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

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: P231175

Luminaire Tested: **ARCH-M-AF48-130-D-U-T3-7050**

Issue Date: 3/3/2020

Report Generated By E9812814

Test Information

Test Method:	LM-79-08
Report Number:	P231175
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)
Test Lab:	INNOVATION CENTER-P2
Issue Date:	3/3/2020
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	STREETWORKS
Catalog Number:	ARCH-M-AF48-130-D-U-T3-7050
Description:	ARCHEON-M ROADWAY AND AREA LUMINAIRE
	(2) 70 CRI, 5000K, 845mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
Light Source:	-
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	16149 lumens
Efficiency:	N/A
Efficacy:	123.3 lumens/watt
Luminous Opening:	Rectangular (W 0.75' x L: 1' x H: 0')
IES Classification:	Type III - Short - Non-Cutoff
BUG Rating:	B2 - U0 - G3

Input Watts (W):	131
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:	28.75 FT

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Scaled Data Report

REPORT NUMBER: P231175
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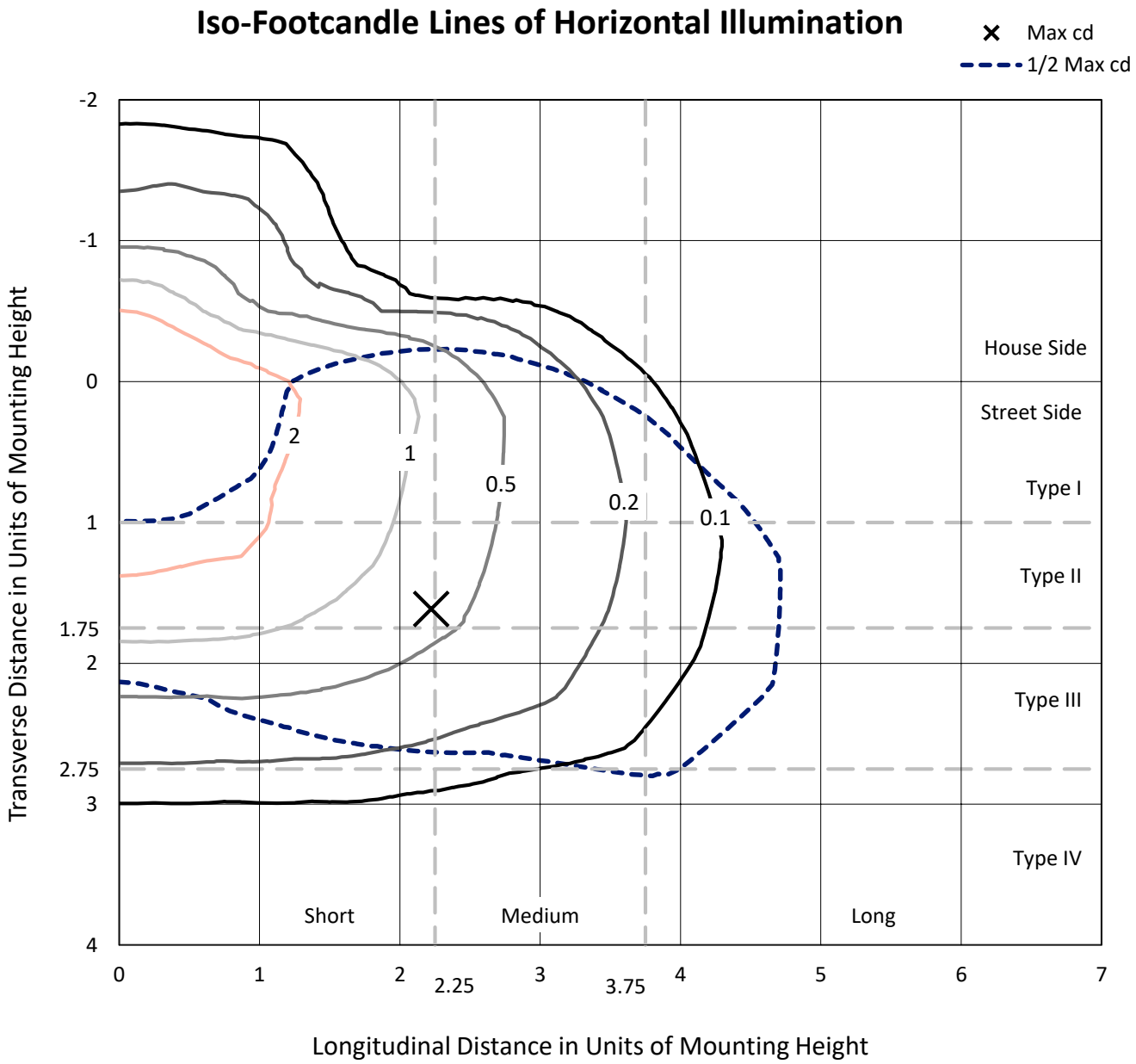

Based on 25 foot mounting height. Maximum calculated value = 3.4 fc
Type III - Short - Non-Cutoff

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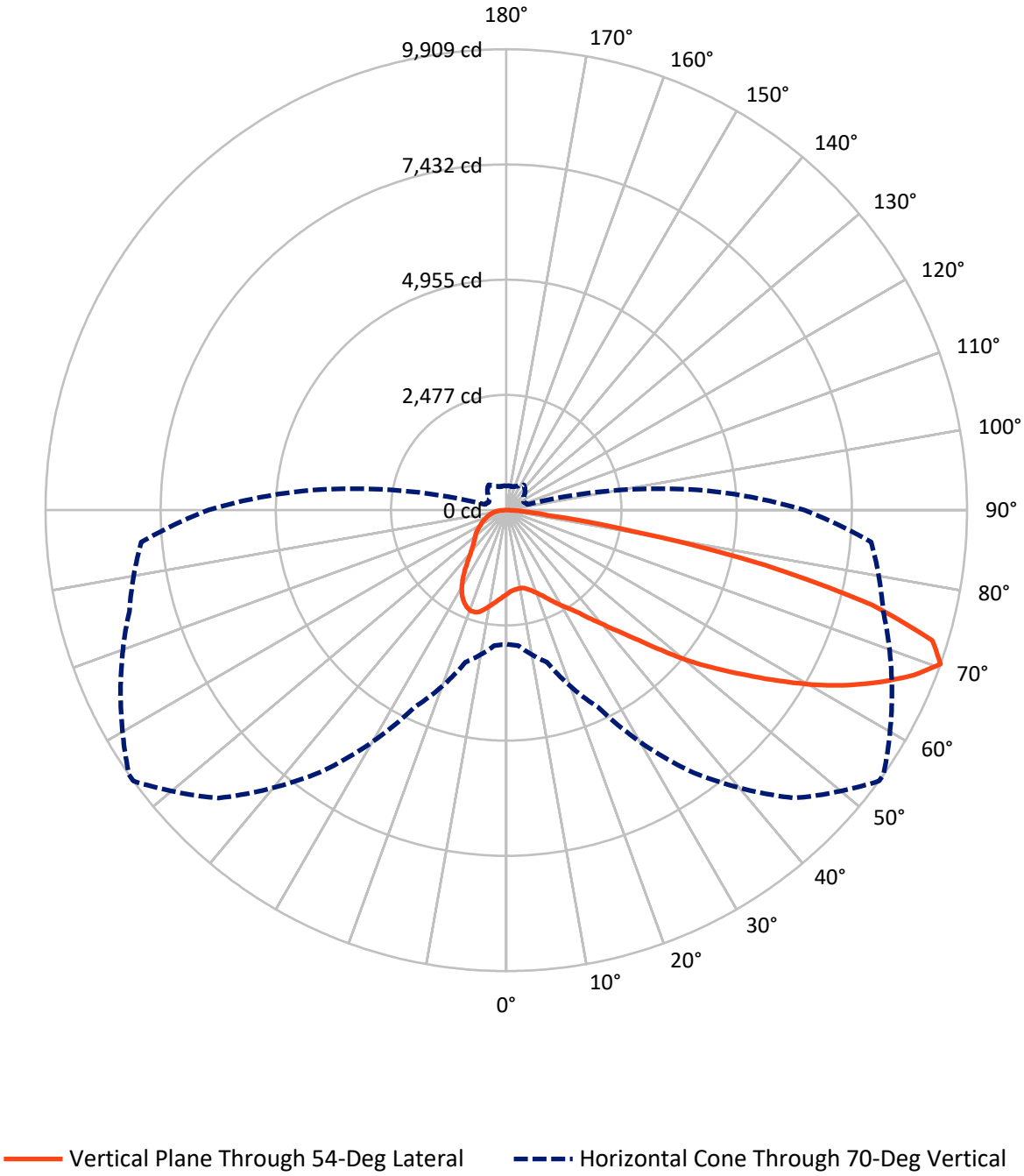
Luminous Intensity Polar Plot



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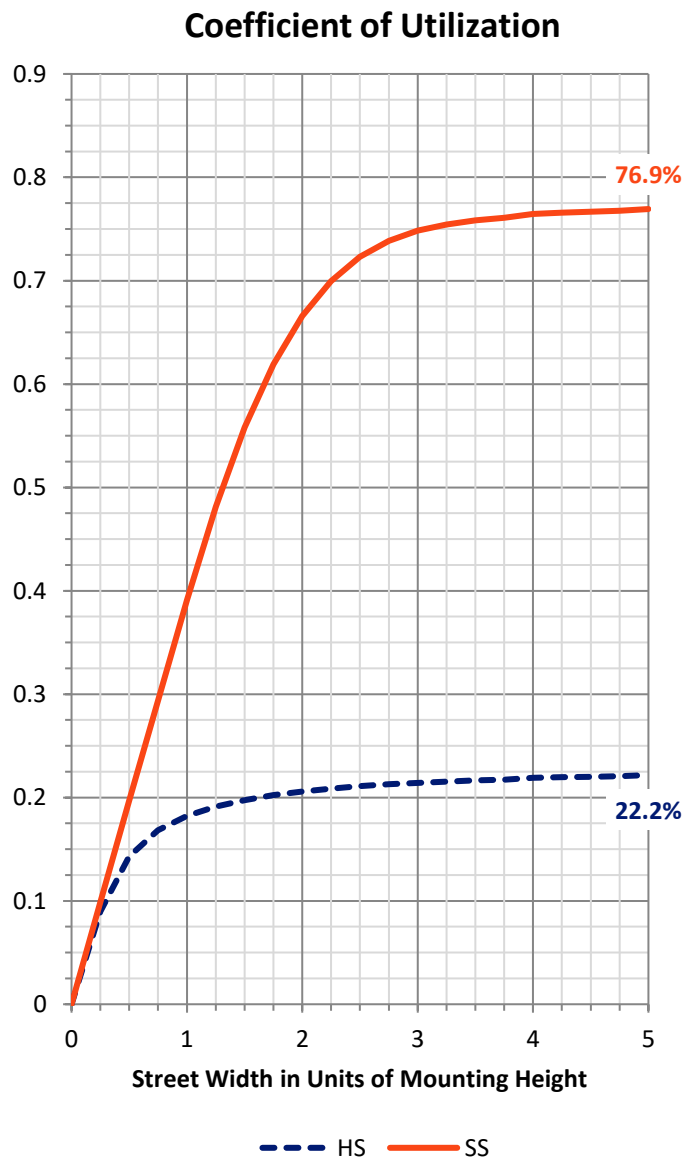
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3662.5	0.0	3662.5
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	12486.5	0.0	12486.5
	% Fixture	77.3	0.0	77.3
Total	Lumens	16149.0	0.0	16149.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	177.3	1.1
10°-20°	566.6	3.5
20°-30°	984.3	6.1
30°-40°	1438.4	8.9
40°-50°	2257.6	14.0
50°-60°	3471.6	21.5
60°-70°	4241.5	26.3
70°-80°	2629.7	16.3
80°-90°	382.0	2.4
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°	16149.0	100.0
0°-180°	16149.0	100.0



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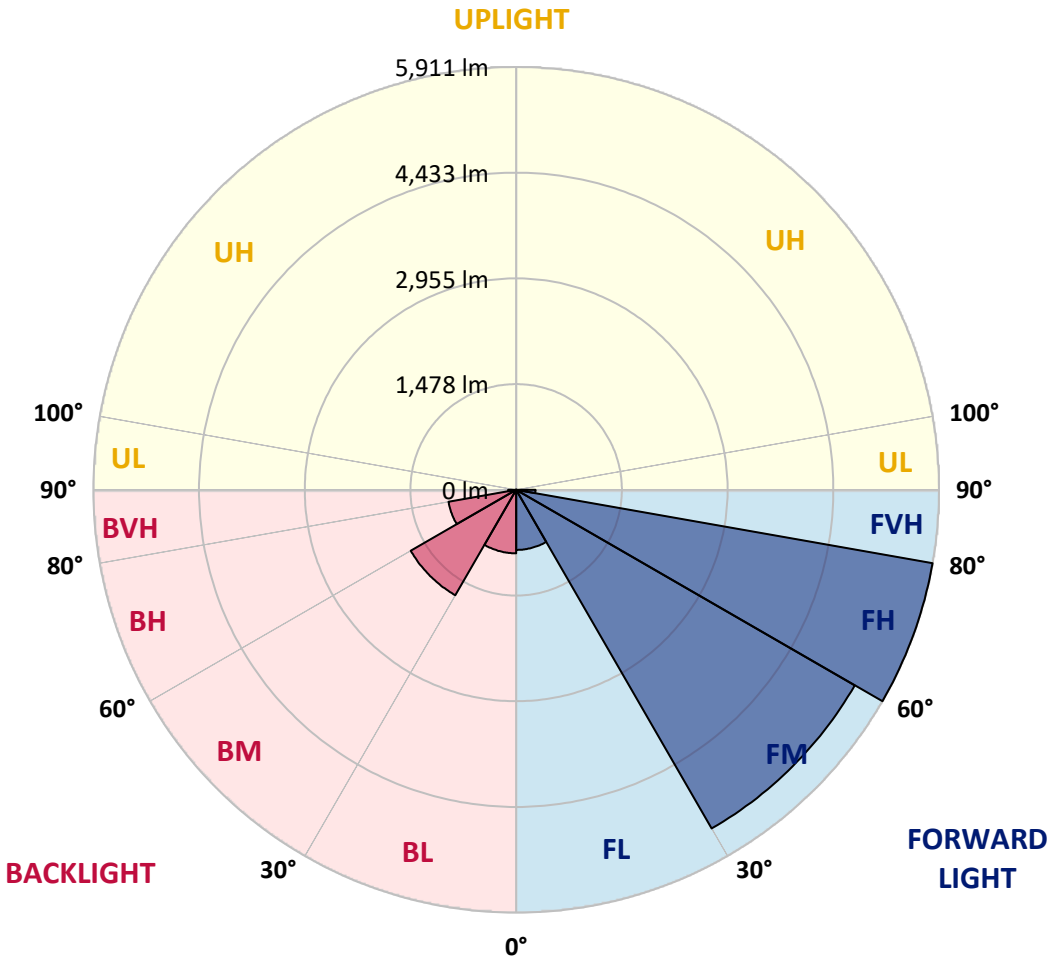
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	840.2	5.2			
FM	(30°-60°)	5465.7	33.8			
FH	(60°-80°)	5910.8	36.6			G3/7500
FVH	(80°-90°)	269.8	1.7			G3/500
BL	(0°-30°)	887.9	5.5	B2/1000		
BM	(30°-60°)	1701.9	10.5	B2/2500		
BH	(60°-80°)	960.4	5.9	B2/1000		G2/1000
BVH	(80°-90°)	112.3	0.7			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3
Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	1806.7	1806.7	1806.7	1806.7	1806.7	1806.7	*1806.7*	1806.7	1806.7	1806.7	1806.7
2.5°	1735.8	1729.9	1729.9	1738.7	1741.7	1750.6	*1750.6*	1753.5	1762.4	1777.2	1794.9
5°	1682.6	1679.6	1682.6	1694.4	1700.3	1718.0	*1724.0*	1726.9	1744.6	1768.3	1794.9
7.5°	1629.3	1626.4	1632.3	1650.0	1667.8	1694.4	*1709.2*	1712.1	1738.7	1771.3	1806.7
10°	1611.6	1608.6	1617.5	1632.3	1650.0	1679.6	*1703.3*	1706.2	1744.6	1783.1	1833.4
12.5°	1635.2	1632.3	1641.2	1655.9	1673.7	1694.4	*1721.0*	1724.0	1774.2	1824.5	1877.7
15°	1694.4	1694.4	1697.3	1706.2	1724.0	1741.7	*1765.3*	1768.3	1821.5	1880.7	1933.9
17.5°	1786.0	1780.1	1780.1	1777.2	1789.0	1797.9	*1827.4*	1830.4	1886.6	1939.8	1993.0
20°	1898.4	1895.5	1883.6	1868.8	1865.9	1871.8	*1901.4*	1904.3	1960.5	2004.9	2055.1
22.5°	2034.4	2037.4	2010.8	1978.3	1963.5	1972.3	*1999.0*	2001.9	2043.3	2081.8	2126.1
25°	2214.8	2205.9	2167.5	2120.2	2090.6	2090.6	*2117.2*	2117.2	2155.7	2179.3	2208.9
27.5°	2386.3	2368.6	2333.1	2265.1	2217.8	2226.6	*2253.3*	2253.3	2288.7	2297.6	2312.4
30°	2572.6	2554.9	2510.5	2424.8	2362.7	2356.8	*2389.3*	2386.3	2433.6	2430.7	2418.9
32.5°	2800.3	2791.4	2717.5	2608.1	2525.3	2504.6	*2534.2*	2537.1	2566.7	2557.8	2519.4
35°	3119.7	3116.7	3048.7	2856.5	2747.1	2708.6	*2726.4*	2726.4	2747.1	2723.4	2658.4
37.5°	3521.8	3527.7	3468.6	3184.7	3031.0	2965.9	*2968.9*	2965.9	2971.8	2945.2	2877.2
40°	3924.0	3938.8	3935.8	3592.8	3397.6	3285.3	*3243.9*	3238.0	3252.7	3240.9	3175.9
42.5°	4453.3	4488.8	4406.0	4095.5	3876.7	3687.4	*3575.1*	3560.3	3592.8	3607.6	3545.5
45°	5003.3	4991.5	4861.4	4636.6	4438.5	4196.0	*3983.1*	3959.5	3983.1	4027.5	3962.4
47.5°	5290.1	5281.3	5248.7	5136.4	5106.8	4828.8	*4506.5*	4485.8	4441.5	4503.6	4426.7
50°	5763.3	5772.1	5639.1	5627.2	5751.4	5597.7	*5097.9*	5050.6	4970.8	5021.0	4956.0
52.5°	6106.3	6067.8	5985.0	6088.5	6475.9	6393.1	*5653.8*	5633.1	5559.2	5547.4	5517.8
55°	6245.3	6245.3	6260.0	6499.6	7052.5	6943.1	*6257.1*	6277.8	6177.2	6094.4	6132.9
57.5°	6286.7	6304.4	6431.5	6827.8	7729.7	7371.9	*6922.4*	6952.0	6807.1	6641.5	6762.7
60°	6082.6	6135.8	6440.4	7014.1	8111.1	7827.3	*7623.2*	7632.1	7422.2	7179.7	7392.6
62.5°	5559.2	5624.3	6168.4	7091.0	8049.0	8294.5	*8285.6*	8306.3	8019.5	7717.9	7984.0
65°	4917.5	4982.6	5562.2	6875.1	8001.7	8628.6	*8891.8*	8948.0	8578.4	8173.2	8353.6
67.5°	3974.3	4060.0	4610.0	6147.7	7771.1	8903.6	*9459.5*	9518.7	9010.1	8409.8	8321.1
70°	*2880.1*	*2921.5*	*3382.8*	*4672.1*	*6830.7*	*8752.8*	*9909.0*	*9906.1*	*9152.0*	*8392.1*	*7877.5*
72.5°	1386.8	1419.4	1818.6	2900.8	4885.0	7428.1	*9583.7*	9639.9	8956.9	8134.8	6863.3
75°	570.7	603.2	736.3	1224.2	2563.7	4908.7	*8123.0*	8256.0	8134.8	7300.9	5370.0
77.5°	354.8	366.7	431.7	632.8	1171.0	2291.7	*5686.4*	5866.8	6446.3	5849.0	3545.5
80°	266.1	275.0	322.3	443.6	739.3	845.7	*2824.0*	3051.7	3906.2	3356.2	1605.7
82.5°	221.8	224.7	257.3	322.3	502.7	485.0	*904.9*	1008.3	1821.5	1280.4	553.0
85°	207.0	212.9	230.6	230.6	319.4	304.6	*375.5*	393.3	529.3	437.6	192.2
87.5°	106.5	100.5	204.0	180.4	165.6	147.9	*159.7*	171.5	198.1	209.9	85.8
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°	1806.7	1806.7	1806.7	1806.7	1806.7	1806.7	1806.7	1806.7	1806.7	1806.7	1806.7
2.5°	1800.8	1809.7	1824.5	1839.3	1857.0	1877.7	1889.5	1904.3	1916.2	1910.2	1907.3
5°	1809.7	1824.5	1857.0	1886.6	1922.1	1963.5	1990.1	2019.7	2043.3	2049.2	2040.4
7.5°	1824.5	1851.1	1895.5	1948.7	1996.0	2049.2	2090.6	2132.0	2161.6	2167.5	2167.5
10°	1860.0	1889.5	1948.7	2019.7	2075.8	2132.0	2179.3	2211.9	2238.5	2250.3	2250.3
12.5°	1910.2	1945.7	2016.7	2102.5	2164.5	2217.8	2244.4	2259.2	2271.0	2282.8	2285.8
15°	1969.4	2007.8	2093.6	2185.2	2250.3	2276.9	2276.9	2274.0	2274.0	2279.9	2285.8
17.5°	2028.5	2069.9	2158.6	2256.2	2297.6	2282.8	2262.1	2253.3	2247.3	2244.4	2253.3
20°	2090.6	2132.0	2220.7	2312.4	2300.6	2238.5	2208.9	2188.2	2170.5	2161.6	2173.4
22.5°	2158.6	2197.1	2288.7	2350.8	2262.1	2167.5	2111.3	2078.8	2049.2	2031.5	2043.3
25°	2238.5	2276.9	2365.6	2362.7	2194.1	2061.1	1972.3	1919.1	1886.6	1868.8	1868.8
27.5°	2333.1	2365.6	2451.4	2333.1	2099.5	1919.1	1789.0	1738.7	1729.9	1715.1	1715.1
30°	2430.7	2457.3	2531.2	2265.1	1969.4	1732.8	1590.9	1567.2	1570.2	1555.4	1558.4
32.5°	2531.2	2557.8	2578.5	2164.5	1800.8	1522.9	1428.2	1410.5	1407.5	1395.7	1383.9
35°	2673.2	2711.6	2584.4	2028.5	1596.8	1348.4	1280.4	1262.7	1244.9	1203.5	1203.5
37.5°	2889.0	2930.4	2569.7	1860.0	1386.8	1212.4	1150.3	1126.6	1097.1	1055.7	1040.9
40°	3184.7	3184.7	2537.1	1670.7	1218.3	1103.0	1043.8	1014.3	981.7	940.3	931.5
42.5°	3533.7	3450.9	2486.9	1478.5	1094.1	1029.0	975.8	943.3	904.9	857.5	851.6
45°	3941.7	3717.0	2415.9	1307.0	1002.4	984.7	952.2	896.0	830.9	780.7	771.8
47.5°	4338.0	3956.5	2347.9	1185.8	925.6	966.9	940.3	845.7	757.0	686.0	677.2
50°	4772.7	4169.4	2268.0	1085.2	866.4	955.1	925.6	771.8	674.2	623.9	618.0
52.5°	5207.3	4385.3	2182.3	978.8	816.1	931.5	890.1	718.6	671.2	603.2	594.4
55°	5665.7	4636.6	2081.8	860.5	757.0	884.2	842.8	715.6	691.9	603.2	582.5
57.5°	6112.2	4914.6	1919.1	745.2	691.9	813.2	825.0	697.9	647.6	597.3	573.7
60°	6606.0	5210.3	1650.0	647.6	635.8	754.0	801.4	659.4	597.3	579.6	567.8
62.5°	7002.3	5476.4	1289.3	579.6	588.4	706.7	771.8	635.8	576.6	561.8	558.9
65°	7173.8	5482.3	925.6	520.4	541.1	662.4	742.2	615.1	558.9	553.0	550.0
67.5°	6993.4	5180.7	650.5	464.3	490.9	621.0	703.8	594.4	541.1	544.1	538.2
70°	*6410.8*	*4545.0*	*476.1*	*411.0*	*443.6*	*576.6*	*662.4*	*567.8*	*520.4*	*526.4*	*517.5*
72.5°	5364.1	3542.5	381.5	366.7	405.1	529.3	621.0	538.2	487.9	490.9	473.1
75°	3962.4	2347.9	319.4	328.2	360.8	485.0	567.8	499.7	452.4	440.6	428.8
77.5°	2356.8	1206.5	263.2	286.8	322.3	431.7	508.6	452.4	414.0	393.3	384.4
80°	972.9	487.9	215.9	242.5	280.9	384.4	449.5	396.2	369.6	348.9	337.1
82.5°	387.4	239.5	171.5	198.1	236.6	334.1	393.3	348.9	322.3	307.5	275.0
85°	147.9	118.3	115.3	139.0	177.4	257.3	325.3	292.7	272.0	233.6	224.7
87.5°	59.1	53.2	53.2	68.0	100.5	162.6	233.6	204.0	212.9	168.6	171.5
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)