

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: P158673

Luminaire Tested: **VST-F05-LED-E-U-SL4-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158673
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33714)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-F05-LED-E-U-SL4-8030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL
Light Source: (35) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10105.9 lumens
Efficiency: N/A
Efficacy: 75.8 lumens/watt
Luminous Opening: Rectangular (W 0.83' x L: 1' x H: 0')
IES Classification: Type IV - Short - Full Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 133.3
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: 28.75 FT

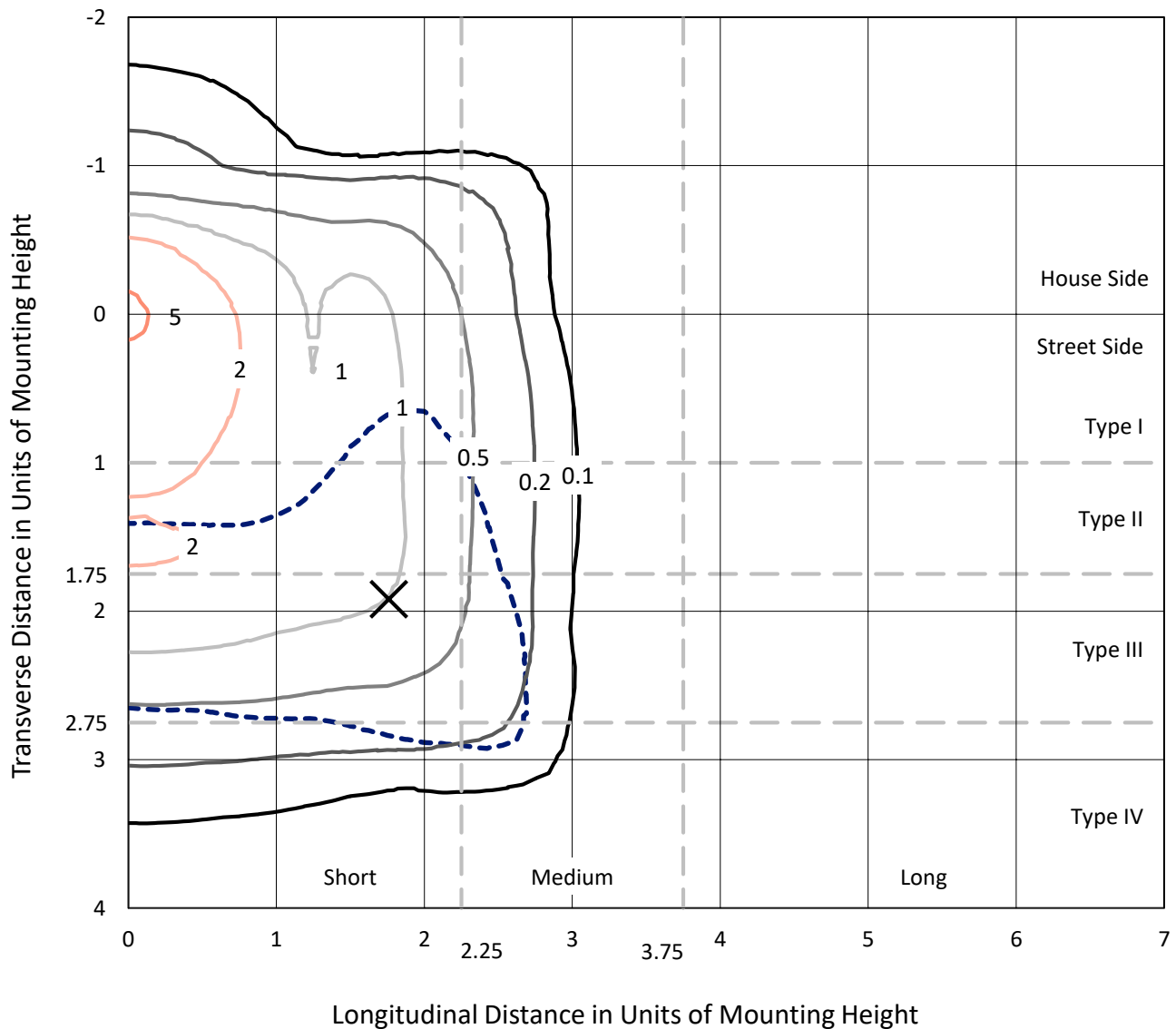


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

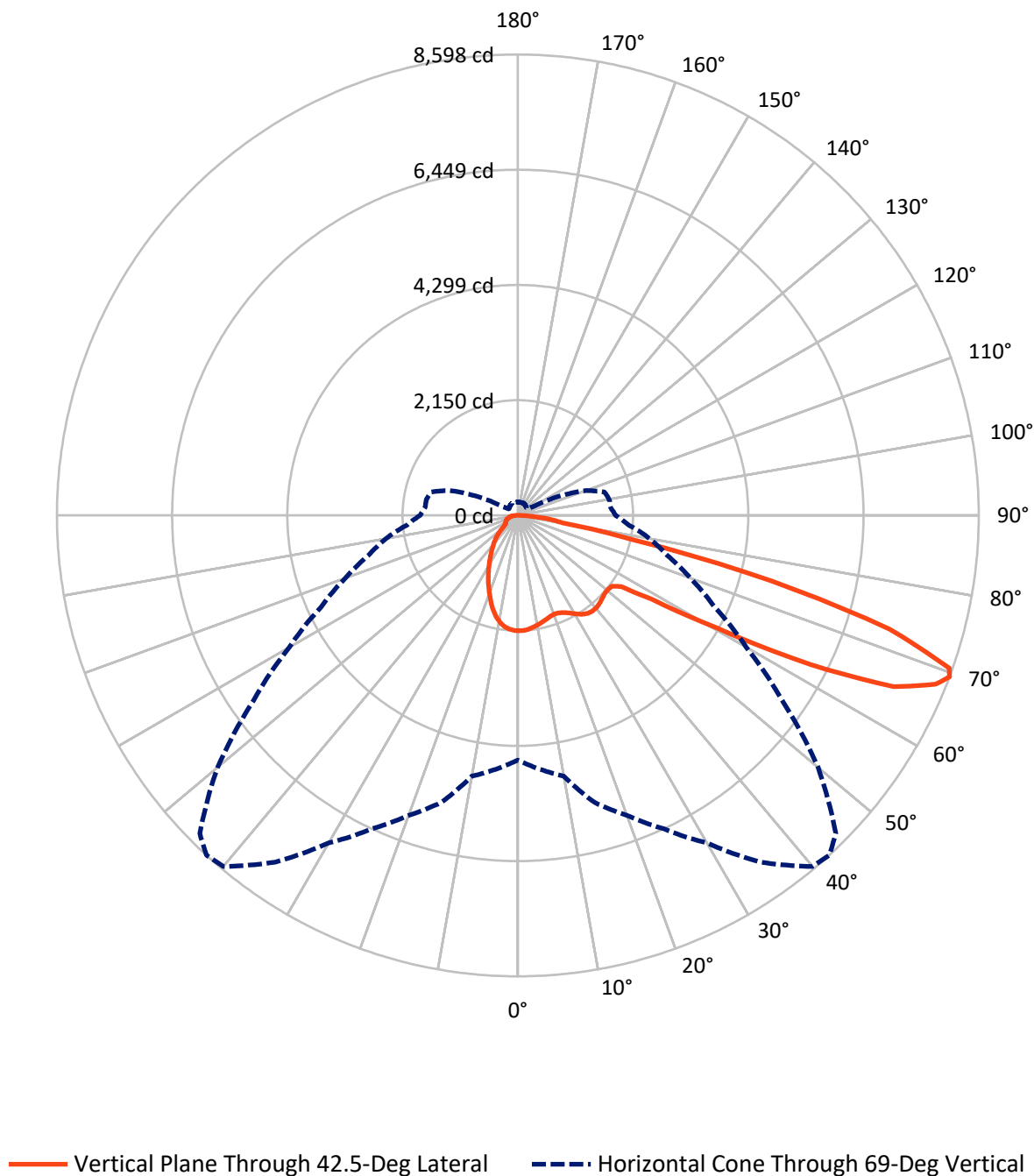


Based on 20 foot mounting height. Maximum calculated value = 5.4 fc
 Type IV - Short - Full Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2246.7	0.0	2246.7
	% Fixture	22.2	0.0	22.2
Street Side	Lumens	7859.2	0.0	7859.2
	% Fixture	77.8	0.0	77.8
Total	Lumens	10105.9	0.0	10105.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	200.3	2.0
10°-20°	540.0	5.3
20°-30°	787.4	7.8
30°-40°	1003.7	9.9
40°-50°	1167.9	11.6
50°-60°	1776.9	17.6
60°-70°	3138.9	31.1
70°-80°	1295.3	12.8
80°-90°	195.6	1.9
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°	10105.9	100.0
0°-180°	10105.9	100.0

Coefficient of Utilization



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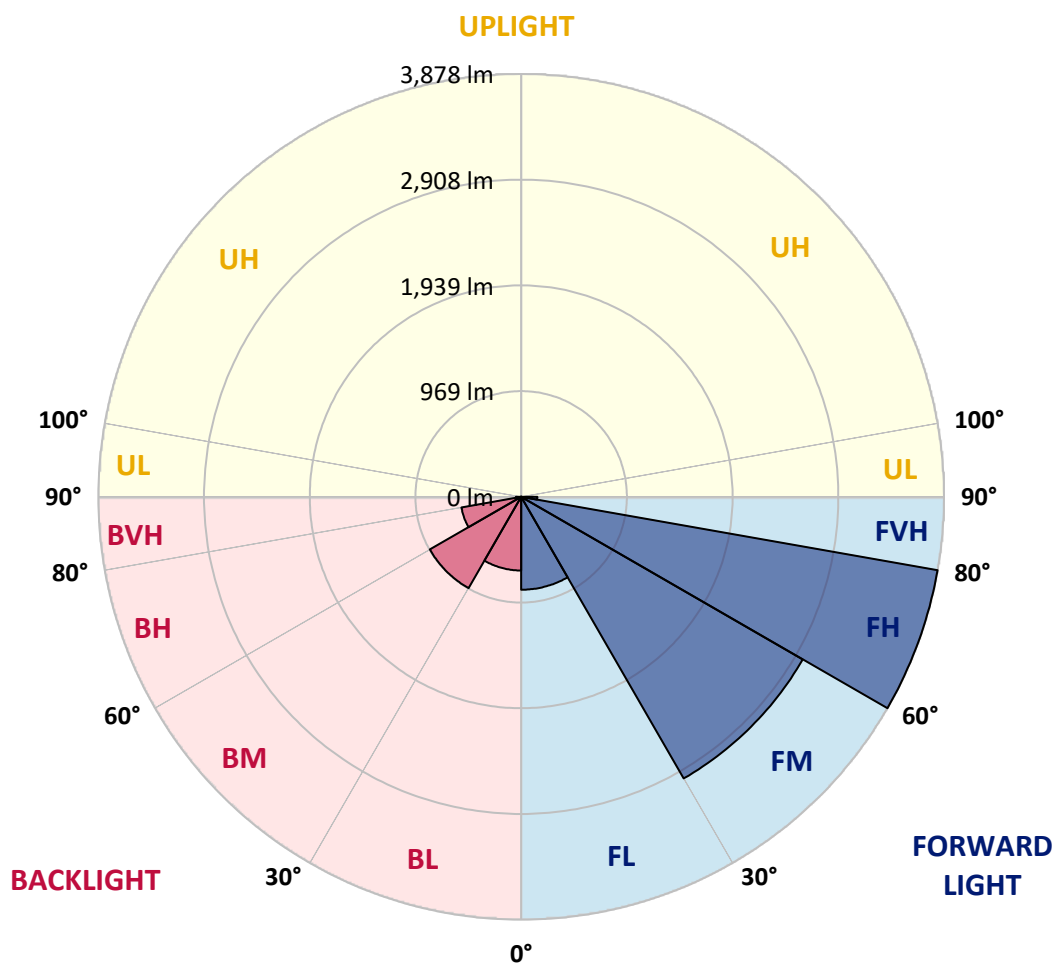
CATALOG NUMBER: VST-F05-LED-E-U-SL4-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	852.2	8.4			
FM	(30°-60°)	2981.5	29.5			
FH	(60°-80°)	3877.6	38.4			G2/5000
FVH	(80°-90°)	147.9	1.5			G2/225
BL	(0°-30°)	675.5	6.7	B2/1000		
BM	(30°-60°)	967.0	9.6	B1/1000		
BH	(60°-80°)	556.5	5.5	B2/1000		G2/1000
BVH	(80°-90°)	47.7	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	42.5°	45°
0°	2152.2	2152.2	2152.2	2152.2	2152.2	2152.2	2152.2	2152.2	2152.2	2152.2	2152.2
2.5°	2145.2	2152.9	2150.1	2150.1	2152.2	2148.7	2148.7	2150.1	2146.6	2148.7	2148.0
5°	2137.6	2141.8	2140.4	2140.4	2140.4	2137.6	2136.2	2135.5	2130.6	2130.6	2128.5
7.5°	2120.9	2122.3	2124.3	2121.6	2120.9	2120.2	2115.3	2112.5	2106.9	2102.1	2103.4
10°	2098.6	2097.9	2101.4	2099.3	2096.5	2094.4	2090.2	2085.3	2079.1	2072.8	2072.1
12.5°	2073.5	2072.8	2075.6	2074.2	2072.1	2067.9	2064.4	2056.1	2046.3	2038.6	2038.0
15°	2057.5	2055.4	2058.2	2055.4	2051.9	2047.7	2041.4	2031.0	2013.6	2005.9	1999.6
17.5°	2072.8	2069.3	2070.7	2067.2	2062.3	2051.2	2036.6	2014.3	1989.2	1975.9	1966.2
20°	2126.4	2120.2	2121.6	2118.1	2106.9	2092.3	2064.4	2025.4	1982.9	1961.3	1946.0
22.5°	2203.1	2198.2	2200.3	2196.8	2185.7	2163.4	2121.6	2065.8	2005.2	1973.9	1949.5
25°	2319.4	2323.6	2325.0	2309.0	2302.7	2261.6	2203.8	2126.4	2045.6	2008.7	1975.2
27.5°	2450.4	2450.4	2456.7	2450.4	2437.9	2389.8	2308.3	2214.9	2111.1	2060.9	2020.5
30°	2577.9	2576.5	2588.4	2587.0	2566.8	2512.4	2419.8	2306.2	2187.7	2131.3	2079.8
32.5°	2713.1	2717.3	2724.9	2722.1	2695.7	2620.4	2508.9	2385.6	2260.9	2198.9	2141.1
35°	2859.4	2861.5	2864.3	2862.9	2809.2	2714.5	2574.4	2436.5	2306.9	2245.6	2185.7
37.5°	3005.7	3003.6	3000.1	2970.2	2908.9	2777.2	2614.2	2465.7	2329.9	2263.7	2201.7
40°	3136.7	3124.9	3113.7	3067.0	2973.0	2812.7	2629.5	2472.7	2327.8	2259.5	2198.9
42.5°	3208.5	3195.2	3172.2	3113.7	2999.4	2816.2	2619.0	2451.8	2306.2	2238.6	2178.7
45°	3221.7	3212.0	3189.7	3124.2	2993.2	2793.9	2587.0	2417.7	2274.1	2206.6	2150.1
47.5°	3190.4	3182.7	3161.1	3096.3	2966.0	2760.5	2550.1	2381.4	2242.8	2179.4	2125.0
50°	3142.3	3135.3	3118.6	3059.4	2935.3	2737.5	2531.2	2362.6	2232.3	2174.5	2124.3
52.5°	3220.3	3225.9	3177.1	3112.3	2968.1	2757.7	2552.1	2382.1	2251.2	2194.0	2141.8
55°	4433.3	4425.7	4132.3	3886.4	3446.8	3048.2	2750.7	2536.8	2396.8	2339.6	2290.9
57.5°	5760.6	5734.1	5613.6	5383.7	4911.3	4280.7	3707.3	3219.6	3027.3	2945.1	2950.7
60°	6194.0	6203.7	6178.0	6096.4	5927.1	5599.0	5162.8	4796.3	4435.4	4259.1	4279.3
62.5°	6434.4	6451.8	6474.1	6456.0	6400.9	6325.0	6269.9	6303.4	6253.2	6126.4	6025.4
65°	6467.8	6503.3	6577.2	6635.7	6664.3	6736.0	6904.6	7308.8	7678.0	7702.4	7524.7
67.5°	5805.9	5904.1	6064.4	6335.4	6567.4	6822.4	7229.3	7843.8	8388.7	8406.8	8241.0
69°	4565.0	4753.8	4941.2	5546.7	5954.3	6453.9	7055.8	7895.4	8548.2	8598.4	8389.4
70°	3657.9	3770.0	3931.7	4539.9	5148.9	5785.7	6658.0	7725.4	8438.9	8539.9	8309.3
72.5°	2196.1	2239.3	2295.0	2513.1	2826.7	3393.8	4550.4	6298.5	7118.5	7253.7	6960.4
75°	1419.9	1417.2	1422.0	1482.7	1500.8	1609.5	1973.9	3240.5	4643.7	4889.0	4537.8
77.5°	1069.5	1079.2	1063.9	1069.5	1064.6	1093.9	1105.0	1160.1	1833.1	2258.1	2019.1
80°	944.1	949.0	949.7	946.9	912.7	909.9	928.1	896.7	833.3	845.8	810.3
82.5°	538.6	537.9	544.2	591.5	611.0	675.1	701.6	716.2	661.2	620.1	560.9
85°	349.1	351.9	358.8	373.5	358.8	364.4	358.1	370.7	340.0	315.6	282.2
87.5°	142.8	142.8	151.9	165.1	154.0	151.2	129.6	128.2	108.7	98.2	76.6
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):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
0°	2152.2	2152.2	2152.2	2152.2	2152.2	2152.2	2152.2	2152.2	2152.2	2152.2	2152.2
2.5°	2143.9	2148.0	2145.9	2148.7	2146.6	2146.6	2143.9	2143.2	2145.2	2142.5	2143.2
5°	2125.0	2125.7	2122.3	2123.6	2119.5	2118.1	2116.0	2110.4	2113.9	2110.4	2111.8
7.5°	2097.9	2095.8	2090.9	2083.9	2079.1	2077.0	2072.8	2065.1	2066.5	2060.2	2063.7
10°	2063.0	2056.1	2047.7	2037.3	2030.3	2024.0	2015.0	2005.9	2001.0	1995.5	1994.8
12.5°	2024.0	2015.7	2004.5	1988.5	1973.2	1962.7	1948.8	1932.7	1927.9	1918.8	1913.9
15°	1981.5	1968.3	1955.0	1936.9	1920.2	1904.2	1885.4	1865.2	1851.9	1838.0	1827.5
17.5°	1943.2	1927.9	1910.4	1893.0	1874.9	1855.4	1831.7	1806.6	1787.1	1761.3	1740.4
20°	1913.2	1893.7	1876.3	1858.2	1838.0	1814.3	1785.7	1753.7	1720.9	1692.4	1668.0
22.5°	1901.4	1870.7	1849.8	1831.7	1811.5	1783.6	1748.8	1711.2	1671.5	1631.8	1599.7
25°	1911.1	1865.9	1833.1	1811.5	1794.1	1765.5	1726.5	1680.5	1634.5	1587.2	1544.0
27.5°	1939.7	1881.9	1834.5	1800.4	1780.2	1751.6	1710.5	1661.7	1607.4	1554.4	1501.5
30°	1984.3	1909.1	1849.1	1801.1	1769.7	1737.0	1693.8	1637.3	1582.3	1521.7	1463.8
32.5°	2027.5	1937.6	1865.9	1803.8	1755.8	1713.3	1665.2	1609.5	1550.2	1486.8	1426.9
35°	2058.2	1956.4	1872.1	1797.6	1734.2	1681.2	1629.7	1573.9	1516.1	1451.3	1390.0
37.5°	2072.8	1966.9	1872.8	1780.9	1705.6	1647.1	1592.0	1537.0	1482.7	1421.3	1363.5
40°	2072.1	1966.2	1863.1	1759.3	1671.5	1609.5	1555.1	1501.5	1450.6	1397.0	1344.7
42.5°	2056.8	1955.0	1849.1	1738.4	1647.1	1578.1	1521.7	1470.1	1426.9	1379.5	1335.6
45°	2033.1	1936.2	1834.5	1728.6	1640.1	1571.1	1511.2	1461.1	1422.7	1379.5	1341.9
47.5°	2015.0	1925.8	1836.6	1746.0	1661.7	1590.0	1526.5	1471.5	1438.8	1403.9	1377.4
50°	2017.7	1930.7	1843.6	1756.5	1677.0	1604.6	1543.3	1493.1	1469.4	1460.4	1454.1
52.5°	2032.4	1938.3	1864.5	1812.2	1785.0	1730.7	1694.5	1663.1	1680.5	1646.4	1606.0
55°	2219.1	2188.4	2260.2	2327.8	2413.5	2445.5	2414.9	2409.3	2437.2	2321.5	2056.1
57.5°	2990.4	3069.8	3180.6	3239.1	3310.2	3291.4	3220.3	3161.1	3091.4	2956.2	2625.3
60°	4302.3	4242.4	4192.3	4050.8	3935.2	3800.0	3649.5	3520.6	3397.3	3202.9	2844.8
62.5°	5654.0	5238.1	4890.4	4554.6	4284.2	4059.9	3841.8	3648.1	3461.4	3190.4	2805.1
65°	6823.1	5947.3	5294.5	4801.9	4406.9	4066.1	3786.1	3518.5	3280.9	2963.2	2582.1
67.5°	7348.5	6251.1	5301.5	4595.7	4048.7	3586.1	3223.8	2819.7	2553.5	2350.1	2135.5
69°	7309.5	6019.1	4923.1	4054.3	3425.8	2886.6	2497.8	2076.3	1821.3	1734.9	1730.0
70°	7124.1	5626.1	4481.4	3614.7	2895.6	2359.8	1987.1	1608.8	1371.2	1312.0	1417.2
72.5°	5816.3	3975.6	2808.5	2144.6	1649.2	1303.6	1063.2	843.7	673.7	583.9	603.4
75°	3285.1	1840.8	1190.0	899.5	760.1	628.5	539.3	459.8	416.0	337.9	267.5
77.5°	1194.2	790.1	628.5	543.5	385.3	265.5	222.3	194.4	176.3	176.3	167.9
80°	755.3	595.0	415.3	284.3	210.4	183.2	160.2	140.7	129.6	126.8	129.6
82.5°	471.7	364.4	232.7	178.4	149.8	134.5	117.1	102.4	93.4	91.3	95.5
85°	232.7	180.5	141.4	126.1	118.4	110.1	96.8	82.9	80.1	85.7	100.3
87.5°	69.7	62.0	50.9	53.0	55.7	54.3	43.2	37.6	35.5	46.7	73.2
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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	2152.2	2152.2	2152.2	2152.2	2152.2	2152.2	2152.2	2152.2	2152.2	2152.2	2152.2
2.5°	2144.6	2143.9	2145.2	2143.2	2144.6	2145.2	2143.9	2150.1	2145.9	2146.6	2149.4
5°	2113.2	2111.8	2117.4	2116.0	2118.8	2121.6	2120.2	2129.2	2125.7	2128.5	2134.1
7.5°	2060.9	2063.7	2064.4	2064.4	2070.0	2079.1	2081.1	2086.7	2086.7	2094.4	2100.0
10°	1991.3	1992.0	1996.1	1995.5	2002.4	2012.2	2013.6	2023.3	2026.8	2039.3	2047.0
12.5°	1910.4	1907.0	1906.3	1905.6	1914.6	1925.1	1926.5	1943.2	1950.2	1961.3	1973.9
15°	1819.9	1810.8	1808.0	1813.6	1811.5	1817.8	1824.1	1833.1	1842.9	1865.2	1876.3
17.5°	1731.4	1713.3	1708.4	1702.1	1695.9	1695.9	1698.6	1709.8	1730.0	1741.8	1766.9
20°	1640.8	1619.2	1601.8	1585.1	1570.4	1564.9	1565.6	1579.5	1594.1	1613.6	1637.3
22.5°	1564.9	1532.1	1502.2	1479.9	1449.9	1449.2	1445.0	1449.2	1465.2	1470.1	1483.3
25°	1499.4	1455.5	1415.1	1378.8	1349.6	1334.2	1330.1	1328.7	1321.0	1318.9	1309.2
27.5°	1448.5	1395.6	1343.3	1299.4	1263.2	1242.3	1215.8	1197.0	1169.8	1162.9	1145.4
30°	1406.7	1349.6	1292.4	1235.3	1194.2	1156.6	1112.0	1079.2	1037.4	1010.3	986.6
32.5°	1366.3	1308.5	1250.6	1194.2	1130.8	1072.3	1013.8	962.9	916.2	874.4	839.6
35°	1332.9	1277.8	1219.3	1151.0	1070.2	985.9	915.5	857.7	793.6	749.7	705.8
37.5°	1311.3	1261.1	1202.6	1108.5	1004.7	914.1	834.0	763.6	698.1	631.9	582.5
40°	1301.5	1257.6	1184.5	1069.5	947.6	847.2	758.7	680.7	597.1	522.6	469.6
42.5°	1300.8	1256.2	1159.4	1026.3	900.2	790.8	692.6	599.2	506.5	429.9	377.6
45°	1313.3	1254.1	1132.9	990.1	858.4	744.1	627.1	513.5	409.7	352.5	324.7
47.5°	1346.8	1257.6	1111.3	956.6	818.7	687.7	551.8	419.4	333.7	307.3	307.3
50°	1406.7	1277.8	1105.7	932.9	779.0	622.2	459.8	338.6	295.4	295.4	303.8
52.5°	1498.7	1320.3	1115.5	916.2	729.5	535.8	362.3	291.9	283.6	291.2	302.4
55°	1710.5	1395.6	1128.7	887.6	654.2	425.0	298.9	275.9	279.4	288.4	298.9
57.5°	2099.3	1556.5	1142.6	824.9	533.0	327.5	271.0	269.6	275.9	284.3	293.3
60°	2355.0	1761.3	1178.2	730.2	403.4	270.3	257.1	265.5	273.1	280.1	287.1
62.5°	2355.0	1819.2	1204.7	624.3	303.1	245.9	248.0	261.3	270.3	273.8	278.0
65°	2204.5	1713.3	1114.8	508.6	246.6	232.0	239.7	252.9	261.3	264.1	267.5
67.5°	1926.5	1513.3	939.2	383.2	220.2	220.2	229.9	239.7	246.6	252.2	257.8
69°	1675.0	1357.9	827.0	324.7	209.7	211.1	220.9	229.2	237.6	244.6	251.5
70°	1493.8	1241.6	749.0	294.7	203.4	204.1	213.9	223.0	230.6	238.3	246.6
72.5°	799.9	857.7	569.2	241.8	187.4	189.5	198.6	206.9	213.9	221.6	229.2
75°	272.4	368.6	362.3	197.9	169.3	174.9	180.5	188.1	197.2	202.1	206.2
77.5°	159.6	165.1	193.0	160.9	152.6	155.4	161.6	167.9	175.6	180.5	183.9
80°	133.8	133.1	133.8	131.0	133.1	139.3	143.5	151.9	158.9	160.2	159.6
82.5°	108.7	114.3	115.0	113.6	119.8	124.7	128.2	133.1	132.4	133.8	136.6
85°	96.8	96.1	101.0	101.7	101.7	98.2	98.9	98.9	98.9	101.0	101.7
87.5°	96.8	80.8	62.7	56.4	59.2	55.7	53.0	52.3	57.8	63.4	62.0
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):

	160°	165°	170°	175°	180°
0°	2152.2	2152.2	2152.2	2152.2	2152.2
2.5°	2150.8	2152.9	2151.5	2151.5	2152.9
5°	2136.2	2139.7	2138.3	2139.7	2139.7
7.5°	2102.7	2107.6	2111.1	2114.6	2112.5
10°	2054.7	2063.0	2068.6	2072.8	2070.7
12.5°	1982.9	1990.6	2002.4	2009.4	2003.8
15°	1884.7	1906.3	1913.2	1923.0	1917.4
17.5°	1782.2	1795.5	1803.8	1812.9	1818.5
20°	1645.7	1656.1	1667.3	1671.5	1665.2
22.5°	1481.3	1486.8	1484.7	1491.0	1478.5
25°	1300.8	1304.3	1302.2	1307.8	1297.3
27.5°	1130.1	1129.4	1130.1	1123.1	1116.2
30°	965.7	959.4	956.6	946.2	944.1
32.5°	818.7	797.1	785.9	770.6	767.1
35°	671.7	641.0	620.8	603.4	595.7
37.5°	540.0	503.0	479.4	464.0	461.9
40°	427.1	393.0	376.2	367.9	366.5
42.5°	348.4	333.7	329.6	329.6	329.6
45°	317.7	317.0	320.5	323.3	324.0
47.5°	311.4	315.6	320.5	324.7	326.1
50°	311.4	315.6	319.1	323.3	324.7
52.5°	310.0	313.5	314.9	317.7	319.1
55°	305.9	308.0	308.0	309.4	310.7
57.5°	298.9	300.3	298.2	299.6	303.1
60°	291.9	293.3	289.8	293.3	295.4
62.5°	284.3	285.0	283.6	286.4	286.4
65°	271.7	270.3	272.4	274.5	275.2
67.5°	259.2	255.7	257.8	258.5	259.9
69°	249.4	247.3	248.0	249.4	250.8
70°	242.5	241.1	242.5	244.6	246.6
72.5°	225.0	225.7	230.6	234.8	239.0
75°	209.0	213.9	220.2	229.2	234.1
77.5°	189.5	193.0	197.9	207.6	216.7
80°	163.7	165.8	166.5	170.0	169.3
82.5°	133.1	131.0	129.6	128.2	127.5
85°	95.5	94.8	89.2	85.0	85.0
87.5°	57.1	54.3	51.6	48.1	46.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)