

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: P165238

Luminaire Tested: **VST-E02-LED-E-U-SL3-HSS-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165238
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33727)
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-SL3-HSS-7050
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (42) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3515.6 lumens
Efficiency: N/A
Efficacy: 67.5 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 1' x H: 0.1')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B0 - U0 - G1

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



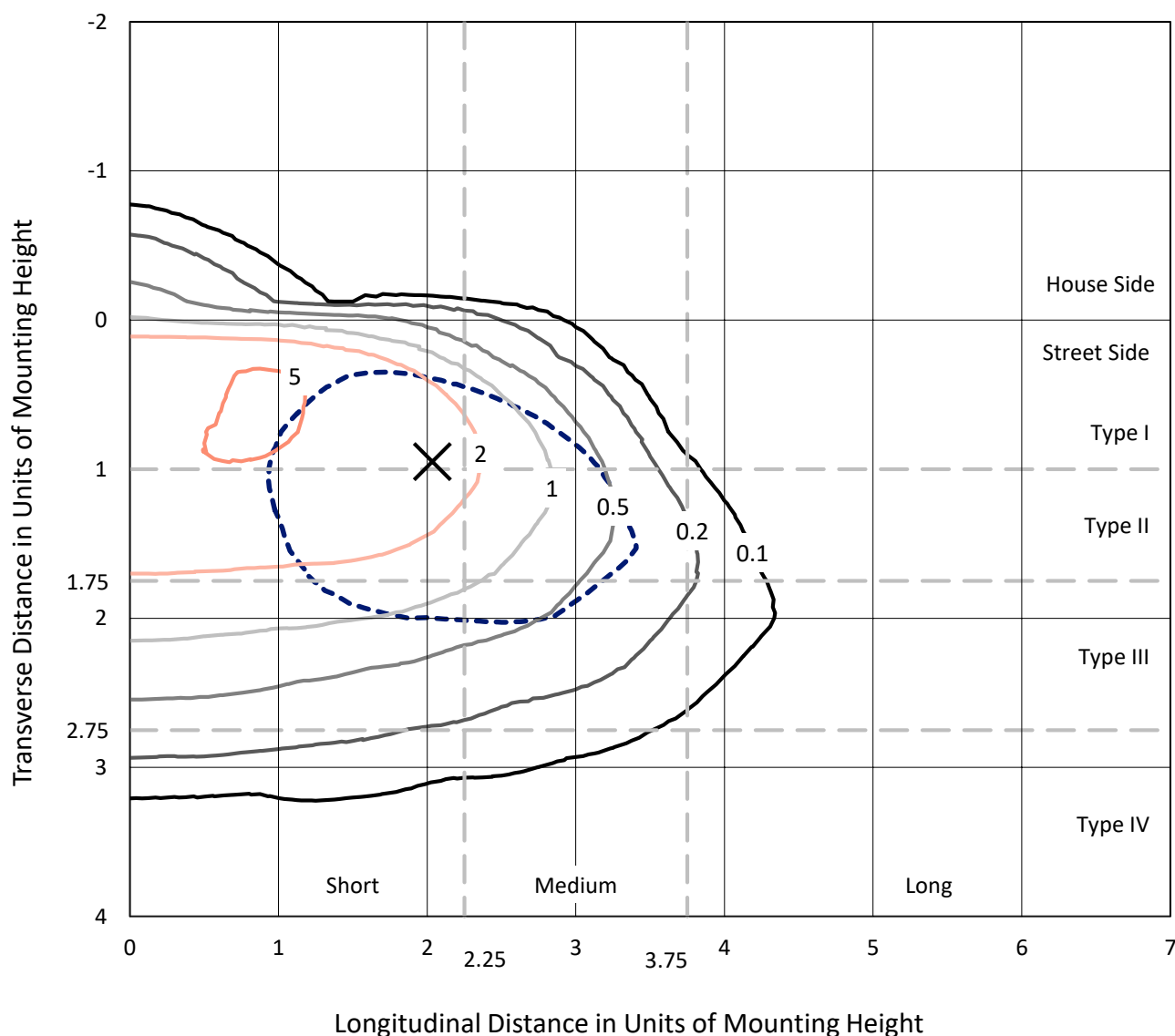
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

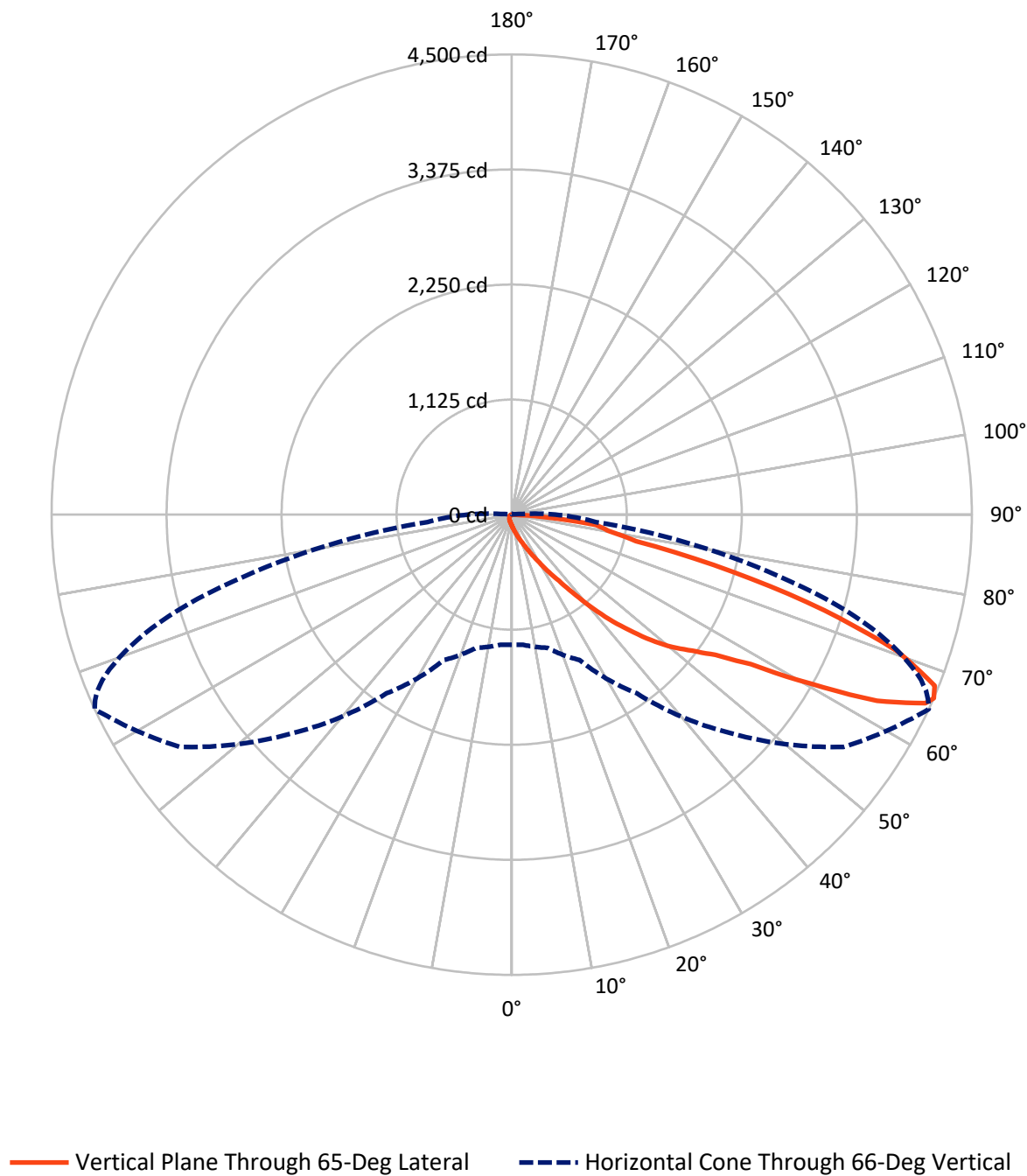


Based on 10 foot mounting height. Maximum calculated value = 5.8 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	76.2	0.0	76.2
	% Fixture	2.2	0.0	2.2
Street Side	Lumens	3439.5	0.0	3439.5
	% Fixture	97.8	0.0	97.8
Total	Lumens	3515.6	0.0	3515.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	11.9	0.3
10°-20°	50.4	1.4
20°-30°	108.6	3.1
30°-40°	232.0	6.6
40°-50°	513.1	14.6
50°-60°	869.5	24.7
60°-70°	1160.3	33.0
70°-80°	511.1	14.5
80°-90°	58.9	1.7
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°	3515.6	100.0
0°-180°	3515.6	100.0

Coefficient of Utilization



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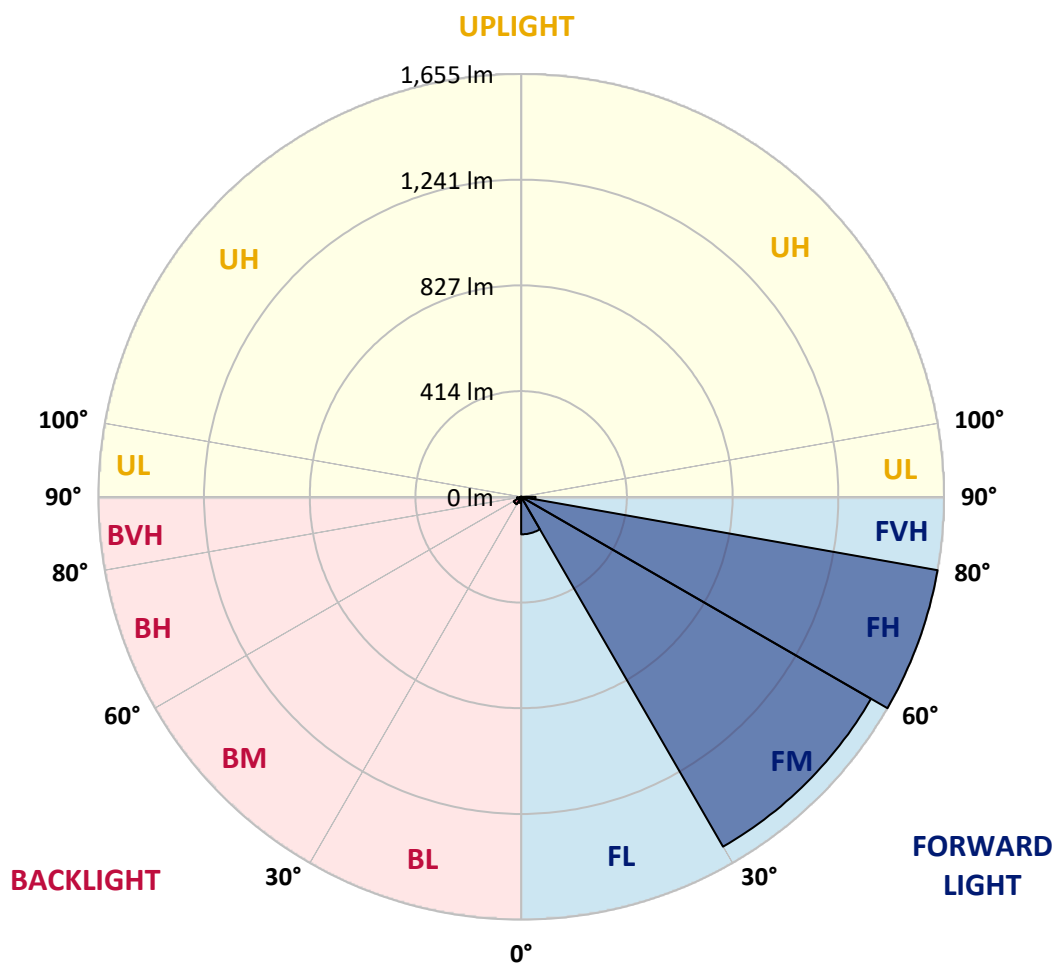
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	146.8	4.2			
FM	(30°-60°)	1581.1	45.0			
FH	(60°-80°)	1655.0	47.1			G1/1800
FVH	(80°-90°)	56.5	1.6			G1/100
BL	(0°-30°)	24.0	0.7	B0/110		
BM	(30°-60°)	33.5	1.0	B0/220		
BH	(60°-80°)	16.3	0.5	B0/110		G0/110
BVH	(80°-90°)	2.4	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	67°	68°
0°	106.1	106.1	106.1	106.1	106.1	106.1	106.1	106.1	106.1	106.1	106.1
2.5°	133.9	133.1	130.4	130.4	126.4	123.7	120.3	116.9	116.9	116.2	115.6
5°	177.1	173.0	172.3	164.9	158.8	150.1	142.0	131.2	129.8	128.4	127.7
7.5°	225.1	224.4	218.3	209.5	197.4	181.1	164.9	147.4	144.7	143.3	140.6
10°	287.3	283.9	275.8	260.9	242.6	221.0	194.7	166.9	163.6	160.9	159.5
12.5°	346.7	340.7	335.9	317.0	294.0	262.3	230.5	190.6	187.9	184.6	179.1
15°	402.2	396.7	388.6	372.4	346.7	306.8	269.7	221.0	214.3	209.5	205.4
17.5°	445.4	442.0	432.5	414.4	386.6	351.5	306.8	252.1	246.7	240.6	233.2
20°	486.7	481.9	467.0	442.0	412.3	385.3	350.8	292.6	285.2	277.8	269.7
22.5°	525.8	521.1	496.8	455.5	423.8	412.3	400.1	338.6	327.1	321.1	312.9
25°	580.6	570.5	532.6	467.0	424.5	433.3	454.2	398.1	387.3	378.5	365.6
27.5°	654.3	640.7	581.3	484.0	427.1	456.2	516.4	470.4	458.9	448.8	434.6
30°	737.4	728.6	657.7	524.5	446.8	490.0	586.0	562.3	548.8	536.6	519.8
32.5°	821.2	809.0	738.8	601.6	499.4	555.6	673.2	669.1	651.6	640.1	621.8
35°	894.9	888.8	836.8	727.9	619.8	670.5	789.4	794.2	778.6	766.4	746.2
37.5°	944.9	944.9	934.8	863.8	811.1	848.9	960.4	961.1	945.6	917.9	907.7
40°	970.6	978.0	1014.5	1028.0	1025.3	1074.0	1184.9	1172.7	1159.8	1145.6	1111.9
42.5°	1023.3	1030.0	1107.8	1201.1	1261.9	1326.1	1402.5	1398.4	1382.9	1357.2	1326.1
45°	1112.5	1121.3	1213.9	1361.9	1486.9	1578.2	1626.8	1607.9	1592.4	1568.1	1551.8
47.5°	1226.1	1243.0	1347.7	1530.9	1681.6	1832.3	1883.0	1833.1	1819.6	1800.5	1774.2
50°	1347.1	1363.3	1474.8	1684.3	1854.7	2034.4	2119.0	2034.4	2014.9	2008.7	1979.0
52.5°	1451.8	1465.4	1572.8	1802.6	1987.1	2198.0	2321.0	2209.5	2195.3	2175.0	2153.4
55°	1514.0	1524.8	1625.5	1859.4	2077.0	2345.3	2516.4	2418.4	2397.4	2389.3	2358.2
57.5°	1535.0	1545.8	1636.4	1866.8	2125.7	2479.9	2753.6	2757.0	2732.0	2702.9	2693.5
60°	1535.0	1547.1	1623.5	1848.6	2173.0	2623.1	3069.9	3351.8	3297.7	3292.3	3257.8
62.5°	1471.4	1482.9	1559.9	1792.5	2236.6	2816.5	3510.6	4008.1	3992.5	3957.4	3900.6
65°	1333.5	1340.3	1416.0	1649.2	2212.2	2994.2	3892.4	4444.7	4419.7	4350.7	4277.8
66°	1271.3	1276.7	1347.7	1567.4	2132.5	3018.5	3960.1	4499.5	4458.2	4400.0	4317.6
67.5°	1181.5	1190.9	1240.9	1415.3	1941.2	2934.1	3917.5	4460.9	4425.1	4354.8	4272.4
70°	788.8	782.0	958.4	1086.2	1478.9	2390.6	3514.7	4005.4	4006.0	3972.9	3939.8
72.5°	374.5	378.5	429.8	668.5	967.9	1597.1	2797.6	3197.0	3242.9	3183.5	3142.2
75°	269.0	275.1	306.2	408.9	577.2	958.4	1813.4	2235.8	2237.2	2131.7	2037.8
77.5°	78.4	81.8	114.9	252.1	432.5	646.8	1041.5	1243.0	1213.9	1138.2	1067.2
80°	32.4	32.4	33.8	80.5	173.7	439.3	728.6	957.1	953.7	924.7	882.7
82.5°	12.1	12.8	16.2	33.1	41.2	108.2	485.9	830.7	828.7	787.4	757.7
85°	1.4	1.4	4.1	14.2	15.5	20.3	97.3	366.3	364.3	366.3	321.1
87.5°	0.0	0.0	0.7	1.4	2.0	2.7	4.1	14.2	15.5	14.9	13.5
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):

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	106.1	106.1	106.1	106.1	106.1	106.1	106.1	106.1	106.1	106.1	106.1
2.5°	115.6	114.2	114.2	113.6	113.6	113.6	112.9	112.2	112.2	111.5	110.9
5°	126.4	125.0	124.4	123.0	122.3	121.7	120.3	119.6	118.3	117.6	116.9
7.5°	139.2	136.5	135.8	133.9	131.8	130.4	129.1	127.1	125.7	123.0	122.3
10°	155.5	152.0	149.3	146.6	144.7	141.3	139.2	136.5	133.9	131.8	129.8
12.5°	176.4	171.7	167.6	164.9	160.2	156.1	152.0	150.1	144.7	142.0	138.5
15°	199.4	194.0	189.2	183.8	180.5	173.7	168.3	162.2	159.5	154.8	149.3
17.5°	229.1	220.3	212.9	207.5	200.8	194.0	187.9	181.8	173.7	168.3	161.6
20°	260.9	253.4	243.3	233.9	225.7	217.7	208.9	200.8	193.3	184.6	176.4
22.5°	301.4	290.6	278.5	269.0	258.2	249.4	237.2	226.4	214.3	202.7	193.3
25°	352.8	338.6	327.1	313.6	300.8	287.3	272.3	258.8	243.3	232.5	216.3
27.5°	416.3	402.8	387.3	369.7	356.9	336.6	317.0	300.1	281.9	265.0	246.7
30°	497.5	477.9	461.6	444.8	419.0	399.4	376.4	353.5	328.5	311.6	283.9
32.5°	594.8	573.8	549.5	525.2	501.5	473.8	445.4	417.0	389.3	358.3	329.8
35°	713.8	688.7	661.0	634.7	598.2	568.4	532.6	493.4	462.3	426.5	390.7
37.5°	871.3	830.0	805.7	778.0	728.6	688.1	648.2	609.0	554.2	516.4	465.7
40°	1068.6	1044.2	1004.4	959.8	915.2	861.8	807.7	755.6	692.1	639.4	580.6
42.5°	1300.4	1264.6	1224.1	1159.8	1114.6	1051.7	990.2	921.2	843.5	775.9	707.0
45°	1518.1	1475.5	1444.4	1380.2	1332.8	1258.5	1184.2	1111.2	1021.3	934.1	854.3
47.5°	1753.3	1718.1	1666.7	1614.7	1566.7	1482.9	1402.5	1313.9	1219.3	1115.9	1012.5
50°	1960.1	1932.4	1897.2	1834.4	1781.0	1710.7	1616.1	1519.4	1399.8	1297.0	1179.4
52.5°	2135.8	2114.2	2064.8	2020.3	1972.3	1906.0	1821.5	1729.0	1599.8	1486.9	1353.1
55°	2343.4	2327.8	2284.5	2256.8	2214.2	2150.7	2071.6	1985.8	1849.3	1726.3	1574.8
57.5°	2683.3	2671.1	2633.3	2621.8	2579.9	2524.4	2427.1	2335.2	2175.7	2023.0	1849.9
60°	3246.3	3222.0	3166.6	3138.2	3049.6	2975.3	2848.9	2722.5	2529.9	2335.2	2127.1
62.5°	3849.2	3781.0	3675.5	3584.9	3459.2	3330.1	3161.2	2967.8	2742.1	2510.9	2271.7
65°	4174.3	4058.1	3925.0	3781.0	3618.1	3428.2	3215.2	2983.4	2740.7	2496.8	2243.9
66°	4211.5	4080.4	3939.1	3778.9	3597.8	3395.7	3179.4	2936.1	2684.0	2446.1	2193.3
67.5°	4164.9	4027.7	3878.3	3700.6	3504.5	3295.0	3067.9	2815.1	2572.4	2331.1	2085.1
70°	3838.4	3701.9	3568.7	3381.5	3172.6	2961.8	2746.9	2464.3	2234.5	2012.8	1793.8
72.5°	3065.2	2972.6	2840.8	2680.6	2477.2	2229.8	2050.7	1797.9	1598.5	1383.5	1213.9
75°	1915.5	1785.1	1622.2	1418.0	1262.6	1061.8	957.1	765.1	651.6	552.2	456.2
77.5°	979.4	881.4	767.2	652.3	542.1	432.5	334.6	236.6	159.5	110.9	82.4
80°	809.0	722.5	627.9	523.1	425.8	330.5	238.0	162.2	103.4	67.6	52.7
82.5°	668.5	595.4	511.0	413.6	329.2	259.6	180.5	117.6	73.0	47.3	37.2
85°	284.6	258.2	199.4	158.2	118.9	87.9	61.5	41.2	29.0	23.6	21.7
87.5°	12.1	13.5	12.8	10.1	7.4	7.4	6.8	5.4	5.4	5.4	5.4
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):

	80°	81°	82°	83°	84°	85°	95°	105°	115°	125°	135°
0°	106.1	106.1	106.1	106.1	106.1	106.1	106.1	106.1	106.1	106.1	106.1
2.5°	110.9	110.2	109.5	109.5	108.8	108.2	104.1	100.7	96.7	94.0	91.3
5°	115.6	114.9	113.6	112.9	111.5	110.9	102.1	94.6	88.6	83.8	80.5
7.5°	120.3	119.6	117.6	115.6	114.9	113.6	99.4	89.9	81.8	76.4	73.0
10°	126.4	124.4	122.3	119.6	117.6	115.6	96.7	84.5	75.7	71.0	67.6
12.5°	135.2	131.8	128.4	125.0	122.3	118.9	95.3	79.7	71.0	65.5	62.2
15°	145.3	140.6	136.5	132.5	127.7	124.4	92.6	75.7	66.9	61.5	57.5
17.5°	154.8	149.3	143.3	137.2	132.5	127.7	89.9	71.6	62.8	57.5	53.4
20°	168.3	160.2	152.8	145.3	138.5	132.5	85.8	67.6	59.5	53.4	49.3
22.5°	183.2	173.7	164.3	154.1	145.3	137.2	82.4	64.2	56.1	50.0	45.3
25°	202.1	190.6	177.8	164.9	154.8	144.0	79.1	60.8	52.7	46.6	41.9
27.5°	228.5	212.2	198.1	181.8	166.3	154.1	76.4	58.1	49.3	43.3	38.5
30°	264.3	240.6	218.3	200.8	182.5	164.9	73.7	54.8	46.6	39.9	34.5
32.5°	304.1	276.4	250.7	224.4	201.4	181.1	71.0	52.0	43.3	36.5	31.7
35°	353.5	318.4	283.9	253.4	225.7	198.7	68.3	49.3	40.6	33.1	28.4
37.5°	424.5	380.5	335.2	296.0	260.2	224.4	66.2	46.6	37.2	29.8	25.0
40°	521.8	465.1	409.6	356.2	309.5	265.0	63.5	43.9	34.5	27.1	22.3
42.5°	627.2	558.3	485.3	425.2	361.0	304.9	60.8	41.2	31.7	24.4	19.6
45°	758.4	672.5	584.0	502.2	423.8	351.5	58.1	38.5	28.4	21.7	16.9
47.5°	901.7	792.2	692.1	589.4	496.1	409.6	54.8	36.5	25.7	18.9	14.9
50°	1049.0	933.4	807.0	690.1	579.2	467.8	51.4	33.1	23.0	16.9	12.1
52.5°	1207.8	1071.3	942.2	796.9	667.8	544.1	48.0	30.4	20.9	14.9	10.1
55°	1409.9	1257.2	1105.8	942.8	787.4	632.6	44.6	27.1	18.2	12.8	8.1
57.5°	1664.0	1482.9	1297.0	1113.2	924.7	748.9	41.9	23.6	15.5	10.8	6.8
60°	1904.0	1692.5	1467.4	1255.8	1042.9	838.1	37.9	20.9	13.5	8.8	6.8
62.5°	2028.4	1787.0	1544.4	1311.2	1084.1	869.9	33.8	17.6	11.5	7.4	6.1
65°	1997.9	1751.9	1516.7	1281.5	1059.1	849.6	29.8	15.5	10.1	6.8	6.1
66°	1954.0	1710.7	1474.1	1250.4	1038.2	828.0	27.7	14.9	9.5	6.8	5.4
67.5°	1858.0	1622.8	1397.0	1188.9	980.7	786.7	25.0	13.5	8.8	6.1	5.4
70°	1587.0	1373.4	1193.0	1007.8	838.1	663.1	20.3	11.5	7.4	5.4	5.4
72.5°	1050.3	905.0	784.7	675.2	564.4	438.0	16.9	9.5	6.1	5.4	4.7
75°	396.1	358.3	307.6	276.4	241.3	211.6	13.5	6.1	4.7	4.7	4.7
77.5°	70.3	64.9	57.5	52.7	48.7	44.6	10.8	4.1	4.1	4.7	4.7
80°	47.3	43.9	39.9	36.5	33.8	30.4	7.4	3.4	4.1	4.1	4.7
82.5°	33.8	31.7	29.8	27.1	25.0	22.3	4.7	3.4	4.1	4.1	4.1
85°	20.3	18.9	17.6	16.2	14.2	13.5	3.4	3.4	3.4	4.1	4.1
87.5°	5.4	4.7	5.4	5.4	4.1	4.7	2.7	2.7	2.7	3.4	3.4
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):

	145°	155°	165°	175°	180°
0°	106.1	106.1	106.1	106.1	106.1
2.5°	89.9	89.9	88.6	90.6	90.6
5°	77.8	77.8	77.0	77.8	77.8
7.5°	71.0	70.3	70.3	70.3	71.0
10°	64.9	64.2	64.2	64.2	64.2
12.5°	59.5	58.8	58.1	58.8	58.8
15°	54.8	53.4	53.4	53.4	53.4
17.5°	50.7	49.3	48.7	48.7	48.7
20°	46.6	44.6	44.6	44.6	44.6
22.5°	42.5	40.6	40.6	40.6	40.6
25°	38.5	36.5	36.5	36.5	36.5
27.5°	35.2	33.1	33.1	33.1	33.1
30°	31.1	29.8	29.8	30.4	29.8
32.5°	28.4	26.3	26.3	27.1	27.1
35°	25.0	23.6	23.6	23.6	23.6
37.5°	21.7	20.3	20.3	20.3	20.3
40°	18.9	17.6	16.9	17.6	17.6
42.5°	16.2	14.9	14.2	14.2	14.2
45°	14.2	12.1	11.5	12.1	12.1
47.5°	11.5	10.1	10.1	10.8	10.8
50°	8.8	8.8	9.5	10.8	10.8
52.5°	8.1	8.1	9.5	10.8	10.8
55°	7.4	8.1	9.5	10.1	10.8
57.5°	6.8	8.1	9.5	10.1	10.1
60°	6.8	7.4	8.8	10.1	10.1
62.5°	6.1	6.8	8.1	9.5	9.5
65°	6.1	6.8	8.1	9.5	9.5
66°	6.1	6.8	8.1	9.5	9.5
67.5°	6.1	6.8	8.1	9.5	9.5
70°	6.1	6.8	8.1	8.8	8.8
72.5°	5.4	6.1	7.4	8.8	8.8
75°	5.4	6.1	7.4	8.8	8.8
77.5°	5.4	6.1	7.4	8.8	8.8
80°	5.4	6.1	7.4	8.1	8.8
82.5°	4.7	6.1	6.8	8.1	8.1
85°	4.7	5.4	6.8	7.4	8.1
87.5°	4.1	4.7	5.4	6.8	6.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)