

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: P198607

Luminaire Tested: **XNV2-AF-02-LED-U-T2R-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198607
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-7030
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11186 lumens
Efficiency: N/A
Efficacy: 100.8 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

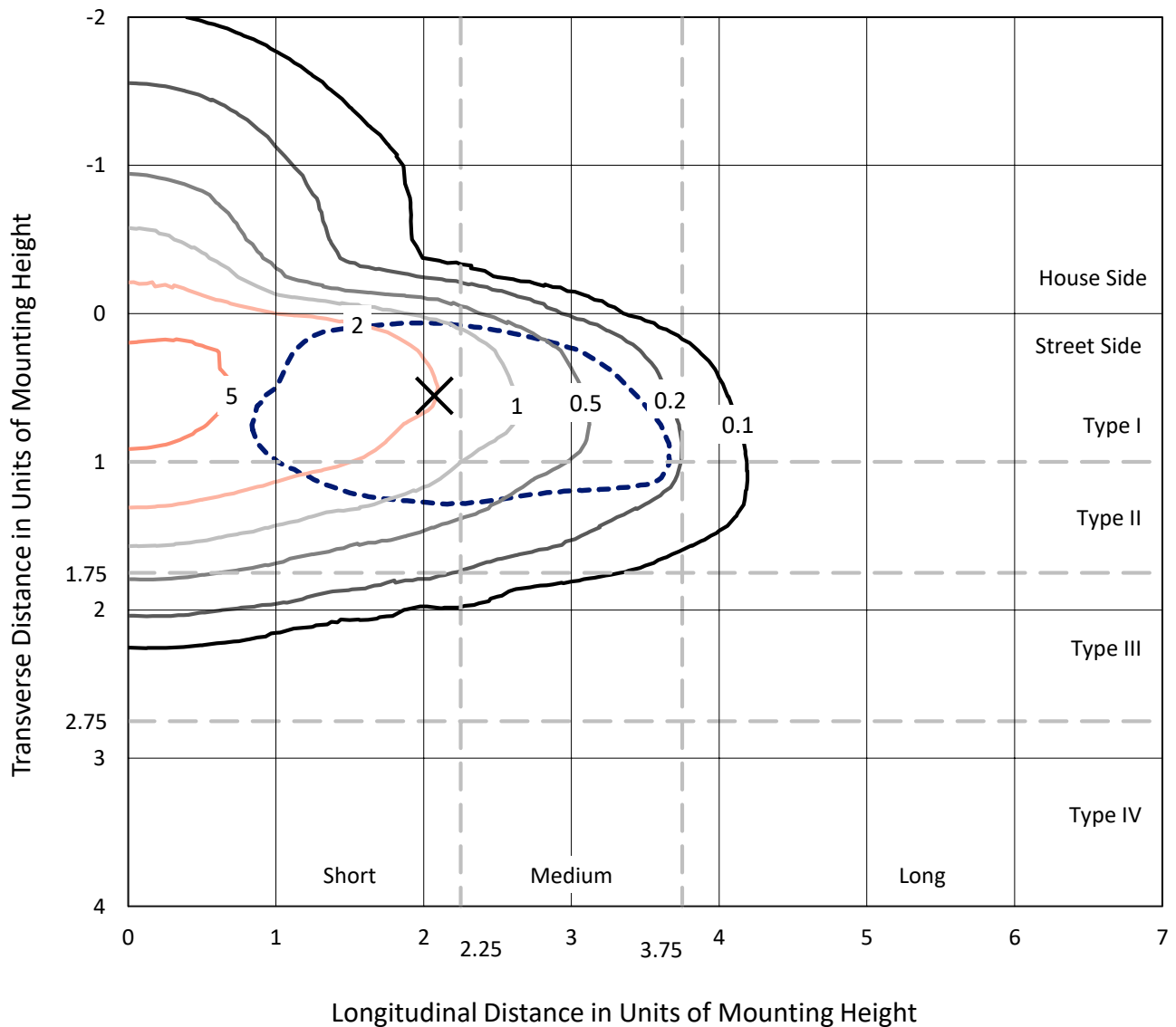
Input Watts (W): 111
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

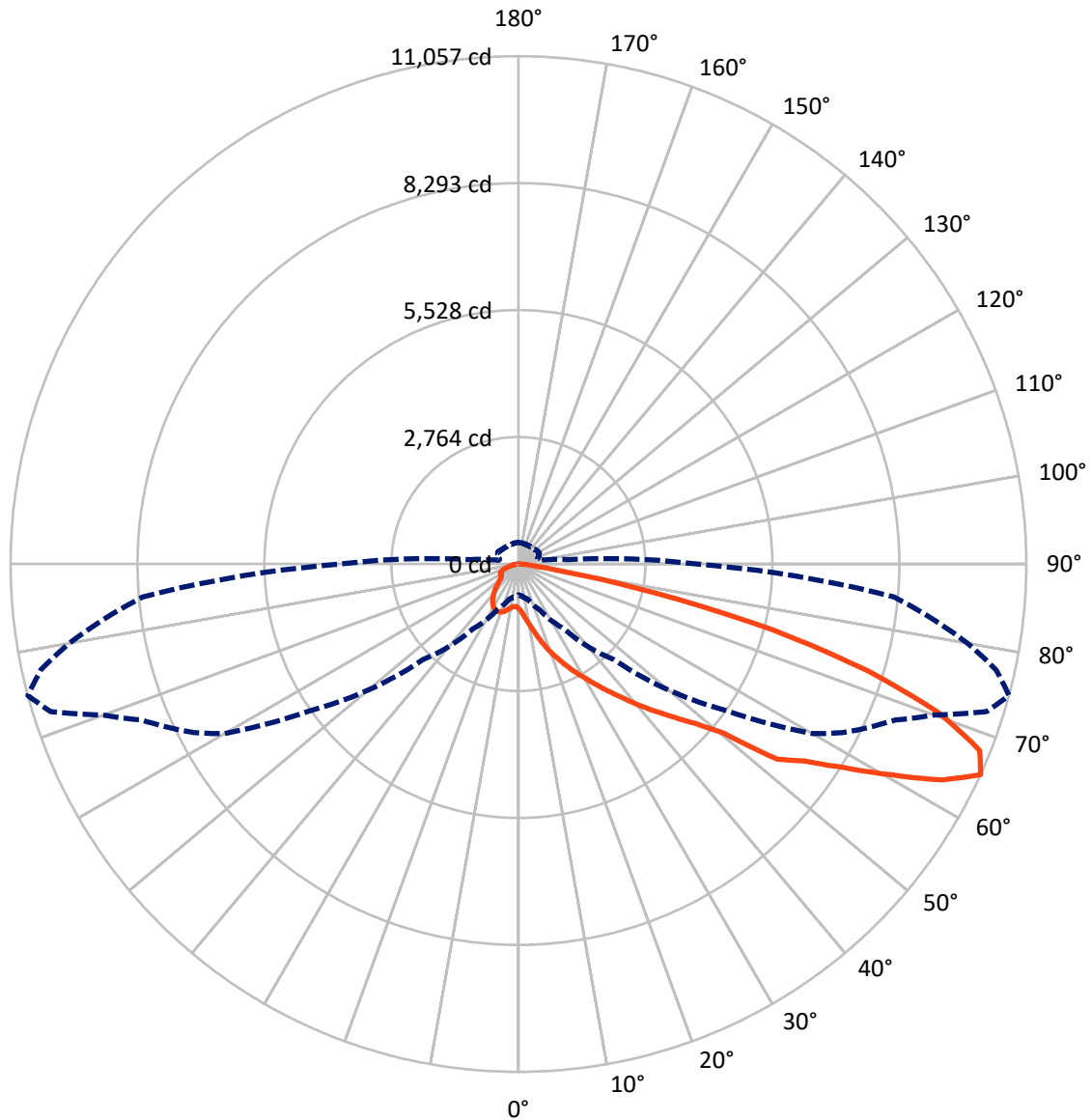
✕ Max cd
 - - - 1/2 Max cd



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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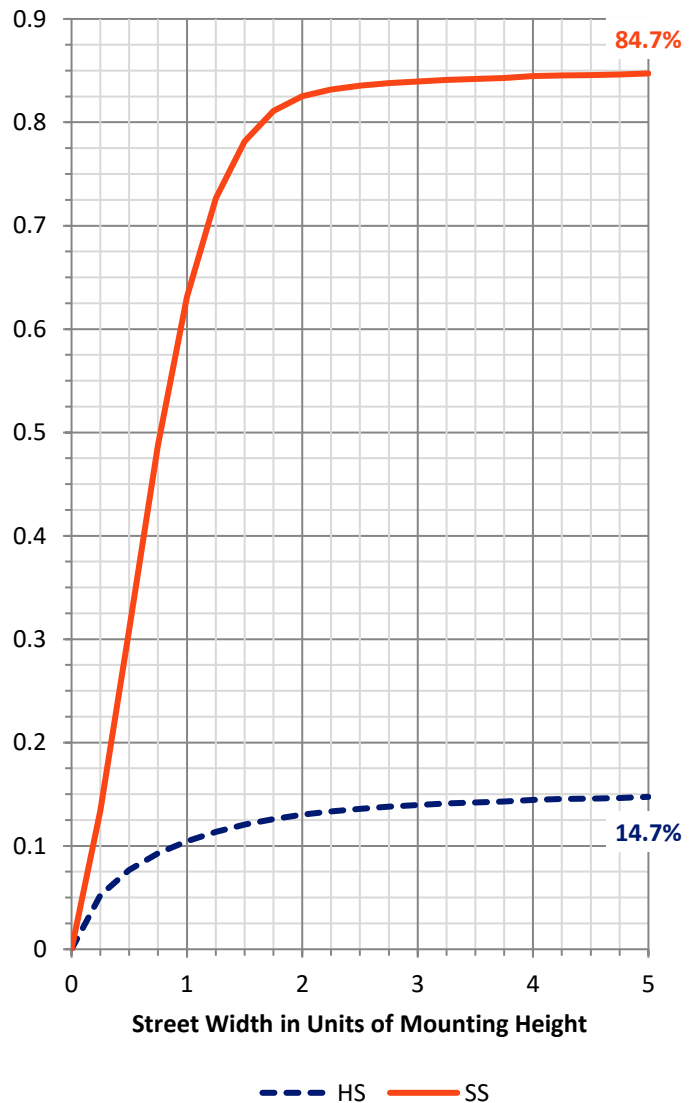
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1680.9	0.0	1680.9
	% Fixture	15.0	0.0	15.0
Street Side	Lumens	9505.1	0.0	9505.1
	% Fixture	85.0	0.0	85.0
Total	Lumens	11186.0	0.0	11186.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.4	1.0
10°-20°	437.0	3.9
20°-30°	882.0	7.9
30°-40°	1497.8	13.4
40°-50°	2089.1	18.7
50°-60°	2560.5	22.9
60°-70°	2409.1	21.5
70°-80°	1056.3	9.4
80°-90°	139.8	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°	11186.0	100.0
0°-180°	11186.0	100.0

Coefficient of Utilization



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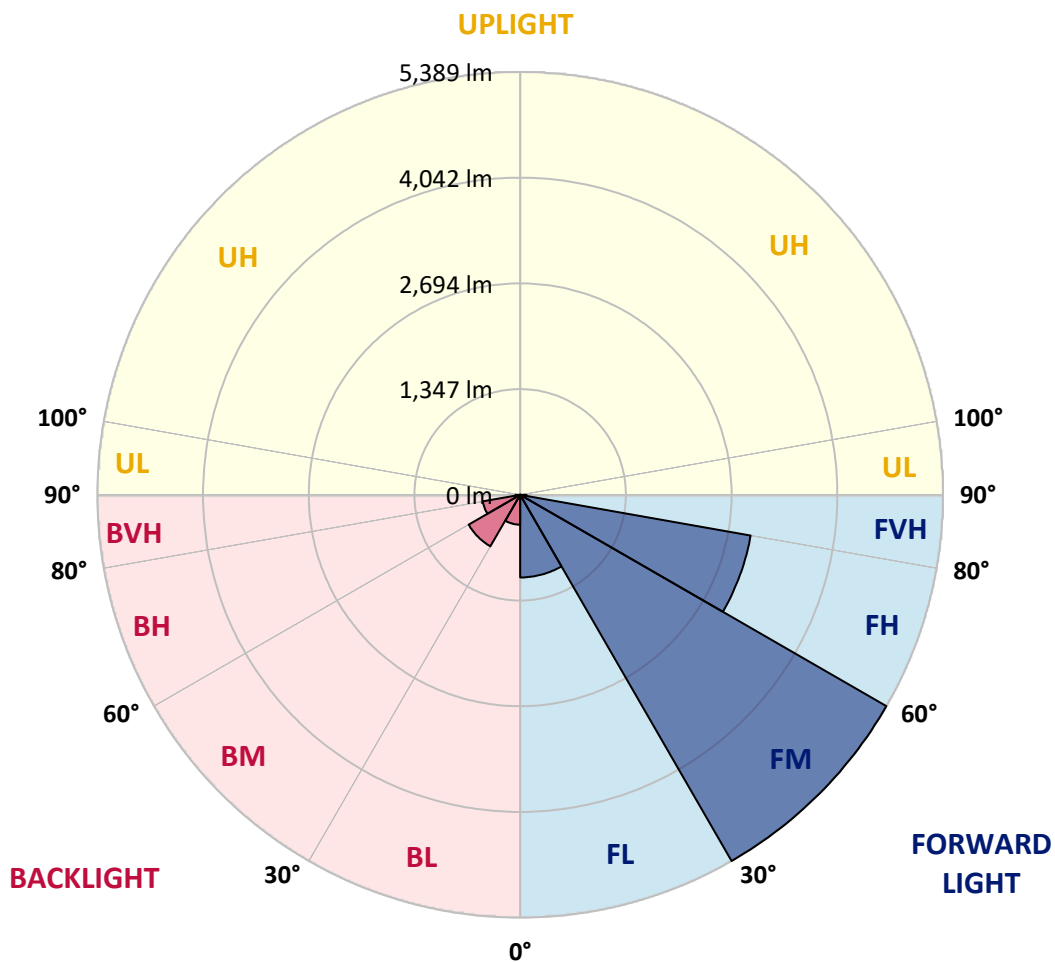
CATALOG NUMBER: XNV2-AF-02-LED-U-T2R-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1052.9	9.4			
FM	(30°-60°)	5388.9	48.2			
FH	(60°-80°)	2982.3	26.7			G2/5000
FVH	(80°-90°)	81.0	0.7			G1/100
BL	(0°-30°)	380.5	3.4	B1/500		
BM	(30°-60°)	758.5	6.8	B1/1000		
BH	(60°-80°)	483.1	4.3	B1/500		G1/500
BVH	(80°-90°)	58.7	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°	969.2	969.2	969.2	969.2	969.2	969.2	969.2	969.2	969.2	969.2	969.2
2.5°	1220.4	1206.2	1207.6	1187.7	1158.5	1126.5	1100.1	1085.9	1073.8	1070.2	1050.3
5°	1596.1	1578.3	1571.9	1526.4	1458.1	1376.9	1296.5	1265.2	1239.6	1224.0	1185.5
7.5°	1903.5	1894.3	1885.7	1843.8	1776.2	1672.3	1542.7	1496.5	1453.8	1406.8	1360.6
10°	2112.7	2109.2	2105.6	2076.4	2020.2	1929.9	1790.4	1739.9	1686.5	1626.7	1566.2
12.5°	2270.7	2270.7	2273.6	2249.4	2215.2	2145.5	2018.8	1971.8	1917.8	1855.1	1786.1
15°	2376.7	2379.6	2394.5	2401.6	2383.9	2339.0	2228.0	2186.7	2135.5	2073.6	2005.3
17.5°	2447.2	2452.9	2474.9	2498.4	2521.2	2505.5	2423.0	2384.6	2338.3	2281.4	2217.3
20°	2610.9	2603.7	2604.5	2597.3	2630.8	2642.9	2597.3	2565.3	2528.3	2476.4	2418.0
22.5°	2954.6	2941.0	2906.2	2817.2	2776.7	2772.4	2745.4	2728.3	2699.8	2667.1	2608.7
25°	3402.9	3387.2	3318.2	3171.6	3050.6	2938.9	2889.1	2878.4	2859.9	2837.9	2795.9
27.5°	3866.1	3849.0	3760.1	3575.1	3417.1	3191.5	3036.4	3022.2	3005.1	2995.8	2975.9
30°	4273.9	4255.4	4167.8	3980.0	3789.3	3520.3	3234.9	3185.1	3155.9	3158.8	3147.4
32.5°	4631.8	4615.4	4517.2	4325.8	4132.3	3871.1	3492.5	3415.0	3349.5	3325.3	3333.8
35°	4932.1	4917.2	4809.7	4616.9	4421.9	4204.8	3824.1	3707.4	3600.7	3533.8	3526.0
37.5°	5108.6	5100.0	5024.6	4860.9	4667.4	4508.0	4195.6	4066.1	3908.8	3811.3	3768.6
40°	5098.6	5107.9	5095.1	5021.0	4870.9	4754.9	4582.7	4454.6	4300.9	4155.7	4068.9
42.5°	4953.4	4966.3	5023.9	5062.3	5021.8	4951.3	4920.7	4825.4	4687.3	4533.6	4413.3
45°	4754.2	4765.6	4840.3	4979.1	5095.1	5115.0	5216.7	5169.1	5052.4	4921.4	4789.1
47.5°	4448.9	4471.0	4557.8	4778.4	5054.5	5246.6	5465.1	5487.1	5419.5	5311.4	5187.6
50°	4007.0	4036.2	4157.9	4471.7	4900.8	5381.8	5834.4	5918.4	5891.3	5781.7	5656.5
52.5°	3554.4	3583.6	3745.9	4079.6	4653.1	5437.3	6198.0	6412.9	6568.1	6681.2	6703.3
55°	3083.4	3116.1	3294.0	3678.3	4323.0	5366.9	6457.8	6701.8	6859.1	6977.2	7024.9
57.5°	2551.8	2588.8	2761.0	3149.5	3856.2	5083.7	6746.7	7092.5	7326.6	7508.8	7611.3
60°	1942.0	1988.2	2166.8	2558.2	3242.8	4541.4	6875.5	7387.1	7759.3	8032.5	8194.8
62.5°	1231.1	1278.0	1463.8	1870.1	2544.7	3800.7	6511.1	7257.6	7892.3	8296.5	8594.0
65°	671.7	692.4	795.6	1101.6	1715.7	2948.9	5587.5	6467.7	7382.1	7955.0	8411.8
67.5°	503.8	506.7	517.3	592.1	913.7	1991.1	4368.5	5174.8	6190.2	6927.4	7473.2
70°	441.2	441.2	442.6	443.3	496.0	1078.8	2959.5	3701.7	4632.5	5378.3	6056.4
72.5°	395.6	391.4	390.0	381.4	388.5	552.9	1611.1	2277.8	3062.7	3899.6	4532.2
75°	341.6	340.9	340.9	332.3	336.6	389.2	698.8	1093.0	1701.4	2480.6	3103.3
77.5°	295.3	290.3	291.0	286.1	299.6	298.2	331.6	450.4	740.8	1302.9	1819.6
80°	243.4	239.8	241.9	239.1	260.4	220.6	223.4	275.4	367.9	571.4	805.5
82.5°	180.0	181.5	195.0	193.6	219.2	148.7	163.7	205.7	247.6	284.6	309.5
85°	105.3	107.5	140.2	147.3	160.8	78.3	100.3	122.4	138.1	153.0	159.4
87.5°	11.4	14.9	78.3	80.4	71.9	23.5	40.6	51.2	54.8	58.4	51.2
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):

	67.5°	70°	72.5°	75°	77.5°	80°	85°	90°	95°	100°	102.5°
0°	969.2	969.2	969.2	969.2	969.2	969.2	969.2	969.2	969.2	969.2	969.2
2.5°	1043.9	1034.7	1024.7	1019.0	1009.0	1000.5	984.9	972.0	957.8	947.9	943.6
5°	1166.3	1144.3	1120.8	1103.7	1082.3	1063.8	1028.3	985.6	972.0	943.6	936.5
7.5°	1325.7	1285.9	1246.0	1213.3	1176.3	1145.7	1085.9	1009.0	999.1	953.5	943.6
10°	1512.9	1454.5	1395.4	1344.9	1290.8	1243.9	1155.6	1047.5	1036.8	978.4	968.5
12.5°	1722.1	1650.9	1574.8	1499.3	1435.3	1369.1	1248.9	1107.2	1090.2	1021.1	1007.6
15°	1937.7	1860.8	1772.6	1681.5	1602.5	1515.0	1363.4	1185.5	1154.2	1073.1	1054.6
17.5°	2150.5	2067.2	1974.7	1872.9	1780.4	1675.8	1487.2	1273.1	1219.0	1124.3	1100.8
20°	2356.1	2271.4	2173.9	2074.3	1959.0	1839.5	1613.9	1359.2	1276.6	1167.0	1136.4
22.5°	2543.3	2470.7	2373.2	2258.6	2141.9	2007.4	1742.7	1445.3	1327.1	1199.8	1160.6
25°	2740.4	2674.2	2577.4	2467.1	2331.2	2181.8	1875.8	1527.1	1367.7	1217.5	1169.2
27.5°	2939.6	2882.7	2791.6	2675.6	2529.7	2363.9	2011.0	1602.5	1400.4	1223.2	1164.9
30°	3152.4	3108.3	3024.3	2894.8	2747.5	2563.9	2158.3	1676.5	1421.1	1215.4	1145.7
32.5°	3353.8	3352.3	3277.6	3143.1	2984.4	2782.4	2313.4	1751.2	1431.7	1193.4	1112.2
35°	3563.0	3592.2	3535.9	3407.8	3240.6	3016.5	2484.9	1830.9	1432.4	1154.2	1068.8
37.5°	3800.7	3852.6	3827.7	3706.0	3530.2	3283.3	2686.3	1920.6	1428.2	1100.1	1005.5
40°	4071.1	4142.2	4141.5	4039.0	3851.2	3582.2	2920.4	2020.9	1418.2	1032.5	930.8
42.5°	4380.6	4465.3	4488.8	4387.7	4197.7	3908.8	3188.7	2131.2	1402.6	965.6	851.8
45°	4735.0	4809.7	4853.8	4759.9	4569.2	4264.6	3496.8	2256.5	1383.3	879.5	761.4
47.5°	5114.3	5201.1	5267.3	5186.8	4983.3	4670.2	3861.9	2418.0	1376.2	781.3	663.9
50°	5584.6	5674.3	5817.3	5781.0	5669.3	5417.4	4633.9	2799.4	1379.1	688.1	582.1
52.5°	6751.7	6957.3	7138.1	7057.6	6792.2	6360.3	5261.6	3011.5	1319.3	612.0	525.2
55°	7103.9	7337.3	7604.2	7570.7	7316.0	6880.5	5757.6	3188.7	1261.7	556.5	488.2
57.5°	7720.1	7995.5	8368.4	8361.3	8048.9	7558.6	6395.9	3400.7	1236.8	524.4	469.7
60°	8372.7	8723.5	9238.7	9319.1	8979.7	8469.5	7150.2	3661.2	1240.3	506.7	459.0
62.5°	8849.5	9363.9	10113.3	10353.8	9953.9	9391.7	7932.9	3921.6	1219.0	486.0	446.2
65°	8878.6	9619.4	10682.5	11056.8	10651.9	9929.7	8209.0	3870.4	1090.9	458.3	425.5
67.5°	8167.0	9132.0	10423.5	10834.1	10420.0	9598.1	7725.1	3383.7	886.7	409.9	390.0
70°	6802.2	7922.2	9262.9	9720.4	9378.2	8546.3	6723.2	2702.7	662.5	345.8	336.6
72.5°	5256.6	6301.2	7518.8	7942.2	7680.3	6948.8	5302.8	1969.7	473.2	280.4	273.3
75°	3758.0	4647.5	5531.3	5692.8	5434.5	4762.7	3440.6	1230.4	331.6	229.8	219.9
77.5°	2326.9	2905.5	3222.8	3015.0	2685.6	2232.3	1400.4	607.7	220.6	187.2	177.2
80°	1032.5	1211.9	1131.4	1008.3	796.3	654.7	427.7	269.7	142.3	144.5	138.8
82.5°	347.3	367.2	357.2	355.1	320.2	280.4	181.5	116.7	79.7	92.5	90.4
85°	169.4	177.2	177.9	184.3	160.1	124.5	49.1	46.3	34.2	49.8	51.9
87.5°	51.2	51.9	47.0	51.2	41.3	28.5	9.3	12.8	6.4	12.1	12.1
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):

	105°	107.5°	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°
0°	969.2	969.2	969.2	969.2	969.2	969.2	969.2	969.2	969.2	969.2	969.2
2.5°	935.8	932.9	927.9	922.2	920.8	913.7	911.6	908.0	905.9	902.3	899.5
5°	927.2	922.2	916.5	910.1	910.1	900.2	895.9	891.6	891.6	885.2	882.4
7.5°	935.8	929.3	922.9	917.3	919.4	908.0	903.7	899.5	898.8	892.3	889.5
10°	959.9	953.5	945.7	940.0	937.9	928.6	923.7	917.3	913.0	908.7	904.4
12.5°	997.0	988.4	978.4	966.4	961.4	953.5	945.7	937.2	927.2	922.9	916.5
15°	1041.1	1026.8	1013.3	998.4	984.9	977.0	966.4	952.8	939.3	933.6	925.1
17.5°	1077.4	1062.4	1043.2	1025.4	1001.2	994.8	979.9	963.5	941.4	939.3	926.5
20°	1108.0	1085.2	1061.7	1040.4	1003.4	999.8	981.3	962.1	930.8	930.8	915.1
22.5°	1125.0	1093.7	1066.0	1037.5	991.3	988.4	967.1	944.3	905.9	907.3	888.1
25°	1127.9	1090.2	1055.3	1021.1	967.8	962.8	935.8	910.8	868.9	866.0	846.1
27.5°	1116.5	1072.4	1031.8	990.5	932.9	922.2	892.3	862.5	821.2	814.1	792.7
30°	1090.2	1038.2	992.7	945.0	884.5	867.4	836.1	805.5	763.5	754.3	734.4
32.5°	1048.2	989.1	938.6	890.9	824.0	802.7	771.4	740.8	700.2	693.1	674.6
35°	992.7	926.5	873.1	822.6	755.7	733.7	703.8	676.7	639.7	636.9	624.1
37.5°	922.9	853.9	797.0	748.6	685.3	673.9	643.3	623.4	592.8	595.6	589.2
40°	844.0	773.5	719.4	676.7	621.9	612.0	593.5	578.5	552.2	560.0	560.7
42.5°	764.3	693.8	644.7	606.3	559.3	552.9	540.1	531.6	511.6	527.3	533.7
45°	673.9	608.4	566.4	537.3	502.4	502.4	496.0	495.3	481.8	503.8	510.2
47.5°	586.4	535.1	505.9	488.2	464.0	475.3	473.2	478.9	468.9	491.7	497.4
50°	520.2	484.6	466.8	458.3	441.2	459.0	463.3	471.1	462.5	482.5	486.7
52.5°	478.2	454.7	444.7	442.6	430.5	452.6	459.7	466.8	456.8	475.3	474.6
55°	454.7	439.1	435.5	439.8	430.5	451.9	459.0	464.0	455.4	468.2	467.5
57.5°	446.2	437.6	439.8	446.2	439.8	457.6	461.1	466.8	458.3	464.0	466.8
60°	445.5	445.5	454.0	462.5	458.3	471.1	473.2	472.5	464.7	465.4	466.8
62.5°	441.2	451.9	466.1	479.6	478.2	493.9	495.3	486.0	479.6	472.5	470.4
65°	427.7	445.5	466.1	484.6	487.4	511.6	514.5	505.2	501.0	488.9	479.6
67.5°	397.8	420.6	444.7	467.5	472.5	505.2	511.6	515.2	517.3	509.5	497.4
70°	347.3	370.7	395.6	422.0	429.1	465.4	478.9	495.3	508.1	519.5	515.2
72.5°	282.5	303.9	325.2	349.4	360.1	397.8	415.6	444.0	464.0	493.1	505.2
75°	224.2	237.0	249.8	264.7	273.3	310.3	332.3	366.5	393.5	434.1	461.1
77.5°	176.5	182.9	189.3	195.7	199.2	219.9	237.7	271.8	303.1	354.4	394.2
80°	135.9	139.5	140.2	142.3	140.9	150.9	157.3	177.9	204.9	255.5	302.4
82.5°	87.5	90.4	91.8	95.4	88.2	101.0	105.3	107.5	121.7	158.7	192.1
85°	49.1	49.8	50.5	51.9	42.0	54.8	55.5	51.9	50.5	65.5	74.0
87.5°	12.1	11.4	12.1	12.1	5.0	11.4	11.4	7.8	5.7	10.7	8.5
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°	969.2	969.2	969.2	969.2	969.2	969.2
2.5°	893.1	891.6	892.3	888.8	887.4	888.1
5°	878.8	876.0	876.0	873.8	871.0	871.0
7.5°	885.2	879.5	877.4	873.1	868.9	869.6
10°	895.2	885.2	878.1	871.7	866.7	866.7
12.5°	901.6	883.8	873.1	864.6	858.9	858.9
15°	903.0	876.0	860.3	851.1	845.4	845.4
17.5°	894.5	860.3	840.4	828.3	821.9	823.3
20°	873.1	831.1	807.7	794.9	788.5	789.2
22.5°	839.7	791.3	764.3	749.3	742.9	742.9
25°	794.1	741.5	712.3	700.2	694.5	694.5
27.5°	742.2	688.1	662.5	653.2	649.7	649.7
30°	683.8	639.0	620.5	614.1	608.4	608.4
32.5°	634.7	602.7	596.3	587.8	572.8	572.1
35°	595.6	592.1	587.1	561.5	540.1	537.3
37.5°	574.3	595.6	564.3	520.2	503.1	502.4
40°	562.9	582.8	528.7	507.4	505.2	505.2
42.5°	535.8	550.1	526.6	514.5	514.5	515.2
45°	507.4	519.5	531.6	520.9	524.4	525.2
47.5°	487.4	511.6	531.6	522.3	529.4	533.7
50°	468.9	504.5	520.9	520.9	528.7	529.4
52.5°	464.7	494.6	510.9	518.8	519.5	515.9
55°	465.4	486.7	503.1	513.1	508.8	508.8
57.5°	464.7	482.5	496.7	500.3	502.4	502.4
60°	465.4	476.8	488.2	486.7	493.9	493.9
62.5°	467.5	468.9	474.6	473.2	483.9	483.9
65°	472.5	459.0	455.4	456.8	469.7	468.9
67.5°	481.8	445.5	434.1	434.8	453.3	450.4
70°	495.3	427.0	409.9	405.6	436.9	431.9
72.5°	499.5	405.6	378.6	374.3	392.8	378.6
75°	479.6	388.5	345.1	330.9	323.1	318.8
77.5°	427.7	377.9	310.3	280.4	268.3	265.4
80°	354.4	355.8	264.7	229.1	266.1	265.4
82.5°	267.6	307.4	212.1	198.5	192.8	160.8
85°	129.5	231.3	163.0	136.6	81.8	77.6
87.5°	11.4	96.8	93.9	61.2	27.8	26.3
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)