

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: P842385

Luminaire Tested: **ARCH4-40-727-U-T4W**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842385
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-19)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-40-727-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 355mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7199 lumens
Efficiency: N/A
Efficacy: 164.4 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 43.8
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



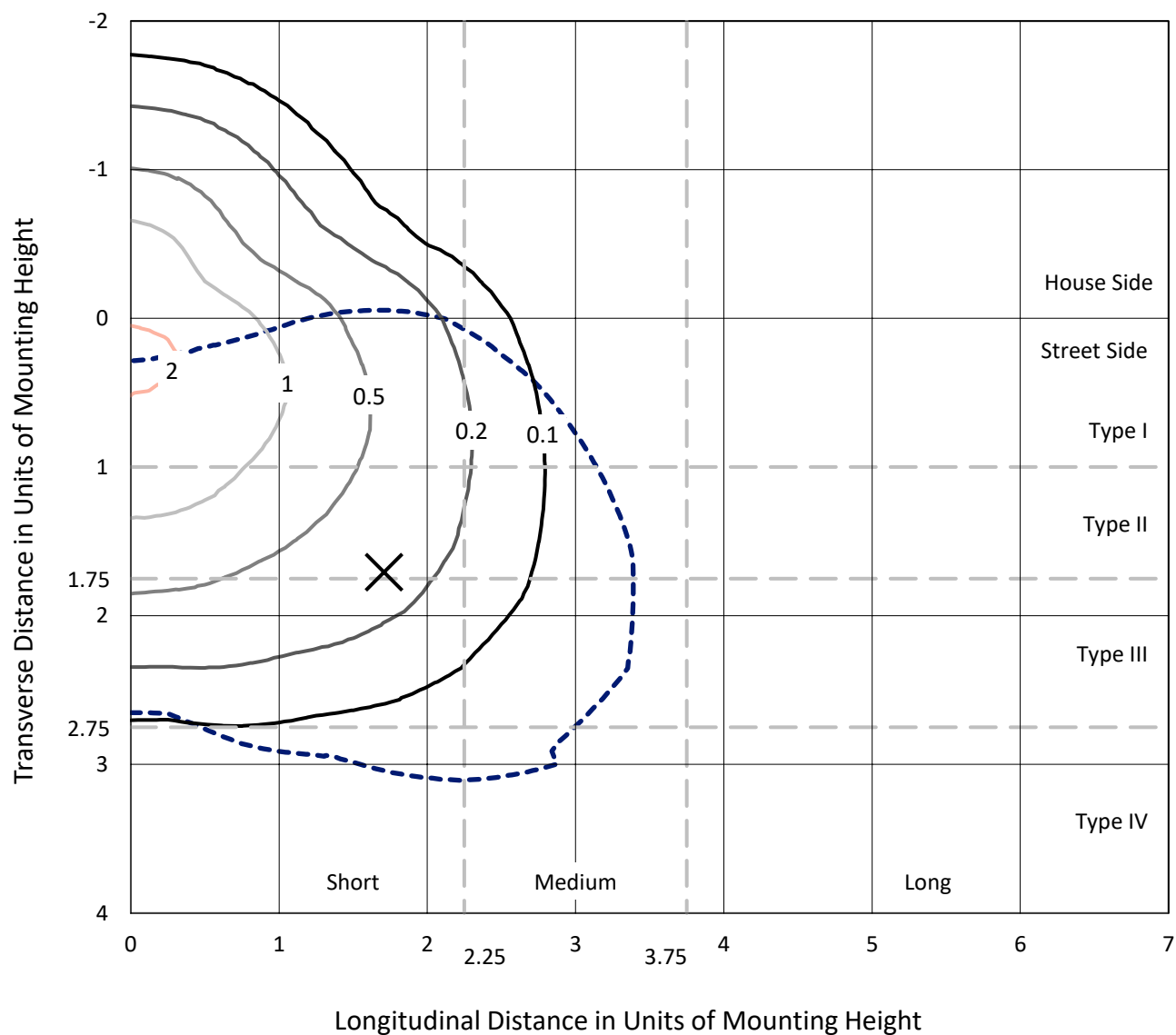
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

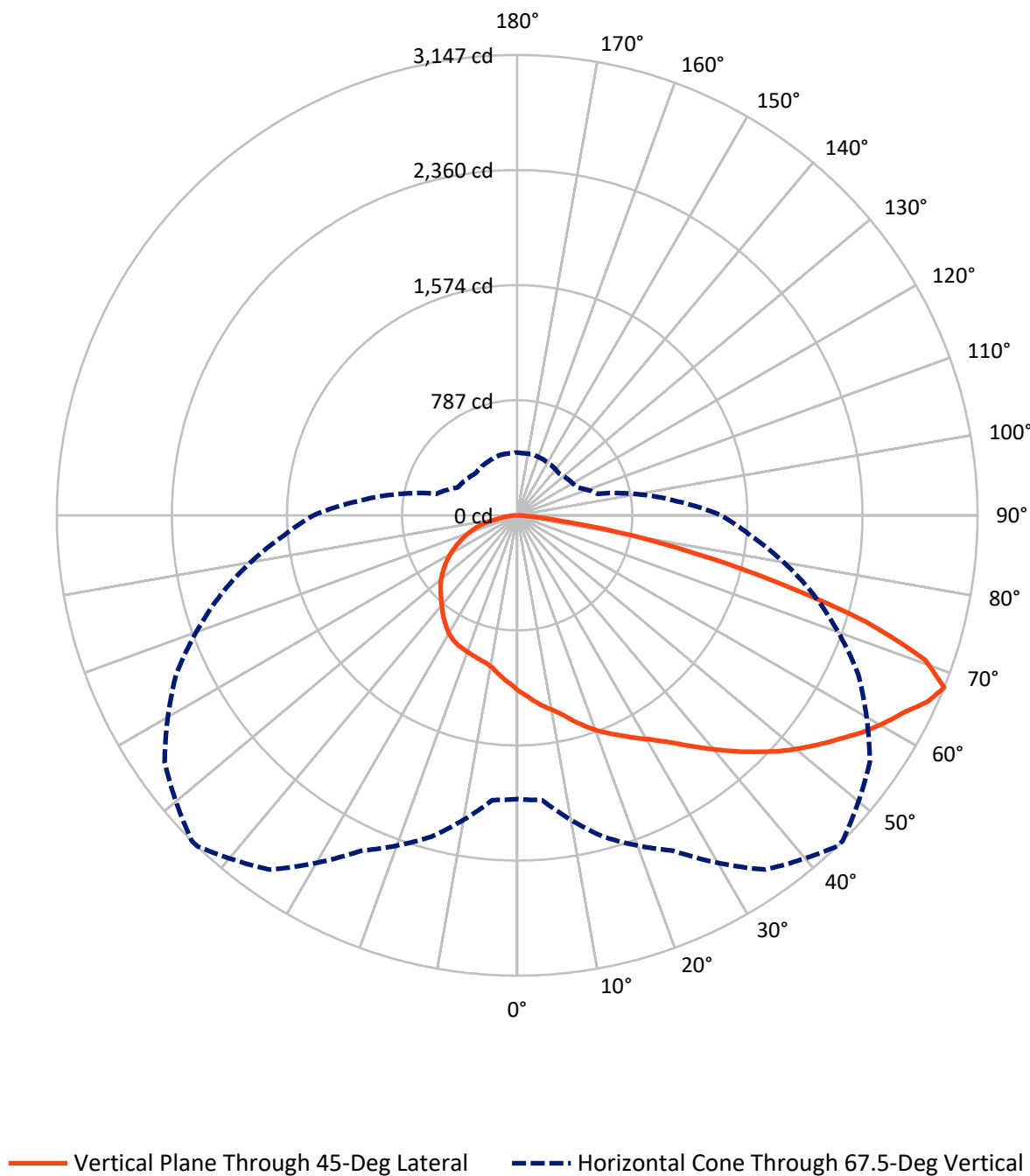


Based on 25 foot mounting height. Maximum calculated value = 2.2 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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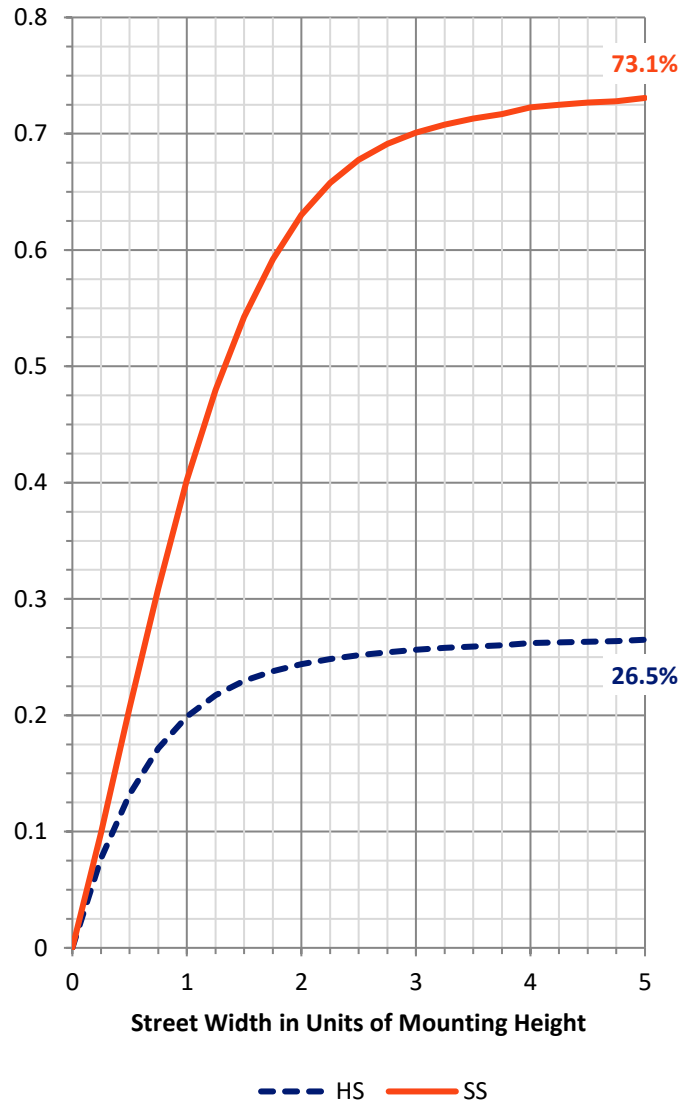
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1923.2	0.0	1923.2
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	5275.8	0.0	5275.8
	% Fixture	73.3	0.0	73.3
Total	Lumens	7199.0	0.0	7199.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.0	1.6
10°-20°	355.1	4.9
20°-30°	613.0	8.5
30°-40°	903.9	12.6
40°-50°	1224.6	17.0
50°-60°	1496.8	20.8
60°-70°	1543.7	21.4
70°-80°	845.5	11.7
80°-90°	101.4	1.4
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°	7199.0	100.0
0°-180°	7199.0	100.0

Coefficient of Utilization



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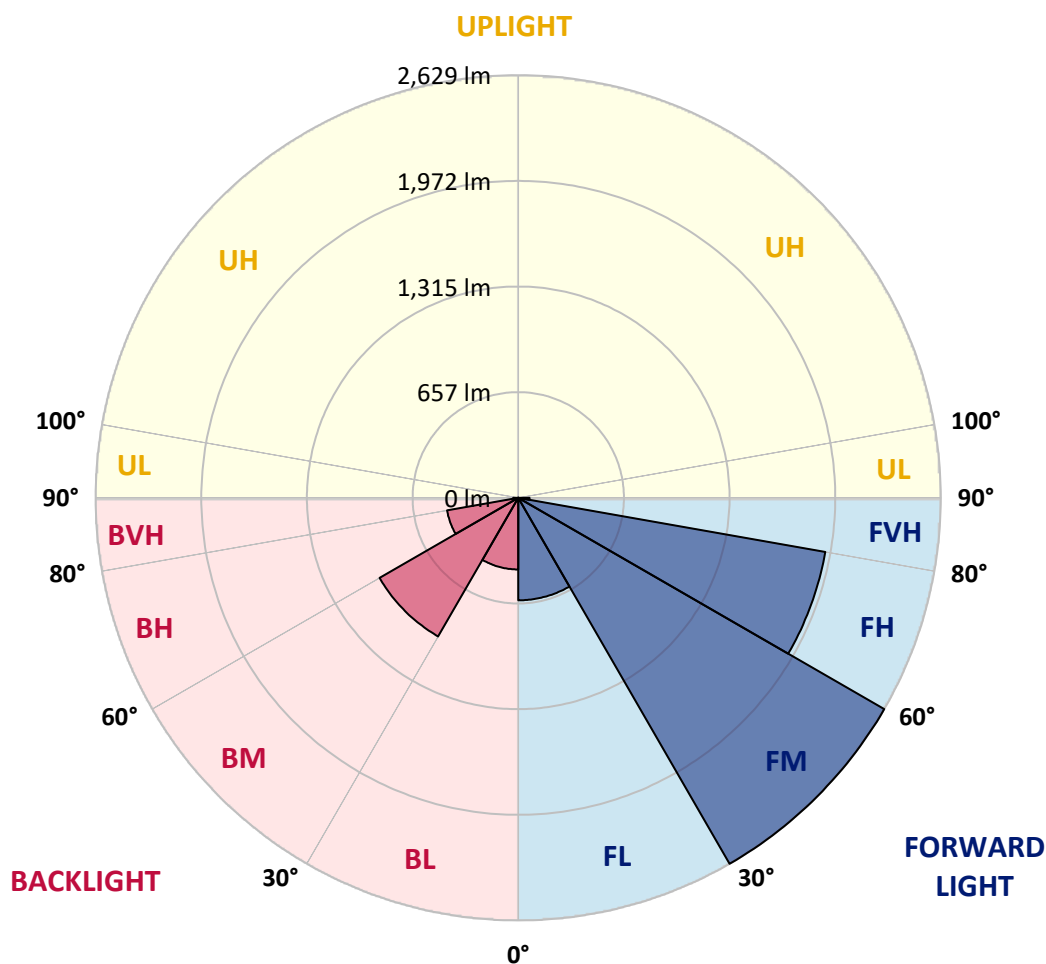
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	637.3	8.9			
FM	(30°-60°)	2629.1	36.5			
FH	(60°-80°)	1939.5	26.9			G2/5000
FVH	(80°-90°)	69.8	1.0			G1/100
BL	(0°-30°)	445.7	6.2	B1/500		
BM	(30°-60°)	996.2	13.8	B1/1000		
BH	(60°-80°)	449.8	6.2	B1/500		G1/500
BVH	(80°-90°)	31.5	0.4			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 IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1200.7	1200.7	1200.7	1200.7	1200.7	1200.7	1200.7	1200.7	1200.7	1200.7	1200.7
2.5°	1253.2	1252.1	1254.3	1246.7	1236.8	1235.7	1235.7	1229.1	1221.5	1206.1	1194.1
5°	1312.4	1310.2	1311.3	1300.3	1287.2	1280.6	1279.5	1265.3	1247.8	1223.7	1201.8
7.5°	1367.2	1365.0	1363.9	1351.8	1332.1	1321.2	1320.1	1299.3	1278.4	1241.2	1209.4
10°	1418.7	1416.5	1414.3	1397.8	1373.7	1357.3	1355.1	1328.8	1302.5	1256.5	1216.0
12.5°	1484.4	1480.0	1477.8	1458.1	1423.0	1405.5	1402.2	1367.2	1334.3	1278.4	1229.1
15°	1553.4	1550.1	1546.8	1528.2	1488.8	1465.8	1460.3	1416.5	1371.6	1306.9	1248.9
17.5°	1604.9	1601.6	1601.6	1585.2	1549.0	1522.7	1518.3	1465.8	1409.9	1333.2	1264.2
20°	1636.7	1633.4	1636.7	1626.8	1599.4	1577.5	1573.1	1515.1	1448.2	1357.3	1277.3
22.5°	1659.7	1656.4	1661.9	1657.5	1637.8	1624.6	1621.3	1564.4	1487.7	1382.5	1290.5
25°	1700.2	1700.2	1700.2	1692.5	1673.9	1669.5	1669.5	1620.2	1538.1	1415.4	1310.2
27.5°	1781.3	1776.9	1771.4	1749.5	1717.7	1716.6	1723.2	1677.2	1596.1	1458.1	1334.3
30°	1900.7	1898.5	1877.7	1831.7	1778.0	1772.5	1776.9	1738.5	1658.6	1503.0	1361.7
32.5°	2055.1	2047.5	2004.7	1935.7	1859.0	1833.8	1842.6	1802.1	1724.3	1549.0	1388.0
35°	2164.7	2166.9	2136.2	2073.8	1982.8	1916.0	1922.6	1873.3	1795.5	1600.5	1420.9
37.5°	2290.7	2298.3	2252.3	2205.2	2120.9	2006.9	2013.5	1946.7	1866.7	1665.1	1455.9
40°	2464.9	2449.5	2371.7	2315.9	2222.7	2102.2	2107.7	2028.8	1948.9	1726.5	1496.4
42.5°	2610.6	2583.2	2489.0	2417.7	2306.0	2203.0	2208.5	2117.6	2032.1	1794.4	1541.4
45°	2819.8	2744.2	2608.4	2573.3	2391.5	2301.6	2307.1	2211.8	2119.8	1866.7	1589.6
47.5°	2941.4	2820.9	2734.3	2715.7	2485.7	2403.5	2410.1	2311.5	2214.0	1948.9	1639.9
50°	2933.7	2855.9	2830.7	2784.7	2568.9	2498.8	2505.4	2414.5	2309.3	2029.9	1688.1
52.5°	2883.3	2897.6	2884.4	2807.7	2652.2	2590.8	2598.5	2516.3	2406.8	2105.5	1733.1
55°	2961.1	2971.0	2945.8	2845.0	2744.2	2682.9	2691.6	2623.7	2503.2	2172.4	1771.4
57.5°	3054.2	3019.2	2994.0	2910.7	2839.5	2782.5	2792.4	2733.2	2586.5	2226.0	1801.0
60°	3049.8	2976.4	3001.6	2915.1	2904.1	2874.6	2883.3	2823.1	2650.0	2265.5	1813.0
62.5°	2825.3	2785.8	2912.9	2883.3	2956.7	2956.7	2967.7	2877.9	2688.3	2281.9	1806.5
65°	2435.3	2437.5	2660.9	2783.6	3019.2	3069.6	3078.3	2911.8	2666.4	2233.7	1745.1
67.5°	1940.1	1954.4	2275.3	2530.6	2956.7	3146.2	3147.3	2942.5	2572.2	2097.9	1602.7
70°	1419.8	1430.7	1809.7	2119.8	2662.0	2976.4	2958.9	2855.9	2367.4	1861.2	1380.3
72.5°	959.6	969.5	1359.5	1627.9	2184.4	2535.0	2496.6	2524.0	2017.9	1529.3	1109.7
75°	645.2	657.3	967.3	1164.5	1607.1	1924.8	1839.3	1911.6	1561.1	1157.9	809.6
77.5°	406.4	414.1	614.6	763.6	1097.7	1310.2	1224.8	1225.9	899.4	623.3	434.9
80°	258.5	260.7	372.5	440.4	635.4	787.7	696.7	566.4	405.3	330.8	259.6
82.5°	150.1	146.8	222.4	248.7	302.4	299.1	247.6	234.4	177.5	165.4	132.6
85°	60.3	55.9	97.5	90.9	92.0	97.5	72.3	72.3	58.1	44.9	32.9
87.5°	12.1	12.1	13.1	12.1	12.1	13.1	9.9	9.9	8.8	8.8	8.8
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°	1200.7	1200.7	1200.7	1200.7	1200.7	1200.7	1200.7	1200.7	1200.7	1200.7	1200.7
2.5°	1191.9	1189.7	1184.2	1170.0	1162.3	1157.9	1151.4	1149.2	1148.1	1149.2	1152.5
5°	1195.2	1187.5	1172.2	1149.2	1133.8	1124.0	1113.0	1108.6	1105.3	1105.3	1108.6
7.5°	1197.4	1185.3	1159.0	1125.1	1103.2	1087.8	1074.7	1069.2	1068.1	1071.4	1072.5
10°	1198.5	1180.9	1143.7	1101.0	1072.5	1052.8	1039.6	1036.3	1039.6	1046.2	1047.3
12.5°	1206.1	1182.0	1134.9	1084.5	1050.6	1030.9	1021.0	1021.0	1029.8	1041.8	1042.9
15°	1219.3	1189.7	1130.5	1071.4	1036.3	1018.8	1015.5	1021.0	1034.1	1052.8	1055.0
17.5°	1229.1	1194.1	1120.7	1053.9	1017.7	1006.8	1012.2	1025.4	1044.0	1069.2	1071.4
20°	1235.7	1194.1	1106.4	1033.0	999.1	996.9	1012.2	1033.0	1052.8	1082.3	1085.6
22.5°	1242.3	1191.9	1090.0	1007.9	978.3	984.8	1013.3	1039.6	1059.3	1091.1	1096.6
25°	1254.3	1195.2	1073.6	982.7	956.4	975.0	1012.2	1044.0	1064.8	1097.7	1106.4
27.5°	1270.8	1202.8	1061.5	959.6	934.5	959.6	1004.6	1042.9	1064.8	1096.6	1106.4
30°	1288.3	1211.6	1047.3	934.5	909.3	937.7	988.1	1030.9	1056.1	1085.6	1097.7
32.5°	1306.9	1221.5	1035.2	907.1	878.6	908.2	964.0	1012.2	1039.6	1067.0	1080.2
35°	1332.1	1239.0	1028.7	885.2	851.2	877.5	933.4	988.1	1017.7	1042.9	1058.2
37.5°	1362.8	1260.9	1025.4	863.2	821.6	843.5	900.5	958.6	990.3	1011.1	1025.4
40°	1397.8	1288.3	1024.3	842.4	792.0	808.5	866.5	924.6	955.3	971.7	983.7
42.5°	1437.3	1319.0	1022.1	821.6	762.5	775.6	833.7	890.6	916.9	931.2	942.1
45°	1478.9	1349.6	1017.7	796.4	730.7	746.0	799.7	850.1	877.5	889.5	901.6
47.5°	1520.5	1380.3	1008.9	767.9	702.2	716.5	763.6	807.4	829.3	840.2	852.3
50°	1561.1	1407.7	988.1	735.1	672.6	685.8	721.9	751.5	767.9	776.7	788.8
52.5°	1597.2	1426.3	958.6	696.7	643.1	649.6	673.7	698.9	712.1	713.2	724.1
55°	1627.9	1436.2	915.8	657.3	611.3	612.4	625.5	645.2	650.7	646.3	654.0
57.5°	1645.4	1430.7	868.7	616.8	578.4	574.0	583.9	593.8	594.9	583.9	591.6
60°	1649.8	1405.5	807.4	576.2	545.6	533.5	536.8	534.6	532.4	528.0	534.6
62.5°	1627.9	1351.8	739.5	536.8	510.5	491.9	490.8	489.7	493.0	494.1	495.2
65°	1547.9	1251.0	658.4	496.3	473.3	448.1	447.0	460.1	464.5	457.9	460.1
67.5°	1393.5	1096.6	569.7	449.2	426.1	404.2	413.0	420.7	428.3	426.1	428.3
70°	1174.4	900.5	488.6	396.6	374.7	362.6	372.5	379.0	380.1	377.9	380.1
72.5°	923.5	703.3	413.0	342.9	323.2	317.7	329.7	335.2	345.1	349.5	350.6
75°	667.2	519.3	338.5	284.8	268.4	268.4	279.3	289.2	298.0	292.5	289.2
77.5°	372.5	310.0	243.2	196.1	199.4	214.7	219.1	230.1	238.8	237.7	235.5
80°	225.7	193.9	164.3	127.1	126.0	138.0	166.5	185.1	189.5	179.7	178.6
82.5°	117.2	101.9	87.6	71.2	78.9	92.0	96.4	116.1	128.2	123.8	129.3
85°	29.6	28.5	31.8	32.9	40.5	44.9	49.3	58.1	38.3	18.6	18.6
87.5°	8.8	8.8	11.0	11.0	14.2	17.5	16.4	16.4	8.8	1.1	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)