

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: P179075

Luminaire Tested: **VERD-A028-E-U-T4-7030-AP**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P179075
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-T4-7030-AP
Description: VERDEON ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K 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: 7548 lumens
Efficiency: N/A
Efficacy: 104.8 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

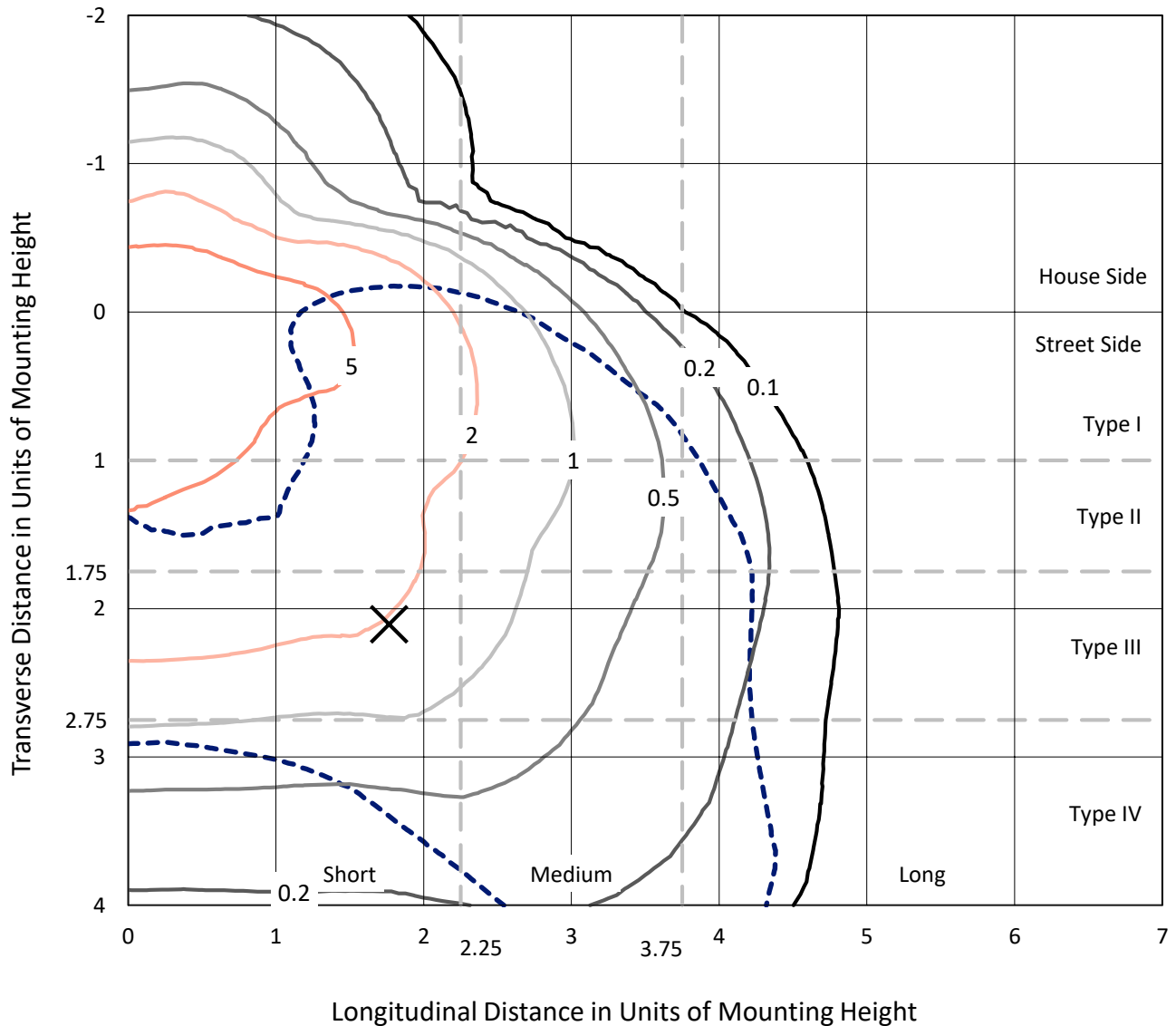
Input Watts (W): 72
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

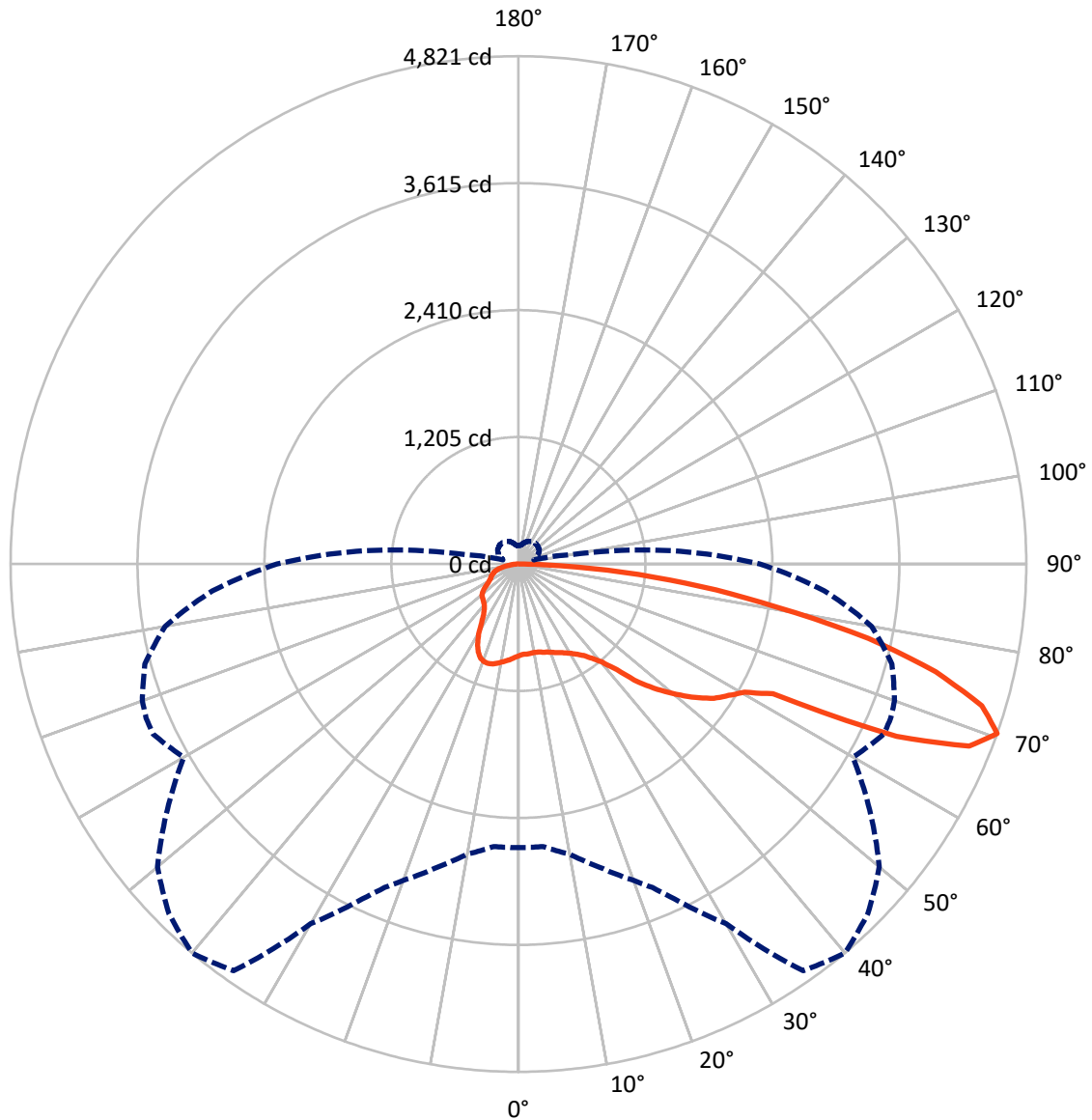
✕ Max cd
 - - - 1/2 Max cd



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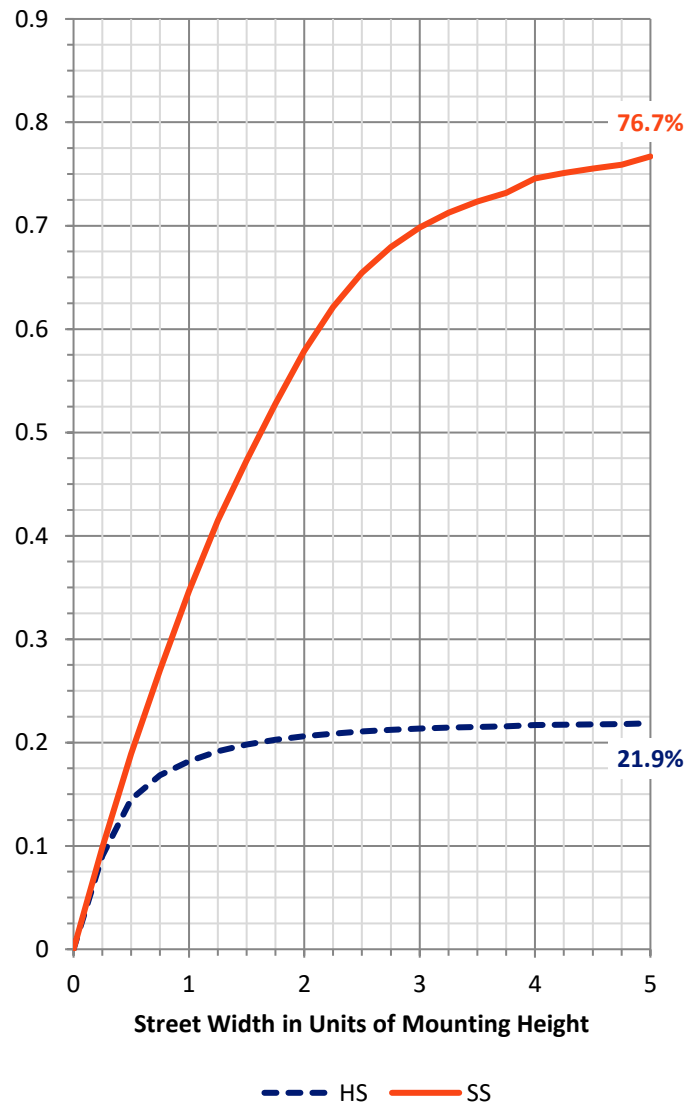
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1672.0	0.0	1672.0
	% Fixture	22.2	0.0	22.2
Street Side	Lumens	5876.0	0.0	5876.0
	% Fixture	77.8	0.0	77.8
Total	Lumens	7548.0	0.0	7548.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.6	1.1
10°-20°	264.4	3.5
20°-30°	442.6	5.9
30°-40°	624.0	8.3
40°-50°	977.2	12.9
50°-60°	1429.2	18.9
60°-70°	1982.2	26.3
70°-80°	1485.2	19.7
80°-90°	258.5	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°	7548.0	100.0
0°-180°	7548.0	100.0



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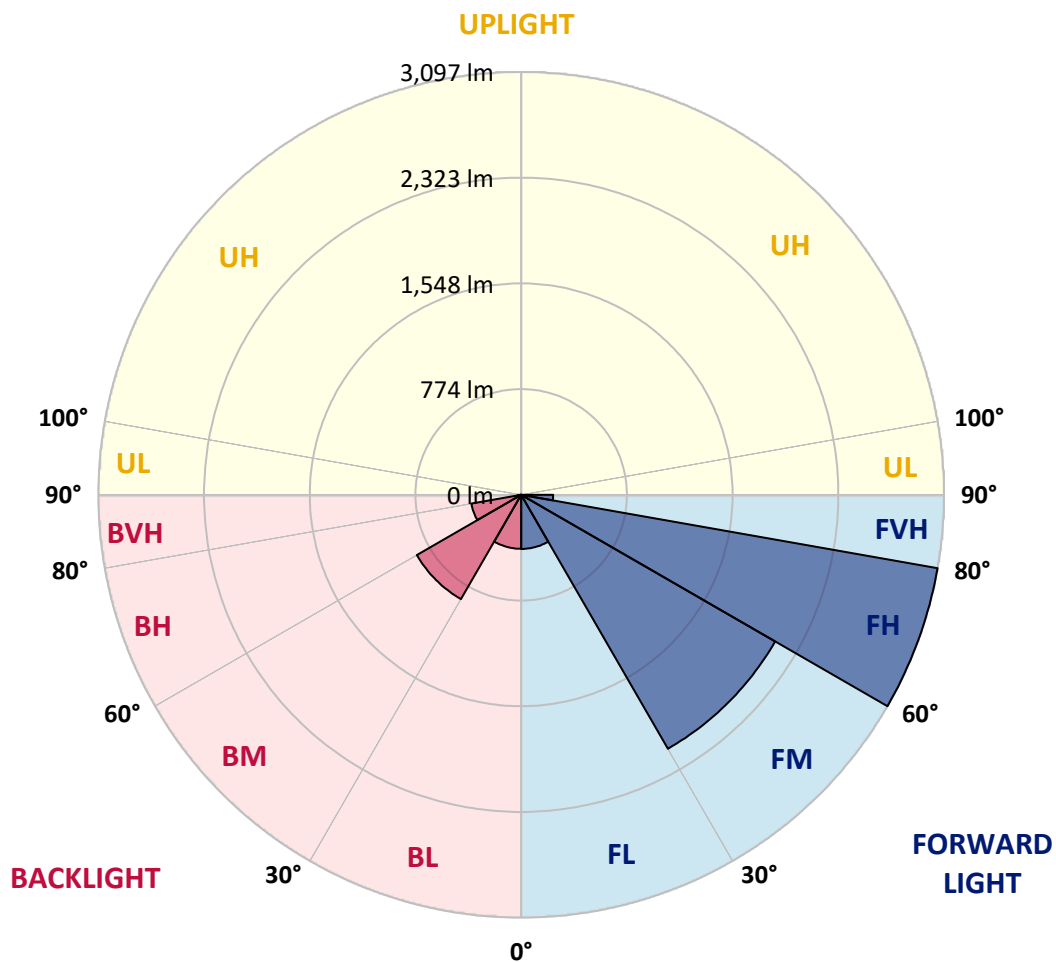
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	396.2	5.2			
FM	(30°-60°)	2148.1	28.5			
FH	(60°-80°)	3096.9	41.0			G2/5000
FVH	(80°-90°)	234.7	3.1			G3/500
BL	(0°-30°)	395.4	5.2	B1/500		
BM	(30°-60°)	882.3	11.7	B1/1000		
BH	(60°-80°)	370.6	4.9	B1/500		G1/500
BVH	(80°-90°)	23.8	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°	869.3	869.3	869.3	869.3	869.3	869.3	869.3	869.3	869.3	869.3	869.3
2.5°	862.6	861.7	857.6	855.9	850.9	853.4	858.4	862.6	860.9	858.4	860.1
5°	860.1	858.4	855.1	852.6	847.5	848.4	853.4	855.9	859.2	858.4	860.1
7.5°	849.2	847.5	842.5	841.7	837.5	838.4	840.9	845.0	851.7	855.1	855.9
10°	842.5	839.2	835.0	835.0	830.8	831.7	834.2	838.4	846.7	852.6	855.1
12.5°	839.2	836.7	834.2	835.0	832.5	834.2	836.7	841.7	850.1	857.6	859.2
15°	845.0	845.0	841.7	843.4	843.4	846.7	849.2	852.6	859.2	868.4	874.3
17.5°	860.9	861.7	858.4	861.7	861.7	864.2	866.8	868.4	870.9	879.3	889.3
20°	867.6	870.1	869.3	875.1	879.3	881.8	883.5	886.8	887.6	893.5	902.7
22.5°	886.0	884.3	884.3	892.6	892.6	896.0	898.5	900.2	904.3	913.5	920.2
25°	906.0	903.5	904.3	911.0	909.3	910.2	912.7	916.0	920.2	931.9	944.4
27.5°	919.4	918.5	919.4	924.4	928.5	930.2	932.7	936.1	945.2	955.3	969.5
30°	948.6	948.6	941.1	944.4	946.9	948.6	952.8	961.9	972.8	984.5	998.7
32.5°	997.0	997.8	987.8	984.5	981.1	980.3	982.8	998.7	1006.2	1020.4	1035.4
35°	1047.1	1039.6	1034.6	1039.6	1041.3	1039.6	1040.4	1049.6	1054.6	1067.2	1080.5
37.5°	1181.6	1163.2	1154.8	1150.7	1130.6	1115.6	1110.6	1113.9	1118.1	1134.8	1149.0
40°	1376.9	1376.9	1355.2	1342.7	1309.3	1285.1	1267.6	1235.8	1217.5	1223.3	1236.7
42.5°	1589.0	1578.2	1564.8	1534.8	1513.1	1483.0	1461.3	1415.4	1382.8	1369.4	1344.4
45°	1756.9	1763.6	1768.6	1744.4	1726.8	1713.5	1702.6	1682.6	1641.6	1603.2	1549.8
47.5°	1914.7	1922.2	1921.4	1867.9	1881.3	1883.0	1880.5	1857.9	1814.5	1776.9	1715.1
50°	2070.8	2086.7	2068.3	1980.7	2000.7	2005.7	2006.6	1988.2	1955.6	1943.1	1913.9
52.5°	2264.6	2250.4	2166.9	2112.6	2101.7	2105.1	2104.2	2100.9	2102.6	2105.9	2099.2
55°	2487.5	2374.8	2266.2	2237.9	2218.6	2205.3	2196.1	2181.1	2190.3	2251.2	2248.7
57.5°	2519.3	2515.1	2509.2	2392.3	2359.8	2350.6	2332.2	2318.9	2272.9	2353.1	2389.0
60°	3019.4	3068.7	3013.6	2974.3	2903.4	2799.8	2675.4	2536.0	2399.8	2467.5	2520.9
62.5°	3562.2	3562.2	3627.3	3583.9	3538.8	3453.6	3407.7	3228.2	2970.2	2711.3	2718.0
65°	3619.8	3641.5	3694.1	3797.7	3841.9	3865.3	3897.0	3880.3	3919.6	3944.6	3494.6
67.5°	3254.9	3281.6	3349.3	3508.8	3664.9	3741.7	3831.9	4026.5	4384.7	4613.5	4553.4
70°	2691.3	2692.1	2795.6	2979.4	3195.6	3323.4	3505.4	3942.1	4712.9	4820.6	4692.0
72.5°	1993.2	1992.4	2103.4	2267.1	2484.2	2665.4	2851.6	3484.5	4477.4	4600.1	4545.0
75°	1404.5	1411.2	1503.0	1652.5	1842.9	1988.2	2166.0	2835.7	3786.8	4090.8	4177.6
77.5°	979.5	1002.9	1060.5	1184.9	1345.2	1462.1	1600.7	2160.2	2982.7	3397.7	3530.5
80°	622.9	643.8	695.6	805.8	946.1	1049.6	1159.0	1578.2	2219.5	2487.5	2609.4
82.5°	355.7	369.9	415.8	503.5	610.4	692.2	776.6	1061.3	1573.2	1743.5	1711.0
85°	174.5	183.7	213.8	273.1	354.0	412.5	471.8	642.1	897.6	994.5	945.2
87.5°	46.8	50.1	62.6	89.3	121.9	146.1	167.8	238.0	293.9	254.7	190.4
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	869.3	869.3	869.3	869.3	869.3	869.3	869.3	869.3	869.3	869.3	869.3
2.5°	858.4	854.2	856.7	857.6	857.6	860.1	862.6	864.2	860.9	869.3	865.9
5°	859.2	855.1	860.9	863.4	863.4	865.1	870.1	871.8	873.4	879.3	877.6
7.5°	857.6	859.2	865.9	871.8	872.6	873.4	882.6	882.6	891.0	891.8	893.5
10°	859.2	865.9	873.4	884.3	886.8	887.6	896.0	901.0	911.0	907.7	915.2
12.5°	866.8	878.4	886.8	902.7	908.5	911.0	922.7	933.6	945.2	941.9	948.6
15°	880.9	896.0	908.5	927.7	935.2	941.1	956.9	974.5	983.7	986.2	996.2
17.5°	896.8	914.3	931.0	951.1	961.9	970.3	988.7	1012.0	1021.2	1031.2	1042.1
20°	911.8	931.9	947.7	969.5	982.8	994.5	1019.6	1044.6	1058.8	1075.5	1088.0
22.5°	928.5	947.7	965.3	987.8	1003.7	1019.6	1052.1	1078.0	1100.6	1120.6	1137.3
25°	955.3	969.5	990.3	1013.7	1032.9	1053.8	1087.2	1115.6	1146.5	1169.9	1189.1
27.5°	983.7	995.3	1018.7	1047.9	1068.0	1088.9	1120.6	1156.5	1194.1	1225.8	1251.7
30°	1012.9	1029.6	1058.8	1088.9	1108.1	1128.1	1162.3	1209.1	1255.0	1296.8	1319.3
32.5°	1048.8	1072.2	1108.1	1139.8	1156.5	1174.9	1215.8	1270.1	1335.2	1380.3	1382.8
35°	1100.6	1128.9	1166.5	1199.9	1215.8	1235.8	1284.3	1349.4	1432.1	1468.8	1450.4
37.5°	1169.9	1204.9	1240.8	1277.6	1296.0	1320.2	1376.9	1472.1	1564.0	1580.7	1533.1
40°	1263.4	1297.6	1338.5	1381.1	1408.7	1441.2	1516.4	1668.4	1751.0	1728.5	1647.5
42.5°	1364.4	1412.9	1463.0	1523.9	1564.0	1598.2	1713.5	1893.8	1938.1	1896.3	1773.6
45°	1531.4	1559.0	1609.1	1681.7	1727.7	1783.6	1948.9	2136.0	2161.0	2077.5	1910.5
47.5°	1692.6	1690.1	1739.3	1842.1	1908.0	1994.9	2205.3	2380.6	2378.1	2272.1	2060.0
50°	1887.1	1885.5	1908.9	2034.1	2127.6	2230.3	2495.0	2623.6	2581.0	2444.9	2202.8
52.5°	2075.0	2092.6	2139.3	2241.2	2336.4	2468.3	2743.0	2818.2	2769.8	2601.9	2323.0
55°	2249.5	2286.3	2348.9	2480.0	2601.1	2768.1	2984.4	3015.3	2931.8	2723.8	2409.9
57.5°	2416.5	2467.5	2554.3	2733.0	2905.9	3058.7	3189.8	3186.4	3062.9	2817.4	2465.8
60°	2572.7	2648.7	2760.6	2990.2	3186.4	3302.5	3388.5	3337.6	3163.9	2877.5	2485.0
62.5°	2753.1	2832.4	2961.0	3269.1	3441.1	3520.4	3545.5	3442.8	3220.7	2889.2	2452.5
65°	3095.4	3120.5	3216.5	3544.7	3656.6	3686.6	3646.5	3488.7	3231.5	2850.8	2331.4
67.5°	4202.7	3585.6	3470.3	3755.1	3796.0	3781.8	3686.6	3487.9	3170.6	2695.4	2040.0
70°	4472.4	4069.1	3666.6	3825.2	3824.4	3798.5	3670.7	3403.5	2915.1	2289.6	1458.8
72.5°	4366.3	3983.9	3643.2	3754.2	3783.5	3784.3	3520.4	3056.2	2359.8	1559.0	675.5
75°	4088.3	3730.9	3588.1	3578.1	3525.5	3376.8	2919.2	2300.5	1432.1	621.3	100.2
77.5°	3460.3	3125.5	2882.5	2638.7	2505.9	2294.6	1713.5	1032.1	471.0	75.2	64.3
80°	2447.4	2001.5	1484.7	1127.3	950.3	650.5	223.0	81.8	67.6	47.6	40.9
82.5°	1448.8	987.0	432.5	100.2	76.8	71.0	59.3	50.9	43.4	29.2	25.9
85°	739.0	390.8	56.8	46.8	44.3	41.8	35.9	31.7	24.2	15.9	17.5
87.5°	99.4	30.1	16.7	16.7	15.9	15.9	15.0	11.7	7.5	5.0	5.0
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°	869.3	869.3	869.3	869.3	869.3	869.3	869.3	869.3	869.3	869.3	869.3
2.5°	865.9	868.4	870.9	872.6	874.3	875.1	877.6	877.6	880.9	885.1	888.5
5°	877.6	883.5	883.5	885.1	890.1	890.1	895.1	894.3	900.2	906.8	907.7
7.5°	895.1	903.5	901.8	903.5	909.3	911.0	914.3	911.8	920.2	925.2	926.0
10°	919.4	924.4	926.0	928.5	933.6	937.7	938.6	936.1	942.7	942.7	943.6
12.5°	959.4	961.1	967.0	967.8	967.8	974.5	971.1	967.8	968.6	962.8	958.6
15°	1007.9	1007.0	1016.2	1015.4	1012.0	1015.4	1007.9	1001.2	994.5	979.5	967.0
17.5°	1053.8	1054.6	1061.3	1058.8	1056.3	1053.0	1042.9	1030.4	1012.0	987.0	965.3
20°	1099.7	1100.6	1099.7	1097.2	1093.9	1078.0	1063.0	1042.9	1017.1	982.0	951.9
22.5°	1147.3	1147.3	1139.0	1134.0	1127.3	1099.7	1075.5	1045.4	1007.0	961.9	920.2
25°	1197.4	1198.3	1179.0	1168.2	1156.5	1113.9	1076.3	1031.2	976.1	917.7	865.9
27.5°	1255.0	1240.8	1208.3	1189.1	1166.5	1109.7	1053.0	995.3	926.0	853.4	786.6
30°	1304.3	1269.2	1218.3	1189.1	1154.8	1085.5	1007.9	931.0	850.1	766.5	684.7
32.5°	1346.9	1287.6	1213.3	1172.4	1126.4	1037.9	947.7	847.5	754.9	660.5	595.4
35°	1387.0	1301.0	1204.1	1151.5	1093.0	980.3	871.8	758.2	661.3	582.8	527.7
37.5°	1437.1	1315.2	1187.4	1121.4	1051.3	919.4	799.9	688.9	602.0	538.6	502.7
40°	1501.4	1331.9	1164.0	1082.2	998.7	851.7	722.3	621.3	553.6	507.7	491.8
42.5°	1578.2	1350.2	1127.3	1025.4	928.5	766.5	639.6	559.5	513.5	491.0	481.8
45°	1659.2	1369.4	1083.0	960.3	850.1	681.4	567.8	507.7	485.1	477.6	472.6
47.5°	1755.2	1395.3	1031.2	884.3	762.4	597.0	506.9	466.8	466.8	467.6	466.8
50°	1853.7	1421.2	980.3	803.3	666.3	514.4	456.8	442.6	447.6	454.3	456.8
52.5°	1937.2	1444.6	963.6	771.6	582.8	442.6	415.0	414.2	420.8	429.2	431.7
55°	1982.3	1448.8	977.8	766.5	564.5	394.1	373.3	379.1	385.8	395.0	395.0
57.5°	2007.4	1417.0	907.7	656.3	488.5	351.5	334.0	342.4	344.9	353.2	358.2
60°	1974.8	1348.6	672.2	459.3	360.7	300.6	294.8	307.3	312.3	322.3	328.2
62.5°	1885.5	1166.5	421.7	297.3	268.0	263.0	268.9	280.6	290.6	300.6	305.6
65°	1673.4	777.4	234.6	233.0	238.8	243.8	259.7	270.5	279.7	288.9	287.2
67.5°	1203.3	290.6	195.4	205.4	215.4	233.8	250.5	264.7	268.0	273.1	273.1
70°	507.7	152.8	174.5	187.0	205.4	224.6	241.3	244.7	253.0	253.0	254.7
72.5°	114.4	124.4	150.3	167.8	187.9	205.4	220.4	228.0	230.5	242.2	239.7
75°	90.2	102.7	133.6	148.6	159.5	174.5	192.1	199.6	207.1	215.4	221.3
77.5°	65.1	81.0	110.2	120.2	131.1	147.8	156.1	167.8	174.5	179.5	180.4
80°	45.9	65.1	85.2	91.0	97.7	100.2	109.4	127.8	132.8	141.1	143.6
82.5°	34.2	45.1	50.9	52.6	54.3	61.8	63.5	73.5	78.5	91.9	99.4
85°	25.1	25.9	20.0	19.2	19.2	23.4	26.7	35.1	42.6	51.8	56.8
87.5°	5.8	6.7	7.5	8.4	9.2	11.7	15.9	24.2	35.1	45.1	47.6
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°	869.3	869.3	869.3	869.3	869.3	869.3	869.3	869.3
2.5°	889.3	896.0	897.6	898.5	901.8	902.7	903.5	904.3
5°	908.5	916.9	918.5	919.4	924.4	925.2	925.2	926.9
7.5°	926.0	932.7	934.4	935.2	939.4	941.9	941.9	943.6
10°	941.9	944.4	943.6	943.6	947.7	947.7	947.7	947.7
12.5°	952.8	949.4	945.2	942.7	940.2	936.1	933.6	931.0
15°	953.6	941.1	932.7	926.9	917.7	905.2	897.6	891.0
17.5°	940.2	918.5	906.8	896.0	875.9	855.9	841.7	830.0
20°	912.7	875.9	860.1	844.2	813.3	784.9	767.4	754.9
22.5°	866.8	815.0	791.6	772.4	732.3	699.7	681.4	669.7
25°	802.5	734.8	703.9	676.4	640.5	615.4	600.4	590.4
27.5°	709.8	644.6	620.4	599.5	567.8	545.3	529.4	523.6
30°	620.4	572.0	553.6	536.9	511.0	489.3	472.6	465.1
32.5°	545.3	514.4	501.8	491.0	471.8	450.1	432.5	425.9
35°	495.2	477.6	469.3	460.9	441.7	420.8	400.0	390.8
37.5°	485.1	472.6	465.9	459.3	443.4	417.5	393.3	383.3
40°	481.0	471.0	467.6	463.4	445.1	421.7	395.0	383.3
42.5°	476.8	473.5	468.4	461.8	441.7	419.2	397.5	384.9
45°	472.6	469.3	462.6	455.9	435.9	410.8	390.0	377.4
47.5°	465.9	458.4	450.9	443.4	424.2	398.3	374.1	363.2
50°	446.7	435.0	430.0	420.0	398.3	372.4	349.9	343.2
52.5°	419.2	405.0	400.0	389.1	366.6	339.0	317.3	309.0
55°	387.4	377.4	374.1	364.9	343.2	314.8	296.4	288.1
57.5°	361.6	359.1	358.2	354.0	335.7	312.3	298.1	292.3
60°	332.3	332.3	335.7	339.0	325.7	298.9	280.6	275.6
62.5°	305.6	302.3	303.1	303.1	289.8	267.2	252.2	244.7
65°	281.4	273.9	272.2	266.4	249.7	226.3	211.3	207.9
67.5°	264.7	254.7	251.3	246.3	228.8	207.9	193.7	188.7
70°	247.2	235.5	232.1	226.3	208.8	188.7	177.0	172.8
72.5°	230.5	216.3	213.8	208.8	190.4	172.8	158.7	152.8
75°	211.3	187.9	179.5	169.5	147.0	126.9	115.2	111.1
77.5°	170.3	163.7	157.8	150.3	128.6	108.6	97.7	92.7
80°	138.6	136.1	132.8	129.4	106.9	86.0	58.5	51.8
82.5°	100.2	96.0	99.4	101.9	82.7	50.9	40.1	35.9
85°	55.9	52.6	51.8	56.8	46.8	35.9	25.9	22.5
87.5°	48.4	45.1	42.6	40.1	28.4	24.2	20.0	17.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)