L-AF72-160-D-U-T2R-7030-HSS**

Issue Date: 8/23/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P236949  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 8/23/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-160-D-U-T2R-7030-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 3000K, 705mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16188.9 lumens  
Efficiency: N/A  
Efficacy: 99.9 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G2

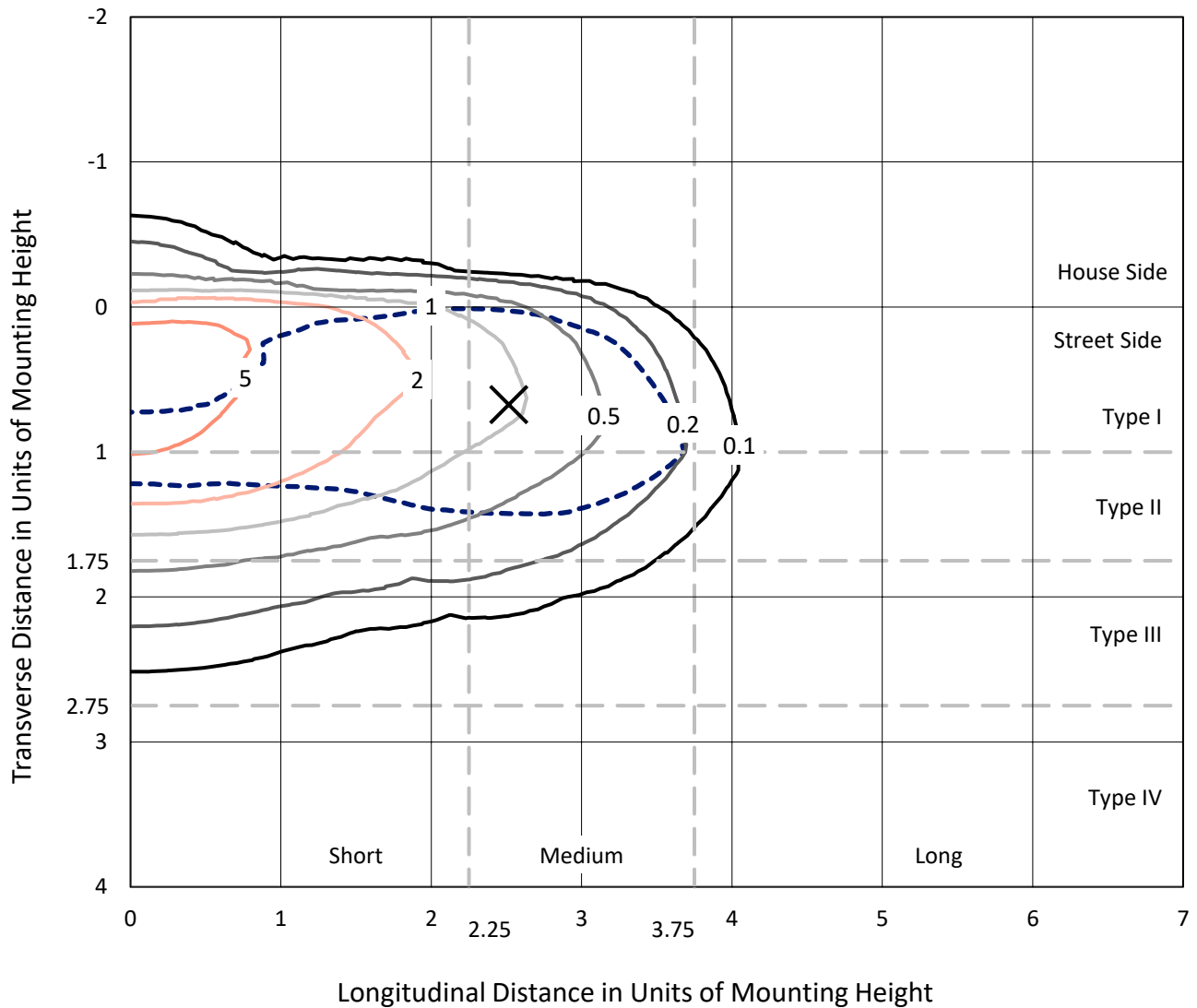
Input Watts (W): 162  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

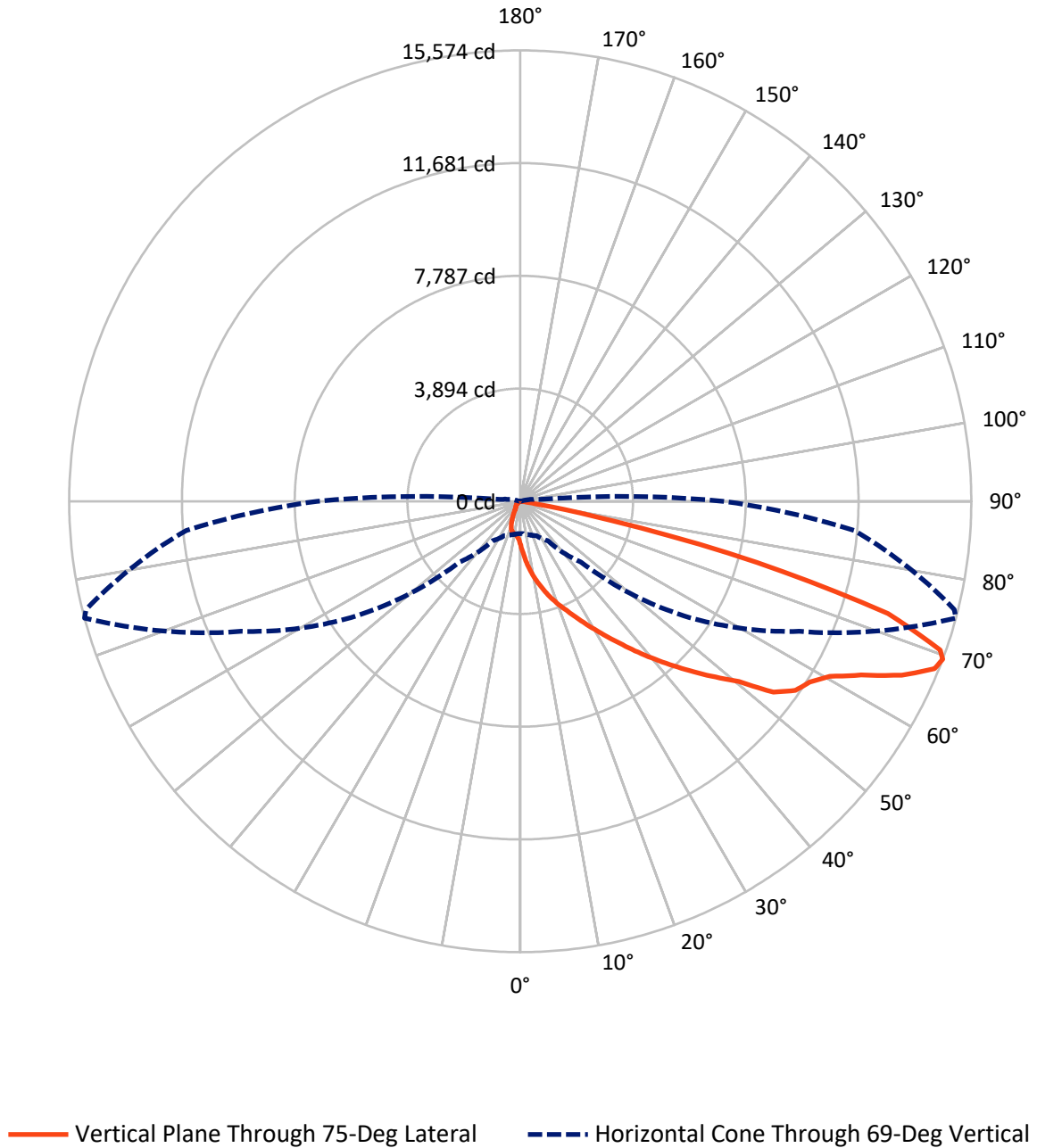
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.6 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



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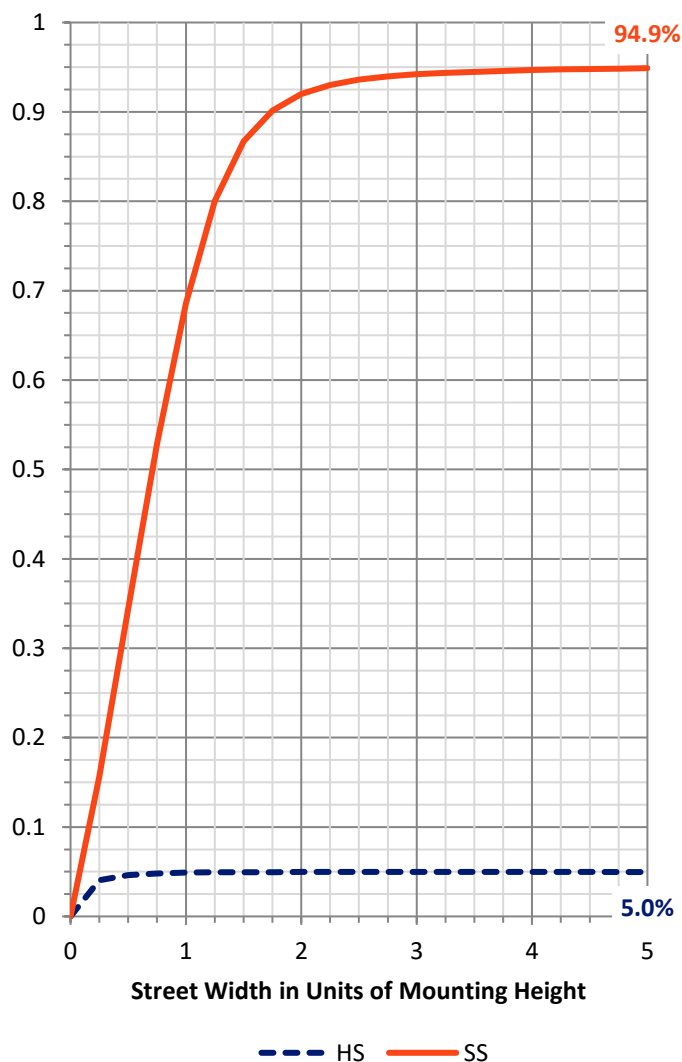
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	807.7	0.0	807.7
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	15381.2	0.0	15381.2
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	16188.9	0.0	16188.9
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	175.7	1.1
10°-20°	628.0	3.9
20°-30°	1198.8	7.4
30°-40°	2150.5	13.3
40°-50°	3294.7	20.4
50°-60°	3829.3	23.7
60°-70°	3390.9	20.9
70°-80°	1462.6	9.0
80°-90°	58.6	0.4
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°	16188.9	100.0
0°-180°	16188.9	100.0

**Coefficient of Utilization**



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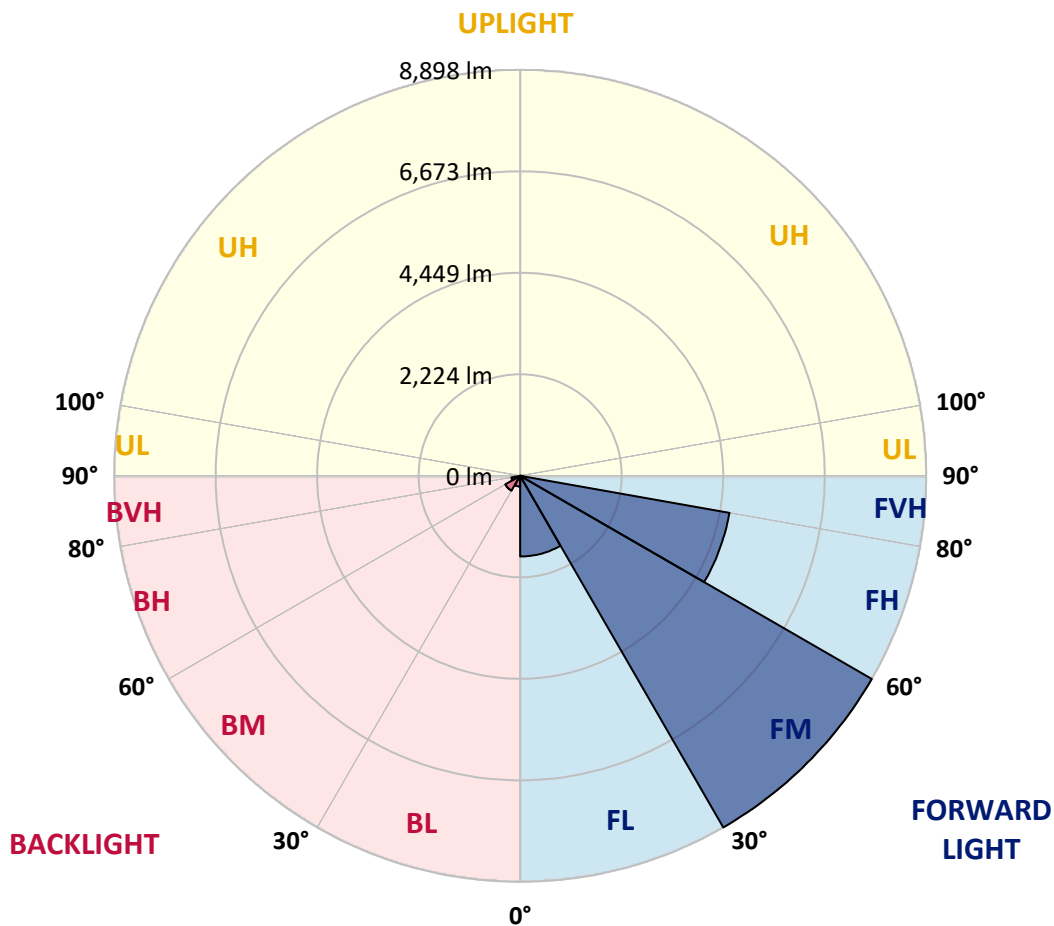
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1767.9	10.9			
FM (30°-60°)	8897.8	55.0			
FH (60°-80°)	4657.8	28.8			G2/5000
FVH (80°-90°)	57.7	0.4			G1/100
BL (0°-30°)	234.6	1.4	B1/500		
BM (30°-60°)	376.6	2.3	B1/1000		
BH (60°-80°)	195.7	1.2	B1/500		G1/500
BVH (80°-90°)	0.9	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1506.3	1506.3	1506.3	1506.3	1506.3	1506.3	1506.3	1506.3	1506.3	1506.3	1506.3
2.5°	2481.5	2457.0	2432.5	2404.6	2341.7	2233.4	2097.0	1950.3	1768.5	1737.0	1590.3
5°	3012.8	3002.2	2977.8	2939.4	2869.4	2750.6	2596.9	2380.1	2076.0	2023.7	1712.6
7.5°	3386.7	3379.7	3358.7	3313.3	3250.5	3131.6	2970.8	2736.6	2383.6	2324.3	1866.3
10°	3722.3	3718.7	3701.2	3659.3	3596.4	3467.2	3295.8	3051.2	2677.2	2610.9	2044.6
12.5°	4026.3	4029.8	4022.8	4001.8	3956.4	3834.1	3638.4	3372.8	2960.3	2886.9	2257.9
15°	4204.6	4215.0	4243.0	4284.9	4299.0	4201.1	3998.4	3704.8	3250.5	3187.5	2502.5
17.5°	4145.2	4155.6	4243.0	4386.3	4522.6	4536.6	4354.8	4019.3	3537.0	3474.1	2743.6
20°	4001.8	4015.9	4106.7	4302.4	4568.0	4753.4	4679.9	4361.8	3809.7	3732.8	2974.2
22.5°	4162.7	4162.7	4190.6	4309.4	4550.5	4840.6	4938.5	4704.3	4089.2	3994.8	3205.0
25°	4714.9	4704.3	4644.9	4596.0	4672.9	4931.5	5134.3	5053.9	4417.8	4309.4	3449.7
27.5°	5413.9	5462.8	5351.0	5172.7	4997.9	5109.8	5309.0	5399.9	4781.3	4669.4	3701.2
30°	6196.7	6217.7	6084.8	5847.2	5539.7	5431.4	5515.2	5697.0	5176.1	5053.9	3963.4
32.5°	6902.8	6885.3	6773.4	6525.3	6144.3	5910.2	5780.8	5934.6	5606.1	5466.2	4232.4
35°	7528.4	7542.3	7406.0	7119.5	6745.4	6497.3	6189.7	6203.7	6088.4	5927.7	4543.5
37.5°	8091.0	8066.6	7937.3	7650.7	7311.7	7042.6	6717.5	6483.3	6616.2	6448.4	4893.0
40°	8549.0	8524.5	8388.2	8108.5	7790.5	7570.3	7315.2	6857.3	7171.9	6979.7	5267.1
42.5°	8912.4	8884.4	8769.1	8500.1	8192.5	7996.6	7874.5	7318.7	7766.0	7573.9	5686.5
45°	9090.7	9066.3	8996.3	8793.6	8524.5	8353.2	8412.6	7849.9	8402.1	8241.4	6147.8
47.5°	8880.9	8870.5	8950.8	8915.9	8762.1	8671.3	8877.5	8430.1	9069.7	8912.4	6679.1
50°	8244.9	8262.3	8496.5	8786.6	8860.1	8968.3	9258.4	9041.8	9786.3	9618.4	7290.8
52.5°	6675.6	6794.4	7500.4	8199.5	8741.2	9150.1	9705.8	9915.5	10953.6	10789.3	8244.9
55°	4984.0	5032.9	5801.7	6997.2	8262.3	9136.1	10037.8	10429.4	11530.2	11362.5	8496.5
57.5°	3952.9	3970.4	4351.4	5571.1	7276.7	8821.6	10212.6	10614.5	11781.9	11642.1	8870.5
60°	3103.6	3124.6	3400.7	4239.5	5889.2	7972.2	9960.9	10775.2	12274.7	12162.8	9524.0
62.5°	2415.0	2436.1	2603.8	3096.6	4417.8	6665.2	9454.2	11034.0	13211.4	13158.9	10593.6
65°	1869.9	1876.8	1992.3	2222.9	3121.1	5249.6	8835.6	11275.1	14476.7	14431.2	11460.3
67.5°	1380.6	1391.1	1471.4	1614.8	2107.5	3771.2	7822.0	11089.9	15430.6	15297.9	11774.9
69°	1114.9	1125.4	1195.3	1310.7	1663.7	2970.8	6895.8	10632.0	15574.1	15448.1	11575.7
70°	954.2	961.2	1031.1	1128.8	1419.0	2523.5	6161.7	10237.0	15385.4	15263.0	11121.3
72.5°	611.7	646.6	716.5	779.3	940.1	1670.7	4159.2	8489.6	13274.2	13064.5	8709.7
75°	339.0	349.5	475.3	552.2	625.6	1087.0	2313.8	5295.0	8444.1	8297.2	4659.0
77.5°	279.6	286.6	335.5	419.4	419.4	608.1	873.7	2086.6	3212.0	2897.4	1261.7
80°	195.7	202.6	255.1	276.1	300.6	342.5	283.1	457.9	496.2	440.5	188.7
82.5°	136.3	143.3	174.7	227.2	241.1	160.7	104.9	136.3	143.3	143.3	73.4
85°	24.5	35.0	129.4	188.7	143.3	48.9	59.4	48.9	45.5	48.9	17.5
87.5°	0.0	0.0	80.5	90.9	76.9	21.0	24.5	17.5	10.5	13.9	7.0
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°	1506.3	1506.3	1506.3	1506.3	1506.3	1506.3	1506.3	1506.3	1506.3	1506.3	1506.3
2.5°	1516.8	1443.5	1317.6	1226.8	1149.9	1090.4	1066.1	1027.6	999.6	1013.6	996.1
5°	1558.8	1429.4	1226.8	1097.4	1006.6	929.7	866.8	817.8	779.3	772.5	765.5
7.5°	1625.2	1439.9	1174.3	1013.6	877.3	758.5	660.6	587.2	531.2	531.2	510.2
10°	1716.0	1467.9	1142.9	929.7	727.0	566.2	468.2	398.5	370.5	367.0	360.0
12.5°	1841.9	1520.4	1118.4	821.3	566.2	412.5	353.0	328.6	318.1	314.5	311.1
15°	2013.2	1597.3	1090.4	688.6	429.9	339.0	314.5	293.6	283.1	279.6	276.1
17.5°	2177.4	1667.2	1031.1	552.2	349.5	307.6	279.6	262.1	248.1	244.6	244.6
20°	2331.3	1726.6	929.7	429.9	314.5	276.1	248.1	227.2	213.2	209.7	209.7
22.5°	2491.9	1775.5	803.8	349.5	286.6	244.6	216.7	195.7	181.7	178.2	174.7
25°	2663.2	1810.4	660.6	311.1	258.6	216.7	185.2	167.7	157.3	153.8	150.3
27.5°	2848.5	1824.4	524.2	283.1	227.2	188.7	160.7	143.3	136.3	132.9	132.9
30°	3016.2	1810.4	405.5	251.7	199.2	164.2	139.9	125.8	118.9	115.4	115.4
32.5°	3191.0	1775.5	325.0	223.7	174.7	139.9	118.9	108.3	104.9	101.4	101.4
35°	3376.2	1730.0	279.6	199.2	150.3	122.4	104.9	97.9	94.4	90.9	90.9
37.5°	3592.9	1674.2	255.1	178.2	132.9	108.3	90.9	87.4	83.9	83.9	83.9
40°	3837.6	1604.3	237.6	160.7	118.9	94.4	80.5	76.9	73.4	73.4	73.4
42.5°	4096.2	1523.8	220.1	143.3	104.9	80.5	69.9	69.9	66.4	66.4	63.0
45°	4386.3	1443.5	202.6	125.8	90.9	69.9	59.4	55.9	55.9	52.5	52.5
47.5°	4728.8	1370.1	185.2	111.9	80.5	59.4	52.5	48.9	45.5	41.9	41.9
50°	5211.1	1363.1	164.2	97.9	73.4	48.9	41.9	38.5	35.0	31.4	31.4
52.5°	5690.0	1300.1	139.9	80.5	59.4	41.9	31.4	28.0	24.5	24.5	21.0
55°	5798.3	1195.3	122.4	69.9	45.5	31.4	24.5	17.5	17.5	13.9	13.9
57.5°	6036.0	1146.3	104.9	55.9	35.0	24.5	13.9	10.5	10.5	10.5	10.5
60°	6504.3	1132.4	90.9	48.9	24.5	17.5	10.5	7.0	7.0	3.5	3.5
62.5°	7150.9	1118.4	76.9	41.9	17.5	10.5	7.0	3.5	0.0	0.0	0.0
65°	7507.4	1024.1	63.0	31.4	13.9	10.5	3.5	0.0	0.0	0.0	0.0
67.5°	7413.0	845.7	55.9	21.0	10.5	7.0	3.5	0.0	0.0	0.0	0.0
69°	7018.0	713.0	45.5	17.5	10.5	7.0	3.5	0.0	0.0	0.0	0.0
70°	6542.8	615.1	41.9	13.9	7.0	3.5	3.5	0.0	0.0	0.0	0.0
72.5°	4644.9	321.6	28.0	10.5	7.0	3.5	0.0	0.0	0.0	0.0	0.0
75°	2170.4	143.3	17.5	7.0	3.5	3.5	0.0	0.0	0.0	0.0	0.0
77.5°	478.8	66.4	10.5	7.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0
80°	90.9	24.5	7.0	3.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	31.4	10.5	3.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	10.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.5	0.0	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)