

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: P836897

Luminaire Tested: **ARCH3-90-727-U-T4W-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836897
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: ARCH3-90-727-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 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: 9610 lumens
Efficiency: N/A
Efficacy: 103.2 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



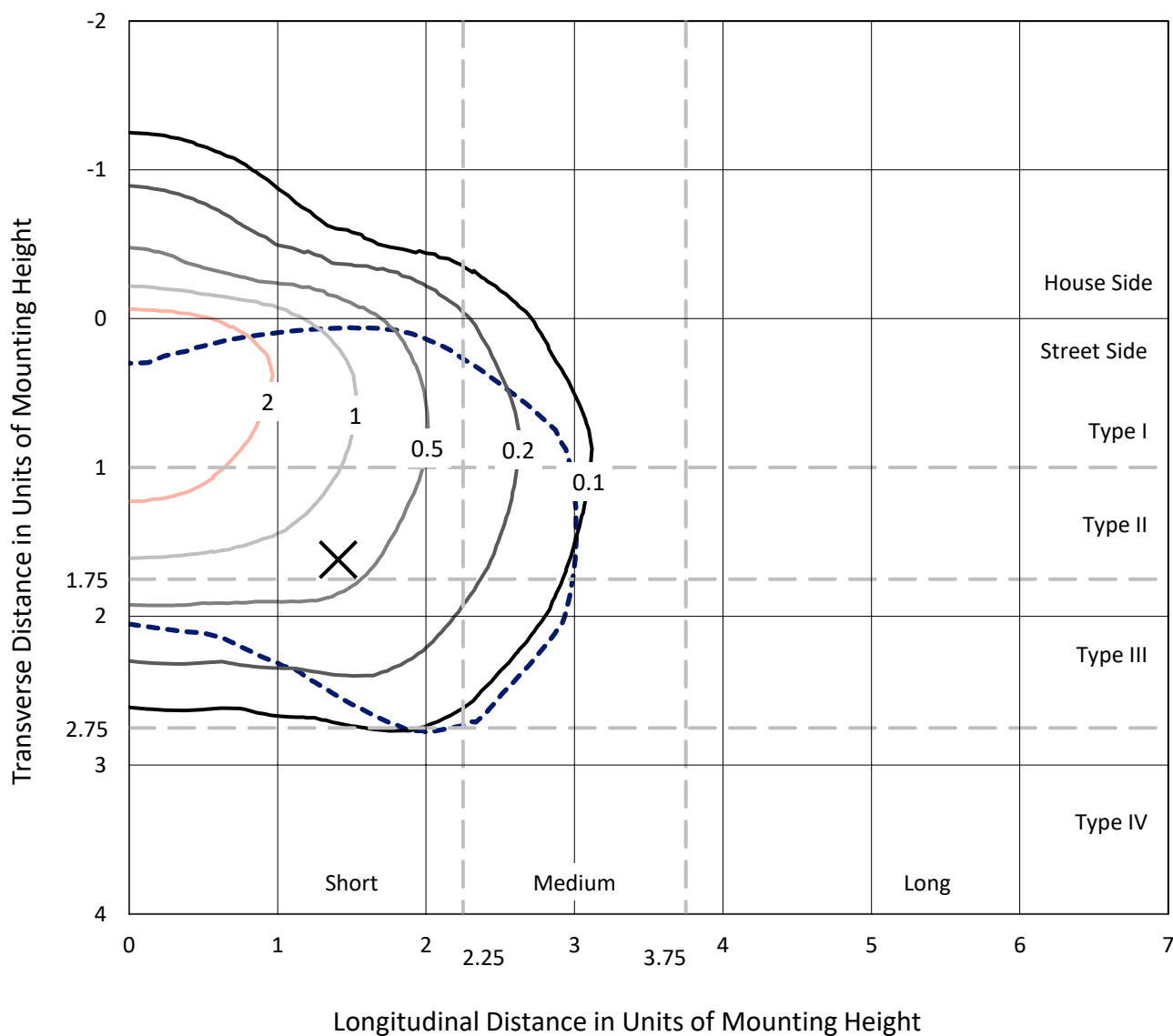
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

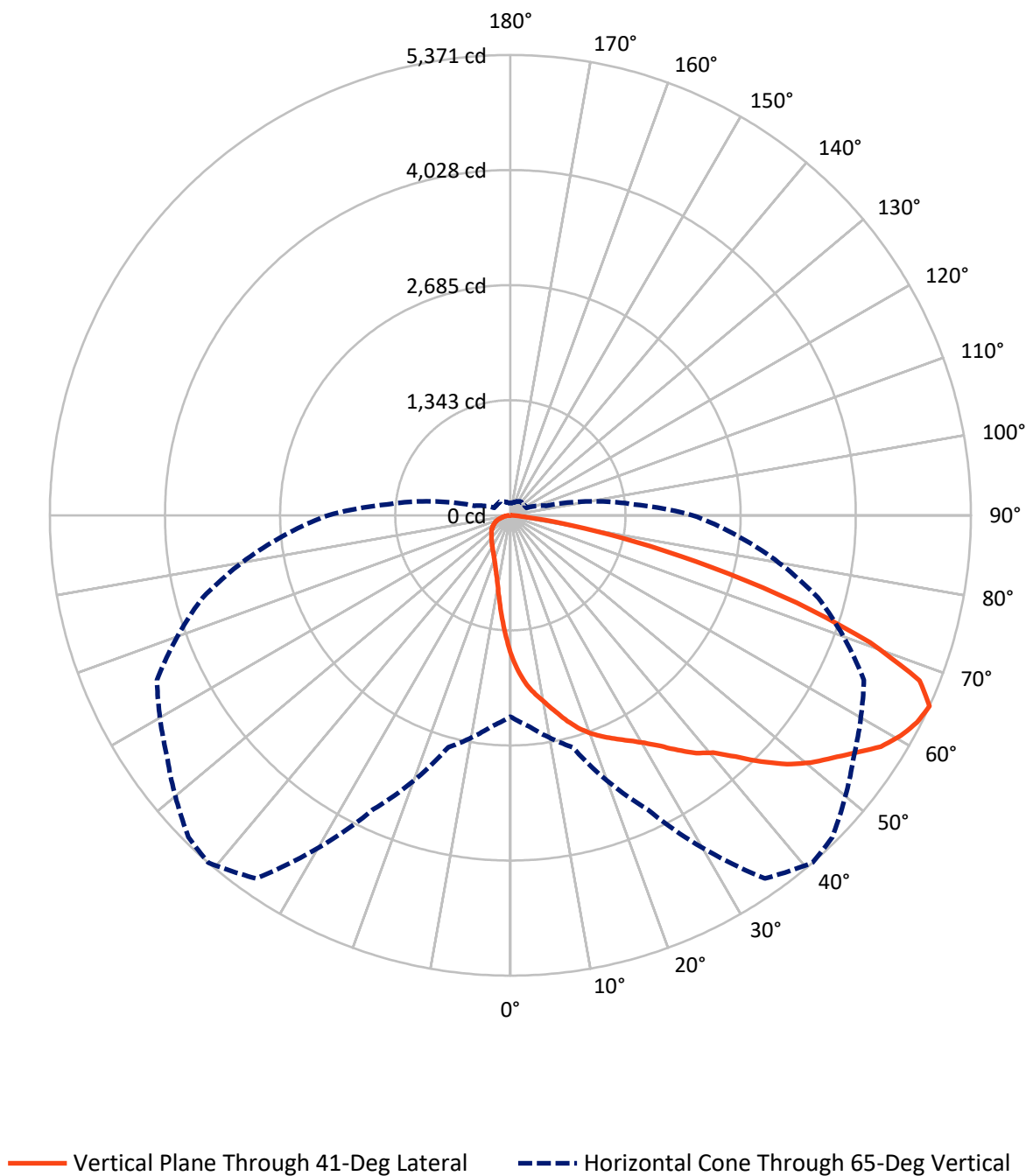


Based on 25 foot mounting height. Maximum calculated value = 3.8 fc

Type III - Short - N/A

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Luminous Intensity Polar Plot



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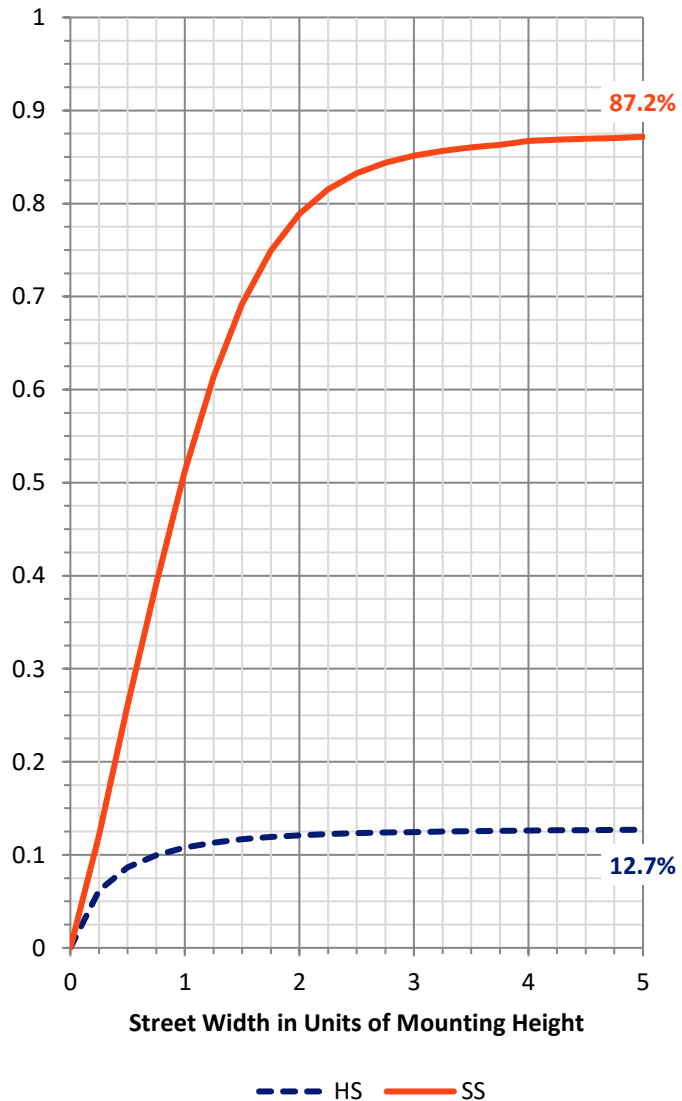
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1233.8	0.0	1233.8
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	8376.2	0.0	8376.2
	% Fixture	87.2	0.0	87.2
Total	Lumens	9610.0	0.0	9610.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.6	1.6
10°-20°	457.5	4.8
20°-30°	787.1	8.2
30°-40°	1193.7	12.4
40°-50°	1748.8	18.2
50°-60°	2208.4	23.0
60°-70°	2070.7	21.5
70°-80°	922.9	9.6
80°-90°	68.4	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°	9610.0	100.0
0°-180°	9610.0	100.0

Coefficient of Utilization



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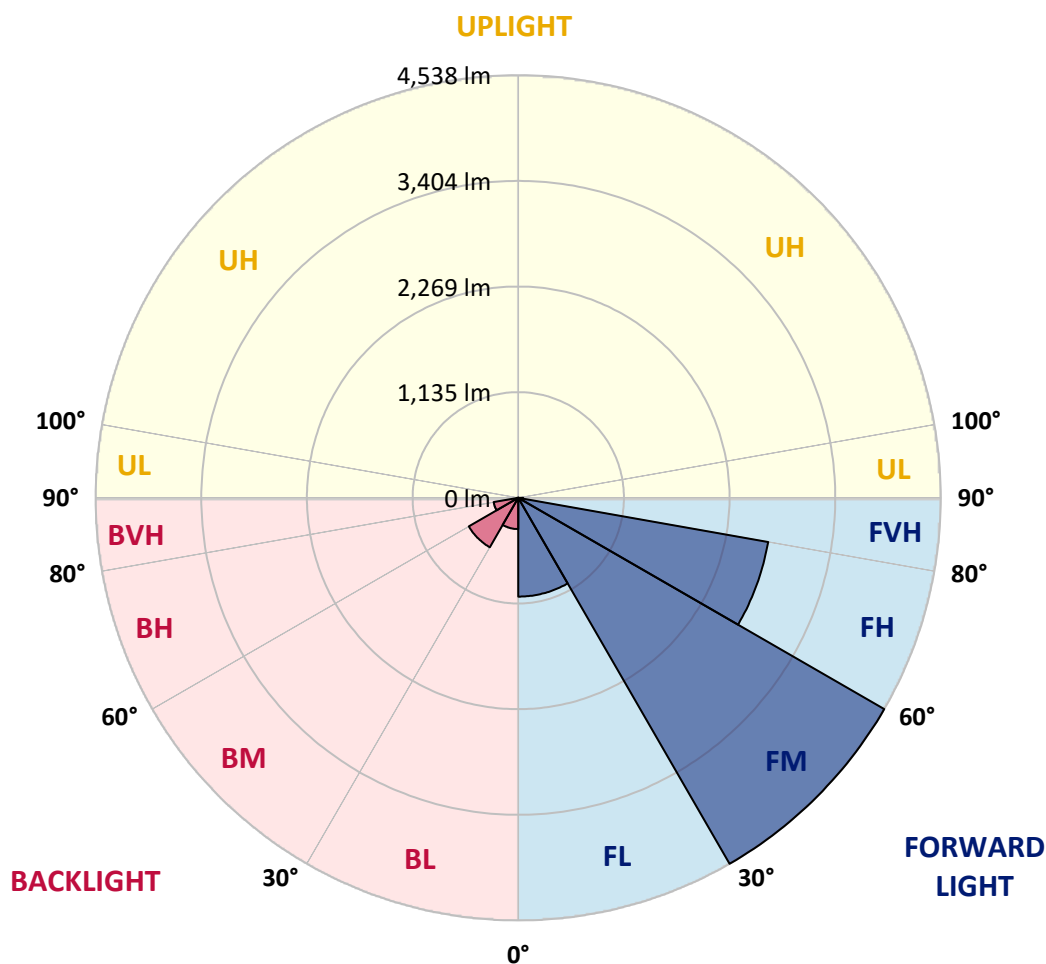
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1061.3	11.0			
FM	(30°-60°)	4538.2	47.2			
FH	(60°-80°)	2725.6	28.4			G2/5000
FVH	(80°-90°)	51.1	0.5			G1/100
BL	(0°-30°)	335.8	3.5	B1/500		
BM	(30°-60°)	612.6	6.4	B1/1000		
BH	(60°-80°)	268.0	2.8	B1/500		G1/500
BVH	(80°-90°)	17.3	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°	1637.5	1637.5	1637.5	1637.5	1637.5	1637.5	1637.5	1637.5	1637.5	1637.5	1637.5
2.5°	1888.8	1882.7	1878.7	1856.4	1856.4	1826.0	1828.0	1799.6	1765.2	1710.5	1651.7
5°	2067.1	2059.0	2048.9	2026.6	2018.5	1988.1	1984.0	1943.5	1884.7	1789.5	1684.1
7.5°	2223.2	2215.1	2200.9	2168.5	2146.2	2109.7	2099.6	2046.9	1982.0	1864.5	1716.5
10°	2365.0	2359.0	2340.7	2300.2	2269.8	2225.2	2207.0	2136.0	2055.0	1925.3	1742.9
12.5°	2508.9	2500.8	2476.5	2442.1	2405.6	2352.9	2330.6	2239.4	2136.0	1992.1	1781.4
15°	2642.7	2630.5	2612.3	2575.8	2543.4	2492.7	2468.4	2361.0	2235.3	2067.1	1832.0
17.5°	2729.8	2719.7	2703.5	2683.2	2656.9	2618.4	2594.0	2488.7	2334.6	2140.1	1884.7
20°	2782.5	2778.5	2772.4	2760.2	2748.1	2721.7	2703.5	2604.2	2442.1	2211.0	1935.4
22.5°	2823.1	2819.0	2817.0	2817.0	2819.0	2808.9	2796.7	2711.6	2545.4	2286.0	1982.0
25°	2885.9	2883.9	2879.8	2875.7	2889.9	2892.0	2887.9	2829.1	2675.1	2385.3	2040.8
27.5°	2973.0	2966.9	2958.8	2954.8	2969.0	2979.1	2987.2	2946.7	2812.9	2486.6	2107.7
30°	3106.8	3088.5	3068.3	3054.1	3064.2	3080.4	3098.7	3074.4	2954.8	2612.3	2176.6
32.5°	3264.9	3242.6	3196.0	3169.6	3196.0	3208.1	3222.3	3210.1	3102.7	2748.1	2245.5
35°	3457.4	3431.0	3382.4	3343.9	3390.5	3364.2	3358.1	3345.9	3242.6	2881.8	2322.5
37.5°	3777.6	3739.1	3662.1	3577.0	3577.0	3520.2	3497.9	3461.4	3368.2	3001.4	2397.5
40°	4148.5	4097.8	3998.5	3872.8	3757.3	3639.8	3625.6	3599.2	3516.2	3139.2	2482.6
42.5°	4555.8	4458.5	4320.7	4168.7	3982.3	3848.5	3816.1	3741.1	3660.0	3279.0	2567.7
45°	5007.7	4805.1	4604.4	4527.4	4219.4	4097.8	4037.0	3901.2	3810.0	3425.0	2656.9
47.5°	5080.7	4922.6	4788.9	4776.7	4440.3	4339.0	4270.0	4075.5	3972.1	3581.0	2750.1
50°	5040.2	4944.9	4959.1	4910.5	4602.4	4535.5	4482.8	4261.9	4132.2	3731.0	2835.2
52.5°	4869.9	4922.6	5003.7	4914.5	4756.4	4701.7	4675.4	4462.6	4282.2	3868.8	2912.2
55°	4667.3	4703.7	4878.0	4987.5	4934.8	4886.1	4861.8	4695.6	4430.2	3984.3	2983.2
57.5°	4371.4	4355.2	4547.7	4975.3	5121.2	5092.8	5066.5	4924.6	4568.0	4067.4	3027.7
60°	3927.6	3893.1	4136.3	4732.1	5182.0	5226.6	5214.4	5076.6	4673.3	4065.4	3009.5
62.5°	3159.5	3244.6	3581.0	4334.9	5208.4	5321.9	5299.6	5088.8	4707.8	3947.8	2894.0
65°	2348.8	2470.4	2800.8	3787.7	5171.9	5370.5	5309.7	4890.2	4547.7	3714.8	2640.7
67.5°	1692.2	1799.6	2040.8	3116.9	4821.3	5147.6	5076.6	4565.9	4178.9	3384.4	2290.1
70°	1157.2	1234.2	1398.4	2269.8	4116.0	4450.4	4405.8	4081.6	3597.2	2991.3	1860.4
72.5°	816.7	849.1	954.5	1497.7	3127.0	3491.8	3439.1	3358.1	2889.9	2486.6	1447.0
75°	612.0	632.3	689.0	968.7	2109.7	2419.8	2371.1	2417.7	2158.3	1882.7	1053.8
77.5°	231.0	251.3	391.1	618.1	1248.4	1485.5	1436.9	1465.2	1199.7	950.5	524.9
80°	62.8	66.9	129.7	293.9	567.4	739.7	672.8	577.6	445.9	437.7	277.6
82.5°	26.3	30.4	58.8	158.1	202.7	202.7	170.2	210.8	170.2	204.7	133.8
85°	10.1	12.2	14.2	40.5	26.3	28.4	30.4	40.5	34.5	42.6	30.4
87.5°	0.0	0.0	0.0	2.0	2.0	4.1	2.0	4.1	6.1	6.1	6.1
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°	1637.5	1637.5	1637.5	1637.5	1637.5	1637.5	1637.5	1637.5	1637.5	1637.5	1637.5
2.5°	1627.4	1605.1	1572.6	1520.0	1465.2	1434.8	1396.3	1390.2	1349.7	1345.7	1329.5
5°	1637.5	1590.9	1507.8	1406.5	1307.2	1230.1	1173.4	1143.0	1084.2	1084.2	1068.0
7.5°	1645.6	1572.6	1438.9	1288.9	1153.1	1049.8	972.8	940.3	887.7	883.6	871.4
10°	1647.6	1550.3	1363.9	1169.3	1003.2	897.8	822.8	786.3	739.7	735.7	727.5
12.5°	1663.8	1538.2	1297.0	1066.0	895.8	782.3	709.3	678.9	642.4	638.4	630.3
15°	1690.2	1538.2	1240.3	978.8	800.5	695.1	632.3	603.9	577.6	573.5	569.5
17.5°	1716.5	1534.1	1183.5	897.8	721.5	626.2	571.5	549.2	528.9	526.9	522.9
20°	1740.9	1532.1	1126.8	828.9	660.7	569.5	526.9	506.7	490.4	490.4	488.4
22.5°	1765.2	1528.1	1072.1	764.0	608.0	526.9	490.4	468.1	456.0	456.0	454.0
25°	1801.6	1528.1	1021.4	709.3	565.4	494.5	458.0	441.8	431.7	429.6	429.6
27.5°	1844.2	1540.2	976.8	660.7	528.9	462.1	433.7	417.5	405.3	401.3	403.3
30°	1890.8	1550.3	936.3	618.1	494.5	437.7	407.3	391.1	379.0	374.9	376.9
32.5°	1937.4	1562.5	899.8	579.6	460.0	415.5	385.1	366.8	354.7	352.6	352.6
35°	1988.1	1574.7	863.3	547.2	431.7	393.2	364.8	344.5	336.4	332.4	334.4
37.5°	2038.8	1594.9	828.9	516.8	411.4	372.9	346.5	326.3	320.2	318.2	318.2
40°	2099.6	1625.3	814.7	496.5	393.2	354.7	332.4	312.1	306.0	306.0	306.0
42.5°	2150.2	1649.7	802.5	474.2	379.0	338.4	318.2	302.0	297.9	295.9	297.9
45°	2200.9	1671.9	786.3	454.0	360.7	322.2	306.0	289.8	285.8	285.8	285.8
47.5°	2251.6	1684.1	764.0	433.7	344.5	308.0	293.9	279.7	275.6	275.6	275.6
50°	2292.1	1694.2	731.6	411.4	326.3	295.9	281.7	267.5	263.5	263.5	263.5
52.5°	2332.6	1696.3	697.2	385.1	308.0	281.7	269.5	255.4	251.3	249.3	249.3
55°	2369.1	1694.2	656.6	354.7	287.8	265.5	255.4	243.2	235.1	227.0	231.0
57.5°	2395.4	1692.2	610.0	324.3	267.5	249.3	245.2	229.0	212.8	192.5	196.6
60°	2385.3	1669.9	559.3	285.8	245.2	233.1	233.1	210.8	182.4	172.3	174.3
62.5°	2320.5	1607.1	506.7	245.2	222.9	216.8	214.8	190.5	168.2	158.1	160.1
65°	2125.9	1449.0	429.6	208.7	200.6	198.6	198.6	176.3	156.0	143.9	145.9
67.5°	1830.0	1216.0	350.6	176.3	178.3	182.4	182.4	162.1	141.9	129.7	131.7
70°	1467.3	950.5	279.7	152.0	154.0	160.1	164.2	145.9	127.7	115.5	115.5
72.5°	1104.5	721.5	225.0	127.7	137.8	137.8	143.9	129.7	111.5	99.3	101.3
75°	800.5	516.8	178.3	107.4	119.6	117.5	117.5	109.4	95.3	87.1	87.1
77.5°	379.0	271.6	141.9	77.0	93.2	91.2	93.2	87.1	81.1	73.0	75.0
80°	186.4	133.8	91.2	54.7	64.9	66.9	73.0	68.9	66.9	60.8	60.8
82.5°	89.2	52.7	42.6	38.5	44.6	46.6	50.7	50.7	52.7	48.6	48.6
85°	24.3	14.2	18.2	24.3	28.4	30.4	34.5	36.5	36.5	34.5	36.5
87.5°	6.1	6.1	8.1	12.2	14.2	16.2	18.2	18.2	8.1	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)