

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: P842387

Luminaire Tested: **ARCH4-40-730-U-T2R-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842387
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: ARCH4-40-730-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 355mA 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: 5310 lumens
Efficiency: N/A
Efficacy: 121.2 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): 43.8
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



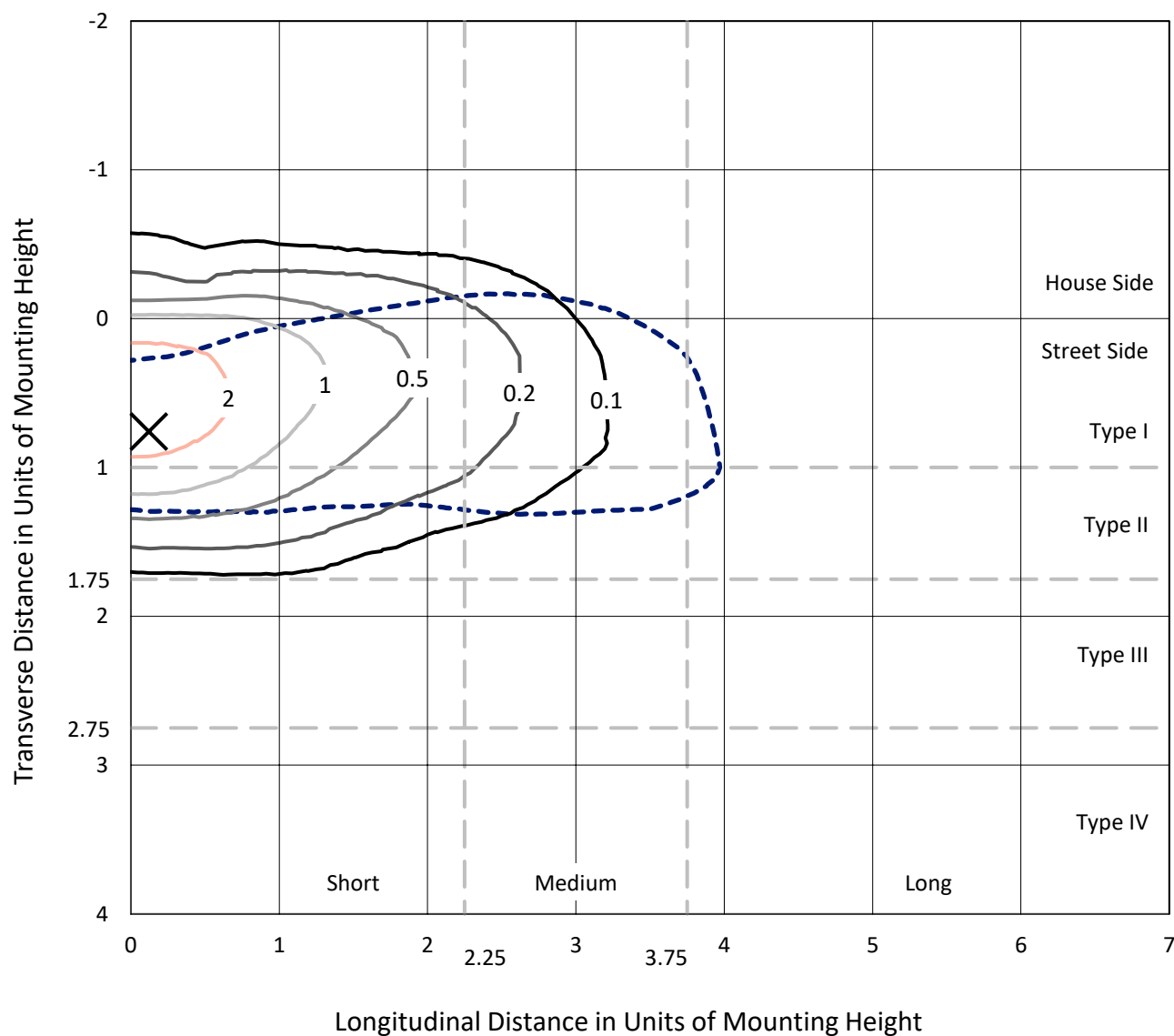
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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

--- 1/2 Max cd

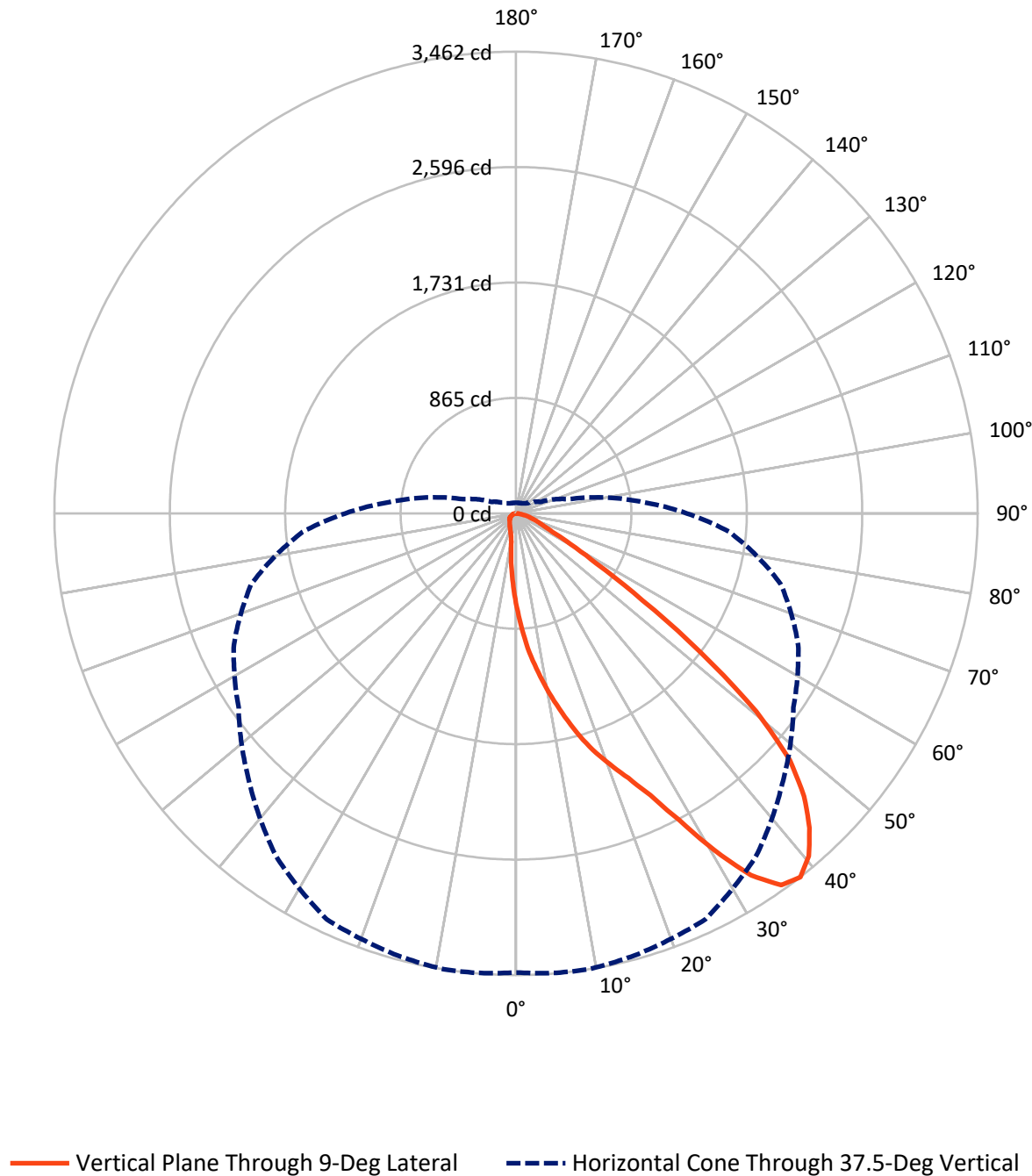


Based on 25 foot mounting height. Maximum calculated value = 3.1 fc

Type II - Short - N/A

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Luminous Intensity Polar Plot



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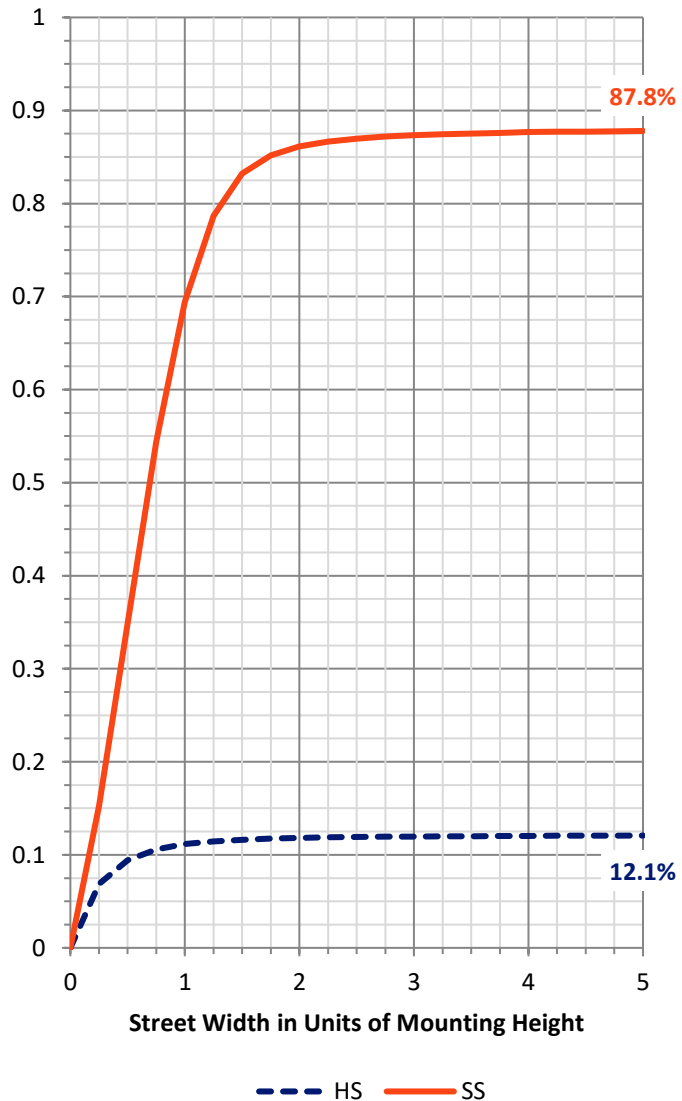
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	645.8	0.0	645.8
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	4664.2	0.0	4664.2
	% Fixture	87.8	0.0	87.8
Total	Lumens	5310.0	0.0	5310.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.6	1.3
10°-20°	245.2	4.6
20°-30°	503.9	9.5
30°-40°	890.6	16.8
40°-50°	1183.1	22.3
50°-60°	1122.1	21.1
60°-70°	856.1	16.1
70°-80°	415.0	7.8
80°-90°	23.4	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°	5310.0	100.0
0°-180°	5310.0	100.0

Coefficient of Utilization



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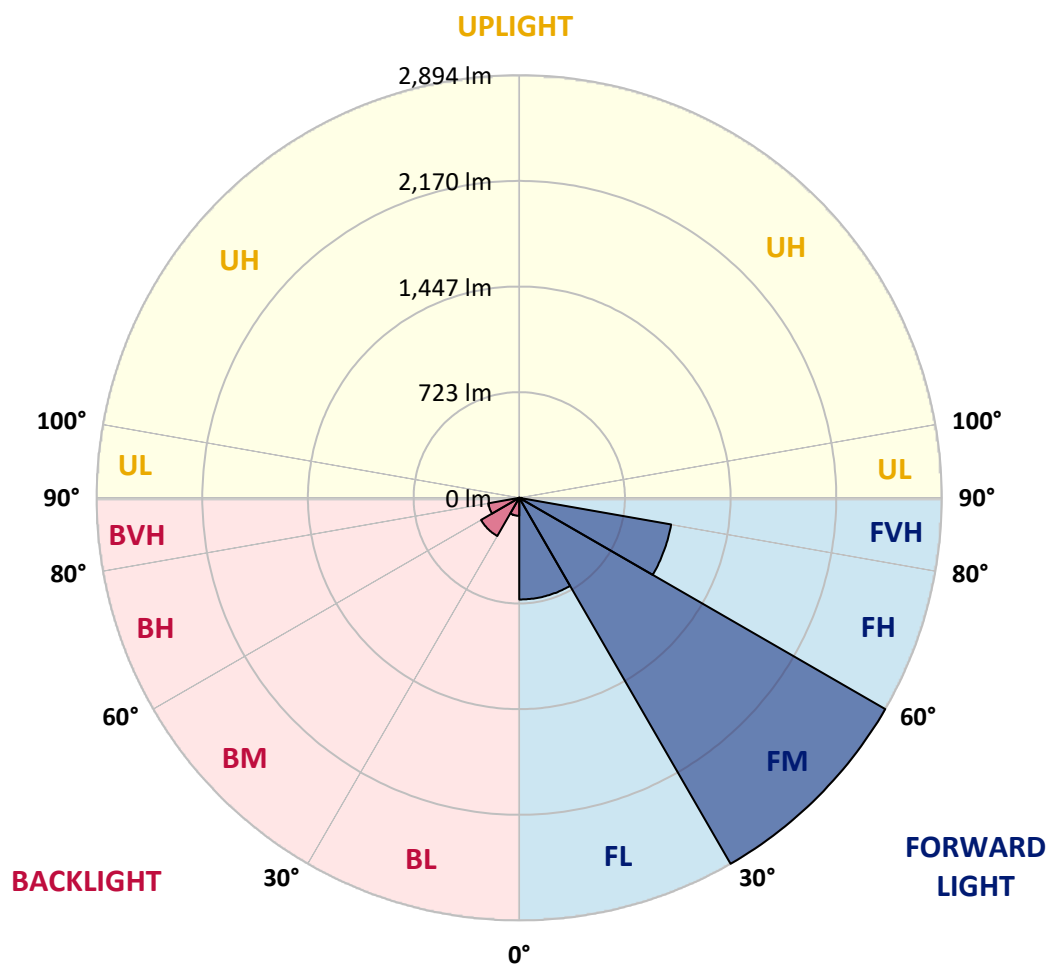
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	696.4	13.1			
FM	(30°-60°)	2893.7	54.5			
FH	(60°-80°)	1055.6	19.9			G1/1800
FVH	(80°-90°)	18.5	0.3			G1/100
BL	(0°-30°)	123.2	2.3	B1/500		
BM	(30°-60°)	302.2	5.7	B1/1000		
BH	(60°-80°)	215.5	4.1	B1/500		G1/500
BVH	(80°-90°)	4.9	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°	701.9	701.9	701.9	701.9	701.9	701.9	701.9	701.9	701.9	701.9	701.9
2.5°	869.8	854.5	871.9	869.8	854.5	844.7	814.2	804.4	768.4	742.2	719.4
5°	1048.5	1033.3	1048.5	1044.2	1022.4	998.4	948.2	915.5	851.2	794.6	743.3
7.5°	1196.7	1196.7	1203.3	1204.4	1178.2	1141.2	1079.0	1030.0	939.5	852.3	770.6
10°	1357.0	1358.1	1372.2	1362.4	1327.5	1277.4	1198.9	1136.8	1027.8	913.4	796.7
12.5°	1528.1	1529.2	1533.5	1529.2	1487.8	1423.5	1328.6	1246.9	1121.5	983.1	832.7
15°	1699.2	1700.3	1705.7	1698.1	1652.3	1577.1	1469.2	1369.0	1220.7	1061.6	876.3
17.5°	1859.4	1861.6	1866.0	1856.2	1808.2	1718.8	1608.7	1487.8	1326.5	1145.5	925.4
20°	2003.3	2005.5	2008.7	1995.7	1947.7	1858.3	1739.5	1613.1	1434.4	1231.6	978.8
22.5°	2148.3	2150.4	2155.9	2138.5	2085.0	1982.6	1866.0	1735.2	1548.8	1326.5	1040.9
25°	2333.5	2335.7	2340.1	2315.0	2242.0	2122.1	1998.9	1864.9	1673.0	1433.3	1117.2
27.5°	2604.9	2602.8	2602.8	2557.0	2431.6	2275.8	2133.0	1996.8	1807.1	1547.7	1201.1
30°	2940.6	2935.2	2931.9	2869.8	2691.0	2449.1	2270.3	2119.9	1935.7	1668.7	1291.6
32.5°	3241.5	3241.5	3234.9	3169.5	2979.9	2682.3	2416.4	2239.8	2060.0	1790.8	1385.3
35°	3419.1	3426.8	3423.5	3374.4	3236.0	2933.0	2613.7	2383.7	2190.8	1918.3	1497.6
37.5°	3443.1	3458.4	3461.6	3432.2	3359.2	3137.9	2832.7	2539.5	2334.6	2055.6	1606.6
40°	3346.1	3378.8	3378.8	3374.4	3348.3	3234.9	3016.9	2720.5	2482.9	2198.4	1716.6
42.5°	3196.8	3230.6	3226.2	3242.6	3236.0	3212.0	3120.5	2889.4	2631.1	2345.5	1816.9
45°	3001.7	3036.6	3027.8	3057.3	3070.3	3096.5	3109.6	3007.1	2777.2	2505.8	1929.2
47.5°	2688.9	2747.7	2760.8	2813.1	2867.6	2949.4	3011.5	3049.6	2913.4	2678.0	2051.3
50°	2226.7	2309.6	2335.7	2445.8	2595.1	2764.1	2864.3	2997.3	3009.3	2854.5	2183.1
52.5°	1594.6	1690.5	1730.8	1911.7	2219.1	2513.4	2694.3	2881.8	3046.4	3023.5	2325.9
55°	1031.1	1112.8	1152.1	1322.1	1730.8	2192.9	2493.8	2732.5	3025.7	3178.2	2489.4
57.5°	635.4	682.3	708.5	854.5	1230.5	1782.0	2231.1	2595.1	2962.4	3312.3	2659.4
60°	428.3	455.6	468.7	537.3	836.0	1331.9	1870.3	2451.3	2879.6	3402.8	2814.2
62.5°	284.5	293.2	306.3	348.8	551.5	935.2	1436.5	2194.0	2817.5	3408.2	2928.7
65°	220.2	224.5	230.0	248.5	340.1	654.0	1010.4	1777.7	2724.8	3292.7	2964.6
67.5°	173.3	177.7	184.2	194.0	246.3	443.6	687.7	1302.5	2535.2	3111.8	2905.8
70°	136.2	139.5	143.9	152.6	191.8	321.5	454.5	865.4	2152.6	2939.6	2720.5
72.5°	107.9	111.2	115.5	124.3	155.9	235.4	311.7	539.5	1660.0	2729.2	2364.1
75°	85.0	87.2	90.5	99.2	125.3	183.1	211.4	322.6	1128.1	2344.4	1842.0
77.5°	42.5	52.3	59.9	68.7	91.6	126.4	140.6	178.7	476.3	1203.3	878.5
80°	25.1	30.5	32.7	38.1	59.9	76.3	76.3	71.9	150.4	462.1	358.6
82.5°	14.2	19.6	20.7	21.8	36.0	43.6	34.9	26.2	30.5	154.8	104.6
85°	4.4	6.5	7.6	8.7	12.0	13.1	12.0	10.9	8.7	15.3	9.8
87.5°	0.0	0.0	0.0	0.0	1.1	2.2	2.2	2.2	3.3	3.3	3.3
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°	701.9	701.9	701.9	701.9	701.9	701.9	701.9	701.9	701.9	701.9	701.9
2.5°	706.3	692.1	664.9	639.8	615.8	598.4	582.0	566.8	555.9	547.1	546.1
5°	716.1	687.7	635.4	586.4	541.7	504.6	473.0	448.0	429.4	416.4	415.3
7.5°	729.2	685.6	606.0	533.0	466.5	413.1	367.3	333.5	309.5	299.7	292.1
10°	740.1	683.4	576.6	479.6	392.4	324.8	270.3	236.5	219.1	212.5	209.3
12.5°	758.6	685.6	551.5	430.5	328.1	248.5	207.1	188.6	180.9	175.5	174.4
15°	785.8	695.4	527.5	382.6	262.7	200.5	176.6	164.6	157.0	155.9	154.8
17.5°	813.1	704.1	505.7	333.5	218.0	174.4	158.0	148.2	142.8	141.7	141.7
20°	844.7	715.0	481.8	286.7	186.4	157.0	143.9	136.2	129.7	128.6	128.6
22.5°	881.8	730.3	458.9	245.2	165.7	143.9	133.0	124.3	118.8	117.7	117.7
25°	931.9	753.1	440.3	214.7	151.5	133.0	123.2	115.5	111.2	109.0	109.0
27.5°	987.5	784.8	427.3	196.2	141.7	124.3	114.4	107.9	103.5	101.4	101.4
30°	1049.6	819.6	418.5	188.6	136.2	116.6	107.9	101.4	95.9	94.8	94.8
32.5°	1118.3	860.0	413.1	189.6	135.2	111.2	101.4	94.8	90.5	88.3	88.3
35°	1194.6	904.6	409.8	196.2	137.3	106.8	95.9	89.4	85.0	82.8	82.8
37.5°	1279.6	957.0	409.8	202.7	142.8	105.7	90.5	83.9	80.7	78.5	78.5
40°	1359.1	1012.5	414.2	210.4	148.2	105.7	86.1	80.7	76.3	74.1	74.1
42.5°	1421.3	1044.2	417.4	218.0	151.5	104.6	81.7	76.3	73.0	70.8	70.8
45°	1492.1	1077.9	410.9	221.3	151.5	102.5	78.5	73.0	69.8	67.6	67.6
47.5°	1570.6	1119.4	409.8	223.4	148.2	98.1	75.2	69.8	67.6	65.4	65.4
50°	1650.2	1165.1	412.0	222.3	143.9	91.6	70.8	67.6	64.3	62.1	62.1
52.5°	1740.6	1213.1	416.4	220.2	134.1	83.9	67.6	64.3	61.0	58.9	57.8
55°	1840.9	1265.4	425.1	215.8	121.0	76.3	64.3	61.0	56.7	54.5	53.4
57.5°	1956.4	1329.7	434.9	207.1	106.8	69.8	61.0	56.7	50.1	46.9	45.8
60°	2066.5	1402.7	445.8	186.4	92.6	63.2	57.8	51.2	44.7	42.5	41.4
62.5°	2170.1	1474.7	451.2	149.3	78.5	57.8	54.5	46.9	40.3	38.1	37.1
65°	2236.5	1553.2	439.2	101.4	64.3	53.4	50.1	43.6	37.1	33.8	33.8
67.5°	2240.9	1590.2	397.8	66.5	52.3	48.0	45.8	39.2	32.7	30.5	29.4
70°	2130.8	1534.6	304.1	52.3	43.6	41.4	41.4	34.9	28.3	26.2	25.1
72.5°	1878.0	1359.1	194.0	42.5	37.1	34.9	34.9	29.4	25.1	21.8	20.7
75°	1482.3	1048.5	103.5	34.9	30.5	29.4	27.2	24.0	20.7	18.5	17.4
77.5°	681.2	462.1	48.0	25.1	22.9	22.9	20.7	17.4	16.3	14.2	14.2
80°	269.2	157.0	24.0	16.3	15.3	15.3	15.3	12.0	12.0	9.8	8.7
82.5°	74.1	32.7	12.0	9.8	9.8	9.8	8.7	7.6	7.6	6.5	6.5
85°	7.6	5.4	5.4	5.4	5.4	4.4	4.4	3.3	2.2	2.2	2.2
87.5°	3.3	3.3	3.3	3.3	3.3	2.2	1.1	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)