

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: P198768

Luminaire Tested: **XNV-AF-01-LED-U-T2R-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198768
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: XNV-AF-01-LED-U-T2R-1200
Description: XNV ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 1200mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7112.6 lumens
Efficiency: N/A
Efficacy: 107.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 66
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

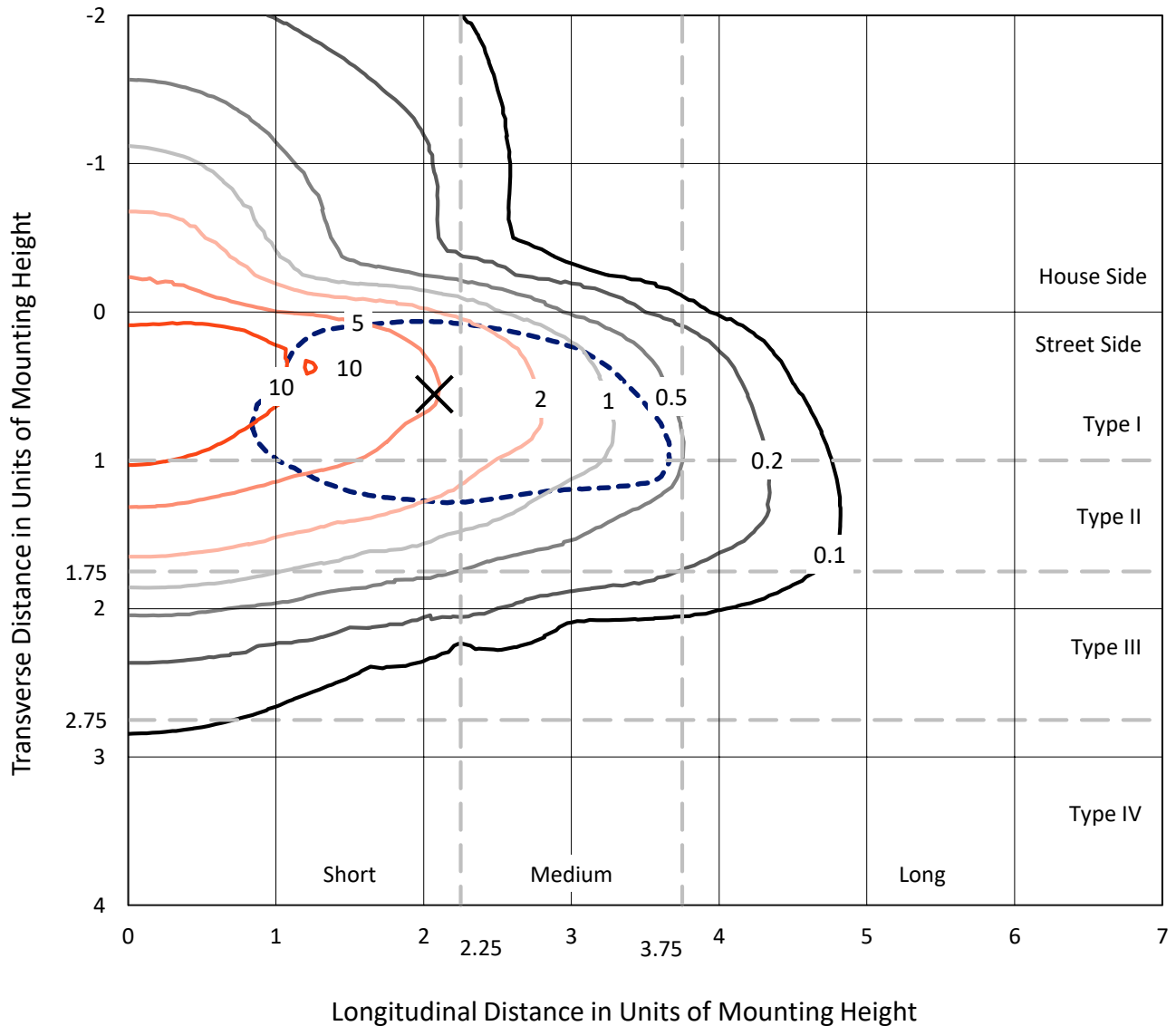


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Iso-Footcandle Lines of Horizontal Illumination

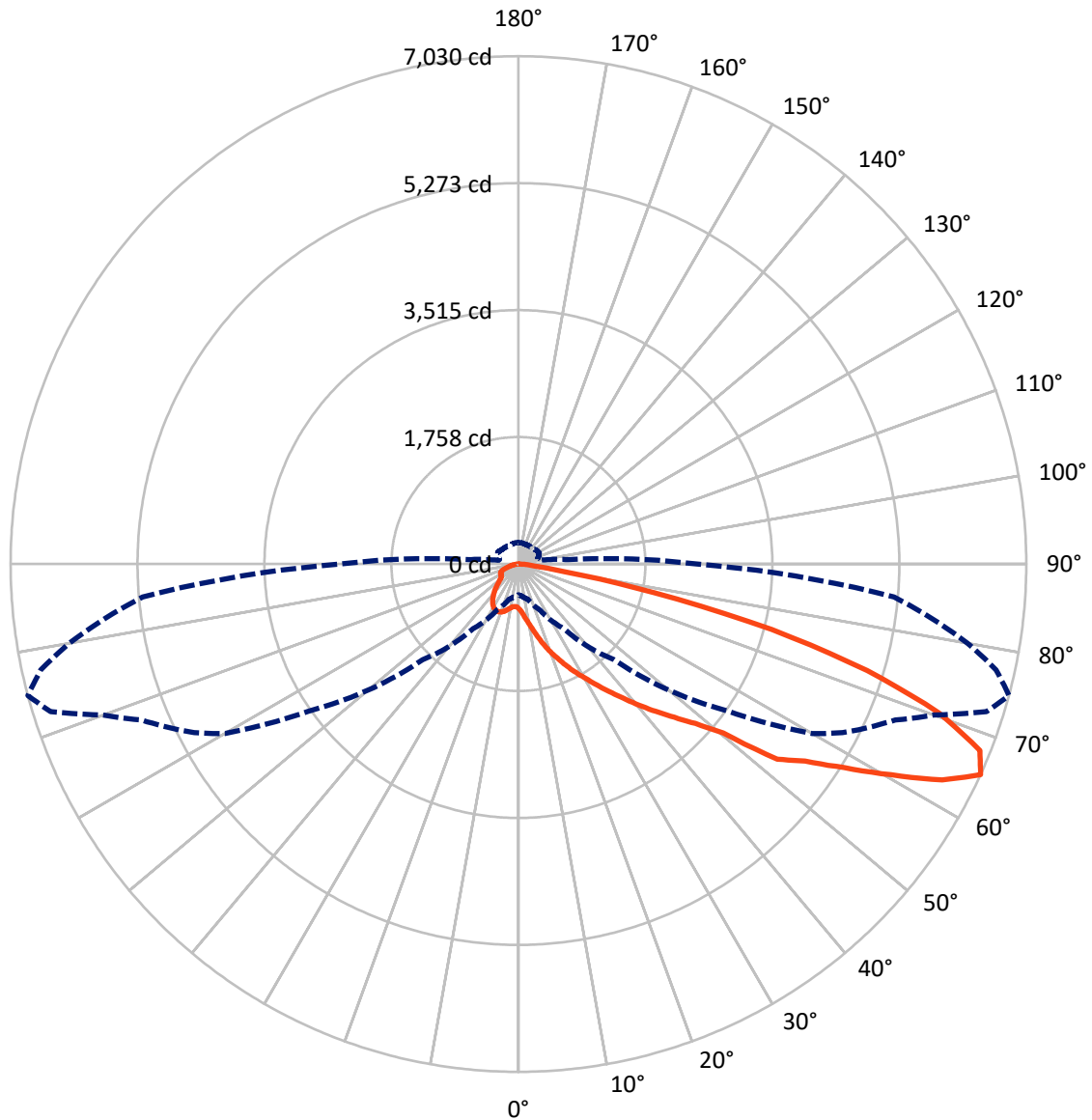
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 17.7 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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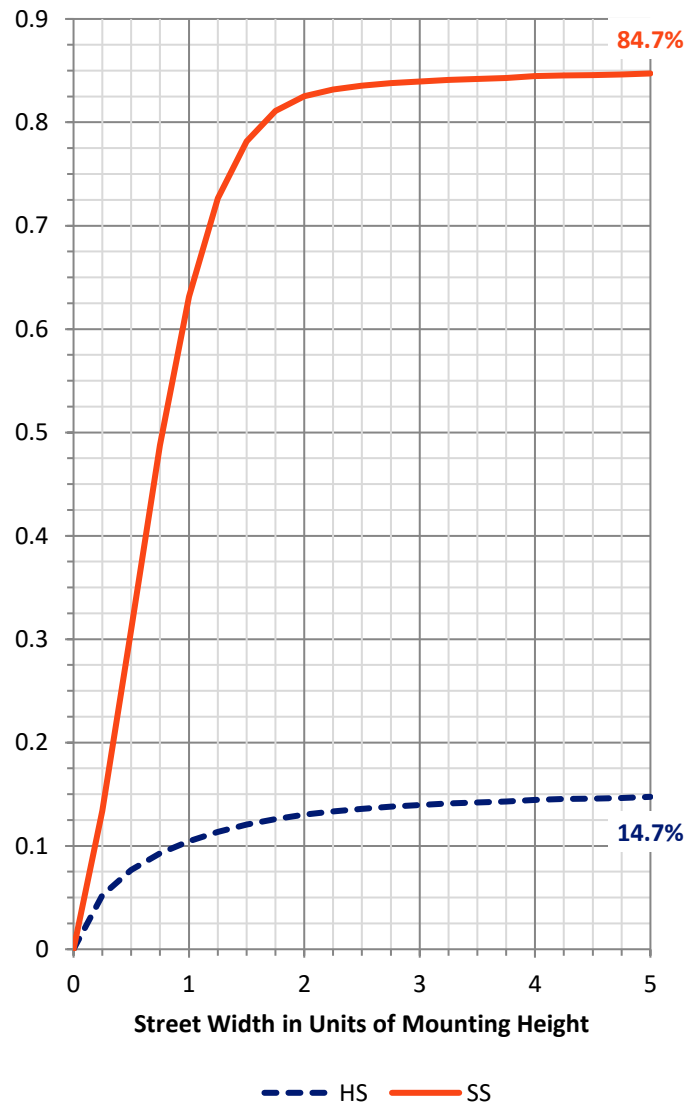
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1068.8	0.0	1068.8
	% Fixture	15.0	0.0	15.0
Street Side	Lumens	6043.8	0.0	6043.8
	% Fixture	85.0	0.0	85.0
Total	Lumens	7112.6	0.0	7112.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.8	1.0
10°-20°	277.9	3.9
20°-30°	560.8	7.9
30°-40°	952.4	13.4
40°-50°	1328.4	18.7
50°-60°	1628.1	22.9
60°-70°	1531.8	21.5
70°-80°	671.7	9.4
80°-90°	88.9	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°	7112.6	100.0
0°-180°	7112.6	100.0

Coefficient of Utilization



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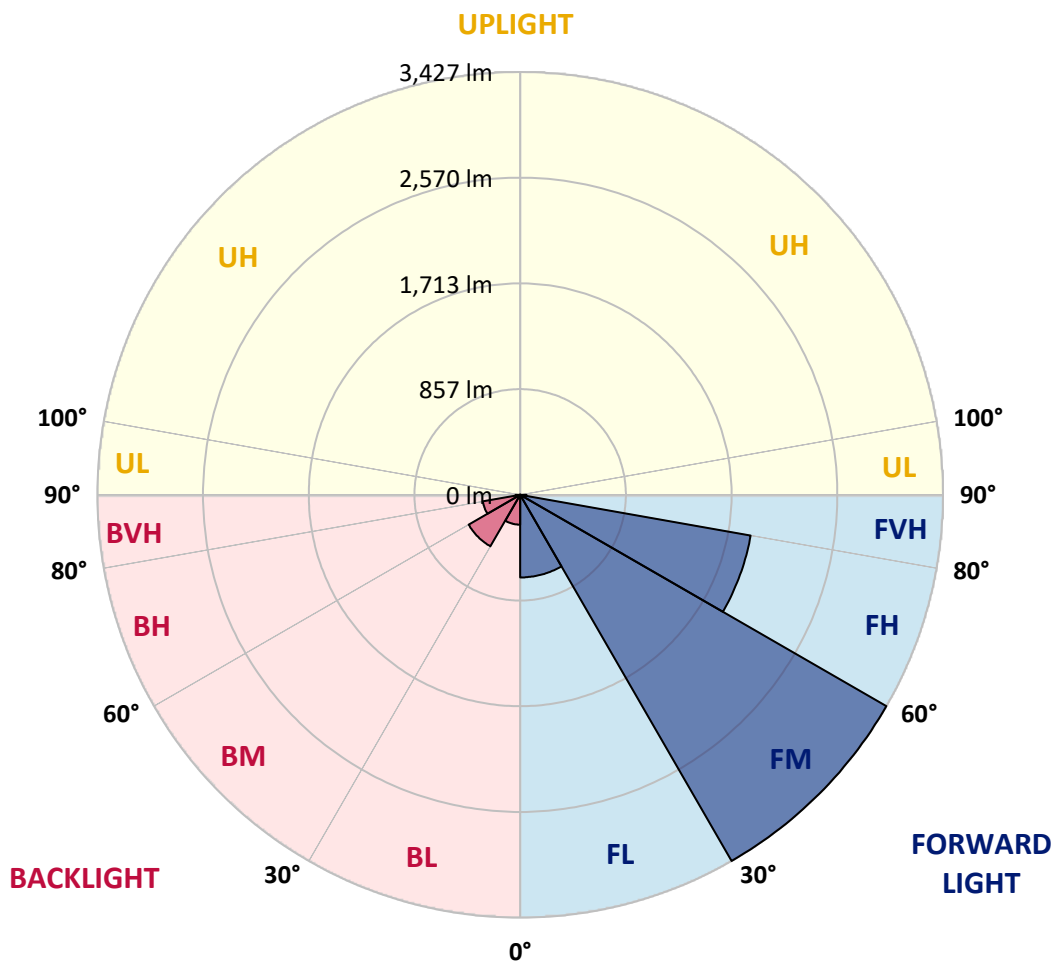
CATALOG NUMBER: XNV-AF-01-LED-U-T2R-1200

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	669.5	9.4			
FM	(30°-60°)	3426.5	48.2			
FH	(60°-80°)	1896.3	26.7			G2/5000
FVH	(80°-90°)	51.5	0.7			G1/100
BL	(0°-30°)	241.9	3.4	B1/500		
BM	(30°-60°)	482.3	6.8	B1/1000		
BH	(60°-80°)	307.2	4.3	B1/500		G1/500
BVH	(80°-90°)	37.4	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°	616.2	616.2	616.2	616.2	616.2	616.2	616.2	616.2	616.2	616.2	616.2
2.5°	776.0	766.9	767.8	755.1	736.6	716.3	699.5	690.5	682.8	680.5	667.9
5°	1014.9	1003.6	999.5	970.6	927.1	875.5	824.4	804.4	788.2	778.3	753.8
7.5°	1210.4	1204.4	1199.0	1172.3	1129.3	1063.3	980.9	951.5	924.4	894.6	865.1
10°	1343.3	1341.1	1338.8	1320.3	1284.5	1227.1	1138.4	1106.3	1072.4	1034.3	995.8
12.5°	1443.8	1443.8	1445.6	1430.3	1408.5	1364.2	1283.7	1253.8	1219.4	1179.6	1135.7
15°	1511.2	1513.0	1522.6	1527.1	1515.8	1487.3	1416.7	1390.4	1357.9	1318.5	1275.0
17.5°	1556.0	1559.7	1573.7	1588.6	1603.1	1593.1	1540.7	1516.2	1486.9	1450.6	1409.9
20°	1660.1	1655.5	1656.1	1651.6	1672.7	1680.5	1651.6	1631.2	1607.7	1574.6	1537.5
22.5°	1878.6	1870.1	1847.9	1791.3	1765.5	1762.9	1745.7	1734.7	1716.6	1695.8	1658.7
25°	2163.7	2153.7	2109.8	2016.6	1939.7	1868.7	1837.0	1830.3	1818.5	1804.5	1777.8
27.5°	2458.3	2447.4	2390.8	2273.2	2172.7	2029.3	1930.7	1921.6	1910.8	1904.9	1892.3
30°	2717.6	2705.8	2650.1	2530.7	2409.4	2238.3	2056.9	2025.2	2006.7	2008.5	2001.3
32.5°	2945.1	2934.7	2872.2	2750.5	2627.4	2461.4	2220.7	2171.4	2129.8	2114.3	2119.9
35°	3136.1	3126.5	3058.2	2935.6	2811.7	2673.6	2431.6	2357.4	2289.5	2246.9	2242.0
37.5°	3248.3	3242.9	3194.9	3090.8	2967.8	2866.4	2667.8	2585.4	2485.4	2423.4	2396.3
40°	3241.9	3247.8	3239.7	3192.6	3097.2	3023.4	2913.9	2832.4	2734.8	2642.4	2587.2
42.5°	3149.7	3157.7	3194.5	3218.8	3193.0	3148.2	3128.8	3068.1	2980.4	2882.7	2806.2
45°	3022.9	3030.2	3077.6	3165.9	3239.7	3252.4	3317.0	3286.7	3212.5	3129.3	3045.1
47.5°	2828.9	2842.9	2898.0	3038.4	3213.9	3336.0	3475.0	3489.0	3446.0	3377.2	3298.5
50°	2547.9	2566.4	2643.8	2843.3	3116.1	3422.0	3709.8	3763.1	3745.9	3676.3	3596.7
52.5°	2260.1	2278.6	2381.8	2594.0	2958.7	3457.3	3941.0	4077.7	4176.3	4248.2	4262.2
55°	1960.6	1981.4	2094.5	2338.8	2748.8	3412.6	4106.1	4261.3	4361.4	4436.4	4466.7
57.5°	1622.5	1646.0	1755.6	2002.6	2451.9	3232.4	4289.8	4509.8	4658.6	4774.4	4839.6
60°	1234.8	1264.2	1377.8	1626.6	2061.9	2887.7	4371.8	4697.1	4933.7	5107.5	5210.6
62.5°	782.8	812.6	930.7	1189.1	1618.0	2416.6	4140.1	4614.7	5018.3	5275.4	5464.5
65°	427.1	440.3	505.8	700.4	1090.9	1875.1	3552.8	4112.5	4693.9	5058.2	5348.6
67.5°	320.4	322.1	329.0	376.4	580.9	1266.0	2777.7	3290.3	3936.0	4404.7	4751.8
70°	280.5	280.5	281.4	281.9	315.4	686.0	1881.8	2353.7	2945.6	3419.7	3851.0
72.5°	251.5	248.9	248.0	242.5	247.0	351.6	1024.4	1448.4	1947.4	2479.5	2881.8
75°	217.2	216.8	216.8	211.3	214.0	247.5	444.4	695.0	1081.9	1577.3	1973.2
77.5°	187.8	184.6	185.1	181.9	190.5	189.6	210.8	286.4	471.1	828.5	1157.0
80°	154.8	152.5	153.9	152.0	165.6	140.2	142.1	175.1	233.9	363.4	512.2
82.5°	114.5	115.4	124.0	123.1	139.3	94.5	104.0	130.7	157.4	181.0	196.8
85°	67.0	68.3	89.1	93.7	102.3	49.8	63.8	77.8	87.8	97.3	101.4
87.5°	7.3	9.5	49.8	51.1	45.7	14.9	25.8	32.5	34.9	37.1	32.5
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):

	67.5°	70°	72.5°	75°	77.5°	80°	85°	90°	95°	100°	102.5°
0°	616.2	616.2	616.2	616.2	616.2	616.2	616.2	616.2	616.2	616.2	616.2
2.5°	663.8	657.9	651.5	647.9	641.6	636.2	626.3	618.1	609.1	602.7	600.0
5°	741.6	727.5	712.6	701.7	688.2	676.5	653.8	626.7	618.1	600.0	595.5
7.5°	842.9	817.6	792.3	771.4	747.9	728.4	690.5	641.6	635.3	606.3	600.0
10°	962.0	924.8	887.3	855.2	820.8	790.9	734.8	666.0	659.3	622.2	615.8
12.5°	1095.0	1049.8	1001.3	953.4	912.7	870.5	794.1	704.0	693.2	649.3	640.7
15°	1232.0	1183.2	1127.1	1069.2	1019.0	963.3	867.0	753.8	733.9	682.3	670.5
17.5°	1367.4	1314.4	1255.6	1190.9	1132.1	1065.6	945.6	809.5	775.1	714.9	700.0
20°	1498.1	1444.3	1382.3	1319.0	1245.6	1169.6	1026.2	864.2	811.7	742.0	722.6
22.5°	1617.1	1570.9	1509.0	1436.1	1362.0	1276.4	1108.1	918.9	843.8	762.8	738.0
25°	1742.5	1700.3	1638.9	1568.7	1482.3	1387.2	1192.7	971.0	869.6	774.2	743.4
27.5°	1869.1	1832.9	1775.0	1701.3	1608.5	1503.1	1278.7	1019.0	890.5	777.7	740.7
30°	2004.5	1976.3	1922.9	1840.6	1747.0	1630.3	1372.3	1066.0	903.6	772.8	728.4
32.5°	2132.4	2131.6	2084.1	1998.5	1897.7	1769.2	1471.0	1113.5	910.3	758.8	707.2
35°	2265.5	2284.0	2248.3	2166.9	2060.5	1918.0	1580.0	1164.2	910.8	733.9	679.6
37.5°	2416.6	2449.7	2433.8	2356.5	2244.7	2087.6	1708.0	1221.2	908.1	699.5	639.3
40°	2588.6	2633.8	2633.4	2568.2	2448.7	2277.7	1857.0	1285.0	901.7	656.5	591.8
42.5°	2785.4	2839.2	2854.1	2789.9	2669.1	2485.4	2027.5	1355.1	891.8	614.0	541.7
45°	3010.7	3058.2	3086.2	3026.6	2905.3	2711.6	2223.4	1434.8	879.6	559.2	484.2
47.5°	3251.9	3307.1	3349.1	3298.0	3168.6	2969.5	2455.6	1537.5	875.0	496.8	422.2
50°	3551.0	3607.9	3698.9	3675.9	3604.8	3444.7	2946.5	1780.0	876.9	437.5	370.1
52.5°	4293.0	4423.8	4538.7	4487.6	4318.8	4044.1	3345.6	1914.9	838.9	389.1	333.9
55°	4516.9	4665.4	4835.1	4813.8	4651.9	4375.0	3660.9	2027.5	802.2	353.8	310.4
57.5°	4908.8	5084.0	5321.0	5316.5	5117.8	4806.1	4066.7	2162.3	786.3	333.5	298.6
60°	5323.7	5546.8	5874.4	5925.5	5709.7	5385.2	4546.4	2327.9	788.7	322.1	291.8
62.5°	5626.8	5954.0	6430.5	6583.4	6329.1	5971.7	5044.1	2493.5	775.1	309.0	283.7
65°	5645.5	6116.4	6792.5	7030.4	6773.0	6313.8	5219.7	2461.0	693.7	291.4	270.6
67.5°	5193.0	5806.5	6627.8	6888.9	6625.4	6102.9	4912.0	2151.5	563.7	260.6	248.0
70°	4325.1	5037.3	5889.7	6180.7	5963.1	5434.1	4274.9	1718.5	421.3	219.9	214.0
72.5°	3342.4	4006.6	4780.8	5050.0	4883.5	4418.3	3371.7	1252.4	300.8	178.3	173.7
75°	2389.5	2955.1	3517.0	3619.7	3455.5	3028.3	2187.7	782.4	210.8	146.2	139.8
77.5°	1479.6	1847.4	2049.3	1917.1	1707.6	1419.3	890.5	386.4	140.2	119.0	112.6
80°	656.5	770.6	719.4	641.2	506.4	416.2	271.9	171.4	90.5	91.9	88.3
82.5°	220.9	233.4	227.1	225.8	203.6	178.3	115.4	74.2	50.6	58.8	57.5
85°	107.7	112.6	113.1	117.2	101.8	79.2	31.2	29.5	21.7	31.7	33.0
87.5°	32.5	33.0	29.9	32.5	26.3	18.1	5.9	8.2	4.1	7.7	7.7
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):

	105°	107.5°	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°
0°	616.2	616.2	616.2	616.2	616.2	616.2	616.2	616.2	616.2	616.2	616.2
2.5°	594.9	593.2	590.0	586.4	585.5	580.9	579.6	577.4	576.0	573.8	571.9
5°	589.5	586.4	582.8	578.7	578.7	572.3	569.7	566.9	566.9	562.8	561.1
7.5°	594.9	591.0	586.9	583.2	584.6	577.4	574.6	571.9	571.4	567.4	565.6
10°	610.4	606.3	601.3	597.7	596.4	590.4	587.3	583.2	580.5	577.8	575.1
12.5°	633.9	628.5	622.2	614.5	611.3	606.3	601.3	595.9	589.5	586.9	582.8
15°	662.0	652.9	644.4	634.8	626.3	621.2	614.5	605.9	597.3	593.6	588.2
17.5°	685.1	675.6	663.3	652.0	636.6	632.6	623.1	612.6	598.6	597.3	589.1
20°	704.5	690.0	675.0	661.5	638.0	635.8	624.0	611.7	591.8	591.8	581.9
22.5°	715.3	695.4	677.8	659.7	630.2	628.5	614.9	600.5	576.0	576.9	564.7
25°	717.2	693.2	671.1	649.3	615.4	612.2	594.9	579.2	552.5	550.7	538.0
27.5°	709.9	681.9	656.1	629.8	593.2	586.4	567.4	548.4	522.1	517.6	504.0
30°	693.2	660.1	631.2	600.9	562.4	551.6	531.6	512.2	485.5	479.7	467.0
32.5°	666.5	628.9	596.8	566.5	524.0	510.4	490.5	471.1	445.2	440.7	428.9
35°	631.2	589.1	555.2	523.0	480.5	466.5	447.5	430.3	406.7	405.0	396.8
37.5°	586.9	543.0	506.8	476.0	435.8	428.5	409.1	396.4	376.9	378.7	374.6
40°	536.6	491.8	457.5	430.3	395.5	389.1	377.4	367.9	351.1	356.1	356.5
42.5°	485.9	441.2	409.9	385.6	355.7	351.6	343.4	338.0	325.3	335.3	339.3
45°	428.5	386.9	360.2	341.6	319.5	319.5	315.4	315.0	306.3	320.4	324.4
47.5°	372.9	340.2	321.7	310.4	295.0	302.3	300.8	304.5	298.2	312.6	316.3
50°	330.7	308.1	296.9	291.4	280.5	291.8	294.5	299.5	294.1	306.8	309.4
52.5°	304.0	289.1	282.7	281.4	273.7	287.8	292.3	296.9	290.5	302.3	301.8
55°	289.1	279.2	276.9	279.7	273.7	287.3	291.8	295.0	289.6	297.7	297.3
57.5°	283.7	278.2	279.7	283.7	279.7	290.9	293.2	296.9	291.4	295.0	296.9
60°	283.3	283.3	288.7	294.1	291.4	299.5	300.8	300.4	295.4	295.9	296.9
62.5°	280.5	287.3	296.3	304.9	304.0	314.0	315.0	309.0	304.9	300.4	299.1
65°	271.9	283.3	296.3	308.1	310.0	325.3	327.1	321.2	318.5	310.9	304.9
67.5°	253.0	267.4	282.7	297.3	300.4	321.2	325.3	327.5	329.0	324.0	316.3
70°	220.9	235.7	251.5	268.3	272.8	295.9	304.5	315.0	323.0	330.3	327.5
72.5°	179.6	193.2	206.7	222.2	228.9	253.0	264.2	282.3	295.0	313.5	321.2
75°	142.5	150.7	158.9	168.3	173.7	197.2	211.3	233.0	250.2	276.0	293.2
77.5°	112.2	116.3	120.4	124.4	126.6	139.8	151.1	172.9	192.7	225.4	250.6
80°	86.4	88.7	89.1	90.5	89.6	96.0	100.0	113.1	130.3	162.4	192.3
82.5°	55.6	57.5	58.4	60.7	56.1	64.2	67.0	68.3	77.3	100.9	122.1
85°	31.2	31.7	32.1	33.0	26.7	34.9	35.3	33.0	32.1	41.6	47.1
87.5°	7.7	7.3	7.7	7.7	3.2	7.3	7.3	5.0	3.6	6.8	5.4
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):

	135°	145°	155°	165°	175°	180°
0°	616.2	616.2	616.2	616.2	616.2	616.2
2.5°	567.8	566.9	567.4	565.2	564.3	564.7
5°	558.8	557.0	557.0	555.7	553.8	553.8
7.5°	562.8	559.2	557.9	555.2	552.5	552.9
10°	569.2	562.8	558.3	554.2	551.1	551.1
12.5°	573.3	562.0	555.2	549.7	546.2	546.2
15°	574.2	557.0	547.1	541.1	537.6	537.6
17.5°	568.8	547.1	534.4	526.7	522.6	523.5
20°	555.2	528.5	513.5	505.4	501.3	501.8
22.5°	533.9	503.2	485.9	476.5	472.4	472.4
25°	504.9	471.5	453.0	445.2	441.6	441.6
27.5°	471.9	437.5	421.3	415.3	413.1	413.1
30°	434.9	406.3	394.6	390.5	386.9	386.9
32.5°	403.6	383.2	379.2	373.8	364.3	363.8
35°	378.7	376.4	373.3	357.0	343.4	341.6
37.5°	365.1	378.7	358.9	330.7	319.9	319.5
40°	357.9	370.6	336.1	322.6	321.2	321.2
42.5°	340.7	349.7	334.8	327.1	327.1	327.5
45°	322.6	330.3	338.0	331.2	333.5	333.9
47.5°	310.0	325.3	338.0	332.2	336.7	339.3
50°	298.2	320.8	331.2	331.2	336.1	336.7
52.5°	295.4	314.5	324.9	329.8	330.3	328.1
55°	295.9	309.4	319.9	326.2	323.6	323.6
57.5°	295.4	306.8	315.8	318.0	319.5	319.5
60°	295.9	303.2	310.4	309.4	314.0	314.0
62.5°	297.3	298.2	301.8	300.8	307.7	307.7
65°	300.4	291.8	289.6	290.5	298.6	298.2
67.5°	306.3	283.3	276.0	276.5	288.3	286.4
70°	315.0	271.5	260.6	257.9	277.8	274.7
72.5°	317.6	257.9	240.7	238.0	249.8	240.7
75°	304.9	247.0	219.4	210.4	205.4	202.7
77.5°	271.9	240.3	197.2	178.3	170.6	168.8
80°	225.4	226.3	168.3	145.7	169.2	168.8
82.5°	170.1	195.5	134.8	126.2	122.7	102.3
85°	82.3	147.1	103.6	86.8	52.1	49.3
87.5°	7.3	61.6	59.7	38.9	17.7	16.8
90°	0.0	0.0	0.0	0.0	0.0	0.0

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