

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: P841455

Luminaire Tested: **ARCH4-180-730-U-T3-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841455
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-26)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-180-730-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 1455mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19340 lumens
Efficiency: N/A
Efficacy: 107.4 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G3

Input Watts (W): 180
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

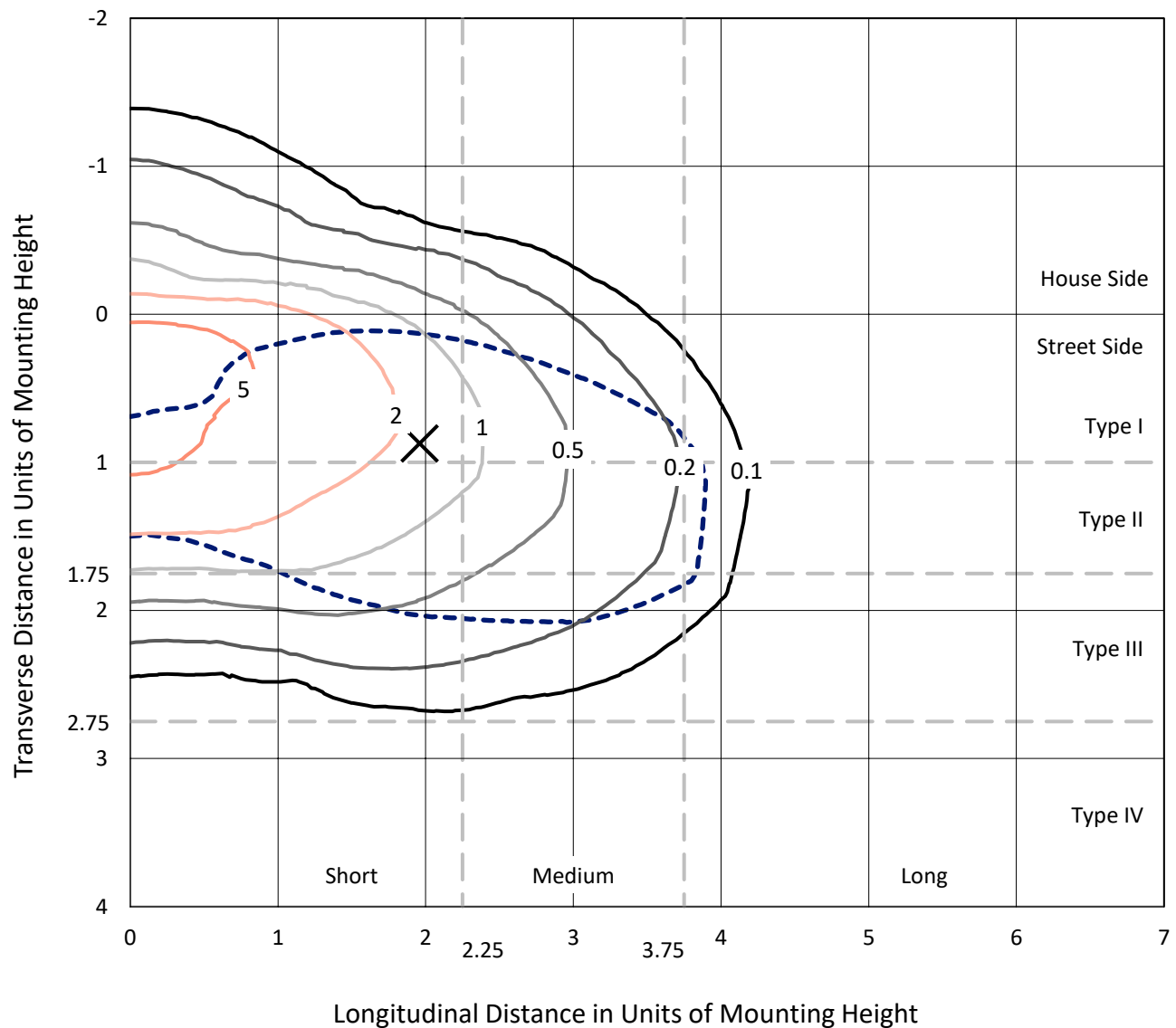


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Iso-Footcandle Lines of Horizontal Illumination

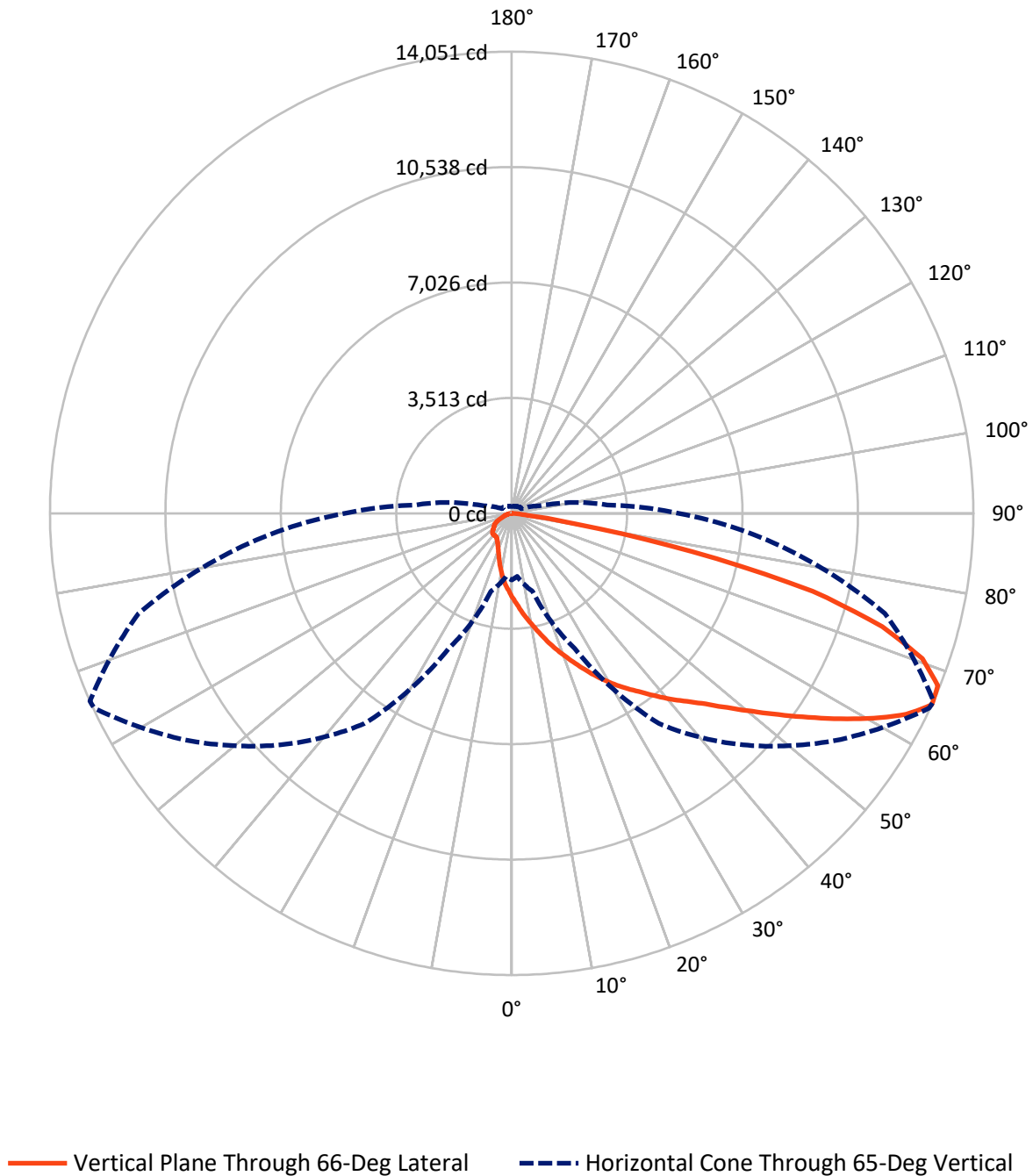
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.4 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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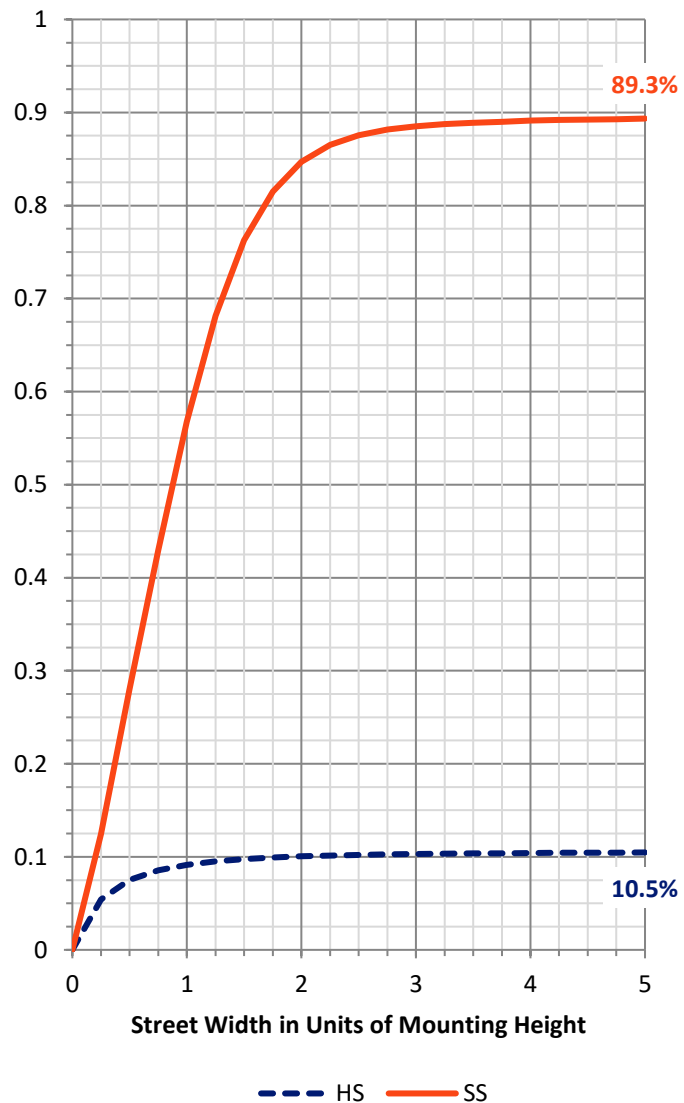
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2045.7	0.0	2045.7
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	17294.3	0.0	17294.3
	% Fixture	89.4	0.0	89.4
Total	Lumens	19340.0	0.0	19340.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	252.6	1.3
10°-20°	823.4	4.3
20°-30°	1489.8	7.7
30°-40°	2329.6	12.0
40°-50°	3534.0	18.3
50°-60°	4490.0	23.2
60°-70°	4195.5	21.7
70°-80°	2085.1	10.8
80°-90°	140.1	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°	19340.0	100.0
0°-180°	19340.0	100.0

Coefficient of Utilization



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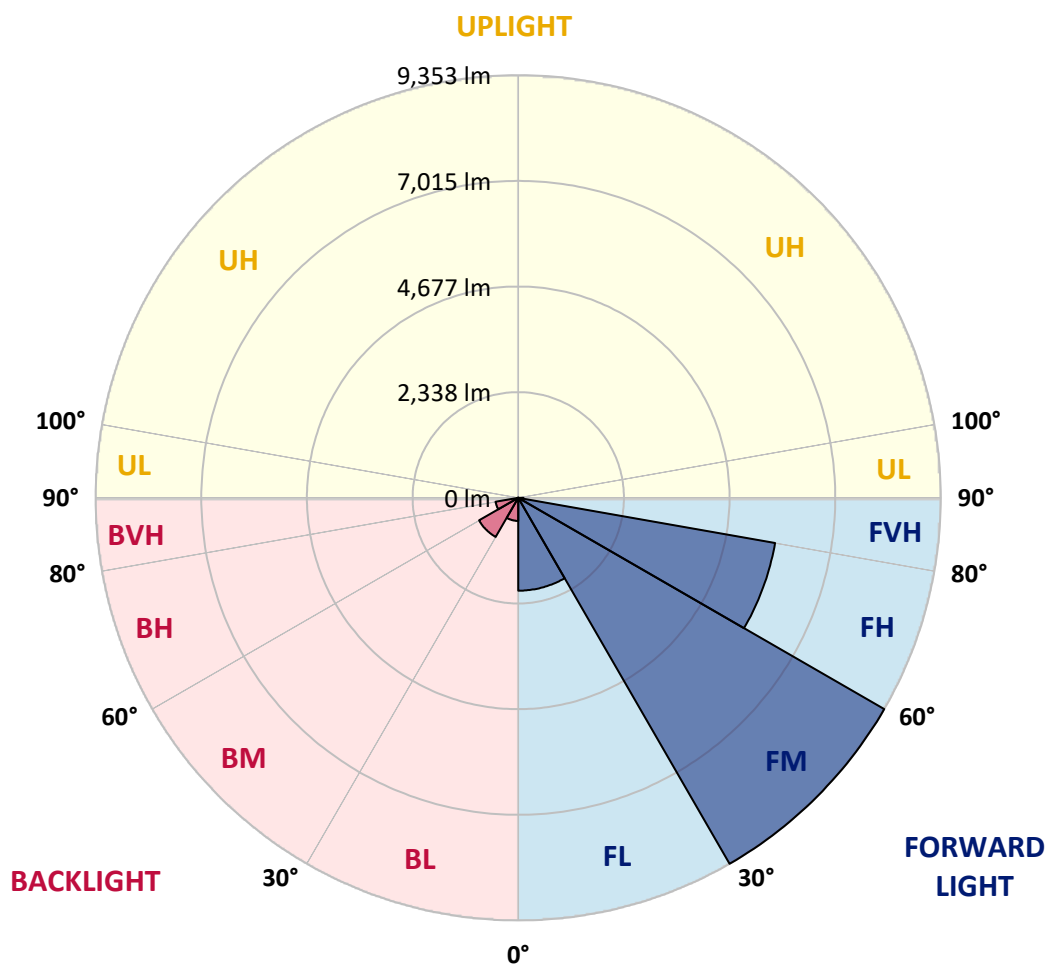
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2054.9	10.6			
FM	(30°-60°)	9353.0	48.4			
FH	(60°-80°)	5771.1	29.8			G3/7500
FVH	(80°-90°)	115.3	0.6			G2/225
BL	(0°-30°)	510.9	2.6	B2/1000		
BM	(30°-60°)	1000.5	5.2	B2/2500		
BH	(60°-80°)	509.4	2.6	B2/1000		G2/1000
BVH	(80°-90°)	24.8	0.1			G1/100
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°	55°	65°	66°	75°	85°
0°	2559.5	2559.5	2559.5	2559.5	2559.5	2559.5	2559.5	2559.5	2559.5	2559.5	2559.5
2.5°	2989.5	3013.9	3026.0	3030.1	2936.8	2896.2	2855.7	2762.4	2742.1	2689.3	2620.4
5°	3516.8	3549.3	3541.2	3524.9	3411.4	3281.6	3176.1	3001.7	2973.3	2847.5	2693.4
7.5°	4036.0	4064.4	4056.3	3995.5	3869.7	3687.2	3512.8	3257.2	3216.7	3013.9	2766.4
10°	4470.1	4494.4	4490.4	4429.5	4279.4	4056.3	3845.4	3504.7	3456.0	3168.0	2827.3
12.5°	4827.0	4859.5	4855.4	4814.9	4681.0	4437.6	4198.3	3788.6	3727.8	3354.6	2912.4
15°	5106.9	5147.5	5147.5	5131.3	5038.0	4835.1	4563.4	4100.9	4027.9	3569.6	3017.9
17.5°	5277.3	5309.7	5338.1	5366.5	5301.6	5147.5	4900.0	4413.3	4336.2	3780.5	3127.4
20°	5366.5	5399.0	5419.3	5480.1	5492.3	5415.2	5220.5	4721.6	4640.4	4019.8	3253.2
22.5°	5512.5	5540.9	5545.0	5597.7	5622.1	5642.4	5520.7	5025.8	4960.9	4283.5	3395.1
25°	5755.9	5788.4	5776.2	5800.5	5804.6	5828.9	5816.8	5374.6	5309.7	4583.7	3565.5
27.5°	6068.3	6108.8	6100.7	6076.4	6039.9	6019.6	6072.3	5727.5	5666.7	4883.8	3739.9
30°	6404.9	6453.6	6441.4	6392.8	6295.4	6210.2	6283.3	6060.2	6003.4	5192.1	3934.6
32.5°	6745.7	6802.5	6798.4	6717.3	6551.0	6404.9	6514.5	6372.5	6331.9	5524.7	4145.6
35°	6968.8	7041.8	7033.7	6985.0	6770.0	6644.3	6778.1	6692.9	6664.5	5930.4	4449.8
37.5°	7329.8	7406.9	7337.9	7216.2	6968.8	6903.9	7066.1	7054.0	7033.7	6360.3	4770.2
40°	8206.0	8319.5	8137.0	7638.1	7232.4	7175.6	7406.9	7455.5	7435.2	6786.2	5058.2
42.5°	9122.7	9293.0	9009.1	8319.5	7711.1	7504.2	7780.0	7849.0	7824.7	7151.3	5317.8
45°	9678.4	9751.4	9467.5	8932.0	8558.9	7901.7	8177.6	8291.1	8270.9	7589.4	5650.5
47.5°	10132.7	10104.3	9779.8	9418.8	9487.8	8461.5	8627.8	8850.9	8834.7	8072.1	6015.5
50°	10230.1	10165.2	10035.4	9808.2	9990.7	9029.4	9102.4	9487.8	9471.5	8607.5	6384.7
52.5°	9544.5	9459.4	9812.3	10002.9	9942.1	9443.1	9625.7	10185.4	10177.3	9187.6	6737.6
55°	7832.8	7763.8	8713.0	9698.7	9889.3	9735.2	10205.7	10911.5	10956.1	9804.1	7058.0
57.5°	6161.6	6088.5	7021.5	8936.1	9694.6	10002.9	10883.1	11743.1	11799.9	10473.4	7362.2
60°	4912.2	4802.7	5516.6	7735.4	9329.6	10209.8	11536.2	12655.7	12663.9	11085.9	7548.8
62.5°	3338.4	3216.7	4007.7	6214.3	8717.0	10242.2	12039.2	13442.7	13475.1	11544.3	7581.3
65°	2028.2	1926.8	2462.2	4539.0	7812.5	9966.4	12047.3	14022.7	14051.1	11755.2	7386.6
67.5°	1176.3	1135.8	1407.5	2827.3	6311.6	9224.1	11540.3	13933.5	13986.2	11666.0	6944.4
70°	685.5	681.5	782.9	1399.4	4453.8	7751.6	10408.5	13183.1	13260.1	11199.5	6267.0
72.5°	503.0	511.1	551.7	750.4	2579.8	5581.5	8814.4	11674.1	11791.7	10286.8	5301.6
75°	397.5	401.6	438.1	511.1	1354.8	3155.8	6603.7	9370.1	9463.4	8660.3	4141.5
77.5°	296.1	304.2	332.6	361.0	628.7	1448.1	3715.6	5772.2	5618.0	4754.0	1999.8
80°	215.0	235.3	247.4	259.6	332.6	559.8	1115.5	2011.9	1995.7	2076.8	945.1
82.5°	137.9	154.1	166.3	174.4	198.8	267.7	332.6	450.3	486.8	807.2	377.2
85°	60.8	69.0	77.1	93.3	85.2	93.3	137.9	89.2	77.1	121.7	69.0
87.5°	0.0	0.0	12.2	20.3	16.2	8.1	24.3	16.2	12.2	12.2	12.2
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°	2559.5	2559.5	2559.5	2559.5	2559.5	2559.5	2559.5	2559.5	2559.5	2559.5	2559.5
2.5°	2583.9	2539.3	2446.0	2356.7	2304.0	2235.0	2174.2	2117.4	2113.3	2097.1	2068.7
5°	2616.3	2531.1	2356.7	2190.4	2064.7	1930.8	1817.2	1728.0	1695.5	1671.2	1638.8
7.5°	2648.8	2514.9	2255.3	2011.9	1813.2	1626.6	1492.7	1371.0	1334.5	1302.1	1281.8
10°	2661.0	2486.5	2137.7	1813.2	1553.6	1354.8	1212.8	1123.6	1091.2	1074.9	1062.8
12.5°	2697.5	2470.3	2028.2	1626.6	1326.4	1143.9	1042.5	989.7	977.6	965.4	953.2
15°	2746.1	2470.3	1918.6	1444.1	1147.9	1001.9	941.1	904.6	896.4	892.4	884.3
17.5°	2798.9	2470.3	1813.2	1289.9	1018.1	908.6	864.0	843.7	839.7	835.6	831.5
20°	2871.9	2474.4	1699.6	1156.1	924.8	839.7	803.2	778.8	774.8	770.7	770.7
22.5°	2944.9	2482.5	1590.1	1054.6	864.0	786.9	742.3	718.0	709.9	709.9	709.9
25°	3038.2	2506.8	1488.7	969.5	811.3	738.3	681.5	661.2	657.1	657.1	653.1
27.5°	3147.7	2535.2	1399.4	904.6	758.5	681.5	624.7	604.4	596.3	596.3	592.2
30°	3265.3	2563.6	1326.4	855.9	705.8	624.7	571.9	547.6	539.5	543.5	539.5
32.5°	3395.1	2604.2	1269.6	823.4	657.1	576.0	527.3	498.9	494.9	494.9	490.8
35°	3614.2	2717.7	1261.5	807.2	616.6	539.5	490.8	462.4	458.4	458.4	454.3
37.5°	3849.5	2847.5	1298.0	799.1	584.1	507.0	462.4	434.0	430.0	430.0	430.0
40°	4048.2	2944.9	1338.6	799.1	563.8	478.6	438.1	413.7	413.7	413.7	413.7
42.5°	4182.1	2953.0	1330.5	799.1	547.6	458.4	421.9	397.5	397.5	401.6	397.5
45°	4380.8	2993.6	1298.0	786.9	535.4	442.1	405.6	385.4	381.3	385.4	385.4
47.5°	4616.1	3066.6	1265.6	738.3	531.4	425.9	393.5	369.1	365.1	369.1	365.1
50°	4839.2	3131.5	1249.3	673.4	523.3	409.7	377.2	352.9	348.8	352.9	348.8
52.5°	5025.8	3159.9	1221.0	628.7	503.0	393.5	361.0	336.7	328.6	332.6	332.6
55°	5175.9	3151.8	1180.4	592.2	466.5	377.2	340.7	320.4	308.3	308.3	304.2
57.5°	5313.8	3155.8	1143.9	555.7	425.9	352.9	324.5	300.2	283.9	279.9	275.8
60°	5366.5	3135.5	1079.0	507.0	385.4	332.6	304.2	275.8	259.6	255.5	251.5
62.5°	5293.5	3062.5	993.8	421.9	348.8	308.3	283.9	255.5	239.3	235.3	231.2
65°	5086.6	2924.6	864.0	332.6	316.4	279.9	259.6	239.3	219.0	210.9	206.9
67.5°	4733.7	2725.9	701.7	267.7	279.9	255.5	243.4	219.0	194.7	186.6	182.5
70°	4230.7	2462.2	527.3	227.2	247.4	227.2	219.0	194.7	174.4	166.3	162.3
72.5°	3524.9	2036.3	369.1	194.7	215.0	198.8	190.6	174.4	154.1	142.0	142.0
75°	2665.0	1460.3	243.4	166.3	178.5	170.4	158.2	146.0	133.9	125.7	121.7
77.5°	1147.9	567.9	150.1	125.7	146.0	142.0	125.7	117.6	113.6	105.5	105.5
80°	494.9	231.2	93.3	93.3	105.5	101.4	97.4	89.2	89.2	85.2	81.1
82.5°	182.5	93.3	56.8	69.0	77.1	69.0	69.0	69.0	69.0	64.9	64.9
85°	44.6	28.4	28.4	40.6	44.6	40.6	44.6	40.6	40.6	40.6	36.5
87.5°	12.2	12.2	16.2	16.2	16.2	16.2	16.2	12.2	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)