

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: P842127

Luminaire Tested: **ARCH4-270-750-U-T2R**

Issue Date: 5/27/2024

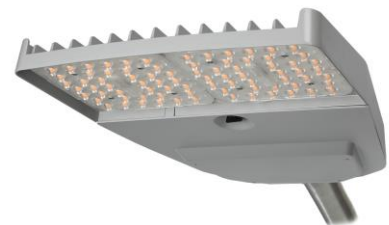
Test Information

Test Method: LM-79-08
Report Number: P842127
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: ARCH4-270-750-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 1045mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 40491 lumens
Efficiency: N/A
Efficacy: 150.5 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): 269
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



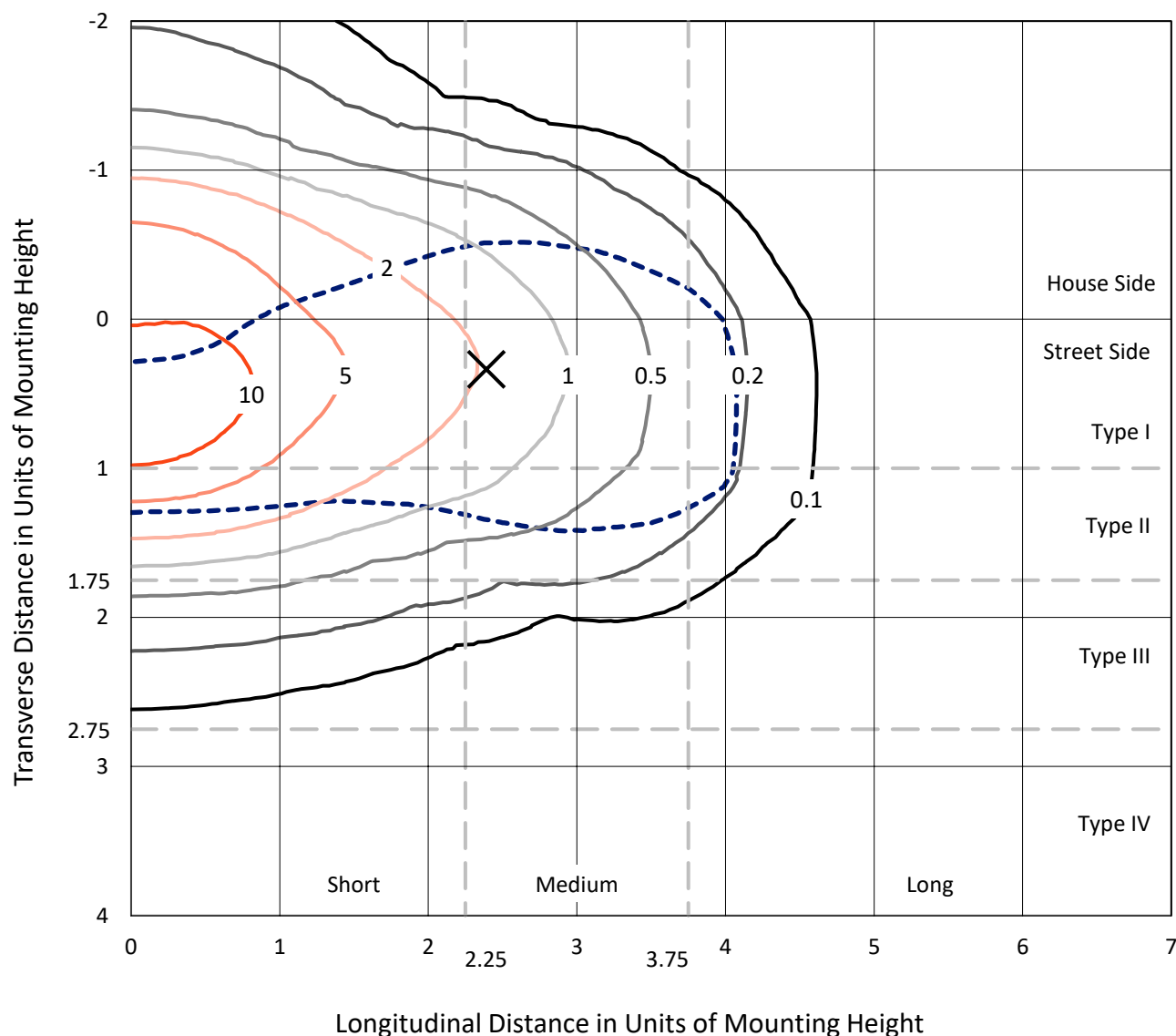
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

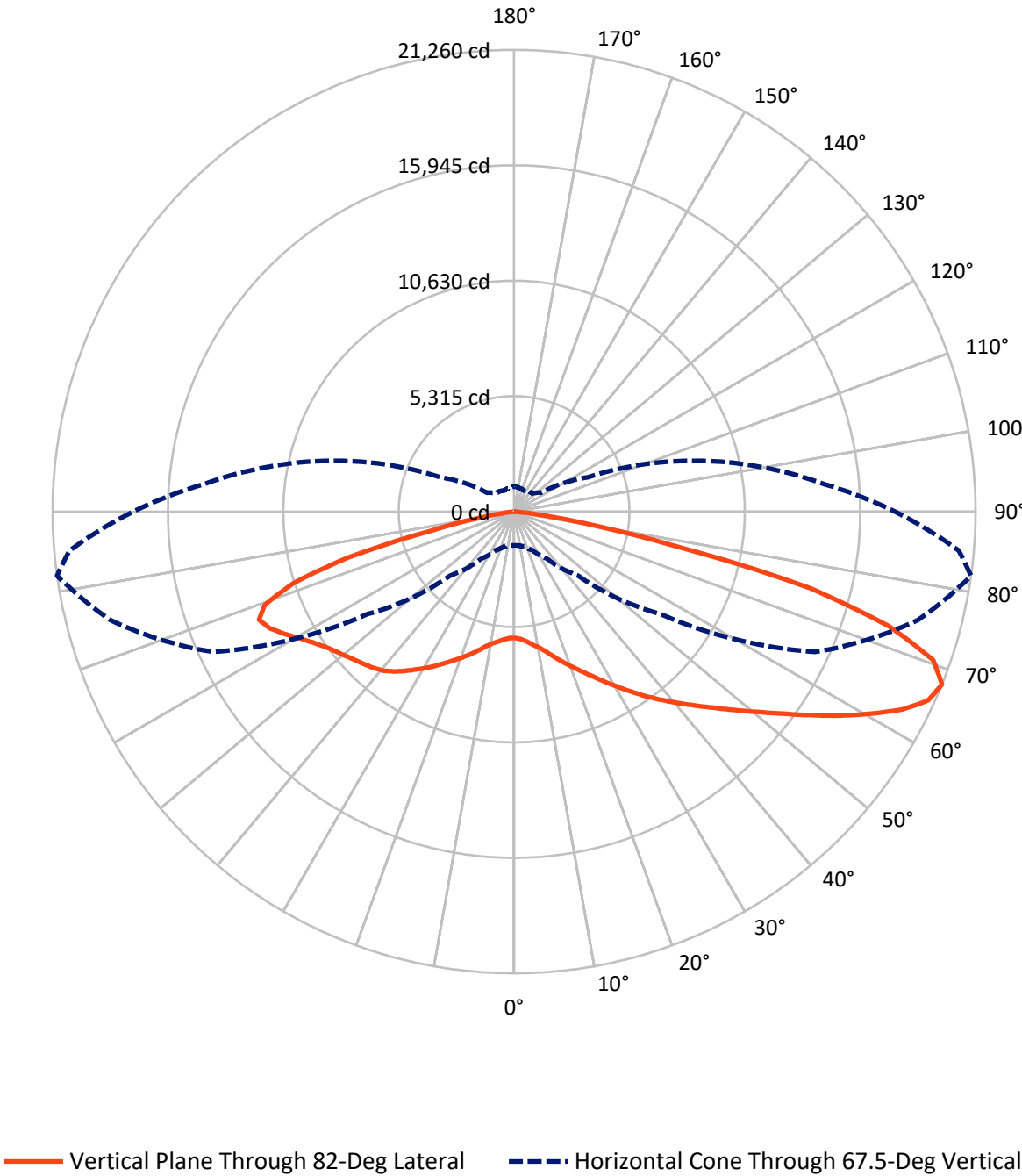
--- 1/2 Max cd



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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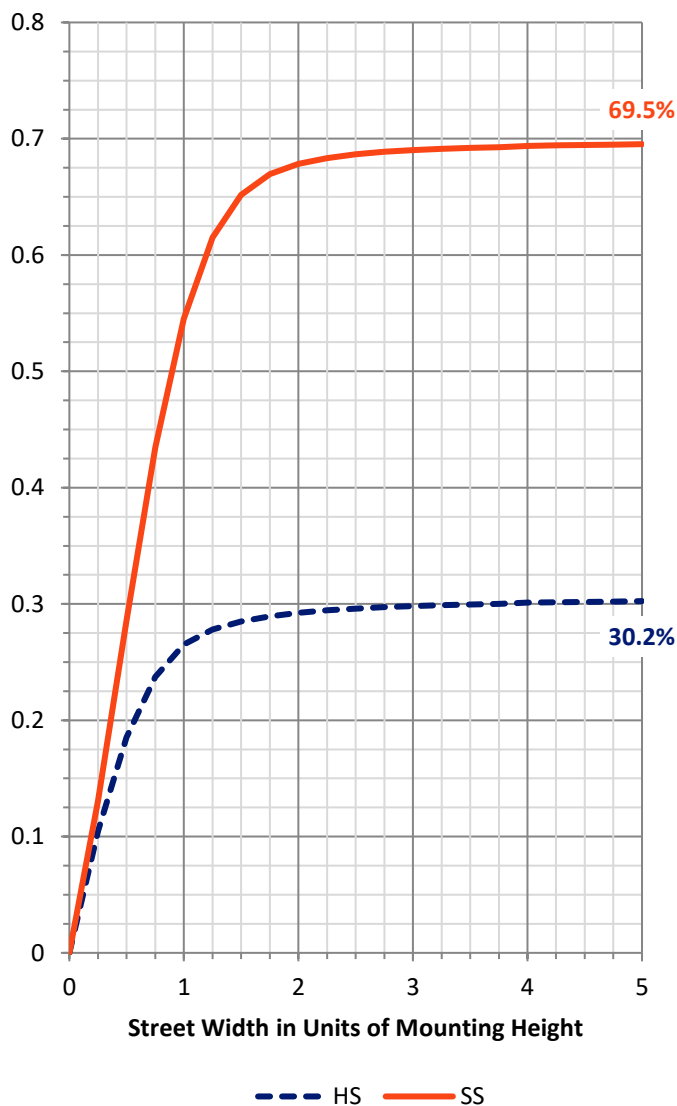
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12331.1	0.0	12331.1
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	28159.8	0.0	28159.8
	% Fixture	69.5	0.0	69.5
Total	Lumens	40491.0	0.0	40491.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	601.5	1.5
10°-20°	2166.7	5.4
20°-30°	4354.6	10.8
30°-40°	6840.5	16.9
40°-50°	8333.1	20.6
50°-60°	7873.7	19.4
60°-70°	6501.9	16.1
70°-80°	3540.6	8.7
80°-90°	278.4	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°	40491.0	100.0
0°-180°	40491.0	100.0

Coefficient of Utilization



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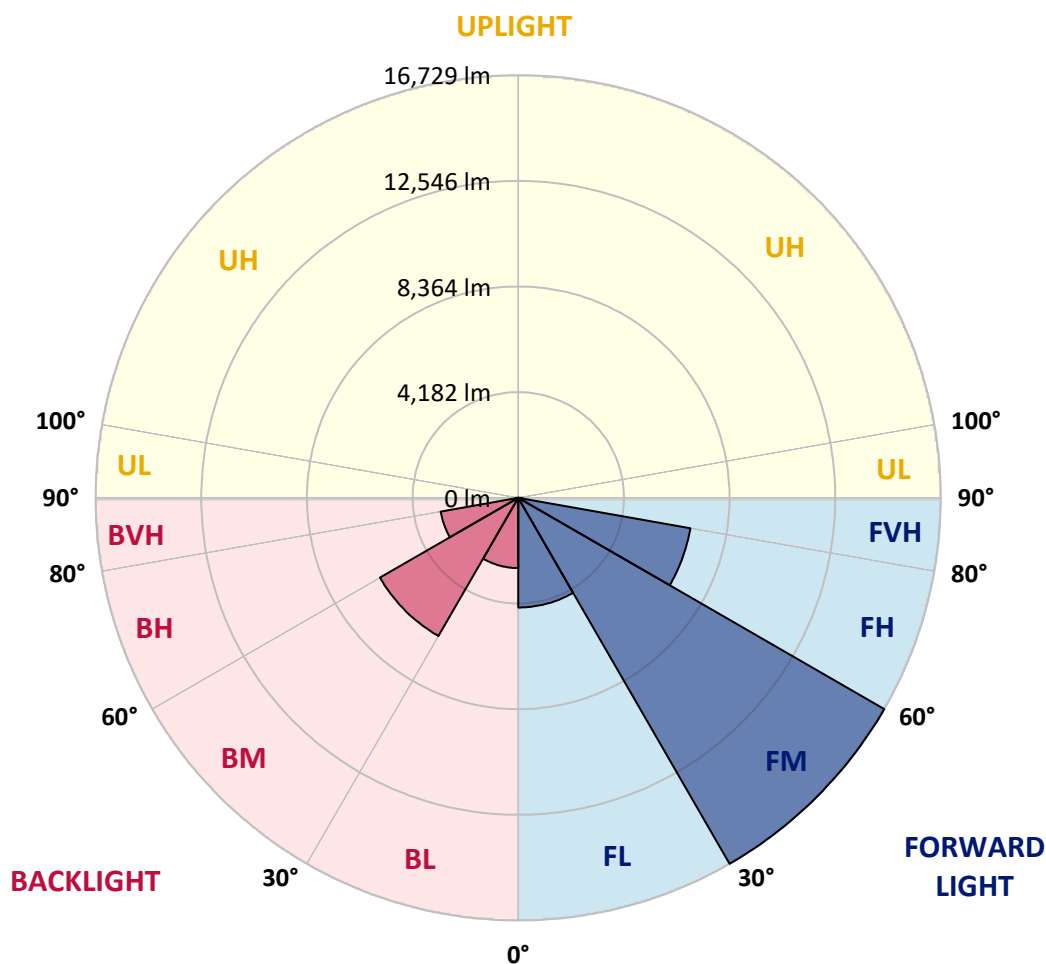
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4342.1	10.7			
FM	(30°-60°)	16728.6	41.3			
FH	(60°-80°)	6921.4	17.1			G3/7500
FVH	(80°-90°)	167.8	0.4			G2/225
BL	(0°-30°)	2780.8	6.9	B4/5000		
BM	(30°-60°)	6318.7	15.6	B4/8500		
BH	(60°-80°)	3121.1	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°	5820.6	5820.6	5820.6	5820.6	5820.6	5820.6	5820.6	5820.6	5820.6	5820.6	5820.6
2.5°	6085.1	6085.1	6132.2	6132.2	6091.0	6026.3	6008.7	5938.1	5873.5	5873.5	5879.4
5°	6667.2	6661.3	6696.6	6649.5	6549.6	6420.3	6332.1	6179.2	6049.9	6008.7	6002.8
7.5°	7378.6	7372.7	7390.3	7313.9	7125.8	6914.1	6737.7	6490.8	6279.1	6191.0	6167.4
10°	8172.3	8166.4	8148.8	8019.4	7766.6	7437.4	7172.8	6831.8	6514.3	6373.2	6343.8
12.5°	9083.6	9071.8	9030.7	8842.5	8495.7	8072.4	7690.2	7249.2	6825.9	6631.9	6567.2
15°	10100.7	10083.1	10006.7	9777.4	9312.9	8777.9	8284.0	7719.6	7202.2	6949.4	6861.2
17.5°	11170.8	11170.8	11053.2	10712.2	10194.8	9530.4	8919.0	8201.7	7596.1	7284.5	7178.7
20°	12258.5	12252.6	12105.6	11694.0	11082.6	10318.3	9542.2	8754.4	8001.8	7625.5	7496.2
22.5°	13404.9	13393.2	13210.9	12740.6	12011.5	11147.3	10241.8	9301.1	8448.6	7995.9	7831.3
25°	14721.9	14704.3	14480.8	13904.7	13040.4	12064.4	11029.7	9942.0	8960.1	8407.5	8213.5
27.5°	16121.2	16097.7	15833.1	15162.9	14216.3	13040.4	11899.8	10682.8	9524.6	8866.1	8648.5
30°	17367.6	17350.0	17061.9	16374.0	15286.3	14010.5	12728.8	11423.6	10118.4	9354.1	9083.6
32.5°	18308.3	18308.3	18049.6	17373.5	16244.7	14939.4	13563.7	12123.2	10735.7	9877.3	9559.8
35°	18878.6	18896.2	18672.8	18131.9	17067.8	15815.5	14427.9	12946.3	11394.2	10435.9	10094.9
37.5°	18960.9	19019.7	18890.4	18525.8	17638.1	16544.5	15274.6	13740.0	12076.2	11000.3	10618.1
40°	18578.8	18619.9	18625.8	18484.7	17873.2	17067.8	16021.2	14580.8	12799.4	11594.1	11153.1
42.5°	17814.4	17843.8	17896.8	17937.9	17702.7	17297.1	16591.5	15362.8	13569.5	12199.7	11682.3
45°	16826.7	16820.8	16909.0	17085.4	17073.6	17167.7	16909.0	16074.2	14369.1	12887.5	12270.2
47.5°	15351.0	15321.6	15633.2	16033.0	16232.9	16673.8	16914.9	16632.7	15239.3	13646.0	12940.5
50°	13040.4	13011.0	13693.0	14633.7	15221.6	15891.9	16591.5	16967.8	16150.6	14498.5	13669.5
52.5°	10230.1	10200.7	11064.9	12711.2	13992.9	14968.8	15938.9	17044.2	17014.9	15450.9	14492.6
55°	7607.9	7584.4	8425.1	10206.6	12282.0	13898.8	15139.3	16844.3	17826.2	16544.5	15492.1
57.5°	5362.0	5350.2	6079.3	7555.0	10083.1	12593.6	14369.1	16456.3	18572.9	17732.1	16620.9
60°	3762.8	3745.1	4274.3	5414.9	7625.5	10624.0	13604.8	15938.9	19131.4	18902.1	17820.3
62.5°	2534.0	2522.2	2898.5	3851.0	5414.9	8178.2	12446.6	15592.0	19448.9	20078.0	19031.5
65°	1922.5	1916.7	2087.2	2610.4	3833.3	5873.5	10606.4	15550.9	19490.1	20959.9	20060.4
67.5°	1552.1	1558.0	1652.1	1951.9	2651.6	4174.3	8225.2	15292.2	19272.5	21259.7	20560.1
70°	1269.9	1269.9	1311.1	1511.0	1957.8	2816.2	5744.1	14116.3	18666.9	20477.8	19966.3
72.5°	970.1	976.0	1105.3	1222.9	1475.7	1975.5	3680.5	11682.3	17238.3	18055.5	17667.5
75°	770.2	764.3	840.7	1005.4	1146.5	1411.0	2257.7	8378.1	14669.0	14110.4	13863.5
77.5°	552.7	546.8	605.6	746.7	870.1	999.5	1346.4	4227.3	7978.3	7331.6	7149.3
80°	376.3	364.5	417.4	517.4	576.2	587.9	658.5	1622.7	3480.6	3280.7	3239.5
82.5°	194.0	194.0	223.4	294.0	299.8	305.7	294.0	523.3	1152.4	1075.9	1028.9
85°	76.4	76.4	82.3	99.9	99.9	105.8	105.8	135.2	123.5	117.6	111.7
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°	5820.6	5820.6	5820.6	5820.6	5820.6	5820.6	5820.6	5820.6	5820.6	5820.6	5820.6
2.5°	5867.6	5844.1	5767.6	5750.0	5738.2	5720.6	5726.5	5685.3	5667.7	5673.6	5650.1
5°	5973.4	5932.3	5838.2	5797.0	5785.3	5767.6	5785.3	5755.9	5726.5	5738.2	5726.5
7.5°	6120.4	6061.6	5944.0	5902.9	5897.0	5879.4	5902.9	5879.4	5855.8	5867.6	5844.1
10°	6273.3	6196.8	6067.5	6026.3	6026.3	6020.5	6044.0	6008.7	5985.2	5991.1	5979.3
12.5°	6496.7	6396.7	6255.6	6220.4	6202.7	6220.4	6226.2	6179.2	6138.0	6143.9	6126.3
15°	6767.1	6655.4	6502.6	6449.7	6437.9	6432.0	6408.5	6349.7	6296.8	6290.9	6273.3
17.5°	7061.1	6920.0	6737.7	6684.8	6631.9	6614.3	6555.5	6479.0	6396.7	6396.7	6373.2
20°	7343.3	7184.6	6967.0	6890.6	6814.2	6743.6	6643.7	6520.2	6414.4	6396.7	6373.2
22.5°	7649.0	7460.9	7208.1	7096.4	6961.2	6820.1	6649.5	6484.9	6349.7	6320.3	6302.7
25°	7990.0	7754.9	7455.0	7290.4	7072.9	6855.3	6602.5	6390.9	6232.1	6185.1	6173.3
27.5°	8366.3	8084.1	7719.6	7478.5	7161.1	6820.1	6496.7	6243.9	6049.9	5991.1	5973.4
30°	8748.5	8413.4	7960.6	7607.9	7161.1	6708.3	6302.7	6008.7	5785.3	5703.0	5691.2
32.5°	9130.6	8754.4	8178.2	7678.4	7090.5	6520.2	6049.9	5703.0	5450.2	5350.2	5373.7
35°	9589.2	9130.6	8378.1	7707.8	6972.9	6290.9	5761.8	5356.1	5097.4	5009.2	5026.8
37.5°	10065.5	9506.9	8536.8	7684.3	6808.3	6032.2	5438.4	5044.5	4721.1	4568.3	4585.9
40°	10477.0	9847.9	8648.5	7602.0	6596.6	5738.2	5120.9	4603.5	4156.7	4009.7	3992.1
42.5°	10865.0	10100.7	8707.3	7478.5	6355.6	5397.2	4668.2	4003.8	3557.0	3374.7	3380.6
45°	11270.7	10347.7	8683.8	7313.9	6055.7	4997.5	4086.2	3415.9	3022.0	2857.4	2863.2
47.5°	11735.2	10612.2	8660.3	7137.5	5691.2	4480.1	3527.6	2898.5	2557.5	2439.9	2428.2
50°	12229.1	10906.2	8630.9	6920.0	5285.5	3903.9	2975.0	2416.4	2128.3	2051.9	2034.3
52.5°	12787.6	11223.7	8613.3	6661.3	4797.6	3292.4	2481.1	1993.1	1799.1	1746.2	1740.3
55°	13457.8	11594.1	8636.8	6349.7	4209.6	2716.3	2063.7	1716.8	1587.4	1558.0	1552.1
57.5°	14275.1	12070.3	8707.3	5985.2	3592.3	2216.5	1757.9	1546.3	1464.0	1440.4	1440.4
60°	15162.9	12611.2	8836.7	5573.6	2975.0	1828.5	1558.0	1411.0	1375.8	1405.2	1405.2
62.5°	16121.2	13246.2	9066.0	5073.9	2398.8	1546.3	1399.3	1299.3	1275.8	1334.6	1340.5
65°	17009.0	13863.5	9212.9	4474.2	1904.9	1340.5	1275.8	1187.6	1199.4	1258.2	1252.3
67.5°	17555.8	14375.0	9007.2	3721.6	1511.0	1187.6	1146.5	1070.0	1099.4	1146.5	1152.4
70°	17220.6	14086.9	7990.0	2810.3	1181.8	1034.8	1005.4	958.3	981.9	1040.6	1064.2
72.5°	15580.3	12617.1	6214.5	1899.0	952.5	870.1	881.9	858.4	887.8	940.7	993.6
75°	12646.5	9536.3	4168.5	1217.0	752.6	740.8	758.4	740.8	752.6	805.5	834.9
77.5°	6602.5	4650.6	2075.4	758.4	558.5	576.2	605.6	611.5	646.7	658.5	670.2
80°	3080.8	2093.0	864.3	423.3	370.4	405.7	464.5	470.3	482.1	499.7	505.6
82.5°	1005.4	629.1	399.8	229.3	211.7	229.3	299.8	358.6	364.5	399.8	399.8
85°	105.8	64.7	88.2	94.1	82.3	99.9	135.2	129.3	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)