Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
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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: P842774

Luminaire Tested: **ARCH4-90-750-U-T2R-HSS**

Issue Date: 5/27/2024

Report Generated By 670246001

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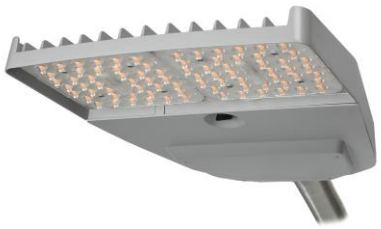
Test Information

Test Method:	LM-79-08
Report Number:	P842774
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-2)
Test Lab:	INNOVATION CENTER
Issue Date:	5/27/2024
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	STREETWORKS
Catalog Number:	ARCH4-90-750-U-T2R-HSS
Description:	ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
	(2) 70 CRI, 5000K, 765mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	11694 lumens
Efficiency:	N/A
Efficacy:	125.6 lumens/watt
Luminous Opening:	Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification:	Type II - 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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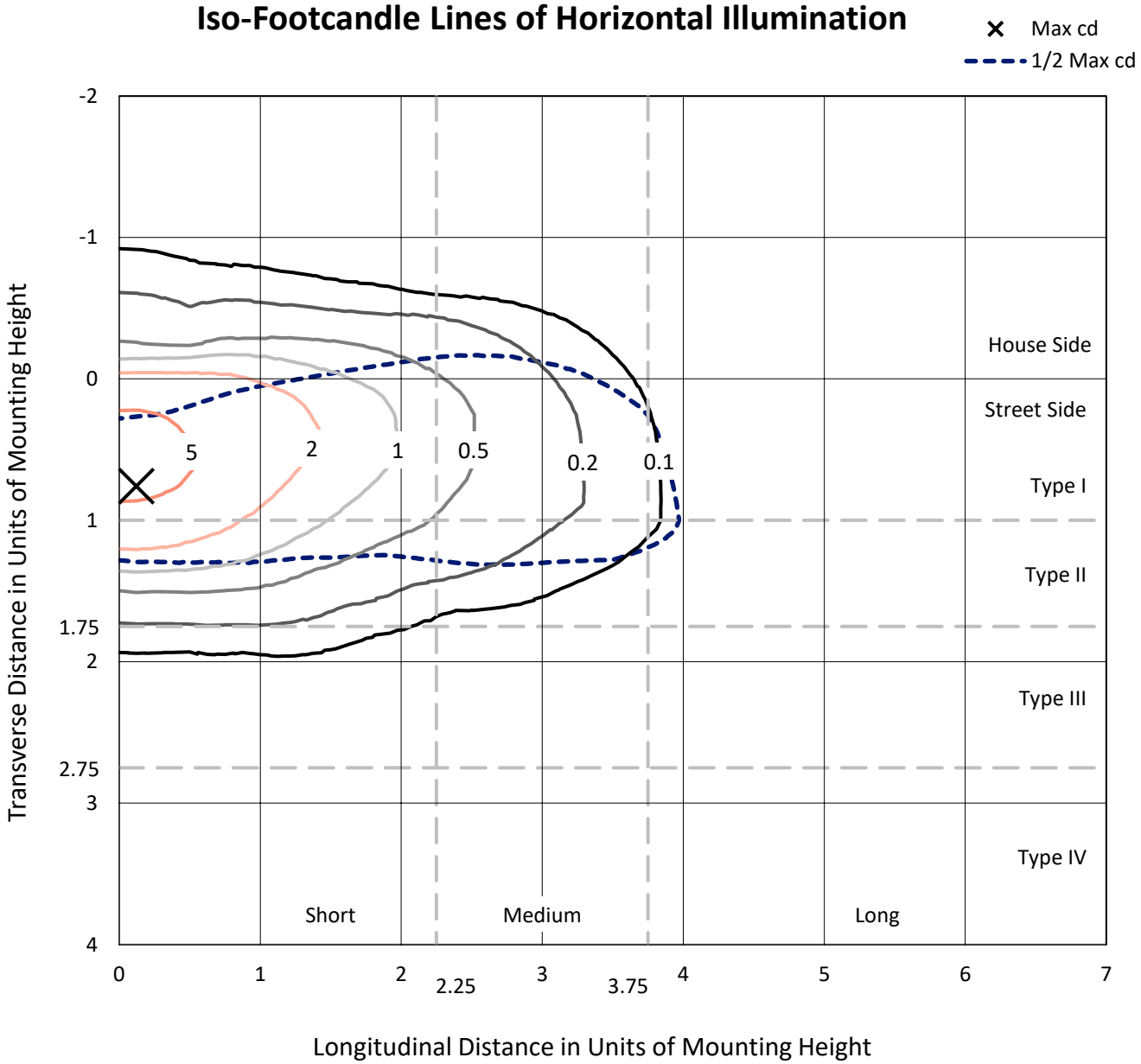
Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 6.8 fc
Type II - Short - N/A

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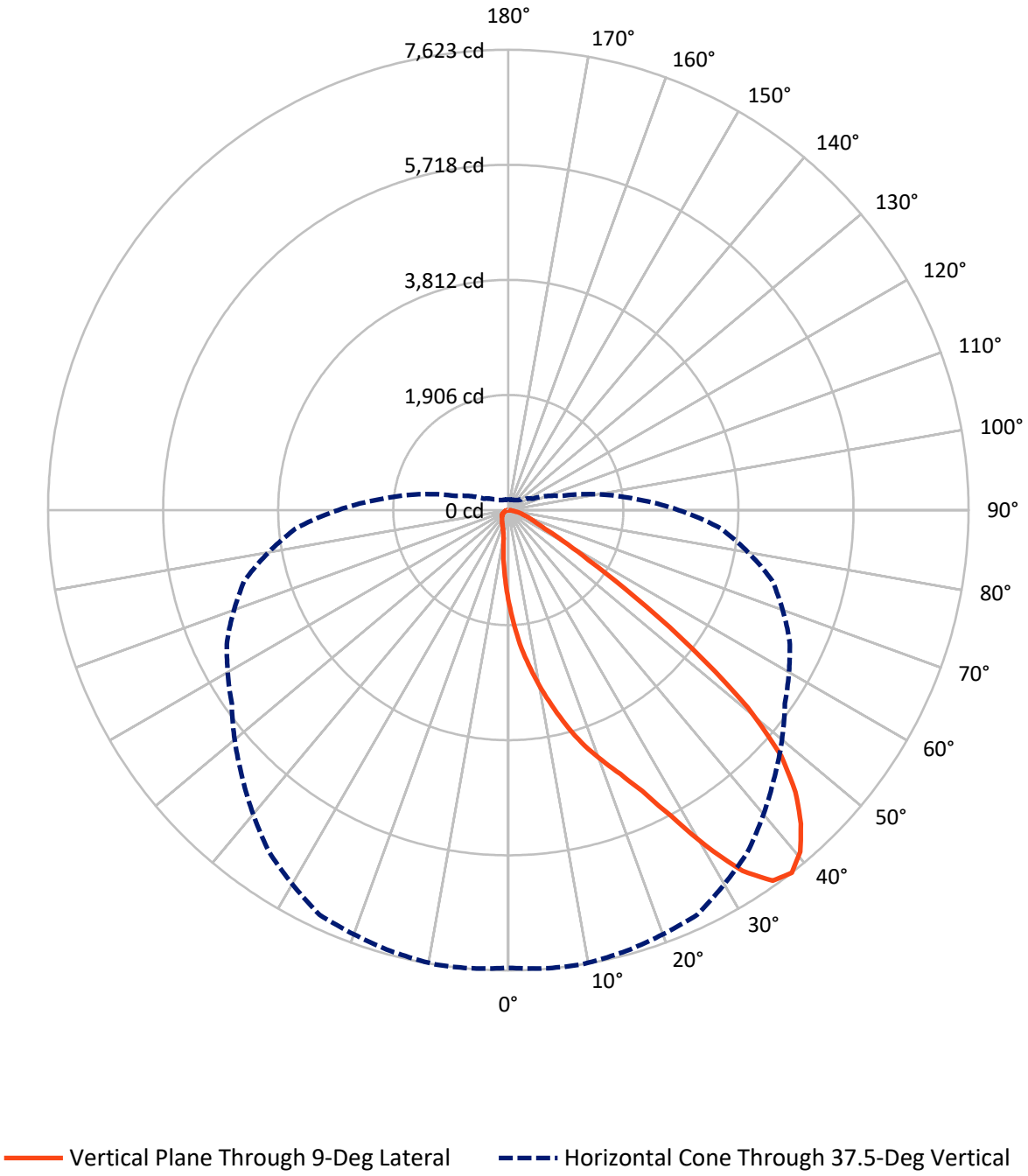
Luminous Intensity Polar Plot



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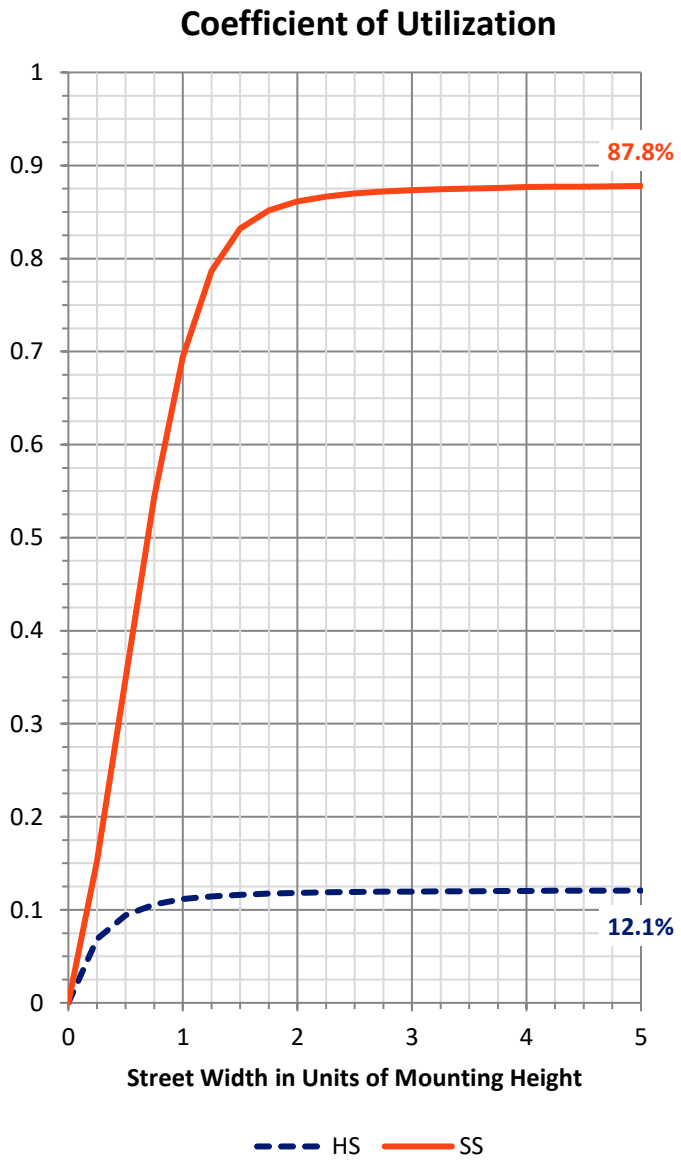
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1422.2	0.0	1422.2
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	10271.8	0.0	10271.8
	% Fixture	87.8	0.0	87.8
Total	Lumens	11694.0	0.0	11694.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.4	1.3
10°-20°	540.0	4.6
20°-30°	1109.7	9.5
30°-40°	1961.4	16.8
40°-50°	2605.6	22.3
50°-60°	2471.2	21.1
60°-70°	1885.3	16.1
70°-80°	914.0	7.8
80°-90°	51.4	0.4
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°	11694.0	100.0
0°-180°	11694.0	100.0



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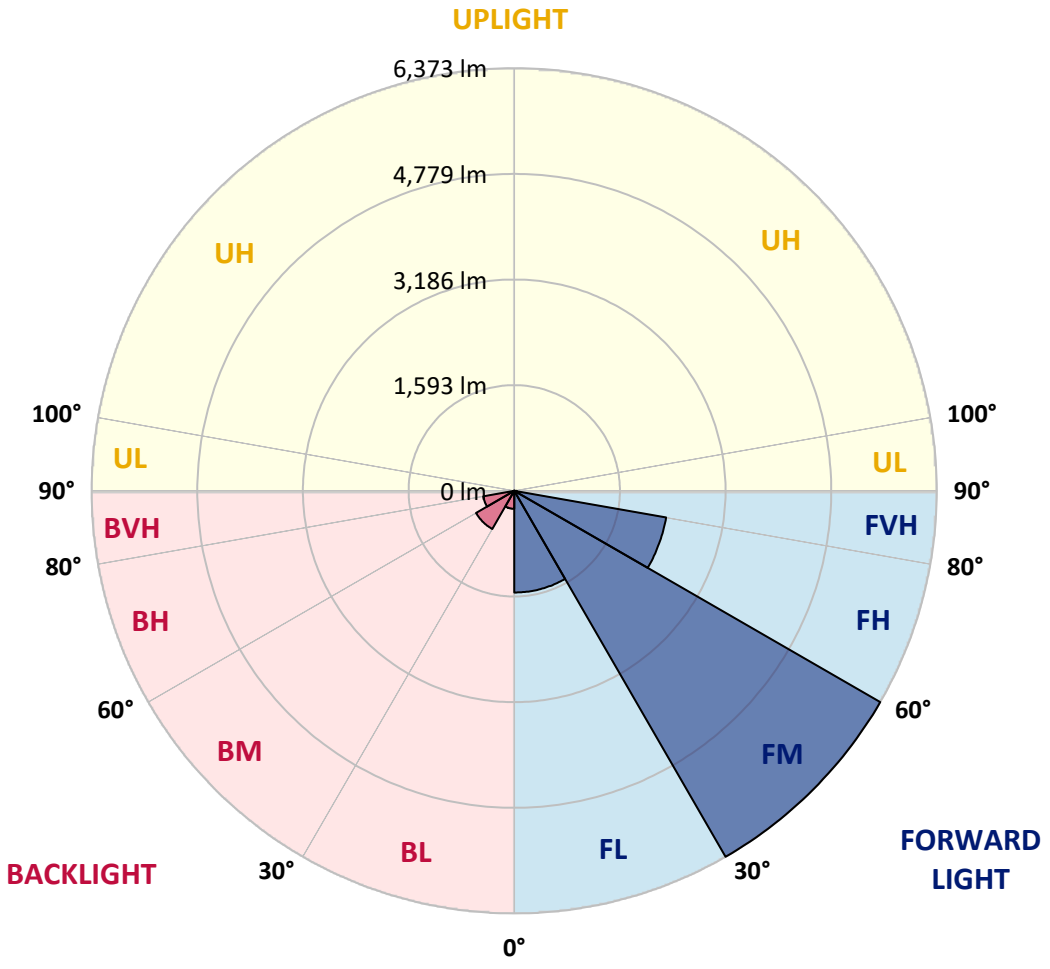
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1533.7	13.1			
FM	(30°-60°)	6372.7	54.5			
FH	(60°-80°)	2324.7	19.9			G2/5000
FVH	(80°-90°)	40.7	0.3			G1/100
BL	(0°-30°)	271.4	2.3	B1/500		
BM	(30°-60°)	665.5	5.7	B1/1000		
BH	(60°-80°)	474.6	4.1	B1/500		G1/500
BVH	(80°-90°)	10.7	0.1			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 II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	9°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1545.8	1545.8	*1545.8*	1545.8	1545.8	1545.8	1545.8	1545.8	1545.8	1545.8	1545.8
2.5°	1915.5	1881.8	*1920.3*	1915.5	1881.8	1860.2	1793.0	1771.4	1692.2	1634.6	1584.2
5°	2309.1	2275.5	*2309.1*	2299.5	2251.5	2198.7	2088.3	2016.3	1874.6	1749.8	1637.0
7.5°	2635.6	2635.6	*2650.0*	2652.4	2594.7	2513.1	2376.3	2268.3	2069.1	1877.0	1697.0
10°	2988.4	2990.8	*3022.0*	3000.4	2923.6	2813.2	2640.4	2503.5	2263.5	2011.5	1754.6
12.5°	3365.2	3367.6	*3377.2*	3367.6	3276.4	3134.8	2926.0	2746.0	2469.9	2165.1	1833.8
15°	3742.1	3744.5	*3756.5*	3739.7	3638.9	3473.3	3235.6	3014.8	2688.4	2337.9	1929.9
17.5°	4094.9	4099.7	*4109.3*	4087.7	3982.1	3785.3	3542.9	3276.4	2921.2	2522.7	2037.9
20°	4411.8	4416.6	*4423.8*	4395.0	4289.4	4092.5	3830.9	3552.5	3158.8	2712.4	2155.5
22.5°	4731.0	4735.8	*4747.8*	4709.4	4591.8	4366.2	4109.3	3821.3	3410.9	2921.2	2292.3
25°	5139.1	5143.9	*5153.5*	5098.3	4937.5	4673.4	4402.2	4106.9	3684.5	3156.4	2460.3
27.5°	5736.8	5732.0	*5732.0*	5631.1	5355.1	5011.9	4697.4	4397.4	3979.7	3408.5	2645.2
30°	6476.1	6464.1	*6456.9*	6320.0	5926.4	5393.5	4999.9	4668.6	4263.0	3674.9	2844.4
32.5°	7138.5	7138.5	*7124.1*	6980.1	6562.5	5907.2	5321.5	4932.7	4536.6	3943.7	3050.8
35°	7529.8	7546.6	*7539.4*	7431.4	7126.5	6459.3	5756.0	5249.5	4824.6	4224.6	3298.0
37.5°	*7582.6*	*7616.2*	*7623.4*	*7558.6*	*7397.8*	*6910.5*	*6238.4*	*5592.7*	*5141.5*	*4527.0*	*3538.1*
40°	7369.0	7441.0	*7441.0*	7431.4	7373.8	7124.1	6644.1	5991.2	5467.9	4841.4	3780.5
42.5°	7040.1	7114.5	*7104.9*	7140.9	7126.5	7073.7	6872.1	6363.2	5794.4	5165.5	4001.3
45°	6610.5	6687.3	*6668.1*	6732.9	6761.7	6819.3	6848.1	6622.5	6116.0	5518.3	4248.6
47.5°	5921.6	6051.2	*6080.0*	6195.2	6315.2	6495.3	6632.1	6716.1	6416.1	5897.6	4517.4
50°	4903.9	5086.3	*5143.9*	5386.3	5715.2	6087.2	6308.0	6600.9	6627.3	6286.4	4807.8
52.5°	3511.7	3722.9	*3811.7*	4210.2	4887.0	5535.1	5933.6	6346.4	6708.9	6658.5	5122.3
55°	2270.7	2450.7	*2537.1*	2911.6	3811.7	4829.4	5491.9	6017.6	6663.3	6999.3	5482.3
57.5°	1399.4	1502.6	*1560.2*	1881.8	2710.0	3924.5	4913.5	5715.2	6524.1	7294.6	5856.8
60°	943.3	1003.3	*1032.1*	1183.4	1841.0	2933.2	4118.9	5398.3	6341.6	7493.8	6197.6
62.5°	626.5	645.7	*674.5*	768.1	1214.6	2059.5	3163.6	4831.8	6204.8	7505.8	6449.7
65°	484.9	494.5	*506.5*	547.3	748.9	1440.2	2225.1	3914.9	6000.8	7251.4	6528.9
67.5°	381.7	391.3	*405.7*	427.3	542.5	976.9	1514.6	2868.4	5583.1	6852.9	6399.2
70°	300.0	307.2	*316.8*	336.0	422.5	708.1	1000.9	1905.9	4740.6	6473.7	5991.2
72.5°	237.6	244.8	*254.4*	273.6	343.2	518.5	686.5	1188.2	3655.7	6010.4	5206.3
75°	187.2	192.0	*199.2*	218.4	276.0	403.3	465.7	710.5	2484.3	5163.1	4056.5
77.5°	93.6	115.2	*132.0*	151.2	201.6	278.4	309.6	393.7	1048.9	2650.0	1934.7
80°	55.2	67.2	*72.0*	84.0	132.0	168.0	168.0	158.4	331.2	1017.7	789.7
82.5°	31.2	43.2	*45.6*	48.0	79.2	96.0	76.8	57.6	67.2	340.8	230.4
85°	9.6	14.4	*16.8*	19.2	26.4	28.8	26.4	24.0	19.2	33.6	21.6
87.5°	0.0	0.0	*0.0*	0.0	2.4	4.8	4.8	4.8	7.2	7.2	7.2
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°	1545.8	1545.8	1545.8	1545.8	1545.8	1545.8	1545.8	1545.8	1545.8	1545.8	1545.8
2.5°	1555.4	1524.2	1464.2	1409.0	1356.2	1317.8	1281.8	1248.2	1224.2	1205.0	1202.6
5°	1577.0	1514.6	1399.4	1291.4	1193.0	1111.3	1041.7	986.5	945.7	916.9	914.5
7.5°	1605.8	1509.8	1334.6	1173.8	1027.3	909.7	808.9	734.5	681.7	660.1	643.3
10°	1629.8	1505.0	1269.8	1056.1	864.1	715.3	595.3	520.9	482.5	468.1	460.9
12.5°	1670.6	1509.8	1214.6	948.1	722.5	547.3	456.1	415.3	398.5	386.5	384.1
15°	1730.6	1531.4	1161.8	842.5	578.5	441.7	388.9	362.4	345.6	343.2	340.8
17.5°	1790.6	1550.6	1113.7	734.5	480.1	384.1	348.0	326.4	314.4	312.0	312.0
20°	1860.2	1574.6	1060.9	631.3	410.5	345.6	316.8	300.0	285.6	283.2	283.2
22.5°	1941.9	1608.2	1010.5	540.1	364.8	316.8	292.8	273.6	261.6	259.2	259.2
25°	2052.3	1658.6	969.7	472.9	333.6	292.8	271.2	254.4	244.8	240.0	240.0
27.5°	2174.7	1728.2	940.9	432.1	312.0	273.6	252.0	237.6	228.0	223.2	223.2
30°	2311.5	1805.0	921.7	415.3	300.0	256.8	237.6	223.2	211.2	208.8	208.8
32.5°	2462.7	1893.9	909.7	417.7	297.6	244.8	223.2	208.8	199.2	194.4	194.4
35°	2630.7	1992.3	902.5	432.1	302.4	235.2	211.2	196.8	187.2	182.4	182.4
37.5°	*2818.0*	*2107.5*	*902.5*	*446.5*	*314.4*	*232.8*	*199.2*	*184.8*	*177.6*	*172.8*	*172.8*
40°	2993.2	2229.9	912.1	463.3	326.4	232.8	189.6	177.6	168.0	163.2	163.2
42.5°	3130.0	2299.5	919.3	480.1	333.6	230.4	180.0	168.0	160.8	156.0	156.0
45°	3286.0	2373.9	904.9	487.3	333.6	225.6	172.8	160.8	153.6	148.8	148.8
47.5°	3458.9	2465.1	902.5	492.1	326.4	216.0	165.6	153.6	148.8	144.0	144.0
50°	3634.1	2565.9	907.3	489.7	316.8	201.6	156.0	148.8	141.6	136.8	136.8
52.5°	3833.3	2671.6	916.9	484.9	295.2	184.8	148.8	141.6	134.4	129.6	127.2
55°	4054.1	2786.8	936.1	475.3	266.4	168.0	141.6	134.4	124.8	120.0	117.6
57.5°	4308.6	2928.4	957.7	456.1	235.2	153.6	134.4	124.8	110.4	103.2	100.8
60°	4551.0	3089.2	981.7	410.5	204.0	139.2	127.2	112.8	98.4	93.6	91.2
62.5°	4779.0	3247.6	993.7	328.8	172.8	127.2	120.0	103.2	88.8	84.0	81.6
65°	4925.5	3420.5	967.3	223.2	141.6	117.6	110.4	96.0	81.6	74.4	74.4
67.5°	4935.1	3502.1	876.1	146.4	115.2	105.6	100.8	86.4	72.0	67.2	64.8
70°	4692.6	3379.6	669.7	115.2	96.0	91.2	91.2	76.8	62.4	57.6	55.2
72.5°	4135.7	2993.2	427.3	93.6	81.6	76.8	76.8	64.8	55.2	48.0	45.6
75°	3264.4	2309.1	228.0	76.8	67.2	64.8	60.0	52.8	45.6	40.8	38.4
77.5°	1500.2	1017.7	105.6	55.2	50.4	50.4	45.6	38.4	36.0	31.2	31.2
80°	592.9	345.6	52.8	36.0	33.6	33.6	33.6	26.4	26.4	21.6	19.2
82.5°	163.2	72.0	26.4	21.6	21.6	21.6	19.2	16.8	16.8	14.4	14.4
85°	16.8	12.0	12.0	12.0	12.0	9.6	9.6	7.2	4.8	4.8	4.8
87.5°	7.2	7.2	7.2	7.2	7.2	4.8	2.4	0.0	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)