

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: P842454

Luminaire Tested: **ARCH4-50-727-U-T3-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842454
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-26)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-50-727-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 435mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

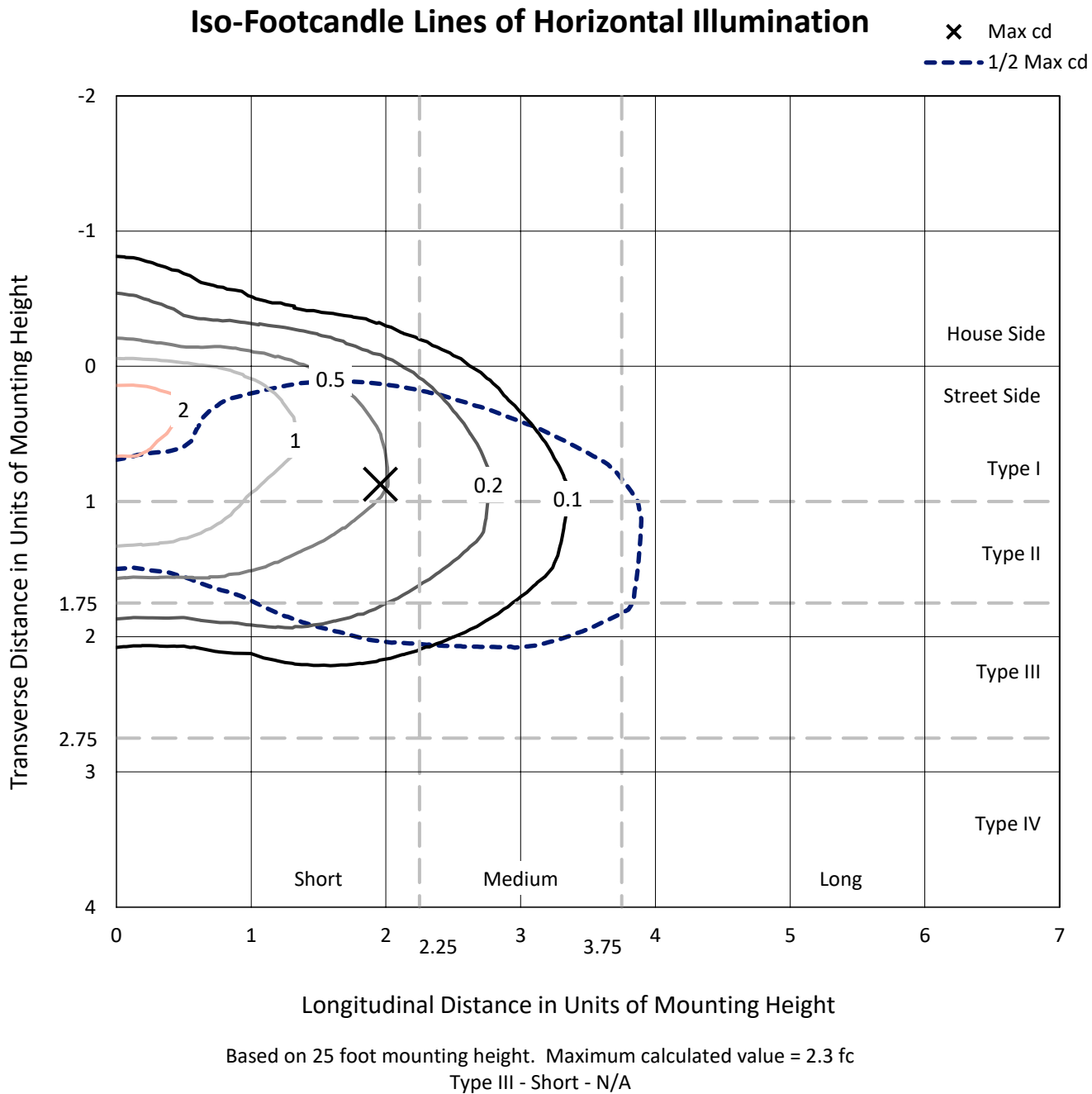
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6108 lumens
Efficiency: N/A
Efficacy: 114.8 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 53.2
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



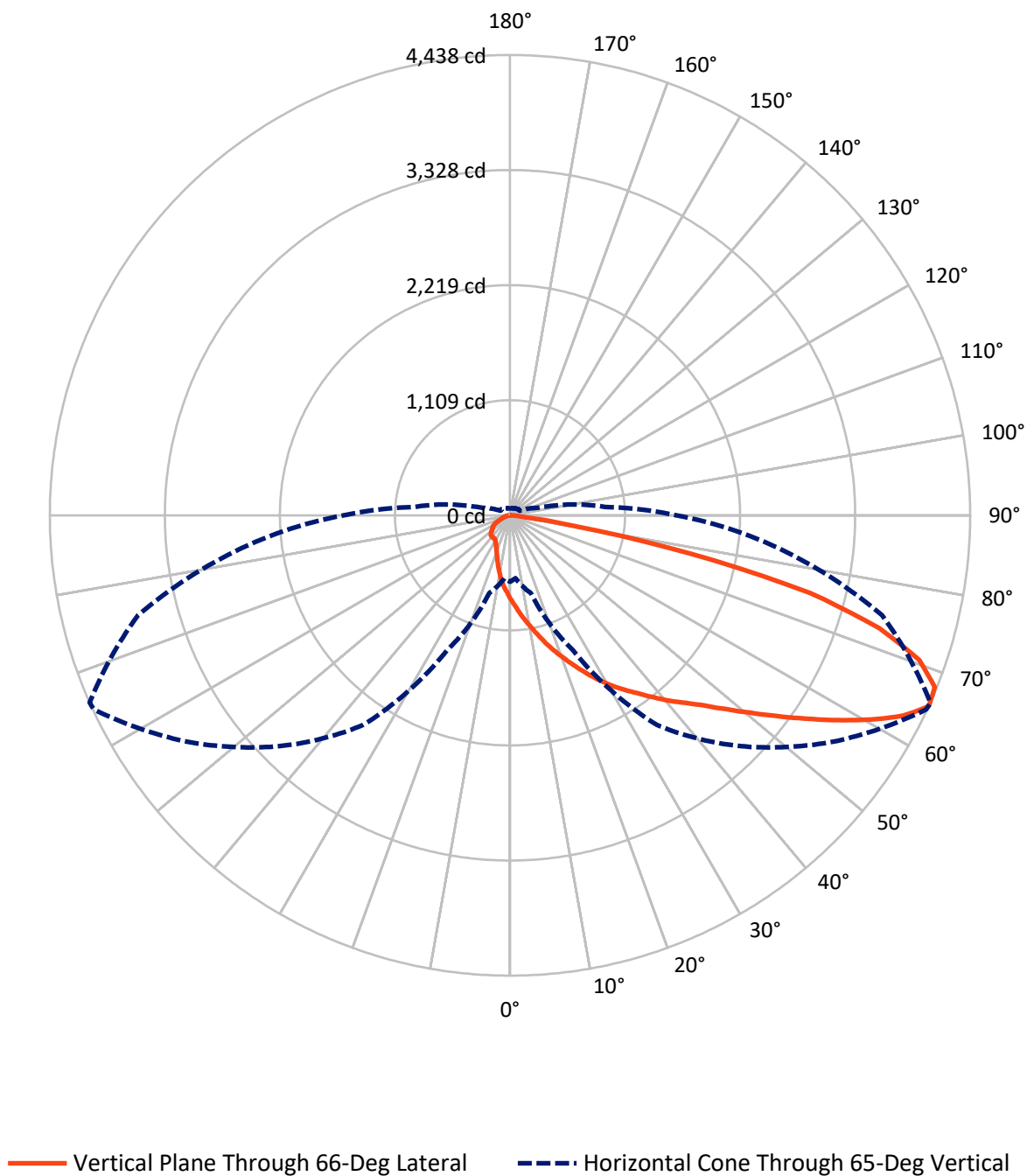
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Luminous Intensity Polar Plot



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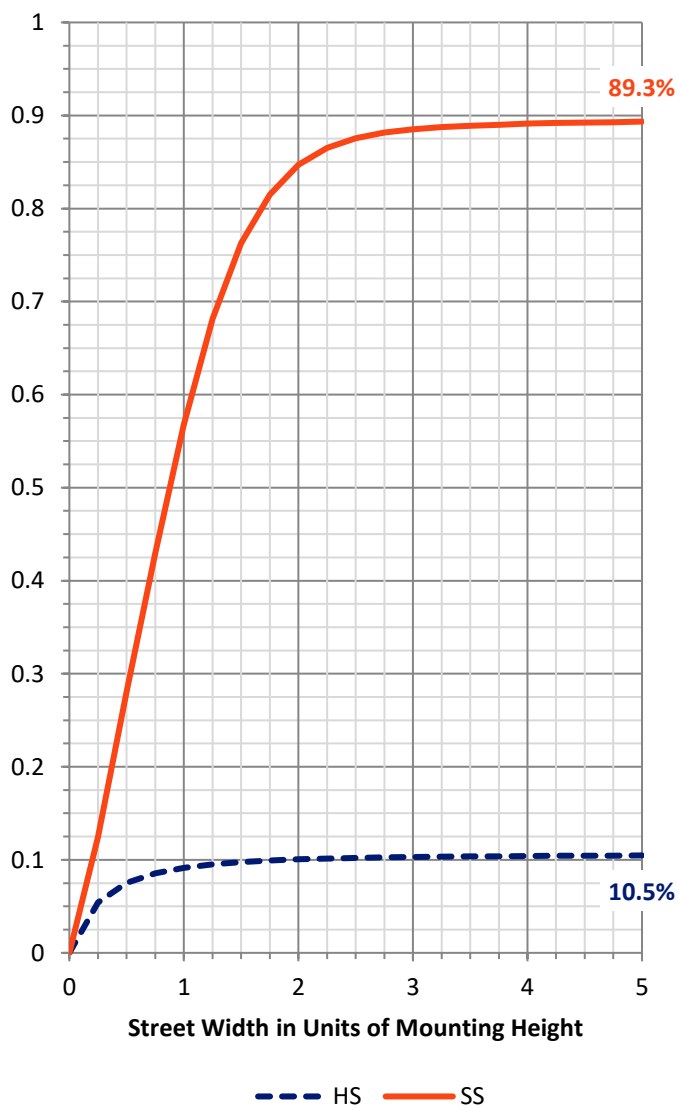
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	646.1	0.0	646.1
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	5461.9	0.0	5461.9
	% Fixture	89.4	0.0	89.4
Total	Lumens	6108.0	0.0	6108.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.8	1.3
10°-20°	260.0	4.3
20°-30°	470.5	7.7
30°-40°	735.7	12.0
40°-50°	1116.1	18.3
50°-60°	1418.1	23.2
60°-70°	1325.0	21.7
70°-80°	658.5	10.8
80°-90°	44.2	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°	6108.0	100.0
0°-180°	6108.0	100.0

Coefficient of Utilization



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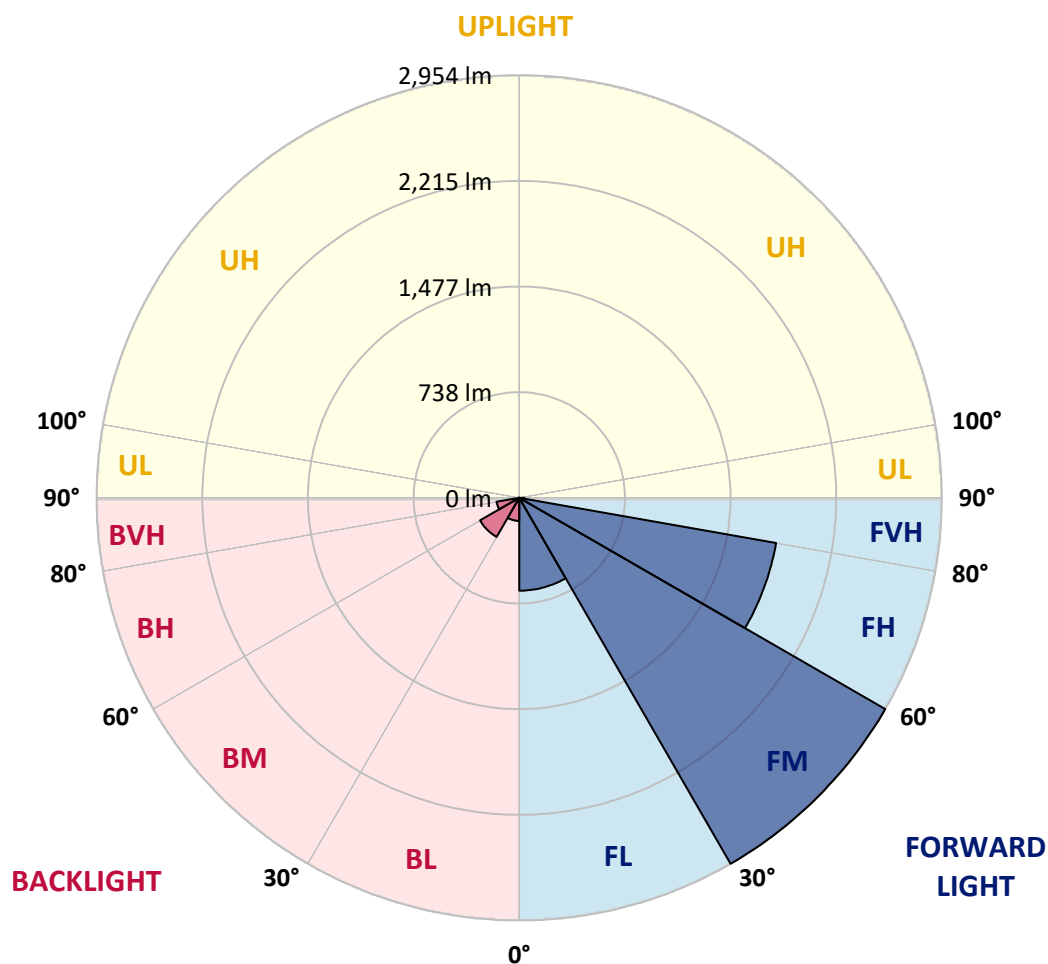
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	649.0	10.6			
FM	(30°-60°)	2953.9	48.4			
FH	(60°-80°)	1822.7	29.8			G2/5000
FVH	(80°-90°)	36.4	0.6			G1/100
BL	(0°-30°)	161.4	2.6	B1/500		
BM	(30°-60°)	316.0	5.2	B1/1000		
BH	(60°-80°)	160.9	2.6	B1/500		G1/500
BVH	(80°-90°)	7.8	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-G2

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	808.4	808.4	808.4	808.4	808.4	808.4	808.4	808.4	808.4	808.4	808.4
2.5°	944.2	951.8	955.7	957.0	927.5	914.7	901.9	872.4	866.0	849.4	827.6
5°	1110.7	1120.9	1118.4	1113.3	1077.4	1036.4	1003.1	948.0	939.0	899.3	850.6
7.5°	1274.7	1283.6	1281.1	1261.9	1222.1	1164.5	1109.4	1028.7	1015.9	951.8	873.7
10°	1411.7	1419.4	1418.2	1398.9	1351.5	1281.1	1214.5	1106.9	1091.5	1000.5	892.9
12.5°	1524.5	1534.7	1533.5	1520.6	1478.4	1401.5	1325.9	1196.5	1177.3	1059.5	919.8
15°	1612.9	1625.7	1625.7	1620.6	1591.1	1527.0	1441.2	1295.2	1272.1	1127.3	953.1
17.5°	1666.7	1676.9	1685.9	1694.9	1674.4	1625.7	1547.5	1393.8	1369.5	1194.0	987.7
20°	1694.9	1705.1	1711.5	1730.7	1734.6	1710.2	1648.7	1491.2	1465.6	1269.5	1027.4
22.5°	1741.0	1750.0	1751.2	1767.9	1775.6	1782.0	1743.5	1587.3	1566.8	1352.8	1072.3
25°	1817.8	1828.1	1824.3	1831.9	1833.2	1840.9	1837.1	1697.4	1676.9	1447.6	1126.1
27.5°	1916.5	1929.3	1926.7	1919.1	1907.5	1901.1	1917.8	1808.9	1789.7	1542.4	1181.2
30°	2022.8	2038.2	2034.4	2019.0	1988.2	1961.3	1984.4	1913.9	1896.0	1639.8	1242.6
32.5°	2130.4	2148.4	2147.1	2121.5	2068.9	2022.8	2057.4	2012.6	1999.8	1744.8	1309.3
35°	2200.9	2224.0	2221.4	2206.0	2138.1	2098.4	2140.7	2113.8	2104.8	1872.9	1405.3
37.5°	2314.9	2339.2	2317.5	2279.0	2200.9	2180.4	2231.6	2227.8	2221.4	2008.7	1506.5
40°	2591.6	2627.5	2569.8	2412.3	2284.2	2266.2	2339.2	2354.6	2348.2	2143.2	1597.5
42.5°	2881.1	2934.9	2845.3	2627.5	2435.3	2370.0	2457.1	2478.9	2471.2	2258.5	1679.5
45°	3056.7	3079.7	2990.0	2820.9	2703.1	2495.5	2582.7	2618.5	2612.1	2396.9	1784.5
47.5°	3200.1	3191.2	3088.7	2974.7	2996.4	2672.3	2724.9	2795.3	2790.2	2549.3	1899.8
50°	3230.9	3210.4	3169.4	3097.6	3155.3	2851.7	2874.7	2996.4	2991.3	2718.4	2016.4
52.5°	3014.4	2987.5	3098.9	3159.1	3139.9	2982.3	3040.0	3216.8	3214.2	2901.6	2127.9
55°	2473.8	2452.0	2751.8	3063.1	3123.3	3074.6	3223.2	3446.1	3460.2	3096.4	2229.1
57.5°	1946.0	1922.9	2217.5	2822.2	3061.8	3159.1	3437.1	3708.7	3726.7	3307.7	2325.2
60°	1551.4	1516.8	1742.3	2443.0	2946.5	3224.5	3643.4	3997.0	3999.5	3501.2	2384.1
62.5°	1054.3	1015.9	1265.7	1962.6	2753.0	3234.7	3802.2	4245.5	4255.7	3645.9	2394.3
65°	640.5	608.5	777.6	1433.5	2467.4	3147.6	3804.8	4428.7	4437.7	3712.6	2332.8
67.5°	371.5	358.7	444.5	892.9	1993.4	2913.2	3644.7	4400.5	4417.2	3684.4	2193.2
70°	216.5	215.2	247.2	442.0	1406.6	2448.1	3287.2	4163.5	4187.8	3537.1	1979.3
72.5°	158.9	161.4	174.2	237.0	814.8	1762.8	2783.8	3686.9	3724.1	3248.8	1674.4
75°	125.5	126.8	138.4	161.4	427.9	996.7	2085.6	2959.3	2988.8	2735.1	1308.0
77.5°	93.5	96.1	105.0	114.0	198.6	457.3	1173.5	1823.0	1774.3	1501.4	631.6
80°	67.9	74.3	78.1	82.0	105.0	176.8	352.3	635.4	630.3	655.9	298.5
82.5°	43.6	48.7	52.5	55.1	62.8	84.6	105.0	142.2	153.7	254.9	119.1
85°	19.2	21.8	24.3	29.5	26.9	29.5	43.6	28.2	24.3	38.4	21.8
87.5°	0.0	0.0	3.8	6.4	5.1	2.6	7.7	5.1	3.8	3.8	3.8
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°	808.4	808.4	808.4	808.4	808.4	808.4	808.4	808.4	808.4	808.4	808.4
2.5°	816.0	802.0	772.5	744.3	727.7	705.9	686.7	668.7	667.4	662.3	653.3
5°	826.3	799.4	744.3	691.8	652.1	609.8	573.9	545.7	535.5	527.8	517.6
7.5°	836.5	794.3	712.3	635.4	572.6	513.7	471.4	433.0	421.5	411.2	404.8
10°	840.4	785.3	675.1	572.6	490.7	427.9	383.0	354.9	344.6	339.5	335.6
12.5°	851.9	780.2	640.5	513.7	418.9	361.3	329.2	312.6	308.7	304.9	301.1
15°	867.3	780.2	605.9	456.1	362.5	316.4	297.2	285.7	283.1	281.8	279.3
17.5°	883.9	780.2	572.6	407.4	321.6	287.0	272.9	266.5	265.2	263.9	262.6
20°	907.0	781.5	536.8	365.1	292.1	265.2	253.7	246.0	244.7	243.4	243.4
22.5°	930.1	784.0	502.2	333.1	272.9	248.5	234.4	226.8	224.2	224.2	224.2
25°	959.5	791.7	470.2	306.2	256.2	233.2	215.2	208.8	207.5	207.5	206.3
27.5°	994.1	800.7	442.0	285.7	239.6	215.2	197.3	190.9	188.3	188.3	187.0
30°	1031.3	809.6	418.9	270.3	222.9	197.3	180.6	172.9	170.4	171.7	170.4
32.5°	1072.3	822.5	401.0	260.1	207.5	181.9	166.5	157.6	156.3	156.3	155.0
35°	1141.4	858.3	398.4	254.9	194.7	170.4	155.0	146.0	144.8	144.8	143.5
37.5°	1215.7	899.3	409.9	252.4	184.5	160.1	146.0	137.1	135.8	135.8	135.8
40°	1278.5	930.1	422.8	252.4	178.1	151.2	138.4	130.7	130.7	130.7	130.7
42.5°	1320.8	932.6	420.2	252.4	172.9	144.8	133.2	125.5	125.5	126.8	125.5
45°	1383.6	945.4	409.9	248.5	169.1	139.6	128.1	121.7	120.4	121.7	121.7
47.5°	1457.9	968.5	399.7	233.2	167.8	134.5	124.3	116.6	115.3	116.6	115.3
50°	1528.3	989.0	394.6	212.7	165.3	129.4	119.1	111.5	110.2	111.5	110.2
52.5°	1587.3	998.0	385.6	198.6	158.9	124.3	114.0	106.3	103.8	105.0	105.0
55°	1634.7	995.4	372.8	187.0	147.3	119.1	107.6	101.2	97.4	97.4	96.1
57.5°	1678.2	996.7	361.3	175.5	134.5	111.5	102.5	94.8	89.7	88.4	87.1
60°	1694.9	990.3	340.8	160.1	121.7	105.0	96.1	87.1	82.0	80.7	79.4
62.5°	1671.8	967.2	313.9	133.2	110.2	97.4	89.7	80.7	75.6	74.3	73.0
65°	1606.5	923.7	272.9	105.0	99.9	88.4	82.0	75.6	69.2	66.6	65.3
67.5°	1495.0	860.9	221.6	84.6	88.4	80.7	76.9	69.2	61.5	58.9	57.6
70°	1336.2	777.6	166.5	71.7	78.1	71.7	69.2	61.5	55.1	52.5	51.2
72.5°	1113.3	643.1	116.6	61.5	67.9	62.8	60.2	55.1	48.7	44.8	44.8
75°	841.7	461.2	76.9	52.5	56.4	53.8	50.0	46.1	42.3	39.7	38.4
77.5°	362.5	179.4	47.4	39.7	46.1	44.8	39.7	37.2	35.9	33.3	33.3
80°	156.3	73.0	29.5	29.5	33.3	32.0	30.7	28.2	28.2	26.9	25.6
82.5°	57.6	29.5	17.9	21.8	24.3	21.8	21.8	21.8	21.8	20.5	20.5
85°	14.1	9.0	9.0	12.8	14.1	12.8	14.1	12.8	12.8	12.8	11.5
87.5°	3.8	3.8	5.1	5.1	5.1	5.1	5.1	3.8	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)