

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: P158674

Luminaire Tested: **VST-F05-LED-E-U-SL4-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158674
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-SL4-7030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL
Light Source: (35) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10936.4 lumens
Efficiency: N/A
Efficacy: 82.0 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

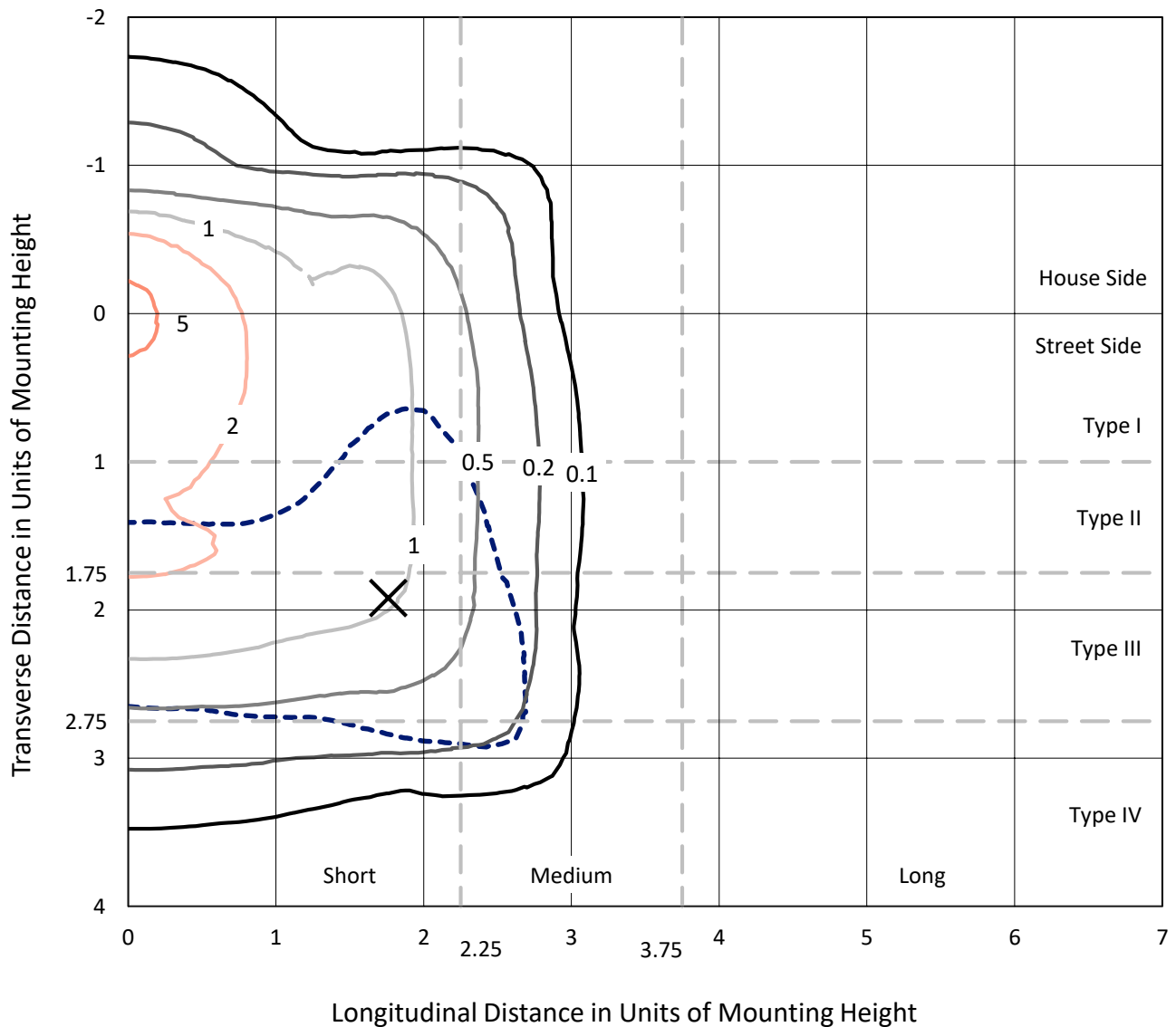


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Iso-Footcandle Lines of Horizontal Illumination

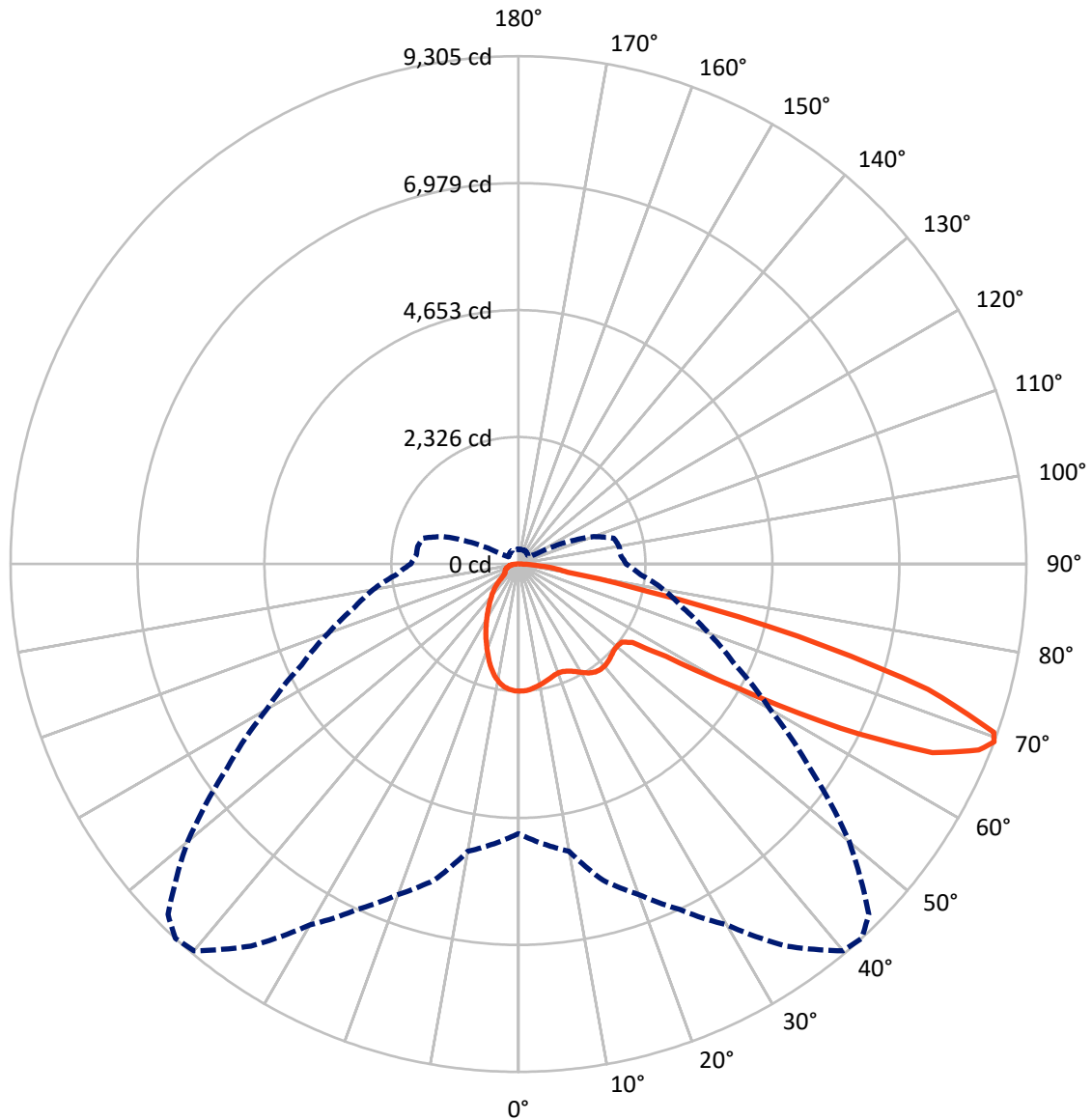
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 5.8 fc
 Type IV - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 42.5-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical



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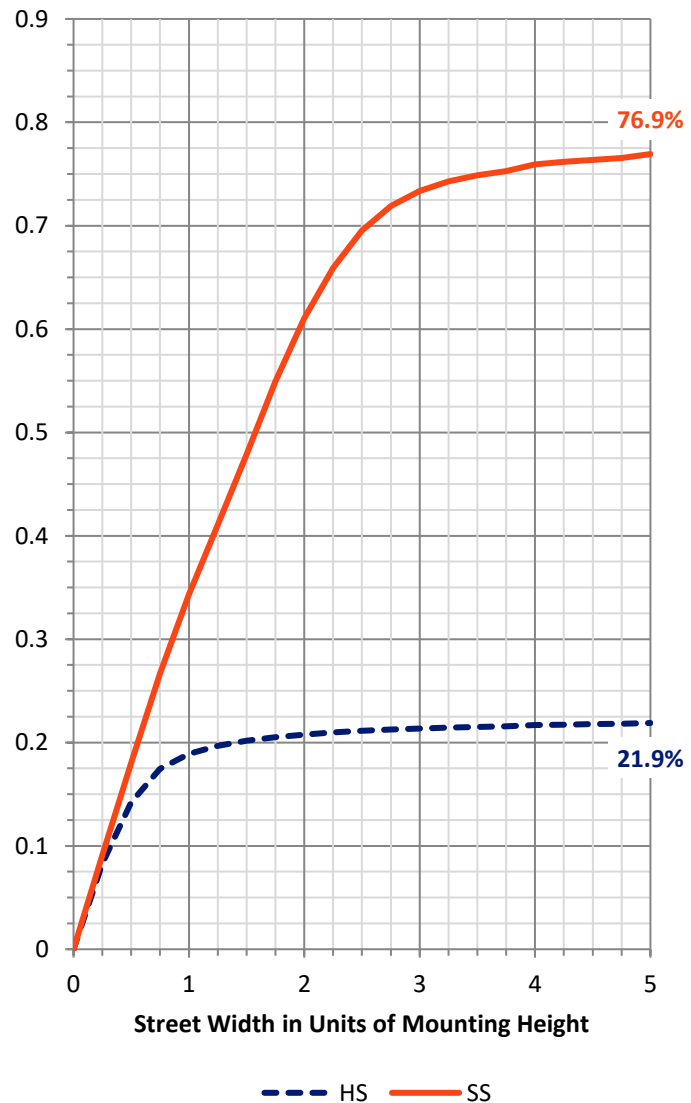
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2431.3	0.0	2431.3
	% Fixture	22.2	0.0	22.2
Street Side	Lumens	8505.1	0.0	8505.1
	% Fixture	77.8	0.0	77.8
Total	Lumens	10936.4	0.0	10936.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	216.8	2.0
10°-20°	584.3	5.3
20°-30°	852.1	7.8
30°-40°	1086.2	9.9
40°-50°	1263.9	11.6
50°-60°	1923.0	17.6
60°-70°	3396.8	31.1
70°-80°	1401.7	12.8
80°-90°	211.7	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°	10936.4	100.0
0°-180°	10936.4	100.0



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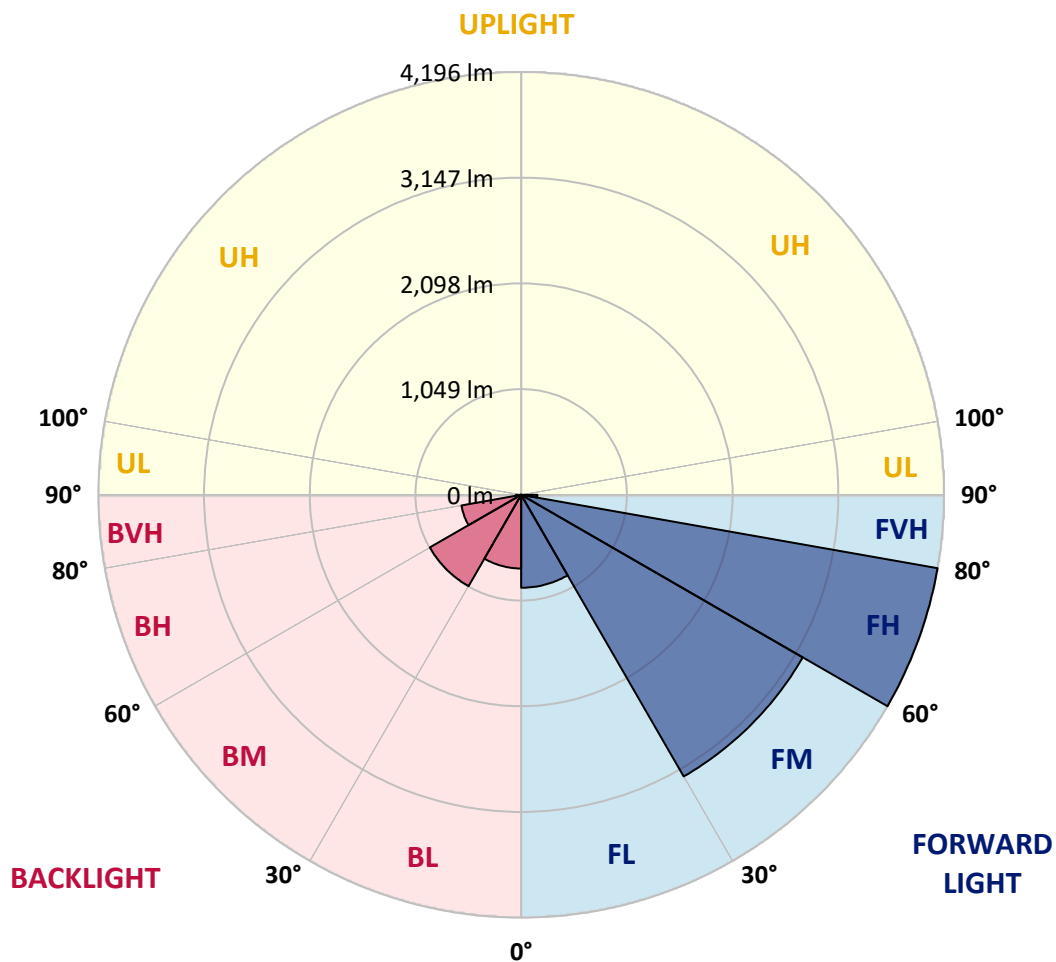
CATALOG NUMBER: VST-F05-LED-E-U-SL4-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	922.2	8.4			
FM (30°-60°)	3226.5	29.5			
FH (60°-80°)	4196.3	38.4			G2/5000
FVH (80°-90°)	160.1	1.5			G2/225
BL (0°-30°)	731.0	6.7	B2/1000		
BM (30°-60°)	1046.5	9.6	B2/2500		
BH (60°-80°)	602.2	5.5	B2/1000		G2/1000
BVH (80°-90°)	51.6	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°	2329.1	2329.1	2329.1	2329.1	2329.1	2329.1	2329.1	2329.1	2329.1	2329.1	2329.1
2.5°	2321.5	2329.8	2326.8	2326.8	2329.1	2325.3	2325.3	2326.8	2323.1	2325.3	2324.6
5°	2313.3	2317.8	2316.3	2316.3	2316.3	2313.3	2311.7	2311.0	2305.7	2305.7	2303.5
7.5°	2295.2	2296.7	2298.9	2295.9	2295.2	2294.4	2289.1	2286.1	2280.1	2274.8	2276.3
10°	2271.0	2270.3	2274.0	2271.8	2268.8	2266.5	2262.0	2256.7	2249.9	2243.1	2242.4
12.5°	2243.9	2243.1	2246.1	2244.6	2242.4	2237.9	2234.1	2225.0	2214.5	2206.2	2205.4
15°	2226.5	2224.3	2227.3	2224.3	2220.5	2216.0	2209.2	2197.9	2179.0	2170.7	2164.0
17.5°	2243.1	2239.4	2240.9	2237.1	2231.8	2219.8	2203.9	2179.8	2152.7	2138.3	2127.8
20°	2301.2	2294.4	2295.9	2292.1	2280.1	2264.2	2234.1	2191.9	2145.9	2122.5	2105.9
22.5°	2384.1	2378.8	2381.1	2377.3	2365.3	2341.1	2295.9	2235.6	2170.0	2136.1	2109.7
25°	2510.0	2514.6	2516.1	2498.7	2491.9	2447.5	2384.9	2301.2	2213.7	2173.8	2137.6
27.5°	2651.8	2651.8	2658.6	2651.8	2638.2	2586.2	2498.0	2396.9	2284.6	2230.3	2186.6
30°	2789.8	2788.3	2801.1	2799.6	2777.7	2718.9	2618.6	2495.7	2367.5	2306.5	2250.7
32.5°	2936.1	2940.6	2948.9	2945.9	2917.2	2835.8	2715.1	2581.7	2446.7	2379.6	2317.0
35°	3094.4	3096.7	3099.7	3098.2	3040.1	2937.6	2786.0	2636.7	2496.5	2430.1	2365.3
37.5°	3252.7	3250.5	3246.7	3214.3	3147.9	3005.4	2829.0	2668.4	2521.4	2449.7	2382.6
40°	3394.5	3381.7	3369.6	3319.1	3217.3	3043.9	2845.6	2675.9	2519.1	2445.2	2379.6
42.5°	3472.1	3457.8	3432.9	3369.6	3245.9	3047.6	2834.3	2653.3	2495.7	2422.6	2357.7
45°	3486.5	3475.9	3451.8	3380.9	3239.2	3023.5	2799.6	2616.4	2461.0	2387.9	2326.8
47.5°	3452.5	3444.2	3420.9	3350.7	3209.8	2987.3	2759.6	2577.1	2427.1	2358.5	2299.7
50°	3400.5	3393.0	3374.9	3310.8	3176.6	2962.4	2739.3	2556.8	2415.8	2353.2	2298.9
52.5°	3485.0	3491.0	3438.2	3368.1	3212.0	2984.3	2761.9	2577.9	2436.2	2374.3	2317.8
55°	4797.7	4789.4	4471.9	4205.8	3730.0	3298.7	2976.8	2745.3	2593.7	2531.9	2479.1
57.5°	6234.0	6205.4	6074.9	5826.1	5314.9	4632.5	4012.0	3484.2	3276.1	3187.1	3193.2
60°	6703.0	6713.6	6685.7	6597.4	6414.2	6059.1	5587.1	5190.5	4799.9	4609.2	4631.0
62.5°	6963.1	6982.0	7006.1	6986.5	6926.9	6844.8	6785.2	6821.4	6767.1	6629.9	6520.5
65°	6999.3	7037.8	7117.7	7181.0	7211.9	7289.6	7472.1	7909.4	8309.0	8335.4	8143.1
67.5°	6283.0	6389.3	6562.8	6856.1	7107.1	7383.1	7823.4	8488.5	9078.1	9097.7	8918.2
69°	4940.2	5144.5	5347.3	6002.5	6443.6	6984.2	7635.7	8544.3	9250.7	9305.0	9078.8
70°	3958.5	4079.9	4254.8	4913.0	5572.0	6261.2	7205.2	8360.3	9132.4	9241.7	8992.1
72.5°	2376.6	2423.3	2483.7	2719.7	3059.0	3672.7	4924.3	6816.1	7703.6	7849.8	7532.4
75°	1536.6	1533.6	1538.9	1604.5	1624.1	1741.7	2136.1	3506.8	5025.4	5290.8	4910.8
77.5°	1157.4	1167.9	1151.3	1157.4	1152.1	1183.8	1195.8	1255.4	1983.8	2443.7	2185.1
80°	1021.7	1026.9	1027.7	1024.7	987.7	984.7	1004.3	970.4	901.8	915.3	876.9
82.5°	582.8	582.1	588.9	640.1	661.3	730.6	759.3	775.1	715.5	671.1	607.0
85°	377.8	380.8	388.3	404.1	388.3	394.3	387.6	401.1	367.9	341.6	305.4
87.5°	154.6	154.6	164.4	178.7	166.6	163.6	140.2	138.7	117.6	106.3	82.9
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°	2329.1	2329.1	2329.1	2329.1	2329.1	2329.1	2329.1	2329.1	2329.1	2329.1	2329.1
2.5°	2320.0	2324.6	2322.3	2325.3	2323.1	2323.1	2320.0	2319.3	2321.5	2318.5	2319.3
5°	2299.7	2300.4	2296.7	2298.2	2293.6	2292.1	2289.9	2283.8	2287.6	2283.8	2285.4
7.5°	2270.3	2268.0	2262.7	2255.2	2249.9	2247.7	2243.1	2234.8	2236.3	2229.6	2233.3
10°	2232.6	2225.0	2216.0	2204.7	2197.1	2190.4	2180.5	2170.7	2165.5	2159.4	2158.7
12.5°	2190.4	2181.3	2169.2	2151.9	2135.3	2124.0	2108.9	2091.6	2086.3	2076.5	2071.2
15°	2144.4	2130.0	2115.7	2096.1	2078.0	2060.7	2040.3	2018.4	2004.1	1989.0	1977.7
17.5°	2102.9	2086.3	2067.5	2048.6	2029.0	2007.9	1982.2	1955.1	1934.0	1906.1	1883.5
20°	2070.5	2049.4	2030.5	2010.9	1989.0	1963.4	1932.5	1897.8	1862.4	1831.5	1805.1
22.5°	2057.6	2024.5	2001.9	1982.2	1960.4	1930.2	1892.5	1851.8	1808.8	1765.9	1731.2
25°	2068.2	2019.2	1983.8	1960.4	1941.5	1910.6	1868.4	1818.6	1768.9	1717.6	1670.8
27.5°	2099.1	2036.5	1985.3	1948.3	1926.5	1895.5	1851.1	1798.3	1739.5	1682.2	1624.9
30°	2147.4	2065.9	2001.1	1949.1	1915.1	1879.7	1833.0	1771.9	1712.3	1646.7	1584.1
32.5°	2194.1	2096.9	2019.2	1952.1	1900.1	1854.1	1802.0	1741.7	1677.6	1609.0	1544.2
35°	2227.3	2117.2	2026.0	1945.3	1876.7	1819.4	1763.6	1703.3	1640.7	1570.6	1504.2
37.5°	2243.1	2128.5	2026.7	1927.2	1845.8	1782.4	1722.9	1663.3	1604.5	1538.1	1475.6
40°	2242.4	2127.8	2016.2	1903.8	1808.8	1741.7	1682.9	1624.9	1569.8	1511.8	1455.2
42.5°	2225.8	2115.7	2001.1	1881.2	1782.4	1707.8	1646.7	1590.9	1544.2	1492.9	1445.4
45°	2200.2	2095.3	1985.3	1870.7	1774.9	1700.3	1635.4	1581.1	1539.7	1492.9	1452.2
47.5°	2180.5	2084.0	1987.5	1889.5	1798.3	1720.6	1652.0	1592.4	1557.0	1519.3	1490.6
50°	2183.6	2089.3	1995.1	1900.8	1814.9	1736.4	1670.1	1615.8	1590.2	1580.4	1573.6
52.5°	2199.4	2097.6	2017.7	1961.1	1931.7	1872.9	1833.7	1799.8	1818.6	1781.7	1738.0
55°	2401.5	2368.3	2446.0	2519.1	2611.8	2646.5	2613.3	2607.3	2637.5	2512.3	2225.0
57.5°	3236.1	3322.1	3442.0	3505.3	3582.2	3561.9	3485.0	3420.9	3345.5	3199.2	2841.0
60°	4655.9	4591.1	4536.8	4383.7	4258.6	4112.3	3949.4	3809.9	3676.5	3466.1	3078.6
62.5°	6118.7	5668.5	5292.3	4928.9	4636.3	4393.5	4157.5	3947.9	3745.8	3452.5	3035.6
65°	7383.9	6436.1	5729.6	5196.5	4769.0	4400.3	4097.2	3807.7	3550.6	3206.7	2794.3
67.5°	7952.4	6764.8	5737.1	4973.3	4381.5	3880.8	3488.7	3051.4	2763.4	2543.2	2311.0
69°	7910.1	6513.7	5327.7	4387.5	3707.4	3123.8	2703.1	2246.9	1970.9	1877.4	1872.2
70°	7709.6	6088.5	4849.7	3911.7	3133.6	2553.8	2150.4	1741.0	1483.9	1419.8	1533.6
72.5°	6294.3	4302.3	3039.3	2320.8	1784.7	1410.7	1150.6	913.1	729.1	631.8	653.0
75°	3555.1	1992.1	1287.8	973.4	822.6	680.1	583.6	497.6	450.1	365.7	289.5
77.5°	1292.3	855.0	680.1	588.1	417.0	287.3	240.5	210.4	190.8	190.8	181.7
80°	817.3	643.9	449.4	307.6	227.7	198.3	173.4	152.3	140.2	137.2	140.2
82.5°	510.5	394.3	251.8	193.0	162.1	145.5	126.7	110.8	101.0	98.8	103.3
85°	251.8	195.3	153.1	136.5	128.2	119.1	104.8	89.7	86.7	92.7	108.6
87.5°	75.4	67.1	55.0	57.3	60.3	58.8	46.7	40.7	38.5	50.5	79.2
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°	2329.1	2329.1	2329.1	2329.1	2329.1	2329.1	2329.1	2329.1	2329.1	2329.1	2329.1
2.5°	2320.8	2320.0	2321.5	2319.3	2320.8	2321.5	2320.0	2326.8	2322.3	2323.1	2326.1
5°	2286.9	2285.4	2291.4	2289.9	2292.9	2295.9	2294.4	2304.2	2300.4	2303.5	2309.5
7.5°	2230.3	2233.3	2234.1	2234.1	2240.1	2249.9	2252.2	2258.2	2258.2	2266.5	2272.5
10°	2154.9	2155.7	2160.2	2159.4	2167.0	2177.5	2179.0	2189.6	2193.4	2206.9	2215.2
12.5°	2067.5	2063.7	2062.9	2062.2	2072.0	2083.3	2084.8	2102.9	2110.4	2122.5	2136.1
15°	1969.4	1959.6	1956.6	1962.6	1960.4	1967.2	1974.0	1983.8	1994.3	2018.4	2030.5
17.5°	1873.7	1854.1	1848.8	1842.0	1835.2	1835.2	1838.2	1850.3	1872.2	1885.0	1912.1
20°	1775.7	1752.3	1733.4	1715.3	1699.5	1693.5	1694.2	1709.3	1725.1	1746.2	1771.9
22.5°	1693.5	1658.0	1625.6	1601.5	1569.1	1568.3	1563.8	1568.3	1585.6	1590.9	1605.3
25°	1622.6	1575.1	1531.4	1492.2	1460.5	1443.9	1439.4	1437.9	1429.6	1427.3	1416.8
27.5°	1567.6	1510.2	1453.7	1406.2	1367.0	1344.4	1315.7	1295.4	1266.0	1258.4	1239.6
30°	1522.3	1460.5	1398.7	1336.8	1292.3	1251.6	1203.4	1167.9	1122.7	1093.3	1067.7
32.5°	1478.6	1416.0	1353.4	1292.3	1223.7	1160.4	1097.1	1042.0	991.5	946.3	908.6
35°	1442.4	1382.8	1319.5	1245.6	1158.1	1066.9	990.7	928.2	858.8	811.3	763.8
37.5°	1419.0	1364.7	1301.4	1199.6	1087.3	989.2	902.5	826.4	755.5	683.9	630.3
40°	1408.5	1361.0	1281.8	1157.4	1025.4	916.9	821.1	736.7	646.2	565.5	508.2
42.5°	1407.7	1359.5	1254.6	1110.6	974.2	855.8	749.5	648.4	548.2	465.2	408.7
45°	1421.3	1357.2	1226.0	1071.4	928.9	805.3	678.6	555.7	443.3	381.5	351.4
47.5°	1457.5	1361.0	1202.6	1035.2	885.9	744.2	597.2	453.9	361.2	332.5	332.5
50°	1522.3	1382.8	1196.6	1009.6	843.0	673.3	497.6	366.4	319.7	319.7	328.7
52.5°	1621.8	1428.8	1207.1	991.5	789.4	579.8	392.1	315.9	306.9	315.2	327.2
55°	1851.1	1510.2	1221.5	960.6	708.0	459.9	323.5	298.6	302.4	312.2	323.5
57.5°	2271.8	1684.4	1236.5	892.7	576.8	354.4	293.3	291.8	298.6	307.6	317.4
60°	2548.5	1906.1	1275.0	790.2	436.6	292.5	278.2	287.3	295.6	303.1	310.6
62.5°	2548.5	1968.7	1303.7	675.6	328.0	266.2	268.4	282.7	292.5	296.3	300.8
65°	2385.6	1854.1	1206.4	550.4	266.9	251.1	259.4	273.7	282.7	285.8	289.5
67.5°	2084.8	1637.7	1016.4	414.7	238.3	238.3	248.8	259.4	266.9	272.9	279.0
69°	1812.6	1469.5	895.0	351.4	227.0	228.5	239.0	248.1	257.1	264.7	272.2
70°	1616.6	1343.6	810.5	318.9	220.2	220.9	231.5	241.3	249.6	257.9	266.9
72.5°	865.6	928.2	616.0	261.6	202.8	205.1	214.9	223.9	231.5	239.8	248.1
75°	294.8	398.9	392.1	214.1	183.2	189.3	195.3	203.6	213.4	218.7	223.2
77.5°	172.7	178.7	208.9	174.2	165.1	168.1	174.9	181.7	190.0	195.3	199.1
80°	144.8	144.0	144.8	141.8	144.0	150.8	155.3	164.4	171.9	173.4	172.7
82.5°	117.6	123.7	124.4	122.9	129.7	135.0	138.7	144.0	143.3	144.8	147.8
85°	104.8	104.1	109.3	110.1	110.1	106.3	107.1	107.1	107.1	109.3	110.1
87.5°	104.8	87.5	67.9	61.1	64.1	60.3	57.3	56.5	62.6	68.6	67.1
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):

	160°	165°	170°	175°	180°
0°	2329.1	2329.1	2329.1	2329.1	2329.1
2.5°	2327.6	2329.8	2328.3	2328.3	2329.8
5°	2311.7	2315.5	2314.0	2315.5	2315.5
7.5°	2275.6	2280.8	2284.6	2288.4	2286.1
10°	2223.5	2232.6	2238.6	2243.1	2240.9
12.5°	2145.9	2154.2	2167.0	2174.5	2168.5
15°	2039.6	2062.9	2070.5	2081.0	2075.0
17.5°	1928.7	1943.0	1952.1	1961.9	1967.9
20°	1780.9	1792.2	1804.3	1808.8	1802.0
22.5°	1603.0	1609.0	1606.8	1613.5	1600.0
25°	1407.7	1411.5	1409.2	1415.2	1403.9
27.5°	1223.0	1222.2	1223.0	1215.4	1207.9
30°	1045.0	1038.2	1035.2	1023.9	1021.7
32.5°	885.9	862.6	850.5	833.9	830.1
35°	726.8	693.7	671.8	653.0	644.7
37.5°	584.3	544.4	518.7	502.2	499.9
40°	462.2	425.3	407.2	398.1	396.6
42.5°	377.0	361.2	356.6	356.6	356.6
45°	343.8	343.1	346.8	349.9	350.6
47.5°	337.0	341.6	346.8	351.4	352.9
50°	337.0	341.6	345.3	349.9	351.4
52.5°	335.5	339.3	340.8	343.8	345.3
55°	331.0	333.3	333.3	334.8	336.3
57.5°	323.5	325.0	322.7	324.2	328.0
60°	315.9	317.4	313.7	317.4	319.7
62.5°	307.6	308.4	306.9	309.9	309.9
65°	294.1	292.5	294.8	297.1	297.8
67.5°	280.5	276.7	279.0	279.7	281.2
69°	269.9	267.7	268.4	269.9	271.4
70°	262.4	260.9	262.4	264.7	266.9
72.5°	243.5	244.3	249.6	254.1	258.6
75°	226.2	231.5	238.3	248.1	253.3
77.5°	205.1	208.9	214.1	224.7	234.5
80°	177.2	179.5	180.2	184.0	183.2
82.5°	144.0	141.8	140.2	138.7	138.0
85°	103.3	102.5	96.5	92.0	92.0
87.5°	61.8	58.8	55.8	52.0	49.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)