

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: P842461

Luminaire Tested: **ARCH4-50-730-U-T2U-HSS**

Issue Date: 5/27/2024

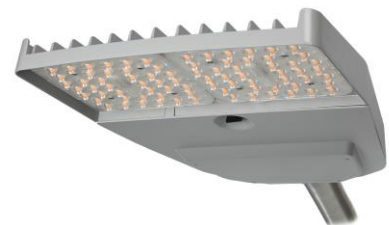
Test Information

Test Method: LM-79-08
Report Number: P842461
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-25)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-50-730-U-T2U-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 435mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II U
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6531 lumens
Efficiency: N/A
Efficacy: 122.8 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

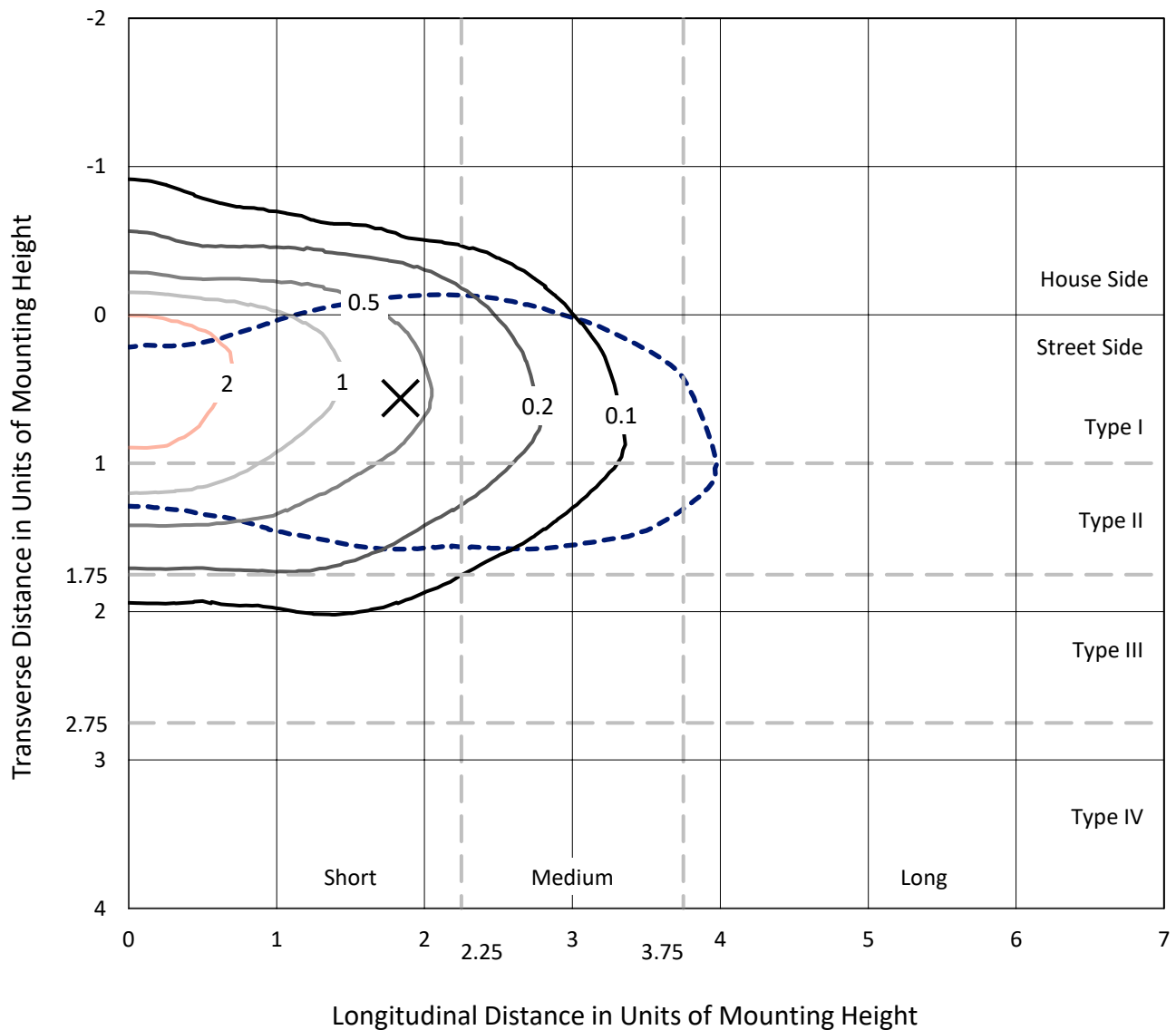
Input Watts (W): 53.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

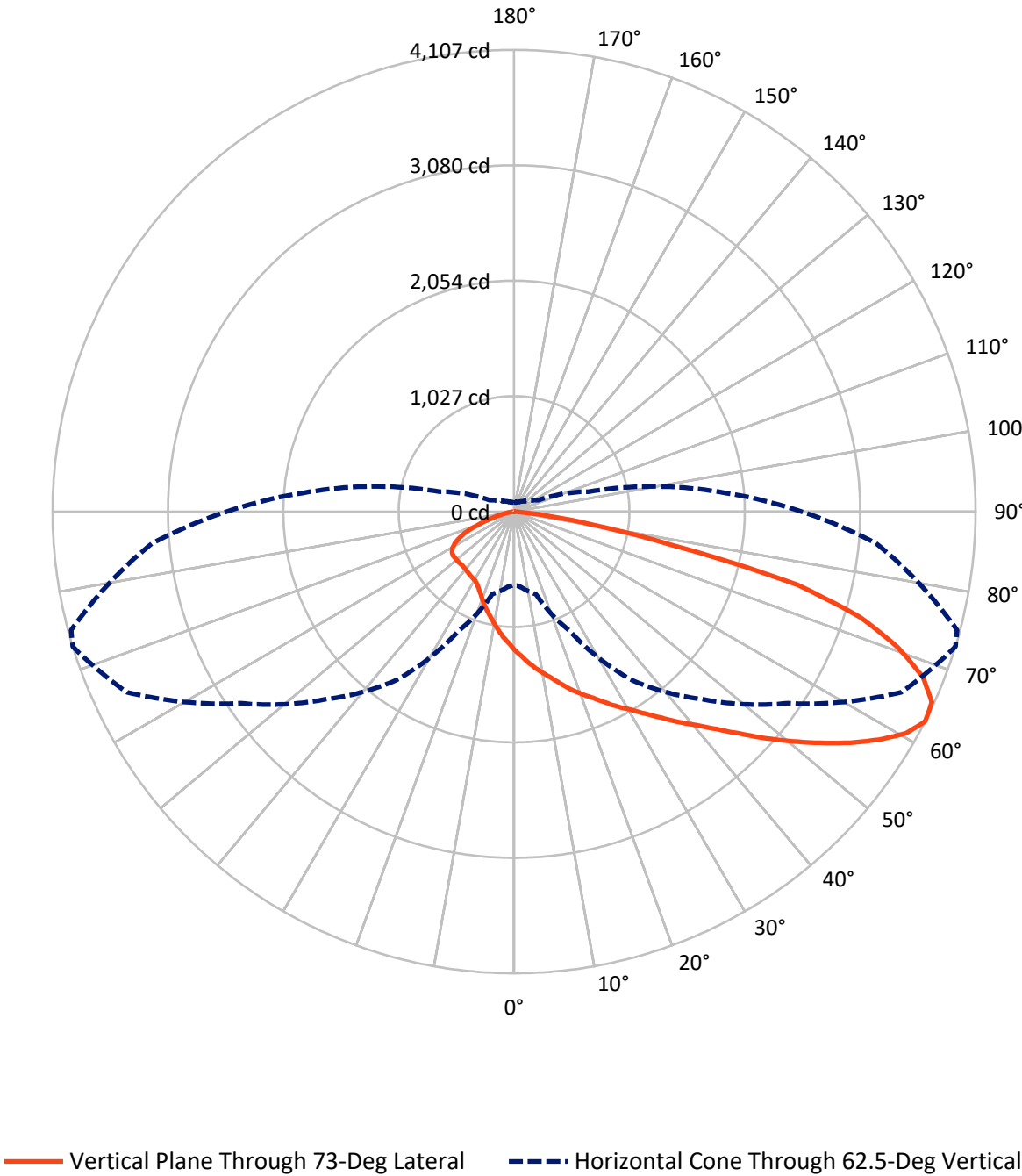
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.1 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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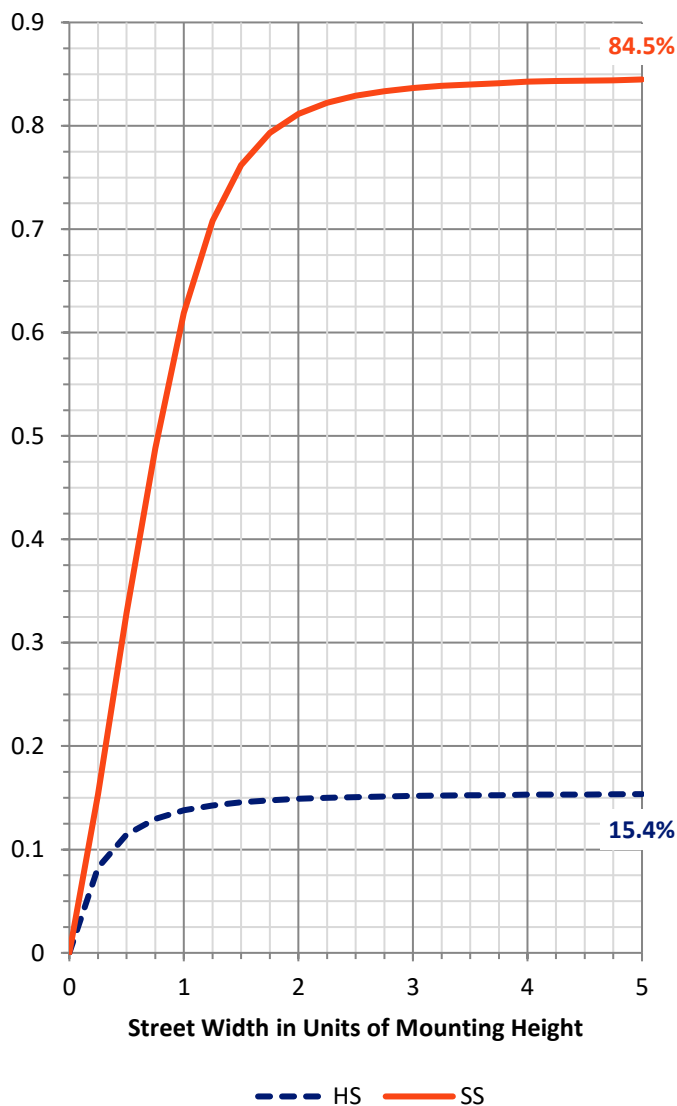
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1012.4	0.0	1012.4
	% Fixture	15.5	0.0	15.5
Street Side	Lumens	5518.6	0.0	5518.6
	% Fixture	84.5	0.0	84.5
Total	Lumens	6531.0	0.0	6531.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.5	1.8
10°-20°	360.5	5.5
20°-30°	600.1	9.2
30°-40°	905.4	13.9
40°-50°	1265.5	19.4
50°-60°	1397.8	21.4
60°-70°	1217.7	18.6
70°-80°	615.1	9.4
80°-90°	49.4	0.8
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°	6531.0	100.0
0°-180°	6531.0	100.0

Coefficient of Utilization



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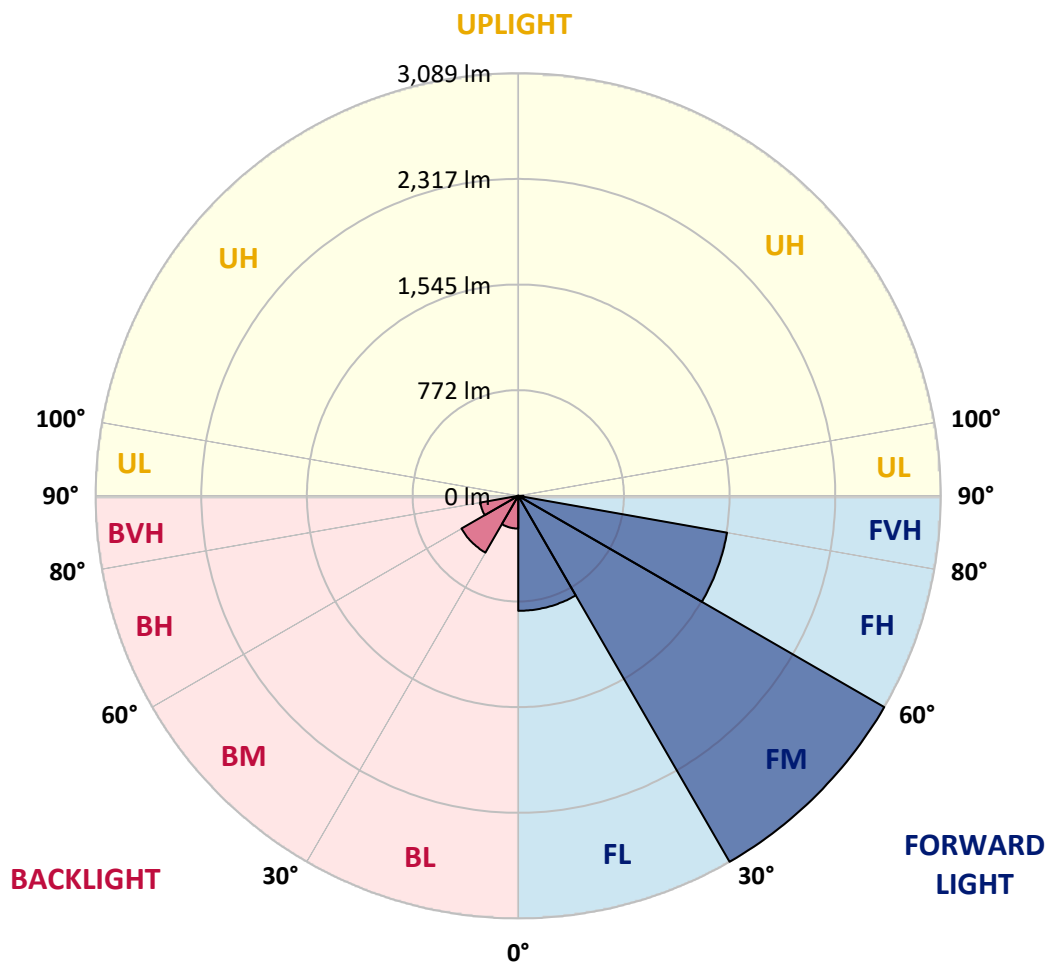
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	840.7	12.9			
FM	(30°-60°)	3089.4	47.3			
FH	(60°-80°)	1550.3	23.7			G1/1800
FVH	(80°-90°)	38.2	0.6			G1/100
BL	(0°-30°)	239.3	3.7	B1/500		
BM	(30°-60°)	479.4	7.3	B1/1000		
BH	(60°-80°)	282.6	4.3	B1/500		G1/500
BVH	(80°-90°)	11.2	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-G1

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	1236.7	1236.7	1236.7	1236.7	1236.7	1236.7	1236.7	1236.7	1236.7	1236.7	1236.7
2.5°	1407.4	1423.1	1414.5	1420.2	1391.8	1373.3	1351.9	1310.7	1287.9	1285.0	1258.0
5°	1613.8	1630.9	1616.6	1612.4	1562.5	1519.9	1471.5	1398.9	1350.5	1342.0	1282.2
7.5°	1820.1	1835.8	1818.7	1805.9	1739.0	1663.6	1592.4	1485.7	1410.3	1396.0	1302.1
10°	1965.3	1979.5	1966.7	1953.9	1884.2	1807.3	1706.3	1566.8	1464.4	1441.6	1314.9
12.5°	2074.9	2083.4	2077.7	2066.3	2000.9	1918.3	1821.5	1657.9	1525.5	1497.1	1334.9
15°	2164.5	2178.7	2171.6	2163.1	2100.5	2017.9	1925.4	1753.2	1596.7	1561.1	1364.7
17.5°	2224.3	2234.2	2235.7	2235.7	2180.2	2099.0	2009.4	1840.0	1667.9	1622.3	1393.2
20°	2251.3	2262.7	2269.8	2281.2	2235.7	2165.9	2074.9	1914.0	1734.7	1683.5	1420.2
22.5°	2264.1	2274.1	2292.6	2318.2	2281.2	2222.9	2138.9	1982.4	1801.6	1747.5	1451.5
25°	2274.1	2286.9	2313.9	2362.3	2336.7	2286.9	2214.3	2060.6	1881.3	1825.8	1497.1
27.5°	2301.1	2316.8	2342.4	2400.7	2369.4	2345.2	2294.0	2144.6	1965.3	1908.4	1552.6
30°	2395.0	2407.9	2406.4	2443.4	2405.0	2397.9	2362.3	2225.7	2046.4	1989.5	1618.0
32.5°	2565.8	2578.6	2547.3	2533.1	2449.1	2450.5	2436.3	2312.5	2143.2	2084.8	1693.5
35°	2749.4	2763.6	2722.4	2698.2	2557.3	2516.0	2523.1	2420.7	2251.3	2193.0	1787.4
37.5°	2913.0	2930.1	2894.5	2859.0	2716.7	2621.3	2619.9	2541.6	2375.1	2315.4	1891.3
40°	3002.7	3022.6	3044.0	3024.1	2874.6	2769.3	2723.8	2665.4	2497.5	2436.3	2003.7
42.5°	3045.4	3100.9	3139.3	3126.5	3004.1	2897.4	2843.3	2794.9	2646.9	2587.2	2137.5
45°	2925.9	2927.3	3008.4	3078.1	3055.4	2984.2	2974.2	2940.1	2817.7	2760.8	2288.3
47.5°	2776.4	2765.0	2822.0	2945.8	3009.8	3028.3	3086.7	3100.9	3012.7	2955.7	2442.0
50°	2417.8	2424.9	2609.9	2787.8	2913.0	3032.6	3166.4	3266.0	3213.3	3159.2	2604.2
52.5°	1966.7	1983.8	2195.8	2587.2	2785.0	2989.9	3213.3	3431.1	3418.2	3367.0	2766.5
55°	1576.8	1603.8	1828.7	2252.7	2621.3	2894.5	3233.2	3581.9	3630.3	3583.3	2925.9
57.5°	1205.4	1233.8	1423.1	1858.5	2412.1	2739.4	3219.0	3714.2	3828.1	3798.2	3072.4
60°	907.9	936.4	1057.4	1507.0	2150.3	2565.8	3147.9	3801.1	4006.0	3974.7	3179.2
62.5°	650.3	673.1	762.8	1172.6	1831.5	2359.5	2972.8	3802.5	4107.0	4081.4	3230.4
65°	468.2	468.2	540.8	836.8	1532.7	2111.9	2708.1	3627.4	4085.7	4078.6	3194.8
67.5°	337.3	340.1	398.5	584.9	1222.4	1811.6	2365.2	3315.8	3920.6	3956.2	3066.7
70°	239.1	246.2	273.2	408.4	923.6	1430.2	1998.0	2907.4	3623.2	3685.8	2819.1
72.5°	185.0	189.3	207.8	284.6	674.5	1063.0	1592.4	2452.0	3226.1	3297.3	2481.9
75°	142.3	146.6	160.8	209.2	483.8	745.7	1131.4	1902.7	2601.4	2728.0	1993.7
77.5°	103.9	109.6	119.5	152.3	281.8	473.9	685.9	1070.2	1435.9	1495.7	1044.5
80°	48.4	55.5	69.7	98.2	152.3	223.4	243.3	412.7	690.2	721.5	566.4
82.5°	27.0	34.2	39.8	59.8	76.8	79.7	82.5	103.9	260.4	287.5	237.7
85°	12.8	17.1	18.5	25.6	25.6	22.8	27.0	19.9	42.7	51.2	49.8
87.5°	0.0	1.4	2.8	7.1	5.7	4.3	4.3	4.3	4.3	5.7	4.3
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°	1236.7	1236.7	1236.7	1236.7	1236.7	1236.7	1236.7	1236.7	1236.7	1236.7	1236.7
2.5°	1245.2	1226.7	1184.0	1147.0	1122.8	1101.5	1073.0	1060.2	1037.4	1041.7	1028.9
5°	1252.3	1218.2	1142.7	1073.0	1021.8	976.2	926.4	898.0	866.7	863.8	853.8
7.5°	1256.6	1203.9	1095.8	997.6	919.3	849.6	782.7	745.7	707.3	698.7	690.2
10°	1252.3	1182.6	1047.4	919.3	815.4	728.6	653.2	606.2	566.4	556.4	547.9
12.5°	1256.6	1171.2	1001.9	846.7	722.9	624.7	539.3	491.0	454.0	444.0	438.3
15°	1266.5	1164.1	963.4	781.3	640.4	530.8	446.8	405.6	375.7	365.7	362.9
17.5°	1275.1	1157.0	922.2	717.2	557.8	448.3	375.7	341.5	315.9	306.0	303.1
20°	1286.5	1147.0	880.9	656.0	485.3	382.8	318.8	288.9	269.0	261.8	260.4
22.5°	1296.4	1139.9	842.5	594.8	418.4	330.2	276.1	251.9	237.7	230.5	230.5
25°	1322.0	1142.7	809.7	537.9	368.6	288.9	243.3	224.8	213.5	209.2	209.2
27.5°	1351.9	1154.1	784.1	489.5	325.9	257.6	220.6	204.9	199.2	193.5	195.0
30°	1394.6	1176.9	767.0	449.7	294.6	233.4	202.1	190.7	185.0	183.6	183.6
32.5°	1448.7	1213.9	765.6	424.1	271.8	214.9	189.3	179.3	176.5	175.0	175.0
35°	1512.7	1246.6	757.1	412.7	257.6	202.1	179.3	172.2	170.8	170.8	170.8
37.5°	1589.6	1300.7	751.4	397.0	250.5	195.0	172.2	166.5	166.5	166.5	166.5
40°	1669.3	1344.8	742.8	382.8	247.6	190.7	167.9	160.8	160.8	160.8	160.8
42.5°	1764.6	1408.9	740.0	375.7	243.3	187.8	162.2	153.7	155.1	155.1	156.5
45°	1879.9	1481.4	738.6	368.6	241.9	185.0	156.5	146.6	148.0	146.6	146.6
47.5°	1996.6	1565.4	742.8	364.3	240.5	182.2	152.3	139.5	139.5	138.0	138.0
50°	2119.0	1642.2	745.7	360.0	237.7	176.5	145.2	133.8	130.9	128.1	129.5
52.5°	2234.2	1713.4	747.1	352.9	229.1	167.9	139.5	126.7	122.4	118.1	119.5
55°	2349.5	1781.7	750.0	344.4	217.7	159.4	132.3	119.5	113.8	108.2	108.2
57.5°	2453.4	1841.5	742.8	323.0	204.9	150.8	125.2	111.0	102.5	96.8	96.8
60°	2524.5	1884.2	721.5	291.7	187.8	140.9	118.1	102.5	92.5	88.2	88.2
62.5°	2558.7	1891.3	683.1	240.5	166.5	130.9	109.6	93.9	85.4	82.5	82.5
65°	2526.0	1860.0	623.3	180.7	143.7	119.5	101.0	86.8	78.3	71.2	71.2
67.5°	2412.1	1771.7	540.8	136.6	122.4	108.2	92.5	79.7	69.7	64.0	64.0
70°	2183.0	1588.2	418.4	109.6	103.9	93.9	84.0	71.2	62.6	55.5	55.5
72.5°	1882.7	1346.2	294.6	88.2	88.2	79.7	71.2	62.6	54.1	48.4	48.4
75°	1444.4	996.2	197.8	71.2	72.6	66.9	58.3	51.2	45.5	41.3	41.3
77.5°	788.4	492.4	121.0	52.7	54.1	51.2	45.5	41.3	38.4	34.2	34.2
80°	382.8	216.3	69.7	37.0	38.4	37.0	34.2	29.9	29.9	27.0	27.0
82.5°	160.8	81.1	37.0	25.6	25.6	22.8	21.3	21.3	21.3	19.9	19.9
85°	39.8	15.7	15.7	14.2	14.2	14.2	12.8	12.8	12.8	10.0	11.4
87.5°	5.7	5.7	5.7	5.7	5.7	5.7	4.3	1.4	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)