

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: P159553

Luminaire Tested: **VST-F05-LED-E-U-T3-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P159553
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-F05-LED-E-U-T3-8030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 AREA
Light Source: (35) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10654.3 lumens
Efficiency: N/A
Efficacy: 79.9 lumens/watt
Luminous Opening: Rectangular (W 0.83' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G3

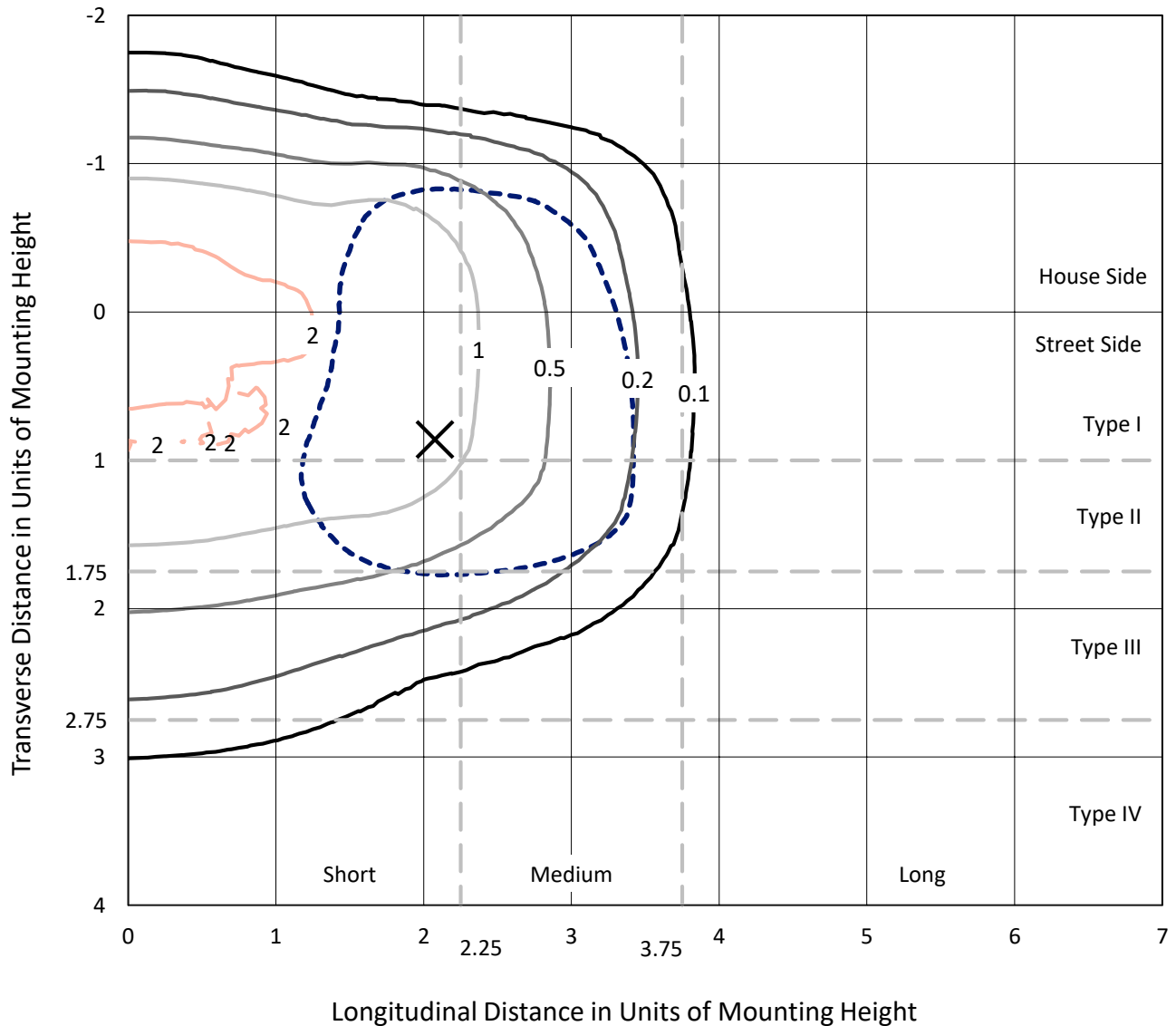
Input Watts (W): 133.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

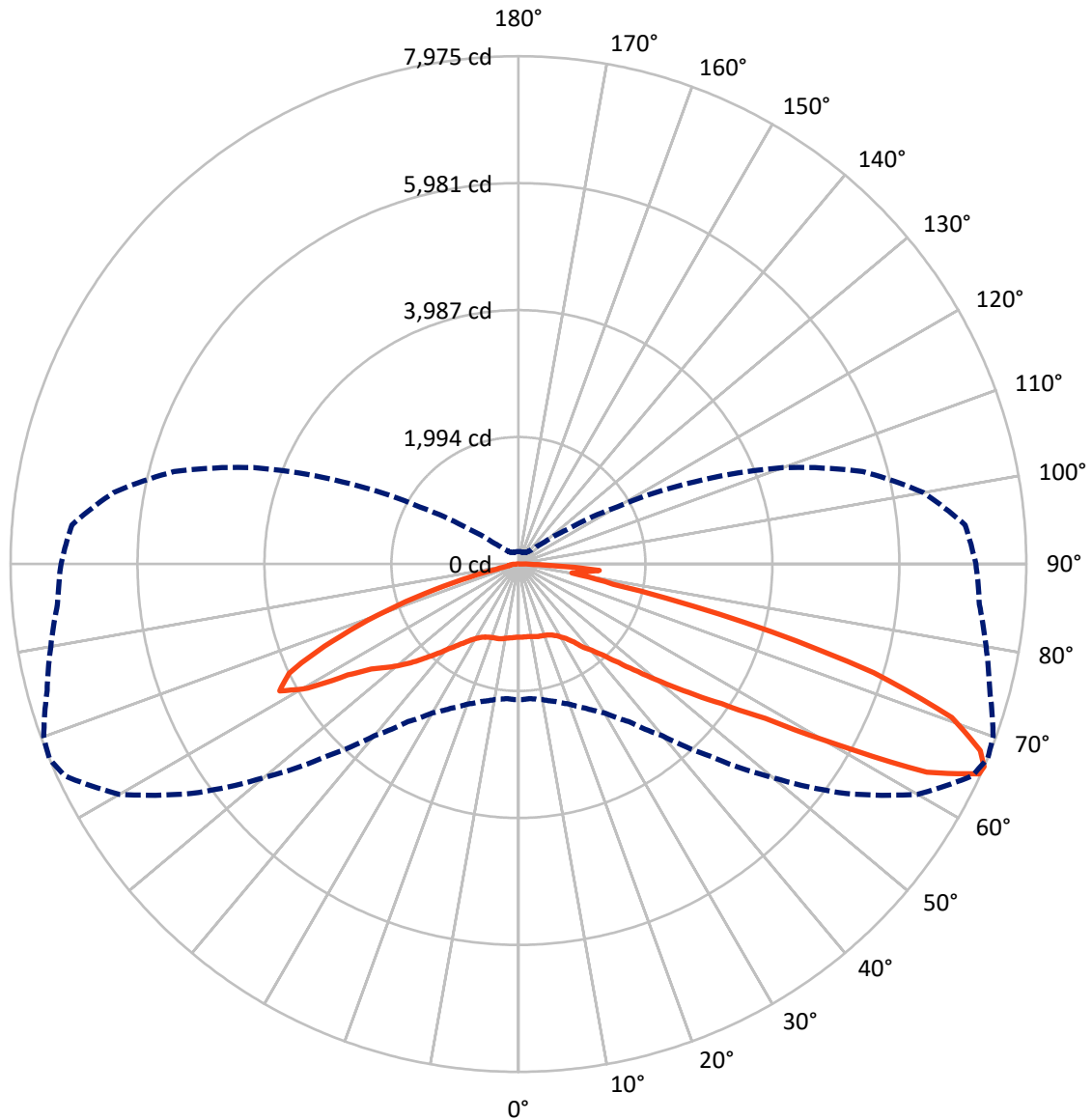
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 2.9 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 67.5-Deg Lateral - - - Horizontal Cone Through 66-Deg Vertical

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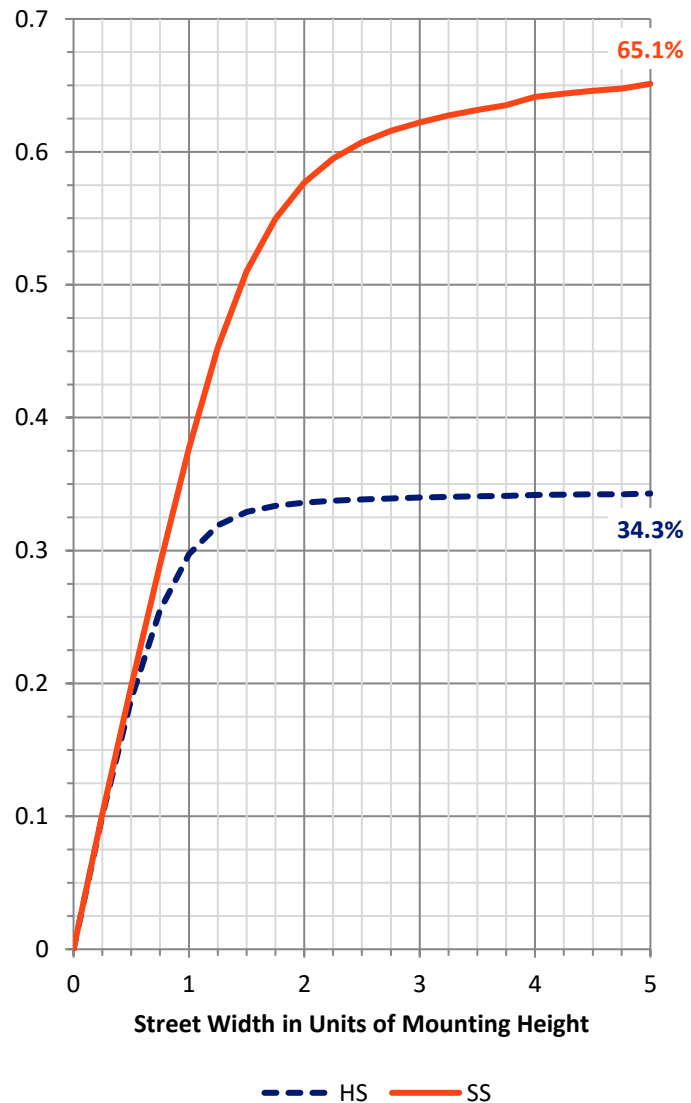
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3686.9	0.0	3686.9
	% Fixture	34.6	0.0	34.6
Street Side	Lumens	6967.5	0.0	6967.5
	% Fixture	65.4	0.0	65.4
Total	Lumens	10654.3	0.0	10654.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.3	1.0
10°-20°	326.7	3.1
20°-30°	561.5	5.3
30°-40°	907.5	8.5
40°-50°	1504.0	14.1
50°-60°	2360.4	22.2
60°-70°	3227.2	30.3
70°-80°	1419.2	13.3
80°-90°	237.5	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°	10654.3	100.0
0°-180°	10654.3	100.0

Coefficient of Utilization



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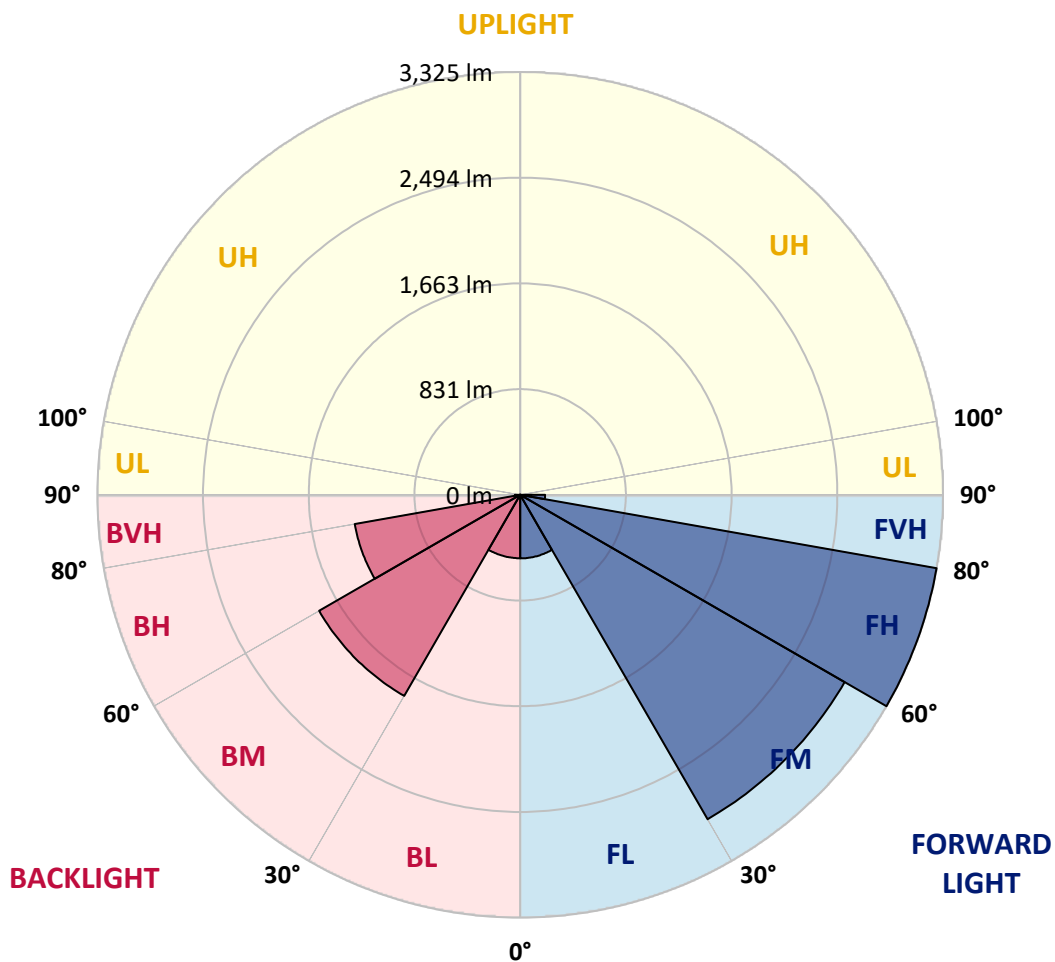
CATALOG NUMBER: VST-F05-LED-E-U-T3-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	499.8	4.7			
FM (30°-60°)	2946.2	27.7			
FH (60°-80°)	3325.5	31.2			G2/5000
FVH (80°-90°)	196.0	1.8			G2/225
BL (0°-30°)	498.7	4.7	B1/500		
BM (30°-60°)	1825.7	17.1	B2/2500		
BH (60°-80°)	1320.8	12.4	B3/2500		G3/2500
BVH (80°-90°)	41.6	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°	1149.6	1149.6	1149.6	1149.6	1149.6	1149.6	1149.6	1149.6	1149.6	1149.6	1149.6
2.5°	1147.5	1147.5	1148.2	1147.5	1147.5	1146.8	1149.6	1149.6	1149.6	1148.9	1151.0
5°	1144.7	1144.7	1145.4	1145.4	1146.1	1145.4	1147.5	1148.2	1148.2	1148.2	1150.3
7.5°	1137.8	1139.9	1138.5	1139.2	1139.9	1141.9	1144.7	1146.1	1147.5	1149.6	1150.3
10°	1123.1	1126.6	1125.9	1128.0	1128.7	1135.0	1137.1	1139.9	1144.7	1147.5	1149.6
12.5°	1102.9	1105.0	1105.7	1108.5	1111.3	1119.0	1124.5	1129.4	1136.4	1143.3	1150.3
15°	1086.9	1088.3	1088.3	1091.1	1095.3	1102.2	1109.2	1117.6	1128.0	1139.9	1151.0
17.5°	1091.8	1095.3	1092.5	1091.8	1093.2	1097.4	1103.6	1110.6	1123.1	1136.4	1149.6
20°	1123.8	1124.5	1123.1	1119.7	1116.9	1117.6	1117.6	1119.0	1126.6	1137.1	1147.5
22.5°	1150.3	1153.1	1152.4	1153.1	1152.4	1155.2	1153.8	1151.0	1148.2	1148.9	1153.8
25°	1173.3	1176.1	1176.1	1178.2	1181.7	1187.2	1191.4	1190.7	1186.5	1181.0	1178.9
27.5°	1210.9	1210.9	1210.9	1213.0	1217.9	1224.9	1231.8	1236.0	1239.5	1233.9	1222.1
30°	1270.1	1270.8	1268.8	1269.5	1272.9	1282.0	1290.4	1296.6	1303.6	1302.9	1287.6
32.5°	1334.9	1337.7	1337.0	1339.8	1344.7	1353.1	1362.1	1371.9	1380.9	1386.5	1376.7
35°	1418.6	1421.3	1422.0	1426.2	1431.8	1444.3	1456.9	1469.4	1479.2	1483.3	1481.3
37.5°	1555.8	1556.5	1553.7	1547.4	1549.5	1559.3	1573.9	1594.1	1600.4	1604.6	1614.3
40°	1761.3	1759.3	1748.1	1742.5	1739.1	1743.2	1740.4	1756.5	1771.1	1771.8	1771.1
42.5°	2010.8	2004.5	1994.1	1992.7	1991.3	1989.9	1982.2	1982.9	1996.1	1999.6	1995.5
45°	2258.8	2251.2	2243.5	2250.5	2242.1	2263.7	2270.0	2286.7	2288.8	2295.7	2285.3
47.5°	2462.3	2463.0	2463.0	2472.7	2489.4	2530.5	2567.5	2599.5	2611.4	2628.1	2630.2
50°	2616.2	2620.4	2633.7	2665.0	2700.5	2769.5	2831.5	2889.4	2941.6	2961.1	3012.7
52.5°	2706.1	2717.3	2745.1	2797.4	2860.8	2950.0	3047.5	3145.8	3236.3	3313.0	3374.3
55°	2690.1	2698.5	2747.2	2828.7	2927.7	3047.5	3184.1	3326.2	3467.7	3597.2	3697.6
57.5°	2587.0	2592.6	2641.3	2733.3	2856.6	3017.6	3210.6	3421.7	3620.2	3829.3	4000.7
60°	2451.8	2460.2	2505.5	2577.9	2706.8	2878.2	3101.9	3388.2	3705.2	4034.1	4354.6
62.5°	2365.4	2363.3	2403.0	2467.8	2564.7	2720.1	2935.3	3274.7	3713.6	4269.6	4902.9
65°	2221.9	2215.6	2256.7	2330.6	2435.8	2586.3	2790.4	3116.5	3625.8	4358.8	5256.9
66°	2132.7	2120.2	2161.3	2235.8	2341.0	2501.3	2697.1	3019.0	3519.2	4271.7	5219.2
67.5°	1976.6	1970.4	1989.9	2048.4	2126.4	2276.9	2481.1	2805.1	3267.0	4009.7	4943.3
70°	1606.7	1592.7	1608.1	1634.5	1664.5	1701.4	1826.8	2083.9	2474.8	3194.5	3982.5
72.5°	1094.6	1087.6	1116.2	1156.6	1236.7	1274.3	1323.8	1365.6	1503.6	2013.6	2777.9
75°	832.6	836.8	873.0	939.9	1043.0	1154.5	1263.2	1302.9	1256.9	1217.2	1576.7
77.5°	466.8	491.2	535.1	620.1	729.5	886.9	1076.5	1285.5	1390.0	1364.2	1275.7
80°	192.3	188.8	210.4	257.1	294.7	423.6	648.0	909.9	1204.0	1390.0	1360.7
82.5°	53.6	55.0	71.1	91.3	117.7	149.8	234.1	376.2	613.1	953.8	1248.6
85°	16.7	16.7	23.0	34.1	40.4	46.7	59.2	97.5	166.5	332.3	673.7
87.5°	3.5	3.5	4.9	9.8	10.5	10.5	13.2	18.1	16.0	14.6	65.5
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):

	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°	100°
0°	1149.6	1149.6	1149.6	1149.6	1149.6	1149.6	1149.6	1149.6	1149.6	1149.6	1149.6
2.5°	1148.9	1147.5	1148.2	1148.9	1148.2	1148.2	1147.5	1146.8	1147.5	1147.5	1149.6
5°	1148.2	1147.5	1148.2	1148.2	1148.2	1148.9	1148.9	1148.9	1151.0	1151.0	1154.5
7.5°	1149.6	1149.6	1151.0	1151.0	1151.0	1151.0	1151.7	1153.1	1156.6	1155.9	1162.2
10°	1152.4	1153.8	1157.3	1158.0	1158.0	1160.1	1161.5	1164.2	1167.7	1169.1	1174.7
12.5°	1155.9	1162.9	1169.1	1170.5	1172.6	1176.1	1178.2	1179.6	1185.8	1187.9	1194.9
15°	1160.1	1169.8	1177.5	1180.3	1183.1	1187.2	1190.0	1192.1	1197.7	1200.5	1208.8
17.5°	1160.8	1171.9	1181.0	1185.1	1188.6	1193.5	1197.7	1201.9	1208.1	1212.3	1220.7
20°	1160.1	1174.7	1188.6	1194.2	1197.7	1206.7	1213.0	1218.6	1226.3	1230.4	1238.8
22.5°	1167.7	1184.5	1203.3	1210.2	1215.8	1228.3	1236.7	1245.8	1255.5	1258.3	1264.6
25°	1185.8	1203.3	1227.0	1236.7	1246.5	1263.2	1275.0	1288.3	1298.0	1299.4	1301.5
27.5°	1216.5	1232.5	1261.1	1275.7	1291.7	1315.4	1332.9	1346.1	1360.0	1360.0	1358.6
30°	1278.5	1282.0	1312.0	1330.8	1354.5	1389.3	1415.1	1429.7	1440.2	1440.2	1428.3
32.5°	1358.6	1354.5	1381.6	1401.8	1434.6	1483.3	1518.2	1529.3	1540.5	1537.0	1516.8
35°	1474.3	1462.4	1477.8	1508.4	1545.4	1612.2	1648.5	1673.6	1680.5	1670.8	1638.7
37.5°	1619.9	1618.5	1626.2	1660.3	1701.4	1787.8	1824.8	1840.8	1835.2	1817.8	1761.3
40°	1773.9	1769.7	1764.8	1787.8	1833.8	1937.6	2003.1	2011.5	2003.8	1978.0	1907.0
42.5°	1979.4	1979.4	1956.4	1962.7	2001.0	2117.4	2194.7	2221.2	2221.9	2184.3	2089.5
45°	2262.3	2259.5	2219.1	2209.3	2238.6	2352.9	2452.5	2467.1	2467.1	2417.7	2313.9
47.5°	2602.3	2598.8	2559.1	2525.0	2530.5	2653.9	2736.8	2759.1	2739.6	2702.6	2579.3
50°	2985.5	2979.2	2938.8	2906.8	2892.8	3017.6	3087.9	3098.4	3069.8	3025.9	2892.1
52.5°	3374.3	3393.1	3369.4	3352.0	3356.9	3437.7	3510.2	3460.7	3446.1	3398.7	3264.2
55°	3779.1	3836.9	3889.2	3873.8	3892.0	3970.7	3984.6	3919.1	3892.7	3858.5	3708.7
57.5°	4186.7	4355.3	4526.7	4574.8	4619.4	4732.2	4716.2	4608.9	4629.1	4680.0	4511.4
60°	4755.9	5242.9	5677.7	5757.8	5896.5	5992.6	6014.2	5993.3	6087.4	6060.9	5911.8
62.5°	5630.3	6442.0	7046.8	7197.3	7336.6	7331.7	7258.6	7183.3	7276.0	7276.0	6886.5
65°	6254.6	7175.7	7822.9	7947.7	7942.1	7774.2	7601.4	7450.9	7437.7	7334.5	6765.3
66°	6283.9	7232.1	7866.1	7974.8	7933.0	7662.7	7455.8	7264.9	7183.3	7039.8	6456.6
67.5°	6020.5	7072.6	7725.4	7820.2	7710.1	7322.7	7037.7	6782.0	6663.6	6421.8	5872.8
70°	4938.5	6078.3	7028.0	7221.7	7096.9	6606.4	6216.3	5870.7	5644.3	5295.2	4899.4
72.5°	3604.9	4487.7	5516.1	5831.0	5811.5	5360.0	5045.8	4729.4	4431.9	4114.2	3825.1
75°	2343.1	2919.3	3492.7	3676.7	3588.2	3326.9	3101.9	2917.2	2635.1	2414.2	2360.5
77.5°	1337.7	1634.5	1546.1	1523.1	1412.3	1139.9	758.0	531.6	480.1	599.2	657.0
80°	1272.9	1153.8	944.8	852.1	783.1	533.7	280.1	197.2	172.8	177.0	190.2
82.5°	1435.3	1495.9	1223.5	1022.1	889.7	649.4	354.6	165.1	120.5	142.8	160.2
85°	1075.8	1514.7	1501.5	1272.2	1043.7	748.3	419.4	126.1	72.5	100.3	131.0
87.5°	218.1	358.8	345.6	303.8	258.5	180.5	70.4	39.7	36.2	49.5	75.2
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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	1149.6	1149.6	1149.6	1149.6	1149.6	1149.6	1149.6	1149.6	1149.6	1149.6	1149.6
2.5°	1151.0	1151.0	1152.4	1154.5	1155.2	1155.2	1156.6	1155.2	1158.0	1158.7	1159.4
5°	1157.3	1159.4	1160.8	1164.2	1166.3	1167.7	1169.8	1168.4	1171.2	1171.9	1173.3
7.5°	1164.2	1167.7	1170.5	1171.9	1174.7	1174.7	1175.4	1174.0	1173.3	1171.2	1170.5
10°	1176.8	1178.9	1182.4	1181.0	1179.6	1174.7	1170.5	1164.2	1160.8	1154.5	1151.0
12.5°	1197.0	1198.4	1198.4	1192.1	1183.1	1171.9	1161.5	1151.0	1142.6	1135.7	1131.5
15°	1210.9	1213.7	1210.2	1201.2	1187.9	1172.6	1158.7	1144.7	1133.6	1124.5	1119.0
17.5°	1221.4	1220.7	1214.4	1201.9	1189.3	1176.1	1163.5	1148.9	1135.0	1121.7	1113.4
20°	1237.4	1230.4	1219.3	1206.0	1192.8	1181.7	1171.9	1158.0	1143.3	1125.2	1112.7
22.5°	1259.0	1246.5	1230.4	1216.5	1204.0	1193.5	1182.4	1170.5	1155.2	1135.0	1117.6
25°	1289.7	1268.1	1249.9	1236.0	1224.9	1213.0	1200.5	1185.1	1169.8	1148.9	1128.0
27.5°	1336.3	1304.3	1281.3	1268.8	1258.3	1242.3	1226.3	1208.1	1188.6	1167.0	1143.3
30°	1392.8	1354.5	1328.0	1316.8	1304.3	1286.2	1268.8	1243.7	1216.5	1190.7	1161.5
32.5°	1459.0	1419.9	1393.5	1385.1	1364.9	1344.0	1319.6	1286.2	1250.6	1212.3	1177.5
35°	1559.3	1509.8	1485.4	1465.9	1438.1	1413.0	1371.9	1328.0	1277.1	1226.3	1183.1
37.5°	1662.4	1612.2	1587.2	1560.0	1523.8	1477.8	1422.7	1360.0	1292.4	1229.7	1176.8
40°	1800.4	1746.0	1714.0	1672.2	1613.6	1541.9	1460.4	1374.7	1292.4	1214.4	1150.3
42.5°	1961.3	1911.1	1861.7	1792.7	1698.6	1594.1	1479.9	1369.8	1270.1	1180.3	1112.7
45°	2184.3	2098.6	2019.8	1909.1	1771.8	1624.8	1482.0	1346.8	1231.8	1132.2	1056.9
47.5°	2435.1	2324.3	2185.0	2011.5	1824.1	1636.6	1461.8	1303.6	1171.2	1063.2	981.0
50°	2724.2	2554.2	2340.3	2093.0	1850.5	1620.6	1413.7	1231.1	1087.6	963.6	875.8
52.5°	3055.2	2796.0	2481.1	2150.8	1846.3	1571.8	1334.2	1135.7	975.4	843.7	757.4
55°	3422.4	3059.4	2615.5	2187.7	1808.7	1477.1	1209.5	1001.2	836.1	706.5	630.5
57.5°	4069.6	3521.3	2871.9	2237.2	1730.0	1333.6	1051.4	831.2	682.1	572.0	499.6
60°	5272.2	4328.8	3357.6	2353.6	1611.5	1153.8	852.1	652.1	527.4	447.3	393.7
62.5°	6016.3	4897.4	3594.5	2336.9	1419.3	907.8	632.6	483.5	385.3	332.3	298.9
65°	5840.0	4674.4	3305.3	2007.3	1104.3	643.8	418.7	316.3	264.8	237.6	221.6
66°	5600.4	4425.0	3060.8	1797.6	962.2	537.9	345.6	265.5	227.8	207.6	199.3
67.5°	5098.0	3969.3	2639.9	1439.5	721.1	400.6	255.0	208.3	185.3	174.9	169.3
70°	4266.8	3198.0	1867.3	850.0	390.9	217.4	163.0	144.9	139.3	135.9	133.8
72.5°	3299.0	2315.3	1091.1	418.0	197.2	140.7	124.0	116.4	114.3	114.3	115.0
75°	2078.4	1330.8	488.4	201.4	133.8	113.6	105.9	102.4	103.1	103.8	103.1
77.5°	690.5	459.1	203.4	142.8	116.4	103.1	96.8	95.5	96.8	97.5	97.5
80°	198.6	173.5	147.0	126.1	106.6	96.1	90.6	89.9	93.4	94.1	92.7
82.5°	152.6	142.8	133.1	121.9	102.4	90.6	88.5	89.2	91.3	89.9	83.6
85°	140.0	138.7	99.6	98.9	89.2	86.4	84.3	85.0	82.9	75.2	68.3
87.5°	78.7	73.2	56.4	57.1	66.2	68.3	56.4	59.9	55.7	48.8	44.6
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°	1149.6	1149.6	1149.6	1149.6	1149.6
2.5°	1160.8	1160.1	1160.1	1162.2	1159.4
5°	1174.0	1173.3	1173.3	1175.4	1173.3
7.5°	1167.7	1165.6	1164.2	1163.5	1163.5
10°	1146.8	1144.7	1140.6	1139.2	1137.8
12.5°	1125.2	1123.1	1118.3	1118.3	1116.9
15°	1112.0	1109.2	1105.7	1103.6	1102.2
17.5°	1105.0	1100.8	1096.7	1094.6	1093.2
20°	1102.2	1096.7	1091.8	1088.3	1088.3
22.5°	1102.9	1096.0	1090.4	1086.2	1084.8
25°	1109.9	1099.4	1092.5	1088.3	1086.9
27.5°	1119.7	1107.1	1098.1	1092.5	1090.4
30°	1132.9	1115.5	1102.9	1096.0	1093.2
32.5°	1141.9	1117.6	1101.5	1091.8	1088.3
35°	1141.3	1109.9	1090.4	1077.8	1073.7
37.5°	1128.7	1091.8	1066.0	1050.7	1043.7
40°	1100.8	1058.3	1031.2	1016.5	1008.2
42.5°	1060.4	1014.4	990.1	974.0	965.0
45°	997.0	951.7	921.8	909.2	897.4
47.5°	909.2	863.3	837.5	819.4	811.7
50°	806.1	760.1	733.0	718.3	711.4
52.5°	693.3	649.4	629.8	615.9	606.2
55°	576.2	535.8	527.4	512.1	503.0
57.5°	466.1	442.4	434.8	419.4	411.8
60°	364.4	356.7	348.4	338.6	334.4
62.5°	282.2	275.2	273.1	266.8	266.2
65°	215.3	216.0	214.6	213.2	211.8
66°	195.8	195.1	195.8	194.4	193.7
67.5°	166.5	169.3	171.4	170.7	170.7
70°	135.2	137.3	140.0	139.3	139.3
72.5°	115.7	119.1	120.5	119.8	119.8
75°	104.5	108.0	108.0	106.6	105.9
77.5°	97.5	98.9	97.5	96.1	94.8
80°	90.6	89.2	87.1	85.0	83.6
82.5°	78.7	75.2	73.2	69.7	69.7
85°	63.4	60.6	55.7	52.3	48.8
87.5°	41.1	39.7	36.2	27.2	21.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)