

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: P842122

Luminaire Tested: **ARCH4-270-740-U-T3**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842122
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-270-740-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 1045mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 40445 lumens
Efficiency: N/A
Efficacy: 150.4 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B4 - U0 - G4

Input Watts (W): 269
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

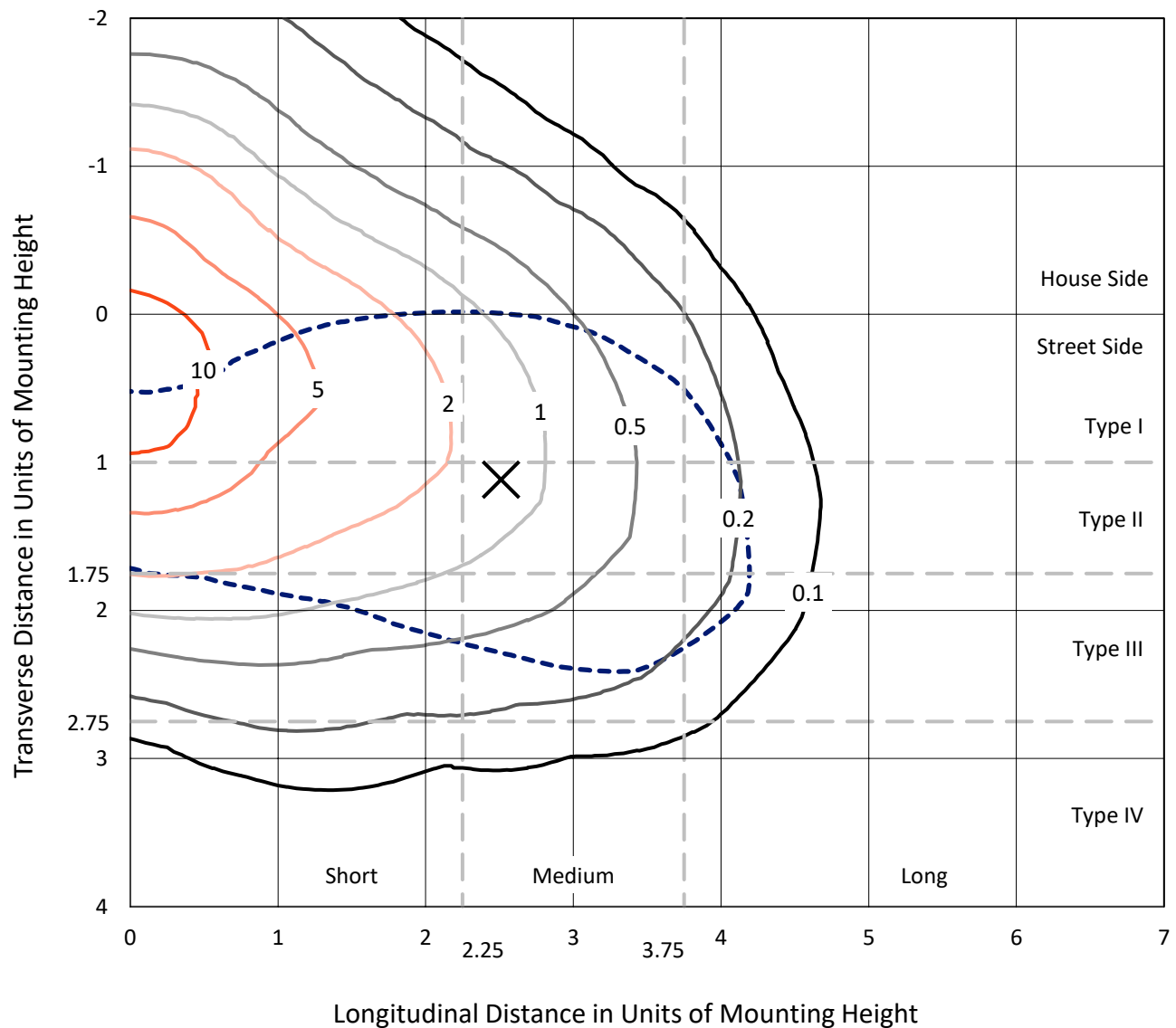


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Iso-Footcandle Lines of Horizontal Illumination

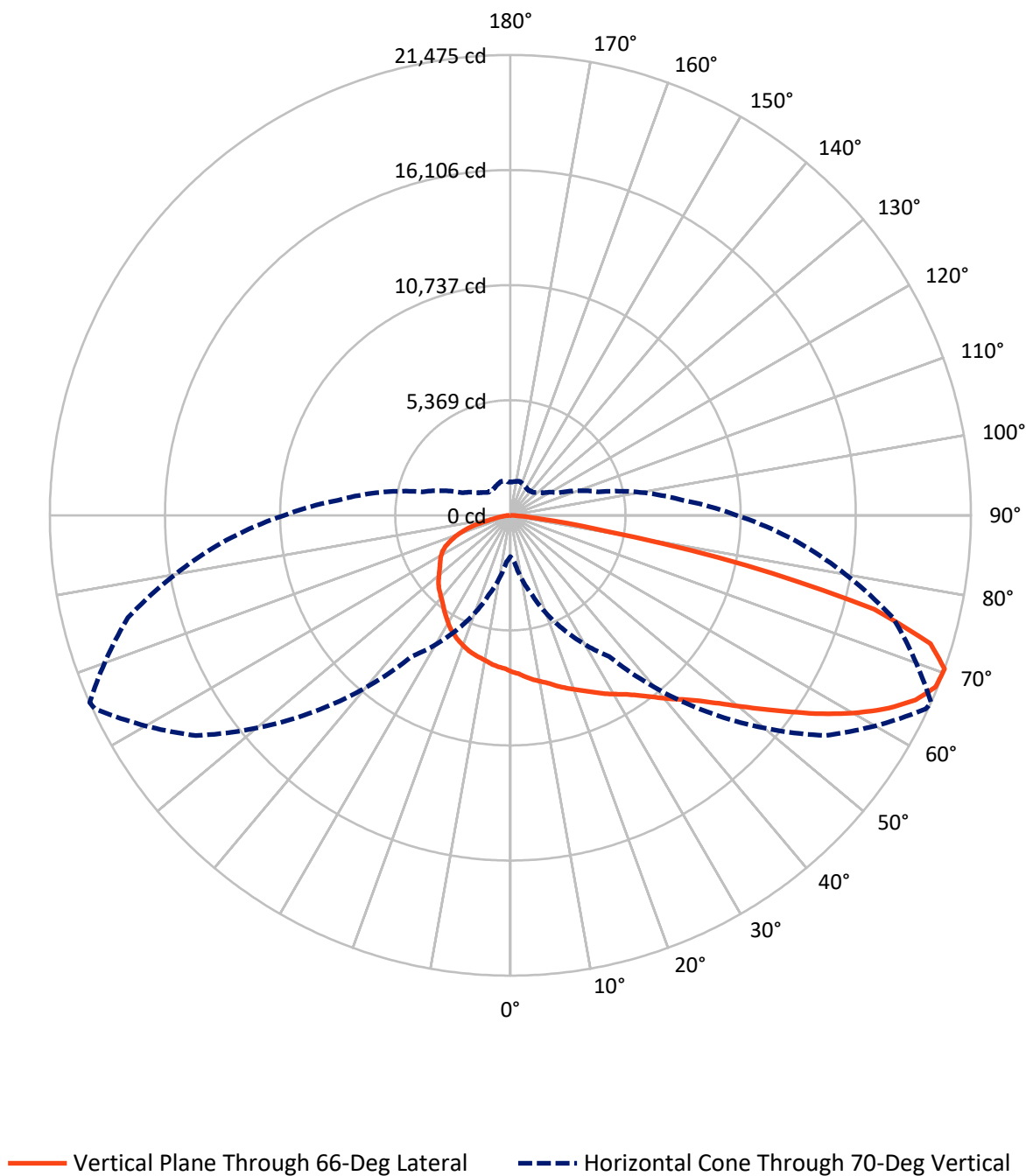
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.7 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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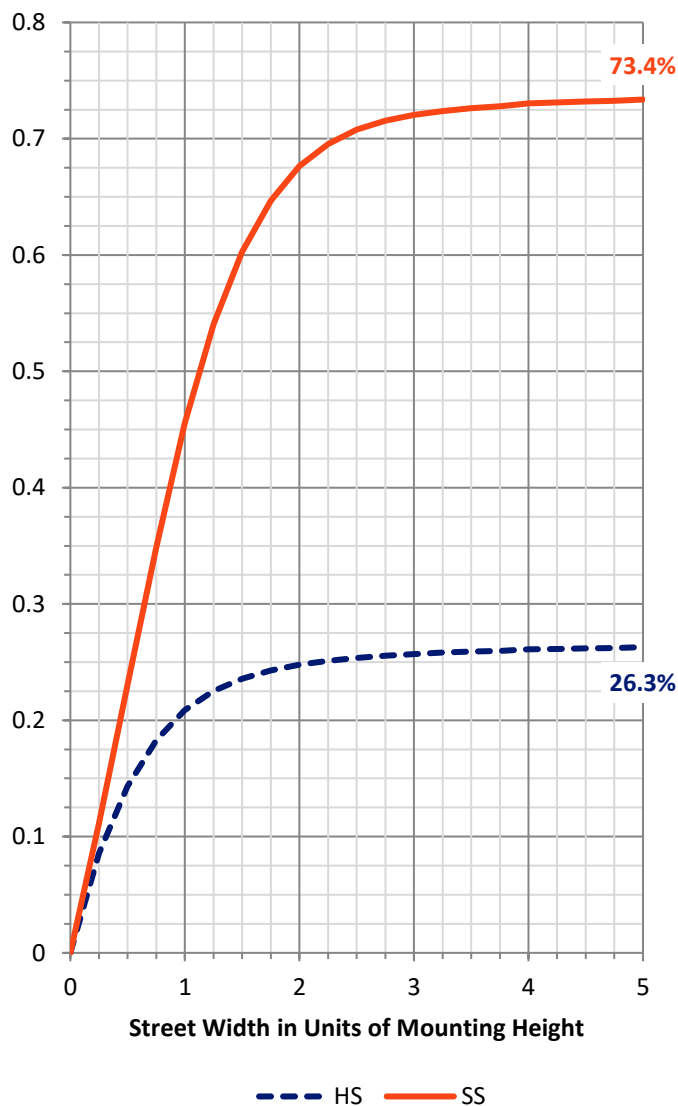
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10717.0	0.0	10717.0
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	29728.0	0.0	29728.0
	% Fixture	73.5	0.0	73.5
Total	Lumens	40445.0	0.0	40445.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	701.4	1.7
10°-20°	2103.9	5.2
20°-30°	3526.9	8.7
30°-40°	5280.9	13.1
40°-50°	7060.6	17.5
50°-60°	8243.5	20.4
60°-70°	8196.8	20.3
70°-80°	4852.7	12.0
80°-90°	478.3	1.2
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°	40445.0	100.0
0°-180°	40445.0	100.0

Coefficient of Utilization



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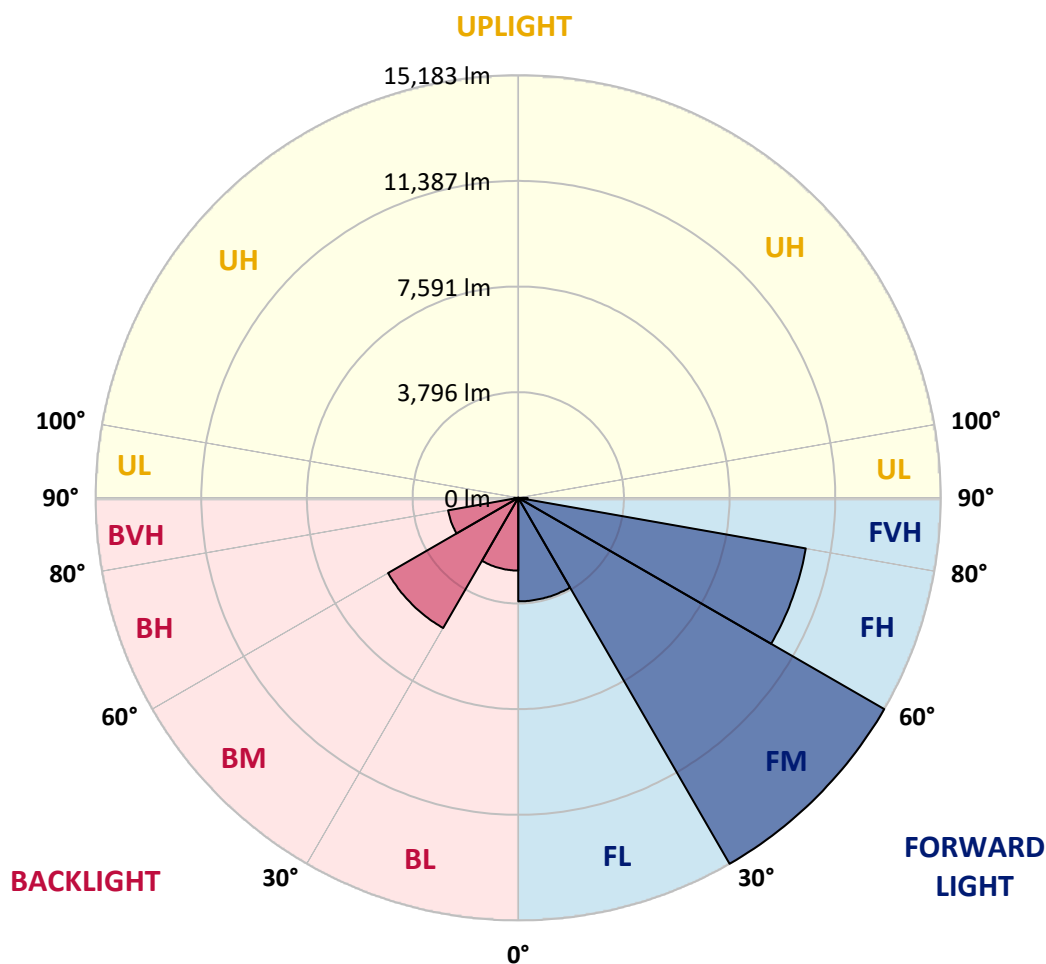
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3719.9	9.2			
FM	(30°-60°)	15182.5	37.5			
FH	(60°-80°)	10489.5	25.9			G4/12000
FVH	(80°-90°)	336.1	0.8			G3/500
BL	(0°-30°)	2612.3	6.5	B4/5000		
BM	(30°-60°)	5402.5	13.4	B4/8500		
BH	(60°-80°)	2560.0	6.3	B4/5000		G4/5000
BVH	(80°-90°)	142.2	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 III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	7299.4	7299.4	7299.4	7299.4	7299.4	7299.4	7299.4	7299.4	7299.4	7299.4	7299.4
2.5°	7567.8	7555.8	7549.9	7526.0	7472.3	7496.2	7442.5	7406.7	7400.8	7317.3	7269.6
5°	7877.9	7871.9	7860.0	7824.2	7740.7	7752.6	7663.2	7597.6	7579.7	7448.5	7347.1
7.5°	8140.3	8128.3	8122.4	8074.7	7985.2	7979.2	7871.9	7776.5	7746.7	7567.8	7412.7
10°	8343.0	8325.1	8337.1	8289.4	8193.9	8176.0	8038.9	7913.6	7883.8	7657.2	7442.5
12.5°	8516.0	8504.0	8521.9	8480.2	8402.7	8384.8	8247.6	8086.6	8050.8	7788.4	7508.1
15°	8706.8	8665.1	8700.8	8682.9	8629.3	8623.3	8498.1	8319.2	8271.5	7955.4	7609.5
17.5°	8808.2	8784.3	8826.1	8832.0	8808.2	8849.9	8730.7	8516.0	8474.2	8110.4	7699.0
20°	8879.7	8844.0	8891.7	8927.5	8945.3	9028.8	8933.4	8724.7	8677.0	8259.5	7782.5
22.5°	9124.3	9046.7	9052.7	9076.5	9088.5	9207.7	9148.1	8945.3	8897.6	8444.4	7883.8
25°	9738.5	9583.4	9482.1	9410.5	9327.0	9428.4	9392.6	9195.8	9154.1	8665.1	8009.1
27.5°	10692.7	10495.9	10293.1	10084.4	9756.4	9714.6	9655.0	9476.1	9428.4	8885.7	8134.3
30°	11778.0	11581.2	11342.7	11008.7	10394.5	10072.5	9935.3	9738.5	9684.8	9082.5	8253.6
32.5°	12857.4	12684.5	12446.0	12040.4	11163.8	10507.8	10215.6	10012.8	9959.2	9297.2	8396.7
35°	13698.3	13591.0	13435.9	12929.0	11927.1	11020.7	10621.1	10376.6	10317.0	9637.1	8659.1
37.5°	14378.2	14300.6	14169.4	13638.7	12481.7	11533.5	11086.3	10806.0	10740.4	10006.9	8939.4
40°	15380.0	15177.3	15069.9	14300.6	12964.8	11998.7	11611.1	11318.8	11247.3	10400.5	9166.0
42.5°	16232.8	16083.7	15952.5	14891.0	13424.0	12398.2	12106.0	11837.7	11742.3	10788.1	9410.5
45°	16375.9	16435.6	16370.0	15183.2	14151.5	12791.8	12607.0	12434.0	12344.6	11312.9	9780.2
47.5°	16381.9	16381.9	15994.3	15350.2	15052.0	13233.1	13143.7	13203.3	13107.9	11980.8	10221.5
50°	15952.5	16030.1	15827.3	15392.0	15290.6	13674.5	13799.7	14121.7	14026.3	12690.5	10698.6
52.5°	15064.0	15320.4	15314.4	15326.4	14944.7	14050.2	14491.5	15225.0	15064.0	13489.6	11205.5
55°	13495.5	14008.4	14467.6	14861.2	14646.5	14276.8	15338.3	16399.8	16232.8	14384.1	11718.4
57.5°	12153.7	12481.7	13054.2	14169.4	14294.7	14473.6	16131.4	17628.3	17479.2	15374.1	12255.1
60°	10621.1	11074.3	11646.8	13233.1	13865.3	14730.0	17002.1	18827.0	18683.8	16375.9	12774.0
62.5°	8265.5	8849.9	9994.9	11795.9	13239.1	14891.0	17687.9	19882.5	19816.9	17324.2	13239.1
65°	5760.8	6279.6	7883.8	10030.7	12243.2	14819.5	18236.6	20824.8	20765.1	18099.4	13567.1
67.5°	3363.4	3965.8	5778.7	8074.7	10483.9	14324.5	18415.5	21379.4	21379.4	18570.5	13656.6
70°	1920.3	2200.6	3810.7	5886.0	8038.9	12958.8	17914.5	21373.4	21474.8	18463.2	13286.8
72.5°	1341.8	1467.0	2564.3	3959.8	5450.7	10483.9	16602.6	20341.7	20478.9	17449.4	12022.5
75°	1043.6	1133.1	1807.0	2701.5	3435.0	7120.5	13734.1	17151.2	17515.0	14873.1	9720.6
77.5°	793.2	858.8	1055.6	1687.7	2200.6	4091.0	9064.6	11247.3	11271.1	9106.4	5212.2
80°	578.5	644.1	703.7	1031.7	1168.9	1914.3	3423.1	4699.3	4568.1	4407.1	2820.8
82.5°	345.9	411.5	429.4	560.6	572.5	817.0	1198.7	1514.7	1455.1	1938.2	1323.9
85°	149.1	208.7	220.7	256.4	244.5	334.0	477.1	399.6	357.8	411.5	286.3
87.5°	35.8	59.6	59.6	65.6	53.7	83.5	89.5	65.6	59.6	71.6	71.6
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°	7299.4	7299.4	7299.4	7299.4	7299.4	7299.4	7299.4	7299.4	7299.4	7299.4	7299.4
2.5°	7257.7	7239.8	7245.7	7144.3	7114.5	7084.7	7066.8	7054.9	7043.0	7060.9	7078.7
5°	7311.3	7269.6	7221.9	7072.8	7013.2	6947.6	6899.8	6858.1	6840.2	6840.2	6858.1
7.5°	7353.1	7281.5	7180.1	6983.3	6876.0	6786.5	6709.0	6655.3	6625.5	6625.5	6643.4
10°	7359.0	7257.7	7096.6	6858.1	6715.0	6583.8	6494.3	6434.7	6392.9	6392.9	6404.9
12.5°	7394.8	7257.7	7048.9	6762.7	6583.8	6422.8	6315.4	6226.0	6208.1	6208.1	6220.0
15°	7454.5	7287.5	7019.1	6679.2	6464.5	6279.6	6160.4	6064.9	6029.2	6053.0	6059.0
17.5°	7508.1	7305.4	6965.4	6571.8	6315.4	6112.7	5981.5	5898.0	5850.3	5903.9	5903.9
20°	7543.9	7305.4	6887.9	6434.7	6154.4	5927.8	5802.5	5701.2	5665.4	5731.0	5736.9
22.5°	7597.6	7299.4	6804.4	6297.5	5981.5	5742.9	5617.7	5540.2	5522.3	5593.8	5617.7
25°	7657.2	7311.3	6715.0	6142.5	5790.6	5558.0	5462.6	5426.8	5438.8	5528.2	5558.0
27.5°	7722.8	7335.2	6625.5	5969.5	5581.9	5373.2	5319.5	5337.4	5385.1	5498.4	5534.2
30°	7782.5	7341.1	6500.3	5766.8	5343.4	5146.6	5170.4	5247.9	5319.5	5432.8	5474.6
32.5°	7860.0	7347.1	6369.1	5546.1	5086.9	4943.8	5051.1	5176.4	5247.9	5355.3	5403.0
35°	8050.8	7448.5	6267.7	5331.4	4848.4	4770.9	4949.8	5110.8	5152.5	5247.9	5289.7
37.5°	8271.5	7615.5	6214.0	5110.8	4615.8	4597.9	4824.5	4985.5	4997.5	5057.1	5098.8
40°	8408.6	7687.0	6154.4	4925.9	4407.1	4419.0	4651.6	4776.8	4753.0	4794.7	4824.5
42.5°	8545.8	7710.9	6029.2	4770.9	4210.3	4222.2	4401.1	4490.6	4502.5	4591.9	4633.7
45°	8778.4	7776.5	5892.0	4627.7	4031.4	3989.6	4097.0	4216.2	4371.3	4544.2	4591.9
47.5°	9088.5	7913.6	5748.9	4454.8	3858.4	3721.3	3763.0	3971.7	4132.7	4293.8	4323.6
50°	9404.5	8050.8	5617.7	4246.1	3685.5	3435.0	3452.9	3643.7	3774.9	3900.2	3918.1
52.5°	9714.6	8170.1	5504.4	4049.3	3488.7	3095.1	3166.7	3363.4	3452.9	3512.5	3530.4
55°	10024.7	8271.5	5403.0	3882.3	3262.1	2826.7	2892.3	3077.2	3166.7	3196.5	3208.4
57.5°	10346.8	8390.7	5325.5	3739.2	3005.6	2588.2	2629.9	2761.1	2844.6	2880.4	2868.5
60°	10615.1	8492.1	5283.7	3590.1	2749.2	2367.5	2355.6	2474.9	2594.2	2629.9	2618.0
62.5°	10823.9	8557.7	5218.1	3399.2	2522.6	2146.9	2087.2	2242.3	2367.5	2391.4	2409.3
65°	10937.2	8563.7	5057.1	3154.7	2290.0	1908.3	1866.6	2021.6	2099.2	2123.0	2123.0
67.5°	10919.3	8468.3	4741.0	2826.7	2075.3	1693.7	1657.9	1753.3	1866.6	1884.5	1866.6
70°	10549.5	8074.7	4234.1	2480.8	1818.9	1502.8	1437.2	1532.6	1640.0	1574.4	1544.6
72.5°	9500.0	7054.9	3488.7	2099.2	1532.6	1264.3	1234.5	1329.9	1335.8	1347.8	1317.9
75°	7496.2	5253.9	2612.0	1634.0	1240.4	1061.5	1055.6	1037.7	1061.5	1109.2	1073.4
77.5°	3936.0	2624.0	1413.4	1001.9	900.5	852.8	811.0	805.1	876.6	906.5	870.7
80°	2135.0	1473.0	811.0	602.3	548.6	554.6	608.3	596.4	673.9	691.8	662.0
82.5°	930.3	697.7	399.6	363.8	363.8	357.8	375.7	417.4	500.9	500.9	399.6
85°	202.8	172.9	155.1	178.9	202.8	202.8	202.8	202.8	143.1	77.5	53.7
87.5°	65.6	65.6	65.6	71.6	77.5	77.5	65.6	47.7	29.8	6.0	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)