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: P842492

Luminaire Tested: **ARCH4-50-750-U-T4W-HSS**

Issue Date: 5/27/2024

Report Generated By 670246001

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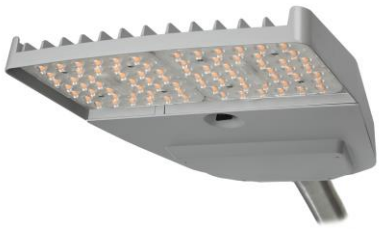
Test Information

Test Method:	LM-79-08
Report Number:	P842492
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)
Test Lab:	INNOVATION CENTER
Issue Date:	5/27/2024
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	STREETWORKS
Catalog Number:	ARCH4-50-750-U-T4W-HSS
Description:	ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
	(2) 70 CRI, 5000K, 435mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	6779 lumens
Efficiency:	N/A
Efficacy:	127.4 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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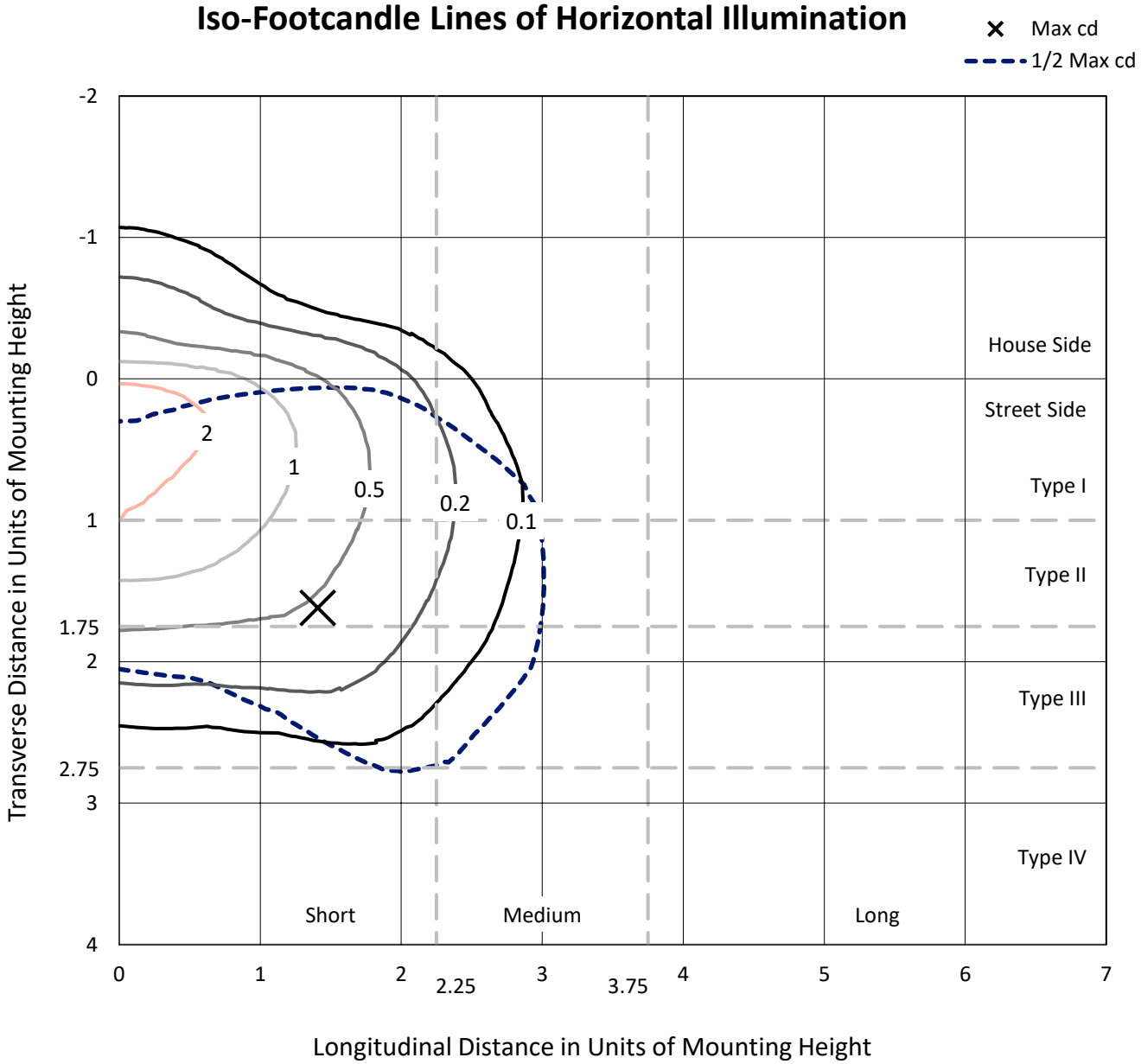
Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 2.7 fc
Type III - Short - N/A

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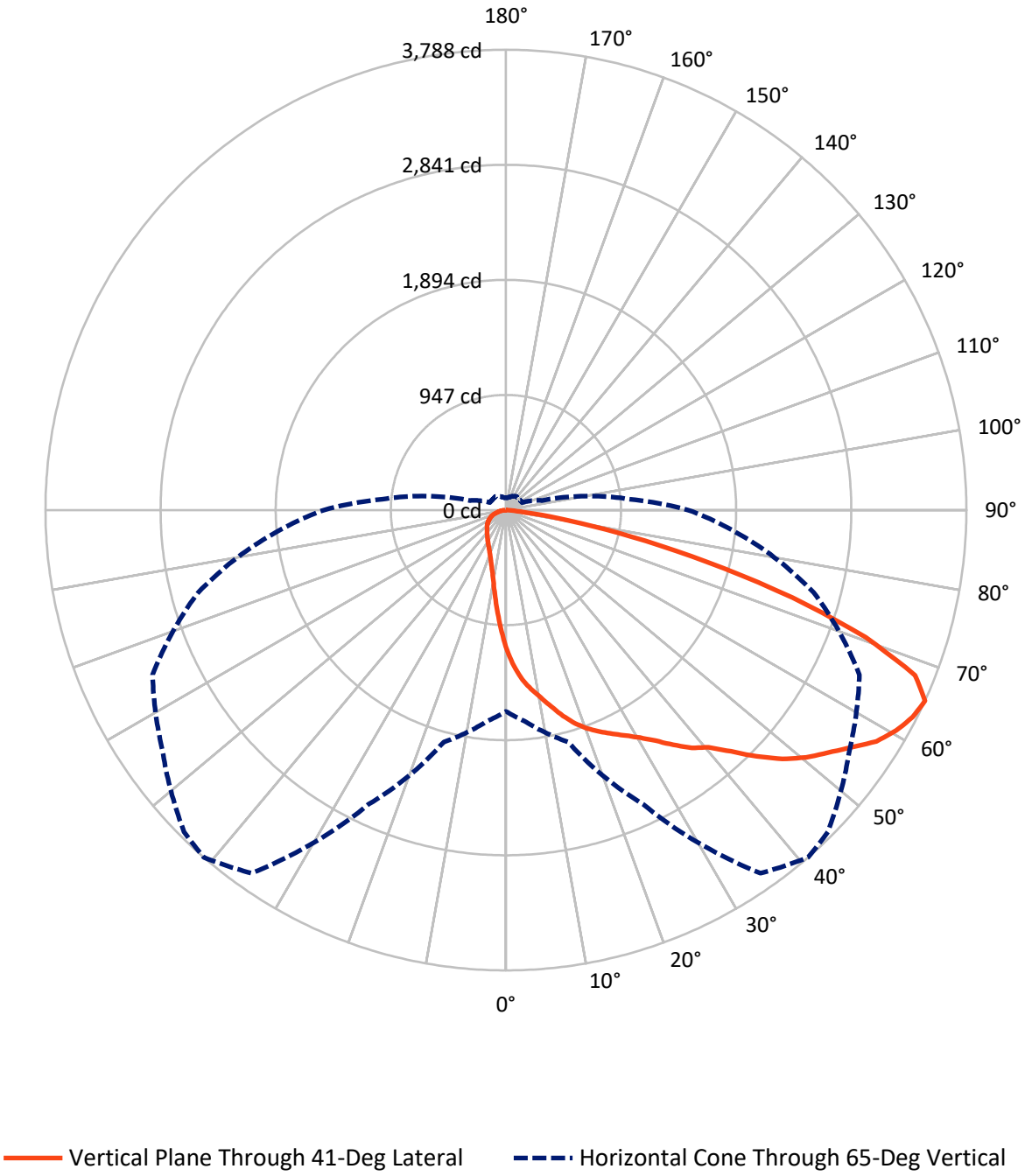
Luminous Intensity Polar Plot



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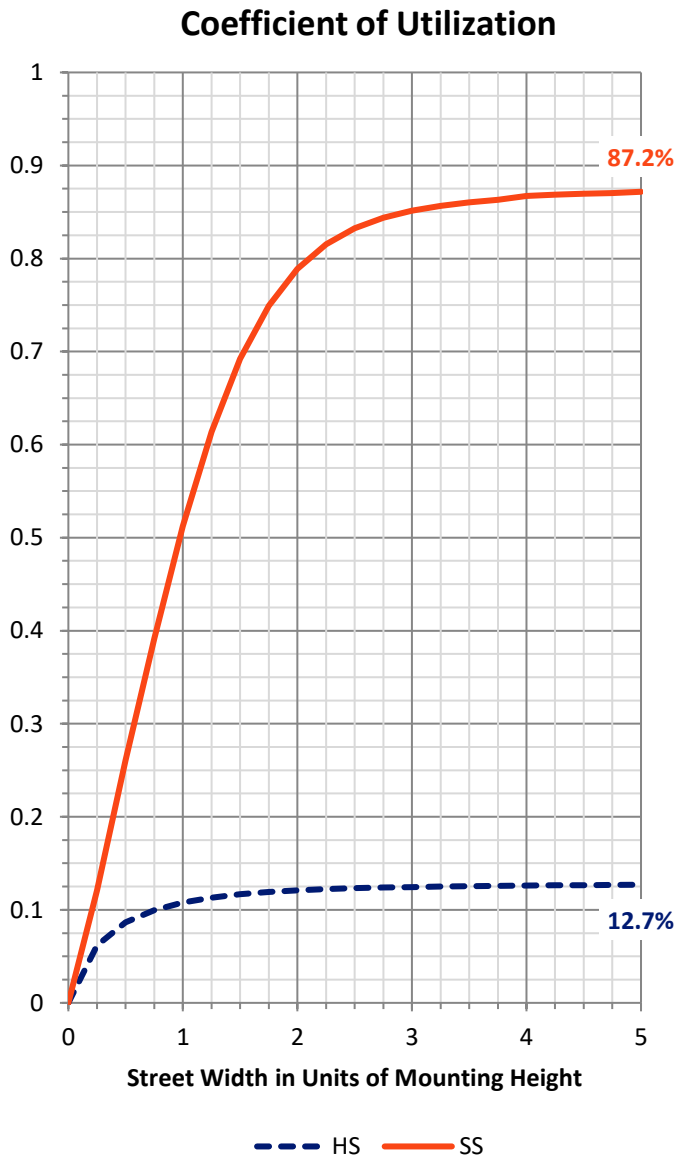
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	870.3	0.0	870.3
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	5908.7	0.0	5908.7
	% Fixture	87.2	0.0	87.2
Total	Lumens	6779.0	0.0	6779.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.6	1.6
10°-20°	322.7	4.8
20°-30°	555.2	8.2
30°-40°	842.0	12.4
40°-50°	1233.6	18.2
50°-60°	1557.8	23.0
60°-70°	1460.7	21.5
70°-80°	651.0	9.6
80°-90°	48.2	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°	6779.0	100.0
0°-180°	6779.0	100.0



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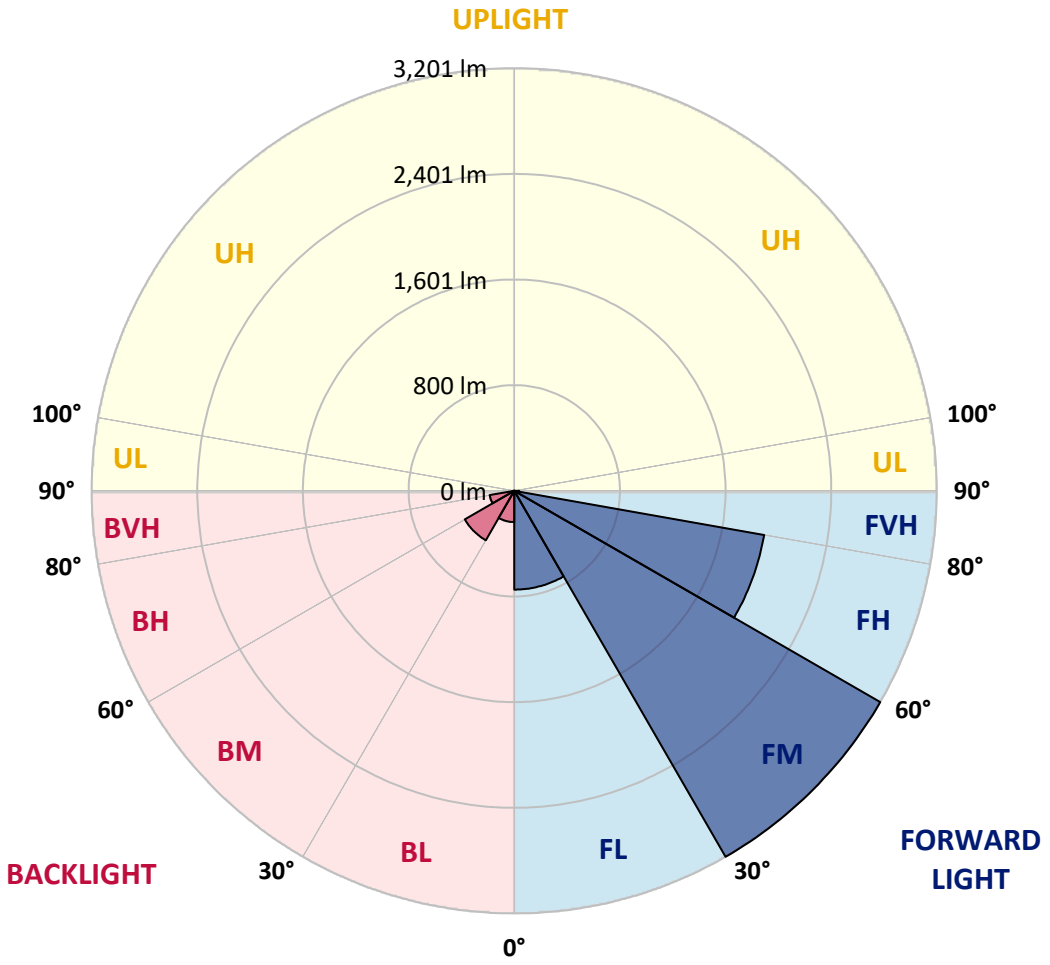
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	748.7	11.0			
FM	(30°-60°)	3201.3	47.2			
FH	(60°-80°)	1922.7	28.4			G2/5000
FVH	(80°-90°)	36.0	0.5			G1/100
BL	(0°-30°)	236.9	3.5	B1/500		
BM	(30°-60°)	432.2	6.4	B1/1000		
BH	(60°-80°)	189.1	2.8	B1/500		G1/500
BVH	(80°-90°)	12.2	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°	1155.1	1155.1	1155.1	1155.1	1155.1	*1155.1*	1155.1	1155.1	1155.1	1155.1	1155.1
2.5°	1332.4	1328.1	1325.2	1309.5	1309.5	*1288.1*	1289.5	1269.5	1245.2	1206.6	1165.1
5°	1458.2	1452.5	1445.3	1429.6	1423.9	*1402.4*	1399.6	1371.0	1329.5	1262.3	1188.0
7.5°	1568.3	1562.5	1552.5	1529.7	1513.9	*1488.2*	1481.1	1443.9	1398.1	1315.2	1210.9
10°	1668.3	1664.0	1651.2	1622.6	1601.1	*1569.7*	1556.8	1506.8	1449.6	1358.1	1229.4
12.5°	1769.8	1764.1	1747.0	1722.7	1696.9	*1659.8*	1644.0	1579.7	1506.8	1405.3	1256.6
15°	1864.2	1855.6	1842.7	1817.0	1794.1	*1758.4*	1741.2	1665.5	1576.8	1458.2	1292.3
17.5°	1925.7	1918.5	1907.1	1892.8	1874.2	*1847.0*	1829.9	1755.5	1646.9	1509.6	1329.5
20°	1962.8	1960.0	1955.7	1947.1	1938.5	*1919.9*	1907.1	1837.0	1722.7	1559.7	1365.3
22.5°	1991.4	1988.6	1987.1	1987.1	1988.6	*1981.4*	1972.8	1912.8	1795.6	1612.6	1398.1
25°	2035.7	2034.3	2031.4	2028.6	2038.6	*2040.0*	2037.2	1995.7	1887.1	1682.6	1439.6
27.5°	2097.2	2092.9	2087.2	2084.3	2094.3	*2101.5*	2107.2	2078.6	1984.3	1754.1	1486.8
30°	2191.6	2178.7	2164.4	2154.4	2161.5	*2173.0*	2185.8	2168.7	2084.3	1842.7	1535.4
32.5°	2303.1	2287.3	2254.5	2235.9	2254.5	*2263.0*	2273.0	2264.5	2188.7	1938.5	1584.0
35°	2438.9	2420.3	2386.0	2358.8	2391.7	*2373.1*	2368.8	2360.2	2287.3	2032.9	1638.3
37.5°	2664.7	2637.6	2583.3	2523.2	2523.2	*2483.2*	2467.5	2441.7	2376.0	2117.2	1691.2
40°	2926.4	2890.6	2820.6	2731.9	2650.5	*2567.5*	2557.5	2538.9	2480.3	2214.4	1751.2
42.5°	3213.7	3145.1	3047.9	2940.7	2809.1	*2714.8*	2691.9	2639.0	2581.8	2313.1	1811.3
45°	3532.5	3389.6	3248.0	3193.7	2976.4	*2890.6*	2847.7	2752.0	2687.6	2416.0	1874.2
47.5°	3584.0	3472.5	3378.1	3369.5	3132.2	*3060.7*	3012.1	2874.9	2802.0	2526.1	1939.9
50°	3555.4	3488.2	3498.2	3463.9	3246.6	*3199.4*	3162.2	3006.4	2914.9	2631.9	2000.0
52.5°	3435.3	3472.5	3529.6	3466.7	3355.2	*3316.6*	3298.1	3148.0	3020.7	2729.1	2054.3
55°	3292.3	3318.1	3441.0	3518.2	3481.0	*3446.7*	3429.6	3312.4	3125.1	2810.6	2104.4
57.5°	3083.6	3072.2	3208.0	3509.6	3612.6	*3592.6*	3574.0	3473.9	3222.3	2869.2	2135.8
60°	2770.5	2746.2	2917.8	3338.1	3655.5	*3686.9*	3678.3	3581.1	3296.6	2867.8	2122.9
62.5°	2228.7	2288.8	2526.1	3057.9	3674.0	*3754.1*	3738.4	3589.7	3320.9	2784.8	2041.4
65°	*1656.9*	*1742.7*	*1975.7*	*2671.9*	*3648.3*	*3788.4*	*3745.5*	*3449.6*	*3208.0*	*2620.4*	*1862.8*
67.5°	1193.7	1269.5	1439.6	2198.7	3401.0	*3631.2*	3581.1	3220.9	2947.8	2387.4	1615.4
70°	816.3	870.6	986.4	1601.1	2903.5	*3139.4*	3107.9	2879.2	2537.5	2110.1	1312.4
72.5°	576.1	599.0	673.3	1056.5	2205.9	*2463.2*	2426.0	2368.8	2038.6	1754.1	1020.7
75°	431.7	446.0	486.1	683.3	1488.2	*1706.9*	1672.6	1705.5	1522.5	1328.1	743.4
77.5°	163.0	177.3	275.9	436.0	880.6	*1047.9*	1013.6	1033.6	846.3	670.5	370.3
80°	44.3	47.2	91.5	207.3	400.3	*521.8*	474.6	407.4	314.5	308.8	195.9
82.5°	18.6	21.4	41.5	111.5	143.0	*143.0*	120.1	148.7	120.1	144.4	94.4
85°	7.1	8.6	10.0	28.6	18.6	*20.0*	21.4	28.6	24.3	30.0	21.4
87.5°	0.0	0.0	0.0	1.4	1.4	*2.9*	1.4	2.9	4.3	4.3	4.3
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°	1155.1	1155.1	1155.1	1155.1	1155.1	1155.1	1155.1	1155.1	1155.1	1155.1	1155.1
2.5°	1148.0	1132.2	1109.4	1072.2	1033.6	1012.1	985.0	980.7	952.1	949.2	937.8
5°	1155.1	1122.2	1063.6	992.1	922.1	867.8	827.7	806.3	764.8	764.8	753.4
7.5°	1160.8	1109.4	1015.0	909.2	813.4	740.5	686.2	663.3	626.2	623.3	614.7
10°	1162.3	1093.6	962.1	824.9	707.6	633.3	580.4	554.7	521.8	518.9	513.2
12.5°	1173.7	1085.1	914.9	752.0	631.9	551.8	500.4	478.9	453.2	450.3	444.6
15°	1192.3	1085.1	874.9	690.5	564.7	490.3	446.0	426.0	407.4	404.6	401.7
17.5°	1210.9	1082.2	834.9	633.3	508.9	441.7	403.1	387.4	373.1	371.7	368.8
20°	1228.0	1080.8	794.9	584.7	466.0	401.7	371.7	357.4	346.0	346.0	344.5
22.5°	1245.2	1077.9	756.3	539.0	428.9	371.7	346.0	330.2	321.7	321.7	320.2
25°	1270.9	1077.9	720.5	500.4	398.9	348.8	323.1	311.6	304.5	303.1	303.1
27.5°	1300.9	1086.5	689.1	466.0	373.1	325.9	305.9	294.5	285.9	283.1	284.5
30°	1333.8	1093.6	660.5	436.0	348.8	308.8	287.3	275.9	267.3	264.5	265.9
32.5°	1366.7	1102.2	634.7	408.9	324.5	293.1	271.6	258.8	250.2	248.7	248.7
35°	1402.4	1110.8	609.0	386.0	304.5	277.3	257.3	243.0	237.3	234.5	235.9
37.5°	1438.2	1125.1	584.7	364.5	290.2	263.0	244.5	230.2	225.9	224.4	224.4
40°	1481.1	1146.5	574.7	350.2	277.3	250.2	234.5	220.2	215.9	215.9	215.9
42.5°	1516.8	1163.7	566.1	334.5	267.3	238.7	224.4	213.0	210.1	208.7	210.1
45°	1552.5	1179.4	554.7	320.2	254.5	227.3	215.9	204.4	201.6	201.6	201.6
47.5°	1588.3	1188.0	539.0	305.9	243.0	217.3	207.3	197.3	194.4	194.4	194.4
50°	1616.9	1195.1	516.1	290.2	230.2	208.7	198.7	188.7	185.8	185.8	185.8
52.5°	1645.5	1196.6	491.8	271.6	217.3	198.7	190.1	180.1	177.3	175.8	175.8
55°	1671.2	1195.1	463.2	250.2	203.0	187.3	180.1	171.6	165.8	160.1	163.0
57.5°	1689.8	1193.7	430.3	228.7	188.7	175.8	173.0	161.5	150.1	135.8	138.7
60°	1682.6	1178.0	394.6	201.6	173.0	164.4	164.4	148.7	128.7	121.5	122.9
62.5°	1636.9	1133.7	357.4	173.0	157.3	153.0	151.5	134.4	118.7	111.5	112.9
65°	*1499.6*	*1022.2*	*303.1*	*147.2*	*141.5*	*140.1*	*140.1*	*124.4*	*110.1*	*101.5*	*102.9*
67.5°	1290.9	857.8	247.3	124.4	125.8	128.7	128.7	114.4	100.1	91.5	92.9
70°	1035.0	670.5	197.3	107.2	108.6	112.9	115.8	102.9	90.1	81.5	81.5
72.5°	779.1	508.9	158.7	90.1	97.2	97.2	101.5	91.5	78.6	70.0	71.5
75°	564.7	364.5	125.8	75.8	84.3	82.9	82.9	77.2	67.2	61.5	61.5
77.5°	267.3	191.6	100.1	54.3	65.8	64.3	65.8	61.5	57.2	51.5	52.9
80°	131.5	94.4	64.3	38.6	45.7	47.2	51.5	48.6	47.2	42.9	42.9
82.5°	62.9	37.2	30.0	27.2	31.5	32.9	35.7	35.7	37.2	34.3	34.3
85°	17.2	10.0	12.9	17.2	20.0	21.4	24.3	25.7	25.7	24.3	25.7
87.5°	4.3	4.3	5.7	8.6	10.0	11.4	12.9	12.9	5.7	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)