

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: P836924

Luminaire Tested: **ARCH3-90-740-U-T4W-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836924
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-90-740-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 735mA LIGHTSQUARE WITH 40 LEDS AND TYPE IV WIDE OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10457 lumens
Efficiency: N/A
Efficacy: 112.3 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 93.1
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



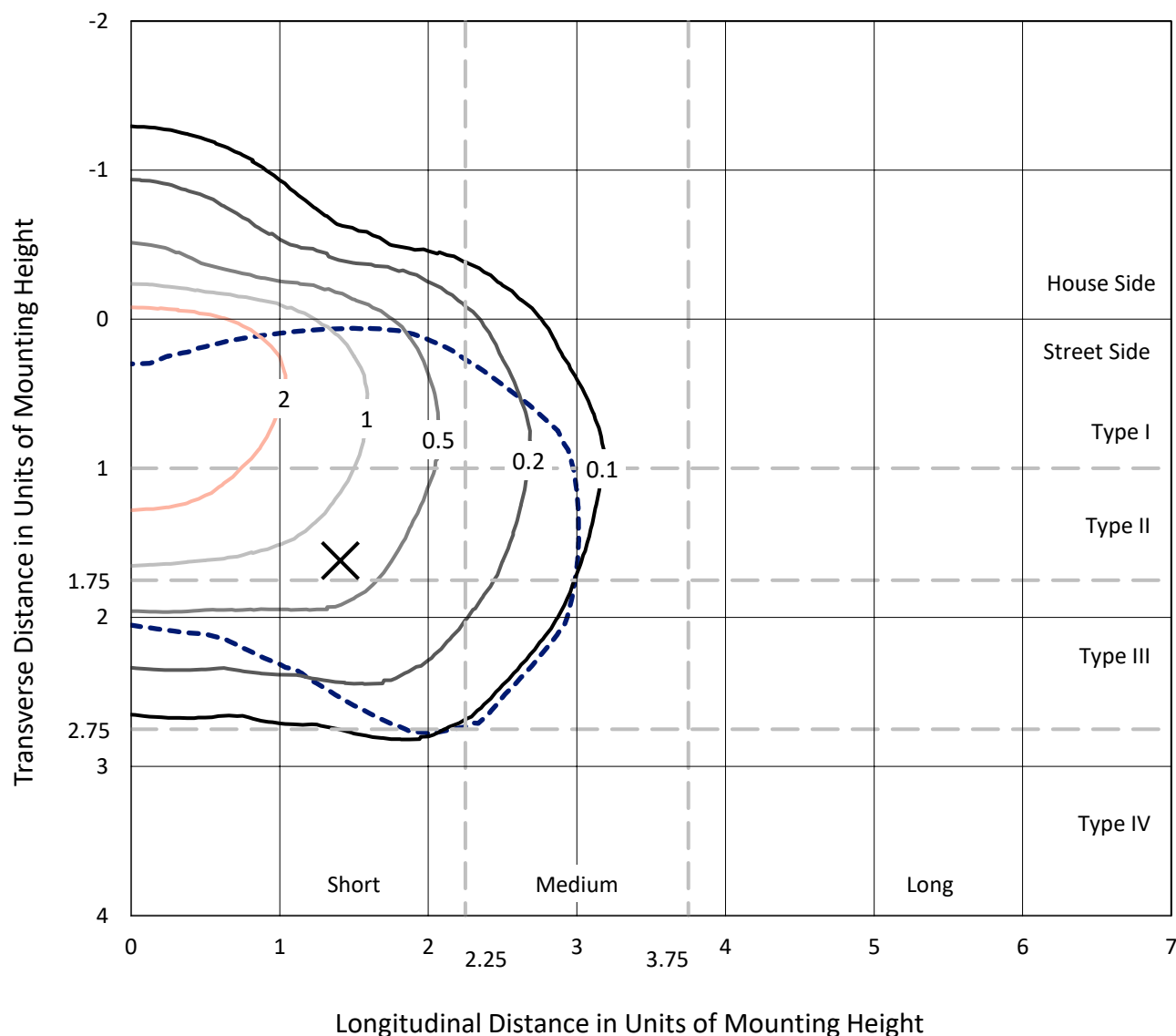
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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

--- 1/2 Max cd

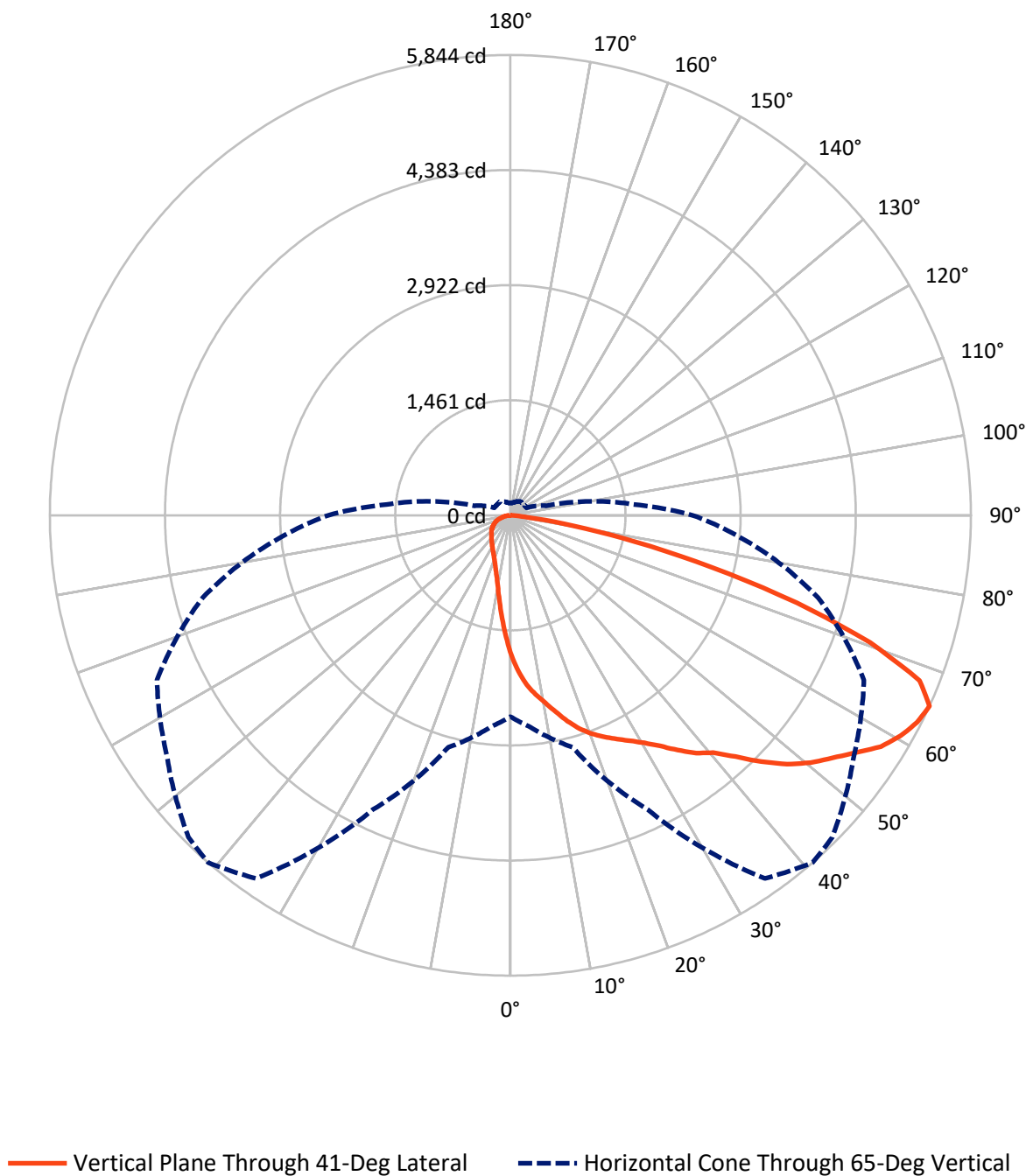


Based on 25 foot mounting height. Maximum calculated value = 4.1 fc

Type III - Short - N/A

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Luminous Intensity Polar Plot



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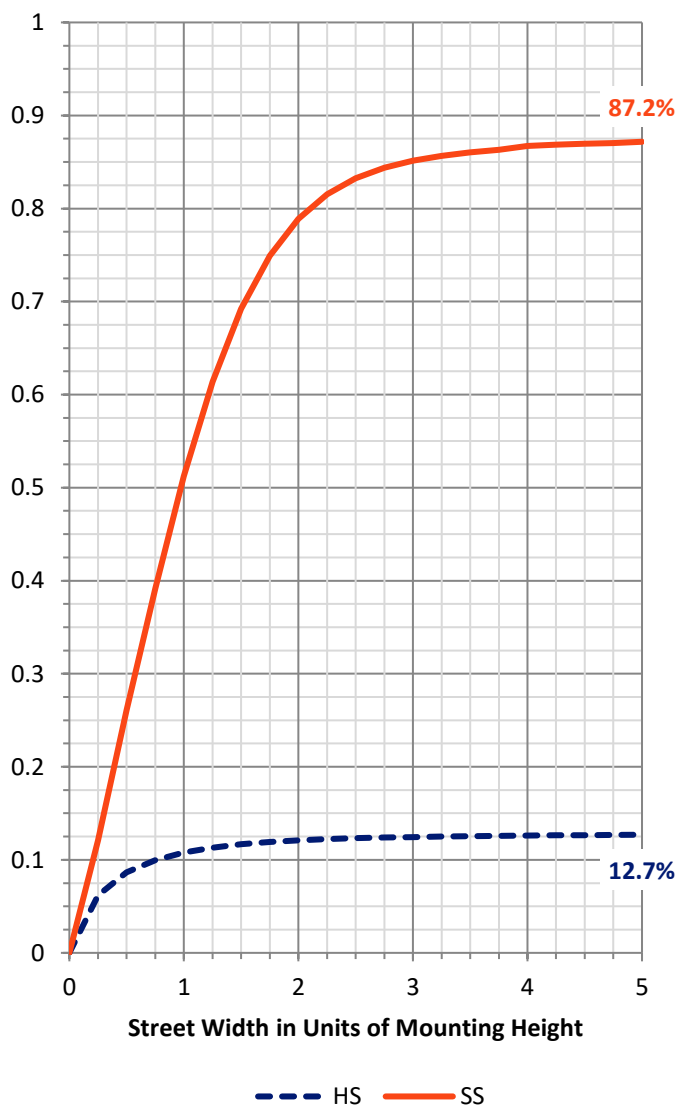
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1342.5	0.0	1342.5
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	9114.5	0.0	9114.5
	% Fixture	87.2	0.0	87.2
Total	Lumens	10457.0	0.0	10457.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.0	1.6
10°-20°	497.8	4.8
20°-30°	856.4	8.2
30°-40°	1298.9	12.4
40°-50°	1902.9	18.2
50°-60°	2403.0	23.0
60°-70°	2253.2	21.5
70°-80°	1004.3	9.6
80°-90°	74.4	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°	10457.0	100.0
0°-180°	10457.0	100.0

Coefficient of Utilization



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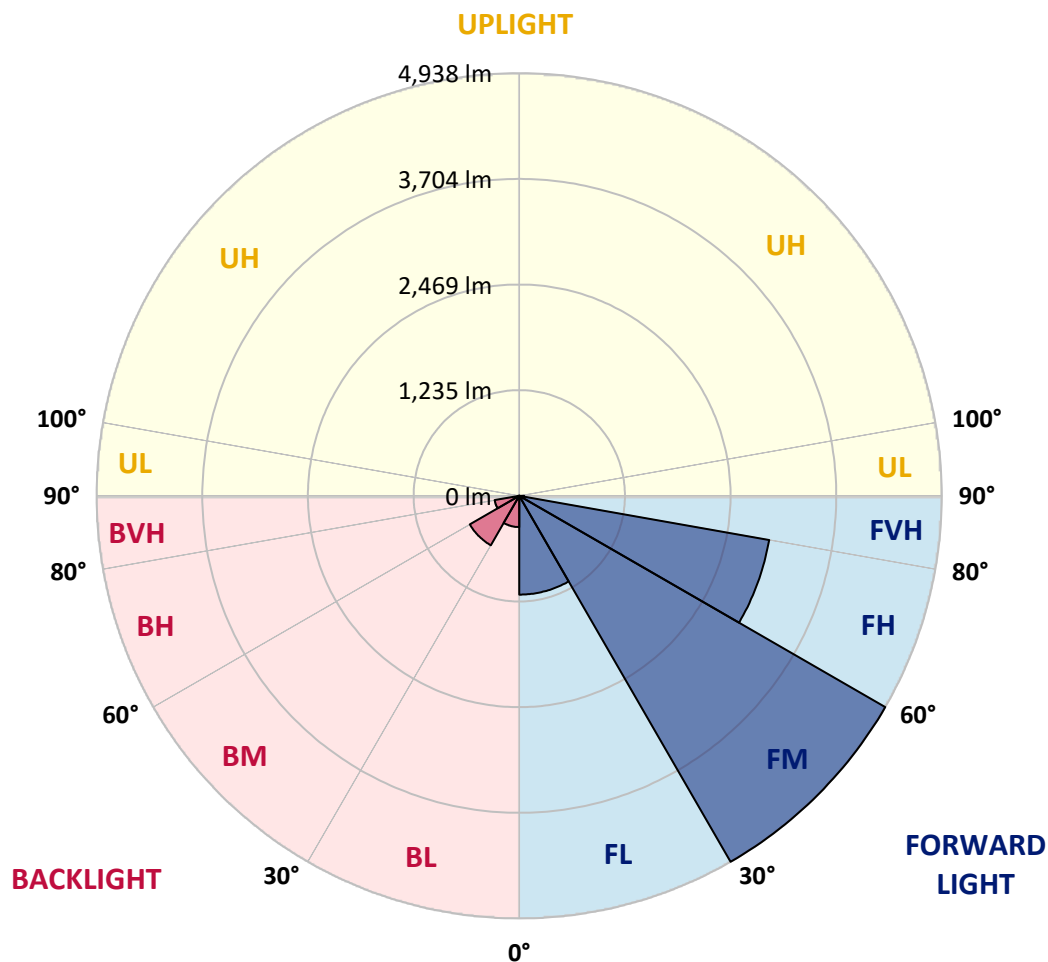
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1154.8	11.0			
FM	(30°-60°)	4938.2	47.2			
FH	(60°-80°)	2965.9	28.4			G2/5000
FVH	(80°-90°)	55.6	0.5			G1/100
BL	(0°-30°)	365.4	3.5	B1/500		
BM	(30°-60°)	666.6	6.4	B1/1000		
BH	(60°-80°)	291.6	2.8	B1/500		G1/500
BVH	(80°-90°)	18.8	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°	1781.8	1781.8	1781.8	1781.8	1781.8	1781.8	1781.8	1781.8	1781.8	1781.8	1781.8
2.5°	2055.3	2048.6	2044.2	2020.0	2020.0	1986.9	1989.1	1958.2	1920.7	1861.2	1797.3
5°	2249.3	2240.5	2229.5	2205.2	2196.4	2163.3	2158.9	2114.8	2050.9	1947.2	1832.5
7.5°	2419.1	2410.3	2394.9	2359.6	2335.3	2295.6	2284.6	2227.3	2156.7	2028.8	1867.8
10°	2573.5	2566.9	2547.0	2502.9	2469.8	2421.3	2401.5	2324.3	2236.1	2095.0	1896.5
12.5°	2730.1	2721.2	2694.8	2657.3	2617.6	2560.3	2536.0	2436.8	2324.3	2167.7	1938.4
15°	2875.6	2862.4	2842.5	2802.8	2767.6	2712.4	2686.0	2569.1	2432.4	2249.3	1993.5
17.5°	2970.4	2959.4	2941.8	2919.7	2891.0	2849.1	2822.7	2708.0	2540.4	2328.7	2050.9
20°	3027.8	3023.4	3016.7	3003.5	2990.3	2961.6	2941.8	2833.7	2657.3	2405.9	2106.0
22.5°	3071.9	3067.5	3065.3	3065.3	3067.5	3056.4	3043.2	2950.6	2769.8	2487.5	2156.7
25°	3140.2	3138.0	3133.6	3129.2	3144.6	3146.8	3142.4	3078.5	2910.9	2595.5	2220.7
27.5°	3235.1	3228.4	3219.6	3215.2	3230.6	3241.7	3250.5	3206.4	3060.8	2705.8	2293.4
30°	3380.6	3360.8	3338.7	3323.3	3334.3	3351.9	3371.8	3345.3	3215.2	2842.5	2368.4
32.5°	3552.6	3528.4	3477.6	3449.0	3477.6	3490.9	3506.3	3493.1	3376.2	2990.3	2443.4
35°	3762.1	3733.4	3680.5	3638.6	3689.3	3660.7	3654.1	3640.8	3528.4	3135.8	2527.2
37.5°	4110.5	4068.6	3984.8	3892.2	3892.2	3830.5	3806.2	3766.5	3665.1	3265.9	2608.8
40°	4514.1	4459.0	4350.9	4214.2	4088.5	3960.6	3945.1	3916.5	3826.1	3415.9	2701.4
42.5°	4957.3	4851.5	4701.5	4536.1	4333.3	4187.7	4152.4	4070.8	3982.6	3568.0	2794.0
45°	5449.1	5228.6	5010.3	4926.5	4591.3	4459.0	4392.8	4245.0	4145.8	3726.8	2891.0
47.5°	5528.5	5356.5	5210.9	5197.7	4831.6	4721.4	4646.4	4434.7	4322.2	3896.6	2992.5
50°	5484.4	5380.7	5396.2	5343.2	5008.1	4935.3	4877.9	4637.6	4496.4	4059.8	3085.1
52.5°	5299.1	5356.5	5444.7	5347.7	5175.7	5116.1	5087.4	4855.9	4659.6	4209.8	3168.9
55°	5078.6	5118.3	5308.0	5427.0	5369.7	5316.8	5290.3	5109.5	4820.6	4335.5	3246.1
57.5°	4756.7	4739.0	4948.5	5413.8	5572.6	5541.7	5513.1	5358.7	4970.6	4425.9	3294.6
60°	4273.7	4236.2	4500.9	5149.2	5638.7	5687.3	5674.0	5524.1	5085.2	4423.7	3274.8
62.5°	3437.9	3530.6	3896.6	4717.0	5667.4	5790.9	5766.7	5537.3	5122.7	4295.8	3149.1
65°	2555.9	2688.2	3047.6	4121.6	5627.7	5843.8	5777.7	5321.2	4948.5	4042.2	2873.4
67.5°	1841.4	1958.2	2220.7	3391.6	5246.2	5601.3	5524.1	4968.4	4547.2	3682.7	2491.9
70°	1259.2	1343.0	1521.6	2469.8	4478.8	4842.7	4794.1	4441.3	3914.3	3254.9	2024.4
72.5°	888.7	924.0	1038.7	1629.7	3402.7	3799.6	3742.3	3654.1	3144.6	2705.8	1574.5
75°	666.0	688.0	749.8	1054.1	2295.6	2633.0	2580.1	2630.8	2348.6	2048.6	1146.7
77.5°	251.4	273.4	425.6	672.6	1358.4	1616.4	1563.5	1594.4	1305.5	1034.2	571.2
80°	68.4	72.8	141.1	319.8	617.5	804.9	732.1	628.5	485.1	476.3	302.1
82.5°	28.7	33.1	64.0	172.0	220.5	220.5	185.2	229.3	185.2	222.7	145.5
85°	11.0	13.2	15.4	44.1	28.7	30.9	33.1	44.1	37.5	46.3	33.1
87.5°	0.0	0.0	0.0	2.2	2.2	4.4	2.2	4.4	6.6	6.6	6.6
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°	1781.8	1781.8	1781.8	1781.8	1781.8	1781.8	1781.8	1781.8	1781.8	1781.8	1781.8
2.5°	1770.8	1746.5	1711.3	1653.9	1594.4	1561.3	1519.4	1512.8	1468.7	1464.3	1446.6
5°	1781.8	1731.1	1640.7	1530.4	1422.4	1338.6	1276.8	1243.7	1179.8	1179.8	1162.2
7.5°	1790.6	1711.3	1565.7	1402.5	1254.8	1142.3	1058.5	1023.2	965.9	961.5	948.2
10°	1792.8	1687.0	1484.1	1272.4	1091.6	976.9	895.3	855.6	804.9	800.5	791.7
12.5°	1810.5	1673.8	1411.3	1159.9	974.7	851.2	771.8	738.7	699.1	694.6	685.8
15°	1839.2	1673.8	1349.6	1065.1	871.1	756.4	688.0	657.2	628.5	624.1	619.7
17.5°	1867.8	1669.4	1287.8	976.9	785.1	681.4	621.9	597.6	575.6	573.4	568.9
20°	1894.3	1667.1	1226.1	901.9	718.9	619.7	573.4	551.3	533.7	533.7	531.5
22.5°	1920.7	1662.7	1166.6	831.4	661.6	573.4	533.7	509.4	496.2	496.2	494.0
25°	1960.4	1662.7	1111.4	771.8	615.3	538.1	498.4	480.7	469.7	467.5	467.5
27.5°	2006.8	1676.0	1062.9	718.9	575.6	502.8	471.9	454.3	441.0	436.6	438.8
30°	2057.5	1687.0	1018.8	672.6	538.1	476.3	443.2	425.6	412.4	408.0	410.2
32.5°	2108.2	1700.2	979.1	630.7	500.6	452.1	419.0	399.1	385.9	383.7	383.7
35°	2163.3	1713.5	939.4	595.4	469.7	427.8	396.9	374.9	366.1	361.7	363.9
37.5°	2218.5	1735.5	901.9	562.3	447.7	405.8	377.1	355.0	348.4	346.2	346.2
40°	2284.6	1768.6	886.5	540.3	427.8	385.9	361.7	339.6	333.0	333.0	333.0
42.5°	2339.7	1795.0	873.3	516.0	412.4	368.3	346.2	328.6	324.2	322.0	324.2
45°	2394.9	1819.3	855.6	494.0	392.5	350.6	333.0	315.3	310.9	310.9	310.9
47.5°	2450.0	1832.5	831.4	471.9	374.9	335.2	319.8	304.3	299.9	299.9	299.9
50°	2494.1	1843.6	796.1	447.7	355.0	322.0	306.5	291.1	286.7	286.7	286.7
52.5°	2538.2	1845.8	758.6	419.0	335.2	306.5	293.3	277.9	273.4	271.2	271.2
55°	2577.9	1843.6	714.5	385.9	313.1	288.9	277.9	264.6	255.8	247.0	251.4
57.5°	2606.6	1841.4	663.8	352.8	291.1	271.2	266.8	249.2	231.5	209.5	213.9
60°	2595.5	1817.1	608.6	310.9	266.8	253.6	253.6	229.3	198.5	187.4	189.6
62.5°	2525.0	1748.7	551.3	266.8	242.6	236.0	233.8	207.3	183.0	172.0	174.2
65°	2313.3	1576.7	467.5	227.1	218.3	216.1	216.1	191.9	169.8	156.6	158.8
67.5°	1991.3	1323.1	381.5	191.9	194.1	198.5	198.5	176.4	154.4	141.1	143.3
70°	1596.6	1034.2	304.3	165.4	167.6	174.2	178.6	158.8	138.9	125.7	125.7
72.5°	1201.8	785.1	244.8	138.9	150.0	150.0	156.6	141.1	121.3	108.1	110.3
75°	871.1	562.3	194.1	116.9	130.1	127.9	127.9	119.1	103.6	94.8	94.8
77.5°	412.4	295.5	154.4	83.8	101.4	99.2	101.4	94.8	88.2	79.4	81.6
80°	202.9	145.5	99.2	59.5	70.6	72.8	79.4	75.0	72.8	66.2	66.2
82.5°	97.0	57.3	46.3	41.9	48.5	50.7	55.1	55.1	57.3	52.9	52.9
85°	26.5	15.4	19.8	26.5	30.9	33.1	37.5	39.7	39.7	37.5	39.7
87.5°	6.6	6.6	8.8	13.2	15.4	17.6	19.8	19.8	8.8	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)