

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: P842522

Luminaire Tested: **ARCH4-60-727-U-T2R-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842522
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: ARCH4-60-727-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 520mA 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: 7435 lumens
Efficiency: N/A
Efficacy: 118.0 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 63
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

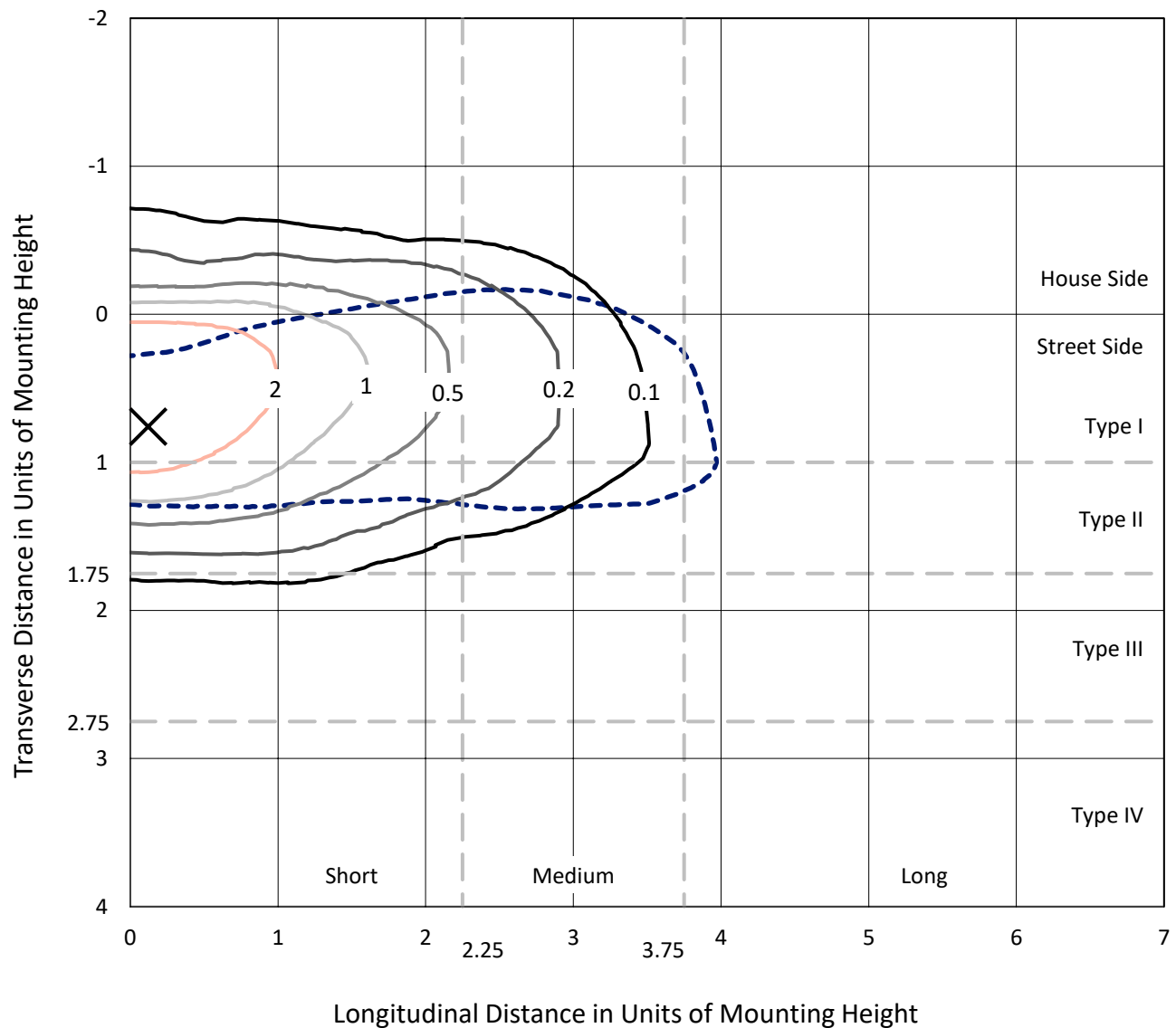


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Iso-Footcandle Lines of Horizontal Illumination

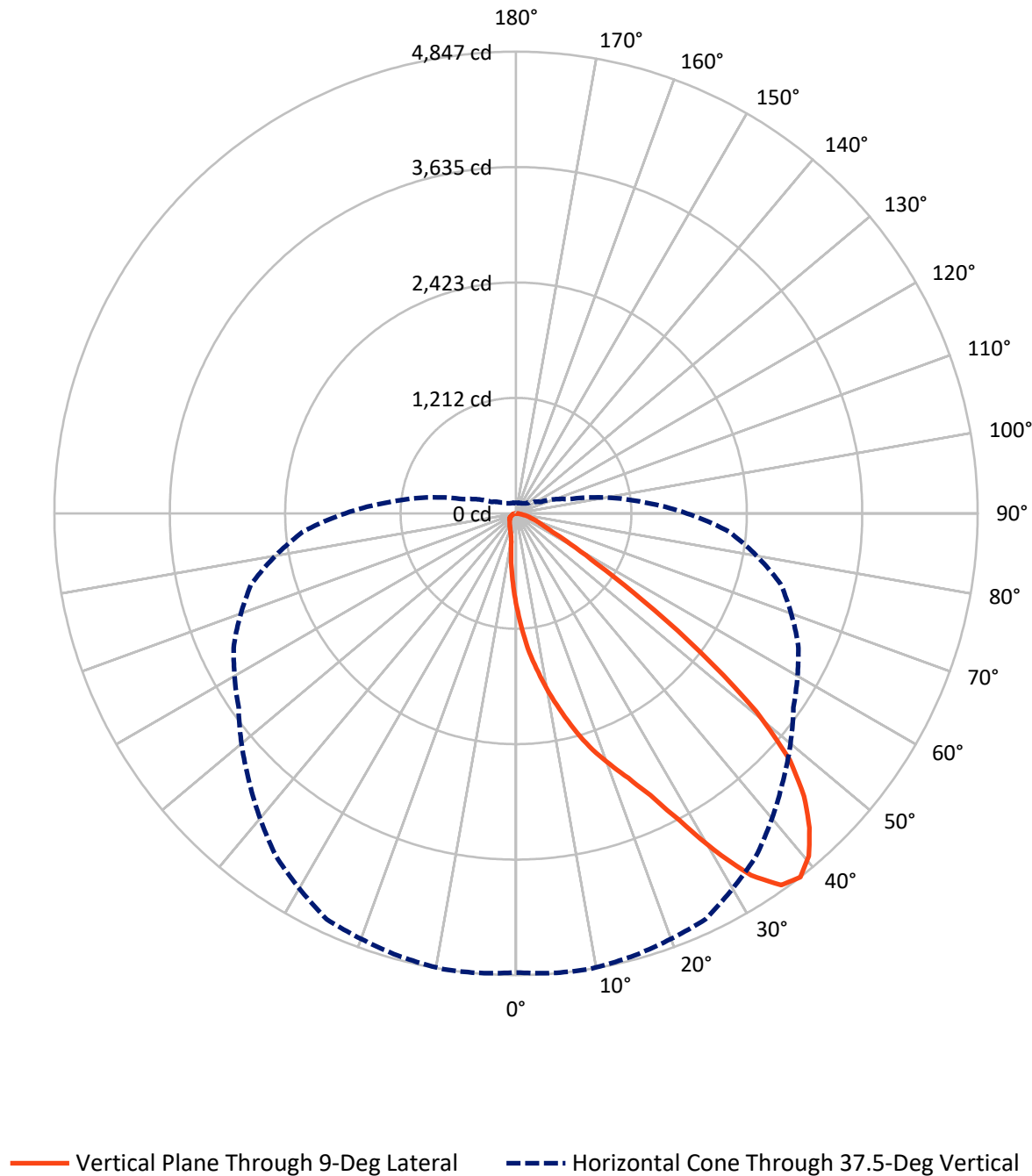
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.3 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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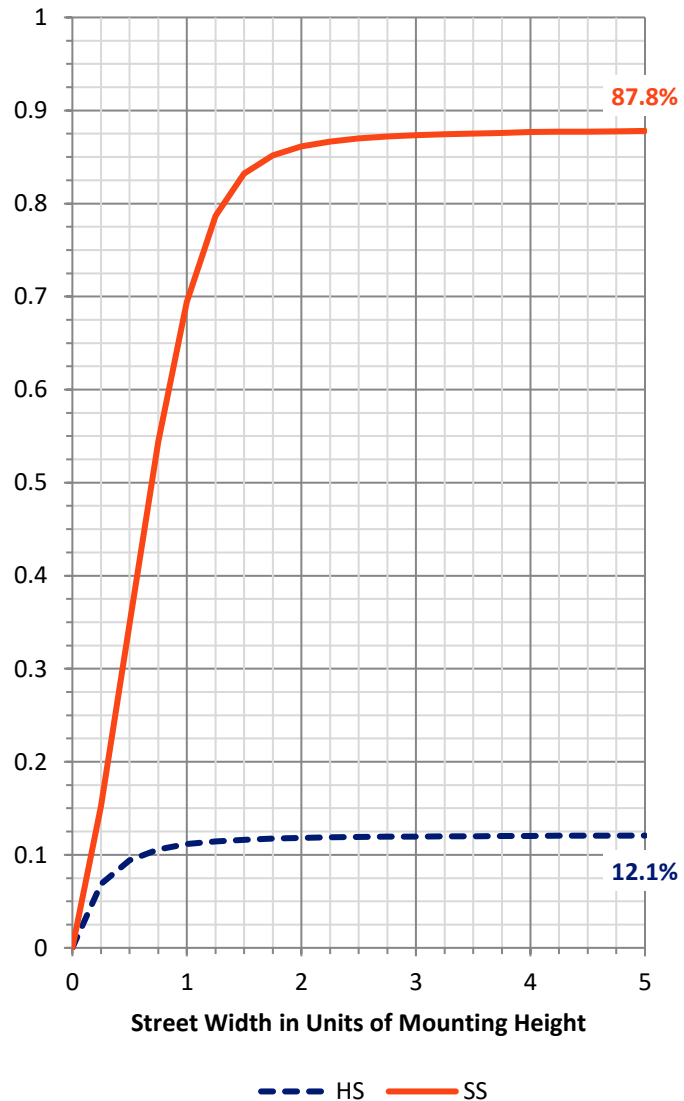
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	904.2	0.0	904.2
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	6530.8	0.0	6530.8
	% Fixture	87.8	0.0	87.8
Total	Lumens	7435.0	0.0	7435.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.8	1.3
10°-20°	343.4	4.6
20°-30°	705.5	9.5
30°-40°	1247.1	16.8
40°-50°	1656.6	22.3
50°-60°	1571.2	21.1
60°-70°	1198.7	16.1
70°-80°	581.1	7.8
80°-90°	32.7	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°	7435.0	100.0
0°-180°	7435.0	100.0

Coefficient of Utilization



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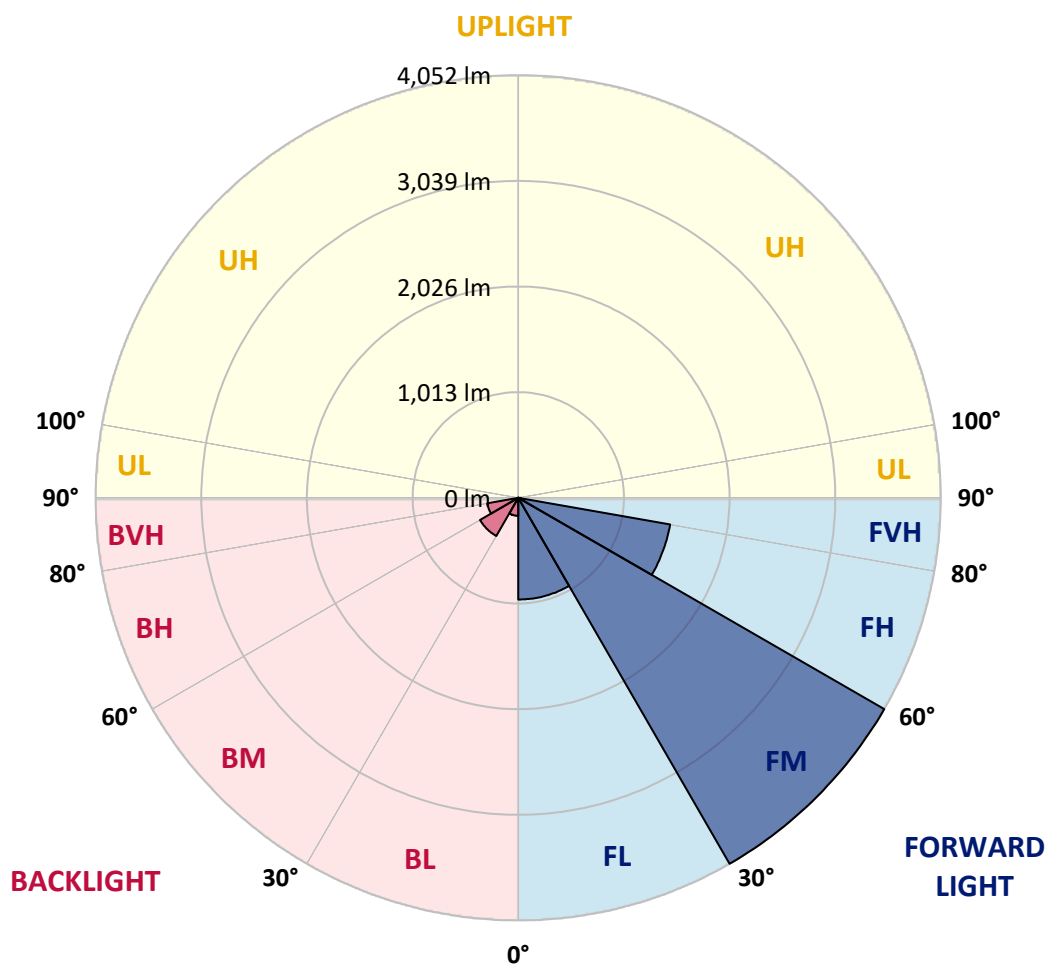
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	975.1	13.1			
FM	(30°-60°)	4051.7	54.5			
FH	(60°-80°)	1478.1	19.9			G1/1800
FVH	(80°-90°)	25.9	0.3			G1/100
BL	(0°-30°)	172.6	2.3	B1/500		
BM	(30°-60°)	423.1	5.7	B1/1000		
BH	(60°-80°)	301.7	4.1	B1/500		G1/500
BVH	(80°-90°)	6.8	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°	982.8	982.8	982.8	982.8	982.8	982.8	982.8	982.8	982.8	982.8	982.8
2.5°	1217.8	1196.5	1220.9	1217.8	1196.5	1182.7	1140.0	1126.3	1075.9	1039.3	1007.2
5°	1468.1	1446.8	1468.1	1462.0	1431.5	1397.9	1327.7	1281.9	1191.9	1112.5	1040.8
7.5°	1675.7	1675.7	1684.8	1686.4	1649.7	1597.8	1510.9	1442.2	1315.5	1193.4	1079.0
10°	1900.0	1901.5	1921.4	1907.6	1858.8	1788.6	1678.7	1591.7	1439.1	1278.9	1115.6
12.5°	2139.6	2141.1	2147.2	2141.1	2083.1	1993.1	1860.3	1745.9	1570.4	1376.6	1166.0
15°	2379.2	2380.7	2388.4	2377.7	2313.6	2208.3	2057.2	1916.8	1709.2	1486.4	1227.0
17.5°	2603.5	2606.6	2612.7	2599.0	2531.8	2406.7	2252.5	2083.1	1857.3	1603.9	1295.7
20°	2805.0	2808.0	2812.6	2794.3	2727.2	2602.0	2435.7	2258.6	2008.4	1724.5	1370.4
22.5°	3008.0	3011.0	3018.7	2994.2	2919.5	2776.0	2612.7	2429.6	2168.6	1857.3	1457.4
25°	3267.4	3270.5	3276.6	3241.5	3139.2	2971.3	2798.9	2611.2	2342.6	2006.8	1564.3
27.5°	3647.4	3644.4	3644.4	3580.3	3404.8	3186.5	2986.6	2795.8	2530.3	2167.1	1681.8
30°	4117.5	4109.8	4105.2	4018.3	3768.0	3429.2	3178.9	2968.3	2710.4	2336.5	1808.4
32.5°	4538.7	4538.7	4529.5	4437.9	4172.4	3755.8	3383.4	3136.2	2884.4	2507.4	1939.7
35°	4787.4	4798.1	4793.5	4724.8	4531.0	4106.8	3659.6	3337.6	3067.5	2686.0	2096.9
37.5°	4821.0	4842.4	4846.9	4805.7	4703.5	4393.7	3966.4	3555.8	3268.9	2878.2	2249.5
40°	4685.2	4731.0	4731.0	4724.8	4688.2	4529.5	4224.3	3809.2	3476.5	3078.2	2403.6
42.5°	4476.1	4523.4	4517.3	4540.2	4531.0	4497.5	4369.3	4045.7	3684.0	3284.2	2544.0
45°	4202.9	4251.8	4239.5	4280.7	4299.1	4335.7	4354.0	4210.5	3888.5	3508.5	2701.2
47.5°	3764.9	3847.3	3865.6	3938.9	4015.2	4129.7	4216.7	4270.1	4079.3	3749.7	2872.1
50°	3117.8	3233.8	3270.5	3424.6	3633.7	3870.2	4010.6	4196.8	4213.6	3996.9	3056.8
52.5°	2232.7	2367.0	2423.5	2676.8	3107.2	3519.2	3772.6	4035.0	4265.5	4233.4	3256.7
55°	1443.7	1558.2	1613.1	1851.2	2423.5	3070.5	3491.7	3826.0	4236.5	4450.1	3485.6
57.5°	889.7	955.3	992.0	1196.5	1723.0	2495.2	3124.0	3633.7	4148.0	4637.9	3723.7
60°	599.8	637.9	656.2	752.4	1170.5	1864.9	2618.8	3432.2	4032.0	4764.5	3940.4
62.5°	398.3	410.5	428.8	488.4	772.2	1309.4	2011.4	3072.1	3945.0	4772.2	4100.7
65°	308.3	314.4	322.0	348.0	476.1	915.7	1414.7	2489.1	3815.3	4610.4	4151.0
67.5°	242.7	248.8	257.9	271.6	344.9	621.1	963.0	1823.7	3549.7	4357.1	4068.6
70°	190.8	195.3	201.4	213.7	268.6	450.2	636.4	1211.7	3014.1	4115.9	3809.2
72.5°	151.1	155.7	161.8	174.0	218.2	329.6	436.5	755.4	2324.3	3821.4	3310.1
75°	119.0	122.1	126.7	138.9	175.5	256.4	296.1	451.7	1579.5	3282.7	2579.1
77.5°	59.5	73.3	83.9	96.1	128.2	177.0	196.9	250.3	666.9	1684.8	1230.0
80°	35.1	42.7	45.8	53.4	83.9	106.8	106.8	100.7	210.6	647.1	502.1
82.5°	19.8	27.5	29.0	30.5	50.4	61.0	48.8	36.6	42.7	216.7	146.5
85°	6.1	9.2	10.7	12.2	16.8	18.3	16.8	15.3	12.2	21.4	13.7
87.5°	0.0	0.0	0.0	0.0	1.5	3.1	3.1	3.1	4.6	4.6	4.6
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°	982.8	982.8	982.8	982.8	982.8	982.8	982.8	982.8	982.8	982.8	982.8
2.5°	988.9	969.1	930.9	895.8	862.3	837.8	814.9	793.6	778.3	766.1	764.6
5°	1002.7	963.0	889.7	821.0	758.5	706.6	662.3	627.2	601.3	583.0	581.4
7.5°	1021.0	959.9	848.5	746.3	653.2	578.4	514.3	467.0	433.4	419.7	409.0
10°	1036.2	956.9	807.3	671.5	549.4	454.8	378.5	331.2	306.7	297.6	293.0
12.5°	1062.2	959.9	772.2	602.8	459.4	348.0	290.0	264.0	253.3	245.7	244.2
15°	1100.3	973.7	738.6	535.7	367.8	280.8	247.2	230.4	219.8	218.2	216.7
17.5°	1138.5	985.9	708.1	467.0	305.2	244.2	221.3	207.6	199.9	198.4	198.4
20°	1182.7	1001.1	674.5	401.4	261.0	219.8	201.4	190.8	181.6	180.1	180.1
22.5°	1234.6	1022.5	642.5	343.4	232.0	201.4	186.2	174.0	166.3	164.8	164.8
25°	1304.8	1054.5	616.5	300.6	212.1	186.2	172.5	161.8	155.7	152.6	152.6
27.5°	1382.7	1098.8	598.2	274.7	198.4	174.0	160.2	151.1	145.0	141.9	141.9
30°	1469.6	1147.6	586.0	264.0	190.8	163.3	151.1	141.9	134.3	132.8	132.8
32.5°	1565.8	1204.1	578.4	265.5	189.2	155.7	141.9	132.8	126.7	123.6	123.6
35°	1672.6	1266.7	573.8	274.7	192.3	149.6	134.3	125.1	119.0	116.0	116.0
37.5°	1791.7	1339.9	573.8	283.9	199.9	148.0	126.7	117.5	112.9	109.9	109.9
40°	1903.1	1417.8	579.9	294.5	207.6	148.0	120.6	112.9	106.8	103.8	103.8
42.5°	1990.1	1462.0	584.5	305.2	212.1	146.5	114.5	106.8	102.2	99.2	99.2
45°	2089.2	1509.3	575.3	309.8	212.1	143.5	109.9	102.2	97.7	94.6	94.6
47.5°	2199.1	1567.3	573.8	312.9	207.6	137.4	105.3	97.7	94.6	91.6	91.6
50°	2310.5	1631.4	576.9	311.3	201.4	128.2	99.2	94.6	90.0	87.0	87.0
52.5°	2437.2	1698.6	583.0	308.3	187.7	117.5	94.6	90.0	85.5	82.4	80.9
55°	2577.6	1771.8	595.2	302.2	169.4	106.8	90.0	85.5	79.4	76.3	74.8
57.5°	2739.4	1861.9	608.9	290.0	149.6	97.7	85.5	79.4	70.2	65.6	64.1
60°	2893.5	1964.1	624.2	261.0	129.7	88.5	80.9	71.7	62.6	59.5	58.0
62.5°	3038.5	2064.8	631.8	209.1	109.9	80.9	76.3	65.6	56.5	53.4	51.9
65°	3131.6	2174.7	615.0	141.9	90.0	74.8	70.2	61.0	51.9	47.3	47.3
67.5°	3137.7	2226.6	557.0	93.1	73.3	67.1	64.1	54.9	45.8	42.7	41.2
70°	2983.6	2148.8	425.8	73.3	61.0	58.0	58.0	48.8	39.7	36.6	35.1
72.5°	2629.5	1903.1	271.6	59.5	51.9	48.8	48.8	41.2	35.1	30.5	29.0
75°	2075.5	1468.1	145.0	48.8	42.7	41.2	38.2	33.6	29.0	25.9	24.4
77.5°	953.8	647.1	67.1	35.1	32.0	32.0	29.0	24.4	22.9	19.8	19.8
80°	377.0	219.8	33.6	22.9	21.4	21.4	21.4	16.8	16.8	13.7	12.2
82.5°	103.8	45.8	16.8	13.7	13.7	13.7	12.2	10.7	10.7	9.2	9.2
85°	10.7	7.6	7.6	7.6	7.6	6.1	6.1	4.6	3.1	3.1	3.1
87.5°	4.6	4.6	4.6	4.6	4.6	3.1	1.5	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)