

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: P836347

Luminaire Tested: **ARCH3-170-740-U-T3**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836347
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-170-740-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 1310mA LIGHTSQUARE WITH 40 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24277 lumens
Efficiency: N/A
Efficacy: 142.3 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G3

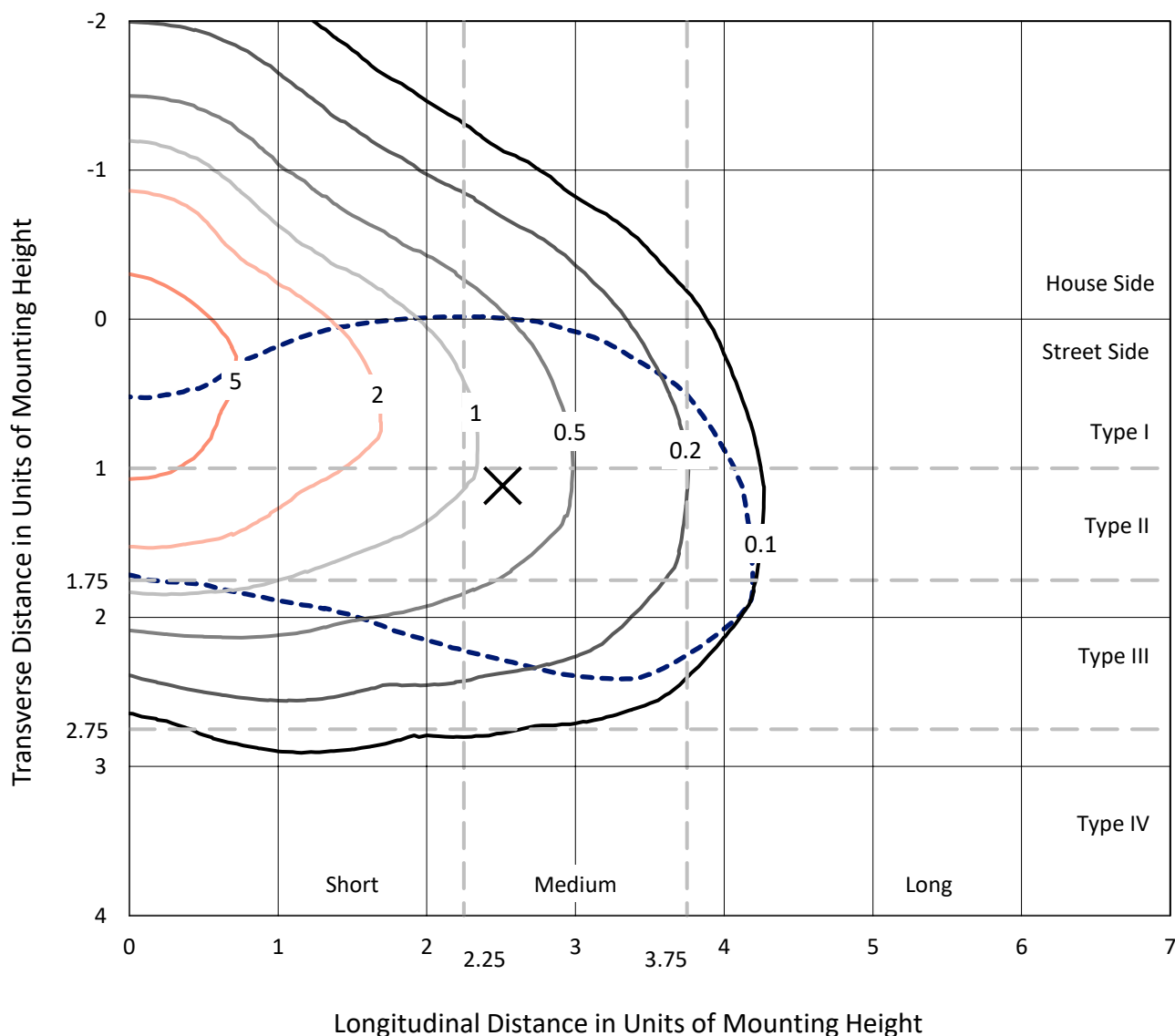
Input Watts (W): 170.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

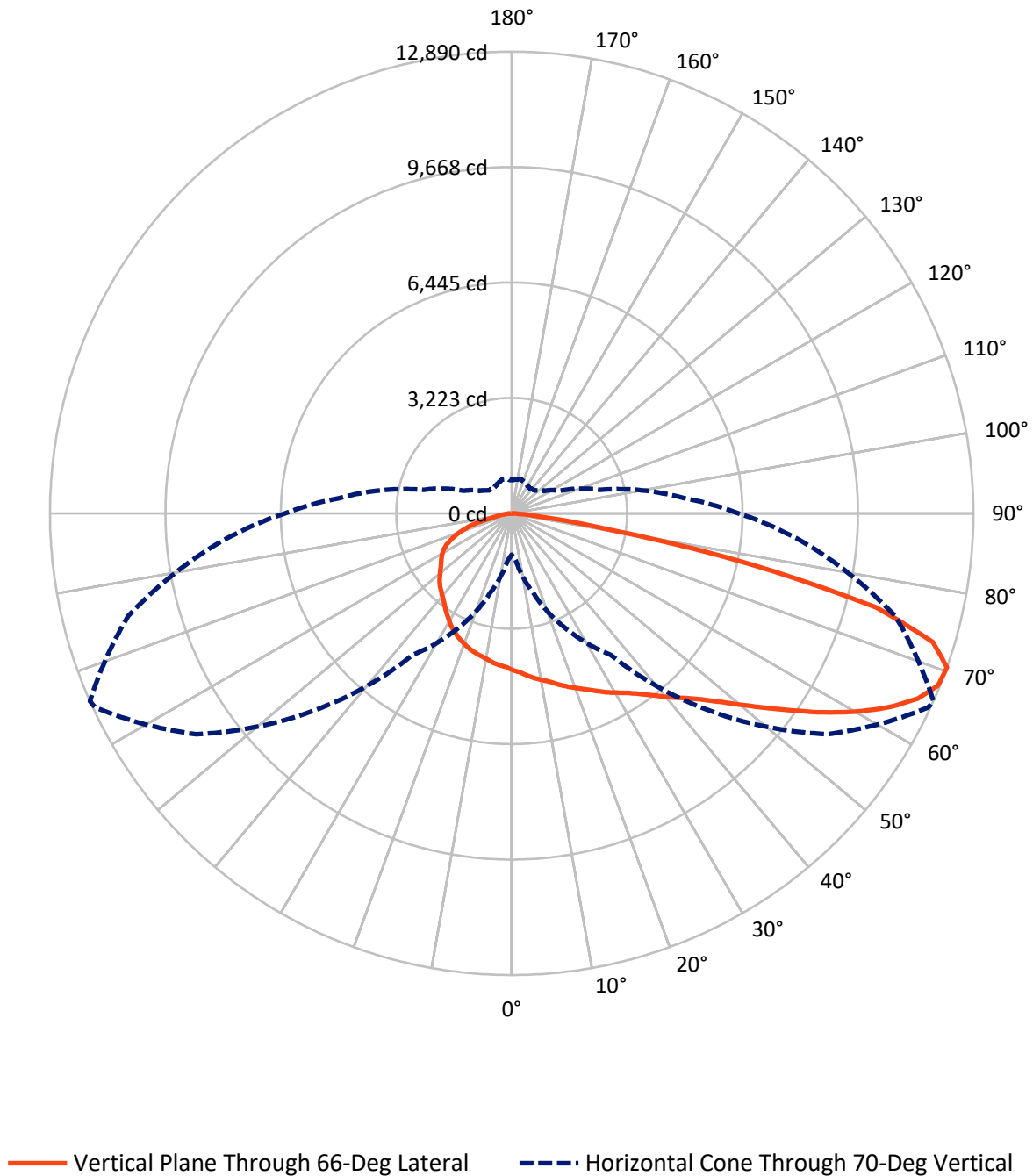
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.6 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



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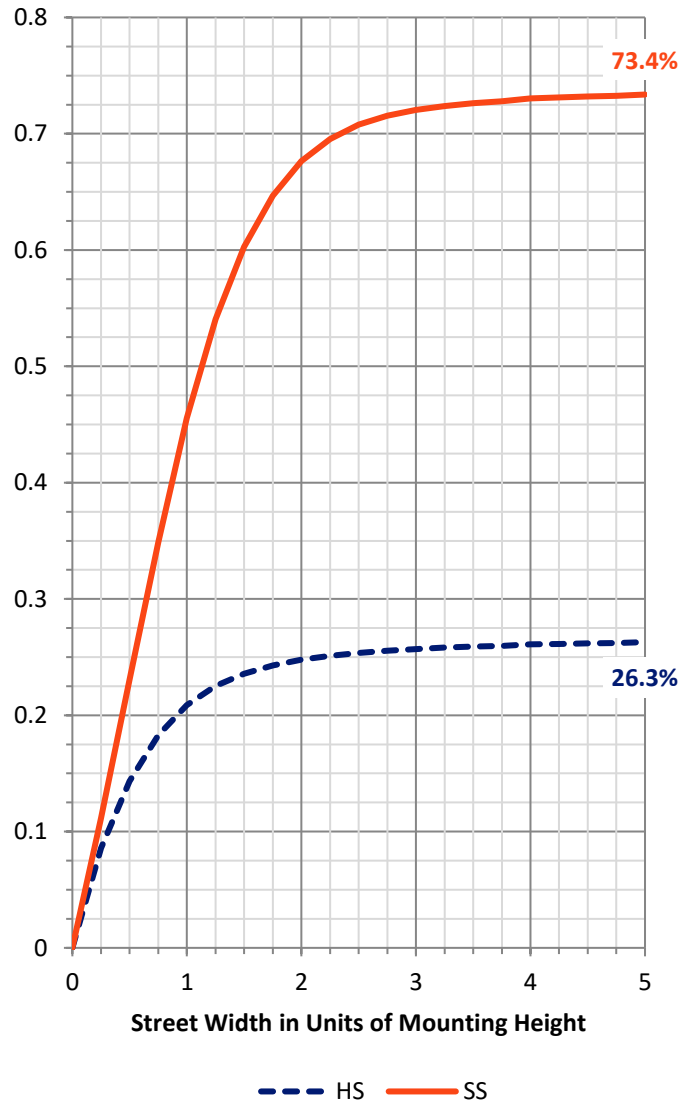
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6432.9	0.0	6432.9
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	17844.1	0.0	17844.1
	% Fixture	73.5	0.0	73.5
Total	Lumens	24277.0	0.0	24277.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	421.0	1.7
10°-20°	1262.9	5.2
20°-30°	2117.0	8.7
30°-40°	3169.9	13.1
40°-50°	4238.1	17.5
50°-60°	4948.1	20.4
60°-70°	4920.1	20.3
70°-80°	2912.8	12.0
80°-90°	287.1	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°	24277.0	100.0
0°-180°	24277.0	100.0

Coefficient of Utilization



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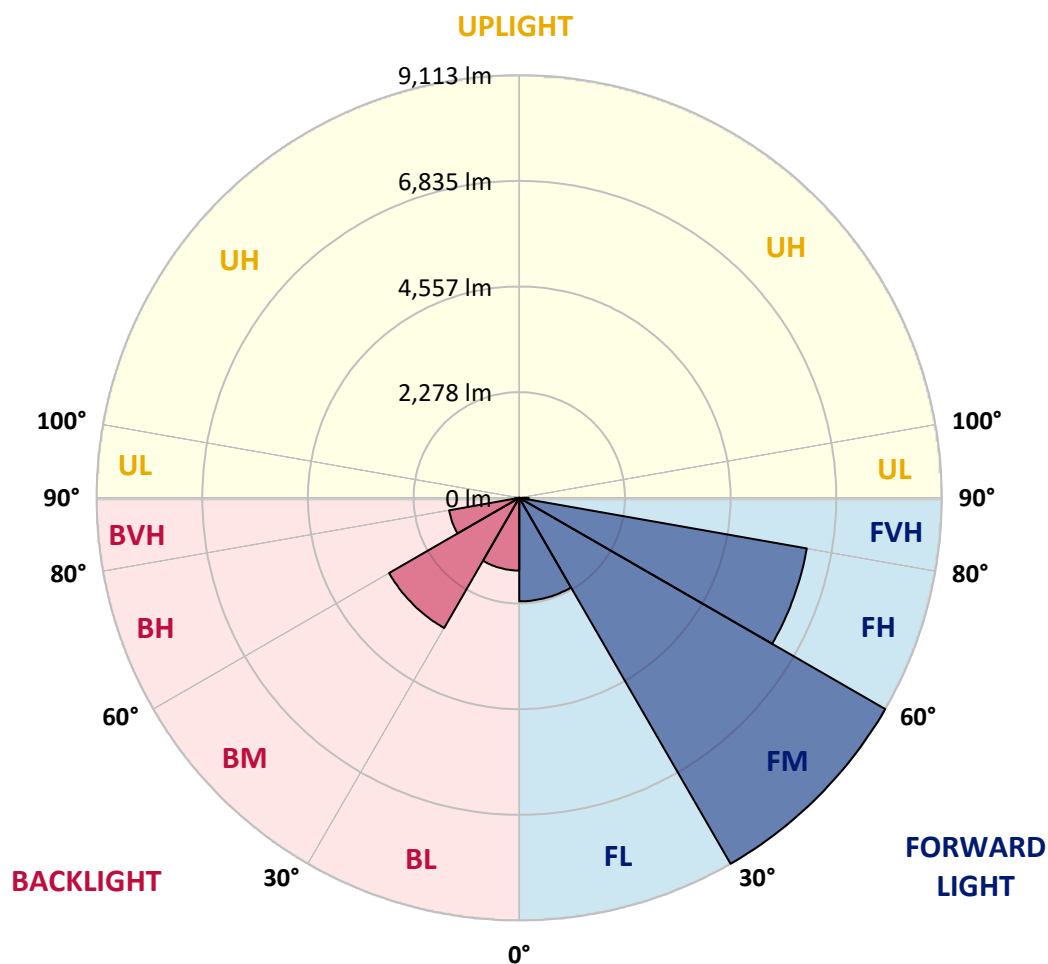
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2232.8	9.2			
FM	(30°-60°)	9113.3	37.5			
FH	(60°-80°)	6296.3	25.9			G3/7500
FVH	(80°-90°)	201.8	0.8			G2/225
BL	(0°-30°)	1568.1	6.5	B3/2500		
BM	(30°-60°)	3242.8	13.4	B3/5000		
BH	(60°-80°)	1536.6	6.3	B3/2500		G3/2500
BVH	(80°-90°)	85.3	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 III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	4381.4	4381.4	4381.4	4381.4	4381.4	4381.4	4381.4	4381.4	4381.4	4381.4	4381.4
2.5°	4542.5	4535.4	4531.8	4517.5	4485.3	4499.6	4467.4	4445.9	4442.3	4392.2	4363.5
5°	4728.7	4725.1	4717.9	4696.5	4646.3	4653.5	4599.8	4560.4	4549.7	4470.9	4410.1
7.5°	4886.2	4879.0	4875.4	4846.8	4793.1	4789.5	4725.1	4667.8	4649.9	4542.5	4449.5
10°	5007.9	4997.1	5004.3	4975.7	4918.4	4907.6	4825.3	4750.1	4732.2	4596.2	4467.4
12.5°	5111.7	5104.5	5115.3	5090.2	5043.7	5032.9	4950.6	4854.0	4832.5	4675.0	4506.7
15°	5226.2	5201.2	5222.7	5211.9	5179.7	5176.1	5100.9	4993.6	4964.9	4775.2	4567.6
17.5°	5287.1	5272.8	5297.8	5301.4	5287.1	5312.1	5240.6	5111.7	5086.6	4868.3	4621.3
20°	5330.0	5308.6	5337.2	5358.7	5369.4	5419.5	5362.3	5237.0	5208.3	4957.8	4671.4
22.5°	5476.8	5430.3	5433.9	5448.2	5455.3	5526.9	5491.1	5369.4	5340.8	5068.7	4732.2
25°	5845.5	5752.4	5691.6	5648.6	5598.5	5659.4	5637.9	5519.8	5494.7	5201.2	4807.4
27.5°	6418.2	6300.1	6178.4	6053.1	5856.2	5831.2	5795.4	5688.0	5659.4	5333.6	4882.6
30°	7069.7	6951.6	6808.4	6608.0	6239.3	6046.0	5963.6	5845.5	5813.3	5451.7	4954.2
32.5°	7717.6	7613.8	7470.7	7227.2	6701.0	6307.3	6131.9	6010.2	5978.0	5580.6	5040.1
35°	8222.4	8157.9	8064.9	7760.6	7159.2	6615.1	6375.3	6228.5	6192.7	5784.7	5197.6
37.5°	8630.4	8583.9	8505.2	8186.6	7492.1	6923.0	6654.5	6486.3	6446.9	6006.6	5365.8
40°	9231.8	9110.1	9045.7	8583.9	7782.1	7202.2	6969.5	6794.1	6751.1	6242.8	5501.9
42.5°	9743.7	9654.2	9575.5	8938.3	8057.7	7442.0	7266.6	7105.5	7048.3	6475.5	5648.6
45°	9829.6	9865.4	9826.0	9113.7	8494.4	7678.3	7567.3	7463.5	7409.8	6790.5	5870.6
47.5°	9833.2	9833.2	9600.5	9213.9	9034.9	7943.2	7889.5	7925.3	7868.0	7191.4	6135.5
50°	9575.5	9622.0	9500.3	9239.0	9178.1	8208.1	8283.2	8476.5	8419.2	7617.4	6421.8
52.5°	9042.1	9196.0	9192.4	9199.6	8970.5	8433.6	8698.5	9138.8	9042.1	8097.1	6726.1
55°	8100.7	8408.5	8684.1	8920.4	8791.5	8569.6	9206.8	9843.9	9743.7	8634.0	7033.9
57.5°	7295.3	7492.1	7835.8	8505.2	8580.3	8687.7	9682.9	10581.3	10491.8	9228.2	7356.1
60°	6375.3	6647.3	6991.0	7943.2	8322.6	8841.6	10205.5	11300.8	11214.9	9829.6	7667.5
62.5°	4961.3	5312.1	5999.4	7080.5	7946.7	8938.3	10617.1	11934.4	11895.1	10398.8	7946.7
65°	3457.9	3769.3	4732.2	6020.9	7348.9	8895.3	10946.5	12500.0	12464.2	10864.1	8143.6
67.5°	2018.9	2380.4	3468.6	4846.8	6293.0	8598.2	11053.8	12832.9	12832.9	11146.9	8197.3
70°	1152.6	1320.9	2287.4	3533.1	4825.3	7778.5	10753.2	12829.3	12890.2	11082.5	7975.4
72.5°	805.4	880.6	1539.2	2376.9	3271.8	6293.0	9965.6	12210.1	12292.4	10473.9	7216.5
75°	626.4	680.1	1084.6	1621.6	2061.9	4274.1	8243.8	10295.0	10513.3	8927.6	5834.8
77.5°	476.1	515.5	633.6	1013.0	1320.9	2455.6	5441.0	6751.1	6765.5	5466.1	3128.6
80°	347.2	386.6	422.4	619.3	701.6	1149.1	2054.7	2820.7	2742.0	2645.3	1693.2
82.5°	207.6	247.0	257.7	336.5	343.6	490.4	719.5	909.2	873.4	1163.4	794.7
85°	89.5	125.3	132.4	153.9	146.8	200.5	286.4	239.8	214.8	247.0	171.8
87.5°	21.5	35.8	35.8	39.4	32.2	50.1	53.7	39.4	35.8	43.0	43.0
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°	4381.4	4381.4	4381.4	4381.4	4381.4	4381.4	4381.4	4381.4	4381.4	4381.4	4381.4
2.5°	4356.4	4345.6	4349.2	4288.4	4270.5	4252.6	4241.8	4234.7	4227.5	4238.3	4249.0
5°	4388.6	4363.5	4334.9	4245.4	4209.6	4170.2	4141.6	4116.6	4105.8	4105.8	4116.6
7.5°	4413.7	4370.7	4309.9	4191.7	4127.3	4073.6	4027.1	3994.8	3976.9	3976.9	3987.7
10°	4417.2	4356.4	4259.7	4116.6	4030.6	3951.9	3898.2	3862.4	3837.3	3837.3	3844.5
12.5°	4438.7	4356.4	4231.1	4059.3	3951.9	3855.2	3790.8	3737.1	3726.4	3726.4	3733.5
15°	4474.5	4374.3	4213.2	4009.2	3880.3	3769.3	3697.7	3640.5	3619.0	3633.3	3636.9
17.5°	4506.7	4385.0	4181.0	3944.7	3790.8	3669.1	3590.4	3540.2	3511.6	3543.8	3543.8
20°	4528.2	4385.0	4134.5	3862.4	3694.2	3558.1	3483.0	3422.1	3400.6	3440.0	3443.6
22.5°	4560.4	4381.4	4084.3	3780.1	3590.4	3447.2	3372.0	3325.5	3314.7	3357.7	3372.0
25°	4596.2	4388.6	4030.6	3687.0	3475.8	3336.2	3278.9	3257.4	3264.6	3318.3	3336.2
27.5°	4635.6	4402.9	3976.9	3583.2	3350.5	3225.2	3193.0	3203.8	3232.4	3300.4	3321.9
30°	4671.4	4406.5	3901.8	3461.5	3207.3	3089.2	3103.5	3150.1	3193.0	3261.0	3286.1
32.5°	4717.9	4410.1	3823.0	3329.0	3053.4	2967.5	3031.9	3107.1	3150.1	3214.5	3243.1
35°	4832.5	4470.9	3762.2	3200.2	2910.2	2863.7	2971.1	3067.7	3092.8	3150.1	3175.1
37.5°	4964.9	4571.2	3730.0	3067.7	2770.6	2759.9	2895.9	2992.6	2999.7	3035.5	3060.6
40°	5047.3	4614.1	3694.2	2956.8	2645.3	2652.5	2792.1	2867.3	2853.0	2878.0	2895.9
42.5°	5129.6	4628.4	3619.0	2863.7	2527.2	2534.4	2641.8	2695.4	2702.6	2756.3	2781.4
45°	5269.2	4667.8	3536.7	2777.8	2419.8	2394.8	2459.2	2530.8	2623.9	2727.7	2756.3
47.5°	5455.3	4750.1	3450.7	2674.0	2316.0	2233.7	2258.7	2384.0	2480.7	2577.3	2595.2
50°	5645.0	4832.5	3372.0	2548.7	2212.2	2061.9	2072.6	2187.1	2265.9	2341.1	2351.8
52.5°	5831.2	4904.1	3304.0	2430.6	2094.1	1857.8	1900.8	2018.9	2072.6	2108.4	2119.1
55°	6017.3	4964.9	3243.1	2330.3	1958.0	1696.7	1736.1	1847.1	1900.8	1918.7	1925.8
57.5°	6210.6	5036.5	3196.6	2244.4	1804.1	1553.6	1578.6	1657.4	1707.5	1729.0	1721.8
60°	6371.7	5097.4	3171.5	2154.9	1650.2	1421.1	1413.9	1485.5	1557.1	1578.6	1571.4
62.5°	6497.0	5136.7	3132.2	2040.4	1514.2	1288.7	1252.9	1345.9	1421.1	1435.4	1446.2
65°	6565.0	5140.3	3035.5	1893.6	1374.6	1145.5	1120.4	1213.5	1260.0	1274.3	1274.3
67.5°	6554.3	5083.0	2845.8	1696.7	1245.7	1016.6	995.1	1052.4	1120.4	1131.2	1120.4
70°	6332.3	4846.8	2541.5	1489.1	1091.8	902.1	862.7	920.0	984.4	945.0	927.1
72.5°	5702.3	4234.7	2094.1	1260.0	920.0	758.9	741.0	798.3	801.8	809.0	791.1
75°	4499.6	3153.6	1567.9	980.8	744.6	637.2	633.6	622.9	637.2	665.8	644.3
77.5°	2362.5	1575.0	848.4	601.4	540.5	511.9	486.8	483.2	526.2	544.1	522.6
80°	1281.5	884.2	486.8	361.5	329.3	332.9	365.1	358.0	404.5	415.2	397.3
82.5°	558.4	418.8	239.8	218.4	218.4	214.8	225.5	250.6	300.7	300.7	239.8
85°	121.7	103.8	93.1	107.4	121.7	121.7	121.7	121.7	85.9	46.5	32.2
87.5°	39.4	39.4	39.4	43.0	46.5	46.5	39.4	28.6	17.9	3.6	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)