

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: P198924

Luminaire Tested: **XNV-AF-01-LED-U-T2R-7050-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198924
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-7050-800
Description: XNV ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 800mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5120 lumens
Efficiency: N/A
Efficacy: 116.4 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 - G1

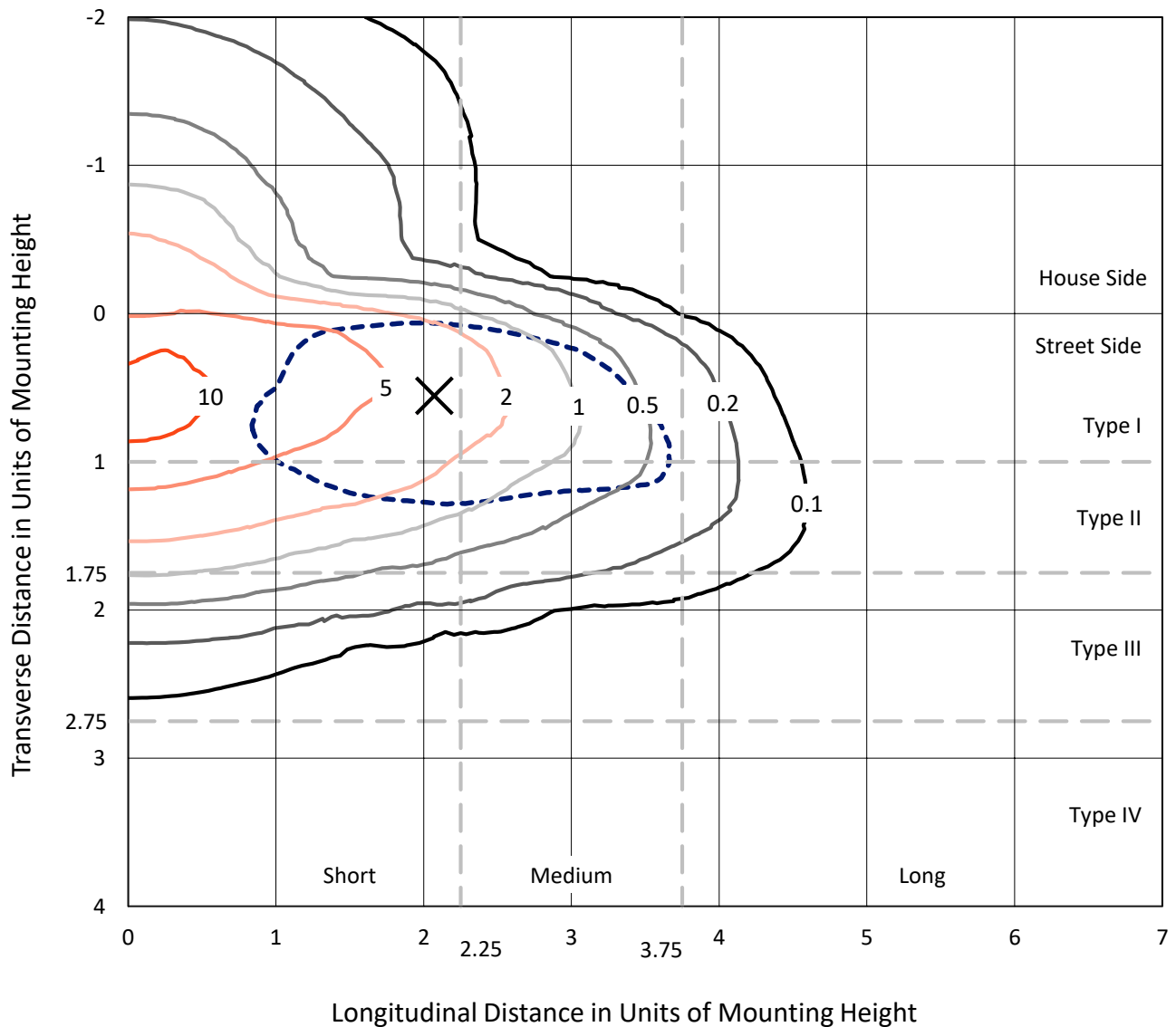
Input Watts (W): 44
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

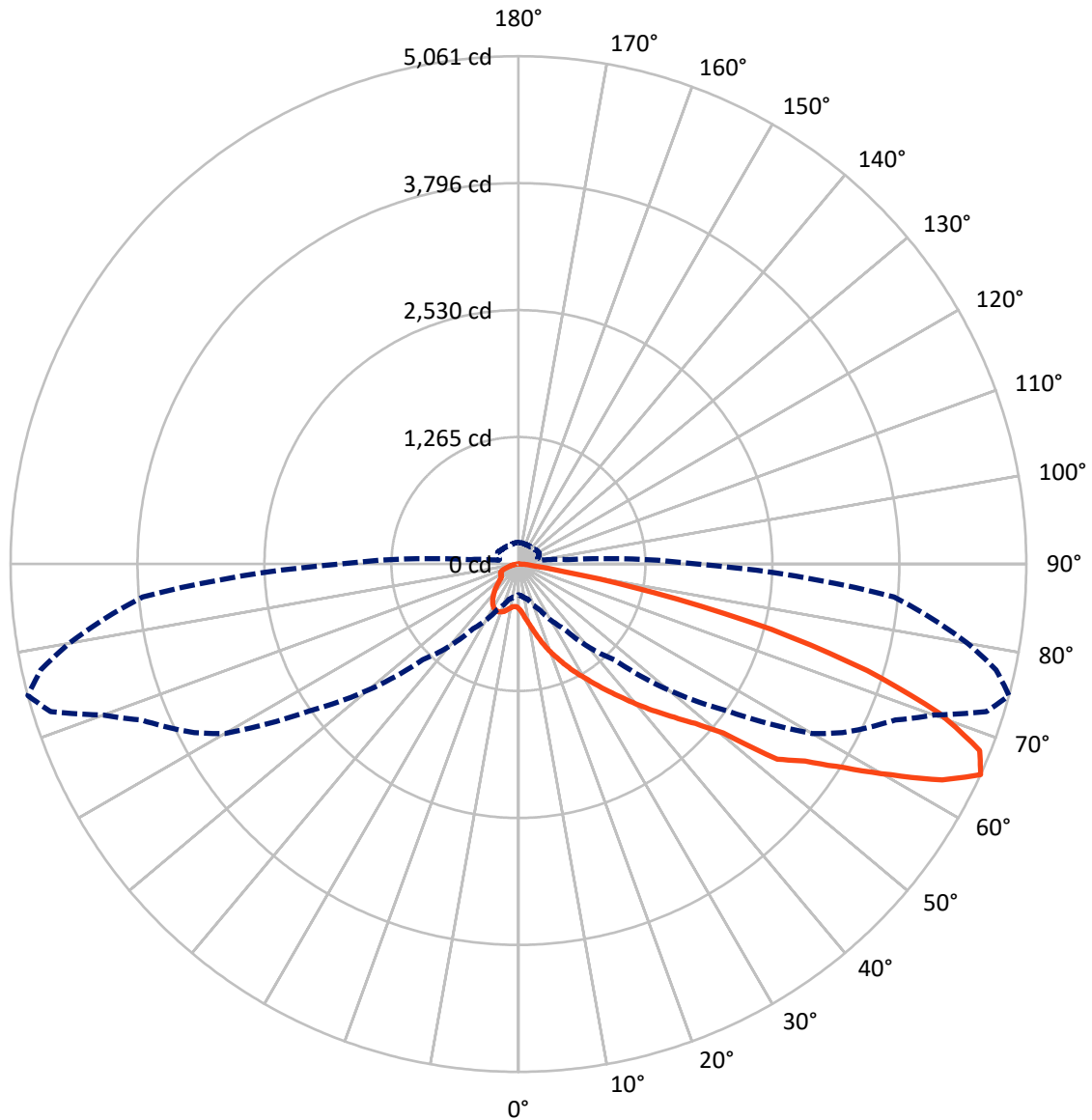
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 12.7 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	769.4	0.0	769.4
	% Fixture	15.0	0.0	15.0
Street Side	Lumens	4350.6	0.0	4350.6
	% Fixture	85.0	0.0	85.0
Total	Lumens	5120.0	0.0	5120.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.4	1.0
10°-20°	200.0	3.9
20°-30°	403.7	7.9
30°-40°	685.6	13.4
40°-50°	956.2	18.7
50°-60°	1172.0	22.9
60°-70°	1102.7	21.5
70°-80°	483.5	9.4
80°-90°	64.0	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°	5120.0	100.0
0°-180°	5120.0	100.0



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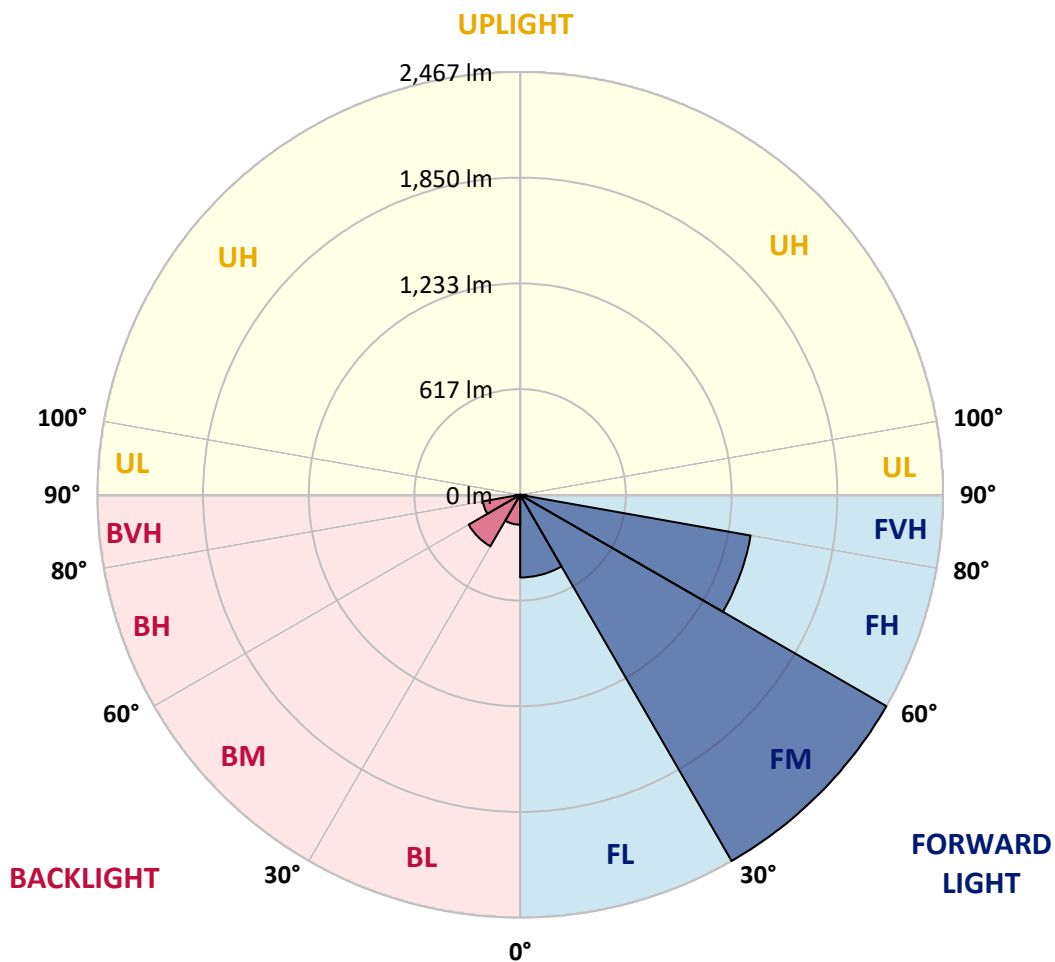
CATALOG NUMBER: XNV-AF-01-LED-U-T2R-7050-800

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	481.9	9.4			
FM	(30°-60°)	2466.6	48.2			
FH	(60°-80°)	1365.0	26.7			G1/1800
FVH	(80°-90°)	37.1	0.7			G1/100
BL	(0°-30°)	174.2	3.4	B1/500		
BM	(30°-60°)	347.2	6.8	B1/1000		
BH	(60°-80°)	221.1	4.3	B1/500		G1/500
BVH	(80°-90°)	26.9	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-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57.5°	60°	62.5°	65°
0°	443.6	443.6	443.6	443.6	443.6	443.6	443.6	443.6	443.6	443.6	443.6
2.5°	558.6	552.1	552.7	543.6	530.3	515.6	503.5	497.0	491.5	489.9	480.7
5°	730.6	722.4	719.5	698.6	667.4	630.2	593.4	579.1	567.4	560.2	542.6
7.5°	871.3	867.0	863.1	843.9	813.0	765.4	706.1	685.0	665.4	643.9	622.8
10°	967.0	965.4	963.8	950.4	924.7	883.3	819.5	796.4	771.9	744.6	716.9
12.5°	1039.3	1039.3	1040.6	1029.6	1013.9	982.0	924.0	902.5	877.8	849.1	817.5
15°	1087.9	1089.2	1096.0	1099.3	1091.1	1070.6	1019.8	1000.9	977.5	949.1	917.9
17.5°	1120.1	1122.7	1132.8	1143.6	1154.0	1146.8	1109.0	1091.5	1070.3	1044.2	1014.9
20°	1195.0	1191.8	1192.1	1188.8	1204.1	1209.7	1188.8	1174.2	1157.2	1133.5	1106.8
22.5°	1352.3	1346.2	1330.2	1289.5	1270.9	1269.0	1256.6	1248.8	1235.7	1220.8	1194.1
25°	1557.5	1550.4	1518.8	1451.7	1396.3	1345.2	1322.4	1317.5	1309.0	1298.9	1279.7
27.5°	1769.6	1761.8	1721.1	1636.4	1564.1	1460.8	1389.8	1383.3	1375.5	1371.2	1362.1
30°	1956.2	1947.7	1907.7	1821.7	1734.4	1611.3	1480.7	1457.9	1444.5	1445.8	1440.6
32.5°	2120.0	2112.6	2067.6	1980.0	1891.4	1771.9	1598.6	1563.1	1533.1	1522.0	1526.0
35°	2257.5	2250.7	2201.5	2113.2	2024.0	1924.6	1750.4	1696.9	1648.1	1617.5	1613.9
37.5°	2338.3	2334.4	2299.8	2224.9	2136.3	2063.4	1920.4	1861.1	1789.1	1744.5	1725.0
40°	2333.7	2337.9	2332.1	2298.2	2229.5	2176.4	2097.6	2038.9	1968.6	1902.1	1862.4
42.5°	2267.3	2273.1	2299.5	2317.1	2298.5	2266.3	2252.3	2208.6	2145.5	2075.1	2020.1
45°	2176.1	2181.3	2215.5	2279.0	2332.1	2341.2	2387.8	2366.0	2312.5	2252.6	2192.0
47.5°	2036.3	2046.4	2086.2	2187.1	2313.5	2401.5	2501.5	2511.5	2480.6	2431.1	2374.4
50°	1834.1	1847.4	1903.1	2046.8	2243.2	2463.3	2670.5	2708.9	2696.6	2646.4	2589.1
52.5°	1626.9	1640.3	1714.5	1867.3	2129.8	2488.7	2836.9	2935.3	3006.3	3058.1	3068.2
55°	1411.3	1426.3	1507.7	1683.6	1978.7	2456.5	2955.8	3067.5	3139.5	3193.6	3215.4
57.5°	1168.0	1184.9	1263.8	1441.6	1765.0	2326.9	3088.1	3246.3	3353.5	3436.9	3483.8
60°	888.9	910.0	991.8	1170.9	1484.3	2078.7	3147.0	3381.2	3551.5	3676.6	3750.9
62.5°	563.5	585.0	670.0	856.0	1164.7	1739.6	2980.2	3321.9	3612.4	3797.4	3933.6
65°	307.5	316.9	364.1	504.2	785.3	1349.7	2557.5	2960.4	3378.9	3641.1	3850.2
67.5°	230.6	231.9	236.8	271.0	418.2	911.3	1999.5	2368.6	2833.3	3170.8	3420.6
70°	201.9	201.9	202.6	202.9	227.0	493.8	1354.6	1694.3	2120.4	2461.7	2772.1
72.5°	181.1	179.1	178.5	174.6	177.8	253.1	737.4	1042.6	1401.9	1784.9	2074.4
75°	156.3	156.0	156.0	152.1	154.1	178.2	319.8	500.3	778.8	1135.4	1420.4
77.5°	135.2	132.9	133.2	130.9	137.1	136.5	151.8	206.2	339.1	596.4	832.8
80°	111.4	109.8	110.7	109.4	119.2	101.0	102.3	126.0	168.4	261.5	368.7
82.5°	82.4	83.1	89.2	88.6	100.3	68.1	74.9	94.1	113.3	130.3	141.7
85°	48.2	49.2	64.2	67.4	73.6	35.8	45.9	56.0	63.2	70.0	73.0
87.5°	5.2	6.8	35.8	36.8	32.9	10.7	18.6	23.5	25.1	26.7	23.5
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°	443.6	443.6	443.6	443.6	443.6	443.6	443.6	443.6	443.6	443.6	443.6
2.5°	477.8	473.6	469.0	466.4	461.9	457.9	450.8	444.9	438.4	433.8	431.9
5°	533.8	523.7	513.0	505.2	495.4	486.9	470.7	451.1	444.9	431.9	428.6
7.5°	606.8	588.6	570.3	555.3	538.4	524.4	497.0	461.9	457.3	436.5	431.9
10°	692.5	665.8	638.7	615.6	590.8	569.3	529.0	479.4	474.6	447.9	443.3
12.5°	788.2	755.6	720.8	686.3	657.0	626.7	571.6	506.8	499.0	467.4	461.2
15°	886.9	851.7	811.3	769.7	733.5	693.4	624.1	542.6	528.3	491.2	482.7
17.5°	984.3	946.2	903.8	857.3	814.9	767.0	680.7	582.7	557.9	514.6	503.9
20°	1078.4	1039.7	995.0	949.4	896.7	842.0	738.7	622.1	584.3	534.2	520.2
22.5°	1164.1	1130.9	1086.2	1033.8	980.4	918.8	797.7	661.5	607.4	549.1	531.2
25°	1254.3	1224.0	1179.7	1129.2	1067.0	998.6	858.6	699.0	626.0	557.3	535.1
27.5°	1345.5	1319.5	1277.8	1224.7	1157.9	1082.0	920.5	733.5	641.0	559.9	533.2
30°	1442.9	1422.7	1384.3	1325.0	1257.6	1173.5	987.9	767.4	650.4	556.3	524.4
32.5°	1535.1	1534.4	1500.2	1438.7	1366.0	1273.5	1058.9	801.6	655.3	546.2	509.1
35°	1630.8	1644.2	1618.5	1559.8	1483.3	1380.7	1137.4	838.1	655.7	528.3	489.2
37.5°	1739.6	1763.4	1752.0	1696.3	1615.8	1502.8	1229.6	879.1	653.7	503.5	460.2
40°	1863.4	1896.0	1895.6	1848.7	1762.7	1639.6	1336.7	925.0	649.1	472.6	426.0
42.5°	2005.1	2043.8	2054.6	2008.3	1921.4	1789.1	1459.5	975.5	642.0	442.0	389.9
45°	2167.3	2201.5	2221.7	2178.7	2091.4	1952.0	1600.5	1032.8	633.2	402.6	348.5
47.5°	2340.9	2380.6	2410.9	2374.1	2280.9	2137.6	1767.6	1106.8	629.9	357.6	303.9
50°	2556.2	2597.2	2662.7	2646.1	2594.9	2479.6	2121.0	1281.3	631.2	315.0	266.4
52.5°	3090.3	3184.5	3267.2	3230.4	3108.9	2911.2	2408.3	1378.4	603.9	280.1	240.4
55°	3251.6	3358.4	3480.5	3465.2	3348.6	3149.3	2635.3	1459.5	577.5	254.7	223.4
57.5°	3533.6	3659.7	3830.3	3827.1	3684.1	3459.7	2927.5	1556.6	566.1	240.0	215.0
60°	3832.3	3992.9	4228.7	4265.5	4110.1	3876.6	3272.7	1675.8	567.7	231.9	210.1
62.5°	4050.5	4286.0	4629.0	4739.1	4556.0	4298.7	3631.0	1795.0	557.9	222.5	204.2
65°	4063.9	4402.9	4889.6	5060.9	4875.5	4545.0	3757.4	1771.5	499.3	209.8	194.8
67.5°	3738.2	4179.8	4771.0	4958.9	4769.4	4393.2	3535.9	1548.7	405.8	187.6	178.5
70°	3113.5	3626.1	4239.8	4449.2	4292.5	3911.8	3077.3	1237.0	303.2	158.3	154.1
72.5°	2406.0	2884.2	3441.4	3635.2	3515.4	3180.6	2427.2	901.6	216.6	128.3	125.1
75°	1720.1	2127.2	2531.7	2605.7	2487.4	2180.0	1574.8	563.2	151.8	105.2	100.6
77.5°	1065.1	1329.9	1475.1	1380.0	1229.2	1021.8	641.0	278.2	101.0	85.7	81.1
80°	472.6	554.7	517.9	461.5	364.5	299.7	195.8	123.4	65.1	66.1	63.5
82.5°	158.9	168.1	163.5	162.5	146.6	128.3	83.1	53.4	36.5	42.3	41.4
85°	77.5	81.1	81.4	84.4	73.3	57.0	22.5	21.2	15.6	22.8	23.8
87.5°	23.5	23.8	21.5	23.5	18.9	13.0	4.2	5.9	2.9	5.5	5.5
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):

	105°	107.5°	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°
0°	443.6	443.6	443.6	443.6	443.6	443.6	443.6	443.6	443.6	443.6	443.6
2.5°	428.3	427.0	424.7	422.1	421.5	418.2	417.2	415.6	414.6	413.0	411.7
5°	424.4	422.1	419.5	416.6	416.6	412.0	410.1	408.1	408.1	405.2	403.9
7.5°	428.3	425.4	422.4	419.8	420.8	415.6	413.7	411.7	411.4	408.4	407.1
10°	439.4	436.5	432.9	430.3	429.3	425.1	422.8	419.8	417.9	415.9	414.0
12.5°	456.3	452.4	447.9	442.3	440.0	436.5	432.9	429.0	424.4	422.4	419.5
15°	476.5	470.0	463.8	457.0	450.8	447.2	442.3	436.1	429.9	427.3	423.4
17.5°	493.1	486.3	477.5	469.3	458.3	455.3	448.5	441.0	430.9	429.9	424.1
20°	507.1	496.7	486.0	476.2	459.3	457.6	449.2	440.4	426.0	426.0	418.9
22.5°	514.9	500.6	487.9	474.9	453.7	452.4	442.6	432.2	414.6	415.3	406.5
25°	516.2	499.0	483.0	467.4	443.0	440.7	428.3	416.9	397.7	396.4	387.3
27.5°	511.0	490.8	472.3	453.4	427.0	422.1	408.4	394.8	375.9	372.6	362.8
30°	499.0	475.2	454.4	432.5	404.9	397.0	382.7	368.7	349.5	345.3	336.1
32.5°	479.8	452.7	429.6	407.8	377.2	367.4	353.1	339.1	320.5	317.2	308.8
35°	454.4	424.1	399.6	376.5	345.9	335.8	322.1	309.7	292.8	291.5	285.6
37.5°	422.4	390.9	364.8	342.6	313.7	308.4	294.4	285.3	271.3	272.6	269.7
40°	386.3	354.0	329.3	309.7	284.7	280.1	271.6	264.8	252.8	256.3	256.7
42.5°	349.8	317.6	295.1	277.5	256.0	253.1	247.2	243.3	234.2	241.4	244.3
45°	308.4	278.5	259.3	245.9	230.0	230.0	227.0	226.7	220.5	230.6	233.5
47.5°	268.4	244.9	231.6	223.4	212.4	217.6	216.6	219.2	214.6	225.1	227.7
50°	238.1	221.8	213.7	209.8	201.9	210.1	212.0	215.6	211.7	220.8	222.8
52.5°	218.9	208.1	203.6	202.6	197.1	207.2	210.4	213.7	209.1	217.6	217.2
55°	208.1	201.0	199.3	201.3	197.1	206.8	210.1	212.4	208.5	214.3	214.0
57.5°	204.2	200.3	201.3	204.2	201.3	209.4	211.1	213.7	209.8	212.4	213.7
60°	203.9	203.9	207.8	211.7	209.8	215.6	216.6	216.3	212.7	213.0	213.7
62.5°	201.9	206.8	213.3	219.5	218.9	226.0	226.7	222.5	219.5	216.3	215.3
65°	195.8	203.9	213.3	221.8	223.1	234.2	235.5	231.3	229.3	223.8	219.5
67.5°	182.1	192.5	203.6	214.0	216.3	231.3	234.2	235.8	236.8	233.2	227.7
70°	158.9	169.7	181.1	193.1	196.4	213.0	219.2	226.7	232.6	237.8	235.8
72.5°	129.3	139.1	148.8	159.9	164.8	182.1	190.2	203.2	212.4	225.7	231.3
75°	102.6	108.5	114.3	121.2	125.1	142.0	152.1	167.7	180.1	198.7	211.1
77.5°	80.8	83.7	86.6	89.6	91.2	100.6	108.8	124.4	138.8	162.2	180.4
80°	62.2	63.8	64.2	65.1	64.5	69.1	72.0	81.4	93.8	116.9	138.4
82.5°	40.1	41.4	42.0	43.6	40.4	46.3	48.2	49.2	55.7	72.6	87.9
85°	22.5	22.8	23.1	23.8	19.2	25.1	25.4	23.8	23.1	30.0	33.9
87.5°	5.5	5.2	5.5	5.5	2.3	5.2	5.2	3.6	2.6	4.9	3.9
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°	443.6	443.6	443.6	443.6	443.6	443.6
2.5°	408.8	408.1	408.4	406.8	406.2	406.5
5°	402.3	400.9	400.9	400.0	398.7	398.7
7.5°	405.2	402.6	401.6	399.6	397.7	398.0
10°	409.7	405.2	401.9	399.0	396.7	396.7
12.5°	412.7	404.5	399.6	395.7	393.1	393.1
15°	413.3	400.9	393.8	389.5	386.9	386.9
17.5°	409.4	393.8	384.7	379.1	376.2	376.8
20°	399.6	380.4	369.7	363.8	360.9	361.2
22.5°	384.3	362.2	349.8	343.0	340.0	340.0
25°	363.5	339.4	326.0	320.5	317.9	317.9
27.5°	339.7	315.0	303.2	299.0	297.4	297.4
30°	313.0	292.5	284.0	281.1	278.5	278.5
32.5°	290.5	275.9	272.9	269.0	262.2	261.9
35°	272.6	271.0	268.7	257.0	247.2	245.9
37.5°	262.8	272.6	258.3	238.1	230.3	230.0
40°	257.6	266.8	242.0	232.2	231.3	231.3
42.5°	245.3	251.8	241.0	235.5	235.5	235.8
45°	232.2	237.8	243.3	238.4	240.0	240.4
47.5°	223.1	234.2	243.3	239.1	242.3	244.3
50°	214.6	230.9	238.4	238.4	242.0	242.3
52.5°	212.7	226.4	233.9	237.4	237.8	236.1
55°	213.0	222.8	230.3	234.8	232.9	232.9
57.5°	212.7	220.8	227.3	229.0	230.0	230.0
60°	213.0	218.2	223.4	222.8	226.0	226.0
62.5°	214.0	214.6	217.2	216.6	221.5	221.5
65°	216.3	210.1	208.5	209.1	215.0	214.6
67.5°	220.5	203.9	198.7	199.0	207.5	206.2
70°	226.7	195.4	187.6	185.7	200.0	197.7
72.5°	228.6	185.7	173.3	171.3	179.8	173.3
75°	219.5	177.8	158.0	151.5	147.9	145.9
77.5°	195.8	173.0	142.0	128.3	122.8	121.5
80°	162.2	162.9	121.2	104.9	121.8	121.5
82.5°	122.5	140.7	97.1	90.9	88.3	73.6
85°	59.3	105.9	74.6	62.5	37.5	35.5
87.5°	5.2	44.3	43.0	28.0	12.7	12.1
90°	0.0	0.0	0.0	0.0	0.0	0.0

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