

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: P836906

Luminaire Tested: **ARCH3-90-730-U-T4W-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836906
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-90-730-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 735mA LIGHTSQUARE WITH 40 LEDS AND TYPE IV WIDE OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9959 lumens
Efficiency: N/A
Efficacy: 107.0 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

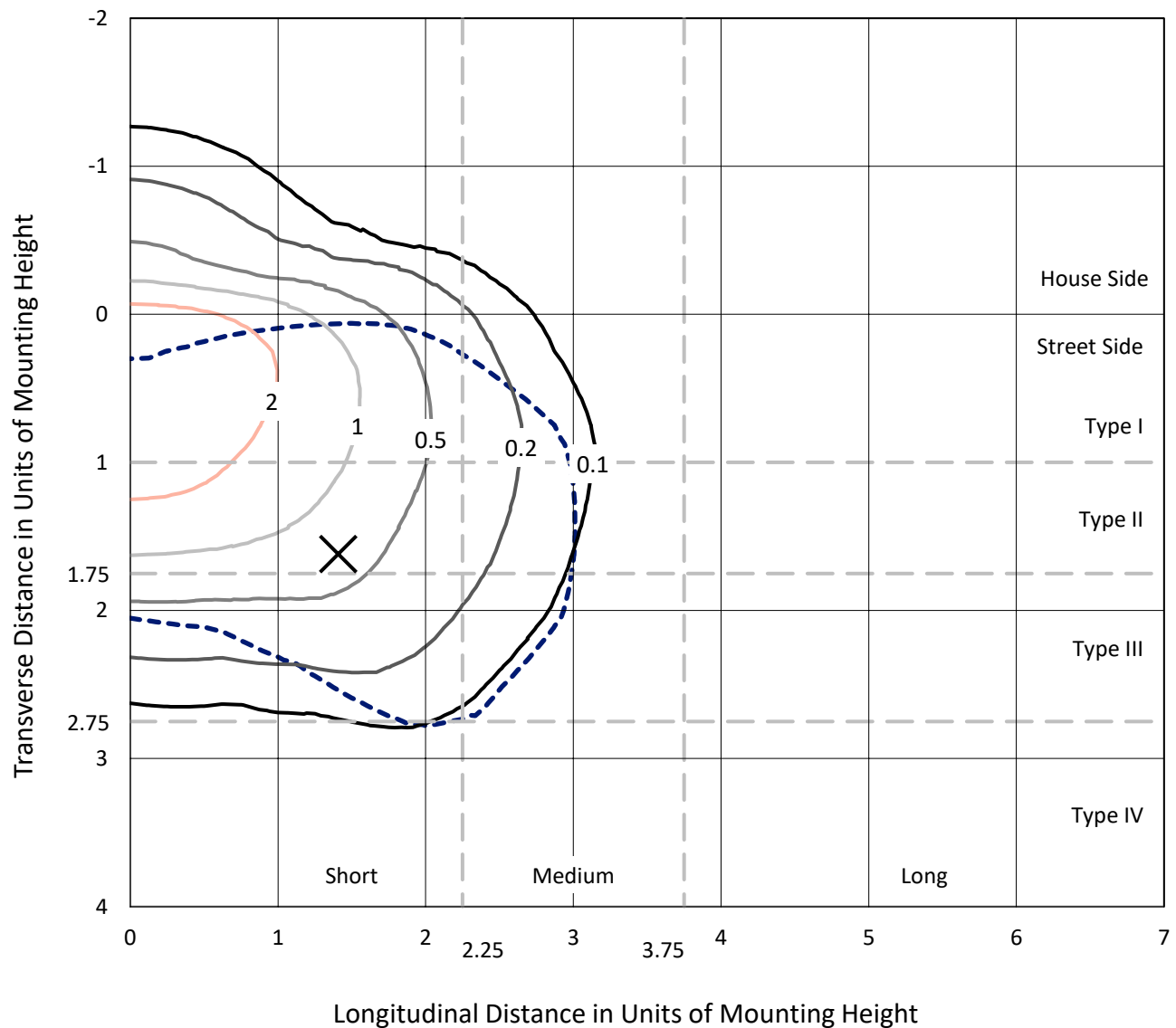
Input Watts (W): 93.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

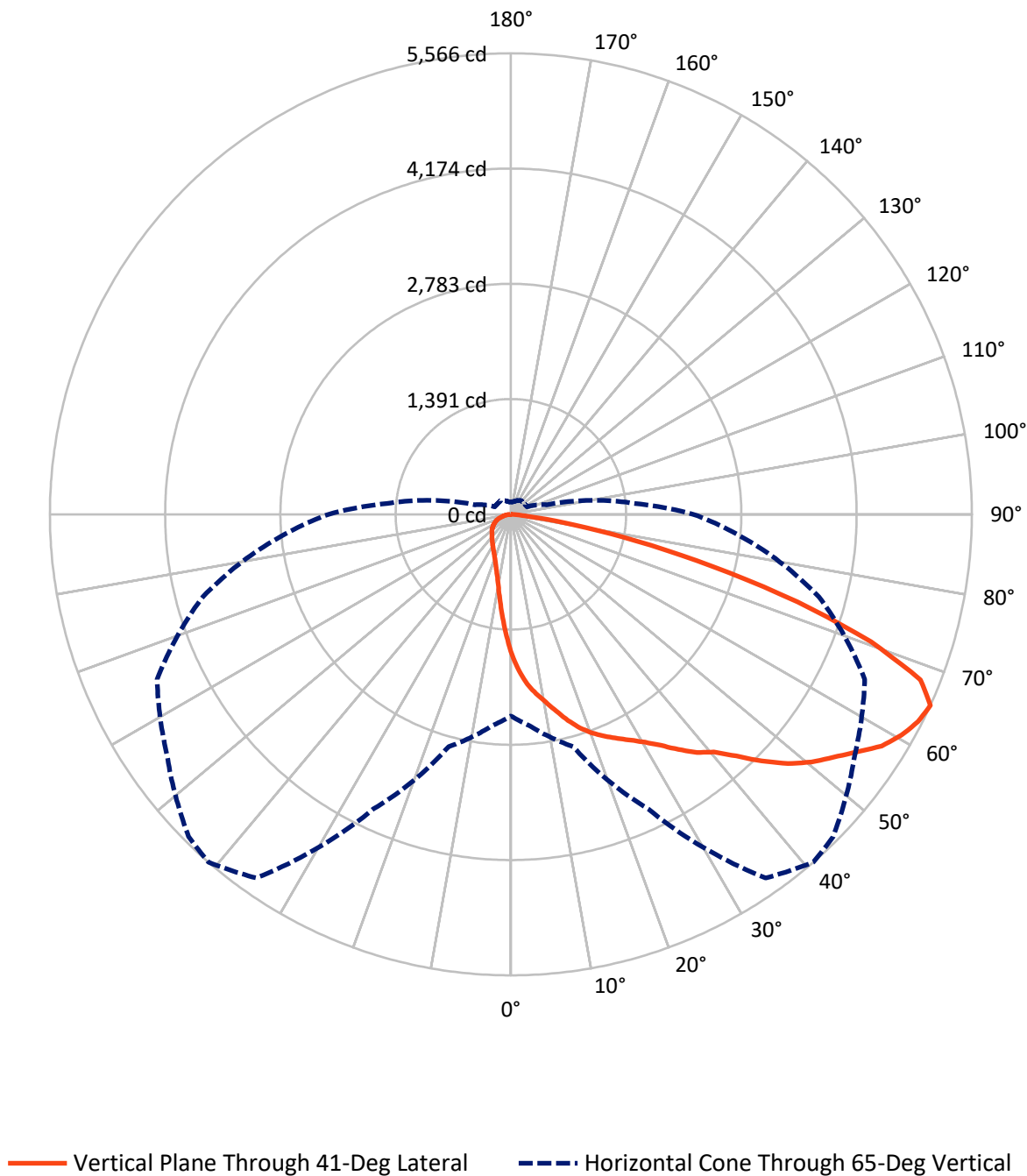
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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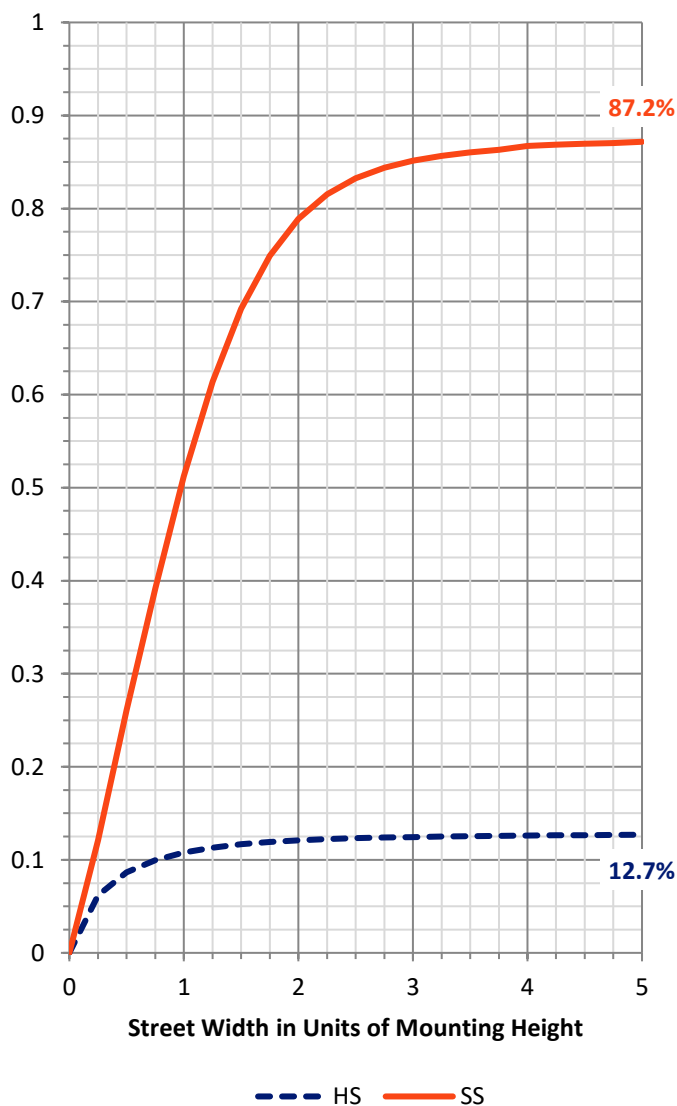
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1278.5	0.0	1278.5
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	8680.4	0.0	8680.4
	% Fixture	87.2	0.0	87.2
Total	Lumens	9959.0	0.0	9959.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.1	1.6
10°-20°	474.1	4.8
20°-30°	815.6	8.2
30°-40°	1237.0	12.4
40°-50°	1812.3	18.2
50°-60°	2288.5	23.0
60°-70°	2145.9	21.5
70°-80°	956.4	9.6
80°-90°	70.8	0.7
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°	9959.0	100.0
0°-180°	9959.0	100.0

Coefficient of Utilization



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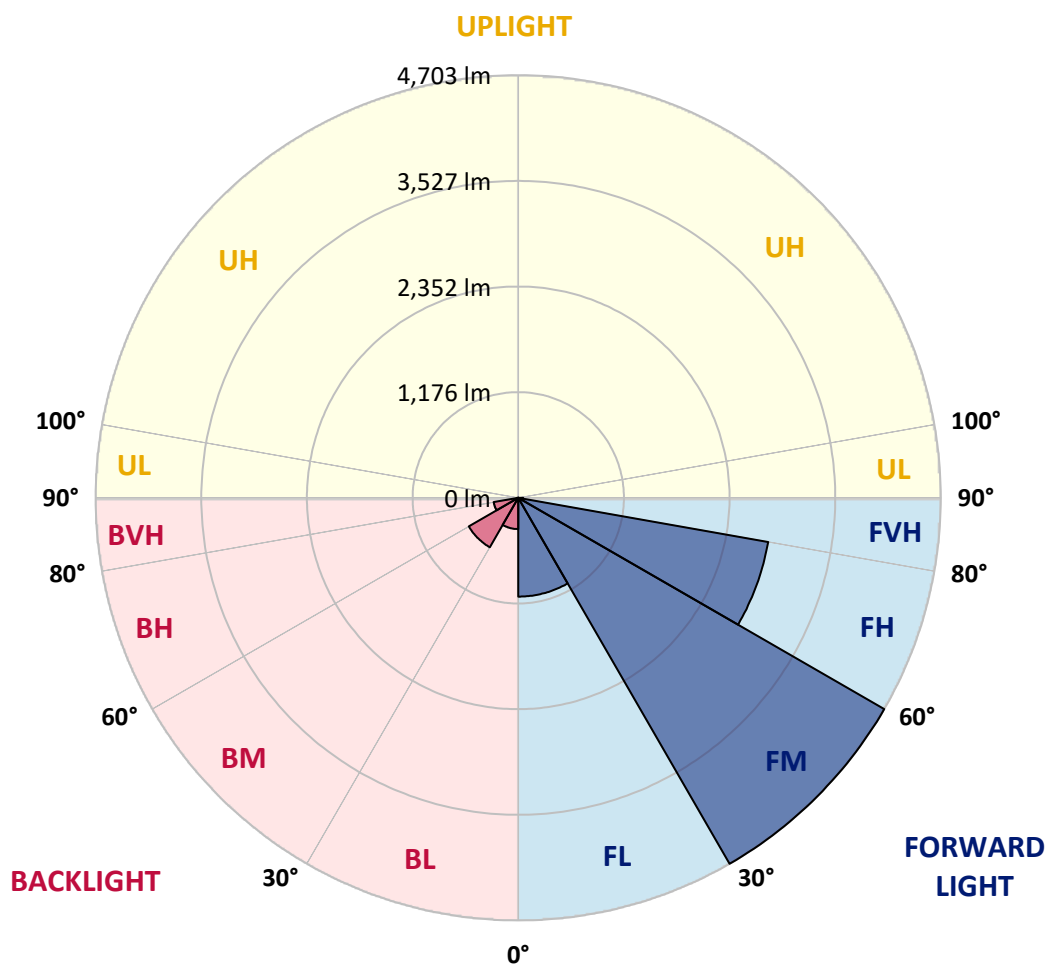
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1099.8	11.0			
FM	(30°-60°)	4703.0	47.2			
FH	(60°-80°)	2824.6	28.4			G2/5000
FVH	(80°-90°)	52.9	0.5			G1/100
BL	(0°-30°)	348.0	3.5	B1/500		
BM	(30°-60°)	634.9	6.4	B1/1000		
BH	(60°-80°)	277.7	2.8	B1/500		G1/500
BVH	(80°-90°)	17.9	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	1697.0	1697.0	1697.0	1697.0	1697.0	1697.0	1697.0	1697.0	1697.0	1697.0	1697.0
2.5°	1957.4	1951.1	1946.9	1923.8	1923.8	1892.3	1894.4	1865.0	1829.3	1772.6	1711.7
5°	2142.2	2133.8	2123.3	2100.2	2091.8	2060.3	2056.1	2014.1	1953.2	1854.5	1745.3
7.5°	2303.9	2295.5	2280.8	2247.2	2224.1	2186.3	2175.8	2121.2	2054.0	1932.2	1778.9
10°	2450.9	2444.6	2425.7	2383.7	2352.2	2306.0	2287.1	2213.6	2129.6	1995.2	1806.2
12.5°	2600.0	2591.6	2566.4	2530.7	2492.9	2438.3	2415.2	2320.7	2213.6	2064.5	1846.1
15°	2738.7	2726.1	2707.2	2669.4	2635.8	2583.2	2558.0	2446.7	2316.5	2142.2	1898.6
17.5°	2829.0	2818.5	2801.7	2780.7	2753.4	2713.5	2688.3	2579.0	2419.4	2217.8	1953.2
20°	2883.6	2879.4	2873.1	2860.5	2847.9	2820.6	2801.7	2698.8	2530.7	2291.3	2005.7
22.5°	2925.6	2921.4	2919.3	2919.3	2921.4	2910.9	2898.3	2810.1	2637.9	2369.0	2054.0
25°	2990.7	2988.6	2984.4	2980.2	2994.9	2997.0	2992.8	2931.9	2772.3	2471.9	2114.9
27.5°	3081.0	3074.7	3066.3	3062.1	3076.8	3087.3	3095.7	3053.7	2915.1	2576.9	2184.2
30°	3219.6	3200.7	3179.7	3165.0	3175.5	3192.3	3211.2	3186.0	3062.1	2707.2	2255.6
32.5°	3383.4	3360.3	3312.0	3284.7	3312.0	3324.6	3339.3	3326.7	3215.4	2847.9	2327.0
35°	3582.9	3555.6	3505.2	3465.3	3513.6	3486.3	3480.0	3467.4	3360.3	2986.5	2406.8
37.5°	3914.8	3874.9	3795.1	3706.9	3706.9	3648.0	3624.9	3587.1	3490.5	3110.4	2484.5
40°	4299.1	4246.6	4143.7	4013.5	3893.8	3772.0	3757.3	3730.0	3643.8	3253.2	2572.7
42.5°	4721.2	4620.4	4477.6	4320.1	4126.9	3988.3	3954.7	3877.0	3793.0	3398.1	2661.0
45°	5189.6	4979.6	4771.7	4691.8	4372.6	4246.6	4183.6	4042.9	3948.4	3549.3	2753.4
47.5°	5265.2	5101.4	4962.8	4950.2	4601.5	4496.5	4425.1	4223.5	4116.4	3711.1	2850.0
50°	5223.2	5124.5	5139.2	5088.8	4769.6	4700.2	4645.6	4416.7	4282.3	3866.5	2938.2
52.5°	5046.8	5101.4	5185.4	5093.0	4929.2	4872.5	4845.2	4624.6	4437.7	4009.3	3018.0
55°	4836.8	4874.6	5055.2	5168.6	5114.0	5063.6	5038.4	4866.2	4591.0	4129.0	3091.5
57.5°	4530.1	4513.3	4712.8	5156.0	5307.2	5277.8	5250.5	5103.5	4733.9	4215.1	3137.7
60°	4070.2	4034.5	4286.5	4904.0	5370.2	5416.4	5403.8	5261.0	4843.1	4213.0	3118.8
62.5°	3274.2	3362.4	3711.1	4492.3	5397.5	5515.1	5492.0	5273.6	4878.8	4091.2	2999.1
65°	2434.1	2560.1	2902.5	3925.3	5359.7	5565.5	5502.5	5067.8	4712.8	3849.7	2736.6
67.5°	1753.7	1865.0	2114.9	3230.1	4996.4	5334.5	5261.0	4731.8	4330.6	3507.3	2373.2
70°	1199.2	1279.0	1449.1	2352.2	4265.5	4612.0	4565.8	4229.8	3727.9	3099.9	1928.0
72.5°	846.4	880.0	989.2	1552.0	3240.6	3618.6	3564.0	3480.0	2994.9	2576.9	1499.5
75°	634.3	655.3	714.1	1003.9	2186.3	2507.6	2457.2	2505.5	2236.7	1951.1	1092.1
77.5°	239.4	260.4	405.3	640.6	1293.7	1539.4	1489.0	1518.4	1243.3	985.0	544.0
80°	65.1	69.3	134.4	304.5	588.1	766.6	697.3	598.6	462.0	453.6	287.7
82.5°	27.3	31.5	60.9	163.8	210.0	210.0	176.4	218.4	176.4	212.1	138.6
85°	10.5	12.6	14.7	42.0	27.3	29.4	31.5	42.0	35.7	44.1	31.5
87.5°	0.0	0.0	0.0	2.1	2.1	4.2	2.1	4.2	6.3	6.3	6.3
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°	1697.0	1697.0	1697.0	1697.0	1697.0	1697.0	1697.0	1697.0	1697.0	1697.0	1697.0
2.5°	1686.5	1663.4	1629.8	1575.1	1518.4	1486.9	1447.0	1440.7	1398.7	1394.5	1377.7
5°	1697.0	1648.7	1562.5	1457.5	1354.6	1274.8	1216.0	1184.5	1123.6	1123.6	1106.8
7.5°	1705.4	1629.8	1491.1	1335.7	1195.0	1087.9	1008.1	974.5	919.9	915.7	903.1
10°	1707.5	1606.7	1413.4	1211.8	1039.6	930.4	852.7	814.9	766.6	762.4	754.0
12.5°	1724.3	1594.1	1344.1	1104.7	928.3	810.7	735.1	703.6	665.8	661.6	653.2
15°	1751.6	1594.1	1285.3	1014.4	829.6	720.4	655.3	625.9	598.6	594.4	590.2
17.5°	1778.9	1589.9	1226.5	930.4	747.7	649.0	592.3	569.2	548.2	546.1	541.9
20°	1804.1	1587.8	1167.7	859.0	684.7	590.2	546.1	525.0	508.2	508.2	506.1
22.5°	1829.3	1583.6	1111.0	791.8	630.1	546.1	508.2	485.1	472.5	472.5	470.4
25°	1867.1	1583.6	1058.5	735.1	586.0	512.4	474.6	457.8	447.3	445.2	445.2
27.5°	1911.2	1596.2	1012.3	684.7	548.2	478.8	449.4	432.6	420.0	415.8	417.9
30°	1959.5	1606.7	970.3	640.6	512.4	453.6	422.1	405.3	392.7	388.5	390.6
32.5°	2007.8	1619.3	932.5	600.7	476.7	430.5	399.0	380.1	367.5	365.4	365.4
35°	2060.3	1631.9	894.7	567.1	447.3	407.4	378.0	357.0	348.6	344.4	346.5
37.5°	2112.8	1652.9	859.0	535.6	426.3	386.4	359.1	338.1	331.8	329.7	329.7
40°	2175.8	1684.4	844.3	514.5	407.4	367.5	344.4	323.4	317.1	317.1	317.1
42.5°	2228.3	1709.6	831.7	491.4	392.7	350.7	329.7	312.9	308.7	306.6	308.7
45°	2280.8	1732.7	814.9	470.4	373.8	333.9	317.1	300.3	296.1	296.1	296.1
47.5°	2333.3	1745.3	791.8	449.4	357.0	319.2	304.5	289.8	285.6	285.6	285.6
50°	2375.3	1755.8	758.2	426.3	338.1	306.6	291.9	277.2	273.0	273.0	273.0
52.5°	2417.3	1757.9	722.5	399.0	319.2	291.9	279.3	264.6	260.4	258.3	258.3
55°	2455.1	1755.8	680.5	367.5	298.2	275.1	264.6	252.0	243.6	235.2	239.4
57.5°	2482.4	1753.7	632.2	336.0	277.2	258.3	254.1	237.3	220.5	199.5	203.7
60°	2471.9	1730.6	579.7	296.1	254.1	241.5	241.5	218.4	189.0	178.5	180.6
62.5°	2404.7	1665.5	525.0	254.1	231.0	224.7	222.6	197.4	174.3	163.8	165.9
65°	2203.1	1501.6	445.2	216.3	207.9	205.8	205.8	182.7	161.7	149.1	151.2
67.5°	1896.5	1260.1	363.3	182.7	184.8	189.0	189.0	168.0	147.0	134.4	136.5
70°	1520.5	985.0	289.8	157.5	159.6	165.9	170.1	151.2	132.3	119.7	119.7
72.5°	1144.6	747.7	233.1	132.3	142.8	142.8	149.1	134.4	115.5	102.9	105.0
75°	829.6	535.6	184.8	111.3	123.9	121.8	121.8	113.4	98.7	90.3	90.3
77.5°	392.7	281.4	147.0	79.8	96.6	94.5	96.6	90.3	84.0	75.6	77.7
80°	193.2	138.6	94.5	56.7	67.2	69.3	75.6	71.4	69.3	63.0	63.0
82.5°	92.4	54.6	44.1	39.9	46.2	48.3	52.5	52.5	54.6	50.4	50.4
85°	25.2	14.7	18.9	25.2	29.4	31.5	35.7	37.8	37.8	35.7	37.8
87.5°	6.3	6.3	8.4	12.6	14.7	16.8	18.9	18.9	8.4	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)