

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: P159543

Luminaire Tested: **VST-F04-LED-E-U-T3-8030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P159543  
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-F04-LED-E-U-T3-8030  
Description: VENTUS LED SITE/ROADWAY LUMINAIRE  
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 AREA  
Light Source: (28) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8523.5 lumens  
Efficiency: N/A  
Efficacy: 83.4 lumens/watt  
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B3 - U0 - G3

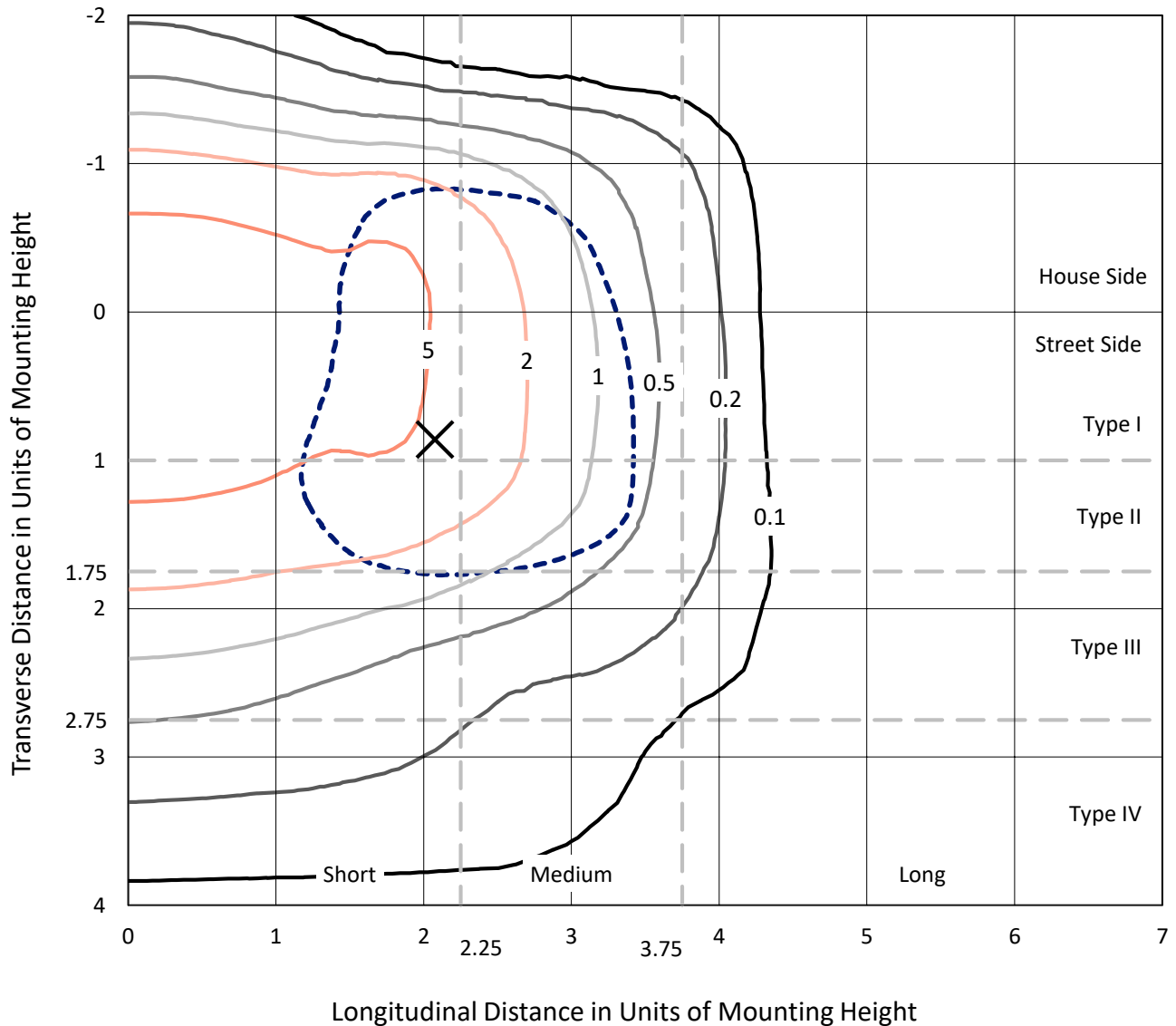
Input Watts (W): 102.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

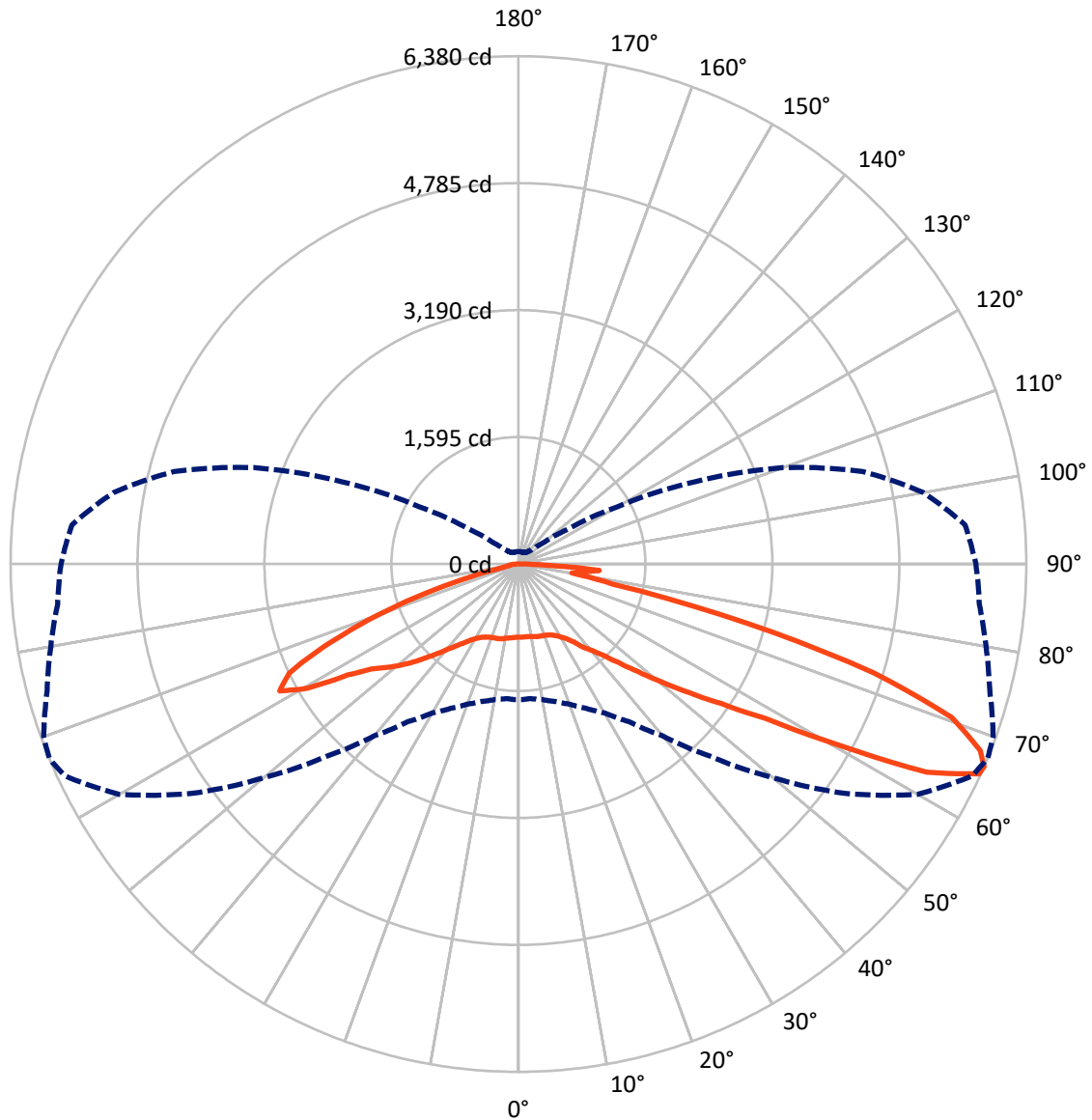
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.2 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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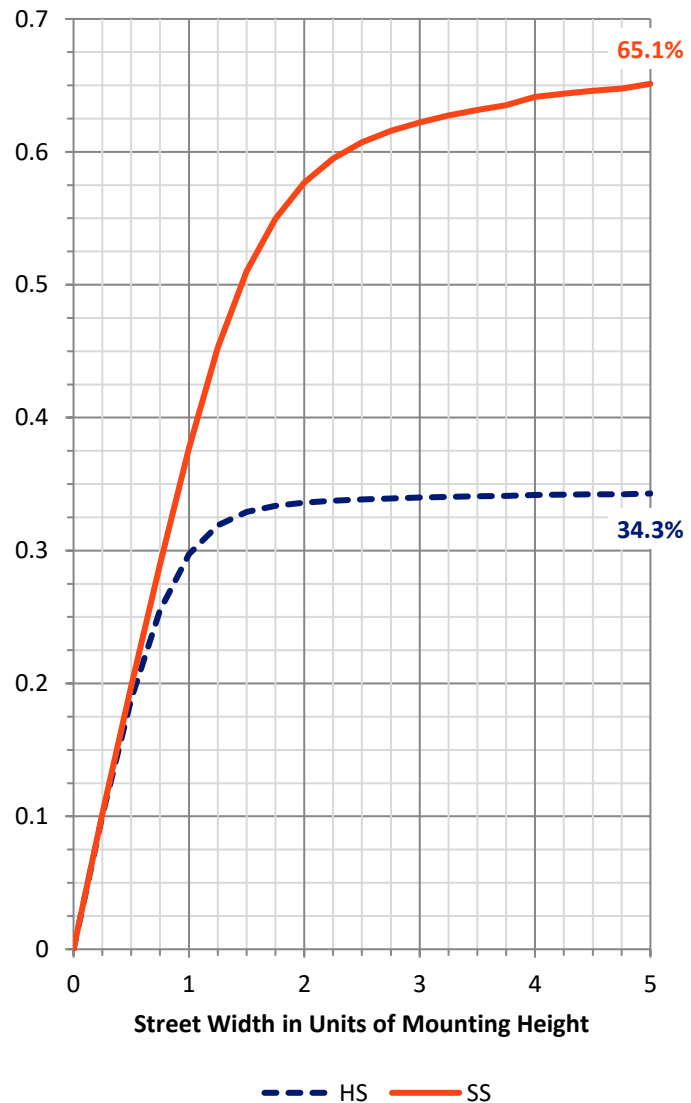
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2949.5	0.0	2949.5
	% Fixture	34.6	0.0	34.6
<b>Street Side</b>	Lumens	5574.0	0.0	5574.0
	% Fixture	65.4	0.0	65.4
<b>Total</b>	Lumens	8523.5	0.0	8523.5
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	88.3	1.0
10°-20°	261.3	3.1
20°-30°	449.2	5.3
30°-40°	726.0	8.5
40°-50°	1203.2	14.1
50°-60°	1888.3	22.2
60°-70°	2581.7	30.3
70°-80°	1135.3	13.3
80°-90°	190.0	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°	8523.5	100.0
0°-180°	8523.5	100.0

**Coefficient of Utilization**



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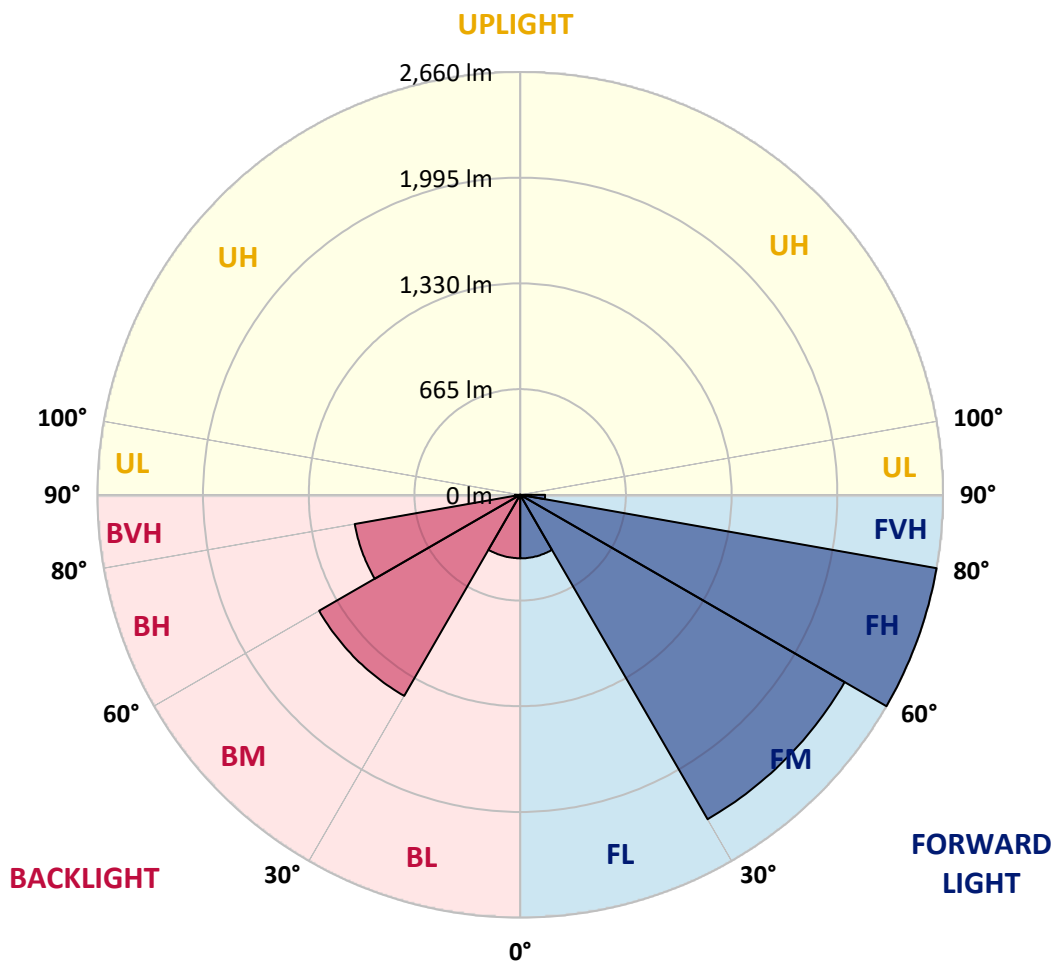
CATALOG NUMBER: VST-F04-LED-E-U-T3-8030

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	399.8	4.7			
FM (30°-60°)	2357.0	27.7			
FH (60°-80°)	2660.4	31.2			G2/5000
FVH (80°-90°)	156.8	1.8			G2/225
BL (0°-30°)	399.0	4.7	B1/500		
BM (30°-60°)	1460.6	17.1	B2/2500		
BH (60°-80°)	1056.7	12.4	B3/2500		G3/2500
BVH (80°-90°)	33.2	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°	919.7	919.7	919.7	919.7	919.7	919.7	919.7	919.7	919.7	919.7	919.7
2.5°	918.0	918.0	918.6	918.0	918.0	917.5	919.7	919.7	919.7	919.1	920.8
5°	915.8	915.8	916.3	916.3	916.9	916.3	918.0	918.6	918.6	918.6	920.2
7.5°	910.2	911.9	910.8	911.3	911.9	913.6	915.8	916.9	918.0	919.7	920.2
10°	898.5	901.3	900.7	902.4	903.0	908.0	909.7	911.9	915.8	918.0	919.7
12.5°	882.3	884.0	884.6	886.8	889.0	895.2	899.6	903.5	909.1	914.7	920.2
15°	869.5	870.6	870.6	872.9	876.2	881.8	887.4	894.1	902.4	911.9	920.8
17.5°	873.4	876.2	874.0	873.4	874.5	877.9	882.9	888.5	898.5	909.1	919.7
20°	899.1	899.6	898.5	895.7	893.5	894.1	894.1	895.2	901.3	909.7	918.0
22.5°	920.2	922.5	921.9	922.5	921.9	924.2	923.0	920.8	918.6	919.1	923.0
25°	938.6	940.9	940.9	942.5	945.3	949.8	953.1	952.6	949.2	944.8	943.1
27.5°	968.7	968.7	968.7	970.4	974.3	979.9	985.5	988.8	991.6	987.1	977.7
30°	1016.1	1016.7	1015.0	1015.6	1018.3	1025.6	1032.3	1037.3	1042.9	1042.3	1030.1
32.5°	1068.0	1070.2	1069.6	1071.9	1075.8	1082.4	1089.7	1097.5	1104.7	1109.2	1101.4
35°	1134.8	1137.1	1137.6	1141.0	1145.4	1155.5	1165.5	1175.5	1183.3	1186.7	1185.0
37.5°	1244.6	1245.2	1243.0	1238.0	1239.6	1247.4	1259.1	1275.3	1280.3	1283.7	1291.5
40°	1409.1	1407.4	1398.5	1394.0	1391.2	1394.6	1392.4	1405.2	1416.9	1417.4	1416.9
42.5°	1608.6	1603.6	1595.2	1594.1	1593.0	1591.9	1585.8	1586.3	1596.9	1599.7	1596.4
45°	1807.1	1800.9	1794.8	1800.4	1793.7	1811.0	1816.0	1829.3	1831.0	1836.6	1828.2
47.5°	1969.8	1970.4	1970.4	1978.2	1991.5	2024.4	2054.0	2079.6	2089.1	2102.5	2104.1
50°	2093.0	2096.3	2106.9	2132.0	2160.4	2215.6	2265.2	2311.5	2353.3	2368.9	2410.1
52.5°	2164.9	2173.8	2196.1	2237.9	2288.6	2360.0	2438.0	2516.6	2589.1	2650.4	2699.4
55°	2152.1	2158.8	2197.8	2263.0	2342.1	2438.0	2547.3	2661.0	2774.1	2877.8	2958.1
57.5°	2069.6	2074.0	2113.1	2186.6	2285.3	2414.0	2568.4	2737.3	2896.2	3063.4	3200.5
60°	1961.4	1968.1	2004.4	2062.3	2165.5	2302.6	2481.5	2710.6	2964.2	3227.3	3483.7
62.5°	1892.3	1890.7	1922.4	1974.3	2051.7	2176.0	2348.3	2619.7	2970.9	3415.7	3922.3
65°	1777.5	1772.5	1805.4	1864.5	1948.6	2069.0	2232.3	2493.2	2900.6	3487.0	4205.5
66°	1706.2	1696.1	1729.0	1788.7	1872.8	2001.0	2157.7	2415.2	2815.4	3417.3	4175.4
67.5°	1581.3	1576.3	1591.9	1638.7	1701.1	1821.5	1984.9	2244.0	2613.6	3207.8	3954.7
70°	1285.3	1274.2	1286.5	1307.6	1331.6	1361.1	1461.5	1667.1	1979.8	2555.6	3186.0
72.5°	875.7	870.1	892.9	925.3	989.4	1019.5	1059.0	1092.5	1202.8	1610.9	2222.3
75°	666.1	669.4	698.4	751.9	834.4	923.6	1010.5	1042.3	1005.5	973.8	1261.4
77.5°	373.5	393.0	428.1	496.1	583.6	709.6	861.2	1028.4	1112.0	1091.4	1020.6
80°	153.8	151.1	168.3	205.7	235.8	338.9	518.4	727.9	963.2	1112.0	1088.6
82.5°	42.9	44.0	56.9	73.0	94.2	119.8	187.3	301.0	490.5	763.1	998.8
85°	13.4	13.4	18.4	27.3	32.3	37.3	47.4	78.0	133.2	265.9	539.0
87.5°	2.8	2.8	3.9	7.8	8.4	8.4	10.6	14.5	12.8	11.7	52.4
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):**

	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°	100°
0°	919.7	919.7	919.7	919.7	919.7	919.7	919.7	919.7	919.7	919.7	919.7
2.5°	919.1	918.0	918.6	919.1	918.6	918.6	918.0	917.5	918.0	918.0	919.7
5°	918.6	918.0	918.6	918.6	918.6	919.1	919.1	919.1	920.8	920.8	923.6
7.5°	919.7	919.7	920.8	920.8	920.8	920.8	921.4	922.5	925.3	924.7	929.7
10°	921.9	923.0	925.8	926.4	926.4	928.1	929.2	931.4	934.2	935.3	939.8
12.5°	924.7	930.3	935.3	936.4	938.1	940.9	942.5	943.7	948.7	950.3	955.9
15°	928.1	935.9	942.0	944.2	946.4	949.8	952.0	953.7	958.2	960.4	967.1
17.5°	928.6	937.5	944.8	948.1	950.9	954.8	958.2	961.5	966.5	969.9	976.5
20°	928.1	939.8	950.9	955.4	958.2	965.4	970.4	974.9	981.0	984.3	991.0
22.5°	934.2	947.6	962.6	968.2	972.6	982.7	989.4	996.6	1004.4	1006.6	1011.7
25°	948.7	962.6	981.6	989.4	997.2	1010.5	1020.0	1030.6	1038.4	1039.5	1041.2
27.5°	973.2	986.0	1008.9	1020.6	1033.4	1052.3	1066.3	1076.9	1088.0	1088.0	1086.9
30°	1022.8	1025.6	1049.6	1064.6	1083.6	1111.4	1132.1	1143.8	1152.1	1152.1	1142.6
32.5°	1086.9	1083.6	1105.3	1121.5	1147.7	1186.7	1214.5	1223.5	1232.4	1229.6	1213.4
35°	1179.4	1170.0	1182.2	1206.7	1236.3	1289.8	1318.8	1338.8	1344.4	1336.6	1311.0
37.5°	1295.9	1294.8	1300.9	1328.3	1361.1	1430.3	1459.8	1472.6	1468.2	1454.2	1409.1
40°	1419.1	1415.8	1411.9	1430.3	1467.0	1550.1	1602.5	1609.2	1603.0	1582.4	1525.6
42.5°	1583.5	1583.5	1565.1	1570.2	1600.8	1693.9	1755.8	1777.0	1777.5	1747.4	1671.6
45°	1809.8	1807.6	1775.3	1767.5	1790.9	1882.3	1962.0	1973.7	1973.7	1934.1	1851.1
47.5°	2081.8	2079.1	2047.3	2020.0	2024.4	2123.1	2189.4	2207.3	2191.7	2162.1	2063.5
50°	2388.4	2383.4	2351.1	2325.4	2314.3	2414.0	2470.3	2478.7	2455.9	2420.7	2313.7
52.5°	2699.4	2714.5	2695.5	2681.6	2685.5	2750.2	2808.1	2768.5	2756.8	2718.9	2611.4
55°	3023.3	3069.5	3111.3	3099.1	3113.6	3176.6	3187.7	3135.3	3114.1	3086.8	2967.0
57.5°	3349.3	3484.2	3621.4	3659.8	3695.5	3785.8	3773.0	3687.1	3703.3	3744.0	3609.1
60°	3804.7	4194.3	4542.2	4606.3	4717.2	4794.1	4811.4	4794.7	4869.9	4848.7	4729.4
62.5°	4504.3	5153.6	5637.4	5757.8	5869.3	5865.4	5806.9	5746.7	5820.8	5820.8	5509.2
65°	5003.7	5740.5	6258.4	6358.1	6353.7	6219.3	6081.1	5960.7	5950.1	5867.6	5412.2
66°	5027.1	5785.7	6292.9	6379.9	6346.4	6130.2	5964.6	5811.9	5746.7	5631.9	5165.3
67.5°	4816.4	5658.1	6180.3	6256.1	6168.1	5858.2	5630.2	5425.6	5330.9	5137.4	4698.2
70°	3950.8	4862.7	5622.4	5777.3	5677.6	5285.2	4973.0	4696.6	4515.4	4236.2	3919.6
72.5°	2883.9	3590.1	4412.8	4664.8	4649.2	4288.0	4036.6	3783.6	3545.5	3291.4	3060.1
75°	1874.5	2335.5	2794.2	2941.3	2870.6	2661.5	2481.5	2333.8	2108.0	1931.4	1888.4
77.5°	1070.2	1307.6	1236.8	1218.5	1129.8	911.9	606.4	425.3	384.0	479.4	525.6
80°	1018.3	923.0	755.8	681.7	626.5	427.0	224.1	157.7	138.2	141.6	152.2
82.5°	1148.2	1196.7	978.8	817.7	711.8	519.5	283.7	132.1	96.4	114.3	128.2
85°	860.6	1211.8	1201.2	1017.8	835.0	598.6	335.5	100.9	58.0	80.3	104.8
87.5°	174.5	287.1	276.5	243.0	206.8	144.4	56.3	31.8	29.0	39.6	60.2
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°	919.7	919.7	919.7	919.7	919.7	919.7	919.7	919.7	919.7	919.7	919.7
2.5°	920.8	920.8	921.9	923.6	924.2	924.2	925.3	924.2	926.4	926.9	927.5
5°	925.8	927.5	928.6	931.4	933.1	934.2	935.9	934.7	937.0	937.5	938.6
7.5°	931.4	934.2	936.4	937.5	939.8	939.8	940.3	939.2	938.6	937.0	936.4
10°	941.4	943.1	945.9	944.8	943.7	939.8	936.4	931.4	928.6	923.6	920.8
12.5°	957.6	958.7	958.7	953.7	946.4	937.5	929.2	920.8	914.1	908.5	905.2
15°	968.7	971.0	968.2	960.9	950.3	938.1	926.9	915.8	906.9	899.6	895.2
17.5°	977.1	976.5	971.5	961.5	951.5	940.9	930.8	919.1	908.0	897.4	890.7
20°	989.9	984.3	975.4	964.8	954.2	945.3	937.5	926.4	914.7	900.2	890.1
22.5°	1007.2	997.2	984.3	973.2	963.2	954.8	945.9	936.4	924.2	908.0	894.1
25°	1031.7	1014.4	1000.0	988.8	979.9	970.4	960.4	948.1	935.9	919.1	902.4
27.5°	1069.1	1043.4	1025.0	1015.0	1006.6	993.8	981.0	966.5	950.9	933.6	914.7
30°	1114.2	1083.6	1062.4	1053.5	1043.4	1028.9	1015.0	994.9	973.2	952.6	929.2
32.5°	1167.2	1136.0	1114.8	1108.1	1091.9	1075.2	1055.7	1028.9	1000.5	969.9	942.0
35°	1247.4	1207.9	1188.4	1172.7	1150.4	1130.4	1097.5	1062.4	1021.7	981.0	946.4
37.5°	1329.9	1289.8	1269.7	1248.0	1219.0	1182.2	1138.2	1088.0	1034.0	983.8	941.4
40°	1440.3	1396.8	1371.2	1337.7	1290.9	1233.5	1168.3	1099.7	1034.0	971.5	920.2
42.5°	1569.0	1528.9	1489.3	1434.2	1358.9	1275.3	1183.9	1095.8	1016.1	944.2	890.1
45°	1747.4	1678.9	1615.9	1527.2	1417.4	1299.8	1185.6	1077.4	985.5	905.8	845.6
47.5°	1948.1	1859.4	1748.0	1609.2	1459.2	1309.3	1169.4	1042.9	937.0	850.6	784.8
50°	2179.4	2043.4	1872.3	1674.4	1480.4	1296.5	1130.9	984.9	870.1	770.9	700.6
52.5°	2444.1	2236.8	1984.9	1720.7	1477.1	1257.5	1067.4	908.5	780.3	675.0	605.9
55°	2737.9	2447.5	2092.4	1750.2	1447.0	1181.7	967.6	801.0	668.9	565.2	504.4
57.5°	3255.7	2817.0	2297.6	1789.8	1384.0	1066.8	841.1	665.0	545.7	457.6	399.6
60°	4217.8	3463.1	2686.1	1882.9	1289.2	923.0	681.7	521.7	421.9	357.8	314.9
62.5°	4813.0	3917.9	2875.6	1869.5	1135.4	726.3	506.1	386.8	308.2	265.9	239.1
65°	4672.0	3739.5	2644.3	1605.8	883.5	515.0	335.0	253.1	211.8	190.1	177.2
66°	4480.3	3540.0	2448.6	1438.1	769.8	430.3	276.5	212.4	182.3	166.1	159.4
67.5°	4078.4	3175.4	2111.9	1151.6	576.9	320.5	204.0	166.7	148.3	139.9	135.4
70°	3413.4	2558.4	1493.8	680.0	312.7	173.9	130.4	115.9	111.5	108.7	107.0
72.5°	2639.2	1852.2	872.9	334.4	157.7	112.6	99.2	93.1	91.4	91.4	92.0
75°	1662.7	1064.6	390.7	161.1	107.0	90.9	84.7	81.9	82.5	83.1	82.5
77.5°	552.4	367.3	162.8	114.3	93.1	82.5	77.5	76.4	77.5	78.0	78.0
80°	158.9	138.8	117.6	100.9	85.3	76.9	72.5	71.9	74.7	75.2	74.1
82.5°	122.1	114.3	106.5	97.5	81.9	72.5	70.8	71.3	73.0	71.9	66.9
85°	112.0	110.9	79.7	79.1	71.3	69.1	67.4	68.0	66.3	60.2	54.6
87.5°	63.0	58.5	45.1	45.7	53.0	54.6	45.1	47.9	44.6	39.0	35.7
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°	919.7	919.7	919.7	919.7	919.7
2.5°	928.6	928.1	928.1	929.7	927.5
5°	939.2	938.6	938.6	940.3	938.6
7.5°	934.2	932.5	931.4	930.8	930.8
10°	917.5	915.8	912.4	911.3	910.2
12.5°	900.2	898.5	894.6	894.6	893.5
15°	889.6	887.4	884.6	882.9	881.8
17.5°	884.0	880.7	877.3	875.7	874.5
20°	881.8	877.3	873.4	870.6	870.6
22.5°	882.3	876.8	872.3	869.0	867.9
25°	887.9	879.6	874.0	870.6	869.5
27.5°	895.7	885.7	878.4	874.0	872.3
30°	906.3	892.4	882.3	876.8	874.5
32.5°	913.6	894.1	881.2	873.4	870.6
35°	913.0	887.9	872.3	862.3	858.9
37.5°	903.0	873.4	852.8	840.5	835.0
40°	880.7	846.7	824.9	813.2	806.5
42.5°	848.3	811.6	792.0	779.2	772.0
45°	797.6	761.4	737.4	727.4	717.9
47.5°	727.4	690.6	670.0	655.5	649.4
50°	644.9	608.1	586.4	574.7	569.1
52.5°	554.6	519.5	503.9	492.7	484.9
55°	461.0	428.6	421.9	409.7	402.4
57.5°	372.9	353.9	347.8	335.5	329.4
60°	291.5	285.4	278.7	270.9	267.5
62.5°	225.7	220.2	218.5	213.5	212.9
65°	172.2	172.8	171.7	170.6	169.4
66°	156.6	156.1	156.6	155.5	155.0
67.5°	133.2	135.4	137.1	136.6	136.6
70°	108.1	109.8	112.0	111.5	111.5
72.5°	92.5	95.3	96.4	95.9	95.9
75°	83.6	86.4	86.4	85.3	84.7
77.5°	78.0	79.1	78.0	76.9	75.8
80°	72.5	71.3	69.7	68.0	66.9
82.5°	63.0	60.2	58.5	55.7	55.7
85°	50.7	48.5	44.6	41.8	39.0
87.5°	32.9	31.8	29.0	21.7	17.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)