

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: P841737

Luminaire Tested: **ARCH4-220-727-U-T4W**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841737
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: ARCH4-220-727-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 870mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31622 lumens
Efficiency: N/A
Efficacy: 142.6 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G4

Input Watts (W): 221.8
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

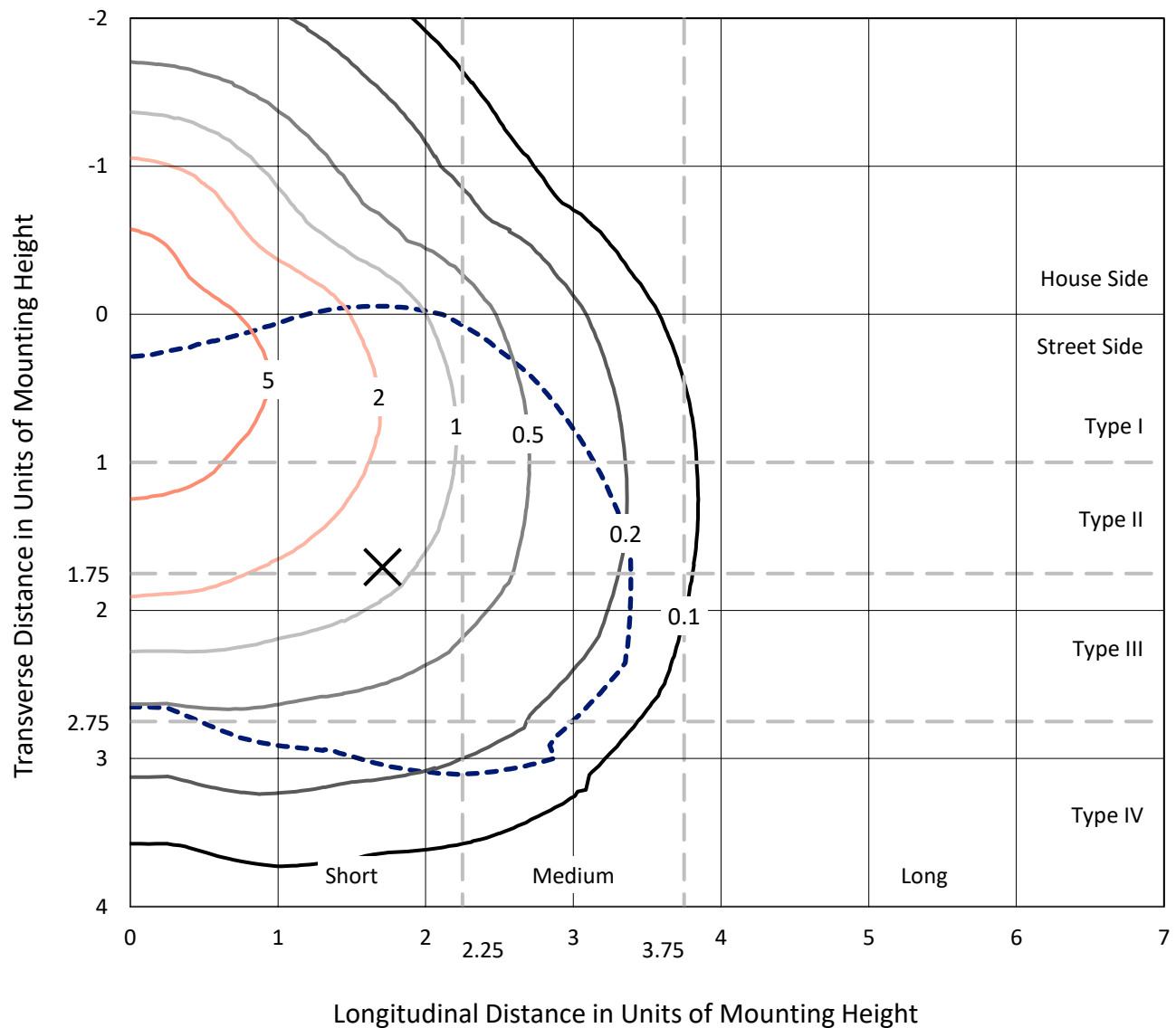


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Iso-Footcandle Lines of Horizontal Illumination

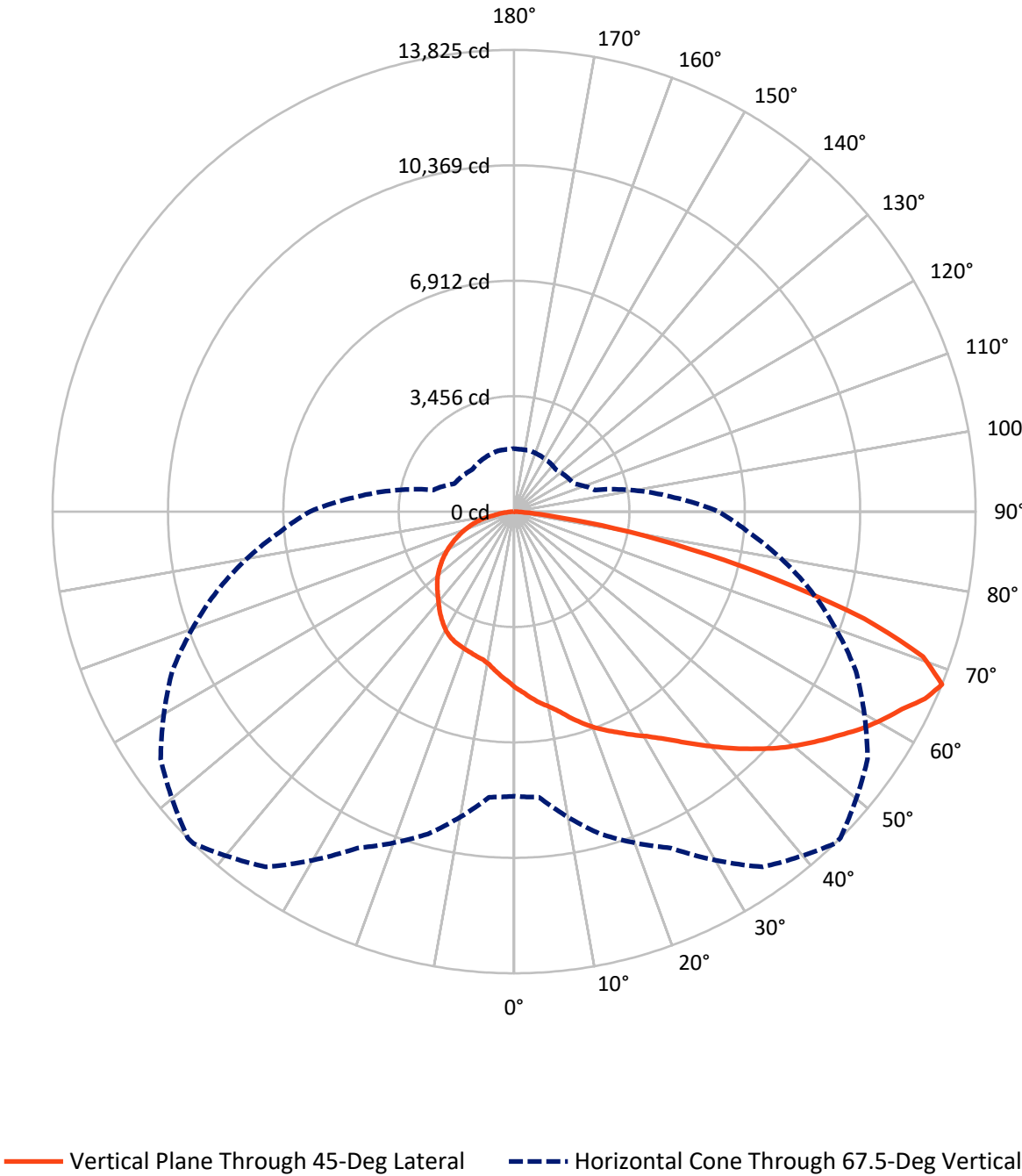
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.8 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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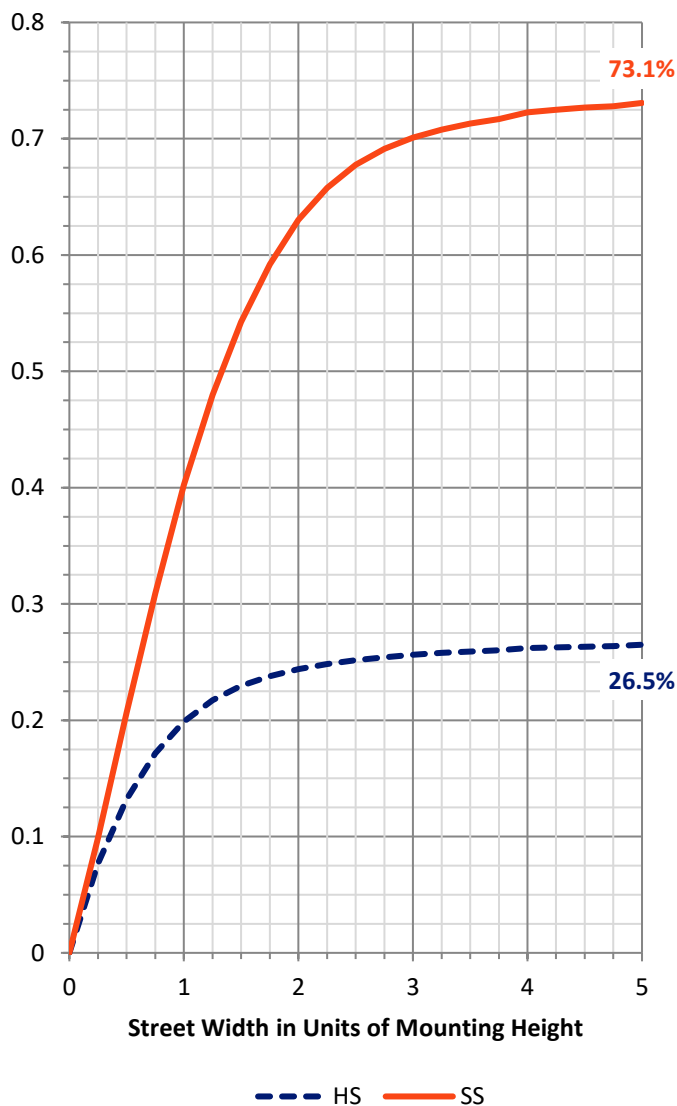
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8447.8	0.0	8447.8
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	23174.2	0.0	23174.2
	% Fixture	73.3	0.0	73.3
Total	Lumens	31622.0	0.0	31622.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	505.0	1.6
10°-20°	1559.9	4.9
20°-30°	2692.5	8.5
30°-40°	3970.5	12.6
40°-50°	5379.3	17.0
50°-60°	6574.7	20.8
60°-70°	6780.9	21.4
70°-80°	3714.1	11.7
80°-90°	445.2	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°	31622.0	100.0
0°-180°	31622.0	100.0

Coefficient of Utilization



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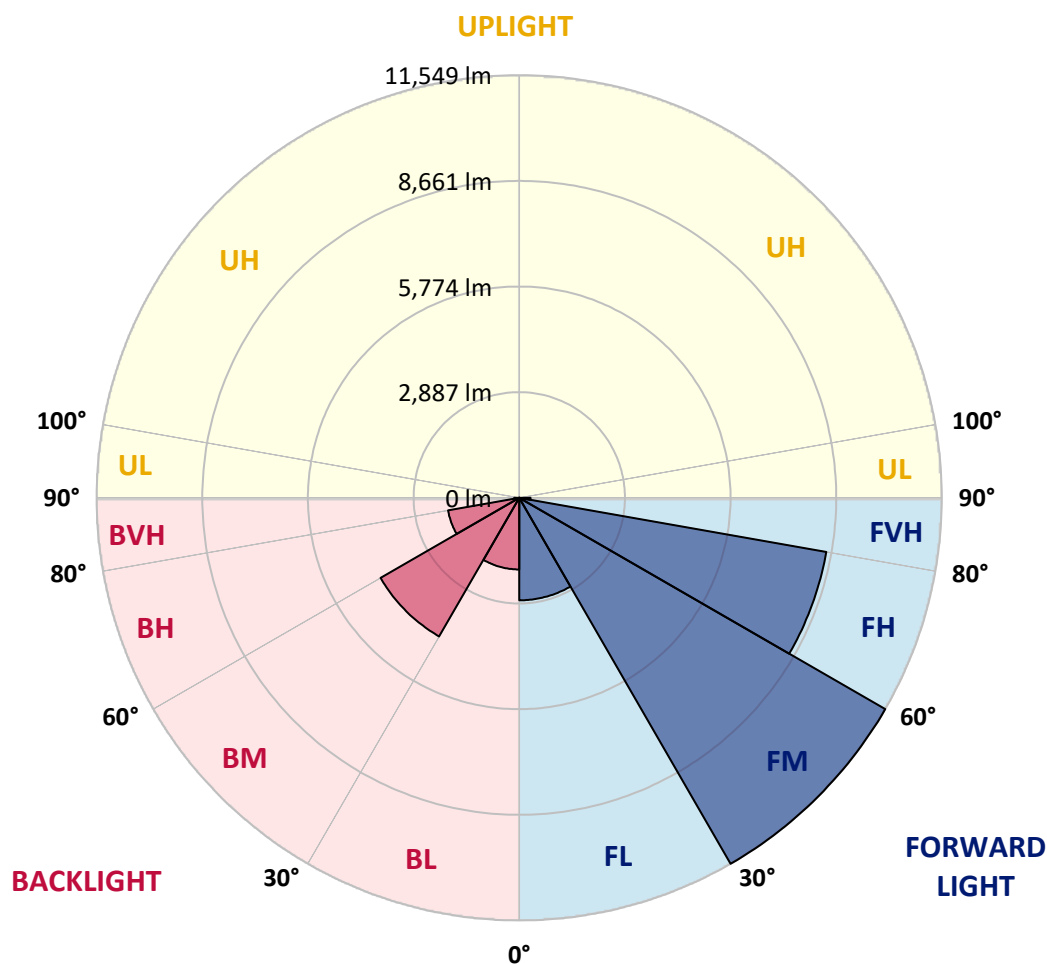
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2799.4	8.9			
FM	(30°-60°)	11548.7	36.5			
FH	(60°-80°)	8519.4	26.9			G4/12000
FVH	(80°-90°)	306.7	1.0			G3/500
BL	(0°-30°)	1957.9	6.2	B3/2500		
BM	(30°-60°)	4375.8	13.8	B3/5000		
BH	(60°-80°)	1975.6	6.2	B3/2500		G3/2500
BVH	(80°-90°)	138.5	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-G4

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	5273.9	5273.9	5273.9	5273.9	5273.9	5273.9	5273.9	5273.9	5273.9	5273.9	5273.9
2.5°	5504.9	5500.1	5509.7	5476.1	5432.7	5427.9	5427.9	5399.1	5365.4	5298.0	5245.1
5°	5764.8	5755.1	5760.0	5711.8	5654.1	5625.2	5620.4	5557.9	5480.9	5375.0	5278.8
7.5°	6005.4	5995.7	5990.9	5938.0	5851.4	5803.3	5798.5	5707.0	5615.6	5452.0	5312.4
10°	6231.5	6221.9	6212.3	6140.1	6034.2	5962.1	5952.4	5837.0	5721.5	5519.4	5341.3
12.5°	6520.3	6501.0	6491.4	6404.8	6250.8	6173.8	6159.4	6005.4	5861.0	5615.6	5399.1
15°	6823.4	6809.0	6794.5	6712.7	6539.5	6438.5	6414.4	6221.9	6024.6	5740.7	5485.7
17.5°	7049.6	7035.1	7035.1	6963.0	6804.2	6688.7	6669.4	6438.5	6193.0	5856.2	5553.0
20°	7189.1	7174.7	7189.1	7145.8	7025.5	6929.3	6910.0	6655.0	6361.5	5962.1	5610.8
22.5°	7290.2	7275.7	7299.8	7280.6	7193.9	7136.2	7121.8	6871.5	6534.7	6072.7	5668.5
25°	7468.2	7468.2	7468.2	7434.5	7352.7	7333.5	7333.5	7116.9	6756.0	6217.1	5755.1
27.5°	7824.3	7805.1	7781.0	7684.8	7545.2	7540.4	7569.3	7367.2	7011.1	6404.8	5861.0
30°	8348.8	8339.2	8247.8	8045.7	7809.9	7785.8	7805.1	7636.6	7285.4	6602.1	5981.3
32.5°	9027.3	8993.6	8806.0	8502.8	8166.0	8055.3	8093.8	7915.7	7574.1	6804.2	6096.8
35°	9508.5	9518.1	9383.4	9109.1	8709.7	8416.2	8445.1	8228.5	7886.9	7030.3	6241.2
37.5°	10061.9	10095.6	9893.5	9686.6	9316.0	8815.6	8844.5	8550.9	8199.6	7314.2	6395.1
40°	10827.0	10759.6	10418.0	10172.6	9763.5	9234.2	9258.3	8911.8	8560.5	7583.7	6573.2
42.5°	11467.0	11346.7	10932.9	10620.1	10129.3	9676.9	9701.0	9301.6	8926.3	7882.1	6770.5
45°	12386.1	12054.1	11457.4	11303.4	10504.6	10110.0	10134.1	9715.4	9311.2	8199.6	6982.2
47.5°	12920.2	12390.9	12010.7	11928.9	10918.4	10557.5	10586.4	10153.3	9725.0	8560.5	7203.6
50°	12886.5	12544.9	12434.2	12232.1	11284.1	10976.2	11005.0	10605.6	10143.7	8916.6	7415.3
52.5°	12665.2	12727.7	12670.0	12333.2	11649.8	11380.4	11414.1	11053.2	10572.0	9248.7	7612.6
55°	13006.8	13050.1	12939.5	12496.8	12054.1	11784.6	11823.1	11524.7	10995.4	9542.2	7781.0
57.5°	13415.9	13261.9	13151.2	12785.5	12472.7	12222.5	12265.8	12005.9	11361.1	9778.0	7910.9
60°	13396.6	13074.2	13184.9	12804.7	12756.6	12626.7	12665.2	12400.5	11640.2	9951.2	7963.9
62.5°	12410.1	12236.9	12795.1	12665.2	12987.6	12987.6	13035.7	12641.1	11808.6	10023.4	7935.0
65°	10697.1	10706.7	11688.3	12227.3	13261.9	13483.2	13521.7	12790.3	11712.4	9811.7	7665.5
67.5°	8522.0	8584.6	9994.5	11115.7	12987.6	13820.1	13824.9	12925.0	11298.6	9215.0	7040.0
70°	6236.3	6284.5	7949.4	9311.2	11693.2	13074.2	12997.2	12544.9	10398.7	8175.6	6063.1
72.5°	4215.3	4258.6	5971.7	7150.6	9595.1	11135.0	10966.5	11086.8	8863.7	6717.5	4874.6
75°	2834.3	2887.2	4249.0	5115.2	7059.2	8454.7	8079.3	8396.9	6857.1	5086.3	3556.1
77.5°	1785.3	1818.9	2699.5	3354.0	4821.6	5755.1	5379.8	5384.6	3950.7	2738.0	1910.4
80°	1135.6	1145.3	1636.1	1934.4	2791.0	3459.8	3060.4	2487.8	1780.4	1453.2	1140.4
82.5°	659.2	644.8	976.8	1092.3	1328.1	1313.7	1087.5	1029.8	779.5	726.6	582.3
85°	264.7	245.4	428.3	399.4	404.2	428.3	317.6	317.6	255.0	197.3	144.4
87.5°	52.9	52.9	57.7	52.9	52.9	57.7	43.3	43.3	38.5	38.5	38.5
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°	5273.9	5273.9	5273.9	5273.9	5273.9	5273.9	5273.9	5273.9	5273.9	5273.9	5273.9
2.5°	5235.5	5225.8	5201.8	5139.2	5105.5	5086.3	5057.4	5047.8	5043.0	5047.8	5062.2
5°	5249.9	5216.2	5148.8	5047.8	4980.4	4937.1	4889.0	4869.7	4855.3	4855.3	4869.7
7.5°	5259.5	5206.6	5091.1	4941.9	4845.7	4778.3	4720.6	4696.5	4691.7	4706.1	4710.9
10°	5264.3	5187.3	5023.7	4836.1	4710.9	4624.3	4566.6	4552.2	4566.6	4595.5	4600.3
12.5°	5298.0	5192.1	4985.2	4763.9	4614.7	4528.1	4484.8	4484.8	4523.3	4576.2	4581.0
15°	5355.8	5225.8	4966.0	4706.1	4552.2	4475.2	4460.7	4484.8	4542.5	4624.3	4634.0
17.5°	5399.1	5245.1	4922.7	4629.1	4470.3	4422.2	4446.3	4504.0	4585.8	4696.5	4706.1
20°	5427.9	5245.1	4860.1	4537.7	4388.5	4378.9	4446.3	4537.7	4624.3	4754.3	4768.7
22.5°	5456.8	5235.5	4787.9	4427.0	4297.1	4326.0	4451.1	4566.6	4653.2	4792.8	4816.8
25°	5509.7	5249.9	4715.8	4316.4	4200.9	4282.7	4446.3	4585.8	4677.3	4821.6	4860.1
27.5°	5581.9	5283.6	4662.8	4215.3	4104.6	4215.3	4412.6	4581.0	4677.3	4816.8	4860.1
30°	5658.9	5322.1	4600.3	4104.6	3994.0	4119.1	4340.4	4528.1	4638.8	4768.7	4821.6
32.5°	5740.7	5365.4	4547.3	3984.3	3859.2	3989.1	4234.6	4446.3	4566.6	4686.9	4744.6
35°	5851.4	5442.4	4518.5	3888.1	3738.9	3854.4	4099.8	4340.4	4470.3	4581.0	4648.4
37.5°	5986.1	5538.6	4504.0	3791.9	3609.0	3705.2	3955.5	4210.5	4350.0	4441.5	4504.0
40°	6140.1	5658.9	4499.2	3700.4	3479.1	3551.3	3806.3	4061.3	4196.1	4268.2	4321.2
42.5°	6313.3	5793.6	4489.6	3609.0	3349.2	3406.9	3661.9	3912.2	4027.6	4090.2	4138.3
45°	6496.2	5928.4	4470.3	3498.3	3209.6	3277.0	3512.8	3734.1	3854.4	3907.3	3960.3
47.5°	6679.1	6063.1	4431.9	3373.2	3084.5	3147.0	3354.0	3546.4	3642.7	3690.8	3743.7
50°	6857.1	6183.4	4340.4	3228.9	2954.6	3012.3	3171.1	3301.0	3373.2	3411.7	3464.6
52.5°	7015.9	6265.2	4210.5	3060.4	2824.6	2853.5	2959.4	3070.1	3127.8	3132.6	3180.7
55°	7150.6	6308.5	4022.8	2887.2	2685.1	2689.9	2747.7	2834.3	2858.3	2839.1	2872.8
57.5°	7227.6	6284.5	3815.9	2709.2	2540.7	2521.5	2564.8	2608.1	2612.9	2564.8	2598.5
60°	7246.9	6173.8	3546.4	2531.1	2396.4	2343.4	2357.9	2348.3	2338.6	2319.4	2348.3
62.5°	7150.6	5938.0	3248.1	2357.9	2242.4	2160.6	2155.8	2151.0	2165.4	2170.2	2175.0
65°	6799.4	5495.3	2892.0	2179.8	2078.8	1968.1	1963.3	2021.0	2040.3	2011.4	2021.0
67.5°	6120.9	4816.8	2502.2	1972.9	1871.9	1775.6	1814.1	1847.8	1881.5	1871.9	1881.5
70°	5158.5	3955.5	2146.2	1741.9	1645.7	1592.8	1636.1	1665.0	1669.8	1660.1	1669.8
72.5°	4056.5	3089.3	1814.1	1506.2	1419.5	1395.5	1448.4	1472.5	1515.8	1535.0	1539.8
75°	2930.5	2280.9	1486.9	1251.1	1178.9	1178.9	1227.1	1270.4	1308.9	1284.8	1270.4
77.5°	1636.1	1361.8	1068.3	861.3	875.8	943.2	962.4	1010.5	1049.0	1044.2	1034.6
80°	991.3	851.7	721.8	558.2	553.4	606.3	731.4	813.2	832.5	789.2	784.4
82.5°	514.9	447.5	385.0	312.8	346.5	404.2	423.5	510.1	563.0	543.8	567.8
85°	129.9	125.1	139.5	144.4	178.0	197.3	216.5	255.0	168.4	81.8	81.8
87.5°	38.5	38.5	48.1	48.1	62.6	77.0	72.2	72.2	38.5	4.8	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)