

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: P841411

Luminaire Tested: **ARCH4-170-750-U-T3**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841411
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: ARCH4-170-750-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 1380mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28691 lumens
Efficiency: N/A
Efficacy: 169.0 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G3

Input Watts (W): 169.8
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

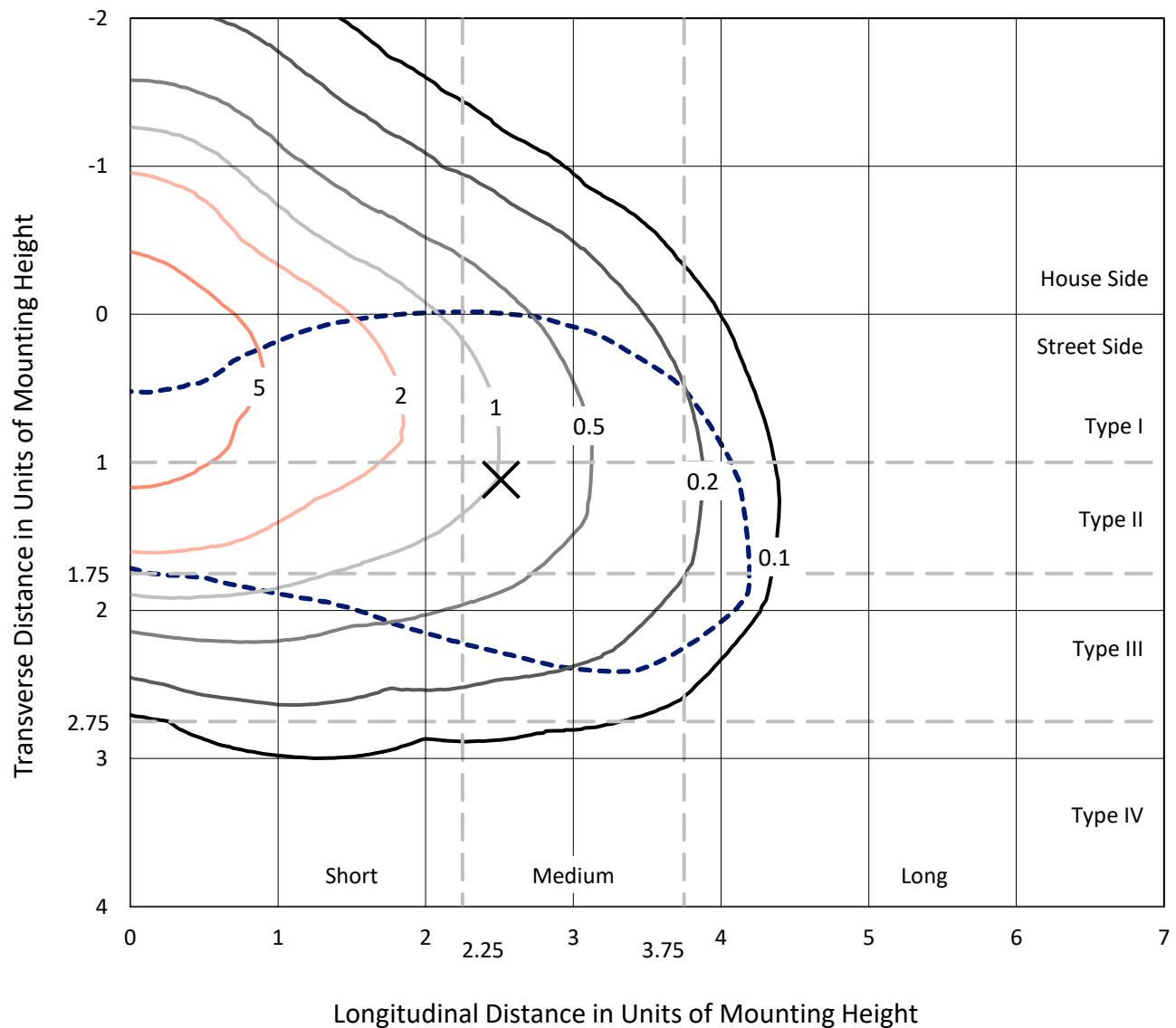


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Iso-Footcandle Lines of Horizontal Illumination

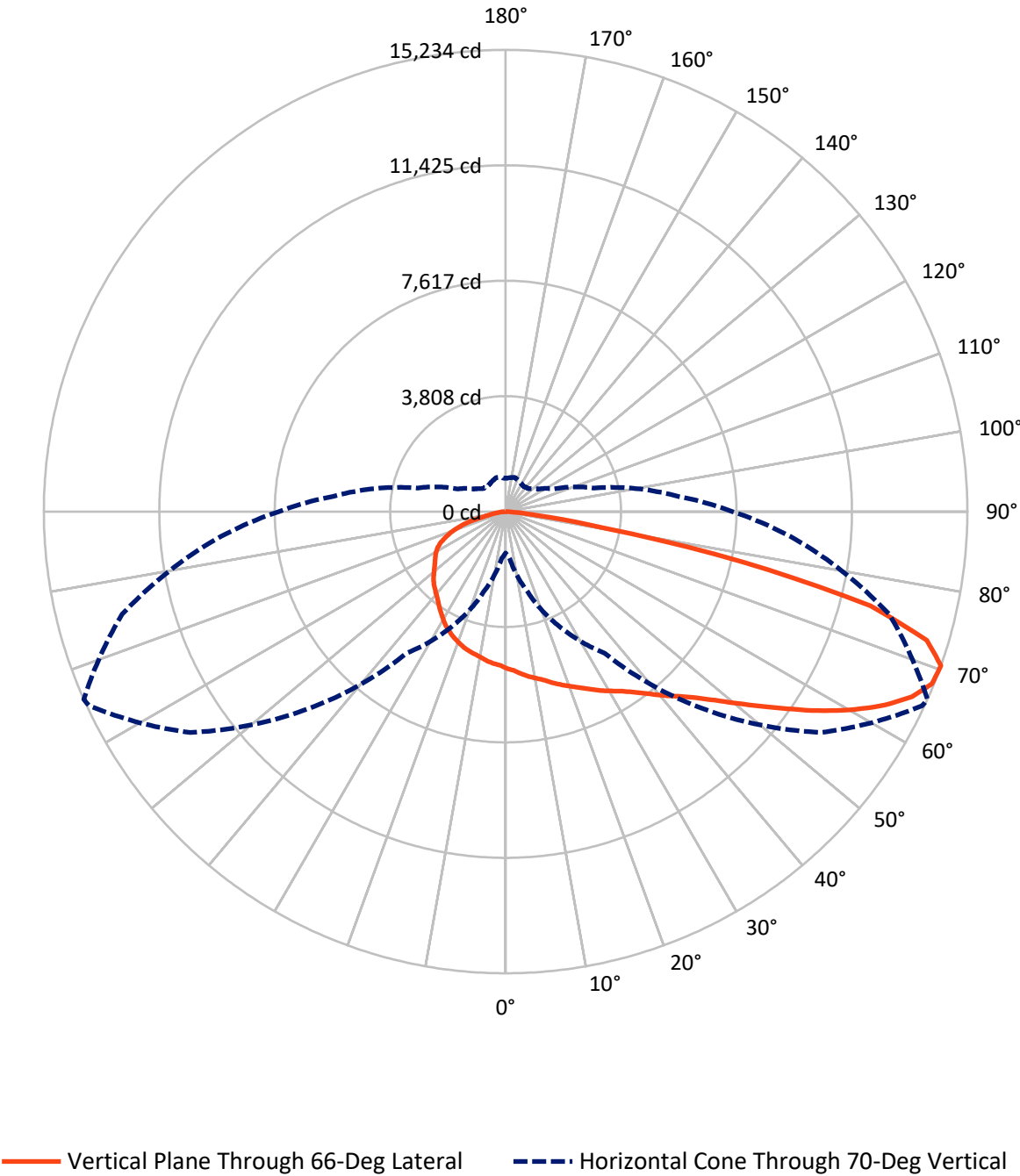
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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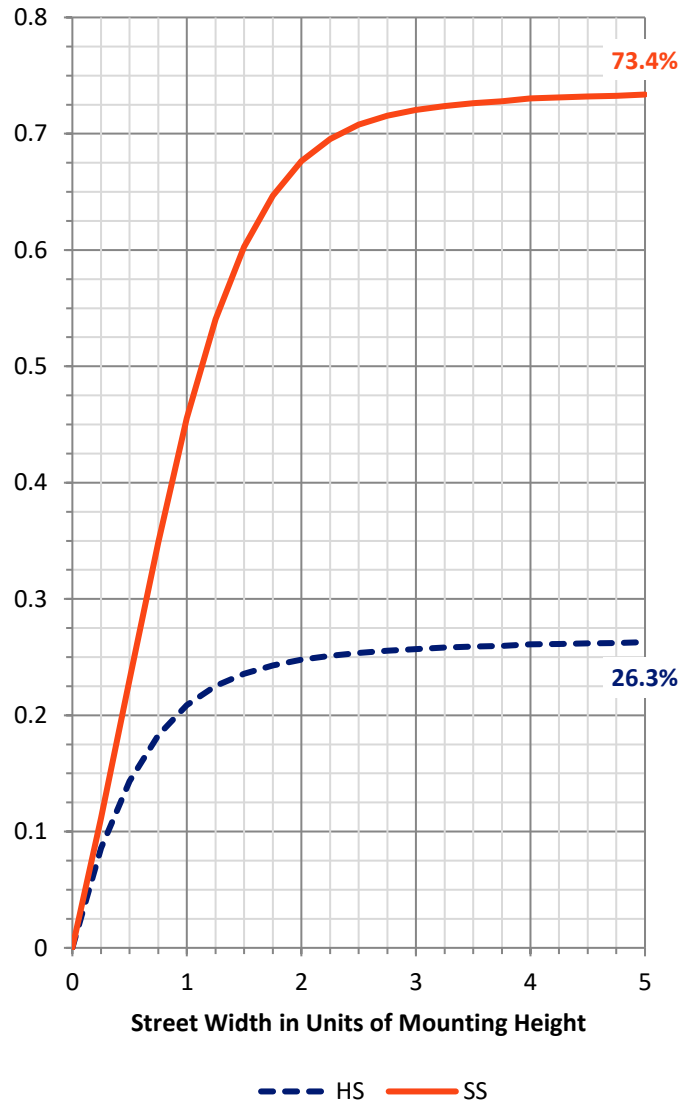
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7602.4	0.0	7602.4
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	21088.5	0.0	21088.5
	% Fixture	73.5	0.0	73.5
Total	Lumens	28691.0	0.0	28691.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	497.6	1.7
10°-20°	1492.5	5.2
20°-30°	2501.9	8.7
30°-40°	3746.2	13.1
40°-50°	5008.7	17.5
50°-60°	5847.8	20.4
60°-70°	5814.7	20.3
70°-80°	3442.4	12.0
80°-90°	339.3	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°	28691.0	100.0
0°-180°	28691.0	100.0

Coefficient of Utilization



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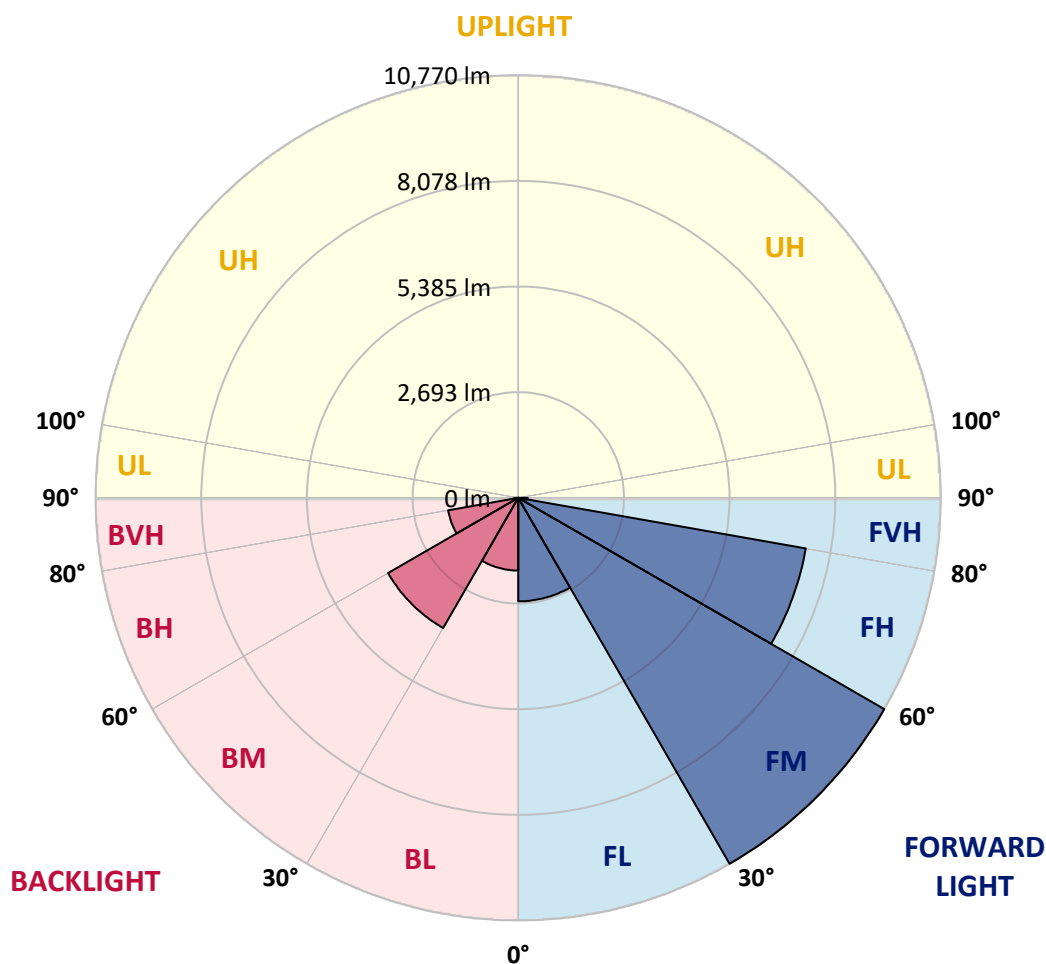
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2638.8	9.2			
FM	(30°-60°)	10770.2	37.5			
FH	(60°-80°)	7441.1	25.9			G3/7500
FVH	(80°-90°)	238.5	0.8			G3/500
BL	(0°-30°)	1853.2	6.5	B3/2500		
BM	(30°-60°)	3832.4	13.4	B3/5000		
BH	(60°-80°)	1816.0	6.3	B3/2500		G3/2500
BVH	(80°-90°)	100.8	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 III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	5178.1	5178.1	5178.1	5178.1	5178.1	5178.1	5178.1	5178.1	5178.1	5178.1	5178.1
2.5°	5368.4	5360.0	5355.8	5338.8	5300.8	5317.7	5279.6	5254.2	5250.0	5190.8	5156.9
5°	5588.4	5584.2	5575.7	5550.4	5491.1	5499.6	5436.1	5389.6	5376.9	5283.8	5211.9
7.5°	5774.6	5766.1	5761.9	5728.0	5664.6	5660.3	5584.2	5516.5	5495.4	5368.4	5258.5
10°	5918.4	5905.7	5914.2	5880.3	5812.6	5799.9	5702.6	5613.8	5592.7	5431.9	5279.6
12.5°	6041.1	6032.6	6045.3	6015.7	5960.7	5948.0	5850.7	5736.5	5711.1	5525.0	5326.1
15°	6176.5	6146.8	6172.2	6159.5	6121.5	6117.2	6028.4	5901.5	5867.6	5643.4	5398.1
17.5°	6248.4	6231.5	6261.1	6265.3	6248.4	6278.0	6193.4	6041.1	6011.5	5753.4	5461.5
20°	6299.1	6273.8	6307.6	6333.0	6345.7	6404.9	6337.2	6189.1	6155.3	5859.2	5520.7
22.5°	6472.6	6417.6	6421.8	6438.7	6447.2	6531.8	6489.5	6345.7	6311.8	5990.3	5592.7
25°	6908.3	6798.3	6726.4	6675.7	6616.4	6688.3	6663.0	6523.4	6493.7	6146.8	5681.5
27.5°	7585.2	7445.6	7301.8	7153.7	6921.0	6891.4	6849.1	6722.2	6688.3	6303.4	5770.3
30°	8355.1	8215.5	8046.3	7809.4	7373.7	7145.2	7047.9	6908.3	6870.3	6443.0	5854.9
32.5°	9120.9	8998.2	8829.0	8541.3	7919.4	7454.1	7246.8	7102.9	7064.9	6595.3	5956.5
35°	9717.3	9641.2	9531.2	9171.6	8460.9	7817.9	7534.4	7361.0	7318.7	6836.4	6142.6
37.5°	10199.6	10144.6	10051.6	9675.0	8854.3	8181.7	7864.4	7665.6	7619.0	7098.7	6341.4
40°	10910.3	10766.5	10690.3	10144.6	9197.0	8511.7	8236.7	8029.4	7978.6	7377.9	6502.2
42.5°	11515.3	11409.5	11316.5	10563.4	9522.7	8795.1	8587.8	8397.4	8329.8	7652.9	6675.7
45°	11616.8	11659.1	11612.6	10770.7	10038.9	9074.3	8943.2	8820.5	8757.0	8025.2	6937.9
47.5°	11621.0	11621.0	11346.1	10889.2	10677.7	9387.4	9323.9	9366.2	9298.5	8499.0	7251.0
50°	11316.5	11371.5	11227.6	10918.8	10846.9	9700.4	9789.3	10017.7	9950.0	9002.4	7589.4
52.5°	10686.1	10868.0	10863.8	10872.3	10601.5	9966.9	10280.0	10800.3	10686.1	9569.3	7949.0
55°	9573.5	9937.3	10263.1	10542.3	10390.0	10127.7	10880.7	11633.7	11515.3	10203.8	8312.8
57.5°	8621.7	8854.3	9260.5	10051.6	10140.4	10267.3	11443.4	12505.2	12399.5	10906.1	8693.6
60°	7534.4	7855.9	8262.1	9387.4	9835.8	10449.2	12061.0	13355.5	13254.0	11616.8	9061.6
62.5°	5863.4	6278.0	7090.2	8367.8	9391.6	10563.4	12547.5	14104.3	14057.8	12289.5	9391.6
65°	4086.6	4454.7	5592.7	7115.6	8685.1	10512.7	12936.7	14772.7	14730.4	12839.4	9624.3
67.5°	2386.0	2813.2	4099.3	5728.0	7437.1	10161.5	13063.6	15166.2	15166.2	13173.6	9687.7
70°	1362.2	1561.0	2703.3	4175.5	5702.6	9192.8	12708.3	15161.9	15233.9	13097.5	9425.4
72.5°	951.9	1040.7	1819.1	2809.0	3866.6	7437.1	11777.6	14430.1	14527.4	12378.3	8528.6
75°	740.3	803.8	1281.8	1916.4	2436.7	5051.2	9742.7	12166.8	12424.8	10550.7	6895.6
77.5°	562.6	609.2	748.8	1197.2	1561.0	2902.1	6430.3	7978.6	7995.6	6459.9	3697.4
80°	410.4	456.9	499.2	731.9	829.2	1358.0	2428.3	3333.6	3240.5	3126.3	2001.0
82.5°	245.4	291.9	304.6	397.7	406.1	579.6	850.3	1074.5	1032.2	1374.9	939.2
85°	105.8	148.1	156.5	181.9	173.4	236.9	338.4	283.4	253.8	291.9	203.1
87.5°	25.4	42.3	42.3	46.5	38.1	59.2	63.5	46.5	42.3	50.8	50.8
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°	5178.1	5178.1	5178.1	5178.1	5178.1	5178.1	5178.1	5178.1	5178.1	5178.1	5178.1
2.5°	5148.5	5135.8	5140.0	5068.1	5046.9	5025.8	5013.1	5004.6	4996.2	5008.9	5021.5
5°	5186.5	5156.9	5123.1	5017.3	4975.0	4928.5	4894.6	4865.0	4852.3	4852.3	4865.0
7.5°	5216.1	5165.4	5093.5	4953.9	4877.7	4814.3	4759.3	4721.2	4700.0	4700.0	4712.7
10°	5220.4	5148.5	5034.2	4865.0	4763.5	4670.4	4607.0	4564.7	4535.0	4535.0	4543.5
12.5°	5245.8	5148.5	5000.4	4797.3	4670.4	4556.2	4480.0	4416.6	4403.9	4403.9	4412.4
15°	5288.1	5169.6	4979.2	4738.1	4585.8	4454.7	4370.1	4302.4	4277.0	4293.9	4298.1
17.5°	5326.1	5182.3	4941.2	4662.0	4480.0	4336.2	4243.1	4183.9	4150.1	4188.1	4188.1
20°	5351.5	5182.3	4886.2	4564.7	4365.8	4205.1	4116.2	4044.3	4018.9	4065.5	4069.7
22.5°	5389.6	5178.1	4826.9	4467.4	4243.1	4073.9	3985.1	3930.1	3917.4	3968.2	3985.1
25°	5431.9	5186.5	4763.5	4357.4	4107.8	3942.8	3875.1	3849.7	3858.2	3921.6	3942.8
27.5°	5478.4	5203.5	4700.0	4234.7	3959.7	3811.6	3773.6	3786.3	3820.1	3900.5	3925.9
30°	5520.7	5207.7	4611.2	4090.8	3790.5	3650.9	3667.8	3722.8	3773.6	3853.9	3883.6
32.5°	5575.7	5211.9	4518.1	3934.3	3608.6	3507.0	3583.2	3672.0	3722.8	3798.9	3832.8
35°	5711.1	5283.8	4446.2	3782.0	3439.4	3384.4	3511.3	3625.5	3655.1	3722.8	3752.4
37.5°	5867.6	5402.3	4408.1	3625.5	3274.4	3261.7	3422.4	3536.7	3545.1	3587.4	3617.0
40°	5964.9	5453.1	4365.8	3494.4	3126.3	3134.8	3299.8	3388.6	3371.7	3401.3	3422.4
42.5°	6062.2	5470.0	4277.0	3384.4	2986.7	2995.2	3122.1	3185.5	3194.0	3257.4	3287.1
45°	6227.2	5516.5	4179.7	3282.8	2859.8	2830.2	2906.3	2990.9	3100.9	3223.6	3257.4
47.5°	6447.2	5613.8	4078.2	3160.1	2737.1	2639.8	2669.4	2817.5	2931.7	3045.9	3067.1
50°	6671.4	5711.1	3985.1	3012.1	2614.4	2436.7	2449.4	2584.8	2677.9	2766.7	2779.4
52.5°	6891.4	5795.7	3904.7	2872.5	2474.8	2195.6	2246.4	2386.0	2449.4	2491.7	2504.4
55°	7111.4	5867.6	3832.8	2754.0	2314.1	2005.2	2051.8	2182.9	2246.4	2267.5	2276.0
57.5°	7339.8	5952.2	3777.8	2652.5	2132.1	1836.0	1865.6	1958.7	2017.9	2043.3	2034.8
60°	7530.2	6024.2	3748.2	2546.7	1950.2	1679.5	1671.0	1755.6	1840.2	1865.6	1857.2
62.5°	7678.3	6070.7	3701.6	2411.4	1789.5	1523.0	1480.7	1590.6	1679.5	1696.4	1709.1
65°	7758.6	6074.9	3587.4	2237.9	1624.5	1353.7	1324.1	1434.1	1489.1	1506.0	1506.0
67.5°	7746.0	6007.2	3363.2	2005.2	1472.2	1201.4	1176.1	1243.8	1324.1	1336.8	1324.1
70°	7483.7	5728.0	3003.6	1759.9	1290.3	1066.1	1019.5	1087.2	1163.4	1116.8	1095.7
72.5°	6739.1	5004.6	2474.8	1489.1	1087.2	896.9	875.7	943.4	947.6	956.1	934.9
75°	5317.7	3727.0	1852.9	1159.1	879.9	753.0	748.8	736.1	753.0	786.9	761.5
77.5°	2792.1	1861.4	1002.6	710.7	638.8	605.0	575.3	571.1	621.9	643.0	617.6
80°	1514.5	1044.9	575.3	427.3	389.2	393.4	431.5	423.0	478.0	490.7	469.6
82.5°	660.0	495.0	283.4	258.1	258.1	253.8	266.5	296.1	355.4	355.4	283.4
85°	143.8	122.7	110.0	126.9	143.8	143.8	143.8	143.8	101.5	55.0	38.1
87.5°	46.5	46.5	46.5	50.8	55.0	55.0	46.5	33.8	21.2	4.2	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)