

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: P236974

Luminaire Tested: **ARCH-L-AF72-210-D-U-T2R-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P236974  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-210-D-U-T2R-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 900mA 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: 20545 lumens  
Efficiency: N/A  
Efficacy: 97.4 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium - Full Cutoff  
BUG Rating: B1 - U0 - G3

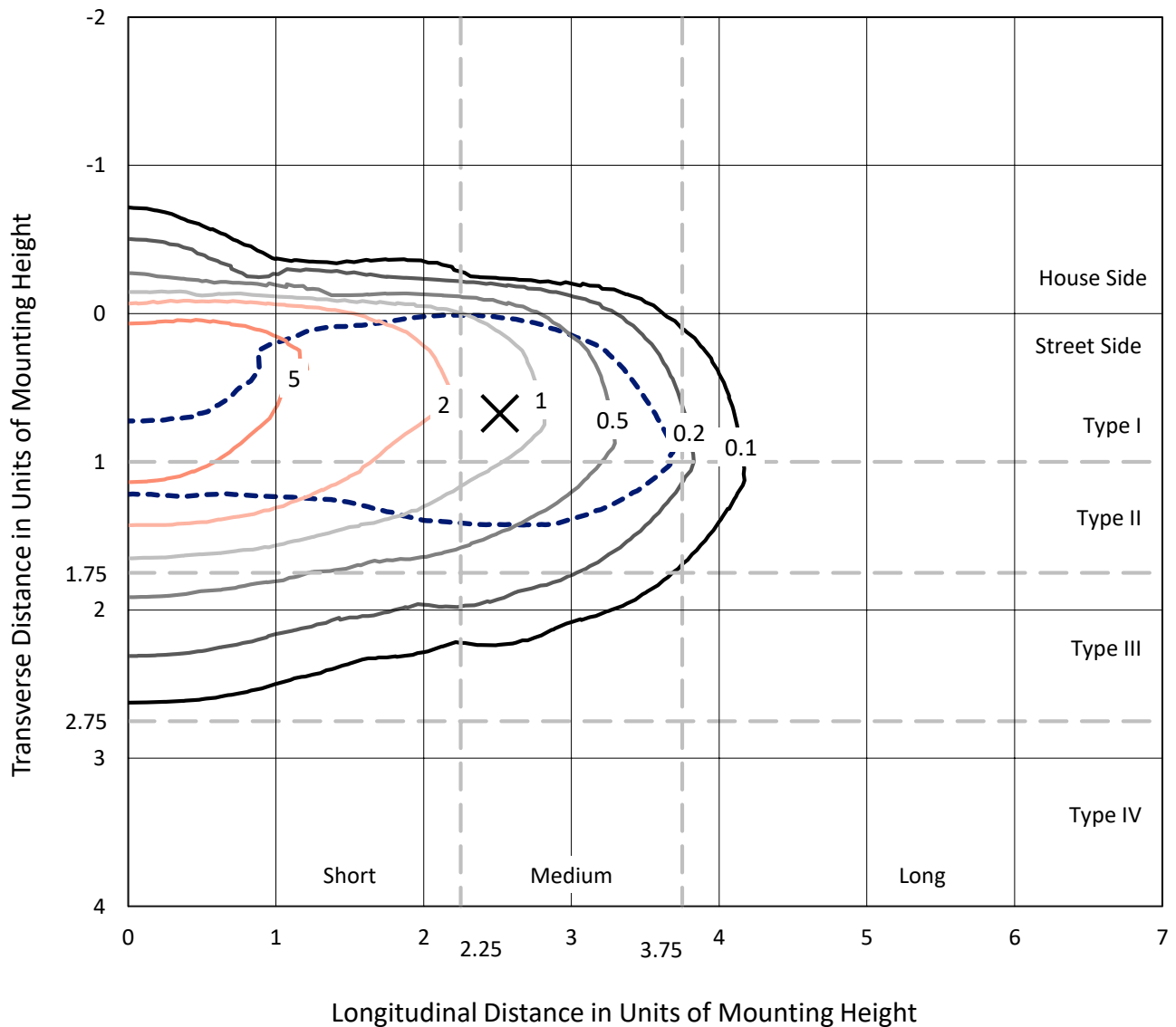
Input Watts (W): 211  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

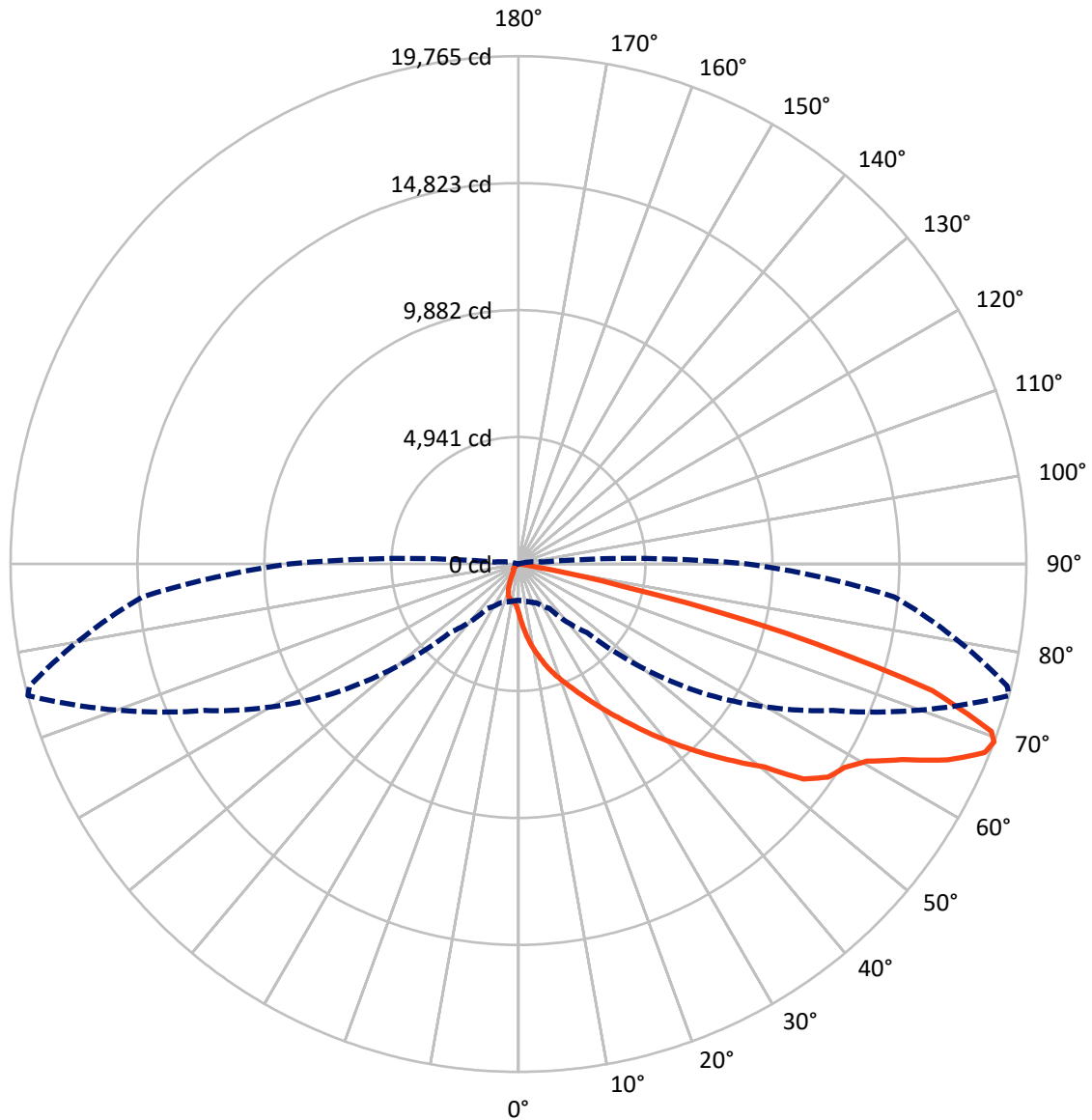
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.4 fc  
 Type II - Medium - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

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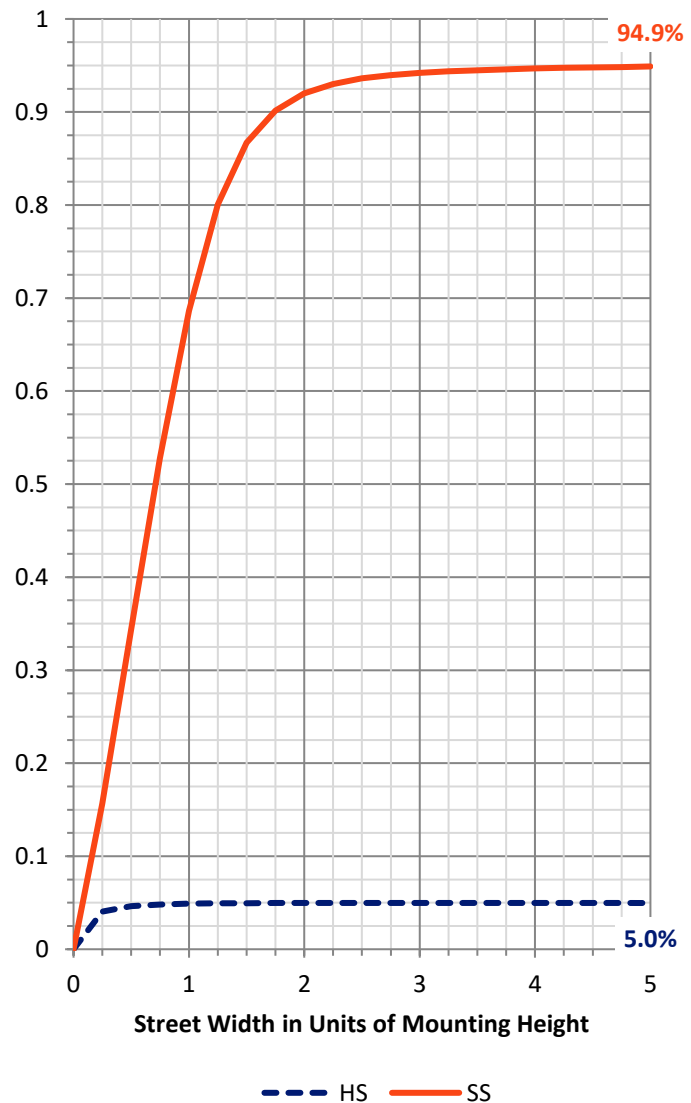
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1025.1	0.0	1025.1
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	19519.9	0.0	19519.9
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	20545.0	0.0	20545.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	222.9	1.1
10°-20°	796.9	3.9
20°-30°	1521.4	7.4
30°-40°	2729.1	13.3
40°-50°	4181.2	20.4
50°-60°	4859.6	23.7
60°-70°	4303.2	20.9
70°-80°	1856.2	9.0
80°-90°	74.4	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°	20545.0	100.0
0°-180°	20545.0	100.0

**Coefficient of Utilization**



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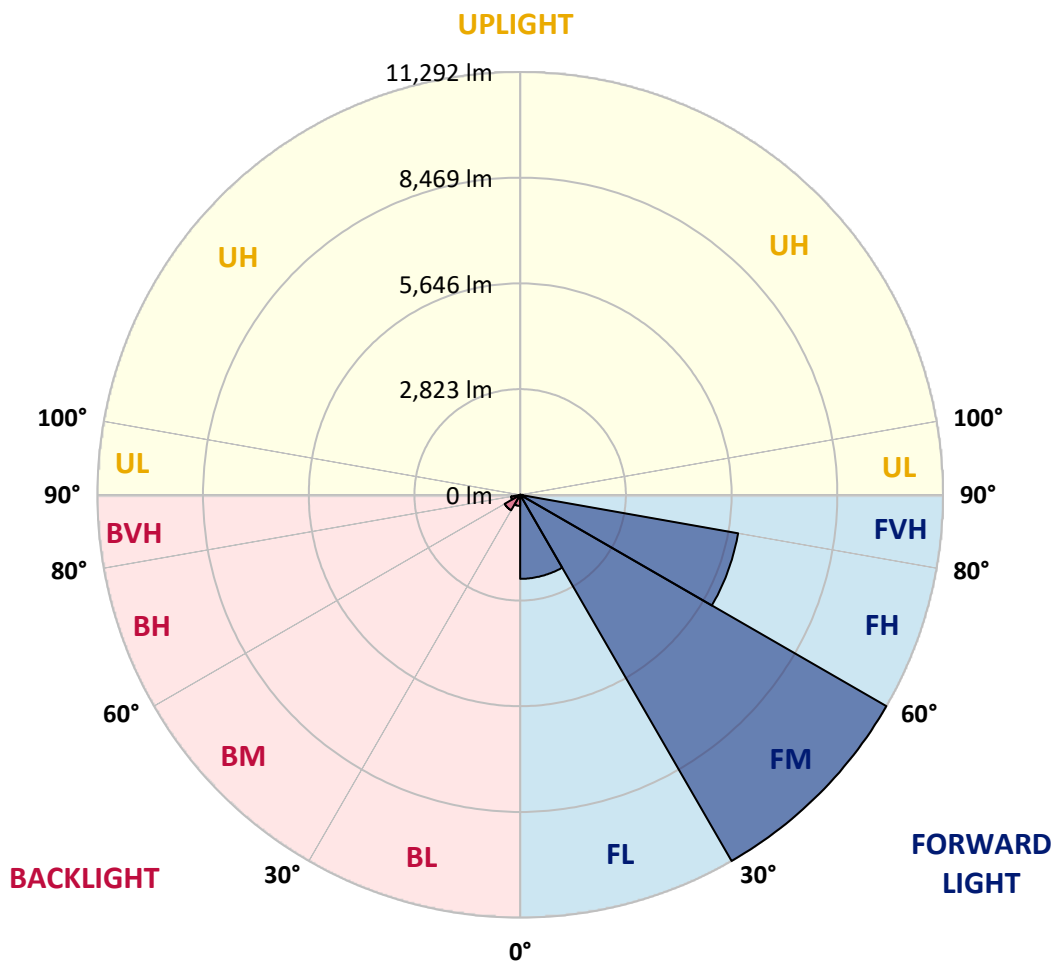
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2243.5	10.9			
FM	(30°-60°)	11292.0	55.0			
FH	(60°-80°)	5911.1	28.8			G3/7500
FVH	(80°-90°)	73.3	0.4			G1/100
BL	(0°-30°)	297.7	1.4	B1/500		
BM	(30°-60°)	477.9	2.3	B1/1000		
BH	(60°-80°)	248.3	1.2	B1/500		G1/500
BVH	(80°-90°)	1.1	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-G3**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1911.7	1911.7	1911.7	1911.7	1911.7	1911.7	1911.7	1911.7	1911.7	1911.7	1911.7
2.5°	3149.2	3118.2	3087.1	3051.7	2971.8	2834.3	2661.3	2475.0	2244.4	2204.5	2018.2
5°	3823.4	3810.1	3779.1	3730.3	3641.5	3490.7	3295.5	3020.6	2634.7	2568.1	2173.4
7.5°	4298.0	4289.1	4262.5	4204.8	4125.0	3974.2	3770.2	3473.0	3025.0	2949.6	2368.5
10°	4723.8	4719.4	4697.2	4644.0	4564.1	4400.0	4182.6	3872.2	3397.6	3313.3	2594.8
12.5°	5109.7	5114.1	5105.2	5078.6	5020.9	4865.8	4617.4	4280.2	3756.9	3663.7	2865.3
15°	5335.9	5349.2	5384.7	5437.9	5455.7	5331.5	5074.2	4701.6	4125.0	4045.2	3175.9
17.5°	5260.5	5273.8	5384.7	5566.6	5739.6	5757.3	5526.6	5100.8	4488.7	4408.9	3481.8
20°	5078.6	5096.3	5211.7	5460.1	5797.2	6032.2	5939.2	5535.5	4834.7	4737.1	3774.6
22.5°	5282.7	5282.7	5318.1	5469.0	5775.0	6143.1	6267.3	5970.1	5189.5	5069.7	4067.4
25°	5983.4	5970.1	5894.8	5832.7	5930.3	6258.5	6515.8	6413.7	5606.5	5469.0	4377.8
27.5°	6870.5	6932.6	6790.8	6564.6	6342.8	6484.7	6737.6	6852.8	6067.7	5925.9	4697.2
30°	7864.1	7890.7	7722.2	7420.6	7030.2	6892.7	6999.2	7229.9	6569.0	6413.7	5029.8
32.5°	8760.1	8737.9	8596.0	8281.1	7797.6	7500.4	7336.3	7531.5	7114.5	6937.1	5371.4
35°	9554.1	9571.9	9398.8	9035.1	8560.5	8245.6	7855.2	7873.0	7726.7	7522.6	5766.2
37.5°	10268.2	10237.1	10073.0	9709.3	9279.1	8937.5	8525.1	8227.8	8396.4	8183.5	6209.7
40°	10849.2	10818.2	10645.2	10290.4	9886.7	9607.2	9283.5	8702.4	9101.6	8857.7	6684.3
42.5°	11310.6	11275.1	11128.7	10787.1	10396.8	10148.4	9993.2	9287.9	9855.7	9611.7	7216.5
45°	11536.7	11505.6	11416.9	11159.7	10818.2	10600.8	10676.2	9962.1	10662.9	10458.9	7802.0
47.5°	11270.6	11257.3	11359.4	11315.0	11119.8	11004.5	11266.2	10698.4	11510.1	11310.6	8476.3
50°	10463.4	10485.6	10782.7	11150.9	11244.0	11381.5	11749.6	11474.6	12419.4	12206.5	9252.5
52.5°	8471.8	8622.7	9518.6	10405.7	11093.2	11612.1	12317.4	12583.5	13900.9	13692.4	10463.4
55°	6325.0	6387.1	7362.9	8879.8	10485.6	11594.4	12738.7	13235.6	14632.7	14419.8	10782.7
57.5°	5016.6	5038.7	5522.2	7070.2	9234.7	11195.2	12960.5	13470.6	14952.1	14774.7	11257.3
60°	3938.8	3965.4	4315.7	5380.2	7473.8	10117.4	12641.2	13674.6	15577.5	15435.5	12086.8
62.5°	3065.0	3091.6	3304.4	3929.9	5606.5	8458.5	11998.0	14002.9	16766.2	16699.7	13444.0
65°	2373.0	2381.8	2528.2	2821.0	3960.9	6662.1	11213.0	14308.9	18371.8	18314.2	14544.0
67.5°	1752.0	1765.3	1867.3	2049.2	2674.6	4785.9	9926.6	14073.9	19582.8	19414.2	14943.2
69°	1414.9	1428.2	1516.9	1663.3	2111.3	3770.2	8751.2	13492.8	19764.5	19604.9	14690.4
70°	1210.9	1219.8	1308.5	1432.6	1800.8	3202.4	7819.7	12991.6	19525.1	19369.8	14113.8
72.5°	776.2	820.6	909.3	989.1	1193.2	2120.2	5278.2	10773.8	16846.1	16579.9	11053.3
75°	430.3	443.6	603.2	700.8	793.9	1379.4	2936.3	6719.8	10716.1	10529.8	5912.6
77.5°	354.9	363.8	425.9	532.2	532.2	771.8	1108.9	2648.0	4076.3	3677.0	1601.2
80°	248.4	257.3	323.8	350.4	381.5	434.7	359.3	581.0	629.8	558.8	239.5
82.5°	173.0	181.9	221.8	288.3	306.1	204.1	133.1	173.0	181.9	181.9	93.2
85°	31.1	44.4	164.1	239.5	181.9	62.1	75.4	62.1	57.7	62.1	22.2
87.5°	0.0	0.0	102.0	115.3	97.6	26.6	31.1	22.2	13.3	17.7	8.9
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°	1911.7	1911.7	1911.7	1911.7	1911.7	1911.7	1911.7	1911.7	1911.7	1911.7	1911.7
2.5°	1925.0	1831.9	1672.2	1556.8	1459.2	1383.8	1352.9	1304.1	1268.6	1286.3	1264.2
5°	1978.2	1814.1	1556.8	1392.7	1277.5	1179.9	1100.0	1037.9	989.1	980.3	971.4
7.5°	2062.5	1827.4	1490.3	1286.3	1113.3	962.5	838.3	745.1	674.2	674.2	647.6
10°	2177.9	1862.9	1450.4	1179.9	922.6	718.5	594.3	505.6	470.1	465.7	456.8
12.5°	2337.5	1929.5	1419.3	1042.4	718.5	523.3	448.0	417.0	403.7	399.2	394.8
15°	2554.8	2027.0	1383.8	873.8	545.5	430.3	399.2	372.6	359.3	354.9	350.4
17.5°	2763.3	2115.8	1308.5	700.8	443.6	390.4	354.9	332.7	315.0	310.5	310.5
20°	2958.5	2191.2	1179.9	545.5	399.2	350.4	315.0	288.3	270.6	266.2	266.2
22.5°	3162.6	2253.3	1020.2	443.6	363.8	310.5	275.0	248.4	230.7	226.2	221.8
25°	3379.8	2297.5	838.3	394.8	328.3	275.0	235.1	212.9	199.6	195.2	190.7
27.5°	3614.9	2315.3	665.3	359.3	288.3	239.5	204.1	181.9	173.0	168.6	168.6
30°	3827.9	2297.5	514.5	319.4	252.9	208.5	177.4	159.7	150.8	146.4	146.4
32.5°	4049.7	2253.3	412.5	283.9	221.8	177.4	150.8	137.5	133.1	128.6	128.6
35°	4284.7	2195.6	354.9	252.9	190.7	155.3	133.1	124.2	119.8	115.3	115.3
37.5°	4559.7	2124.6	323.8	226.2	168.6	137.5	115.3	110.9	106.5	106.5	106.5
40°	4870.2	2035.9	301.6	204.1	150.8	119.8	102.0	97.6	93.2	93.2	93.2
42.5°	5198.4	1933.9	279.5	181.9	133.1	102.0	88.7	88.7	84.3	84.3	79.8
45°	5566.6	1831.9	257.3	159.7	115.3	88.7	75.4	71.0	71.0	66.5	66.5
47.5°	6001.2	1738.7	235.1	142.0	102.0	75.4	66.5	62.1	57.7	53.2	53.2
50°	6613.4	1729.8	208.5	124.2	93.2	62.1	53.2	48.8	44.4	39.9	39.9
52.5°	7221.0	1650.0	177.4	102.0	75.4	53.2	39.9	35.5	31.1	31.1	26.6
55°	7358.5	1516.9	155.3	88.7	57.7	39.9	31.1	22.2	22.2	17.7	17.7
57.5°	7660.1	1454.8	133.1	71.0	44.4	31.1	17.7	13.3	13.3	13.3	13.3
60°	8254.5	1437.1	115.3	62.1	31.1	22.2	13.3	8.9	8.9	4.4	4.4
62.5°	9075.0	1419.3	97.6	53.2	22.2	13.3	8.9	4.4	0.0	0.0	0.0
65°	9527.5	1299.6	79.8	39.9	17.7	13.3	4.4	0.0	0.0	0.0	0.0
67.5°	9407.7	1073.4	71.0	26.6	13.3	8.9	4.4	0.0	0.0	0.0	0.0
69°	8906.5	904.8	57.7	22.2	13.3	8.9	4.4	0.0	0.0	0.0	0.0
70°	8303.3	780.6	53.2	17.7	8.9	4.4	4.4	0.0	0.0	0.0	0.0
72.5°	5894.8	408.1	35.5	13.3	8.9	4.4	0.0	0.0	0.0	0.0	0.0
75°	2754.4	181.9	22.2	8.9	4.4	4.4	0.0	0.0	0.0	0.0	0.0
77.5°	607.6	84.3	13.3	8.9	4.4	0.0	0.0	0.0	0.0	0.0	0.0
80°	115.3	31.1	8.9	4.4	4.4	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	39.9	13.3	4.4	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	13.3	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.4	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)