

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: P842169

Luminaire Tested: **ARCH4-280-727-U-T4W**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842169
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: ARCH4-280-727-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1085mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 37651 lumens
Efficiency: N/A
Efficacy: 134.6 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U0 - G4

Input Watts (W): 279.7
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

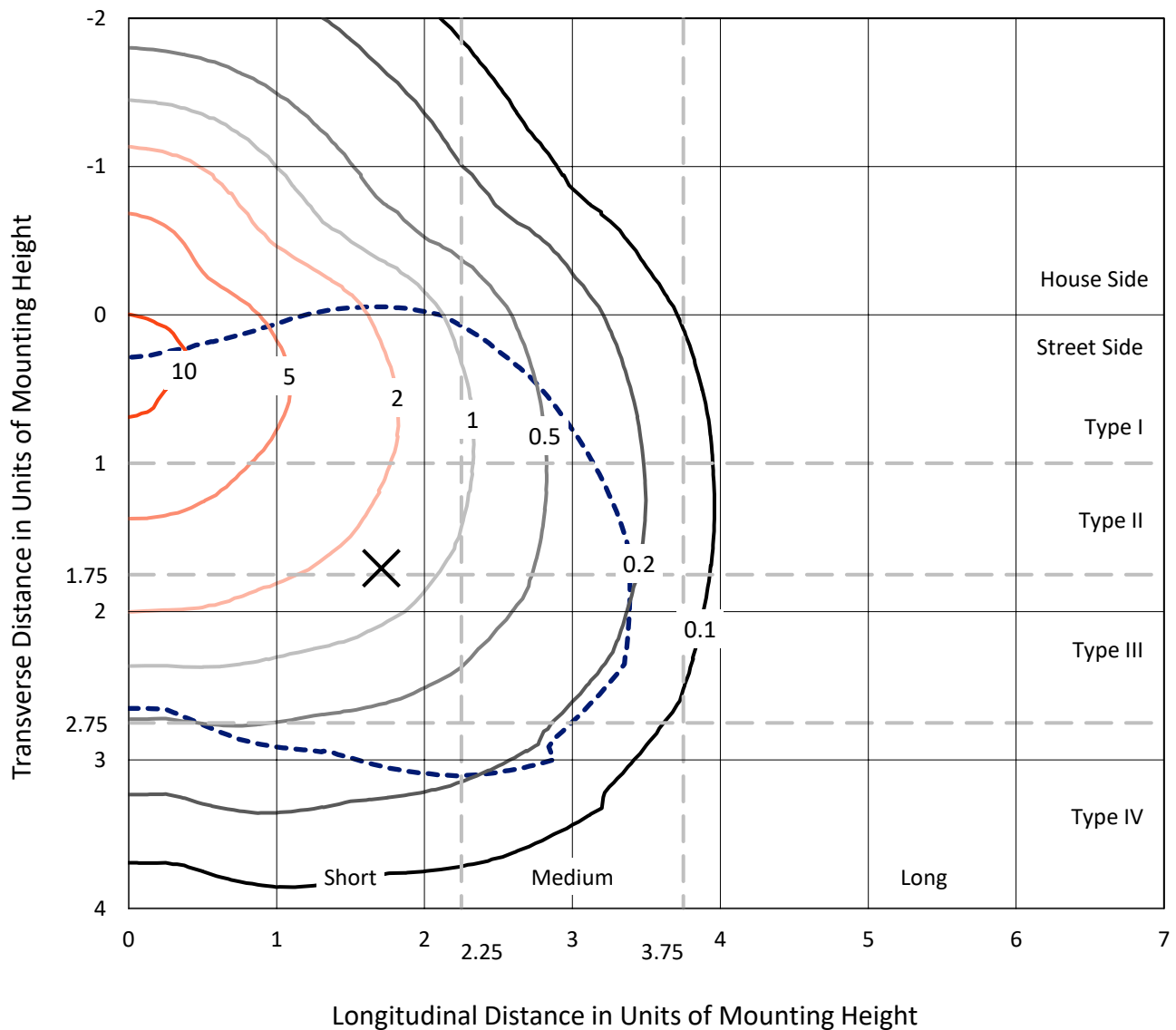


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Iso-Footcandle Lines of Horizontal Illumination

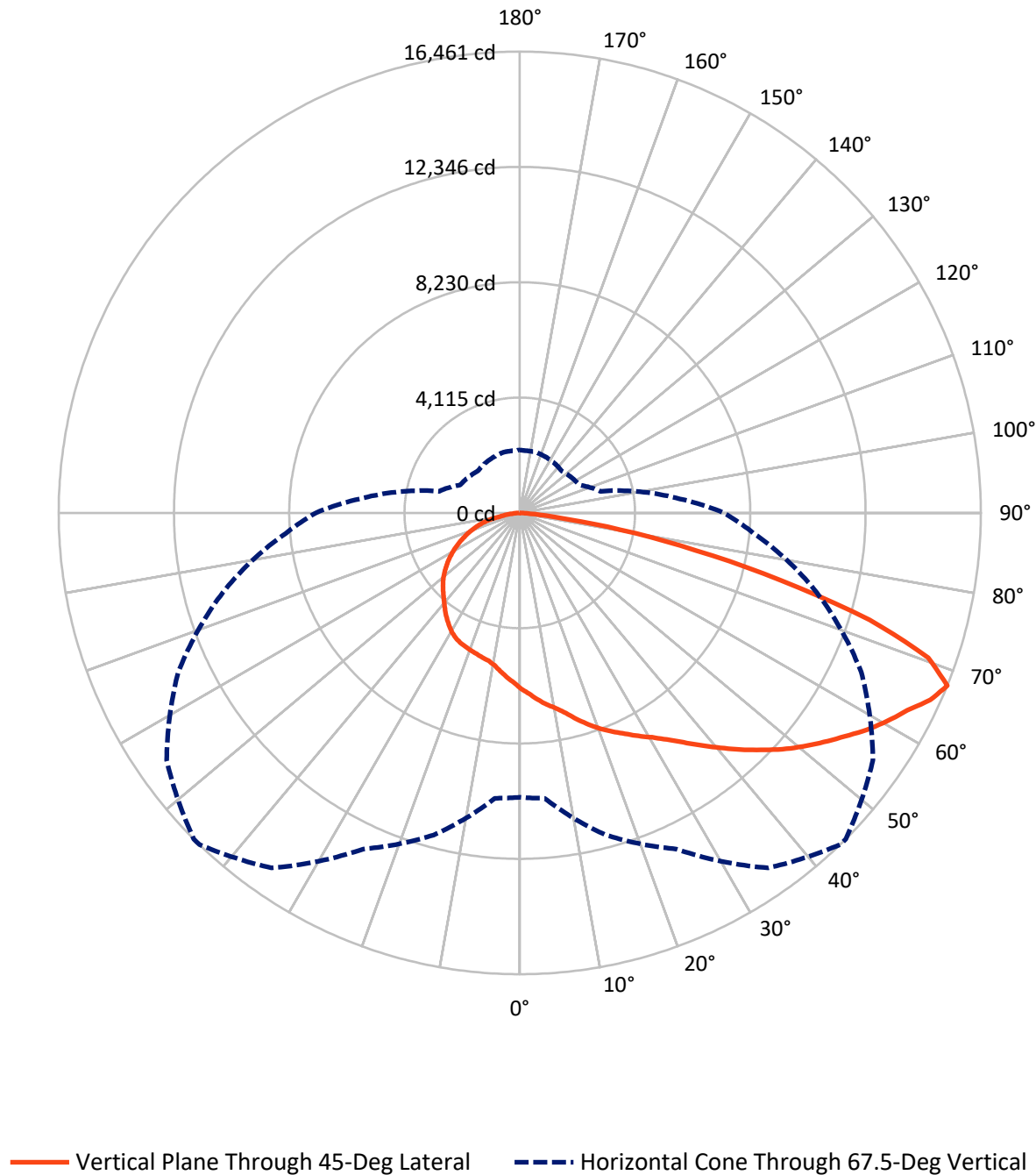
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.7 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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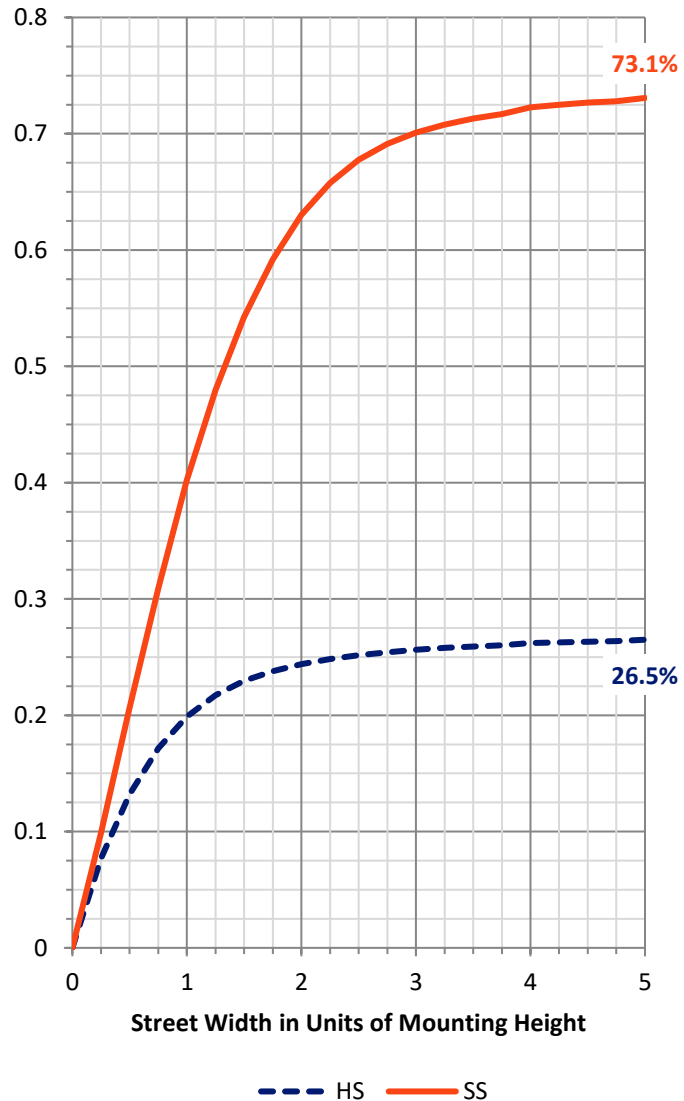
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10058.5	0.0	10058.5
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	27592.5	0.0	27592.5
	% Fixture	73.3	0.0	73.3
Total	Lumens	37651.0	0.0	37651.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	601.2	1.6
10°-20°	1857.3	4.9
20°-30°	3205.9	8.5
30°-40°	4727.5	12.6
40°-50°	6404.9	17.0
50°-60°	7828.3	20.8
60°-70°	8073.8	21.4
70°-80°	4422.2	11.7
80°-90°	530.0	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°	37651.0	100.0
0°-180°	37651.0	100.0

Coefficient of Utilization



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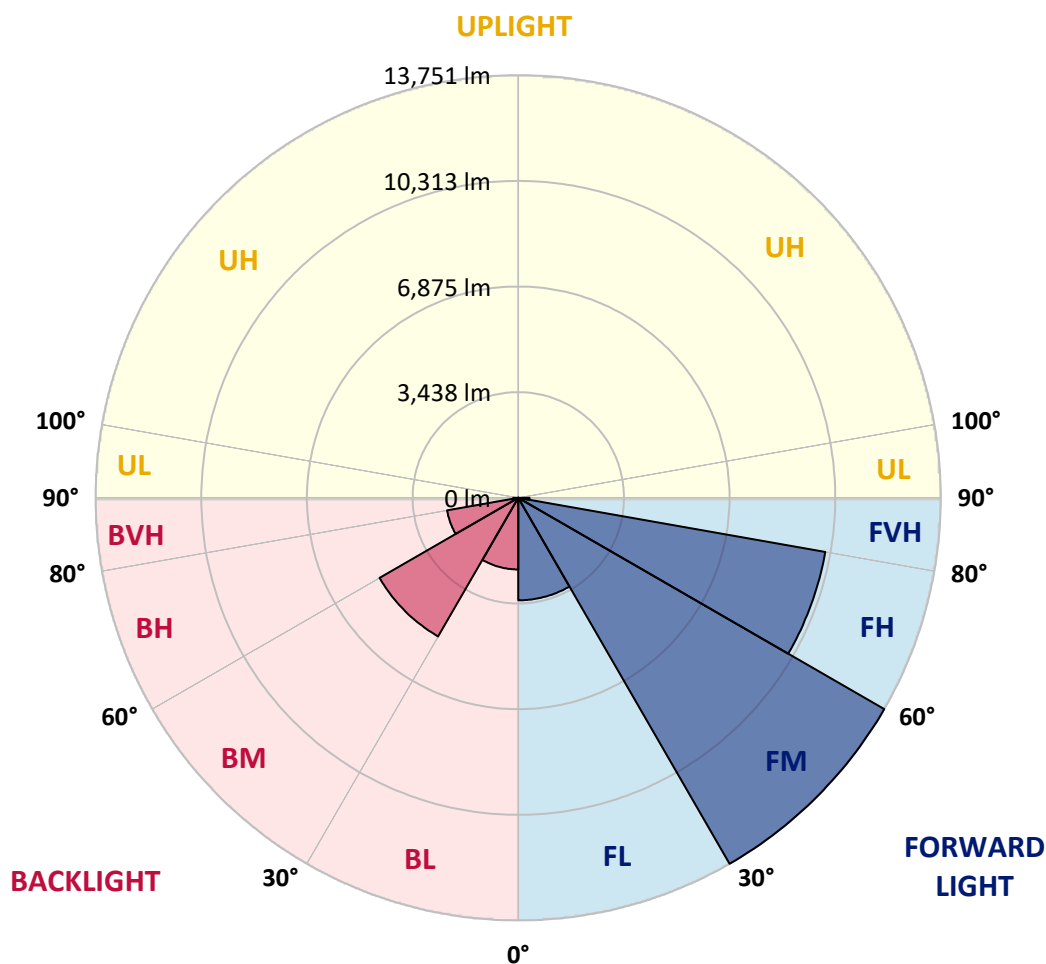
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3333.1	8.9			
FM	(30°-60°)	13750.5	36.5			
FH	(60°-80°)	10143.7	26.9			G4/12000
FVH	(80°-90°)	365.1	1.0			G3/500
BL	(0°-30°)	2331.2	6.2	B3/2500		
BM	(30°-60°)	5210.1	13.8	B4/8500		
BH	(60°-80°)	2352.3	6.2	B3/2500		G3/2500
BVH	(80°-90°)	164.9	0.4			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	6279.5	6279.5	6279.5	6279.5	6279.5	6279.5	6279.5	6279.5	6279.5	6279.5	6279.5
2.5°	6554.5	6548.8	6560.2	6520.1	6468.5	6462.8	6462.8	6428.4	6388.3	6308.1	6245.1
5°	6863.9	6852.4	6858.1	6800.9	6732.1	6697.7	6692.0	6617.5	6525.8	6399.8	6285.2
7.5°	7150.3	7138.9	7133.2	7070.1	6967.0	6909.7	6904.0	6795.1	6686.3	6491.5	6325.3
10°	7419.6	7408.2	7396.7	7310.8	7184.7	7098.8	7087.3	6949.8	6812.3	6571.7	6359.7
12.5°	7763.4	7740.5	7729.0	7625.9	7442.6	7350.9	7333.7	7150.3	6978.5	6686.3	6428.4
15°	8124.4	8107.2	8090.0	7992.6	7786.3	7666.0	7637.4	7408.2	7173.3	6835.2	6531.6
17.5°	8393.6	8376.4	8376.4	8290.5	8101.4	7963.9	7941.0	7666.0	7373.8	6972.7	6611.8
20°	8559.8	8542.6	8559.8	8508.2	8365.0	8250.4	8227.5	7923.8	7574.3	7098.8	6680.5
22.5°	8680.1	8662.9	8691.6	8668.7	8565.5	8496.8	8479.6	8181.6	7780.6	7230.6	6749.3
25°	8892.1	8892.1	8892.1	8852.0	8754.6	8731.7	8731.7	8473.9	8044.1	7402.4	6852.4
27.5°	9316.1	9293.2	9264.5	9149.9	8983.8	8978.0	9012.4	8771.8	8347.8	7625.9	6978.5
30°	9940.6	9929.1	9820.3	9579.6	9298.9	9270.2	9293.2	9092.6	8674.4	7860.8	7121.7
32.5°	10748.4	10708.3	10484.9	10123.9	9722.9	9591.1	9636.9	9424.9	9018.1	8101.4	7259.2
35°	11321.4	11332.8	11172.4	10845.8	10370.3	10020.8	10055.2	9797.4	9390.6	8370.7	7431.1
37.5°	11980.3	12020.4	11779.7	11533.4	11092.2	10496.3	10530.7	10181.2	9763.0	8708.8	7614.4
40°	12891.3	12811.0	12404.3	12112.0	11625.0	10994.8	11023.5	10610.9	10192.7	9029.6	7826.4
42.5°	13653.3	13510.0	13017.3	12644.9	12060.5	11521.9	11550.6	11075.0	10628.1	9384.8	8061.3
45°	14747.6	14352.3	13641.8	13458.5	12507.4	12037.6	12066.2	11567.8	11086.5	9763.0	8313.4
47.5°	15383.6	14753.3	14300.7	14203.3	13000.1	12570.4	12604.8	12089.1	11579.2	10192.7	8577.0
50°	15343.5	14936.7	14804.9	14564.3	13435.6	13068.9	13103.2	12627.7	12077.7	10616.7	8829.1
52.5°	15079.9	15154.4	15085.6	14684.6	13871.0	13550.1	13590.2	13160.5	12587.6	11012.0	9064.0
55°	15486.7	15538.3	15406.5	14879.4	14352.3	14031.4	14077.2	13722.0	13091.8	11361.5	9264.5
57.5°	15973.7	15790.4	15658.6	15223.1	14850.7	14552.8	14604.4	14295.0	13527.2	11642.2	9419.2
60°	15950.8	15566.9	15698.7	15246.1	15188.8	15034.1	15079.9	14764.8	13859.5	11848.5	9482.2
62.5°	14776.2	14570.0	15234.6	15079.9	15463.8	15463.8	15521.1	15051.3	14060.1	11934.4	9447.9
65°	12736.6	12748.0	13916.8	14558.5	15790.4	16053.9	16099.7	15228.9	13945.5	11682.3	9127.0
67.5°	10146.8	10221.3	11900.1	13235.0	15463.8	16455.0	16460.7	15389.3	13452.7	10971.9	8382.2
70°	7425.4	7482.7	9465.0	11086.5	13922.6	15566.9	15475.2	14936.7	12381.3	9734.3	7219.1
72.5°	5019.0	5070.6	7110.2	8514.0	11424.5	13257.9	13057.4	13200.6	10553.6	7998.3	5803.9
75°	3374.6	3437.7	5059.1	6090.4	8405.1	10066.6	9619.7	9997.9	8164.5	6056.0	4234.1
77.5°	2125.6	2165.7	3214.2	3993.4	5740.9	6852.4	6405.5	6411.2	4703.9	3260.1	2274.6
80°	1352.1	1363.6	1948.0	2303.2	3323.1	4119.5	3643.9	2962.1	2119.9	1730.3	1357.9
82.5°	784.9	767.7	1163.1	1300.6	1581.3	1564.1	1294.9	1226.1	928.2	865.1	693.3
85°	315.1	292.2	509.9	475.5	481.3	509.9	378.1	378.1	303.7	234.9	171.9
87.5°	63.0	63.0	68.8	63.0	63.0	68.8	51.6	51.6	45.8	45.8	45.8
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°	6279.5	6279.5	6279.5	6279.5	6279.5	6279.5	6279.5	6279.5	6279.5	6279.5	6279.5
2.5°	6233.6	6222.2	6193.5	6119.0	6078.9	6056.0	6021.6	6010.2	6004.5	6010.2	6027.4
5°	6250.8	6210.7	6130.5	6010.2	5930.0	5878.4	5821.1	5798.2	5781.0	5781.0	5798.2
7.5°	6262.3	6199.3	6061.8	5884.1	5769.6	5689.3	5620.6	5591.9	5586.2	5603.4	5609.1
10°	6268.0	6176.3	5981.5	5758.1	5609.1	5506.0	5437.2	5420.1	5437.2	5471.6	5477.4
12.5°	6308.1	6182.1	5935.7	5672.2	5494.5	5391.4	5339.8	5339.8	5385.7	5448.7	5454.4
15°	6376.9	6222.2	5912.8	5603.4	5420.1	5328.4	5311.2	5339.8	5408.6	5506.0	5517.5
17.5°	6428.4	6245.1	5861.2	5511.7	5322.7	5265.4	5294.0	5362.8	5460.2	5591.9	5603.4
20°	6462.8	6245.1	5786.7	5402.9	5225.3	5213.8	5294.0	5402.9	5506.0	5660.7	5677.9
22.5°	6497.2	6233.6	5700.8	5271.1	5116.4	5150.8	5299.7	5437.2	5540.4	5706.5	5735.2
25°	6560.2	6250.8	5614.9	5139.3	5001.8	5099.2	5294.0	5460.2	5569.0	5740.9	5786.7
27.5°	6646.2	6290.9	5551.8	5019.0	4887.2	5019.0	5253.9	5454.4	5569.0	5735.2	5786.7
30°	6737.8	6336.8	5477.4	4887.2	4755.4	4904.4	5168.0	5391.4	5523.2	5677.9	5740.9
32.5°	6835.2	6388.3	5414.3	4744.0	4595.0	4749.7	5041.9	5294.0	5437.2	5580.5	5649.2
35°	6967.0	6480.0	5379.9	4629.4	4451.8	4589.3	4881.5	5168.0	5322.7	5454.4	5534.6
37.5°	7127.4	6594.6	5362.8	4514.8	4297.1	4411.7	4709.6	5013.3	5179.4	5288.3	5362.8
40°	7310.8	6737.8	5357.0	4405.9	4142.4	4228.3	4532.0	4835.7	4996.1	5082.0	5145.0
42.5°	7517.0	6898.3	5345.6	4297.1	3987.7	4056.4	4360.1	4658.0	4795.5	4870.0	4927.3
45°	7734.8	7058.7	5322.7	4165.3	3821.5	3901.8	4182.5	4446.1	4589.3	4652.3	4715.3
47.5°	7952.5	7219.1	5276.8	4016.3	3672.6	3747.1	3993.4	4222.6	4337.2	4394.5	4457.5
50°	8164.5	7362.3	5168.0	3844.5	3517.9	3586.6	3775.7	3930.4	4016.3	4062.2	4125.2
52.5°	8353.5	7459.7	5013.3	3643.9	3363.2	3397.6	3523.6	3655.4	3724.1	3729.9	3787.2
55°	8514.0	7511.3	4789.8	3437.7	3197.0	3202.8	3271.5	3374.6	3403.3	3380.4	3420.5
57.5°	8605.6	7482.7	4543.5	3225.7	3025.1	3002.2	3053.8	3105.4	3111.1	3053.8	3093.9
60°	8628.5	7350.9	4222.6	3013.7	2853.3	2790.2	2807.4	2796.0	2784.5	2761.6	2796.0
62.5°	8514.0	7070.1	3867.4	2807.4	2669.9	2572.5	2566.8	2561.1	2578.3	2584.0	2589.7
65°	8095.7	6543.0	3443.4	2595.4	2475.1	2343.3	2337.6	2406.4	2429.3	2394.9	2406.4
67.5°	7287.9	5735.2	2979.3	2349.1	2228.8	2114.2	2160.0	2200.1	2240.2	2228.8	2240.2
70°	6142.0	4709.6	2555.3	2074.1	1959.5	1896.4	1948.0	1982.4	1988.1	1976.7	1988.1
72.5°	4829.9	3678.3	2160.0	1793.3	1690.2	1661.5	1724.6	1753.2	1804.8	1827.7	1833.4
75°	3489.2	2715.8	1770.4	1489.7	1403.7	1403.7	1461.0	1512.6	1558.4	1529.8	1512.6
77.5°	1948.0	1621.4	1271.9	1025.6	1042.8	1123.0	1145.9	1203.2	1249.0	1243.3	1231.8
80°	1180.3	1014.1	859.4	664.6	658.9	721.9	870.9	968.3	991.2	939.6	933.9
82.5°	613.1	532.8	458.4	372.4	412.5	481.3	504.2	607.3	670.3	647.4	676.1
85°	154.7	149.0	166.2	171.9	212.0	234.9	257.8	303.7	200.5	97.4	97.4
87.5°	45.8	45.8	57.3	57.3	74.5	91.7	85.9	85.9	45.8	5.7	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)