

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: P165472

Luminaire Tested: **VST-F03-LED-E-U-SL4-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165472
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33728)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-F03-LED-E-U-SL4-HSS
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (21) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4979.1 lumens
Efficiency: N/A
Efficacy: 63.6 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 1' x H: 0.1')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B0 - U0 - G2

Input Watts (W): 78.3
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

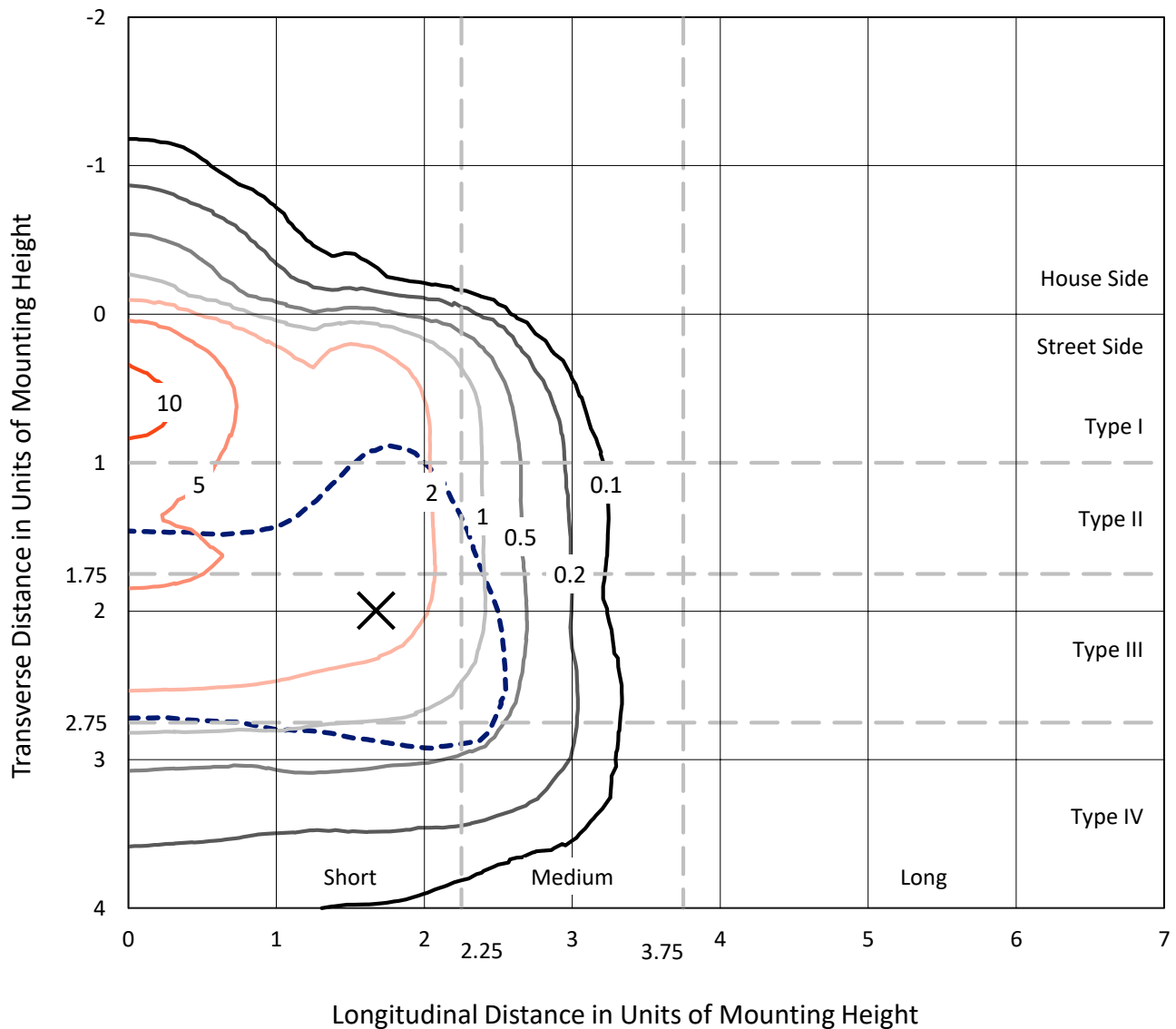


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

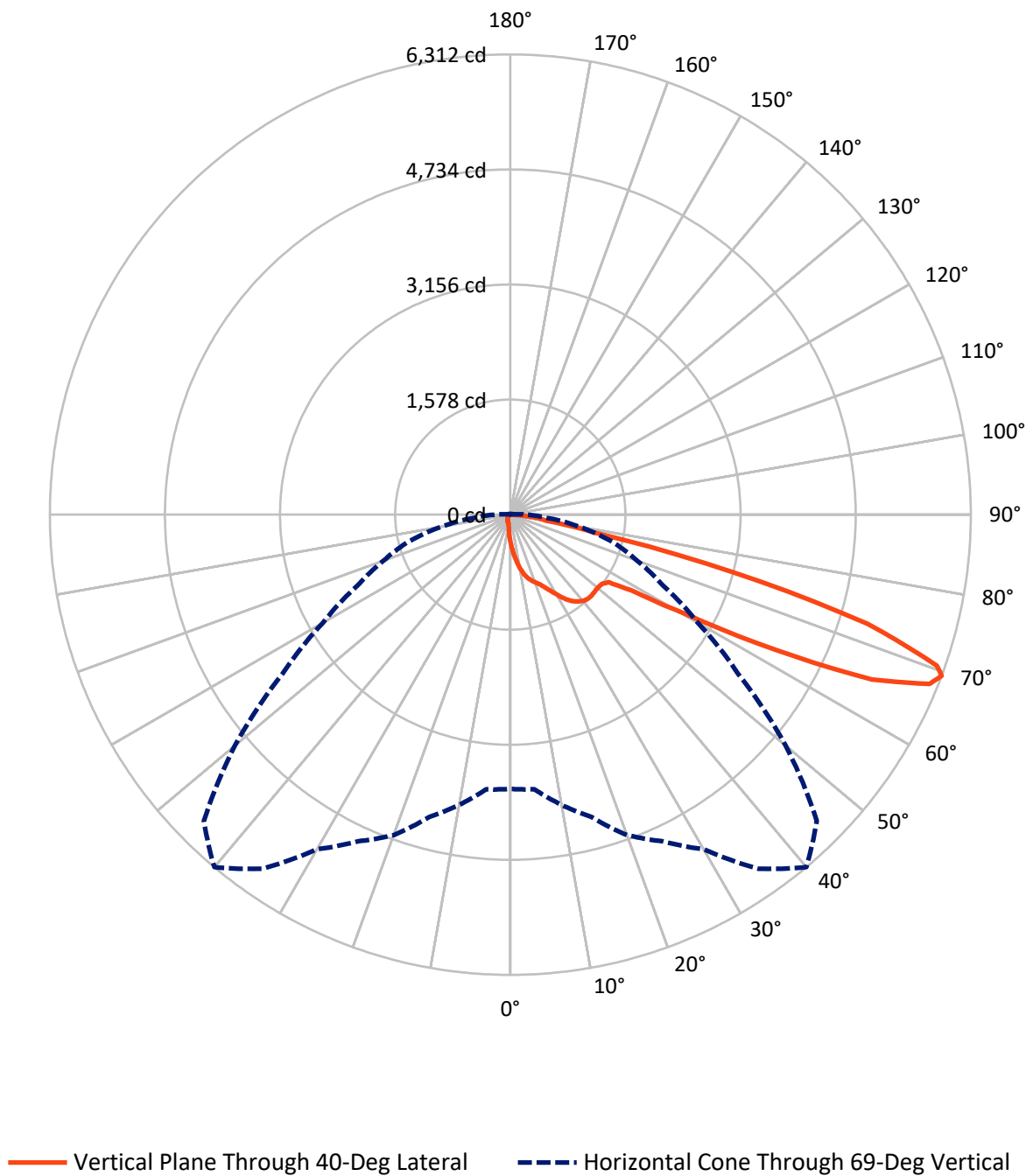


Based on 10 foot mounting height. Maximum calculated value = 11.1 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	148.3	0.0	148.3
	% Fixture	3.0	0.0	3.0
Street Side	Lumens	4830.9	0.0	4830.9
	% Fixture	97.0	0.0	97.0
Total	Lumens	4979.1	0.0	4979.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.6	0.8
10°-20°	133.3	2.7
20°-30°	255.0	5.1
30°-40°	424.1	8.5
40°-50°	573.9	11.5
50°-60°	897.6	18.0
60°-70°	1845.4	37.1
70°-80°	742.5	14.9
80°-90°	68.7	1.4
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°	4979.1	100.0
0°-180°	4979.1	100.0

Coefficient of Utilization



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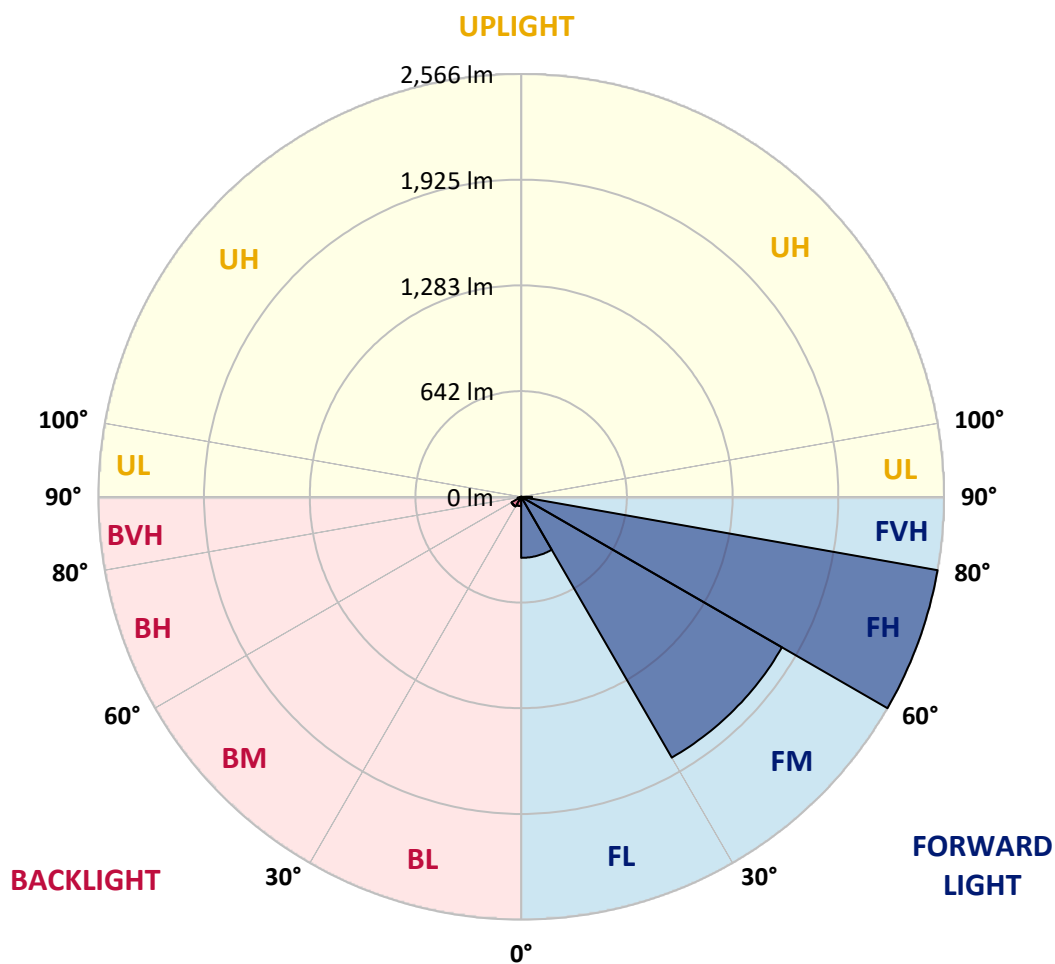
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	370.5	7.4			
FM	(30°-60°)	1827.9	36.7			
FH	(60°-80°)	2566.3	51.5			G2/5000
FVH	(80°-90°)	66.1	1.3			G1/100
BL	(0°-30°)	56.4	1.1	B0/110		
BM	(30°-60°)	67.7	1.4	B0/220		
BH	(60°-80°)	21.6	0.4	B0/110		G0/110
BVH	(80°-90°)	2.6	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-G2

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	376.0	376.0	376.0	376.0	376.0	376.0	376.0	376.0	376.0	376.0	376.0
2.5°	501.7	495.9	489.4	489.4	481.3	481.3	476.3	463.3	461.7	454.3	447.0
5°	640.3	635.4	627.2	619.9	613.4	602.0	593.8	578.3	561.2	544.9	530.2
7.5°	775.7	773.2	758.6	756.1	745.5	726.8	710.5	687.6	658.2	635.4	608.5
10°	901.3	895.6	892.3	878.5	863.0	842.6	817.3	789.6	755.3	719.4	681.1
12.5°	1000.9	997.6	982.9	977.2	960.8	940.4	908.6	872.8	838.5	792.0	747.1
15°	1075.0	1069.3	1059.5	1050.5	1031.0	1013.0	983.7	944.5	902.9	852.4	798.5
17.5°	1137.1	1126.4	1124.0	1110.1	1089.7	1068.5	1035.9	1000.0	951.1	900.5	841.7
20°	1220.2	1205.5	1200.7	1180.3	1156.6	1127.2	1089.7	1044.8	993.5	938.0	877.6
22.5°	1318.1	1307.5	1296.9	1279.0	1248.8	1207.2	1152.5	1103.6	1038.3	977.2	911.9
25°	1456.8	1447.8	1430.6	1406.2	1368.7	1318.9	1252.9	1181.1	1104.4	1026.1	949.4
27.5°	1591.3	1583.2	1570.9	1552.2	1509.8	1455.1	1373.6	1282.2	1185.1	1090.6	1005.7
30°	1717.8	1710.4	1698.2	1679.5	1641.9	1588.1	1495.9	1398.0	1277.3	1167.2	1065.3
32.5°	1854.0	1851.5	1837.7	1810.8	1778.2	1705.6	1605.2	1500.0	1377.7	1250.4	1131.3
35°	2008.1	1989.4	1976.3	1949.4	1894.0	1816.4	1699.0	1584.0	1455.1	1324.6	1191.7
37.5°	2138.7	2120.8	2104.4	2070.2	2002.4	1903.7	1770.8	1644.4	1511.4	1378.4	1243.0
40°	2234.0	2225.1	2205.5	2160.7	2084.8	1967.4	1823.8	1685.9	1552.2	1418.5	1284.7
42.5°	2305.0	2291.2	2269.2	2222.7	2133.0	1999.2	1845.0	1703.1	1570.9	1442.9	1311.6
45°	2331.2	2319.8	2299.4	2248.8	2151.7	2008.1	1844.2	1698.2	1571.8	1450.3	1329.5
47.5°	2315.6	2304.2	2286.3	2239.0	2143.6	1997.6	1829.5	1684.3	1563.6	1452.7	1345.8
50°	2264.3	2257.7	2243.9	2203.9	2118.2	1977.1	1816.4	1677.0	1562.0	1465.0	1368.7
52.5°	2259.4	2255.3	2238.2	2198.2	2110.9	1970.6	1814.8	1681.1	1575.8	1480.4	1385.0
55°	2761.0	2703.1	2573.4	2463.3	2282.2	2066.9	1897.2	1747.1	1634.6	1541.6	1474.7
57.5°	3924.1	3837.7	3667.2	3457.6	3041.6	2632.9	2305.9	2069.3	1952.7	1910.3	1935.5
60°	4469.0	4453.5	4426.6	4327.1	4114.2	3762.7	3371.1	2947.8	2778.1	2763.5	2814.8
62.5°	4727.6	4717.8	4726.0	4713.7	4647.7	4544.9	4432.3	4249.6	4081.6	3973.1	3743.0
65°	4846.7	4853.2	4899.7	4936.4	4944.5	4971.4	5053.9	5281.4	5447.8	5168.0	4529.3
67.5°	4544.0	4582.4	4689.2	4823.0	4979.6	5131.3	5376.0	5855.6	6197.4	5868.7	4961.6
69°	3761.8	3780.6	4041.6	4293.7	4676.2	4943.8	5298.5	5927.4	6311.6	5940.5	4927.4
70°	2961.7	2978.8	3258.6	3601.1	4247.9	4592.2	5056.3	5805.9	6204.7	5845.0	4751.2
72.5°	1336.1	1311.6	1410.2	1593.8	2296.9	2843.4	3655.0	4703.9	5119.1	4682.7	3554.6
75°	933.1	922.5	933.1	933.9	1043.2	1345.8	1698.2	2549.8	3153.3	2721.1	1698.2
77.5°	722.6	715.3	708.0	699.8	712.9	798.5	832.8	904.6	1174.6	1111.0	647.6
80°	571.8	565.3	583.2	577.5	577.5	587.3	580.7	553.8	503.2	466.6	417.6
82.5°	265.9	267.5	267.5	290.3	349.9	408.7	427.4	400.5	355.6	302.6	243.9
85°	25.3	28.6	48.1	74.2	147.7	166.4	167.2	138.7	138.7	109.3	88.1
87.5°	0.0	0.8	0.8	0.8	7.3	20.4	17.2	4.9	2.4	2.4	4.1
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°	70°	75°	80°	85°	90°	95°	100°	105°
0°	376.0	376.0	376.0	376.0	376.0	376.0	376.0	376.0	376.0	376.0	376.0
2.5°	433.9	431.5	421.7	411.9	403.0	393.1	384.2	375.2	365.4	358.1	349.1
5°	507.4	489.4	469.0	449.5	429.8	409.5	388.3	369.5	349.9	332.0	314.8
7.5°	581.5	546.5	518.8	483.7	451.9	420.1	390.7	360.5	332.8	306.7	282.2
10°	644.3	602.0	558.7	513.9	468.2	425.8	385.0	349.1	312.4	280.6	250.4
12.5°	695.8	641.9	588.9	532.6	481.3	427.4	376.9	333.6	290.3	254.5	223.5
15°	742.2	680.3	616.6	551.4	486.2	425.0	368.6	314.8	270.8	230.0	194.9
17.5°	779.8	708.8	637.0	563.6	493.5	421.7	358.1	301.8	250.4	208.0	173.8
20°	812.4	738.2	660.7	578.3	498.4	420.8	349.1	285.5	232.4	187.6	154.1
22.5°	842.6	768.4	685.1	597.1	505.7	420.1	340.9	273.2	217.0	172.1	138.7
25°	876.8	798.5	711.3	616.6	518.8	423.4	336.1	263.5	203.1	157.4	126.4
27.5°	915.2	832.8	742.2	641.1	535.9	429.8	334.4	252.8	190.9	143.5	116.6
30°	969.0	873.6	773.2	665.6	551.4	437.2	332.8	246.3	178.6	133.0	106.9
32.5°	1016.3	913.6	807.5	690.8	568.5	444.5	332.0	237.4	167.2	122.3	99.5
35°	1066.1	950.3	836.9	715.3	583.2	452.6	331.1	230.8	156.6	111.7	92.2
37.5°	1109.3	981.2	859.7	736.6	599.5	460.0	332.0	225.1	146.8	102.8	85.6
40°	1146.0	1013.0	885.0	756.1	616.6	471.4	332.8	219.4	137.0	94.6	79.9
42.5°	1178.6	1043.2	911.9	778.1	636.2	484.5	337.7	214.5	128.9	87.3	74.2
45°	1203.9	1070.9	941.2	809.2	668.0	505.7	346.7	211.3	120.7	80.8	69.4
47.5°	1230.0	1111.7	991.0	858.1	714.5	539.2	362.2	210.5	114.2	75.8	65.2
50°	1265.9	1152.5	1035.1	907.8	757.0	573.4	380.9	211.3	106.0	71.0	61.2
52.5°	1292.0	1194.1	1092.2	994.3	858.1	677.8	453.5	225.9	101.9	66.8	56.3
55°	1446.2	1429.0	1431.5	1447.8	1342.6	1153.3	758.6	326.3	119.9	75.8	55.5
57.5°	2039.2	2099.5	2134.6	2133.8	1960.0	1625.6	1018.7	419.2	133.8	88.1	66.1
60°	2818.9	2773.3	2708.8	2549.8	2318.9	1855.6	1139.5	451.1	115.8	70.1	60.4
62.5°	3508.1	3240.6	3003.2	2745.5	2442.9	1935.5	1163.9	448.6	101.2	53.0	42.4
65°	3938.0	3456.8	3073.4	2750.4	2393.9	1868.7	1101.1	411.9	85.6	43.3	35.0
67.5°	4040.8	3340.1	2797.7	2385.8	2000.0	1454.3	808.3	310.0	66.8	35.9	31.0
69°	3816.5	2969.0	2318.1	1850.8	1455.1	964.9	500.0	195.7	51.4	32.6	28.6
70°	3510.6	2582.4	1888.3	1485.3	1077.5	677.8	349.9	137.8	41.6	30.2	26.1
72.5°	2258.6	1356.4	928.2	646.0	444.5	270.0	137.0	62.0	31.8	25.3	21.2
75°	876.0	501.7	363.8	276.5	216.2	150.1	83.2	40.0	26.9	21.2	16.3
77.5°	431.5	330.3	270.0	185.2	107.7	66.8	44.9	31.0	22.0	15.5	10.6
80°	340.9	226.7	135.4	84.0	63.6	48.1	34.3	25.3	16.3	9.8	7.3
82.5°	174.5	95.5	70.1	57.1	47.3	37.6	27.7	17.9	10.6	6.5	5.7
85°	54.7	40.0	35.9	35.0	32.6	26.9	19.6	11.5	6.5	4.1	4.1
87.5°	4.1	5.7	7.3	5.7	6.5	5.7	7.3	4.9	3.2	3.2	2.4
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	376.0	376.0	376.0	376.0	376.0	376.0	376.0	376.0	376.0	376.0	376.0
2.5°	342.5	332.8	323.8	318.1	307.5	303.4	299.3	297.7	290.3	292.0	285.5
5°	299.3	282.2	269.2	256.1	243.9	234.9	227.5	218.6	211.3	208.0	201.4
7.5°	260.2	238.2	221.0	207.2	192.5	181.1	171.3	164.8	158.3	151.7	148.4
10°	225.9	202.3	182.7	168.8	155.0	145.2	137.8	133.0	128.9	126.4	125.6
12.5°	194.1	171.3	153.4	141.1	130.5	125.6	122.3	119.9	119.1	118.3	118.3
15°	169.6	146.8	133.0	124.0	119.1	116.6	115.8	114.2	112.6	111.7	111.7
17.5°	146.8	129.7	119.9	115.0	112.6	110.9	109.3	107.7	106.0	105.2	105.2
20°	131.3	117.4	112.6	109.3	106.9	105.2	102.8	101.2	100.4	99.5	98.7
22.5°	119.1	110.1	106.9	104.4	101.2	98.7	97.1	95.5	93.8	93.0	92.2
25°	110.1	104.4	101.9	98.7	95.5	93.0	90.5	88.1	86.5	85.6	84.0
27.5°	103.6	99.5	96.2	92.2	88.9	86.5	84.0	81.6	79.9	78.3	77.5
30°	97.9	93.8	89.7	86.5	82.4	79.9	76.7	74.2	73.4	71.8	70.1
32.5°	92.2	88.1	84.0	79.9	75.8	72.6	71.0	67.7	66.1	65.2	63.6
35°	85.6	81.6	76.7	73.4	69.4	66.1	63.6	61.2	59.5	57.9	57.1
37.5°	79.9	75.1	70.1	66.1	62.8	59.5	57.1	54.7	53.0	51.4	50.6
40°	73.4	68.5	63.6	59.5	56.3	53.8	51.4	49.0	47.3	46.5	46.5
42.5°	67.7	62.0	57.1	53.8	51.4	48.1	45.7	43.3	42.4	41.6	42.4
45°	62.0	56.3	52.2	49.0	46.5	43.3	40.7	39.1	38.3	39.1	40.0
47.5°	57.1	51.4	47.3	44.9	42.4	40.0	37.6	35.9	35.9	37.6	39.1
50°	52.2	46.5	43.3	41.6	39.1	36.7	33.4	32.6	33.4	35.0	36.7
52.5°	47.3	40.7	38.3	37.6	35.0	32.6	30.2	29.4	30.2	31.8	31.0
55°	42.4	35.9	35.0	34.3	31.8	28.6	26.1	26.1	26.1	25.3	23.7
57.5°	40.7	31.8	31.0	30.2	27.7	24.5	22.9	21.2	20.4	17.9	17.2
60°	42.4	28.6	28.6	26.9	24.5	21.2	18.8	16.3	14.6	13.0	13.0
62.5°	34.3	26.1	25.3	23.7	20.4	17.2	14.6	12.2	11.5	10.6	10.6
65°	27.7	23.7	22.0	19.6	17.2	13.9	11.5	9.8	8.9	8.9	9.8
67.5°	25.3	21.2	18.8	16.3	13.9	10.6	8.9	8.2	8.2	8.9	8.9
69°	23.7	19.6	17.2	14.6	12.2	9.8	8.2	8.2	8.2	8.2	8.9
70°	22.0	18.8	16.3	13.9	10.6	8.2	7.3	7.3	8.2	8.2	8.9
72.5°	17.2	14.6	13.9	11.5	8.2	7.3	6.5	7.3	7.3	8.2	8.2
75°	13.0	10.6	10.6	8.9	6.5	5.7	5.7	6.5	6.5	7.3	7.3
77.5°	8.9	7.3	7.3	6.5	5.7	4.9	4.9	5.7	6.5	6.5	7.3
80°	6.5	5.7	4.9	5.7	4.9	4.1	4.9	5.7	5.7	6.5	6.5
82.5°	4.9	4.9	4.9	4.9	4.1	4.1	4.9	4.9	5.7	6.5	6.5
85°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.9	4.9	5.7	5.7
87.5°	2.4	2.4	2.4	3.2	3.2	4.1	4.1	4.1	4.1	4.9	4.9
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):

	165°	170°	175°	180°
0°	376.0	376.0	376.0	376.0
2.5°	283.9	283.0	279.8	280.6
5°	199.0	194.1	197.4	196.6
7.5°	146.0	145.2	144.4	146.0
10°	124.8	124.8	124.0	124.8
12.5°	117.4	117.4	117.4	117.4
15°	111.7	111.7	110.9	110.9
17.5°	105.2	105.2	105.2	104.4
20°	98.7	97.9	97.9	97.9
22.5°	91.3	90.5	90.5	90.5
25°	84.0	83.2	83.2	83.2
27.5°	76.7	75.8	75.1	75.1
30°	69.4	68.5	67.7	67.7
32.5°	62.0	61.2	60.4	60.4
35°	55.5	55.5	54.7	53.8
37.5°	49.8	49.8	49.8	49.8
40°	45.7	46.5	46.5	46.5
42.5°	43.3	44.0	44.9	45.7
45°	41.6	43.3	44.0	44.0
47.5°	40.7	41.6	42.4	42.4
50°	37.6	36.7	36.7	36.7
52.5°	30.2	28.6	27.7	26.9
55°	22.0	21.2	19.6	19.6
57.5°	15.5	15.5	14.6	14.6
60°	12.2	12.2	11.5	12.2
62.5°	10.6	10.6	10.6	10.6
65°	9.8	9.8	9.8	9.8
67.5°	9.8	9.8	9.8	9.8
69°	8.9	8.9	8.9	8.9
70°	8.9	8.9	8.9	8.9
72.5°	8.2	8.2	8.2	8.2
75°	7.3	8.2	8.2	8.2
77.5°	7.3	7.3	7.3	7.3
80°	6.5	6.5	7.3	7.3
82.5°	6.5	6.5	6.5	6.5
85°	5.7	5.7	6.5	6.5
87.5°	4.9	4.9	5.7	5.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)