

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: P842465

Luminaire Tested: **ARCH4-50-730-U-T4W-HSS**

Issue Date: 5/27/2024

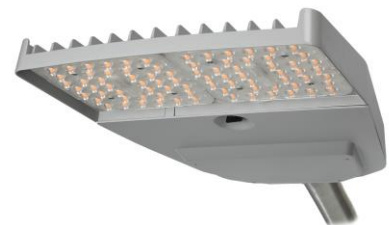
Test Information

Test Method: LM-79-08
Report Number: P842465
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: ARCH4-50-730-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 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: 6457 lumens
Efficiency: N/A
Efficacy: 121.4 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

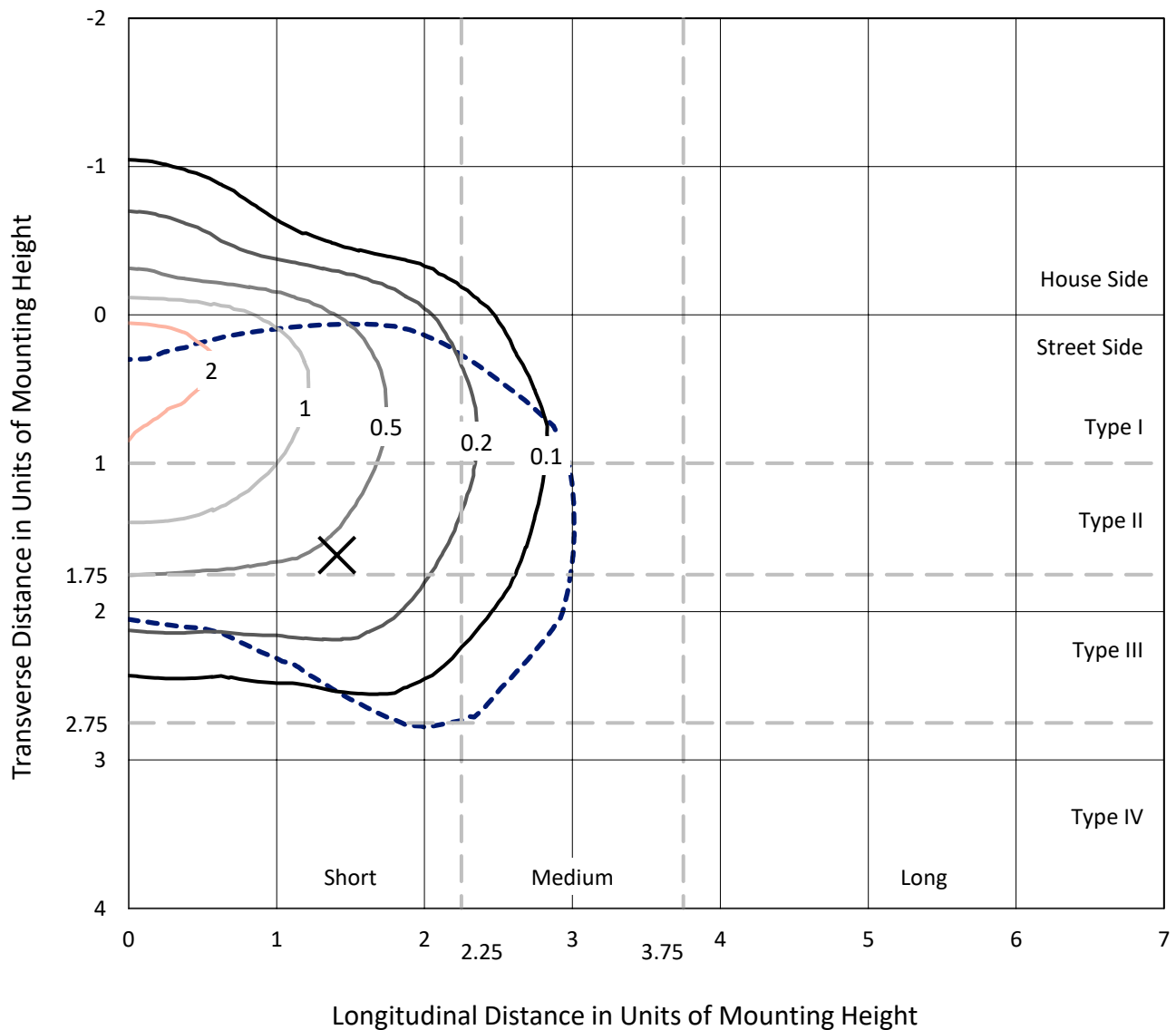
Input Watts (W): 53.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

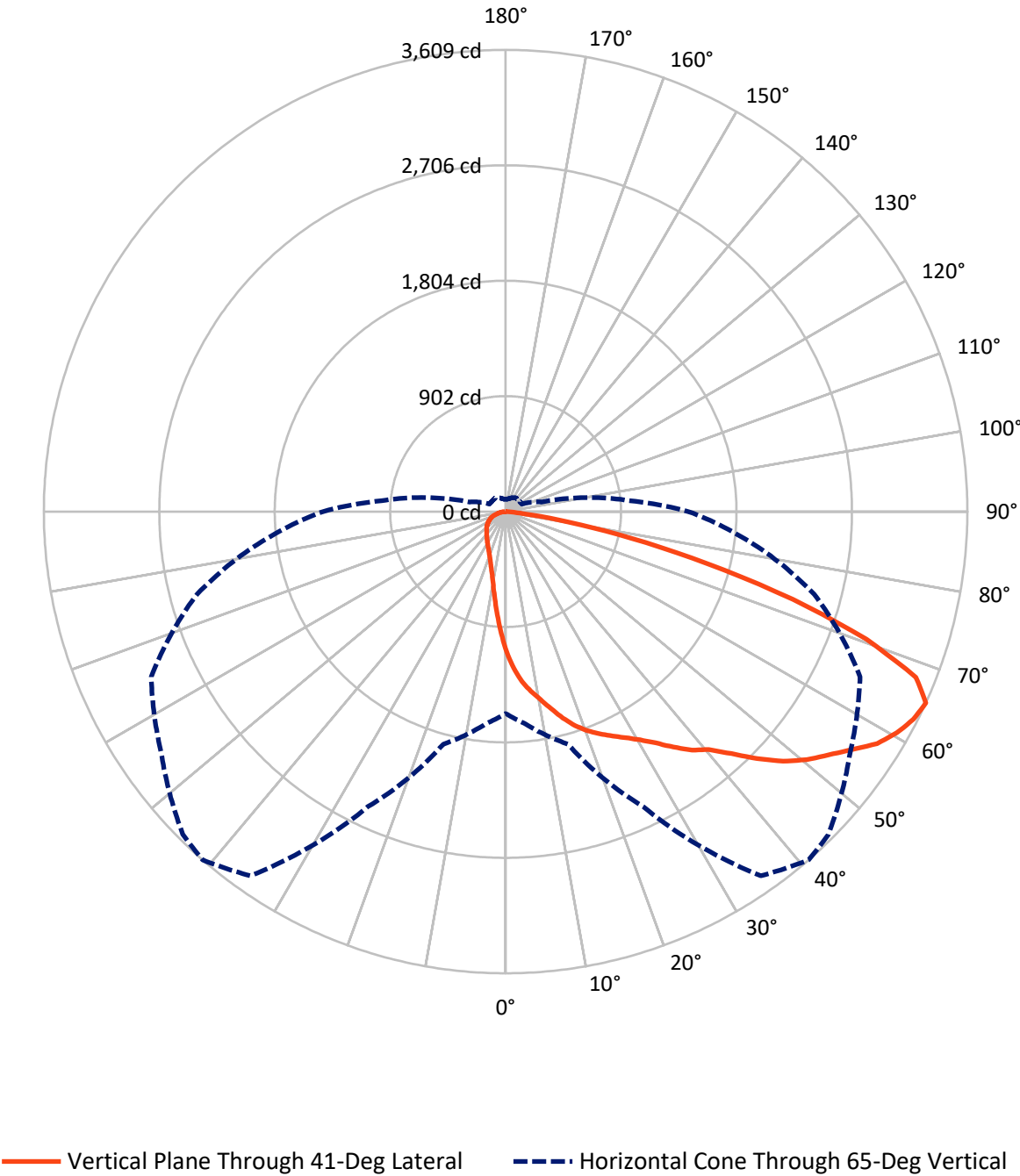
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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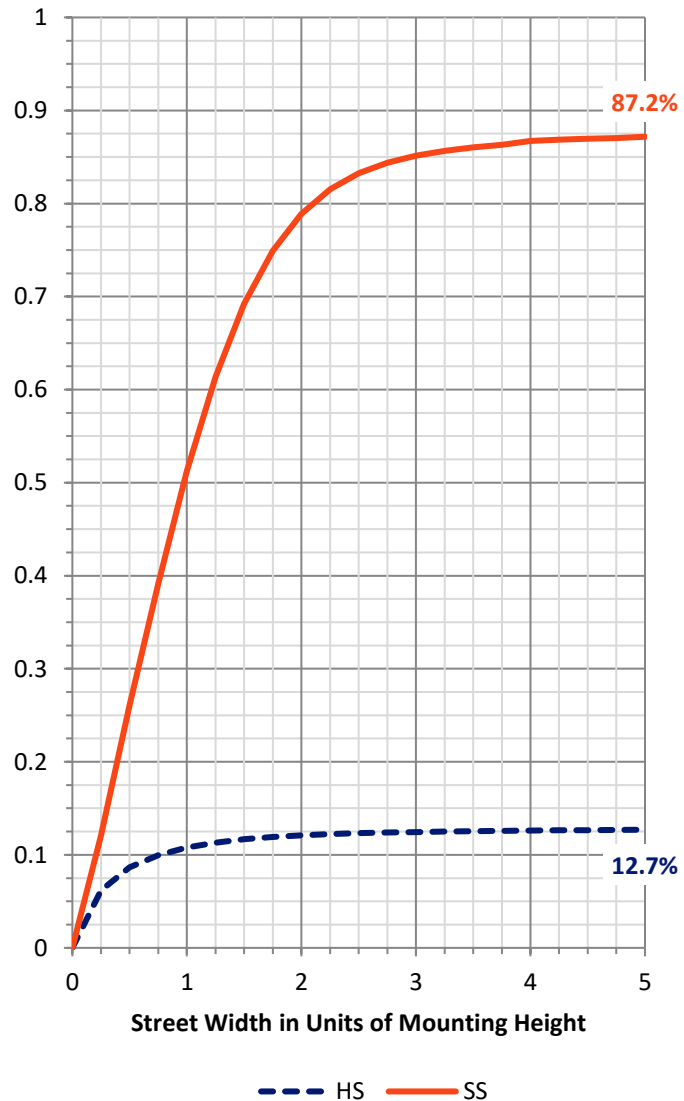
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	829.0	0.0	829.0
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	5628.0	0.0	5628.0
	% Fixture	87.2	0.0	87.2
Total	Lumens	6457.0	0.0	6457.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.5	1.6
10°-20°	307.4	4.8
20°-30°	528.8	8.2
30°-40°	802.0	12.4
40°-50°	1175.0	18.2
50°-60°	1483.8	23.0
60°-70°	1391.3	21.5
70°-80°	620.1	9.6
80°-90°	45.9	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°	6457.0	100.0
0°-180°	6457.0	100.0

Coefficient of Utilization



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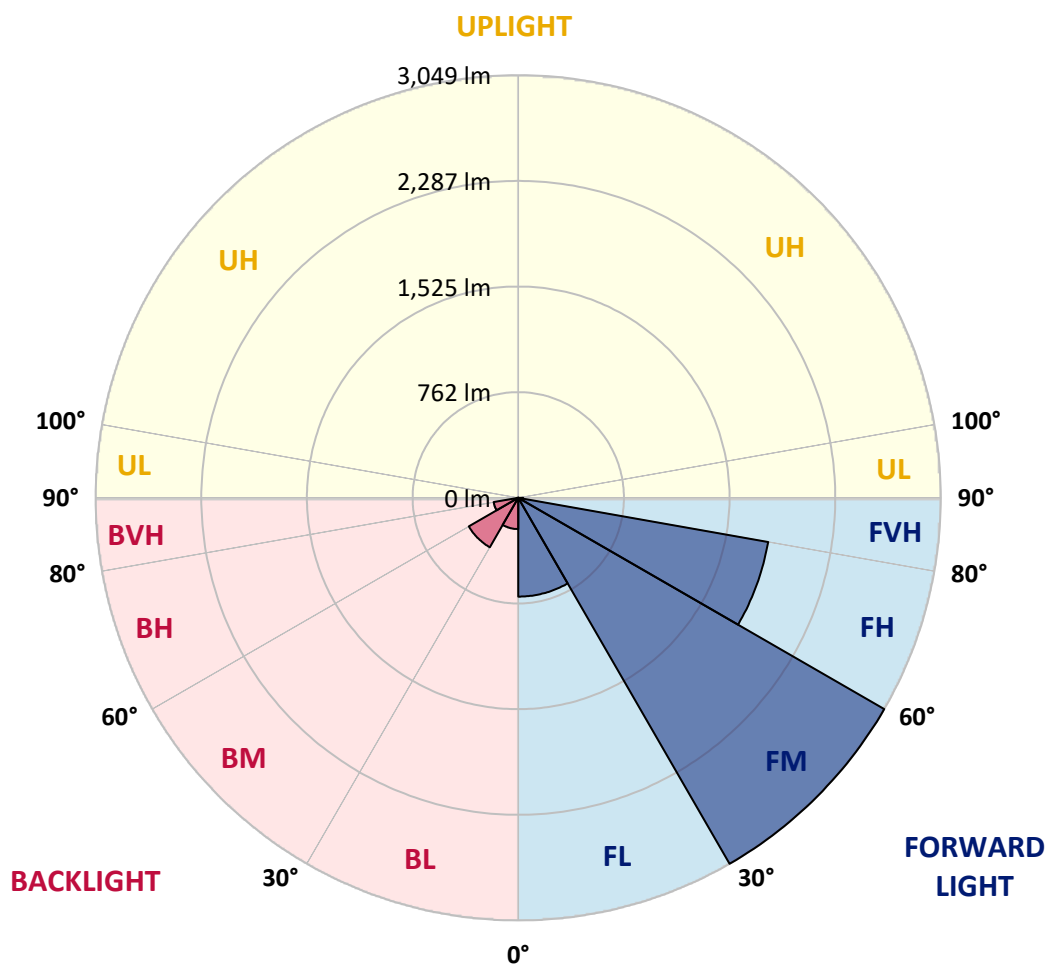
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	713.1	11.0			
FM	(30°-60°)	3049.2	47.2			
FH	(60°-80°)	1831.4	28.4			G2/5000
FVH	(80°-90°)	34.3	0.5			G1/100
BL	(0°-30°)	225.6	3.5	B1/500		
BM	(30°-60°)	411.6	6.4	B1/1000		
BH	(60°-80°)	180.1	2.8	B1/500		G1/500
BVH	(80°-90°)	11.6	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°	1100.2	1100.2	1100.2	1100.2	1100.2	1100.2	1100.2	1100.2	1100.2	1100.2	1100.2
2.5°	1269.1	1265.0	1262.3	1247.3	1247.3	1226.9	1228.2	1209.2	1186.0	1149.3	1109.8
5°	1388.9	1383.5	1376.7	1361.7	1356.2	1335.8	1333.1	1305.9	1266.4	1202.4	1131.6
7.5°	1493.8	1488.3	1478.8	1457.0	1442.0	1417.5	1410.7	1375.3	1331.7	1252.7	1153.3
10°	1589.1	1585.0	1572.7	1545.5	1525.1	1495.1	1482.9	1435.2	1380.7	1293.6	1171.0
12.5°	1685.8	1680.3	1664.0	1640.8	1616.3	1580.9	1565.9	1504.7	1435.2	1338.5	1196.9
15°	1775.6	1767.5	1755.2	1730.7	1708.9	1674.9	1658.5	1586.4	1501.9	1388.9	1231.0
17.5°	1834.2	1827.4	1816.5	1802.9	1785.2	1759.3	1743.0	1672.1	1568.7	1437.9	1266.4
20°	1869.6	1866.9	1862.8	1854.6	1846.4	1828.7	1816.5	1749.8	1640.8	1485.6	1300.4
22.5°	1896.8	1894.1	1892.7	1892.7	1894.1	1887.3	1879.1	1821.9	1710.3	1536.0	1331.7
25°	1939.0	1937.7	1935.0	1932.2	1941.8	1943.1	1940.4	1900.9	1797.4	1602.7	1371.2
27.5°	1997.6	1993.5	1988.1	1985.3	1994.9	2001.7	2007.1	1979.9	1890.0	1670.8	1416.1
30°	2087.5	2075.2	2061.6	2052.1	2058.9	2069.8	2082.0	2065.7	1985.3	1755.2	1462.4
32.5°	2193.7	2178.7	2147.4	2129.7	2147.4	2155.5	2165.1	2156.9	2084.7	1846.4	1508.7
35°	2323.0	2305.3	2272.6	2246.8	2278.1	2260.4	2256.3	2248.1	2178.7	1936.3	1560.5
37.5°	2538.2	2512.3	2460.6	2403.4	2403.4	2365.2	2350.3	2325.8	2263.1	2016.7	1610.9
40°	2787.4	2753.3	2686.6	2602.2	2524.6	2445.6	2436.0	2418.3	2362.5	2109.2	1668.1
42.5°	3061.1	2995.7	2903.1	2801.0	2675.7	2585.8	2564.0	2513.7	2459.2	2203.2	1725.3
45°	3364.7	3228.5	3093.7	3042.0	2835.0	2753.3	2712.5	2621.2	2560.0	2301.2	1785.2
47.5°	3413.7	3307.5	3217.7	3209.5	2983.4	2915.4	2869.1	2738.3	2668.9	2406.1	1847.8
50°	3386.5	3322.5	3332.0	3299.4	3092.4	3047.4	3012.0	2863.6	2776.5	2506.9	1905.0
52.5°	3272.1	3307.5	3362.0	3302.1	3195.9	3159.1	3141.4	2998.4	2877.2	2599.5	1956.7
55°	3136.0	3160.5	3277.6	3351.1	3315.7	3283.0	3266.7	3155.0	2976.6	2677.1	2004.4
57.5°	2937.1	2926.3	3055.6	3342.9	3441.0	3421.9	3404.2	3308.9	3069.2	2732.9	2034.4
60°	2638.9	2615.8	2779.2	3179.5	3481.8	3511.8	3503.6	3411.0	3140.0	2731.5	2022.1
62.5°	2122.9	2180.1	2406.1	2912.6	3499.5	3575.8	3560.8	3419.2	3163.2	2652.6	1944.5
65°	1578.2	1659.9	1881.8	2545.0	3475.0	3608.5	3567.6	3285.7	3055.6	2496.0	1774.3
67.5°	1137.0	1209.2	1371.2	2094.3	3239.4	3458.7	3411.0	3067.9	2807.8	2274.0	1538.7
70°	777.5	829.3	939.6	1525.1	2765.6	2990.3	2960.3	2742.4	2417.0	2009.8	1250.0
72.5°	548.8	570.5	641.4	1006.3	2101.1	2346.2	2310.8	2256.3	1941.8	1670.8	972.2
75°	411.2	424.8	463.0	650.9	1417.5	1625.8	1593.2	1624.5	1450.2	1265.0	708.1
77.5°	155.2	168.8	262.8	415.3	838.8	998.1	965.4	984.5	806.1	638.6	352.7
80°	42.2	44.9	87.1	197.4	381.3	497.0	452.1	388.1	299.6	294.1	186.6
82.5°	17.7	20.4	39.5	106.2	136.2	136.2	114.4	141.6	114.4	137.5	89.9
85°	6.8	8.2	9.5	27.2	17.7	19.1	20.4	27.2	23.1	28.6	20.4
87.5°	0.0	0.0	0.0	1.4	1.4	2.7	1.4	2.7	4.1	4.1	4.1
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°	1100.2	1100.2	1100.2	1100.2	1100.2	1100.2	1100.2	1100.2	1100.2	1100.2	1100.2
2.5°	1093.4	1078.5	1056.7	1021.3	984.5	964.1	938.2	934.1	906.9	904.2	893.3
5°	1100.2	1068.9	1013.1	945.0	878.3	826.5	788.4	768.0	728.5	728.5	717.6
7.5°	1105.7	1056.7	966.8	866.0	774.8	705.4	653.6	631.8	596.4	593.7	585.5
10°	1107.0	1041.7	916.4	785.7	674.0	603.2	552.8	528.3	497.0	494.3	488.8
12.5°	1117.9	1033.5	871.5	716.2	601.9	525.6	476.6	456.2	431.7	428.9	423.5
15°	1135.6	1033.5	833.3	657.7	537.9	467.1	424.8	405.8	388.1	385.4	382.6
17.5°	1153.3	1030.8	795.2	603.2	484.8	420.8	384.0	369.0	355.4	354.0	351.3
20°	1169.7	1029.4	757.1	556.9	443.9	382.6	354.0	340.4	329.5	329.5	328.2
22.5°	1186.0	1026.7	720.3	513.4	408.5	354.0	329.5	314.5	306.4	306.4	305.0
25°	1210.5	1026.7	686.3	476.6	379.9	332.3	307.7	296.8	290.0	288.7	288.7
27.5°	1239.1	1034.9	656.3	443.9	355.4	310.5	291.4	280.5	272.3	269.6	271.0
30°	1270.4	1041.7	629.1	415.3	332.3	294.1	273.7	262.8	254.6	251.9	253.3
32.5°	1301.8	1049.9	604.6	389.4	309.1	279.1	258.7	246.5	238.3	236.9	236.9
35°	1335.8	1058.0	580.1	367.7	290.0	264.2	245.1	231.5	226.0	223.3	224.7
37.5°	1369.9	1071.6	556.9	347.2	276.4	250.5	232.8	219.2	215.1	213.8	213.8
40°	1410.7	1092.1	547.4	333.6	264.2	238.3	223.3	209.7	205.6	205.6	205.6
42.5°	1444.7	1108.4	539.2	318.6	254.6	227.4	213.8	202.9	200.2	198.8	200.2
45°	1478.8	1123.4	528.3	305.0	242.4	216.5	205.6	194.7	192.0	192.0	192.0
47.5°	1512.8	1131.6	513.4	291.4	231.5	207.0	197.4	187.9	185.2	185.2	185.2
50°	1540.1	1138.4	491.6	276.4	219.2	198.8	189.3	179.7	177.0	177.0	177.0
52.5°	1567.3	1139.7	468.4	258.7	207.0	189.3	181.1	171.6	168.8	167.5	167.5
55°	1591.8	1138.4	441.2	238.3	193.4	178.4	171.6	163.4	158.0	152.5	155.2
57.5°	1609.5	1137.0	409.9	217.9	179.7	167.5	164.8	153.9	143.0	129.4	132.1
60°	1602.7	1122.0	375.8	192.0	164.8	156.6	156.6	141.6	122.6	115.7	117.1
62.5°	1559.1	1079.8	340.4	164.8	149.8	145.7	144.3	128.0	113.0	106.2	107.6
65°	1428.4	973.6	288.7	140.3	134.8	133.4	133.4	118.5	104.8	96.7	98.0
67.5°	1229.6	817.0	235.6	118.5	119.8	122.6	122.6	108.9	95.3	87.1	88.5
70°	985.9	638.6	187.9	102.1	103.5	107.6	110.3	98.0	85.8	77.6	77.6
72.5°	742.1	484.8	151.1	85.8	92.6	92.6	96.7	87.1	74.9	66.7	68.1
75°	537.9	347.2	119.8	72.2	80.3	79.0	79.0	73.5	64.0	58.6	58.6
77.5°	254.6	182.5	95.3	51.7	62.6	61.3	62.6	58.6	54.5	49.0	50.4
80°	125.3	89.9	61.3	36.8	43.6	44.9	49.0	46.3	44.9	40.9	40.9
82.5°	59.9	35.4	28.6	25.9	30.0	31.3	34.0	34.0	35.4	32.7	32.7
85°	16.3	9.5	12.3	16.3	19.1	20.4	23.1	24.5	24.5	23.1	24.5
87.5°	4.1	4.1	5.4	8.2	9.5	10.9	12.3	12.3	5.4	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)