

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: P158452

Luminaire Tested: **VST-E05-LED-E-U-SL3-7060**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158452
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33713)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-E05-LED-E-U-SL3-7060
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL
Light Source: (105) 5700K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15478.1 lumens
Efficiency: N/A
Efficacy: 121.6 lumens/watt
Luminous Opening: Rectangular (W 0.83' x L: 1' x H: 0')
IES Classification: Type III - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G3

Input Watts (W): 127.3
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

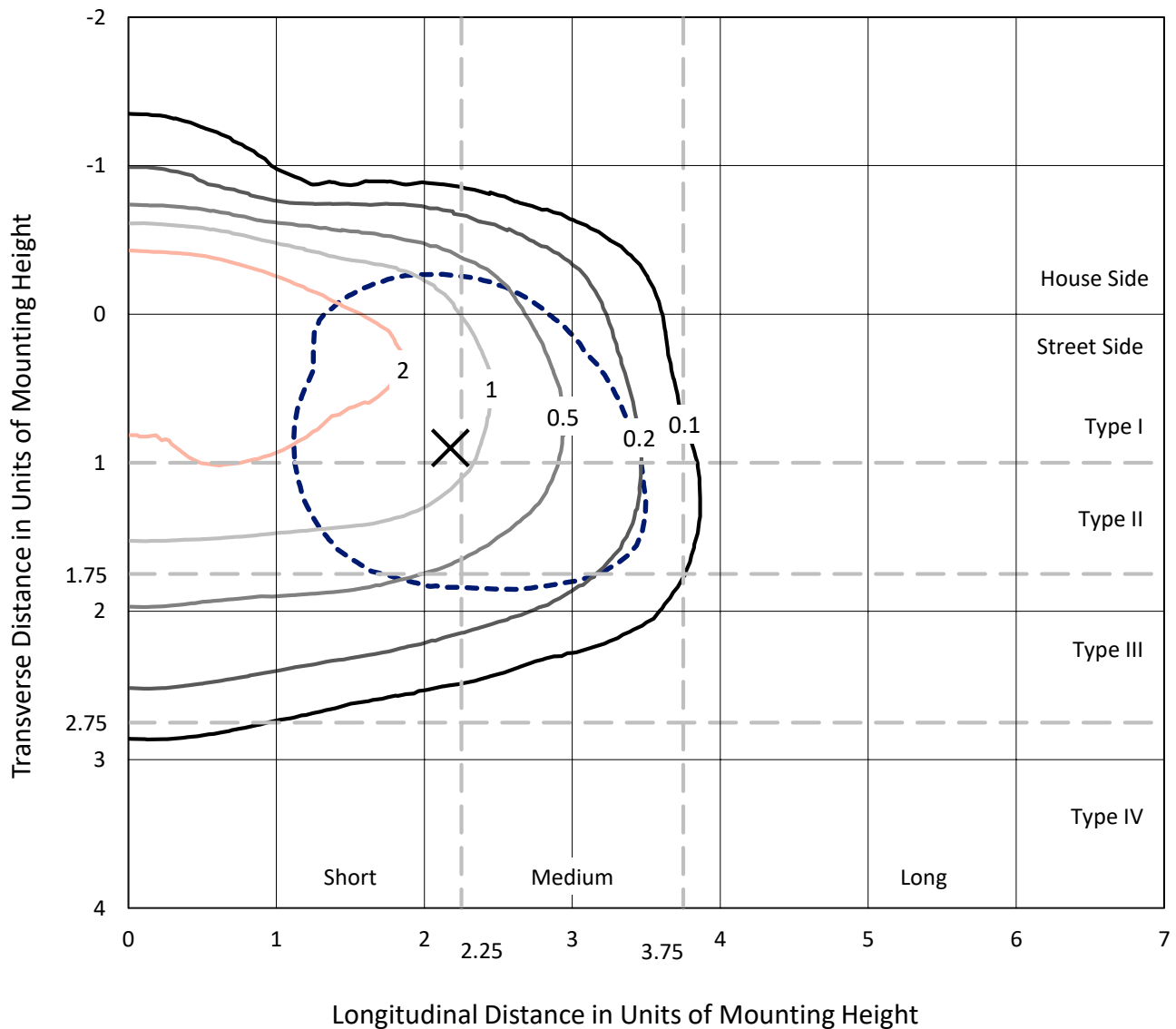


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

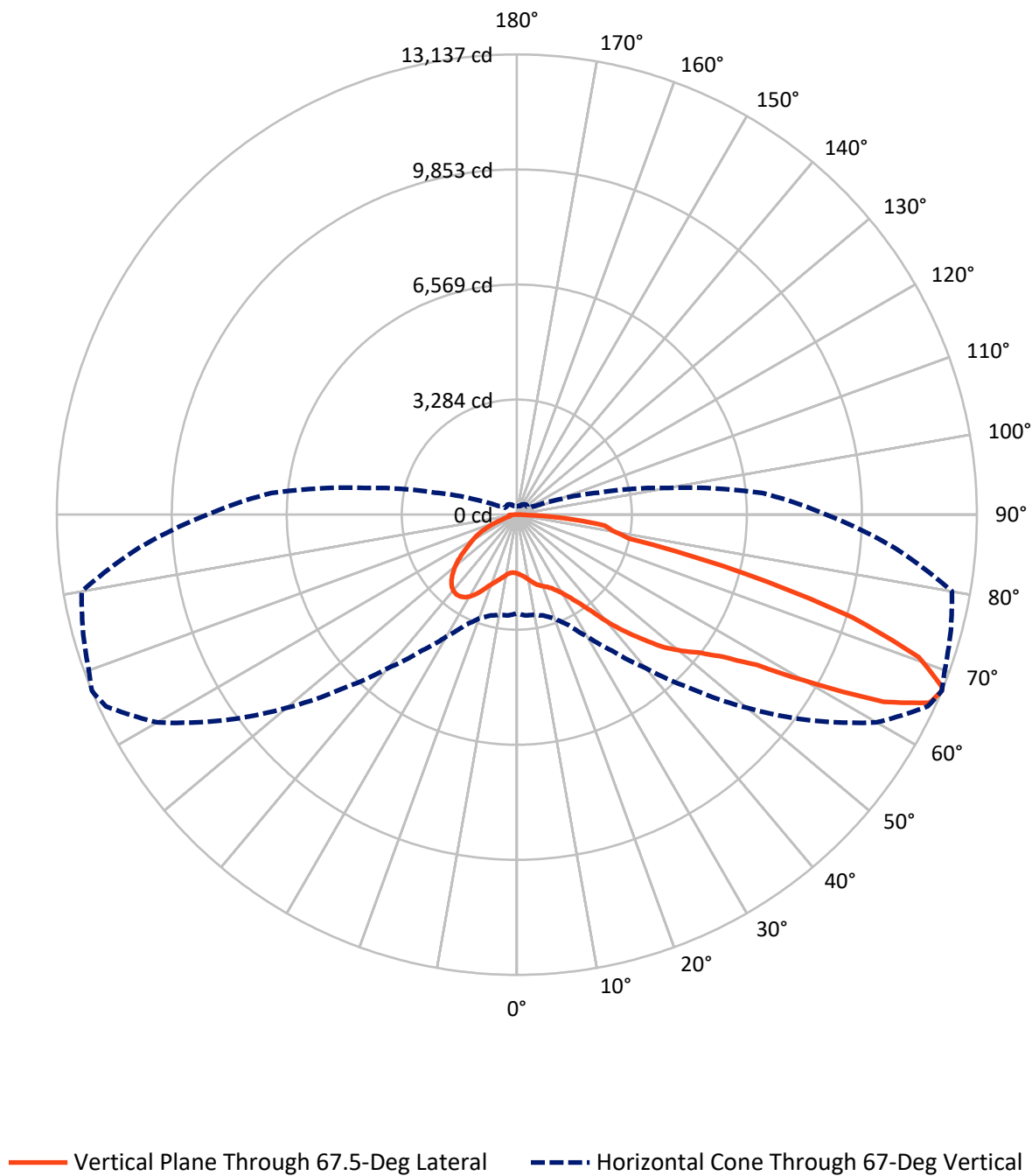


Based on 25 foot mounting height. Maximum calculated value = 3.4 fc
Type III - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3713.2	0.0	3713.2
	% Fixture	24.0	0.0	24.0
Street Side	Lumens	11764.9	0.0	11764.9
	% Fixture	76.0	0.0	76.0
Total	Lumens	15478.1	0.0	15478.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.7	1.1
10°-20°	568.1	3.7
20°-30°	1014.2	6.6
30°-40°	1486.4	9.6
40°-50°	2296.7	14.8
50°-60°	3344.4	21.6
60°-70°	4356.6	28.1
70°-80°	1950.2	12.6
80°-90°	294.9	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°	15478.1	100.0
0°-180°	15478.1	100.0

Coefficient of Utilization



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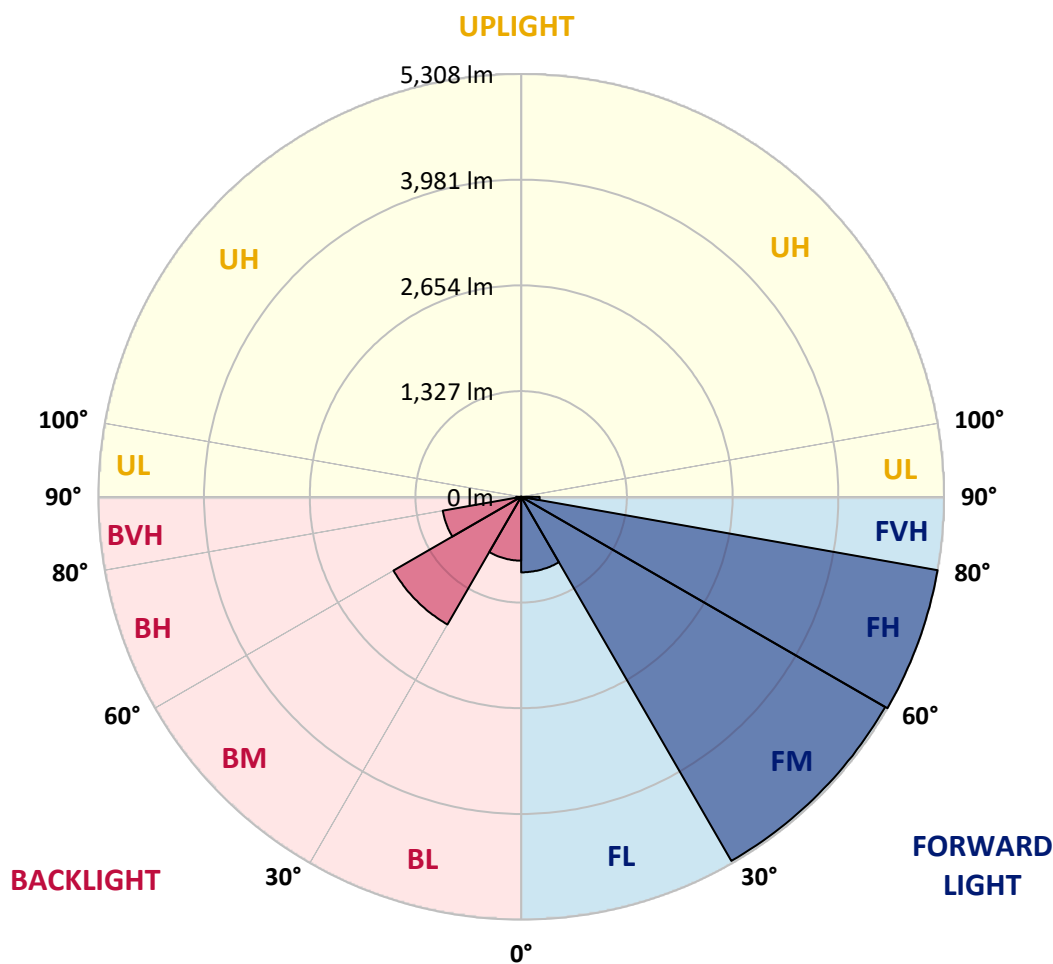
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	948.3	6.1			
FM	(30°-60°)	5277.2	34.1			
FH	(60°-80°)	5307.8	34.3			G3/7500
FVH	(80°-90°)	231.6	1.5			G3/500
BL	(0°-30°)	800.7	5.2	B2/1000		
BM	(30°-60°)	1850.2	12.0	B2/2500		
BH	(60°-80°)	999.0	6.5	B2/1000		G2/1000
BVH	(80°-90°)	63.3	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1677.7	1677.7	1677.7	1677.7	1677.7	1677.7	1677.7	1677.7	1677.7	1677.7	1677.7
2.5°	1743.4	1747.5	1748.5	1747.5	1748.5	1744.4	1743.4	1737.2	1740.3	1732.1	1730.0
5°	1837.8	1840.8	1842.9	1834.7	1836.7	1832.6	1827.5	1821.3	1813.1	1801.8	1794.7
7.5°	1930.1	1935.2	1934.2	1931.1	1923.9	1919.8	1909.6	1900.3	1886.0	1872.6	1863.4
10°	2054.3	2053.2	2053.2	2035.8	2025.5	2016.3	1997.8	1983.5	1969.1	1949.6	1939.3
12.5°	2197.9	2190.7	2187.7	2175.3	2153.8	2137.4	2110.7	2083.0	2057.3	2036.8	2020.4
15°	2336.4	2336.4	2328.2	2308.7	2288.2	2266.7	2228.7	2188.7	2146.6	2113.8	2097.4
17.5°	2462.7	2451.4	2444.2	2418.5	2397.0	2362.1	2320.0	2276.9	2224.6	2178.4	2146.6
20°	2555.0	2545.8	2530.4	2498.6	2461.6	2420.6	2371.3	2321.1	2264.6	2214.3	2178.4
22.5°	2608.4	2597.1	2573.5	2531.4	2481.1	2423.7	2366.2	2319.0	2267.7	2229.7	2200.0
25°	2636.1	2624.8	2593.0	2537.6	2469.8	2393.9	2328.2	2282.1	2252.3	2243.1	2239.0
27.5°	2635.0	2625.8	2591.9	2528.3	2441.1	2353.9	2283.1	2244.1	2241.0	2276.9	2303.6
30°	2608.4	2602.2	2571.4	2507.8	2416.5	2325.2	2259.5	2239.0	2270.8	2346.7	2412.4
32.5°	2581.7	2578.6	2557.1	2499.6	2421.6	2344.7	2299.5	2301.6	2367.2	2484.2	2589.9
35°	2584.8	2588.9	2585.8	2555.0	2505.7	2465.7	2444.2	2489.3	2591.9	2733.5	2875.1
37.5°	2611.4	2626.8	2646.3	2649.4	2650.4	2644.3	2689.4	2784.9	2934.7	3119.4	3341.0
40°	2669.9	2687.4	2743.8	2793.1	2856.7	2932.6	3023.9	3156.3	3342.0	3569.8	3841.7
42.5°	2851.5	2876.2	2945.9	3037.3	3154.2	3273.3	3409.7	3590.3	3818.1	4058.2	4343.5
45°	3088.6	3139.9	3216.8	3318.4	3493.9	3661.1	3837.6	4039.8	4281.9	4582.6	4869.9
47.5°	3384.1	3435.4	3547.2	3656.0	3863.3	4071.6	4264.5	4475.9	4738.6	5046.4	5364.5
50°	3642.7	3701.2	3800.7	3947.4	4187.5	4443.0	4656.5	4885.3	5105.9	5430.2	5751.3
52.5°	3845.8	3887.9	3983.3	4117.8	4385.6	4665.7	4935.6	5190.0	5451.7	5775.9	6073.5
55°	3871.5	3910.5	4003.9	4157.8	4429.7	4740.6	5051.5	5353.2	5723.6	6077.6	6471.6
57.5°	3760.7	3792.5	3886.9	4024.4	4289.1	4643.1	5036.1	5423.0	5897.0	6375.2	6856.4
60°	3603.7	3635.5	3709.4	3819.2	4058.2	4440.0	4898.6	5428.1	6058.1	6748.7	7456.7
62.5°	3431.3	3459.0	3518.5	3596.5	3806.9	4158.8	4684.2	5394.2	6189.5	7120.1	8211.9
65°	3140.9	3207.6	3233.3	3313.3	3523.6	3856.1	4390.7	5165.4	6136.1	7285.3	8686.0
67°	2819.7	2887.5	2900.8	2981.9	3150.1	3469.3	4013.1	4741.6	5713.4	7000.1	8581.3
67.5°	2717.1	2774.6	2795.1	2876.2	3035.2	3335.9	3852.0	4588.7	5584.1	6844.1	8455.1
70°	1997.8	2061.4	2084.0	2117.9	2231.8	2482.1	2823.8	3463.1	4452.3	5585.1	7132.5
72.5°	1069.2	1120.5	1142.1	1192.3	1250.8	1387.3	1649.0	2107.6	2732.5	3737.1	5074.1
75°	723.4	743.9	759.3	794.2	854.7	963.5	1078.4	1239.5	1617.1	2108.6	2887.5
77.5°	412.5	421.7	423.8	429.9	478.2	581.8	770.6	1043.5	1338.0	1527.9	1847.0
80°	178.5	197.0	211.4	202.1	199.1	220.6	276.0	411.5	806.5	1280.6	1519.7
82.5°	96.5	104.7	117.0	118.0	124.2	131.3	142.6	169.3	238.1	480.2	1047.7
85°	50.3	52.3	69.8	80.0	85.2	89.3	91.3	101.6	117.0	148.8	260.6
87.5°	7.2	10.3	12.3	16.4	18.5	19.5	22.6	28.7	33.9	41.0	69.8
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):

	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°	100°
0°	1677.7	1677.7	1677.7	1677.7	1677.7	1677.7	1677.7	1677.7	1677.7	1677.7	1677.7
2.5°	1720.8	1718.7	1712.6	1708.5	1704.4	1700.3	1695.1	1691.0	1683.8	1678.7	1672.6
5°	1784.4	1772.1	1763.9	1752.6	1750.5	1737.2	1723.9	1717.7	1705.4	1695.1	1682.8
7.5°	1849.0	1834.7	1821.3	1812.1	1807.0	1788.5	1775.2	1759.8	1745.4	1732.1	1717.7
10°	1925.0	1910.6	1896.2	1890.1	1880.9	1863.4	1852.1	1832.6	1818.3	1801.8	1782.3
12.5°	2004.0	1993.7	1983.5	1975.3	1971.1	1962.9	1946.5	1930.1	1910.6	1894.2	1871.6
15°	2073.8	2066.6	2062.5	2060.4	2060.4	2055.3	2039.9	2024.5	2004.0	1985.5	1960.9
17.5°	2123.0	2119.9	2123.0	2126.1	2130.2	2126.1	2123.0	2105.6	2092.2	2069.7	2045.0
20°	2151.7	2157.9	2173.3	2183.6	2192.8	2200.0	2203.0	2188.7	2171.2	2154.8	2138.4
22.5°	2182.5	2200.0	2226.6	2242.0	2257.4	2283.1	2289.2	2279.0	2265.6	2255.4	2237.9
25°	2233.8	2259.5	2305.7	2330.3	2351.8	2389.8	2394.9	2397.0	2393.9	2385.7	2364.1
27.5°	2313.9	2364.1	2425.7	2457.5	2481.1	2530.4	2549.9	2549.9	2541.7	2550.9	2550.9
30°	2453.4	2520.1	2600.2	2618.6	2655.6	2698.7	2730.5	2734.6	2735.6	2755.1	2783.8
32.5°	2667.9	2731.5	2820.8	2841.3	2873.1	2914.1	2950.1	2945.9	2955.2	2997.3	3035.2
35°	2979.8	3044.5	3102.9	3130.6	3145.0	3182.0	3195.3	3217.9	3245.6	3297.9	3292.8
37.5°	3441.6	3499.0	3507.2	3524.7	3507.2	3514.4	3524.7	3551.4	3625.2	3672.4	3596.5
40°	3997.7	4093.1	4083.9	4063.4	4024.4	3972.1	3990.5	4031.6	4111.6	4070.6	3866.4
42.5°	4522.0	4620.6	4602.1	4578.5	4492.3	4472.8	4470.7	4504.6	4547.7	4430.7	4077.7
45°	5038.2	5138.7	5106.9	5093.6	5036.1	4994.1	5028.9	5031.0	5019.7	4769.3	4262.4
47.5°	5570.7	5663.1	5642.6	5653.8	5594.3	5566.6	5569.7	5555.3	5449.6	5056.6	4406.1
50°	6000.7	6124.8	6137.1	6111.5	6079.7	6037.6	6145.3	6106.4	5871.4	5335.7	4544.6
52.5°	6335.2	6502.4	6566.0	6549.6	6524.0	6529.1	6731.3	6775.4	6386.5	5687.7	4697.5
55°	6731.3	6995.0	7098.6	7160.2	7133.5	7236.1	7698.9	7721.4	7102.7	6147.4	4896.6
57.5°	7302.8	7680.4	8007.7	8094.9	8179.1	8512.6	9263.7	9034.9	8032.4	6843.1	5149.0
60°	8171.9	8998.9	9530.5	9809.6	10006.6	10472.4	11186.6	10606.9	9190.8	7671.2	5466.1
62.5°	9388.9	10597.6	11486.2	11766.4	11847.4	12115.2	12632.4	11523.2	9821.9	8042.6	5493.8
65°	10294.9	11744.8	12808.9	12952.5	12856.1	12861.2	12996.7	11474.9	9586.9	7718.4	5017.7
67°	10235.4	11858.7	12948.4	13137.2	13003.8	12828.4	12617.0	10821.3	8831.7	7039.1	4393.8
67.5°	10144.1	11748.9	12887.9	13086.9	12964.8	12764.8	12455.9	10567.9	8596.7	6827.7	4266.5
70°	8769.1	10362.6	11896.7	12176.8	12228.1	12045.5	11178.4	8910.7	6979.6	5554.3	3313.3
72.5°	6825.7	8244.8	9762.4	10005.6	10202.6	9676.2	8136.0	6154.6	5087.4	4002.8	2399.0
75°	4506.7	5950.4	6715.9	6751.8	6500.4	5525.6	3975.1	3082.4	2837.2	2352.9	1484.8
77.5°	2411.3	3499.0	3520.6	3259.9	3140.9	2341.6	950.2	524.3	583.9	662.9	591.0
80°	1798.8	2228.7	2582.7	2776.6	2834.1	2008.1	491.5	278.1	243.2	221.6	218.6
82.5°	1622.3	2152.8	2413.4	2519.1	2492.4	1652.0	276.0	186.8	154.9	168.3	191.9
85°	636.2	1149.2	1511.5	1463.2	1229.3	615.7	150.8	100.6	100.6	145.7	188.8
87.5°	130.3	236.0	320.1	305.8	275.0	119.0	73.9	60.5	61.6	118.0	178.5
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°	1677.7	1677.7	1677.7	1677.7	1677.7	1677.7	1677.7	1677.7	1677.7	1677.7	1677.7
2.5°	1666.4	1660.2	1656.1	1652.0	1647.9	1645.9	1642.8	1642.8	1636.6	1634.6	1632.5
5°	1673.6	1663.3	1656.1	1646.9	1639.7	1633.6	1625.4	1623.3	1616.1	1611.0	1608.9
7.5°	1704.4	1689.0	1673.6	1662.3	1652.0	1638.7	1629.5	1621.2	1614.1	1608.9	1602.8
10°	1762.8	1746.4	1724.9	1704.4	1691.0	1670.5	1656.1	1641.8	1633.6	1627.4	1619.2
12.5°	1849.0	1825.4	1799.8	1775.2	1752.6	1725.9	1711.5	1694.1	1683.8	1678.7	1672.6
15°	1937.3	1911.6	1879.8	1856.2	1830.6	1810.0	1796.7	1781.3	1773.1	1767.0	1762.8
17.5°	2027.6	1997.8	1975.3	1951.7	1939.3	1923.9	1906.5	1887.0	1863.4	1849.0	1829.5
20°	2119.9	2097.4	2084.0	2070.7	2056.3	2034.8	1999.9	1959.9	1915.7	1873.7	1833.7
22.5°	2227.7	2214.3	2212.3	2200.0	2170.2	2118.9	2054.3	1979.4	1904.5	1834.7	1780.3
25°	2379.5	2379.5	2369.3	2319.0	2249.2	2156.9	2048.1	1940.4	1840.8	1745.4	1673.6
27.5°	2570.4	2563.2	2512.9	2409.3	2284.1	2140.5	1994.7	1858.3	1731.0	1626.4	1534.0
30°	2780.7	2730.5	2622.7	2459.6	2271.8	2087.1	1908.6	1750.5	1600.7	1472.5	1363.7
32.5°	2999.3	2877.2	2683.3	2459.6	2228.7	2007.1	1800.8	1606.9	1435.5	1291.9	1162.6
35°	3197.3	2974.7	2697.6	2419.6	2144.6	1889.1	1650.0	1430.4	1225.2	1070.2	928.6
37.5°	3376.9	3039.3	2682.2	2341.6	2022.5	1722.8	1442.7	1200.5	968.6	818.8	697.8
40°	3493.9	3052.7	2618.6	2219.5	1848.0	1498.1	1188.2	917.3	733.7	597.2	516.1
42.5°	3566.7	3027.0	2516.0	2052.2	1613.0	1215.9	891.7	657.7	521.3	445.3	414.5
45°	3607.8	2960.3	2364.1	1823.4	1328.8	924.5	633.1	475.1	401.2	374.5	364.3
47.5°	3605.7	2852.6	2174.3	1558.7	1014.8	644.4	448.4	370.4	349.9	341.7	339.6
50°	3584.2	2720.2	1951.7	1271.3	732.6	449.4	355.0	332.5	327.3	322.2	320.1
52.5°	3554.4	2556.0	1705.4	991.2	520.2	359.1	322.2	316.0	311.9	306.8	304.8
55°	3499.0	2353.9	1438.6	746.0	407.4	324.2	310.9	308.9	303.7	296.5	292.4
57.5°	3431.3	2148.7	1183.1	582.8	360.2	316.0	308.9	305.8	298.6	290.4	282.2
60°	3406.7	1979.4	983.0	491.5	348.9	319.1	314.0	309.9	299.6	287.3	278.1
62.5°	3252.8	1788.5	839.4	455.6	355.0	332.5	330.4	324.2	308.9	294.5	280.1
65°	2854.6	1512.5	711.1	431.0	367.3	355.0	357.1	347.8	332.5	313.0	287.3
67°	2414.4	1233.4	592.1	407.4	376.6	378.6	385.8	378.6	359.1	331.4	296.5
67.5°	2297.5	1162.6	562.3	400.2	378.6	384.8	393.0	387.9	368.4	336.6	300.6
70°	1707.4	818.8	419.7	362.2	378.6	403.3	421.7	426.9	405.3	361.2	308.9
72.5°	1202.6	528.4	322.2	314.0	343.7	376.6	411.5	428.9	404.3	356.1	297.6
75°	722.4	330.4	261.7	266.8	289.4	323.2	350.9	358.1	327.3	296.5	257.6
77.5°	334.5	219.6	205.2	212.4	234.0	249.3	249.3	235.0	211.4	192.9	184.7
80°	197.0	179.6	178.5	191.9	206.2	195.0	177.5	158.0	145.7	139.6	136.5
82.5°	184.7	191.9	204.2	207.3	196.0	168.3	146.7	127.2	121.1	118.0	114.9
85°	217.5	232.9	212.4	196.0	173.4	141.6	114.9	98.5	95.4	92.3	88.2
87.5°	201.1	191.9	167.3	143.7	119.0	86.2	62.6	56.4	60.5	59.5	57.5
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°	1677.7	1677.7	1677.7	1677.7	1677.7
2.5°	1633.6	1633.6	1629.5	1627.4	1632.5
5°	1604.8	1605.9	1602.8	1601.8	1602.8
7.5°	1598.7	1597.6	1595.6	1593.5	1595.6
10°	1617.1	1616.1	1613.0	1615.1	1612.0
12.5°	1672.6	1678.7	1677.7	1679.7	1683.8
15°	1762.8	1761.8	1758.7	1760.8	1763.9
17.5°	1814.2	1805.9	1798.8	1795.7	1795.7
20°	1801.8	1778.2	1765.9	1758.7	1756.7
22.5°	1729.0	1695.1	1669.5	1663.3	1658.2
25°	1610.0	1567.9	1535.1	1527.9	1514.5
27.5°	1471.4	1415.0	1376.0	1367.8	1360.6
30°	1289.8	1225.2	1180.0	1151.3	1160.5
32.5°	1068.2	1006.6	954.3	908.1	900.9
35°	825.0	757.3	711.1	690.6	677.2
37.5°	615.7	559.2	528.4	508.9	510.0
40°	471.0	441.2	424.8	411.5	412.5
42.5°	393.0	379.7	375.6	369.4	366.3
45°	356.1	352.0	353.0	346.8	344.8
47.5°	335.5	332.5	333.5	329.4	328.4
50°	319.1	317.1	318.1	315.0	314.0
52.5°	302.7	303.7	302.7	300.6	300.6
55°	288.3	287.3	289.4	286.3	286.3
57.5°	277.0	276.0	276.0	275.0	275.0
60°	270.9	266.8	265.8	265.8	266.8
62.5°	267.8	260.6	259.6	259.6	260.6
65°	268.8	257.6	253.4	252.4	251.4
67°	269.9	253.4	245.2	241.1	240.1
67.5°	270.9	251.4	242.2	238.1	236.0
70°	264.7	237.0	223.7	216.5	214.5
72.5°	249.3	219.6	203.2	193.9	191.9
75°	221.6	199.1	184.7	174.4	170.3
77.5°	171.4	161.1	156.0	149.8	147.8
80°	133.4	128.3	126.2	122.1	121.1
82.5°	110.8	105.7	102.6	97.5	94.4
85°	86.2	80.0	78.0	73.9	71.8
87.5°	56.4	53.4	52.3	47.2	45.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)