

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: P841662

Luminaire Tested: **ARCH4-210-727-U-T3-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841662
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-26)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-210-727-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 835mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21191 lumens
Efficiency: N/A
Efficacy: 99.4 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G3

Input Watts (W): 213.1
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

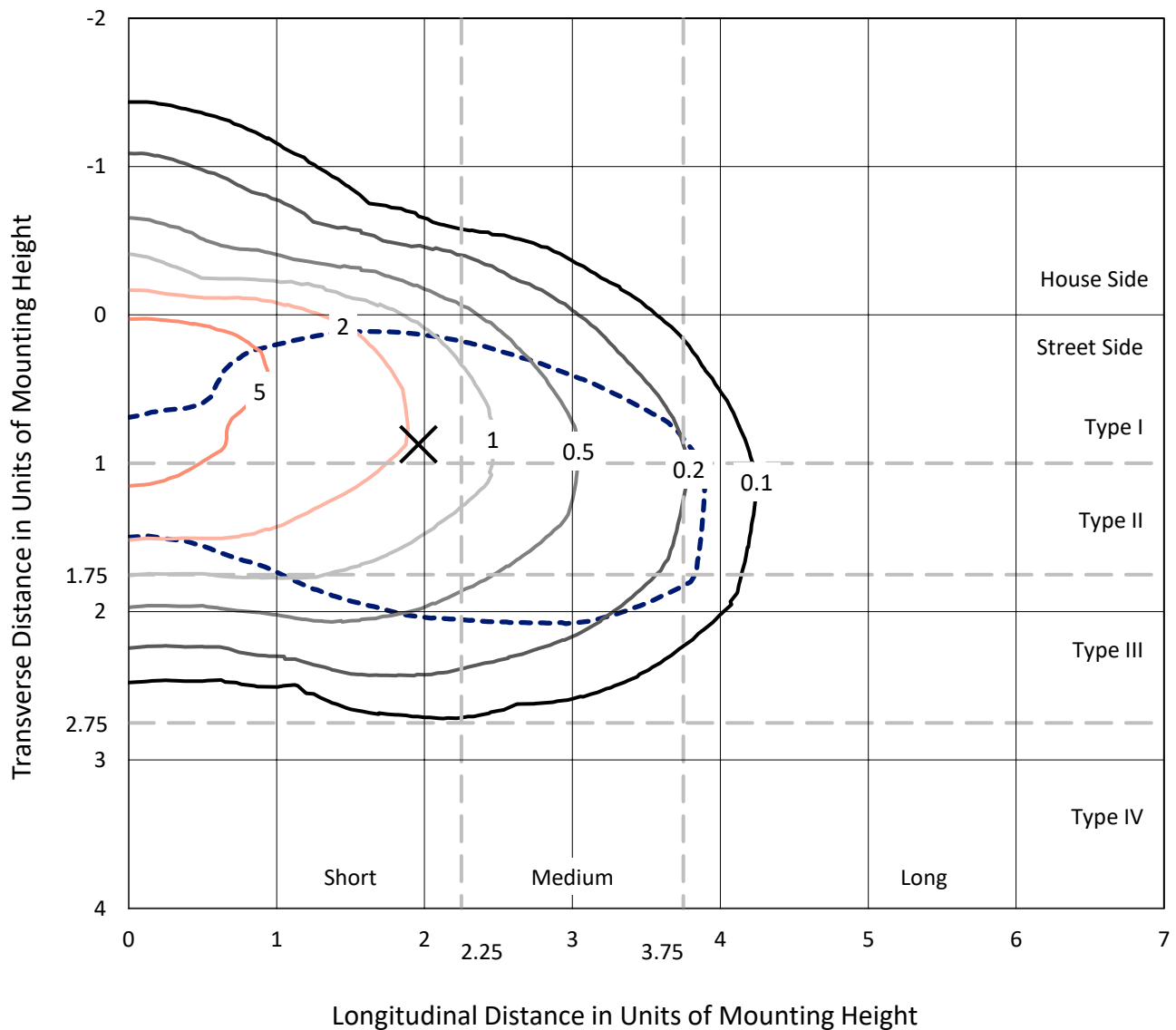


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

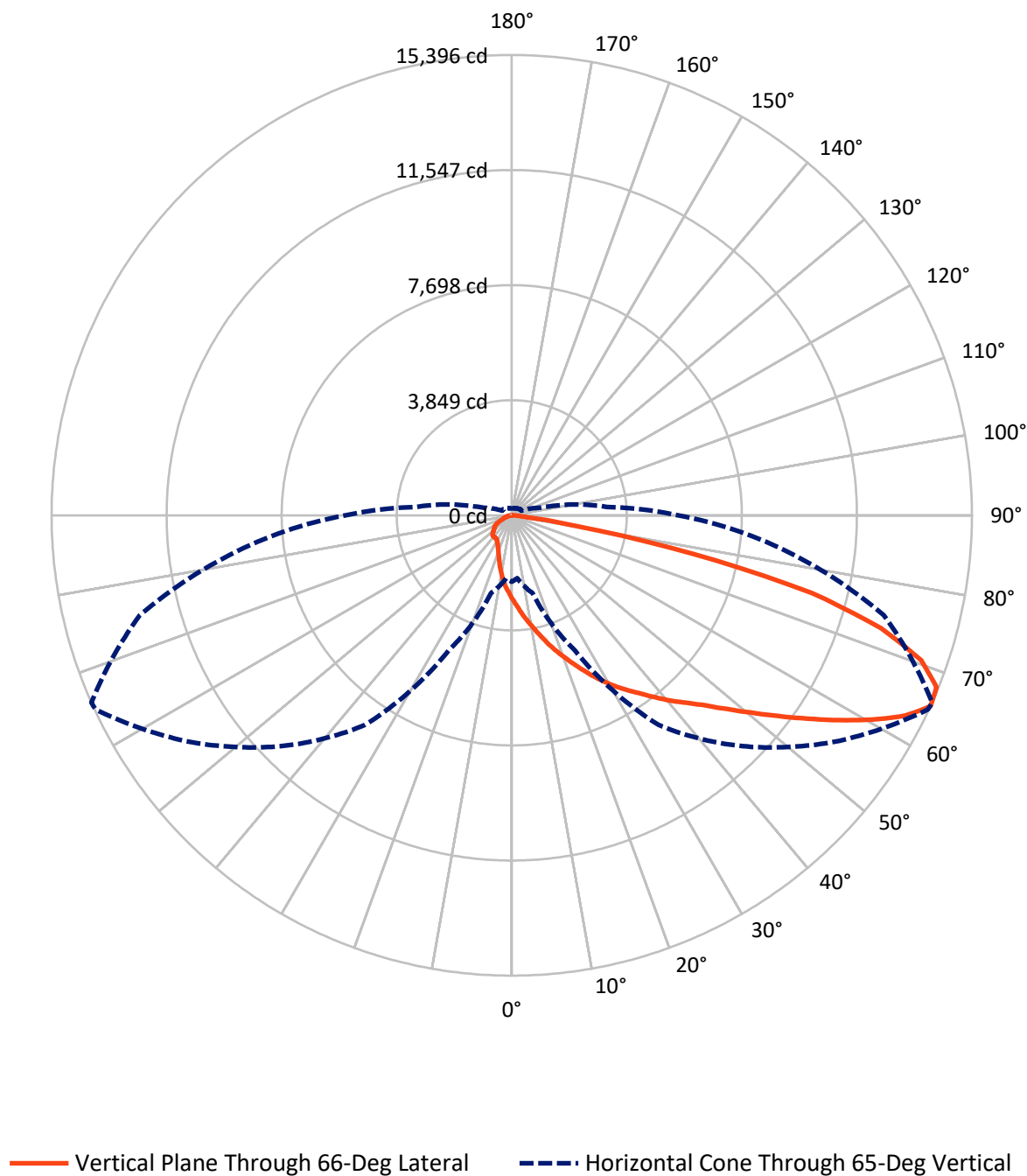


Based on 25 foot mounting height. Maximum calculated value = 8.1 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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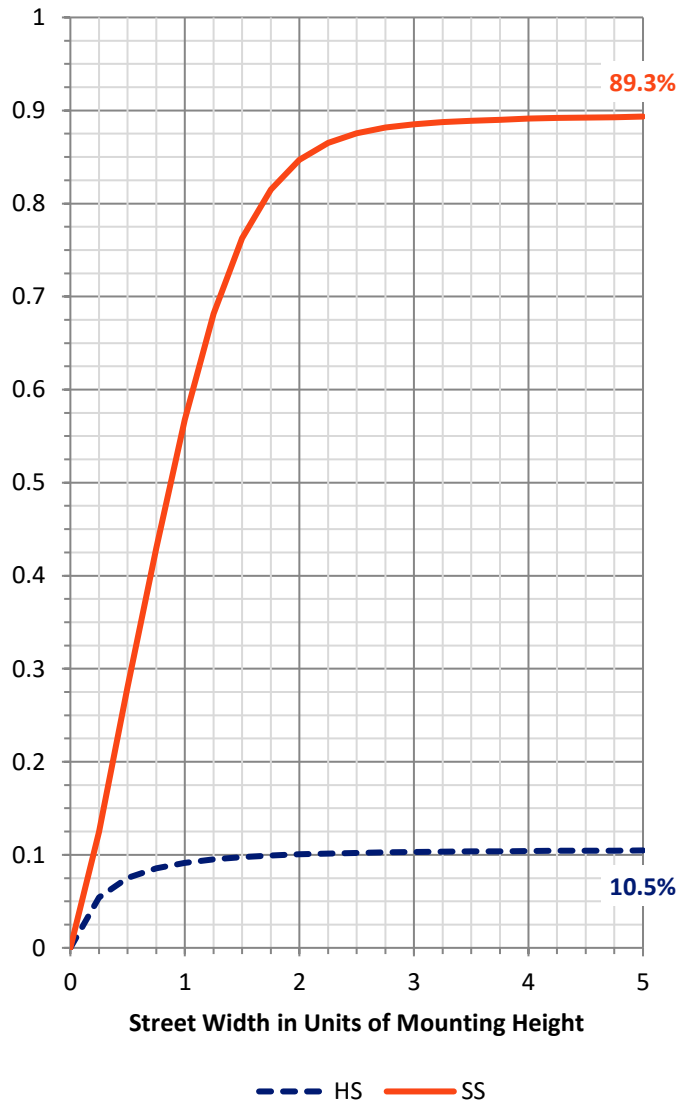
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2241.4	0.0	2241.4
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	18949.6	0.0	18949.6
	% Fixture	89.4	0.0	89.4
Total	Lumens	21191.0	0.0	21191.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	276.8	1.3
10°-20°	902.2	4.3
20°-30°	1632.3	7.7
30°-40°	2552.5	12.0
40°-50°	3872.2	18.3
50°-60°	4919.7	23.2
60°-70°	4597.0	21.7
70°-80°	2284.7	10.8
80°-90°	153.5	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°	21191.0	100.0
0°-180°	21191.0	100.0

Coefficient of Utilization



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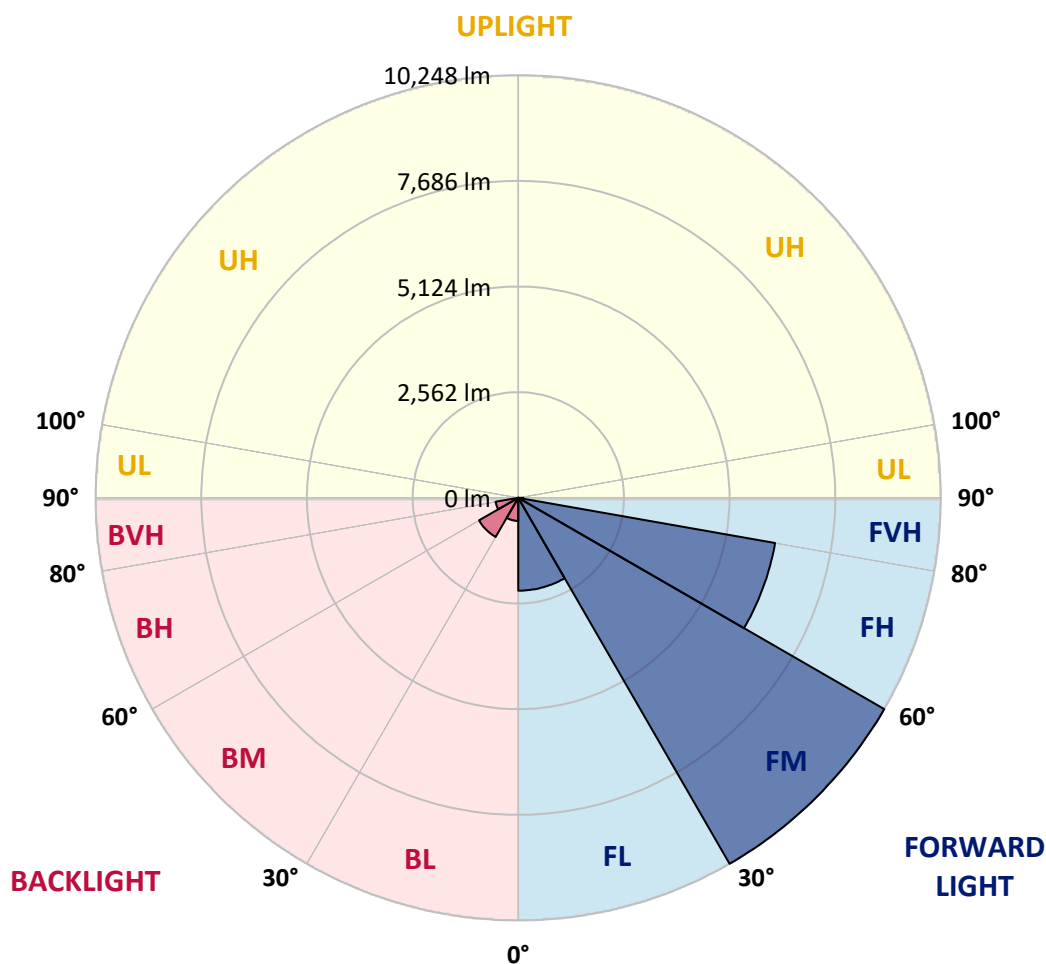
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2251.5	10.6			
FM	(30°-60°)	10248.2	48.4			
FH	(60°-80°)	6323.5	29.8			G3/7500
FVH	(80°-90°)	126.3	0.6			G2/225
BL	(0°-30°)	559.8	2.6	B2/1000		
BM	(30°-60°)	1096.3	5.2	B2/2500		
BH	(60°-80°)	558.2	2.6	B2/1000		G2/1000
BVH	(80°-90°)	27.2	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2804.5	2804.5	2804.5	2804.5	2804.5	2804.5	2804.5	2804.5	2804.5	2804.5	2804.5
2.5°	3275.6	3302.3	3315.6	3320.1	3217.9	3173.4	3129.0	3026.7	3004.5	2946.7	2871.2
5°	3853.4	3889.0	3880.1	3862.3	3737.9	3595.6	3480.1	3289.0	3257.9	3120.1	2951.2
7.5°	4422.3	4453.4	4444.6	4377.9	4240.1	4040.1	3849.0	3569.0	3524.5	3302.3	3031.2
10°	4897.9	4924.6	4920.1	4853.5	4689.0	4444.6	4213.4	3840.1	3786.8	3471.2	3097.9
12.5°	5289.0	5324.6	5320.1	5275.7	5129.0	4862.3	4600.1	4151.2	4084.5	3675.6	3191.2
15°	5595.7	5640.1	5640.1	5622.4	5520.1	5297.9	5000.1	4493.4	4413.4	3911.2	3306.7
17.5°	5782.4	5817.9	5849.0	5880.1	5809.0	5640.1	5369.0	4835.7	4751.2	4142.3	3426.7
20°	5880.1	5915.7	5937.9	6004.6	6017.9	5933.5	5720.1	5173.5	5084.6	4404.6	3564.5
22.5°	6040.1	6071.3	6075.7	6133.5	6160.1	6182.4	6049.0	5506.8	5435.7	4693.4	3720.1
25°	6306.8	6342.4	6329.0	6355.7	6360.2	6386.8	6373.5	5889.0	5817.9	5022.3	3906.8
27.5°	6649.1	6693.5	6684.6	6657.9	6617.9	6595.7	6653.5	6275.7	6209.0	5351.2	4097.9
30°	7017.9	7071.3	7057.9	7004.6	6897.9	6804.6	6884.6	6640.2	6577.9	5689.0	4311.2
32.5°	7391.3	7453.5	7449.1	7360.2	7178.0	7017.9	7138.0	6982.4	6937.9	6053.5	4542.3
35°	7635.7	7715.7	7706.9	7653.5	7418.0	7280.2	7426.8	7333.5	7302.4	6497.9	4875.7
37.5°	8031.3	8115.8	8040.2	7906.9	7635.7	7564.6	7742.4	7729.1	7706.9	6969.1	5226.8
40°	8991.3	9115.8	8915.8	8369.1	7924.6	7862.4	8115.8	8169.1	8146.9	7435.7	5542.4
42.5°	9995.8	10182.5	9871.4	9115.8	8449.1	8222.4	8524.7	8600.2	8573.5	7835.7	5826.8
45°	10604.7	10684.7	10373.6	9786.9	9378.0	8658.0	8960.2	9084.7	9062.4	8315.8	6191.3
47.5°	11102.5	11071.4	10715.8	10320.3	10395.8	9271.3	9453.6	9698.0	9680.2	8844.7	6591.3
50°	11209.2	11138.0	10995.8	10746.9	10946.9	9893.6	9973.6	10395.8	10378.0	9431.3	6995.7
52.5°	10458.0	10364.7	10751.4	10960.3	10893.6	10346.9	10546.9	11160.3	11151.4	10066.9	7382.4
55°	8582.4	8506.9	9546.9	10626.9	10835.8	10666.9	11182.5	11955.8	12004.7	10742.5	7733.5
57.5°	6751.3	6671.3	7693.5	9791.3	10622.5	10960.3	11924.7	12867.0	12929.2	11475.8	8066.9
60°	5382.4	5262.4	6044.6	8475.8	10222.5	11186.9	12640.3	13867.0	13875.9	12147.0	8271.3
62.5°	3657.9	3524.5	4391.2	6809.1	9551.3	11222.5	13191.4	14729.2	14764.8	12649.2	8306.9
65°	2222.3	2111.2	2697.8	4973.5	8560.2	10920.3	13200.3	15364.8	15395.9	12880.3	8093.5
67.5°	1288.9	1244.5	1542.3	3097.9	6915.7	10106.9	12644.8	15267.0	15324.8	12782.5	7609.1
70°	751.1	746.7	857.8	1533.4	4880.1	8493.5	11404.7	14444.8	14529.2	12271.4	6866.8
72.5°	551.1	560.0	604.5	822.2	2826.7	6115.7	9658.0	12791.4	12920.3	11271.4	5809.0
75°	435.6	440.0	480.0	560.0	1484.5	3457.9	7235.7	10266.9	10369.1	9489.1	4537.9
77.5°	324.5	333.3	364.5	395.6	688.9	1586.7	4071.2	6324.6	6155.7	5209.0	2191.2
80°	235.6	257.8	271.1	284.5	364.5	613.3	1222.3	2204.5	2186.7	2275.6	1035.6
82.5°	151.1	168.9	182.2	191.1	217.8	293.3	364.5	493.3	533.3	884.5	413.3
85°	66.7	75.6	84.4	102.2	93.3	102.2	151.1	97.8	84.4	133.3	75.6
87.5°	0.0	0.0	13.3	22.2	17.8	8.9	26.7	17.8	13.3	13.3	13.3
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°	2804.5	2804.5	2804.5	2804.5	2804.5	2804.5	2804.5	2804.5	2804.5	2804.5	2804.5
2.5°	2831.2	2782.3	2680.1	2582.3	2524.5	2448.9	2382.3	2320.1	2315.6	2297.8	2266.7
5°	2866.7	2773.4	2582.3	2400.1	2262.3	2115.6	1991.2	1893.4	1857.8	1831.2	1795.6
7.5°	2902.3	2755.6	2471.2	2204.5	1986.7	1782.3	1635.6	1502.3	1462.3	1426.7	1404.5
10°	2915.6	2724.5	2342.3	1986.7	1702.3	1484.5	1328.9	1231.1	1195.6	1177.8	1164.5
12.5°	2955.6	2706.7	2222.3	1782.3	1453.4	1253.4	1142.2	1084.5	1071.1	1057.8	1044.5
15°	3009.0	2706.7	2102.3	1582.3	1257.8	1097.8	1031.1	991.1	982.2	977.8	968.9
17.5°	3066.7	2706.7	1986.7	1413.4	1115.6	995.6	946.7	924.5	920.0	915.6	911.1
20°	3146.7	2711.2	1862.3	1266.7	1013.4	920.0	880.0	853.4	848.9	844.5	844.5
22.5°	3226.7	2720.1	1742.3	1155.6	946.7	862.2	813.4	786.7	777.8	777.8	777.8
25°	3329.0	2746.7	1631.2	1062.2	888.9	808.9	746.7	724.5	720.0	720.0	715.6
27.5°	3449.0	2777.8	1533.4	991.1	831.1	746.7	684.5	662.2	653.3	653.3	648.9
30°	3577.9	2809.0	1453.4	937.8	773.4	684.5	626.7	600.0	591.1	595.6	591.1
32.5°	3720.1	2853.4	1391.1	902.2	720.0	631.1	577.8	546.7	542.2	542.2	537.8
35°	3960.1	2977.9	1382.3	884.5	675.6	591.1	537.8	506.7	502.2	502.2	497.8
37.5°	4217.9	3120.1	1422.3	875.6	640.0	555.6	506.7	475.6	471.1	471.1	471.1
40°	4435.7	3226.7	1466.7	875.6	617.8	524.5	480.0	453.3	453.3	453.3	453.3
42.5°	4582.3	3235.6	1457.8	875.6	600.0	502.2	462.2	435.6	435.6	440.0	435.6
45°	4800.1	3280.1	1422.3	862.2	586.7	484.5	444.5	422.2	417.8	422.2	422.2
47.5°	5057.9	3360.1	1386.7	808.9	582.2	466.7	431.1	404.5	400.0	404.5	400.0
50°	5302.4	3431.2	1368.9	737.8	573.3	448.9	413.3	386.7	382.2	386.7	382.2
52.5°	5506.8	3462.3	1337.8	688.9	551.1	431.1	395.6	368.9	360.0	364.5	364.5
55°	5671.2	3453.4	1293.4	648.9	511.1	413.3	373.3	351.1	337.8	337.8	333.3
57.5°	5822.4	3457.9	1253.4	608.9	466.7	386.7	355.6	328.9	311.1	306.7	302.2
60°	5880.1	3435.6	1182.3	555.6	422.2	364.5	333.3	302.2	284.5	280.0	275.6
62.5°	5800.1	3355.6	1088.9	462.2	382.2	337.8	311.1	280.0	262.2	257.8	253.3
65°	5573.5	3204.5	946.7	364.5	346.7	306.7	284.5	262.2	240.0	231.1	226.7
67.5°	5186.8	2986.7	768.9	293.3	306.7	280.0	266.7	240.0	213.3	204.4	200.0
70°	4635.7	2697.8	577.8	248.9	271.1	248.9	240.0	213.3	191.1	182.2	177.8
72.5°	3862.3	2231.2	404.5	213.3	235.6	217.8	208.9	191.1	168.9	155.6	155.6
75°	2920.1	1600.0	266.7	182.2	195.6	186.7	173.3	160.0	146.7	137.8	133.3
77.5°	1257.8	622.2	164.4	137.8	160.0	155.6	137.8	128.9	124.4	115.6	115.6
80°	542.2	253.3	102.2	102.2	115.6	111.1	106.7	97.8	97.8	93.3	88.9
82.5°	200.0	102.2	62.2	75.6	84.4	75.6	75.6	75.6	75.6	71.1	71.1
85°	48.9	31.1	31.1	44.4	48.9	44.4	48.9	44.4	44.4	44.4	40.0
87.5°	13.3	13.3	17.8	17.8	17.8	17.8	17.8	13.3	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)