

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: P159531

Luminaire Tested: **VST-E03-LED-E-U-T3-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P159531
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33706)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-E03-LED-E-U-T3-7050
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 AREA
Light Source: (63) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9414.6 lumens
Efficiency: N/A
Efficacy: 125.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G3

Input Watts (W): 75.2
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

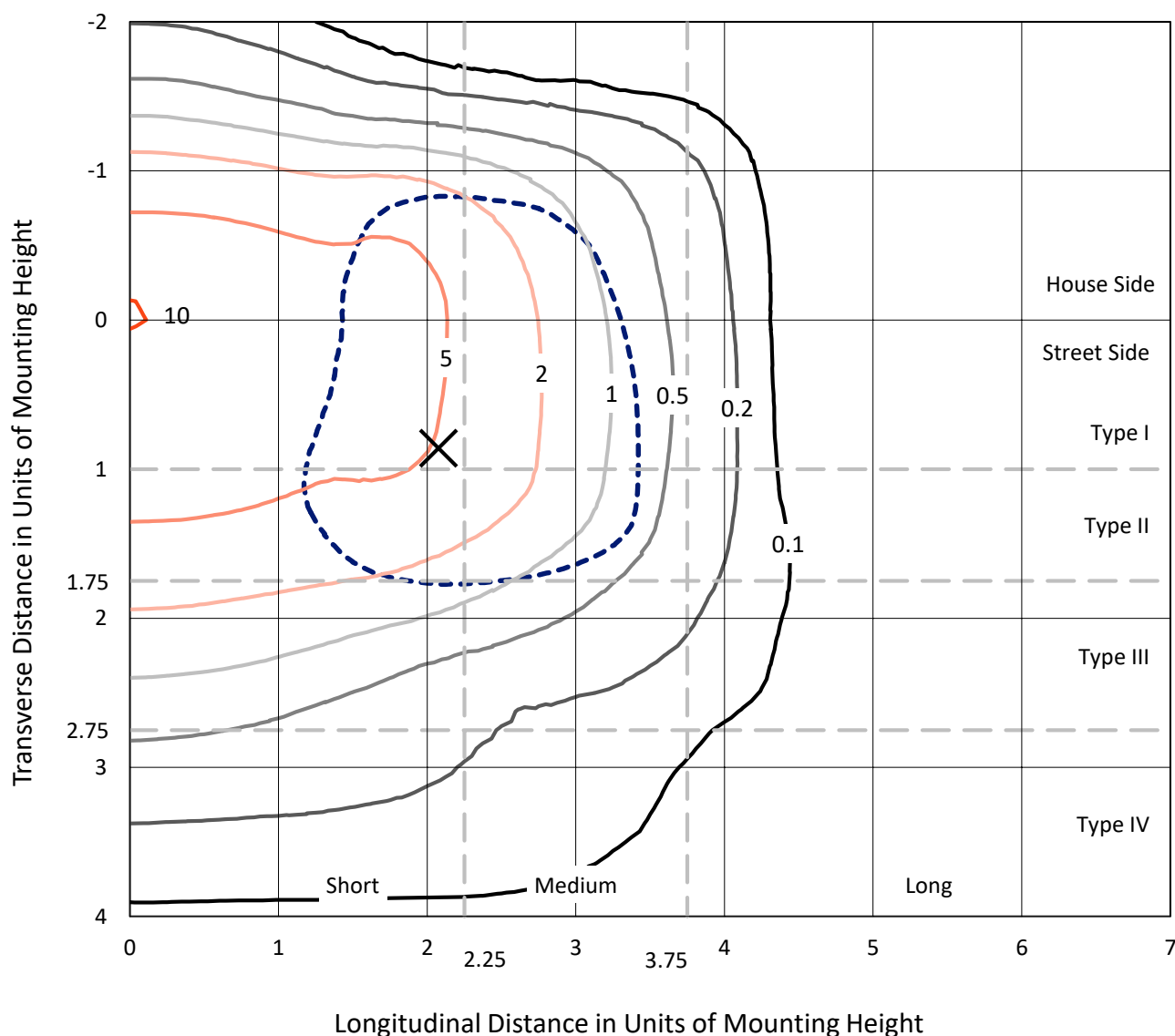


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

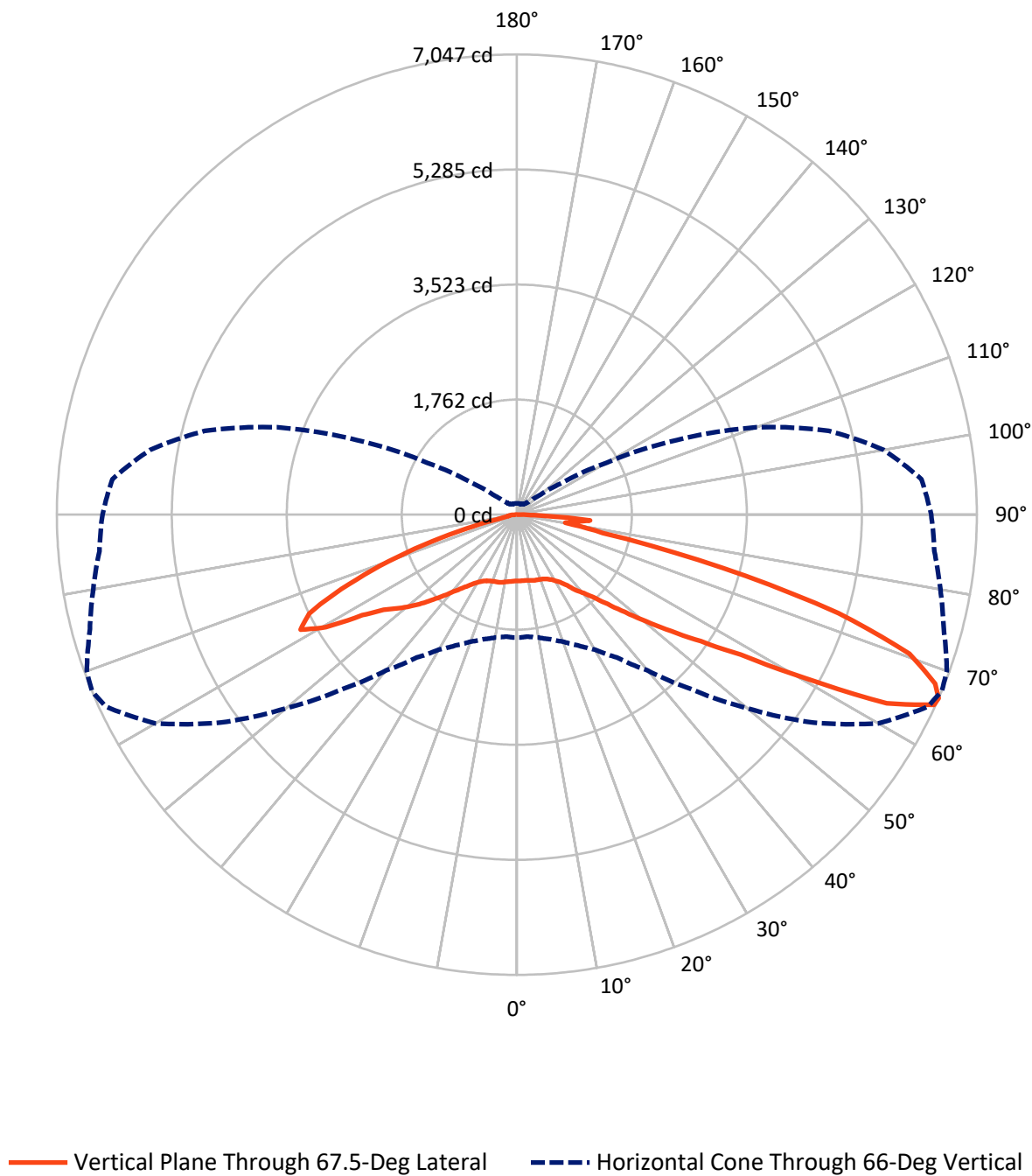


Based on 10 foot mounting height. Maximum calculated value = 10.2 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3257.9	0.0	3257.9
	% Fixture	34.6	0.0	34.6
Street Side	Lumens	6156.7	0.0	6156.7
	% Fixture	65.4	0.0	65.4
Total	Lumens	9414.6	0.0	9414.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.5	1.0
10°-20°	288.7	3.1
20°-30°	496.2	5.3
30°-40°	801.9	8.5
40°-50°	1329.0	14.1
50°-60°	2085.8	22.2
60°-70°	2851.6	30.3
70°-80°	1254.0	13.3
80°-90°	209.9	2.2
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°	9414.6	100.0
0°-180°	9414.6	100.0

Coefficient of Utilization



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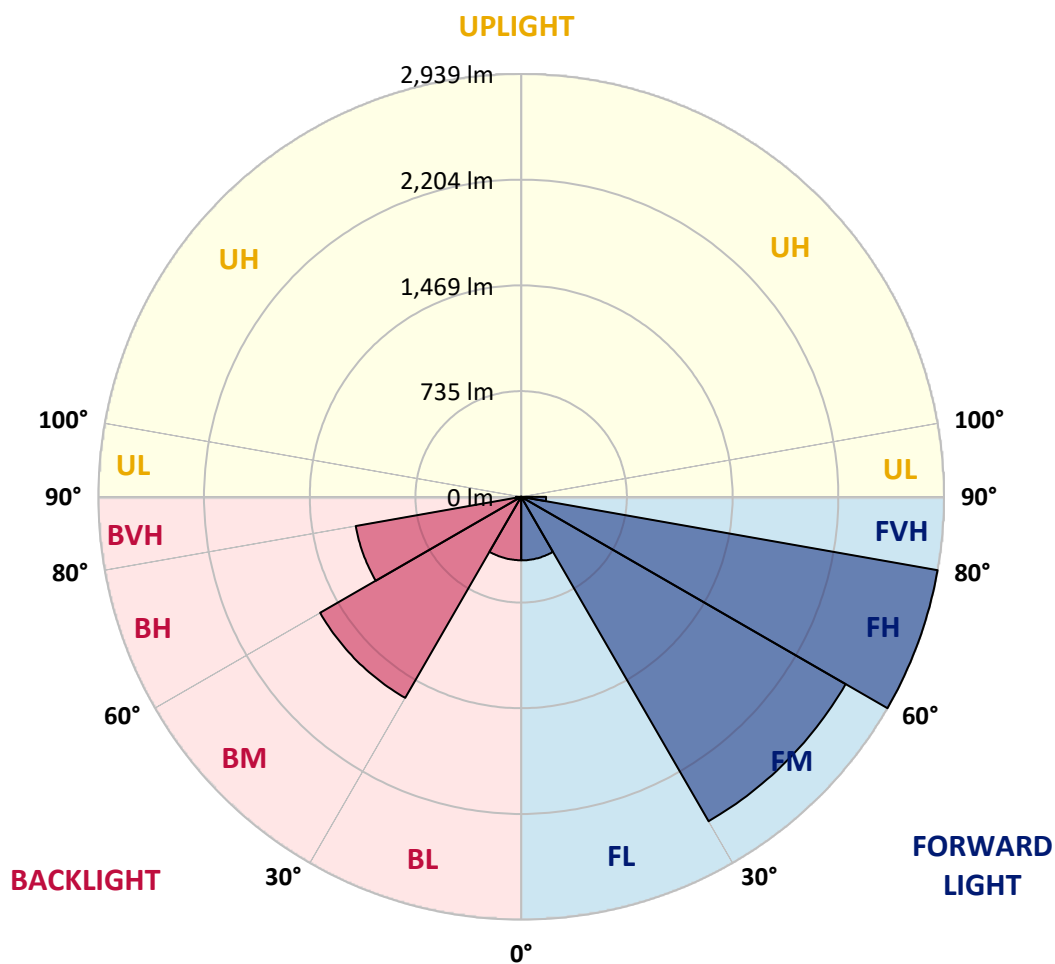
CATALOG NUMBER: VST-E03-LED-E-U-T3-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	441.6	4.7			
FM	(30°-60°)	2603.4	27.7			
FH	(60°-80°)	2938.5	31.2			G2/5000
FVH	(80°-90°)	173.2	1.8			G2/225
BL	(0°-30°)	440.7	4.7	B1/500		
BM	(30°-60°)	1613.3	17.1	B2/2500		
BH	(60°-80°)	1167.2	12.4	B3/2500		G3/2500
BVH	(80°-90°)	36.7	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1015.9	1015.9	1015.9	1015.9	1015.9	1015.9	1015.9	1015.9	1015.9	1015.9	1015.9
2.5°	1014.0	1014.0	1014.6	1014.0	1014.0	1013.4	1015.9	1015.9	1015.9	1015.2	1017.1
5°	1011.5	1011.5	1012.1	1012.1	1012.7	1012.1	1014.0	1014.6	1014.6	1014.6	1016.5
7.5°	1005.4	1007.2	1006.0	1006.6	1007.2	1009.1	1011.5	1012.7	1014.0	1015.9	1016.5
10°	992.5	995.5	994.9	996.8	997.4	1002.9	1004.8	1007.2	1011.5	1014.0	1015.9
12.5°	974.6	976.4	977.0	979.5	982.0	988.7	993.7	998.0	1004.2	1010.3	1016.5
15°	960.4	961.7	961.7	964.1	967.8	974.0	980.2	987.5	996.8	1007.2	1017.1
17.5°	964.7	967.8	965.3	964.7	966.0	969.7	975.2	981.4	992.5	1004.2	1015.9
20°	993.1	993.7	992.5	989.4	986.9	987.5	987.5	988.7	995.5	1004.8	1014.0
22.5°	1016.5	1018.9	1018.3	1018.9	1018.3	1020.8	1019.5	1017.1	1014.6	1015.2	1019.5
25°	1036.8	1039.3	1039.3	1041.1	1044.2	1049.1	1052.8	1052.2	1048.5	1043.5	1041.7
27.5°	1070.0	1070.0	1070.0	1071.8	1076.2	1082.3	1088.5	1092.2	1095.2	1090.3	1079.9
30°	1122.4	1123.0	1121.1	1121.8	1124.8	1132.8	1140.2	1145.8	1151.9	1151.3	1137.7
32.5°	1179.6	1182.1	1181.5	1183.9	1188.2	1195.6	1203.6	1212.2	1220.2	1225.1	1216.6
35°	1253.5	1256.0	1256.6	1260.2	1265.2	1276.3	1287.4	1298.5	1307.0	1310.8	1308.9
37.5°	1374.8	1375.4	1372.9	1367.4	1369.3	1377.8	1390.8	1408.6	1414.2	1417.9	1426.5
40°	1556.4	1554.5	1544.7	1539.8	1536.7	1540.4	1537.9	1552.1	1565.0	1565.6	1565.0
42.5°	1776.8	1771.3	1762.0	1760.8	1759.6	1758.4	1751.6	1752.2	1763.9	1766.9	1763.3
45°	1996.0	1989.2	1982.5	1988.6	1981.2	2000.3	2005.9	2020.6	2022.5	2028.6	2019.4
47.5°	2175.8	2176.4	2176.4	2185.0	2199.8	2236.1	2268.7	2297.0	2307.5	2322.3	2324.1
50°	2311.8	2315.5	2327.2	2354.9	2386.3	2447.3	2502.1	2553.2	2599.3	2616.5	2662.1
52.5°	2391.2	2401.1	2425.7	2471.9	2527.9	2606.7	2692.9	2779.7	2859.8	2927.5	2981.6
55°	2377.1	2384.5	2427.5	2499.6	2587.0	2692.9	2813.6	2939.2	3064.1	3178.7	3267.3
57.5°	2285.9	2290.9	2334.0	2415.2	2524.2	2666.5	2837.0	3023.5	3199.0	3383.7	3535.1
60°	2166.5	2173.9	2213.9	2278.0	2391.8	2543.3	2740.9	2994.0	3274.1	3564.7	3847.9
62.5°	2090.2	2088.3	2123.4	2180.7	2266.3	2403.5	2593.8	2893.6	3281.5	3772.8	4332.4
65°	1963.4	1957.8	1994.2	2059.4	2152.4	2285.3	2465.8	2753.9	3203.9	3851.6	4645.2
66°	1884.5	1873.4	1909.8	1975.7	2068.6	2210.2	2383.3	2667.7	3109.7	3774.7	4612.0
67.5°	1746.7	1741.1	1758.4	1810.1	1879.0	2012.0	2192.4	2478.7	2886.8	3543.1	4368.1
70°	1419.7	1407.4	1421.0	1444.3	1470.8	1503.4	1614.2	1841.5	2186.8	2822.8	3519.1
72.5°	967.2	961.1	986.3	1022.0	1092.8	1126.0	1169.8	1206.7	1328.6	1779.2	2454.7
75°	735.7	739.4	771.4	830.5	921.7	1020.2	1116.2	1151.3	1110.7	1075.6	1393.3
77.5°	412.5	434.0	472.8	547.9	644.6	783.7	951.2	1135.9	1228.3	1205.5	1127.3
80°	169.9	166.9	185.9	227.2	260.4	374.3	572.6	804.1	1063.9	1228.3	1202.4
82.5°	47.4	48.7	62.8	80.6	104.0	132.4	206.9	332.5	541.8	842.8	1103.3
85°	14.8	14.8	20.3	30.2	35.7	41.2	52.3	86.2	147.1	293.7	595.3
87.5°	3.1	3.1	4.3	8.6	9.2	9.2	11.7	16.0	14.2	12.9	57.9
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):

	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°	100°
0°	1015.9	1015.9	1015.9	1015.9	1015.9	1015.9	1015.9	1015.9	1015.9	1015.9	1015.9
2.5°	1015.2	1014.0	1014.6	1015.2	1014.6	1014.6	1014.0	1013.4	1014.0	1014.0	1015.9
5°	1014.6	1014.0	1014.6	1014.6	1014.6	1015.2	1015.2	1015.2	1017.1	1017.1	1020.2
7.5°	1015.9	1015.9	1017.1	1017.1	1017.1	1017.1	1017.7	1018.9	1022.0	1021.4	1026.9
10°	1018.3	1019.5	1022.6	1023.2	1023.2	1025.1	1026.3	1028.8	1031.9	1033.1	1038.0
12.5°	1021.4	1027.6	1033.1	1034.3	1036.1	1039.3	1041.1	1042.3	1047.8	1049.7	1055.9
15°	1025.1	1033.7	1040.5	1042.9	1045.4	1049.1	1051.6	1053.4	1058.3	1060.8	1068.2
17.5°	1025.7	1035.5	1043.5	1047.2	1050.3	1054.6	1058.3	1062.0	1067.6	1071.2	1078.6
20°	1025.1	1038.0	1050.3	1055.2	1058.3	1066.3	1071.8	1076.8	1083.5	1087.3	1094.6
22.5°	1031.9	1046.6	1063.3	1069.4	1074.4	1085.4	1092.8	1100.8	1109.4	1111.9	1117.4
25°	1047.8	1063.3	1084.2	1092.8	1101.4	1116.2	1126.7	1138.4	1147.0	1148.2	1150.1
27.5°	1075.0	1089.1	1114.4	1127.3	1141.4	1162.4	1177.7	1189.4	1201.8	1201.8	1200.5
30°	1129.7	1132.8	1159.3	1175.9	1196.8	1227.7	1250.4	1263.4	1272.6	1272.6	1262.1
32.5°	1200.5	1196.8	1220.9	1238.7	1267.7	1310.8	1341.5	1351.4	1361.2	1358.2	1340.3
35°	1302.7	1292.3	1305.8	1332.9	1365.5	1424.6	1456.7	1478.8	1485.0	1476.4	1448.0
37.5°	1431.4	1430.2	1436.9	1467.1	1503.4	1579.8	1612.4	1626.6	1621.7	1606.3	1556.4
40°	1567.5	1563.8	1559.5	1579.8	1620.4	1712.2	1770.1	1777.4	1770.7	1747.9	1685.1
42.5°	1749.1	1749.1	1728.8	1734.3	1768.2	1871.0	1939.3	1962.7	1963.4	1930.1	1846.4
45°	1999.1	1996.6	1960.9	1952.3	1978.1	2079.1	2167.1	2180.0	2180.0	2136.4	2044.6
47.5°	2299.5	2296.4	2261.3	2231.2	2236.1	2345.0	2418.3	2438.0	2420.8	2388.2	2279.2
50°	2638.1	2632.6	2596.9	2568.5	2556.2	2666.5	2728.6	2737.9	2712.6	2673.8	2555.6
52.5°	2981.6	2998.3	2977.3	2962.0	2966.3	3037.7	3101.7	3058.0	3045.1	3003.2	2884.4
55°	3339.4	3390.5	3436.6	3423.1	3439.1	3508.7	3521.0	3463.1	3439.7	3409.6	3277.2
57.5°	3699.5	3848.5	4000.0	4042.4	4081.9	4181.6	4167.4	4072.6	4090.4	4135.4	3986.4
60°	4202.5	4632.8	5017.0	5087.8	5210.3	5295.3	5314.4	5296.0	5379.1	5355.7	5223.9
62.5°	4975.2	5692.4	6226.8	6359.8	6482.9	6478.6	6414.0	6347.5	6429.4	6429.4	6085.2
65°	5526.8	6340.7	6912.7	7022.9	7018.0	6869.6	6716.9	6583.9	6572.2	6481.1	5978.1
66°	5552.6	6390.6	6950.8	7046.9	7009.9	6771.1	6588.2	6419.5	6347.5	6220.7	5705.3
67.5°	5320.0	6249.6	6826.5	6910.2	6812.9	6470.6	6218.8	5992.9	5888.2	5674.6	5189.4
70°	4363.8	5371.0	6210.2	6381.4	6271.1	5837.7	5492.9	5187.6	4987.5	4679.0	4329.4
72.5°	3185.5	3965.5	4874.2	5152.5	5135.2	4736.3	4458.7	4179.1	3916.3	3635.5	3380.0
75°	2070.5	2579.6	3086.3	3248.9	3170.6	2939.8	2740.9	2577.8	2328.4	2133.3	2085.8
77.5°	1182.1	1444.3	1366.1	1345.9	1247.9	1007.2	669.8	469.7	424.2	529.5	580.6
80°	1124.8	1019.5	834.8	752.9	692.0	471.6	247.5	174.2	152.7	156.4	168.1
82.5°	1268.3	1321.8	1081.1	903.2	786.2	573.8	313.4	145.9	106.5	126.2	141.6
85°	950.6	1338.5	1326.8	1124.2	922.3	661.2	370.6	111.4	64.0	88.7	115.7
87.5°	192.7	317.0	305.3	268.4	228.4	159.5	62.2	35.1	32.0	43.7	66.5
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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	1015.9	1015.9	1015.9	1015.9	1015.9	1015.9	1015.9	1015.9	1015.9	1015.9	1015.9
2.5°	1017.1	1017.1	1018.3	1020.2	1020.8	1020.8	1022.0	1020.8	1023.2	1023.8	1024.4
5°	1022.6	1024.4	1025.7	1028.8	1030.6	1031.9	1033.7	1032.5	1034.9	1035.5	1036.8
7.5°	1028.8	1031.9	1034.3	1035.5	1038.0	1038.0	1038.6	1037.4	1036.8	1034.9	1034.3
10°	1039.9	1041.7	1044.8	1043.5	1042.3	1038.0	1034.3	1028.8	1025.7	1020.2	1017.1
12.5°	1057.7	1058.9	1058.9	1053.4	1045.4	1035.5	1026.3	1017.1	1009.7	1003.6	999.8
15°	1070.0	1072.5	1069.4	1061.4	1049.7	1036.1	1023.8	1011.5	1001.7	993.7	988.7
17.5°	1079.3	1078.6	1073.1	1062.0	1051.0	1039.3	1028.2	1015.2	1002.9	991.2	983.8
20°	1093.4	1087.3	1077.4	1065.7	1054.0	1044.2	1035.5	1023.2	1010.3	994.3	983.2
22.5°	1112.5	1101.4	1087.3	1075.0	1063.9	1054.6	1044.8	1034.3	1020.8	1002.9	987.5
25°	1139.6	1120.5	1104.5	1092.2	1082.3	1071.8	1060.8	1047.2	1033.7	1015.2	996.8
27.5°	1180.9	1152.5	1132.2	1121.1	1111.9	1097.7	1083.5	1067.6	1050.3	1031.2	1010.3
30°	1230.7	1196.8	1173.5	1163.6	1152.5	1136.5	1121.1	1099.0	1075.0	1052.2	1026.3
32.5°	1289.2	1254.7	1231.3	1223.9	1206.1	1187.6	1166.0	1136.5	1105.1	1071.2	1040.5
35°	1377.8	1334.2	1312.6	1295.3	1270.7	1248.5	1212.2	1173.5	1128.5	1083.5	1045.4
37.5°	1469.0	1424.6	1402.5	1378.5	1346.5	1305.8	1257.2	1201.8	1142.0	1086.7	1039.9
40°	1590.9	1542.8	1514.5	1477.6	1425.9	1362.5	1290.4	1214.7	1142.0	1073.1	1016.5
42.5°	1733.1	1688.8	1645.1	1584.1	1501.0	1408.6	1307.6	1210.4	1122.4	1042.9	983.2
45°	1930.1	1854.4	1784.8	1686.9	1565.6	1435.7	1309.5	1190.1	1088.5	1000.4	934.0
47.5°	2151.7	2053.9	1930.7	1777.4	1611.8	1446.2	1291.7	1151.9	1034.9	939.5	866.9
50°	2407.3	2257.0	2068.0	1849.4	1635.2	1432.0	1249.2	1087.9	961.1	851.5	773.9
52.5°	2699.7	2470.7	2192.4	1900.6	1631.5	1388.9	1179.0	1003.6	861.9	745.6	669.2
55°	3024.1	2703.4	2311.2	1933.2	1598.3	1305.2	1068.8	884.7	738.8	624.3	557.2
57.5°	3596.1	3111.5	2537.8	1976.9	1528.7	1178.4	929.0	734.5	602.8	505.4	441.4
60°	4658.7	3825.1	2966.9	2079.7	1424.0	1019.5	752.9	576.2	466.1	395.3	347.8
62.5°	5316.2	4327.5	3176.2	2065.0	1254.1	802.2	559.0	427.3	340.4	293.7	264.1
65°	5160.5	4130.5	2920.7	1773.7	975.8	568.9	370.0	279.5	233.9	209.9	195.8
66°	4948.7	3910.1	2704.6	1588.4	850.3	475.3	305.3	234.5	201.3	183.5	176.1
67.5°	4504.8	3507.4	2332.7	1271.9	637.2	354.0	225.4	184.1	163.7	154.6	149.6
70°	3770.3	2825.9	1650.0	751.1	345.4	192.1	144.1	128.0	123.1	120.1	118.2
72.5°	2915.2	2045.8	964.1	369.4	174.2	124.4	109.6	102.8	101.0	101.0	101.6
75°	1836.5	1175.9	431.6	177.9	118.2	100.4	93.6	90.5	91.1	91.7	91.1
77.5°	610.1	405.7	179.8	126.2	102.8	91.1	85.6	84.4	85.6	86.2	86.2
80°	175.4	153.3	129.9	111.4	94.2	85.0	80.0	79.4	82.5	83.1	81.9
82.5°	134.8	126.2	117.6	107.8	90.5	80.0	78.2	78.8	80.6	79.4	73.9
85°	123.7	122.5	88.0	87.4	78.8	76.3	74.5	75.1	73.3	66.5	60.4
87.5°	69.5	64.6	49.9	50.5	58.5	60.4	49.9	52.9	49.3	43.1	39.4
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):

	160°	165°	170°	175°	180°
0°	1015.9	1015.9	1015.9	1015.9	1015.9
2.5°	1025.7	1025.1	1025.1	1026.9	1024.4
5°	1037.4	1036.8	1036.8	1038.6	1036.8
7.5°	1031.9	1030.0	1028.8	1028.2	1028.2
10°	1013.4	1011.5	1007.8	1006.6	1005.4
12.5°	994.3	992.5	988.1	988.1	986.9
15°	982.6	980.2	977.0	975.2	974.0
17.5°	976.4	972.7	969.1	967.2	966.0
20°	974.0	969.1	964.7	961.7	961.7
22.5°	974.6	968.5	963.5	959.8	958.6
25°	980.8	971.5	965.3	961.7	960.4
27.5°	989.4	978.3	970.3	965.3	963.5
30°	1001.0	985.7	974.6	968.5	966.0
32.5°	1009.1	987.5	973.4	964.7	961.7
35°	1008.5	980.8	963.5	952.4	948.7
37.5°	997.4	964.7	941.9	928.4	922.3
40°	972.7	935.2	911.2	898.3	890.9
42.5°	937.0	896.4	874.9	860.7	852.7
45°	881.0	841.0	814.5	803.5	793.0
47.5°	803.5	762.8	740.0	724.0	717.2
50°	712.3	671.7	647.7	634.7	628.6
52.5°	612.6	573.8	556.6	544.3	535.6
55°	509.2	473.5	466.1	452.5	444.5
57.5°	411.9	391.0	384.2	370.6	363.8
60°	322.0	315.2	307.9	299.2	295.5
62.5°	249.4	243.2	241.3	235.8	235.2
65°	190.3	190.9	189.6	188.4	187.1
66°	173.0	172.4	173.0	171.8	171.2
67.5°	147.1	149.6	151.4	150.8	150.8
70°	119.5	121.3	123.7	123.1	123.1
72.5°	102.2	105.3	106.5	105.9	105.9
75°	92.3	95.4	95.4	94.2	93.6
77.5°	86.2	87.4	86.2	85.0	83.8
80°	80.0	78.8	77.0	75.1	73.9
82.5°	69.5	66.5	64.6	61.6	61.6
85°	56.0	53.6	49.3	46.2	43.1
87.5°	36.3	35.1	32.0	24.0	19.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)