

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: P836819

Luminaire Tested: **ARCH3-80-727-U-T2R-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836819
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-2)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-80-727-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 650mA LIGHTSQUARE WITH 40 LEDS AND TYPE II ROADWAY
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8894 lumens
Efficiency: N/A
Efficacy: 108.6 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

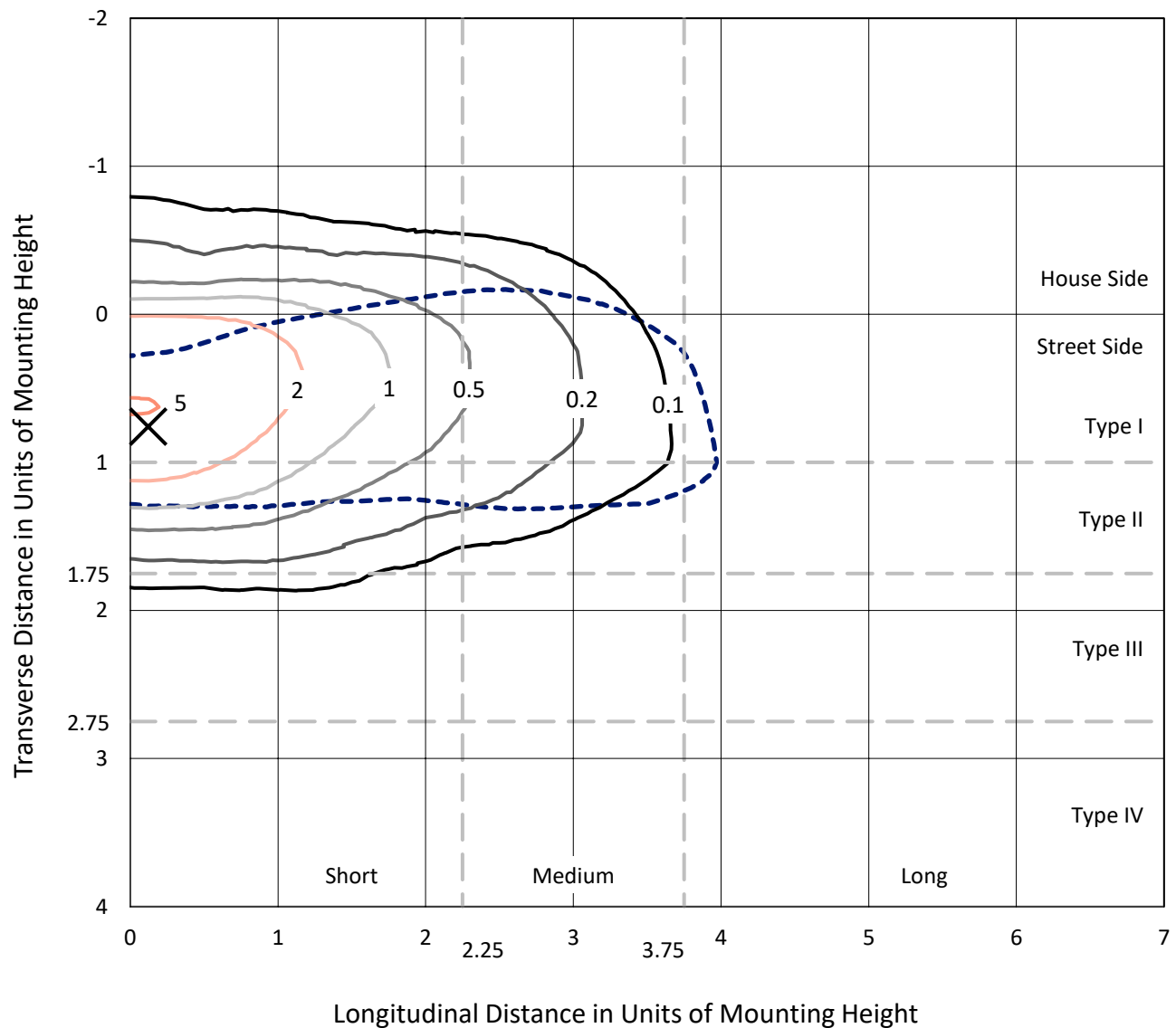
Input Watts (W): 81.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

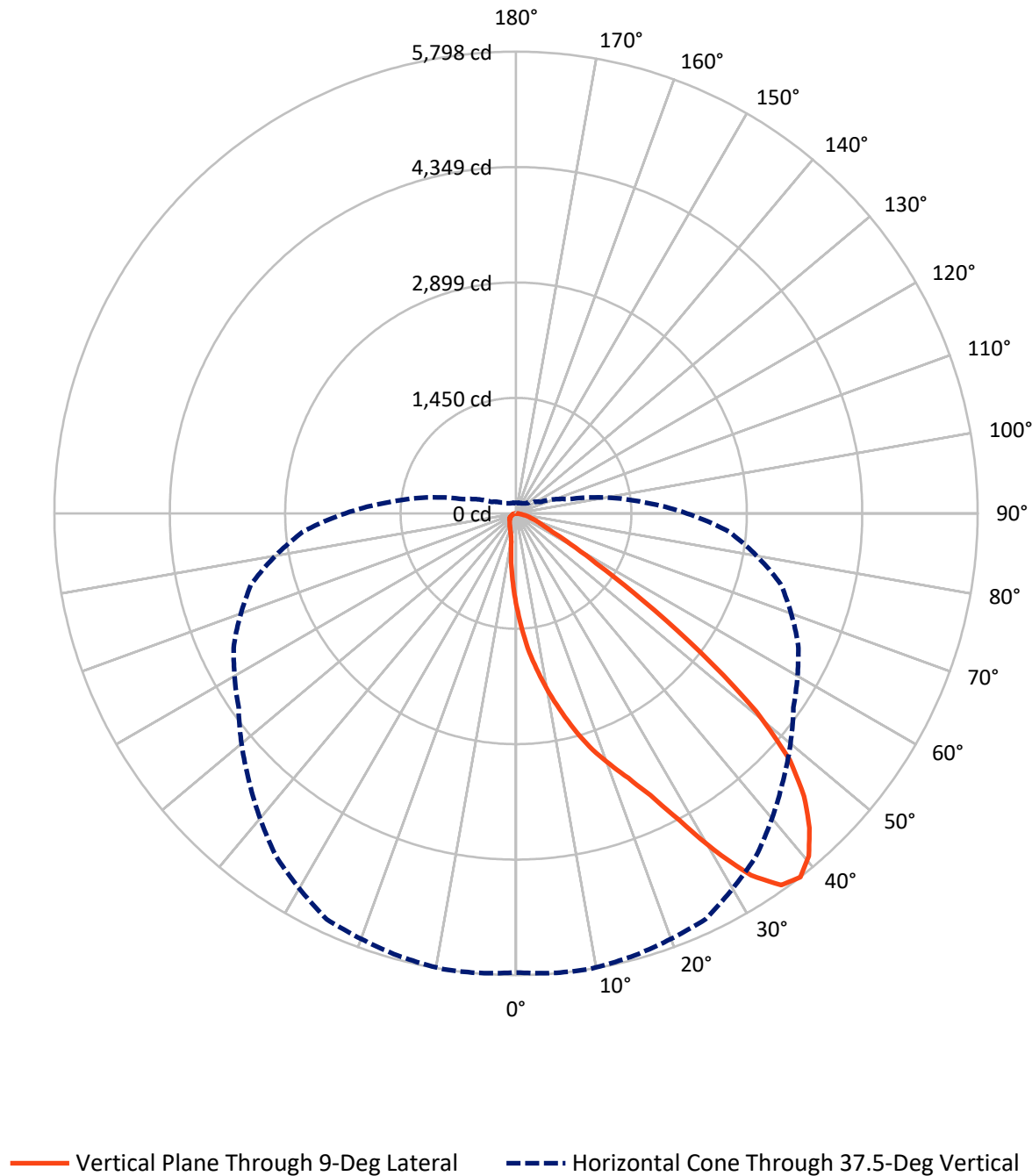
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.2 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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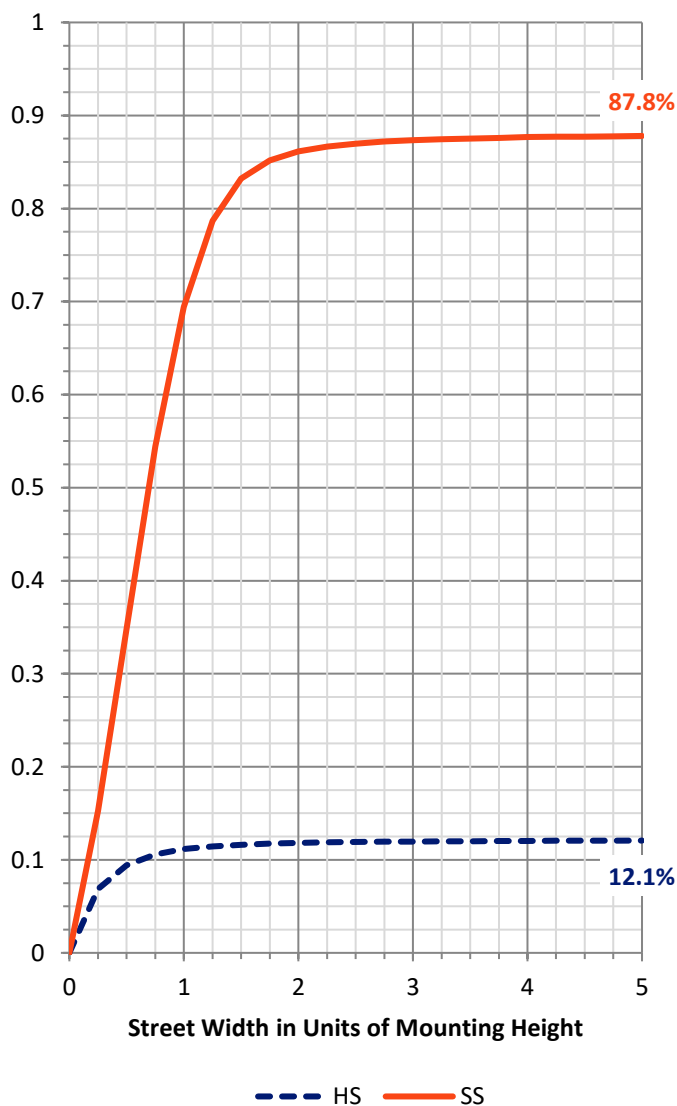
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1081.7	0.0	1081.7
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	7812.3	0.0	7812.3
	% Fixture	87.8	0.0	87.8
Total	Lumens	8894.0	0.0	8894.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.2	1.3
10°-20°	410.7	4.6
20°-30°	844.0	9.5
30°-40°	1491.8	16.8
40°-50°	1981.7	22.3
50°-60°	1879.5	21.1
60°-70°	1433.9	16.1
70°-80°	695.1	7.8
80°-90°	39.1	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°	8894.0	100.0
0°-180°	8894.0	100.0

Coefficient of Utilization



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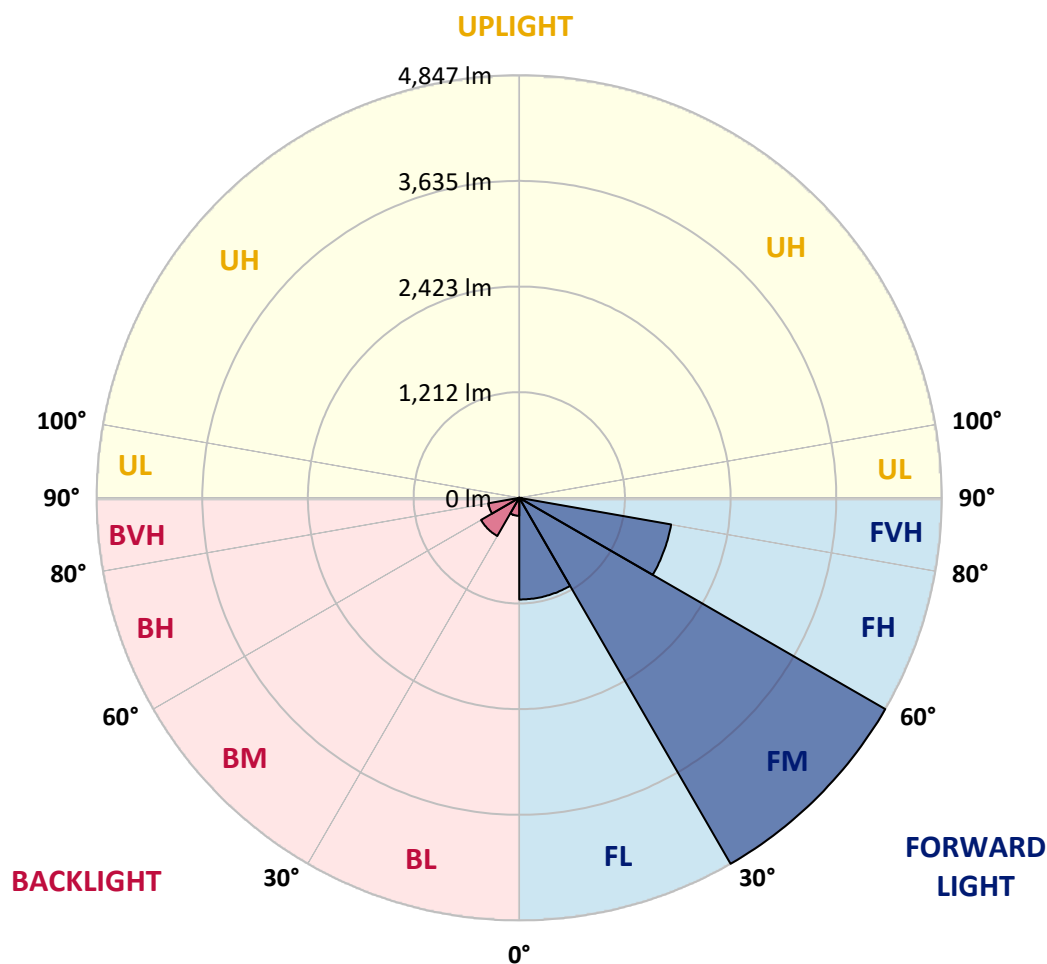
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1166.4	13.1			
FM	(30°-60°)	4846.8	54.5			
FH	(60°-80°)	1768.1	19.9			G1/1800
FVH	(80°-90°)	31.0	0.3			G1/100
BL	(0°-30°)	206.4	2.3	B1/500		
BM	(30°-60°)	506.2	5.7	B1/1000		
BH	(60°-80°)	360.9	4.1	B1/500		G1/500
BVH	(80°-90°)	8.2	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	9°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1175.7	1175.7	1175.7	1175.7	1175.7	1175.7	1175.7	1175.7	1175.7	1175.7	1175.7
2.5°	1456.8	1431.3	1460.5	1456.8	1431.3	1414.8	1363.7	1347.3	1287.0	1243.2	1204.9
5°	1756.2	1730.7	1756.2	1748.9	1712.4	1672.2	1588.3	1533.5	1425.8	1330.9	1245.1
7.5°	2004.5	2004.5	2015.5	2017.3	1973.5	1911.4	1807.3	1725.2	1573.7	1427.6	1290.7
10°	2272.9	2274.7	2298.4	2282.0	2223.6	2139.6	2008.1	1904.1	1721.5	1529.8	1334.5
12.5°	2559.5	2561.3	2568.6	2561.3	2491.9	2384.2	2225.4	2088.5	1878.5	1646.7	1394.7
15°	2846.1	2847.9	2857.0	2844.3	2767.6	2641.6	2460.9	2292.9	2044.7	1778.1	1467.8
17.5°	3114.5	3118.1	3125.4	3109.0	3028.7	2879.0	2694.6	2491.9	2221.7	1918.7	1549.9
20°	3355.4	3359.1	3364.6	3342.7	3262.3	3112.6	2913.6	2701.9	2402.5	2062.9	1639.4
22.5°	3598.2	3601.9	3611.0	3581.8	3492.4	3320.7	3125.4	2906.3	2594.2	2221.7	1743.4
25°	3908.6	3912.2	3919.5	3877.6	3755.2	3554.4	3348.1	3123.6	2802.3	2400.6	1871.2
27.5°	4363.2	4359.5	4359.5	4282.8	4072.9	3811.8	3572.7	3344.5	3026.8	2592.3	2011.8
30°	4925.4	4916.3	4910.8	4806.8	4507.4	4102.1	3802.7	3550.8	3242.2	2795.0	2163.3
32.5°	5429.3	5429.3	5418.3	5308.8	4991.2	4492.8	4047.3	3751.6	3450.4	2999.4	2320.3
35°	5726.9	5739.7	5734.2	5652.0	5420.2	4912.7	4377.8	3992.6	3669.4	3213.0	2508.4
37.5°	5767.0	5792.6	5798.1	5748.8	5626.5	5255.9	4744.7	4253.6	3910.4	3443.1	2690.9
40°	5604.6	5659.3	5659.3	5652.0	5608.2	5418.3	5053.2	4556.7	4158.7	3682.2	2875.3
42.5°	5354.5	5411.0	5403.7	5431.1	5420.2	5380.0	5226.7	4839.6	4407.0	3928.7	3043.3
45°	5027.7	5086.1	5071.5	5120.8	5142.7	5186.5	5208.4	5036.8	4651.6	4197.0	3231.3
47.5°	4503.7	4602.3	4624.2	4711.8	4803.1	4940.0	5044.1	5108.0	4879.8	4485.5	3435.8
50°	3729.7	3868.4	3912.2	4096.6	4346.7	4629.7	4797.6	5020.4	5040.5	4781.2	3656.7
52.5°	2670.8	2831.5	2899.0	3202.1	3716.9	4209.8	4512.9	4826.9	5102.5	5064.2	3895.8
55°	1727.0	1863.9	1929.6	2214.4	2899.0	3673.1	4176.9	4576.8	5067.8	5323.4	4169.6
57.5°	1064.3	1142.8	1186.6	1431.3	2061.1	2984.8	3737.0	4346.7	4962.0	5548.0	4454.4
60°	717.5	763.1	785.0	900.0	1400.2	2230.9	3132.7	4105.7	4823.2	5699.5	4713.7
62.5°	476.5	491.1	513.0	584.2	923.7	1566.4	2406.1	3674.9	4719.1	5708.6	4905.4
65°	368.8	376.1	385.2	416.2	569.6	1095.4	1692.3	2977.5	4564.0	5515.1	4965.6
67.5°	290.3	297.6	308.5	325.0	412.6	743.0	1151.9	2181.6	4246.3	5212.1	4867.0
70°	228.2	233.7	241.0	255.6	321.3	538.5	761.3	1449.5	3605.5	4923.6	4556.7
72.5°	180.7	186.2	193.5	208.1	261.1	394.3	522.1	903.7	2780.4	4571.3	3959.7
75°	142.4	146.0	151.5	166.1	209.9	306.7	354.2	540.4	1889.5	3926.8	3085.2
77.5°	71.2	87.6	100.4	115.0	153.3	211.8	235.5	299.4	797.8	2015.5	1471.4
80°	42.0	51.1	54.8	63.9	100.4	127.8	127.8	120.5	251.9	774.0	600.6
82.5°	23.7	32.9	34.7	36.5	60.2	73.0	58.4	43.8	51.1	259.2	175.3
85°	7.3	11.0	12.8	14.6	20.1	21.9	20.1	18.3	14.6	25.6	16.4
87.5°	0.0	0.0	0.0	0.0	1.8	3.7	3.7	3.7	5.5	5.5	5.5
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°	1175.7	1175.7	1175.7	1175.7	1175.7	1175.7	1175.7	1175.7	1175.7	1175.7	1175.7
2.5°	1183.0	1159.2	1113.6	1071.6	1031.5	1002.2	974.9	949.3	931.1	916.4	914.6
5°	1199.4	1151.9	1064.3	982.2	907.3	845.2	792.3	750.3	719.3	697.4	695.5
7.5°	1221.3	1148.3	1015.0	892.7	781.4	691.9	615.2	558.6	518.5	502.0	489.3
10°	1239.6	1144.6	965.7	803.3	657.2	544.0	452.7	396.2	366.9	356.0	350.5
12.5°	1270.6	1148.3	923.7	721.1	549.5	416.2	346.9	315.8	303.0	293.9	292.1
15°	1316.2	1164.7	883.6	640.8	440.0	335.9	295.7	275.7	262.9	261.1	259.2
17.5°	1361.9	1179.3	847.1	558.6	365.1	292.1	264.7	248.3	239.2	237.3	237.3
20°	1414.8	1197.6	806.9	480.1	312.2	262.9	241.0	228.2	217.2	215.4	215.4
22.5°	1476.9	1223.1	768.6	410.8	277.5	241.0	222.7	208.1	199.0	197.2	197.2
25°	1560.9	1261.5	737.5	359.6	253.8	222.7	206.3	193.5	186.2	182.6	182.6
27.5°	1654.0	1314.4	715.6	328.6	237.3	208.1	191.7	180.7	173.4	169.8	169.8
30°	1758.0	1372.8	701.0	315.8	228.2	195.3	180.7	169.8	160.7	158.8	158.8
32.5°	1873.1	1440.4	691.9	317.7	226.4	186.2	169.8	158.8	151.5	147.9	147.9
35°	2000.8	1515.2	686.4	328.6	230.0	178.9	160.7	149.7	142.4	138.7	138.7
37.5°	2143.2	1602.9	686.4	339.6	239.2	177.1	151.5	140.6	135.1	131.4	131.4
40°	2276.5	1696.0	693.7	352.3	248.3	177.1	144.2	135.1	127.8	124.1	124.1
42.5°	2380.6	1748.9	699.2	365.1	253.8	175.3	136.9	127.8	122.3	118.7	118.7
45°	2499.2	1805.5	688.2	370.6	253.8	171.6	131.4	122.3	116.8	113.2	113.2
47.5°	2630.7	1874.9	686.4	374.2	248.3	164.3	126.0	116.8	113.2	109.5	109.5
50°	2763.9	1951.6	690.1	372.4	241.0	153.3	118.7	113.2	107.7	104.1	104.1
52.5°	2915.5	2031.9	697.4	368.8	224.5	140.6	113.2	107.7	102.2	98.6	96.8
55°	3083.4	2119.5	712.0	361.5	202.6	127.8	107.7	102.2	94.9	91.3	89.5
57.5°	3276.9	2227.2	728.4	346.9	178.9	116.8	102.2	94.9	84.0	78.5	76.7
60°	3461.3	2349.5	746.7	312.2	155.2	105.9	96.8	85.8	74.8	71.2	69.4
62.5°	3634.7	2470.0	755.8	250.1	131.4	96.8	91.3	78.5	67.5	63.9	62.1
65°	3746.1	2601.5	735.7	169.8	107.7	89.5	84.0	73.0	62.1	56.6	56.6
67.5°	3753.4	2663.5	666.3	111.4	87.6	80.3	76.7	65.7	54.8	51.1	49.3
70°	3569.0	2570.4	509.3	87.6	73.0	69.4	69.4	58.4	47.5	43.8	42.0
72.5°	3145.5	2276.5	325.0	71.2	62.1	58.4	58.4	49.3	42.0	36.5	34.7
75°	2482.8	1756.2	173.4	58.4	51.1	49.3	45.6	40.2	34.7	31.0	29.2
77.5°	1141.0	774.0	80.3	42.0	38.3	38.3	34.7	29.2	27.4	23.7	23.7
80°	450.9	262.9	40.2	27.4	25.6	25.6	25.6	20.1	20.1	16.4	14.6
82.5°	124.1	54.8	20.1	16.4	16.4	16.4	14.6	12.8	12.8	11.0	11.0
85°	12.8	9.1	9.1	9.1	9.1	7.3	7.3	5.5	3.7	3.7	3.7
87.5°	5.5	5.5	5.5	5.5	5.5	3.7	1.8	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)