

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: P841449

Luminaire Tested: **ARCH4-180-727-U-T4W**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841449
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-19)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-180-727-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1455mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26902 lumens
Efficiency: N/A
Efficacy: 149.5 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - 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



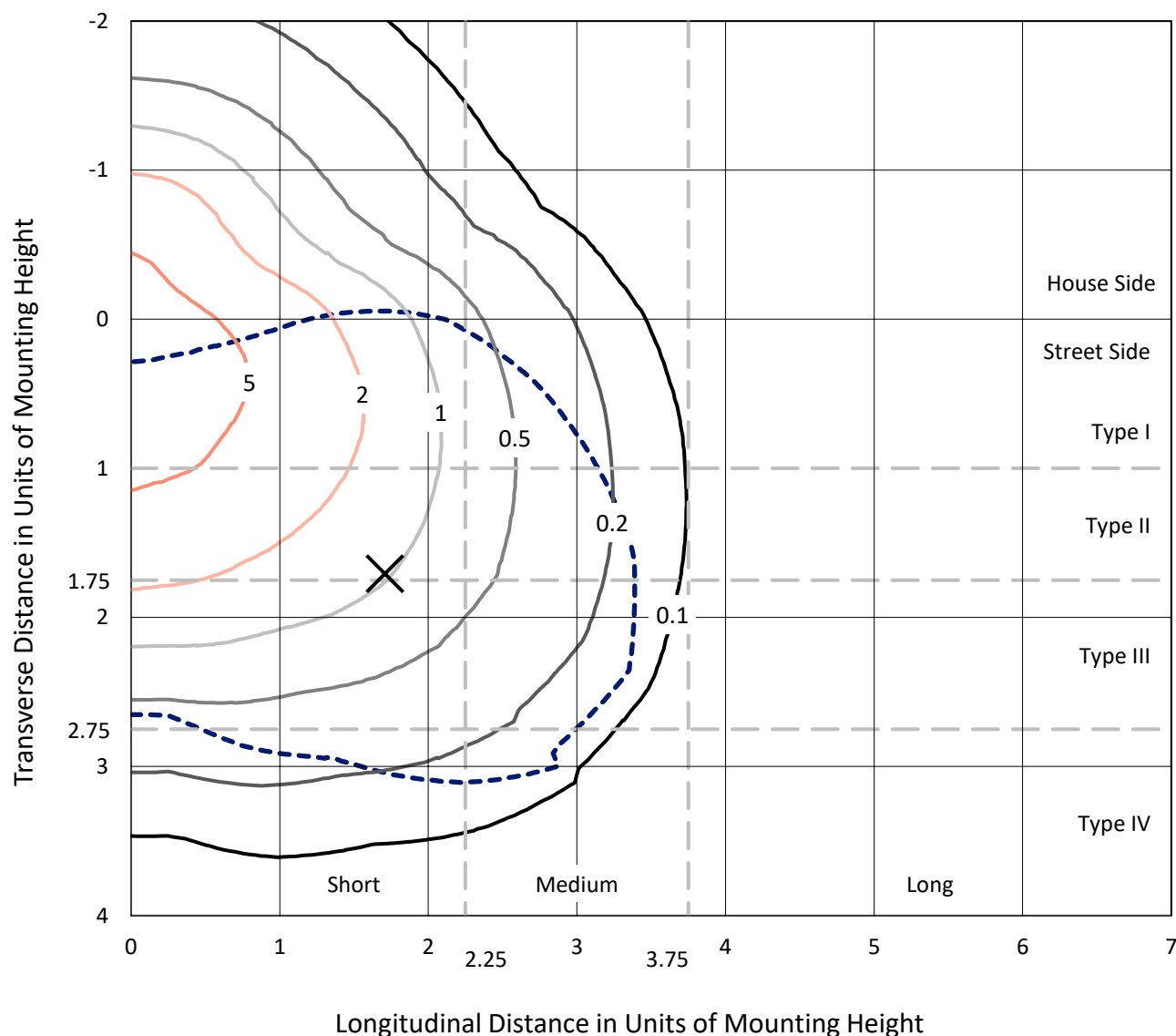
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd



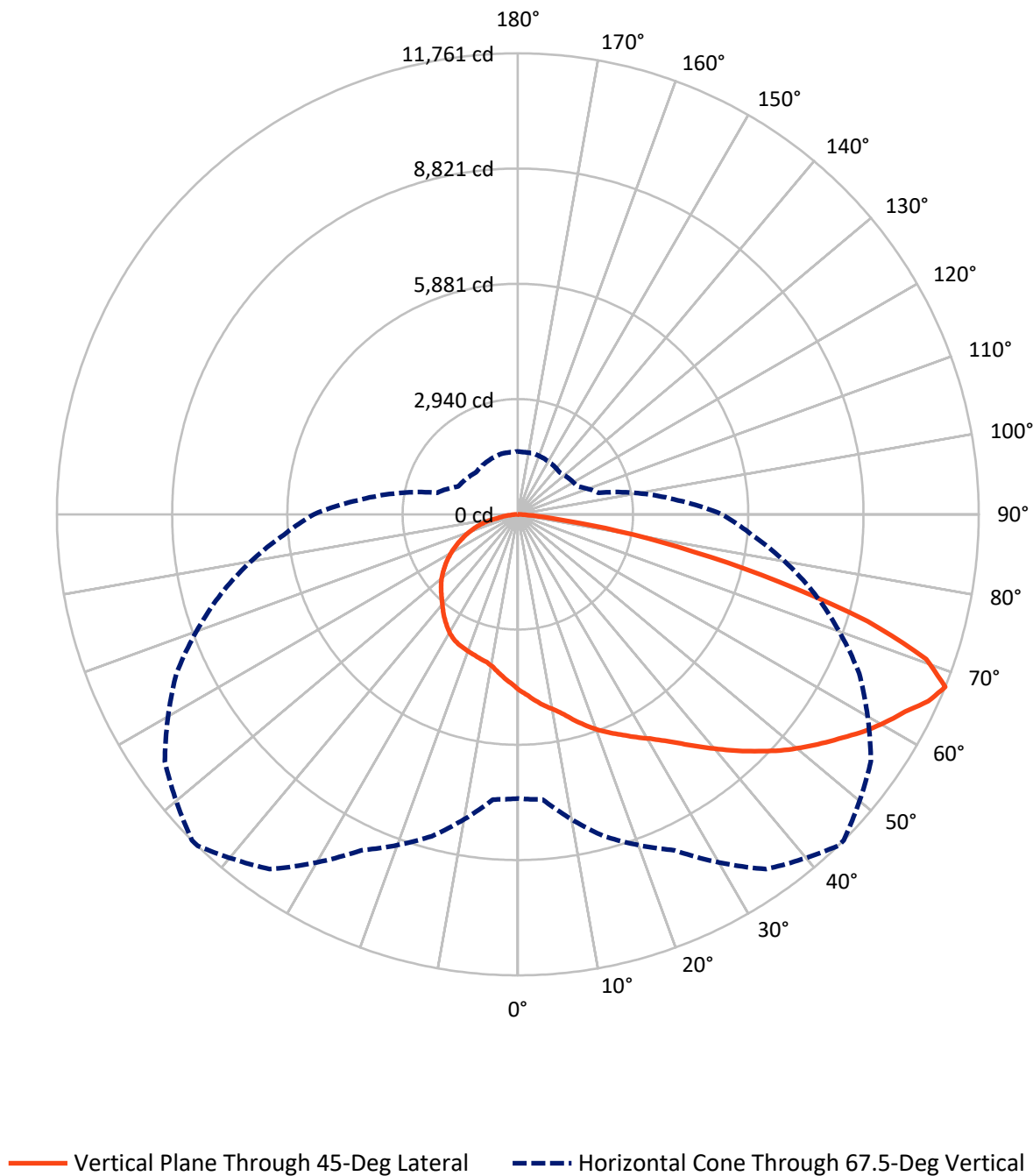
Based on 25 foot mounting height. Maximum calculated value = 8.3 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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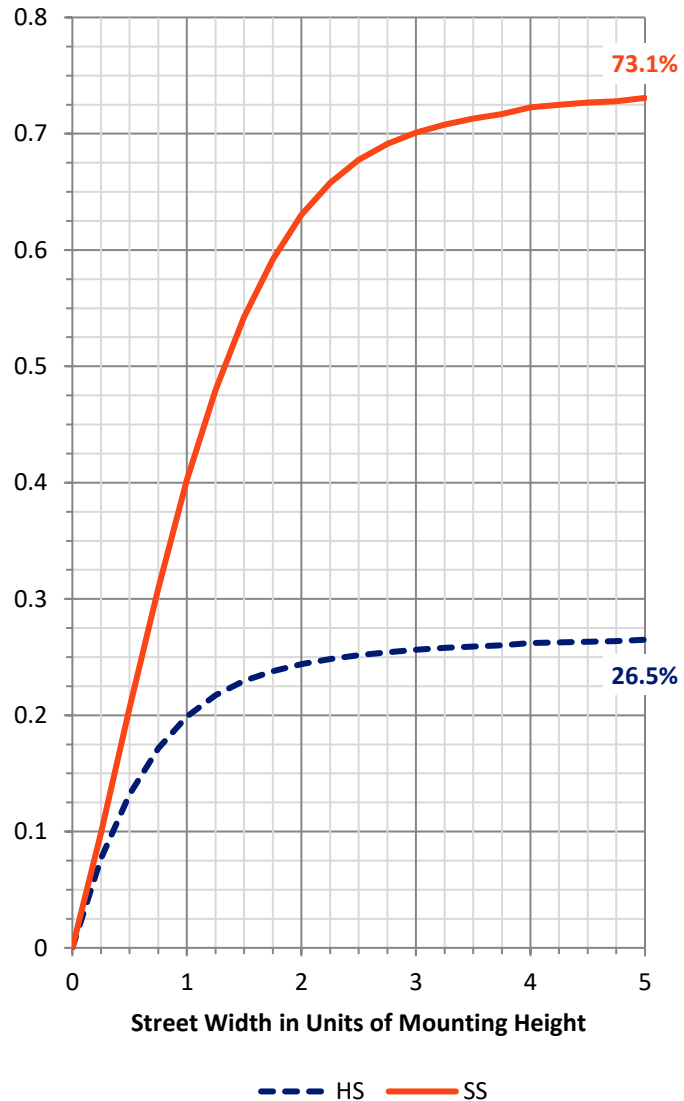
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7186.9	0.0	7186.9
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	19715.1	0.0	19715.1
	% Fixture	73.3	0.0	73.3
Total	Lumens	26902.0	0.0	26902.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	429.6	1.6
10°-20°	1327.0	4.9
20°-30°	2290.6	8.5
30°-40°	3377.9	12.6
40°-50°	4576.3	17.0
50°-60°	5593.4	20.8
60°-70°	5768.8	21.4
70°-80°	3159.7	11.7
80°-90°	378.7	1.4
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°	26902.0	100.0
0°-180°	26902.0	100.0

Coefficient of Utilization



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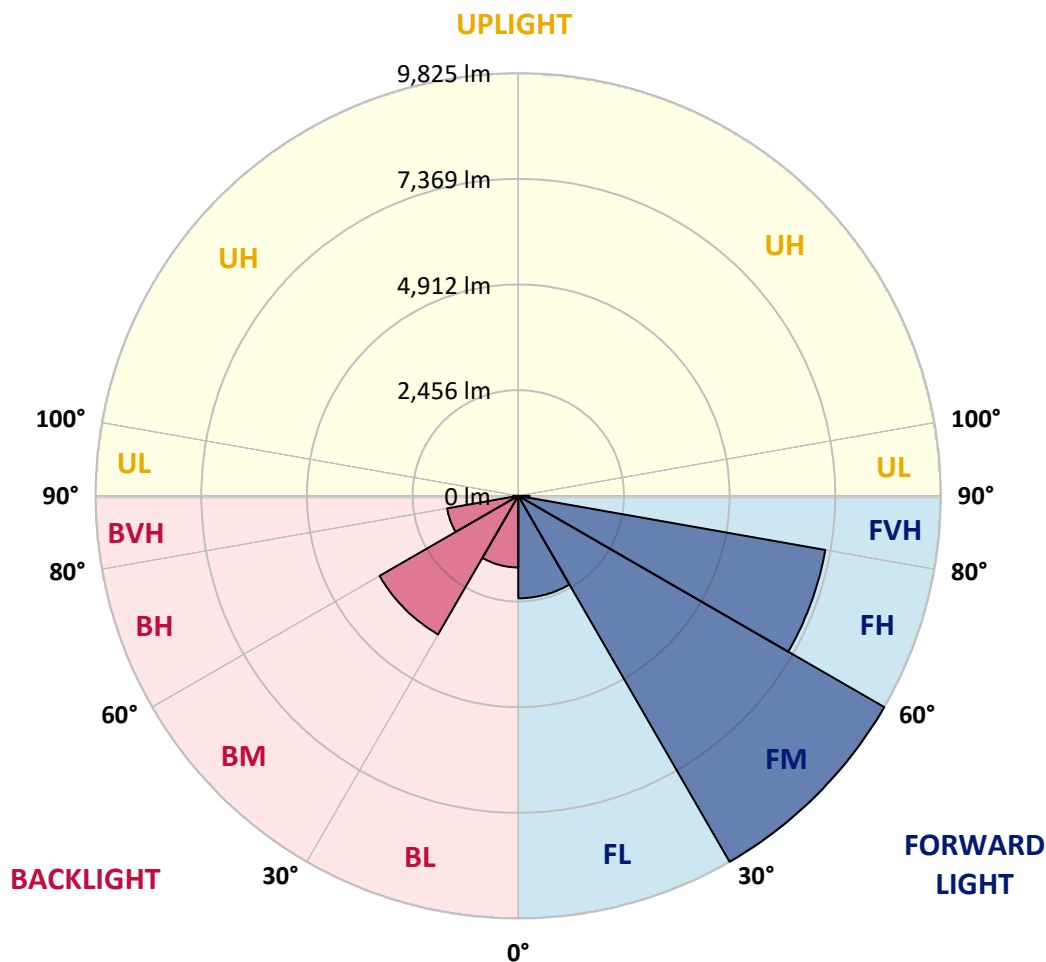
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2381.6	8.9			
FM	(30°-60°)	9824.9	36.5			
FH	(60°-80°)	7247.8	26.9			G3/7500
FVH	(80°-90°)	260.9	1.0			G3/500
BL	(0°-30°)	1665.7	6.2	B3/2500		
BM	(30°-60°)	3722.7	13.8	B3/5000		
BH	(60°-80°)	1680.7	6.2	B3/2500		G3/2500
BVH	(80°-90°)	117.8	0.4			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	4486.7	4486.7	4486.7	4486.7	4486.7	4486.7	4486.7	4486.7	4486.7	4486.7	4486.7
2.5°	4683.2	4679.1	4687.3	4658.7	4621.8	4617.7	4617.7	4593.2	4564.5	4507.2	4462.2
5°	4904.3	4896.1	4900.2	4859.3	4810.1	4785.6	4781.5	4728.3	4662.8	4572.7	4490.8
7.5°	5109.0	5100.8	5096.7	5051.7	4978.0	4937.1	4933.0	4855.2	4777.4	4638.2	4519.5
10°	5301.4	5293.2	5285.0	5223.6	5133.6	5072.1	5064.0	4965.7	4867.5	4695.5	4544.1
12.5°	5547.0	5530.6	5522.5	5448.8	5317.8	5252.3	5240.0	5109.0	4986.2	4777.4	4593.2
15°	5804.9	5792.6	5780.4	5710.8	5563.4	5477.4	5457.0	5293.2	5125.4	4883.8	4666.9
17.5°	5997.3	5985.1	5985.1	5923.6	5788.6	5690.3	5673.9	5477.4	5268.6	4982.1	4724.2
20°	6116.1	6103.8	6116.1	6079.2	5976.9	5895.0	5878.6	5661.6	5411.9	5072.1	4773.3
22.5°	6202.0	6189.7	6210.2	6193.8	6120.1	6071.0	6058.7	5845.9	5559.3	5166.3	4822.4
25°	6353.5	6353.5	6353.5	6324.8	6255.2	6238.9	6238.9	6054.6	5747.6	5289.1	4896.1
27.5°	6656.4	6640.1	6619.6	6537.7	6419.0	6414.9	6439.5	6267.5	5964.6	5448.8	4986.2
30°	7102.6	7094.5	7016.7	6844.7	6644.1	6623.7	6640.1	6496.8	6197.9	5616.6	5088.5
32.5°	7679.9	7651.2	7491.6	7233.6	6947.1	6852.9	6885.7	6734.2	6443.6	5788.6	5186.8
35°	8089.2	8097.4	7982.8	7749.5	7409.7	7160.0	7184.5	7000.3	6709.6	5981.0	5309.6
37.5°	8560.0	8588.7	8416.7	8240.7	7925.5	7499.7	7524.3	7274.6	6975.7	6222.5	5440.6
40°	9210.9	9153.6	8863.0	8654.2	8306.2	7855.9	7876.4	7581.6	7282.8	6451.7	5592.1
42.5°	9755.4	9653.0	9301.0	9034.9	8617.3	8232.5	8253.0	7913.2	7593.9	6705.6	5759.9
45°	10537.3	10254.8	9747.2	9616.2	8936.6	8601.0	8621.4	8265.3	7921.4	6975.7	5940.0
47.5°	10991.7	10541.4	10218.0	10148.4	9288.7	8981.7	9006.2	8637.8	8273.5	7282.8	6128.3
50°	10963.0	10672.4	10578.2	10406.3	9599.8	9337.8	9362.4	9022.6	8629.6	7585.7	6308.5
52.5°	10774.7	10828.0	10778.8	10492.3	9911.0	9681.7	9710.4	9403.3	8994.0	7868.2	6476.3
55°	11065.4	11102.2	11008.1	10631.5	10254.8	10025.6	10058.3	9804.5	9354.2	8117.9	6619.6
57.5°	11413.4	11282.4	11188.2	10877.1	10611.0	10398.1	10435.0	10213.9	9665.3	8318.5	6730.1
60°	11397.0	11122.7	11216.9	10893.5	10852.5	10742.0	10774.7	10549.6	9902.8	8465.9	6775.1
62.5°	10557.8	10410.4	10885.3	10774.7	11049.0	11049.0	11090.0	10754.3	10046.0	8527.3	6750.6
65°	9100.4	9108.6	9943.7	10402.2	11282.4	11470.7	11503.4	10881.2	9964.2	8347.1	6521.3
67.5°	7250.0	7303.2	8502.7	9456.5	11049.0	11757.2	11761.3	10995.8	9612.1	7839.5	5989.1
70°	5305.5	5346.4	6762.9	7921.4	9947.8	11122.7	11057.2	10672.4	8846.6	6955.3	5158.1
72.5°	3586.1	3623.0	5080.3	6083.3	8162.9	9472.9	9329.6	9432.0	7540.7	5714.9	4147.0
75°	2411.2	2456.2	3614.8	4351.6	6005.5	7192.7	6873.4	7143.6	5833.6	4327.1	3025.3
77.5°	1518.8	1547.4	2296.6	2853.3	4101.9	4896.1	4576.8	4580.9	3361.0	2329.3	1625.2
80°	966.1	974.3	1391.9	1645.7	2374.4	2943.4	2603.6	2116.5	1514.7	1236.3	970.2
82.5°	560.8	548.6	831.0	929.3	1129.9	1117.6	925.2	876.1	663.2	618.2	495.3
85°	225.2	208.8	364.3	339.8	343.9	364.3	270.2	270.2	217.0	167.8	122.8
87.5°	45.0	45.0	49.1	45.0	45.0	49.1	36.8	36.8	32.7	32.7	32.7
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°	4486.7	4486.7	4486.7	4486.7	4486.7	4486.7	4486.7	4486.7	4486.7	4486.7	4486.7
2.5°	4454.0	4445.8	4425.3	4372.1	4343.5	4327.1	4302.5	4294.3	4290.2	4294.3	4306.6
5°	4466.3	4437.6	4380.3	4294.3	4237.0	4200.2	4159.2	4142.9	4130.6	4130.6	4142.9
7.5°	4474.5	4429.4	4331.2	4204.3	4122.4	4065.1	4016.0	3995.5	3991.4	4003.7	4007.8
10°	4478.6	4413.1	4273.9	4114.2	4007.8	3934.1	3885.0	3872.7	3885.0	3909.5	3913.6
12.5°	4507.2	4417.1	4241.1	4052.8	3925.9	3852.2	3815.4	3815.4	3848.1	3893.2	3897.2
15°	4556.3	4445.8	4224.7	4003.7	3872.7	3807.2	3794.9	3815.4	3864.5	3934.1	3942.3
17.5°	4593.2	4462.2	4187.9	3938.2	3803.1	3762.2	3782.6	3831.7	3901.3	3995.5	4003.7
20°	4617.7	4462.2	4134.7	3860.4	3733.5	3725.3	3782.6	3860.4	3934.1	4044.6	4056.9
22.5°	4642.3	4454.0	4073.3	3766.2	3655.7	3680.3	3786.7	3885.0	3958.7	4077.4	4097.8
25°	4687.3	4466.3	4011.9	3672.1	3573.8	3643.4	3782.6	3901.3	3979.1	4101.9	4134.7
27.5°	4748.7	4494.9	3966.8	3586.1	3492.0	3586.1	3754.0	3897.2	3979.1	4097.8	4134.7
30°	4814.2	4527.7	3913.6	3492.0	3397.8	3504.2	3692.6	3852.2	3946.4	4056.9	4101.9
32.5°	4883.8	4564.5	3868.6	3389.6	3283.2	3393.7	3602.5	3782.6	3885.0	3987.3	4036.4
35°	4978.0	4630.0	3844.0	3307.7	3180.8	3279.1	3487.9	3692.6	3803.1	3897.2	3954.6
37.5°	5092.6	4711.9	3831.7	3225.9	3070.3	3152.2	3365.1	3582.0	3700.7	3778.5	3831.7
40°	5223.6	4814.2	3827.7	3148.1	2959.8	3021.2	3238.2	3455.1	3569.7	3631.2	3676.2
42.5°	5371.0	4928.9	3819.5	3070.3	2849.2	2898.4	3115.3	3328.2	3426.5	3479.7	3520.6
45°	5526.6	5043.5	3803.1	2976.2	2730.5	2787.8	2988.4	3176.7	3279.1	3324.1	3369.2
47.5°	5682.1	5158.1	3770.3	2869.7	2624.1	2677.3	2853.3	3017.1	3099.0	3139.9	3184.9
50°	5833.6	5260.5	3692.6	2746.9	2513.6	2562.7	2697.8	2808.3	2869.7	2902.5	2947.5
52.5°	5968.7	5330.1	3582.0	2603.6	2403.0	2427.6	2517.7	2611.8	2660.9	2665.0	2706.0
55°	6083.3	5366.9	3422.4	2456.2	2284.3	2288.4	2337.5	2411.2	2431.7	2415.3	2444.0
57.5°	6148.8	5346.4	3246.3	2304.8	2161.5	2145.1	2182.0	2218.8	2222.9	2182.0	2210.6
60°	6165.2	5252.3	3017.1	2153.3	2038.7	1993.7	2005.9	1997.7	1989.6	1973.2	1997.7
62.5°	6083.3	5051.7	2763.3	2005.9	1907.7	1838.1	1834.0	1829.9	1842.2	1846.3	1850.4
65°	5784.5	4675.1	2460.3	1854.5	1768.5	1674.3	1670.2	1719.4	1735.7	1711.2	1719.4
67.5°	5207.2	4097.8	2128.7	1678.4	1592.5	1510.6	1543.3	1572.0	1600.7	1592.5	1600.7
70°	4388.5	3365.1	1825.8	1481.9	1400.1	1355.0	1391.9	1416.4	1420.5	1412.3	1420.5
72.5°	3451.0	2628.2	1543.3	1281.3	1207.7	1187.2	1232.2	1252.7	1289.5	1305.9	1310.0
75°	2493.1	1940.4	1265.0	1064.4	1003.0	1003.0	1043.9	1080.7	1113.5	1093.0	1080.7
77.5°	1391.9	1158.5	908.8	732.8	745.1	802.4	818.7	859.7	892.4	888.3	880.2
80°	843.3	724.6	614.1	474.9	470.8	515.8	622.2	691.8	708.2	671.4	667.3
82.5°	438.0	380.7	327.5	266.1	294.7	343.9	360.2	433.9	479.0	462.6	483.1
85°	110.5	106.4	118.7	122.8	151.5	167.8	184.2	217.0	143.3	69.6	69.6
87.5°	32.7	32.7	40.9	40.9	53.2	65.5	61.4	61.4	32.7	4.1	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)