

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: P165314

Luminaire Tested: **VST-F09-LED-E-U-SL3-HSS-7060**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165314
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-F09-LED-E-U-SL3-HSS-7060
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(9) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL AND
HOUSE SIDE SHIELD
Light Source: (63) 5700K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13060.1 lumens
Efficiency: N/A
Efficacy: 55.6 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 1.5' x L: 1' x H: 0.1')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B0 - U0 - G3

Input Watts (W): 234.8
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



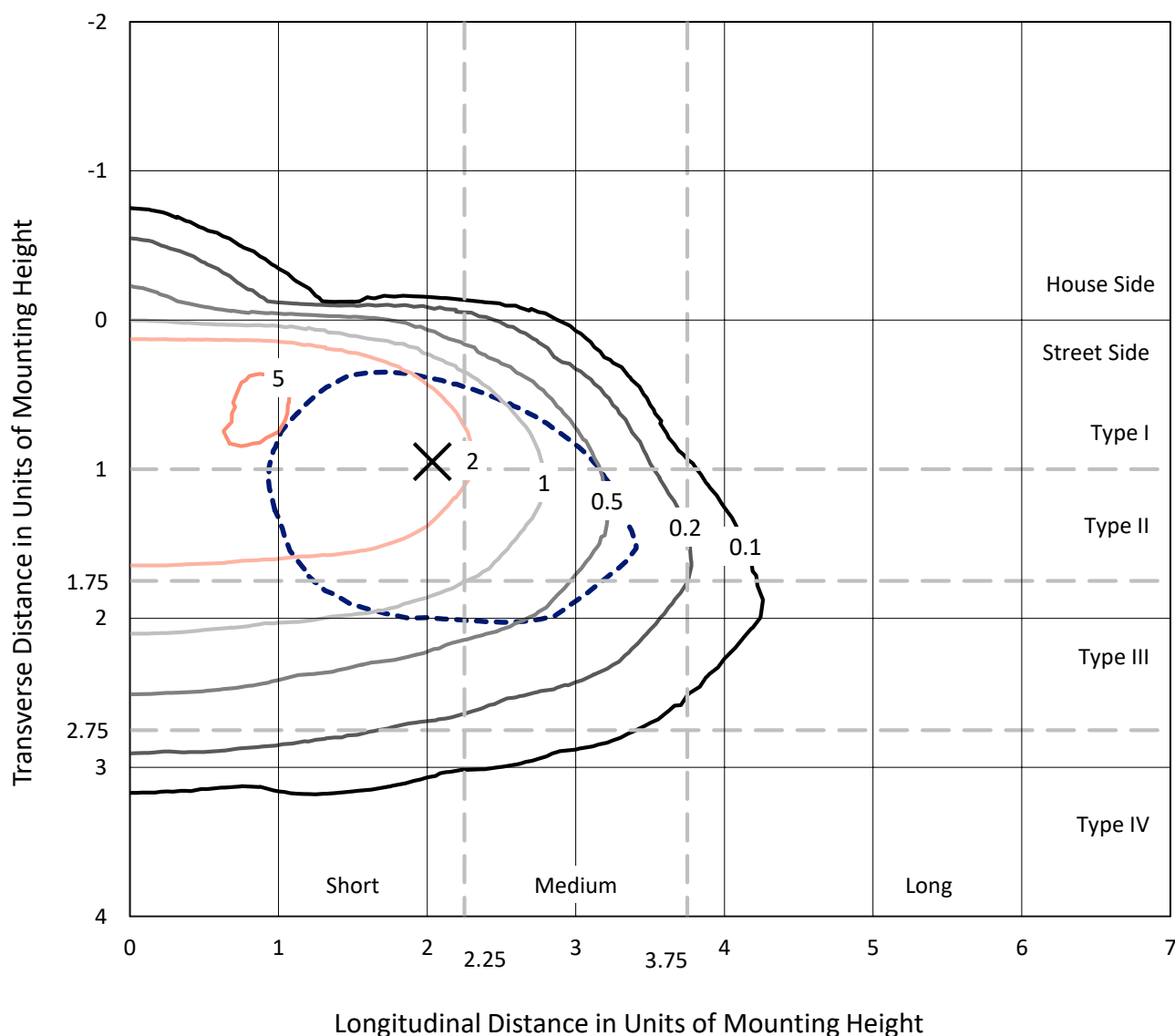
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

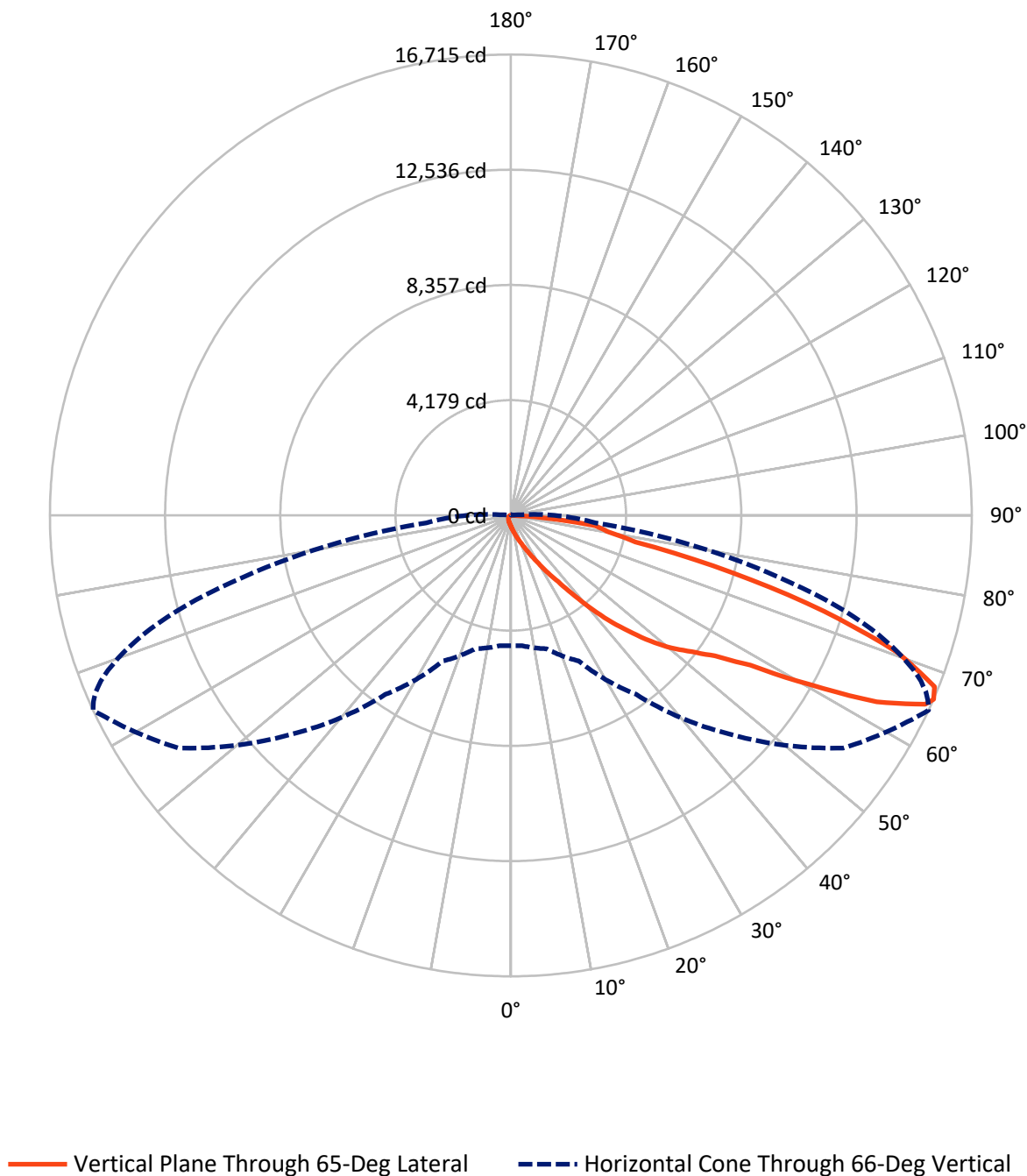


Based on 20 foot mounting height. Maximum calculated value = 5.4 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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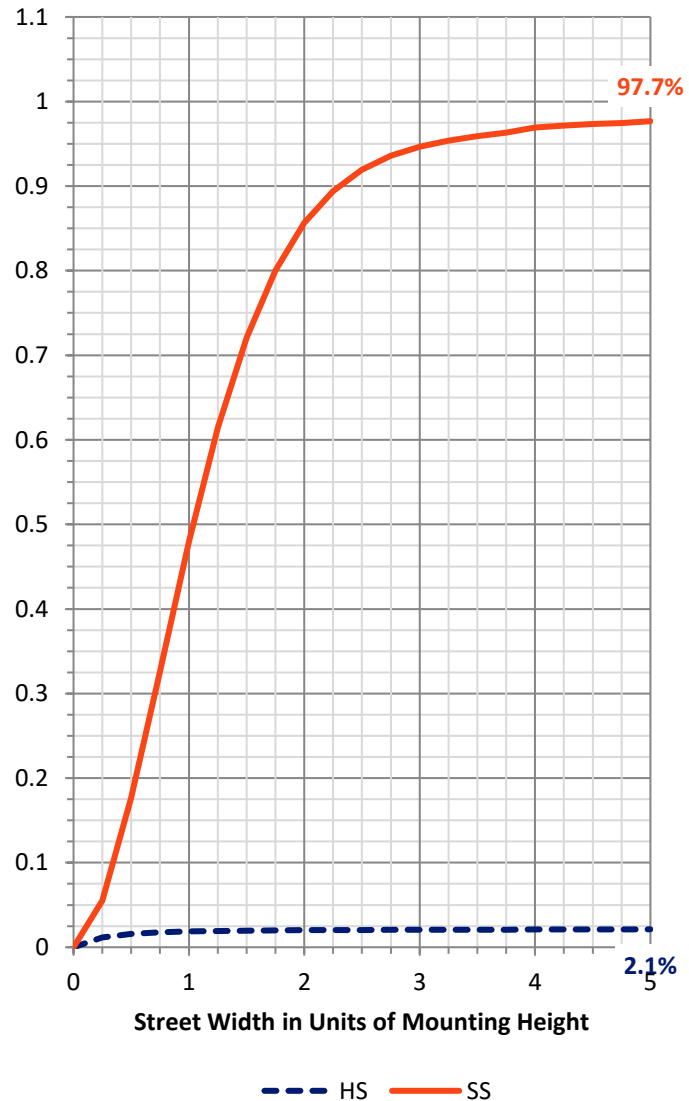
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	283.0	0.0	283.0
	% Fixture	2.2	0.0	2.2
Street Side	Lumens	12777.1	0.0	12777.1
	% Fixture	97.8	0.0	97.8
Total	Lumens	13060.1	0.0	13060.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.1	0.3
10°-20°	187.1	1.4
20°-30°	403.6	3.1
30°-40°	861.8	6.6
40°-50°	1906.0	14.6
50°-60°	3230.0	24.7
60°-70°	4310.2	33.0
70°-80°	1898.6	14.5
80°-90°	218.7	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°	13060.1	100.0
0°-180°	13060.1	100.0

Coefficient of Utilization



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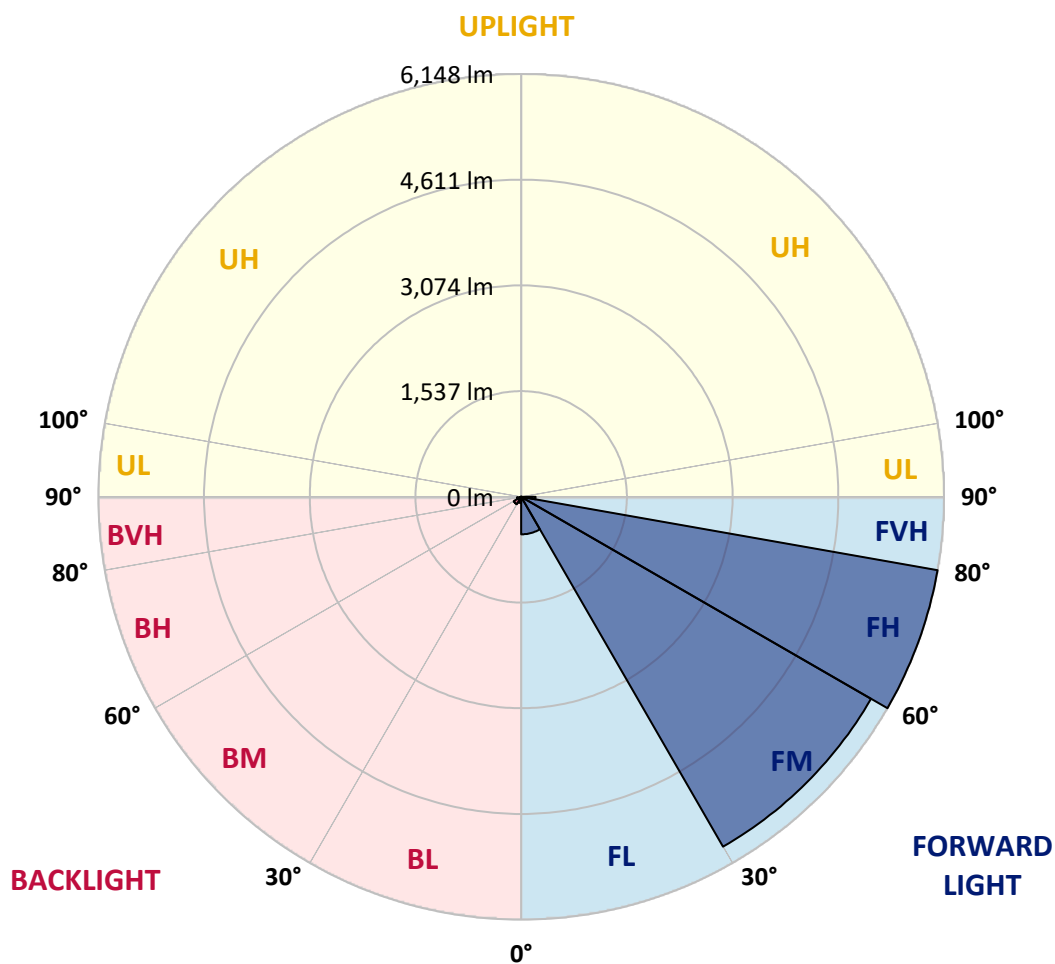
CATALOG NUMBER: VST-F09-LED-E-U-SL3-HSS-7060

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	545.5	4.2			
FM	(30°-60°)	5873.6	45.0			
FH	(60°-80°)	6148.1	47.1			G3/7500
FVH	(80°-90°)	210.0	1.6			G2/225
BL	(0°-30°)	89.3	0.7	B0/110		
BM	(30°-60°)	124.3	1.0	B0/220		
BH	(60°-80°)	60.7	0.5	B0/110		G0/110
BVH	(80°-90°)	8.7	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-G3

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	67°	68°
0°	394.1	394.1	394.1	394.1	394.1	394.1	394.1	394.1	394.1	394.1	394.1
2.5°	497.2	494.6	484.6	484.6	469.5	459.6	446.9	434.4	434.4	431.8	429.4
5°	657.8	642.8	640.2	612.6	590.1	557.4	527.3	487.2	482.1	477.1	474.5
7.5°	836.2	833.6	811.0	778.4	733.2	672.9	612.6	547.4	537.3	532.3	522.2
10°	1067.2	1054.5	1024.5	969.1	901.4	821.1	723.2	620.1	607.6	597.5	592.5
12.5°	1288.1	1265.5	1247.8	1177.6	1092.2	974.2	856.1	708.1	698.0	685.5	665.4
15°	1493.9	1473.8	1443.8	1383.5	1288.1	1139.9	1001.9	821.1	795.9	778.4	763.3
17.5°	1654.6	1642.1	1606.9	1539.2	1436.1	1305.6	1139.9	936.5	916.5	893.8	866.2
20°	1807.9	1790.2	1735.0	1642.1	1531.6	1431.1	1303.2	1087.1	1059.5	1031.9	1001.9
22.5°	1953.5	1935.8	1845.5	1692.3	1574.3	1531.6	1486.5	1257.9	1215.2	1192.6	1162.5
25°	2156.9	2119.2	1978.5	1735.0	1576.9	1609.5	1687.3	1478.8	1438.7	1406.1	1358.4
27.5°	2430.6	2380.3	2159.3	1797.8	1586.8	1694.9	1918.3	1747.5	1704.8	1667.1	1614.5
30°	2739.3	2706.7	2443.1	1948.5	1659.7	1820.4	2176.9	2089.0	2038.9	1993.6	1930.9
32.5°	3050.7	3005.6	2744.4	2234.7	1855.5	2063.9	2500.9	2485.8	2420.5	2377.8	2310.0
35°	3324.4	3301.8	3108.5	2704.1	2302.5	2490.8	2932.7	2950.2	2892.6	2847.3	2772.0
37.5°	3510.2	3510.2	3472.6	3208.8	3013.0	3153.6	3567.9	3570.5	3512.7	3409.8	3372.1
40°	3605.5	3633.1	3768.8	3819.0	3808.9	3989.8	4401.6	4356.3	4308.6	4255.8	4130.4
42.5°	3801.5	3826.5	4115.3	4461.8	4687.8	4926.3	5210.0	5194.9	5137.3	5041.8	4926.3
45°	4132.9	4165.6	4509.6	5059.4	5523.8	5862.9	6043.6	5973.3	5915.5	5825.3	5764.9
47.5°	4554.7	4617.5	5006.6	5687.1	6247.0	6806.9	6995.2	6809.5	6759.3	6688.9	6591.0
50°	5004.2	5064.4	5478.7	6257.1	6889.8	7557.7	7871.6	7557.7	7484.9	7462.2	7351.8
52.5°	5393.3	5443.6	5842.8	6696.5	7381.9	8165.3	8622.2	8208.0	8155.2	8079.9	7999.5
55°	5624.3	5664.5	6038.6	6907.4	7715.9	8712.6	9348.0	8983.9	8906.0	8875.9	8760.4
57.5°	5702.2	5742.3	6078.8	6935.0	7896.6	9212.3	10229.3	10241.8	10148.9	10041.0	10005.8
60°	5702.2	5747.3	6031.1	6867.3	8072.4	9744.6	11404.3	12451.3	12250.5	12230.4	12102.3
62.5°	5466.2	5508.9	5795.1	6658.8	8308.4	10462.7	13041.4	14889.4	14831.7	14701.0	14490.2
65°	4953.9	4979.0	5260.2	6126.5	8218.0	11123.1	14460.0	16511.4	16418.5	16162.4	15891.3
66°	4722.9	4743.0	5006.6	5822.7	7921.8	11213.5	14711.1	16714.8	16561.7	16345.6	16039.3
67.5°	4389.0	4424.2	4609.9	5257.7	7211.2	10899.6	14553.0	16571.7	16438.6	16177.5	15871.1
70°	2930.2	2905.1	3560.4	4034.9	5493.8	8881.0	13056.5	14879.3	14881.9	14758.8	14635.8
72.5°	1391.0	1406.1	1596.9	2483.2	3595.5	5933.2	10392.4	11876.3	12047.1	11826.2	11672.9
75°	999.3	1021.9	1137.5	1519.1	2144.2	3560.4	6736.6	8305.8	8310.9	7919.2	7570.3
77.5°	291.2	303.9	426.8	936.5	1606.9	2402.8	3869.2	4617.5	4509.6	4228.2	3964.6
80°	120.5	120.5	125.5	298.8	645.3	1632.1	2706.7	3555.4	3542.9	3434.9	3279.2
82.5°	45.1	47.7	60.2	123.0	153.2	401.8	1805.3	3085.9	3078.3	2925.2	2814.7
85°	5.0	5.0	15.1	52.8	57.8	75.3	361.5	1360.8	1353.4	1360.8	1192.6
87.5°	0.0	0.0	2.4	5.0	7.5	10.1	15.1	52.8	57.8	55.2	50.2
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°	394.1	394.1	394.1	394.1	394.1	394.1	394.1	394.1	394.1	394.1	394.1
2.5°	429.4	424.3	424.3	421.9	421.9	421.9	419.3	416.9	416.9	414.3	411.8
5°	469.5	464.4	462.0	457.0	454.5	451.9	446.9	444.5	439.4	436.8	434.4
7.5°	517.2	507.1	504.7	497.2	489.6	484.6	479.5	472.1	467.0	457.0	454.5
10°	577.6	564.9	554.9	544.8	537.3	524.8	517.2	507.1	497.2	489.6	482.1
12.5°	655.3	637.8	622.7	612.6	595.1	580.0	564.9	557.4	537.3	527.3	514.8
15°	740.7	720.6	703.1	682.9	670.4	645.3	625.1	602.6	592.5	575.0	554.9
17.5°	851.1	818.5	790.9	770.9	745.7	720.6	698.0	675.5	645.3	625.1	600.1
20°	969.1	941.5	903.9	868.8	838.6	808.6	775.8	745.7	718.2	685.5	655.3
22.5°	1119.9	1079.7	1034.5	999.3	959.2	926.6	881.3	841.2	795.9	753.2	718.2
25°	1310.7	1257.9	1215.2	1165.1	1117.3	1067.2	1011.8	961.7	903.9	863.8	803.5
27.5°	1546.7	1496.5	1438.7	1373.5	1325.8	1250.4	1177.6	1114.9	1047.0	984.2	916.5
30°	1848.0	1775.3	1714.9	1652.2	1556.8	1483.9	1398.5	1313.3	1220.2	1157.6	1054.5
32.5°	2209.5	2131.7	2041.3	1950.9	1863.1	1760.2	1654.6	1549.1	1446.2	1330.8	1225.3
35°	2651.5	2558.5	2455.6	2357.7	2222.2	2111.6	1978.5	1832.9	1717.5	1584.4	1451.2
37.5°	3236.6	3083.3	2992.9	2890.0	2706.7	2556.1	2407.9	2262.3	2058.9	1918.3	1730.0
40°	3969.7	3879.2	3731.2	3565.4	3399.7	3201.3	3000.5	2807.2	2571.2	2375.2	2156.9
42.5°	4830.8	4697.9	4547.2	4308.6	4140.4	3906.8	3678.4	3422.3	3133.5	2882.5	2626.4
45°	5639.4	5481.3	5365.7	5127.2	4951.4	4675.1	4399.0	4127.9	3793.8	3470.0	3173.7
47.5°	6513.2	6382.5	6191.8	5998.5	5820.2	5508.9	5210.0	4881.1	4529.5	4145.5	3761.2
50°	7281.5	7178.6	7047.9	6814.5	6616.1	6354.9	6003.5	5644.4	5200.0	4818.3	4381.5
52.5°	7934.3	7853.9	7670.6	7504.9	7326.7	7080.6	6766.8	6422.8	5943.3	5523.8	5026.8
55°	8705.2	8647.4	8486.7	8383.8	8225.6	7989.6	7695.8	7377.0	6869.7	6412.7	5850.3
57.5°	9968.1	9923.0	9782.2	9739.6	9583.9	9378.0	9016.5	8675.0	8082.5	7515.0	6872.3
60°	12059.6	11969.3	11763.3	11658.0	11328.9	11052.8	10583.3	10113.7	9398.2	8675.0	7901.6
62.5°	14299.3	14045.7	13654.0	13317.7	12850.6	12370.9	11743.2	11025.2	10186.6	9327.9	8439.0
65°	15507.0	15075.2	14580.6	14045.7	13440.7	12735.1	11944.2	11083.0	10181.6	9275.1	8336.0
66°	15645.2	15158.0	14633.3	14038.2	13365.4	12614.6	11811.1	10907.2	9970.6	9086.8	8147.7
67.5°	15472.0	14962.2	14407.4	13747.0	13018.8	12240.4	11396.8	10457.7	9556.3	8659.9	7746.0
70°	14259.2	13751.9	13257.3	12561.8	11785.9	11002.6	10204.1	9154.7	8301.0	7477.3	6663.9
72.5°	11386.7	11042.7	10553.2	9958.1	9202.2	8283.3	7617.9	6679.0	5938.2	5139.7	4509.6
75°	7115.8	6631.2	6026.1	5267.8	4690.2	3944.5	3555.4	2842.3	2420.5	2051.4	1694.9
77.5°	3638.2	3274.2	2849.9	2423.0	2013.7	1606.9	1242.8	878.9	592.5	411.8	306.3
80°	3005.6	2684.1	2332.5	1943.4	1581.9	1227.9	883.9	602.6	384.2	251.1	195.8
82.5°	2483.2	2212.1	1898.1	1536.6	1222.8	964.2	670.4	436.8	271.1	175.8	138.1
85°	1057.1	959.2	740.7	587.5	441.9	326.4	228.6	153.2	108.0	87.8	80.4
87.5°	45.1	50.2	47.7	37.7	27.6	27.6	25.2	20.1	20.1	20.1	20.1
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):

	80°	81°	82°	83°	84°	85°	95°	105°	115°	125°	135°
0°	394.1	394.1	394.1	394.1	394.1	394.1	394.1	394.1	394.1	394.1	394.1
2.5°	411.8	409.2	406.8	406.8	404.2	401.8	386.7	374.2	359.1	349.0	338.9
5°	429.4	426.8	421.9	419.3	414.3	411.8	379.2	351.5	328.9	311.4	298.8
7.5°	446.9	444.5	436.8	429.4	426.8	421.9	369.1	333.9	303.9	283.8	271.1
10°	469.5	462.0	454.5	444.5	436.8	429.4	359.1	313.8	281.2	263.6	251.1
12.5°	502.1	489.6	477.1	464.4	454.5	441.9	354.0	296.3	263.6	243.5	231.0
15°	539.9	522.2	507.1	492.2	474.5	462.0	344.0	281.2	248.5	228.6	213.5
17.5°	575.0	554.9	532.3	509.7	492.2	474.5	333.9	266.2	233.4	213.5	198.4
20°	625.1	595.1	567.5	539.9	514.8	492.2	318.8	251.1	220.9	198.4	183.3
22.5°	680.5	645.3	610.2	572.5	539.9	509.7	306.3	238.5	208.4	185.9	168.2
25°	750.8	708.1	660.4	612.6	575.0	534.9	293.8	226.0	195.8	173.2	155.7
27.5°	848.7	788.4	735.7	675.5	617.7	572.5	283.8	215.9	183.3	160.7	143.2
30°	981.8	893.8	811.0	745.7	677.9	612.6	273.7	203.4	173.2	148.2	128.1
32.5°	1129.8	1026.9	931.5	833.6	748.2	672.9	263.6	193.3	160.7	135.5	118.0
35°	1313.3	1182.6	1054.5	941.5	838.6	738.1	253.6	183.3	150.6	123.0	105.5
37.5°	1576.9	1413.6	1245.4	1099.8	966.7	833.6	246.1	173.2	138.1	110.5	92.9
40°	1938.4	1727.5	1521.5	1323.2	1150.0	984.2	236.0	163.1	128.1	100.5	82.8
42.5°	2330.1	2073.9	1802.8	1579.3	1340.9	1132.4	226.0	153.2	118.0	90.4	72.9
45°	2817.3	2498.3	2169.4	1865.5	1574.3	1305.6	215.9	143.2	105.5	80.4	62.8
47.5°	3349.5	2942.7	2571.2	2189.5	1842.9	1521.5	203.4	135.5	95.4	70.3	55.2
50°	3896.9	3467.6	2997.9	2563.5	2151.9	1737.6	190.9	123.0	85.4	62.8	45.1
52.5°	4486.8	3979.7	3500.2	2960.3	2480.7	2021.2	178.2	113.0	77.8	55.2	37.7
55°	5237.6	4670.3	4107.8	3502.6	2925.2	2350.2	165.7	100.5	67.9	47.7	30.2
57.5°	6181.7	5508.9	4818.3	4135.4	3434.9	2782.0	155.7	87.8	57.8	40.1	25.2
60°	7073.1	6287.2	5451.1	4665.2	3874.2	3113.5	140.6	77.8	50.2	32.6	25.2
62.5°	7535.1	6638.7	5737.3	4871.1	4027.4	3231.5	125.5	65.3	42.7	27.6	22.6
65°	7422.1	6508.2	5634.4	4760.5	3934.6	3156.2	110.5	57.8	37.7	25.2	22.6
66°	7259.0	6354.9	5476.2	4645.1	3856.7	3075.9	102.9	55.2	35.2	25.2	20.1
67.5°	6902.3	6028.5	5189.9	4416.6	3643.2	2922.6	92.9	50.2	32.6	22.6	20.1
70°	5895.5	5102.1	4431.6	3743.7	3113.5	2463.2	75.3	42.7	27.6	20.1	20.1
72.5°	3901.8	3362.0	2915.1	2508.3	2096.5	1627.0	62.8	35.2	22.6	20.1	17.5
75°	1471.4	1330.8	1142.5	1026.9	896.4	785.8	50.2	22.6	17.5	17.5	17.5
77.5°	261.2	241.1	213.5	195.8	180.8	165.7	40.1	15.1	15.1	17.5	17.5
80°	175.8	163.1	148.2	135.5	125.5	113.0	27.6	12.5	15.1	15.1	17.5
82.5°	125.5	118.0	110.5	100.5	92.9	82.8	17.5	12.5	15.1	15.1	15.1
85°	75.3	70.3	65.3	60.2	52.8	50.2	12.5	12.5	12.5	15.1	15.1
87.5°	20.1	17.5	20.1	20.1	15.1	17.5	10.1	10.1	10.1	12.5	12.5
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):

	145°	155°	165°	175°	180°
0°	394.1	394.1	394.1	394.1	394.1
2.5°	333.9	333.9	328.9	336.5	336.5
5°	288.8	288.8	286.2	288.8	288.8
7.5°	263.6	261.2	261.2	261.2	263.6
10°	241.1	238.5	238.5	238.5	238.5
12.5°	220.9	218.5	215.9	218.5	218.5
15°	203.4	198.4	198.4	198.4	198.4
17.5°	188.3	183.3	180.8	180.8	180.8
20°	173.2	165.7	165.7	165.7	165.7
22.5°	158.1	150.6	150.6	150.6	150.6
25°	143.2	135.5	135.5	135.5	135.5
27.5°	130.5	123.0	123.0	123.0	123.0
30°	115.6	110.5	110.5	113.0	110.5
32.5°	105.5	97.9	97.9	100.5	100.5
35°	92.9	87.8	87.8	87.8	87.8
37.5°	80.4	75.3	75.3	75.3	75.3
40°	70.3	65.3	62.8	65.3	65.3
42.5°	60.2	55.2	52.8	52.8	52.8
45°	52.8	45.1	42.7	45.1	45.1
47.5°	42.7	37.7	37.7	40.1	40.1
50°	32.6	32.6	35.2	40.1	40.1
52.5°	30.2	30.2	35.2	40.1	40.1
55°	27.6	30.2	35.2	37.7	40.1
57.5°	25.2	30.2	35.2	37.7	37.7
60°	25.2	27.6	32.6	37.7	37.7
62.5°	22.6	25.2	30.2	35.2	35.2
65°	22.6	25.2	30.2	35.2	35.2
66°	22.6	25.2	30.2	35.2	35.2
67.5°	22.6	25.2	30.2	35.2	35.2
70°	22.6	25.2	30.2	32.6	32.6
72.5°	20.1	22.6	27.6	32.6	32.6
75°	20.1	22.6	27.6	32.6	32.6
77.5°	20.1	22.6	27.6	32.6	32.6
80°	20.1	22.6	27.6	30.2	32.6
82.5°	17.5	22.6	25.2	30.2	30.2
85°	17.5	20.1	25.2	27.6	30.2
87.5°	15.1	17.5	20.1	25.2	25.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)