

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: P841987

Luminaire Tested: **ARCH4-250-750-U-T3**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841987
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: ARCH4-250-750-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 975mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 38687 lumens
Efficiency: N/A
Efficacy: 155.1 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): 249.5
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



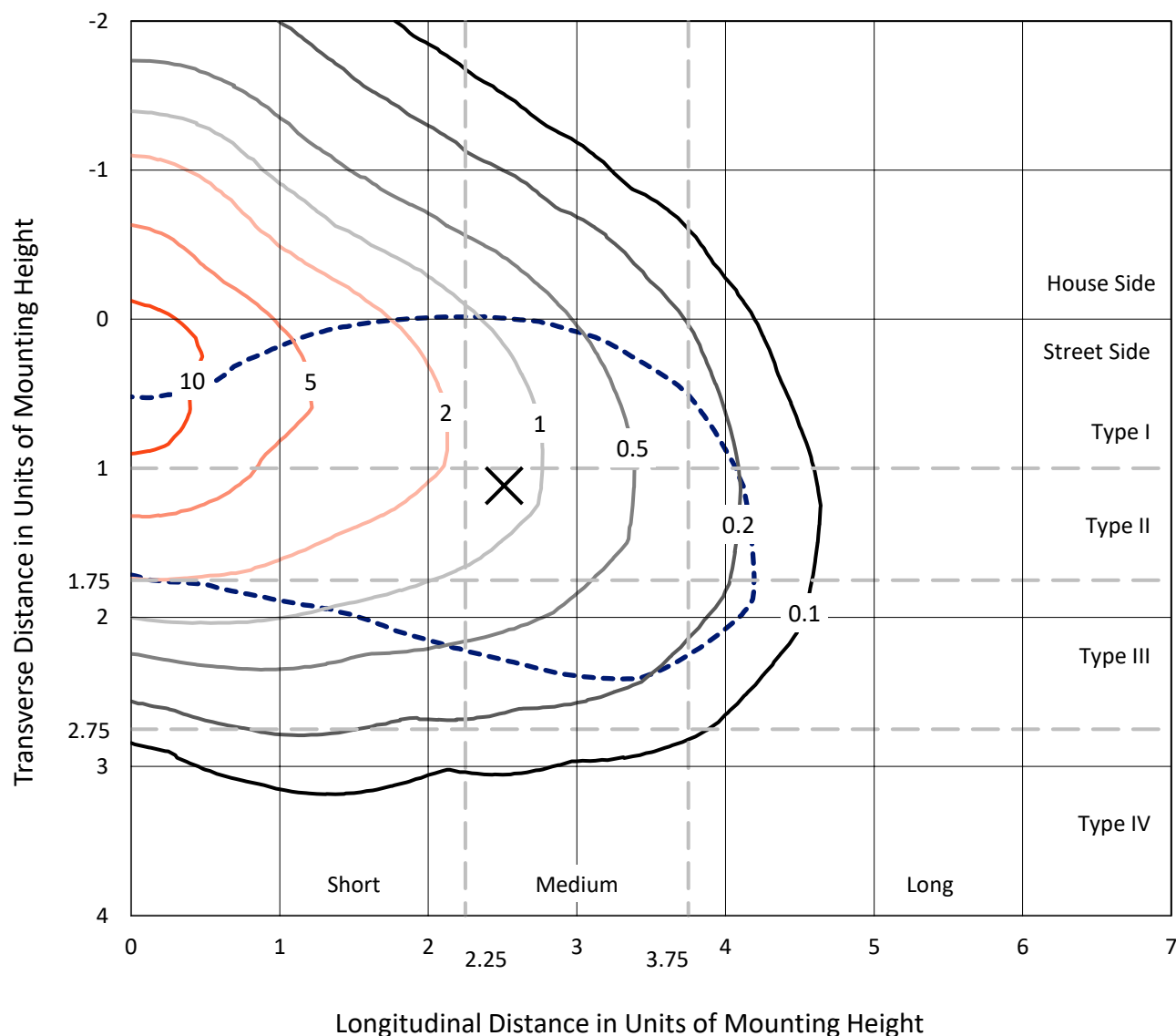
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

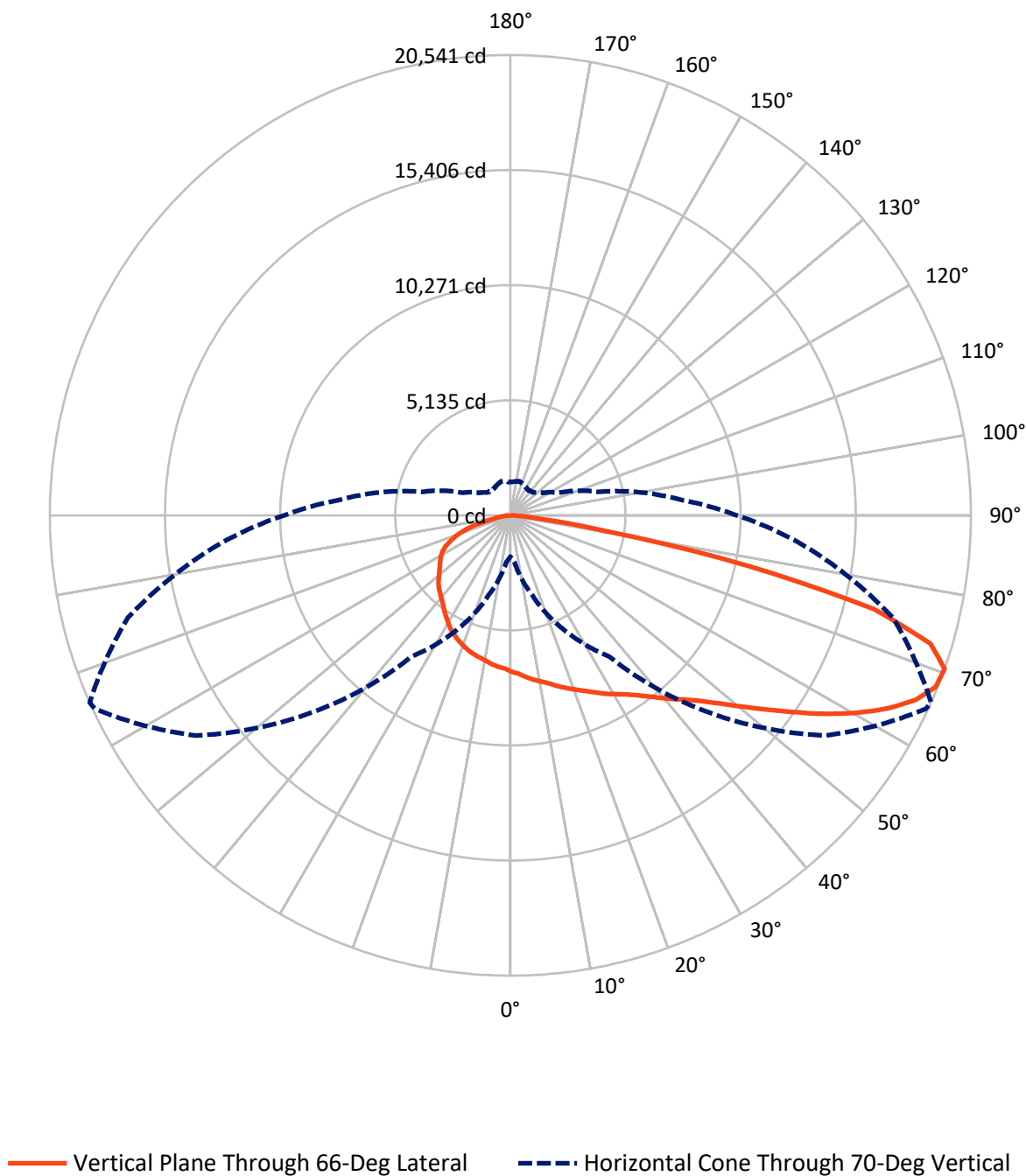
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.1 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



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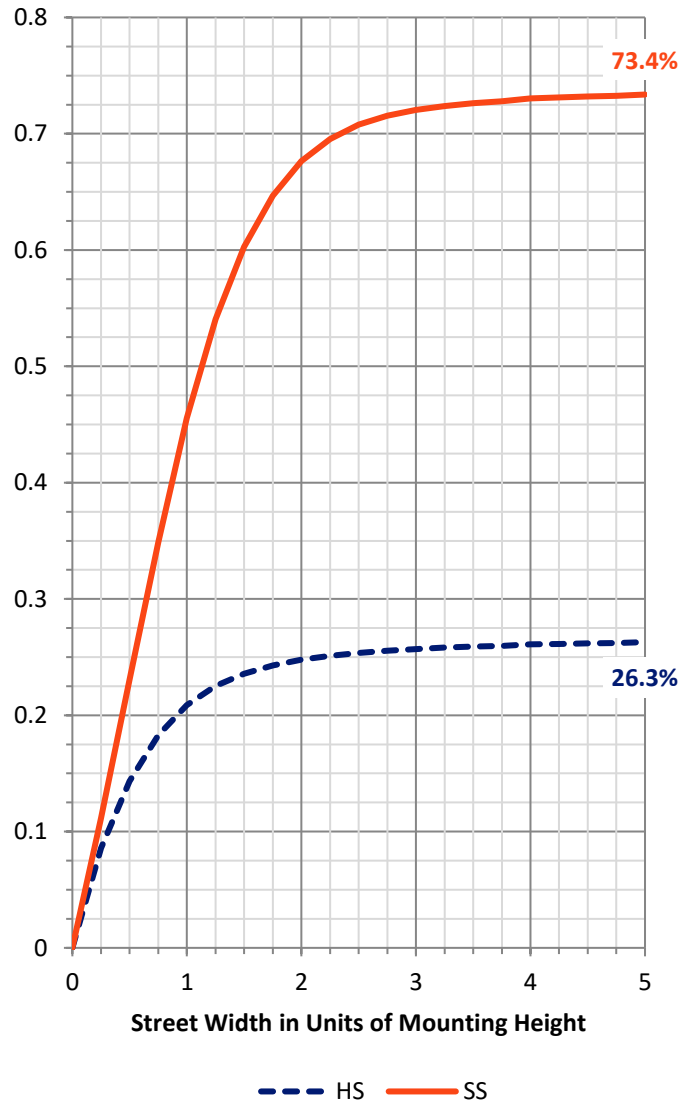
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10251.2	0.0	10251.2
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	28435.8	0.0	28435.8
	% Fixture	73.5	0.0	73.5
Total	Lumens	38687.0	0.0	38687.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	670.9	1.7
10°-20°	2012.5	5.2
20°-30°	3373.6	8.7
30°-40°	5051.4	13.1
40°-50°	6753.7	17.5
50°-60°	7885.2	20.4
60°-70°	7840.6	20.3
70°-80°	4641.7	12.0
80°-90°	457.5	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°	38687.0	100.0
0°-180°	38687.0	100.0

Coefficient of Utilization



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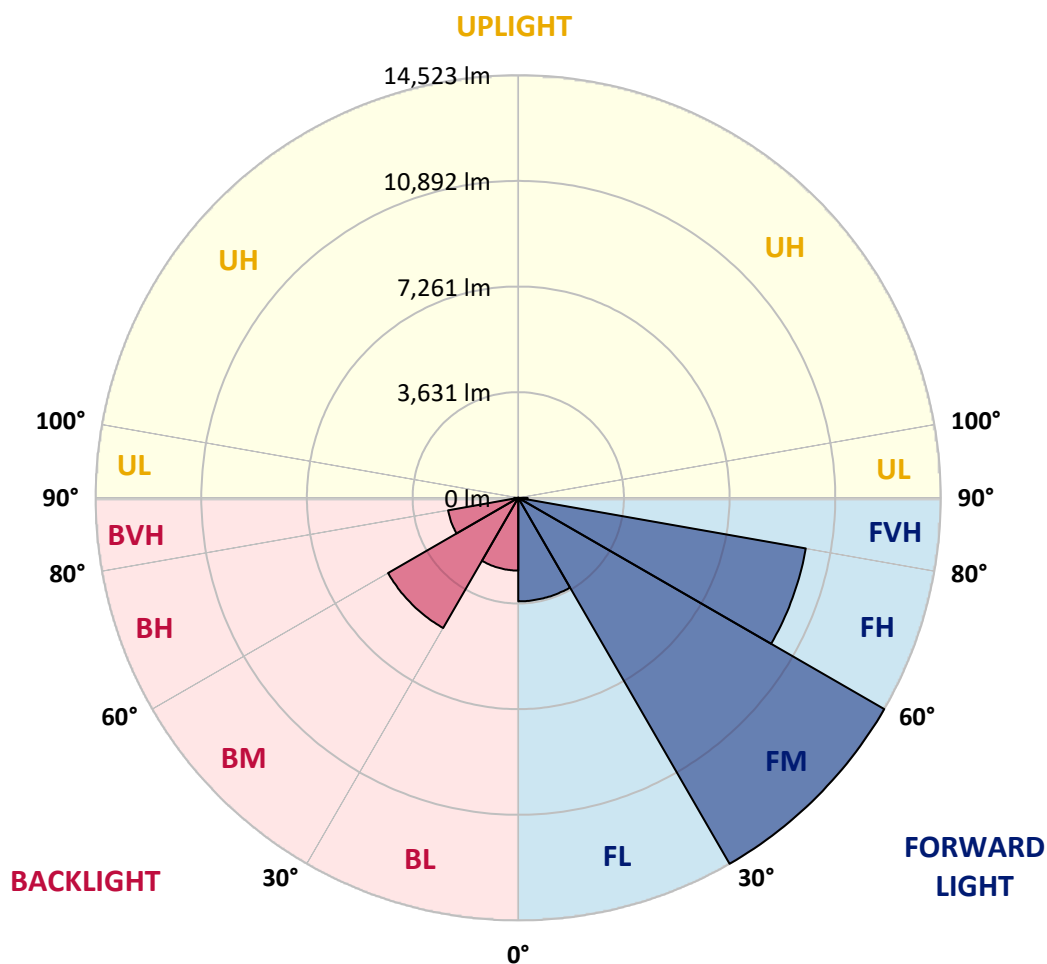
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3558.2	9.2			
FM	(30°-60°)	14522.6	37.5			
FH	(60°-80°)	10033.5	25.9			G4/12000
FVH	(80°-90°)	321.5	0.8			G3/500
BL	(0°-30°)	2498.8	6.5	B3/2500		
BM	(30°-60°)	5167.7	13.4	B4/8500		
BH	(60°-80°)	2448.7	6.3	B3/2500		G3/2500
BVH	(80°-90°)	136.0	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 III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	6982.1	6982.1	6982.1	6982.1	6982.1	6982.1	6982.1	6982.1	6982.1	6982.1	6982.1
2.5°	7238.8	7227.4	7221.7	7198.9	7147.5	7170.4	7119.0	7084.8	7079.1	6999.2	6953.6
5°	7535.4	7529.7	7518.3	7484.1	7404.2	7415.7	7330.1	7267.3	7250.2	7124.7	7027.8
7.5°	7786.4	7775.0	7769.3	7723.7	7638.1	7632.4	7529.7	7438.5	7409.9	7238.8	7090.5
10°	7980.4	7963.3	7974.7	7929.0	7837.8	7820.7	7689.5	7569.7	7541.1	7324.4	7119.0
12.5°	8145.8	8134.4	8151.5	8111.6	8037.4	8020.3	7889.1	7735.1	7700.9	7449.9	7181.8
15°	8328.3	8288.4	8322.6	8305.5	8254.2	8248.5	8128.7	7957.6	7911.9	7609.6	7278.7
17.5°	8425.3	8402.5	8442.4	8448.1	8425.3	8465.3	8351.2	8145.8	8105.9	7757.9	7364.3
20°	8493.8	8459.5	8505.2	8539.4	8556.5	8636.4	8545.1	8345.5	8299.8	7900.5	7444.2
22.5°	8727.7	8653.5	8659.2	8682.0	8693.4	8807.5	8750.5	8556.5	8510.9	8077.4	7541.1
25°	9315.2	9166.9	9069.9	9001.5	8921.6	9018.6	8984.3	8796.1	8756.2	8288.4	7660.9
27.5°	10227.9	10039.7	9845.7	9646.1	9332.3	9292.4	9235.3	9064.2	9018.6	8499.5	7780.7
30°	11266.1	11077.8	10849.7	10530.2	9942.7	9634.6	9503.4	9315.2	9263.9	8687.7	7894.8
32.5°	12298.6	12133.1	11905.0	11517.1	10678.5	10051.1	9771.5	9577.6	9526.3	8893.1	8031.7
35°	13102.9	13000.2	12851.9	12367.0	11408.7	10541.6	10159.4	9925.6	9868.5	9218.2	8282.7
37.5°	13753.2	13679.0	13553.5	13045.8	11939.2	11032.2	10604.4	10336.3	10273.5	9571.9	8550.8
40°	14711.5	14517.6	14414.9	13679.0	12401.3	11477.1	11106.4	10826.9	10758.4	9948.4	8767.6
42.5°	15527.2	15384.6	15259.1	14243.8	12840.5	11859.3	11579.8	11323.1	11231.9	10319.2	9001.5
45°	15664.1	15721.2	15658.4	14523.3	13536.4	12235.8	12059.0	11893.6	11808.0	10821.1	9355.1
47.5°	15669.8	15669.8	15299.1	14683.0	14397.8	12657.9	12572.4	12629.4	12538.2	11460.0	9777.3
50°	15259.1	15333.3	15139.3	14722.9	14625.9	13080.1	13199.9	13507.9	13416.6	12138.9	10233.6
52.5°	14409.2	14654.5	14648.8	14660.2	14295.1	13439.4	13861.6	14563.2	14409.2	12903.2	10718.5
55°	12908.9	13399.5	13838.7	14215.2	14009.9	13656.2	14671.6	15687.0	15527.2	13758.9	11209.0
57.5°	11625.5	11939.2	12486.8	13553.5	13673.3	13844.5	15430.3	16862.1	16719.4	14705.8	11722.4
60°	10159.4	10593.0	11140.6	12657.9	13262.6	14089.7	16263.1	18008.6	17871.7	15664.1	12218.7
62.5°	7906.2	8465.3	9560.5	11283.2	12663.7	14243.8	16919.1	19018.3	18955.5	16571.1	12663.7
65°	5510.4	6006.7	7541.1	9594.7	11711.0	14175.3	17443.9	19919.6	19862.5	17312.7	12977.4
67.5°	3217.3	3793.4	5527.5	7723.7	10028.2	13701.8	17615.0	20450.1	20450.1	17763.3	13063.0
70°	1836.8	2104.9	3645.1	5630.2	7689.5	12395.5	17135.9	20444.4	20541.4	17660.7	12709.3
72.5°	1283.5	1403.3	2452.9	3787.7	5213.8	10028.2	15880.9	19457.5	19588.7	16690.9	11500.0
75°	998.3	1083.8	1728.4	2584.1	3285.7	6811.0	13137.1	16405.7	16753.7	14226.6	9298.1
77.5°	758.7	821.4	1009.7	1614.3	2104.9	3913.2	8670.6	10758.4	10781.2	8710.5	4985.6
80°	553.3	616.1	673.1	986.9	1118.1	1831.1	3274.3	4495.0	4369.5	4215.5	2698.2
82.5°	330.9	393.6	410.7	536.2	547.6	781.5	1146.6	1448.9	1391.9	1853.9	1266.4
85°	142.6	199.7	211.1	245.3	233.9	319.4	456.3	382.2	342.3	393.6	273.8
87.5°	34.2	57.0	57.0	62.7	51.3	79.9	85.6	62.7	57.0	68.5	68.5
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°	6982.1	6982.1	6982.1	6982.1	6982.1	6982.1	6982.1	6982.1	6982.1	6982.1	6982.1
2.5°	6942.2	6925.1	6930.8	6833.8	6805.3	6776.8	6759.7	6748.2	6736.8	6753.9	6771.1
5°	6993.5	6953.6	6908.0	6765.4	6708.3	6645.6	6599.9	6560.0	6542.9	6542.9	6560.0
7.5°	7033.5	6965.0	6868.0	6679.8	6577.1	6491.5	6417.4	6366.1	6337.5	6337.5	6354.6
10°	7039.2	6942.2	6788.2	6560.0	6423.1	6297.6	6212.0	6155.0	6115.1	6115.1	6126.5
12.5°	7073.4	6942.2	6742.5	6468.7	6297.6	6143.6	6040.9	5955.3	5938.2	5938.2	5949.6
15°	7130.4	6970.7	6714.0	6388.9	6183.5	6006.7	5892.6	5801.3	5767.1	5789.9	5795.6
17.5°	7181.8	6987.8	6662.7	6286.2	6040.9	5847.0	5721.5	5641.6	5596.0	5647.3	5647.3
20°	7216.0	6987.8	6588.5	6155.0	5886.9	5670.1	5550.3	5453.4	5419.1	5481.9	5487.6
22.5°	7267.3	6982.1	6508.7	6023.8	5721.5	5493.3	5373.5	5299.3	5282.2	5350.7	5373.5
25°	7324.4	6993.5	6423.1	5875.5	5538.9	5316.5	5225.2	5191.0	5202.4	5287.9	5316.5
27.5°	7387.1	7016.3	6337.5	5710.1	5339.3	5139.6	5088.3	5105.4	5151.0	5259.4	5293.6
30°	7444.2	7022.1	6217.7	5516.1	5111.1	4922.9	4945.7	5019.8	5088.3	5196.7	5236.6
32.5°	7518.3	7027.8	6092.2	5305.0	4865.8	4728.9	4831.6	4951.4	5019.8	5122.5	5168.1
35°	7700.9	7124.7	5995.3	5099.7	4637.6	4563.5	4734.6	4888.6	4928.6	5019.8	5059.8
37.5°	7911.9	7284.5	5943.9	4888.6	4415.2	4398.1	4614.8	4768.8	4780.2	4837.3	4877.2
40°	8043.1	7352.9	5886.9	4711.8	4215.5	4226.9	4449.4	4569.2	4546.4	4586.3	4614.8
42.5°	8174.3	7375.7	5767.1	4563.5	4027.3	4038.7	4209.8	4295.4	4306.8	4392.3	4432.3
45°	8396.8	7438.5	5635.9	4426.6	3856.1	3816.2	3918.9	4033.0	4181.3	4346.7	4392.3
47.5°	8693.4	7569.7	5499.0	4261.1	3690.7	3559.5	3599.4	3799.1	3953.1	4107.1	4135.7
50°	8995.8	7700.9	5373.5	4061.5	3525.3	3285.7	3302.8	3485.4	3610.9	3730.6	3747.8
52.5°	9292.4	7815.0	5265.1	3873.3	3337.0	2960.6	3029.0	3217.3	3302.8	3359.9	3377.0
55°	9589.0	7911.9	5168.1	3713.5	3120.3	2703.9	2766.6	2943.4	3029.0	3057.5	3068.9
57.5°	9897.0	8026.0	5094.0	3576.6	2875.0	2475.7	2515.6	2641.1	2721.0	2755.2	2743.8
60°	10153.7	8123.0	5054.1	3434.0	2629.7	2264.6	2253.2	2367.3	2481.4	2515.6	2504.2
62.5°	10353.4	8185.7	4991.3	3251.5	2412.9	2053.6	1996.5	2144.8	2264.6	2287.4	2304.6
65°	10461.8	8191.4	4837.3	3017.6	2190.5	1825.4	1785.5	1933.8	2007.9	2030.7	2030.7
67.5°	10444.7	8100.2	4535.0	2703.9	1985.1	1620.0	1585.8	1677.1	1785.5	1802.6	1785.5
70°	10091.0	7723.7	4050.1	2373.0	1739.8	1437.5	1374.7	1466.0	1568.7	1505.9	1477.4
72.5°	9087.0	6748.2	3337.0	2007.9	1466.0	1209.3	1180.8	1272.1	1277.8	1289.2	1260.7
75°	7170.4	5025.5	2498.5	1563.0	1186.5	1015.4	1009.7	992.6	1015.4	1061.0	1026.8
77.5°	3764.9	2509.9	1351.9	958.3	861.4	815.7	775.8	770.1	838.5	867.1	832.8
80°	2042.2	1409.0	775.8	576.1	524.8	530.5	581.8	570.4	644.6	661.7	633.2
82.5°	889.9	667.4	382.2	348.0	348.0	342.3	359.4	399.3	479.2	479.2	382.2
85°	193.9	165.4	148.3	171.1	193.9	193.9	193.9	193.9	136.9	74.2	51.3
87.5°	62.7	62.7	62.7	68.5	74.2	74.2	62.7	45.6	28.5	5.7	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)