

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: P840902

Luminaire Tested: **ARCH4-100-750-U-T2R-HSS**

Issue Date: 5/27/2024

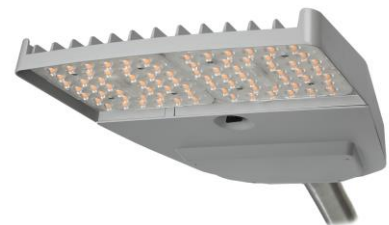
Test Information

Test Method: LM-79-08
Report Number: P840902
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-2)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-100-750-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 845mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12826 lumens
Efficiency: N/A
Efficacy: 124.4 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

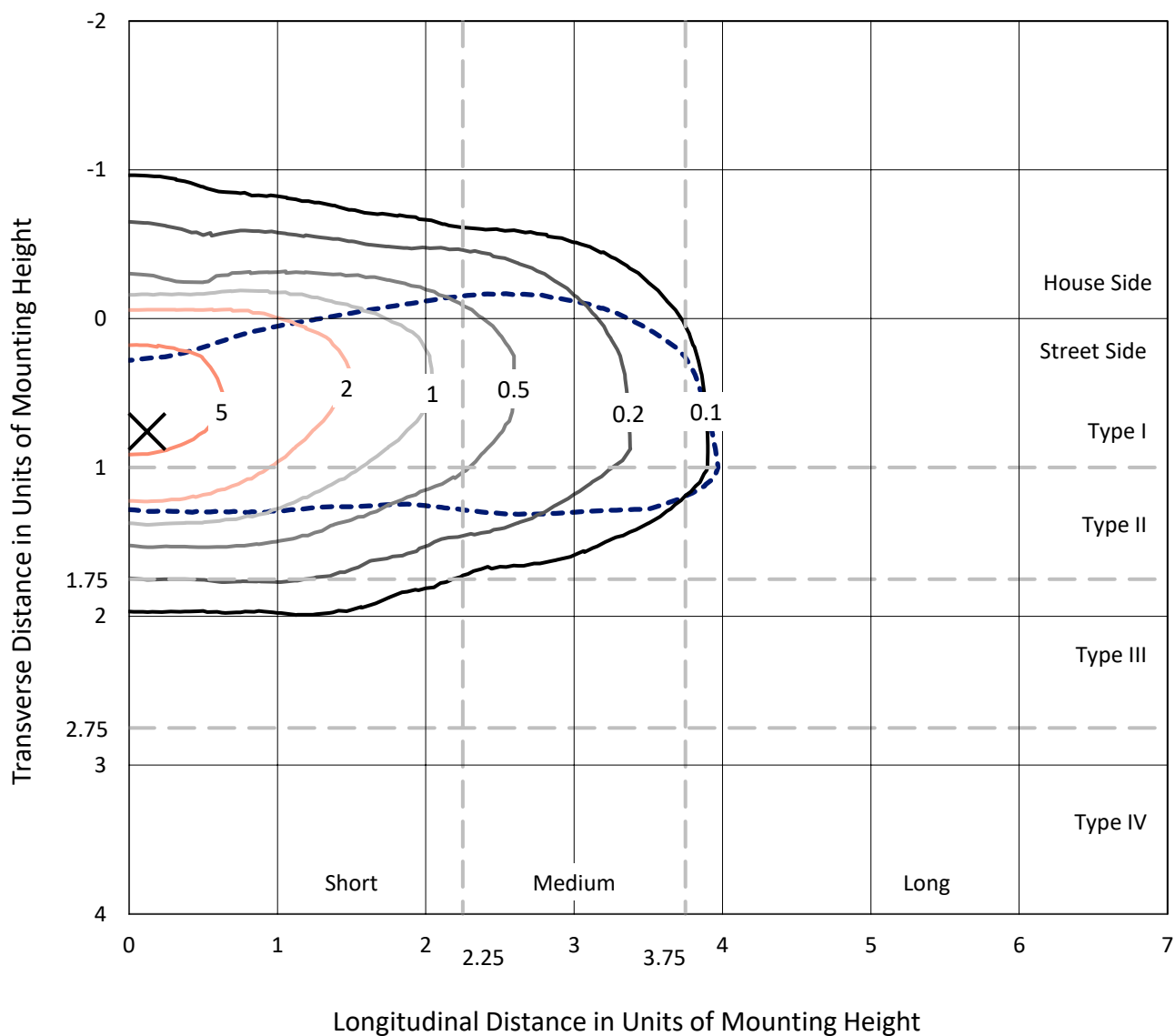
Input Watts (W): 103.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

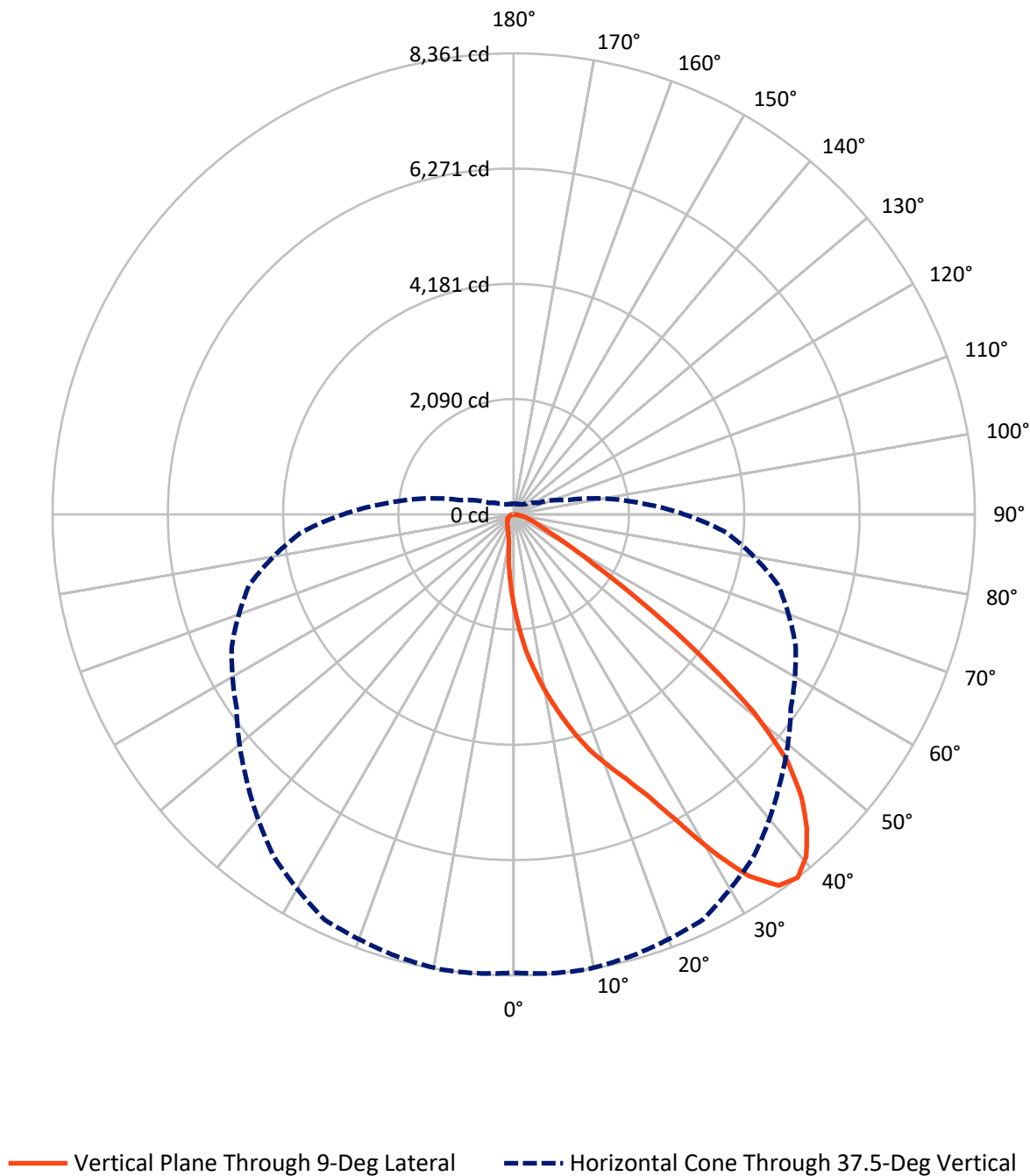
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.5 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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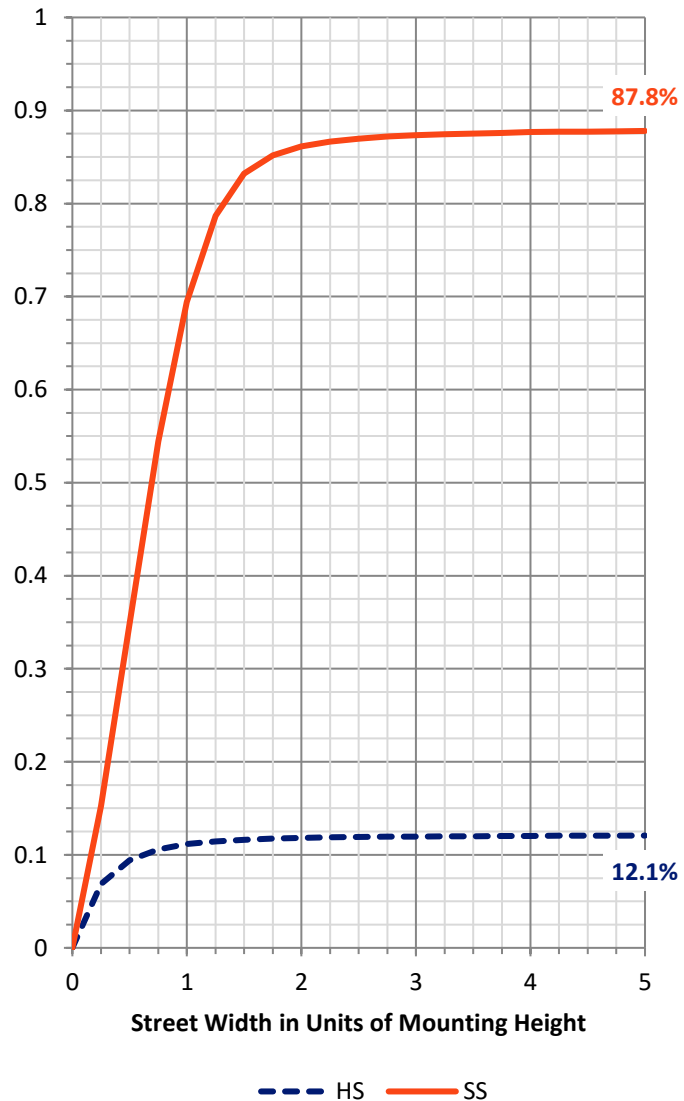
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1559.9	0.0	1559.9
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	11266.1	0.0	11266.1
	% Fixture	87.8	0.0	87.8
Total	Lumens	12826.0	0.0	12826.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.4	1.3
10°-20°	592.3	4.6
20°-30°	1217.1	9.5
30°-40°	2151.3	16.8
40°-50°	2857.8	22.3
50°-60°	2710.4	21.1
60°-70°	2067.8	16.1
70°-80°	1002.5	7.8
80°-90°	56.4	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°	12826.0	100.0
0°-180°	12826.0	100.0

Coefficient of Utilization



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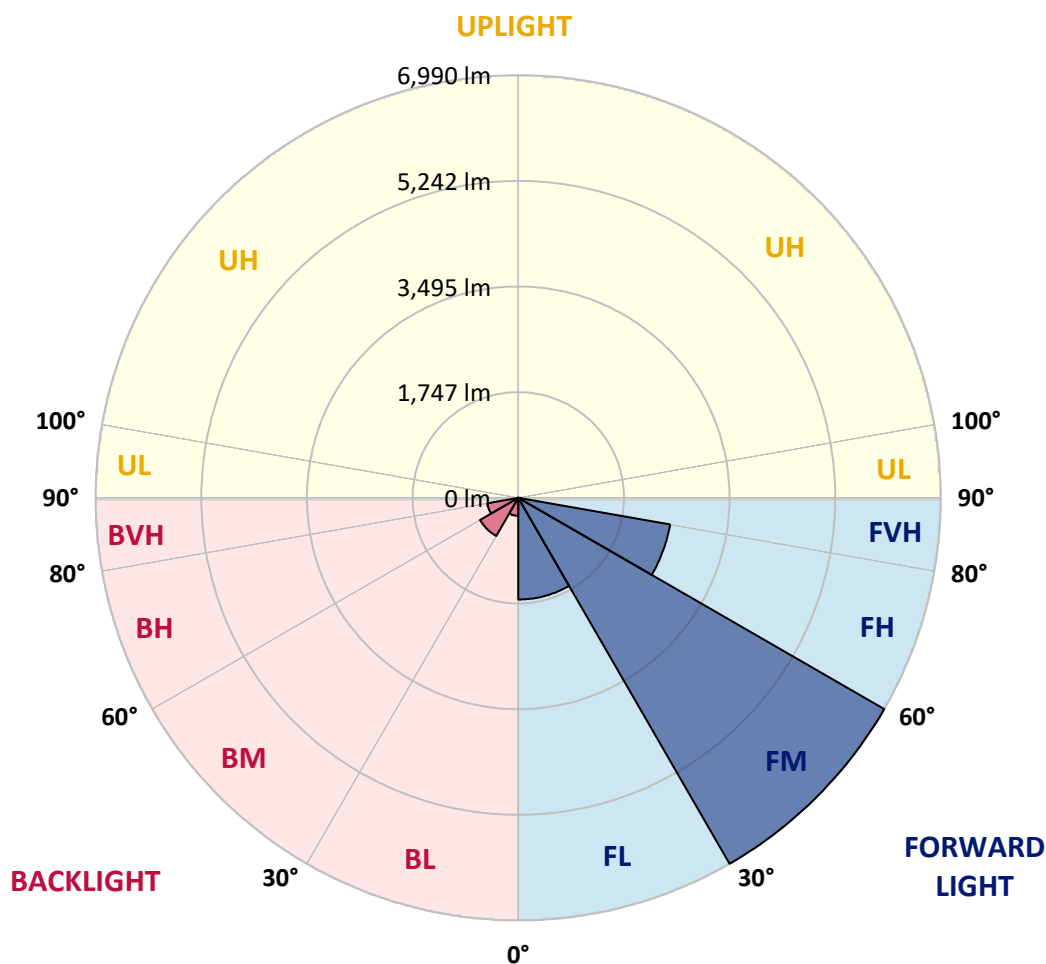
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1682.1	13.1			
FM	(30°-60°)	6989.5	54.5			
FH	(60°-80°)	2549.8	19.9			G2/5000
FVH	(80°-90°)	44.7	0.3			G1/100
BL	(0°-30°)	297.7	2.3	B1/500		
BM	(30°-60°)	729.9	5.7	B1/1000		
BH	(60°-80°)	520.5	4.1	B2/1000		G2/1000
BVH	(80°-90°)	11.8	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	9°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1695.4	1695.4	1695.4	1695.4	1695.4	1695.4	1695.4	1695.4	1695.4	1695.4	1695.4
2.5°	2100.9	2064.0	2106.1	2100.9	2064.0	2040.3	1966.6	1942.9	1856.0	1792.9	1737.6
5°	2532.6	2495.8	2532.6	2522.1	2469.4	2411.5	2290.4	2211.4	2056.1	1919.2	1795.5
7.5°	2890.7	2890.7	2906.5	2909.1	2845.9	2756.4	2606.3	2487.9	2269.4	2058.8	1861.3
10°	3277.7	3280.3	3314.5	3290.8	3206.6	3085.5	2895.9	2745.9	2482.6	2206.2	1924.5
12.5°	3691.0	3693.6	3704.2	3693.6	3593.6	3438.3	3209.2	3011.8	2709.0	2374.7	2011.4
15°	4104.3	4107.0	4120.1	4101.7	3991.1	3809.5	3548.8	3306.6	2948.6	2564.2	2116.7
17.5°	4491.3	4496.6	4507.1	4483.4	4367.6	4151.7	3885.8	3593.6	3204.0	2766.9	2235.1
20°	4838.9	4844.1	4852.0	4820.4	4704.6	4488.7	4201.7	3896.4	3464.6	2974.9	2364.1
22.5°	5189.0	5194.3	5207.4	5165.3	5036.3	4788.8	4507.1	4191.2	3741.0	3204.0	2514.2
25°	5636.6	5641.8	5652.4	5591.8	5415.4	5125.8	4828.3	4504.5	4041.2	3462.0	2698.5
27.5°	6292.1	6286.8	6286.8	6176.3	5873.5	5497.0	5152.1	4823.1	4365.0	3738.4	2901.2
30°	7103.0	7089.8	7081.9	6931.8	6500.1	5915.6	5483.9	5120.6	4675.6	4030.6	3119.7
32.5°	7829.6	7829.6	7813.8	7655.8	7197.7	6479.0	5836.6	5410.1	4975.8	4325.5	3346.1
35°	8258.7	8277.1	8269.2	8150.8	7816.4	7084.5	6313.2	5757.7	5291.7	4633.5	3617.3
37.5°	8316.6	8353.5	8361.4	8290.3	8113.9	7579.5	6842.3	6134.1	5639.2	4965.2	3880.6
40°	8082.3	8161.3	8161.3	8150.8	8087.6	7813.8	7287.2	6571.2	5997.2	5310.1	4146.5
42.5°	7721.6	7803.2	7792.7	7832.2	7816.4	7758.5	7537.3	6979.2	6355.3	5665.5	4388.7
45°	7250.4	7334.6	7313.6	7384.7	7416.2	7479.4	7511.0	7263.5	6708.1	6052.5	4659.8
47.5°	6494.8	6637.0	6668.6	6794.9	6926.6	7124.0	7274.1	7366.2	7037.1	6468.5	4954.7
50°	5378.6	5578.6	5641.8	5907.7	6268.4	6676.5	6918.7	7239.9	7268.8	6895.0	5273.2
52.5°	3851.6	4083.3	4180.7	4617.7	5360.1	6070.9	6508.0	6960.8	7358.3	7303.0	5618.1
55°	2490.5	2688.0	2782.7	3193.4	4180.7	5296.9	6023.6	6600.1	7308.3	7676.9	6013.0
57.5°	1534.8	1648.1	1711.2	2064.0	2972.3	4304.4	5389.1	6268.4	7155.6	8000.7	6423.7
60°	1034.6	1100.5	1132.0	1297.9	2019.3	3217.1	4517.7	5920.9	6955.5	8219.2	6797.6
62.5°	687.1	708.2	739.8	842.5	1332.1	2258.8	3469.9	5299.6	6805.5	8232.4	7074.0
65°	531.8	542.3	555.5	600.2	821.4	1579.6	2440.5	4293.9	6581.7	7953.3	7160.9
67.5°	418.6	429.1	444.9	468.6	595.0	1071.5	1661.2	3146.0	6123.6	7516.3	7018.7
70°	329.1	337.0	347.5	368.6	463.4	776.6	1097.8	2090.3	5199.5	7100.3	6571.2
72.5°	260.6	268.5	279.1	300.1	376.5	568.7	752.9	1303.2	4009.6	6592.2	5710.3
75°	205.3	210.6	218.5	239.6	302.8	442.3	510.7	779.3	2724.8	5662.9	4449.2
77.5°	102.7	126.4	144.8	165.9	221.1	305.4	339.6	431.8	1150.5	2906.5	2121.9
80°	60.6	73.7	79.0	92.1	144.8	184.3	184.3	173.8	363.3	1116.3	866.1
82.5°	34.2	47.4	50.0	52.7	86.9	105.3	84.2	63.2	73.7	373.8	252.7
85°	10.5	15.8	18.4	21.1	29.0	31.6	29.0	26.3	21.1	36.9	23.7
87.5°	0.0	0.0	0.0	0.0	2.6	5.3	5.3	5.3	7.9	7.9	7.9
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°	1695.4	1695.4	1695.4	1695.4	1695.4	1695.4	1695.4	1695.4	1695.4	1695.4	1695.4
2.5°	1706.0	1671.7	1605.9	1545.4	1487.5	1445.3	1405.8	1369.0	1342.7	1321.6	1319.0
5°	1729.7	1661.2	1534.8	1416.4	1308.4	1218.9	1142.6	1082.0	1037.3	1005.7	1003.0
7.5°	1761.3	1656.0	1463.8	1287.4	1126.8	997.8	887.2	805.6	747.7	724.0	705.6
10°	1787.6	1650.7	1392.7	1158.4	947.8	784.5	652.9	571.3	529.2	513.4	505.5
12.5°	1832.3	1656.0	1332.1	1039.9	792.4	600.2	500.2	455.5	437.0	423.9	421.2
15°	1898.2	1679.6	1274.2	924.1	634.5	484.4	426.5	397.5	379.1	376.5	373.8
17.5°	1964.0	1700.7	1221.6	805.6	526.5	421.2	381.7	358.0	344.9	342.2	342.2
20°	2040.3	1727.0	1163.6	692.4	450.2	379.1	347.5	329.1	313.3	310.7	310.7
22.5°	2129.8	1763.9	1108.4	592.4	400.2	347.5	321.2	300.1	287.0	284.3	284.3
25°	2250.9	1819.2	1063.6	518.6	365.9	321.2	297.5	279.1	268.5	263.3	263.3
27.5°	2385.2	1895.5	1032.0	473.9	342.2	300.1	276.4	260.6	250.1	244.8	244.8
30°	2535.3	1979.8	1010.9	455.5	329.1	281.7	260.6	244.8	231.7	229.0	229.0
32.5°	2701.1	2077.2	997.8	458.1	326.5	268.5	244.8	229.0	218.5	213.2	213.2
35°	2885.4	2185.1	989.9	473.9	331.7	258.0	231.7	215.9	205.3	200.1	200.1
37.5°	3090.8	2311.5	989.9	489.7	344.9	255.4	218.5	202.7	194.8	189.6	189.6
40°	3282.9	2445.8	1000.4	508.1	358.0	255.4	208.0	194.8	184.3	179.0	179.0
42.5°	3433.0	2522.1	1008.3	526.5	365.9	252.7	197.5	184.3	176.4	171.1	171.1
45°	3604.1	2603.7	992.5	534.4	365.9	247.5	189.6	176.4	168.5	163.2	163.2
47.5°	3793.7	2703.8	989.9	539.7	358.0	236.9	181.7	168.5	163.2	158.0	158.0
50°	3985.9	2814.3	995.2	537.1	347.5	221.1	171.1	163.2	155.3	150.1	150.1
52.5°	4204.4	2930.2	1005.7	531.8	323.8	202.7	163.2	155.3	147.4	142.2	139.5
55°	4446.6	3056.5	1026.7	521.3	292.2	184.3	155.3	147.4	136.9	131.6	129.0
57.5°	4725.6	3211.9	1050.4	500.2	258.0	168.5	147.4	136.9	121.1	113.2	110.6
60°	4991.5	3388.3	1076.8	450.2	223.8	152.7	139.5	123.7	107.9	102.7	100.0
62.5°	5241.7	3562.0	1089.9	360.7	189.6	139.5	131.6	113.2	97.4	92.1	89.5
65°	5402.2	3751.6	1061.0	244.8	155.3	129.0	121.1	105.3	89.5	81.6	81.6
67.5°	5412.8	3841.1	960.9	160.6	126.4	115.8	110.6	94.8	79.0	73.7	71.1
70°	5146.9	3706.8	734.5	126.4	105.3	100.0	100.0	84.2	68.4	63.2	60.6
72.5°	4536.1	3282.9	468.6	102.7	89.5	84.2	84.2	71.1	60.6	52.7	50.0
75°	3580.4	2532.6	250.1	84.2	73.7	71.1	65.8	57.9	50.0	44.8	42.1
77.5°	1645.4	1116.3	115.8	60.6	55.3	55.3	50.0	42.1	39.5	34.2	34.2
80°	650.3	379.1	57.9	39.5	36.9	36.9	36.9	29.0	29.0	23.7	21.1
82.5°	179.0	79.0	29.0	23.7	23.7	23.7	21.1	18.4	18.4	15.8	15.8
85°	18.4	13.2	13.2	13.2	13.2	10.5	10.5	7.9	5.3	5.3	5.3
87.5°	7.9	7.9	7.9	7.9	7.9	5.3	2.6	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)