

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: P199249

Luminaire Tested: **XNV2-AF-02-LED-U-T2R-8030-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P199249
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24459)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: XNV2-AF-02-LED-U-T2R-8030-1200
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11312 lumens
Efficiency: N/A
Efficacy: 88.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 128
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

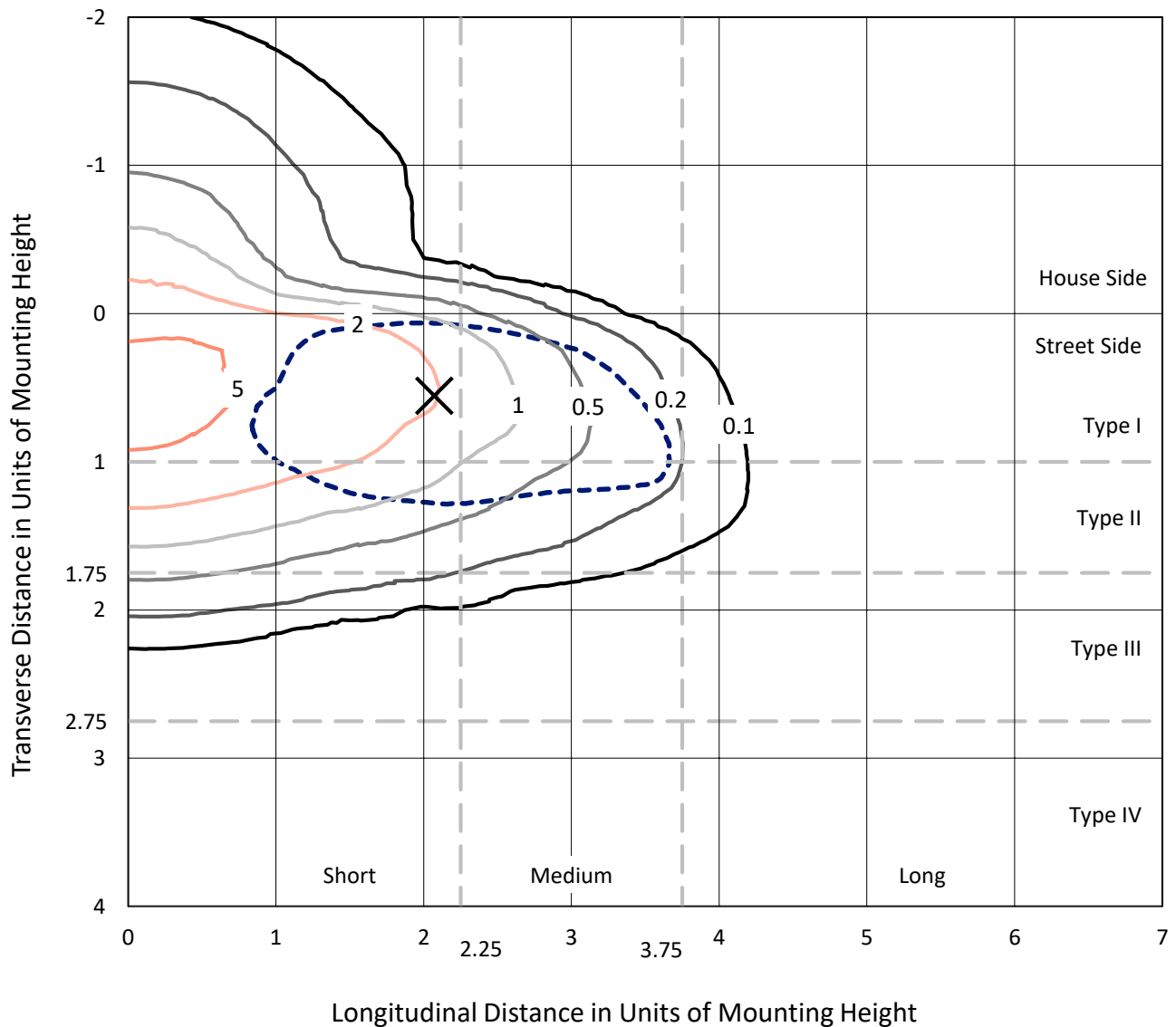


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Iso-Footcandle Lines of Horizontal Illumination

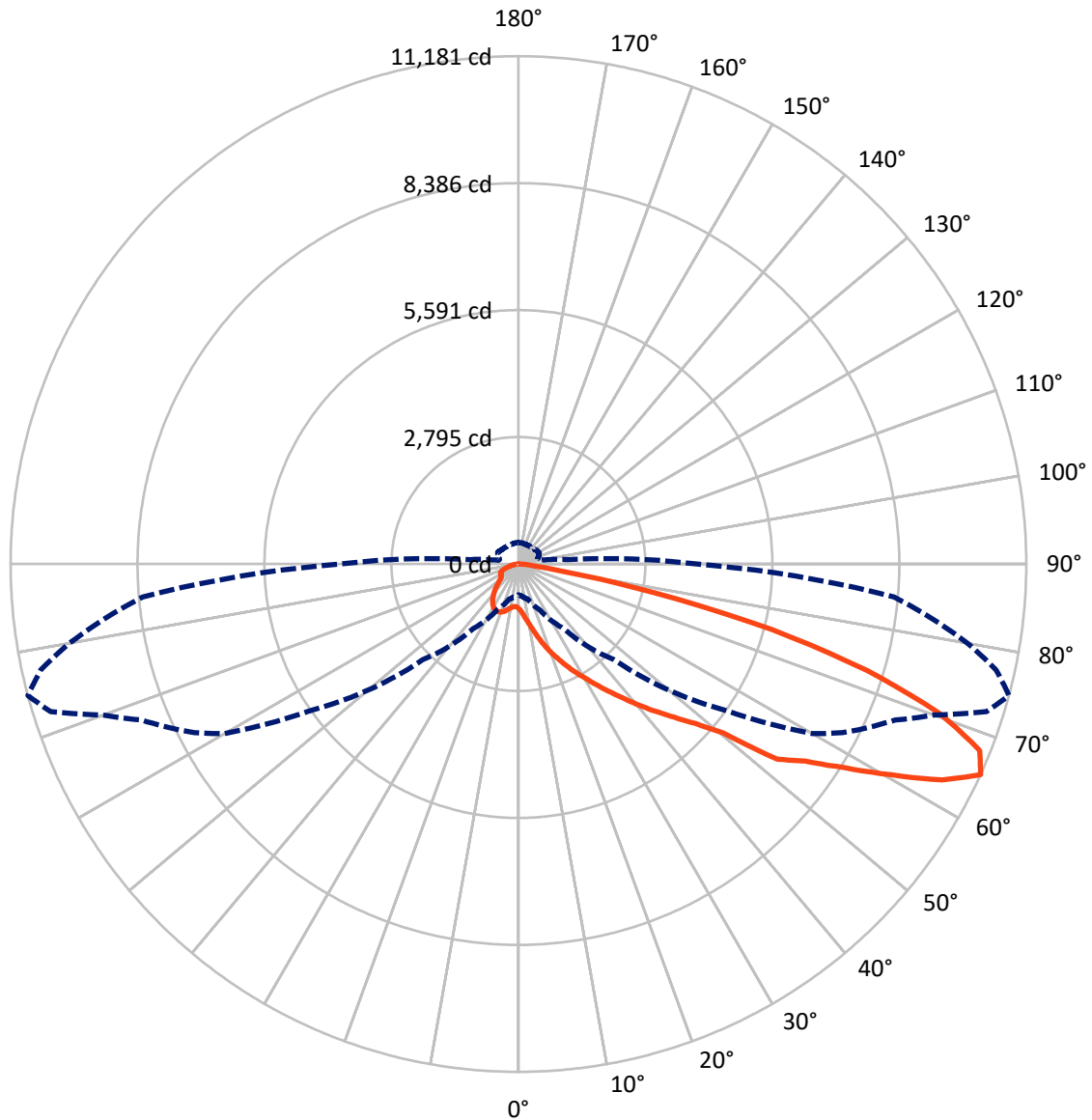
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 7 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1699.8	0.0	1699.8
	% Fixture	15.0	0.0	15.0
Street Side	Lumens	9612.2	0.0	9612.2
	% Fixture	85.0	0.0	85.0
Total	Lumens	11312.0	0.0	11312.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.7	1.0
10°-20°	442.0	3.9
20°-30°	891.9	7.9
30°-40°	1514.7	13.4
40°-50°	2112.6	18.7
50°-60°	2589.3	22.9
60°-70°	2436.2	21.5
70°-80°	1068.2	9.4
80°-90°	141.4	1.2
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°	11312.0	100.0
0°-180°	11312.0	100.0

Coefficient of Utilization



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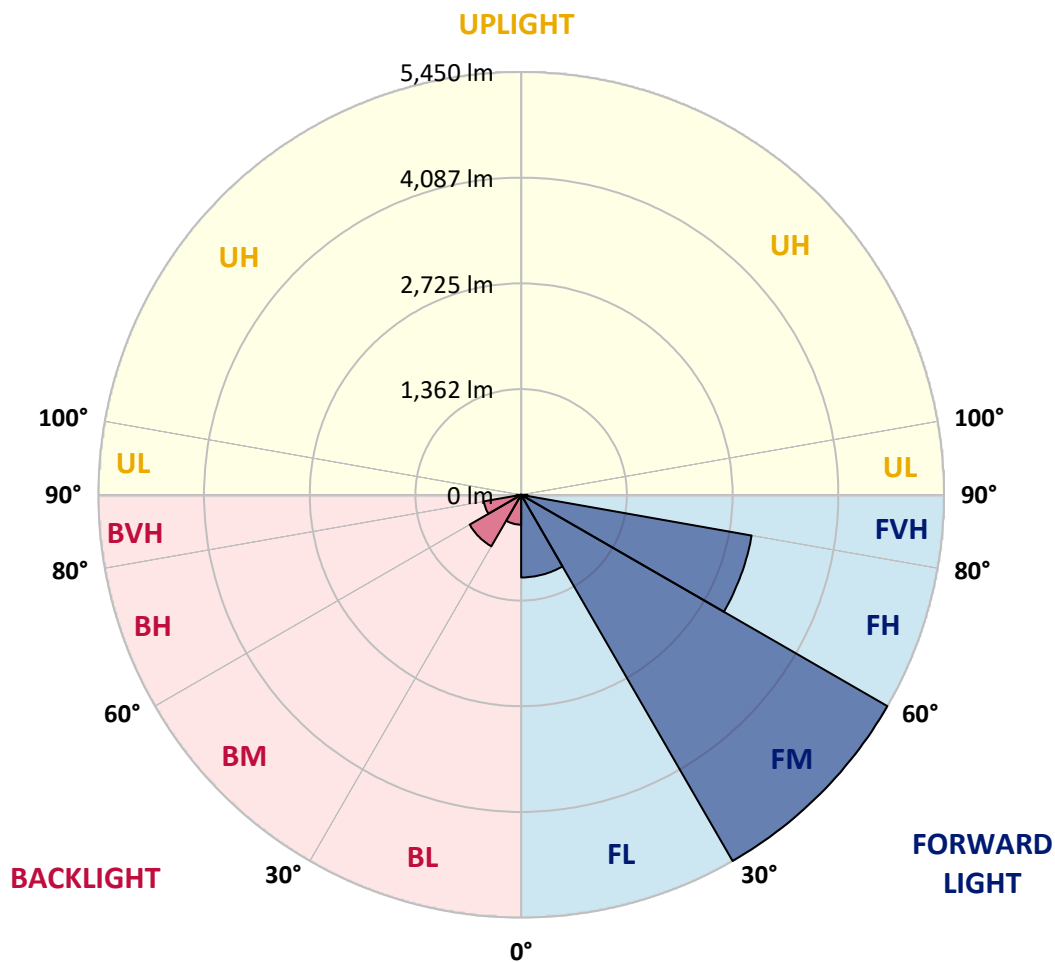
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1064.8	9.4			
FM (30°-60°)	5449.6	48.2			
FH (60°-80°)	3015.9	26.7			G2/5000
FVH (80°-90°)	81.9	0.7			G1/100
BL (0°-30°)	384.8	3.4	B1/500		
BM (30°-60°)	767.0	6.8	B1/1000		
BH (60°-80°)	488.5	4.3	B1/500		G1/500
BVH (80°-90°)	59.4	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57.5°	60°	62.5°	65°
0°	980.1	980.1	980.1	980.1	980.1	980.1	980.1	980.1	980.1	980.1	980.1
2.5°	1234.1	1219.7	1221.2	1201.0	1171.5	1139.2	1112.5	1098.1	1085.9	1082.3	1062.2
5°	1614.1	1596.1	1589.6	1543.6	1474.5	1392.5	1311.1	1279.5	1253.6	1237.7	1198.9
7.5°	1925.0	1915.6	1907.0	1864.5	1796.2	1691.1	1560.1	1513.4	1470.2	1422.7	1375.9
10°	2136.5	2132.9	2129.3	2099.8	2043.0	1951.6	1810.6	1759.5	1705.5	1645.0	1583.9
12.5°	2296.3	2296.3	2299.2	2274.7	2240.2	2169.6	2041.5	1994.1	1939.4	1876.0	1806.2
15°	2403.5	2406.4	2421.5	2428.7	2410.7	2365.4	2253.1	2211.4	2159.6	2097.0	2027.9
17.5°	2474.8	2480.5	2502.8	2526.6	2549.6	2533.8	2450.3	2411.4	2364.7	2307.1	2242.3
20°	2640.3	2633.1	2633.8	2626.6	2660.4	2672.7	2626.6	2594.2	2556.8	2504.3	2445.3
22.5°	2987.8	2974.2	2938.9	2849.0	2807.9	2803.6	2776.3	2759.0	2730.2	2697.1	2638.1
25°	3441.2	3425.4	3355.6	3207.3	3085.0	2972.0	2921.6	2910.8	2892.1	2869.8	2827.4
27.5°	3909.7	3892.4	3802.4	3615.3	3455.6	3227.5	3070.6	3056.2	3038.9	3029.6	3009.4
30°	4322.0	4303.3	4214.8	4024.8	3831.9	3559.9	3271.4	3221.0	3191.5	3194.4	3182.9
32.5°	4684.0	4667.4	4568.1	4374.5	4178.8	3914.7	3531.9	3453.4	3387.2	3362.8	3371.4
35°	4987.7	4972.5	4863.9	4668.9	4471.7	4252.2	3867.2	3749.2	3641.3	3573.6	3565.7
37.5°	5166.1	5157.5	5081.2	4915.7	4720.0	4558.8	4242.8	4111.9	3952.8	3854.3	3811.1
40°	5156.0	5165.4	5152.4	5077.6	4925.8	4808.5	4634.3	4504.8	4349.4	4202.6	4114.8
42.5°	5009.2	5022.2	5080.5	5119.3	5078.3	5007.1	4976.1	4879.7	4740.1	4584.7	4463.1
45°	4807.7	4819.3	4894.8	5035.1	5152.4	5172.6	5275.5	5227.3	5109.3	4976.9	4843.0
47.5°	4499.0	4521.3	4609.1	4832.2	5111.4	5305.7	5526.6	5549.0	5480.6	5371.2	5246.0
50°	4052.2	4081.7	4204.7	4522.1	4956.0	5442.4	5900.1	5985.0	5957.7	5846.9	5720.2
52.5°	3594.5	3624.0	3788.1	4125.6	4705.6	5498.6	6267.8	6485.2	6642.0	6756.5	6778.8
55°	3118.1	3151.2	3331.1	3719.7	4371.7	5427.3	6530.5	6777.3	6936.4	7055.8	7104.0
57.5°	2580.5	2618.0	2792.1	3185.0	3899.6	5140.9	6822.7	7172.4	7409.2	7593.4	7697.0
60°	1963.8	2010.6	2191.2	2587.0	3279.3	4592.6	6952.9	7470.3	7846.7	8123.0	8287.1
62.5°	1244.9	1292.4	1480.2	1891.1	2573.3	3843.5	6584.5	7339.4	7981.2	8390.0	8690.8
65°	679.3	700.2	804.5	1114.0	1735.0	2982.1	5650.4	6540.6	7465.3	8044.6	8506.6
67.5°	509.5	512.4	523.2	598.7	924.0	2013.5	4417.7	5233.0	6259.9	7005.5	7557.4
70°	446.2	446.2	447.6	448.3	501.6	1090.9	2992.9	3743.4	4684.7	5438.8	6124.6
72.5°	400.1	395.8	394.3	385.7	392.9	559.1	1629.2	2303.5	3097.2	3943.5	4583.2
75°	345.4	344.7	344.7	336.1	340.4	393.6	706.7	1105.3	1720.6	2508.6	3138.2
77.5°	298.6	293.6	294.3	289.3	303.0	301.5	335.3	455.5	749.1	1317.6	1840.1
80°	246.1	242.5	244.7	241.8	263.4	223.1	226.0	278.5	372.0	577.9	814.6
82.5°	182.1	183.5	197.2	195.7	221.6	150.4	165.5	208.0	250.4	287.8	313.0
85°	106.5	108.7	141.8	149.0	162.6	79.2	101.5	123.8	139.6	154.7	161.2
87.5°	11.5	15.1	79.2	81.3	72.7	23.7	41.0	51.8	55.4	59.0	51.8
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):

	67.5°	70°	72.5°	75°	77.5°	80°	85°	90°	95°	100°	102.5°
0°	980.1	980.1	980.1	980.1	980.1	980.1	980.1	980.1	980.1	980.1	980.1
2.5°	1055.7	1046.3	1036.2	1030.5	1020.4	1011.8	995.9	983.0	968.6	958.5	954.2
5°	1179.4	1157.1	1133.4	1116.1	1094.5	1075.8	1039.8	996.7	983.0	954.2	947.0
7.5°	1340.6	1300.3	1260.0	1226.9	1189.5	1158.6	1098.1	1020.4	1010.3	964.3	954.2
10°	1529.9	1470.9	1411.2	1360.1	1305.4	1257.9	1168.7	1059.3	1048.5	989.5	979.4
12.5°	1741.5	1669.5	1592.5	1516.2	1451.5	1384.5	1262.9	1119.7	1102.5	1032.6	1019.0
15°	1959.5	1881.8	1792.6	1700.5	1620.6	1532.1	1378.8	1198.9	1167.2	1085.2	1066.5
17.5°	2174.7	2090.5	1996.9	1894.0	1800.5	1694.7	1504.0	1287.4	1232.7	1137.0	1113.2
20°	2382.6	2297.0	2198.4	2097.7	1981.1	1860.2	1632.1	1374.5	1291.0	1180.2	1149.2
22.5°	2571.9	2498.5	2399.9	2284.1	2166.0	2030.0	1762.3	1461.5	1342.1	1213.3	1173.7
25°	2771.2	2704.3	2606.4	2494.9	2357.5	2206.3	1896.9	1544.3	1383.1	1231.3	1182.3
27.5°	2972.7	2915.2	2823.0	2705.8	2558.2	2390.6	2033.6	1620.6	1416.2	1237.0	1178.0
30°	3187.9	3143.3	3058.4	2927.4	2778.4	2592.8	2182.6	1695.4	1437.1	1229.1	1158.6
32.5°	3391.5	3390.1	3314.5	3178.5	3018.1	2813.7	2339.5	1771.0	1447.9	1206.8	1124.8
35°	3603.1	3632.6	3575.8	3446.2	3277.1	3050.4	2512.9	1851.6	1448.6	1167.2	1080.9
37.5°	3843.5	3896.0	3870.8	3747.8	3570.0	3320.3	2716.5	1942.2	1444.3	1112.5	1016.8
40°	4116.9	4188.9	4188.2	4084.5	3894.6	3622.5	2953.3	2043.7	1434.2	1044.2	941.3
42.5°	4429.9	4515.6	4539.3	4437.1	4245.0	3952.8	3224.6	2155.2	1418.4	976.5	861.4
45°	4788.3	4863.9	4908.5	4813.5	4620.6	4312.7	3536.2	2281.9	1398.9	889.4	770.0
47.5°	5171.9	5259.7	5326.6	5245.3	5039.5	4722.8	3905.4	2445.3	1391.7	790.1	671.4
50°	5647.5	5738.2	5882.9	5846.2	5733.2	5478.4	4686.1	2831.0	1394.6	695.9	588.6
52.5°	6827.7	7035.7	7218.5	7137.1	6868.7	6431.9	5320.8	3045.4	1334.2	618.9	531.1
55°	7183.9	7420.0	7689.8	7656.0	7398.4	6958.0	5822.4	3224.6	1275.9	562.7	493.7
57.5°	7807.1	8085.6	8462.7	8455.5	8139.6	7643.8	6467.9	3439.0	1250.7	530.4	474.9
60°	8467.0	8821.8	9342.8	9424.1	9080.8	8564.9	7230.7	3702.4	1254.3	512.4	464.2
62.5°	8949.1	9469.4	10227.2	10470.4	10066.0	9497.5	8022.3	3965.8	1232.7	491.5	451.2
65°	8978.6	9727.8	10802.9	11181.4	10771.9	10041.5	8301.5	3914.0	1103.2	463.4	430.3
67.5°	8259.0	9234.8	10540.9	10956.1	10537.3	9706.2	7812.1	3421.8	896.6	414.5	394.3
70°	6878.8	8011.5	9367.2	9829.9	9483.8	8642.6	6798.9	2733.1	670.0	349.7	340.4
72.5°	5315.8	6372.2	7603.5	8031.6	7766.8	7027.0	5362.6	1991.9	478.5	283.5	276.3
75°	3800.3	4699.8	5593.6	5756.9	5495.7	4816.4	3479.3	1244.2	335.3	232.4	222.4
77.5°	2353.1	2938.2	3259.1	3049.0	2715.8	2257.4	1416.2	614.6	223.1	189.3	179.2
80°	1044.2	1225.5	1144.2	1019.7	805.2	662.0	432.5	272.7	143.9	146.1	140.3
82.5°	351.2	371.3	361.2	359.1	323.8	283.5	183.5	118.0	80.6	93.5	91.4
85°	171.3	179.2	179.9	186.4	161.9	125.9	49.7	46.8	34.5	50.4	52.5
87.5°	51.8	52.5	47.5	51.8	41.7	28.8	9.4	13.0	6.5	12.2	12.2
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°	107.5°	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°
0°	980.1	980.1	980.1	980.1	980.1	980.1	980.1	980.1	980.1	980.1	980.1
2.5°	946.3	943.4	938.4	932.6	931.2	924.0	921.8	918.2	916.1	912.5	909.6
5°	937.7	932.6	926.9	920.4	920.4	910.3	906.0	901.7	901.7	895.2	892.3
7.5°	946.3	939.8	933.3	927.6	929.7	918.2	913.9	909.6	908.9	902.4	899.5
10°	970.8	964.3	956.4	950.6	948.5	939.1	934.1	927.6	923.3	918.9	914.6
12.5°	1008.2	999.5	989.5	977.2	972.2	964.3	956.4	947.7	937.7	933.3	926.9
15°	1052.8	1038.4	1024.7	1009.6	995.9	988.0	977.2	963.6	949.9	944.1	935.5
17.5°	1089.5	1074.4	1055.0	1037.0	1012.5	1006.0	990.9	974.4	952.1	949.9	936.9
20°	1120.4	1097.4	1073.7	1052.1	1014.7	1011.1	992.3	972.9	941.3	941.3	925.4
22.5°	1137.7	1106.0	1078.0	1049.2	1002.4	999.5	978.0	954.9	916.1	917.5	898.1
25°	1140.6	1102.5	1067.2	1032.6	978.7	973.6	946.3	921.1	878.6	875.8	855.6
27.5°	1129.1	1084.5	1043.4	1001.7	943.4	932.6	902.4	872.2	830.4	823.2	801.7
30°	1102.5	1049.9	1003.9	955.6	894.5	877.2	845.5	814.6	772.1	762.8	742.6
32.5°	1060.0	1000.3	949.2	901.0	833.3	811.7	780.1	749.1	708.1	700.9	682.2
35°	1003.9	936.9	883.0	831.9	764.2	741.9	711.7	684.4	646.9	644.1	631.1
37.5°	933.3	863.5	806.0	757.0	693.0	681.5	650.5	630.4	599.4	602.3	595.8
40°	853.5	782.2	727.5	684.4	628.9	618.9	600.2	585.0	558.4	566.3	567.1
42.5°	772.9	701.6	652.0	613.1	565.6	559.1	546.2	537.6	517.4	533.2	539.7
45°	681.5	615.3	572.8	543.3	508.0	508.0	501.6	500.9	487.2	509.5	516.0
47.5°	593.0	541.2	511.6	493.7	469.2	480.7	478.5	484.3	474.2	497.3	503.0
50°	526.0	490.1	472.1	463.4	446.2	464.2	468.5	476.4	467.7	487.9	492.2
52.5°	483.6	459.8	449.8	447.6	435.4	457.7	464.9	472.1	462.0	480.7	480.0
55°	459.8	444.0	440.4	444.7	435.4	457.0	464.2	469.2	460.6	473.5	472.8
57.5°	451.2	442.6	444.7	451.2	444.7	462.7	466.3	472.1	463.4	469.2	472.1
60°	450.5	450.5	459.1	467.7	463.4	476.4	478.5	477.8	469.9	470.6	472.1
62.5°	446.2	457.0	471.3	485.0	483.6	499.4	500.9	491.5	485.0	477.8	475.7
65°	432.5	450.5	471.3	490.1	492.9	517.4	520.3	510.9	506.6	494.4	485.0
67.5°	402.3	425.3	449.8	472.8	477.8	510.9	517.4	521.0	523.2	515.2	503.0
70°	351.2	374.9	400.1	426.7	433.9	470.6	484.3	500.9	513.8	525.3	521.0
72.5°	285.7	307.3	328.9	353.3	364.1	402.3	420.3	449.0	469.2	498.7	510.9
75°	226.7	239.6	252.6	267.7	276.3	313.8	336.1	370.6	397.9	439.0	466.3
77.5°	178.5	184.9	191.4	197.9	201.5	222.4	240.4	274.9	306.6	358.4	398.7
80°	137.4	141.0	141.8	143.9	142.5	152.6	159.0	179.9	207.2	258.3	305.8
82.5°	88.5	91.4	92.8	96.4	89.2	102.2	106.5	108.7	123.1	160.5	194.3
85°	49.7	50.4	51.1	52.5	42.5	55.4	56.1	52.5	51.1	66.2	74.8
87.5°	12.2	11.5	12.2	12.2	5.0	11.5	11.5	7.9	5.8	10.8	8.6
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):

	135°	145°	155°	165°	175°	180°
0°	980.1	980.1	980.1	980.1	980.1	980.1
2.5°	903.1	901.7	902.4	898.8	897.4	898.1
5°	888.7	885.8	885.8	883.7	880.8	880.8
7.5°	895.2	889.4	887.3	883.0	878.6	879.4
10°	905.3	895.2	888.0	881.5	876.5	876.5
12.5°	911.8	893.8	883.0	874.3	868.6	868.6
15°	913.2	885.8	870.0	860.7	854.9	854.9
17.5°	904.6	870.0	849.9	837.6	831.2	832.6
20°	883.0	840.5	816.8	803.8	797.3	798.1
22.5°	849.1	800.2	772.9	757.8	751.3	751.3
25°	803.1	749.8	720.3	708.1	702.3	702.3
27.5°	750.6	695.9	670.0	660.6	657.0	657.0
30°	691.5	646.2	627.5	621.0	615.3	615.3
32.5°	641.9	609.5	603.0	594.4	579.3	578.6
35°	602.3	598.7	593.7	567.8	546.2	543.3
37.5°	580.7	602.3	570.7	526.0	508.8	508.0
40°	569.2	589.4	534.7	513.1	510.9	510.9
42.5°	541.9	556.3	532.5	520.3	520.3	521.0
45°	513.1	525.3	537.6	526.8	530.4	531.1
47.5°	492.9	517.4	537.6	528.2	535.4	539.7
50°	474.2	510.2	526.8	526.8	534.7	535.4
52.5°	469.9	500.1	516.7	524.6	525.3	521.7
55°	470.6	492.2	508.8	518.8	514.5	514.5
57.5°	469.9	487.9	502.3	505.9	508.0	508.0
60°	470.6	482.1	493.7	492.2	499.4	499.4
62.5°	472.8	474.2	480.0	478.5	489.3	489.3
65°	477.8	464.2	460.6	462.0	474.9	474.2
67.5°	487.2	450.5	439.0	439.7	458.4	455.5
70°	500.9	431.8	414.5	410.2	441.8	436.8
72.5°	505.2	410.2	382.8	378.5	397.2	382.8
75°	485.0	392.9	349.0	334.6	326.7	322.4
77.5°	432.5	382.1	313.8	283.5	271.3	268.4
80°	358.4	359.8	267.7	231.7	269.1	268.4
82.5°	270.6	310.9	214.4	200.8	195.0	162.6
85°	131.0	233.9	164.8	138.2	82.8	78.4
87.5°	11.5	97.9	95.0	61.9	28.1	26.6
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)