

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: P841010

Luminaire Tested: **ARCH4-120-727-U-T2R-HSS**

Issue Date: 5/27/2024

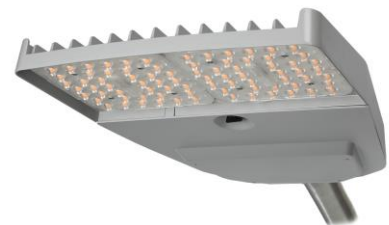
Test Information

Test Method: LM-79-08
Report Number: P841010
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: ARCH4-120-727-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1000mA 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: 13772 lumens
Efficiency: N/A
Efficacy: 112.9 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

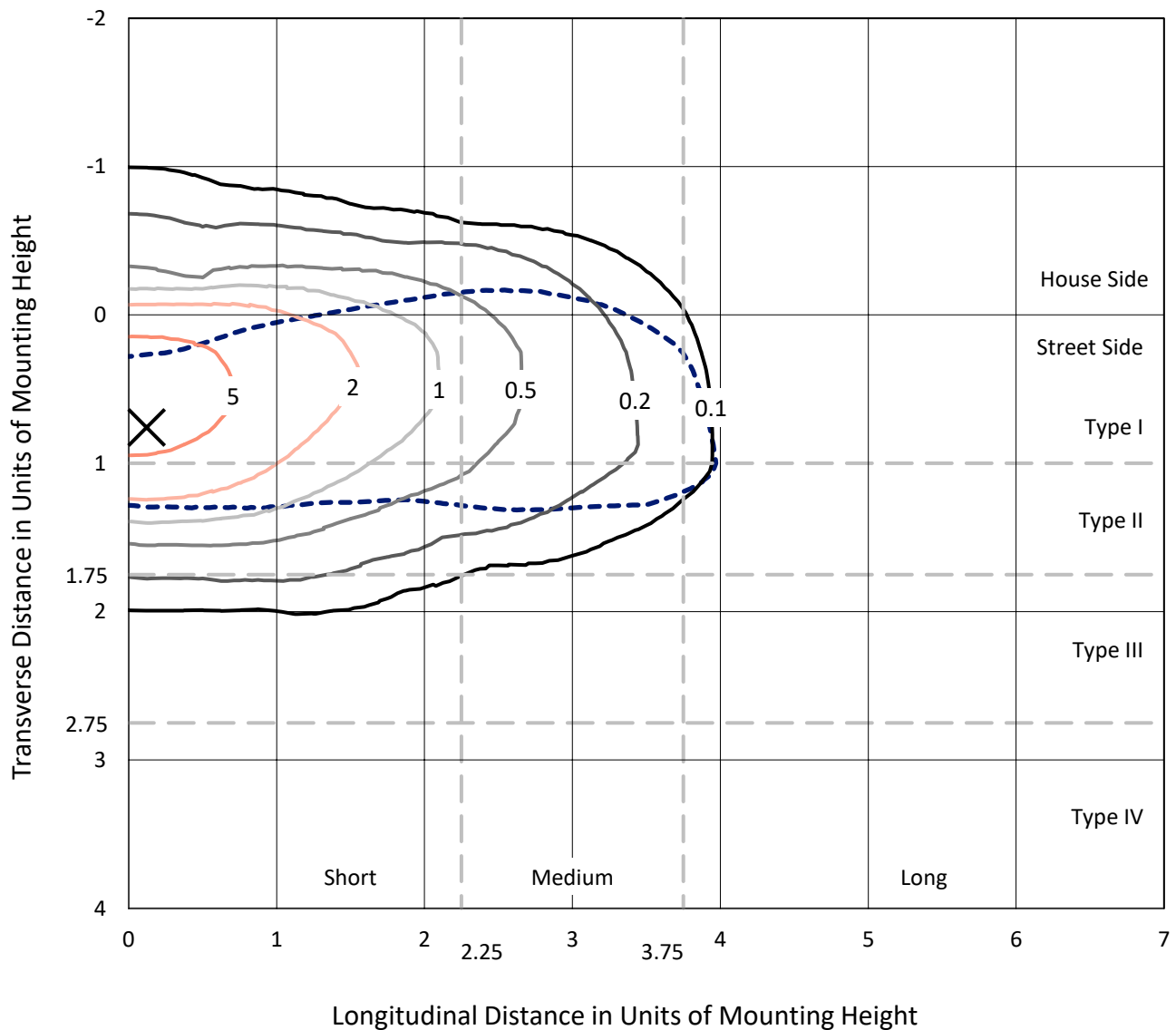
Input Watts (W): 122
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

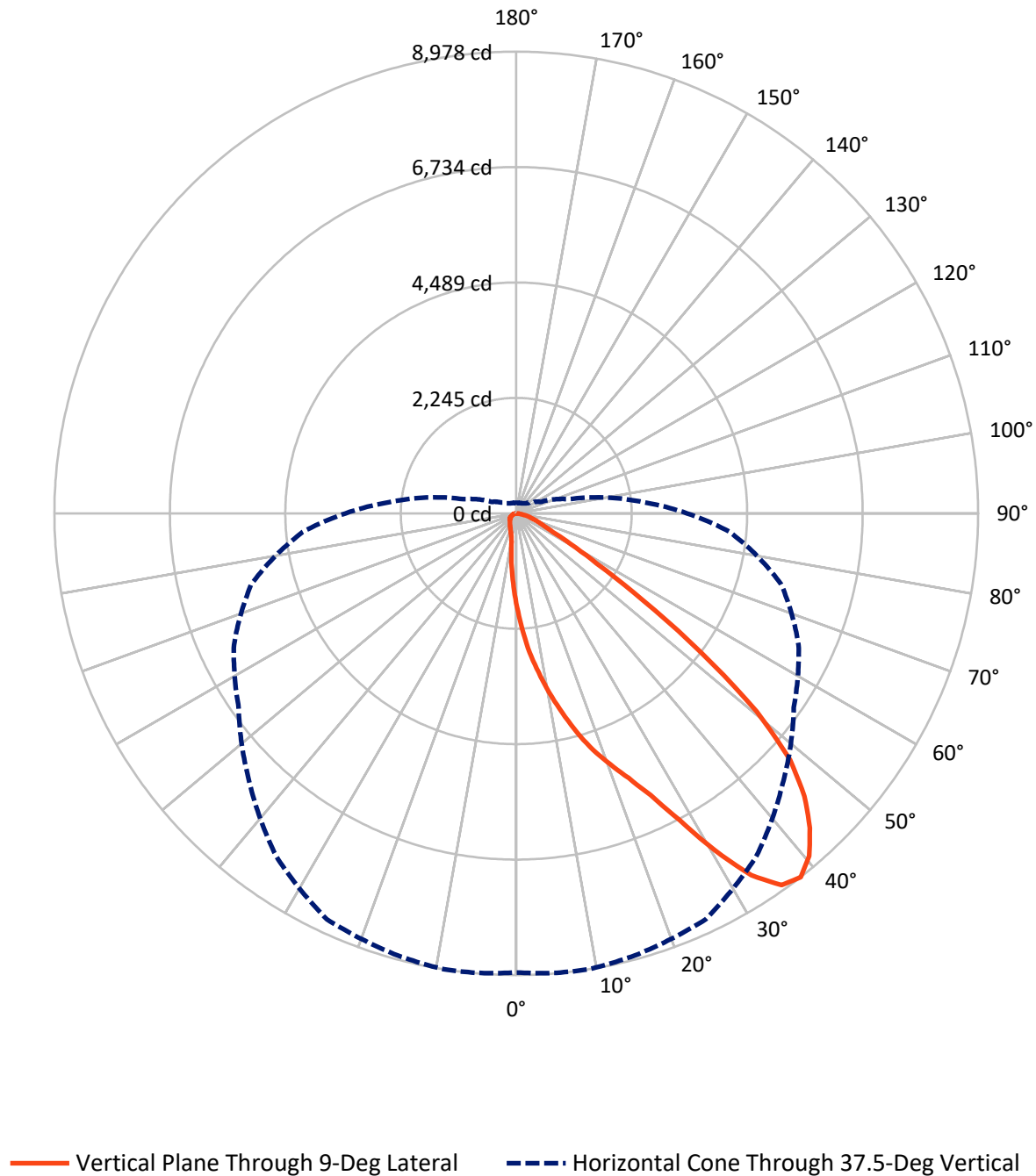
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.1 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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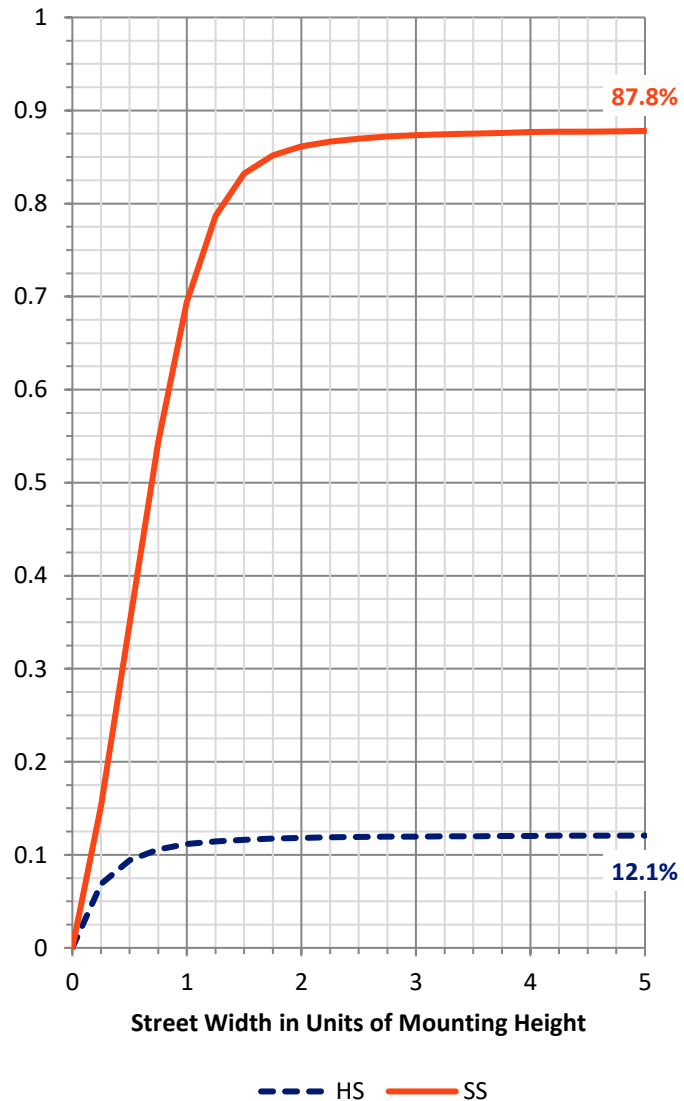
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1674.9	0.0	1674.9
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	12097.1	0.0	12097.1
	% Fixture	87.8	0.0	87.8
Total	Lumens	13772.0	0.0	13772.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.0	1.3
10°-20°	636.0	4.6
20°-30°	1306.8	9.5
30°-40°	2309.9	16.8
40°-50°	3068.6	22.3
50°-60°	2910.3	21.1
60°-70°	2220.3	16.1
70°-80°	1076.4	7.8
80°-90°	60.6	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°	13772.0	100.0
0°-180°	13772.0	100.0

Coefficient of Utilization



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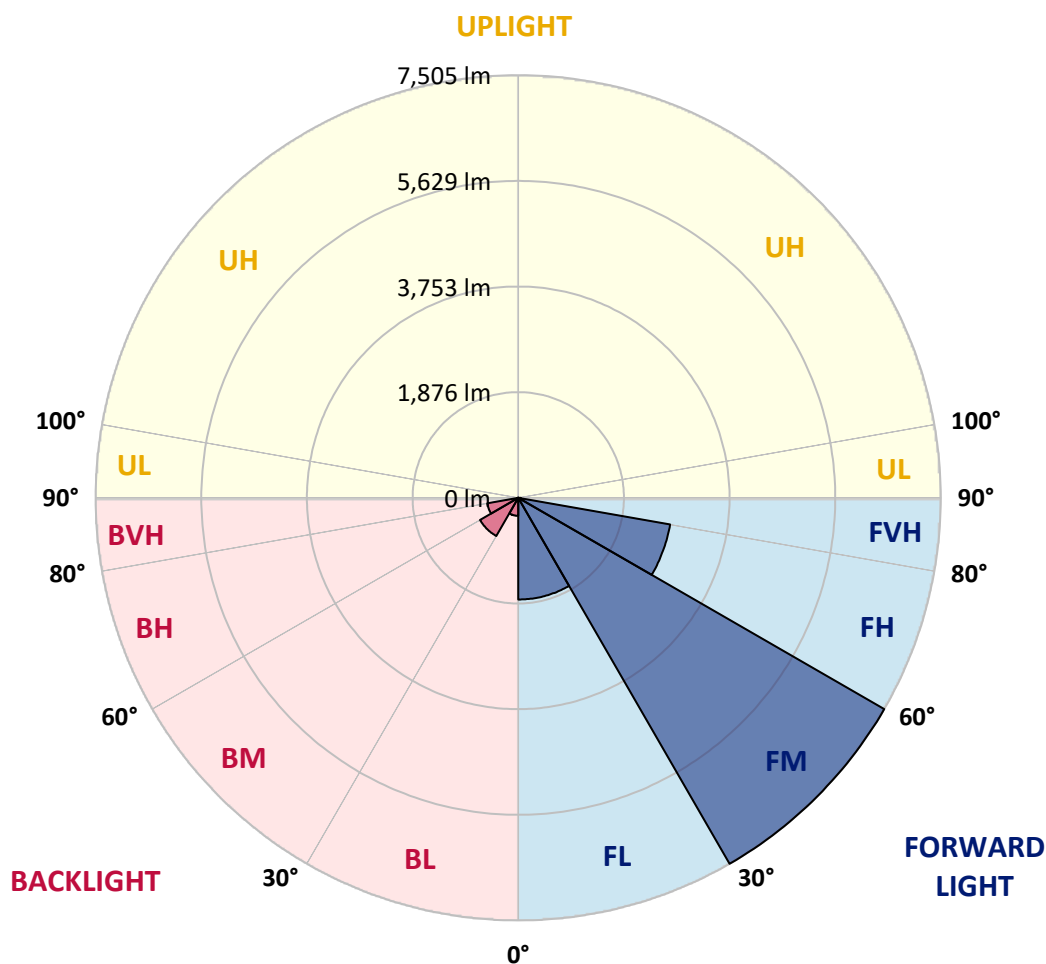
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1806.2	13.1			
FM	(30°-60°)	7505.1	54.5			
FH	(60°-80°)	2737.8	19.9			G2/5000
FVH	(80°-90°)	48.0	0.3			G1/100
BL	(0°-30°)	319.6	2.3	B1/500		
BM	(30°-60°)	783.8	5.7	B1/1000		
BH	(60°-80°)	558.9	4.1	B2/1000		G2/1000
BVH	(80°-90°)	12.6	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°	1820.5	1820.5	1820.5	1820.5	1820.5	1820.5	1820.5	1820.5	1820.5	1820.5	1820.5
2.5°	2255.8	2216.3	2261.5	2255.8	2216.3	2190.8	2111.7	2086.2	1992.9	1925.1	1865.7
5°	2719.4	2679.9	2719.4	2708.1	2651.6	2589.4	2459.4	2374.6	2207.8	2060.8	1927.9
7.5°	3103.9	3103.9	3120.8	3123.7	3055.8	2959.7	2798.6	2671.4	2436.7	2210.6	1998.6
10°	3519.4	3522.3	3559.0	3533.6	3443.1	3313.1	3109.5	2948.4	2665.7	2368.9	2066.4
12.5°	3963.2	3966.1	3977.4	3966.1	3858.7	3691.9	3445.9	3233.9	2908.8	2549.8	2159.7
15°	4407.1	4409.9	4424.0	4404.2	4285.5	4090.5	3810.6	3550.5	3166.1	2753.4	2272.8
17.5°	4822.6	4828.3	4839.6	4814.1	4689.7	4457.9	4172.4	3858.7	3440.3	2971.0	2400.0
20°	5195.8	5201.4	5209.9	5176.0	5051.6	4819.8	4511.7	4183.7	3720.1	3194.3	2538.5
22.5°	5571.7	5577.4	5591.5	5546.3	5407.8	5142.0	4839.6	4500.3	4017.0	3440.3	2699.6
25°	6052.3	6057.9	6069.2	6004.2	5814.8	5503.9	5184.4	4836.7	4339.2	3717.3	2897.5
27.5°	6756.2	6750.5	6750.5	6631.8	6306.7	5902.5	5532.1	5178.8	4686.9	4014.1	3115.2
30°	7626.8	7612.7	7604.2	7443.1	6979.5	6351.9	5888.3	5498.2	5020.5	4327.9	3349.8
32.5°	8407.1	8407.1	8390.1	8220.5	7728.6	6956.9	6267.1	5809.2	5342.7	4644.5	3592.9
35°	8867.8	8887.6	8879.1	8751.9	8392.9	7607.1	6778.8	6182.3	5682.0	4975.3	3884.1
37.5°	8930.0	8969.6	8978.1	8901.8	8712.4	8138.5	7347.0	6586.6	6055.1	5331.4	4166.8
40°	8678.4	8763.2	8763.2	8751.9	8684.1	8390.1	7824.7	7055.8	6439.6	5701.8	4452.3
42.5°	8291.2	8378.8	8367.5	8409.9	8392.9	8330.7	8093.3	7494.0	6824.0	6083.4	4712.4
45°	7785.1	7875.6	7853.0	7929.3	7963.2	8031.1	8065.0	7799.3	7202.8	6498.9	5003.5
47.5°	6973.8	7126.5	7160.4	7296.1	7437.4	7649.5	7810.6	7909.5	7556.2	6945.6	5320.1
50°	5775.3	5990.1	6057.9	6343.5	6730.7	7168.9	7429.0	7773.8	7804.9	7403.5	5662.2
52.5°	4135.7	4384.4	4489.0	4958.3	5755.5	6518.7	6988.0	7474.2	7901.0	7841.7	6032.5
55°	2674.2	2886.2	2988.0	3429.0	4489.0	5687.6	6467.8	7086.9	7847.3	8243.1	6456.5
57.5°	1648.1	1769.6	1837.5	2216.3	3191.5	4621.9	5786.6	6730.7	7683.4	8590.8	6897.5
60°	1111.0	1181.6	1215.5	1393.6	2168.2	3454.4	4850.9	6357.6	7468.5	8825.4	7298.9
62.5°	737.8	760.4	794.3	904.6	1430.4	2425.4	3725.8	5690.5	7307.4	8839.6	7595.7
65°	571.0	582.3	596.5	644.5	882.0	1696.1	2620.5	4610.6	7067.1	8539.9	7689.0
67.5°	449.5	460.8	477.7	503.2	638.9	1150.5	1783.7	3378.1	6575.3	8070.7	7536.4
70°	353.4	361.8	373.1	395.8	497.5	833.9	1178.8	2244.5	5583.0	7624.0	7055.8
72.5°	279.9	288.3	299.6	322.3	404.2	610.6	808.5	1399.3	4305.3	7078.4	6131.4
75°	220.5	226.1	234.6	257.2	325.1	474.9	548.4	836.7	2925.8	6080.6	4777.4
77.5°	110.2	135.7	155.5	178.1	237.5	327.9	364.7	463.6	1235.3	3120.8	2278.4
80°	65.0	79.2	84.8	98.9	155.5	197.9	197.9	186.6	390.1	1198.6	930.0
82.5°	36.7	50.9	53.7	56.5	93.3	113.1	90.5	67.8	79.2	401.4	271.4
85°	11.3	17.0	19.8	22.6	31.1	33.9	31.1	28.3	22.6	39.6	25.4
87.5°	0.0	0.0	0.0	0.0	2.8	5.7	5.7	5.7	8.5	8.5	8.5
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°	1820.5	1820.5	1820.5	1820.5	1820.5	1820.5	1820.5	1820.5	1820.5	1820.5	1820.5
2.5°	1831.8	1795.1	1724.4	1659.4	1597.2	1551.9	1509.5	1470.0	1441.7	1419.1	1416.3
5°	1857.2	1783.7	1648.1	1520.8	1404.9	1308.8	1226.9	1161.8	1113.8	1079.9	1077.0
7.5°	1891.2	1778.1	1571.7	1382.3	1209.9	1071.4	952.6	865.0	802.8	777.4	757.6
10°	1919.4	1772.4	1495.4	1243.8	1017.7	842.4	701.1	613.4	568.2	551.2	542.8
12.5°	1967.5	1778.1	1430.4	1116.6	850.9	644.5	537.1	489.0	469.3	455.1	452.3
15°	2038.2	1803.5	1368.2	992.2	681.3	520.1	457.9	426.9	407.1	404.2	401.4
17.5°	2108.8	1826.1	1311.7	865.0	565.4	452.3	409.9	384.5	370.3	367.5	367.5
20°	2190.8	1854.4	1249.5	743.5	483.4	407.1	373.1	353.4	336.4	333.6	333.6
22.5°	2286.9	1894.0	1190.1	636.0	429.7	373.1	344.9	322.3	308.1	305.3	305.3
25°	2417.0	1953.4	1142.0	556.9	392.9	344.9	319.4	299.6	288.3	282.7	282.7
27.5°	2561.1	2035.3	1108.1	508.8	367.5	322.3	296.8	279.9	268.6	262.9	262.9
30°	2722.3	2125.8	1085.5	489.0	353.4	302.5	279.9	262.9	248.8	245.9	245.9
32.5°	2900.3	2230.4	1071.4	491.9	350.5	288.3	262.9	245.9	234.6	229.0	229.0
35°	3098.2	2346.3	1062.9	508.8	356.2	277.0	248.8	231.8	220.5	214.8	214.8
37.5°	3318.7	2482.0	1062.9	525.8	370.3	274.2	234.6	217.7	209.2	203.5	203.5
40°	3525.1	2626.1	1074.2	545.6	384.5	274.2	223.3	209.2	197.9	192.2	192.2
42.5°	3686.2	2708.1	1082.7	565.4	392.9	271.4	212.0	197.9	189.4	183.7	183.7
45°	3870.0	2795.8	1065.7	573.9	392.9	265.7	203.5	189.4	180.9	175.3	175.3
47.5°	4073.5	2903.2	1062.9	579.5	384.5	254.4	195.1	180.9	175.3	169.6	169.6
50°	4279.9	3021.9	1068.5	576.7	373.1	237.5	183.7	175.3	166.8	161.1	161.1
52.5°	4514.5	3146.3	1079.9	571.0	347.7	217.7	175.3	166.8	158.3	152.6	149.8
55°	4774.6	3282.0	1102.5	559.7	313.8	197.9	166.8	158.3	147.0	141.3	138.5
57.5°	5074.2	3448.8	1127.9	537.1	277.0	180.9	158.3	147.0	130.0	121.6	118.7
60°	5359.7	3638.2	1156.2	483.4	240.3	164.0	149.8	132.9	115.9	110.2	107.4
62.5°	5628.3	3824.7	1170.3	387.3	203.5	149.8	141.3	121.6	104.6	98.9	96.1
65°	5800.7	4028.3	1139.2	262.9	166.8	138.5	130.0	113.1	96.1	87.6	87.6
67.5°	5812.0	4124.4	1031.8	172.4	135.7	124.4	118.7	101.8	84.8	79.2	76.3
70°	5526.5	3980.2	788.7	135.7	113.1	107.4	107.4	90.5	73.5	67.8	65.0
72.5°	4870.7	3525.1	503.2	110.2	96.1	90.5	90.5	76.3	65.0	56.5	53.7
75°	3844.5	2719.4	268.6	90.5	79.2	76.3	70.7	62.2	53.7	48.1	45.2
77.5°	1766.8	1198.6	124.4	65.0	59.4	59.4	53.7	45.2	42.4	36.7	36.7
80°	698.2	407.1	62.2	42.4	39.6	39.6	39.6	31.1	31.1	25.4	22.6
82.5°	192.2	84.8	31.1	25.4	25.4	25.4	22.6	19.8	19.8	17.0	17.0
85°	19.8	14.1	14.1	14.1	14.1	11.3	11.3	8.5	5.7	5.7	5.7
87.5°	8.5	8.5	8.5	8.5	8.5	5.7	2.8	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)