

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: P841377

Luminaire Tested: **ARCH4-170-727-U-T4W**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841377
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: ARCH4-170-727-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1380mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25706 lumens
Efficiency: N/A
Efficacy: 151.4 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type IV - Short
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



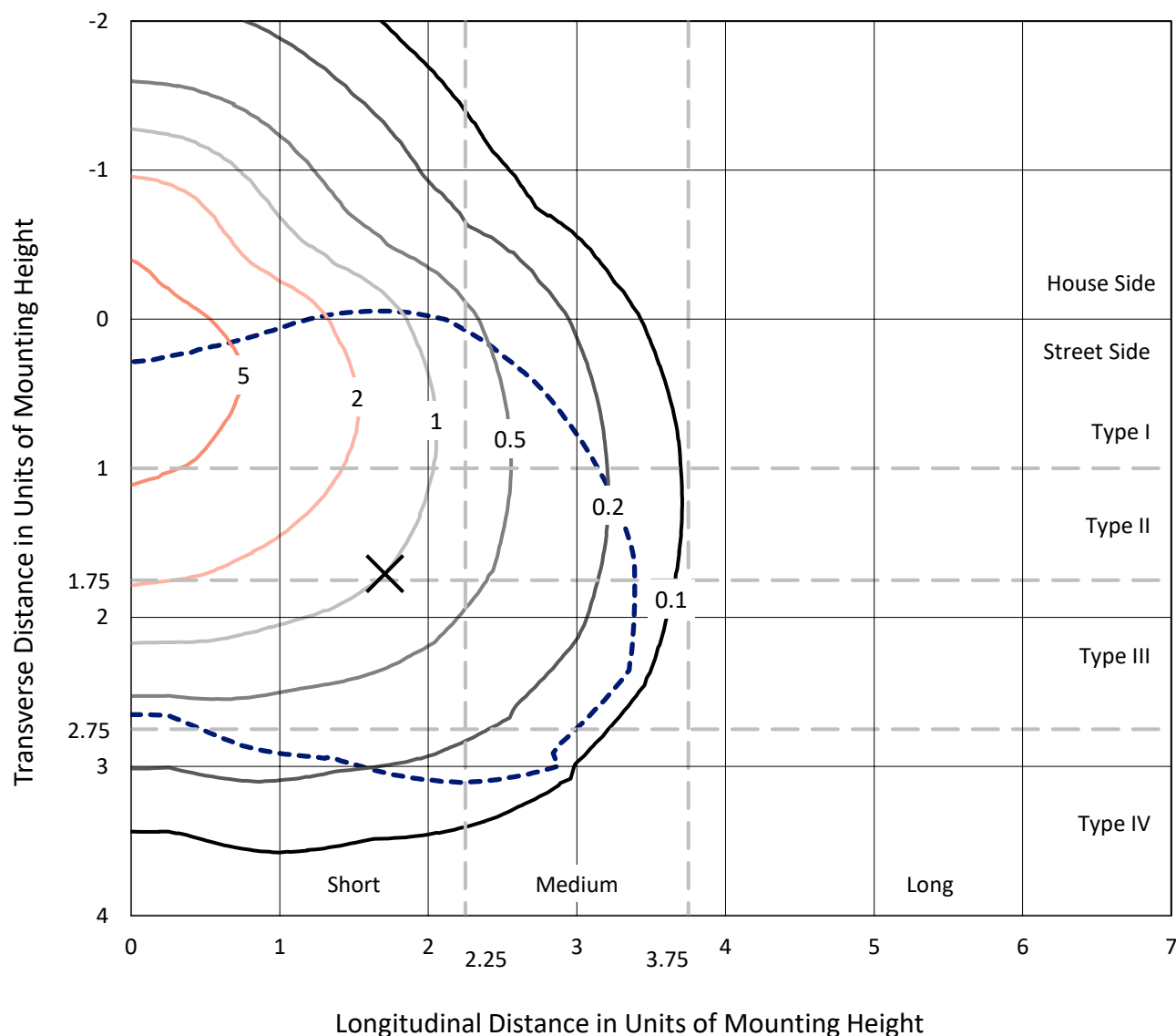
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

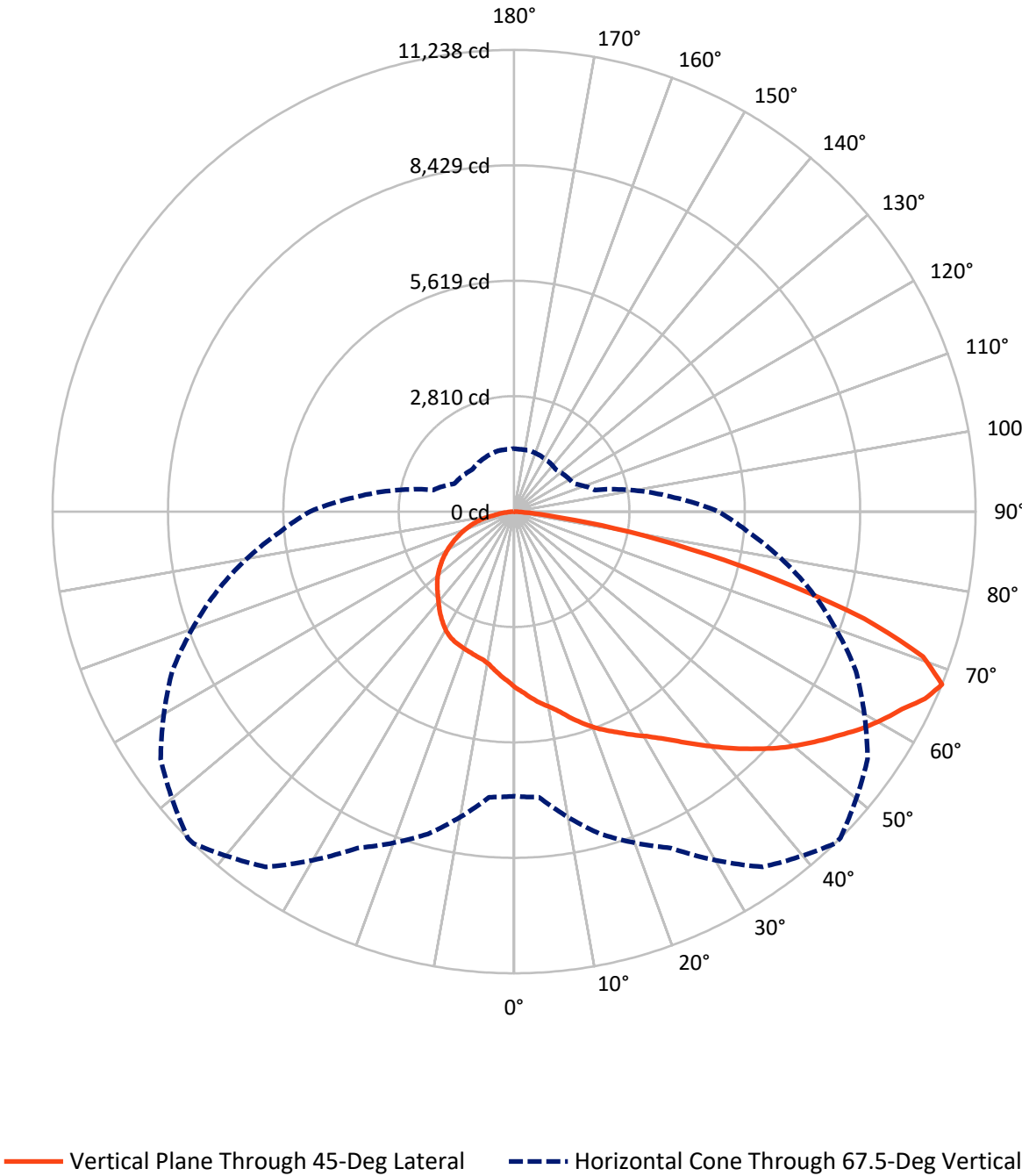


Based on 25 foot mounting height. Maximum calculated value = 8 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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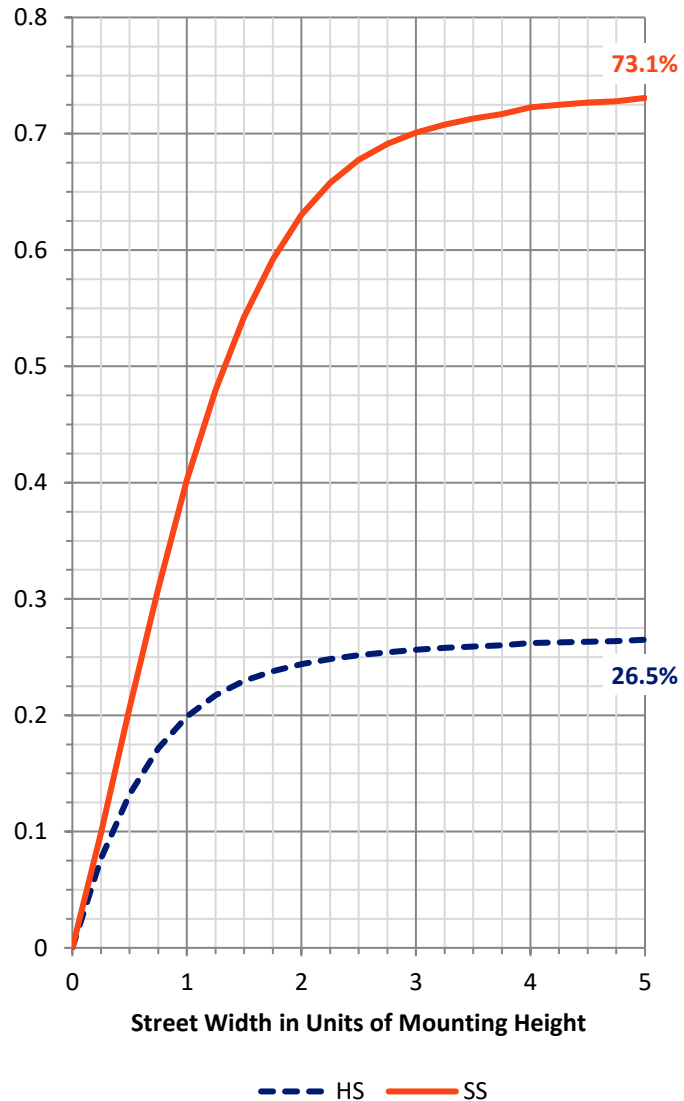
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6867.4	0.0	6867.4
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	18838.6	0.0	18838.6
	% Fixture	73.3	0.0	73.3
Total	Lumens	25706.0	0.0	25706.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	410.5	1.6
10°-20°	1268.0	4.9
20°-30°	2188.8	8.5
30°-40°	3227.7	12.6
40°-50°	4372.9	17.0
50°-60°	5344.7	20.8
60°-70°	5512.3	21.4
70°-80°	3019.3	11.7
80°-90°	361.9	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°	25706.0	100.0
0°-180°	25706.0	100.0

Coefficient of Utilization



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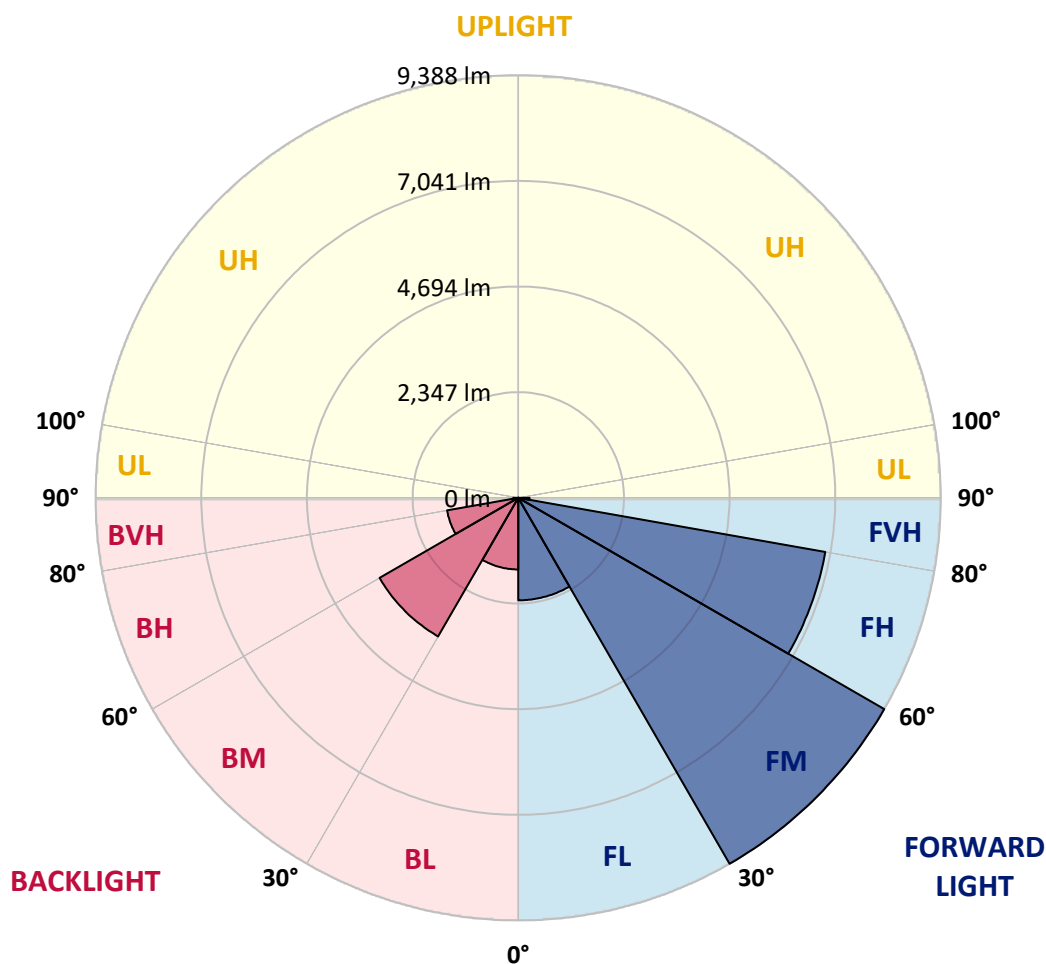
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2275.7	8.9			
FM	(30°-60°)	9388.1	36.5			
FH	(60°-80°)	6925.6	26.9			G3/7500
FVH	(80°-90°)	249.3	1.0			G3/500
BL	(0°-30°)	1591.6	6.2	B3/2500		
BM	(30°-60°)	3557.2	13.8	B3/5000		
BH	(60°-80°)	1606.0	6.2	B3/2500		G3/2500
BVH	(80°-90°)	112.6	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 IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	4287.3	4287.3	4287.3	4287.3	4287.3	4287.3	4287.3	4287.3	4287.3	4287.3	4287.3
2.5°	4475.0	4471.1	4478.9	4451.6	4416.4	4412.4	4412.4	4389.0	4361.6	4306.8	4263.8
5°	4686.3	4678.4	4682.4	4643.2	4596.3	4572.8	4568.9	4518.1	4455.5	4369.4	4291.2
7.5°	4881.9	4874.0	4870.1	4827.1	4756.7	4717.6	4713.7	4639.3	4565.0	4432.0	4318.6
10°	5065.7	5057.9	5050.1	4991.4	4905.3	4846.7	4838.8	4744.9	4651.1	4486.8	4342.0
12.5°	5300.4	5284.8	5276.9	5206.5	5081.4	5018.8	5007.0	4881.9	4764.5	4565.0	4389.0
15°	5546.9	5535.1	5523.4	5456.9	5316.1	5233.9	5214.4	5057.9	4897.5	4666.7	4459.4
17.5°	5730.7	5719.0	5719.0	5660.3	5531.2	5437.3	5421.7	5233.9	5034.4	4760.6	4514.2
20°	5844.1	5832.4	5844.1	5808.9	5711.1	5632.9	5617.3	5409.9	5171.3	4846.7	4561.1
22.5°	5926.3	5914.6	5934.1	5918.5	5848.1	5801.1	5789.4	5586.0	5312.2	4936.6	4608.0
25°	6071.0	6071.0	6071.0	6043.6	5977.1	5961.5	5961.5	5785.5	5492.1	5054.0	4678.4
27.5°	6360.5	6344.9	6325.3	6247.1	6133.6	6129.7	6153.2	5988.9	5699.4	5206.5	4764.5
30°	6786.9	6779.1	6704.7	6540.4	6348.8	6329.2	6344.9	6207.9	5922.4	5366.9	4862.3
32.5°	7338.4	7311.1	7158.5	6912.1	6638.2	6548.3	6579.6	6434.8	6157.1	5531.2	4956.2
35°	7729.6	7737.4	7627.9	7404.9	7080.3	6841.6	6865.1	6689.1	6411.4	5715.1	5073.5
37.5°	8179.5	8206.8	8042.5	7874.3	7573.1	7166.3	7189.8	6951.2	6665.6	5945.9	5198.7
40°	8801.4	8746.7	8468.9	8269.4	7936.9	7506.6	7526.2	7244.6	6959.0	6164.9	5343.4
42.5°	9321.7	9223.9	8887.5	8633.2	8234.2	7866.5	7886.1	7561.4	7256.3	6407.4	5503.8
45°	10068.8	9798.9	9313.9	9188.7	8539.3	8218.6	8238.1	7897.8	7569.2	6665.6	5675.9
47.5°	10503.0	10072.7	9763.7	9697.2	8875.8	8582.4	8605.8	8253.8	7905.6	6959.0	5855.9
50°	10475.7	10197.9	10108.0	9943.7	9173.0	8922.7	8946.2	8621.5	8246.0	7248.5	6028.0
52.5°	10295.7	10346.6	10299.6	10025.8	9470.3	9251.3	9278.7	8985.3	8594.1	7518.4	6188.4
55°	10573.4	10608.7	10518.7	10158.8	9798.9	9579.9	9611.2	9368.6	8938.3	7757.0	6325.3
57.5°	10905.9	10780.8	10690.8	10393.5	10139.2	9935.8	9971.0	9759.8	9235.6	7948.7	6430.9
60°	10890.3	10628.2	10718.2	10409.2	10370.0	10264.4	10295.7	10080.6	9462.5	8089.5	6473.9
62.5°	10088.4	9947.6	10401.3	10295.7	10557.8	10557.8	10596.9	10276.2	9599.4	8148.2	6450.5
65°	8695.8	8703.6	9501.6	9939.7	10780.8	10960.7	10992.0	10397.4	9521.2	7976.0	6231.4
67.5°	6927.7	6978.6	8124.7	9036.1	10557.8	11234.5	11238.4	10506.9	9184.8	7491.0	5722.9
70°	5069.6	5108.7	6462.2	7569.2	9505.5	10628.2	10565.6	10197.9	8453.3	6646.1	4928.8
72.5°	3426.7	3461.9	4854.5	5812.9	7800.0	9051.8	8914.9	9012.7	7205.4	5460.8	3962.6
75°	2304.0	2347.0	3454.1	4158.2	5738.5	6872.9	6567.8	6826.0	5574.2	4134.7	2890.8
77.5°	1451.3	1478.6	2194.5	2726.5	3919.6	4678.4	4373.3	4377.2	3211.5	2225.8	1553.0
80°	923.2	931.0	1330.0	1572.5	2268.8	2812.5	2487.9	2022.4	1447.3	1181.3	927.1
82.5°	535.9	524.2	794.1	888.0	1079.6	1067.9	884.1	837.1	633.7	590.7	473.3
85°	215.1	199.5	348.1	324.7	328.6	348.1	258.2	258.2	207.3	160.4	117.4
87.5°	43.0	43.0	46.9	43.0	43.0	46.9	35.2	35.2	31.3	31.3	31.3
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°	4287.3	4287.3	4287.3	4287.3	4287.3	4287.3	4287.3	4287.3	4287.3	4287.3	4287.3
2.5°	4256.0	4248.2	4228.6	4177.7	4150.4	4134.7	4111.2	4103.4	4099.5	4103.4	4115.2
5°	4267.7	4240.3	4185.6	4103.4	4048.7	4013.5	3974.3	3958.7	3947.0	3947.0	3958.7
7.5°	4275.5	4232.5	4138.6	4017.4	3939.1	3884.4	3837.4	3817.9	3814.0	3825.7	3829.6
10°	4279.4	4216.9	4083.9	3931.3	3829.6	3759.2	3712.2	3700.5	3712.2	3735.7	3739.6
12.5°	4306.8	4220.8	4052.6	3872.6	3751.4	3681.0	3645.7	3645.7	3677.0	3720.1	3724.0
15°	4353.8	4248.2	4036.9	3825.7	3700.5	3637.9	3626.2	3645.7	3692.7	3759.2	3767.0
17.5°	4389.0	4263.8	4001.7	3763.1	3634.0	3594.9	3614.5	3661.4	3727.9	3817.9	3825.7
20°	4412.4	4263.8	3950.9	3688.8	3567.5	3559.7	3614.5	3688.8	3759.2	3864.8	3876.5
22.5°	4435.9	4256.0	3892.2	3598.8	3493.2	3516.7	3618.4	3712.2	3782.7	3896.1	3915.7
25°	4478.9	4267.7	3833.5	3508.8	3415.0	3481.5	3614.5	3727.9	3802.2	3919.6	3950.9
27.5°	4537.6	4295.1	3790.5	3426.7	3336.7	3426.7	3587.1	3724.0	3802.2	3915.7	3950.9
30°	4600.2	4326.4	3739.6	3336.7	3246.7	3348.5	3528.4	3681.0	3770.9	3876.5	3919.6
32.5°	4666.7	4361.6	3696.6	3238.9	3137.2	3242.8	3442.3	3614.5	3712.2	3810.0	3857.0
35°	4756.7	4424.2	3673.1	3160.7	3039.4	3133.3	3332.8	3528.4	3634.0	3724.0	3778.7
37.5°	4866.2	4502.4	3661.4	3082.5	2933.8	3012.0	3215.5	3422.8	3536.2	3610.5	3661.4
40°	4991.4	4600.2	3657.5	3008.1	2828.2	2886.9	3094.2	3301.5	3411.0	3469.7	3512.7
42.5°	5132.2	4709.7	3649.7	2933.8	2722.6	2769.5	2976.8	3180.2	3274.1	3325.0	3364.1
45°	5280.9	4819.3	3634.0	2843.8	2609.1	2663.9	2855.6	3035.5	3133.3	3176.3	3219.4
47.5°	5429.5	4928.8	3602.7	2742.1	2507.4	2558.3	2726.5	2883.0	2961.2	3000.3	3043.3
50°	5574.2	5026.6	3528.4	2624.8	2401.8	2448.8	2577.8	2683.5	2742.1	2773.4	2816.5
52.5°	5703.3	5093.1	3422.8	2487.9	2296.2	2319.7	2405.7	2495.7	2542.6	2546.5	2585.7
55°	5812.9	5128.3	3270.2	2347.0	2182.8	2186.7	2233.6	2304.0	2323.6	2307.9	2335.3
57.5°	5875.4	5108.7	3102.0	2202.3	2065.4	2049.8	2085.0	2120.2	2124.1	2085.0	2112.3
60°	5891.1	5018.8	2883.0	2057.6	1948.0	1905.0	1916.8	1908.9	1901.1	1885.5	1908.9
62.5°	5812.9	4827.1	2640.4	1916.8	1822.9	1756.4	1752.5	1748.6	1760.3	1764.2	1768.1
65°	5527.3	4467.2	2351.0	1772.0	1689.9	1599.9	1596.0	1642.9	1658.6	1635.1	1642.9
67.5°	4975.7	3915.7	2034.1	1603.8	1521.7	1443.4	1474.7	1502.1	1529.5	1521.7	1529.5
70°	4193.4	3215.5	1744.6	1416.1	1337.8	1294.8	1330.0	1353.5	1357.4	1349.6	1357.4
72.5°	3297.6	2511.3	1474.7	1224.4	1154.0	1134.4	1177.4	1197.0	1232.2	1247.8	1251.8
75°	2382.3	1854.2	1208.7	1017.1	958.4	958.4	997.5	1032.7	1064.0	1044.4	1032.7
77.5°	1330.0	1107.0	868.4	700.2	711.9	766.7	782.3	821.5	852.8	848.8	841.0
80°	805.8	692.4	586.8	453.8	449.9	492.9	594.6	661.1	676.7	641.5	637.6
82.5°	418.6	363.8	312.9	254.3	281.6	328.6	344.2	414.6	457.7	442.0	461.6
85°	105.6	101.7	113.4	117.4	144.7	160.4	176.0	207.3	136.9	66.5	66.5
87.5°	31.3	31.3	39.1	39.1	50.9	62.6	58.7	58.7	31.3	3.9	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)