

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: P265645

Luminaire Tested: **ARCH-L-AF72-170-D-U-T2R-7027-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265645  
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-AF72-170-D-U-T2R-7027-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 750mA 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: 15240.5 lumens  
Efficiency: N/A  
Efficacy: 88.1 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 - G2

Input Watts (W): 173  
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

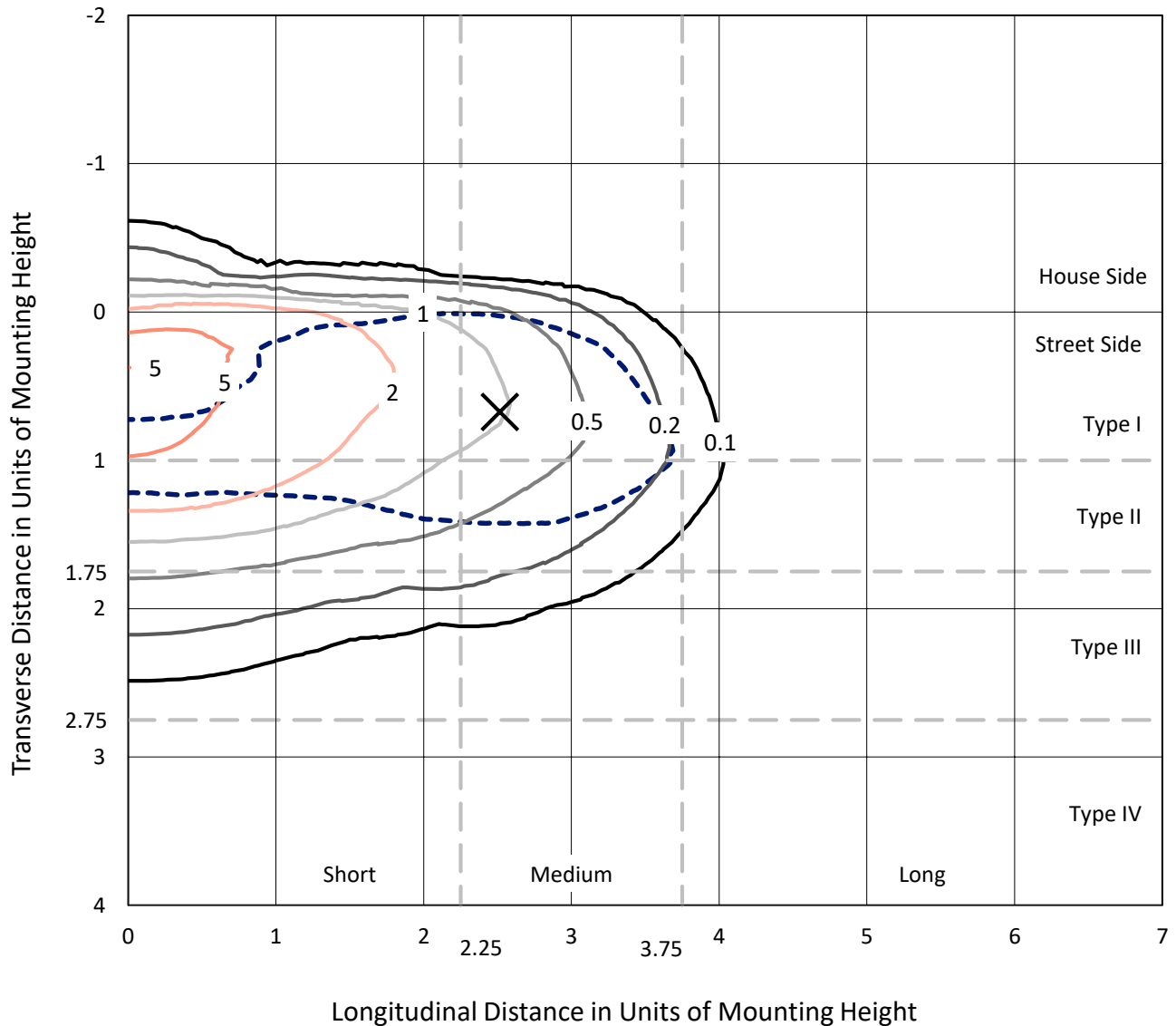


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

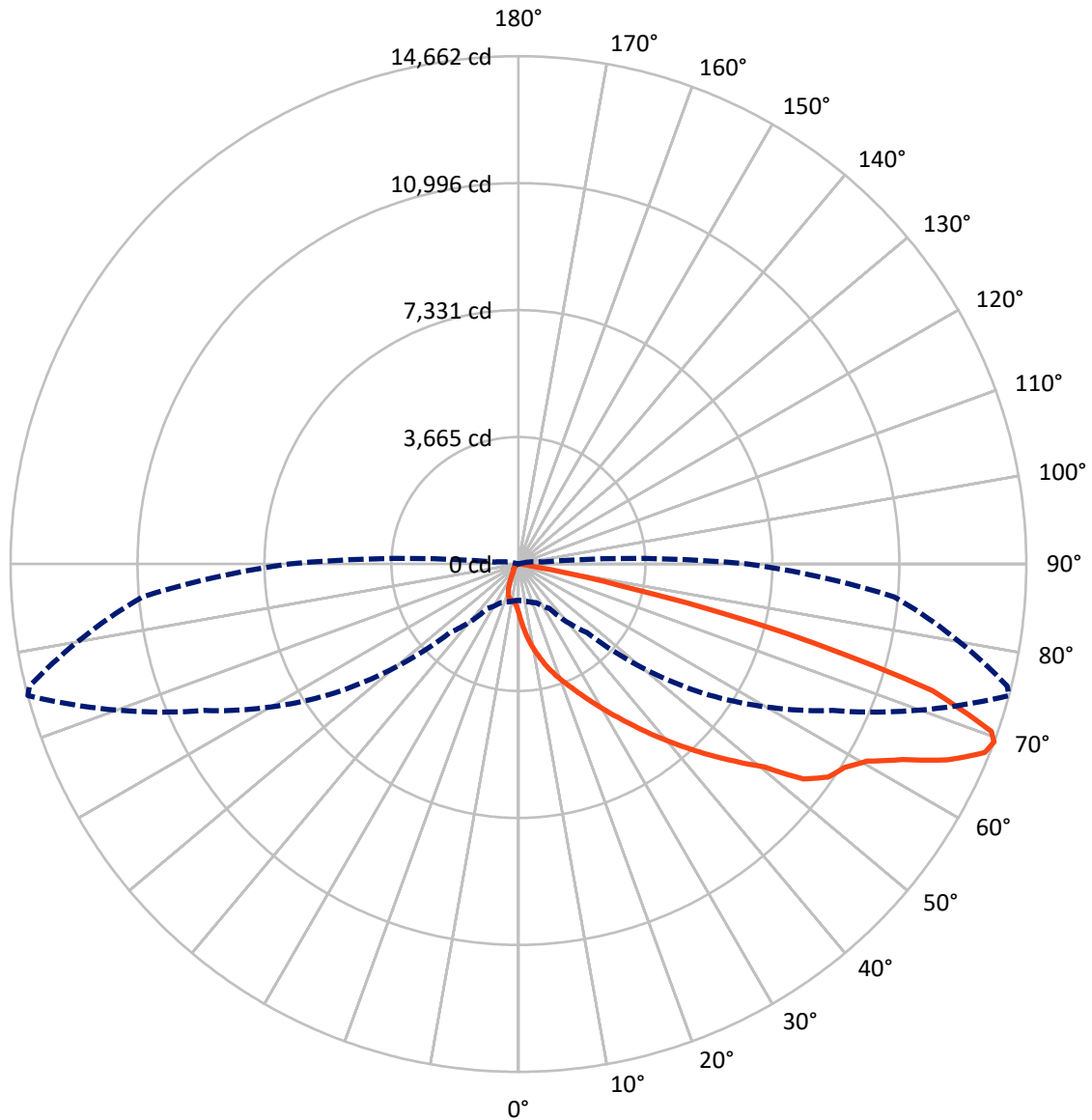


Based on 25 foot mounting height. Maximum calculated value = 6.2 fc  
 Type II - Medium - Full Cutoff

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### Luminous Intensity Polar Plot



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

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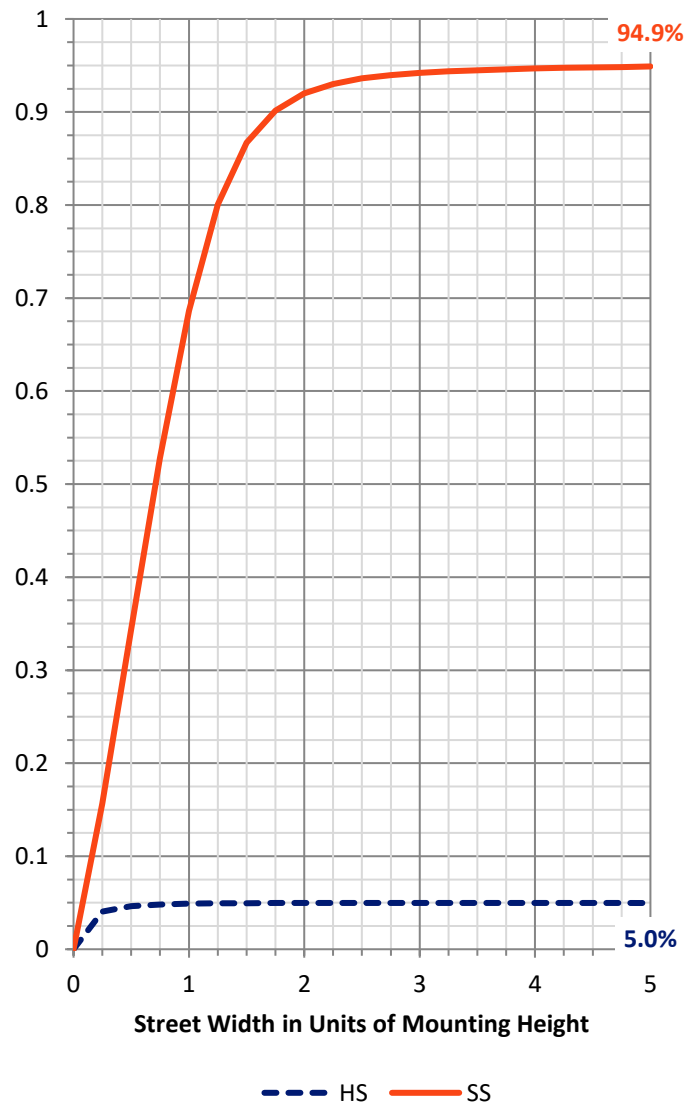
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	760.4	0.0	760.4
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	14480.0	0.0	14480.0
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	15240.5	0.0	15240.5
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	165.4	1.1
10°-20°	591.2	3.9
20°-30°	1128.6	7.4
30°-40°	2024.5	13.3
40°-50°	3101.7	20.4
50°-60°	3604.9	23.7
60°-70°	3192.2	20.9
70°-80°	1376.9	9.0
80°-90°	55.2	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°	15240.5	100.0
0°-180°	15240.5	100.0

**Coefficient of Utilization**



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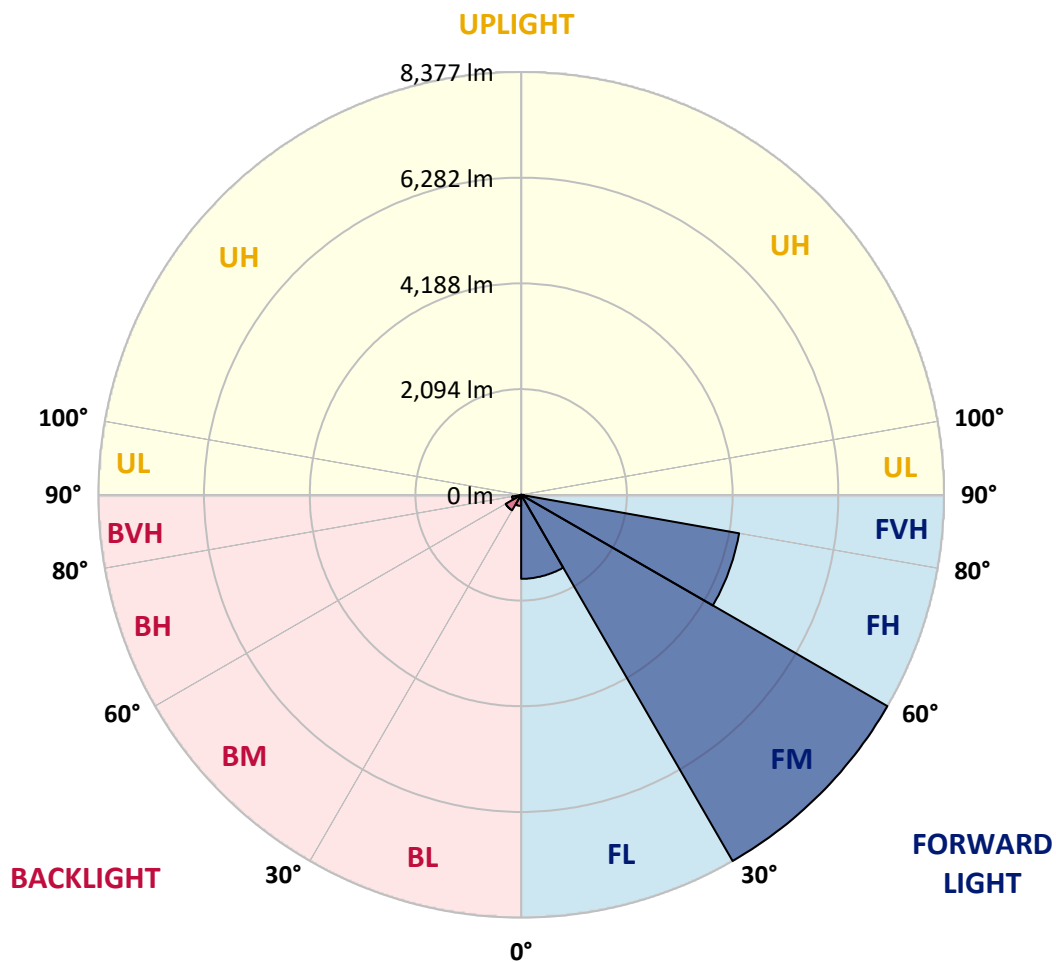
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1664.3	10.9			
FM (30°-60°)	8376.5	55.0			
FH (60°-80°)	4384.9	28.8			G2/5000
FVH (80°-90°)	54.4	0.4			G1/100
BL (0°-30°)	220.8	1.4	B1/500		
BM (30°-60°)	354.5	2.3	B1/1000		
BH (60°-80°)	184.2	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1418.2	1418.2	1418.2	1418.2	1418.2	1418.2	1418.2	1418.2	1418.2	1418.2	1418.2
2.5°	2336.1	2313.0	2290.0	2263.6	2204.5	2102.6	1974.1	1836.0	1664.9	1635.3	1497.0
5°	2836.2	2826.3	2803.3	2767.0	2701.4	2589.5	2444.6	2240.7	1954.4	1905.0	1612.3
7.5°	3188.4	3181.6	3161.9	3119.3	3059.9	2948.1	2796.8	2576.2	2244.0	2188.0	1757.1
10°	3504.2	3500.9	3484.4	3444.9	3385.7	3264.0	3102.7	2872.4	2520.4	2457.9	1924.8
12.5°	3790.4	3793.7	3787.2	3767.4	3724.6	3609.5	3425.1	3175.1	2786.9	2717.8	2125.5
15°	3958.2	3968.2	3994.5	4033.8	4047.0	3955.0	3764.1	3487.7	3059.9	3000.8	2355.8
17.5°	3902.2	3912.2	3994.5	4129.2	4257.6	4270.8	4099.8	3783.8	3329.7	3270.5	2582.8
20°	3767.4	3780.5	3866.0	4050.4	4300.5	4474.7	4405.6	4106.3	3586.5	3514.0	2800.0
22.5°	3918.8	3918.8	3945.0	4056.9	4283.9	4557.0	4649.2	4428.7	3849.6	3760.8	3017.1
25°	4438.6	4428.7	4372.8	4326.7	4399.1	4642.6	4833.4	4757.8	4159.0	4056.9	3247.6
27.5°	5096.7	5142.7	5037.4	4869.6	4705.1	4810.5	4998.0	5083.5	4501.1	4395.9	3484.4
30°	5833.8	5853.4	5728.4	5504.6	5215.1	5113.2	5192.2	5363.2	4872.9	4757.8	3731.2
32.5°	6498.2	6481.9	6376.6	6143.0	5784.4	5563.9	5442.1	5586.9	5277.6	5146.0	3984.5
35°	7087.3	7100.5	6972.1	6702.3	6350.3	6116.6	5827.1	5840.3	5731.6	5580.4	4277.4
37.5°	7617.1	7594.0	7472.2	7202.5	6883.4	6629.9	6324.0	6103.5	6228.6	6070.6	4606.4
40°	8048.0	8025.0	7896.7	7633.4	7334.0	7126.8	6886.5	6455.6	6751.8	6570.7	4958.5
42.5°	8390.3	8363.8	8255.3	8002.0	7712.5	7528.2	7413.1	6889.9	7311.0	7130.0	5353.3
45°	8558.1	8535.1	8469.2	8278.4	8025.0	7863.9	7919.7	7389.9	7909.8	7758.5	5787.6
47.5°	8360.6	8350.7	8426.5	8393.6	8248.7	8163.2	8357.3	7936.2	8538.3	8390.3	6287.7
50°	7761.9	7778.2	7998.7	8271.9	8340.9	8442.9	8716.0	8512.0	9212.8	9054.8	6863.6
52.5°	6284.5	6396.3	7060.9	7719.0	8229.1	8613.9	9137.2	9334.6	10311.9	10157.1	7761.9
55°	4691.9	4738.0	5461.9	6587.2	7778.2	8600.8	9449.7	9818.3	10854.7	10696.7	7998.7
57.5°	3721.3	3737.8	4096.5	5244.8	6850.4	8304.7	9614.2	9992.7	11091.6	10960.0	8350.7
60°	2921.7	2941.5	3201.5	3991.1	5544.2	7505.2	9377.3	10144.0	11555.4	11450.2	8966.1
62.5°	2273.6	2293.4	2451.3	2915.2	4159.0	6274.7	8900.2	10387.6	12437.4	12387.9	9973.0
65°	1760.3	1766.8	1875.5	2092.6	2938.3	4942.0	8317.9	10614.6	13628.4	13585.6	10788.9
67.5°	1299.7	1309.5	1385.2	1520.1	1984.0	3550.2	7363.6	10440.1	14526.6	14401.6	11085.1
69°	1049.6	1059.6	1125.2	1233.8	1566.1	2796.8	6491.7	10009.0	14661.5	14543.1	10897.5
70°	898.2	904.9	970.7	1062.8	1335.9	2375.6	5800.7	9637.2	14483.9	14368.7	10469.7
72.5°	575.9	608.7	674.4	733.7	885.1	1572.8	3915.4	7992.1	12496.5	12299.1	8199.4
75°	319.2	329.0	447.4	519.8	589.0	1023.3	2178.2	4984.9	7949.3	7811.1	4386.0
77.5°	263.3	269.9	315.8	394.9	394.9	572.5	822.6	1964.4	3023.8	2727.7	1187.7
80°	184.2	190.8	240.1	259.9	283.0	322.4	266.4	431.0	467.2	414.6	177.7
82.5°	128.3	134.8	164.5	213.8	227.0	151.4	98.8	128.3	134.8	134.8	69.1
85°	23.0	32.9	121.7	177.7	134.8	46.1	56.0	46.1	42.8	46.1	16.4
87.5°	0.0	0.0	75.6	85.6	72.5	19.8	23.0	16.4	9.9	13.1	6.6
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°	1418.2	1418.2	1418.2	1418.2	1418.2	1418.2	1418.2	1418.2	1418.2	1418.2	1418.2
2.5°	1427.9	1358.9	1240.4	1155.0	1082.5	1026.6	1003.5	967.4	941.1	954.2	937.7
5°	1467.6	1345.8	1155.0	1033.1	947.6	875.2	816.0	769.9	733.7	727.2	720.6
7.5°	1530.1	1355.6	1105.5	954.2	825.8	714.1	621.8	552.7	500.1	500.1	480.4
10°	1615.5	1382.0	1075.9	875.2	684.4	533.1	440.9	375.1	348.8	345.5	338.9
12.5°	1734.0	1431.3	1053.0	773.3	533.1	388.2	332.4	309.2	299.4	296.1	292.8
15°	1895.2	1503.7	1026.6	648.1	404.6	319.2	296.1	276.4	266.4	263.3	259.9
17.5°	2049.8	1569.5	970.7	519.8	329.0	289.6	263.3	246.8	233.6	230.3	230.3
20°	2194.6	1625.5	875.2	404.6	296.1	259.9	233.6	213.8	200.7	197.4	197.4
22.5°	2346.0	1671.4	756.7	329.0	269.9	230.3	203.9	184.2	171.0	167.9	164.5
25°	2507.2	1704.4	621.8	292.8	243.5	203.9	174.5	157.9	148.1	144.7	141.6
27.5°	2681.6	1717.5	493.6	266.4	213.8	177.7	151.4	134.8	128.3	125.0	125.0
30°	2839.5	1704.4	381.7	237.0	187.6	154.7	131.6	118.4	111.8	108.5	108.5
32.5°	3004.0	1671.4	306.1	210.7	164.5	131.6	111.8	102.0	98.8	95.4	95.4
35°	3178.5	1628.6	263.3	187.6	141.6	115.2	98.8	92.2	88.8	85.6	85.6
37.5°	3382.4	1576.0	240.1	167.9	125.0	102.0	85.6	82.3	79.1	79.1	79.1
40°	3612.8	1510.2	223.8	151.4	111.8	88.8	75.6	72.5	69.1	69.1	69.1
42.5°	3856.2	1434.6	207.2	134.8	98.8	75.6	65.8	65.8	62.5	62.5	59.2
45°	4129.2	1358.9	190.8	118.4	85.6	65.8	56.0	52.6	52.6	49.3	49.3
47.5°	4451.8	1289.7	174.5	105.3	75.6	56.0	49.3	46.1	42.8	39.4	39.4
50°	4905.9	1283.1	154.7	92.2	69.1	46.1	39.4	36.2	32.9	29.6	29.6
52.5°	5356.7	1224.0	131.6	75.6	56.0	39.4	29.6	26.3	23.0	23.0	19.8
55°	5458.6	1125.2	115.2	65.8	42.8	29.6	23.0	16.4	16.4	13.1	13.1
57.5°	5682.4	1079.3	98.8	52.6	32.9	23.0	13.1	9.9	9.9	9.9	9.9
60°	6123.2	1066.1	85.6	46.1	23.0	16.4	9.9	6.6	6.6	3.4	3.4
62.5°	6732.0	1053.0	72.5	39.4	16.4	9.9	6.6	3.4	0.0	0.0	0.0
65°	7067.5	964.1	59.2	29.6	13.1	9.9	3.4	0.0	0.0	0.0	0.0
67.5°	6978.8	796.3	52.6	19.8	9.9	6.6	3.4	0.0	0.0	0.0	0.0
69°	6606.9	671.3	42.8	16.4	9.9	6.6	3.4	0.0	0.0	0.0	0.0
70°	6159.5	579.0	39.4	13.1	6.6	3.4	3.4	0.0	0.0	0.0	0.0
72.5°	4372.8	302.6	26.3	9.9	6.6	3.4	0.0	0.0	0.0	0.0	0.0
75°	2043.3	134.8	16.4	6.6	3.4	3.4	0.0	0.0	0.0	0.0	0.0
77.5°	450.8	62.5	9.9	6.6	3.4	0.0	0.0	0.0	0.0	0.0	0.0
80°	85.6	23.0	6.6	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	29.6	9.9	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	9.9	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.4	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)