

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: P179074

Luminaire Tested: **VERD-A02-E-U-T4-7030-AP**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P179074  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26294)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: VERD-A02-E-U-T4-7030-AP  
Description: VERDEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 3000K LEDS AND TYPE IV OPTICS, GREY PAINTED FINISH  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8928 lumens  
Efficiency: N/A  
Efficacy: 97.0 lumens/watt  
Luminous Opening: Rectangular (W 0.79' x L: 1.25' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B2 - U0 - G3

Input Watts (W): 92  
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

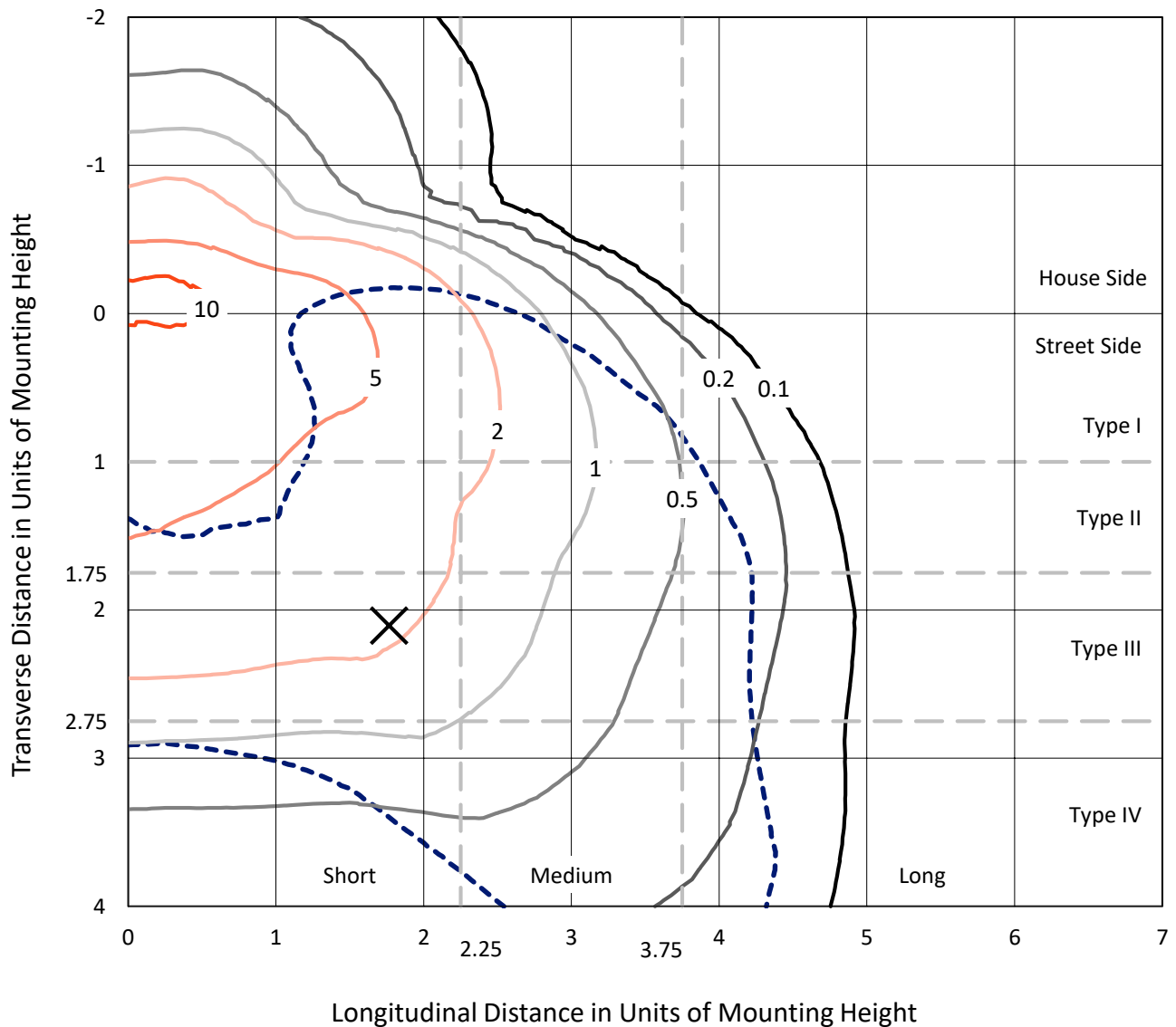


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

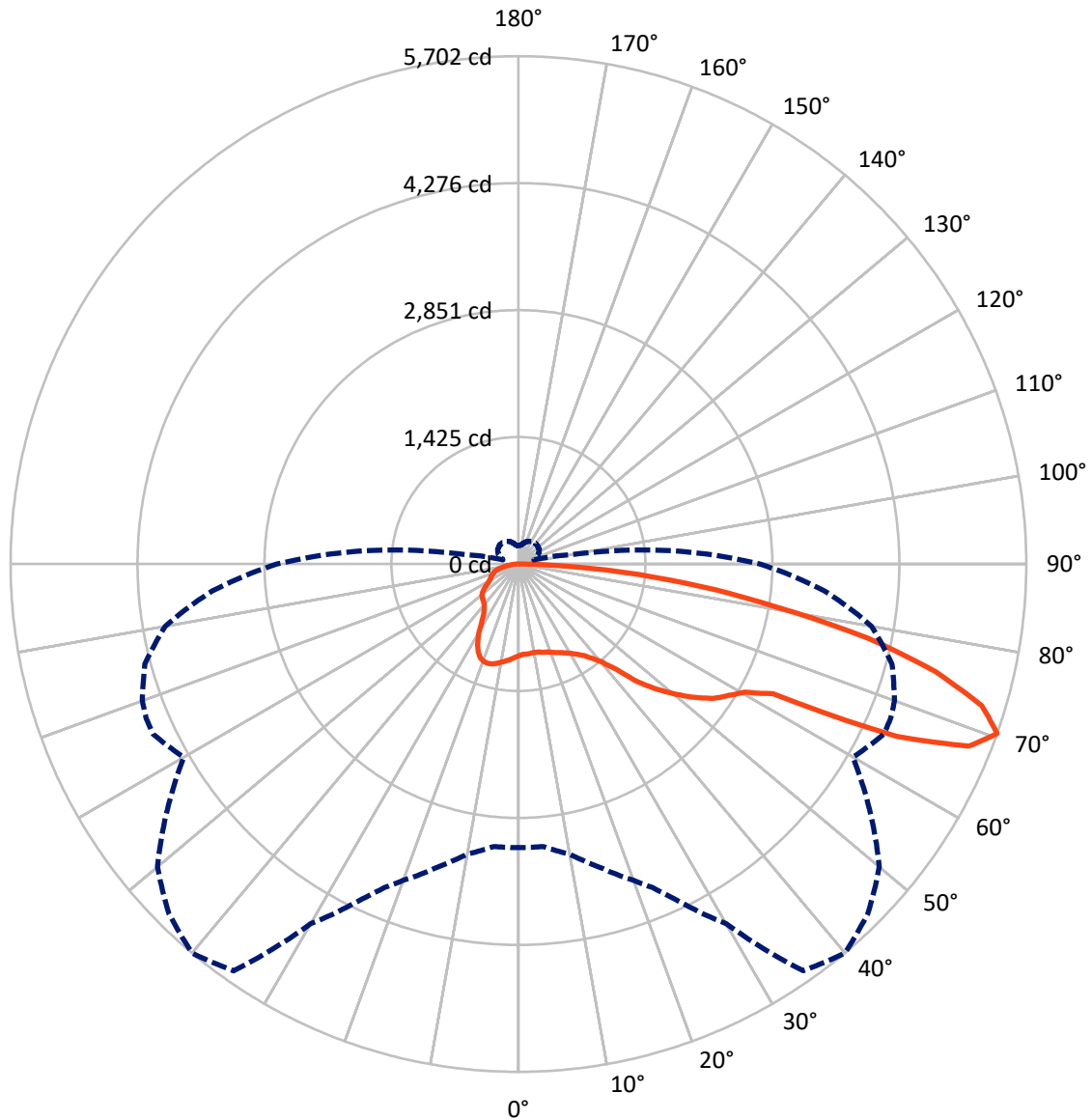


Based on 10 foot mounting height. Maximum calculated value = 10.9 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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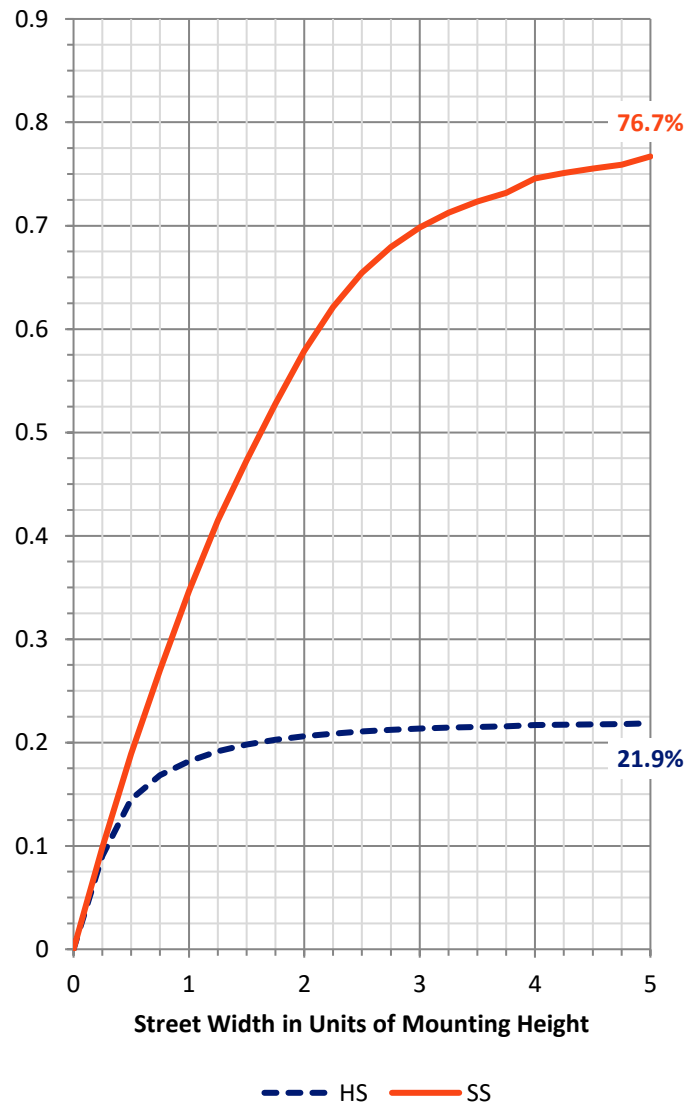
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1977.7	0.0	1977.7
	% Fixture	22.2	0.0	22.2
<b>Street Side</b>	Lumens	6950.3	0.0	6950.3
	% Fixture	77.8	0.0	77.8
<b>Total</b>	Lumens	8928.0	0.0	8928.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.1	1.1
10°-20°	312.7	3.5
20°-30°	523.6	5.9
30°-40°	738.1	8.3
40°-50°	1155.8	12.9
50°-60°	1690.5	18.9
60°-70°	2344.6	26.3
70°-80°	1756.8	19.7
80°-90°	305.8	3.4
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°	8928.0	100.0
0°-180°	8928.0	100.0



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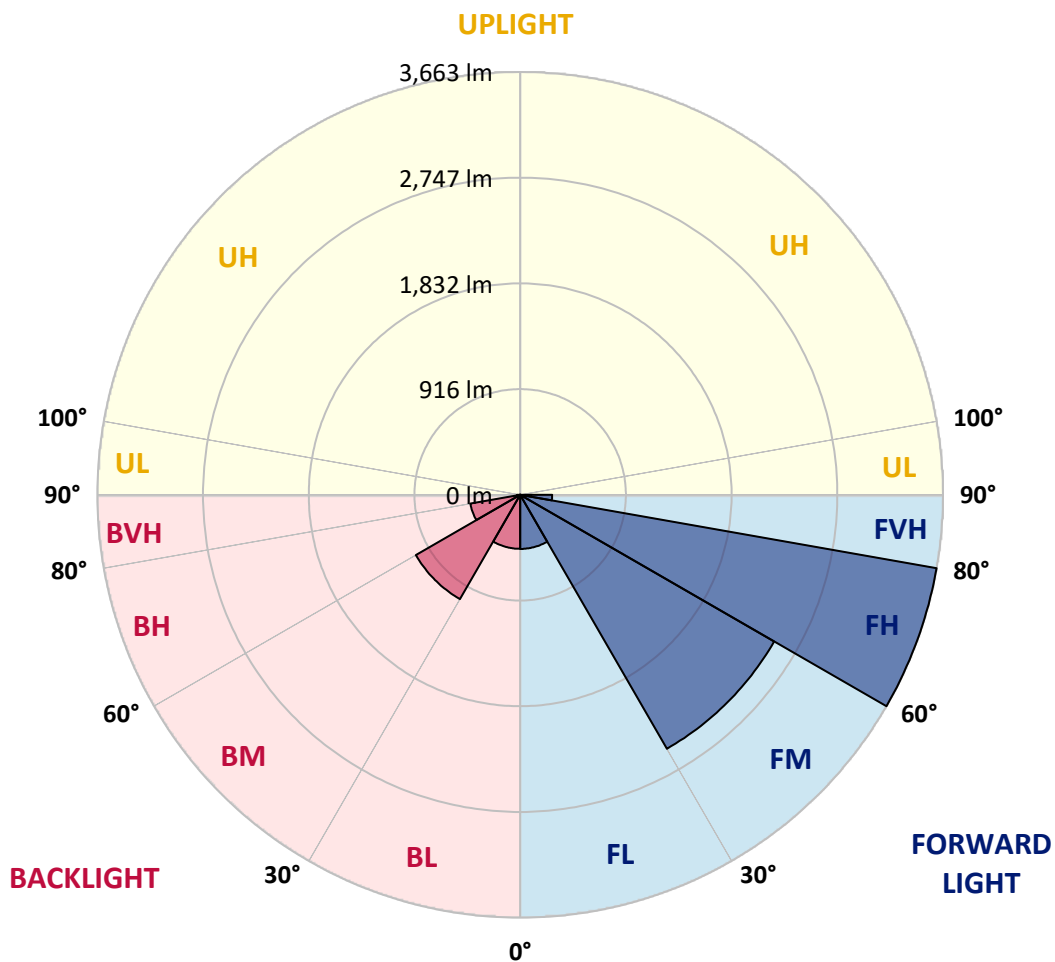
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	468.7	5.2			
FM	(30°-60°)	2540.8	28.5			
FH	(60°-80°)	3663.1	41.0			G2/5000
FVH	(80°-90°)	277.7	3.1			G3/500
BL	(0°-30°)	467.7	5.2	B1/500		
BM	(30°-60°)	1043.6	11.7	B2/2500		
BH	(60°-80°)	438.3	4.9	B1/500		G1/500
BVH	(80°-90°)	28.1	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1028.2	1028.2	1028.2	1028.2	1028.2	1028.2	1028.2	1028.2	1028.2	1028.2	1028.2
2.5°	1020.3	1019.3	1014.4	1012.4	1006.5	1009.4	1015.3	1020.3	1018.3	1015.3	1017.3
5°	1017.3	1015.3	1011.4	1008.4	1002.5	1003.5	1009.4	1012.4	1016.3	1015.3	1017.3
7.5°	1004.5	1002.5	996.6	995.6	990.6	991.6	994.6	999.5	1007.4	1011.4	1012.4
10°	996.6	992.6	987.7	987.7	982.7	983.7	986.7	991.6	1001.5	1008.4	1011.4
12.5°	992.6	989.7	986.7	987.7	984.7	986.7	989.7	995.6	1005.5	1014.4	1016.3
15°	999.5	999.5	995.6	997.6	997.6	1001.5	1004.5	1008.4	1016.3	1027.2	1034.1
17.5°	1018.3	1019.3	1015.3	1019.3	1019.3	1022.3	1025.2	1027.2	1030.2	1040.0	1051.9
20°	1026.2	1029.2	1028.2	1035.1	1040.0	1043.0	1045.0	1048.9	1049.9	1056.8	1067.7
22.5°	1047.9	1046.0	1046.0	1055.8	1055.8	1059.8	1062.8	1064.7	1069.7	1080.5	1088.4
25°	1071.6	1068.7	1069.7	1077.6	1075.6	1076.6	1079.5	1083.5	1088.4	1102.3	1117.1
27.5°	1087.4	1086.5	1087.4	1093.4	1098.3	1100.3	1103.2	1107.2	1118.1	1129.9	1146.7
30°	1122.0	1122.0	1113.1	1117.1	1120.0	1122.0	1127.0	1137.8	1150.7	1164.5	1181.3
32.5°	1179.3	1180.3	1168.4	1164.5	1160.5	1159.5	1162.5	1181.3	1190.2	1207.0	1224.7
35°	1238.6	1229.7	1223.7	1229.7	1231.6	1229.7	1230.7	1241.5	1247.4	1262.3	1278.1
37.5°	1397.6	1375.8	1366.0	1361.0	1337.3	1319.5	1313.6	1317.6	1322.5	1342.3	1359.1
40°	1628.7	1628.7	1603.0	1588.2	1548.7	1520.0	1499.3	1461.8	1440.0	1447.0	1462.8
42.5°	1879.6	1866.7	1850.9	1815.4	1789.7	1754.1	1728.5	1674.1	1635.6	1619.8	1590.2
45°	2078.1	2086.0	2091.9	2063.3	2042.5	2026.7	2013.9	1990.2	1941.8	1896.4	1833.1
47.5°	2264.8	2273.7	2272.7	2209.5	2225.3	2227.2	2224.3	2197.6	2146.2	2101.8	2028.7
50°	2449.5	2468.2	2446.5	2342.8	2366.5	2372.4	2373.4	2351.7	2313.2	2298.3	2263.8
52.5°	2678.6	2661.8	2563.0	2498.8	2486.0	2490.0	2489.0	2485.0	2487.0	2490.9	2483.0
55°	2942.3	2809.0	2680.6	2647.0	2624.3	2608.5	2597.6	2579.8	2590.7	2662.8	2659.8
57.5°	2979.8	2974.9	2968.0	2829.7	2791.2	2780.3	2758.6	2742.8	2688.5	2783.3	2825.8
60°	3571.5	3629.7	3564.6	3518.1	3434.2	3311.7	3164.5	2999.6	2838.6	2918.6	2981.8
62.5°	4213.5	4213.5	4290.5	4239.1	4185.8	4085.1	4030.7	3818.4	3513.2	3207.0	3214.9
65°	4281.6	4307.3	4369.5	4492.0	4544.3	4572.0	4609.5	4589.8	4636.2	4665.8	4133.5
67.5°	3850.0	3881.6	3961.6	4150.3	4335.0	4425.8	4532.5	4762.6	5186.3	5457.0	5385.9
70°	3183.3	3184.3	3306.8	3524.1	3779.9	3931.0	4146.3	4662.9	5574.5	5701.9	5549.8
72.5°	2357.6	2356.6	2488.0	2681.6	2938.4	3152.7	3372.9	4121.6	5296.0	5441.2	5376.0
75°	1661.3	1669.2	1777.8	1954.6	2179.8	2351.7	2562.1	3354.2	4479.2	4838.7	4941.4
77.5°	1158.6	1186.2	1254.4	1401.5	1591.2	1729.4	1893.4	2555.1	3528.0	4018.9	4175.9
80°	736.8	761.5	822.7	953.1	1119.0	1241.5	1370.9	1866.7	2625.3	2942.3	3086.5
82.5°	420.8	437.5	491.9	595.6	722.0	818.8	918.5	1255.3	1860.8	2062.3	2023.8
85°	206.4	217.3	252.8	323.0	418.8	487.9	558.0	759.5	1061.8	1176.3	1118.1
87.5°	55.3	59.3	74.1	105.7	144.2	172.8	198.5	281.5	347.7	301.2	225.2
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):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1028.2	1028.2	1028.2	1028.2	1028.2	1028.2	1028.2	1028.2	1028.2	1028.2	1028.2
2.5°	1015.3	1010.4	1013.4	1014.4	1014.4	1017.3	1020.3	1022.3	1018.3	1028.2	1024.2
5°	1016.3	1011.4	1018.3	1021.3	1021.3	1023.2	1029.2	1031.1	1033.1	1040.0	1038.1
7.5°	1014.4	1016.3	1024.2	1031.1	1032.1	1033.1	1044.0	1044.0	1053.9	1054.8	1056.8
10°	1016.3	1024.2	1033.1	1046.0	1048.9	1049.9	1059.8	1065.7	1077.6	1073.6	1082.5
12.5°	1025.2	1039.0	1048.9	1067.7	1074.6	1077.6	1091.4	1104.2	1118.1	1114.1	1122.0
15°	1042.0	1059.8	1074.6	1097.3	1106.2	1113.1	1131.9	1152.6	1163.5	1166.5	1178.3
17.5°	1060.8	1081.5	1101.3	1125.0	1137.8	1147.7	1169.4	1197.1	1207.9	1219.8	1232.6
20°	1078.6	1102.3	1121.0	1146.7	1162.5	1176.3	1206.0	1235.6	1252.4	1272.1	1287.0
22.5°	1098.3	1121.0	1141.8	1168.4	1187.2	1206.0	1244.5	1275.1	1301.8	1325.5	1345.2
25°	1129.9	1146.7	1171.4	1199.1	1221.8	1246.5	1286.0	1319.5	1356.1	1383.7	1406.5
27.5°	1163.5	1177.3	1205.0	1239.5	1263.3	1287.9	1325.5	1367.9	1412.4	1449.9	1480.5
30°	1198.1	1217.8	1252.4	1287.9	1310.7	1334.4	1374.9	1430.2	1484.5	1533.9	1560.5
32.5°	1240.5	1268.2	1310.7	1348.2	1367.9	1389.7	1438.1	1502.3	1579.3	1632.6	1635.6
35°	1301.8	1335.4	1379.8	1419.3	1438.1	1461.8	1519.1	1596.1	1693.9	1737.3	1715.6
37.5°	1383.7	1425.2	1467.7	1511.2	1532.9	1561.5	1628.7	1741.3	1849.9	1869.7	1813.4
40°	1494.4	1534.9	1583.3	1633.6	1666.2	1704.7	1793.6	1973.4	2071.2	2044.5	1948.7
42.5°	1613.9	1671.2	1730.4	1802.5	1849.9	1890.4	2026.7	2240.1	2292.4	2243.0	2097.8
45°	1811.4	1844.0	1903.3	1989.2	2043.5	2109.7	2305.3	2526.5	2556.1	2457.4	2259.8
47.5°	2002.0	1999.1	2057.4	2178.8	2256.9	2359.6	2608.5	2815.9	2812.9	2687.5	2436.6
50°	2232.2	2230.2	2257.9	2406.0	2516.6	2638.1	2951.2	3103.3	3052.9	2891.9	2605.5
52.5°	2454.4	2475.1	2530.5	2651.0	2763.5	2919.6	3244.5	3333.4	3276.2	3077.6	2747.7
55°	2660.8	2704.3	2778.4	2933.4	3076.6	3274.2	3530.0	3566.5	3467.8	3221.8	2850.5
57.5°	2858.4	2918.6	3021.3	3232.7	3437.1	3617.9	3773.0	3769.0	3622.8	3332.5	2916.6
60°	3043.1	3132.9	3265.3	3536.9	3769.0	3906.3	4008.0	3947.8	3742.3	3403.6	2939.4
62.5°	3256.4	3350.2	3502.3	3866.8	4070.3	4164.1	4193.7	4072.2	3809.5	3417.4	2900.8
65°	3661.4	3691.0	3804.6	4192.7	4325.1	4360.6	4313.2	4126.6	3822.3	3372.0	2757.6
67.5°	4971.0	4241.1	4104.8	4441.6	4490.0	4473.2	4360.6	4125.6	3750.2	3188.3	2412.9
70°	5290.0	4813.0	4336.9	4524.6	4523.6	4493.0	4341.9	4025.8	3448.0	2708.2	1725.5
72.5°	5164.6	4712.3	4309.3	4440.6	4475.2	4476.2	4164.1	3614.9	2791.2	1844.0	799.0
75°	4835.7	4413.0	4244.1	4232.2	4170.0	3994.2	3453.0	2721.1	1693.9	734.8	118.5
77.5°	4093.0	3696.9	3409.5	3121.1	2964.0	2714.2	2026.7	1220.8	557.1	88.9	76.1
80°	2894.9	2367.5	1756.1	1333.4	1124.0	769.4	263.7	96.8	80.0	56.3	48.4
82.5°	1713.6	1167.4	511.6	118.5	90.9	84.0	70.1	60.2	51.4	34.6	30.6
85°	874.1	462.2	67.2	55.3	52.3	49.4	42.5	37.5	28.6	18.8	20.7
87.5°	117.5	35.6	19.8	19.8	18.8	18.8	17.8	13.8	8.9	5.9	5.9
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):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1028.2	1028.2	1028.2	1028.2	1028.2	1028.2	1028.2	1028.2	1028.2	1028.2	1028.2
2.5°	1024.2	1027.2	1030.2	1032.1	1034.1	1035.1	1038.1	1038.1	1042.0	1046.9	1050.9
5°	1038.1	1045.0	1045.0	1046.9	1052.9	1052.9	1058.8	1057.8	1064.7	1072.6	1073.6
7.5°	1058.8	1068.7	1066.7	1068.7	1075.6	1077.6	1081.5	1078.6	1088.4	1094.4	1095.3
10°	1087.4	1093.4	1095.3	1098.3	1104.2	1109.2	1110.2	1107.2	1115.1	1115.1	1116.1
12.5°	1134.9	1136.8	1143.7	1144.7	1144.7	1152.6	1148.7	1144.7	1145.7	1138.8	1133.9
15°	1192.1	1191.1	1202.0	1201.0	1197.1	1201.0	1192.1	1184.2	1176.3	1158.6	1143.7
17.5°	1246.5	1247.4	1255.3	1252.4	1249.4	1245.5	1233.6	1218.8	1197.1	1167.4	1141.8
20°	1300.8	1301.8	1300.8	1297.8	1293.9	1275.1	1257.3	1233.6	1203.0	1161.5	1126.0
22.5°	1357.1	1357.1	1347.2	1341.3	1333.4	1300.8	1272.1	1236.6	1191.1	1137.8	1088.4
25°	1416.3	1417.3	1394.6	1381.8	1367.9	1317.6	1273.1	1219.8	1154.6	1085.5	1024.2
27.5°	1484.5	1467.7	1429.2	1406.5	1379.8	1312.6	1245.5	1177.3	1095.3	1009.4	930.4
30°	1542.8	1501.3	1441.0	1406.5	1366.0	1284.0	1192.1	1101.3	1005.5	906.7	809.9
32.5°	1593.1	1523.0	1435.1	1386.7	1332.4	1227.7	1121.0	1002.5	892.9	781.3	704.2
35°	1640.5	1538.8	1424.2	1362.0	1292.9	1159.5	1031.1	896.8	782.2	689.4	624.2
37.5°	1699.8	1555.6	1404.5	1326.5	1243.5	1087.4	946.2	814.8	712.1	637.1	594.6
40°	1775.9	1575.4	1376.8	1280.0	1181.3	1007.4	854.3	734.8	654.8	600.5	581.7
42.5°	1866.7	1597.1	1333.4	1212.9	1098.3	906.7	756.6	661.7	607.4	580.8	569.9
45°	1962.5	1619.8	1281.0	1135.8	1005.5	806.0	671.6	600.5	573.8	565.0	559.0
47.5°	2076.1	1650.4	1219.8	1046.0	901.8	706.2	599.5	552.1	552.1	553.1	552.1
50°	2192.7	1681.0	1159.5	950.2	788.2	608.4	540.3	523.5	529.4	537.3	540.3
52.5°	2291.4	1708.7	1139.8	912.6	689.4	523.5	490.9	489.9	497.8	507.7	510.6
55°	2344.8	1713.6	1156.6	906.7	667.7	466.2	441.5	448.4	456.3	467.2	467.2
57.5°	2374.4	1676.1	1073.6	776.3	577.8	415.8	395.1	405.0	407.9	417.8	423.7
60°	2335.9	1595.1	795.1	543.2	426.7	355.6	348.7	363.5	369.4	381.2	388.2
62.5°	2230.2	1379.8	498.8	351.6	317.0	311.1	318.0	331.9	343.7	355.6	361.5
65°	1979.3	919.5	277.5	275.6	282.5	288.4	307.2	320.0	330.9	341.7	339.8
67.5°	1423.3	343.7	231.1	243.0	254.8	276.6	296.3	313.1	317.0	323.0	323.0
70°	600.5	180.7	206.4	221.2	243.0	265.7	285.4	289.4	299.3	299.3	301.2
72.5°	135.3	147.2	177.8	198.5	222.2	243.0	260.7	269.6	272.6	286.4	283.5
75°	106.7	121.5	158.0	175.8	188.6	206.4	227.2	236.1	244.9	254.8	261.7
77.5°	77.0	95.8	130.4	142.2	155.1	174.8	184.7	198.5	206.4	212.4	213.3
80°	54.3	77.0	100.7	107.7	115.6	118.5	129.4	151.1	157.0	166.9	169.9
82.5°	40.5	53.3	60.2	62.2	64.2	73.1	75.1	86.9	92.8	108.6	117.5
85°	29.6	30.6	23.7	22.7	22.7	27.7	31.6	41.5	50.4	61.2	67.2
87.5°	6.9	7.9	8.9	9.9	10.9	13.8	18.8	28.6	41.5	53.3	56.3
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):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1028.2	1028.2	1028.2	1028.2	1028.2	1028.2	1028.2	1028.2
2.5°	1051.9	1059.8	1061.8	1062.8	1066.7	1067.7	1068.7	1069.7
5°	1074.6	1084.5	1086.5	1087.4	1093.4	1094.4	1094.4	1096.3
7.5°	1095.3	1103.2	1105.2	1106.2	1111.1	1114.1	1114.1	1116.1
10°	1114.1	1117.1	1116.1	1116.1	1121.0	1121.0	1121.0	1121.0
12.5°	1127.0	1123.0	1118.1	1115.1	1112.1	1107.2	1104.2	1101.3
15°	1127.9	1113.1	1103.2	1096.3	1085.5	1070.7	1061.8	1053.9
17.5°	1112.1	1086.5	1072.6	1059.8	1036.1	1012.4	995.6	981.8
20°	1079.5	1036.1	1017.3	998.6	962.0	928.4	907.7	892.9
22.5°	1025.2	964.0	936.3	913.6	866.2	827.7	806.0	792.1
25°	949.2	869.2	832.6	800.0	757.6	727.9	710.1	698.3
27.5°	839.5	762.5	733.9	709.2	671.6	645.0	626.2	619.3
30°	733.9	676.6	654.8	635.1	604.5	578.8	559.0	550.1
32.5°	645.0	608.4	593.6	580.8	558.0	532.4	511.6	503.7
35°	585.7	565.0	555.1	545.2	522.5	497.8	473.1	462.2
37.5°	573.8	559.0	551.1	543.2	524.5	493.8	465.2	453.3
40°	568.9	557.1	553.1	548.2	526.4	498.8	467.2	453.3
42.5°	564.0	560.0	554.1	546.2	522.5	495.8	470.1	455.3
45°	559.0	555.1	547.2	539.3	515.6	485.9	461.2	446.4
47.5°	551.1	542.2	533.4	524.5	501.7	471.1	442.5	429.6
50°	528.4	514.6	508.7	496.8	471.1	440.5	413.8	405.9
52.5°	495.8	479.0	473.1	460.3	433.6	401.0	375.3	365.4
55°	458.3	446.4	442.5	431.6	405.9	372.4	350.6	340.8
57.5°	427.7	424.7	423.7	418.8	397.0	369.4	352.6	345.7
60°	393.1	393.1	397.0	401.0	385.2	353.6	331.9	325.9
62.5°	361.5	357.5	358.5	358.5	342.7	316.1	298.3	289.4
65°	332.9	324.0	322.0	315.1	295.3	267.7	249.9	245.9
67.5°	313.1	301.2	297.3	291.4	270.6	245.9	229.1	223.2
70°	292.4	278.5	274.6	267.7	246.9	223.2	209.4	204.5
72.5°	272.6	255.8	252.8	246.9	225.2	204.5	187.7	180.7
75°	249.9	222.2	212.4	200.5	173.8	150.1	136.3	131.4
77.5°	201.5	193.6	186.7	177.8	152.1	128.4	115.6	109.6
80°	164.0	161.0	157.0	153.1	126.4	101.7	69.1	61.2
82.5°	118.5	113.6	117.5	120.5	97.8	60.2	47.4	42.5
85°	66.2	62.2	61.2	67.2	55.3	42.5	30.6	26.7
87.5°	57.3	53.3	50.4	47.4	33.6	28.6	23.7	20.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)