

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: P841741

Luminaire Tested: **ARCH4-220-730-U-T2U-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841741
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-25)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-220-730-U-T2U-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 870mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II U
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23457 lumens
Efficiency: N/A
Efficacy: 105.8 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

Input Watts (W): 221.8
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



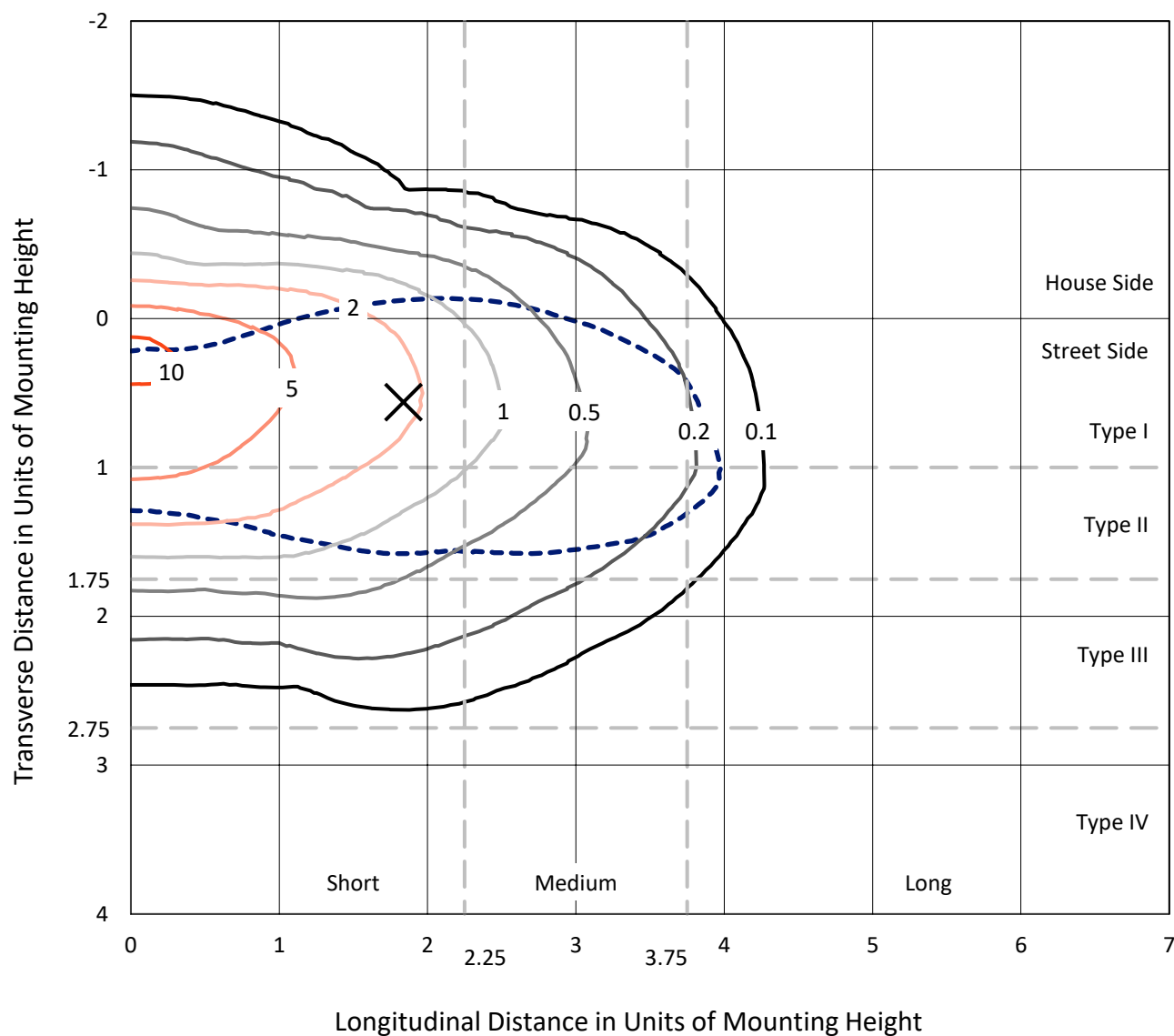
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

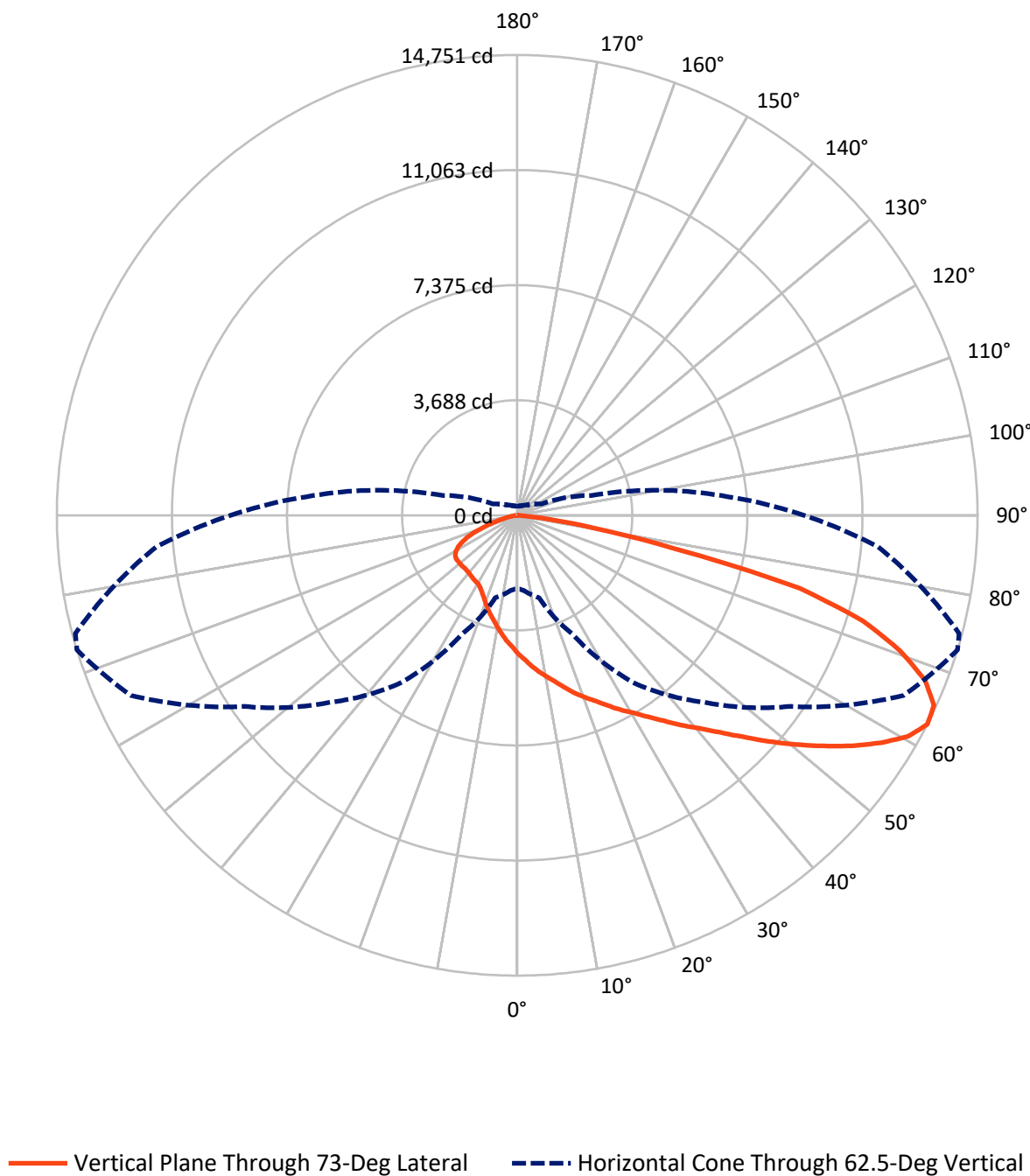


Based on 25 foot mounting height. Maximum calculated value = 11.2 fc

Type II - Short - N/A

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Luminous Intensity Polar Plot



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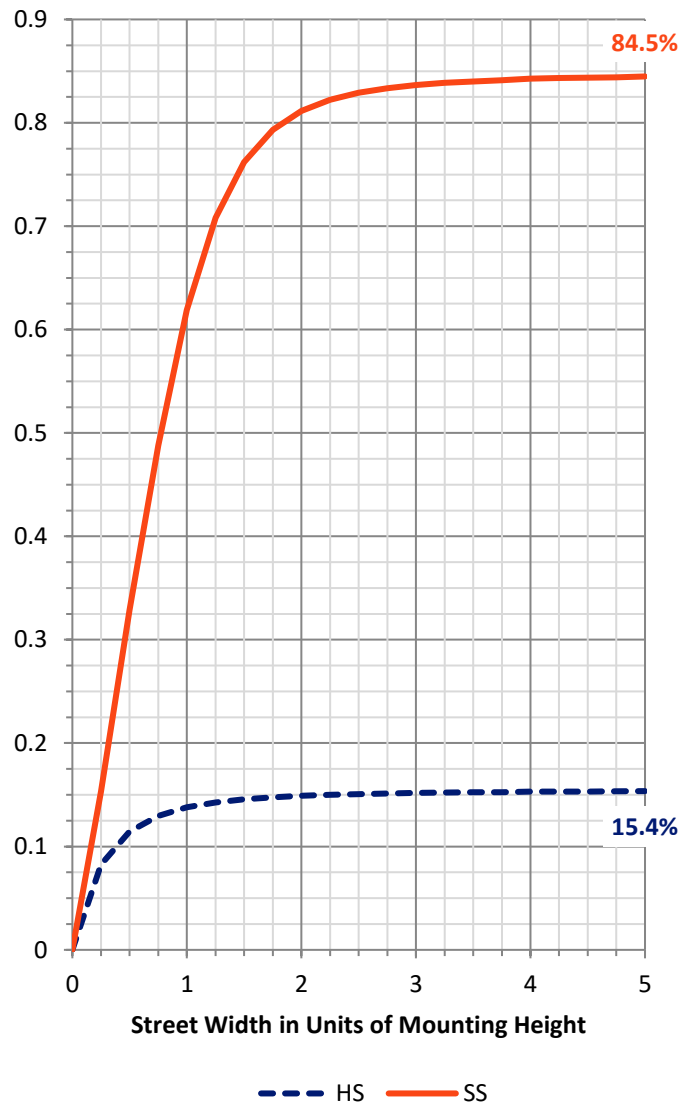
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3636.2	0.0	3636.2
	% Fixture	15.5	0.0	15.5
Street Side	Lumens	19820.8	0.0	19820.8
	% Fixture	84.5	0.0	84.5
Total	Lumens	23457.0	0.0	23457.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	429.1	1.8
10°-20°	1294.8	5.5
20°-30°	2155.2	9.2
30°-40°	3251.9	13.9
40°-50°	4545.3	19.4
50°-60°	5020.6	21.4
60°-70°	4373.6	18.6
70°-80°	2209.3	9.4
80°-90°	177.3	0.8
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°	23457.0	100.0
0°-180°	23457.0	100.0

Coefficient of Utilization



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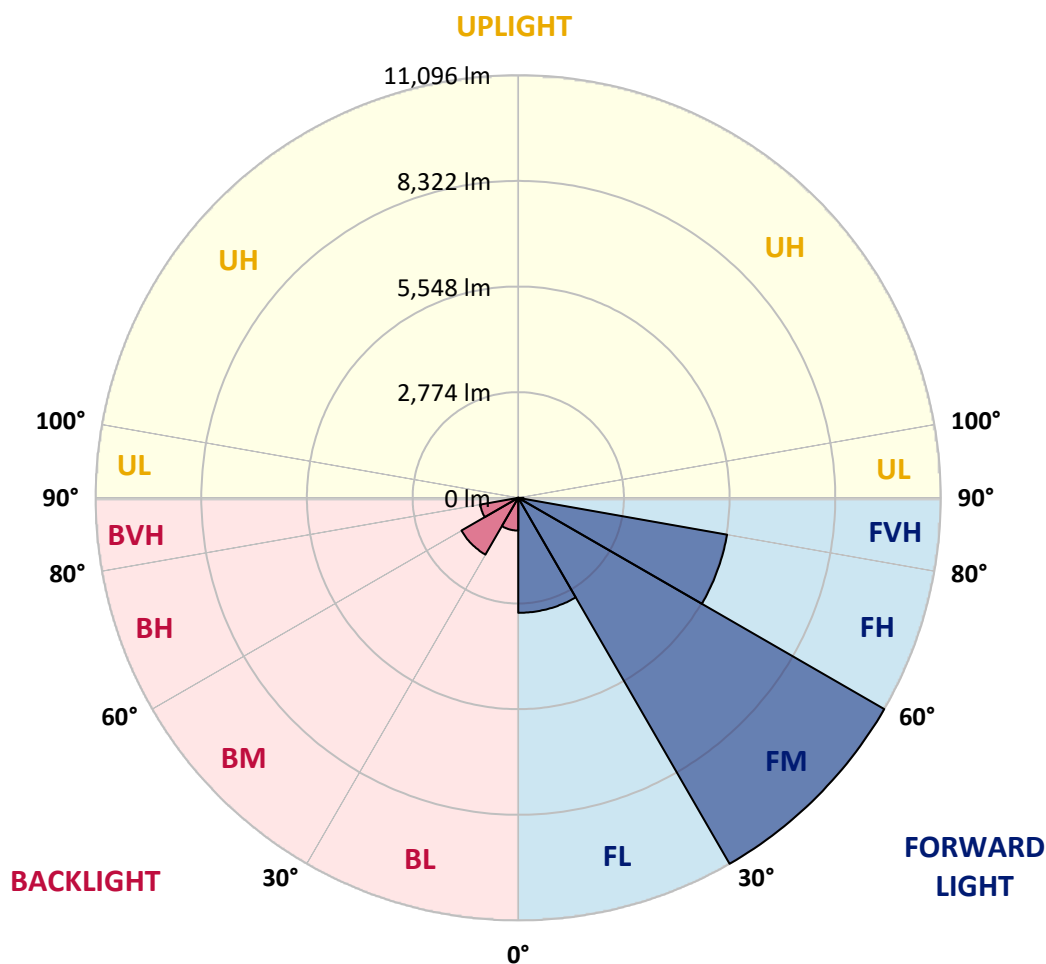
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3019.6	12.9			
FM	(30°-60°)	11096.0	47.3			
FH	(60°-80°)	5567.9	23.7			G3/7500
FVH	(80°-90°)	137.2	0.6			G2/225
BL	(0°-30°)	859.4	3.7	B2/1000		
BM	(30°-60°)	1721.7	7.3	B2/2500		
BH	(60°-80°)	1014.9	4.3	B3/2500		G3/2500
BVH	(80°-90°)	40.1	0.2			G1/100
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 Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	4441.6	4441.6	4441.6	4441.6	4441.6	4441.6	4441.6	4441.6	4441.6	4441.6	4441.6
2.5°	5055.0	5111.2	5080.5	5101.0	4998.8	4932.3	4855.6	4707.4	4625.6	4615.4	4518.3
5°	5796.1	5857.4	5806.3	5791.0	5612.1	5458.8	5285.0	5024.3	4850.5	4819.9	4605.2
7.5°	6537.2	6593.4	6532.1	6486.1	6245.9	5975.0	5719.4	5336.1	5065.2	5014.1	4676.7
10°	7058.6	7109.7	7063.7	7017.7	6767.2	6491.2	6128.3	5627.4	5259.4	5177.6	4722.7
12.5°	7452.1	7482.8	7462.4	7421.5	7186.3	6889.9	6542.3	5954.5	5479.2	5377.0	4794.3
15°	7774.1	7825.2	7799.7	7769.0	7544.1	7247.7	6915.5	6297.0	5734.8	5607.0	4901.6
17.5°	7988.8	8024.6	8029.7	8029.7	7830.4	7539.0	7217.0	6608.8	5990.3	5826.8	5003.9
20°	8085.9	8126.8	8152.4	8193.3	8029.7	7779.2	7452.1	6874.6	6230.6	6046.5	5101.0
22.5°	8131.9	8167.7	8234.1	8326.1	8193.3	7983.7	7682.1	7119.9	6470.8	6276.6	5213.4
25°	8167.7	8213.7	8310.8	8484.6	8392.6	8213.7	7953.0	7401.0	6757.0	6557.7	5377.0
27.5°	8264.8	8321.0	8413.0	8622.6	8510.1	8423.3	8239.3	7702.6	7058.6	6854.1	5576.3
30°	8602.1	8648.2	8643.0	8775.9	8637.9	8612.4	8484.6	7993.9	7349.9	7145.5	5811.4
32.5°	9215.5	9261.5	9149.0	9097.9	8796.4	8801.5	8750.4	8305.7	7697.5	7487.9	6082.3
35°	9874.8	9926.0	9777.7	9690.8	9184.8	9036.6	9062.2	8694.2	8085.9	7876.4	6419.7
37.5°	10462.6	10524.0	10396.2	10268.4	9757.3	9414.8	9409.7	9128.6	8530.6	8315.9	6792.8
40°	10784.6	10856.2	10932.9	10861.3	10324.6	9946.4	9782.8	9573.3	8970.2	8750.4	7196.6
42.5°	10938.0	11137.3	11275.3	11229.3	10789.7	10406.4	10212.2	10038.4	9506.8	9292.2	7677.0
45°	10508.6	10513.7	10805.1	11055.5	10973.7	10718.2	10682.4	10559.7	10120.2	9915.7	8218.8
47.5°	9972.0	9931.1	10135.5	10580.2	10810.2	10876.6	11086.2	11137.3	10820.4	10616.0	8770.8
50°	8683.9	8709.5	9373.9	10012.8	10462.6	10892.0	11372.4	11730.2	11541.1	11346.9	9353.5
52.5°	7063.7	7125.0	7886.6	9292.2	10002.6	10738.6	11541.1	12323.1	12277.1	12093.1	9936.2
55°	5663.2	5760.3	6567.9	8091.0	9414.8	10396.2	11612.6	12864.9	13038.7	12870.0	10508.6
57.5°	4329.2	4431.4	5111.2	6675.2	8663.5	9839.1	11561.5	13340.2	13749.1	13641.8	11035.1
60°	3260.9	3363.2	3797.6	5412.8	7723.0	9215.5	11306.0	13652.0	14388.0	14275.6	11418.4
62.5°	2335.8	2417.6	2739.6	4211.6	6578.1	8474.4	10677.3	13657.1	14750.9	14658.9	11602.4
65°	1681.6	1681.6	1942.3	3005.4	5504.8	7585.0	9726.6	13028.4	14674.3	14648.7	11474.6
67.5°	1211.4	1221.6	1431.1	2100.7	4390.5	6506.6	8494.8	11909.1	14081.4	14209.1	11014.6
70°	858.7	884.2	981.4	1466.9	3317.2	5136.8	7176.1	10442.2	13013.1	13238.0	10125.3
72.5°	664.5	679.8	746.2	1022.2	2422.7	3818.1	5719.4	8806.6	11587.1	11842.7	8913.9
75°	511.1	526.5	577.6	751.3	1737.8	2678.3	4063.4	6833.7	9343.3	9798.2	7160.8
77.5°	373.1	393.6	429.3	546.9	1012.0	1702.0	2463.6	3843.6	5157.2	5371.9	3751.6
80°	173.8	199.3	250.4	352.7	546.9	802.5	874.0	1482.2	2478.9	2591.4	2034.3
82.5°	97.1	122.7	143.1	214.7	276.0	286.2	296.4	373.1	935.3	1032.5	853.6
85°	46.0	61.3	66.4	92.0	92.0	81.8	97.1	71.6	153.3	184.0	178.9
87.5°	0.0	5.1	10.2	25.6	20.4	15.3	15.3	15.3	15.3	20.4	15.3
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°	4441.6	4441.6	4441.6	4441.6	4441.6	4441.6	4441.6	4441.6	4441.6	4441.6	4441.6
2.5°	4472.3	4405.9	4252.5	4119.6	4032.7	3956.1	3853.8	3807.8	3726.1	3741.4	3695.4
5°	4497.9	4375.2	4104.3	3853.8	3669.8	3506.3	3327.4	3225.2	3112.7	3102.5	3066.7
7.5°	4513.2	4324.1	3935.6	3583.0	3301.8	3051.4	2811.2	2678.3	2540.3	2509.6	2478.9
10°	4497.9	4247.4	3761.8	3301.8	2928.7	2616.9	2346.0	2177.4	2034.3	1998.5	1967.8
12.5°	4513.2	4206.5	3598.3	3041.2	2596.5	2243.8	1937.1	1763.4	1630.5	1594.7	1574.2
15°	4549.0	4181.0	3460.3	2806.0	2300.0	1906.5	1604.9	1456.7	1349.4	1313.6	1303.4
17.5°	4579.6	4155.4	3312.1	2576.0	2003.6	1610.0	1349.4	1226.7	1134.7	1098.9	1088.7
20°	4620.5	4119.6	3163.8	2356.3	1742.9	1374.9	1144.9	1037.6	966.0	940.5	935.3
22.5°	4656.3	4094.1	3025.8	2136.5	1502.7	1185.8	991.6	904.7	853.6	828.0	828.0
25°	4748.3	4104.3	2908.3	1932.0	1323.8	1037.6	874.0	807.6	766.7	751.3	751.3
27.5°	4855.6	4145.2	2816.3	1758.3	1170.5	925.1	792.2	736.0	715.6	695.1	700.2
30°	5009.0	4227.0	2754.9	1615.1	1058.0	838.2	725.8	684.9	664.5	659.3	659.3
32.5°	5203.2	4359.9	2749.8	1523.1	976.2	771.8	679.8	644.0	633.8	628.7	628.7
35°	5433.2	4477.4	2719.2	1482.2	925.1	725.8	644.0	618.5	613.3	613.3	613.3
37.5°	5709.2	4671.6	2698.7	1426.0	899.6	700.2	618.5	598.0	598.0	598.0	598.0
40°	5995.4	4830.1	2668.0	1374.9	889.3	684.9	603.1	577.6	577.6	577.6	577.6
42.5°	6337.9	5060.1	2657.8	1349.4	874.0	674.7	582.7	552.0	557.1	557.1	562.2
45°	6751.9	5320.8	2652.7	1323.8	868.9	664.5	562.2	526.5	531.6	526.5	526.5
47.5°	7171.0	5622.3	2668.0	1308.5	863.8	654.2	546.9	500.9	500.9	495.8	495.8
50°	7610.6	5898.3	2678.3	1293.1	853.6	633.8	521.3	480.5	470.2	460.0	465.1
52.5°	8024.6	6153.9	2683.4	1267.6	822.9	603.1	500.9	454.9	439.6	424.2	429.3
55°	8438.6	6399.2	2693.6	1236.9	782.0	572.5	475.3	429.3	408.9	388.5	388.5
57.5°	8811.7	6613.9	2668.0	1160.2	736.0	541.8	449.8	398.7	368.0	347.6	347.6
60°	9067.3	6767.2	2591.4	1047.8	674.7	506.0	424.2	368.0	332.2	316.9	316.9
62.5°	9189.9	6792.8	2453.4	863.8	598.0	470.2	393.6	337.3	306.7	296.4	296.4
65°	9072.4	6680.3	2238.7	649.1	516.2	429.3	362.9	311.8	281.1	255.6	255.6
67.5°	8663.5	6363.4	1942.3	490.7	439.6	388.5	332.2	286.2	250.4	230.0	230.0
70°	7840.6	5704.1	1502.7	393.6	373.1	337.3	301.6	255.6	224.9	199.3	199.3
72.5°	6762.1	4835.2	1058.0	316.9	316.9	286.2	255.6	224.9	194.2	173.8	173.8
75°	5187.9	3577.8	710.5	255.6	260.7	240.2	209.6	184.0	163.6	148.2	148.2
77.5°	2831.6	1768.5	434.5	189.1	194.2	184.0	163.6	148.2	138.0	122.7	122.7
80°	1374.9	776.9	250.4	132.9	138.0	132.9	122.7	107.3	107.3	97.1	97.1
82.5°	577.6	291.3	132.9	92.0	92.0	81.8	76.7	76.7	76.7	71.6	71.6
85°	143.1	56.2	56.2	51.1	51.1	51.1	46.0	46.0	46.0	35.8	40.9
87.5°	20.4	20.4	20.4	20.4	20.4	20.4	15.3	5.1	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)