

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: P842447

Luminaire Tested: **ARCH4-50-722-U-T4W-HSS**

Issue Date: 5/27/2024

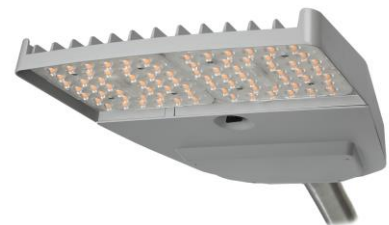
Test Information

Test Method: LM-79-08
Report Number: P842447
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: ARCH4-50-722-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2200K, 435mA 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: 5649 lumens
Efficiency: N/A
Efficacy: 106.2 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G1

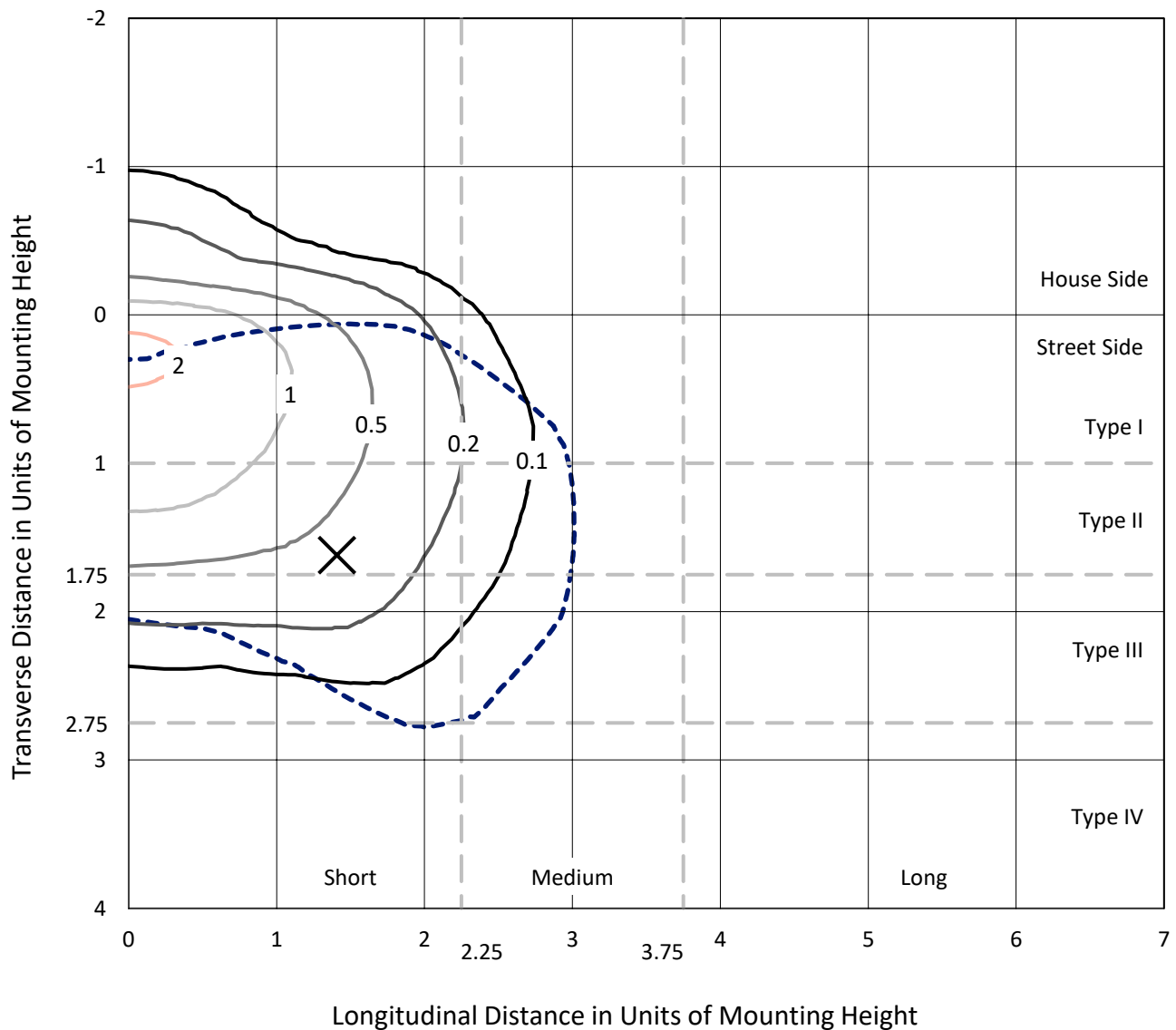
Input Watts (W): 53.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

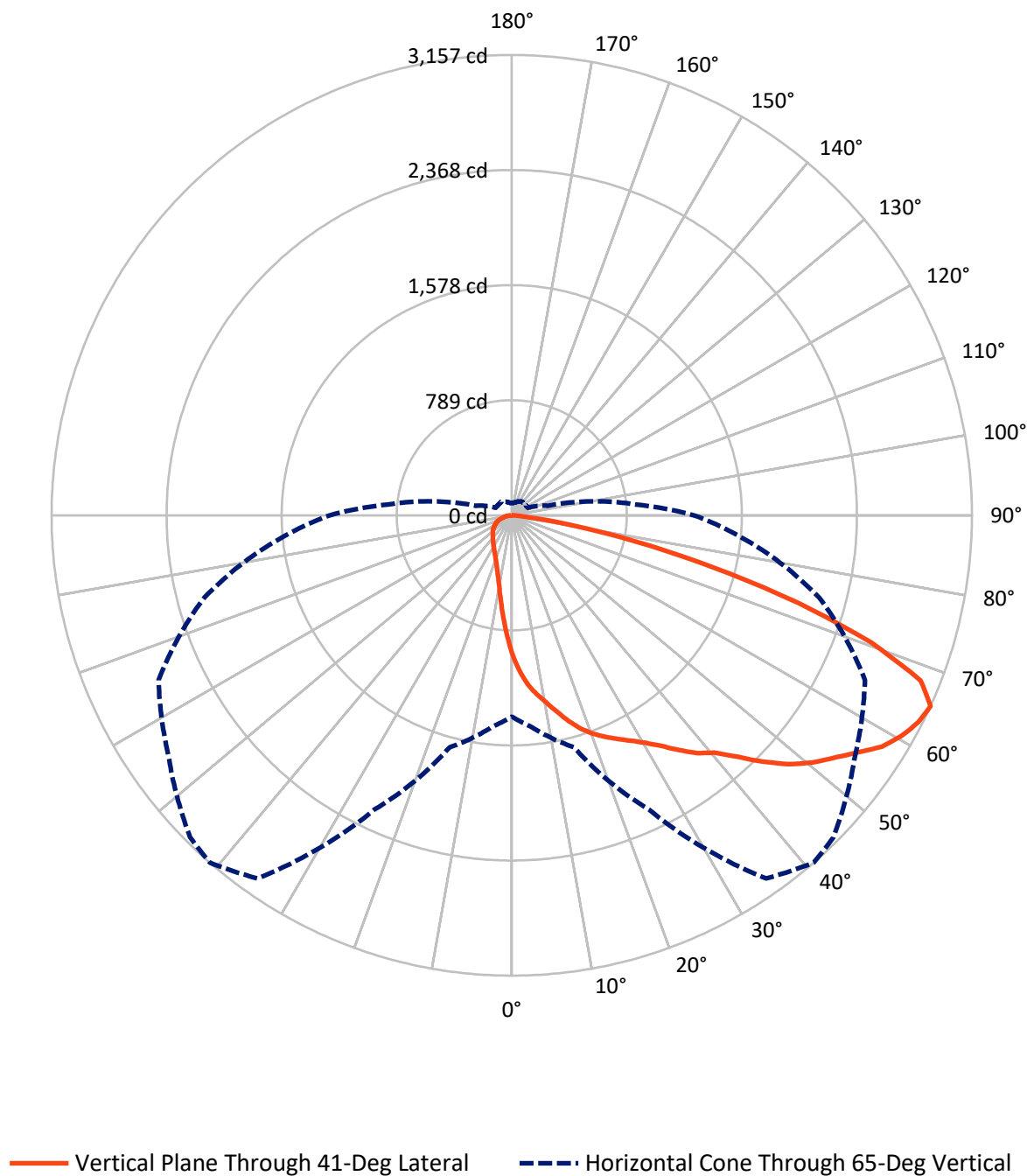
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.2 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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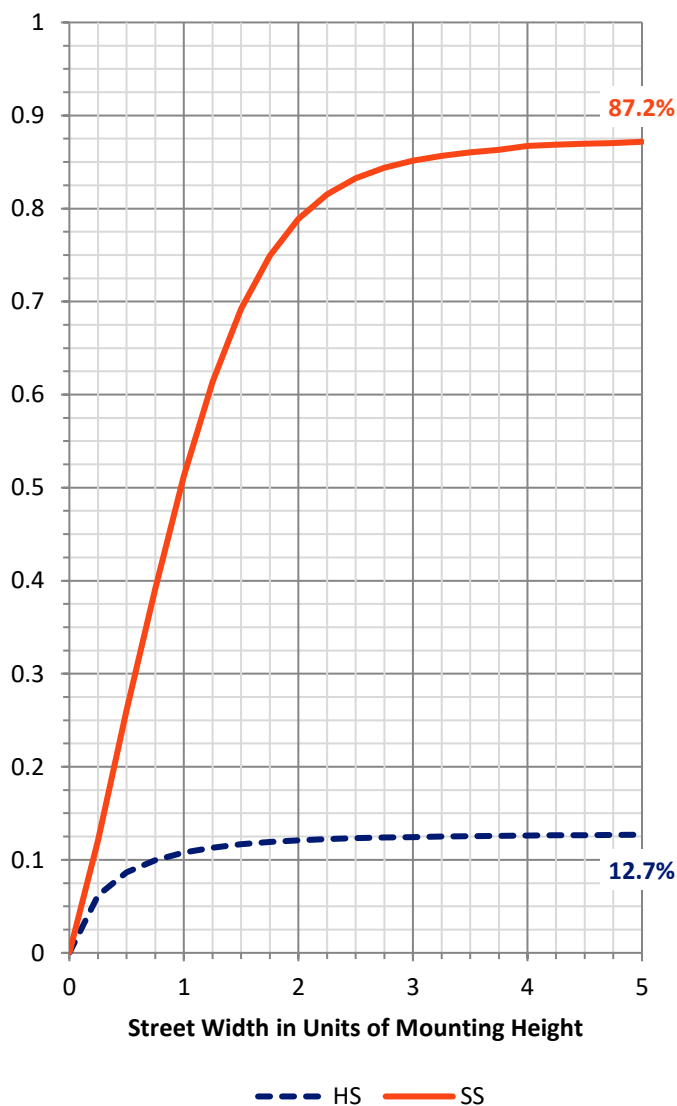
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	725.2	0.0	725.2
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	4923.8	0.0	4923.8
	% Fixture	87.2	0.0	87.2
Total	Lumens	5649.0	0.0	5649.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.7	1.6
10°-20°	268.9	4.8
20°-30°	462.7	8.2
30°-40°	701.7	12.4
40°-50°	1028.0	18.2
50°-60°	1298.1	23.0
60°-70°	1217.2	21.5
70°-80°	542.5	9.6
80°-90°	40.2	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°	5649.0	100.0
0°-180°	5649.0	100.0

Coefficient of Utilization



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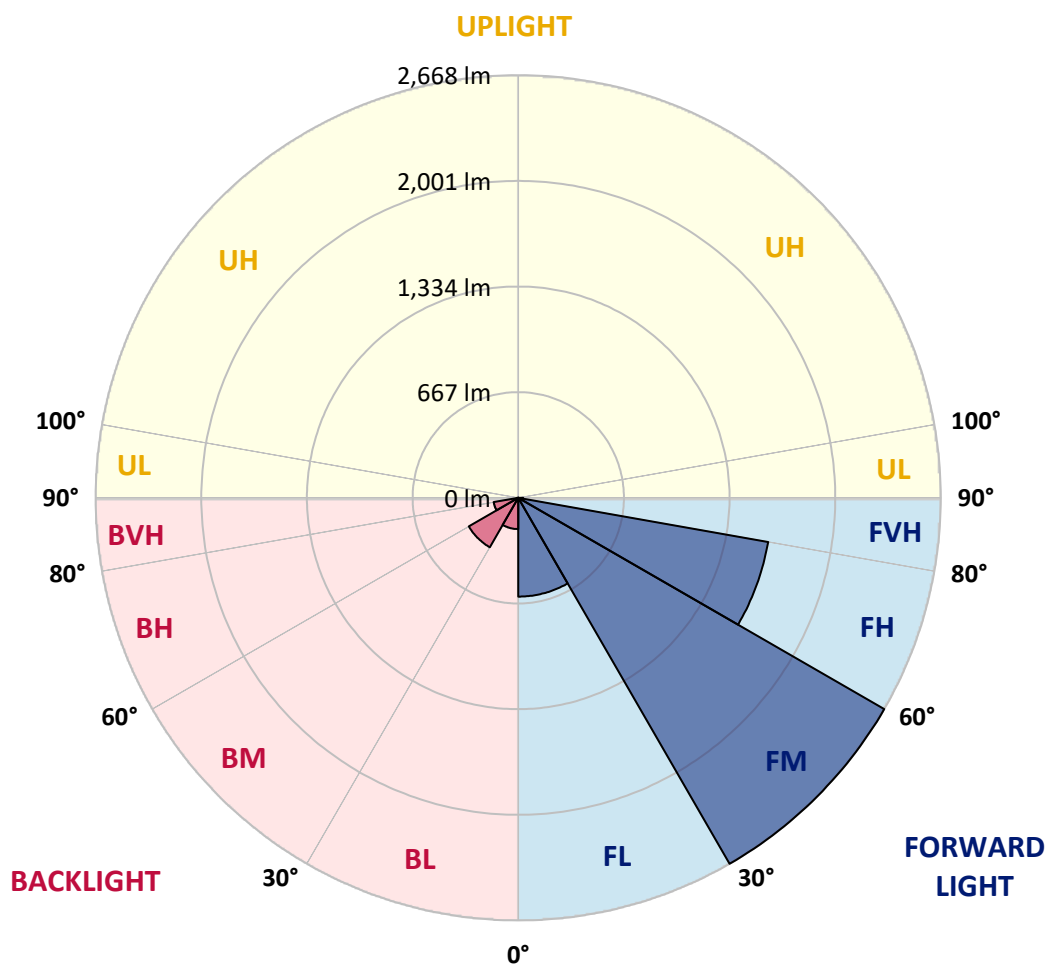
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	623.9	11.0			
FM	(30°-60°)	2667.7	47.2			
FH	(60°-80°)	1602.2	28.4			G1/1800
FVH	(80°-90°)	30.0	0.5			G1/100
BL	(0°-30°)	197.4	3.5	B1/500		
BM	(30°-60°)	360.1	6.4	B1/1000		
BH	(60°-80°)	157.5	2.8	B1/500		G1/500
BVH	(80°-90°)	10.2	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 III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	962.6	962.6	962.6	962.6	962.6	962.6	962.6	962.6	962.6	962.6	962.6
2.5°	1110.3	1106.7	1104.3	1091.2	1091.2	1073.3	1074.5	1057.9	1037.6	1005.4	970.9
5°	1215.1	1210.3	1204.4	1191.3	1186.5	1168.7	1166.3	1142.4	1107.9	1051.9	990.0
7.5°	1306.8	1302.1	1293.7	1274.7	1261.6	1240.1	1234.2	1203.2	1165.1	1096.0	1009.0
10°	1390.2	1386.7	1375.9	1352.1	1334.2	1308.0	1297.3	1255.6	1208.0	1131.7	1024.5
12.5°	1474.8	1470.0	1455.8	1435.5	1414.1	1383.1	1370.0	1316.4	1255.6	1171.0	1047.1
15°	1553.4	1546.3	1535.6	1514.1	1495.1	1465.3	1451.0	1387.8	1314.0	1215.1	1076.9
17.5°	1604.7	1598.7	1589.2	1577.3	1561.8	1539.1	1524.8	1462.9	1372.4	1258.0	1107.9
20°	1635.6	1633.3	1629.7	1622.5	1615.4	1599.9	1589.2	1530.8	1435.5	1299.7	1137.7
22.5°	1659.5	1657.1	1655.9	1655.9	1657.1	1651.1	1644.0	1593.9	1496.3	1343.8	1165.1
25°	1696.4	1695.2	1692.8	1690.4	1698.8	1700.0	1697.6	1663.0	1572.5	1402.1	1199.6
27.5°	1747.6	1744.0	1739.3	1736.9	1745.2	1751.2	1756.0	1732.1	1653.5	1461.7	1238.9
30°	1826.2	1815.5	1803.6	1795.3	1801.2	1810.8	1821.5	1807.2	1736.9	1535.6	1279.4
32.5°	1919.2	1906.1	1878.7	1863.2	1878.7	1885.8	1894.1	1887.0	1823.9	1615.4	1319.9
35°	2032.3	2016.8	1988.3	1965.6	1993.0	1977.5	1974.0	1966.8	1906.1	1694.0	1365.2
37.5°	2220.6	2197.9	2152.7	2102.6	2102.6	2069.3	2056.2	2034.7	1979.9	1764.3	1409.3
40°	2438.6	2408.8	2350.4	2276.5	2208.6	2139.6	2131.2	2115.7	2066.9	1845.3	1459.3
42.5°	2678.0	2620.8	2539.8	2450.5	2340.9	2262.3	2243.2	2199.1	2151.5	1927.5	1509.4
45°	2943.7	2824.5	2706.6	2661.3	2480.3	2408.8	2373.0	2293.2	2239.6	2013.3	1561.8
47.5°	2986.6	2893.6	2815.0	2807.9	2610.1	2550.5	2510.0	2395.7	2334.9	2105.0	1616.6
50°	2962.7	2906.7	2915.1	2886.5	2705.4	2666.1	2635.1	2505.3	2429.0	2193.2	1666.6
52.5°	2862.7	2893.6	2941.3	2888.9	2796.0	2763.8	2748.3	2623.2	2517.2	2274.2	1711.9
55°	2743.5	2765.0	2867.4	2931.8	2900.8	2872.2	2857.9	2760.2	2604.2	2342.1	1753.6
57.5°	2569.6	2560.1	2673.2	2924.6	3010.4	2993.7	2978.2	2894.8	2685.2	2390.9	1779.8
60°	2308.7	2288.5	2431.4	2781.7	3046.1	3072.3	3065.2	2984.2	2747.1	2389.7	1769.1
62.5°	1857.2	1907.3	2105.0	2548.2	3061.6	3128.3	3115.2	2991.3	2767.4	2320.6	1701.2
65°	1380.7	1452.2	1646.4	2226.5	3040.2	3156.9	3121.2	2874.6	2673.2	2183.6	1552.2
67.5°	994.7	1057.9	1199.6	1832.2	2834.1	3025.9	2984.2	2684.0	2456.4	1989.4	1346.2
70°	680.2	725.5	822.0	1334.2	2419.5	2616.1	2589.9	2399.3	2114.5	1758.3	1093.6
72.5°	480.1	499.1	561.1	880.4	1838.2	2052.6	2021.6	1974.0	1698.8	1461.7	850.6
75°	359.8	371.7	405.0	569.4	1240.1	1422.4	1393.8	1421.2	1268.7	1106.7	619.5
77.5°	135.8	147.7	229.9	363.3	733.8	873.2	844.6	861.3	705.2	558.7	308.5
80°	36.9	39.3	76.2	172.7	333.6	434.8	395.5	339.5	262.1	257.3	163.2
82.5°	15.5	17.9	34.5	92.9	119.1	119.1	100.1	123.9	100.1	120.3	78.6
85°	6.0	7.1	8.3	23.8	15.5	16.7	17.9	23.8	20.3	25.0	17.9
87.5°	0.0	0.0	0.0	1.2	1.2	2.4	1.2	2.4	3.6	3.6	3.6
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°	962.6	962.6	962.6	962.6	962.6	962.6	962.6	962.6	962.6	962.6	962.6
2.5°	956.6	943.5	924.4	893.5	861.3	843.4	820.8	817.2	793.4	791.0	781.5
5°	962.6	935.2	886.3	826.8	768.4	723.1	689.8	671.9	637.3	637.3	627.8
7.5°	967.3	924.4	845.8	757.7	677.8	617.1	571.8	552.8	521.8	519.4	512.3
10°	968.5	911.3	801.7	687.4	589.7	527.7	483.7	462.2	434.8	432.4	427.7
12.5°	978.0	904.2	762.4	626.6	526.5	459.8	417.0	399.1	377.6	375.3	370.5
15°	993.5	904.2	729.1	575.4	470.6	408.6	371.7	355.0	339.5	337.1	334.8
17.5°	1009.0	901.8	695.7	527.7	424.1	368.1	335.9	322.8	310.9	309.7	307.4
20°	1023.3	900.6	662.4	487.2	388.4	334.8	309.7	297.8	288.3	288.3	287.1
22.5°	1037.6	898.2	630.2	449.1	357.4	309.7	288.3	275.2	268.0	268.0	266.8
25°	1059.1	898.2	600.4	417.0	332.4	290.7	269.2	259.7	253.7	252.6	252.6
27.5°	1084.1	905.4	574.2	388.4	310.9	271.6	254.9	245.4	238.3	235.9	237.1
30°	1111.5	911.3	550.4	363.3	290.7	257.3	239.4	229.9	222.8	220.4	221.6
32.5°	1138.9	918.5	528.9	340.7	270.4	244.2	226.3	215.6	208.5	207.3	207.3
35°	1168.7	925.6	507.5	321.6	253.7	231.1	214.4	202.5	197.8	195.4	196.6
37.5°	1198.4	937.5	487.2	303.8	241.8	219.2	203.7	191.8	188.2	187.0	187.0
40°	1234.2	955.4	478.9	291.9	231.1	208.5	195.4	183.5	179.9	179.9	179.9
42.5°	1264.0	969.7	471.7	278.8	222.8	198.9	187.0	177.5	175.1	173.9	175.1
45°	1293.7	982.8	462.2	266.8	212.0	189.4	179.9	170.4	168.0	168.0	168.0
47.5°	1323.5	990.0	449.1	254.9	202.5	181.1	172.7	164.4	162.0	162.0	162.0
50°	1347.3	995.9	430.1	241.8	191.8	173.9	165.6	157.2	154.9	154.9	154.9
52.5°	1371.2	997.1	409.8	226.3	181.1	165.6	158.4	150.1	147.7	146.5	146.5
55°	1392.6	995.9	386.0	208.5	169.2	156.1	150.1	143.0	138.2	133.4	135.8
57.5°	1408.1	994.7	358.6	190.6	157.2	146.5	144.1	134.6	125.1	113.2	115.6
60°	1402.1	981.6	328.8	168.0	144.1	137.0	137.0	123.9	107.2	101.3	102.5
62.5°	1364.0	944.7	297.8	144.1	131.0	127.5	126.3	112.0	98.9	92.9	94.1
65°	1249.7	851.8	252.6	122.7	117.9	116.7	116.7	103.6	91.7	84.6	85.8
67.5°	1075.7	714.8	206.1	103.6	104.8	107.2	107.2	95.3	83.4	76.2	77.4
70°	862.5	558.7	164.4	89.3	90.5	94.1	96.5	85.8	75.1	67.9	67.9
72.5°	649.3	424.1	132.2	75.1	81.0	81.0	84.6	76.2	65.5	58.4	59.6
75°	470.6	303.8	104.8	63.1	70.3	69.1	69.1	64.3	56.0	51.2	51.2
77.5°	222.8	159.6	83.4	45.3	54.8	53.6	54.8	51.2	47.7	42.9	44.1
80°	109.6	78.6	53.6	32.2	38.1	39.3	42.9	40.5	39.3	35.7	35.7
82.5°	52.4	31.0	25.0	22.6	26.2	27.4	29.8	29.8	31.0	28.6	28.6
85°	14.3	8.3	10.7	14.3	16.7	17.9	20.3	21.4	21.4	20.3	21.4
87.5°	3.6	3.6	4.8	7.1	8.3	9.5	10.7	10.7	4.8	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)