

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: P265708

Luminaire Tested: **ARCH-L-AF72-240-D-U-T2R-7027-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265708  
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-AF72-240-D-U-T2R-7027-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 1030mA 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: 19139.8 lumens  
Efficiency: N/A  
Efficacy: 79.1 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): 242  
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

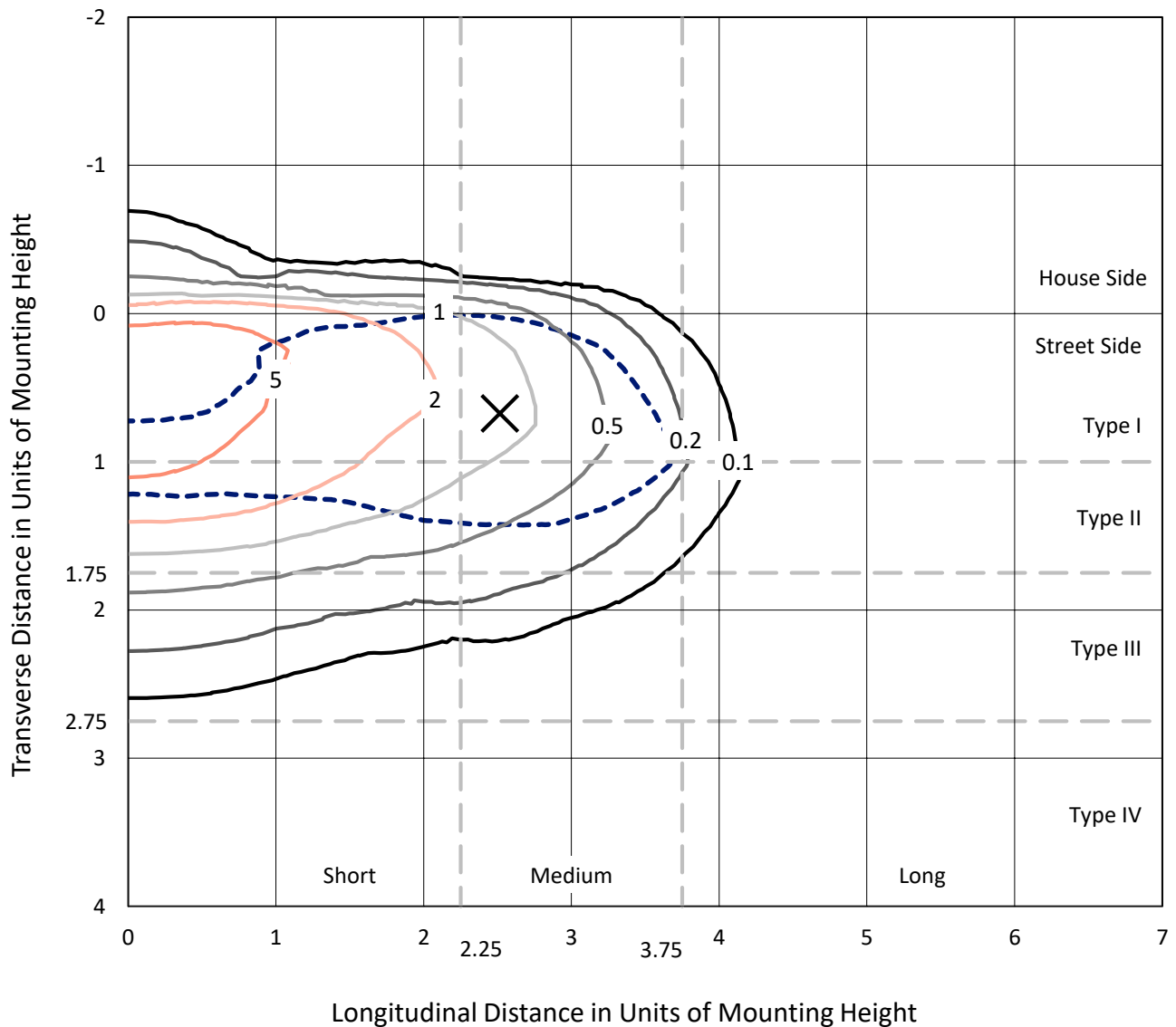


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

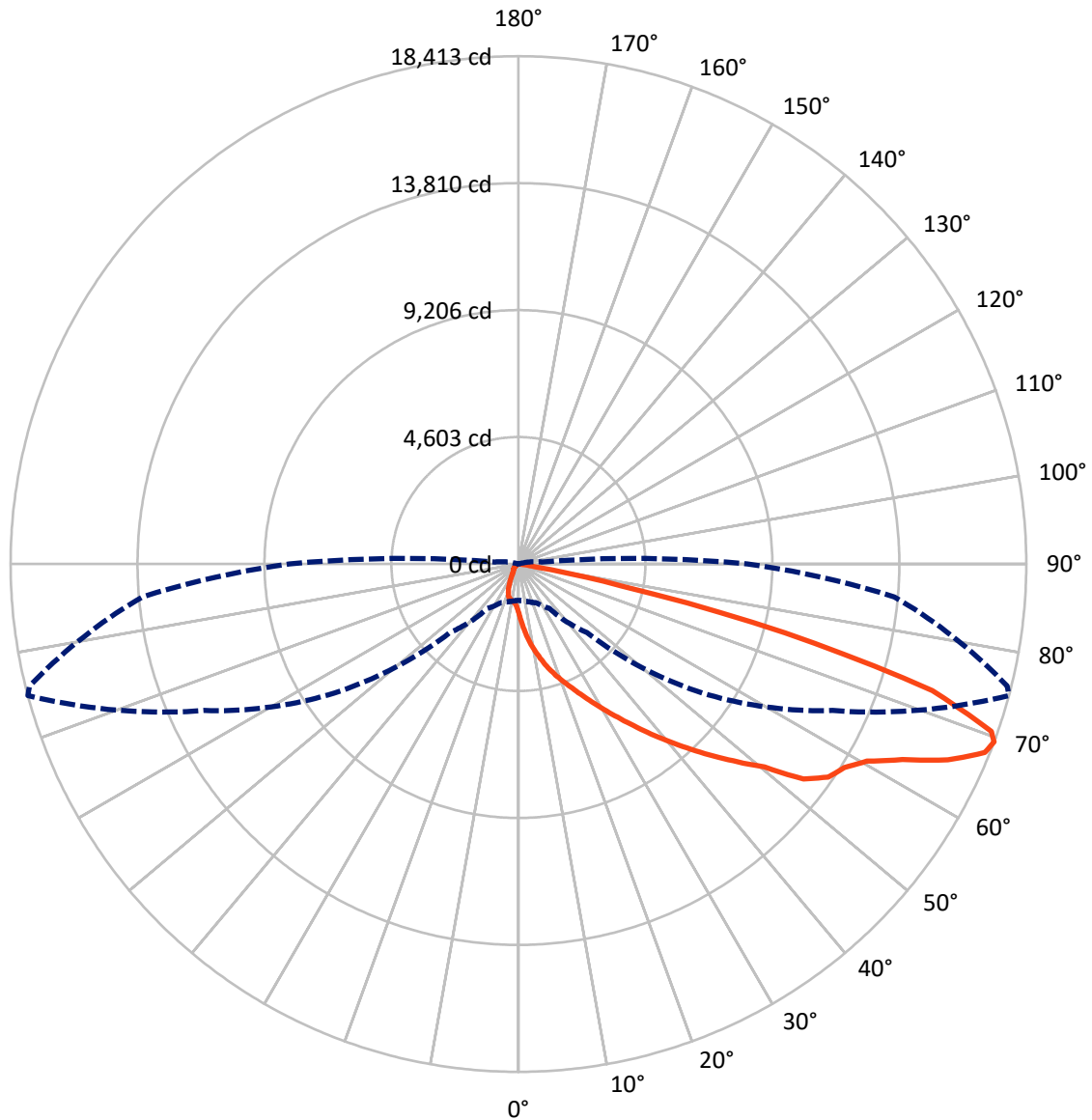


Based on 25 foot mounting height. Maximum calculated value = 7.8 fc  
 Type II - Medium - Full Cutoff

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### Luminous Intensity Polar Plot



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

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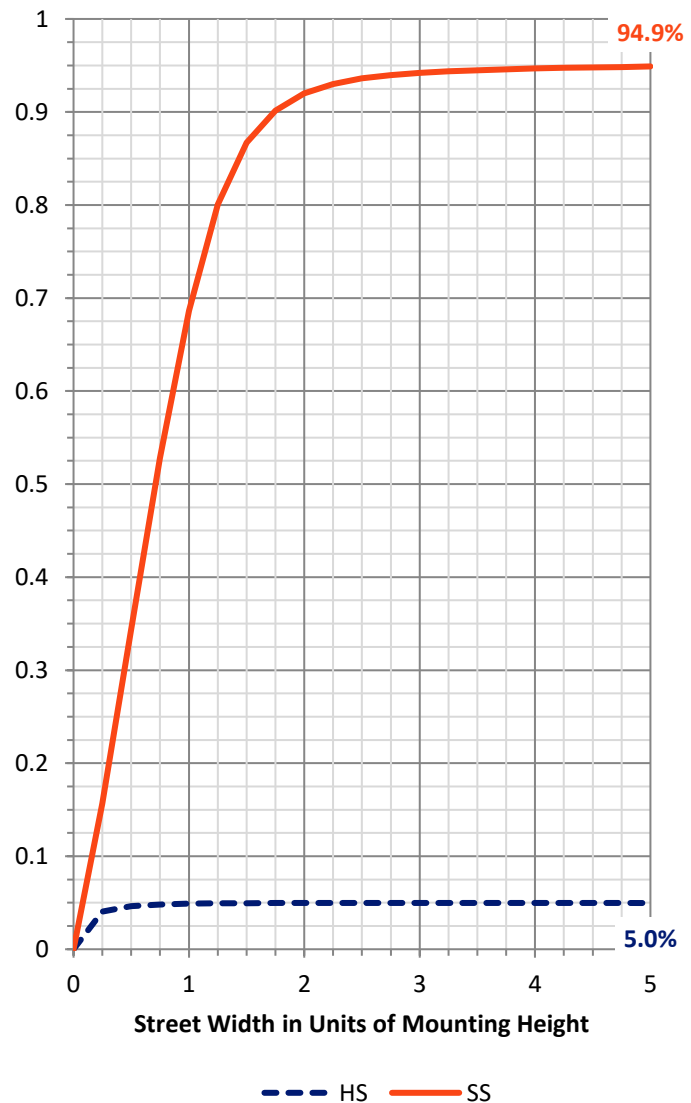
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	954.9	0.0	954.9
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	18184.9	0.0	18184.9
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	19139.8	0.0	19139.8
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	207.7	1.1
10°-20°	742.4	3.9
20°-30°	1417.3	7.4
30°-40°	2542.5	13.3
40°-50°	3895.3	20.4
50°-60°	4527.2	23.7
60°-70°	4008.9	20.9
70°-80°	1729.2	9.0
80°-90°	69.3	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°	19139.8	100.0
0°-180°	19139.8	100.0

**Coefficient of Utilization**



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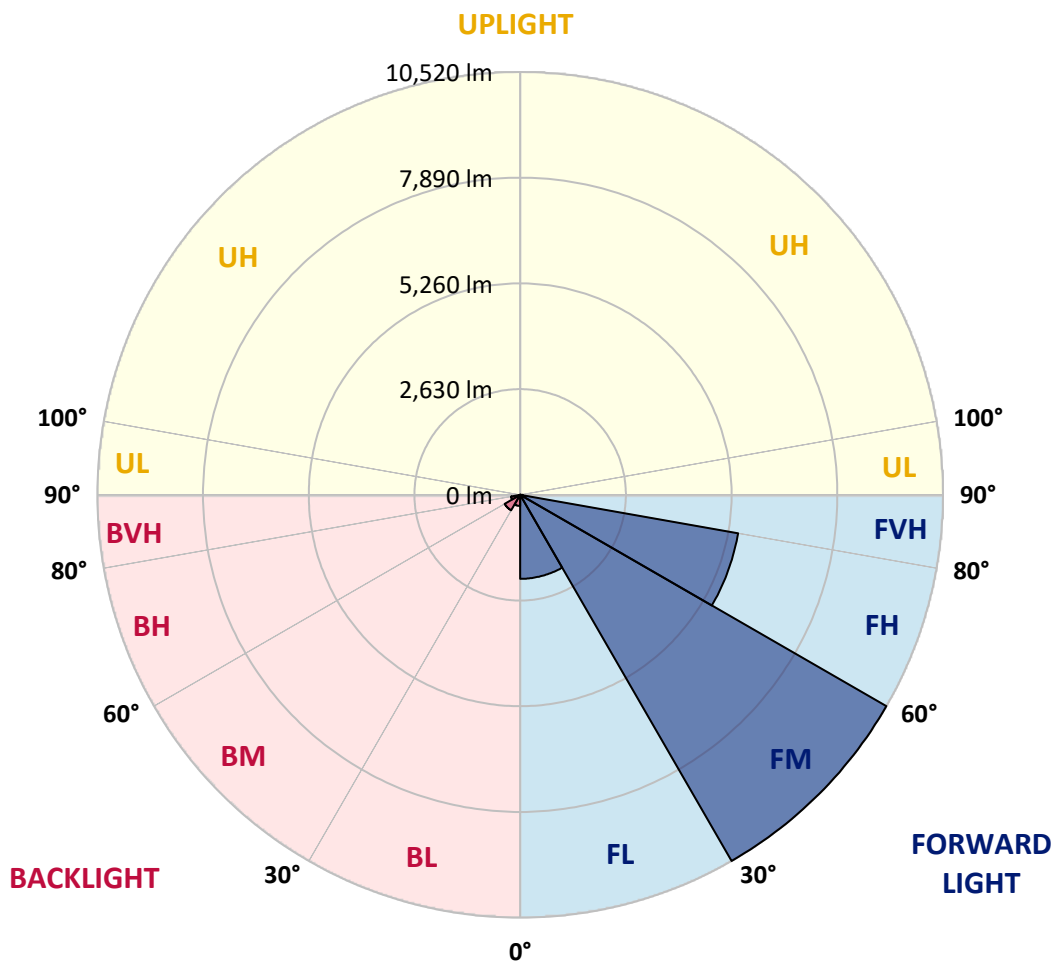
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2090.1	10.9			
FM	(30°-60°)	10519.8	55.0			
FH	(60°-80°)	5506.8	28.8			G3/7500
FVH	(80°-90°)	68.3	0.4			G1/100
BL	(0°-30°)	277.3	1.4	B1/500		
BM	(30°-60°)	445.2	2.3	B1/1000		
BH	(60°-80°)	231.4	1.2	B1/500		G1/500
BVH	(80°-90°)	1.0	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°	1781.0	1781.0	1781.0	1781.0	1781.0	1781.0	1781.0	1781.0	1781.0	1781.0	1781.0
2.5°	2933.9	2904.8	2876.0	2843.0	2768.5	2640.5	2479.3	2305.7	2090.8	2053.6	1880.2
5°	3561.9	3549.6	3520.5	3475.2	3392.4	3252.0	3070.1	2814.0	2454.4	2392.5	2024.8
7.5°	4004.0	3995.8	3971.0	3917.2	3842.9	3702.5	3512.4	3235.4	2818.2	2747.8	2206.5
10°	4400.7	4396.7	4376.0	4326.3	4251.9	4099.1	3896.6	3607.4	3165.3	3086.8	2417.2
12.5°	4760.3	4764.4	4756.0	4731.4	4677.7	4532.9	4301.5	3987.5	3499.9	3413.2	2669.4
15°	4971.0	4983.3	5016.4	5066.0	5082.5	4966.9	4727.2	4380.0	3842.9	3768.5	2958.6
17.5°	4900.8	4913.1	5016.4	5185.8	5347.0	5363.5	5148.6	4751.9	4181.7	4107.4	3243.7
20°	4731.4	4747.8	4855.2	5086.7	5400.7	5619.7	5532.9	5156.9	4504.0	4413.2	3516.4
22.5°	4921.5	4921.5	4954.4	5094.9	5380.0	5723.0	5838.8	5561.9	4834.6	4723.1	3789.2
25°	5574.3	5561.9	5491.6	5433.8	5524.7	5830.4	6070.1	5975.0	5223.0	5094.9	4078.5
27.5°	6400.8	6458.5	6326.4	6115.7	5909.1	6041.2	6276.7	6384.2	5652.8	5520.5	4376.0
30°	7326.2	7351.1	7194.0	6913.0	6549.5	6421.4	6520.5	6735.4	6119.8	5975.0	4685.9
32.5°	8161.0	8140.4	8008.1	7714.7	7264.4	6987.5	6834.6	7016.4	6628.0	6462.6	5004.1
35°	8900.6	8917.1	8756.0	8417.2	7975.1	7681.6	7318.0	7334.7	7198.2	7008.1	5371.9
37.5°	9566.0	9537.0	9384.1	9045.3	8644.5	8326.3	7941.9	7665.1	7822.3	7623.8	5785.1
40°	10107.2	10078.4	9917.2	9586.6	9210.6	8950.3	8648.6	8107.4	8479.2	8251.9	6227.1
42.5°	10536.9	10503.9	10367.6	10049.3	9685.7	9454.3	9309.8	8652.7	9181.7	8954.3	6723.1
45°	10747.7	10718.8	10636.1	10396.5	10078.4	9875.8	9946.2	9280.7	9933.6	9743.6	7268.5
47.5°	10499.7	10487.4	10582.5	10541.2	10359.3	10251.8	10495.6	9966.8	10723.0	10536.9	7896.6
50°	9747.8	9768.3	10045.2	10388.2	10475.0	10603.1	10946.0	10689.9	11570.0	11371.6	8619.6
52.5°	7892.4	8033.0	8867.6	9694.0	10334.6	10818.0	11474.9	11722.9	12950.1	12755.9	9747.8
55°	5892.4	5950.4	6859.4	8272.6	9768.3	10801.4	11867.6	12330.3	13632.0	13433.7	10045.2
57.5°	4673.4	4694.2	5144.6	6586.6	8603.2	10429.5	12074.2	12549.3	13929.5	13764.2	10487.4
60°	3669.3	3694.1	4020.5	5012.4	6962.7	9425.5	11776.6	12739.5	14512.1	14379.9	11260.2
62.5°	2855.4	2880.1	3078.4	3661.1	5223.0	7880.0	11177.5	13045.1	15619.5	15557.6	12524.6
65°	2210.6	2219.0	2355.4	2628.0	3690.0	6206.5	10446.1	13330.3	17115.3	17061.7	13549.3
67.5°	1632.2	1644.5	1739.7	1909.1	2491.7	4458.6	9247.7	13111.3	18243.5	18086.5	13921.3
69°	1318.2	1330.6	1413.3	1549.5	1966.8	3512.4	8152.7	12570.1	18412.9	18264.1	13685.7
70°	1128.1	1136.4	1219.0	1334.7	1677.7	2983.5	7285.0	12103.0	18189.7	18045.2	13148.5
72.5°	723.1	764.5	847.1	921.5	1111.6	1975.2	4917.2	10037.0	15693.8	15445.9	10297.4
75°	400.9	413.2	562.0	652.9	739.7	1285.0	2735.5	6260.2	9983.3	9809.8	5508.1
77.5°	330.5	338.8	396.7	495.9	495.9	719.1	1033.1	2466.8	3797.4	3425.5	1491.7
80°	231.5	239.7	301.7	326.4	355.4	405.0	334.7	541.3	586.8	520.7	223.0
82.5°	161.2	169.4	206.6	268.7	285.1	190.1	124.0	161.2	169.4	169.4	86.7
85°	28.9	41.3	152.9	223.0	169.4	57.9	70.2	57.9	53.7	57.9	20.8
87.5°	0.0	0.0	95.0	107.4	90.9	24.9	28.9	20.8	12.3	16.4	8.3
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°	1781.0	1781.0	1781.0	1781.0	1781.0	1781.0	1781.0	1781.0	1781.0	1781.0	1781.0
2.5°	1793.3	1706.6	1557.8	1450.5	1359.5	1289.2	1260.3	1214.9	1181.8	1198.2	1177.7
5°	1843.0	1690.0	1450.5	1297.5	1190.1	1099.2	1024.7	966.9	921.5	913.1	905.0
7.5°	1921.5	1702.5	1388.4	1198.2	1037.2	896.7	780.9	694.2	628.0	628.0	603.3
10°	2028.9	1735.4	1351.2	1099.2	859.5	669.3	553.7	471.2	438.1	433.9	425.5
12.5°	2177.6	1797.5	1322.2	971.1	669.3	487.6	417.4	388.4	376.0	371.9	367.8
15°	2380.1	1888.3	1289.2	814.0	508.3	400.9	371.9	347.0	334.7	330.5	326.4
17.5°	2574.4	1971.1	1219.0	652.9	413.2	363.6	330.5	309.9	293.3	289.3	289.3
20°	2756.1	2041.3	1099.2	508.3	371.9	326.4	293.3	268.7	252.1	247.9	247.9
22.5°	2946.3	2099.1	950.3	413.2	338.8	289.3	256.1	231.5	214.9	210.7	206.6
25°	3148.6	2140.4	780.9	367.8	305.8	256.1	218.9	198.3	185.9	181.7	177.7
27.5°	3367.7	2157.0	619.8	334.7	268.7	223.0	190.1	169.4	161.2	157.1	157.1
30°	3566.0	2140.4	479.3	297.5	235.5	194.3	165.3	148.8	140.4	136.4	136.4
32.5°	3772.6	2099.1	384.2	264.5	206.6	165.3	140.4	128.1	124.0	119.8	119.8
35°	3991.7	2045.4	330.5	235.5	177.7	144.6	124.0	115.7	111.6	107.4	107.4
37.5°	4247.8	1979.2	301.7	210.7	157.1	128.1	107.4	103.3	99.2	99.2	99.2
40°	4537.1	1896.6	281.0	190.1	140.4	111.6	95.0	90.9	86.7	86.7	86.7
42.5°	4842.9	1801.6	260.2	169.4	124.0	95.0	82.6	82.6	78.5	78.5	74.4
45°	5185.8	1706.6	239.7	148.8	107.4	82.6	70.2	66.1	66.1	62.1	62.1
47.5°	5590.8	1619.9	218.9	132.2	95.0	70.2	62.1	57.9	53.7	49.5	49.5
50°	6161.0	1611.5	194.3	115.7	86.7	57.9	49.5	45.5	41.3	37.2	37.2
52.5°	6727.1	1537.2	165.3	95.0	70.2	49.5	37.2	33.1	28.9	28.9	24.9
55°	6855.2	1413.3	144.6	82.6	53.7	37.2	28.9	20.8	20.8	16.4	16.4
57.5°	7136.2	1355.4	124.0	66.1	41.3	28.9	16.4	12.3	12.3	12.3	12.3
60°	7689.9	1338.8	107.4	57.9	28.9	20.8	12.3	8.3	8.3	4.1	4.1
62.5°	8454.4	1322.2	90.9	49.5	20.8	12.3	8.3	4.1	0.0	0.0	0.0
65°	8875.9	1210.7	74.4	37.2	16.4	12.3	4.1	0.0	0.0	0.0	0.0
67.5°	8764.4	1000.0	66.1	24.9	12.3	8.3	4.1	0.0	0.0	0.0	0.0
69°	8297.4	843.0	53.7	20.8	12.3	8.3	4.1	0.0	0.0	0.0	0.0
70°	7735.3	727.3	49.5	16.4	8.3	4.1	4.1	0.0	0.0	0.0	0.0
72.5°	5491.6	380.2	33.1	12.3	8.3	4.1	0.0	0.0	0.0	0.0	0.0
75°	2566.1	169.4	20.8	8.3	4.1	4.1	0.0	0.0	0.0	0.0	0.0
77.5°	566.1	78.5	12.3	8.3	4.1	0.0	0.0	0.0	0.0	0.0	0.0
80°	107.4	28.9	8.3	4.1	4.1	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	37.2	12.3	4.1	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	12.3	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.1	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)