

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: P158653

Luminaire Tested: **VST-F03-LED-E-U-SL4-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158653
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33714)
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-SL4-8030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL
Light Source: (21) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6063.6 lumens
Efficiency: N/A
Efficacy: 77.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Full Cutoff
BUG Rating: B1 - 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

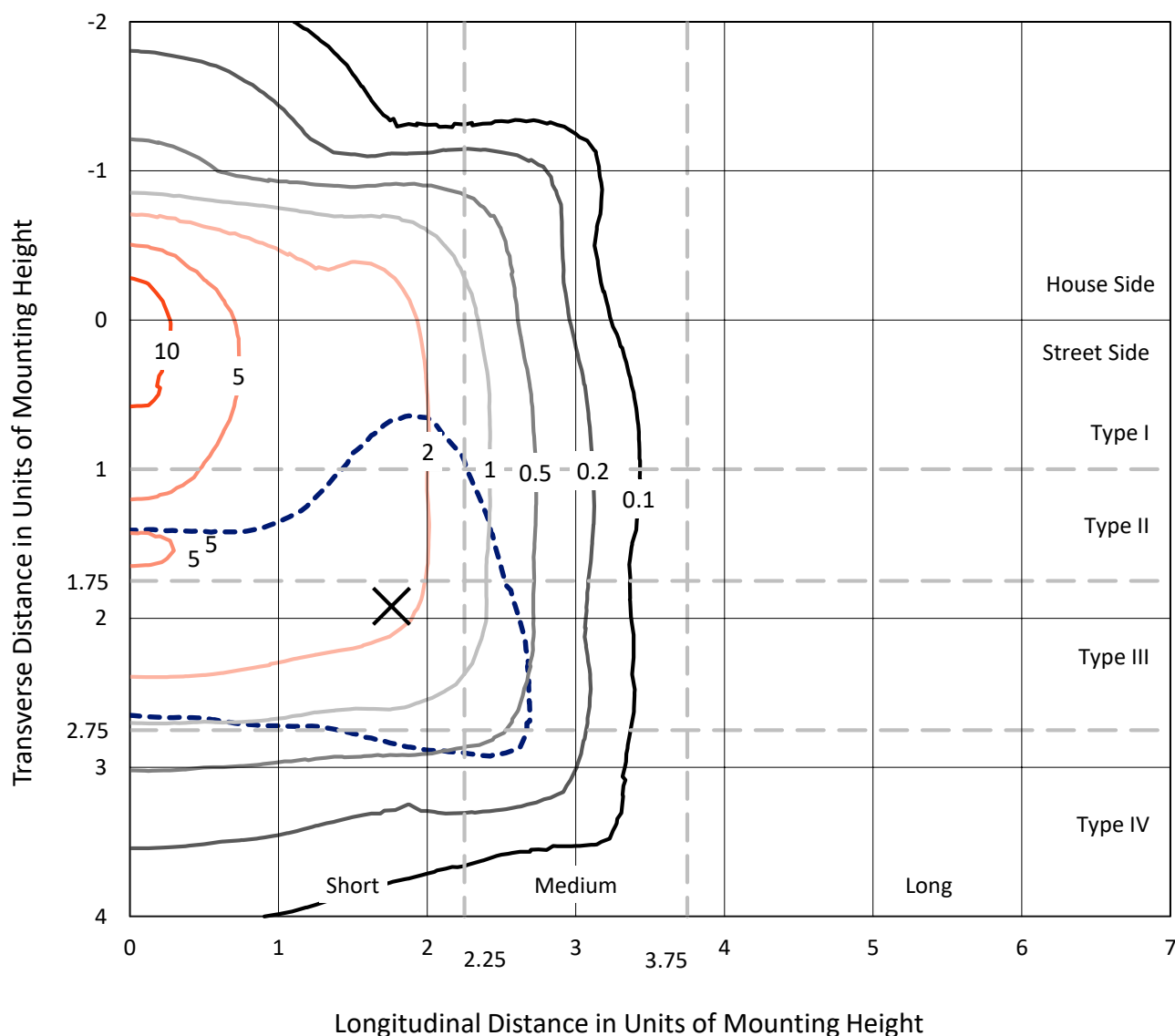


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

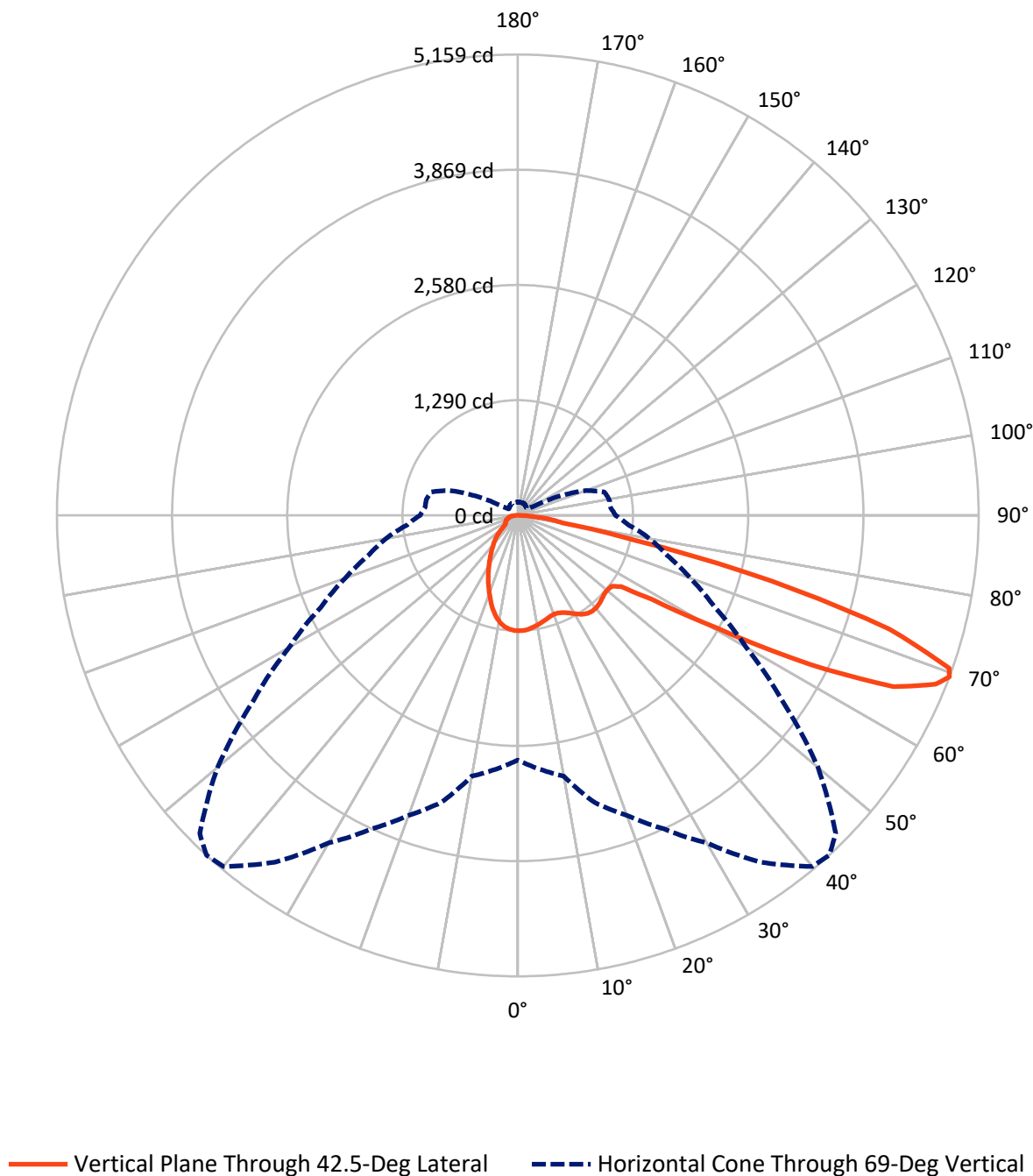


Based on 10 foot mounting height. Maximum calculated value = 12.9 fc
 Type IV - Short - Full Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1348.0	0.0	1348.0
	% Fixture	22.2	0.0	22.2
Street Side	Lumens	4715.5	0.0	4715.5
	% Fixture	77.8	0.0	77.8
Total	Lumens	6063.6	0.0	6063.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.2	2.0
10°-20°	324.0	5.3
20°-30°	472.4	7.8
30°-40°	602.2	9.9
40°-50°	700.7	11.6
50°-60°	1066.2	17.6
60°-70°	1883.3	31.1
70°-80°	777.2	12.8
80°-90°	117.3	1.9
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°	6063.6	100.0
0°-180°	6063.6	100.0

Coefficient of Utilization



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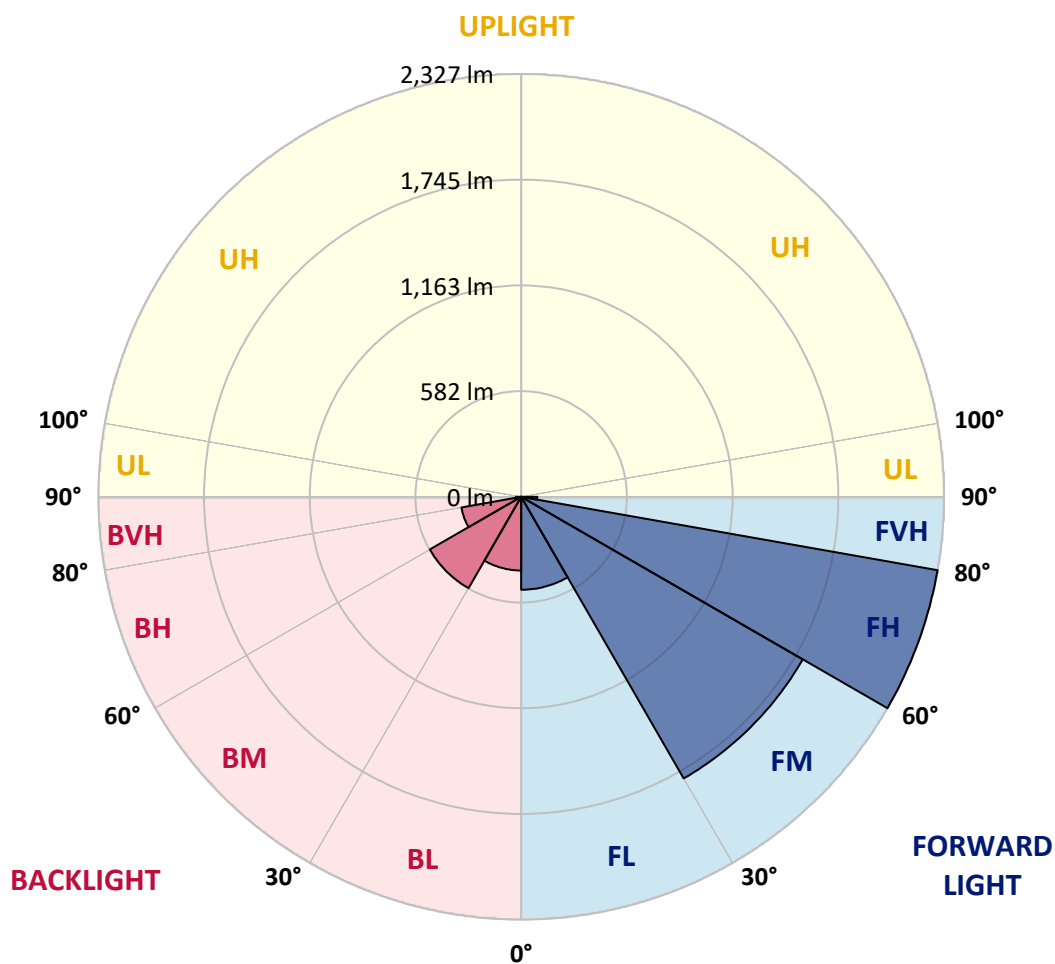
CATALOG NUMBER: VST-F03-LED-E-U-SL4-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	511.3	8.4			
FM	(30°-60°)	1788.9	29.5			
FH	(60°-80°)	2326.6	38.4			G2/5000
FVH	(80°-90°)	88.7	1.5			G1/100
BL	(0°-30°)	405.3	6.7	B1/500		
BM	(30°-60°)	580.2	9.6	B1/1000		
BH	(60°-80°)	333.9	5.5	B1/500		G1/500
BVH	(80°-90°)	28.6	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	42.5°	45°
0°	1291.3	1291.3	1291.3	1291.3	1291.3	1291.3	1291.3	1291.3	1291.3	1291.3	1291.3
2.5°	1287.1	1291.7	1290.1	1290.1	1291.3	1289.2	1289.2	1290.1	1288.0	1289.2	1288.8
5°	1282.6	1285.1	1284.2	1284.2	1284.2	1282.6	1281.7	1281.3	1278.4	1278.4	1277.1
7.5°	1272.5	1273.4	1274.6	1273.0	1272.5	1272.1	1269.2	1267.5	1264.1	1261.3	1262.0
10°	1259.2	1258.7	1260.8	1259.6	1257.9	1256.6	1254.1	1251.2	1247.5	1243.7	1243.3
12.5°	1244.1	1243.7	1245.4	1244.5	1243.3	1240.7	1238.6	1233.7	1227.8	1223.2	1222.8
15°	1234.5	1233.2	1234.9	1233.2	1231.1	1228.6	1224.8	1218.6	1208.2	1203.5	1199.8
17.5°	1243.7	1241.6	1242.4	1240.3	1237.4	1230.7	1222.0	1208.6	1193.5	1185.5	1179.7
20°	1275.8	1272.1	1273.0	1270.9	1264.1	1255.4	1238.6	1215.2	1189.7	1176.8	1167.6
22.5°	1321.9	1318.9	1320.2	1318.1	1311.4	1298.0	1273.0	1239.5	1203.1	1184.3	1169.7
25°	1391.6	1394.2	1395.0	1385.4	1381.6	1357.0	1322.3	1275.8	1227.4	1205.2	1185.1
27.5°	1470.2	1470.2	1474.0	1470.2	1462.7	1433.9	1385.0	1328.9	1266.7	1236.5	1212.3
30°	1546.7	1545.9	1553.0	1552.2	1540.1	1507.4	1451.9	1383.7	1312.6	1278.8	1247.9
32.5°	1627.9	1630.4	1634.9	1633.3	1617.4	1572.2	1505.3	1431.4	1356.5	1319.3	1284.7
35°	1715.6	1716.9	1718.6	1717.7	1685.5	1628.7	1544.6	1461.9	1384.1	1347.4	1311.4
37.5°	1803.4	1802.2	1800.1	1782.1	1745.3	1666.3	1568.5	1479.4	1397.9	1358.2	1321.0
40°	1882.0	1874.9	1868.2	1840.2	1783.8	1687.6	1577.7	1483.6	1396.7	1355.7	1319.3
42.5°	1925.1	1917.1	1903.3	1868.2	1799.6	1689.7	1571.4	1471.1	1383.7	1343.2	1307.2
45°	1933.0	1927.2	1913.8	1874.5	1795.9	1676.3	1552.2	1450.6	1364.5	1324.0	1290.1
47.5°	1914.2	1909.6	1896.7	1857.8	1779.6	1656.3	1530.1	1428.8	1345.7	1307.6	1275.0
50°	1885.4	1881.2	1871.2	1835.6	1761.2	1642.5	1518.7	1417.6	1339.4	1304.7	1274.6
52.5°	1932.2	1935.5	1906.3	1867.4	1780.9	1654.6	1531.3	1429.3	1350.7	1316.4	1285.1
55°	2660.0	2655.4	2479.4	2331.8	2068.1	1828.9	1650.4	1522.1	1438.1	1403.8	1374.5
57.5°	3456.4	3440.5	3368.2	3230.2	2946.8	2568.4	2224.4	1931.8	1816.4	1767.1	1770.4
60°	3716.4	3722.2	3706.8	3657.8	3556.3	3359.4	3097.7	2877.8	2661.2	2555.5	2567.6
62.5°	3860.6	3871.1	3884.5	3873.6	3840.5	3795.0	3761.9	3782.0	3751.9	3675.8	3615.2
65°	3880.7	3902.0	3946.3	3981.4	3998.6	4041.6	4142.8	4385.3	4606.8	4621.4	4514.8
67.5°	3483.5	3542.5	3638.6	3801.2	3940.4	4093.4	4337.6	4706.3	5033.2	5044.1	4944.6
69°	2739.0	2852.3	2964.7	3328.0	3572.6	3872.3	4233.5	4737.2	5128.9	5159.0	5033.6
70°	2194.7	2262.0	2359.0	2723.9	3089.3	3471.4	3994.8	4635.2	5063.3	5123.9	4985.6
72.5°	1317.7	1343.6	1377.0	1507.9	1696.0	2036.3	2730.2	3779.1	4271.1	4352.2	4176.2
75°	851.9	850.3	853.2	889.6	900.5	965.7	1184.3	1944.3	2786.2	2933.4	2722.7
77.5°	641.7	647.5	638.3	641.7	638.8	656.3	663.0	696.1	1099.9	1354.9	1211.5
80°	566.5	569.4	569.8	568.1	547.6	545.9	556.9	538.0	500.0	507.5	486.2
82.5°	323.2	322.7	326.5	354.9	366.6	405.1	421.0	429.7	396.7	372.1	336.5
85°	209.5	211.1	215.3	224.1	215.3	218.6	214.9	222.4	204.0	189.4	169.3
87.5°	85.7	85.7	91.1	99.1	92.4	90.7	77.8	76.9	65.2	58.9	46.0
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):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
0°	1291.3	1291.3	1291.3	1291.3	1291.3	1291.3	1291.3	1291.3	1291.3	1291.3	1291.3
2.5°	1286.3	1288.8	1287.5	1289.2	1288.0	1288.0	1286.3	1285.9	1287.1	1285.5	1285.9
5°	1275.0	1275.4	1273.4	1274.2	1271.7	1270.9	1269.6	1266.2	1268.3	1266.2	1267.1
7.5°	1258.7	1257.5	1254.5	1250.3	1247.5	1246.2	1243.7	1239.1	1239.9	1236.1	1238.2
10°	1237.8	1233.7	1228.6	1222.4	1218.2	1214.4	1209.0	1203.5	1200.6	1197.3	1196.9
12.5°	1214.4	1209.4	1202.7	1193.1	1183.9	1177.6	1169.3	1159.6	1156.7	1151.3	1148.3
15°	1188.9	1181.0	1173.0	1162.1	1152.1	1142.5	1131.2	1119.1	1111.1	1102.8	1096.5
17.5°	1165.9	1156.7	1146.2	1135.8	1124.9	1113.2	1099.0	1084.0	1072.3	1056.8	1044.2
20°	1147.9	1136.2	1125.8	1114.9	1102.8	1088.6	1071.4	1052.2	1032.5	1015.4	1000.8
22.5°	1140.8	1122.4	1109.9	1099.0	1086.9	1070.2	1049.3	1026.7	1002.9	979.1	959.8
25°	1146.7	1119.5	1099.9	1086.9	1076.5	1059.3	1035.9	1008.3	980.7	952.3	926.4
27.5°	1163.8	1129.1	1100.7	1080.2	1068.1	1051.0	1026.3	997.0	964.4	932.6	900.9
30°	1190.6	1145.5	1109.5	1080.7	1061.8	1042.2	1016.3	982.4	949.4	913.0	878.3
32.5°	1216.5	1162.6	1119.5	1082.3	1053.5	1028.0	999.1	965.7	930.1	892.1	856.1
35°	1234.9	1173.8	1123.3	1078.6	1040.5	1008.7	977.8	944.3	909.7	870.8	834.0
37.5°	1243.7	1180.1	1123.7	1068.5	1023.4	988.3	955.2	922.2	889.6	852.8	818.1
40°	1243.3	1179.7	1117.9	1055.6	1002.9	965.7	933.1	900.9	870.4	838.2	806.8
42.5°	1234.1	1173.0	1109.5	1043.0	988.3	946.9	913.0	882.1	856.1	827.7	801.4
45°	1219.9	1161.7	1100.7	1037.2	984.1	942.7	906.7	876.7	853.6	827.7	805.1
47.5°	1209.0	1155.5	1102.0	1047.6	997.0	954.0	915.9	882.9	863.3	842.3	826.4
50°	1210.6	1158.4	1106.2	1053.9	1006.2	962.8	926.0	895.9	881.6	876.2	872.5
52.5°	1219.4	1163.0	1118.7	1087.3	1071.0	1038.4	1016.7	997.9	1008.3	987.8	963.6
55°	1331.5	1313.0	1356.1	1396.7	1448.1	1467.3	1448.9	1445.6	1462.3	1392.9	1233.7
57.5°	1794.2	1841.9	1908.4	1943.5	1986.1	1974.8	1932.2	1896.7	1854.8	1773.7	1575.2
60°	2581.4	2545.4	2515.4	2430.5	2361.1	2280.0	2189.7	2112.4	2038.4	1921.7	1706.9
62.5°	3392.4	3142.9	2934.2	2732.8	2570.5	2435.9	2305.1	2188.9	2076.8	1914.2	1683.1
65°	4093.9	3568.4	3176.7	2881.1	2644.1	2439.7	2271.7	2111.1	1968.5	1777.9	1549.3
67.5°	4409.1	3750.7	3180.9	2757.4	2429.2	2151.7	1934.3	1691.8	1532.1	1410.1	1281.3
69°	4385.7	3611.5	2953.9	2432.6	2055.5	1732.0	1498.7	1245.8	1092.8	1040.9	1038.0
70°	4274.5	3375.7	2688.8	2168.8	1737.4	1415.9	1192.3	965.3	822.7	787.2	850.3
72.5°	3489.8	2385.4	1685.1	1286.8	989.5	782.2	637.9	506.2	404.2	350.3	362.0
75°	1971.1	1104.5	714.0	539.7	456.1	377.1	323.6	275.9	249.6	202.7	160.5
77.5°	716.5	474.1	377.1	326.1	231.2	159.3	133.4	116.6	105.8	105.8	100.7
80°	453.2	357.0	249.2	170.6	126.2	109.9	96.1	84.4	77.8	76.1	77.8
82.5°	283.0	218.6	139.6	107.0	89.9	80.7	70.3	61.4	56.0	54.8	57.3
85°	139.6	108.3	84.8	75.7	71.0	66.1	58.1	49.7	48.1	51.4	60.2
87.5°	41.8	37.2	30.5	31.8	33.4	32.6	25.9	22.6	21.3	28.0	43.9
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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	1291.3	1291.3	1291.3	1291.3	1291.3	1291.3	1291.3	1291.3	1291.3	1291.3	1291.3
2.5°	1286.8	1286.3	1287.1	1285.9	1286.8	1287.1	1286.3	1290.1	1287.5	1288.0	1289.6
5°	1267.9	1267.1	1270.4	1269.6	1271.3	1273.0	1272.1	1277.5	1275.4	1277.1	1280.5
7.5°	1236.5	1238.2	1238.6	1238.6	1242.0	1247.5	1248.7	1252.0	1252.0	1256.6	1260.0
10°	1194.8	1195.2	1197.7	1197.3	1201.4	1207.3	1208.2	1214.0	1216.1	1223.6	1228.2
12.5°	1146.2	1144.2	1143.8	1143.4	1148.8	1155.1	1155.9	1165.9	1170.1	1176.8	1184.3
15°	1091.9	1086.5	1084.8	1088.2	1086.9	1090.7	1094.5	1099.9	1105.7	1119.1	1125.8
17.5°	1038.8	1028.0	1025.0	1021.3	1017.5	1017.5	1019.2	1025.9	1038.0	1045.1	1060.1
20°	984.5	971.5	961.1	951.1	942.2	938.9	939.4	947.7	956.5	968.2	982.4
22.5°	938.9	919.3	901.3	887.9	869.9	869.5	867.0	869.5	879.1	882.1	890.0
25°	899.6	873.3	849.1	827.3	809.8	800.5	798.1	797.2	792.6	791.3	785.5
27.5°	869.1	837.4	806.0	779.6	757.9	745.4	729.5	718.2	701.9	697.7	687.2
30°	844.0	809.8	775.4	741.2	716.5	694.0	667.2	647.5	622.4	606.2	592.0
32.5°	819.8	785.1	750.4	716.5	678.5	643.4	608.3	577.7	549.7	524.6	503.8
35°	799.7	766.7	731.6	690.6	642.1	591.5	549.3	514.6	476.2	449.8	423.5
37.5°	786.8	756.7	721.6	665.1	602.8	548.5	500.4	458.2	418.9	379.1	349.5
40°	780.9	754.6	710.7	641.7	568.6	508.3	455.2	408.4	358.3	313.6	281.8
42.5°	780.5	753.7	695.6	615.8	540.1	474.5	415.6	359.5	303.9	257.9	226.6
45°	788.0	752.5	679.7	594.1	515.0	446.5	376.3	308.1	245.8	211.5	194.8
47.5°	808.1	754.6	666.8	574.0	491.2	412.6	331.1	251.6	200.2	184.4	184.4
50°	844.0	766.7	663.4	559.7	467.4	373.3	275.9	203.2	177.2	177.2	182.3
52.5°	899.2	792.2	669.3	549.7	437.7	321.5	217.4	175.1	170.2	174.7	181.4
55°	1026.3	837.4	677.2	532.6	392.5	255.0	179.3	165.5	167.6	173.0	179.3
57.5°	1259.6	933.9	685.6	494.9	319.8	196.5	162.6	161.8	165.5	170.6	176.0
60°	1413.0	1056.8	706.9	438.1	242.0	162.2	154.3	159.3	163.9	168.1	172.3
62.5°	1413.0	1091.5	722.8	374.6	181.9	147.5	148.8	156.8	162.2	164.3	166.8
65°	1322.7	1028.0	668.9	305.2	148.0	139.2	143.8	151.7	156.8	158.5	160.5
67.5°	1155.9	908.0	563.5	229.9	132.1	132.1	137.9	143.8	148.0	151.3	154.7
69°	1005.0	814.7	496.2	194.8	125.8	126.7	132.5	137.5	142.6	146.8	150.9
70°	896.3	745.0	449.4	176.8	122.0	122.5	128.3	133.8	138.4	143.0	148.0
72.5°	479.9	514.6	341.5	145.1	112.4	113.7	119.2	124.1	128.3	133.0	137.5
75°	163.4	221.2	217.4	118.7	101.6	104.9	108.3	112.9	118.3	121.3	123.7
77.5°	95.8	99.1	115.8	96.5	91.6	93.2	97.0	100.7	105.4	108.3	110.3
80°	80.3	79.9	80.3	78.6	79.9	83.6	86.1	91.1	95.3	96.1	95.8
82.5°	65.2	68.6	69.0	68.2	71.9	74.8	76.9	79.9	79.4	80.3	82.0
85°	58.1	57.7	60.6	61.0	61.0	58.9	59.3	59.3	59.3	60.6	61.0
87.5°	58.1	48.5	37.6	33.8	35.5	33.4	31.8	31.4	34.7	38.0	37.2
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):

	160°	165°	170°	175°	180°
0°	1291.3	1291.3	1291.3	1291.3	1291.3
2.5°	1290.5	1291.7	1290.9	1290.9	1291.7
5°	1281.7	1283.8	1283.0	1283.8	1283.8
7.5°	1261.6	1264.6	1266.7	1268.8	1267.5
10°	1232.8	1237.8	1241.2	1243.7	1242.4
12.5°	1189.7	1194.4	1201.4	1205.6	1202.3
15°	1130.8	1143.8	1147.9	1153.8	1150.4
17.5°	1069.3	1077.3	1082.3	1087.7	1091.1
20°	987.4	993.7	1000.4	1002.9	999.1
22.5°	888.8	892.1	890.8	894.6	887.1
25°	780.5	782.6	781.3	784.7	778.4
27.5°	678.1	677.6	678.1	673.9	669.7
30°	579.4	575.6	574.0	567.7	566.5
32.5°	491.2	478.3	471.5	462.4	460.3
35°	403.0	384.6	372.5	362.0	357.4
37.5°	324.0	301.8	287.6	278.4	277.1
40°	256.3	235.8	225.7	220.7	219.9
42.5°	209.0	200.2	197.8	197.8	197.8
45°	190.6	190.2	192.3	194.0	194.4
47.5°	186.8	189.4	192.3	194.8	195.7
50°	186.8	189.4	191.5	194.0	194.8
52.5°	186.0	188.1	188.9	190.6	191.5
55°	183.5	184.8	184.8	185.6	186.4
57.5°	179.3	180.2	178.9	179.8	181.9
60°	175.1	176.0	173.9	176.0	177.2
62.5°	170.6	171.0	170.2	171.8	171.8
65°	163.0	162.2	163.4	164.7	165.1
67.5°	155.5	153.4	154.7	155.1	155.9
69°	149.6	148.4	148.8	149.6	150.5
70°	145.5	144.7	145.5	146.8	148.0
72.5°	135.0	135.4	138.4	140.9	143.4
75°	125.4	128.3	132.1	137.5	140.5
77.5°	113.7	115.8	118.7	124.6	130.0
80°	98.2	99.5	99.9	102.0	101.6
82.5°	79.9	78.6	77.8	76.9	76.5
85°	57.3	56.9	53.5	51.0	51.0
87.5°	34.3	32.6	31.0	28.9	27.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)