

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: P842307

Luminaire Tested: **ARCH4-300-727-U-T2R**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842307
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-300-727-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1155mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 40512 lumens
Efficiency: N/A
Efficacy: 135.4 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

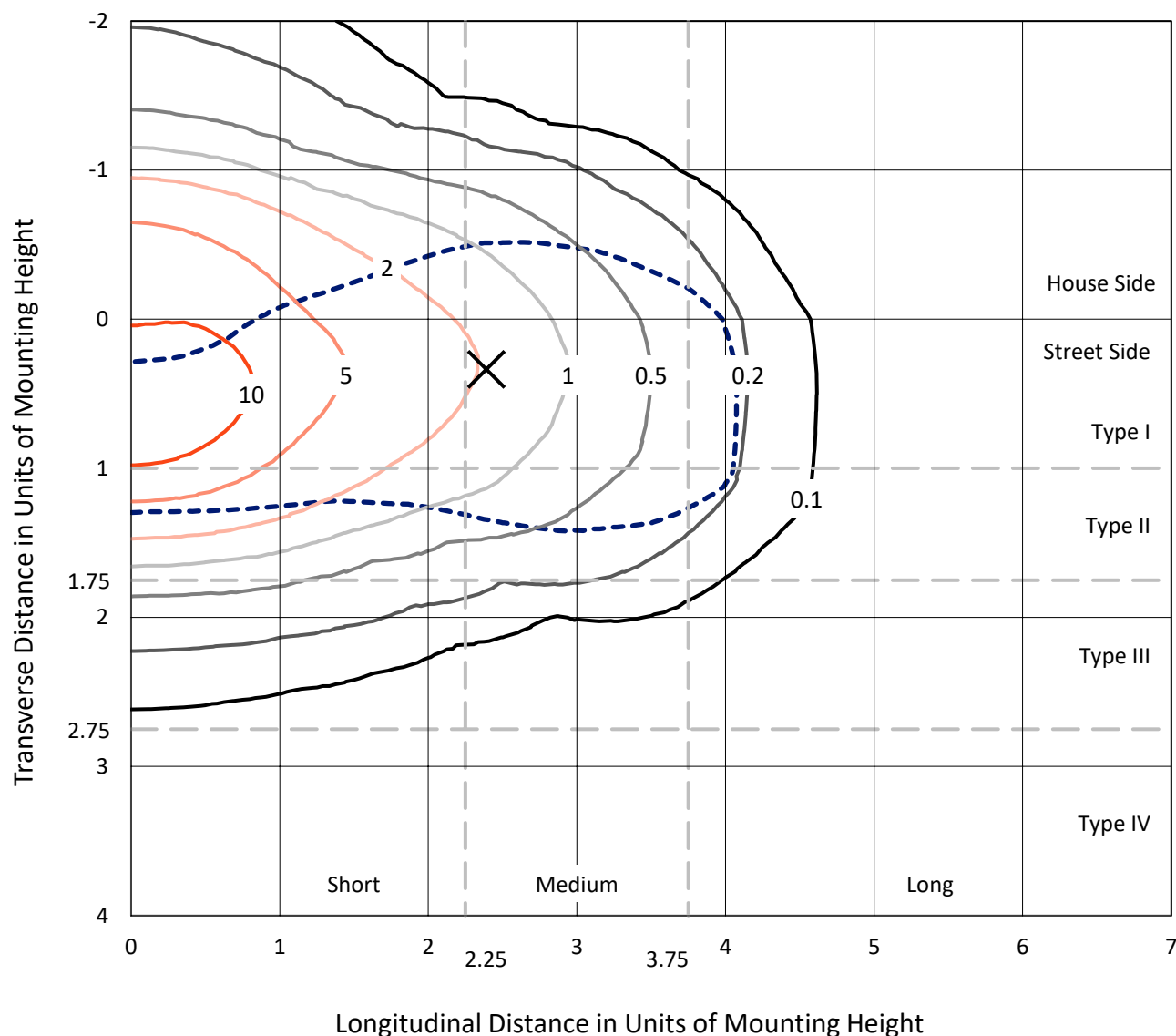
Input Watts (W): 299.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

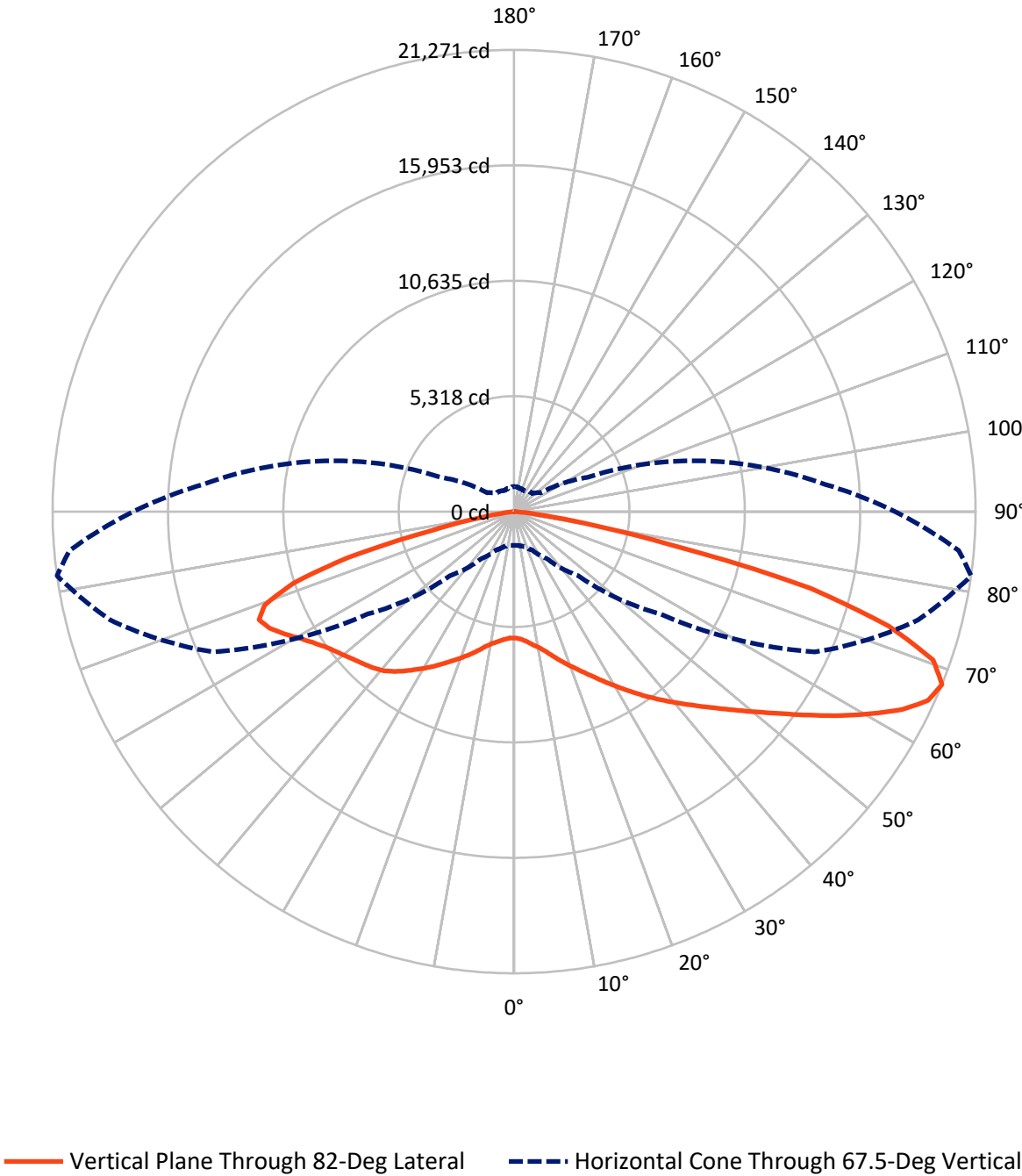
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 17.9 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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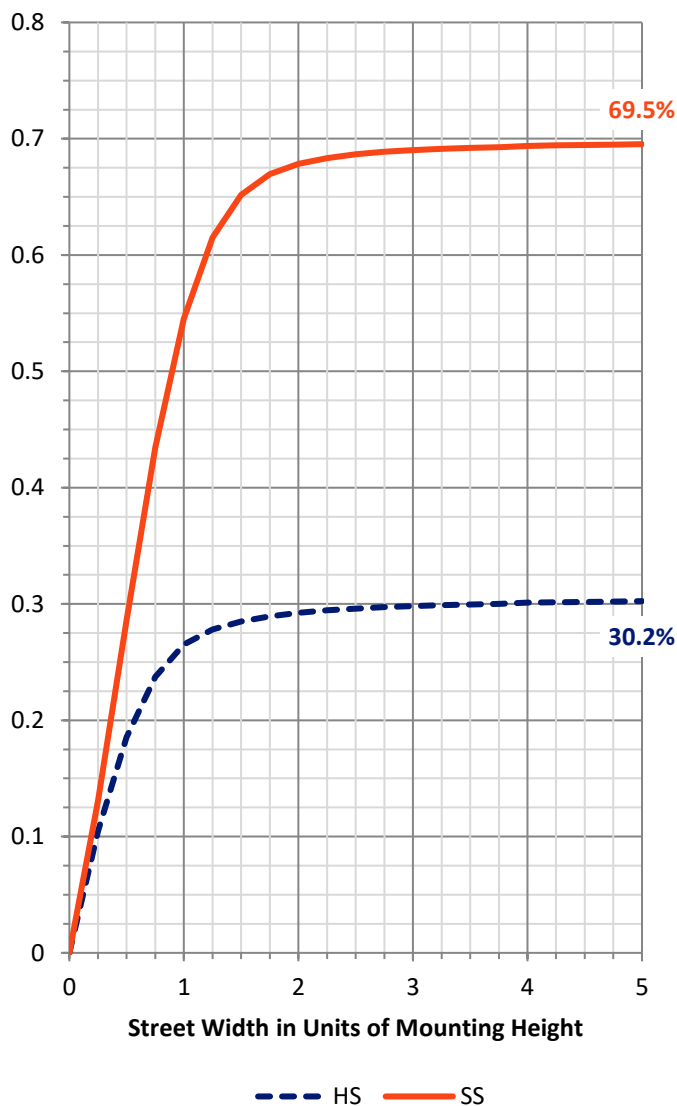
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12337.5	0.0	12337.5
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	28174.5	0.0	28174.5
	% Fixture	69.5	0.0	69.5
Total	Lumens	40512.0	0.0	40512.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	601.9	1.5
10°-20°	2167.8	5.4
20°-30°	4356.9	10.8
30°-40°	6844.0	16.9
40°-50°	8337.4	20.6
50°-60°	7877.8	19.4
60°-70°	6505.3	16.1
70°-80°	3542.4	8.7
80°-90°	278.5	0.7
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°	40512.0	100.0
0°-180°	40512.0	100.0

Coefficient of Utilization



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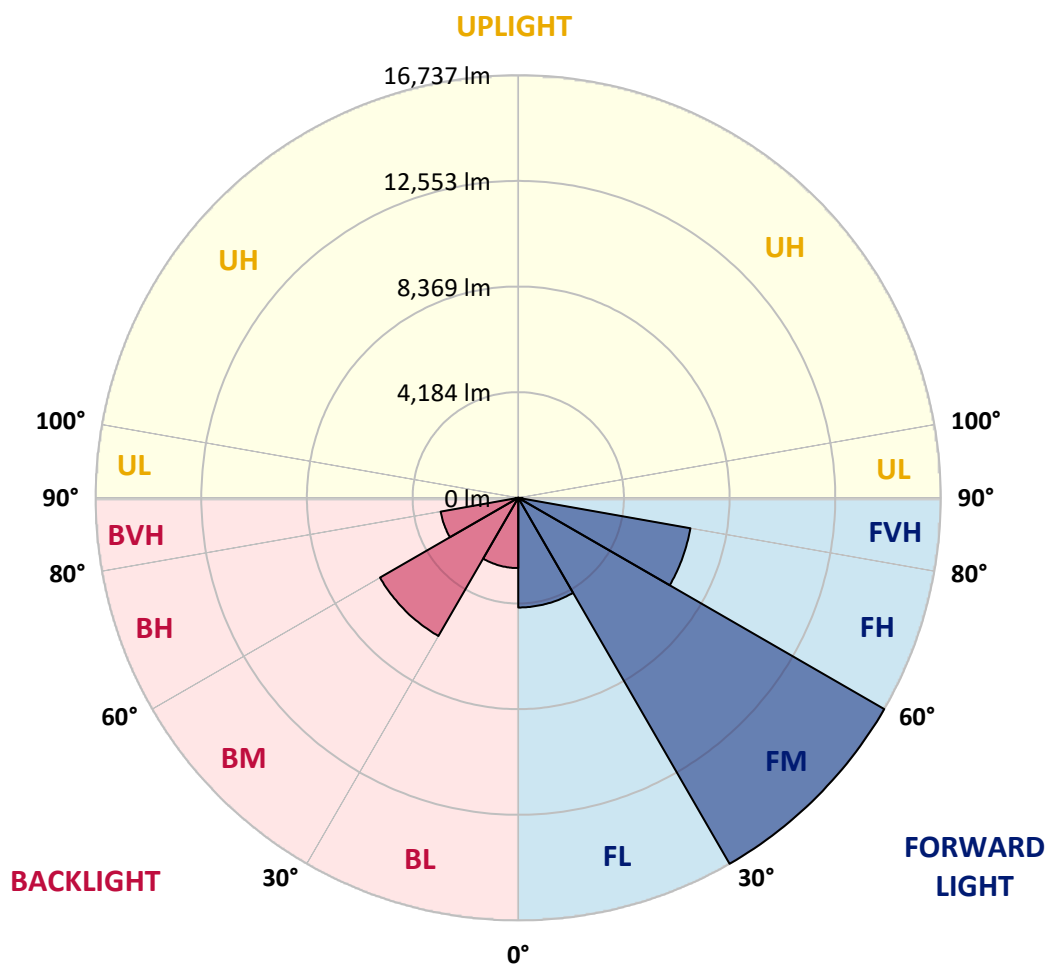
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4344.4	10.7			
FM	(30°-60°)	16737.2	41.3			
FH	(60°-80°)	6925.0	17.1			G3/7500
FVH	(80°-90°)	167.9	0.4			G2/225
BL	(0°-30°)	2782.2	6.9	B4/5000		
BM	(30°-60°)	6322.0	15.6	B4/8500		
BH	(60°-80°)	3122.7	7.7	B4/5000		G4/5000
BVH	(80°-90°)	110.6	0.3			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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	5823.6	5823.6	5823.6	5823.6	5823.6	5823.6	5823.6	5823.6	5823.6	5823.6	5823.6
2.5°	6088.3	6088.3	6135.3	6135.3	6094.2	6029.5	6011.8	5941.2	5876.5	5876.5	5882.4
5°	6670.6	6664.8	6700.1	6653.0	6553.0	6423.6	6335.3	6182.4	6053.0	6011.8	6005.9
7.5°	7382.4	7376.5	7394.2	7317.7	7129.5	6917.7	6741.2	6494.2	6282.4	6194.2	6170.6
10°	8176.5	8170.7	8153.0	8023.6	7770.7	7441.2	7176.5	6835.4	6517.7	6376.5	6347.1
12.5°	9088.3	9076.5	9035.4	8847.1	8500.1	8076.5	7694.2	7253.0	6829.5	6635.4	6570.6
15°	10106.0	10088.3	10011.9	9782.4	9317.7	8782.4	8288.3	7723.6	7205.9	6953.0	6864.8
17.5°	11176.6	11176.6	11058.9	10717.7	10200.1	9535.4	8923.6	8206.0	7600.1	7288.3	7182.4
20°	12264.8	12258.9	12111.9	11700.1	11088.3	10323.6	9547.1	8758.9	8006.0	7629.5	7500.1
22.5°	13411.9	13400.1	13217.8	12747.2	12017.7	11153.0	10247.1	9306.0	8453.0	8000.1	7835.4
25°	14729.5	14711.9	14488.4	13911.9	13047.2	12070.7	11035.4	9947.1	8964.8	8411.8	8217.7
27.5°	16129.5	16106.0	15841.3	15170.7	14223.7	13047.2	11906.0	10688.3	9529.5	8870.7	8653.0
30°	17376.6	17359.0	17070.7	16382.5	15294.2	14017.8	12735.4	11429.5	10123.6	9358.9	9088.3
32.5°	18317.8	18317.8	18059.0	17382.5	16253.1	14947.2	13570.7	12129.5	10741.3	9882.4	9564.8
35°	18888.4	18906.0	18682.5	18141.3	17076.6	15823.7	14435.4	12953.1	11400.1	10441.3	10100.1
37.5°	18970.7	19029.6	18900.2	18535.5	17647.2	16553.1	15282.5	13747.2	12082.5	11006.0	10623.6
40°	18588.4	18629.6	18635.5	18494.3	17882.5	17076.6	16029.5	14588.4	12806.0	11600.1	11158.9
42.5°	17823.7	17853.1	17906.0	17947.2	17711.9	17306.0	16600.1	15370.7	13576.6	12206.0	11688.3
45°	16835.4	16829.6	16917.8	17094.3	17082.5	17176.6	16917.8	16082.5	14376.6	12894.2	12276.6
47.5°	15359.0	15329.5	15641.3	16041.3	16241.3	16682.5	16923.7	16641.3	15247.2	13653.1	12947.2
50°	13047.2	13017.8	13700.1	14641.3	15229.5	15900.1	16600.1	16976.6	16159.0	14506.0	13676.6
52.5°	10235.4	10206.0	11070.7	12717.8	14000.1	14976.6	15947.2	17053.1	17023.7	15459.0	14500.1
55°	7611.8	7588.3	8429.5	10211.9	12288.3	13906.0	15147.2	16853.1	17835.4	16553.1	15500.1
57.5°	5364.8	5353.0	6082.4	7558.9	10088.3	12600.1	14376.6	16464.8	18582.5	17741.3	16629.6
60°	3764.7	3747.1	4276.5	5417.7	7629.5	10629.5	13611.9	15947.2	19141.3	18911.9	17829.6
62.5°	2535.3	2523.6	2900.0	3853.0	5417.7	8182.4	12453.0	15600.1	19459.0	20088.4	19041.3
65°	1923.5	1917.7	2088.3	2611.8	3835.3	5876.5	10611.9	15559.0	19500.2	20970.8	20070.8
67.5°	1553.0	1558.8	1653.0	1953.0	2653.0	4176.5	8229.5	15300.1	19282.5	21270.8	20570.8
70°	1270.6	1270.6	1311.8	1511.8	1958.8	2817.7	5747.1	14123.6	18676.6	20488.4	19976.6
72.5°	970.6	976.5	1105.9	1223.5	1476.5	1976.5	3682.4	11688.3	17247.2	18064.9	17676.6
75°	770.6	764.7	841.2	1005.9	1147.1	1411.8	2258.8	8382.4	14676.6	14117.8	13870.7
77.5°	552.9	547.1	605.9	747.1	870.6	1000.0	1347.1	4229.4	7982.4	7335.4	7153.0
80°	376.5	364.7	417.7	517.7	576.5	588.2	658.8	1623.5	3482.4	3282.4	3241.2
82.5°	194.1	194.1	223.5	294.1	300.0	305.9	294.1	523.5	1153.0	1076.5	1029.4
85°	76.5	76.5	82.4	100.0	100.0	105.9	105.9	135.3	123.5	117.6	111.8
87.5°	5.9	5.9	11.8	11.8	17.6	17.6	17.6	23.5	29.4	29.4	29.4
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°	5823.6	5823.6	5823.6	5823.6	5823.6	5823.6	5823.6	5823.6	5823.6	5823.6	5823.6
2.5°	5870.6	5847.1	5770.6	5753.0	5741.2	5723.6	5729.5	5688.3	5670.6	5676.5	5653.0
5°	5976.5	5935.3	5841.2	5800.0	5788.3	5770.6	5788.3	5758.9	5729.5	5741.2	5729.5
7.5°	6123.6	6064.8	5947.1	5905.9	5900.1	5882.4	5905.9	5882.4	5858.9	5870.6	5847.1
10°	6276.5	6200.1	6070.6	6029.5	6029.5	6023.6	6047.1	6011.8	5988.3	5994.2	5982.4
12.5°	6500.1	6400.1	6258.9	6223.6	6205.9	6223.6	6229.5	6182.4	6141.2	6147.1	6129.5
15°	6770.6	6658.9	6505.9	6453.0	6441.2	6435.3	6411.8	6353.0	6300.1	6294.2	6276.5
17.5°	7064.8	6923.6	6741.2	6688.3	6635.4	6617.7	6558.9	6482.4	6400.1	6400.1	6376.5
20°	7347.1	7188.3	6970.6	6894.2	6817.7	6747.1	6647.1	6523.6	6417.7	6400.1	6376.5
22.5°	7653.0	7464.8	7211.8	7100.1	6964.8	6823.6	6653.0	6488.3	6353.0	6323.6	6305.9
25°	7994.2	7758.9	7458.9	7294.2	7076.5	6858.9	6605.9	6394.2	6235.3	6188.3	6176.5
27.5°	8370.7	8088.3	7723.6	7482.4	7164.8	6823.6	6500.1	6247.1	6053.0	5994.2	5976.5
30°	8753.0	8417.7	7964.8	7611.8	7164.8	6711.8	6305.9	6011.8	5788.3	5705.9	5694.2
32.5°	9135.4	8758.9	8182.4	7682.4	7094.2	6523.6	6053.0	5705.9	5453.0	5353.0	5376.5
35°	9594.2	9135.4	8382.4	7711.8	6976.5	6294.2	5764.8	5358.9	5100.0	5011.8	5029.5
37.5°	10070.7	9511.8	8541.2	7688.3	6811.8	6035.3	5441.2	5047.1	4723.6	4570.6	4588.3
40°	10482.4	9853.0	8653.0	7605.9	6600.1	5741.2	5123.6	4605.9	4158.9	4011.8	3994.2
42.5°	10870.7	10106.0	8711.8	7482.4	6358.9	5400.0	4670.6	4005.9	3558.9	3376.5	3382.4
45°	11276.6	10353.0	8688.3	7317.7	6058.9	5000.0	4088.3	3417.7	3023.6	2858.8	2864.7
47.5°	11741.3	10617.7	8664.8	7141.2	5694.2	4482.4	3529.4	2900.0	2558.8	2441.2	2429.4
50°	12235.4	10911.9	8635.4	6923.6	5288.3	3905.9	2976.5	2417.7	2129.4	2053.0	2035.3
52.5°	12794.2	11229.5	8617.7	6664.8	4800.0	3294.1	2482.4	1994.1	1800.0	1747.1	1741.2
55°	13464.8	11600.1	8641.3	6353.0	4211.8	2717.7	2064.7	1717.7	1588.2	1558.8	1553.0
57.5°	14282.5	12076.6	8711.8	5988.3	3594.1	2217.7	1758.8	1547.1	1464.7	1441.2	1441.2
60°	15170.7	12617.8	8841.3	5576.5	2976.5	1829.4	1558.8	1411.8	1376.5	1405.9	1405.9
62.5°	16129.5	13253.1	9070.7	5076.5	2400.0	1547.1	1400.0	1300.0	1276.5	1335.3	1341.2
65°	17017.8	13870.7	9217.7	4476.5	1905.9	1341.2	1276.5	1188.2	1200.0	1258.8	1253.0
67.5°	17564.9	14382.5	9011.8	3723.6	1511.8	1188.2	1147.1	1070.6	1100.0	1147.1	1153.0
70°	17229.6	14094.2	7994.2	2811.8	1182.4	1035.3	1005.9	958.8	982.4	1041.2	1064.7
72.5°	15588.4	12623.6	6217.7	1900.0	952.9	870.6	882.4	858.8	888.2	941.2	994.1
75°	12653.0	9541.3	4170.6	1217.7	752.9	741.2	758.8	741.2	752.9	805.9	835.3
77.5°	6605.9	4653.0	2076.5	758.8	558.8	576.5	605.9	611.8	647.1	658.8	670.6
80°	3082.4	2094.1	864.7	423.5	370.6	405.9	464.7	470.6	482.4	500.0	505.9
82.5°	1005.9	629.4	400.0	229.4	211.8	229.4	300.0	358.8	364.7	400.0	400.0
85°	105.9	64.7	88.2	94.1	82.4	100.0	135.3	129.4	58.8	35.3	35.3
87.5°	29.4	23.5	29.4	29.4	23.5	23.5	17.6	5.9	0.0	0.0	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)