

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: P842241

Luminaire Tested: **ARCH4-290-727-U-T4W**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842241
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: ARCH4-290-727-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1120mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 38592 lumens
Efficiency: N/A
Efficacy: 133.2 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U0 - G4

Input Watts (W): 289.7
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

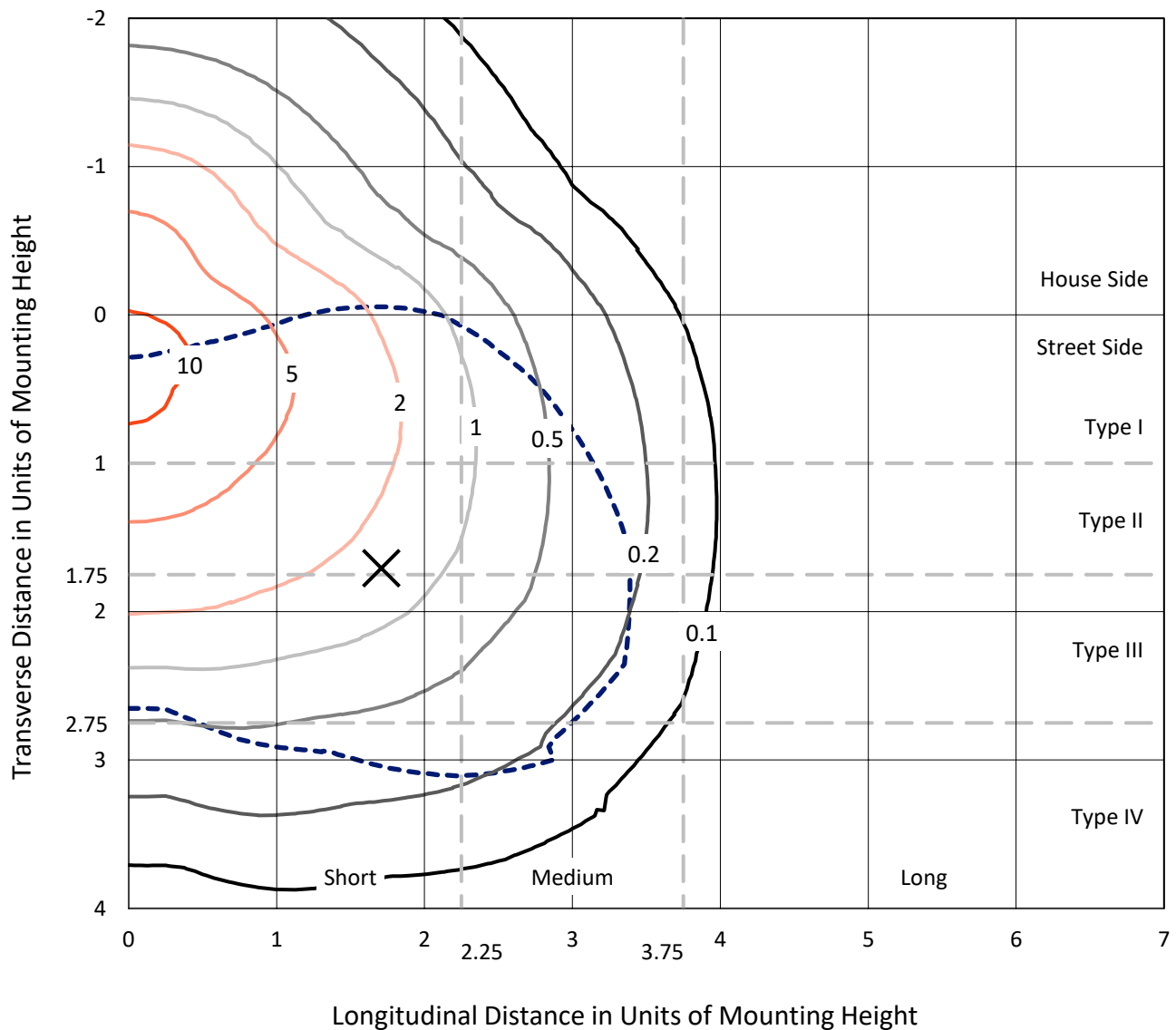


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Iso-Footcandle Lines of Horizontal Illumination

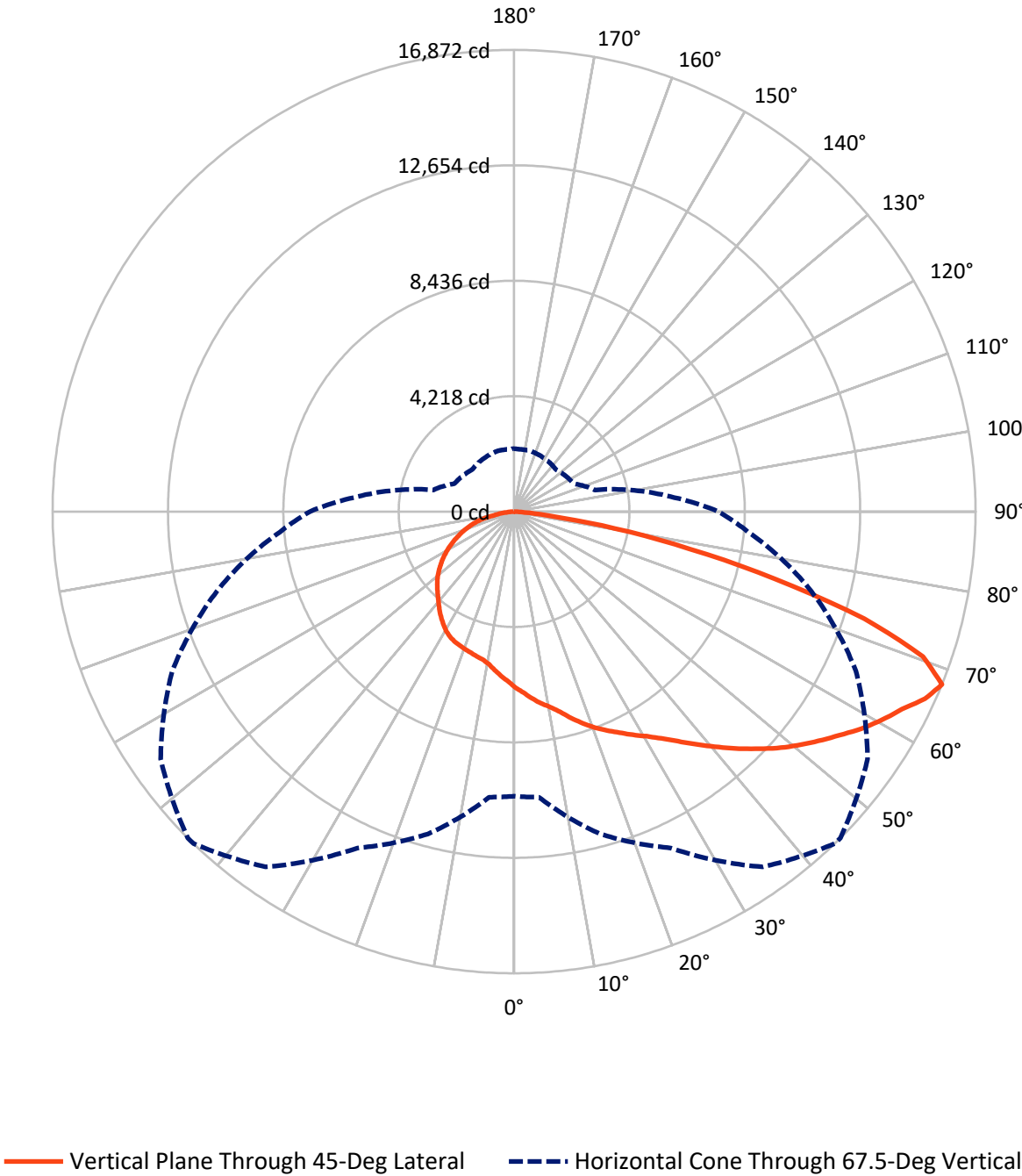
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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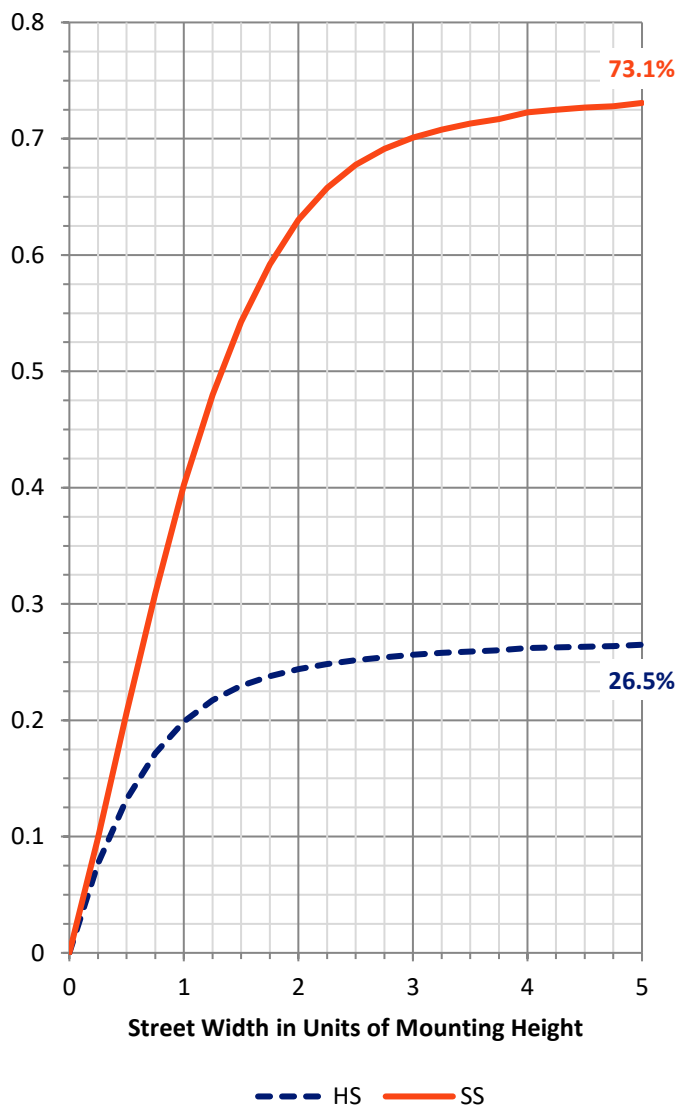
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10309.9	0.0	10309.9
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	28282.1	0.0	28282.1
	% Fixture	73.3	0.0	73.3
Total	Lumens	38592.0	0.0	38592.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	616.3	1.6
10°-20°	1903.7	4.9
20°-30°	3286.0	8.5
30°-40°	4845.7	12.6
40°-50°	6564.9	17.0
50°-60°	8023.9	20.8
60°-70°	8275.5	21.4
70°-80°	4532.8	11.7
80°-90°	543.3	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°	38592.0	100.0
0°-180°	38592.0	100.0

Coefficient of Utilization



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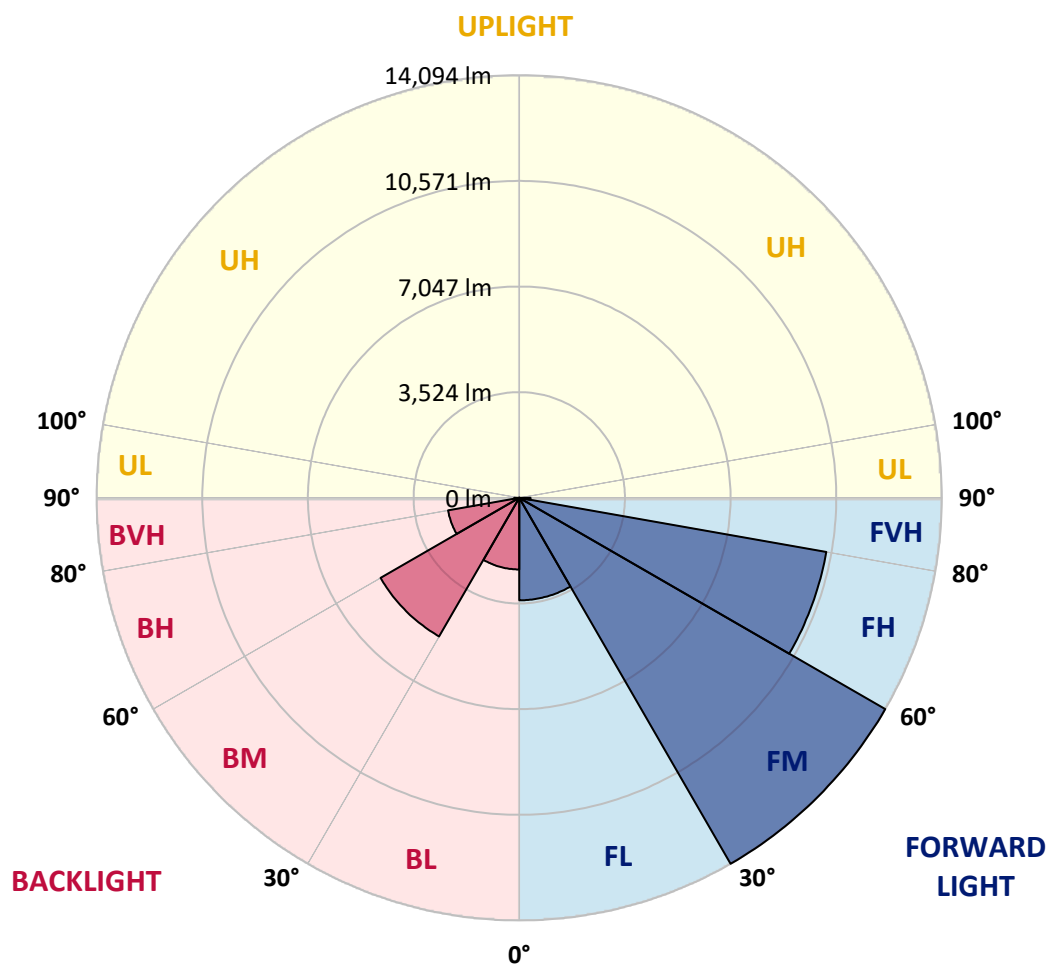
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3416.4	8.9			
FM	(30°-60°)	14094.2	36.5			
FH	(60°-80°)	10397.3	26.9			G4/12000
FVH	(80°-90°)	374.3	1.0			G3/500
BL	(0°-30°)	2389.5	6.2	B3/2500		
BM	(30°-60°)	5340.4	13.8	B4/8500		
BH	(60°-80°)	2411.0	6.2	B3/2500		G3/2500
BVH	(80°-90°)	169.0	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 IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	6436.4	6436.4	6436.4	6436.4	6436.4	6436.4	6436.4	6436.4	6436.4	6436.4	6436.4
2.5°	6718.3	6712.4	6724.2	6683.1	6630.2	6624.3	6624.3	6589.1	6548.0	6465.8	6401.2
5°	7035.4	7023.7	7029.6	6970.8	6900.4	6865.1	6859.2	6782.9	6688.9	6559.7	6442.3
7.5°	7329.1	7317.3	7311.4	7246.8	7141.1	7082.4	7076.5	6965.0	6853.4	6653.7	6483.4
10°	7605.1	7593.3	7581.6	7493.5	7364.3	7276.2	7264.5	7123.5	6982.6	6735.9	6518.6
12.5°	7957.4	7933.9	7922.2	7816.5	7628.6	7534.6	7517.0	7329.1	7152.9	6853.4	6589.1
15°	8327.4	8309.8	8292.2	8192.3	7980.9	7857.6	7828.2	7593.3	7352.5	7006.1	6694.8
17.5°	8603.4	8585.8	8585.8	8497.7	8303.9	8163.0	8139.5	7857.6	7558.1	7147.0	6777.0
20°	8773.7	8756.1	8773.7	8720.9	8574.1	8456.6	8433.1	8121.9	7763.6	7276.2	6847.5
22.5°	8897.0	8879.4	8908.8	8885.3	8779.6	8709.1	8691.5	8386.1	7975.0	7411.3	6918.0
25°	9114.3	9114.3	9114.3	9073.2	8973.4	8949.9	8949.9	8685.6	8245.2	7587.5	7023.7
27.5°	9548.9	9525.4	9496.1	9378.6	9208.3	9202.4	9237.7	8991.0	8556.4	7816.5	7152.9
30°	10189.0	10177.3	10065.7	9819.1	9531.3	9501.9	9525.4	9319.9	8891.2	8057.3	7299.7
32.5°	11017.1	10976.0	10746.9	10377.0	9965.9	9830.8	9877.8	9660.5	9243.5	8303.9	7440.6
35°	11604.3	11616.1	11451.6	11116.9	10629.5	10271.2	10306.5	10042.2	9625.3	8579.9	7616.8
37.5°	12279.7	12320.8	12074.1	11821.6	11369.4	10758.7	10793.9	10435.7	10007.0	8926.4	7804.7
40°	13213.4	13131.2	12714.3	12414.8	11915.6	11269.6	11299.0	10876.1	10447.4	9255.3	8022.0
42.5°	13994.5	13847.7	13342.6	12960.9	12361.9	11809.9	11839.2	11351.8	10893.7	9619.4	8262.8
45°	15116.2	14711.0	13982.8	13794.8	12820.0	12338.4	12367.8	11856.9	11363.6	10007.0	8521.2
47.5°	15768.0	15122.0	14658.1	14558.3	13325.0	12884.6	12919.8	12391.3	11868.6	10447.4	8791.3
50°	15726.9	15310.0	15174.9	14928.3	13771.3	13395.5	13430.7	12943.3	12379.5	10882.0	9049.7
52.5°	15456.8	15533.1	15462.7	15051.6	14217.7	13888.8	13929.9	13489.5	12902.2	11287.2	9290.5
55°	15873.7	15926.6	15791.5	15251.2	14711.0	14382.1	14429.1	14065.0	13419.0	11645.4	9496.1
57.5°	16372.9	16185.0	16049.9	15603.6	15221.9	14916.5	14969.4	14652.2	13865.3	11933.2	9654.6
60°	16349.4	15956.0	16091.0	15627.1	15568.4	15409.8	15456.8	15133.8	14205.9	12144.6	9719.2
62.5°	15145.5	14934.1	15615.4	15456.8	15850.3	15850.3	15909.0	15427.4	14411.5	12232.7	9684.0
65°	13054.9	13066.6	14264.6	14922.4	16185.0	16455.1	16502.1	15609.5	14294.0	11974.3	9355.1
67.5°	10400.4	10476.8	12197.5	13565.8	15850.3	16866.2	16872.1	15773.9	13789.0	11246.1	8591.7
70°	7610.9	7669.7	9701.6	11363.6	14270.5	15956.0	15862.0	15310.0	12690.8	9977.6	7399.5
72.5°	5144.4	5197.3	7287.9	8726.7	11710.0	13589.3	13383.7	13530.6	10817.4	8198.2	5949.0
75°	3459.0	3523.6	5185.5	6242.6	8615.2	10318.2	9860.2	10247.8	8368.5	6207.4	4339.9
77.5°	2178.7	2219.9	3294.6	4093.2	5884.4	7023.7	6565.6	6571.5	4821.4	3341.5	2331.4
80°	1385.9	1397.7	1996.7	2360.8	3406.1	4222.4	3735.0	3036.2	2172.9	1773.5	1391.8
82.5°	804.6	786.9	1192.1	1333.1	1620.8	1603.2	1327.2	1256.7	951.4	886.8	710.6
85°	323.0	299.5	522.7	487.4	493.3	522.7	387.6	387.6	311.2	240.8	176.2
87.5°	64.6	64.6	70.5	64.6	64.6	70.5	52.9	52.9	47.0	47.0	47.0
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°	6436.4	6436.4	6436.4	6436.4	6436.4	6436.4	6436.4	6436.4	6436.4	6436.4	6436.4
2.5°	6389.4	6377.7	6348.3	6272.0	6230.9	6207.4	6172.1	6160.4	6154.5	6160.4	6178.0
5°	6407.1	6365.9	6283.7	6160.4	6078.2	6025.3	5966.6	5943.1	5925.5	5925.5	5943.1
7.5°	6418.8	6354.2	6213.3	6031.2	5913.7	5831.5	5761.1	5731.7	5725.8	5743.4	5749.3
10°	6424.7	6330.7	6131.0	5902.0	5749.3	5643.6	5573.1	5555.5	5573.1	5608.4	5614.2
12.5°	6465.8	6336.6	6084.1	5813.9	5631.9	5526.2	5473.3	5473.3	5520.3	5584.9	5590.8
15°	6536.2	6377.7	6060.6	5743.4	5555.5	5461.6	5443.9	5473.3	5543.8	5643.6	5655.4
17.5°	6589.1	6401.2	6007.7	5649.5	5455.7	5397.0	5426.3	5496.8	5596.6	5731.7	5743.4
20°	6624.3	6401.2	5931.4	5537.9	5355.8	5344.1	5426.3	5537.9	5643.6	5802.2	5819.8
22.5°	6659.6	6389.4	5843.3	5402.8	5244.3	5279.5	5432.2	5573.1	5678.8	5849.1	5878.5
25°	6724.2	6407.1	5755.2	5267.8	5126.8	5226.6	5426.3	5596.6	5708.2	5884.4	5931.4
27.5°	6812.3	6448.2	5690.6	5144.4	5009.4	5144.4	5385.2	5590.8	5708.2	5878.5	5931.4
30°	6906.2	6495.1	5614.2	5009.4	4874.3	5027.0	5297.1	5526.2	5661.2	5819.8	5884.4
32.5°	7006.1	6548.0	5549.6	4862.5	4709.9	4868.4	5167.9	5426.3	5573.1	5720.0	5790.4
35°	7141.1	6642.0	5514.4	4745.1	4563.0	4704.0	5003.5	5297.1	5455.7	5590.8	5673.0
37.5°	7305.6	6759.4	5496.8	4627.6	4404.5	4521.9	4827.3	5138.6	5308.9	5420.4	5496.8
40°	7493.5	6906.2	5490.9	4516.1	4245.9	4334.0	4645.3	4956.5	5120.9	5209.0	5273.6
42.5°	7704.9	7070.7	5479.2	4404.5	4087.4	4157.8	4469.1	4774.5	4915.4	4991.7	5050.5
45°	7928.1	7235.1	5455.7	4269.4	3917.1	3999.3	4287.0	4557.2	4704.0	4768.6	4833.2
47.5°	8151.2	7399.5	5408.7	4116.7	3764.4	3840.7	4093.2	4328.1	4445.6	4504.3	4568.9
50°	8368.5	7546.3	5297.1	3940.5	3605.8	3676.3	3870.1	4028.6	4116.7	4163.7	4228.3
52.5°	8562.3	7646.2	5138.6	3735.0	3447.2	3482.5	3611.7	3746.7	3817.2	3823.1	3881.8
55°	8726.7	7699.0	4909.5	3523.6	3276.9	3282.8	3353.3	3459.0	3488.3	3464.9	3506.0
57.5°	8820.7	7669.7	4657.0	3306.3	3100.8	3077.3	3130.1	3183.0	3188.8	3130.1	3171.2
60°	8844.2	7534.6	4328.1	3089.0	2924.6	2860.0	2877.6	2865.8	2854.1	2830.6	2865.8
62.5°	8726.7	7246.8	3964.0	2877.6	2736.7	2636.8	2630.9	2625.1	2642.7	2648.6	2654.4
65°	8298.0	6706.6	3529.5	2660.3	2537.0	2401.9	2396.0	2466.5	2490.0	2454.8	2466.5
67.5°	7470.0	5878.5	3053.8	2407.8	2284.5	2167.0	2214.0	2255.1	2296.2	2284.5	2296.2
70°	6295.5	4827.3	2619.2	2125.9	2008.4	1943.8	1996.7	2031.9	2037.8	2026.1	2037.8
72.5°	4950.6	3770.2	2214.0	1838.1	1732.4	1703.1	1767.7	1797.0	1849.9	1873.4	1879.2
75°	3576.4	2783.6	1814.6	1526.9	1438.8	1438.8	1497.5	1550.4	1597.4	1568.0	1550.4
77.5°	1996.7	1662.0	1303.7	1051.2	1068.8	1151.0	1174.5	1233.3	1280.2	1274.4	1262.6
80°	1209.8	1039.5	880.9	681.2	675.4	740.0	892.6	992.5	1016.0	963.1	957.2
82.5°	628.4	546.2	469.8	381.7	422.8	493.3	516.8	622.5	687.1	663.6	693.0
85°	158.6	152.7	170.3	176.2	217.3	240.8	264.3	311.2	205.5	99.8	99.8
87.5°	47.0	47.0	58.7	58.7	76.3	94.0	88.1	88.1	47.0	5.9	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)