

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: P840908

Luminaire Tested: **ARCH4-100-750-U-T4W-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P840908
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-100-750-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 845mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12750 lumens
Efficiency: N/A
Efficacy: 123.7 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 103.1
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



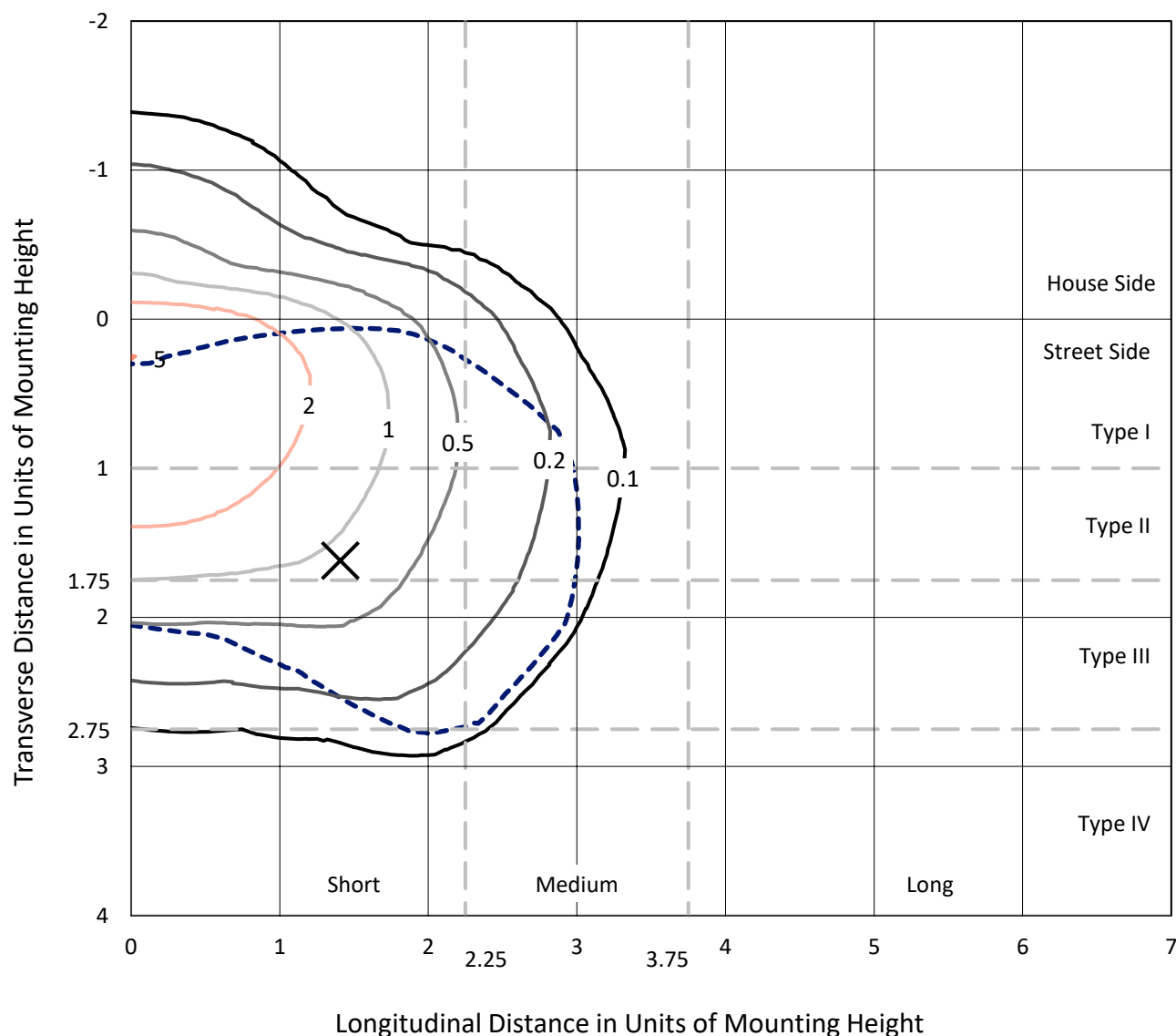
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

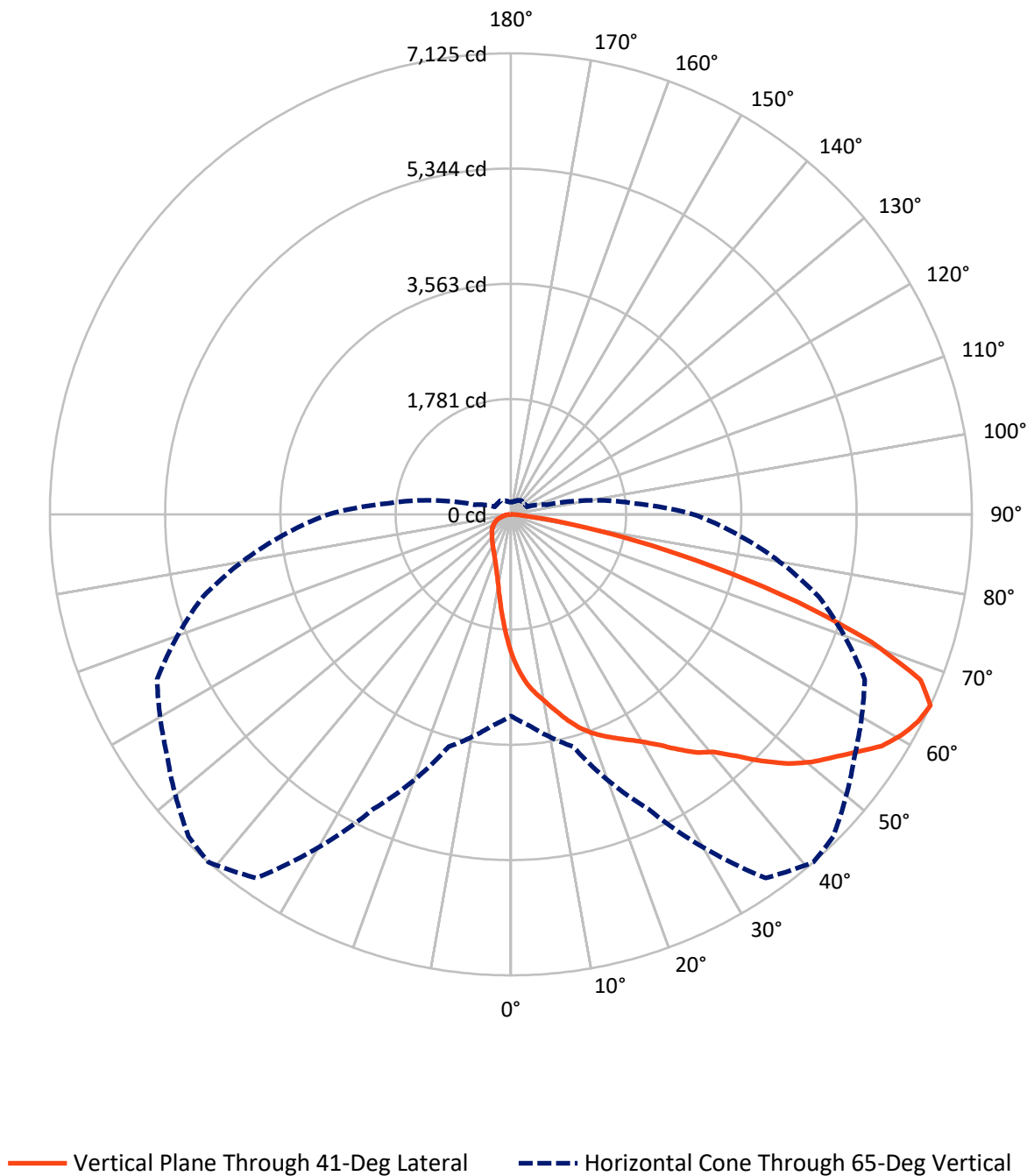


Based on 25 foot mounting height. Maximum calculated value = 5 fc

Type III - Short - N/A

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Luminous Intensity Polar Plot



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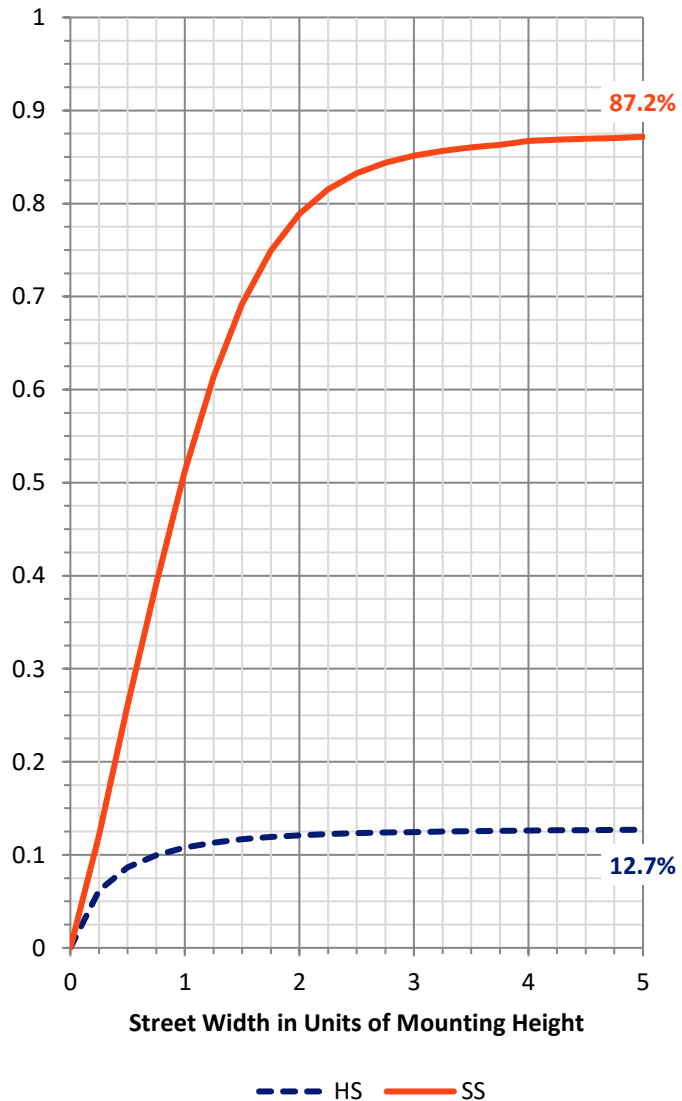
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1636.9	0.0	1636.9
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	11113.1	0.0	11113.1
	% Fixture	87.2	0.0	87.2
Total	Lumens	12750.0	0.0	12750.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	202.4	1.6
10°-20°	607.0	4.8
20°-30°	1044.2	8.2
30°-40°	1583.7	12.4
40°-50°	2320.2	18.2
50°-60°	2929.9	23.0
60°-70°	2747.3	21.5
70°-80°	1224.5	9.6
80°-90°	90.7	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°	12750.0	100.0
0°-180°	12750.0	100.0

Coefficient of Utilization



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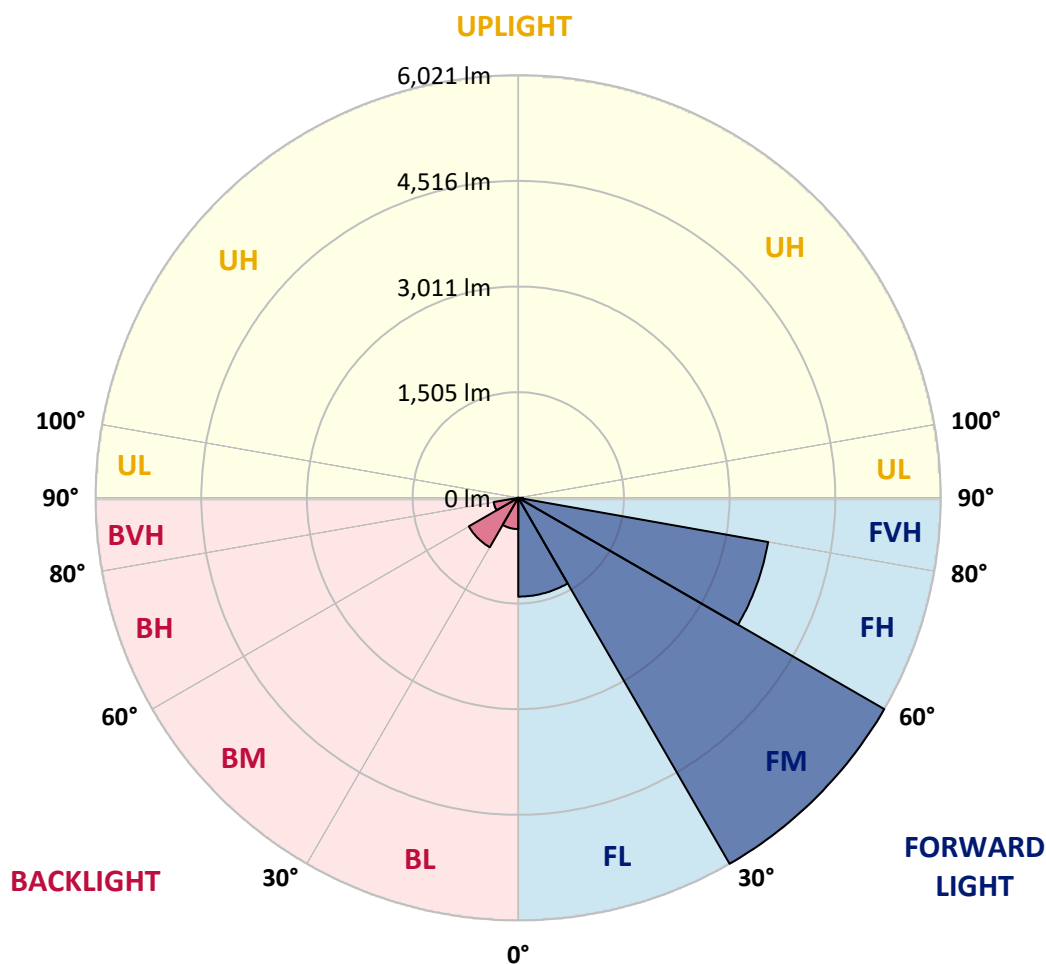
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1408.1	11.0			
FM	(30°-60°)	6021.0	47.2			
FH	(60°-80°)	3616.2	28.4			G2/5000
FVH	(80°-90°)	67.8	0.5			G1/100
BL	(0°-30°)	445.5	3.5	B1/500		
BM	(30°-60°)	812.8	6.4	B1/1000		
BH	(60°-80°)	355.6	2.8	B1/500		G1/500
BVH	(80°-90°)	23.0	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	2172.5	2172.5	2172.5	2172.5	2172.5	2172.5	2172.5	2172.5	2172.5	2172.5	2172.5
2.5°	2505.9	2497.9	2492.5	2462.9	2462.9	2422.6	2425.3	2387.6	2341.9	2269.3	2191.4
5°	2742.6	2731.8	2718.4	2688.8	2678.0	2637.7	2632.3	2578.5	2500.6	2374.2	2234.4
7.5°	2949.6	2938.8	2920.0	2877.0	2847.4	2799.0	2785.6	2715.7	2629.6	2473.7	2277.4
10°	3137.8	3129.7	3105.5	3051.8	3011.4	2952.3	2928.1	2834.0	2726.4	2554.3	2312.3
12.5°	3328.7	3318.0	3285.7	3240.0	3191.6	3121.7	3092.1	2971.1	2834.0	2643.1	2363.4
15°	3506.2	3490.0	3465.8	3417.4	3374.4	3307.2	3274.9	3132.4	2965.7	2742.6	2430.7
17.5°	3621.8	3608.3	3586.8	3559.9	3525.0	3473.9	3441.6	3301.8	3097.5	2839.4	2500.6
20°	3691.7	3686.3	3678.2	3662.1	3646.0	3611.0	3586.8	3455.1	3240.0	2933.5	2567.8
22.5°	3745.5	3740.1	3737.4	3737.4	3740.1	3726.6	3710.5	3597.6	3377.1	3032.9	2629.6
25°	3828.8	3826.1	3820.8	3815.4	3834.2	3836.9	3831.5	3753.5	3549.2	3164.7	2707.6
27.5°	3944.4	3936.4	3925.6	3920.2	3939.1	3952.5	3963.3	3909.5	3732.0	3299.1	2796.3
30°	4121.9	4097.7	4070.8	4052.0	4065.4	4086.9	4111.1	4078.9	3920.2	3465.8	2887.7
32.5°	4331.6	4302.0	4240.2	4205.3	4240.2	4256.3	4275.2	4259.0	4116.5	3646.0	2979.2
35°	4587.1	4552.1	4487.6	4436.5	4498.3	4463.4	4455.3	4439.2	4302.0	3823.4	3081.3
37.5°	5011.9	4960.8	4858.6	4745.7	4745.7	4670.4	4640.8	4592.4	4468.8	3982.1	3180.8
40°	5503.9	5436.7	5305.0	5138.3	4985.0	4829.0	4810.2	4775.3	4665.0	4164.9	3293.8
42.5°	6044.4	5915.3	5732.5	5530.8	5283.5	5106.0	5063.0	4963.5	4855.9	4350.4	3406.7
45°	6644.0	6375.1	6108.9	6006.7	5598.0	5436.7	5356.0	5175.9	5054.9	4544.0	3525.0
47.5°	6740.8	6531.0	6353.6	6337.5	5891.1	5756.7	5665.3	5407.1	5270.0	4751.1	3648.7
50°	6687.0	6560.6	6579.4	6514.9	6106.2	6017.5	5947.6	5654.5	5482.4	4950.0	3761.6
52.5°	6461.1	6531.0	6638.6	6520.3	6310.6	6238.0	6203.0	5920.7	5681.4	5132.9	3863.8
55°	6192.3	6240.7	6471.9	6617.1	6547.2	6482.6	6450.4	6229.9	5877.7	5286.1	3957.9
57.5°	5799.7	5778.2	6033.6	6601.0	6794.5	6756.9	6721.9	6533.7	6060.5	5396.4	4017.0
60°	5210.9	5165.1	5487.8	6278.3	6875.2	6934.4	6918.2	6735.4	6200.3	5393.7	3992.8
62.5°	4191.8	4304.7	4751.1	5751.3	6910.2	7060.7	7031.2	6751.5	6246.0	5237.7	3839.6
65°	3116.3	3277.6	3715.9	5025.3	6861.8	7125.3	7044.6	6488.0	6033.6	4928.5	3503.5
67.5°	2245.1	2387.6	2707.6	4135.3	6396.6	6829.5	6735.4	6057.8	5544.3	4490.3	3038.3
70°	1535.3	1637.5	1855.3	3011.4	5460.9	5904.6	5845.4	5415.2	4772.6	3968.6	2468.3
72.5°	1083.6	1126.6	1266.4	1987.0	4148.8	4632.8	4562.9	4455.3	3834.2	3299.1	1919.8
75°	812.0	838.9	914.2	1285.2	2799.0	3210.4	3145.9	3207.7	2863.5	2497.9	1398.2
77.5°	306.5	333.4	518.9	820.1	1656.3	1970.9	1906.3	1944.0	1591.8	1261.0	696.4
80°	83.4	88.7	172.1	389.9	752.9	981.4	892.7	766.3	591.5	580.8	368.4
82.5°	35.0	40.3	78.0	209.7	268.9	268.9	225.9	279.6	225.9	271.6	177.5
85°	13.4	16.1	18.8	53.8	35.0	37.6	40.3	53.8	45.7	56.5	40.3
87.5°	0.0	0.0	0.0	2.7	2.7	5.4	2.7	5.4	8.1	8.1	8.1
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°	2172.5	2172.5	2172.5	2172.5	2172.5	2172.5	2172.5	2172.5	2172.5	2172.5	2172.5
2.5°	2159.1	2129.5	2086.5	2016.6	1944.0	1903.7	1852.6	1844.5	1790.7	1785.3	1763.8
5°	2172.5	2110.7	2000.5	1866.0	1734.3	1632.1	1556.8	1516.5	1438.5	1438.5	1417.0
7.5°	2183.3	2086.5	1909.0	1710.1	1529.9	1392.8	1290.6	1247.6	1177.7	1172.3	1156.2
10°	2186.0	2056.9	1809.5	1551.4	1330.9	1191.1	1091.6	1043.2	981.4	976.0	965.3
12.5°	2207.5	2040.8	1720.8	1414.3	1188.4	1037.9	941.1	900.7	852.3	847.0	836.2
15°	2242.4	2040.8	1645.5	1298.7	1062.1	922.3	838.9	801.3	766.3	760.9	755.5
17.5°	2277.4	2035.4	1570.2	1191.1	957.2	830.8	758.2	728.7	701.8	699.1	693.7
20°	2309.7	2032.7	1495.0	1099.7	876.5	755.5	699.1	672.2	650.7	650.7	648.0
22.5°	2341.9	2027.3	1422.4	1013.7	806.6	699.1	650.7	621.1	605.0	605.0	602.3
25°	2390.3	2027.3	1355.1	941.1	750.2	656.1	607.7	586.2	572.7	570.0	570.0
27.5°	2446.8	2043.5	1296.0	876.5	701.8	613.0	575.4	553.9	537.8	532.4	535.1
30°	2508.6	2056.9	1242.2	820.1	656.1	580.8	540.4	518.9	502.8	497.4	500.1
32.5°	2570.5	2073.0	1193.8	769.0	610.4	551.2	510.9	486.7	470.5	467.8	467.8
35°	2637.7	2089.2	1145.4	726.0	572.7	521.6	484.0	457.1	446.3	441.0	443.6
37.5°	2704.9	2116.1	1099.7	685.6	545.8	494.7	459.8	432.9	424.8	422.1	422.1
40°	2785.6	2156.4	1080.9	658.8	521.6	470.5	441.0	414.1	406.0	406.0	406.0
42.5°	2852.8	2188.7	1064.8	629.2	502.8	449.0	422.1	400.6	395.3	392.6	395.3
45°	2920.0	2218.2	1043.2	602.3	478.6	427.5	406.0	384.5	379.1	379.1	379.1
47.5°	2987.2	2234.4	1013.7	575.4	457.1	408.7	389.9	371.1	365.7	365.7	365.7
50°	3041.0	2247.8	970.6	545.8	432.9	392.6	373.7	354.9	349.5	349.5	349.5
52.5°	3094.8	2250.5	924.9	510.9	408.7	373.7	357.6	338.8	333.4	330.7	330.7
55°	3143.2	2247.8	871.2	470.5	381.8	352.2	338.8	322.7	311.9	301.1	306.5
57.5°	3178.1	2245.1	809.3	430.2	354.9	330.7	325.3	303.8	282.3	255.4	260.8
60°	3164.7	2215.6	742.1	379.1	325.3	309.2	309.2	279.6	242.0	228.5	231.2
62.5°	3078.7	2132.2	672.2	325.3	295.8	287.7	285.0	252.7	223.2	209.7	212.4
65°	2820.5	1922.5	570.0	276.9	266.2	263.5	263.5	233.9	207.0	190.9	193.6
67.5°	2428.0	1613.3	465.2	233.9	236.6	242.0	242.0	215.1	188.2	172.1	174.8
70°	1946.7	1261.0	371.1	201.7	204.3	212.4	217.8	193.6	169.4	153.3	153.3
72.5°	1465.4	957.2	298.5	169.4	182.8	182.8	190.9	172.1	147.9	131.8	134.4
75°	1062.1	685.6	236.6	142.5	158.6	155.9	155.9	145.2	126.4	115.6	115.6
77.5°	502.8	360.3	188.2	102.2	123.7	121.0	123.7	115.6	107.6	96.8	99.5
80°	247.4	177.5	121.0	72.6	86.0	88.7	96.8	91.4	88.7	80.7	80.7
82.5°	118.3	69.9	56.5	51.1	59.2	61.8	67.2	67.2	69.9	64.5	64.5
85°	32.3	18.8	24.2	32.3	37.6	40.3	45.7	48.4	48.4	45.7	48.4
87.5°	8.1	8.1	10.8	16.1	18.8	21.5	24.2	24.2	10.8	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)