

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: P841409

Luminaire Tested: **ARCH4-170-750-U-T2U**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841409
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: ARCH4-170-750-U-T2U
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 1380mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28734 lumens
Efficiency: N/A
Efficacy: 169.2 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

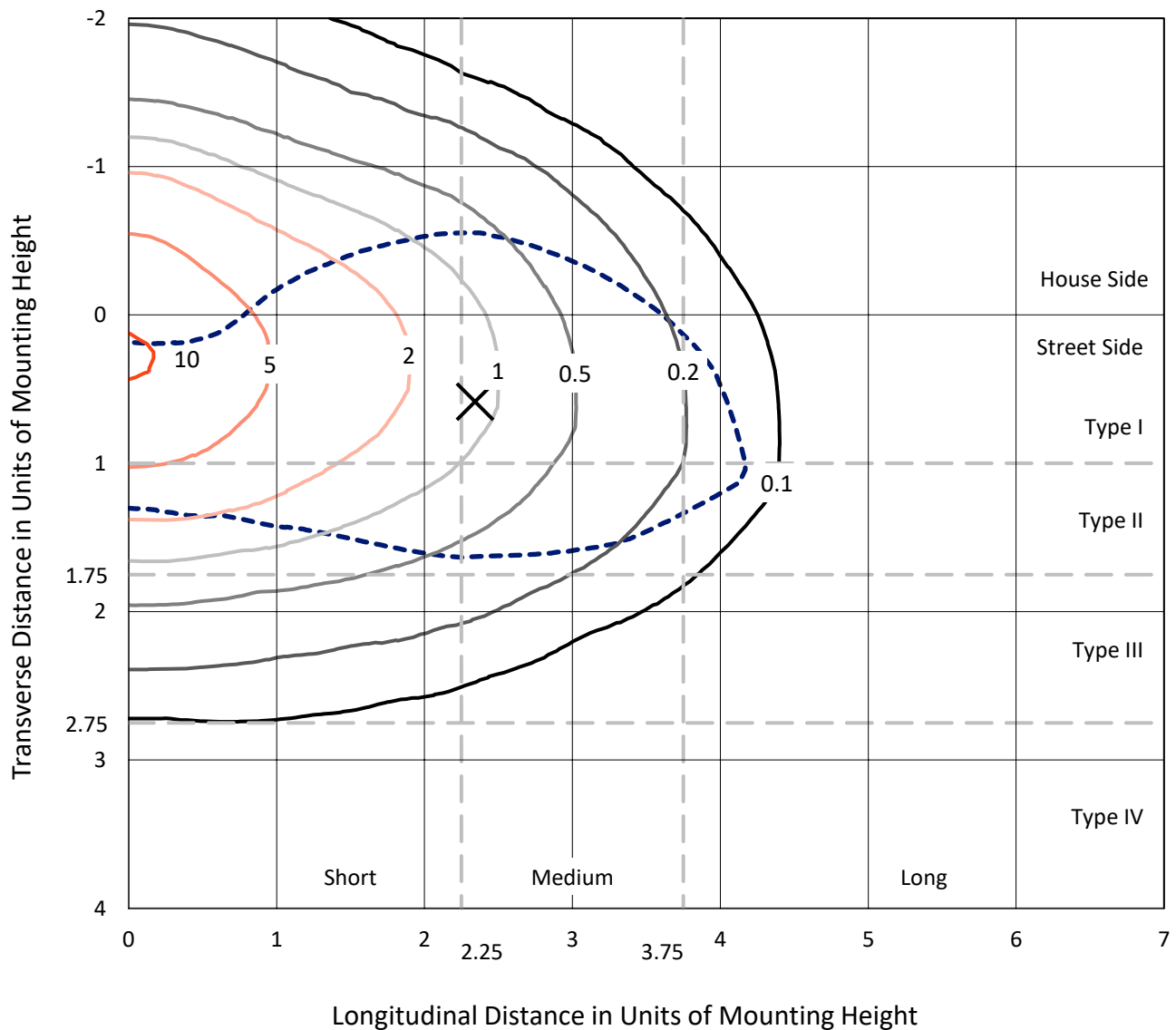
Input Watts (W): 169.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

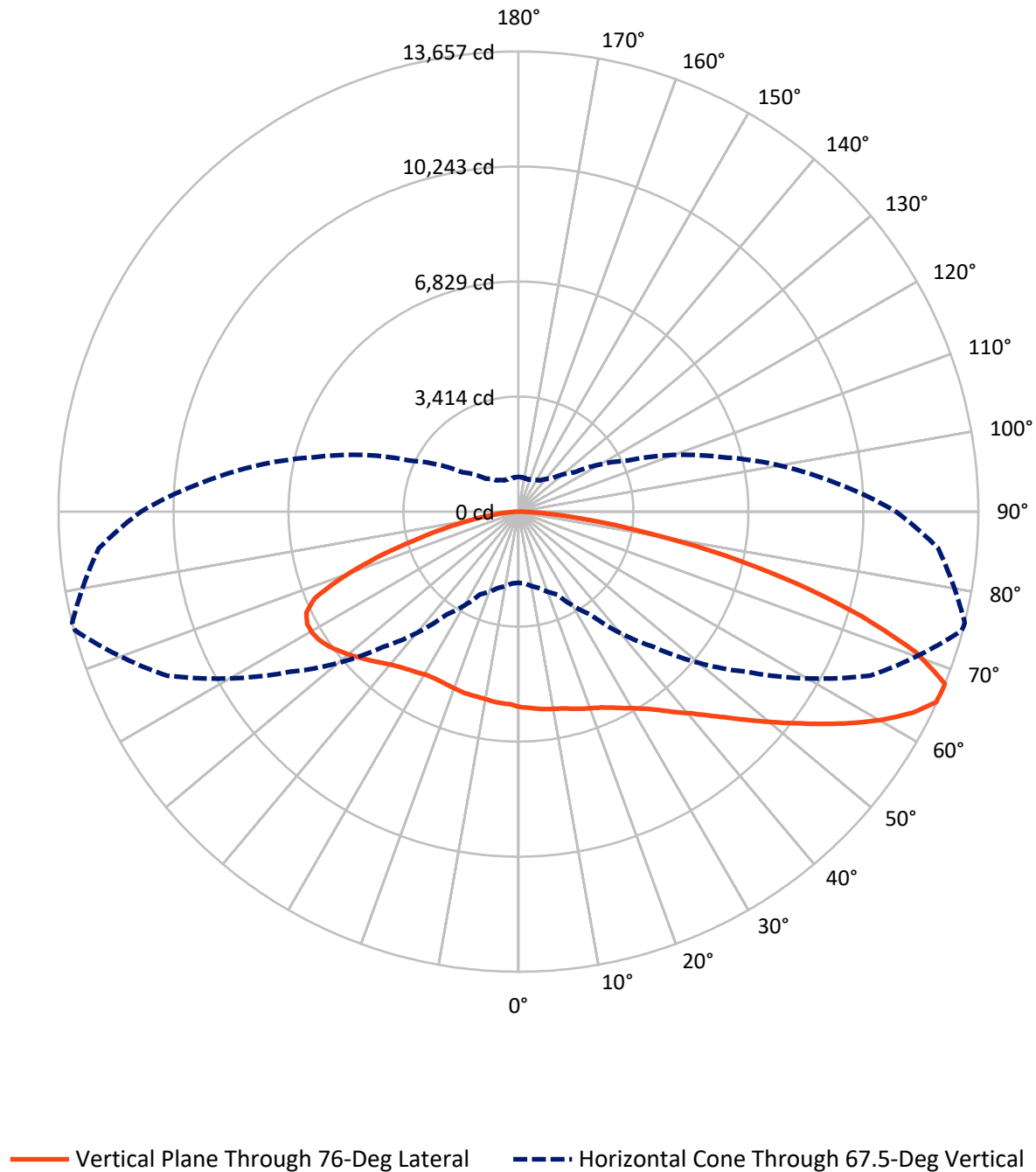
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.5 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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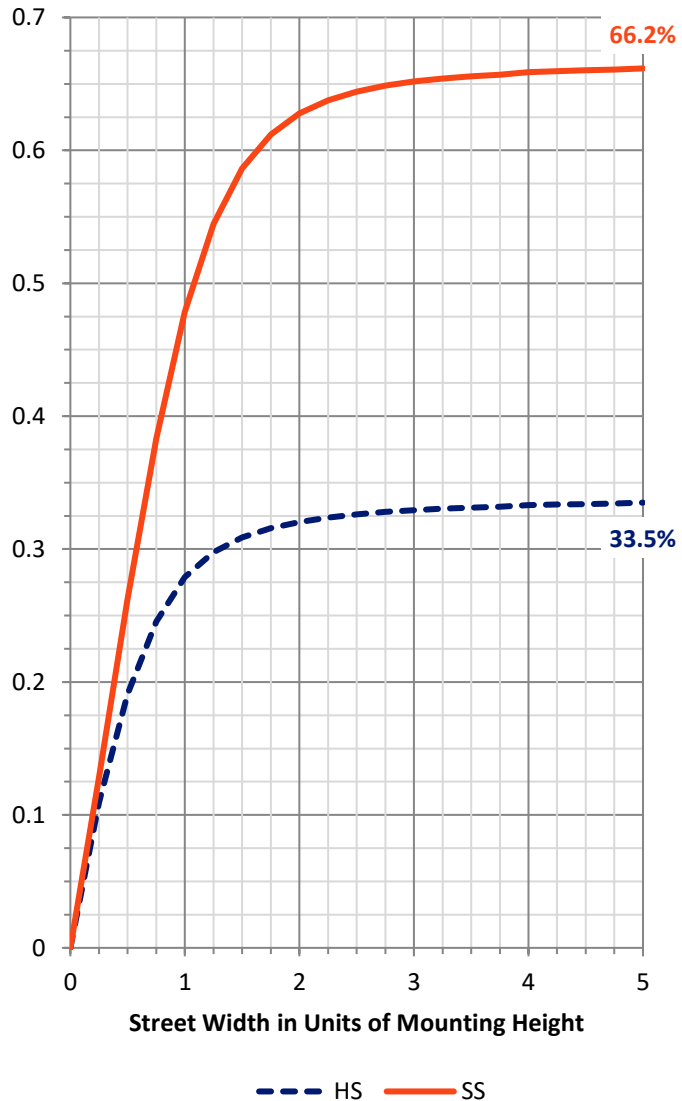
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9709.4	0.0	9709.4
	% Fixture	33.8	0.0	33.8
Street Side	Lumens	19024.6	0.0	19024.6
	% Fixture	66.2	0.0	66.2
Total	Lumens	28734.0	0.0	28734.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	559.7	1.9
10°-20°	1711.1	6.0
20°-30°	2907.1	10.1
30°-40°	4136.5	14.4
40°-50°	5224.2	18.2
50°-60°	5656.2	19.7
60°-70°	5260.9	18.3
70°-80°	2825.6	9.8
80°-90°	452.8	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°	28734.0	100.0
0°-180°	28734.0	100.0

Coefficient of Utilization



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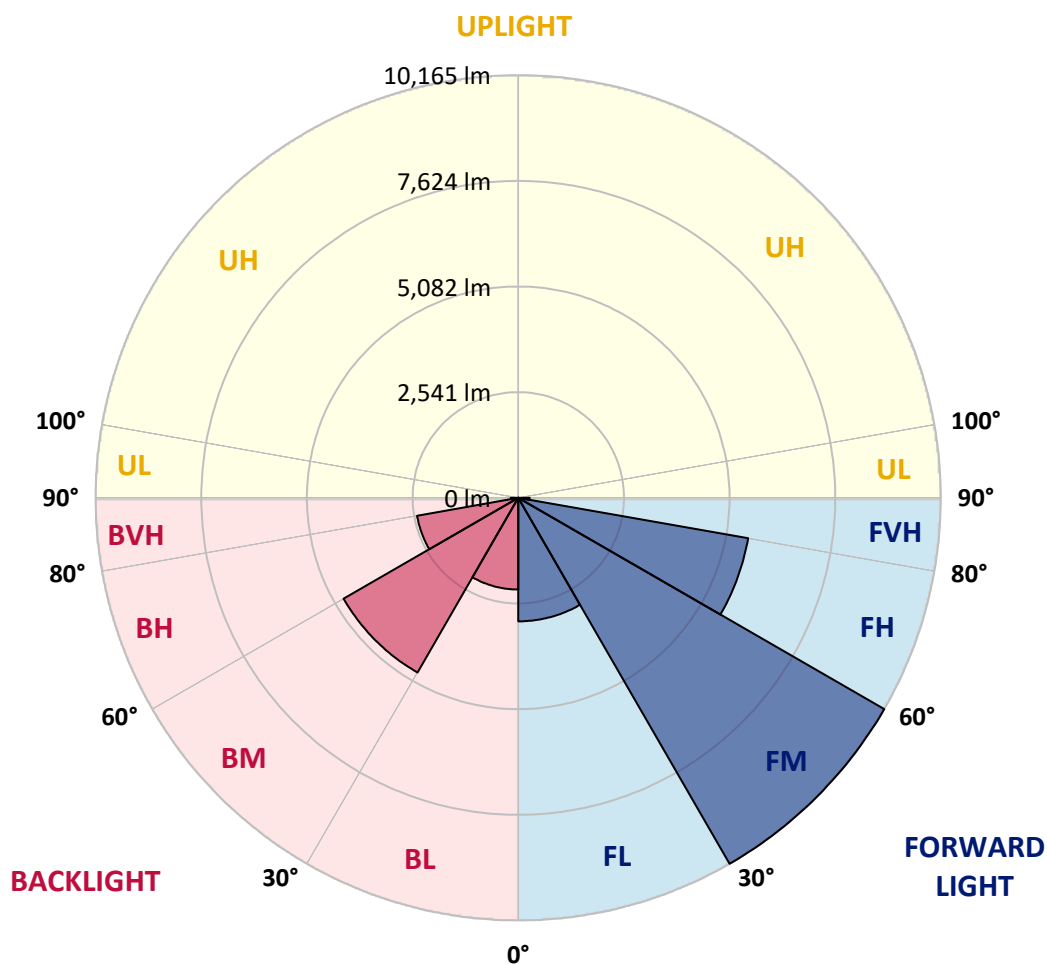
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2971.4	10.3			
FM	(30°-60°)	10165.0	35.4			
FH	(60°-80°)	5614.4	19.5			G3/7500
FVH	(80°-90°)	273.9	1.0			G3/500
BL	(0°-30°)	2206.5	7.7	B3/2500		
BM	(30°-60°)	4851.9	16.9	B3/5000		
BH	(60°-80°)	2472.1	8.6	B3/2500		G3/2500
BVH	(80°-90°)	178.9	0.6			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	5804.2	5804.2	5804.2	5804.2	5804.2	5804.2	5804.2	5804.2	5804.2	5804.2	5804.2
2.5°	5980.3	5969.6	5926.9	5932.2	5932.2	5926.9	5862.9	5836.2	5836.2	5830.9	5772.2
5°	6193.6	6177.6	6129.6	6119.0	6097.6	6070.9	5969.6	5910.9	5884.2	5878.9	5798.9
7.5°	6444.4	6423.0	6364.4	6332.3	6279.0	6209.6	6081.6	5990.9	5926.9	5921.6	5809.5
10°	6695.1	6673.8	6604.4	6545.7	6471.0	6359.0	6193.6	6060.3	5958.9	5948.2	5814.9
12.5°	6993.9	6972.5	6887.2	6812.5	6700.4	6551.1	6332.3	6151.0	6012.3	5996.3	5830.9
15°	7308.6	7276.6	7191.2	7105.9	6967.2	6775.1	6513.7	6273.7	6097.6	6070.9	5878.9
17.5°	7570.0	7527.3	7458.0	7372.6	7217.9	6993.9	6695.1	6396.4	6177.6	6156.3	5926.9
20°	7794.1	7762.1	7687.4	7607.3	7442.0	7196.6	6865.8	6519.1	6252.3	6225.6	5964.2
22.5°	8007.5	7964.8	7922.1	7863.4	7682.0	7410.0	7063.2	6668.4	6348.3	6316.3	6012.3
25°	8252.9	8204.8	8188.8	8156.8	7943.4	7666.0	7303.3	6855.1	6481.7	6444.4	6097.6
27.5°	8556.9	8503.6	8471.6	8471.6	8215.5	7927.4	7559.3	7073.9	6636.4	6604.4	6204.3
30°	8877.0	8813.0	8765.0	8765.0	8476.9	8188.8	7810.1	7292.6	6812.5	6775.1	6343.0
32.5°	9159.8	9095.7	9042.4	9037.1	8738.3	8450.2	8071.5	7532.7	7025.9	6977.8	6513.7
35°	9378.5	9319.8	9271.8	9282.5	8999.7	8717.0	8364.9	7852.7	7292.6	7239.3	6737.8
37.5°	9511.9	9490.5	9463.8	9501.2	9239.8	8973.0	8669.0	8162.2	7596.7	7548.7	7015.2
40°	9581.2	9565.2	9671.9	9719.9	9442.5	9202.4	8973.0	8482.2	7927.4	7874.1	7335.3
42.5°	9682.6	9815.9	9858.6	9847.9	9591.9	9378.5	9250.5	8829.0	8316.9	8268.9	7719.4
45°	9319.8	9287.8	9522.5	9650.6	9602.5	9490.5	9511.9	9245.1	8770.3	8722.3	8162.2
47.5°	8834.3	8791.7	8925.0	9239.8	9426.5	9533.2	9746.6	9677.2	9293.1	9250.5	8679.6
50°	7810.1	7868.8	8364.9	8786.3	9154.4	9522.5	9944.0	10141.4	9869.3	9826.6	9234.4
52.5°	6673.8	6732.5	7249.9	8220.8	8823.7	9442.5	10088.0	10605.5	10493.4	10445.4	9826.6
55°	5846.9	5974.9	6561.7	7265.9	8354.2	9191.8	10173.4	11080.3	11165.6	11122.9	10472.1
57.5°	5025.3	5121.4	5564.1	6188.3	7714.0	8754.3	10168.0	11523.1	11869.8	11827.1	11128.3
60°	4059.7	4182.4	4534.5	5206.7	6860.5	8231.5	10018.7	11869.8	12547.3	12515.3	11763.1
62.5°	3398.2	3435.6	3686.3	4267.8	5761.5	7570.0	9682.6	12056.5	13160.8	13139.5	12333.9
65°	2736.7	2742.1	2971.5	3456.9	4699.9	6748.5	9111.7	11987.2	13624.9	13635.6	12744.7
67.5°	2112.6	2139.2	2347.3	2715.4	3734.3	5681.5	8295.5	11517.7	13630.3	13657.0	12510.0
70°	1461.7	1483.1	1797.8	2155.2	2886.1	4529.2	7191.2	10274.7	12510.0	12531.3	11213.6
72.5°	1029.6	1040.3	1376.4	1723.1	2256.6	3414.2	5425.4	8498.3	10664.2	10680.2	9431.8
75°	768.2	778.9	970.9	1307.0	1728.5	2363.3	3707.6	6508.4	8519.6	8519.6	7447.3
77.5°	544.1	549.5	629.5	901.6	1152.3	1595.1	2229.9	4262.5	6252.3	6263.0	5425.4
80°	368.1	373.4	410.8	608.2	720.2	864.2	1211.0	2235.3	3942.4	3958.4	3446.2
82.5°	192.1	202.7	229.4	309.4	362.8	480.1	624.2	1136.3	2181.9	2224.6	2069.9
85°	74.7	74.7	85.4	101.4	133.4	186.7	288.1	432.1	986.9	1018.9	912.2
87.5°	26.7	26.7	32.0	32.0	37.3	42.7	48.0	64.0	112.0	112.0	106.7
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°	5804.2	5804.2	5804.2	5804.2	5804.2	5804.2	5804.2	5804.2	5804.2	5804.2	5804.2
2.5°	5750.9	5750.9	5724.2	5734.9	5729.5	5718.8	5708.2	5724.2	5708.2	5670.8	5665.5
5°	5761.5	5750.9	5708.2	5702.8	5686.8	5665.5	5638.8	5649.5	5622.8	5590.8	5585.5
7.5°	5766.9	5745.5	5686.8	5665.5	5633.5	5590.8	5548.1	5548.1	5510.8	5478.8	5473.5
10°	5756.2	5729.5	5649.5	5606.8	5548.1	5484.1	5425.4	5409.4	5366.8	5329.4	5329.4
12.5°	5761.5	5724.2	5622.8	5553.5	5473.5	5393.4	5318.7	5297.4	5260.1	5222.7	5217.4
15°	5793.5	5740.2	5612.2	5521.5	5404.1	5313.4	5233.4	5217.4	5185.4	5158.7	5158.7
17.5°	5825.5	5756.2	5596.1	5468.1	5324.1	5222.7	5148.0	5148.0	5126.7	5110.7	5110.7
20°	5841.5	5761.5	5564.1	5393.4	5228.1	5121.4	5052.0	5062.7	5057.3	5052.0	5052.0
22.5°	5878.9	5772.2	5537.5	5324.1	5126.7	5014.7	4950.6	4966.6	4961.3	4961.3	4966.6
25°	5937.6	5798.9	5516.1	5260.1	5030.7	4908.0	4838.6	4849.3	4849.3	4849.3	4849.3
27.5°	6017.6	5852.2	5510.8	5201.4	4934.6	4795.9	4710.6	4710.6	4689.2	4694.6	4699.9
30°	6140.3	5953.6	5521.5	5148.0	4833.3	4657.2	4555.9	4539.9	4534.5	4545.2	4550.5
32.5°	6289.7	6092.3	5585.5	5110.7	4726.6	4502.5	4374.5	4369.2	4353.2	4353.2	4353.2
35°	6476.4	6225.6	5644.2	5105.4	4619.9	4337.1	4198.4	4182.4	4145.1	4129.1	4129.1
37.5°	6716.4	6433.7	5713.5	5068.0	4529.2	4177.1	4011.7	3958.4	3915.7	3910.4	3910.4
40°	7009.9	6668.4	5814.9	5025.3	4433.2	4011.7	3793.0	3702.3	3707.6	3729.0	3729.0
42.5°	7356.6	6956.5	5942.9	5004.0	4294.5	3841.0	3536.9	3430.2	3467.6	3488.9	3494.3
45°	7762.1	7297.9	6086.9	4977.3	4166.4	3649.0	3264.9	3131.5	3147.5	3152.8	3158.2
47.5°	8231.5	7676.7	6236.3	4956.0	4022.4	3408.9	2966.1	2790.1	2784.7	2752.7	2763.4
50°	8722.3	8076.8	6391.0	4918.6	3846.4	3126.2	2651.4	2443.3	2400.6	2352.6	2358.0
52.5°	9245.1	8487.6	6535.1	4860.0	3627.6	2838.1	2352.6	2128.6	2043.2	1989.9	2000.5
55°	9821.3	8909.0	6673.8	4769.3	3398.2	2550.0	2085.9	1856.5	1749.8	1707.1	1712.5
57.5°	10349.4	9314.5	6775.1	4657.2	3147.5	2288.6	1851.2	1627.1	1557.7	1552.4	1557.7
60°	10861.5	9655.9	6817.8	4502.5	2891.4	2048.5	1632.4	1461.7	1413.7	1440.4	1445.7
62.5°	11293.7	9874.6	6796.5	4294.5	2630.0	1819.1	1456.4	1333.7	1301.7	1355.0	1360.4
65°	11544.4	9944.0	6647.1	3995.7	2347.3	1595.1	1291.0	1157.6	1141.6	1173.6	1189.6
67.5°	11213.6	9511.9	6241.7	3584.9	2032.5	1387.0	1131.0	1024.3	997.6	1024.3	1024.3
70°	9938.6	8242.2	5281.4	2934.1	1685.8	1184.3	981.6	906.9	885.6	906.9	901.6
72.5°	8279.5	6855.1	4161.1	2288.6	1328.4	997.6	853.6	784.2	762.9	741.5	730.9
75°	6423.0	5206.7	3019.5	1680.4	1002.9	800.2	714.9	650.8	597.5	618.8	608.2
77.5°	4705.2	3654.3	2139.2	1163.0	720.2	618.8	560.1	512.1	474.8	517.5	512.1
80°	3030.1	2363.3	1429.7	778.9	496.1	432.1	410.8	384.1	421.4	549.5	560.1
82.5°	1851.2	1499.1	853.6	506.8	325.4	288.1	266.7	266.7	432.1	474.8	480.1
85°	826.9	794.9	464.1	261.4	181.4	165.4	149.4	192.1	176.0	128.0	133.4
87.5°	133.4	138.7	101.4	90.7	69.4	69.4	53.3	37.3	26.7	16.0	16.0
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)