

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: P237200

Luminaire Tested: **ARCH-L-AF72-270-D-U-T3-7030-HSS**

Issue Date: 8/23/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P237200  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 8/23/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-270-D-U-T3-7030-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 3000K, 1155mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 20976.7 lumens  
Efficiency: N/A  
Efficacy: 76.8 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B2 - U0 - G4

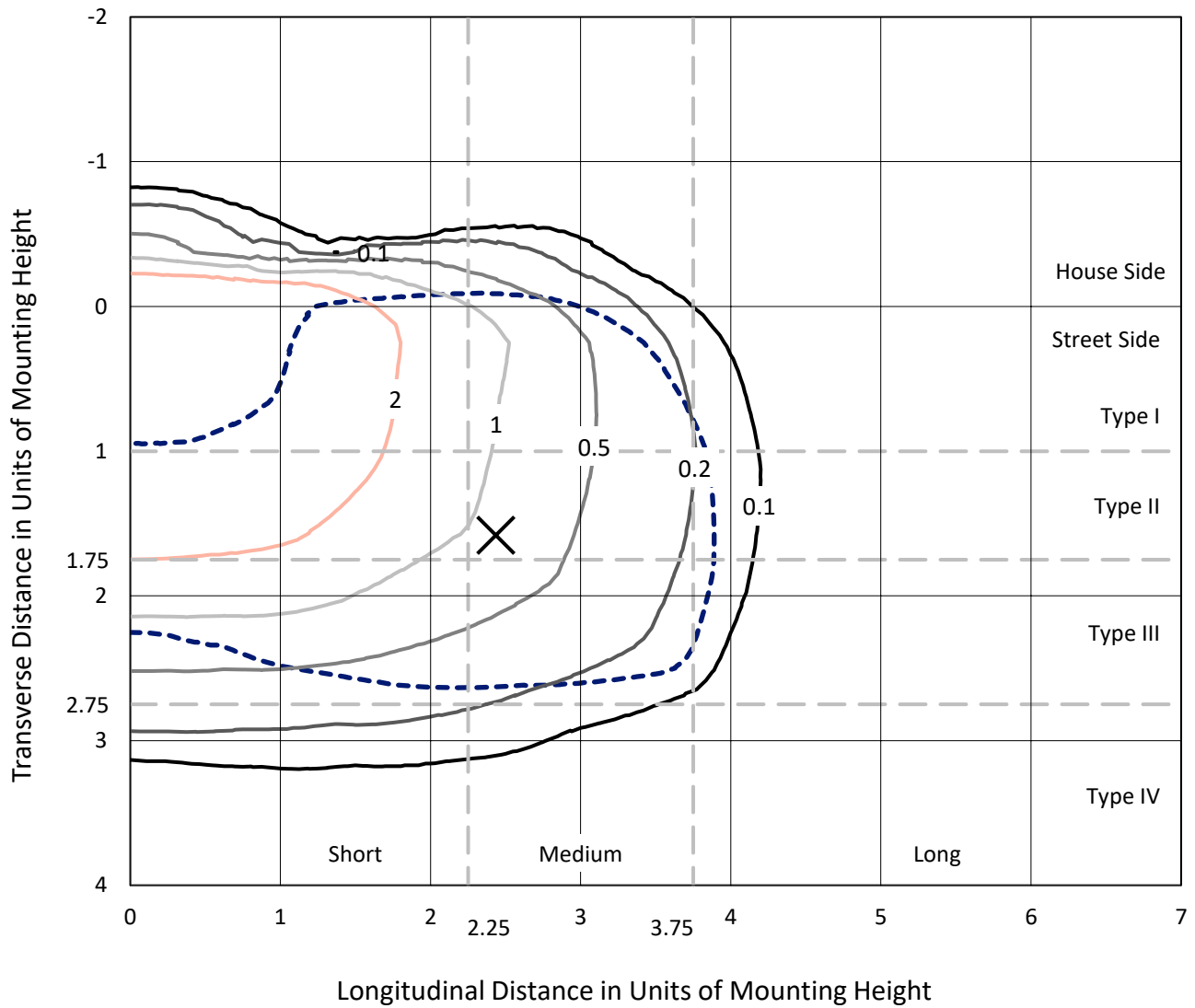
Input Watts (W): 273  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

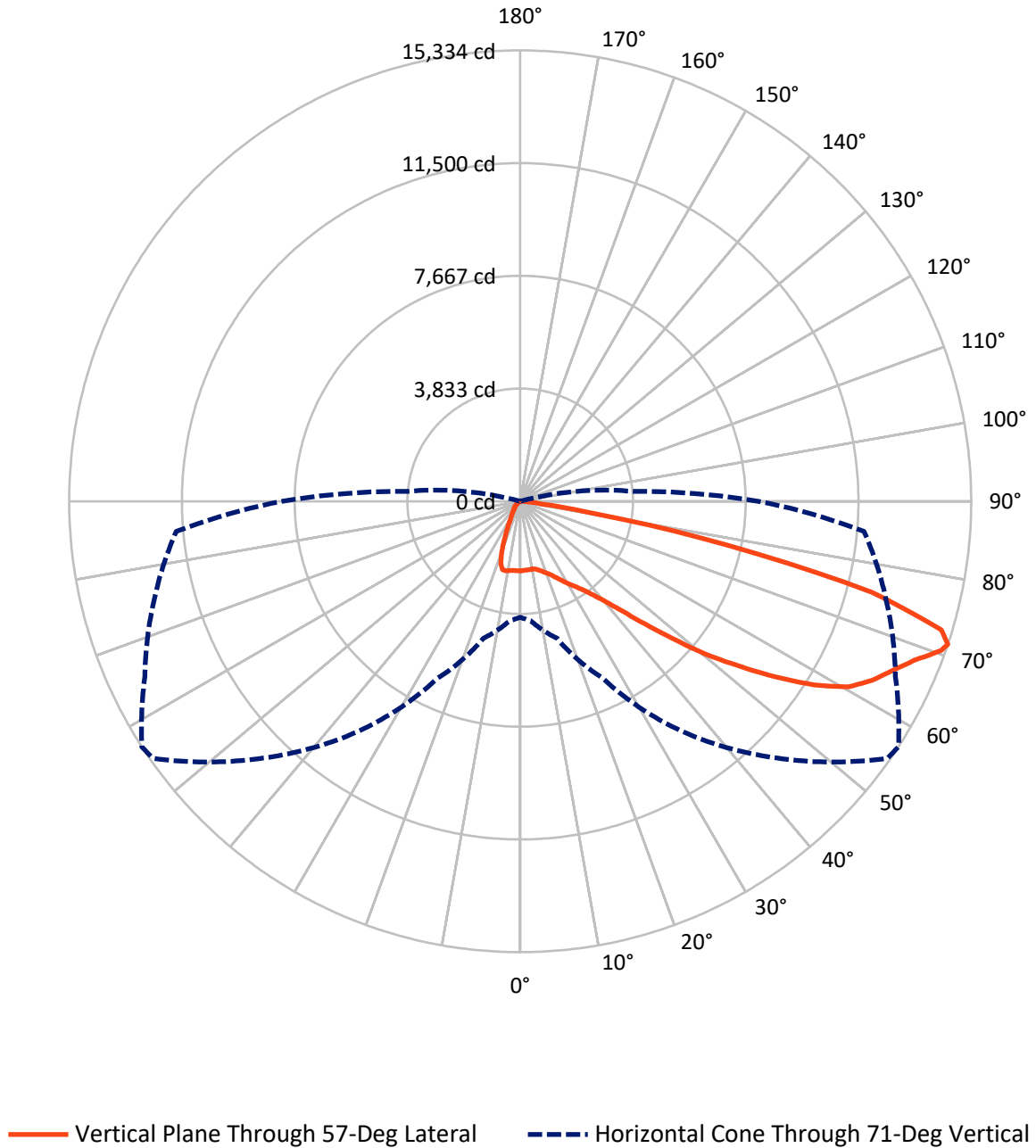
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.7 fc  
 Type III - Medium - N/A

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### Luminous Intensity Polar Plot



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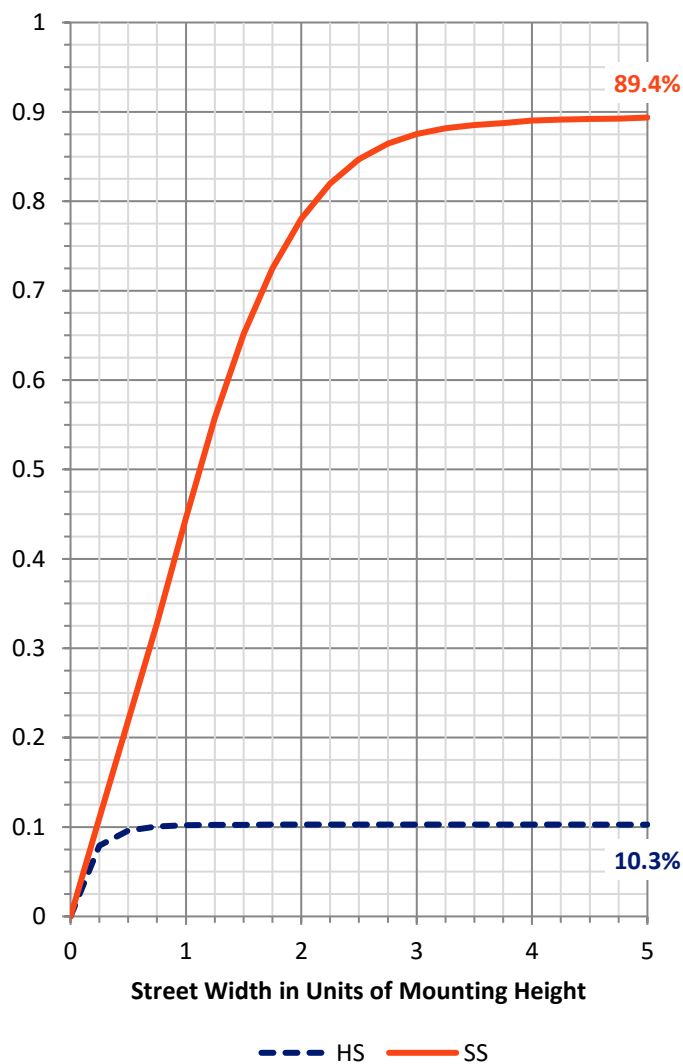
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2173.8	0.0	2173.8
	% Fixture	10.4	0.0	10.4
<b>Street Side</b>	Lumens	18802.8	0.0	18802.8
	% Fixture	89.6	0.0	89.6
<b>Total</b>	Lumens	20976.7	0.0	20976.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	222.6	1.1
10°-20°	595.3	2.8
20°-30°	928.6	4.4
30°-40°	1569.5	7.5
40°-50°	3048.5	14.5
50°-60°	5119.3	24.4
60°-70°	6109.4	29.1
70°-80°	3219.7	15.3
80°-90°	163.6	0.8
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°	20976.7	100.0
0°-180°	20976.7	100.0

**Coefficient of Utilization**



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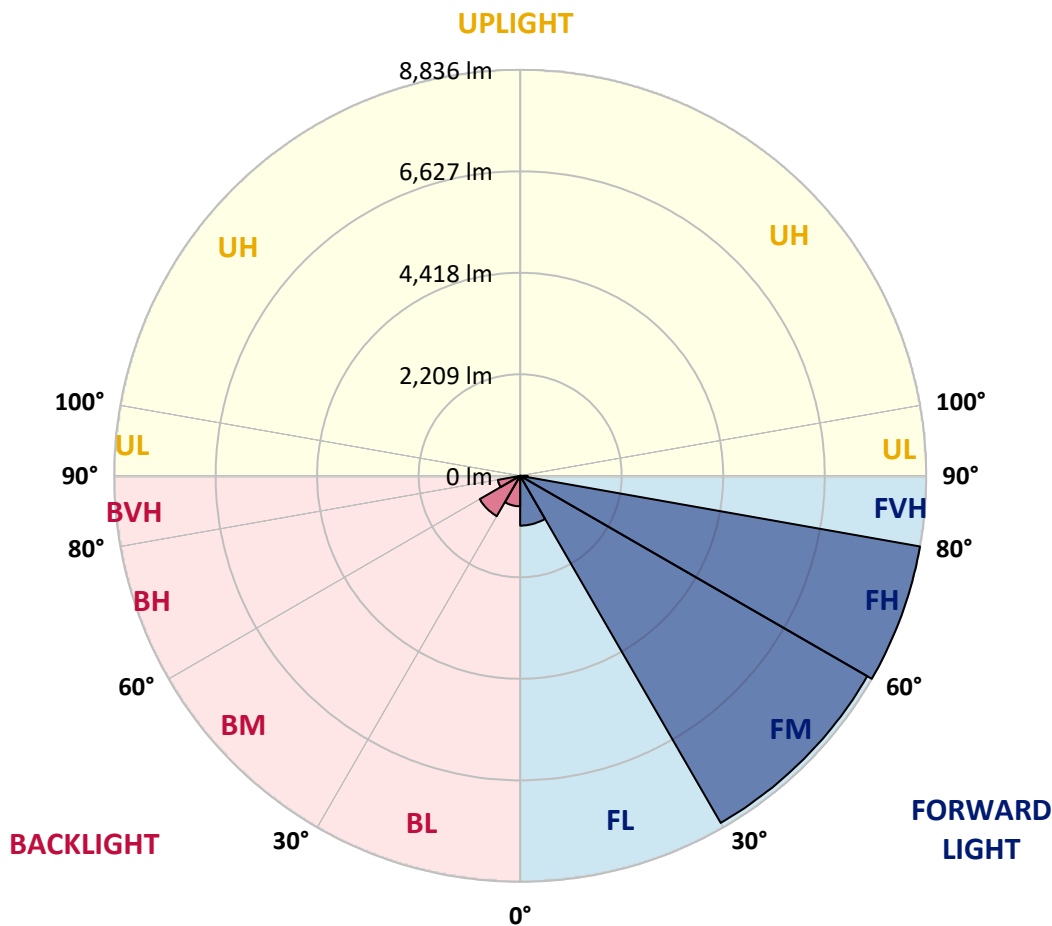
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1083.0	5.2			
FM (30°-60°)	8722.3	41.6			
FH (60°-80°)	8835.5	42.1			G4/12000
FVH (80°-90°)	162.1	0.8			G2/225
BL (0°-30°)	663.6	3.2	B2/1000		
BM (30°-60°)	1015.0	4.8	B2/2500		
BH (60°-80°)	493.7	2.4	B1/500		G1/500
BVH (80°-90°)	1.6	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G4**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	2370.7	2370.7	2370.7	2370.7	2370.7	2370.7	2370.7	2370.7	2370.7	2370.7	2370.7
2.5°	2336.5	2336.5	2336.5	2341.3	2346.3	2346.3	2356.0	2351.2	2351.2	2351.2	2360.9
5°	2272.9	2277.8	2282.8	2292.5	2312.0	2326.6	2351.2	2351.2	2356.0	2365.8	2370.7
7.5°	2184.9	2189.8	2204.6	2224.1	2263.2	2297.4	2336.5	2346.3	2360.9	2385.3	2395.1
10°	2131.2	2140.9	2160.5	2184.9	2228.9	2272.9	2321.8	2336.5	2380.4	2424.5	2448.9
12.5°	2116.5	2121.4	2140.9	2180.0	2233.8	2287.6	2351.2	2365.8	2429.4	2497.7	2536.9
15°	2140.9	2145.9	2155.5	2199.6	2263.2	2331.6	2414.6	2434.2	2512.4	2590.6	2639.4
17.5°	2184.9	2184.9	2194.7	2233.8	2302.2	2380.4	2488.0	2517.4	2605.3	2693.2	2747.1
20°	2214.2	2214.2	2228.9	2268.0	2346.3	2448.9	2576.0	2615.1	2712.8	2810.5	2859.6
22.5°	2243.6	2248.4	2263.2	2307.1	2395.1	2536.9	2683.5	2722.6	2835.1	2937.7	2986.6
25°	2326.6	2321.8	2326.6	2365.8	2468.5	2644.4	2830.2	2879.1	2996.3	3108.8	3133.2
27.5°	2556.4	2546.7	2483.1	2458.7	2536.9	2756.8	3015.9	3064.8	3201.7	3314.1	3314.1
30°	3084.3	3064.8	2908.4	2708.0	2644.4	2859.6	3191.9	3260.3	3436.3	3534.0	3504.7
32.5°	3754.0	3710.0	3509.6	3167.4	2913.3	2996.3	3377.6	3455.9	3680.6	3763.8	3700.2
35°	4487.2	4482.3	4233.0	3793.1	3431.4	3279.9	3617.1	3710.0	3993.5	4066.8	3964.2
37.5°	5264.3	5283.9	5117.7	4511.7	4086.4	3744.2	3934.9	4042.4	4389.4	4477.5	4379.6
40°	6129.6	6124.6	6061.1	5342.6	4873.3	4404.1	4394.3	4492.0	4912.4	5049.3	4912.4
42.5°	7224.4	7214.7	6985.0	6339.8	5826.5	5264.3	5063.9	5098.1	5567.5	5792.3	5591.9
45°	8339.0	8270.5	8006.5	7449.3	6994.8	6329.9	5948.7	5948.7	6349.5	6657.5	6344.6
47.5°	8959.7	8891.3	8783.8	8475.8	8339.0	7595.9	7033.9	6965.4	7278.2	7591.2	7151.1
50°	9776.0	9776.0	9507.2	9389.8	9624.5	9101.6	8231.4	8163.0	8314.5	8563.7	7987.0
52.5°	10421.2	10303.9	10113.2	10216.0	10885.6	10646.1	9429.0	9297.0	9414.4	9477.8	8715.3
55°	10690.0	10577.6	10562.9	10939.4	11975.6	11643.2	10655.8	10538.5	10528.8	10216.0	9350.7
57.5°	10743.8	10646.1	10831.9	11491.7	13036.3	12459.5	11877.9	11789.8	11516.2	10734.0	10000.8
60°	10289.3	10338.1	10787.8	11794.7	13662.0	13168.3	12909.2	12816.3	12185.8	11174.0	10724.3
62.5°	9355.7	9473.0	10313.7	11824.0	13432.3	13456.7	13481.2	13417.6	12703.9	11574.8	11452.5
65°	8250.9	8285.1	9297.0	11418.3	13031.5	13368.8	13901.5	13896.5	13099.8	12024.5	12273.7
67.5°	6799.2	6857.8	7732.9	10049.7	12229.8	13329.6	14453.8	14439.1	13549.6	12537.7	12762.6
70°	5059.1	5132.5	5841.2	7816.0	10440.9	12840.8	15177.3	15187.0	14023.7	12928.7	12425.3
71°	3944.6	4076.6	4819.5	6637.9	9526.8	12347.1	15245.7	15333.7	14077.5	12875.0	11731.1
72.5°	1935.6	2092.1	3025.7	4672.9	7840.3	11242.4	14796.0	14967.1	13740.2	12205.4	10030.2
75°	503.4	532.7	904.2	1911.2	4203.6	7449.3	11931.6	12366.6	11232.6	9292.1	6129.6
77.5°	317.7	327.4	425.2	743.0	1574.0	2830.2	7009.4	7224.4	6418.0	4707.1	2160.5
80°	224.8	229.8	268.9	479.0	919.0	826.1	2522.2	2615.1	2321.8	1246.4	386.1
82.5°	136.9	136.9	195.6	307.9	567.0	449.7	664.8	708.8	625.6	347.0	127.1
85°	78.2	83.1	122.2	210.3	268.9	219.9	249.3	264.0	268.9	229.8	53.7
87.5°	63.6	68.4	107.5	176.0	146.6	107.5	107.5	112.4	117.4	136.9	24.5
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°	2370.7	2370.7	2370.7	2370.7	2370.7	2370.7	2370.7	2370.7	2370.7	2370.7	2370.7
2.5°	2360.9	2360.9	2365.8	2360.9	2360.9	2360.9	2365.8	2365.8	2365.8	2375.7	2380.4
5°	2370.7	2370.7	2370.7	2365.8	2360.9	2360.9	2370.7	2375.7	2375.7	2390.3	2390.3
7.5°	2395.1	2395.1	2385.3	2375.7	2365.8	2351.2	2356.0	2360.9	2356.0	2360.9	2360.9
10°	2448.9	2448.9	2434.2	2414.6	2385.3	2341.3	2282.8	2209.3	2140.9	2116.5	2106.7
12.5°	2536.9	2532.0	2502.7	2468.5	2404.9	2253.4	2033.5	1774.4	1559.2	1500.5	1481.1
15°	2634.7	2624.9	2590.6	2532.0	2360.9	1960.1	1500.5	1168.2	962.9	914.1	904.2
17.5°	2737.3	2722.6	2673.8	2556.4	2160.5	1456.7	967.8	733.2	620.8	611.0	615.9
20°	2844.8	2825.2	2756.8	2507.5	1745.0	972.7	625.6	567.0	557.2	557.2	562.1
22.5°	2967.1	2942.6	2849.7	2331.6	1270.9	645.1	537.7	532.7	527.9	523.1	523.1
25°	3108.8	3079.5	2937.7	2013.8	874.9	527.9	513.2	498.6	488.8	479.0	474.1
27.5°	3279.9	3240.7	3006.2	1622.8	601.3	493.8	483.9	459.4	439.9	420.3	420.3
30°	3451.0	3402.0	2986.6	1221.9	488.8	459.4	439.9	410.6	381.4	361.7	356.8
32.5°	3631.8	3582.9	2859.6	821.2	444.8	420.3	395.9	352.0	317.7	293.3	288.5
35°	3900.7	3861.6	2610.2	542.6	400.8	371.5	337.3	293.3	249.3	224.8	219.9
37.5°	4301.4	4252.6	2302.2	415.5	352.0	307.9	278.6	229.8	185.7	161.2	156.5
40°	4839.1	4692.4	1935.6	366.6	307.9	254.1	215.0	166.2	131.9	117.4	117.4
42.5°	5464.8	5117.7	1539.7	332.3	273.7	210.3	156.5	112.4	92.9	88.0	88.0
45°	6129.6	5513.7	1143.8	307.9	239.5	166.2	112.4	78.2	68.4	63.6	63.6
47.5°	6813.9	5836.3	796.7	278.6	200.4	127.1	78.2	58.7	48.8	44.0	44.0
50°	7454.2	6046.5	562.1	249.3	171.1	92.9	58.7	44.0	34.2	34.2	34.2
52.5°	7899.0	6027.0	405.7	215.0	131.9	63.6	39.2	29.3	29.3	29.3	29.3
55°	8290.0	5953.6	317.7	185.7	102.6	44.0	29.3	24.5	24.5	19.5	19.5
57.5°	8622.4	5836.3	268.9	151.6	73.3	34.2	19.5	19.5	14.6	14.6	14.6
60°	8905.9	5689.6	224.8	127.1	48.8	24.5	14.6	9.8	9.8	4.9	9.8
62.5°	9292.1	5596.8	195.6	97.8	34.2	14.6	9.8	4.9	4.9	0.0	0.0
65°	9575.6	5420.8	166.2	68.4	19.5	9.8	4.9	4.9	0.0	0.0	0.0
67.5°	9585.5	5103.1	122.2	39.2	14.6	9.8	4.9	0.0	0.0	0.0	0.0
70°	8813.1	4350.3	78.2	19.5	9.8	4.9	4.9	0.0	0.0	0.0	0.0
71°	8104.3	3851.7	63.6	14.6	9.8	4.9	0.0	0.0	0.0	0.0	0.0
72.5°	6677.1	2830.2	48.8	14.6	4.9	4.9	0.0	0.0	0.0	0.0	0.0
75°	3680.6	1026.5	24.5	9.8	4.9	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	1178.1	312.8	14.6	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	200.4	48.8	9.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	68.4	19.5	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	19.5	9.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.8	4.9	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)