

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: P842347

Luminaire Tested: **ARCH4-300-750-U-T3**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842347
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: ARCH4-300-750-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 1155mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 44031 lumens
Efficiency: N/A
Efficacy: 147.2 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): 299.2
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

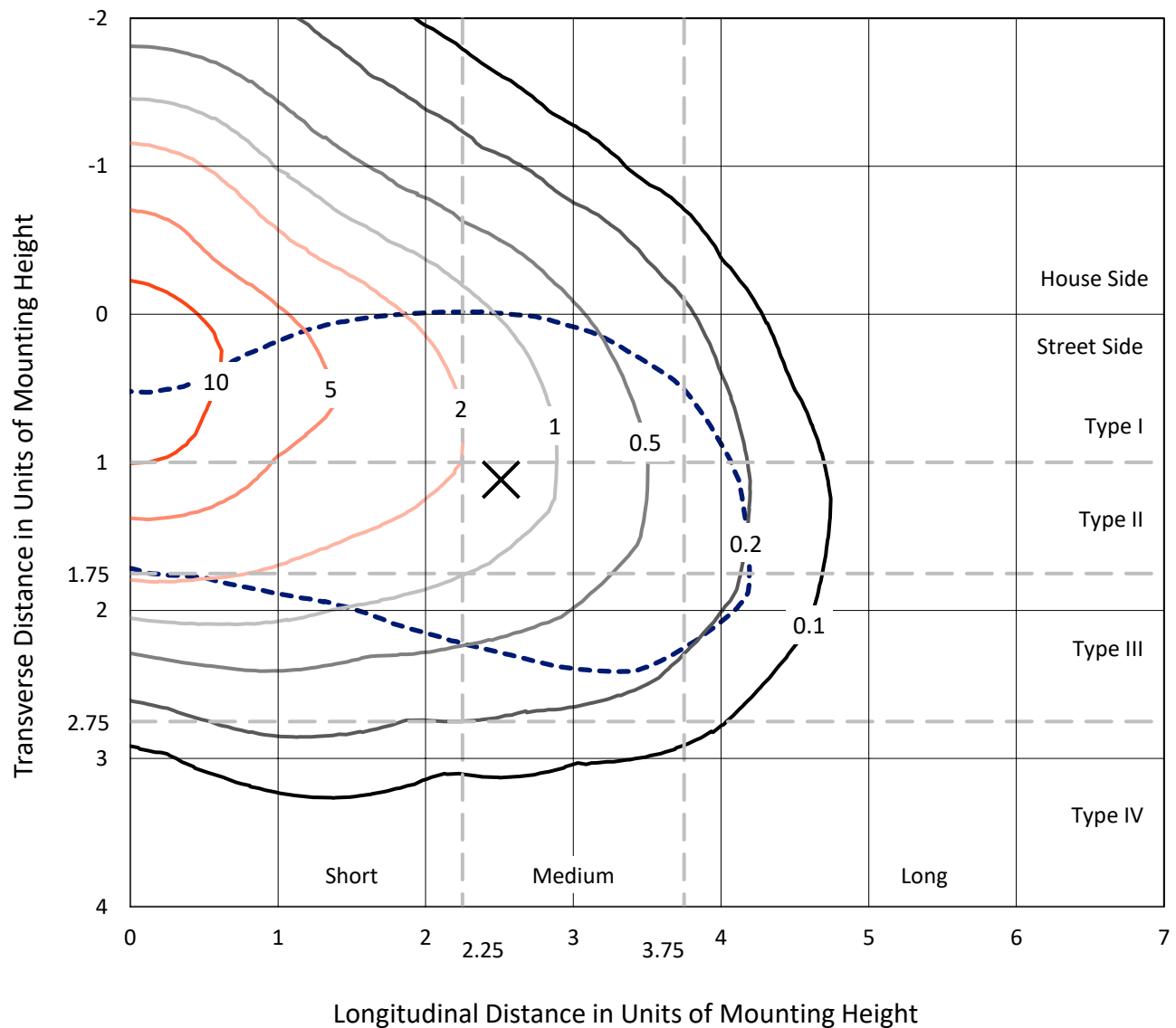


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Iso-Footcandle Lines of Horizontal Illumination

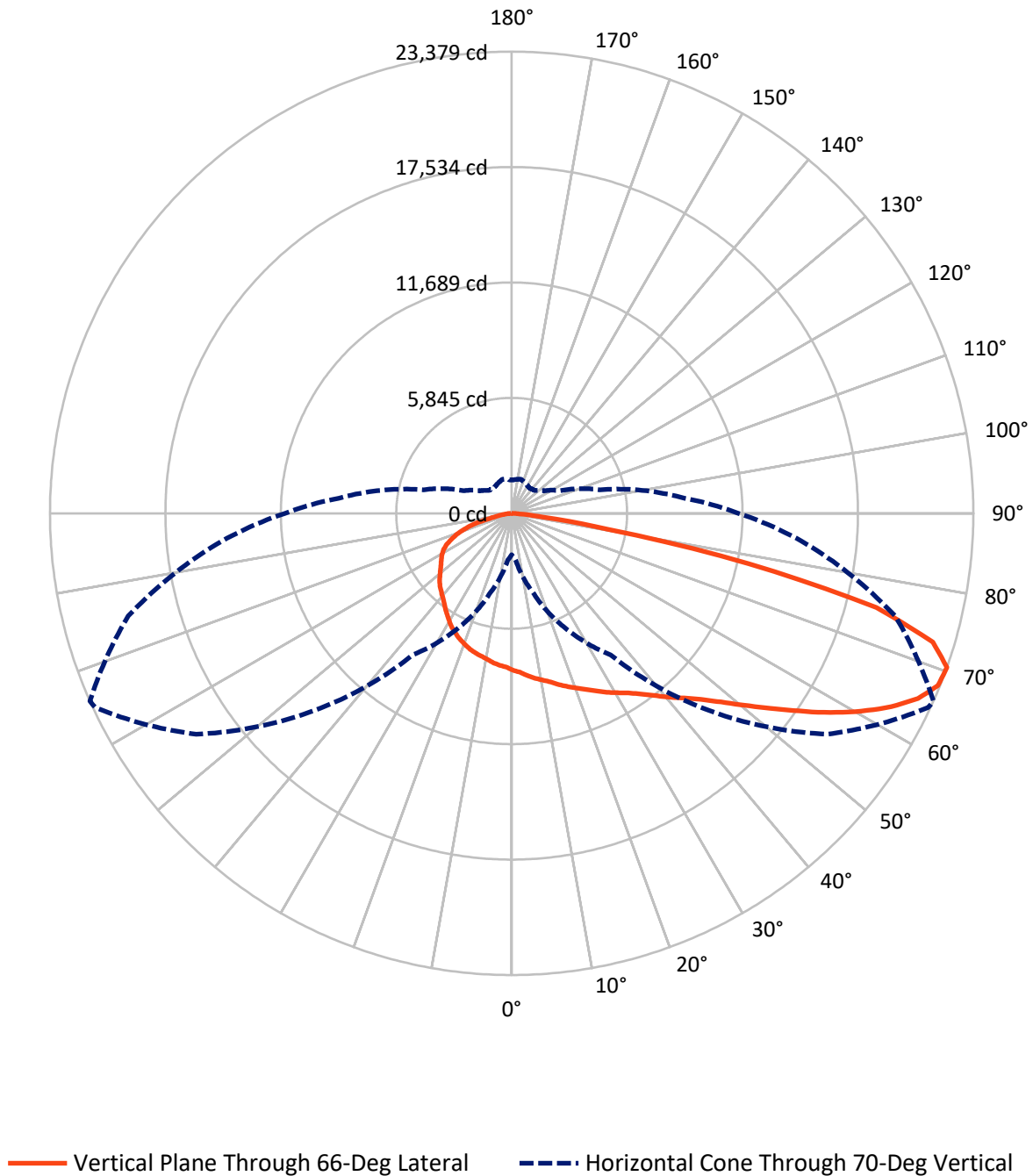
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.8 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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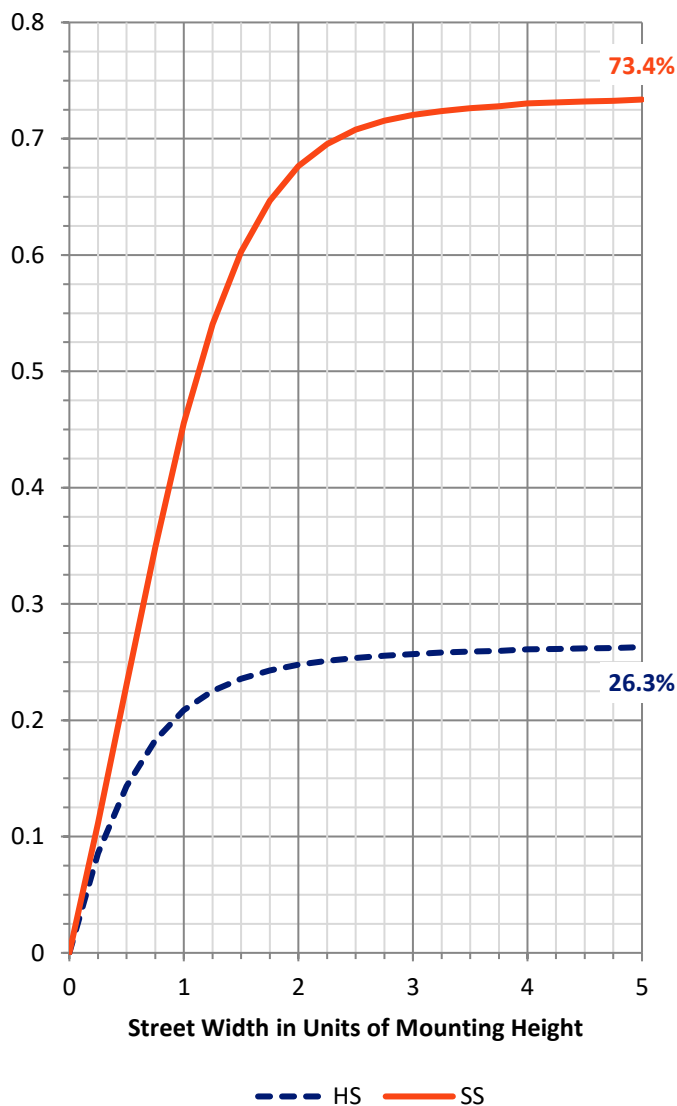
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11667.2	0.0	11667.2
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	32363.8	0.0	32363.8
	% Fixture	73.5	0.0	73.5
Total	Lumens	44031.0	0.0	44031.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	763.6	1.7
10°-20°	2290.5	5.2
20°-30°	3839.6	8.7
30°-40°	5749.1	13.1
40°-50°	7686.6	17.5
50°-60°	8974.4	20.4
60°-70°	8923.6	20.3
70°-80°	5282.9	12.0
80°-90°	520.7	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°	44031.0	100.0
0°-180°	44031.0	100.0

Coefficient of Utilization



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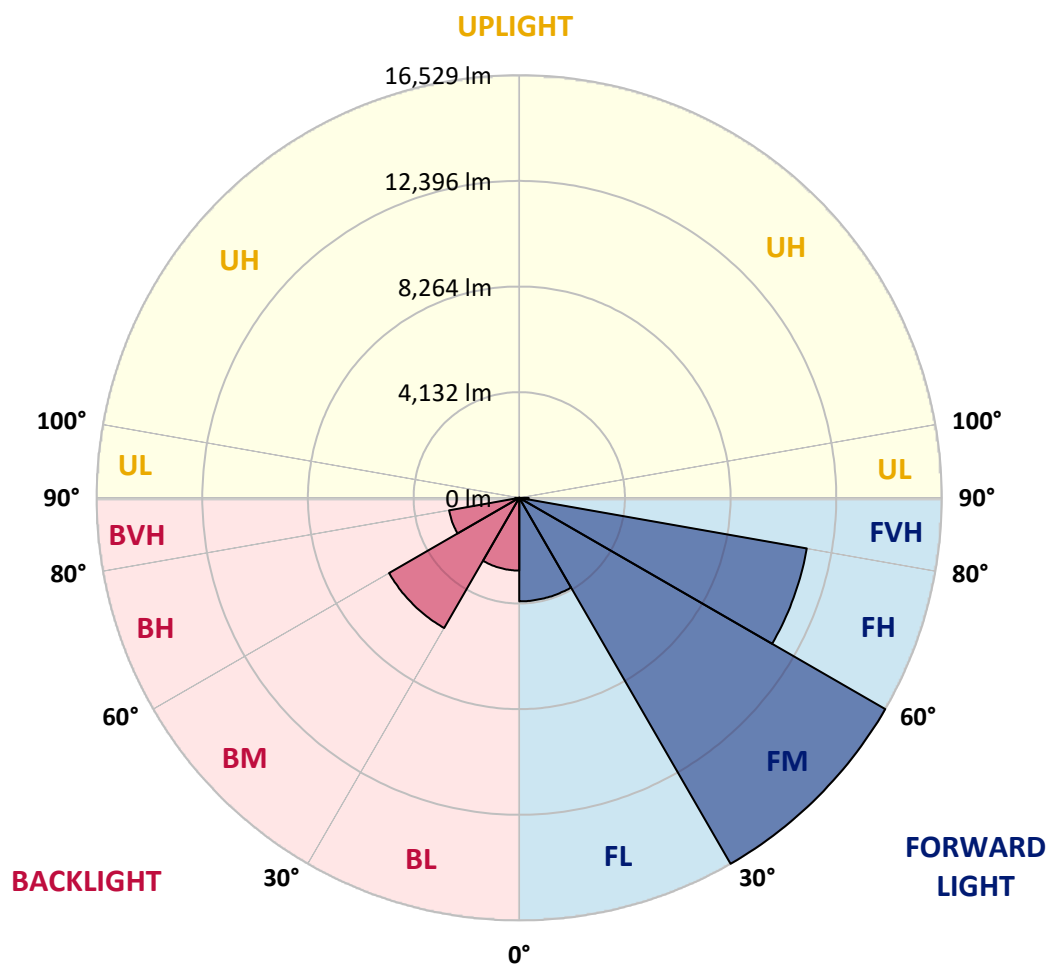
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4049.7	9.2			
FM	(30°-60°)	16528.6	37.5			
FH	(60°-80°)	11419.5	25.9			G4/12000
FVH	(80°-90°)	365.9	0.8			G3/500
BL	(0°-30°)	2844.0	6.5	B4/5000		
BM	(30°-60°)	5881.5	13.4	B4/8500		
BH	(60°-80°)	2787.0	6.3	B4/5000		G4/5000
BVH	(80°-90°)	154.8	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°	7946.6	7946.6	7946.6	7946.6	7946.6	7946.6	7946.6	7946.6	7946.6	7946.6	7946.6
2.5°	8238.7	8225.8	8219.3	8193.3	8134.9	8160.8	8102.4	8063.5	8057.0	7966.1	7914.1
5°	8576.3	8569.9	8556.9	8517.9	8427.0	8440.0	8342.6	8271.2	8251.7	8108.9	7998.5
7.5°	8862.0	8849.0	8842.5	8790.6	8693.2	8686.7	8569.9	8466.0	8433.5	8238.7	8069.9
10°	9082.7	9063.3	9076.3	9024.3	8920.4	8901.0	8751.6	8615.3	8582.8	8336.1	8102.4
12.5°	9271.0	9258.0	9277.5	9232.1	9147.7	9128.2	8978.9	8803.6	8764.6	8479.0	8173.8
15°	9478.8	9433.3	9472.3	9452.8	9394.4	9387.9	9251.5	9056.8	9004.8	8660.7	8284.2
17.5°	9589.1	9563.2	9608.6	9615.1	9589.1	9634.6	9504.7	9271.0	9225.6	8829.5	8381.6
20°	9667.1	9628.1	9680.0	9719.0	9738.5	9829.4	9725.5	9498.3	9446.3	8991.9	8472.5
22.5°	9933.2	9848.8	9855.3	9881.3	9894.3	10024.1	9959.2	9738.5	9686.5	9193.1	8582.8
25°	10601.9	10433.1	10322.8	10244.9	10154.0	10264.3	10225.4	10011.1	9965.7	9433.3	8719.2
27.5°	11640.7	11426.5	11205.7	10978.5	10621.4	10576.0	10511.1	10316.3	10264.3	9673.5	8855.5
30°	12822.3	12608.1	12348.4	11984.8	11316.1	10965.5	10816.2	10601.9	10543.5	9887.8	8985.4
32.5°	13997.4	13809.2	13549.5	13108.0	12153.6	11439.5	11121.3	10900.6	10842.2	10121.5	9141.2
35°	14912.8	14796.0	14627.2	14075.3	12984.6	11997.8	11562.8	11296.6	11231.7	10491.6	9426.8
37.5°	15653.0	15568.6	15425.7	14847.9	13588.4	12556.1	12069.2	11764.1	11692.7	10894.1	9732.0
40°	16743.7	16522.9	16406.1	15568.6	14114.3	13062.5	12640.5	12322.4	12244.5	11322.6	9978.7
42.5°	17672.1	17509.8	17366.9	16211.3	14614.2	13497.5	13179.4	12887.2	12783.4	11744.6	10244.9
45°	17827.9	17892.8	17821.4	16529.4	15406.3	13926.0	13724.8	13536.5	13439.1	12315.9	10647.4
47.5°	17834.4	17834.4	17412.4	16711.2	16386.6	14406.4	14309.1	14374.0	14270.1	13043.1	11127.8
50°	17366.9	17451.3	17230.6	16756.7	16646.3	14886.9	15023.2	15373.8	15269.9	13815.6	11647.2
52.5°	16399.6	16678.8	16672.3	16685.2	16269.7	15295.9	15776.3	16574.9	16399.6	14685.6	12199.1
55°	14692.1	15250.4	15750.4	16178.8	15945.1	15542.6	16698.2	17853.9	17672.1	15659.5	12757.4
57.5°	13231.3	13588.4	14211.7	15425.7	15562.1	15756.8	17561.7	19191.3	19029.0	16737.2	13341.7
60°	11562.8	12056.2	12679.5	14406.4	15094.6	16036.0	18509.6	20496.2	20340.4	17827.9	13906.5
62.5°	8998.3	9634.6	10881.1	12841.8	14412.9	16211.3	19256.2	21645.4	21574.0	18860.2	14412.9
65°	6271.6	6836.4	8582.8	10920.1	13328.7	16133.4	19853.5	22671.2	22606.2	19704.2	14770.0
67.5°	3661.7	4317.4	6291.1	8790.6	11413.5	15594.5	20048.3	23274.9	23274.9	20217.1	14867.4
70°	2090.5	2395.7	4148.6	6407.9	8751.6	14107.8	19502.9	23268.5	23378.8	20100.2	14464.9
72.5°	1460.8	1597.1	2791.7	4310.9	5934.0	11413.5	18074.6	22145.3	22294.6	18996.5	13088.5
75°	1136.2	1233.5	1967.2	2941.0	3739.6	7751.8	14951.8	18671.9	19067.9	16191.8	10582.5
77.5°	863.5	934.9	1149.1	1837.3	2395.7	4453.7	9868.3	12244.5	12270.5	9913.8	5674.3
80°	629.8	701.2	766.1	1123.2	1272.5	2084.0	3726.6	5115.9	4973.1	4797.8	3070.9
82.5°	376.6	448.0	467.4	610.3	623.3	889.4	1305.0	1649.0	1584.1	2110.0	1441.3
85°	162.3	227.2	240.2	279.2	266.2	363.6	519.4	435.0	389.5	448.0	311.6
87.5°	39.0	64.9	64.9	71.4	58.4	90.9	97.4	71.4	64.9	77.9	77.9
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°	7946.6	7946.6	7946.6	7946.6	7946.6	7946.6	7946.6	7946.6	7946.6	7946.6	7946.6
2.5°	7901.1	7881.7	7888.2	7777.8	7745.3	7712.9	7693.4	7680.4	7667.4	7686.9	7706.4
5°	7959.6	7914.1	7862.2	7699.9	7635.0	7563.5	7511.6	7466.2	7446.7	7446.7	7466.2
7.5°	8005.0	7927.1	7816.7	7602.5	7485.6	7388.3	7303.9	7245.4	7213.0	7213.0	7232.4
10°	8011.5	7901.1	7725.9	7466.2	7310.3	7167.5	7070.1	7005.2	6959.8	6959.8	6972.7
12.5°	8050.5	7901.1	7673.9	7362.3	7167.5	6992.2	6875.4	6778.0	6758.5	6758.5	6771.5
15°	8115.4	7933.6	7641.5	7271.4	7037.7	6836.4	6706.6	6602.7	6563.7	6589.7	6596.2
17.5°	8173.8	7953.1	7583.0	7154.5	6875.4	6654.6	6511.8	6420.9	6369.0	6427.4	6427.4
20°	8212.8	7953.1	7498.6	7005.2	6700.1	6453.4	6317.0	6206.7	6167.7	6239.1	6245.6
22.5°	8271.2	7946.6	7407.7	6855.9	6511.8	6252.1	6115.8	6031.4	6011.9	6089.8	6115.8
25°	8336.1	7959.6	7310.3	6687.1	6304.0	6050.8	5947.0	5908.0	5921.0	6018.4	6050.8
27.5°	8407.5	7985.5	7213.0	6498.8	6076.8	5849.6	5791.1	5810.6	5862.6	5985.9	6024.9
30°	8472.5	7992.0	7076.6	6278.1	5817.1	5602.9	5628.8	5713.2	5791.1	5914.5	5959.9
32.5°	8556.9	7998.5	6933.8	6037.9	5537.9	5382.1	5499.0	5635.3	5713.2	5830.1	5882.0
35°	8764.6	8108.9	6823.4	5804.1	5278.3	5193.9	5388.6	5563.9	5609.4	5713.2	5758.7
37.5°	9004.8	8290.7	6765.0	5563.9	5025.1	5005.6	5252.3	5427.6	5440.6	5505.5	5550.9
40°	9154.2	8368.6	6700.1	5362.7	4797.8	4810.8	5064.0	5200.3	5174.4	5219.8	5252.3
42.5°	9303.5	8394.6	6563.7	5193.9	4583.6	4596.6	4791.3	4888.7	4901.7	4999.1	5044.5
45°	9556.7	8466.0	6414.4	5038.0	4388.8	4343.4	4460.2	4590.1	4758.9	4947.1	4999.1
47.5°	9894.3	8615.3	6258.6	4849.8	4200.5	4051.2	4096.7	4323.9	4499.2	4674.5	4706.9
50°	10238.4	8764.6	6115.8	4622.5	4012.3	3739.6	3759.1	3966.8	4109.6	4246.0	4265.5
52.5°	10576.0	8894.5	5992.4	4408.3	3798.0	3369.5	3447.4	3661.7	3759.1	3824.0	3843.5
55°	10913.6	9004.8	5882.0	4226.5	3551.3	3077.4	3148.8	3350.0	3447.4	3479.9	3492.9
57.5°	11264.2	9134.7	5797.6	4070.7	3272.1	2817.7	2863.1	3005.9	3096.8	3135.8	3122.8
60°	11556.3	9245.1	5752.2	3908.4	2993.0	2577.4	2564.5	2694.3	2824.2	2863.1	2850.1
62.5°	11783.6	9316.5	5680.8	3700.6	2746.2	2337.2	2272.3	2441.1	2577.4	2603.4	2622.9
65°	11906.9	9323.0	5505.5	3434.4	2493.0	2077.5	2032.1	2200.9	2285.3	2311.3	2311.3
67.5°	11887.4	9219.1	5161.4	3077.4	2259.3	1843.8	1804.9	1908.7	2032.1	2051.6	2032.1
70°	11484.9	8790.6	4609.5	2700.8	1980.2	1636.1	1564.6	1668.5	1785.4	1714.0	1681.5
72.5°	10342.3	7680.4	3798.0	2285.3	1668.5	1376.4	1343.9	1447.8	1454.3	1467.3	1434.8
75°	8160.8	5719.7	2843.6	1778.9	1350.4	1155.6	1149.1	1129.7	1155.6	1207.6	1168.6
77.5°	4284.9	2856.6	1538.7	1090.7	980.3	928.4	883.0	876.5	954.4	986.8	947.9
80°	2324.2	1603.6	883.0	655.7	597.3	603.8	662.2	649.2	733.6	753.1	720.6
82.5°	1012.8	759.6	435.0	396.0	396.0	389.5	409.0	454.5	545.4	545.4	435.0
85°	220.7	188.3	168.8	194.8	220.7	220.7	220.7	220.7	155.8	84.4	58.4
87.5°	71.4	71.4	71.4	77.9	84.4	84.4	71.4	51.9	32.5	6.5	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)