

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: P265636

Luminaire Tested: **ARCH-L-AF72-160-D-U-T2R-7027-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265636  
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-AF72-160-D-U-T2R-7027-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 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: 14542.6 lumens  
Efficiency: N/A  
Efficacy: 89.8 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 - 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: 28.75 FT

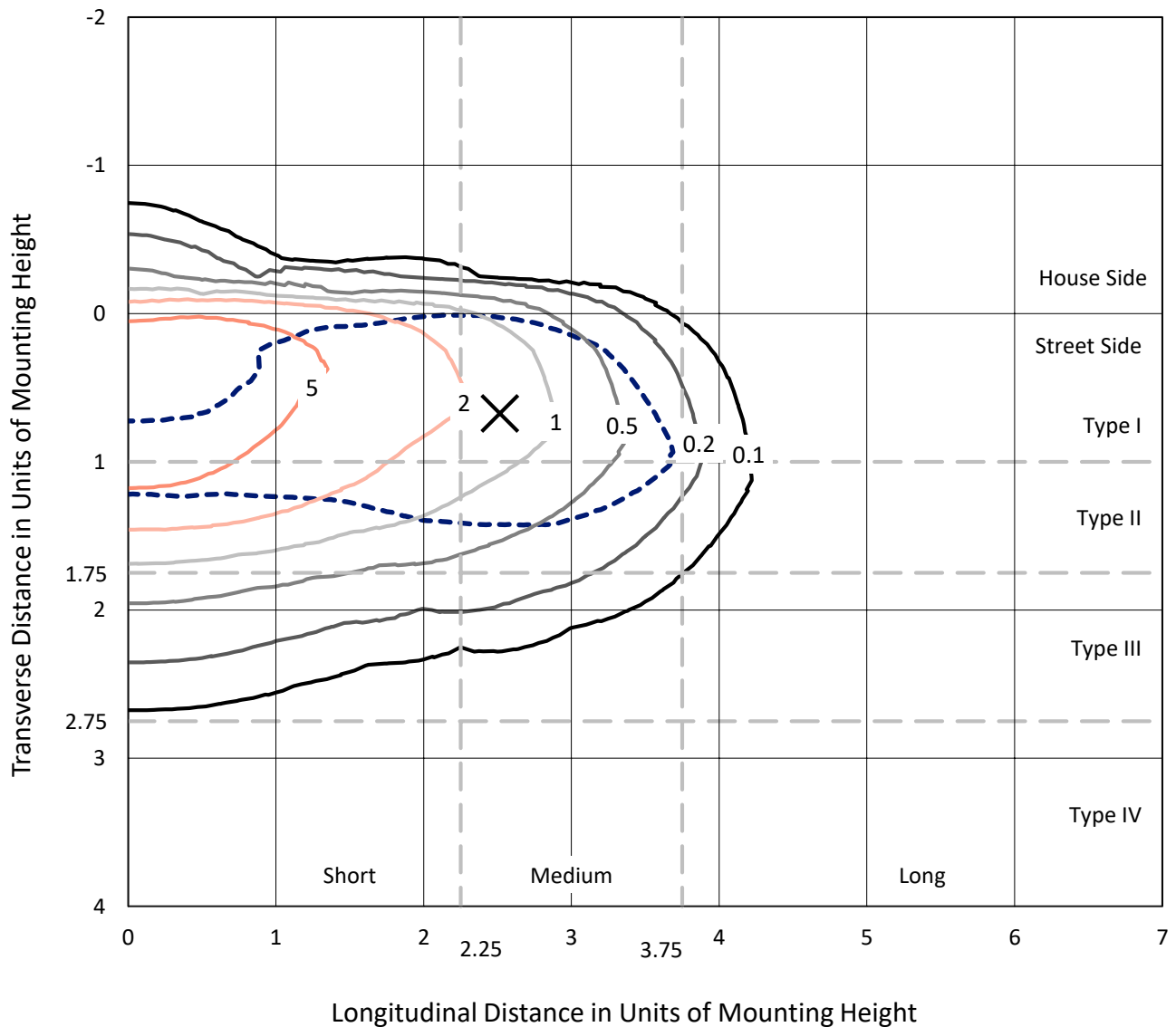


REPORT NUMBER: P265636

CATALOG NUMBER: ARCH-L-AF72-160-D-U-T2R-7027-HSS

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

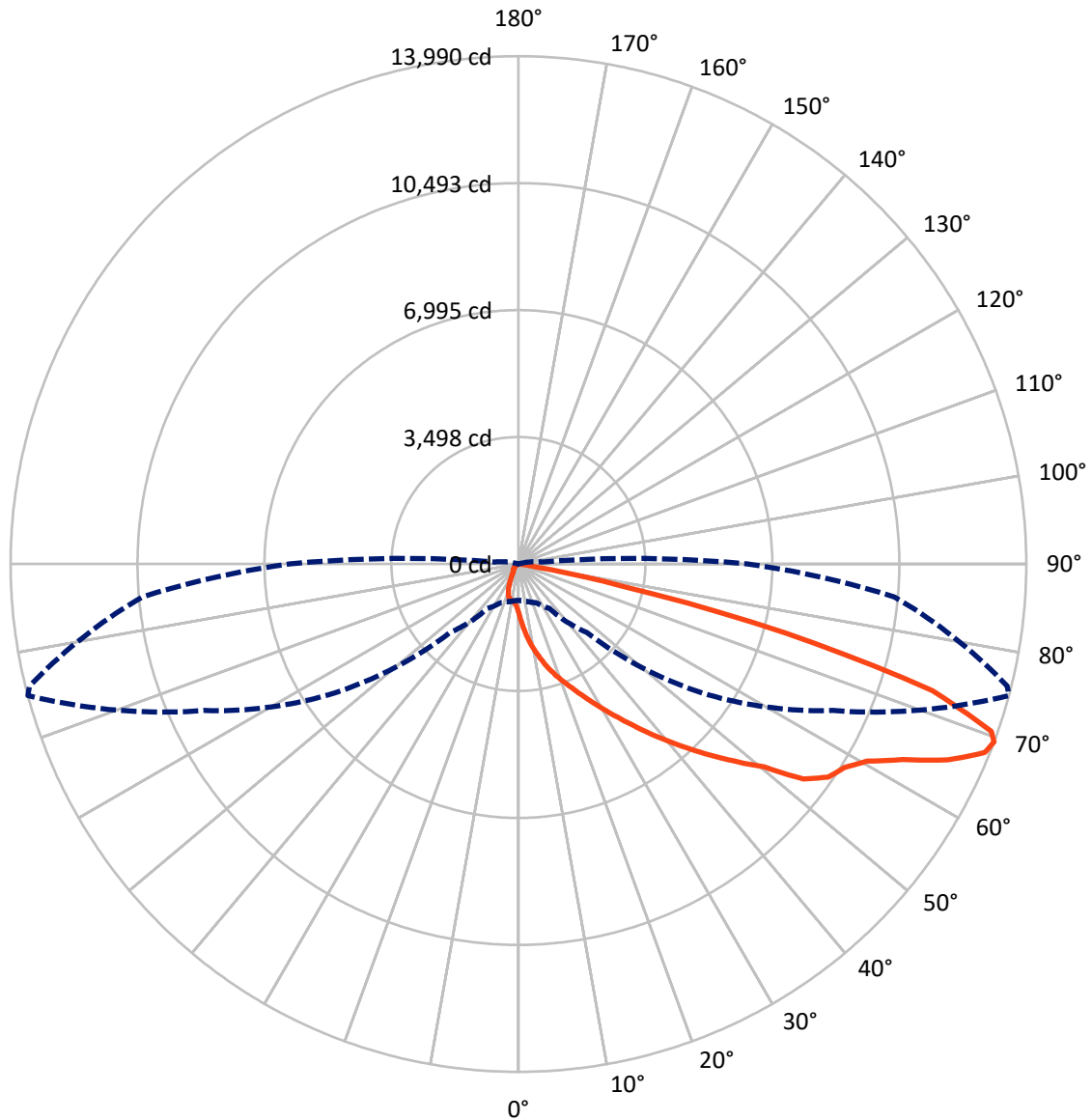


Based on 20 foot mounting height. Maximum calculated value = 9.3 fc  
 Type II - Medium - Full Cutoff

REPORT NUMBER: P265636

CATALOG NUMBER: ARCH-L-AF72-160-D-U-T2R-7027-HSS

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P265636

CATALOG NUMBER: ARCH-L-AF72-160-D-U-T2R-7027-HSS

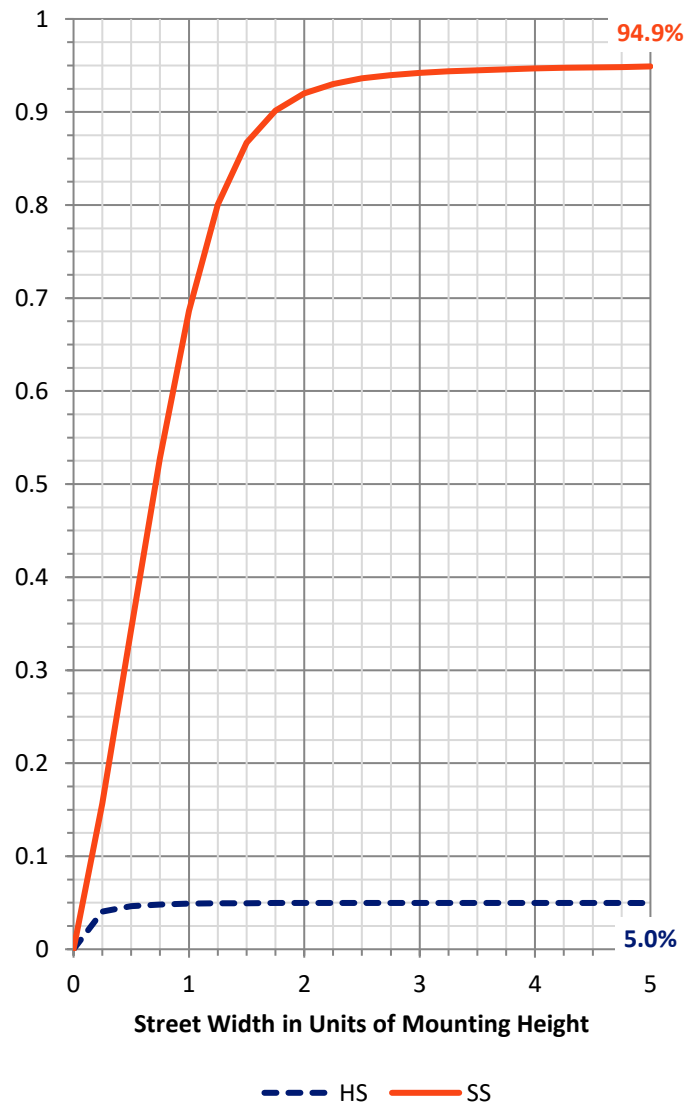
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	725.6	0.0	725.6
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	13817.0	0.0	13817.0
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	14542.6	0.0	14542.6
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	157.8	1.1
10°-20°	564.1	3.9
20°-30°	1076.9	7.4
30°-40°	1931.8	13.3
40°-50°	2959.6	20.4
50°-60°	3439.8	23.7
60°-70°	3046.0	20.9
70°-80°	1313.9	9.0
80°-90°	52.6	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°	14542.6	100.0
0°-180°	14542.6	100.0

**Coefficient of Utilization**



REPORT NUMBER: P265636

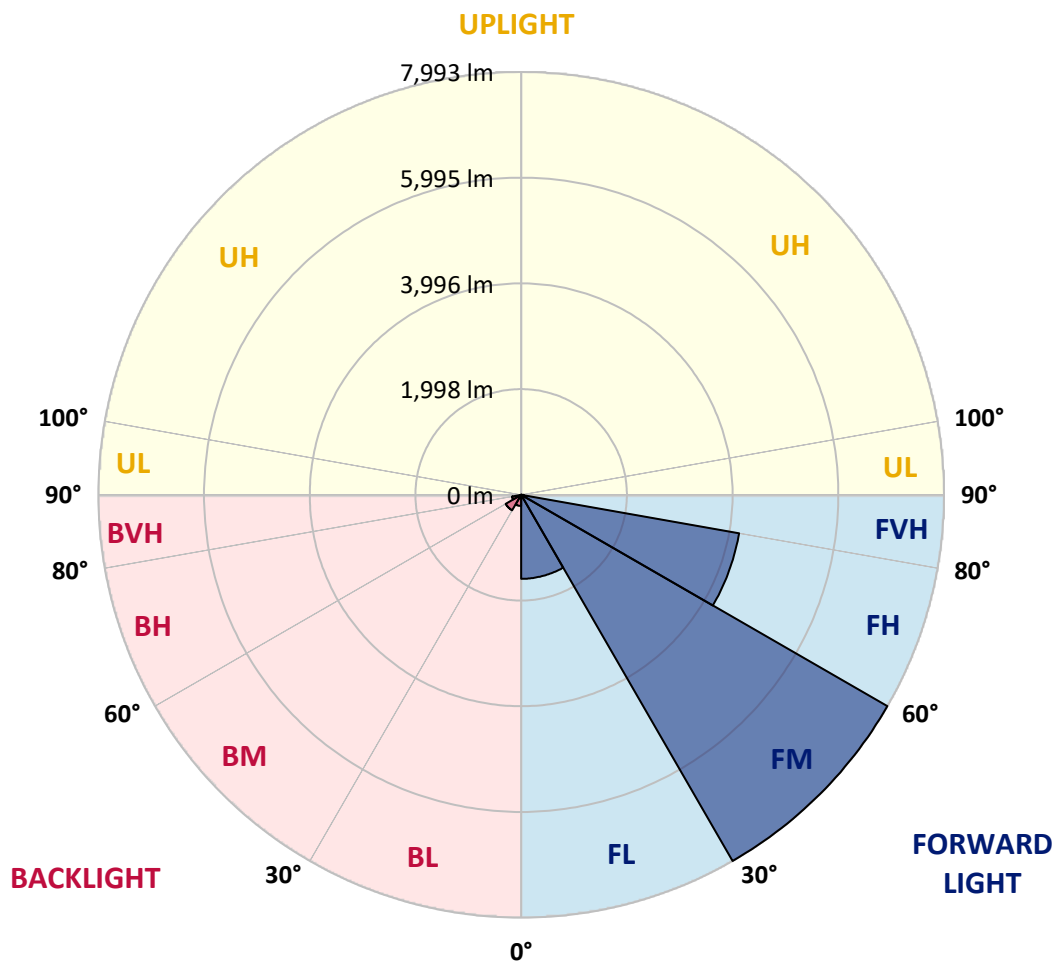
CATALOG NUMBER: ARCH-L-AF72-160-D-U-T2R-7027-HSS

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1588.1	10.9			
FM	(30°-60°)	7993.0	55.0			
FH	(60°-80°)	4184.1	28.8			G2/5000
FVH	(80°-90°)	51.9	0.4			G1/100
BL	(0°-30°)	210.7	1.4	B1/500		
BM	(30°-60°)	338.3	2.3	B1/1000		
BH	(60°-80°)	175.8	1.2	B1/500		G1/500
BVH	(80°-90°)	0.8	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





REPORT NUMBER: P265636

CATALOG NUMBER: ARCH-L-AF72-160-D-U-T2R-7027-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1353.1	1353.1	1353.1	1353.1	1353.1	1353.1	1353.1	1353.1	1353.1	1353.1	1353.1
2.5°	2229.1	2207.1	2185.1	2160.1	2103.6	2006.3	1883.7	1752.0	1588.7	1560.4	1428.6
5°	2706.4	2696.9	2675.0	2640.5	2577.6	2470.9	2332.8	2138.1	1864.9	1817.9	1538.4
7.5°	3042.3	3036.0	3017.1	2976.4	2919.9	2813.1	2668.7	2458.3	2141.2	2087.9	1676.5
10°	3343.8	3340.5	3324.8	3287.2	3230.7	3114.6	2960.6	2740.9	2404.9	2345.4	1836.7
12.5°	3616.8	3620.0	3613.7	3594.8	3554.1	3444.2	3268.4	3029.8	2659.3	2593.3	2028.3
15°	3777.0	3786.4	3811.5	3849.1	3861.8	3773.9	3591.8	3328.0	2919.9	2863.3	2248.0
17.5°	3723.7	3733.0	3811.5	3940.2	4062.7	4075.3	3911.9	3610.6	3177.3	3120.8	2464.6
20°	3594.8	3607.5	3689.1	3864.9	4103.5	4270.0	4204.0	3918.2	3422.3	3353.2	2671.7
22.5°	3739.4	3739.4	3764.4	3871.2	4087.7	4348.3	4436.3	4225.9	3673.3	3588.5	2879.1
25°	4235.4	4225.9	4172.5	4128.6	4197.7	4430.0	4612.2	4539.9	3968.5	3871.2	3098.9
27.5°	4863.3	4907.3	4806.8	4646.7	4489.6	4590.2	4769.1	4850.8	4295.1	4194.5	3324.8
30°	5566.5	5585.4	5466.0	5252.6	4976.3	4879.1	4954.3	5117.6	4649.7	4539.9	3560.3
32.5°	6200.8	6185.1	6084.6	5861.7	5519.5	5309.2	5192.9	5331.1	5036.0	4910.3	3802.0
35°	6762.8	6775.3	6652.8	6395.5	6059.4	5836.6	5560.2	5572.8	5469.2	5324.9	4081.4
37.5°	7268.2	7246.3	7130.1	6872.7	6568.1	6326.4	6034.4	5824.0	5943.4	5792.6	4395.4
40°	7679.6	7657.6	7535.2	7283.9	6998.2	6800.4	6571.3	6159.9	6442.6	6269.9	4731.5
42.5°	8006.1	7980.9	7877.3	7635.7	7359.4	7183.4	7073.7	6574.4	6976.2	6803.7	5108.2
45°	8166.2	8144.3	8081.4	7899.3	7657.6	7503.7	7557.1	7051.6	7547.6	7403.3	5522.6
47.5°	7977.8	7968.4	8040.5	8009.2	7871.0	7789.5	7974.7	7572.8	8147.4	8006.1	5999.9
50°	7406.4	7422.1	7632.4	7893.0	7959.1	8056.3	8316.9	8122.3	8791.1	8640.3	6549.4
52.5°	5996.7	6103.4	6737.6	7365.7	7852.3	8219.6	8718.8	8907.1	9839.7	9692.1	7406.4
55°	4477.2	4521.1	5211.7	6285.6	7422.1	8207.0	9017.0	9368.8	10357.6	10207.0	7632.4
57.5°	3550.9	3566.6	3908.9	5004.5	6536.7	7924.5	9174.0	9535.1	10583.7	10458.2	7968.4
60°	2788.0	2806.8	3054.9	3808.4	5290.3	7161.5	8947.9	9679.4	11026.4	10925.9	8555.5
62.5°	2169.4	2188.4	2339.0	2781.7	3968.5	5987.4	8492.8	9911.9	11867.9	11820.7	9516.3
65°	1679.7	1685.9	1789.7	1996.8	2803.7	4715.7	7937.1	10128.5	13004.5	12963.6	10294.8
67.5°	1240.2	1249.6	1321.8	1450.6	1893.2	3387.7	7026.5	9962.1	13861.4	13742.2	10577.5
69°	1001.5	1011.0	1073.7	1177.4	1494.5	2668.7	6194.5	9550.8	13990.3	13877.1	10398.5
70°	857.2	863.5	926.2	1014.0	1274.7	2266.9	5535.1	9195.9	13820.8	13710.8	9990.3
72.5°	549.5	580.8	643.6	700.0	844.5	1500.8	3736.2	7626.3	11924.3	11735.9	7824.0
75°	304.5	314.0	427.0	496.0	562.0	976.5	2078.5	4756.5	7585.4	7453.4	4185.2
77.5°	251.2	257.5	301.4	376.7	376.7	546.3	784.8	1874.4	2885.4	2602.7	1133.4
80°	175.8	182.0	229.2	248.0	270.0	307.7	254.3	411.3	445.7	395.7	169.5
82.5°	122.4	128.7	156.9	204.1	216.6	144.4	94.2	122.4	128.7	128.7	65.9
85°	22.0	31.4	116.2	169.5	128.7	43.9	53.4	43.9	40.9	43.9	15.7
87.5°	0.0	0.0	72.3	81.7	69.1	18.9	22.0	15.7	9.4	12.5	6.3
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°	1353.1	1353.1	1353.1	1353.1	1353.1	1353.1	1353.1	1353.1	1353.1	1353.1	1353.1
2.5°	1362.5	1296.7	1183.6	1102.0	1033.0	979.5	957.7	923.1	897.9	910.5	894.8
5°	1400.3	1284.0	1102.0	985.8	904.2	835.2	778.7	734.6	700.0	693.9	687.7
7.5°	1459.9	1293.5	1054.9	910.5	788.1	681.4	593.4	527.5	477.2	477.2	458.3
10°	1541.5	1318.6	1026.7	835.2	653.1	508.6	420.6	358.0	332.8	329.7	323.4
12.5°	1654.6	1365.8	1004.7	737.8	508.6	370.6	317.1	295.2	285.8	282.5	279.5
15°	1808.5	1434.9	979.5	618.6	386.2	304.5	282.5	263.7	254.3	251.2	248.0
17.5°	1956.0	1497.7	926.2	496.0	314.0	276.3	251.2	235.4	222.9	219.7	219.7
20°	2094.2	1551.0	835.2	386.2	282.5	248.0	222.9	204.1	191.5	188.4	188.4
22.5°	2238.5	1594.9	722.1	314.0	257.5	219.7	194.7	175.8	163.2	160.1	156.9
25°	2392.4	1626.3	593.4	279.5	232.3	194.7	166.4	150.6	141.3	138.2	135.0
27.5°	2558.8	1638.9	470.9	254.3	204.1	169.5	144.4	128.7	122.4	119.4	119.4
30°	2709.5	1626.3	364.3	226.1	178.9	147.5	125.7	113.0	106.8	103.7	103.7
32.5°	2866.5	1594.9	291.9	201.0	156.9	125.7	106.8	97.3	94.2	91.1	91.1
35°	3032.9	1554.1	251.2	178.9	135.0	110.0	94.2	87.9	84.8	81.7	81.7
37.5°	3227.5	1503.9	229.2	160.1	119.4	97.3	81.7	78.5	75.4	75.4	75.4
40°	3447.3	1441.2	213.4	144.4	106.8	84.8	72.3	69.1	65.9	65.9	65.9
42.5°	3679.6	1368.8	197.7	128.7	94.2	72.3	62.8	62.8	59.6	59.6	56.6
45°	3940.2	1296.7	182.0	113.0	81.7	62.8	53.4	50.2	50.2	47.2	47.2
47.5°	4247.9	1230.8	166.4	100.5	72.3	53.4	47.2	43.9	40.9	37.6	37.6
50°	4681.2	1224.5	147.5	87.9	65.9	43.9	37.6	34.6	31.4	28.2	28.2
52.5°	5111.4	1167.9	125.7	72.3	53.4	37.6	28.2	25.2	22.0	22.0	18.9
55°	5208.6	1073.7	110.0	62.8	40.9	28.2	22.0	15.7	15.7	12.5	12.5
57.5°	5422.2	1029.7	94.2	50.2	31.4	22.0	12.5	9.4	9.4	9.4	9.4
60°	5842.8	1017.2	81.7	43.9	22.0	15.7	9.4	6.3	6.3	3.1	3.1
62.5°	6423.7	1004.7	69.1	37.6	15.7	9.4	6.3	3.1	0.0	0.0	0.0
65°	6743.9	920.0	56.6	28.2	12.5	9.4	3.1	0.0	0.0	0.0	0.0
67.5°	6659.1	759.7	50.2	18.9	9.4	6.3	3.1	0.0	0.0	0.0	0.0
69°	6304.3	640.5	40.9	15.7	9.4	6.3	3.1	0.0	0.0	0.0	0.0
70°	5877.4	552.5	37.6	12.5	6.3	3.1	3.1	0.0	0.0	0.0	0.0
72.5°	4172.5	288.9	25.2	9.4	6.3	3.1	0.0	0.0	0.0	0.0	0.0
75°	1949.7	128.7	15.7	6.3	3.1	3.1	0.0	0.0	0.0	0.0	0.0
77.5°	430.1	59.6	9.4	6.3	3.1	0.0	0.0	0.0	0.0	0.0	0.0
80°	81.7	22.0	6.3	3.1	3.1	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	28.2	9.4	3.1	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	9.4	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.1	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)