

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: P165242

Luminaire Tested: **VST-F02-LED-E-U-SL3-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165242
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-F02-LED-E-U-SL3-HSS
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (14) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2828.4 lumens
Efficiency: N/A
Efficacy: 51.4 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): 55
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



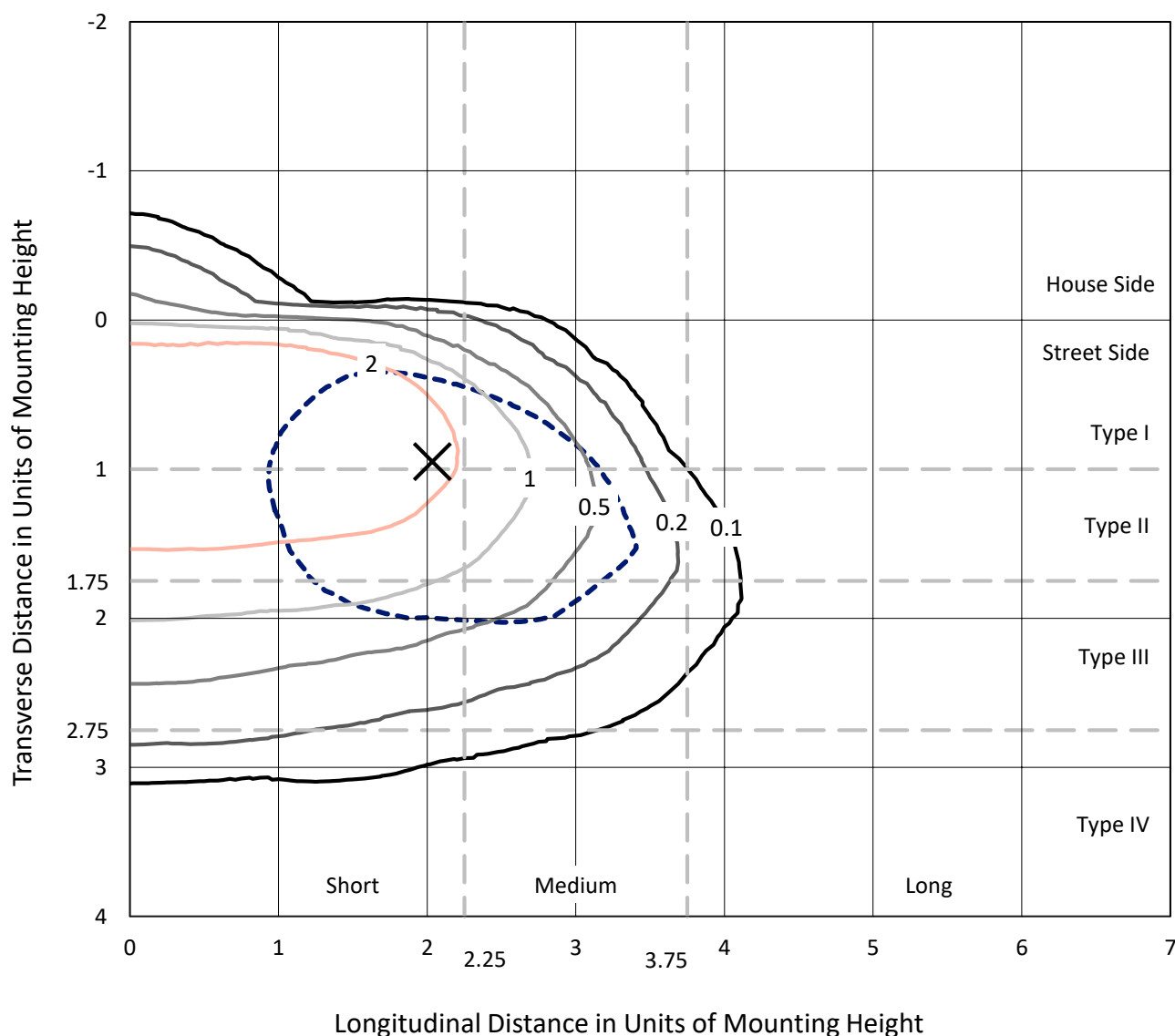
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

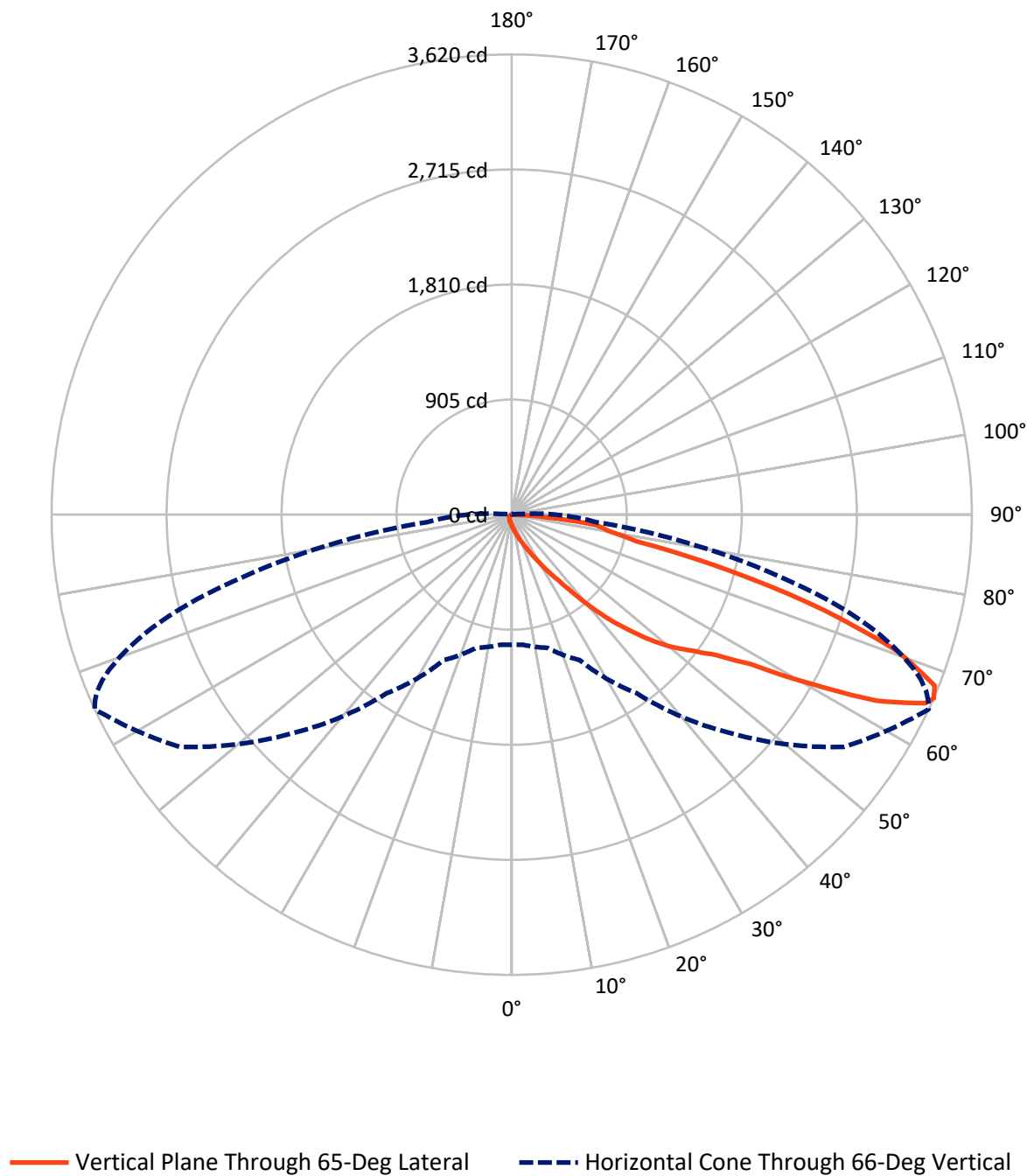


Based on 10 foot mounting height. Maximum calculated value = 4.7 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	61.3	0.0	61.3
	% Fixture	2.2	0.0	2.2
Street Side	Lumens	2767.1	0.0	2767.1
	% Fixture	97.8	0.0	97.8
Total	Lumens	2828.4	0.0	2828.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	9.6	0.3
10°-20°	40.5	1.4
20°-30°	87.4	3.1
30°-40°	186.6	6.6
40°-50°	412.8	14.6
50°-60°	699.5	24.7
60°-70°	933.5	33.0
70°-80°	411.2	14.5
80°-90°	47.4	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°	2828.4	100.0
0°-180°	2828.4	100.0

Coefficient of Utilization



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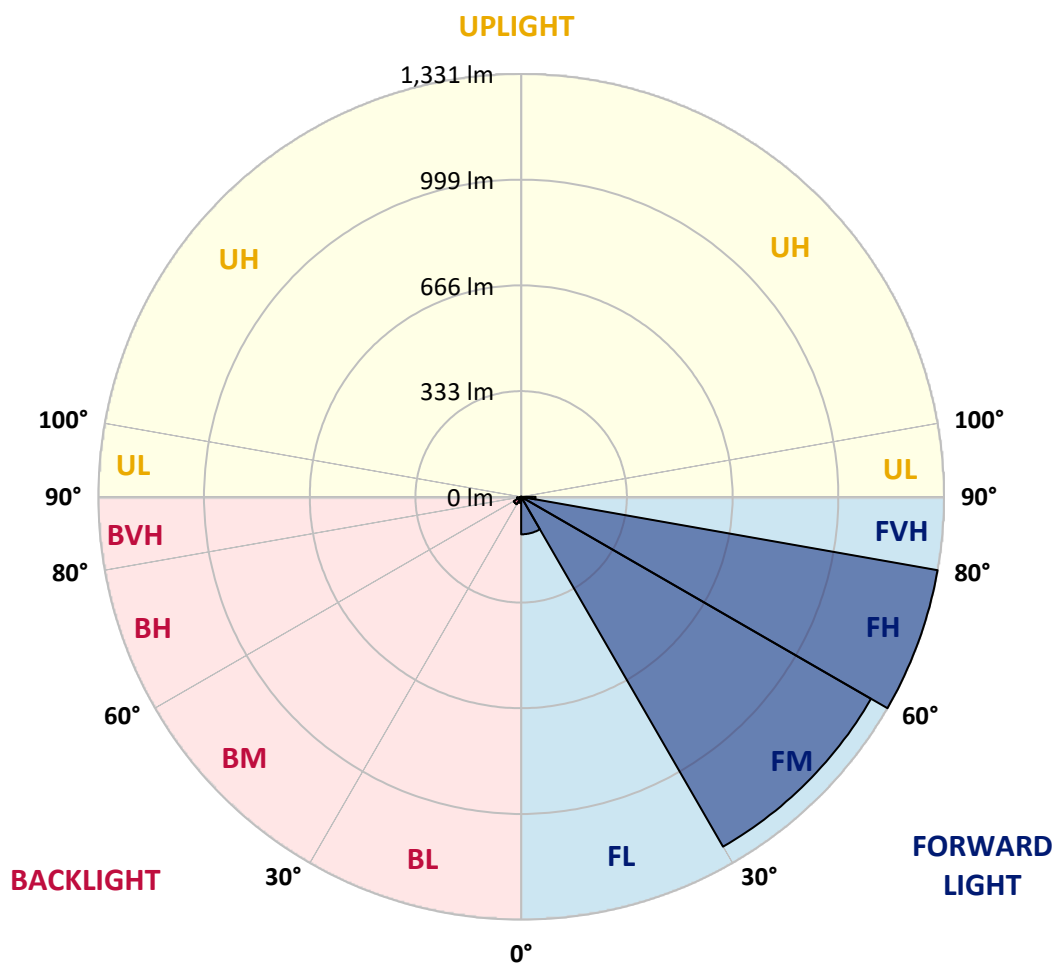
CATALOG NUMBER: VST-F02-LED-E-U-SL3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	118.1	4.2			
FM	(30°-60°)	1272.0	45.0			
FH	(60°-80°)	1331.5	47.1			G1/1800
FVH	(80°-90°)	45.5	1.6			G1/100
BL	(0°-30°)	19.3	0.7	B0/110		
BM	(30°-60°)	26.9	1.0	B0/220		
BH	(60°-80°)	13.2	0.5	B0/110		G0/110
BVH	(80°-90°)	1.9	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°	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4
2.5°	107.7	107.1	104.9	104.9	101.7	99.5	96.8	94.1	94.1	93.5	93.0
5°	142.4	139.2	138.7	132.7	127.8	120.7	114.2	105.5	104.4	103.3	102.8
7.5°	181.1	180.5	175.6	168.6	158.8	145.7	132.7	118.6	116.3	115.3	113.1
10°	231.1	228.4	221.9	209.9	195.2	177.8	156.6	134.3	131.6	129.4	128.3
12.5°	278.9	274.1	270.2	255.0	236.5	211.0	185.4	153.4	151.2	148.4	144.1
15°	323.5	319.2	312.7	299.6	278.9	246.8	217.0	177.8	172.4	168.6	165.3
17.5°	358.3	355.6	348.0	333.4	311.0	282.8	246.8	202.8	198.5	193.6	187.6
20°	391.5	387.7	375.7	355.6	331.7	310.0	282.2	235.4	229.4	223.5	217.0
22.5°	423.1	419.2	399.7	366.5	340.9	331.7	321.9	272.4	263.2	258.3	251.8
25°	467.1	458.9	428.5	375.7	341.5	348.5	365.4	320.3	311.6	304.5	294.2
27.5°	526.4	515.5	467.6	389.3	343.6	367.1	415.4	378.5	369.2	361.1	349.7
30°	593.3	586.2	529.1	422.0	359.5	394.3	471.4	452.4	441.5	431.8	418.2
32.5°	660.7	650.9	594.4	484.0	401.8	447.0	541.6	538.3	524.2	515.0	500.3
35°	719.9	715.1	673.2	585.6	498.7	539.5	635.1	638.9	626.5	616.6	600.3
37.5°	760.2	760.2	752.0	694.9	652.5	683.0	772.7	773.3	760.7	738.4	730.3
40°	780.8	786.8	816.2	827.1	824.9	864.1	953.3	943.4	933.1	921.7	894.5
42.5°	823.3	828.7	891.2	966.3	1015.3	1066.9	1128.3	1125.1	1112.6	1091.9	1066.9
45°	895.1	902.2	976.6	1095.7	1196.3	1269.7	1308.8	1293.7	1281.1	1261.6	1248.5
47.5°	986.4	1000.0	1084.3	1231.7	1352.9	1474.1	1514.9	1474.7	1463.9	1448.6	1427.4
50°	1083.7	1096.8	1186.5	1355.1	1492.1	1636.7	1704.7	1636.7	1621.0	1616.1	1592.2
52.5°	1168.0	1178.9	1265.3	1450.3	1598.7	1768.3	1867.3	1777.6	1766.2	1749.8	1732.4
55°	1218.1	1226.8	1307.8	1495.9	1671.0	1886.9	2024.5	1945.6	1928.8	1922.3	1897.2
57.5°	1234.9	1243.6	1316.5	1501.9	1710.2	1995.1	2215.3	2218.1	2197.9	2174.6	2167.0
60°	1234.9	1244.7	1306.1	1487.2	1748.2	2110.4	2469.8	2696.6	2653.1	2648.7	2621.0
62.5°	1183.8	1193.0	1255.0	1442.1	1799.3	2265.9	2824.4	3224.6	3212.1	3183.8	3138.1
65°	1072.9	1078.3	1139.2	1326.8	1779.8	2408.9	3131.6	3575.8	3555.7	3500.3	3441.5
66°	1022.8	1027.2	1084.3	1261.0	1715.6	2428.5	3185.9	3619.9	3586.7	3539.9	3473.6
67.5°	950.5	958.1	998.3	1138.7	1561.7	2360.5	3151.7	3588.9	3560.1	3503.5	3437.2
70°	634.6	629.2	771.1	873.8	1189.8	1923.4	2827.6	3222.4	3223.0	3196.3	3169.7
72.5°	301.3	304.5	345.8	537.8	778.7	1285.0	2250.7	2572.0	2609.0	2561.2	2528.0
75°	216.4	221.3	246.4	329.0	464.4	771.1	1459.0	1798.8	1799.9	1715.0	1639.5
77.5°	63.1	65.8	92.4	202.8	348.0	520.4	838.0	1000.0	976.6	915.7	858.6
80°	26.1	26.1	27.2	64.7	139.7	353.5	586.2	770.0	767.3	743.9	710.2
82.5°	9.8	10.3	13.0	26.6	33.2	87.0	391.0	668.3	666.7	633.5	609.5
85°	1.1	1.1	3.2	11.4	12.5	16.3	78.3	294.7	293.1	294.7	258.3
87.5°	0.0	0.0	0.5	1.1	1.6	2.2	3.2	11.4	12.5	11.9	10.9
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):

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4
2.5°	93.0	91.9	91.9	91.4	91.4	91.4	90.8	90.3	90.3	89.7	89.2
5°	101.7	100.6	100.1	98.9	98.5	97.9	96.8	96.2	95.2	94.6	94.1
7.5°	112.0	109.8	109.3	107.7	106.0	104.9	103.9	102.2	101.2	98.9	98.5
10°	125.1	122.3	120.2	118.0	116.3	113.6	112.0	109.8	107.7	106.0	104.4
12.5°	141.9	138.1	134.9	132.7	128.9	125.6	122.3	120.7	116.3	114.2	111.5
15°	160.4	156.1	152.3	147.9	145.2	139.7	135.4	130.5	128.3	124.5	120.2
17.5°	184.3	177.2	171.3	167.0	161.5	156.1	151.2	146.3	139.7	135.4	130.0
20°	209.9	203.9	195.7	188.2	181.6	175.1	168.0	161.5	155.5	148.4	141.9
22.5°	242.5	233.8	224.0	216.4	207.7	200.6	190.9	182.2	172.4	163.1	155.5
25°	283.9	272.4	263.2	252.3	242.0	231.1	219.1	208.3	195.7	187.1	174.0
27.5°	335.0	324.1	311.6	297.5	287.1	270.8	255.0	241.4	226.7	213.2	198.5
30°	400.2	384.5	371.4	357.8	337.1	321.4	302.9	284.4	264.2	250.7	228.4
32.5°	478.5	461.6	442.1	422.5	403.5	381.2	358.3	335.5	313.2	288.2	265.4
35°	574.3	554.1	531.8	510.6	481.3	457.3	428.5	397.0	371.9	343.1	314.3
37.5°	700.9	667.7	648.2	625.9	586.2	553.6	521.5	490.0	445.9	415.4	374.6
40°	859.7	840.1	808.1	772.1	736.3	693.3	649.8	607.9	556.9	514.4	467.1
42.5°	1046.2	1017.4	984.8	933.1	896.7	846.1	796.6	741.2	678.6	624.2	568.8
45°	1221.3	1187.1	1162.0	1110.4	1072.3	1012.5	952.7	894.0	821.6	751.5	687.4
47.5°	1410.5	1382.3	1340.9	1299.1	1260.5	1193.0	1128.3	1057.1	980.9	897.8	814.6
50°	1577.0	1554.7	1526.3	1475.8	1432.9	1376.3	1300.1	1222.4	1126.1	1043.5	948.9
52.5°	1718.3	1700.9	1661.2	1625.3	1586.7	1533.4	1465.5	1391.0	1287.1	1196.3	1088.6
55°	1885.3	1872.8	1837.9	1815.7	1781.4	1730.3	1666.7	1597.6	1487.8	1388.8	1267.0
57.5°	2158.8	2149.0	2118.5	2109.3	2075.6	2031.0	1952.7	1878.7	1750.4	1627.5	1488.3
60°	2611.7	2592.2	2547.5	2524.7	2453.5	2393.7	2292.0	2190.3	2035.3	1878.7	1711.3
62.5°	3096.8	3041.9	2957.0	2884.2	2783.0	2679.2	2543.2	2387.7	2206.1	2020.1	1827.6
65°	3358.3	3264.8	3157.7	3041.9	2910.8	2758.0	2586.7	2400.2	2205.0	2008.7	1805.3
66°	3388.3	3282.7	3169.1	3040.3	2894.5	2731.9	2557.9	2362.1	2159.3	1967.9	1764.5
67.5°	3350.8	3240.4	3120.2	2977.2	2819.5	2650.9	2468.2	2264.8	2069.6	1875.5	1677.5
70°	3088.1	2978.2	2871.1	2720.5	2552.5	2382.8	2209.9	1982.6	1797.7	1619.3	1443.2
72.5°	2466.0	2391.5	2285.5	2156.6	1992.9	1793.9	1649.8	1446.5	1286.0	1113.1	976.6
75°	1541.0	1436.1	1305.1	1140.8	1015.7	854.3	770.0	615.5	524.2	444.2	367.1
77.5°	787.9	709.1	617.2	524.8	436.1	348.0	269.2	190.3	128.3	89.2	66.4
80°	650.9	581.3	505.1	420.9	342.6	265.9	191.4	130.5	83.2	54.4	42.4
82.5°	537.8	479.0	411.1	332.8	264.8	208.8	145.2	94.6	58.7	38.1	29.9
85°	229.0	207.7	160.4	127.2	95.7	70.7	49.5	33.2	23.4	19.0	17.4
87.5°	9.8	10.9	10.3	8.2	6.0	6.0	5.5	4.4	4.4	4.4	4.4
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°	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4
2.5°	89.2	88.6	88.1	88.1	87.5	87.0	83.8	81.1	77.8	75.6	73.4
5°	93.0	92.4	91.4	90.8	89.7	89.2	82.1	76.1	71.2	67.4	64.7
7.5°	96.8	96.2	94.6	93.0	92.4	91.4	79.9	72.3	65.8	61.4	58.7
10°	101.7	100.1	98.5	96.2	94.6	93.0	77.8	68.0	60.9	57.1	54.4
12.5°	108.7	106.0	103.3	100.6	98.5	95.7	76.7	64.1	57.1	52.7	50.0
15°	116.9	113.1	109.8	106.6	102.8	100.1	74.5	60.9	53.8	49.5	46.2
17.5°	124.5	120.2	115.3	110.4	106.6	102.8	72.3	57.7	50.6	46.2	43.0
20°	135.4	128.9	122.9	116.9	111.5	106.6	69.1	54.4	47.8	43.0	39.7
22.5°	147.4	139.7	132.2	124.0	116.9	110.4	66.4	51.7	45.1	40.3	36.4
25°	162.6	153.4	143.0	132.7	124.5	115.9	63.7	49.0	42.4	37.5	33.7
27.5°	183.8	170.8	159.3	146.3	133.7	124.0	61.4	46.7	39.7	34.8	31.0
30°	212.6	193.6	175.6	161.5	146.8	132.7	59.3	44.0	37.5	32.1	27.7
32.5°	244.7	222.4	201.7	180.5	162.1	145.7	57.1	41.9	34.8	29.3	25.6
35°	284.4	256.1	228.4	203.9	181.6	159.8	54.9	39.7	32.6	26.6	22.9
37.5°	341.5	306.1	269.7	238.2	209.3	180.5	53.3	37.5	29.9	23.9	20.1
40°	419.8	374.1	329.5	286.6	249.1	213.2	51.1	35.3	27.7	21.8	17.9
42.5°	504.6	449.2	390.4	342.1	290.4	245.2	49.0	33.2	25.6	19.6	15.8
45°	610.1	541.0	469.8	404.0	340.9	282.8	46.7	31.0	22.9	17.4	13.6
47.5°	725.4	637.3	556.9	474.2	399.1	329.5	44.0	29.3	20.7	15.2	11.9
50°	844.0	751.0	649.3	555.2	466.0	376.3	41.3	26.6	18.5	13.6	9.8
52.5°	971.7	861.9	758.0	641.1	537.2	437.7	38.6	24.5	16.9	11.9	8.2
55°	1134.3	1011.4	889.6	758.6	633.5	509.0	35.9	21.8	14.7	10.3	6.5
57.5°	1338.8	1193.0	1043.5	895.6	743.9	602.5	33.7	19.0	12.5	8.7	5.5
60°	1531.8	1361.6	1180.6	1010.3	839.0	674.3	30.4	16.9	10.9	7.1	5.5
62.5°	1631.9	1437.7	1242.5	1054.9	872.2	699.8	27.2	14.2	9.2	6.0	4.9
65°	1607.4	1409.5	1220.2	1031.0	852.1	683.5	23.9	12.5	8.2	5.5	4.9
66°	1572.1	1376.3	1186.0	1006.0	835.3	666.1	22.3	11.9	7.6	5.5	4.4
67.5°	1494.8	1305.6	1124.0	956.5	789.0	632.9	20.1	10.9	7.1	4.9	4.4
70°	1276.8	1105.0	959.8	810.8	674.3	533.5	16.3	9.2	6.0	4.4	4.4
72.5°	845.0	728.1	631.3	543.2	454.0	352.4	13.6	7.6	4.9	4.4	3.8
75°	318.7	288.2	247.4	222.4	194.2	170.2	10.9	4.9	3.8	3.8	3.8
77.5°	56.6	52.2	46.2	42.4	39.2	35.9	8.7	3.2	3.2	3.8	3.8
80°	38.1	35.3	32.1	29.3	27.2	24.5	6.0	2.7	3.2	3.2	3.8
82.5°	27.2	25.6	23.9	21.8	20.1	17.9	3.8	2.7	3.2	3.2	3.2
85°	16.3	15.2	14.2	13.0	11.4	10.9	2.7	2.7	2.7	3.2	3.2
87.5°	4.4	3.8	4.4	4.4	3.2	3.8	2.2	2.2	2.2	2.7	2.7
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):

	145°	155°	165°	175°	180°
0°	85.4	85.4	85.4	85.4	85.4
2.5°	72.3	72.3	71.2	72.9	72.9
5°	62.5	62.5	62.0	62.5	62.5
7.5°	57.1	56.6	56.6	56.6	57.1
10°	52.2	51.7	51.7	51.7	51.7
12.5°	47.8	47.3	46.7	47.3	47.3
15°	44.0	43.0	43.0	43.0	43.0
17.5°	40.8	39.7	39.2	39.2	39.2
20°	37.5	35.9	35.9	35.9	35.9
22.5°	34.3	32.6	32.6	32.6	32.6
25°	31.0	29.3	29.3	29.3	29.3
27.5°	28.3	26.6	26.6	26.6	26.6
30°	25.0	23.9	23.9	24.5	23.9
32.5°	22.9	21.2	21.2	21.8	21.8
35°	20.1	19.0	19.0	19.0	19.0
37.5°	17.4	16.3	16.3	16.3	16.3
40°	15.2	14.2	13.6	14.2	14.2
42.5°	13.0	11.9	11.4	11.4	11.4
45°	11.4	9.8	9.2	9.8	9.8
47.5°	9.2	8.2	8.2	8.7	8.7
50°	7.1	7.1	7.6	8.7	8.7
52.5°	6.5	6.5	7.6	8.7	8.7
55°	6.0	6.5	7.6	8.2	8.7
57.5°	5.5	6.5	7.6	8.2	8.2
60°	5.5	6.0	7.1	8.2	8.2
62.5°	4.9	5.5	6.5	7.6	7.6
65°	4.9	5.5	6.5	7.6	7.6
66°	4.9	5.5	6.5	7.6	7.6
67.5°	4.9	5.5	6.5	7.6	7.6
70°	4.9	5.5	6.5	7.1	7.1
72.5°	4.4	4.9	6.0	7.1	7.1
75°	4.4	4.9	6.0	7.1	7.1
77.5°	4.4	4.9	6.0	7.1	7.1
80°	4.4	4.9	6.0	6.5	7.1
82.5°	3.8	4.9	5.5	6.5	6.5
85°	3.8	4.4	5.5	6.0	6.5
87.5°	3.2	3.8	4.4	5.5	5.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)