

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: P841949

Luminaire Tested: **ARCH4-250-727-U-T2U**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841949
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-250-727-U-T2U
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 975mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 35608 lumens
Efficiency: N/A
Efficacy: 142.7 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B4 - U0 - G4

Input Watts (W): 249.5
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

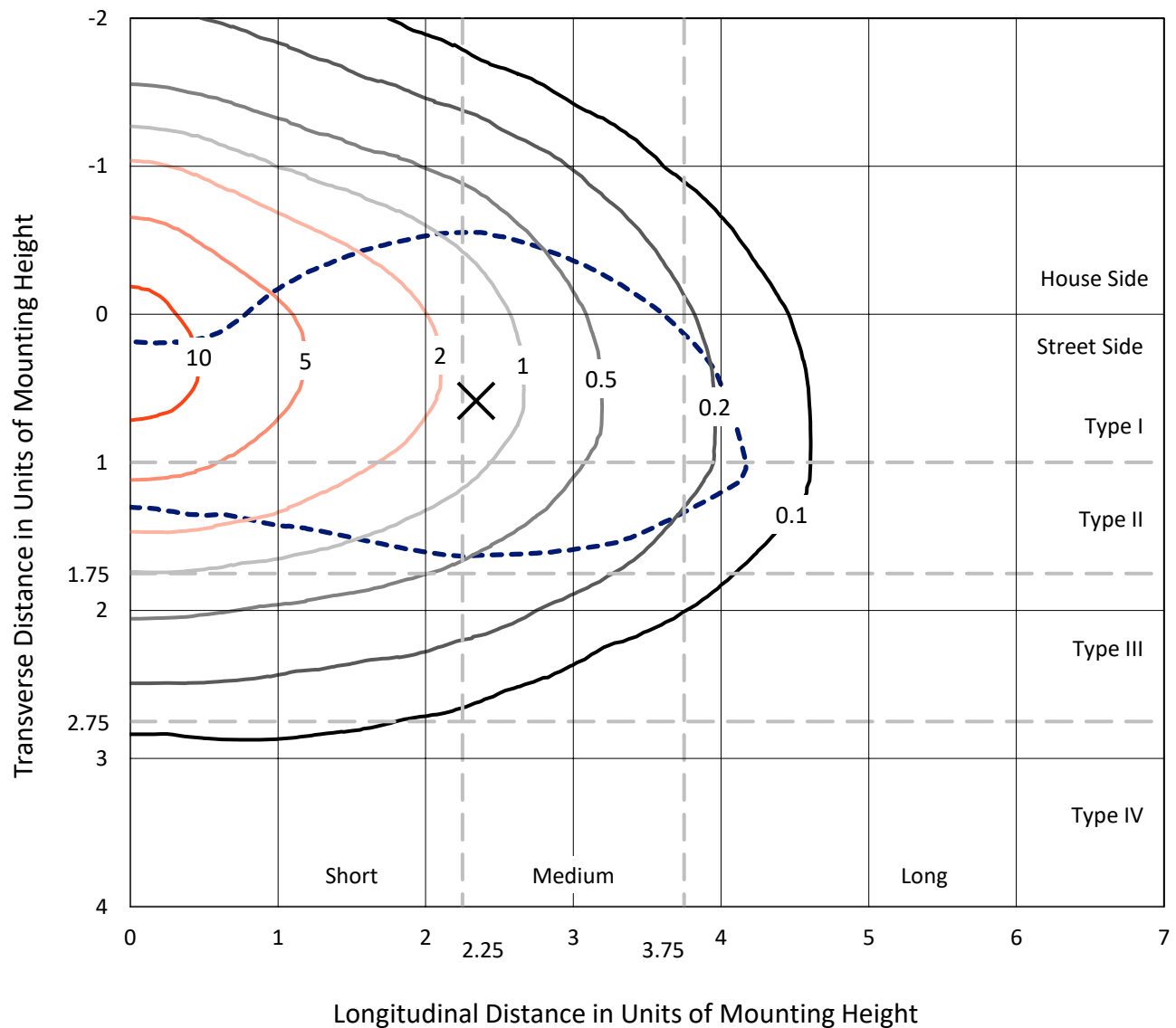


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Iso-Footcandle Lines of Horizontal Illumination

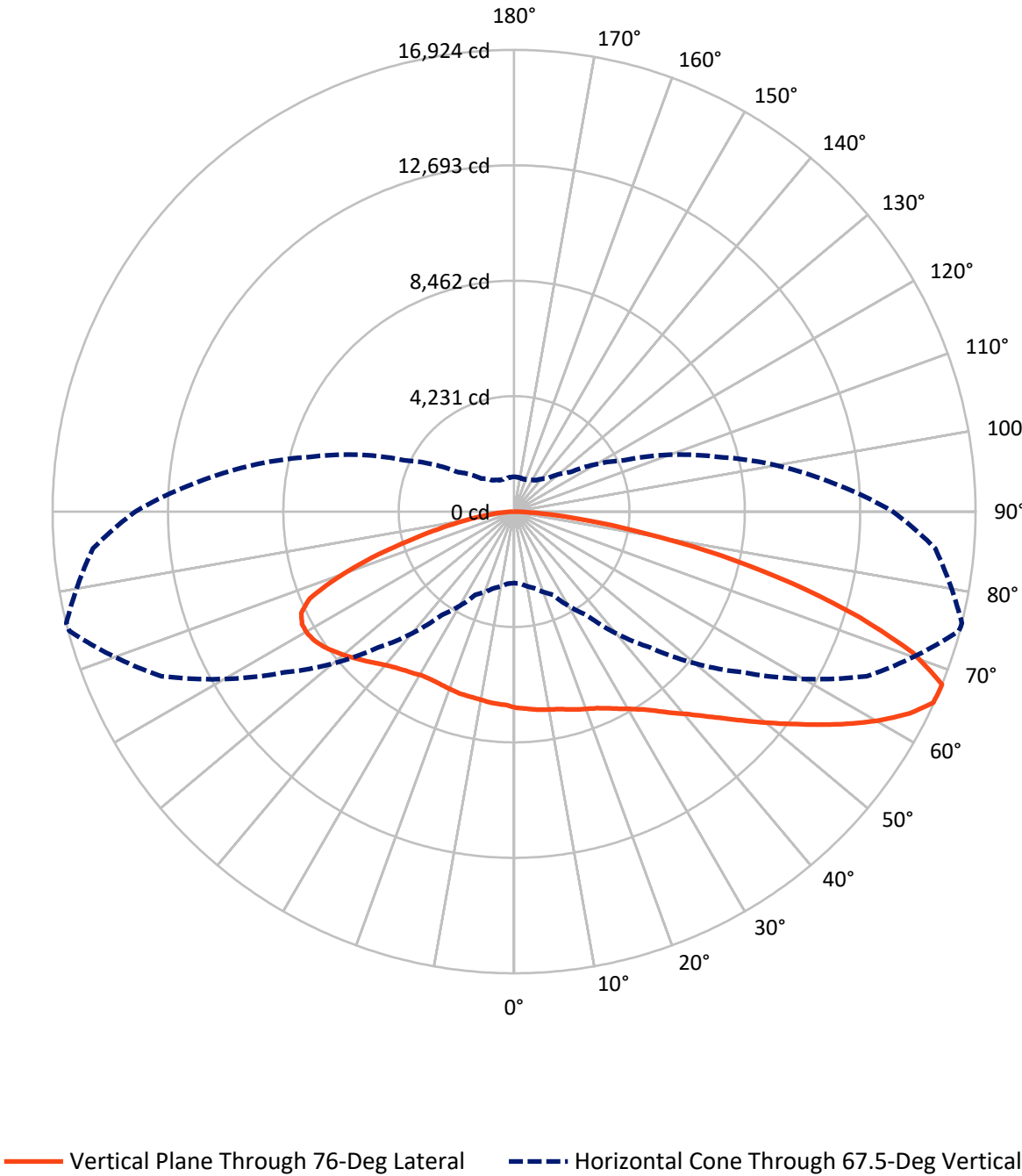
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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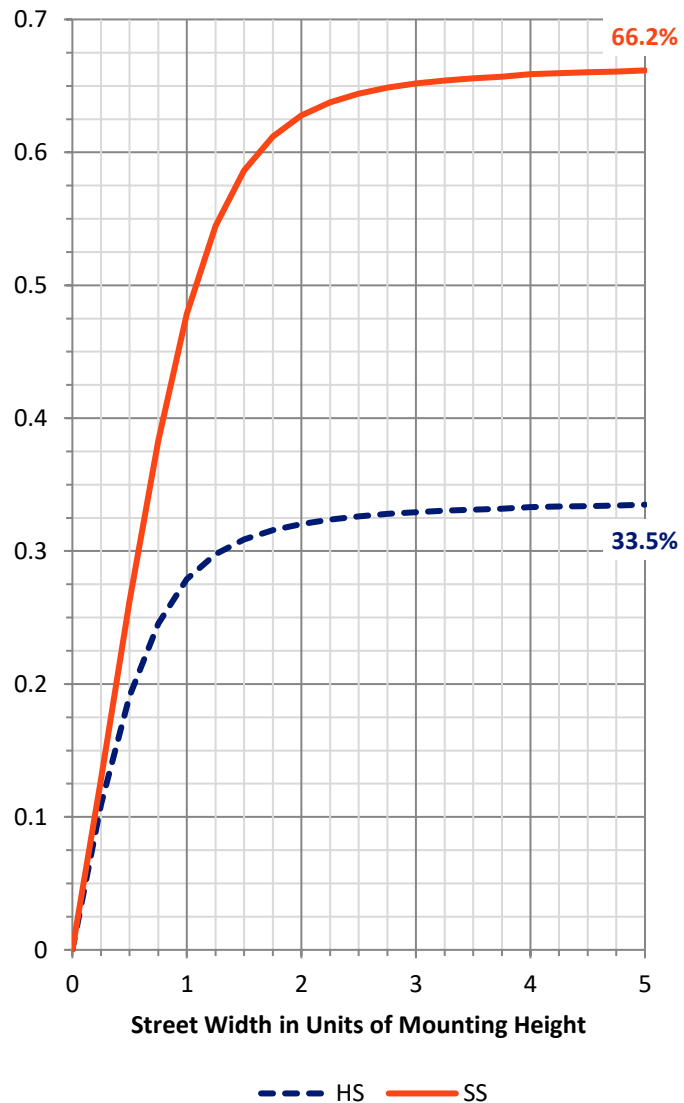
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12032.1	0.0	12032.1
	% Fixture	33.8	0.0	33.8
Street Side	Lumens	23575.9	0.0	23575.9
	% Fixture	66.2	0.0	66.2
Total	Lumens	35608.0	0.0	35608.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	693.6	1.9
10°-20°	2120.4	6.0
20°-30°	3602.6	10.1
30°-40°	5126.1	14.4
40°-50°	6474.0	18.2
50°-60°	7009.3	19.7
60°-70°	6519.4	18.3
70°-80°	3501.5	9.8
80°-90°	561.1	1.6
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°	35608.0	100.0
0°-180°	35608.0	100.0

Coefficient of Utilization



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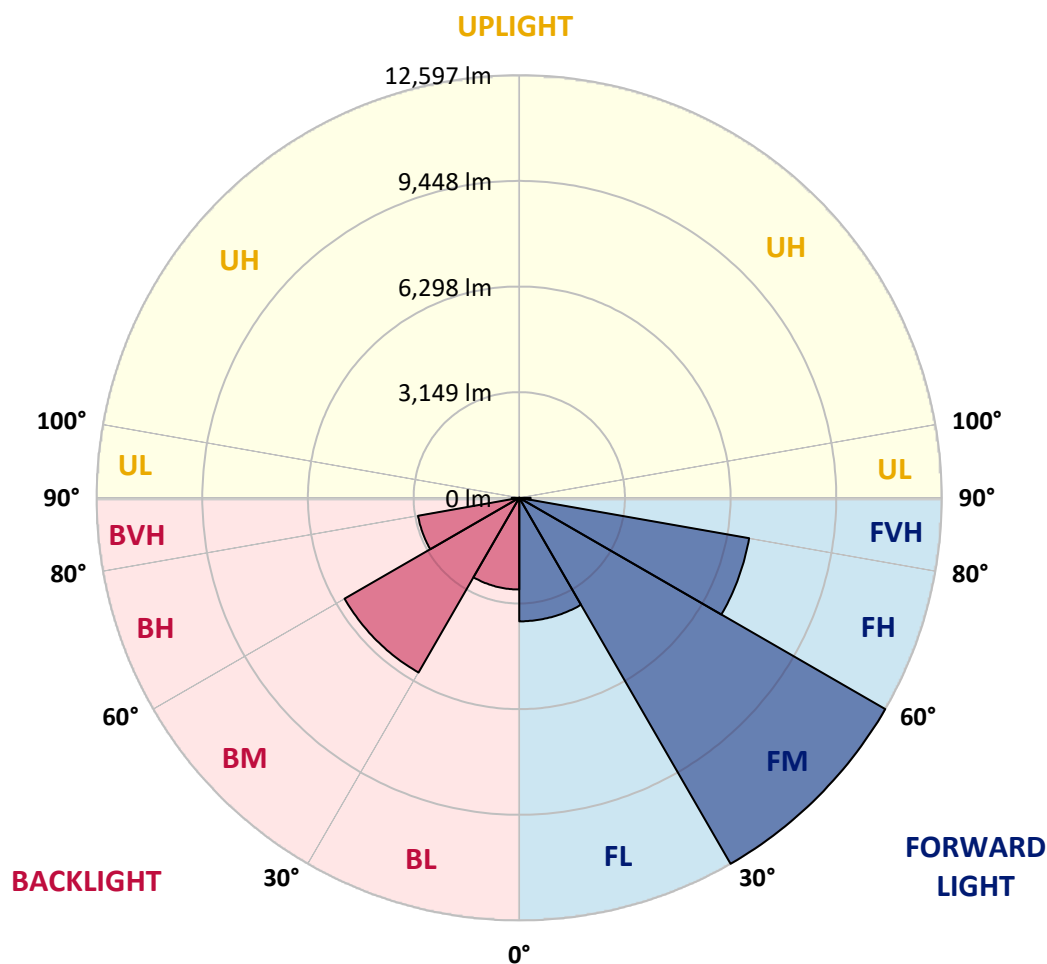
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3682.2	10.3			
FM	(30°-60°)	12596.7	35.4			
FH	(60°-80°)	6957.5	19.5			G3/7500
FVH	(80°-90°)	339.4	1.0			G3/500
BL	(0°-30°)	2734.3	7.7	B4/5000		
BM	(30°-60°)	6012.6	16.9	B4/8500		
BH	(60°-80°)	3063.5	8.6	B4/5000		G4/5000
BVH	(80°-90°)	221.7	0.6			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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	7192.7	7192.7	7192.7	7192.7	7192.7	7192.7	7192.7	7192.7	7192.7	7192.7	7192.7
2.5°	7410.9	7397.7	7344.8	7351.4	7351.4	7344.8	7265.5	7232.4	7232.4	7225.8	7153.1
5°	7675.3	7655.5	7596.0	7582.8	7556.3	7523.3	7397.7	7325.0	7291.9	7285.3	7186.1
7.5°	7986.1	7959.6	7886.9	7847.2	7781.1	7695.2	7536.5	7424.1	7344.8	7338.2	7199.3
10°	8296.8	8270.3	8184.4	8111.7	8019.1	7880.3	7675.3	7510.1	7384.5	7371.2	7206.0
12.5°	8667.0	8640.5	8534.8	8442.2	8303.4	8118.3	7847.2	7622.5	7450.6	7430.7	7225.8
15°	9057.0	9017.4	8911.6	8805.8	8633.9	8395.9	8072.0	7774.5	7556.3	7523.3	7285.3
17.5°	9381.0	9328.1	9242.1	9136.4	8944.6	8667.0	8296.8	7926.6	7655.5	7629.1	7344.8
20°	9658.6	9619.0	9526.4	9427.2	9222.3	8918.2	8508.3	8078.6	7748.1	7715.0	7391.1
22.5°	9923.1	9870.2	9817.3	9744.6	9519.8	9182.6	8752.9	8263.7	7867.1	7827.4	7450.6
25°	10227.2	10167.7	10147.8	10108.2	9843.7	9500.0	9050.4	8495.1	8032.3	7986.1	7556.3
27.5°	10604.0	10537.9	10498.2	10498.2	10180.9	9823.9	9367.7	8766.1	8224.0	8184.4	7688.6
30°	11000.7	10921.3	10861.8	10861.8	10504.8	10147.8	9678.5	9037.2	8442.2	8395.9	7860.4
32.5°	11351.0	11271.7	11205.6	11199.0	10828.8	10471.8	10002.4	9334.7	8706.6	8647.2	8072.0
35°	11622.1	11549.4	11489.9	11503.1	11152.7	10802.3	10366.0	9731.4	9037.2	8971.1	8349.7
37.5°	11787.4	11760.9	11727.9	11774.1	11450.2	11119.7	10742.8	10114.8	9414.0	9354.5	8693.4
40°	11873.3	11853.5	11985.7	12045.2	11701.4	11403.9	11119.7	10511.4	9823.9	9757.8	9090.1
42.5°	11998.9	12164.2	12217.1	12203.9	11886.5	11622.1	11463.4	10941.2	10306.5	10247.0	9566.1
45°	11549.4	11509.7	11800.6	11959.2	11899.7	11760.9	11787.4	11456.8	10868.4	10808.9	10114.8
47.5°	10947.8	10894.9	11060.2	11450.2	11681.6	11813.8	12078.2	11992.3	11516.3	11463.4	10756.1
50°	9678.5	9751.2	10366.0	10888.3	11344.4	11800.6	12322.9	12567.5	12230.3	12177.4	11443.6
52.5°	8270.3	8343.0	8984.3	10187.5	10934.5	11701.4	12501.3	13142.6	13003.8	12944.3	12177.4
55°	7245.6	7404.3	8131.5	9004.1	10352.8	11390.7	12607.1	13731.0	13836.8	13783.9	12977.3
57.5°	6227.5	6346.5	6895.2	7668.7	9559.5	10848.6	12600.5	14279.7	14709.4	14656.5	13790.5
60°	5030.9	5183.0	5619.3	6452.3	8501.7	10200.7	12415.4	14709.4	15549.0	15509.3	14577.2
62.5°	4211.2	4257.5	4568.2	5288.8	7139.8	9381.0	11998.9	14940.8	16309.3	16282.8	15284.6
65°	3391.4	3398.0	3682.3	4283.9	5824.3	8362.9	11291.5	14854.9	16884.4	16897.6	15793.6
67.5°	2617.9	2651.0	2908.8	3365.0	4627.7	7040.7	10280.1	14273.1	16891.0	16924.1	15502.7
70°	1811.4	1837.9	2227.9	2670.8	3576.5	5612.7	8911.6	12732.7	15502.7	15529.2	13896.3
72.5°	1275.9	1289.1	1705.6	2135.3	2796.4	4231.0	6723.4	10531.3	13215.3	13235.2	11688.2
75°	952.0	965.2	1203.2	1619.7	2142.0	2928.7	4594.6	8065.4	10557.7	10557.7	9228.9
77.5°	674.3	680.9	780.1	1117.3	1428.0	1976.7	2763.4	5282.2	7748.1	7761.3	6723.4
80°	456.2	462.8	509.0	753.7	892.5	1071.0	1500.7	2770.0	4885.5	4905.3	4270.7
82.5°	238.0	251.2	284.3	383.4	449.5	595.0	773.5	1408.1	2703.9	2756.8	2565.1
85°	92.6	92.6	105.8	125.6	165.3	231.4	357.0	535.5	1223.0	1262.7	1130.5
87.5°	33.1	33.1	39.7	39.7	46.3	52.9	59.5	79.3	138.8	138.8	132.2
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°	7192.7	7192.7	7192.7	7192.7	7192.7	7192.7	7192.7	7192.7	7192.7	7192.7	7192.7
2.5°	7126.6	7126.6	7093.6	7106.8	7100.2	7087.0	7073.7	7093.6	7073.7	7027.5	7020.9
5°	7139.8	7126.6	7073.7	7067.1	7047.3	7020.9	6987.8	7001.0	6968.0	6928.3	6921.7
7.5°	7146.5	7120.0	7047.3	7020.9	6981.2	6928.3	6875.4	6875.4	6829.1	6789.5	6782.9
10°	7133.2	7100.2	7001.0	6948.1	6875.4	6796.1	6723.4	6703.5	6650.6	6604.4	6604.4
12.5°	7139.8	7093.6	6968.0	6882.0	6782.9	6683.7	6591.1	6564.7	6518.4	6472.1	6465.5
15°	7179.5	7113.4	6954.7	6842.4	6696.9	6584.5	6485.4	6465.5	6425.9	6392.8	6392.8
17.5°	7219.2	7133.2	6934.9	6776.2	6597.7	6472.1	6379.6	6379.6	6353.1	6333.3	6333.3
20°	7239.0	7139.8	6895.2	6683.7	6478.8	6346.5	6260.6	6273.8	6267.2	6260.6	6260.6
22.5°	7285.3	7153.1	6862.2	6597.7	6353.1	6214.3	6135.0	6154.8	6148.2	6148.2	6154.8
25°	7358.0	7186.1	6835.7	6518.4	6234.1	6082.1	5996.2	6009.4	6009.4	6009.4	6009.4
27.5°	7457.2	7252.2	6829.1	6445.7	6115.1	5943.3	5837.5	5837.5	5811.0	5817.7	5824.3
30°	7609.2	7377.8	6842.4	6379.6	5989.5	5771.4	5645.8	5625.9	5619.3	5632.5	5639.2
32.5°	7794.3	7549.7	6921.7	6333.3	5857.3	5579.7	5421.0	5414.4	5394.6	5394.6	5394.6
35°	8025.7	7715.0	6994.4	6326.7	5725.1	5374.7	5202.8	5183.0	5136.7	5116.9	5116.9
37.5°	8323.2	7972.8	7080.4	6280.4	5612.7	5176.4	4971.5	4905.3	4852.5	4845.8	4845.8
40°	8686.8	8263.7	7206.0	6227.5	5493.7	4971.5	4700.4	4588.0	4594.6	4621.1	4621.1
42.5°	9116.5	8620.7	7364.6	6201.1	5321.8	4759.9	4383.1	4250.9	4297.1	4323.6	4330.2
45°	9619.0	9043.8	7543.1	6168.0	5163.2	4521.9	4045.9	3880.6	3900.5	3907.1	3913.7
47.5°	10200.7	9513.2	7728.2	6141.6	4984.7	4224.4	3675.7	3457.5	3450.9	3411.3	3424.5
50°	10808.9	10009.0	7919.9	6095.3	4766.5	3874.0	3285.7	3027.8	2974.9	2915.4	2922.0
52.5°	11456.8	10518.1	8098.4	6022.6	4495.5	3517.0	2915.4	2637.8	2532.0	2465.9	2479.1
55°	12170.8	11040.3	8270.3	5910.2	4211.2	3160.0	2584.9	2300.6	2168.4	2115.5	2122.1
57.5°	12825.3	11542.8	8395.9	5771.4	3900.5	2836.1	2294.0	2016.3	1930.4	1923.8	1930.4
60°	13459.9	11965.9	8448.8	5579.7	3583.1	2538.6	2023.0	1811.4	1751.9	1785.0	1791.6
62.5°	13995.4	12236.9	8422.4	5321.8	3259.2	2254.3	1804.8	1652.7	1613.1	1679.2	1685.8
65°	14306.1	12322.9	8237.3	4951.6	2908.8	1976.7	1599.9	1434.6	1414.7	1454.4	1474.2
67.5°	13896.3	11787.4	7734.8	4442.6	2518.8	1718.9	1401.5	1269.3	1236.3	1269.3	1269.3
70°	12316.2	10214.0	6544.9	3636.0	2089.1	1467.6	1216.4	1123.9	1097.4	1123.9	1117.3
72.5°	10260.2	8495.1	5156.6	2836.1	1646.1	1236.3	1057.8	971.8	945.4	918.9	905.7
75°	7959.6	6452.3	3741.8	2082.5	1242.9	991.6	885.9	806.5	740.4	766.9	753.7
77.5°	5830.9	4528.5	2651.0	1441.2	892.5	766.9	694.2	634.7	588.4	641.3	634.7
80°	3755.0	2928.7	1771.7	965.2	614.8	535.5	509.0	476.0	522.3	680.9	694.2
82.5°	2294.0	1857.7	1057.8	628.0	403.3	357.0	330.5	330.5	535.5	588.4	595.0
85°	1024.7	985.0	575.2	323.9	224.8	204.9	185.1	238.0	218.2	158.7	165.3
87.5°	165.3	171.9	125.6	112.4	85.9	85.9	66.1	46.3	33.1	19.8	19.8
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)