

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: P836834

Luminaire Tested: **ARCH3-80-730-U-T4W-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836834
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: ARCH3-80-730-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 650mA 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: 8932 lumens
Efficiency: N/A
Efficacy: 109.1 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

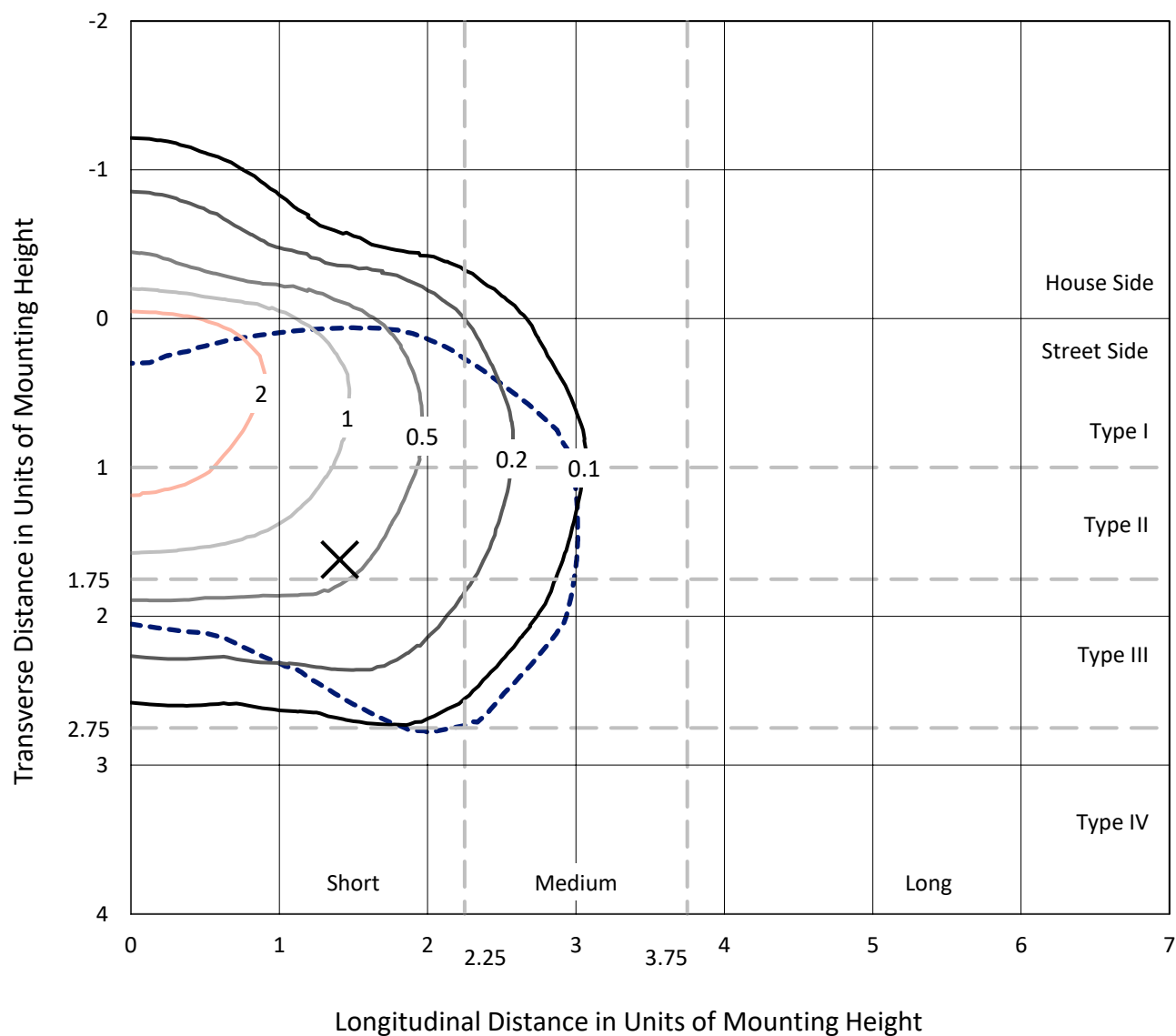
Input Watts (W): 81.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

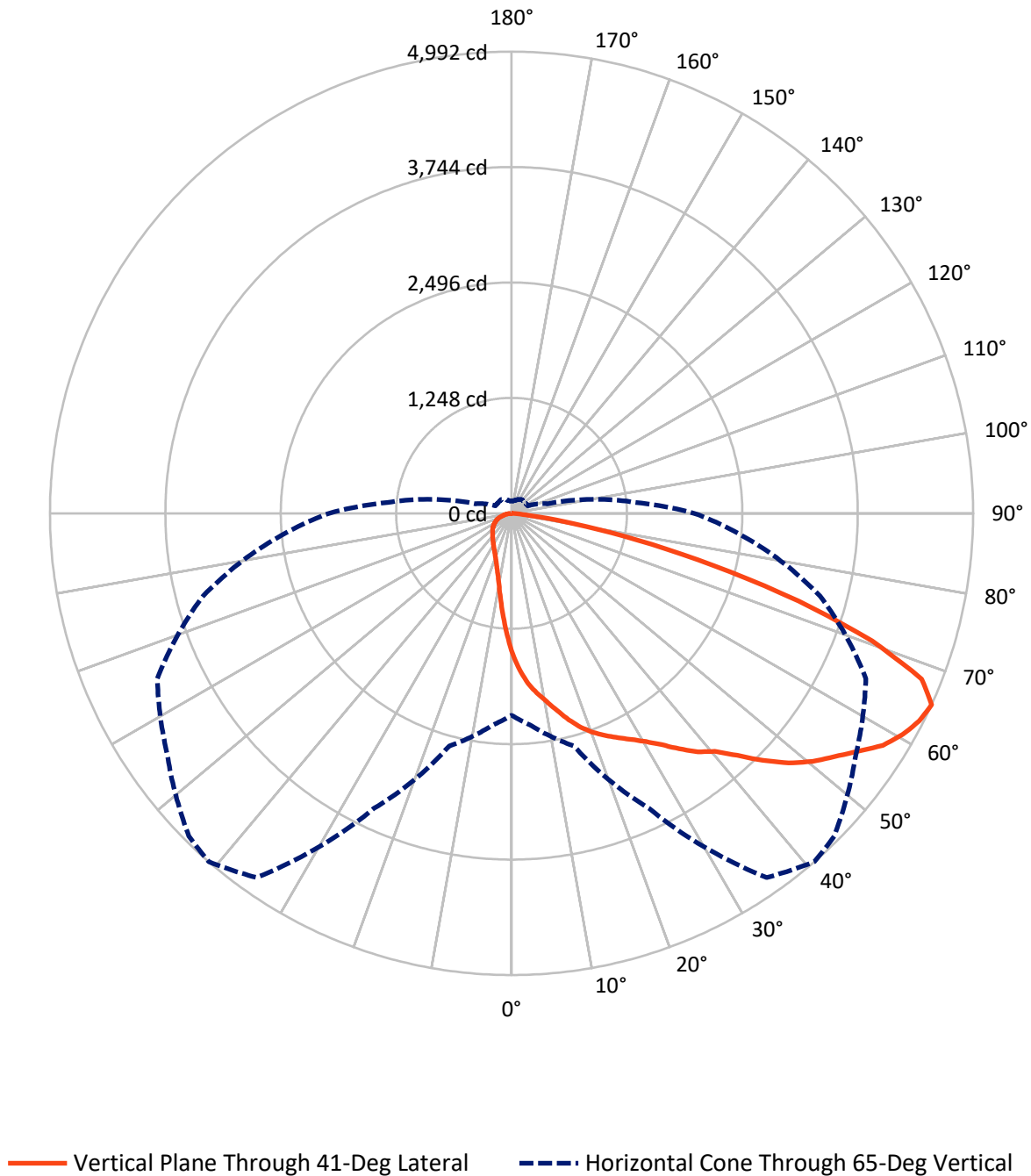
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.5 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



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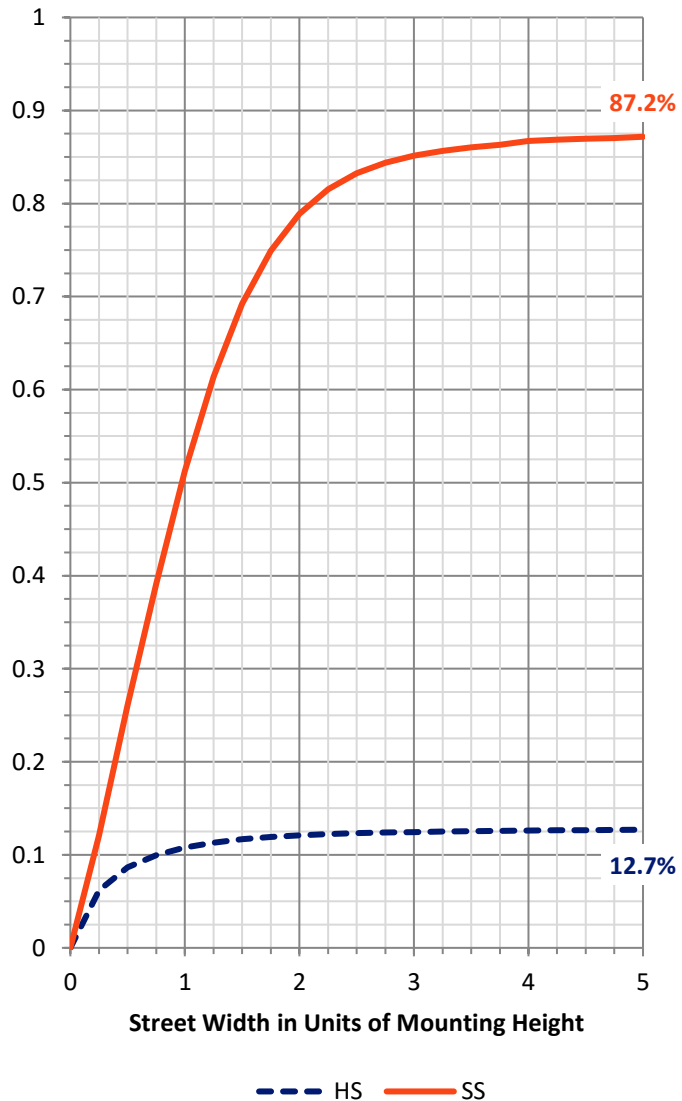
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1146.7	0.0	1146.7
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	7785.3	0.0	7785.3
	% Fixture	87.2	0.0	87.2
Total	Lumens	8932.0	0.0	8932.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.8	1.6
10°-20°	425.2	4.8
20°-30°	731.5	8.2
30°-40°	1109.5	12.4
40°-50°	1625.4	18.2
50°-60°	2052.6	23.0
60°-70°	1924.6	21.5
70°-80°	857.8	9.6
80°-90°	63.6	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°	8932.0	100.0
0°-180°	8932.0	100.0

Coefficient of Utilization



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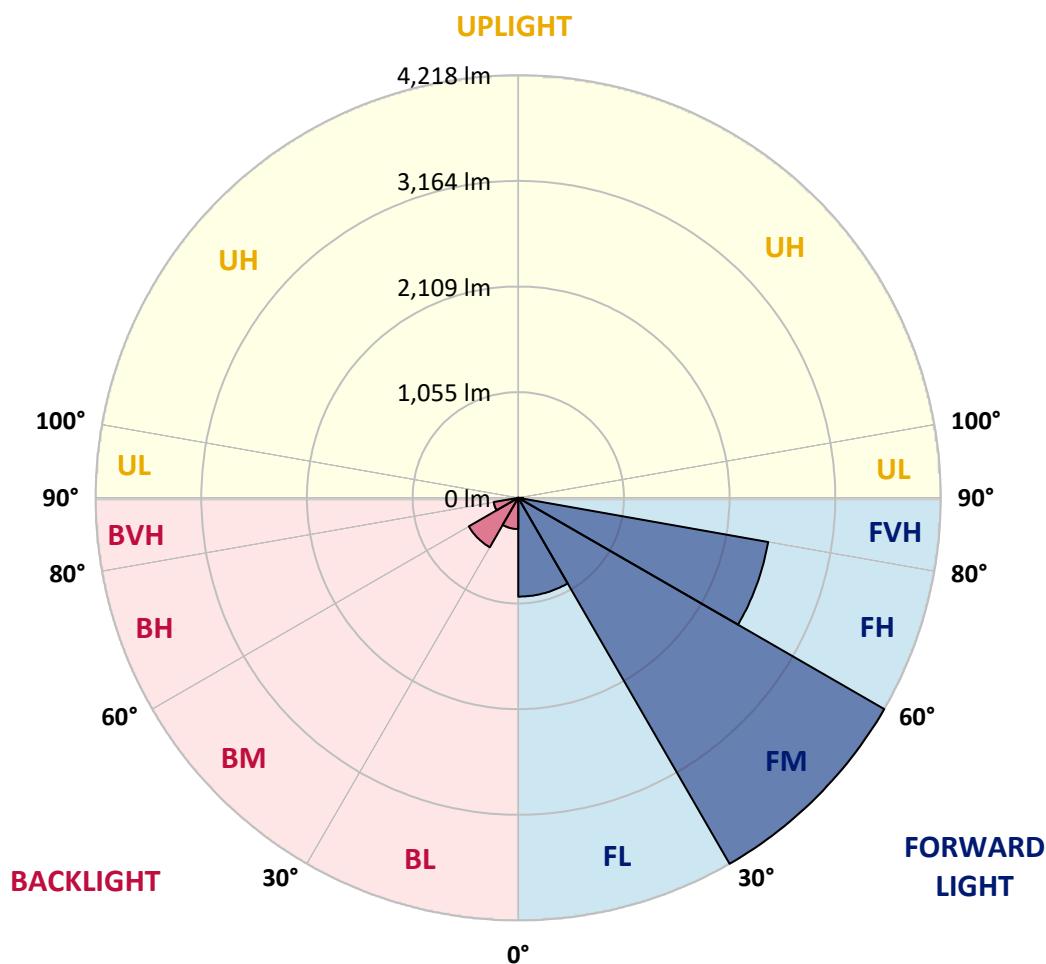
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	986.4	11.0			
FM	(30°-60°)	4218.0	47.2			
FH	(60°-80°)	2533.3	28.4			G2/5000
FVH	(80°-90°)	47.5	0.5			G1/100
BL	(0°-30°)	312.1	3.5	B1/500		
BM	(30°-60°)	569.4	6.4	B1/1000		
BH	(60°-80°)	249.1	2.8	B1/500		G1/500
BVH	(80°-90°)	16.1	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: 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°	1522.0	1522.0	1522.0	1522.0	1522.0	1522.0	1522.0	1522.0	1522.0	1522.0	1522.0
2.5°	1755.5	1749.9	1746.1	1725.4	1725.4	1697.1	1699.0	1672.7	1640.6	1589.8	1535.2
5°	1921.3	1913.8	1904.3	1883.6	1876.1	1847.8	1844.1	1806.4	1751.8	1663.2	1565.3
7.5°	2066.3	2058.8	2045.6	2015.5	1994.8	1960.8	1951.4	1902.5	1842.2	1732.9	1595.4
10°	2198.2	2192.5	2175.6	2137.9	2109.7	2068.2	2051.3	1985.3	1910.0	1789.4	1619.9
12.5°	2331.9	2324.4	2301.8	2269.8	2235.9	2186.9	2166.2	2081.4	1985.3	1851.6	1655.7
15°	2456.2	2444.9	2428.0	2394.1	2363.9	2316.9	2294.3	2194.4	2077.6	1921.3	1702.8
17.5°	2537.2	2527.8	2512.8	2493.9	2469.4	2433.6	2411.0	2313.1	2169.9	1989.1	1751.8
20°	2586.2	2582.4	2576.8	2565.5	2554.2	2529.7	2512.8	2420.5	2269.8	2055.0	1798.9
22.5°	2623.9	2620.1	2618.2	2618.2	2620.1	2610.7	2599.4	2520.3	2365.8	2124.7	1842.2
25°	2682.3	2680.4	2676.6	2672.9	2686.0	2687.9	2684.2	2629.5	2486.4	2217.0	1896.8
27.5°	2763.3	2757.6	2750.1	2746.3	2759.5	2768.9	2776.5	2738.8	2614.5	2311.2	1959.0
30°	2887.6	2870.6	2851.8	2838.6	2848.0	2863.1	2880.1	2857.5	2746.3	2428.0	2023.0
32.5°	3034.5	3013.8	2970.5	2946.0	2970.5	2981.8	2995.0	2983.7	2883.8	2554.2	2087.1
35°	3213.5	3189.0	3143.8	3108.0	3151.3	3126.8	3121.2	3109.9	3013.8	2678.5	2158.6
37.5°	3511.1	3475.3	3403.7	3324.6	3324.6	3271.9	3251.1	3217.2	3130.6	2789.6	2228.3
40°	3855.8	3808.7	3716.4	3599.6	3492.2	3383.0	3369.8	3345.3	3268.1	2917.7	2307.4
42.5°	4234.4	4144.0	4015.9	3874.6	3701.3	3577.0	3546.9	3477.2	3401.8	3047.7	2386.5
45°	4654.4	4466.1	4279.6	4208.0	3921.7	3808.7	3752.2	3626.0	3541.2	3183.3	2469.4
47.5°	4722.2	4575.3	4451.0	4439.7	4127.0	4032.8	3968.8	3788.0	3691.9	3328.4	2556.1
50°	4684.6	4596.0	4609.2	4564.0	4277.7	4215.5	4166.6	3961.3	3840.7	3467.7	2635.2
52.5°	4526.3	4575.3	4650.7	4567.8	4420.9	4370.0	4345.5	4147.7	3980.1	3595.8	2706.8
55°	4338.0	4371.9	4533.9	4635.6	4586.6	4541.4	4518.8	4364.4	4117.6	3703.2	2772.7
57.5°	4063.0	4047.9	4226.8	4624.3	4759.9	4733.5	4709.1	4577.2	4245.7	3780.4	2814.1
60°	3650.5	3618.4	3844.5	4398.3	4816.4	4857.9	4846.6	4718.5	4343.6	3778.5	2797.2
62.5°	2936.6	3015.7	3328.4	4029.1	4840.9	4946.4	4925.7	4729.8	4375.7	3669.3	2689.8
65°	2183.1	2296.1	2603.2	3520.5	4807.0	4991.6	4935.1	4545.2	4226.8	3452.7	2454.4
67.5°	1572.8	1672.7	1896.8	2897.0	4481.1	4784.4	4718.5	4243.8	3884.0	3145.6	2128.5
70°	1075.5	1147.1	1299.7	2109.7	3825.6	4136.4	4095.0	3793.6	3343.4	2780.2	1729.2
72.5°	759.1	789.2	887.2	1392.0	2906.4	3245.5	3196.5	3121.2	2686.0	2311.2	1344.9
75°	568.9	587.7	640.4	900.4	1960.8	2249.0	2203.8	2247.2	2006.1	1749.9	979.5
77.5°	214.7	233.6	363.5	574.5	1160.3	1380.7	1335.5	1361.9	1115.1	883.4	487.9
80°	58.4	62.2	120.6	273.1	527.4	687.5	625.4	536.8	414.4	406.9	258.1
82.5°	24.5	28.3	54.6	146.9	188.4	188.4	158.2	195.9	158.2	190.2	124.3
85°	9.4	11.3	13.2	37.7	24.5	26.4	28.3	37.7	32.0	39.6	28.3
87.5°	0.0	0.0	0.0	1.9	1.9	3.8	1.9	3.8	5.7	5.7	5.7
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°	1522.0	1522.0	1522.0	1522.0	1522.0	1522.0	1522.0	1522.0	1522.0	1522.0	1522.0
2.5°	1512.5	1491.8	1461.7	1412.7	1361.9	1333.6	1297.8	1292.2	1254.5	1250.7	1235.7
5°	1522.0	1478.6	1401.4	1307.2	1214.9	1143.4	1090.6	1062.4	1007.7	1007.7	992.7
7.5°	1529.5	1461.7	1337.4	1198.0	1071.8	975.7	904.1	874.0	825.0	821.3	810.0
10°	1531.4	1441.0	1267.7	1086.8	932.4	834.4	764.8	730.8	687.5	683.8	676.2
12.5°	1546.5	1429.7	1205.5	990.8	832.6	727.1	659.3	631.0	597.1	593.3	585.8
15°	1570.9	1429.7	1152.8	909.8	744.0	646.1	587.7	561.3	536.8	533.1	529.3
17.5°	1595.4	1425.9	1100.0	834.4	670.6	582.0	531.2	510.5	491.6	489.7	486.0
20°	1618.0	1424.0	1047.3	770.4	614.1	529.3	489.7	470.9	455.8	455.8	454.0
22.5°	1640.6	1420.3	996.4	710.1	565.1	489.7	455.8	435.1	423.8	423.8	421.9
25°	1674.5	1420.3	949.3	659.3	525.5	459.6	425.7	410.6	401.2	399.3	399.3
27.5°	1714.1	1431.6	907.9	614.1	491.6	429.5	403.1	388.0	376.7	373.0	374.8
30°	1757.4	1441.0	870.2	574.5	459.6	406.9	378.6	363.5	352.2	348.5	350.4
32.5°	1800.7	1452.3	836.3	538.7	427.6	386.1	357.9	340.9	329.6	327.8	327.8
35°	1847.8	1463.6	802.4	508.6	401.2	365.4	339.1	320.2	312.7	308.9	310.8
37.5°	1894.9	1482.4	770.4	480.3	382.4	346.6	322.1	303.3	297.6	295.7	295.7
40°	1951.4	1510.7	757.2	461.5	365.4	329.6	308.9	290.1	284.4	284.4	284.4
42.5°	1998.5	1533.3	745.9	440.8	352.2	314.6	295.7	280.7	276.9	275.0	276.9
45°	2045.6	1554.0	730.8	421.9	335.3	299.5	284.4	269.4	265.6	265.6	265.6
47.5°	2092.7	1565.3	710.1	403.1	320.2	286.3	273.1	259.9	256.2	256.2	256.2
50°	2130.4	1574.7	680.0	382.4	303.3	275.0	261.8	248.6	244.9	244.9	244.9
52.5°	2168.0	1576.6	648.0	357.9	286.3	261.8	250.5	237.3	233.6	231.7	231.7
55°	2202.0	1574.7	610.3	329.6	267.5	246.8	237.3	226.0	218.5	211.0	214.7
57.5°	2226.4	1572.8	567.0	301.4	248.6	231.7	227.9	212.8	197.8	178.9	182.7
60°	2217.0	1552.1	519.9	265.6	227.9	216.6	216.6	195.9	169.5	160.1	162.0
62.5°	2156.7	1493.7	470.9	227.9	207.2	201.5	199.7	177.1	156.3	146.9	148.8
65°	1975.9	1346.8	399.3	194.0	186.5	184.6	184.6	163.9	145.0	133.7	135.6
67.5°	1700.9	1130.2	325.9	163.9	165.8	169.5	169.5	150.7	131.9	120.6	122.4
70°	1363.7	883.4	259.9	141.3	143.2	148.8	152.6	135.6	118.7	107.4	107.4
72.5°	1026.6	670.6	209.1	118.7	128.1	128.1	133.7	120.6	103.6	92.3	94.2
75°	744.0	480.3	165.8	99.8	111.1	109.3	109.3	101.7	88.5	81.0	81.0
77.5°	352.2	252.4	131.9	71.6	86.6	84.8	86.6	81.0	75.3	67.8	69.7
80°	173.3	124.3	84.8	50.9	60.3	62.2	67.8	64.0	62.2	56.5	56.5
82.5°	82.9	49.0	39.6	35.8	41.4	43.3	47.1	47.1	49.0	45.2	45.2
85°	22.6	13.2	17.0	22.6	26.4	28.3	32.0	33.9	33.9	32.0	33.9
87.5°	5.7	5.7	7.5	11.3	13.2	15.1	17.0	17.0	7.5	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)