

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: P159521

Luminaire Tested: **VST-E02-LED-E-U-T3-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P159521
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33706)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-E02-LED-E-U-T3-7050
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 AREA
Light Source: (42) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6276.4 lumens
Efficiency: N/A
Efficacy: 120.5 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 52.1
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

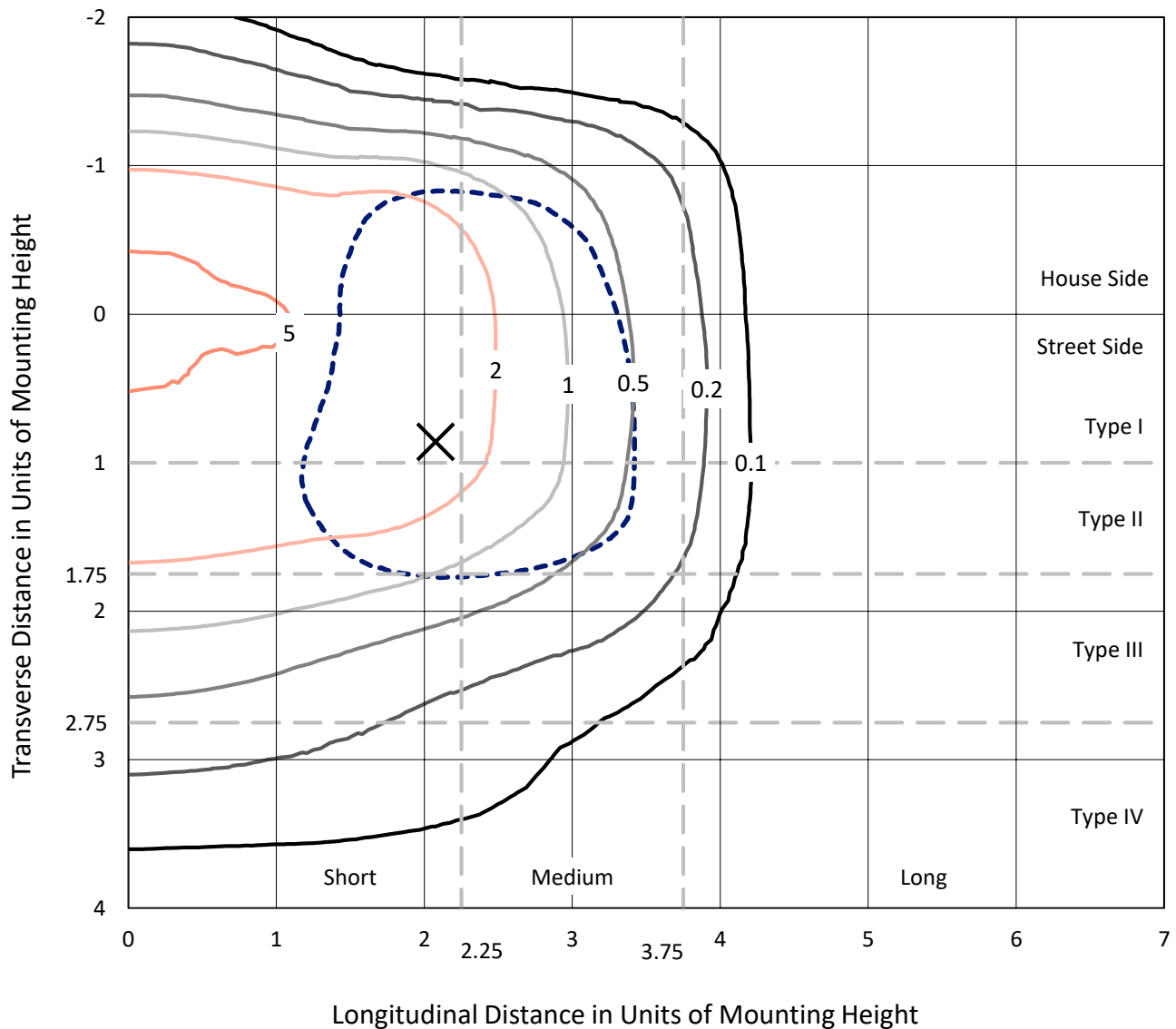


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

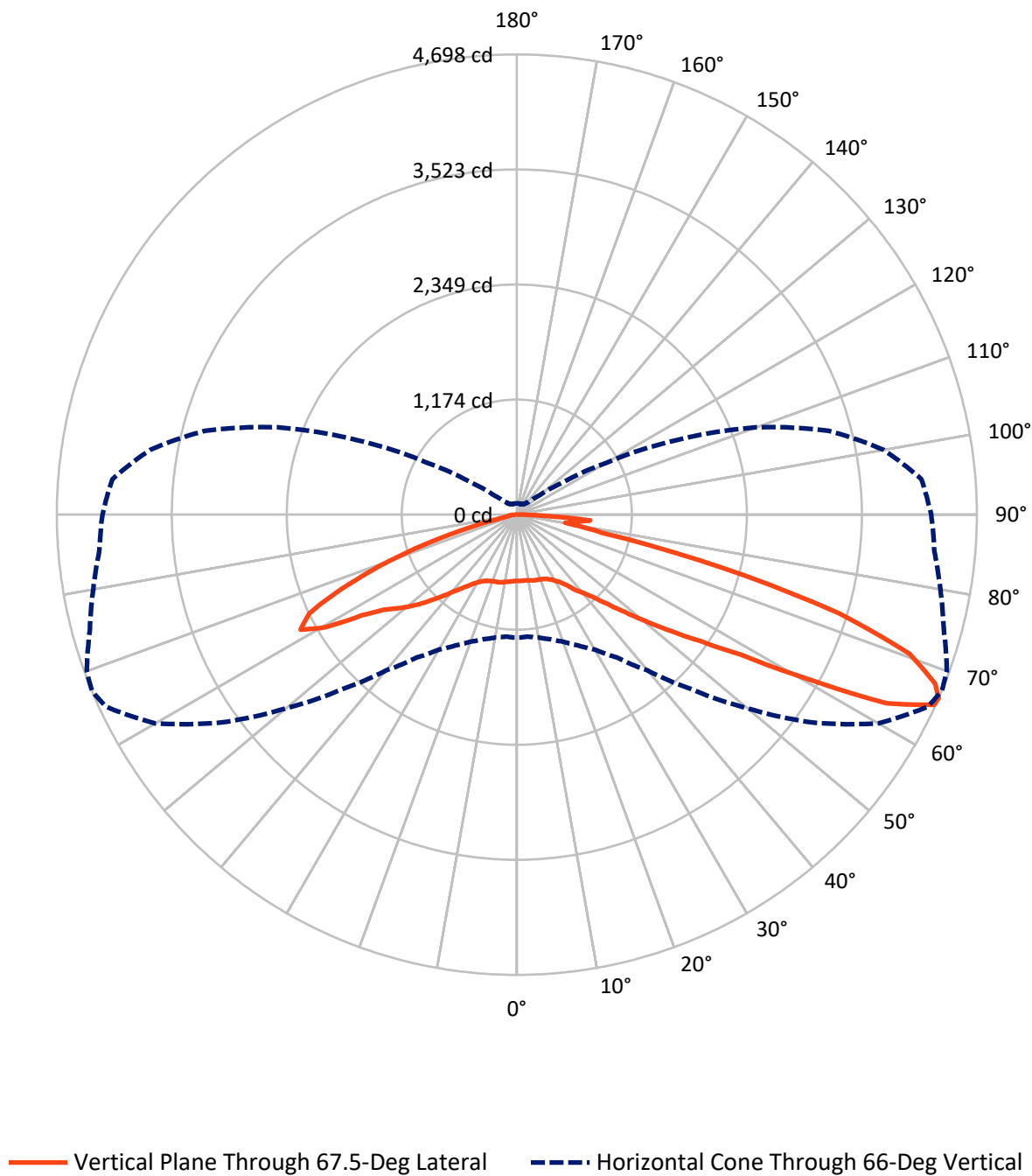


Based on 10 foot mounting height. Maximum calculated value = 6.8 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2171.9	0.0	2171.9
	% Fixture	34.6	0.0	34.6
Street Side	Lumens	4104.5	0.0	4104.5
	% Fixture	65.4	0.0	65.4
Total	Lumens	6276.4	0.0	6276.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.0	1.0
10°-20°	192.4	3.1
20°-30°	330.8	5.3
30°-40°	534.6	8.5
40°-50°	886.0	14.1
50°-60°	1390.5	22.2
60°-70°	1901.1	30.3
70°-80°	836.0	13.3
80°-90°	139.9	2.2
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°	6276.4	100.0
0°-180°	6276.4	100.0

Coefficient of Utilization



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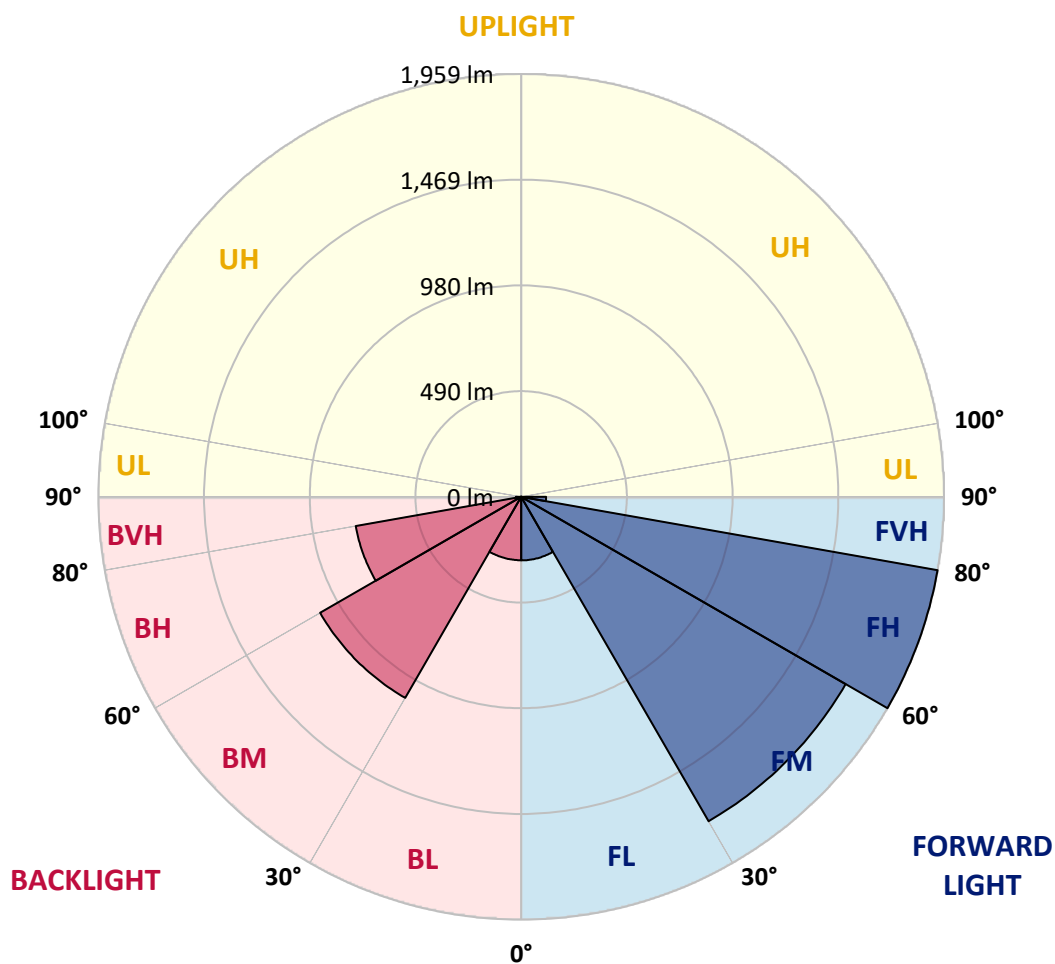
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	294.4	4.7			
FM	(30°-60°)	1735.6	27.7			
FH	(60°-80°)	1959.0	31.2			G2/5000
FVH	(80°-90°)	115.5	1.8			G2/225
BL	(0°-30°)	293.8	4.7	B1/500		
BM	(30°-60°)	1075.5	17.1	B2/2500		
BH	(60°-80°)	778.1	12.4	B2/1000		G2/1000
BVH	(80°-90°)	24.5	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	677.2	677.2	677.2	677.2	677.2	677.2	677.2	677.2	677.2	677.2	677.2
2.5°	676.0	676.0	676.4	676.0	676.0	675.6	677.2	677.2	677.2	676.8	678.1
5°	674.3	674.3	674.8	674.8	675.2	674.8	676.0	676.4	676.4	676.4	677.6
7.5°	670.3	671.5	670.7	671.1	671.5	672.7	674.3	675.2	676.0	677.2	677.6
10°	661.6	663.7	663.3	664.5	664.9	668.6	669.8	671.5	674.3	676.0	677.2
12.5°	649.7	650.9	651.4	653.0	654.7	659.2	662.5	665.3	669.4	673.6	677.6
15°	640.3	641.1	641.1	642.8	645.2	649.3	653.4	658.3	664.5	671.5	678.1
17.5°	643.1	645.2	643.6	643.1	644.0	646.4	650.2	654.2	661.6	669.4	677.2
20°	662.0	662.5	661.6	659.6	658.0	658.3	658.3	659.2	663.7	669.8	676.0
22.5°	677.6	679.3	678.9	679.3	678.9	680.5	679.7	678.1	676.4	676.8	679.7
25°	691.2	692.8	692.8	694.1	696.1	699.4	701.9	701.5	699.0	695.7	694.4
27.5°	713.3	713.3	713.3	714.6	717.5	721.6	725.6	728.1	730.2	726.9	719.9
30°	748.3	748.6	747.4	747.8	749.9	755.2	760.1	763.9	767.9	767.5	758.5
32.5°	786.4	788.0	787.6	789.3	792.2	797.1	802.4	808.1	813.5	816.8	811.0
35°	835.7	837.3	837.7	840.2	843.5	850.9	858.2	865.6	871.4	873.8	872.6
37.5°	916.5	916.9	915.3	911.6	912.8	918.5	927.2	939.1	942.8	945.2	951.0
40°	1037.6	1036.4	1029.8	1026.5	1024.4	1026.9	1025.3	1034.7	1043.3	1043.8	1043.3
42.5°	1184.5	1180.9	1174.7	1173.8	1173.1	1172.2	1167.7	1168.1	1175.9	1178.0	1175.5
45°	1330.7	1326.1	1321.6	1325.7	1320.8	1333.5	1337.2	1347.1	1348.3	1352.4	1346.3
47.5°	1450.5	1450.9	1450.9	1456.7	1466.5	1490.7	1512.5	1531.4	1538.3	1548.2	1549.4
50°	1541.2	1543.7	1551.5	1570.0	1590.9	1631.5	1668.1	1702.1	1732.9	1744.4	1774.7
52.5°	1594.1	1600.7	1617.1	1647.9	1685.3	1737.8	1795.3	1853.2	1906.5	1951.7	1987.8
55°	1584.7	1589.6	1618.4	1666.4	1724.7	1795.3	1875.7	1959.5	2042.8	2119.1	2178.2
57.5°	1524.0	1527.2	1556.0	1610.2	1682.8	1777.6	1891.3	2015.7	2132.6	2255.8	2356.7
60°	1444.3	1449.3	1475.9	1518.7	1594.6	1695.5	1827.3	1996.0	2182.7	2376.5	2565.2
62.5°	1393.4	1392.2	1415.6	1453.8	1510.9	1602.4	1729.2	1929.1	2187.7	2515.2	2888.3
65°	1308.9	1305.2	1329.4	1372.9	1434.9	1523.6	1643.8	1835.9	2135.9	2567.7	3096.8
66°	1256.3	1249.0	1273.2	1317.1	1379.1	1473.5	1588.8	1778.5	2073.1	2516.4	3074.6
67.5°	1164.4	1160.8	1172.2	1206.7	1252.7	1341.3	1461.6	1652.5	1924.6	2362.1	2912.1
70°	946.5	938.3	947.3	962.9	980.5	1002.3	1076.2	1227.7	1457.9	1881.9	2346.1
72.5°	644.8	640.7	657.5	681.4	728.5	750.7	779.8	804.5	885.7	1186.2	1636.4
75°	490.5	493.0	514.3	553.7	614.5	680.1	744.1	767.5	740.5	717.1	928.9
77.5°	275.0	289.4	315.2	365.3	429.7	522.5	634.1	757.3	818.8	803.6	751.5
80°	113.3	111.2	124.0	151.4	173.6	249.5	381.7	536.0	709.3	818.8	801.6
82.5°	31.6	32.4	41.9	53.8	69.4	88.3	137.9	221.6	361.2	561.9	735.5
85°	9.8	9.8	13.6	20.1	23.8	27.5	34.9	57.5	98.1	195.8	396.9
87.5°	2.0	2.0	2.9	5.8	6.2	6.2	7.8	10.7	9.4	8.6	38.6
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):

	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°	100°
0°	677.2	677.2	677.2	677.2	677.2	677.2	677.2	677.2	677.2	677.2	677.2
2.5°	676.8	676.0	676.4	676.8	676.4	676.4	676.0	675.6	676.0	676.0	677.2
5°	676.4	676.0	676.4	676.4	676.4	676.8	676.8	676.8	678.1	678.1	680.1
7.5°	677.2	677.2	678.1	678.1	678.1	678.1	678.5	679.3	681.4	680.9	684.6
10°	678.9	679.7	681.7	682.1	682.1	683.4	684.2	685.9	687.9	688.7	692.0
12.5°	680.9	685.0	688.7	689.5	690.8	692.8	694.1	694.9	698.6	699.8	703.9
15°	683.4	689.2	693.7	695.3	697.0	699.4	701.0	702.2	705.5	707.2	712.1
17.5°	683.8	690.4	695.7	698.2	700.2	703.1	705.5	708.0	711.7	714.2	719.1
20°	683.4	692.0	700.2	703.5	705.5	710.9	714.6	717.8	722.4	724.9	729.8
22.5°	687.9	697.7	708.8	712.9	716.2	723.6	728.5	733.9	739.6	741.2	745.0
25°	698.6	708.8	722.8	728.5	734.3	744.1	751.1	758.9	764.6	765.5	766.7
27.5°	716.6	726.1	742.9	751.5	761.0	774.9	785.2	793.0	801.2	801.2	800.3
30°	753.2	755.2	772.9	784.0	797.9	818.4	833.6	842.2	848.4	848.4	841.4
32.5°	800.3	797.9	813.9	825.8	845.1	873.8	894.4	900.9	907.5	905.5	893.5
35°	868.5	861.5	870.5	888.6	910.4	949.7	971.1	985.9	990.0	984.2	965.3
37.5°	954.3	953.5	958.0	978.1	1002.3	1053.2	1075.0	1084.4	1081.1	1070.8	1037.6
40°	1045.0	1042.5	1039.7	1053.2	1080.3	1141.4	1180.0	1184.9	1180.4	1165.3	1123.4
42.5°	1166.0	1166.0	1152.5	1156.2	1178.8	1247.3	1292.9	1308.5	1308.9	1286.8	1230.9
45°	1332.7	1331.0	1307.3	1301.5	1318.7	1386.1	1444.7	1453.4	1453.4	1424.2	1363.1
47.5°	1533.0	1531.0	1507.6	1487.5	1490.7	1563.4	1612.2	1625.3	1613.9	1592.1	1519.4
50°	1758.7	1755.1	1731.2	1712.3	1704.2	1777.6	1819.1	1825.3	1808.4	1782.5	1703.8
52.5°	1987.8	1998.8	1984.9	1974.7	1977.5	2025.1	2067.8	2038.7	2030.0	2002.1	1922.9
55°	2226.2	2260.3	2291.1	2282.0	2292.7	2339.1	2347.3	2308.7	2293.1	2273.0	2184.8
57.5°	2466.4	2565.7	2666.6	2695.0	2721.2	2787.7	2778.3	2715.1	2727.0	2756.9	2657.6
60°	2801.7	3088.6	3344.7	3391.9	3473.6	3530.2	3542.9	3530.6	3586.0	3570.4	3482.6
62.5°	3316.8	3794.9	4151.2	4239.8	4322.0	4319.1	4276.0	4231.7	4286.2	4286.2	4056.8
65°	3684.5	4227.1	4608.4	4681.9	4678.6	4579.7	4477.9	4389.2	4381.5	4320.7	3985.4
66°	3701.8	4260.4	4633.9	4697.9	4673.3	4514.0	4392.1	4279.7	4231.7	4147.1	3803.6
67.5°	3546.7	4166.4	4551.0	4606.8	4541.9	4313.8	4145.9	3995.2	3925.4	3783.1	3459.6
70°	2909.2	3580.7	4140.1	4254.2	4180.7	3891.8	3662.0	3458.4	3325.0	3119.3	2886.2
72.5°	2123.6	2643.7	3249.5	3435.0	3423.5	3157.6	2972.4	2786.1	2610.8	2423.6	2253.3
75°	1380.3	1719.8	2057.5	2165.9	2113.8	1959.8	1827.3	1718.5	1552.3	1422.2	1390.6
77.5°	788.0	962.9	910.8	897.2	832.0	671.5	446.6	313.1	282.8	353.0	387.1
80°	749.9	679.7	556.6	502.0	461.3	314.4	165.0	116.2	101.8	104.3	112.1
82.5°	845.5	881.2	720.7	602.1	524.2	382.6	208.9	97.3	71.0	84.1	94.4
85°	633.7	892.3	884.5	749.5	614.8	440.8	247.1	74.3	42.7	59.1	77.2
87.5°	128.5	211.4	203.6	179.0	152.3	106.3	41.5	23.4	21.4	29.2	44.3
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°	677.2	677.2	677.2	677.2	677.2	677.2	677.2	677.2	677.2	677.2	677.2
2.5°	678.1	678.1	678.9	680.1	680.5	680.5	681.4	680.5	682.1	682.6	683.0
5°	681.7	683.0	683.8	685.9	687.1	687.9	689.2	688.3	689.9	690.4	691.2
7.5°	685.9	687.9	689.5	690.4	692.0	692.0	692.4	691.6	691.2	689.9	689.5
10°	693.2	694.4	696.5	695.7	694.9	692.0	689.5	685.9	683.8	680.1	678.1
12.5°	705.1	706.0	706.0	702.2	697.0	690.4	684.2	678.1	673.1	669.0	666.5
15°	713.3	715.0	712.9	707.6	699.8	690.8	682.6	674.3	667.8	662.5	659.2
17.5°	719.5	719.1	715.4	708.0	700.6	692.8	685.4	676.8	668.6	660.8	655.9
20°	728.9	724.9	718.3	710.5	702.7	696.1	690.4	682.1	673.6	662.9	655.5
22.5°	741.7	734.3	724.9	716.6	709.3	703.1	696.5	689.5	680.5	668.6	658.3
25°	759.7	747.0	736.3	728.1	721.6	714.6	707.2	698.2	689.2	676.8	664.5
27.5°	787.2	768.4	754.8	747.4	741.2	731.8	722.4	711.7	700.2	687.5	673.6
30°	820.5	797.9	782.3	775.7	768.4	757.7	747.4	732.7	716.6	701.5	684.2
32.5°	859.4	836.5	820.9	815.9	804.1	791.8	777.4	757.7	736.7	714.2	693.7
35°	918.5	889.4	875.0	863.6	847.1	832.4	808.1	782.3	752.3	722.4	697.0
37.5°	979.3	949.7	935.0	919.0	897.7	870.5	838.1	801.2	761.4	724.4	693.2
40°	1060.6	1028.6	1009.7	985.1	950.6	908.3	860.3	809.8	761.4	715.4	677.6
42.5°	1155.4	1125.8	1096.7	1056.1	1000.7	939.1	871.8	806.9	748.3	695.3	655.5
45°	1286.8	1236.2	1189.9	1124.6	1043.8	957.2	873.0	793.4	725.6	667.0	622.6
47.5°	1434.5	1369.3	1287.1	1184.9	1074.5	964.1	861.1	767.9	689.9	626.3	577.9
50°	1604.8	1504.7	1378.7	1232.9	1090.1	954.7	832.8	725.3	640.7	567.7	515.9
52.5°	1799.8	1647.1	1461.6	1267.0	1087.7	926.0	786.0	669.0	574.6	497.0	446.2
55°	2016.1	1802.3	1540.8	1288.8	1065.5	870.1	712.5	589.8	492.5	416.2	371.5
57.5°	2397.4	2074.4	1691.8	1317.9	1019.1	785.6	619.4	489.7	401.8	337.0	294.3
60°	3105.8	2550.1	1977.9	1386.5	949.4	679.7	502.0	384.2	310.7	263.5	231.9
62.5°	3544.1	2885.0	2117.5	1376.6	836.1	534.8	372.7	284.8	227.0	195.8	176.1
65°	3440.3	2753.6	1947.1	1182.5	650.6	379.3	246.7	186.4	155.9	140.0	130.5
66°	3299.2	2606.7	1803.1	1058.9	566.8	316.9	203.6	156.4	134.2	122.3	117.4
67.5°	3003.2	2338.3	1555.1	848.0	424.8	236.0	150.2	122.7	109.2	103.0	99.7
70°	2513.5	1883.9	1100.0	500.8	230.3	128.0	96.1	85.4	82.1	80.0	78.8
72.5°	1943.5	1363.9	642.8	246.2	116.2	82.9	73.1	68.5	67.3	67.3	67.7
75°	1224.4	784.0	287.7	118.6	78.8	66.9	62.4	60.4	60.7	61.1	60.7
77.5°	406.7	270.5	119.8	84.1	68.5	60.7	57.1	56.2	57.1	57.5	57.5
80°	117.0	102.2	86.6	74.3	62.8	56.6	53.3	52.9	55.0	55.4	54.6
82.5°	89.9	84.1	78.4	71.8	60.4	53.3	52.1	52.6	53.8	52.9	49.3
85°	82.5	81.7	58.7	58.3	52.6	50.9	49.7	50.1	48.8	44.3	40.2
87.5°	46.4	43.1	33.2	33.7	39.0	40.2	33.2	35.3	32.8	28.7	26.3
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°	677.2	677.2	677.2	677.2	677.2
2.5°	683.8	683.4	683.4	684.6	683.0
5°	691.6	691.2	691.2	692.4	691.2
7.5°	687.9	686.6	685.9	685.4	685.4
10°	675.6	674.3	671.9	671.1	670.3
12.5°	662.9	661.6	658.7	658.7	658.0
15°	655.1	653.4	651.4	650.2	649.3
17.5°	650.9	648.5	646.0	644.8	644.0
20°	649.3	646.0	643.1	641.1	641.1
22.5°	649.7	645.6	642.4	639.9	639.1
25°	653.8	647.7	643.6	641.1	640.3
27.5°	659.6	652.2	646.9	643.6	642.4
30°	667.4	657.1	649.7	645.6	644.0
32.5°	672.7	658.3	648.9	643.1	641.1
35°	672.3	653.8	642.4	635.0	632.5
37.5°	664.9	643.1	628.0	619.0	614.8
40°	648.5	623.5	607.4	598.9	593.9
42.5°	624.7	597.6	583.3	573.8	568.4
45°	587.3	560.6	543.0	535.6	528.7
47.5°	535.6	508.6	493.4	482.7	478.1
50°	474.9	447.8	431.8	423.2	419.0
52.5°	408.4	382.6	371.0	362.8	357.1
55°	339.4	315.7	310.7	301.7	296.3
57.5°	274.6	260.6	256.1	247.1	242.6
60°	214.7	210.1	205.2	199.5	197.0
62.5°	166.2	162.1	160.9	157.2	156.8
65°	126.8	127.3	126.4	125.6	124.8
66°	115.3	114.9	115.3	114.5	114.1
67.5°	98.1	99.7	101.0	100.6	100.6
70°	79.6	80.9	82.5	82.1	82.1
72.5°	68.2	70.2	71.0	70.6	70.6
75°	61.6	63.6	63.6	62.8	62.4
77.5°	57.5	58.3	57.5	56.6	55.8
80°	53.3	52.6	51.3	50.1	49.3
82.5°	46.4	44.3	43.1	41.0	41.0
85°	37.4	35.7	32.8	30.8	28.7
87.5°	24.2	23.4	21.4	16.0	12.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)