

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: P842237

Luminaire Tested: **ARCH4-290-727-U-T2U**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842237
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-290-727-U-T2U
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1120mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 39646 lumens
Efficiency: N/A
Efficacy: 136.9 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
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

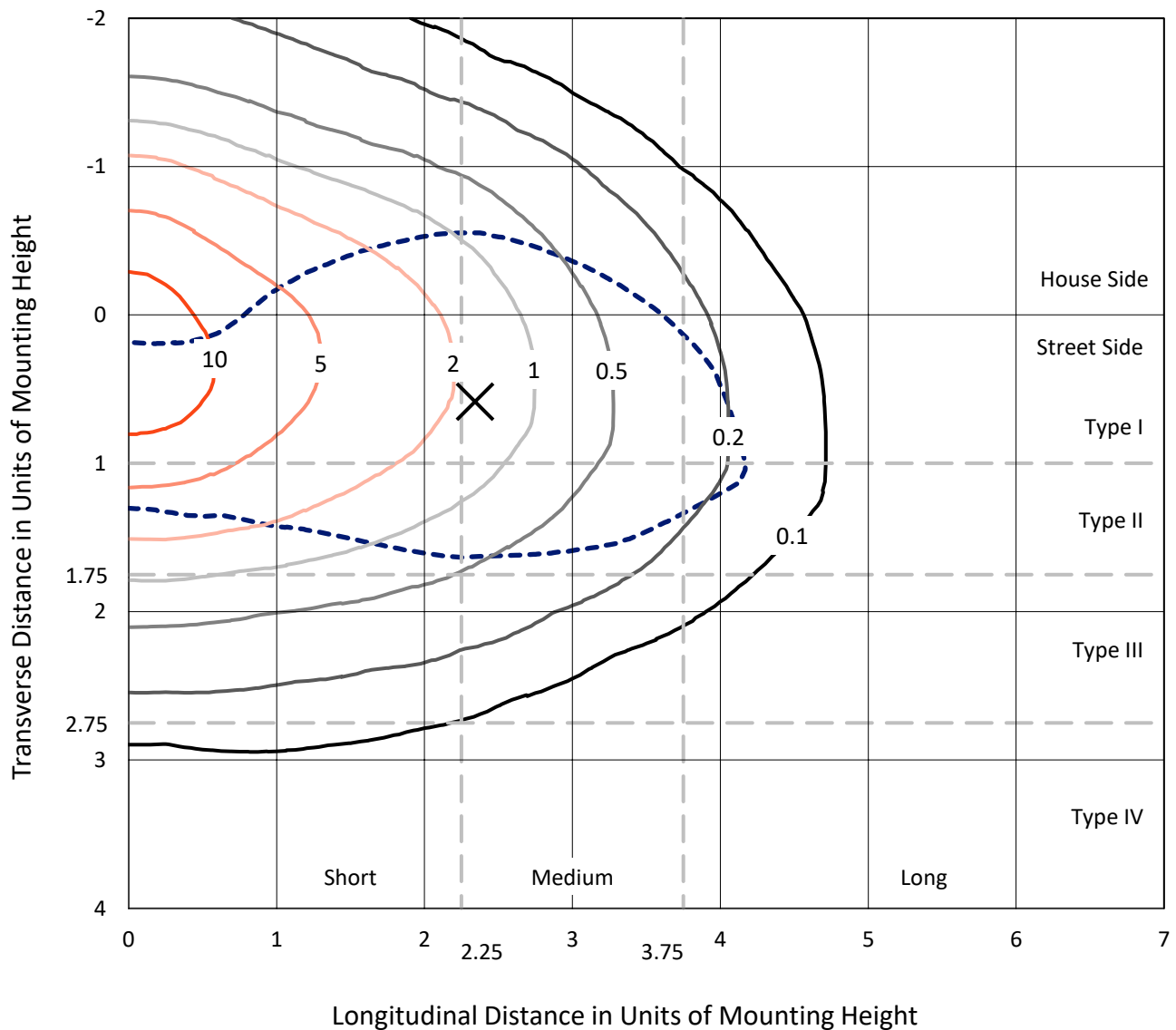


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Iso-Footcandle Lines of Horizontal Illumination

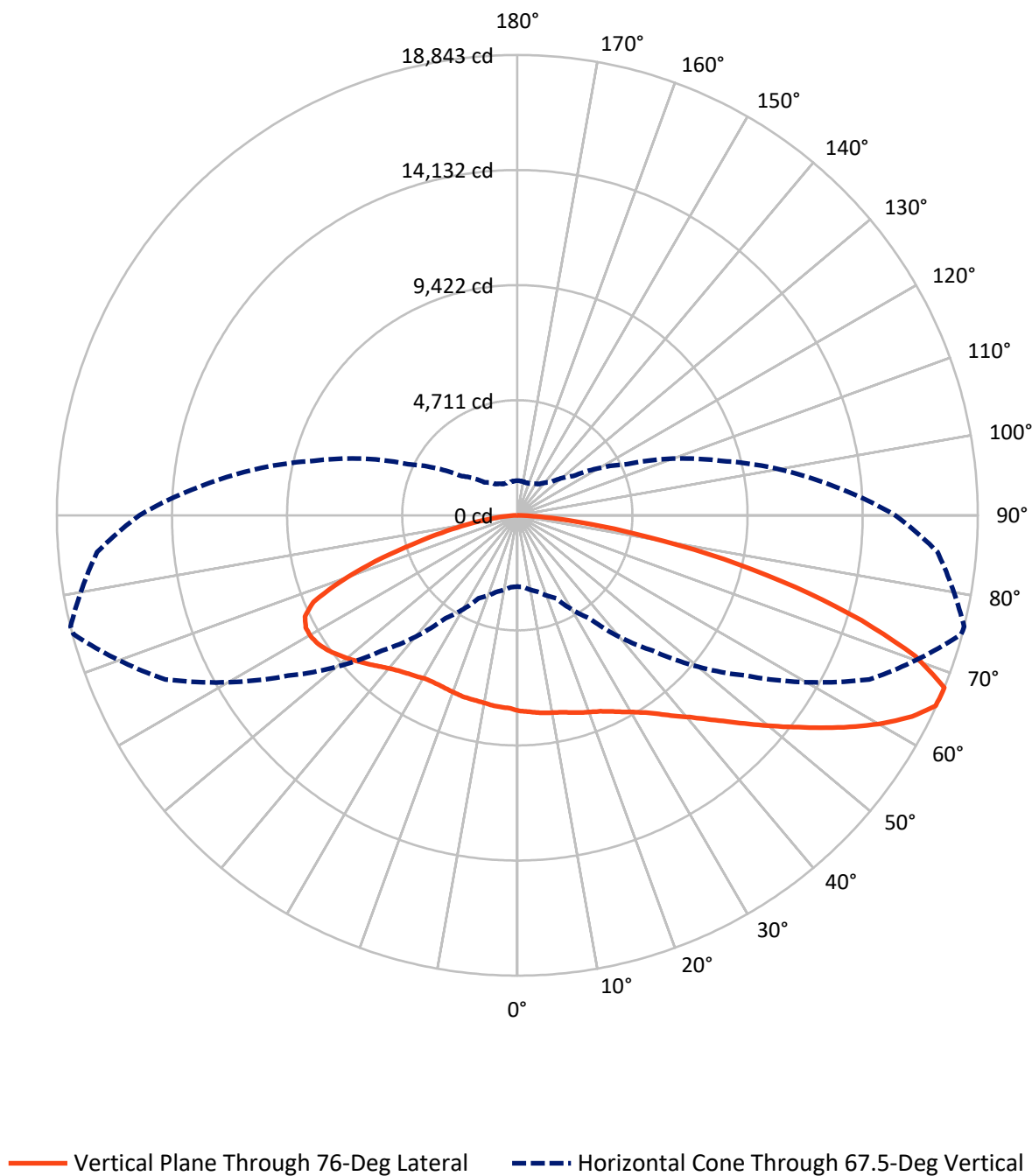
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 14.5 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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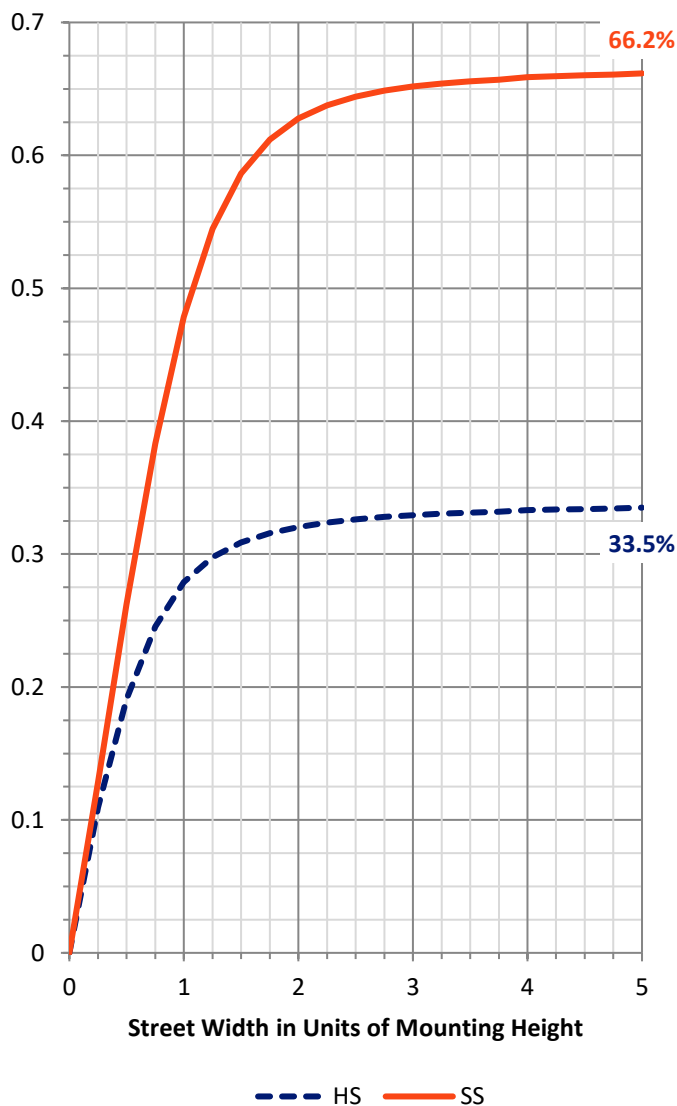
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	13396.6	0.0	13396.6
	% Fixture	33.8	0.0	33.8
Street Side	Lumens	26249.4	0.0	26249.4
	% Fixture	66.2	0.0	66.2
Total	Lumens	39646.0	0.0	39646.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	772.2	1.9
10°-20°	2360.8	6.0
20°-30°	4011.2	10.1
30°-40°	5707.4	14.4
40°-50°	7208.1	18.2
50°-60°	7804.2	19.7
60°-70°	7258.8	18.3
70°-80°	3898.6	9.8
80°-90°	624.7	1.6
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°	39646.0	100.0
0°-180°	39646.0	100.0

Coefficient of Utilization



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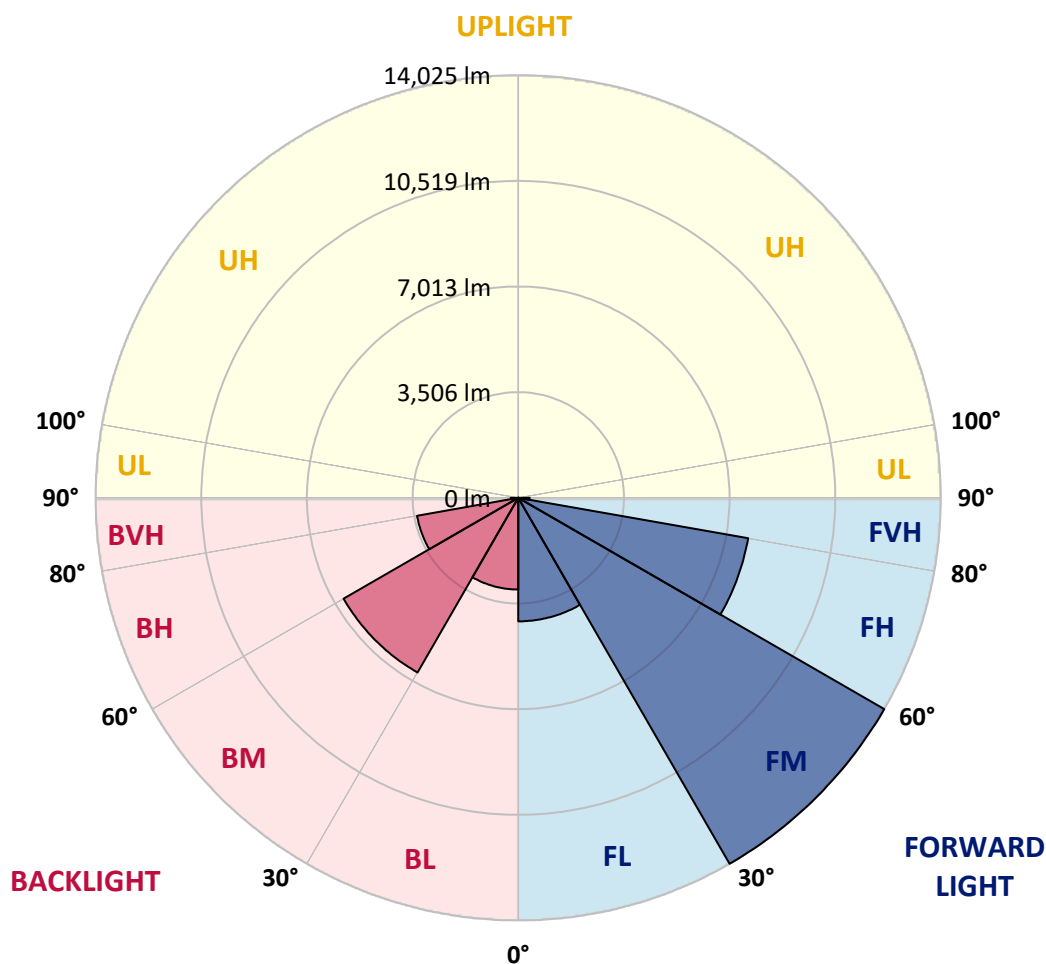
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4099.8	10.3			
FM	(30°-60°)	14025.2	35.4			
FH	(60°-80°)	7746.5	19.5			G4/12000
FVH	(80°-90°)	377.9	1.0			G3/500
BL	(0°-30°)	3044.4	7.7	B4/5000		
BM	(30°-60°)	6694.5	16.9	B4/8500		
BH	(60°-80°)	3410.9	8.6	B4/5000		G4/5000
BVH	(80°-90°)	246.8	0.6			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	8008.4	8008.4	8008.4	8008.4	8008.4	8008.4	8008.4	8008.4	8008.4	8008.4	8008.4
2.5°	8251.3	8236.6	8177.7	8185.1	8185.1	8177.7	8089.4	8052.6	8052.6	8045.2	7964.2
5°	8545.7	8523.7	8457.4	8442.7	8413.2	8376.4	8236.6	8155.6	8118.8	8111.5	8001.0
7.5°	8891.7	8862.2	8781.3	8737.1	8663.5	8567.8	8391.2	8266.0	8177.7	8170.3	8015.8
10°	9237.6	9208.2	9112.5	9031.5	8928.5	8773.9	8545.7	8361.7	8221.9	8207.1	8023.1
12.5°	9649.8	9620.4	9502.6	9399.6	9245.0	9038.9	8737.1	8486.8	8295.5	8273.4	8045.2
15°	10084.1	10039.9	9922.2	9804.4	9613.0	9348.0	8987.4	8656.1	8413.2	8376.4	8111.5
17.5°	10444.8	10385.9	10290.2	10172.4	9959.0	9649.8	9237.6	8825.4	8523.7	8494.2	8177.7
20°	10753.9	10709.8	10606.7	10496.3	10268.1	9929.5	9473.2	8994.7	8626.7	8589.9	8229.2
22.5°	11048.4	10989.5	10930.6	10849.6	10599.4	10224.0	9745.5	9200.8	8759.2	8715.0	8295.5
25°	11387.0	11320.7	11298.6	11254.5	10960.0	10577.3	10076.8	9458.5	8943.2	8891.7	8413.2
27.5°	11806.5	11732.9	11688.7	11688.7	11335.4	10937.9	10430.1	9760.2	9156.7	9112.5	8560.5
30°	12248.1	12159.8	12093.6	12093.6	11696.1	11298.6	10776.0	10062.0	9399.6	9348.0	8751.8
32.5°	12638.3	12549.9	12476.3	12469.0	12056.8	11659.3	11136.7	10393.3	9694.0	9627.8	8987.4
35°	12940.1	12859.1	12792.8	12807.6	12417.4	12027.3	11541.5	10834.9	10062.0	9988.4	9296.5
37.5°	13124.1	13094.6	13057.8	13109.3	12748.7	12380.6	11961.1	11261.8	10481.6	10415.3	9679.3
40°	13219.8	13197.7	13344.9	13411.1	13028.4	12697.1	12380.6	11703.5	10937.9	10864.3	10120.9
42.5°	13359.6	13543.6	13602.5	13587.8	13234.5	12940.1	12763.4	12181.9	11475.3	11409.0	10650.9
45°	12859.1	12814.9	13138.8	13315.4	13249.2	13094.6	13124.1	12756.0	12100.9	12034.7	11261.8
47.5°	12189.3	12130.4	12314.4	12748.7	13006.3	13153.5	13447.9	13352.2	12822.3	12763.4	11975.8
50°	10776.0	10857.0	11541.5	12123.0	12630.9	13138.8	13720.3	13992.6	13617.2	13558.3	12741.3
52.5°	9208.2	9289.2	10003.1	11342.8	12174.5	13028.4	13919.0	14633.0	14478.4	14412.2	13558.3
55°	8067.3	8243.9	9053.6	10025.2	11526.8	12682.4	14036.8	15288.1	15405.9	15347.0	14449.0
57.5°	6933.7	7066.2	7677.2	8538.4	10643.5	12078.9	14029.4	15899.0	16377.5	16318.6	15354.3
60°	5601.5	5770.8	6256.6	7184.0	9465.8	11357.5	13823.3	16377.5	17312.3	17268.1	16230.3
62.5°	4688.7	4740.3	5086.2	5888.5	7949.5	10444.8	13359.6	16635.1	18158.8	18129.3	17017.9
65°	3776.0	3783.4	4099.9	4769.7	6484.7	9311.2	12572.0	16539.4	18799.1	18813.9	17584.6
67.5°	2914.8	2951.6	3238.7	3746.6	5152.5	7839.1	11445.8	15891.7	18806.5	18843.3	17260.8
70°	2016.8	2046.3	2480.5	2973.7	3982.1	6249.2	9922.2	14176.6	17260.8	17290.2	15472.1
72.5°	1420.6	1435.3	1899.1	2377.5	3113.6	4710.8	7485.8	11725.5	14714.0	14736.1	13013.7
75°	1059.9	1074.7	1339.6	1803.4	2384.9	3260.8	5115.7	8980.0	11755.0	11755.0	10275.5
77.5°	750.8	758.1	868.6	1244.0	1589.9	2200.8	3076.8	5881.2	8626.7	8641.4	7485.8
80°	507.9	515.2	566.8	839.1	993.7	1192.4	1670.9	3084.1	5439.5	5461.6	4755.0
82.5°	265.0	279.7	316.5	426.9	500.5	662.5	861.2	1567.8	3010.5	3069.4	2855.9
85°	103.0	103.0	117.8	139.9	184.0	257.6	397.5	596.2	1361.7	1405.9	1258.7
87.5°	36.8	36.8	44.2	44.2	51.5	58.9	66.2	88.3	154.6	154.6	147.2
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°	8008.4	8008.4	8008.4	8008.4	8008.4	8008.4	8008.4	8008.4	8008.4	8008.4	8008.4
2.5°	7934.8	7934.8	7898.0	7912.7	7905.4	7890.6	7875.9	7898.0	7875.9	7824.4	7817.0
5°	7949.5	7934.8	7875.9	7868.6	7846.5	7817.0	7780.2	7794.9	7758.1	7714.0	7706.6
7.5°	7956.9	7927.4	7846.5	7817.0	7772.9	7714.0	7655.1	7655.1	7603.6	7559.4	7552.0
10°	7942.2	7905.4	7794.9	7736.1	7655.1	7566.8	7485.8	7463.7	7404.8	7353.3	7353.3
12.5°	7949.5	7898.0	7758.1	7662.5	7552.0	7441.6	7338.6	7309.1	7257.6	7206.1	7198.7
15°	7993.7	7920.1	7743.4	7618.3	7456.4	7331.2	7220.8	7198.7	7154.6	7117.8	7117.8
17.5°	8037.8	7942.2	7721.3	7544.7	7345.9	7206.1	7103.0	7103.0	7073.6	7051.5	7051.5
20°	8059.9	7949.5	7677.2	7441.6	7213.5	7066.2	6970.6	6985.3	6977.9	6970.6	6970.6
22.5°	8111.5	7964.2	7640.4	7345.9	7073.6	6919.0	6830.7	6852.8	6845.4	6845.4	6852.8
25°	8192.4	8001.0	7610.9	7257.6	6941.1	6771.8	6676.1	6690.8	6690.8	6690.8	6690.8
27.5°	8302.8	8074.7	7603.6	7176.6	6808.6	6617.2	6499.5	6499.5	6470.0	6477.4	6484.7
30°	8472.1	8214.5	7618.3	7103.0	6668.8	6425.9	6286.0	6263.9	6256.6	6271.3	6278.6
32.5°	8678.2	8405.9	7706.6	7051.5	6521.5	6212.4	6035.7	6028.4	6006.3	6006.3	6006.3
35°	8935.8	8589.9	7787.6	7044.2	6374.3	5984.2	5792.8	5770.8	5719.2	5697.2	5697.2
37.5°	9267.1	8877.0	7883.3	6992.6	6249.2	5763.4	5535.2	5461.6	5402.7	5395.4	5395.4
40°	9671.9	9200.8	8023.1	6933.7	6116.7	5535.2	5233.4	5108.3	5115.7	5145.1	5145.1
42.5°	10150.4	9598.3	8199.8	6904.3	5925.3	5299.7	4880.1	4732.9	4784.4	4813.9	4821.2
45°	10709.8	10069.4	8398.5	6867.5	5748.7	5034.7	4504.7	4320.7	4342.8	4350.2	4357.5
47.5°	11357.5	10592.0	8604.6	6838.1	5549.9	4703.5	4092.5	3849.6	3842.3	3798.1	3812.8
50°	12034.7	11144.0	8818.1	6786.5	5307.0	4313.4	3658.3	3371.2	3312.3	3246.1	3253.4
52.5°	12756.0	11710.8	9016.8	6705.6	5005.3	3915.9	3246.1	2936.9	2819.1	2745.5	2760.2
55°	13551.0	12292.3	9208.2	6580.4	4688.7	3518.4	2878.0	2561.5	2414.3	2355.4	2362.8
57.5°	14279.7	12851.7	9348.0	6425.9	4342.8	3157.7	2554.2	2245.0	2149.3	2142.0	2149.3
60°	14986.3	13322.8	9406.9	6212.4	3989.5	2826.5	2252.4	2016.8	1950.6	1987.4	1994.7
62.5°	15582.5	13624.6	9377.5	5925.3	3628.8	2510.0	2009.5	1840.2	1796.0	1869.6	1877.0
65°	15928.5	13720.3	9171.4	5513.1	3238.7	2200.8	1781.3	1597.3	1575.2	1619.3	1641.4
67.5°	15472.1	13124.1	8612.0	4946.4	2804.4	1913.8	1560.5	1413.2	1376.4	1413.2	1413.2
70°	13712.9	11372.2	7287.1	4048.4	2326.0	1634.1	1354.4	1251.3	1221.9	1251.3	1244.0
72.5°	11423.8	9458.5	5741.3	3157.7	1832.8	1376.4	1177.7	1082.0	1052.6	1023.1	1008.4
75°	8862.2	7184.0	4166.1	2318.6	1383.8	1104.1	986.3	898.0	824.4	853.8	839.1
77.5°	6492.1	5042.1	2951.6	1604.6	993.7	853.8	772.9	706.6	655.1	714.0	706.6
80°	4180.9	3260.8	1972.7	1074.7	684.5	596.2	566.8	530.0	581.5	758.1	772.9
82.5°	2554.2	2068.3	1177.7	699.3	449.0	397.5	368.0	368.0	596.2	655.1	662.5
85°	1140.9	1096.7	640.4	360.7	250.3	228.2	206.1	265.0	242.9	176.7	184.0
87.5°	184.0	191.4	139.9	125.1	95.7	95.7	73.6	51.5	36.8	22.1	22.1
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)