

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: P842203

Luminaire Tested: **ARCH4-280-750-U-T3**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842203
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-280-750-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 1085mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 42024 lumens
Efficiency: N/A
Efficacy: 150.2 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B4 - U0 - G4

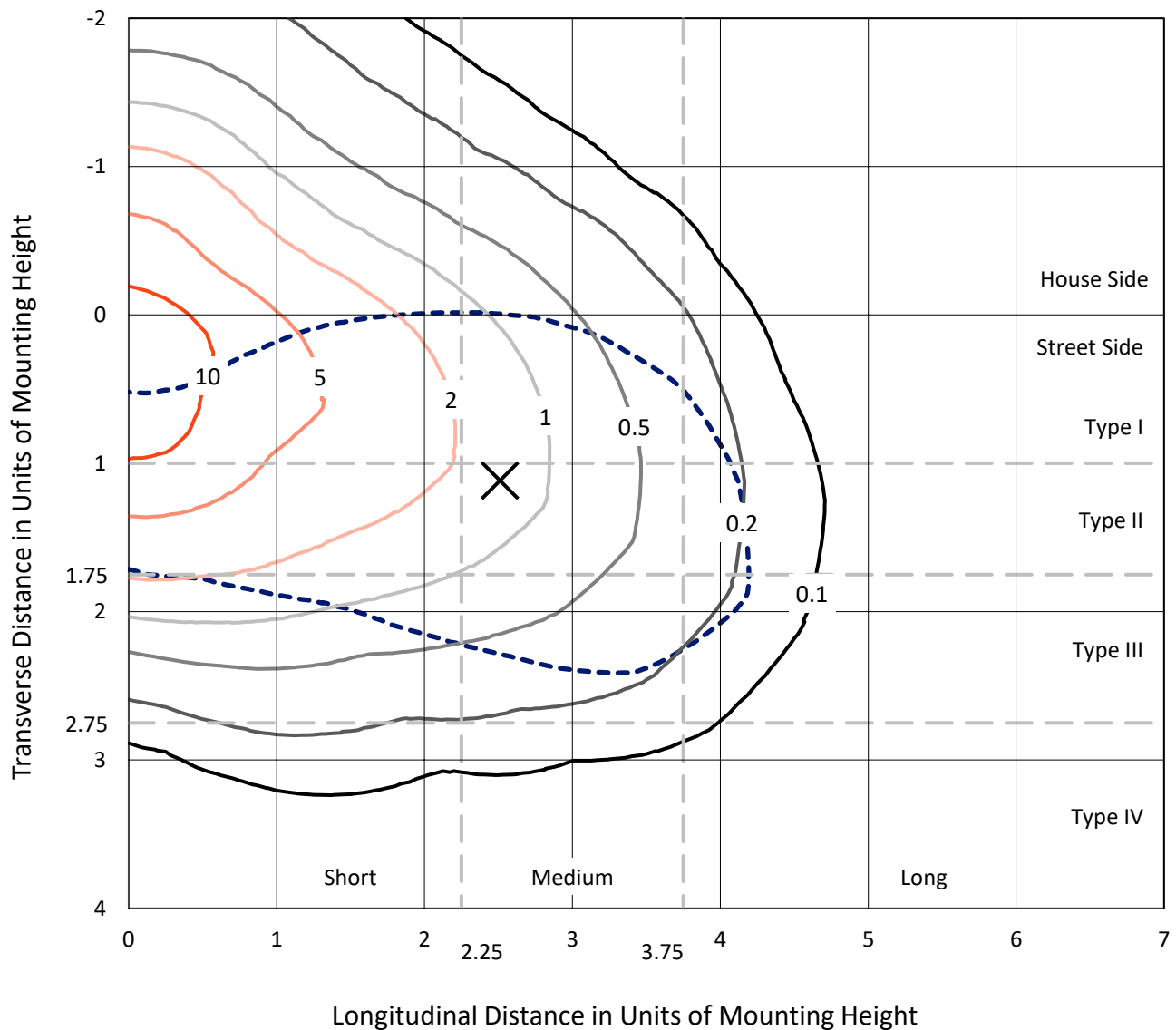
Input Watts (W): 279.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

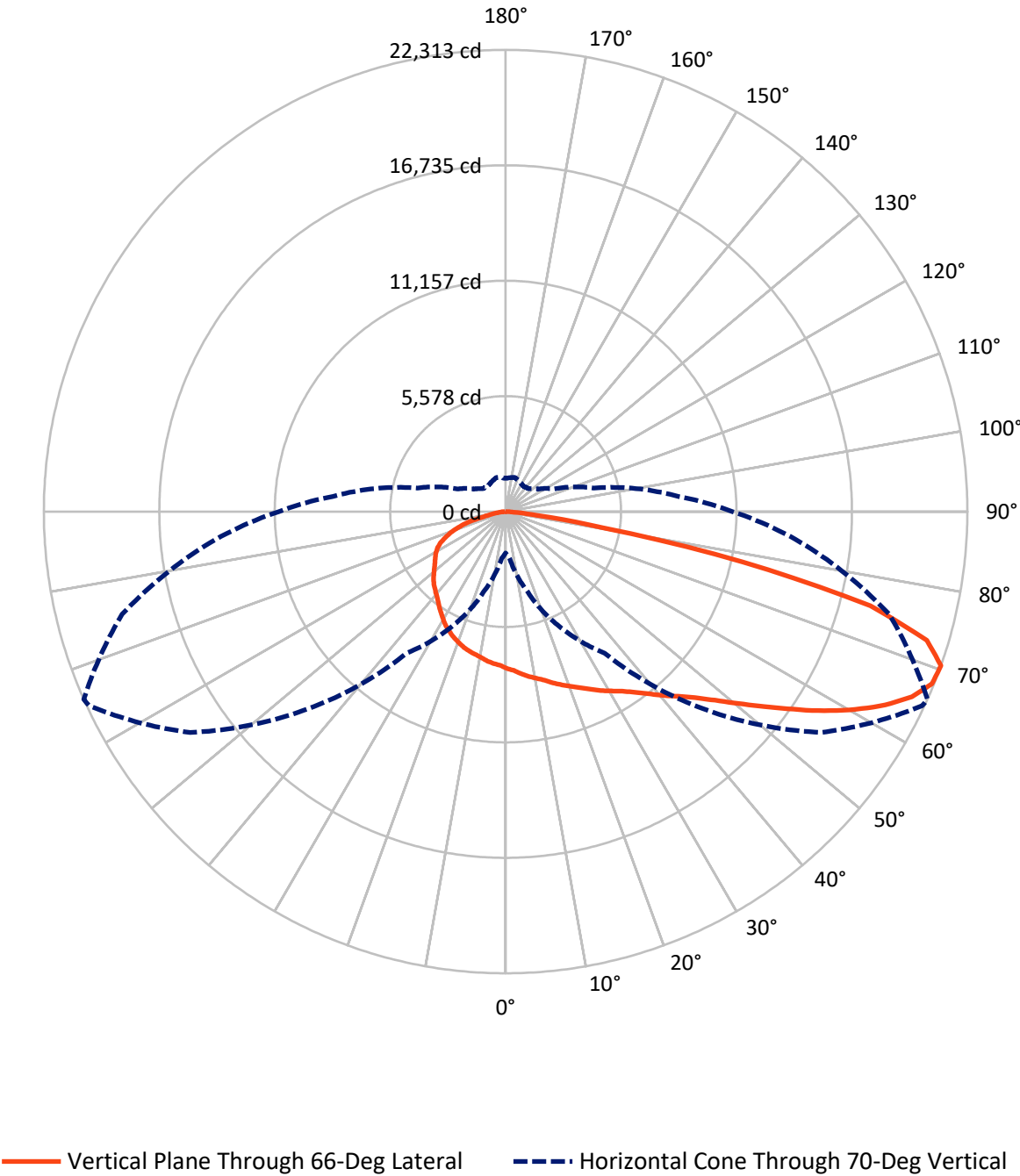
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.2 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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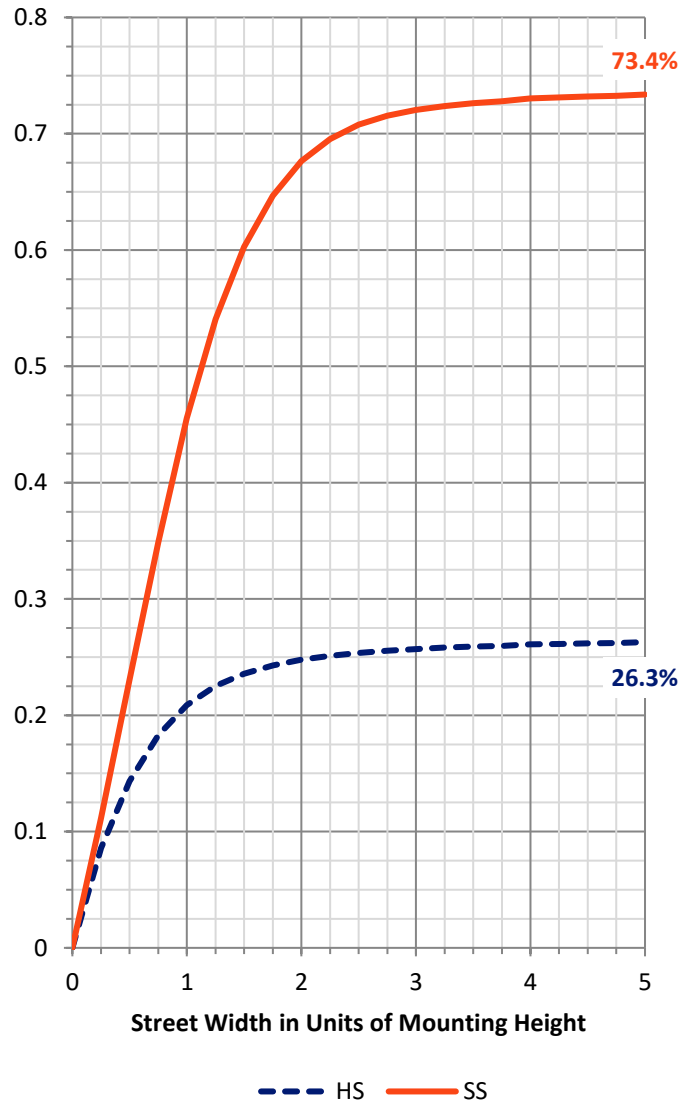
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11135.4	0.0	11135.4
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	30888.6	0.0	30888.6
	% Fixture	73.5	0.0	73.5
Total	Lumens	42024.0	0.0	42024.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	728.8	1.7
10°-20°	2186.1	5.2
20°-30°	3664.6	8.7
30°-40°	5487.1	13.1
40°-50°	7336.2	17.5
50°-60°	8565.3	20.4
60°-70°	8516.9	20.3
70°-80°	5042.1	12.0
80°-90°	497.0	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°	42024.0	100.0
0°-180°	42024.0	100.0

Coefficient of Utilization



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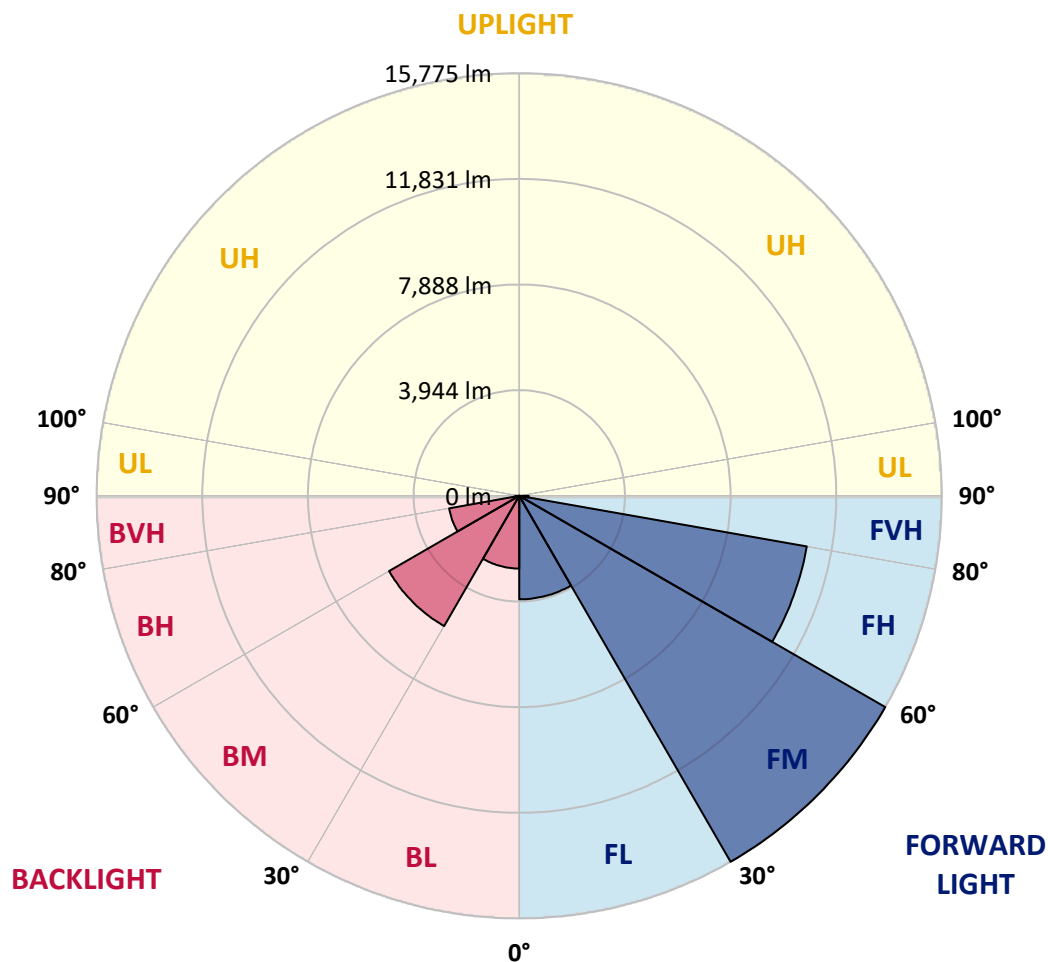
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3865.1	9.2			
FM	(30°-60°)	15775.2	37.5			
FH	(60°-80°)	10899.0	25.9			G4/12000
FVH	(80°-90°)	349.3	0.8			G3/500
BL	(0°-30°)	2714.3	6.5	B4/5000		
BM	(30°-60°)	5613.4	13.4	B4/8500		
BH	(60°-80°)	2660.0	6.3	B4/5000		G4/5000
BVH	(80°-90°)	147.7	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 III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	7584.4	7584.4	7584.4	7584.4	7584.4	7584.4	7584.4	7584.4	7584.4	7584.4	7584.4
2.5°	7863.2	7850.8	7844.6	7819.8	7764.1	7788.9	7733.1	7695.9	7689.7	7603.0	7553.4
5°	8185.4	8179.2	8166.8	8129.7	8042.9	8055.3	7962.4	7894.2	7875.6	7739.3	7633.9
7.5°	8458.1	8445.7	8439.5	8389.9	8297.0	8290.8	8179.2	8080.1	8049.1	7863.2	7702.1
10°	8668.7	8650.2	8662.5	8613.0	8513.8	8495.2	8352.7	8222.6	8191.6	7956.2	7733.1
12.5°	8848.4	8836.0	8854.6	8811.3	8730.7	8712.1	8569.6	8402.3	8365.1	8092.5	7801.2
15°	9046.7	9003.3	9040.5	9021.9	8966.2	8960.0	8829.8	8644.0	8594.4	8266.0	7906.6
17.5°	9152.1	9127.3	9170.6	9176.8	9152.1	9195.4	9071.5	8848.4	8805.1	8427.1	7999.5
20°	9226.4	9189.2	9238.8	9276.0	9294.6	9381.3	9282.2	9065.3	9015.7	8582.0	8086.3
22.5°	9480.5	9399.9	9406.1	9430.9	9443.3	9567.2	9505.3	9294.6	9245.0	8774.1	8191.6
25°	10118.7	9957.6	9852.3	9777.9	9691.1	9796.5	9759.3	9554.8	9511.5	9003.3	8321.7
27.5°	11110.1	10905.6	10695.0	10478.1	10137.3	10093.9	10031.9	9846.1	9796.5	9232.6	8451.9
30°	12237.9	12033.4	11785.5	11438.5	10800.3	10465.7	10323.2	10118.7	10062.9	9437.1	8575.8
32.5°	13359.4	13179.7	12931.9	12510.5	11599.6	10918.0	10614.4	10403.7	10348.0	9660.2	8724.5
35°	14233.1	14121.6	13960.5	13433.8	12392.8	11450.9	11035.8	10781.7	10719.7	10013.4	8997.2
37.5°	14939.5	14858.9	14722.6	14171.1	12969.0	11983.8	11519.1	11227.8	11159.7	10397.5	9288.4
40°	15980.5	15769.8	15658.3	14858.9	13470.9	12467.1	12064.4	11760.7	11686.4	10806.5	9523.8
42.5°	16866.6	16711.6	16575.3	15472.4	13948.1	12882.3	12578.7	12299.8	12200.7	11209.3	9777.9
45°	17015.3	17077.2	17009.1	15776.0	14704.0	13291.2	13099.2	12919.5	12826.5	11754.5	10162.1
47.5°	17021.5	17021.5	16618.7	15949.5	15639.7	13749.8	13656.8	13718.8	13619.7	12448.5	10620.6
50°	16575.3	16655.9	16445.2	15992.9	15887.5	14208.3	14338.4	14673.0	14573.9	13185.9	11116.3
52.5°	15652.1	15918.5	15912.3	15924.7	15528.1	14598.7	15057.2	15819.4	15652.1	14016.2	11643.0
55°	14022.4	14555.3	15032.4	15441.4	15218.3	14834.1	15937.1	17040.1	16866.6	14945.7	12175.9
57.5°	12628.2	12969.0	13563.9	14722.6	14852.7	15038.6	16761.2	18316.5	18161.6	15974.3	12733.6
60°	11035.8	11506.7	12101.5	13749.8	14406.6	15305.1	17665.9	19562.0	19413.3	17015.3	13272.7
62.5°	8588.2	9195.4	10385.1	12256.4	13756.0	15472.4	18378.5	20658.7	20590.6	18000.5	13756.0
65°	5985.7	6524.8	8191.6	10422.3	12721.2	15398.0	18948.5	21637.8	21575.8	18806.0	14096.8
67.5°	3494.8	4120.6	6004.3	8389.9	10893.2	14883.7	19134.4	22214.0	22214.0	19295.5	14189.7
70°	1995.2	2286.5	3959.5	6115.8	8352.7	13464.7	18613.9	22207.8	22313.2	19184.0	13805.5
72.5°	1394.2	1524.3	2664.4	4114.4	5663.5	10893.2	17250.7	21135.9	21278.4	18130.6	12491.9
75°	1084.4	1177.3	1877.5	2807.0	3569.1	7398.5	14270.3	17820.8	18198.8	15453.8	10100.1
77.5°	824.1	892.3	1096.8	1753.6	2286.5	4250.7	9418.5	11686.4	11711.2	9461.9	5415.6
80°	601.0	669.2	731.2	1072.0	1214.5	1989.0	3556.7	4882.8	4746.4	4579.1	2930.9
82.5°	359.4	427.6	446.1	582.5	594.9	848.9	1245.5	1573.9	1511.9	2013.8	1375.6
85°	154.9	216.9	229.3	266.4	254.1	347.0	495.7	415.2	371.8	427.6	297.4
87.5°	37.2	62.0	62.0	68.2	55.8	86.7	92.9	68.2	62.0	74.4	74.4
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°	7584.4	7584.4	7584.4	7584.4	7584.4	7584.4	7584.4	7584.4	7584.4	7584.4	7584.4
2.5°	7541.0	7522.4	7528.6	7423.3	7392.3	7361.3	7342.7	7330.3	7317.9	7336.5	7355.1
5°	7596.8	7553.4	7503.8	7348.9	7286.9	7218.8	7169.2	7125.8	7107.3	7107.3	7125.8
7.5°	7640.1	7565.8	7460.4	7256.0	7144.4	7051.5	6970.9	6915.2	6884.2	6884.2	6902.8
10°	7646.3	7541.0	7373.7	7125.8	6977.1	6840.8	6747.9	6685.9	6642.5	6642.5	6654.9
12.5°	7683.5	7541.0	7324.1	7026.7	6840.8	6673.5	6562.0	6469.0	6450.4	6450.4	6462.8
15°	7745.5	7572.0	7293.1	6940.0	6716.9	6524.8	6400.9	6301.7	6264.5	6289.3	6295.5
17.5°	7801.2	7590.6	7237.4	6828.4	6562.0	6351.3	6215.0	6128.2	6078.7	6134.4	6134.4
20°	7838.4	7590.6	7156.8	6685.9	6394.7	6159.2	6029.1	5923.7	5886.6	5954.7	5960.9
22.5°	7894.2	7584.4	7070.1	6543.4	6215.0	5967.1	5837.0	5756.4	5737.9	5812.2	5837.0
25°	7956.2	7596.8	6977.1	6382.3	6016.7	5775.0	5675.9	5638.7	5651.1	5744.0	5775.0
27.5°	8024.3	7621.6	6884.2	6202.6	5799.8	5582.9	5527.2	5545.8	5595.3	5713.1	5750.2
30°	8086.3	7627.7	6754.1	5991.9	5552.0	5347.5	5372.3	5452.8	5527.2	5644.9	5688.3
32.5°	8166.8	7633.9	6617.7	5762.6	5285.5	5136.8	5248.3	5378.5	5452.8	5564.4	5613.9
35°	8365.1	7739.3	6512.4	5539.6	5037.7	4957.1	5143.0	5310.3	5353.7	5452.8	5496.2
37.5°	8594.4	7912.8	6456.6	5310.3	4796.0	4777.4	5012.9	5180.2	5192.6	5254.5	5297.9
40°	8736.9	7987.1	6394.7	5118.2	4579.1	4591.5	4833.2	4963.3	4938.5	4981.9	5012.9
42.5°	8879.4	8011.9	6264.5	4957.1	4374.6	4387.0	4572.9	4665.9	4678.3	4771.2	4814.6
45°	9121.1	8080.1	6122.0	4808.4	4188.8	4145.4	4256.9	4380.8	4542.0	4721.6	4771.2
47.5°	9443.3	8222.6	5973.3	4628.7	4009.1	3866.5	3909.9	4126.8	4294.1	4461.4	4492.4
50°	9771.7	8365.1	5837.0	4411.8	3829.4	3569.1	3587.7	3786.0	3922.3	4052.4	4071.0
52.5°	10093.9	8489.0	5719.3	4207.3	3624.9	3215.9	3290.3	3494.8	3587.7	3649.7	3668.3
55°	10416.1	8594.4	5613.9	4033.8	3389.4	2937.1	3005.2	3197.3	3290.3	3321.3	3333.7
57.5°	10750.7	8718.3	5533.4	3885.1	3123.0	2689.2	2732.6	2868.9	2955.7	2992.9	2980.5
60°	11029.6	8823.7	5490.0	3730.2	2856.5	2460.0	2447.6	2571.5	2695.4	2732.6	2720.2
62.5°	11246.4	8891.8	5421.8	3531.9	2621.1	2230.7	2168.7	2329.8	2460.0	2484.8	2503.3
65°	11364.2	8898.0	5254.5	3277.9	2379.4	1982.8	1939.5	2100.6	2181.1	2205.9	2205.9
67.5°	11345.6	8798.9	4926.1	2937.1	2156.3	1759.8	1722.6	1821.7	1939.5	1958.1	1939.5
70°	10961.4	8389.9	4399.4	2577.7	1889.9	1561.5	1493.3	1592.5	1704.0	1635.8	1604.9
72.5°	9870.8	7330.3	3624.9	2181.1	1592.5	1313.6	1282.7	1381.8	1388.0	1400.4	1369.4
75°	7788.9	5459.0	2714.0	1697.8	1288.8	1103.0	1096.8	1078.2	1103.0	1152.5	1115.3
77.5°	4089.6	2726.4	1468.5	1041.0	935.7	886.1	842.7	836.5	910.9	941.9	904.7
80°	2218.3	1530.5	842.7	625.8	570.1	576.3	632.0	619.6	700.2	718.8	687.8
82.5°	966.6	725.0	415.2	378.0	378.0	371.8	390.4	433.7	520.5	520.5	415.2
85°	210.7	179.7	161.1	185.9	210.7	210.7	210.7	210.7	148.7	80.6	55.8
87.5°	68.2	68.2	68.2	74.4	80.6	80.6	68.2	49.6	31.0	6.2	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)