

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: P158675

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158675
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
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL
Light Source: (35) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11974 lumens
Efficiency: N/A
Efficacy: 89.8 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



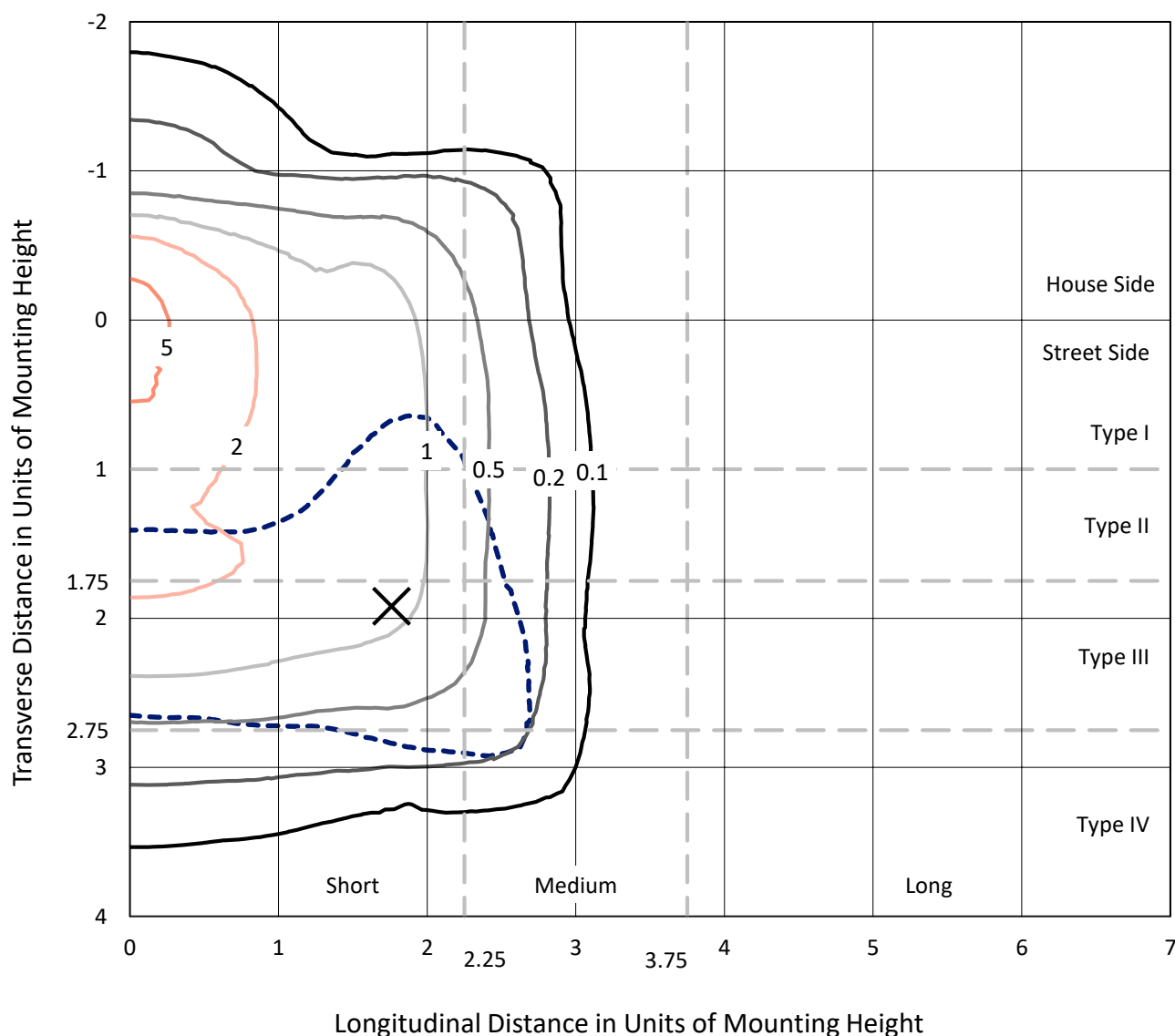
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

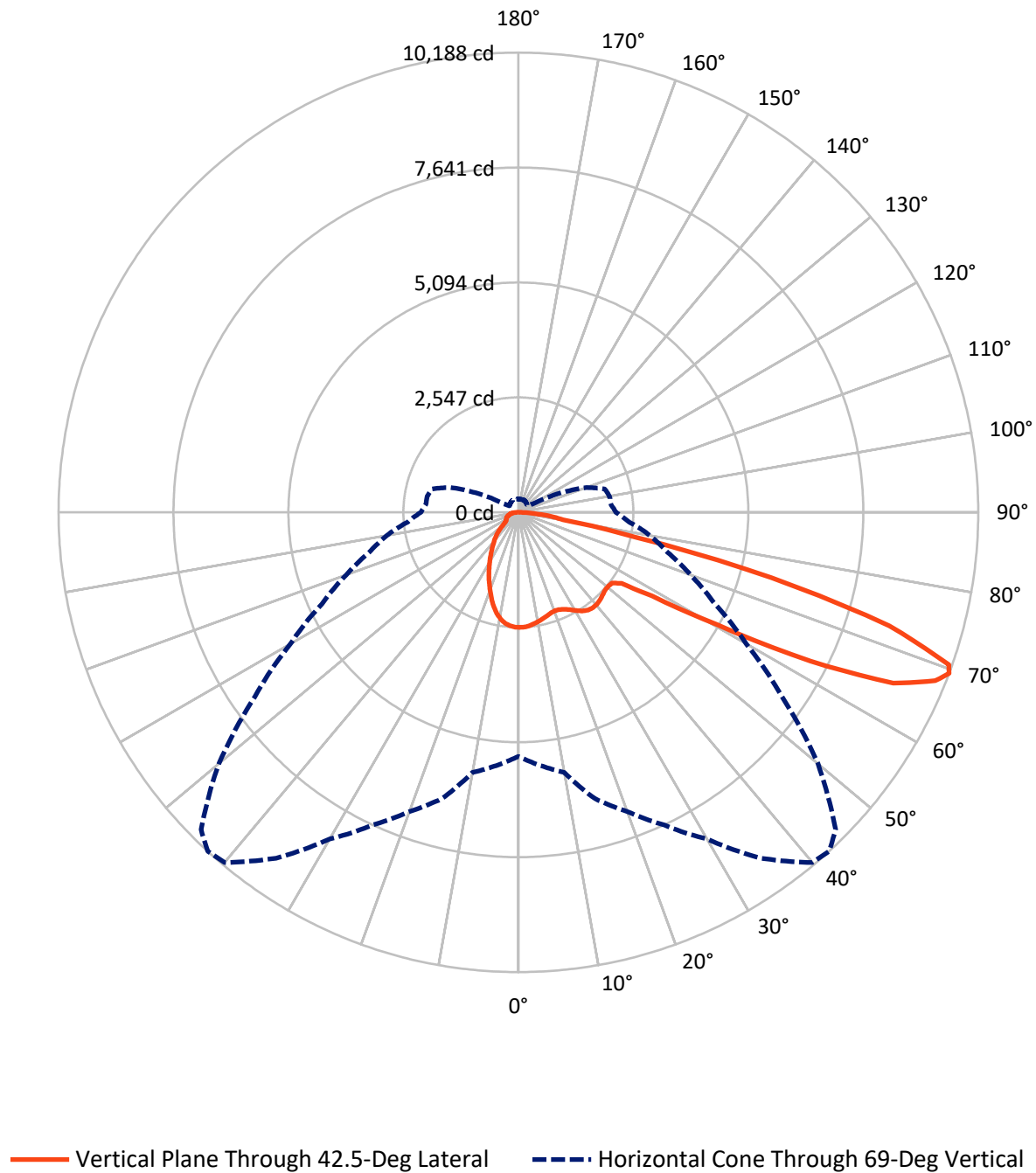


Based on 20 foot mounting height. Maximum calculated value = 6.4 fc
 Type IV - Short - Full Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2662.0	0.0	2662.0
	% Fixture	22.2	0.0	22.2
Street Side	Lumens	9312.0	0.0	9312.0
	% Fixture	77.8	0.0	77.8
Total	Lumens	11974.0	0.0	11974.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	237.4	2.0
10°-20°	639.8	5.3
20°-30°	932.9	7.8
30°-40°	1189.3	9.9
40°-50°	1383.8	11.6
50°-60°	2105.4	17.6
60°-70°	3719.1	31.1
70°-80°	1534.7	12.8
80°-90°	231.7	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°	11974.0	100.0
0°-180°	11974.0	100.0

Coefficient of Utilization



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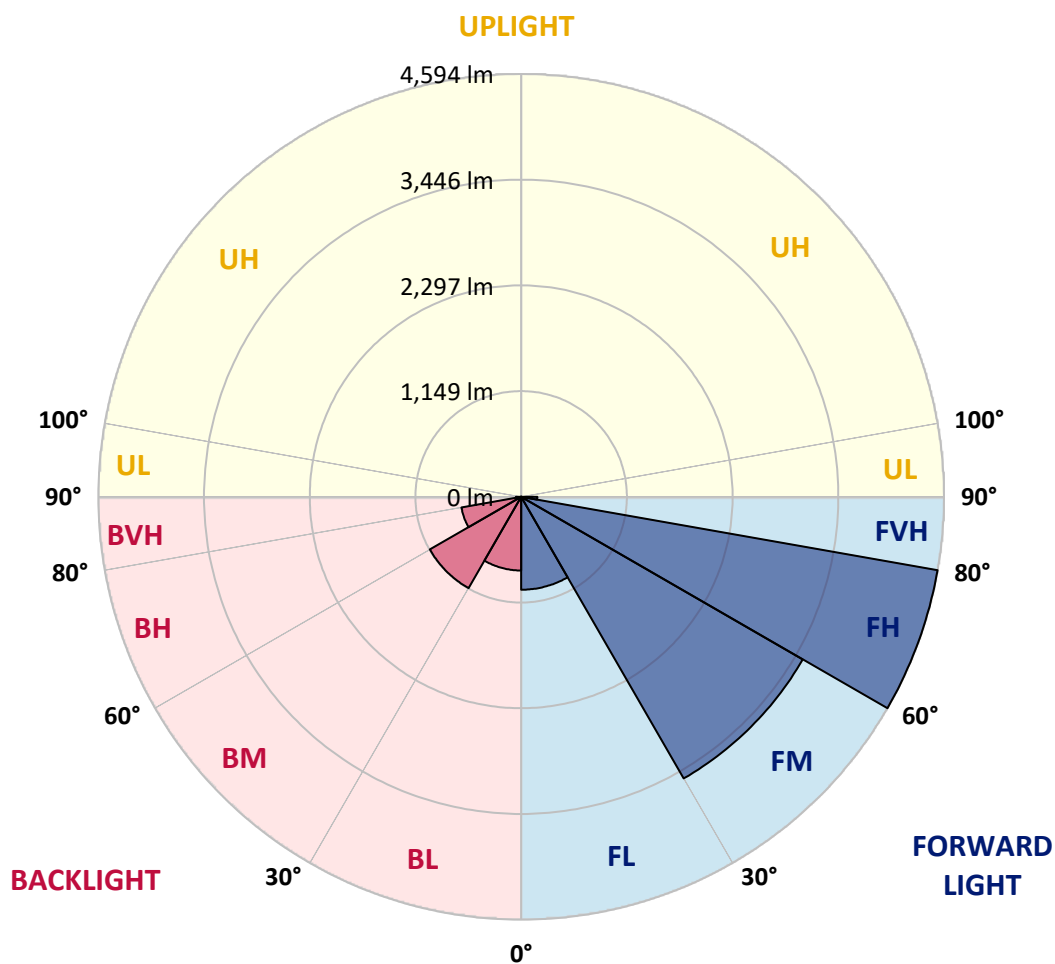
CATALOG NUMBER: VST-F05-LED-E-U-SL4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1009.7	8.4			
FM	(30°-60°)	3532.6	29.5			
FH	(60°-80°)	4594.4	38.4			G2/5000
FVH	(80°-90°)	175.2	1.5			G2/225
BL	(0°-30°)	800.4	6.7	B2/1000		
BM	(30°-60°)	1145.8	9.6	B2/2500		
BH	(60°-80°)	659.4	5.5	B2/1000		G2/1000
BVH	(80°-90°)	56.5	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°	2550.0	2550.0	2550.0	2550.0	2550.0	2550.0	2550.0	2550.0	2550.0	2550.0	2550.0
2.5°	2541.8	2550.9	2547.6	2547.6	2550.0	2545.9	2545.9	2547.6	2543.4	2545.9	2545.1
5°	2532.7	2537.7	2536.0	2536.0	2536.0	2532.7	2531.1	2530.2	2524.5	2524.5	2522.0
7.5°	2512.9	2514.5	2517.0	2513.7	2512.9	2512.1	2506.3	2503.0	2496.4	2490.6	2492.3
10°	2486.5	2485.7	2489.8	2487.3	2484.0	2481.5	2476.6	2470.8	2463.4	2455.9	2455.1
12.5°	2456.8	2455.9	2459.2	2457.6	2455.1	2450.2	2446.0	2436.1	2424.6	2415.5	2414.7
15°	2437.8	2435.3	2438.6	2435.3	2431.2	2426.2	2418.8	2406.4	2385.8	2376.7	2369.3
17.5°	2455.9	2451.8	2453.5	2449.3	2443.6	2430.3	2413.0	2386.6	2356.9	2341.2	2329.6
20°	2519.5	2512.1	2513.7	2509.6	2496.4	2479.1	2446.0	2399.8	2349.4	2323.9	2305.7
22.5°	2610.3	2604.5	2607.0	2602.9	2589.7	2563.3	2513.7	2447.7	2375.9	2338.7	2309.8
25°	2748.2	2753.1	2754.8	2735.8	2728.4	2679.7	2611.1	2519.5	2423.7	2380.0	2340.4
27.5°	2903.4	2903.4	2910.8	2903.4	2888.5	2831.6	2735.0	2624.3	2501.3	2441.9	2394.0
30°	3054.4	3052.8	3066.8	3065.2	3041.2	2976.8	2867.0	2732.5	2592.1	2525.3	2464.2
32.5°	3214.6	3219.5	3228.6	3225.3	3194.0	3104.8	2972.7	2826.6	2678.8	2605.4	2536.8
35°	3388.0	3390.4	3393.7	3392.1	3328.5	3216.2	3050.3	2886.9	2733.3	2660.7	2589.7
37.5°	3561.3	3558.8	3554.7	3519.2	3446.6	3290.5	3097.4	2921.5	2760.6	2682.1	2608.7
40°	3716.5	3702.5	3689.3	3634.0	3522.5	3332.6	3115.5	2929.8	2758.1	2677.2	2605.4
42.5°	3801.5	3785.9	3758.6	3689.3	3553.9	3336.8	3103.1	2905.0	2732.5	2652.4	2581.4
45°	3817.2	3805.7	3779.3	3701.7	3546.5	3310.4	3065.2	2864.6	2694.5	2614.4	2547.6
47.5°	3780.1	3771.0	3745.4	3668.6	3514.3	3270.7	3021.4	2821.6	2657.4	2582.2	2517.9
50°	3723.1	3714.9	3695.0	3624.9	3477.9	3243.5	2999.1	2799.4	2645.0	2576.5	2517.0
52.5°	3815.6	3822.2	3764.4	3687.6	3516.7	3267.4	3023.9	2822.5	2667.3	2599.6	2537.7
55°	5252.8	5243.7	4896.2	4604.8	4083.9	3611.7	3259.2	3005.7	2839.8	2772.1	2714.3
57.5°	6825.4	6794.1	6651.3	6378.8	5819.1	5072.0	4392.6	3814.8	3586.9	3489.5	3496.1
60°	7338.9	7350.5	7319.9	7223.3	7022.7	6633.9	6117.1	5682.9	5255.3	5046.4	5070.4
62.5°	7623.7	7644.4	7670.8	7649.3	7584.1	7494.1	7428.9	7468.5	7409.1	7258.8	7139.1
65°	7663.3	7705.4	7793.0	7862.3	7896.1	7981.2	8181.0	8659.8	9097.3	9126.2	8915.7
67.5°	6879.1	6995.5	7185.4	7506.5	7781.4	8083.5	8565.6	9293.8	9939.3	9960.8	9764.3
69°	5408.8	5632.6	5854.6	6572.0	7054.9	7646.8	8360.1	9354.8	10128.4	10187.8	9940.1
70°	4334.0	4466.9	4658.4	5379.1	6100.6	6855.2	7888.7	9153.4	9998.8	10118.5	9845.2
72.5°	2602.1	2653.2	2719.3	2977.7	3349.2	4021.1	5391.5	7462.7	8434.4	8594.5	8247.0
75°	1682.4	1679.1	1684.9	1756.7	1778.2	1907.0	2338.7	3839.5	5502.1	5792.7	5376.6
77.5°	1267.2	1278.7	1260.6	1267.2	1261.4	1296.1	1309.3	1374.5	2172.0	2675.5	2392.4
80°	1118.6	1124.4	1125.2	1121.9	1081.4	1078.1	1099.6	1062.5	987.3	1002.2	960.1
82.5°	638.1	637.3	644.7	700.9	724.0	799.9	831.3	848.6	783.4	734.7	664.5
85°	413.6	416.9	425.1	442.5	425.1	431.7	424.3	439.2	402.9	374.0	334.3
87.5°	169.2	169.2	180.0	195.6	182.4	179.1	153.5	151.9	128.8	116.4	90.8
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):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
0°	2550.0	2550.0	2550.0	2550.0	2550.0	2550.0	2550.0	2550.0	2550.0	2550.0	2550.0
2.5°	2540.1	2545.1	2542.6	2545.9	2543.4	2543.4	2540.1	2539.3	2541.8	2538.5	2539.3
5°	2517.9	2518.7	2514.5	2516.2	2511.2	2509.6	2507.1	2500.5	2504.6	2500.5	2502.2
7.5°	2485.7	2483.2	2477.4	2469.1	2463.4	2460.9	2455.9	2446.9	2448.5	2441.1	2445.2
10°	2444.4	2436.1	2426.2	2413.8	2405.6	2398.1	2387.4	2376.7	2370.9	2364.3	2363.5
12.5°	2398.1	2388.2	2375.0	2356.0	2337.9	2325.5	2309.0	2290.0	2284.2	2273.5	2267.7
15°	2347.8	2332.1	2316.4	2295.0	2275.1	2256.2	2233.9	2209.9	2194.2	2177.7	2165.4
17.5°	2302.4	2284.2	2263.6	2243.0	2221.5	2198.4	2170.3	2140.6	2117.5	2086.9	2062.2
20°	2266.9	2243.8	2223.1	2201.7	2177.7	2149.7	2115.8	2077.8	2039.0	2005.2	1976.3
22.5°	2252.9	2216.5	2191.8	2170.3	2146.4	2113.3	2072.1	2027.5	1980.4	1933.4	1895.4
25°	2264.4	2210.8	2172.0	2146.4	2125.7	2091.9	2045.7	1991.2	1936.7	1880.5	1829.4
27.5°	2298.3	2229.7	2173.6	2133.2	2109.2	2075.4	2026.7	1968.9	1904.5	1841.7	1779.0
30°	2351.1	2261.9	2190.9	2134.0	2096.8	2058.0	2006.9	1940.0	1874.8	1802.9	1734.4
32.5°	2402.3	2295.8	2210.8	2137.3	2080.3	2030.0	1973.0	1907.0	1836.8	1761.7	1690.7
35°	2438.6	2318.1	2218.2	2129.9	2054.7	1992.0	1930.9	1864.9	1796.3	1719.6	1646.9
37.5°	2455.9	2330.5	2219.0	2110.0	2020.9	1951.5	1886.3	1821.1	1756.7	1684.1	1615.6
40°	2455.1	2329.6	2207.5	2084.5	1980.4	1907.0	1842.6	1779.0	1718.7	1655.2	1593.3
42.5°	2436.9	2316.4	2190.9	2059.7	1951.5	1869.8	1802.9	1741.9	1690.7	1634.5	1582.5
45°	2408.9	2294.1	2173.6	2048.1	1943.3	1861.6	1790.6	1731.1	1685.7	1634.5	1590.0
47.5°	2387.4	2281.8	2176.1	2068.8	1968.9	1883.8	1808.7	1743.5	1704.7	1663.4	1632.1
50°	2390.7	2287.5	2184.3	2081.1	1987.0	1901.2	1828.5	1769.1	1741.0	1730.3	1722.9
52.5°	2408.1	2296.6	2209.1	2147.2	2115.0	2050.6	2007.7	1970.5	1991.2	1950.7	1902.8
55°	2629.3	2593.0	2678.0	2758.1	2859.6	2897.6	2861.3	2854.7	2887.7	2750.6	2436.1
57.5°	3543.2	3637.3	3768.5	3837.9	3922.1	3899.8	3815.6	3745.4	3662.9	3502.7	3110.6
60°	5097.6	5026.6	4967.2	4799.6	4662.6	4502.4	4324.1	4171.4	4025.3	3794.9	3370.6
62.5°	6699.1	6206.3	5794.4	5396.5	5076.2	4810.3	4551.9	4322.4	4101.2	3780.1	3323.6
65°	8084.4	7046.7	6273.2	5689.5	5221.4	4817.8	4485.9	4168.9	3887.4	3511.0	3059.4
67.5°	8706.8	7406.6	6281.4	5445.2	4797.1	4249.0	3819.7	3340.9	3025.5	2784.5	2530.2
69°	8660.6	7131.7	5833.2	4803.7	4059.1	3420.1	2959.5	2460.1	2157.9	2055.6	2049.8
70°	8441.0	6666.1	5309.8	4282.8	3430.9	2796.1	2354.4	1906.1	1624.6	1554.5	1679.1
72.5°	6891.5	4710.4	3327.7	2541.0	1954.0	1544.6	1259.8	999.7	798.3	691.8	714.9
75°	3892.4	2181.0	1410.0	1065.8	900.6	744.6	639.0	544.8	492.8	400.4	317.0
77.5°	1414.9	936.1	744.6	643.9	456.5	314.5	263.3	230.3	208.9	208.9	199.0
80°	894.9	705.0	492.0	336.8	249.3	217.1	189.9	166.8	153.5	150.2	153.5
82.5°	558.9	431.7	275.7	211.3	177.5	159.3	138.7	121.4	110.6	108.1	113.1
85°	275.7	213.8	167.6	149.4	140.3	130.4	114.7	98.2	94.9	101.5	118.9
87.5°	82.6	73.5	60.3	62.7	66.0	64.4	51.2	44.6	42.1	55.3	86.7
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°	2550.0	2550.0	2550.0	2550.0	2550.0	2550.0	2550.0	2550.0	2550.0	2550.0	2550.0
2.5°	2541.0	2540.1	2541.8	2539.3	2541.0	2541.8	2540.1	2547.6	2542.6	2543.4	2546.7
5°	2503.8	2502.2	2508.8	2507.1	2510.4	2513.7	2512.1	2522.8	2518.7	2522.0	2528.6
7.5°	2441.9	2445.2	2446.0	2446.0	2452.6	2463.4	2465.8	2472.4	2472.4	2481.5	2488.1
10°	2359.4	2360.2	2365.1	2364.3	2372.6	2384.1	2385.8	2397.3	2401.5	2416.3	2425.4
12.5°	2263.6	2259.5	2258.6	2257.8	2268.5	2280.9	2282.6	2302.4	2310.6	2323.9	2338.7
15°	2156.3	2145.5	2142.2	2148.8	2146.4	2153.8	2161.2	2172.0	2183.5	2209.9	2223.1
17.5°	2051.4	2030.0	2024.2	2016.8	2009.3	2009.3	2012.6	2025.8	2049.8	2063.8	2093.5
20°	1944.1	1918.5	1897.9	1878.1	1860.7	1854.1	1855.0	1871.5	1888.8	1911.9	1940.0
22.5°	1854.1	1815.3	1779.8	1753.4	1717.9	1717.1	1712.1	1717.1	1736.1	1741.9	1757.5
25°	1776.5	1724.5	1676.6	1633.7	1599.0	1580.9	1575.9	1574.3	1565.2	1562.7	1551.2
27.5°	1716.3	1653.5	1591.6	1539.6	1496.7	1471.9	1440.5	1418.3	1386.1	1377.8	1357.2
30°	1666.7	1599.0	1531.3	1463.7	1414.9	1370.4	1317.5	1278.7	1229.2	1197.0	1168.9
32.5°	1618.9	1550.3	1481.8	1414.9	1339.8	1270.5	1201.1	1140.9	1085.6	1036.0	994.8
35°	1579.2	1514.0	1444.7	1363.8	1268.0	1168.1	1084.7	1016.2	940.3	888.3	836.3
37.5°	1553.6	1494.2	1424.9	1313.4	1190.4	1083.1	988.2	904.8	827.2	748.8	690.1
40°	1542.1	1490.1	1403.4	1267.2	1122.7	1003.8	899.0	806.5	707.5	619.1	556.4
42.5°	1541.3	1488.4	1373.7	1216.0	1066.6	937.0	820.6	710.0	600.2	509.3	447.4
45°	1556.1	1485.9	1342.3	1173.1	1017.0	881.7	743.0	608.4	485.4	417.7	384.7
47.5°	1595.7	1490.1	1316.7	1133.4	970.0	814.8	653.8	497.0	395.4	364.1	364.1
50°	1666.7	1514.0	1310.1	1105.4	922.9	737.2	544.8	401.2	350.0	350.0	359.9
52.5°	1775.7	1564.4	1321.7	1085.6	864.3	634.8	429.3	345.9	336.0	345.1	358.3
55°	2026.7	1653.5	1337.4	1051.7	775.2	503.6	354.2	326.9	331.0	341.8	354.2
57.5°	2487.3	1844.2	1353.9	977.4	631.5	388.0	321.1	319.5	326.9	336.8	347.5
60°	2790.3	2086.9	1396.0	865.2	478.0	320.3	304.6	314.5	323.6	331.9	340.1
62.5°	2790.3	2155.4	1427.3	739.7	359.1	291.4	293.9	309.6	320.3	324.4	329.4
65°	2612.0	2030.0	1320.8	602.6	292.2	274.9	284.0	299.7	309.6	312.9	317.0
67.5°	2282.6	1793.0	1112.8	454.0	260.9	260.9	272.4	284.0	292.2	298.8	305.4
69°	1984.6	1608.9	979.9	384.7	248.5	250.1	261.7	271.6	281.5	289.8	298.0
70°	1769.9	1471.1	887.4	349.2	241.1	241.9	253.4	264.2	273.2	282.3	292.2
72.5°	947.7	1016.2	674.5	286.5	222.1	224.5	235.3	245.2	253.4	262.5	271.6
75°	322.8	436.7	429.3	234.4	200.6	207.2	213.8	222.9	233.6	239.4	244.4
77.5°	189.0	195.6	228.7	190.7	180.8	184.1	191.5	199.0	208.0	213.8	217.9
80°	158.5	157.7	158.5	155.2	157.7	165.1	170.1	180.0	188.2	189.9	189.0
82.5°	128.8	135.4	136.2	134.6	142.0	147.8	151.9	157.7	156.8	158.5	161.8
85°	114.7	113.9	119.7	120.5	120.5	116.4	117.2	117.2	117.2	119.7	120.5
87.5°	114.7	95.8	74.3	66.9	70.2	66.0	62.7	61.9	68.5	75.1	73.5
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°	2550.0	2550.0	2550.0	2550.0	2550.0
2.5°	2548.4	2550.9	2549.2	2549.2	2550.9
5°	2531.1	2535.2	2533.5	2535.2	2535.2
7.5°	2491.4	2497.2	2501.3	2505.5	2503.0
10°	2434.5	2444.4	2451.0	2455.9	2453.5
12.5°	2349.4	2358.5	2372.6	2380.8	2374.2
15°	2233.0	2258.6	2266.9	2278.4	2271.8
17.5°	2111.7	2127.4	2137.3	2148.0	2154.6
20°	1949.9	1962.3	1975.5	1980.4	1973.0
22.5°	1755.1	1761.7	1759.2	1766.6	1751.8
25°	1541.3	1545.4	1542.9	1549.5	1537.1
27.5°	1339.0	1338.2	1339.0	1330.7	1322.5
30°	1144.2	1136.7	1133.4	1121.1	1118.6
32.5°	970.0	944.4	931.2	913.0	908.9
35°	795.8	759.5	735.5	714.9	705.8
37.5°	639.8	596.0	568.0	549.8	547.3
40°	506.0	465.6	445.8	435.9	434.2
42.5°	412.8	395.4	390.5	390.5	390.5
45°	376.4	375.6	379.7	383.0	383.9
47.5°	369.0	374.0	379.7	384.7	386.3
50°	369.0	374.0	378.1	383.0	384.7
52.5°	367.4	371.5	373.1	376.4	378.1
55°	362.4	364.9	364.9	366.5	368.2
57.5°	354.2	355.8	353.3	355.0	359.1
60°	345.9	347.5	343.4	347.5	350.0
62.5°	336.8	337.6	336.0	339.3	339.3
65°	322.0	320.3	322.8	325.3	326.1
67.5°	307.1	303.0	305.4	306.3	307.9
69°	295.5	293.1	293.9	295.5	297.2
70°	287.3	285.6	287.3	289.8	292.2
72.5°	266.6	267.5	273.2	278.2	283.2
75°	247.7	253.4	260.9	271.6	277.4
77.5°	224.5	228.7	234.4	246.0	256.7
80°	194.0	196.5	197.3	201.4	200.6
82.5°	157.7	155.2	153.5	151.9	151.1
85°	113.1	112.3	105.7	100.7	100.7
87.5°	67.7	64.4	61.1	57.0	54.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)