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: P842780

Luminaire Tested: **ARCH4-90-750-U-T4W-HSS**

Issue Date: 5/27/2024

Report Generated By 670246001

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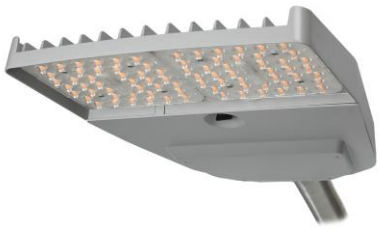
Test Information

Test Method:	LM-79-08
Report Number:	P842780
	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:	ARCH4-90-750-U-T4W-HSS
Description:	ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
	(2) 70 CRI, 5000K, 765mA 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:	11624 lumens
Efficiency:	N/A
Efficacy:	124.9 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):	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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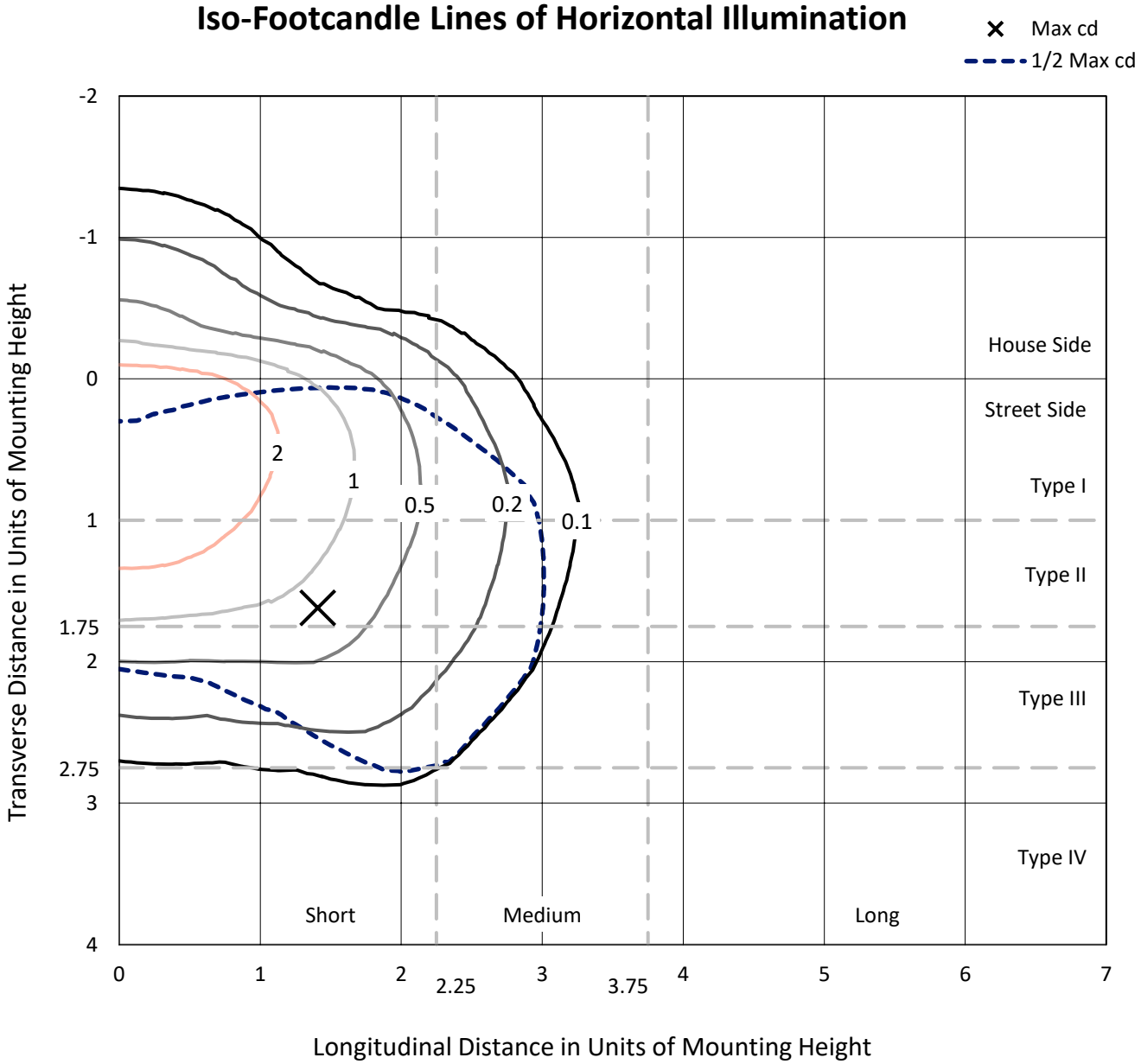
Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 4.6 fc
Type III - Short - N/A

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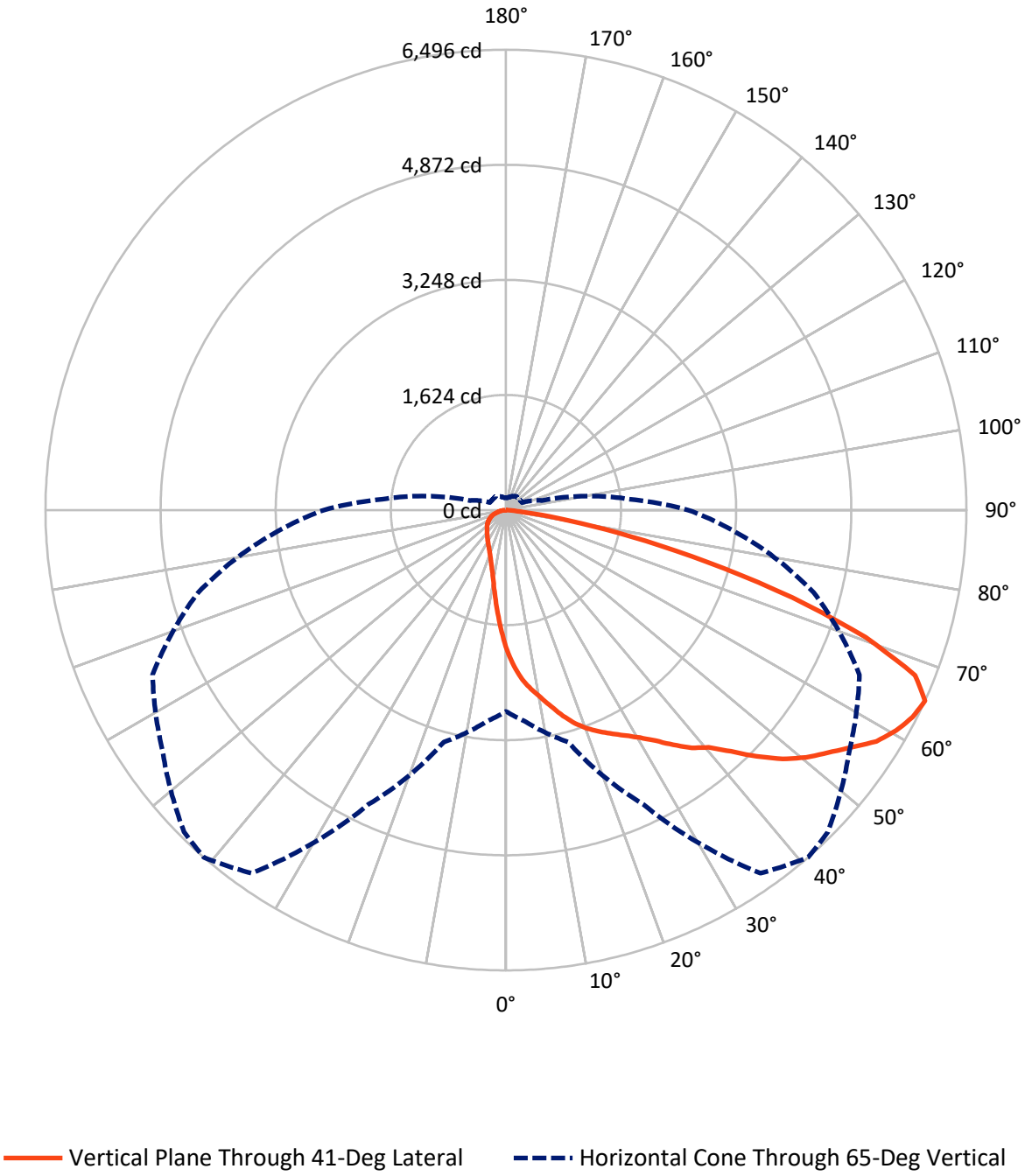
Luminous Intensity Polar Plot



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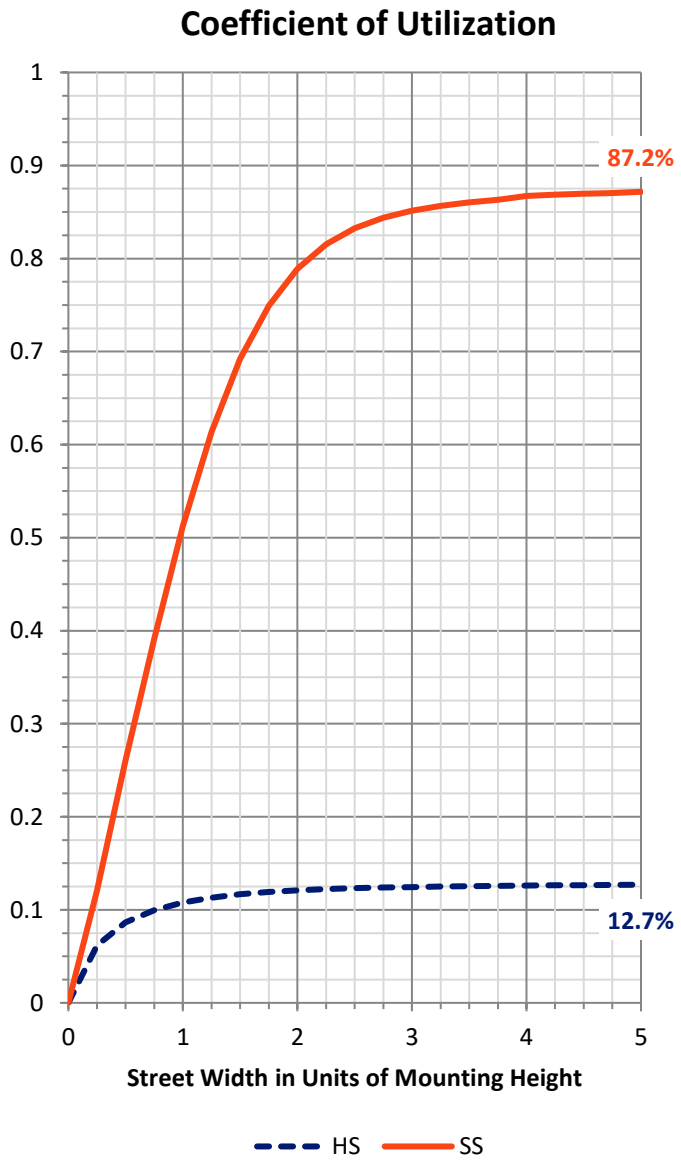
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1492.3	0.0	1492.3
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	10131.7	0.0	10131.7
	% Fixture	87.2	0.0	87.2
Total	Lumens	11624.0	0.0	11624.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.5	1.6
10°-20°	553.4	4.8
20°-30°	952.0	8.2
30°-40°	1443.9	12.4
40°-50°	2115.3	18.2
50°-60°	2671.2	23.0
60°-70°	2504.7	21.5
70°-80°	1116.3	9.6
80°-90°	82.7	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°	11624.0	100.0
0°-180°	11624.0	100.0



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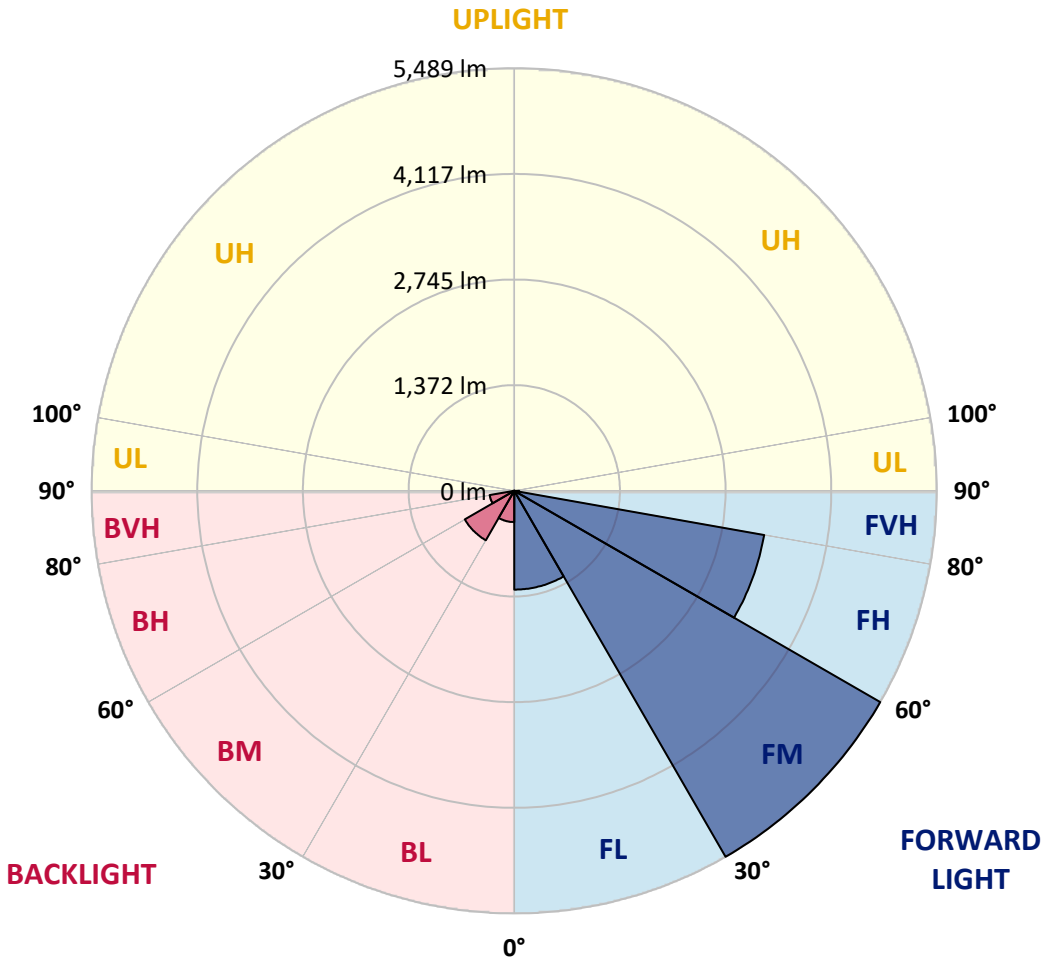
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1283.7	11.0			
FM	(30°-60°)	5489.3	47.2			
FH	(60°-80°)	3296.9	28.4			G2/5000
FVH	(80°-90°)	61.8	0.5			G1/100
BL	(0°-30°)	406.2	3.5	B1/500		
BM	(30°-60°)	741.0	6.4	B1/1000		
BH	(60°-80°)	324.2	2.8	B1/500		G1/500
BVH	(80°-90°)	20.9	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°	1980.7	1980.7	1980.7	1980.7	1980.7	*1980.7*	1980.7	1980.7	1980.7	1980.7	1980.7
2.5°	2284.6	2277.3	2272.4	2245.4	2245.4	*2208.6*	2211.1	2176.8	2135.1	2068.9	1997.8
5°	2500.3	2490.5	2478.3	2451.3	2441.5	*2404.7*	2399.8	2350.8	2279.7	2164.5	2037.0
7.5°	2689.1	2679.3	2662.1	2622.9	2596.0	*2551.8*	2539.6	2475.8	2397.4	2255.2	2076.3
10°	2860.7	2853.3	2831.3	2782.3	2745.5	*2691.6*	2669.5	2583.7	2485.6	2328.8	2108.1
12.5°	3034.7	3024.9	2995.5	2953.8	2909.7	*2846.0*	2819.0	2708.7	2583.7	2409.7	2154.7
15°	3196.5	3181.8	3159.8	3115.6	3076.4	*3015.1*	2985.7	2855.8	2703.8	2500.3	2216.0
17.5°	3301.9	3289.7	3270.1	3245.6	3213.7	*3167.1*	3137.7	3010.2	2823.9	2588.6	2279.7
20°	3365.7	3360.8	3353.4	3338.7	3324.0	*3292.1*	3270.1	3149.9	2953.8	2674.4	2341.0
22.5°	3414.7	3409.8	3407.3	3407.3	3409.8	*3397.5*	3382.8	3279.9	3078.9	2765.1	2397.4
25°	3490.7	3488.2	3483.3	3478.4	3495.6	*3498.0*	3493.1	3422.0	3235.7	2885.2	2468.5
27.5°	3596.1	3588.7	3578.9	3574.0	3591.2	*3603.4*	3613.2	3564.2	3402.4	3007.8	2549.4
30°	3757.9	3735.8	3711.3	3694.1	3706.4	*3726.0*	3748.1	3718.7	3574.0	3159.8	2632.7
32.5°	3949.1	3922.1	3865.7	3833.9	3865.7	*3880.4*	3897.6	3882.9	3753.0	3324.0	2716.1
35°	4182.0	4150.1	4091.3	4044.7	4101.1	*4069.2*	4061.8	4047.1	3922.1	3485.8	2809.2
37.5°	4569.3	4522.7	4429.5	4326.6	4326.6	*4257.9*	4231.0	4186.9	4074.1	3630.4	2899.9
40°	5017.9	4956.6	4836.5	4684.5	4544.8	*4402.6*	4385.4	4353.5	4253.0	3797.1	3002.9
42.5°	5510.6	5392.9	5226.2	5042.4	4816.8	*4655.1*	4615.8	4525.1	4427.1	3966.2	3105.8
45°	6057.2	5812.1	5569.4	5476.3	5103.7	*4956.6*	4883.0	4718.8	4608.5	4142.7	3213.7
47.5°	6145.5	5954.3	5792.5	5777.8	5370.8	*5248.3*	5164.9	4929.6	4804.6	4331.5	3326.4
50°	6096.4	5981.2	5998.4	5939.6	5567.0	*5486.1*	5422.3	5155.1	4998.2	4512.9	3429.4
52.5°	5890.5	5954.3	6052.3	5944.5	5753.3	*5687.1*	5655.2	5397.8	5179.6	4679.6	3522.6
55°	5645.4	5689.5	5900.3	6032.7	5969.0	*5910.1*	5880.7	5679.7	5358.6	4819.3	3608.3
57.5°	5287.5	5267.9	5500.8	6018.0	6194.5	*6160.2*	6128.3	5956.7	5525.3	4919.8	3662.3
60°	4750.7	4709.0	5003.1	5723.8	6268.0	*6322.0*	6307.3	6140.6	5652.8	4917.4	3640.2
62.5°	3821.6	3924.6	4331.5	5243.4	6299.9	*6437.2*	6410.2	6155.3	5694.4	4775.2	3500.5
65°	*2841.1*	*2988.2*	*3387.7*	*4581.5*	*6255.8*	*6496.0*	*6422.5*	*5915.0*	*5500.8*	*4493.3*	*3194.1*
67.5°	2046.9	2176.8	2468.5	3770.1	5831.7	*6226.4*	6140.6	5522.8	5054.6	4093.7	2770.0
70°	1399.7	1492.9	1691.4	2745.5	4978.6	*5383.1*	5329.2	4937.0	4351.1	3618.2	2250.3
72.5°	987.9	1027.1	1154.6	1811.5	3782.4	*4223.6*	4159.9	4061.8	3495.6	3007.8	1750.2
75°	740.3	764.8	833.4	1171.7	2551.8	*2926.9*	2868.0	2924.4	2610.7	2277.3	1274.7
77.5°	279.5	304.0	473.1	747.7	1510.0	*1796.8*	1738.0	1772.3	1451.2	1149.7	634.9
80°	76.0	80.9	156.9	355.4	686.4	*894.7*	813.8	698.6	539.3	529.5	335.8
82.5°	31.9	36.8	71.1	191.2	245.1	*245.1*	205.9	254.9	205.9	247.6	161.8
85°	12.3	14.7	17.2	49.0	31.9	*34.3*	36.8	49.0	41.7	51.5	36.8
87.5°	0.0	0.0	0.0	2.5	2.5	*4.9*	2.5	4.9	7.4	7.4	7.4
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°	1980.7	1980.7	1980.7	1980.7	1980.7	1980.7	1980.7	1980.7	1980.7	1980.7	1980.7
2.5°	1968.4	1941.4	1902.2	1838.5	1772.3	1735.5	1689.0	1681.6	1632.6	1627.7	1608.1
5°	1980.7	1924.3	1823.8	1701.2	1581.1	1488.0	1419.3	1382.5	1311.5	1311.5	1291.8
7.5°	1990.5	1902.2	1740.4	1559.0	1394.8	1269.8	1176.6	1137.4	1073.7	1068.8	1054.1
10°	1992.9	1875.3	1649.7	1414.4	1213.4	1085.9	995.2	951.1	894.7	889.8	880.0
12.5°	2012.5	1860.6	1568.8	1289.4	1083.5	946.2	858.0	821.2	777.1	772.2	762.4
15°	2044.4	1860.6	1500.2	1184.0	968.3	840.8	764.8	730.5	698.6	693.7	688.8
17.5°	2076.3	1855.7	1431.6	1085.9	872.7	757.5	691.3	664.3	639.8	637.3	632.4
20°	2105.7	1853.2	1362.9	1002.6	799.1	688.8	637.3	612.8	593.2	593.2	590.8
22.5°	2135.1	1848.3	1296.7	924.1	735.4	637.3	593.2	566.3	551.5	551.5	549.1
25°	2179.2	1848.3	1235.5	858.0	683.9	598.1	554.0	534.4	522.1	519.7	519.7
27.5°	2230.7	1863.0	1181.5	799.1	639.8	558.9	524.6	505.0	490.3	485.4	487.8
30°	2287.1	1875.3	1132.5	747.7	598.1	529.5	492.7	473.1	458.4	453.5	455.9
32.5°	2343.5	1890.0	1088.4	701.1	556.5	502.5	465.8	443.7	429.0	426.5	426.5
35°	2404.7	1904.7	1044.3	661.9	522.1	475.6	441.2	416.7	406.9	402.0	404.5
37.5°	2466.0	1929.2	1002.6	625.1	497.6	451.0	419.2	394.7	387.3	384.9	384.9
40°	2539.6	1966.0	985.4	600.6	475.6	429.0	402.0	377.5	370.1	370.1	370.1
42.5°	2600.9	1995.4	970.7	573.6	458.4	409.4	384.9	365.2	360.3	357.9	360.3
45°	2662.1	2022.3	951.1	549.1	436.3	389.8	370.1	350.5	345.6	345.6	345.6
47.5°	2723.4	2037.0	924.1	524.6	416.7	372.6	355.4	338.3	333.4	333.4	333.4
50°	2772.4	2049.3	884.9	497.6	394.7	357.9	340.7	323.6	318.7	318.7	318.7
52.5°	2821.5	2051.8	843.3	465.8	372.6	340.7	326.0	308.9	304.0	301.5	301.5
55°	2865.6	2049.3	794.2	429.0	348.1	321.1	308.9	294.2	284.4	274.5	279.5
57.5°	2897.5	2046.9	737.8	392.2	323.6	301.5	296.6	277.0	257.4	232.9	237.8
60°	2885.2	2019.9	676.6	345.6	296.6	281.9	281.9	254.9	220.6	208.4	210.8
62.5°	2806.8	1943.9	612.8	296.6	269.6	262.3	259.8	230.4	203.5	191.2	193.7
65°	*2571.4*	*1752.7*	*519.7*	*252.5*	*242.7*	*240.2*	*240.2*	*213.3*	*188.8*	*174.0*	*176.5*
67.5°	2213.5	1470.8	424.1	213.3	215.7	220.6	220.6	196.1	171.6	156.9	159.3
70°	1774.8	1149.7	338.3	183.8	186.3	193.7	198.6	176.5	154.4	139.7	139.7
72.5°	1336.0	872.7	272.1	154.4	166.7	166.7	174.0	156.9	134.8	120.1	122.6
75°	968.3	625.1	215.7	129.9	144.6	142.2	142.2	132.4	115.2	105.4	105.4
77.5°	458.4	328.5	171.6	93.2	112.8	110.3	112.8	105.4	98.1	88.2	90.7
80°	225.5	161.8	110.3	66.2	78.4	80.9	88.2	83.3	80.9	73.5	73.5
82.5°	107.9	63.7	51.5	46.6	53.9	56.4	61.3	61.3	63.7	58.8	58.8
85°	29.4	17.2	22.1	29.4	34.3	36.8	41.7	44.1	44.1	41.7	44.1
87.5°	7.4	7.4	9.8	14.7	17.2	19.6	22.1	22.1	9.8	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)