

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: P179080

Luminaire Tested: **VERD-A028-E-U-T4-AP**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P179080  
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-A028-E-U-T4-AP  
Description: VERDEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 4000K LEDS AT 80% STANDARD LUMENS AND TYPE IV OPTICS, GREY  
PAINTED FINISH  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7714 lumens  
Efficiency: N/A  
Efficacy: 107.1 lumens/watt  
Luminous Opening: Rectangular (W 0.79' x L: 1.25' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B1 - U0 - G3

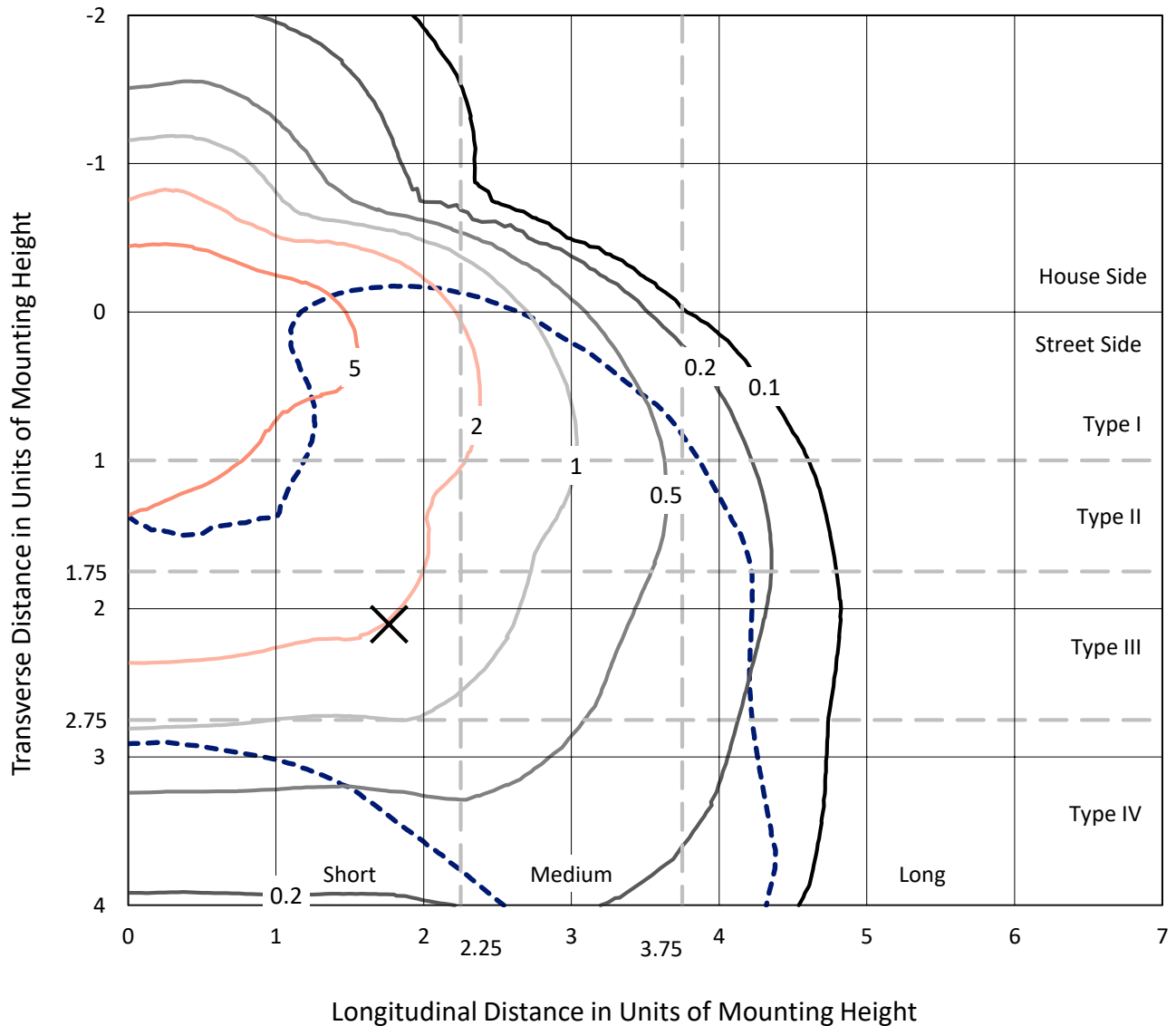
Input Watts (W): 72  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

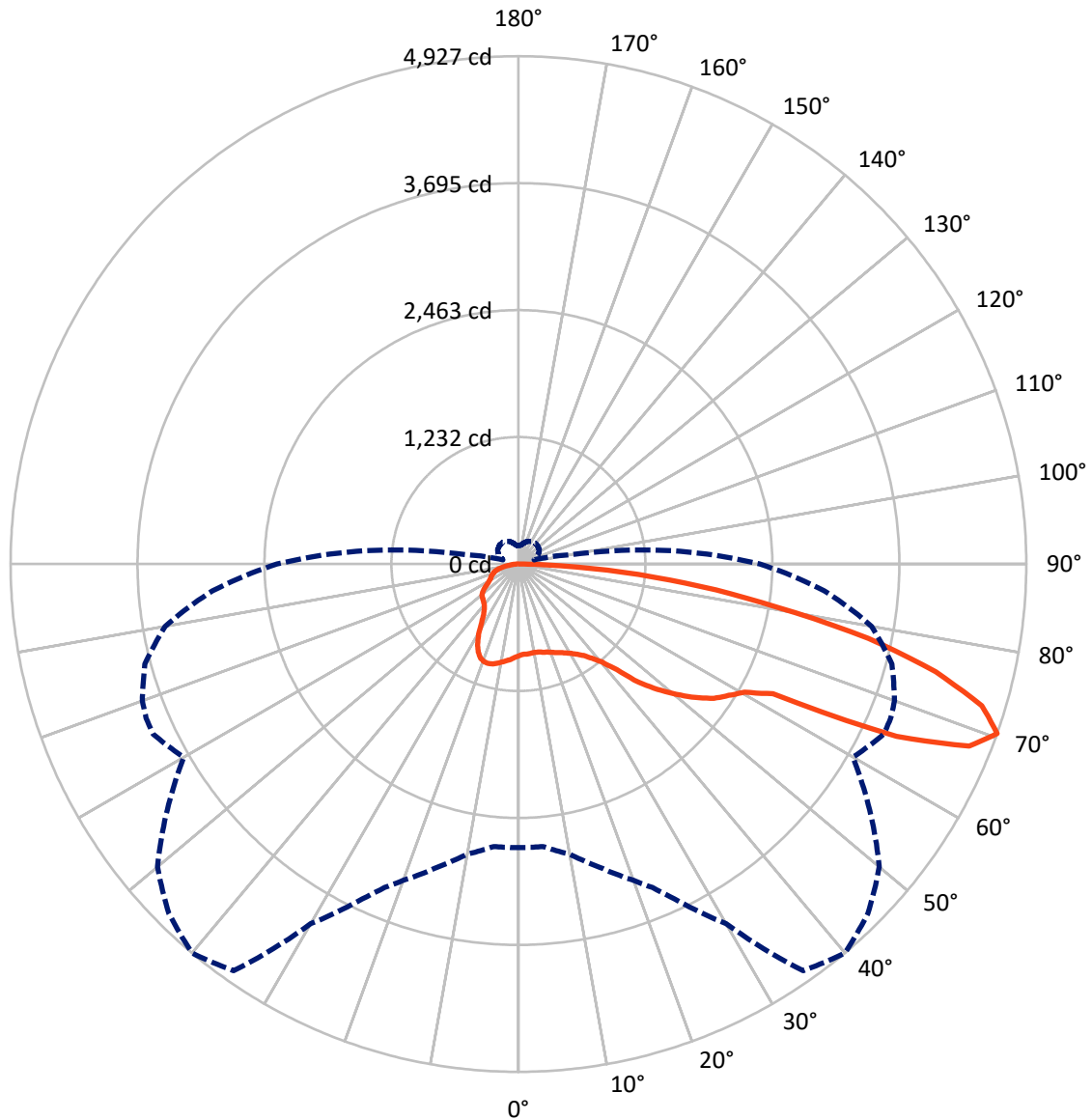


Based on 10 foot mounting height. Maximum calculated value = 9.4 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



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

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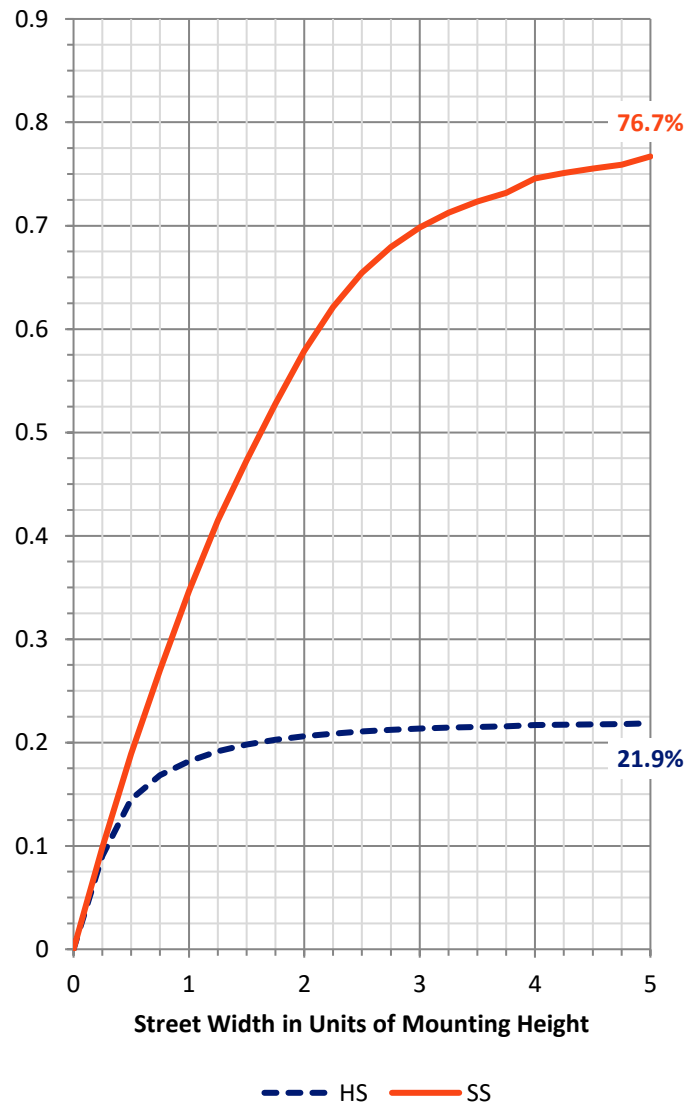
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1708.8	0.0	1708.8
	% Fixture	22.2	0.0	22.2
<b>Street Side</b>	Lumens	6005.2	0.0	6005.2
	% Fixture	77.8	0.0	77.8
<b>Total</b>	Lumens	7714.0	0.0	7714.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	86.5	1.1
10°-20°	270.2	3.5
20°-30°	452.4	5.9
30°-40°	637.7	8.3
40°-50°	998.7	12.9
50°-60°	1460.6	18.9
60°-70°	2025.8	26.3
70°-80°	1517.9	19.7
80°-90°	264.2	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°	7714.0	100.0
0°-180°	7714.0	100.0



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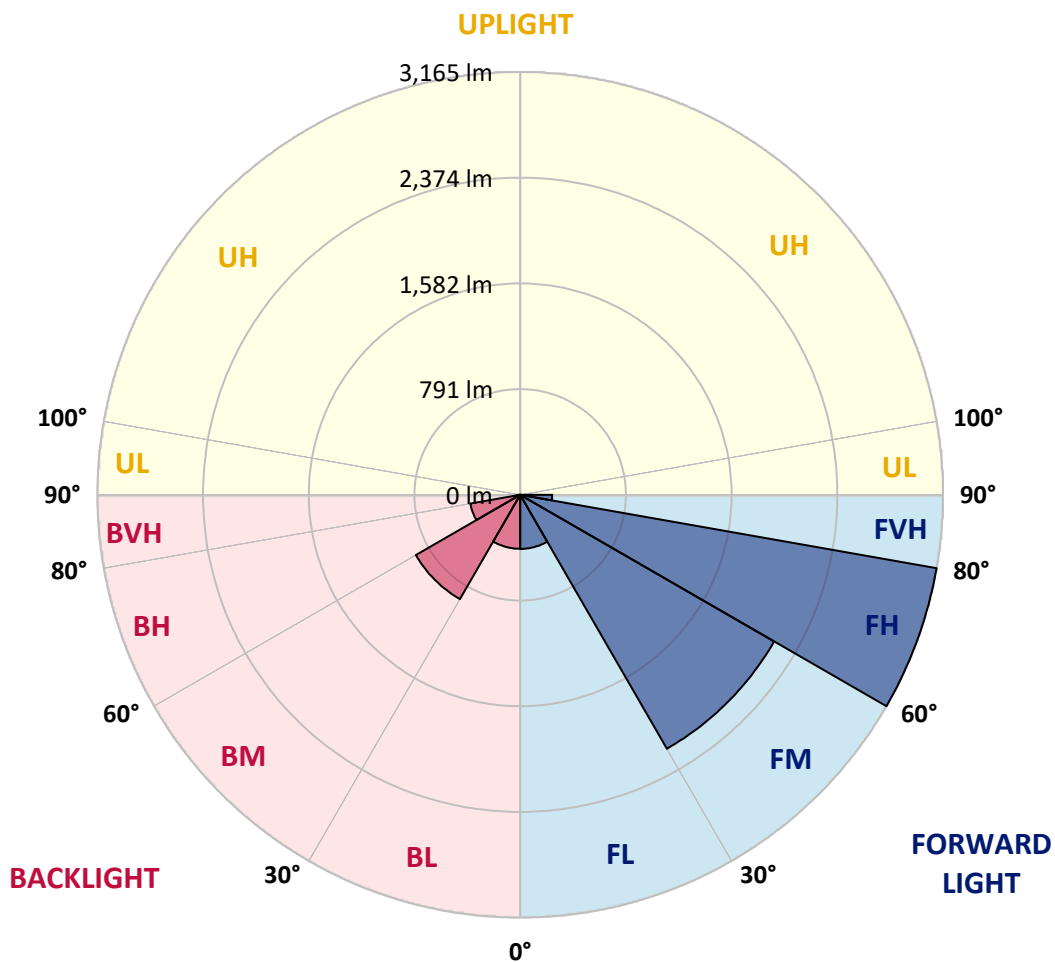
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	404.9	5.2			
FM (30°-60°)	2195.3	28.5			
FH (60°-80°)	3165.0	41.0			G2/5000
FVH (80°-90°)	239.9	3.1			G3/500
BL (0°-30°)	404.1	5.2	B1/500		
BM (30°-60°)	901.7	11.7	B1/1000		
BH (60°-80°)	378.7	4.9	B1/500		G1/500
BVH (80°-90°)	24.3	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-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°	888.4	888.4	888.4	888.4	888.4	888.4	888.4	888.4	888.4	888.4	888.4
2.5°	881.5	880.7	876.4	874.7	869.6	872.2	877.3	881.5	879.8	877.3	879.0
5°	879.0	877.3	873.9	871.3	866.2	867.0	872.2	874.7	878.1	877.3	879.0
7.5°	867.9	866.2	861.1	860.2	855.9	856.8	859.4	863.6	870.5	873.9	874.7
10°	861.1	857.7	853.4	853.4	849.1	850.0	852.5	856.8	865.3	871.3	873.9
12.5°	857.7	855.1	852.5	853.4	850.8	852.5	855.1	860.2	868.7	876.4	878.1
15°	863.6	863.6	860.2	861.9	861.9	865.3	867.9	871.3	878.1	887.5	893.5
17.5°	879.8	880.7	877.3	880.7	880.7	883.3	885.8	887.5	890.1	898.6	908.9
20°	886.7	889.2	888.4	894.3	898.6	901.2	902.9	906.3	907.1	913.1	922.5
22.5°	905.4	903.7	903.7	912.3	912.3	915.7	918.2	919.9	924.2	933.6	940.4
25°	925.9	923.4	924.2	931.0	929.3	930.2	932.7	936.2	940.4	952.4	965.2
27.5°	939.6	938.7	939.6	944.7	949.0	950.7	953.2	956.6	966.0	976.3	990.8
30°	969.4	969.4	961.8	965.2	967.7	969.4	973.7	983.1	994.2	1006.1	1020.6
32.5°	1018.9	1019.8	1009.6	1006.1	1002.7	1001.9	1004.4	1020.6	1028.3	1042.8	1058.2
35°	1070.1	1062.5	1057.3	1062.5	1064.2	1062.5	1063.3	1072.7	1077.8	1090.6	1104.3
37.5°	1207.5	1188.8	1180.2	1176.0	1155.5	1140.1	1135.0	1138.4	1142.7	1159.7	1174.3
40°	1407.2	1407.2	1385.0	1372.2	1338.1	1313.4	1295.4	1263.0	1244.2	1250.2	1263.9
42.5°	1624.0	1612.9	1599.2	1568.5	1546.3	1515.6	1493.4	1446.5	1413.2	1399.5	1373.9
45°	1795.5	1802.3	1807.5	1782.7	1764.8	1751.1	1740.1	1719.6	1677.8	1638.5	1583.9
47.5°	1956.8	1964.5	1963.6	1909.0	1922.7	1924.4	1921.8	1898.8	1854.4	1816.0	1752.9
50°	2116.4	2132.6	2113.8	2024.2	2044.7	2049.8	2050.7	2031.9	1998.6	1985.8	1956.0
52.5°	2314.4	2299.9	2214.5	2159.1	2148.0	2151.4	2150.5	2147.1	2148.8	2152.2	2145.4
55°	2542.2	2427.0	2316.1	2287.1	2267.4	2253.8	2244.4	2229.0	2238.4	2300.7	2298.2
57.5°	2574.7	2570.4	2564.4	2444.9	2411.7	2402.3	2383.5	2369.8	2322.9	2404.8	2441.5
60°	3085.8	3136.2	3079.9	3039.8	2967.2	2861.4	2734.2	2591.7	2452.6	2521.7	2576.4
62.5°	3640.5	3640.5	3707.1	3662.7	3616.6	3529.6	3482.7	3299.2	3035.5	2770.9	2777.8
65°	3699.4	3721.6	3775.4	3881.2	3926.4	3950.3	3982.7	3965.7	4005.8	4031.4	3571.4
67.5°	3326.5	3353.8	3422.9	3585.9	3745.5	3824.0	3916.2	4115.0	4481.1	4714.9	4653.5
70°	2750.5	2751.3	2857.1	3044.9	3265.9	3396.5	3582.5	4028.8	4816.5	4926.6	4795.2
72.5°	2037.0	2036.2	2149.7	2316.9	2538.8	2724.0	2914.3	3561.2	4575.8	4701.3	4645.0
75°	1435.4	1442.2	1536.1	1688.8	1883.4	2031.9	2213.7	2898.1	3870.1	4180.7	4269.5
77.5°	1001.0	1024.9	1083.8	1211.0	1374.8	1494.3	1635.9	2207.7	3048.3	3472.4	3608.1
80°	636.6	658.0	710.9	823.5	966.9	1072.7	1184.5	1612.9	2268.3	2542.2	2666.8
82.5°	363.5	378.0	425.0	514.6	623.8	707.5	793.6	1084.7	1607.8	1781.9	1748.6
85°	178.4	187.7	218.5	279.1	361.8	421.6	482.2	656.3	917.4	1016.4	966.0
87.5°	47.8	51.2	64.0	91.3	124.6	149.3	171.5	243.2	300.4	260.3	194.6
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):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	888.4	888.4	888.4	888.4	888.4	888.4	888.4	888.4	888.4	888.4	888.4
2.5°	877.3	873.0	875.6	876.4	876.4	879.0	881.5	883.3	879.8	888.4	885.0
5°	878.1	873.9	879.8	882.4	882.4	884.1	889.2	890.9	892.6	898.6	896.9
7.5°	876.4	878.1	885.0	890.9	891.8	892.6	902.0	902.0	910.6	911.4	913.1
10°	878.1	885.0	892.6	903.7	906.3	907.1	915.7	920.8	931.0	927.6	935.3
12.5°	885.8	897.8	906.3	922.5	928.5	931.0	943.0	954.1	966.0	962.6	969.4
15°	900.3	915.7	928.5	948.1	955.8	961.8	978.0	995.9	1005.3	1007.8	1018.1
17.5°	916.5	934.5	951.5	972.0	983.1	991.6	1010.4	1034.3	1043.7	1053.9	1065.0
20°	931.9	952.4	968.6	990.8	1004.4	1016.4	1042.0	1067.6	1082.1	1099.2	1112.0
22.5°	949.0	968.6	986.5	1009.6	1025.8	1042.0	1075.3	1101.7	1124.8	1145.2	1162.3
25°	976.3	990.8	1012.1	1036.0	1055.6	1077.0	1111.1	1140.1	1171.7	1195.6	1215.2
27.5°	1005.3	1017.2	1041.1	1071.0	1091.5	1112.8	1145.2	1181.9	1220.3	1252.8	1279.2
30°	1035.2	1052.2	1082.1	1112.8	1132.4	1152.9	1187.9	1235.7	1282.6	1325.3	1348.3
32.5°	1071.9	1095.7	1132.4	1164.9	1181.9	1200.7	1242.5	1298.0	1364.6	1410.6	1413.2
35°	1124.8	1153.8	1192.2	1226.3	1242.5	1263.0	1312.5	1379.1	1463.6	1501.1	1482.3
37.5°	1195.6	1231.4	1268.1	1305.7	1324.5	1349.2	1407.2	1504.5	1598.4	1615.5	1566.8
40°	1291.2	1326.2	1368.0	1411.5	1439.7	1472.9	1549.7	1705.1	1789.5	1766.5	1683.7
42.5°	1394.4	1443.9	1495.1	1557.4	1598.4	1633.4	1751.1	1935.5	1980.7	1938.0	1812.6
45°	1565.1	1593.3	1644.5	1718.7	1765.7	1822.8	1991.8	2183.0	2208.6	2123.2	1952.5
47.5°	1729.8	1727.2	1777.6	1882.6	1950.0	2038.7	2253.8	2433.0	2430.4	2322.1	2105.3
50°	1928.6	1926.9	1950.8	2078.8	2174.4	2279.4	2549.9	2681.3	2637.8	2498.7	2251.2
52.5°	2120.7	2138.6	2186.4	2290.5	2387.8	2522.6	2803.4	2880.2	2830.7	2659.1	2374.1
55°	2299.0	2336.6	2400.6	2534.6	2658.3	2829.0	3050.0	3081.6	2996.2	2783.7	2462.9
57.5°	2469.7	2521.7	2610.5	2793.1	2969.8	3125.9	3259.9	3256.5	3130.2	2879.3	2520.0
60°	2629.3	2706.9	2821.3	3056.0	3256.5	3375.1	3463.0	3411.0	3233.5	2940.8	2539.7
62.5°	2813.6	2894.7	3026.1	3341.0	3516.8	3597.9	3623.5	3518.5	3291.5	2952.7	2506.4
65°	3163.5	3189.1	3287.2	3622.6	3737.0	3767.7	3726.7	3565.4	3302.6	2913.5	2382.6
67.5°	4295.1	3664.4	3546.7	3837.7	3879.5	3865.0	3767.7	3564.6	3240.3	2754.7	2084.8
70°	4570.7	4158.5	3747.2	3909.4	3908.5	3882.0	3751.5	3478.4	2979.2	2340.0	1490.9
72.5°	4462.3	4071.5	3723.3	3836.8	3866.7	3867.5	3597.9	3123.4	2411.7	1593.3	690.4
75°	4178.2	3812.9	3667.0	3656.8	3603.0	3451.1	2983.4	2351.1	1463.6	634.9	102.4
77.5°	3536.4	3194.2	2945.9	2696.7	2561.0	2345.1	1751.1	1054.8	481.3	76.8	65.7
80°	2501.3	2045.6	1517.3	1152.1	971.2	664.8	227.9	83.6	69.1	48.6	41.8
82.5°	1480.6	1008.7	442.1	102.4	78.5	72.5	60.6	52.1	44.4	29.9	26.5
85°	755.2	399.4	58.0	47.8	45.2	42.7	36.7	32.4	24.7	16.2	17.9
87.5°	101.6	30.7	17.1	17.1	16.2	16.2	15.4	11.9	7.7	5.1	5.1
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°	888.4	888.4	888.4	888.4	888.4	888.4	888.4	888.4	888.4	888.4	888.4
2.5°	885.0	887.5	890.1	891.8	893.5	894.3	896.9	896.9	900.3	904.6	908.0
5°	896.9	902.9	902.9	904.6	909.7	909.7	914.8	914.0	919.9	926.8	927.6
7.5°	914.8	923.4	921.7	923.4	929.3	931.0	934.5	931.9	940.4	945.5	946.4
10°	939.6	944.7	946.4	949.0	954.1	958.4	959.2	956.6	963.5	963.5	964.3
12.5°	980.5	982.2	988.2	989.1	989.1	995.9	992.5	989.1	989.9	984.0	979.7
15°	1030.0	1029.2	1038.6	1037.7	1034.3	1037.7	1030.0	1023.2	1016.4	1001.0	988.2
17.5°	1077.0	1077.8	1084.7	1082.1	1079.5	1076.1	1065.9	1053.1	1034.3	1008.7	986.5
20°	1123.9	1124.8	1123.9	1121.3	1117.9	1101.7	1086.4	1065.9	1039.4	1003.6	972.9
22.5°	1172.5	1172.5	1164.0	1158.9	1152.1	1123.9	1099.2	1068.4	1029.2	983.1	940.4
25°	1223.8	1224.6	1205.0	1193.9	1181.9	1138.4	1100.0	1053.9	997.6	937.9	885.0
27.5°	1282.6	1268.1	1234.8	1215.2	1192.2	1134.1	1076.1	1017.2	946.4	872.2	803.9
30°	1333.0	1297.1	1245.1	1215.2	1180.2	1109.4	1030.0	951.5	868.7	783.4	699.8
32.5°	1376.5	1315.9	1240.0	1198.2	1151.2	1060.8	968.6	866.2	771.5	675.0	608.5
35°	1417.5	1329.6	1230.6	1176.8	1117.1	1001.9	890.9	774.9	675.9	595.7	539.3
37.5°	1468.7	1344.1	1213.5	1146.1	1074.4	939.6	817.5	704.0	615.3	550.4	513.7
40°	1534.4	1361.1	1189.6	1106.0	1020.6	870.5	738.2	634.9	565.8	518.9	502.6
42.5°	1612.9	1379.9	1152.1	1048.0	949.0	783.4	653.7	571.8	524.8	501.8	492.4
45°	1695.7	1399.5	1106.8	981.4	868.7	696.4	580.3	518.9	495.8	488.1	483.0
47.5°	1793.8	1426.0	1053.9	903.7	779.1	610.2	518.0	477.0	477.0	477.9	477.0
50°	1894.5	1452.5	1001.9	821.0	681.0	525.7	466.8	452.3	457.4	464.2	466.8
52.5°	1979.9	1476.4	984.8	788.5	595.7	452.3	424.1	423.3	430.1	438.6	441.2
55°	2025.9	1480.6	999.3	783.4	576.9	402.8	381.5	387.4	394.3	403.7	403.7
57.5°	2051.5	1448.2	927.6	670.8	499.2	359.3	341.4	349.9	352.4	361.0	366.1
60°	2018.3	1378.2	687.0	469.4	368.7	307.2	301.2	314.0	319.2	329.4	335.4
62.5°	1926.9	1192.2	431.0	303.8	273.9	268.8	274.8	286.7	297.0	307.2	312.3
65°	1710.2	794.5	239.8	238.1	244.1	249.2	265.4	276.5	285.9	295.3	293.6
67.5°	1229.7	297.0	199.7	209.9	220.2	238.9	256.0	270.5	273.9	279.1	279.1
70°	518.9	156.2	178.4	191.2	209.9	229.6	246.6	250.0	258.6	258.6	260.3
72.5°	116.9	127.2	153.6	171.5	192.0	209.9	225.3	233.0	235.5	247.5	244.9
75°	92.2	105.0	136.5	151.9	163.0	178.4	196.3	204.0	211.6	220.2	226.1
77.5°	66.6	82.8	112.6	122.9	134.0	151.0	159.6	171.5	178.4	183.5	184.3
80°	46.9	66.6	87.0	93.0	99.8	102.4	111.8	130.6	135.7	144.2	146.8
82.5°	35.0	46.1	52.1	53.8	55.5	63.2	64.9	75.1	80.2	93.9	101.6
85°	25.6	26.5	20.5	19.6	19.6	23.9	27.3	35.8	43.5	52.9	58.0
87.5°	6.0	6.8	7.7	8.5	9.4	11.9	16.2	24.7	35.8	46.1	48.6
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):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	888.4	888.4	888.4	888.4	888.4	888.4	888.4	888.4
2.5°	908.9	915.7	917.4	918.2	921.7	922.5	923.4	924.2
5°	928.5	937.0	938.7	939.6	944.7	945.5	945.5	947.3
7.5°	946.4	953.2	954.9	955.8	960.1	962.6	962.6	964.3
10°	962.6	965.2	964.3	964.3	968.6	968.6	968.6	968.6
12.5°	973.7	970.3	966.0	963.5	960.9	956.6	954.1	951.5
15°	974.6	961.8	953.2	947.3	937.9	925.1	917.4	910.6
17.5°	960.9	938.7	926.8	915.7	895.2	874.7	860.2	848.3
20°	932.7	895.2	879.0	862.8	831.2	802.2	784.3	771.5
22.5°	885.8	832.9	809.0	789.4	748.4	715.1	696.4	684.4
25°	820.1	751.0	719.4	691.2	654.5	628.9	613.6	603.3
27.5°	725.4	658.8	634.1	612.7	580.3	557.3	541.0	535.1
30°	634.1	584.6	565.8	548.7	522.3	500.1	483.0	475.3
32.5°	557.3	525.7	512.9	501.8	482.2	460.0	442.1	435.2
35°	506.1	488.1	479.6	471.1	451.4	430.1	408.8	399.4
37.5°	495.8	483.0	476.2	469.4	453.1	426.7	401.9	391.7
40°	491.5	481.3	477.9	473.6	454.9	431.0	403.7	391.7
42.5°	487.3	483.9	478.7	471.9	451.4	428.4	406.2	393.4
45°	483.0	479.6	472.8	465.9	445.5	419.9	398.5	385.7
47.5°	476.2	468.5	460.8	453.1	433.5	407.1	382.3	371.2
50°	456.6	444.6	439.5	429.3	407.1	380.6	357.6	350.7
52.5°	428.4	413.9	408.8	397.7	374.6	346.5	324.3	315.8
55°	396.0	385.7	382.3	372.9	350.7	321.7	303.0	294.4
57.5°	369.5	367.0	366.1	361.8	343.1	319.2	304.7	298.7
60°	339.6	339.6	343.1	346.5	332.8	305.5	286.7	281.6
62.5°	312.3	308.9	309.8	309.8	296.1	273.1	257.7	250.0
65°	287.6	279.9	278.2	272.2	255.2	231.3	215.9	212.5
67.5°	270.5	260.3	256.9	251.7	233.8	212.5	198.0	192.9
70°	252.6	240.7	237.2	231.3	213.3	192.9	180.9	176.7
72.5°	235.5	221.0	218.5	213.3	194.6	176.7	162.1	156.2
75°	215.9	192.0	183.5	173.2	150.2	129.7	117.8	113.5
77.5°	174.1	167.3	161.3	153.6	131.4	110.9	99.8	94.7
80°	141.7	139.1	135.7	132.3	109.2	87.9	59.7	52.9
82.5°	102.4	98.1	101.6	104.1	84.5	52.1	41.0	36.7
85°	57.2	53.8	52.9	58.0	47.8	36.7	26.5	23.0
87.5°	49.5	46.1	43.5	41.0	29.0	24.7	20.5	17.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)