

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: P836394

Luminaire Tested: **ARCH3-180-727-U-T4W**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836394
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-19)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-180-727-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1375mA LIGHTSQUARE WITH 40 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22545 lumens
Efficiency: N/A
Efficacy: 124.9 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G3

Input Watts (W): 180.5
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

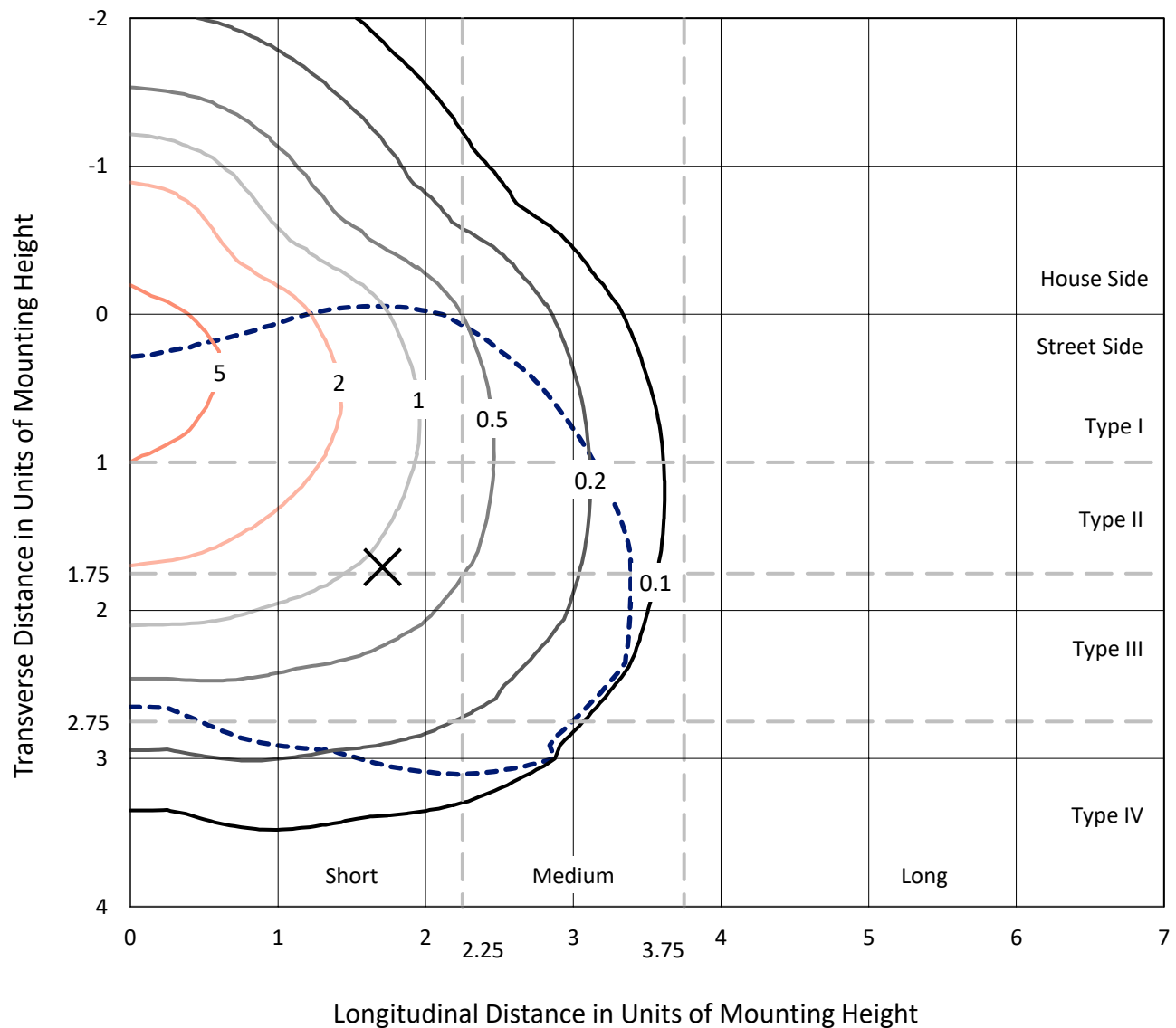


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Iso-Footcandle Lines of Horizontal Illumination

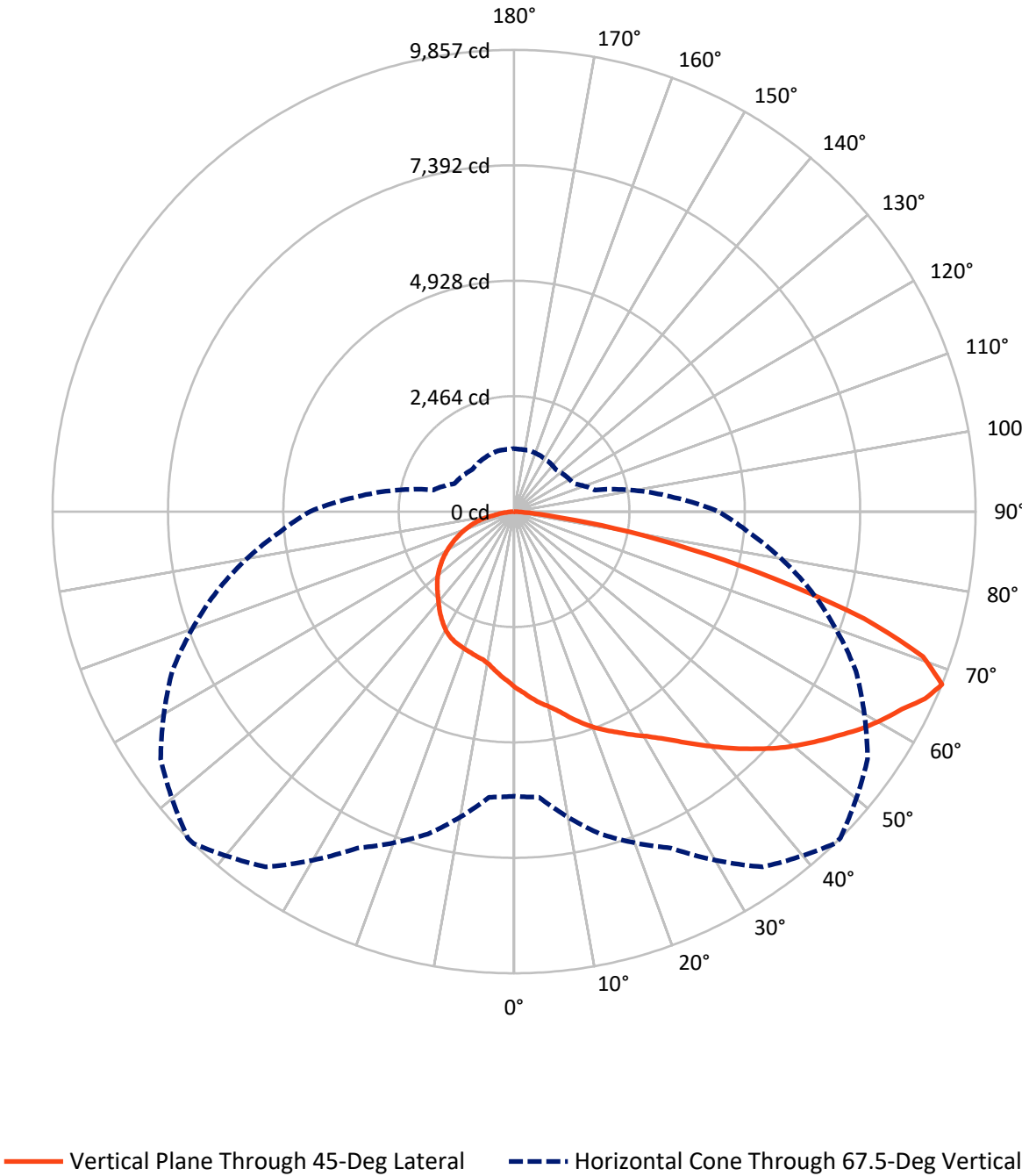
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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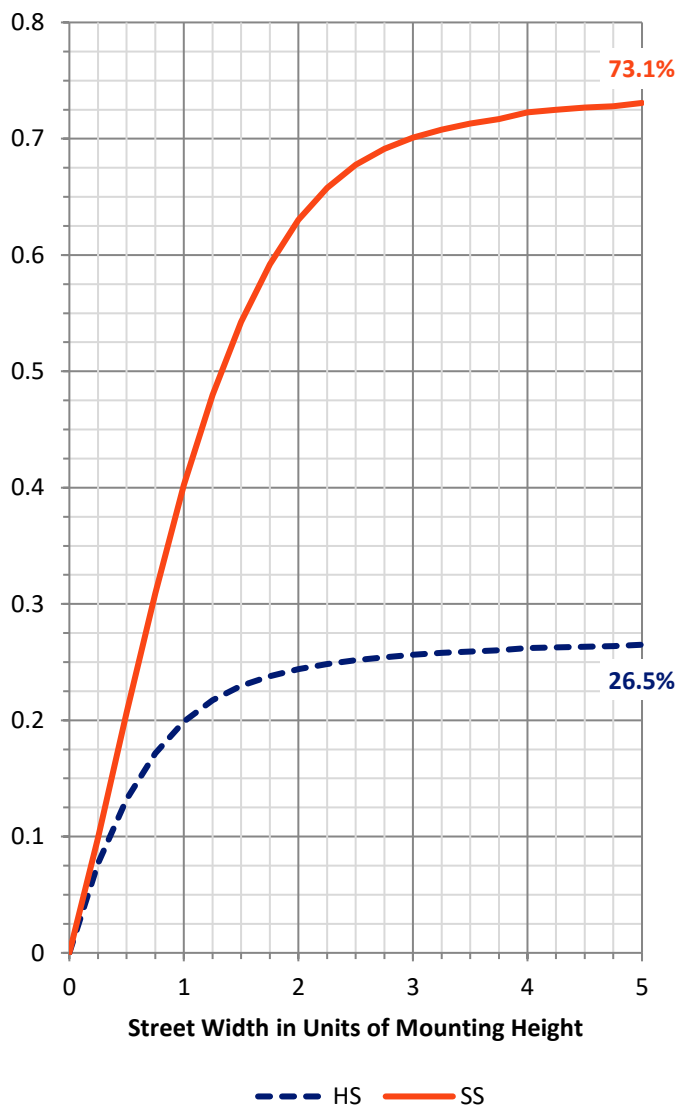
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6022.9	0.0	6022.9
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	16522.1	0.0	16522.1
	% Fixture	73.3	0.0	73.3
Total	Lumens	22545.0	0.0	22545.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	360.0	1.6
10°-20°	1112.1	4.9
20°-30°	1919.6	8.5
30°-40°	2830.8	12.6
40°-50°	3835.2	17.0
50°-60°	4687.5	20.8
60°-70°	4834.5	21.4
70°-80°	2648.0	11.7
80°-90°	317.4	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°	22545.0	100.0
0°-180°	22545.0	100.0

Coefficient of Utilization



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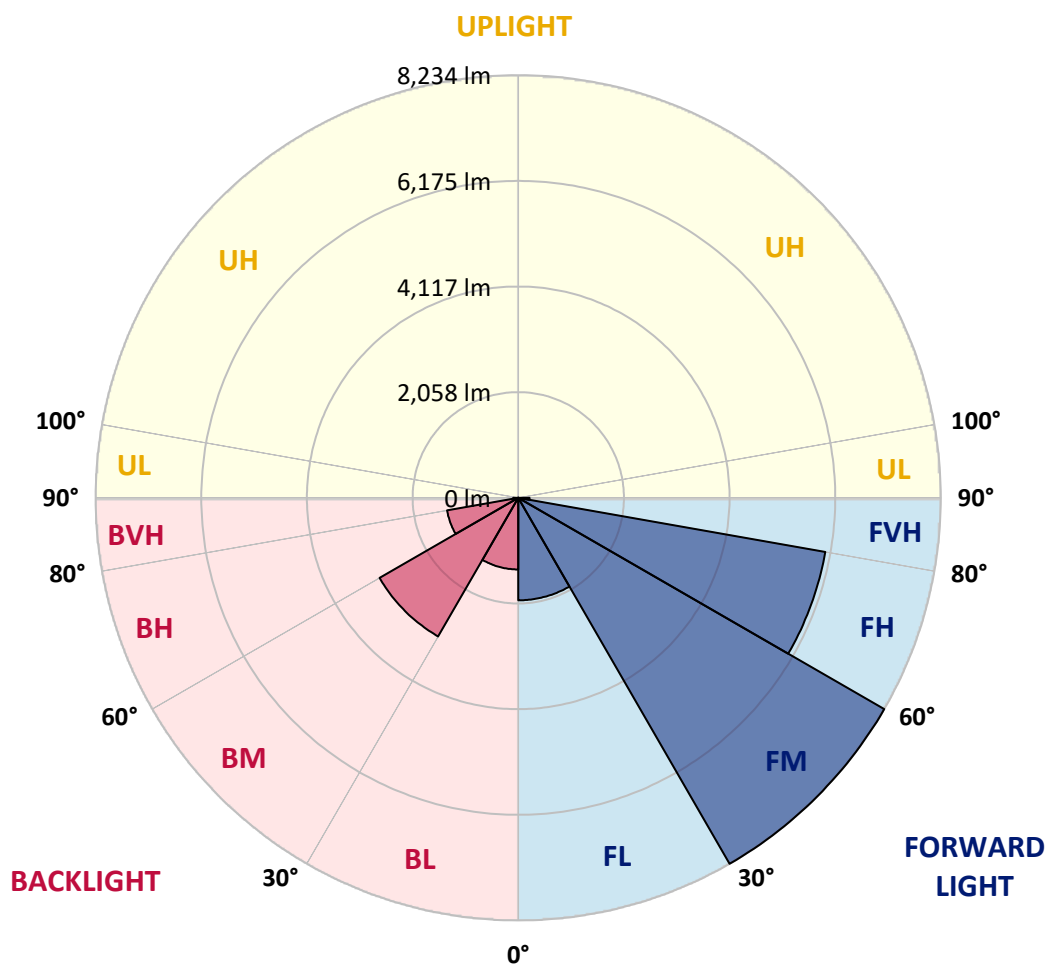
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1995.8	8.9			
FM	(30°-60°)	8233.7	36.5			
FH	(60°-80°)	6074.0	26.9			G3/7500
FVH	(80°-90°)	218.6	1.0			G2/225
BL	(0°-30°)	1395.9	6.2	B3/2500		
BM	(30°-60°)	3119.8	13.8	B3/5000		
BH	(60°-80°)	1408.5	6.2	B3/2500		G3/2500
BVH	(80°-90°)	98.7	0.4			G1/100
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°	3760.1	3760.1	3760.1	3760.1	3760.1	3760.1	3760.1	3760.1	3760.1	3760.1	3760.1
2.5°	3924.8	3921.3	3928.2	3904.2	3873.3	3869.9	3869.9	3849.3	3825.3	3777.2	3739.5
5°	4110.0	4103.2	4106.6	4072.3	4031.1	4010.5	4007.1	3962.5	3907.6	3832.1	3763.5
7.5°	4281.5	4274.7	4271.3	4233.5	4171.8	4137.5	4134.0	4068.8	4003.7	3887.0	3787.5
10°	4442.8	4435.9	4429.1	4377.6	4302.1	4250.7	4243.8	4161.5	4079.1	3935.0	3808.1
12.5°	4648.6	4634.9	4628.1	4566.3	4456.5	4401.6	4391.3	4281.5	4178.6	4003.7	3849.3
15°	4864.8	4854.5	4844.2	4785.9	4662.4	4590.3	4573.2	4435.9	4295.3	4092.9	3911.0
17.5°	5026.0	5015.7	5015.7	4964.3	4851.1	4768.7	4755.0	4590.3	4415.3	4175.2	3959.1
20°	5125.5	5115.2	5125.5	5094.6	5008.9	4940.2	4926.5	4744.7	4535.4	4250.7	4000.2
22.5°	5197.6	5187.3	5204.4	5190.7	5128.9	5087.8	5077.5	4899.1	4658.9	4329.6	4041.4
25°	5324.5	5324.5	5324.5	5300.5	5242.2	5228.4	5228.4	5074.0	4816.7	4432.5	4103.2
27.5°	5578.4	5564.6	5547.5	5478.9	5379.4	5376.0	5396.5	5252.4	4998.6	4566.3	4178.6
30°	5952.3	5945.5	5880.3	5736.2	5568.1	5550.9	5564.6	5444.6	5194.1	4707.0	4264.4
32.5°	6436.0	6412.0	6278.2	6062.1	5821.9	5743.0	5770.5	5643.5	5400.0	4851.1	4346.7
35°	6779.1	6786.0	6689.9	6494.4	6209.6	6000.3	6020.9	5866.5	5623.0	5012.3	4449.7
37.5°	7173.7	7197.7	7053.6	6906.1	6641.9	6285.1	6305.7	6096.4	5846.0	5214.7	4559.4
40°	7719.1	7671.1	7427.5	7252.6	6960.9	6583.6	6600.7	6353.7	6103.3	5406.8	4686.4
42.5°	8175.4	8089.7	7794.6	7571.6	7221.7	6899.2	6916.3	6631.6	6364.0	5619.5	4827.0
45°	8830.7	8594.0	8168.6	8058.8	7489.3	7208.0	7225.1	6926.6	6638.5	5846.0	4978.0
47.5°	9211.5	8834.1	8563.1	8504.8	7784.3	7527.0	7547.6	7238.8	6933.5	6103.3	5135.8
50°	9187.5	8943.9	8865.0	8720.9	8045.1	7825.5	7846.1	7561.3	7232.0	6357.1	5286.8
52.5°	9029.7	9074.3	9033.1	8793.0	8305.8	8113.7	8137.7	7880.4	7537.3	6593.9	5427.4
55°	9273.3	9304.1	9225.2	8909.6	8594.0	8401.9	8429.3	8216.6	7839.2	6803.1	5547.5
57.5°	9564.9	9455.1	9376.2	9115.4	8892.4	8714.1	8744.9	8559.7	8099.9	6971.2	5640.1
60°	9551.1	9321.3	9400.2	9129.2	9094.9	9002.2	9029.7	8841.0	8298.9	7094.7	5677.9
62.5°	8847.8	8724.3	9122.3	9029.7	9259.5	9259.5	9293.8	9012.5	8419.0	7146.2	5657.3
65°	7626.5	7633.4	8333.2	8717.5	9455.1	9612.9	9640.3	9118.9	8350.4	6995.3	5465.2
67.5°	6075.8	6120.4	7125.6	7925.0	9259.5	9853.1	9856.5	9214.9	8055.4	6569.8	5019.2
70°	4446.2	4480.5	5667.6	6638.5	8336.7	9321.3	9266.4	8943.9	7413.8	5828.8	4322.7
72.5°	3005.3	3036.2	4257.5	5098.1	6840.9	7938.7	7818.6	7904.4	6319.4	4789.3	3475.3
75°	2020.7	2058.4	3029.3	3646.9	5032.9	6027.8	5760.2	5986.6	4888.8	3626.3	2535.3
77.5°	1272.8	1296.8	1924.6	2391.2	3437.6	4103.2	3835.6	3839.0	2816.6	1952.1	1362.0
80°	809.7	816.5	1166.4	1379.2	1989.8	2466.7	2181.9	1773.7	1269.4	1036.1	813.1
82.5°	470.0	459.7	696.4	778.8	946.9	936.6	775.3	734.2	555.8	518.0	415.1
85°	188.7	175.0	305.3	284.8	288.2	305.3	226.4	226.4	181.8	140.7	102.9
87.5°	37.7	37.7	41.2	37.7	37.7	41.2	30.9	30.9	27.4	27.4	27.4
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°	3760.1	3760.1	3760.1	3760.1	3760.1	3760.1	3760.1	3760.1	3760.1	3760.1	3760.1
2.5°	3732.6	3725.8	3708.6	3664.0	3640.0	3626.3	3605.7	3598.8	3595.4	3598.8	3609.1
5°	3742.9	3718.9	3670.9	3598.8	3550.8	3519.9	3485.6	3471.9	3461.6	3461.6	3471.9
7.5°	3749.8	3712.0	3629.7	3523.4	3454.7	3406.7	3365.5	3348.4	3345.0	3355.3	3358.7
10°	3753.2	3698.3	3581.7	3447.9	3358.7	3296.9	3255.8	3245.5	3255.8	3276.3	3279.8
12.5°	3777.2	3701.8	3554.2	3396.4	3290.1	3228.3	3197.4	3197.4	3224.9	3262.6	3266.1
15°	3818.4	3725.8	3540.5	3355.3	3245.5	3190.6	3180.3	3197.4	3238.6	3296.9	3303.8
17.5°	3849.3	3739.5	3509.6	3300.4	3187.1	3152.8	3170.0	3211.2	3269.5	3348.4	3355.3
20°	3869.9	3739.5	3465.0	3235.2	3128.8	3122.0	3170.0	3235.2	3296.9	3389.6	3399.9
22.5°	3890.4	3732.6	3413.6	3156.3	3063.6	3084.2	3173.4	3255.8	3317.5	3417.0	3434.2
25°	3928.2	3742.9	3362.1	3077.4	2995.0	3053.3	3170.0	3269.5	3334.7	3437.6	3465.0
27.5°	3979.6	3766.9	3324.4	3005.3	2926.4	3005.3	3146.0	3266.1	3334.7	3434.2	3465.0
30°	4034.5	3794.4	3279.8	2926.4	2847.5	2936.7	3094.5	3228.3	3307.2	3399.9	3437.6
32.5°	4092.9	3825.3	3242.0	2840.6	2751.4	2844.1	3019.0	3170.0	3255.8	3341.5	3382.7
35°	4171.8	3880.2	3221.5	2772.0	2665.7	2748.0	2923.0	3094.5	3187.1	3266.1	3314.1
37.5°	4267.8	3948.8	3211.2	2703.4	2573.0	2641.7	2820.1	3001.9	3101.4	3166.6	3211.2
40°	4377.6	4034.5	3207.7	2638.2	2480.4	2531.9	2713.7	2895.5	2991.6	3043.1	3080.8
42.5°	4501.1	4130.6	3200.9	2573.0	2387.8	2429.0	2610.8	2789.2	2871.5	2916.1	2950.4
45°	4631.5	4226.7	3187.1	2494.1	2288.3	2336.3	2504.4	2662.2	2748.0	2785.8	2823.5
47.5°	4761.9	4322.7	3159.7	2404.9	2199.1	2243.7	2391.2	2528.4	2597.1	2631.4	2669.1
50°	4888.8	4408.5	3094.5	2302.0	2106.5	2147.6	2260.9	2353.5	2404.9	2432.4	2470.1
52.5°	5002.0	4466.8	3001.9	2181.9	2013.8	2034.4	2109.9	2188.8	2230.0	2233.4	2267.7
55°	5098.1	4497.7	2868.1	2058.4	1914.3	1917.8	1958.9	2020.7	2037.9	2024.1	2048.1
57.5°	5153.0	4480.5	2720.6	1931.5	1811.4	1797.7	1828.6	1859.5	1862.9	1828.6	1852.6
60°	5166.7	4401.6	2528.4	1804.6	1708.5	1670.8	1681.1	1674.2	1667.3	1653.6	1674.2
62.5°	5098.1	4233.5	2315.7	1681.1	1598.7	1540.4	1537.0	1533.5	1543.8	1547.3	1550.7
65°	4847.6	3917.9	2061.9	1554.1	1482.1	1403.2	1399.7	1440.9	1454.6	1434.0	1440.9
67.5°	4363.9	3434.2	1784.0	1406.6	1334.6	1265.9	1293.4	1317.4	1341.4	1334.6	1341.4
70°	3677.7	2820.1	1530.1	1241.9	1173.3	1135.6	1166.4	1187.0	1190.5	1183.6	1190.5
72.5°	2892.1	2202.5	1293.4	1073.8	1012.1	994.9	1032.6	1049.8	1080.7	1094.4	1097.8
75°	2089.3	1626.2	1060.1	892.0	840.5	840.5	874.8	905.7	933.2	916.0	905.7
77.5°	1166.4	970.9	761.6	614.1	624.4	672.4	686.1	720.5	747.9	744.5	737.6
80°	706.7	607.2	514.6	398.0	394.5	432.3	521.5	579.8	593.5	562.6	559.2
82.5°	367.1	319.1	274.5	223.0	247.0	288.2	301.9	363.7	401.4	387.7	404.8
85°	92.6	89.2	99.5	102.9	126.9	140.7	154.4	181.8	120.1	58.3	58.3
87.5°	27.4	27.4	34.3	34.3	44.6	54.9	51.5	51.5	27.4	3.4	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)