Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

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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: P836645

Luminaire Tested: **ARCH3-50-750-U-T4W-HSS**

Issue Date: 5/16/2024

Report Generated By 670246001

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Test Information

Test Method:	LM-79-08
Report Number:	P836645
	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:	ARCH3-50-750-U-T4W-HSS
Description:	ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
	(1) 70 CRI, 5000K, 425mA 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:	6355 lumens
Efficiency:	N/A
Efficacy:	118.6 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):	53.6
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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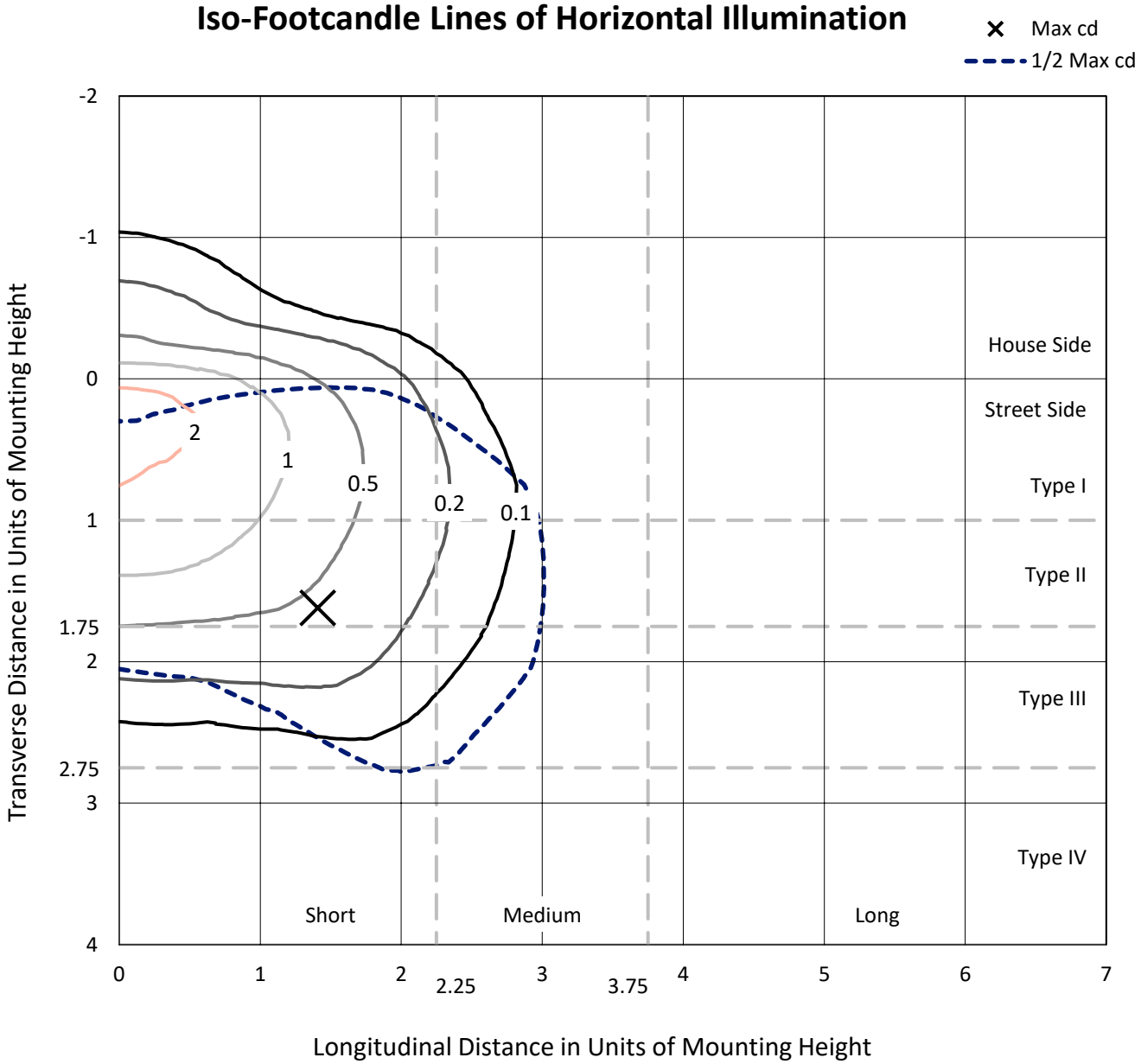
Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 2.5 fc
Type III - Short - N/A

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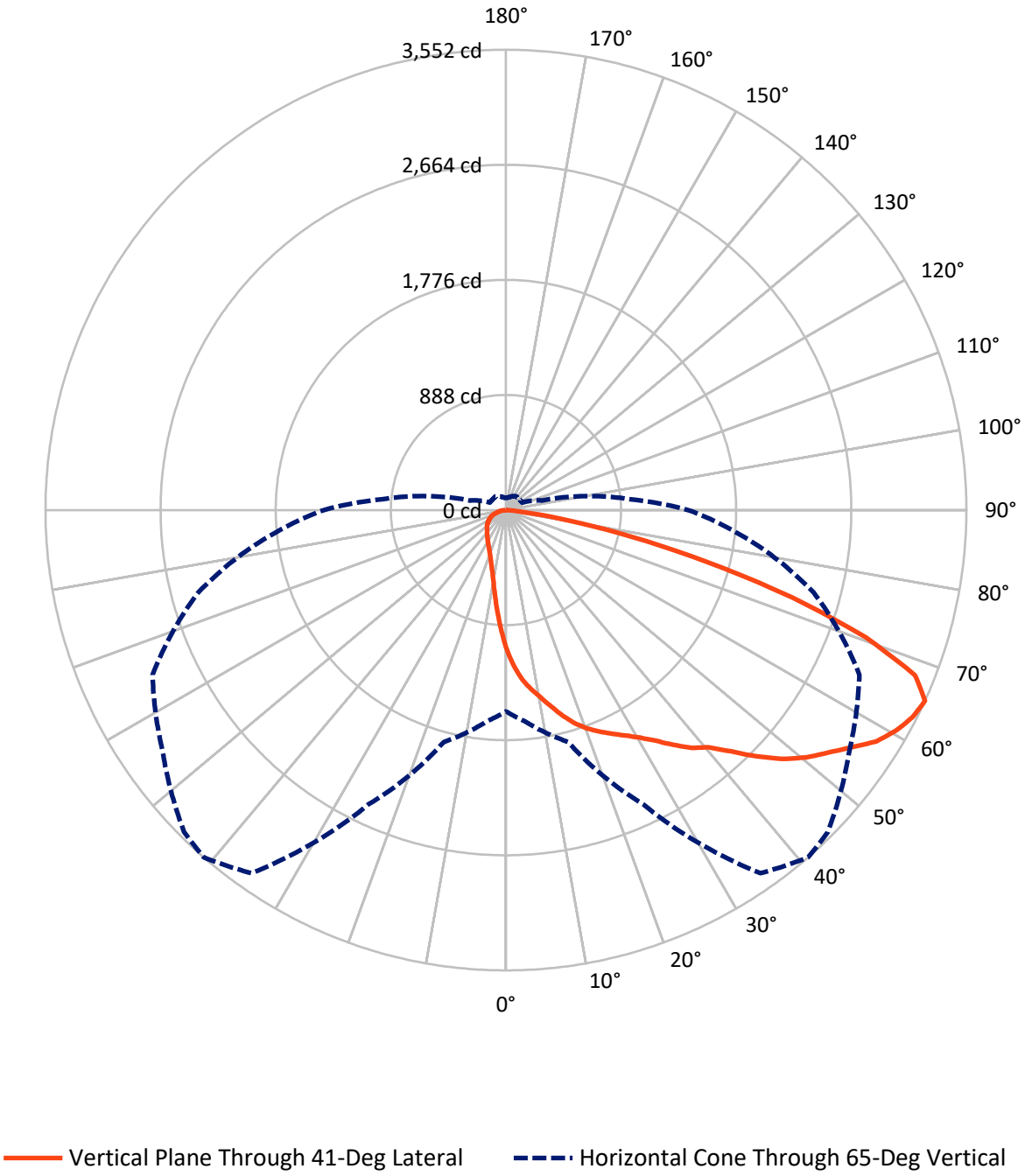
Luminous Intensity Polar Plot



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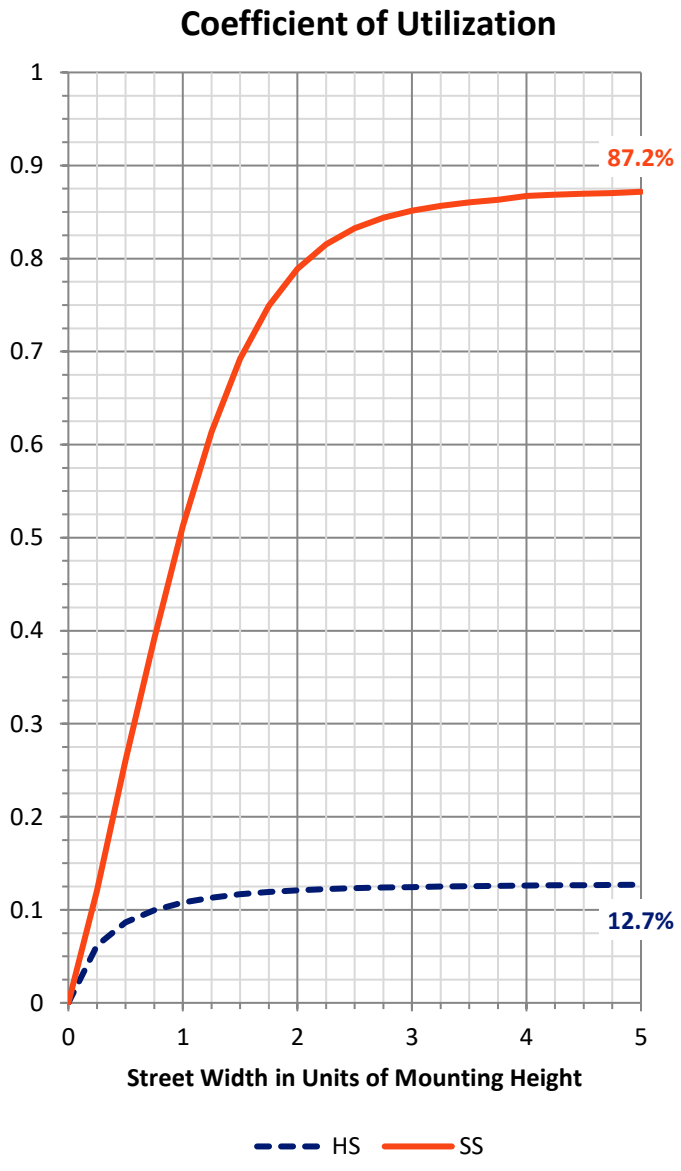
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	815.9	0.0	815.9
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	5539.1	0.0	5539.1
	% Fixture	87.2	0.0	87.2
Total	Lumens	6355.0	0.0	6355.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.9	1.6
10°-20°	302.5	4.8
20°-30°	520.5	8.2
30°-40°	789.4	12.4
40°-50°	1156.5	18.2
50°-60°	1460.4	23.0
60°-70°	1369.4	21.5
70°-80°	610.3	9.6
80°-90°	45.2	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°	6355.0	100.0
0°-180°	6355.0	100.0



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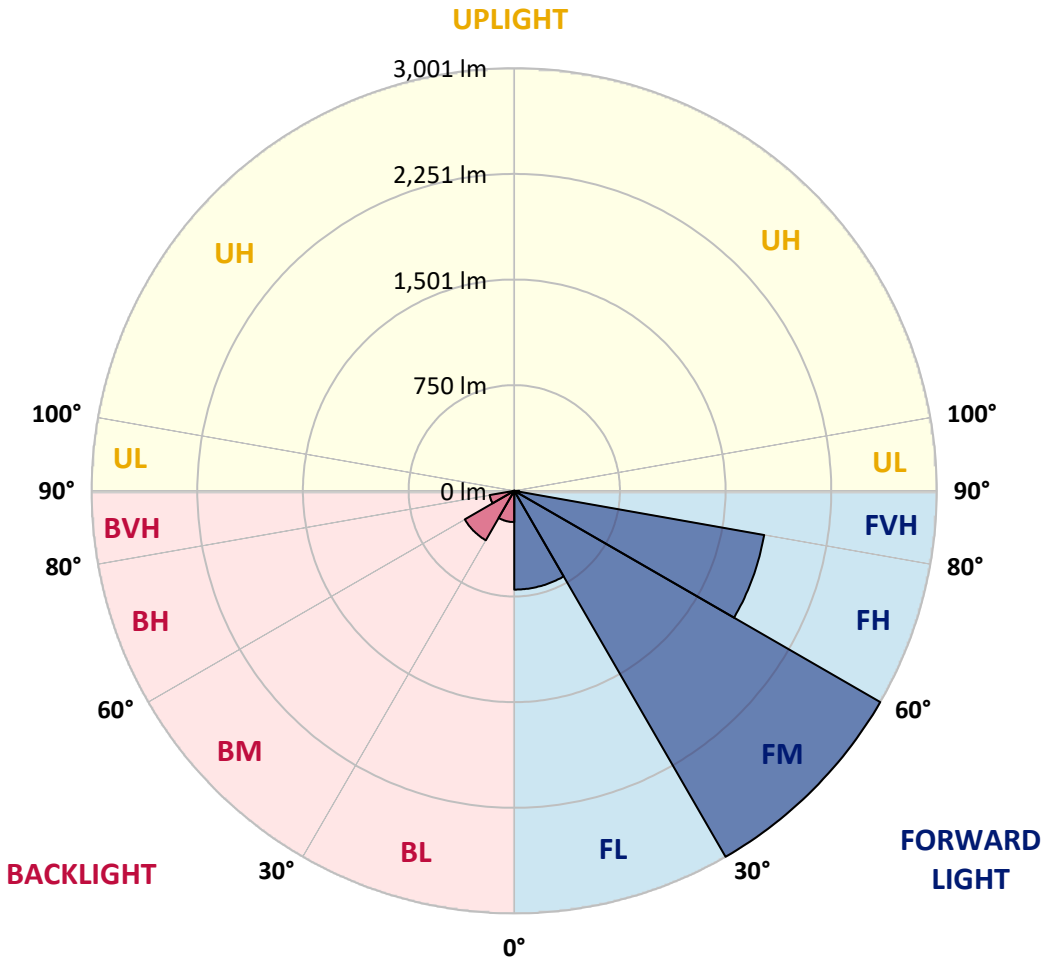
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	701.8	11.0			
FM	(30°-60°)	3001.1	47.2			
FH	(60°-80°)	1802.4	28.4			G2/5000
FVH	(80°-90°)	33.8	0.5			G1/100
BL	(0°-30°)	222.1	3.5	B1/500		
BM	(30°-60°)	405.1	6.4	B1/1000		
BH	(60°-80°)	177.2	2.8	B1/500		G1/500
BVH	(80°-90°)	11.4	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°	1082.9	1082.9	1082.9	1082.9	1082.9	*1082.9*	1082.9	1082.9	1082.9	1082.9	1082.9
2.5°	1249.0	1245.0	1242.3	1227.6	1227.6	*1207.5*	1208.8	1190.1	1167.3	1131.1	1092.2
5°	1367.0	1361.6	1354.9	1340.2	1334.8	*1314.7*	1312.0	1285.2	1246.4	1183.4	1113.7
7.5°	1470.2	1464.8	1455.4	1434.0	1419.2	*1395.1*	1388.4	1353.6	1310.7	1233.0	1135.1
10°	1564.0	1560.0	1547.9	1521.1	1501.0	*1471.5*	1459.4	1412.5	1358.9	1273.2	1152.5
12.5°	1659.1	1653.8	1637.7	1614.9	1590.8	*1555.9*	1541.2	1480.9	1412.5	1317.4	1178.0
15°	1747.6	1739.5	1727.5	1703.4	1681.9	*1648.4*	1632.3	1561.3	1478.2	1367.0	1211.5
17.5°	1805.2	1798.5	1787.8	1774.4	1757.0	*1731.5*	1715.4	1645.7	1543.9	1415.2	1246.4
20°	1840.1	1837.4	1833.4	1825.3	1817.3	*1799.9*	1787.8	1722.1	1614.9	1462.1	1279.9
22.5°	1866.9	1864.2	1862.8	1862.8	1864.2	*1857.5*	1849.4	1793.1	1683.3	1511.7	1310.7
25°	1908.4	1907.1	1904.4	1901.7	1911.1	*1912.4*	1909.7	1870.9	1769.0	1577.4	1349.6
27.5°	1966.0	1962.0	1956.7	1954.0	1963.4	*1970.1*	1975.4	1948.6	1860.2	1644.4	1393.8
30°	2054.5	2042.4	2029.0	2019.6	2026.3	*2037.1*	2049.1	2033.0	1954.0	1727.5	1439.3
32.5°	2159.0	2144.3	2113.5	2096.0	2113.5	*2121.5*	2130.9	2122.8	2051.8	1817.3	1484.9
35°	2286.3	2268.9	2236.7	2211.3	2242.1	*2224.7*	2220.7	2212.6	2144.3	1905.7	1535.8
37.5°	2498.1	2472.6	2421.7	2365.4	2365.4	*2327.9*	2313.1	2289.0	2227.4	1984.8	1585.4
40°	2743.3	2709.8	2644.2	2561.1	2484.7	*2406.9*	2397.6	2380.1	2325.2	2075.9	1641.7
42.5°	3012.7	2948.4	2857.2	2756.7	2633.4	*2545.0*	2523.5	2474.0	2420.4	2168.4	1698.0
45°	3311.6	3177.5	3044.9	2993.9	2790.2	*2709.8*	2669.6	2579.8	2519.5	2264.9	1757.0
47.5°	3359.8	3255.3	3166.8	3158.8	2936.3	*2869.3*	2823.7	2695.1	2626.7	2368.1	1818.6
50°	3333.0	3270.0	3279.4	3247.2	3043.5	*2999.3*	2964.5	2818.4	2732.6	2467.3	1874.9
52.5°	3220.4	3255.3	3308.9	3249.9	3145.4	*3109.2*	3091.8	2951.1	2831.8	2558.4	1925.8
55°	3086.4	3110.5	3225.8	3298.2	3263.3	*3231.2*	3215.1	3105.2	2929.6	2634.8	1972.7
57.5°	2890.8	2880.0	3007.3	3290.1	3386.6	*3367.9*	3350.4	3256.6	3020.7	2689.7	2002.2
60°	2597.3	2574.5	2735.3	3129.3	3426.8	*3456.3*	3448.3	3357.1	3090.4	2688.4	1990.2
62.5°	2089.3	2145.6	2368.1	2866.6	3444.2	*3519.3*	3504.5	3365.2	3113.2	2610.7	1913.8
65°	*1553.3*	*1633.7*	*1852.1*	*2504.8*	*3420.1*	*3551.5*	*3511.2*	*3233.8*	*3007.3*	*2456.5*	*1746.2*
67.5°	1119.0	1190.1	1349.6	2061.2	3188.3	*3404.0*	3357.1	3019.4	2763.4	2238.1	1514.4
70°	765.2	816.2	924.7	1501.0	2721.9	*2943.0*	2913.5	2699.1	2378.8	1978.1	1230.3
72.5°	540.1	561.5	631.2	990.4	2067.9	*2309.1*	2274.3	2220.7	1911.1	1644.4	956.9
75°	404.7	418.1	455.7	640.6	1395.1	*1600.2*	1568.0	1598.8	1427.3	1245.0	696.9
77.5°	152.8	166.2	258.7	408.8	825.5	*982.3*	950.2	968.9	793.4	628.5	347.1
80°	41.5	44.2	85.8	194.3	375.2	*489.2*	444.9	381.9	294.8	289.5	183.6
82.5°	17.4	20.1	38.9	104.5	134.0	*134.0*	112.6	139.4	112.6	135.4	88.5
85°	6.7	8.0	9.4	26.8	17.4	*18.8*	20.1	26.8	22.8	28.1	20.1
87.5°	0.0	0.0	0.0	1.3	1.3	*2.7*	1.3	2.7	4.0	4.0	4.0
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°	1082.9	1082.9	1082.9	1082.9	1082.9	1082.9	1082.9	1082.9	1082.9	1082.9	1082.9
2.5°	1076.2	1061.4	1040.0	1005.1	968.9	948.8	923.4	919.4	892.6	889.9	879.2
5°	1082.9	1052.0	997.1	930.1	864.4	813.5	776.0	755.9	717.0	717.0	706.3
7.5°	1088.2	1040.0	951.5	852.3	762.6	694.2	643.3	621.8	587.0	584.3	576.3
10°	1089.6	1025.2	901.9	773.3	663.4	593.7	544.1	520.0	489.2	486.5	481.1
12.5°	1100.3	1017.2	857.7	704.9	592.4	517.3	469.1	449.0	424.8	422.2	416.8
15°	1117.7	1017.2	820.2	647.3	529.4	459.7	418.1	399.4	381.9	379.3	376.6
17.5°	1135.1	1014.5	782.7	593.7	477.1	414.1	377.9	363.2	349.8	348.4	345.8
20°	1151.2	1013.2	745.1	548.1	436.9	376.6	348.4	335.0	324.3	324.3	323.0
22.5°	1167.3	1010.5	709.0	505.2	402.1	348.4	324.3	309.6	301.5	301.5	300.2
25°	1191.4	1010.5	675.4	469.1	373.9	327.0	302.9	292.2	285.5	284.1	284.1
27.5°	1219.6	1018.5	646.0	436.9	349.8	305.6	286.8	276.1	268.0	265.4	266.7
30°	1250.4	1025.2	619.2	408.8	327.0	289.5	269.4	258.7	250.6	247.9	249.3
32.5°	1281.2	1033.3	595.0	383.3	304.2	274.7	254.6	242.6	234.5	233.2	233.2
35°	1314.7	1041.3	570.9	361.8	285.5	260.0	241.2	227.8	222.5	219.8	221.1
37.5°	1348.2	1054.7	548.1	341.7	272.1	246.6	229.2	215.8	211.7	210.4	210.4
40°	1388.4	1074.8	538.7	328.3	260.0	234.5	219.8	206.4	202.4	202.4	202.4
42.5°	1421.9	1090.9	530.7	313.6	250.6	223.8	210.4	199.7	197.0	195.7	197.0
45°	1455.4	1105.6	520.0	300.2	238.6	213.1	202.4	191.6	189.0	189.0	189.0
47.5°	1488.9	1113.7	505.2	286.8	227.8	203.7	194.3	184.9	182.3	182.3	182.3
50°	1515.7	1120.4	483.8	272.1	215.8	195.7	186.3	176.9	174.2	174.2	174.2
52.5°	1542.5	1121.7	461.0	254.6	203.7	186.3	178.2	168.9	166.2	164.8	164.8
55°	1566.7	1120.4	434.2	234.5	190.3	175.6	168.9	160.8	155.5	150.1	152.8
57.5°	1584.1	1119.0	403.4	214.4	176.9	164.8	162.2	151.4	140.7	127.3	130.0
60°	1577.4	1104.3	369.9	189.0	162.2	154.1	154.1	139.4	120.6	113.9	115.3
62.5°	1534.5	1062.8	335.0	162.2	147.4	143.4	142.1	126.0	111.2	104.5	105.9
65°	*1405.8*	*958.2*	*284.1*	*138.0*	*132.7*	*131.3*	*131.3*	*116.6*	*103.2*	*95.2*	*96.5*
67.5°	1210.2	804.1	231.8	116.6	117.9	120.6	120.6	107.2	93.8	85.8	87.1
70°	970.3	628.5	184.9	100.5	101.9	105.9	108.6	96.5	84.4	76.4	76.4
72.5°	730.4	477.1	148.8	84.4	91.1	91.1	95.2	85.8	73.7	65.7	67.0
75°	529.4	341.7	117.9	71.0	79.1	77.7	77.7	72.4	63.0	57.6	57.6
77.5°	250.6	179.6	93.8	50.9	61.6	60.3	61.6	57.6	53.6	48.2	49.6
80°	123.3	88.5	60.3	36.2	42.9	44.2	48.2	45.6	44.2	40.2	40.2
82.5°	59.0	34.8	28.1	25.5	29.5	30.8	33.5	33.5	34.8	32.2	32.2
85°	16.1	9.4	12.1	16.1	18.8	20.1	22.8	24.1	24.1	22.8	24.1
87.5°	4.0	4.0	5.4	8.0	9.4	10.7	12.1	12.1	5.4	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)