

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: P265681

Luminaire Tested: **ARCH-L-AF72-210-D-U-T2R-7027-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265681  
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-7027-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 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: 17449.8 lumens  
Efficiency: N/A  
Efficacy: 82.7 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

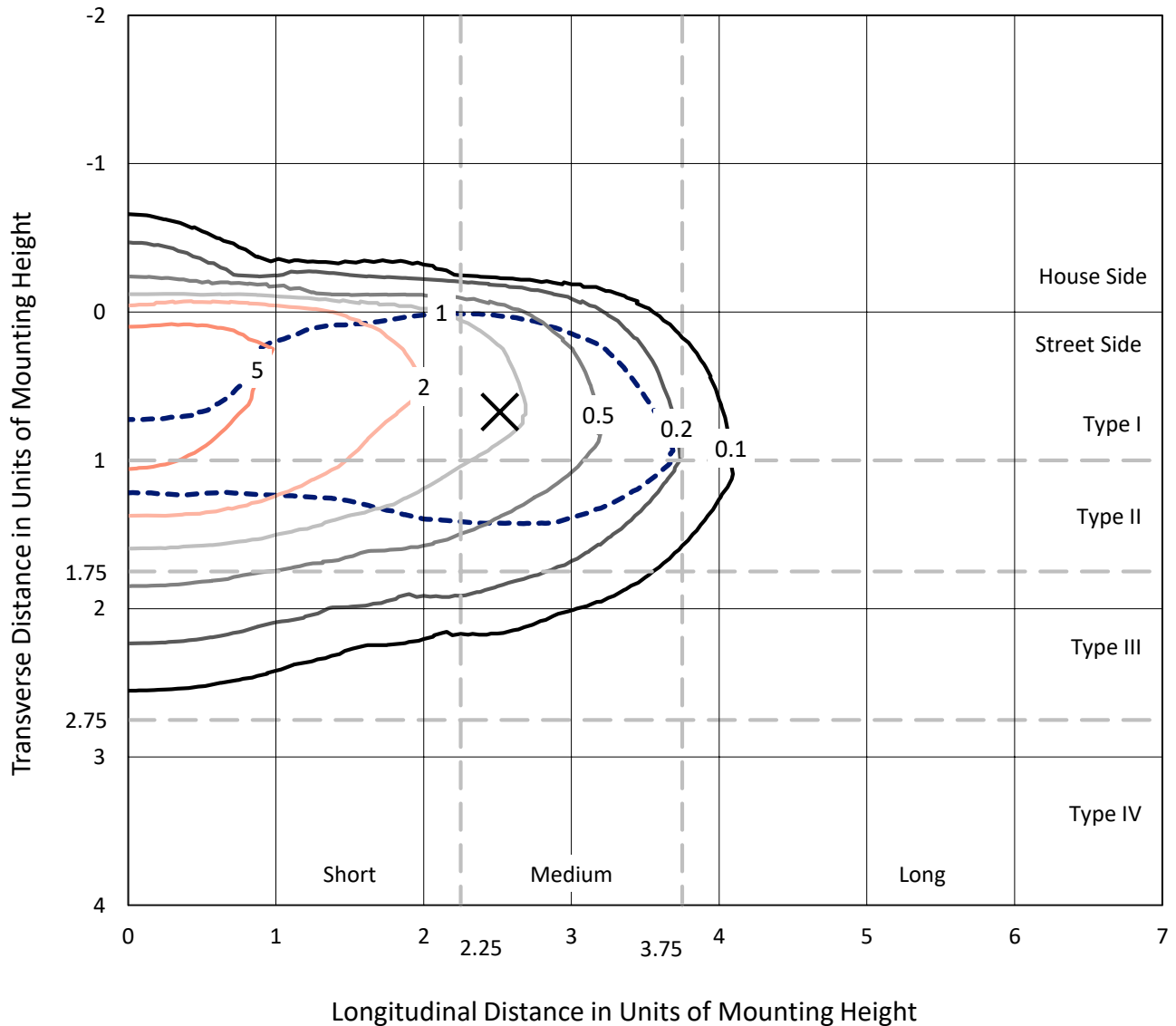


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

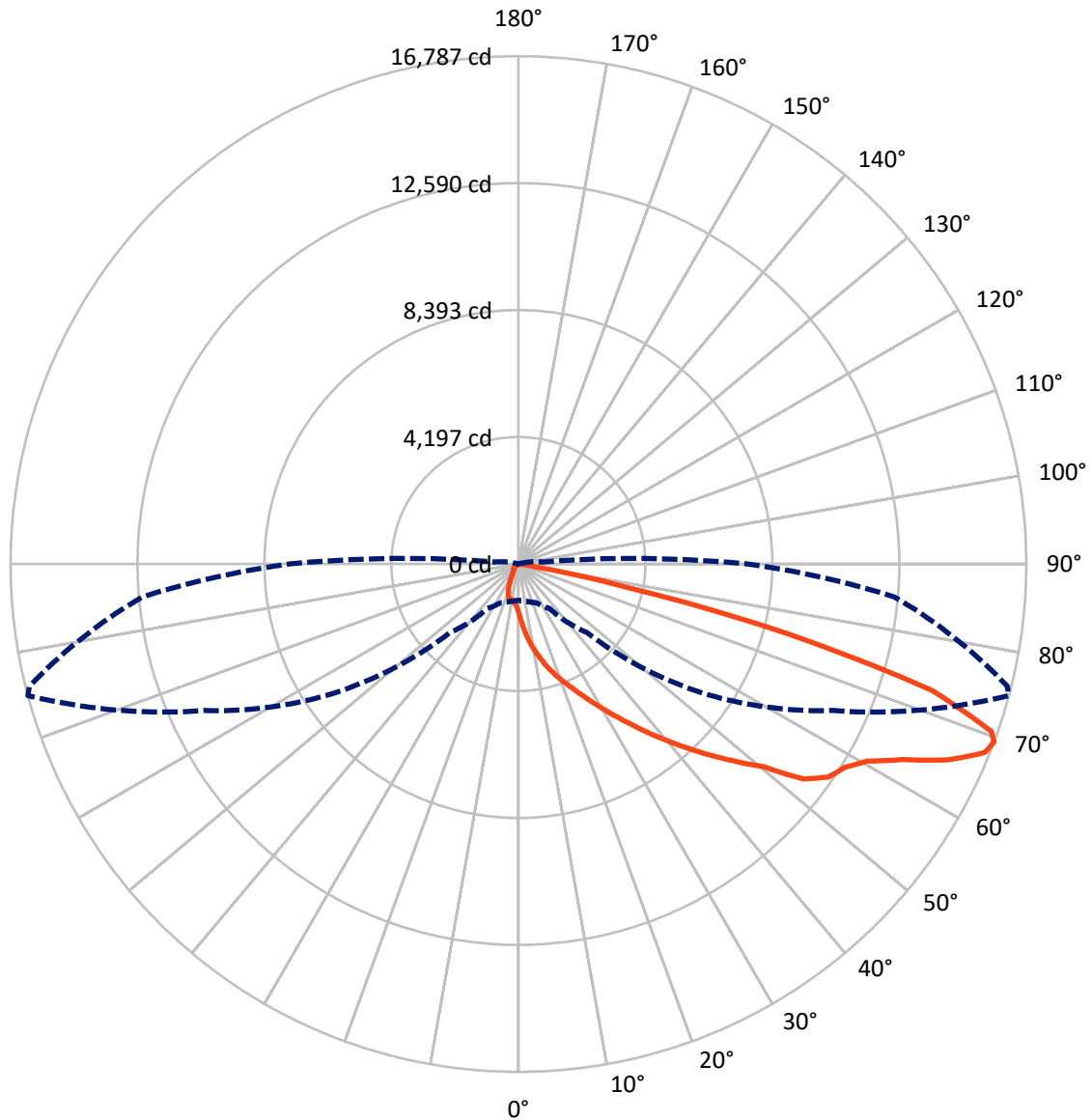


Based on 25 foot mounting height. Maximum calculated value = 7.1 fc  
 Type II - Medium - Full Cutoff

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### Luminous Intensity Polar Plot



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

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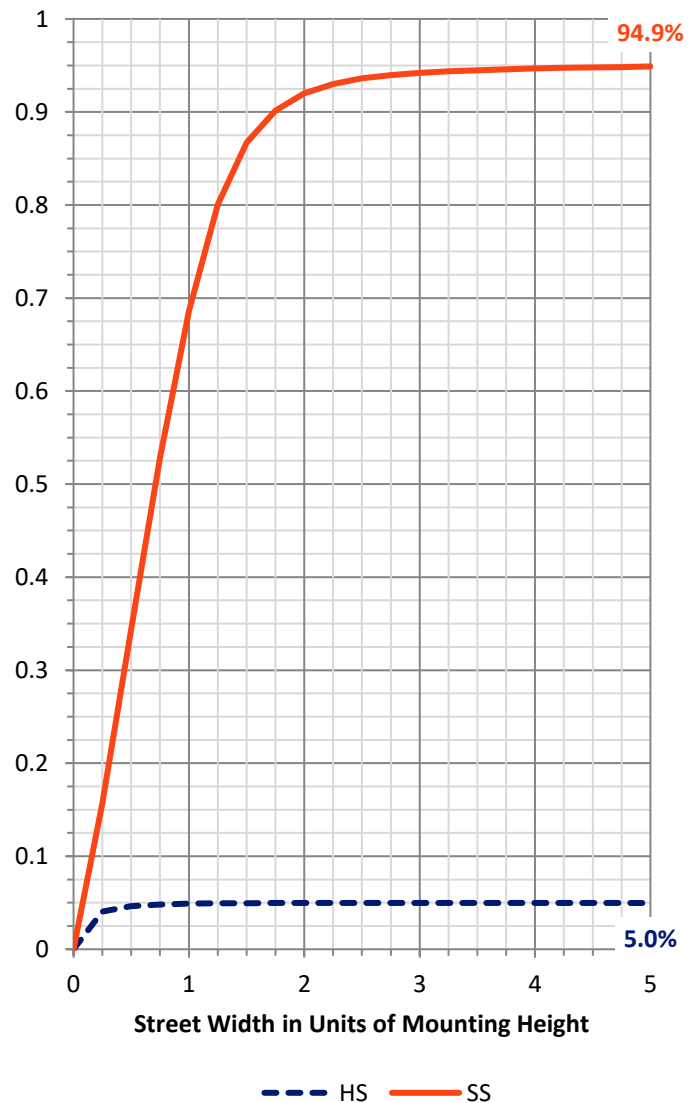
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	870.6	0.0	870.6
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	16579.1	0.0	16579.1
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	17449.8	0.0	17449.8
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	189.3	1.1
10°-20°	676.9	3.9
20°-30°	1292.2	7.4
30°-40°	2318.0	13.3
40°-50°	3551.3	20.4
50°-60°	4127.5	23.7
60°-70°	3654.9	20.9
70°-80°	1576.5	9.0
80°-90°	63.2	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°	17449.8	100.0
0°-180°	17449.8	100.0

**Coefficient of Utilization**



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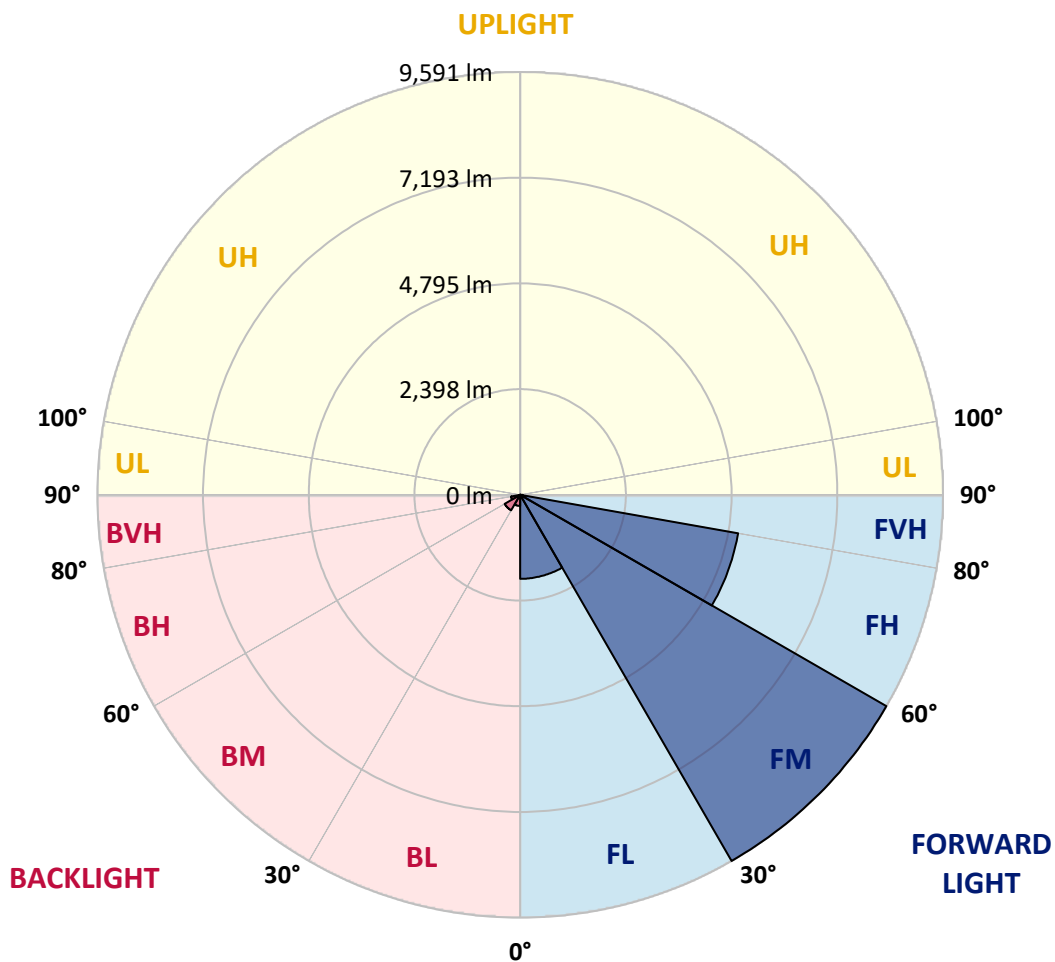
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1905.5	10.9			
FM	(30°-60°)	9590.8	55.0			
FH	(60°-80°)	5020.5	28.8			G3/7500
FVH	(80°-90°)	62.2	0.4			G1/100
BL	(0°-30°)	252.9	1.4	B1/500		
BM	(30°-60°)	405.9	2.3	B1/1000		
BH	(60°-80°)	210.9	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-G3**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1623.6	1623.6	1623.6	1623.6	1623.6	1623.6	1623.6	1623.6	1623.6	1623.6	1623.6
2.5°	2674.8	2648.5	2622.1	2591.9	2524.1	2407.3	2260.3	2102.2	1906.3	1872.3	1714.1
5°	3247.5	3236.1	3209.7	3168.3	3093.0	2964.9	2799.1	2565.5	2237.8	2181.3	1845.9
7.5°	3650.5	3642.9	3620.3	3571.4	3503.6	3375.6	3202.2	2949.8	2569.3	2505.3	2011.8
10°	4012.1	4008.3	3989.6	3944.4	3876.5	3737.0	3552.5	3288.9	2885.7	2814.1	2203.8
12.5°	4339.9	4343.7	4336.1	4313.5	4264.6	4132.7	3921.7	3635.4	3190.9	3111.8	2433.7
15°	4531.9	4543.4	4573.5	4618.6	4633.7	4528.3	4309.8	3993.3	3503.6	3435.7	2697.4
17.5°	4468.0	4479.3	4573.5	4727.9	4874.8	4890.0	4694.1	4332.3	3812.4	3744.7	2957.3
20°	4313.5	4328.7	4426.6	4637.5	4923.8	5123.6	5044.4	4701.5	4106.3	4023.5	3206.0
22.5°	4486.9	4486.9	4516.9	4645.0	4904.9	5217.6	5323.1	5070.8	4407.8	4305.9	3454.6
25°	5082.0	5070.8	5006.8	4954.0	5036.8	5315.6	5534.1	5447.5	4761.8	4645.0	3718.4
27.5°	5835.5	5888.2	5767.7	5575.6	5387.1	5507.8	5722.6	5820.5	5153.7	5033.1	3989.6
30°	6679.3	6702.0	6558.9	6302.7	5971.2	5854.3	5944.8	6140.6	5579.4	5447.5	4272.1
32.5°	7440.3	7421.5	7301.0	7033.5	6622.8	6370.5	6231.1	6396.8	6042.7	5892.1	4562.1
35°	8114.7	8129.8	7982.9	7674.0	7270.8	7003.4	6671.8	6687.0	6562.6	6389.3	4897.5
37.5°	8721.3	8694.9	8555.5	8246.6	7881.1	7591.0	7240.7	6988.3	7131.5	6950.6	5274.2
40°	9214.8	9188.4	9041.4	8740.1	8397.3	8159.9	7885.0	7391.3	7730.5	7523.2	5677.3
42.5°	9606.6	9576.4	9452.1	9162.1	8830.5	8619.4	8487.6	7888.6	8370.9	8163.6	6129.3
45°	9798.7	9772.3	9696.9	9478.5	9188.4	9003.8	9067.9	8461.2	9056.5	8883.2	6626.6
47.5°	9572.7	9561.3	9647.9	9610.2	9444.5	9346.5	9568.8	9086.6	9776.1	9606.6	7199.2
50°	8887.0	8905.8	9158.2	9470.9	9550.1	9666.8	9979.5	9745.9	10548.3	10367.5	7858.6
52.5°	7195.6	7323.6	8084.6	8838.1	9422.0	9862.8	10461.8	10687.8	11806.7	11629.5	8887.0
55°	5372.1	5424.9	6253.7	7542.1	8905.8	9847.6	10819.5	11241.5	12428.2	12247.4	9158.2
57.5°	4260.8	4279.6	4690.2	6005.0	7843.5	9508.6	11008.0	11441.3	12699.5	12548.8	9561.3
60°	3345.4	3367.9	3665.5	4569.7	6347.9	8593.1	10736.7	11614.5	13230.6	13110.1	10265.8
62.5°	2603.2	2625.7	2806.7	3337.8	4761.8	7184.1	10190.5	11893.3	14240.3	14183.8	11418.5
65°	2015.4	2023.1	2147.4	2396.0	3364.2	5658.5	9523.7	12153.2	15604.1	15555.1	12353.0
67.5°	1488.0	1499.5	1586.0	1740.5	2271.6	4064.9	8431.1	11953.6	16632.5	16489.4	12692.0
69°	1201.8	1213.0	1288.3	1412.8	1793.2	3202.2	7432.8	11460.0	16786.9	16651.3	12477.2
70°	1028.5	1035.9	1111.4	1216.8	1529.5	2720.0	6641.7	11034.3	16583.5	16451.6	11987.4
72.5°	659.3	696.9	772.4	840.2	1013.4	1800.7	4483.0	9150.8	14308.2	14082.1	9388.0
75°	365.4	376.7	512.4	595.2	674.4	1171.6	2494.0	5707.4	9101.7	8943.4	5021.7
77.5°	301.4	308.8	361.7	452.0	452.0	655.6	941.9	2249.0	3462.1	3123.0	1359.9
80°	210.9	218.5	275.1	297.6	324.0	369.3	305.2	493.4	534.9	474.7	203.5
82.5°	147.0	154.5	188.4	244.9	259.9	173.4	113.0	147.0	154.5	154.5	79.1
85°	26.4	37.6	139.3	203.5	154.5	52.7	64.0	52.7	49.0	52.7	18.9
87.5°	0.0	0.0	86.6	97.9	82.9	22.5	26.4	18.9	11.3	15.1	7.5
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°	1623.6	1623.6	1623.6	1623.6	1623.6	1623.6	1623.6	1623.6	1623.6	1623.6	1623.6
2.5°	1634.9	1555.9	1420.3	1322.3	1239.4	1175.4	1149.0	1107.6	1077.4	1092.5	1073.7
5°	1680.2	1540.9	1322.3	1182.9	1085.0	1002.1	934.2	881.5	840.2	832.5	825.1
7.5°	1751.8	1552.1	1265.8	1092.5	945.6	817.5	711.9	632.9	572.6	572.6	550.0
10°	1849.7	1582.3	1231.8	1002.1	783.6	610.3	504.8	429.5	399.3	395.6	388.1
12.5°	1985.3	1638.8	1205.5	885.3	610.3	444.5	380.5	354.1	342.9	339.1	335.2
15°	2169.9	1721.6	1175.4	742.2	463.3	365.4	339.1	316.5	305.2	301.4	297.6
17.5°	2347.0	1797.0	1111.4	595.2	376.7	331.6	301.4	282.5	267.4	263.7	263.7
20°	2512.7	1861.0	1002.1	463.3	339.1	297.6	267.4	244.9	229.7	226.1	226.1
22.5°	2686.0	1913.7	866.4	376.7	308.8	263.7	233.6	210.9	195.9	192.1	188.4
25°	2870.7	1951.5	711.9	335.2	278.7	233.6	199.7	180.7	169.5	165.7	162.0
27.5°	3070.3	1966.5	565.2	305.2	244.9	203.5	173.4	154.5	147.0	143.2	143.2
30°	3251.1	1951.5	436.9	271.3	214.8	177.1	150.6	135.6	128.1	124.3	124.3
32.5°	3439.5	1913.7	350.3	241.1	188.4	150.6	128.1	116.8	113.0	109.2	109.2
35°	3639.2	1864.8	301.4	214.8	162.0	131.8	113.0	105.6	101.7	97.9	97.9
37.5°	3872.8	1804.5	275.1	192.1	143.2	116.8	97.9	94.2	90.4	90.4	90.4
40°	4136.4	1729.1	256.1	173.4	128.1	101.7	86.6	82.9	79.1	79.1	79.1
42.5°	4415.2	1642.6	237.3	154.5	113.0	86.6	75.4	75.4	71.5	71.5	67.8
45°	4727.9	1555.9	218.5	135.6	97.9	75.4	64.0	60.2	60.2	56.6	56.6
47.5°	5097.2	1476.8	199.7	120.6	86.6	64.0	56.6	52.7	49.0	45.3	45.3
50°	5617.0	1469.3	177.1	105.6	79.1	52.7	45.3	41.4	37.6	33.9	33.9
52.5°	6133.1	1401.4	150.6	86.6	64.0	45.3	33.9	30.2	26.4	26.4	22.5
55°	6249.9	1288.3	131.8	75.4	49.0	33.9	26.4	18.9	18.9	15.1	15.1
57.5°	6506.1	1235.7	113.0	60.2	37.6	26.4	15.1	11.3	11.3	11.3	11.3
60°	7010.9	1220.5	97.9	52.7	26.4	18.9	11.3	7.5	7.5	3.8	3.8
62.5°	7707.8	1205.5	82.9	45.3	18.9	11.3	7.5	3.8	0.0	0.0	0.0
65°	8092.1	1103.7	67.8	33.9	15.1	11.3	3.8	0.0	0.0	0.0	0.0
67.5°	7990.3	911.7	60.2	22.5	11.3	7.5	3.8	0.0	0.0	0.0	0.0
69°	7564.6	768.5	49.0	18.9	11.3	7.5	3.8	0.0	0.0	0.0	0.0
70°	7052.4	662.9	45.3	15.1	7.5	3.8	3.8	0.0	0.0	0.0	0.0
72.5°	5006.8	346.6	30.2	11.3	7.5	3.8	0.0	0.0	0.0	0.0	0.0
75°	2339.5	154.5	18.9	7.5	3.8	3.8	0.0	0.0	0.0	0.0	0.0
77.5°	516.2	71.5	11.3	7.5	3.8	0.0	0.0	0.0	0.0	0.0	0.0
80°	97.9	26.4	7.5	3.8	3.8	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	33.9	11.3	3.8	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	11.3	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.8	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)