

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: P198922

Luminaire Tested: **XNV-AF-01-LED-U-T2R-7050-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198922
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-7050-600
Description: XNV ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 615mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4176 lumens
Efficiency: N/A
Efficacy: 122.8 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 - G1

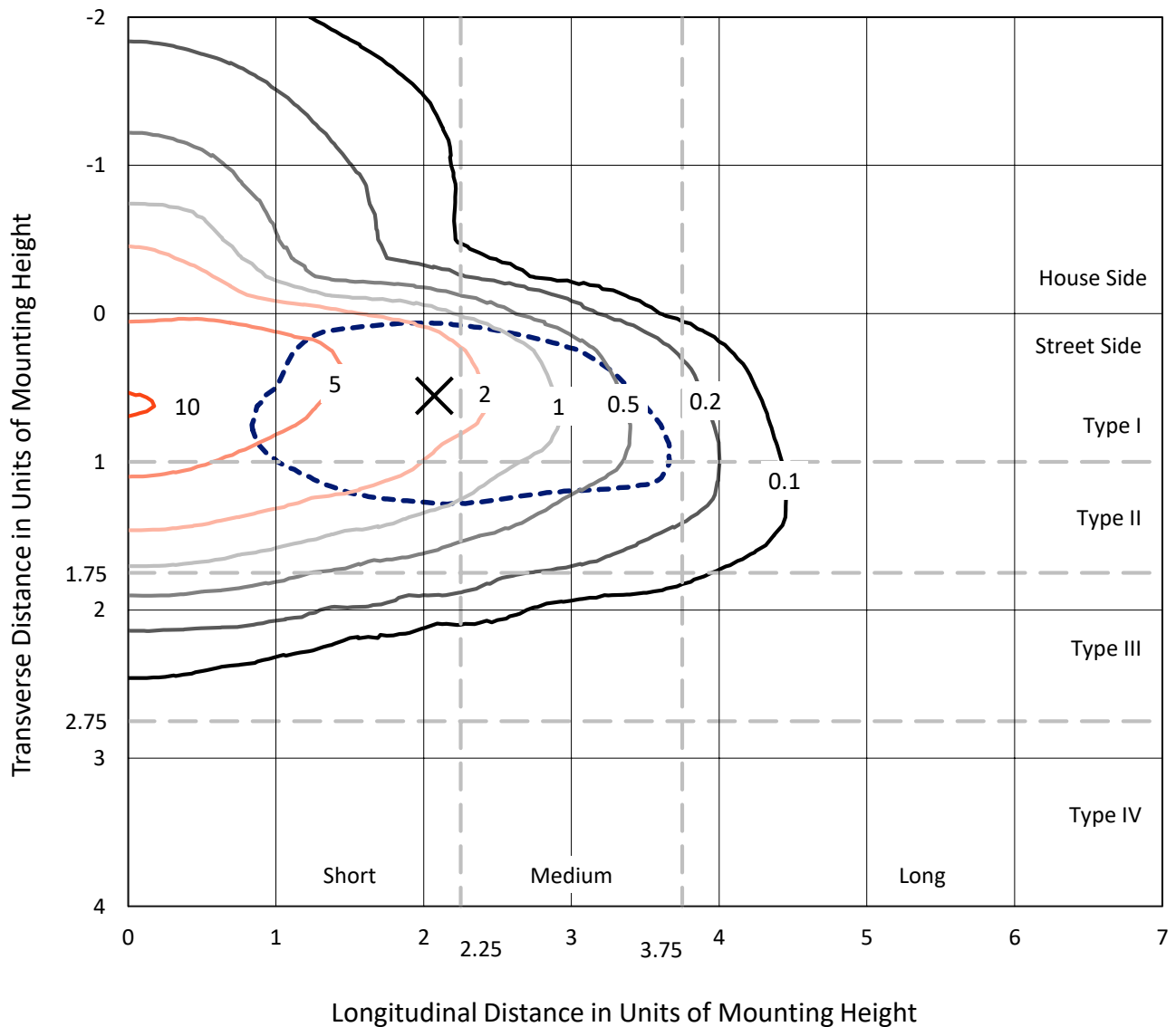
Input Watts (W): 34
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

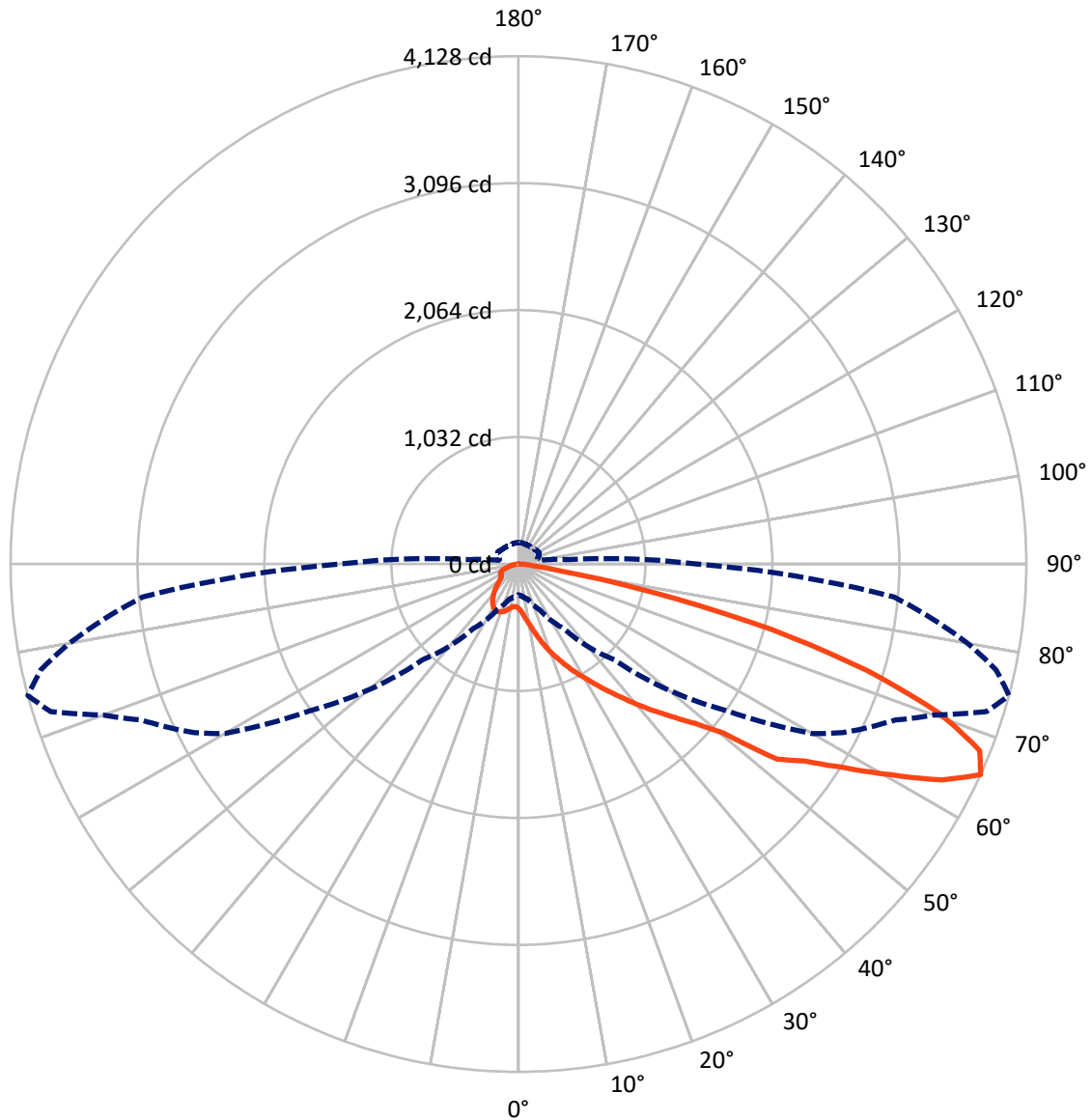
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 10.4 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	627.5	0.0	627.5
	% Fixture	15.0	0.0	15.0
Street Side	Lumens	3548.5	0.0	3548.5
	% Fixture	85.0	0.0	85.0
Total	Lumens	4176.0	0.0	4176.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.7	1.0
10°-20°	163.2	3.9
20°-30°	329.3	7.9
30°-40°	559.2	13.4
40°-50°	779.9	18.7
50°-60°	955.9	22.9
60°-70°	899.4	21.5
70°-80°	394.4	9.4
80°-90°	52.2	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°	4176.0	100.0
0°-180°	4176.0	100.0

Coefficient of Utilization



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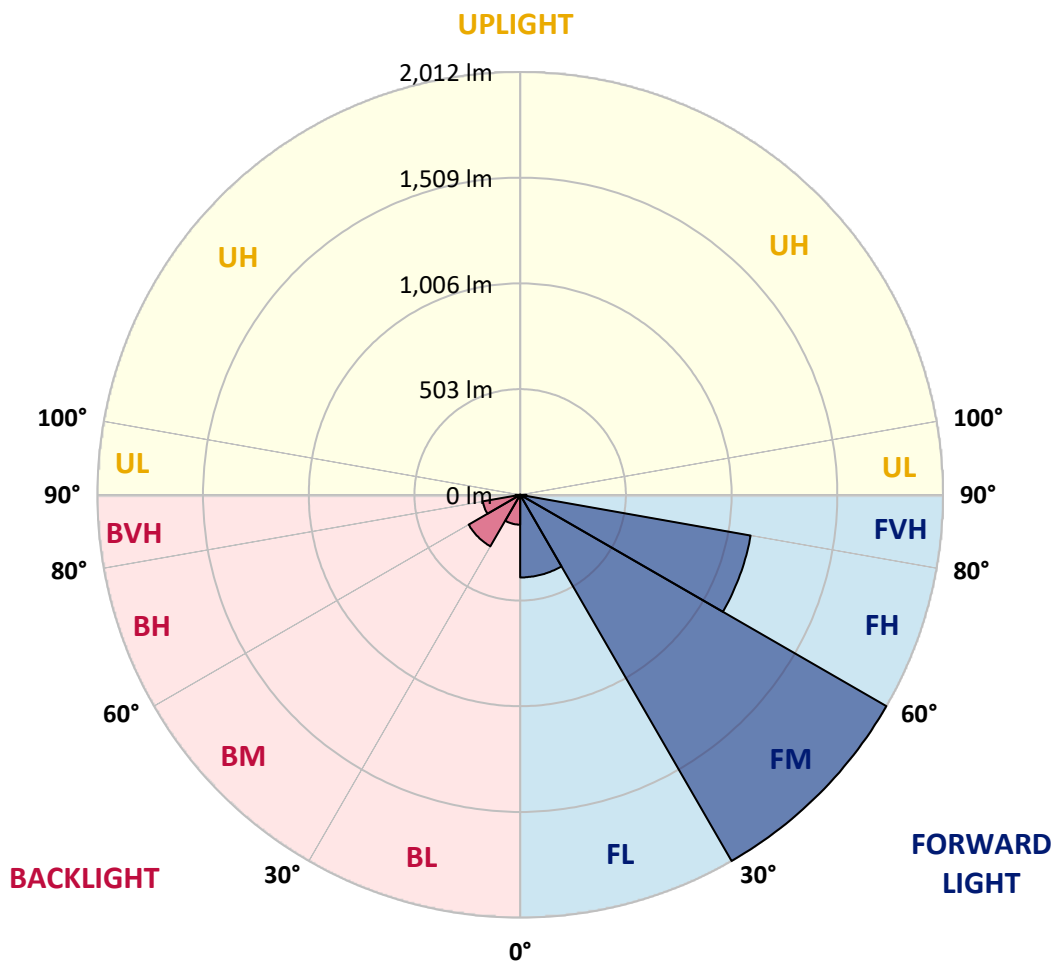
CATALOG NUMBER: XNV-AF-01-LED-U-T2R-7050-600

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	393.1	9.4			
FM	(30°-60°)	2011.8	48.2			
FH	(60°-80°)	1113.4	26.7			G1/1800
FVH	(80°-90°)	30.2	0.7			G1/100
BL	(0°-30°)	142.1	3.4	B1/500		
BM	(30°-60°)	283.2	6.8	B1/1000		
BH	(60°-80°)	180.4	4.3	B1/500		G1/500
BVH	(80°-90°)	21.9	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°	361.8	361.8	361.8	361.8	361.8	361.8	361.8	361.8	361.8	361.8	361.8
2.5°	455.6	450.3	450.8	443.4	432.5	420.5	410.7	405.4	400.9	399.5	392.1
5°	595.9	589.2	586.8	569.8	544.3	514.0	484.0	472.3	462.8	456.9	442.6
7.5°	710.6	707.2	704.0	688.3	663.1	624.3	575.9	558.7	542.7	525.2	507.9
10°	788.7	787.4	786.1	775.2	754.2	720.5	668.4	649.5	629.6	607.3	584.7
12.5°	847.7	847.7	848.8	839.7	827.0	801.0	753.7	736.1	715.9	692.6	666.8
15°	887.3	888.4	893.9	896.6	890.0	873.2	831.8	816.4	797.2	774.1	748.6
17.5°	913.6	915.7	924.0	932.7	941.2	935.4	904.6	890.2	872.9	851.7	827.8
20°	974.7	972.0	972.3	969.6	982.1	986.7	969.6	957.7	943.9	924.5	902.7
22.5°	1103.0	1098.0	1084.9	1051.7	1036.6	1035.0	1024.9	1018.5	1007.9	995.7	973.9
25°	1270.4	1264.5	1238.8	1184.0	1138.9	1097.2	1078.6	1074.6	1067.7	1059.4	1043.8
27.5°	1443.3	1436.9	1403.7	1334.7	1275.7	1191.5	1133.6	1128.2	1121.9	1118.4	1111.0
30°	1595.5	1588.6	1556.0	1485.8	1414.6	1314.2	1207.7	1189.1	1178.2	1179.3	1175.0
32.5°	1729.2	1723.1	1686.4	1614.9	1542.7	1445.2	1303.8	1274.9	1250.4	1241.4	1244.6
35°	1841.3	1835.7	1795.6	1723.6	1650.8	1569.8	1427.6	1384.1	1344.2	1319.3	1316.3
37.5°	1907.2	1904.0	1875.8	1814.7	1742.4	1682.9	1566.3	1518.0	1459.3	1422.9	1406.9
40°	1903.4	1906.9	1902.1	1874.5	1818.4	1775.1	1710.8	1663.0	1605.6	1551.4	1519.0
42.5°	1849.2	1854.0	1875.5	1889.9	1874.7	1848.4	1837.0	1801.4	1749.9	1692.5	1647.6
45°	1774.9	1779.1	1807.0	1858.8	1902.1	1909.5	1947.5	1929.7	1886.2	1837.3	1787.9
47.5°	1660.9	1669.1	1701.5	1783.9	1887.0	1958.7	2040.2	2048.5	2023.2	1982.9	1936.6
50°	1495.9	1506.8	1552.2	1669.4	1829.6	2009.2	2178.1	2209.5	2199.4	2158.5	2111.7
52.5°	1327.0	1337.8	1398.4	1523.0	1737.1	2029.9	2313.9	2394.1	2452.0	2494.3	2502.5
55°	1151.1	1163.3	1229.7	1373.2	1613.9	2003.6	2410.8	2502.0	2560.7	2604.8	2622.6
57.5°	952.6	966.5	1030.7	1175.8	1439.6	1897.9	2518.7	2647.8	2735.2	2803.2	2841.5
60°	725.0	742.2	808.9	955.0	1210.6	1695.4	2566.8	2757.8	2896.7	2998.7	3059.3
62.5°	459.6	477.1	546.5	698.1	950.0	1418.9	2430.8	2709.4	2946.4	3097.3	3208.3
65°	250.8	258.5	297.0	411.2	640.5	1100.9	2085.9	2414.6	2755.9	2969.8	3140.3
67.5°	188.1	189.1	193.1	221.0	341.1	743.3	1630.9	1931.9	2311.0	2586.2	2789.9
70°	164.7	164.7	165.2	165.5	185.2	402.7	1104.9	1381.9	1729.4	2007.8	2261.0
72.5°	147.7	146.1	145.6	142.4	145.0	206.4	601.4	850.4	1143.4	1455.8	1692.0
75°	127.5	127.2	127.2	124.1	125.7	145.3	260.9	408.0	635.2	926.1	1158.5
77.5°	110.2	108.4	108.7	106.8	111.8	111.3	123.8	168.2	276.5	486.4	679.3
80°	90.9	89.5	90.3	89.3	97.2	82.4	83.4	102.8	137.3	213.3	300.7
82.5°	67.2	67.7	72.8	72.3	81.8	55.5	61.1	76.8	92.4	106.3	115.6
85°	39.3	40.1	52.3	55.0	60.0	29.2	37.5	45.7	51.5	57.1	59.5
87.5°	4.3	5.6	29.2	30.0	26.8	8.8	15.1	19.1	20.5	21.8	19.1
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):

	67.5°	70°	72.5°	75°	77.5°	80°	85°	90°	95°	100°	102.5°
0°	361.8	361.8	361.8	361.8	361.8	361.8	361.8	361.8	361.8	361.8	361.8
2.5°	389.7	386.3	382.5	380.4	376.7	373.5	367.7	362.9	357.6	353.9	352.3
5°	435.4	427.2	418.4	412.0	404.1	397.2	383.9	367.9	362.9	352.3	349.6
7.5°	494.9	480.0	465.2	452.9	439.1	427.7	405.4	376.7	373.0	356.0	352.3
10°	564.8	543.0	521.0	502.1	481.9	464.4	431.4	391.0	387.1	365.3	361.6
12.5°	642.9	616.3	587.9	559.7	535.8	511.1	466.2	413.4	407.0	381.2	376.2
15°	723.4	694.7	661.8	627.7	598.3	565.6	509.0	442.6	430.9	400.6	393.7
17.5°	802.8	771.7	737.2	699.2	664.7	625.6	555.2	475.3	455.1	419.7	411.0
20°	879.6	848.0	811.6	774.4	731.4	686.7	602.5	507.4	476.6	435.7	424.3
22.5°	949.5	922.4	886.0	843.2	799.6	749.4	650.6	539.5	495.5	447.9	433.3
25°	1023.0	998.3	962.2	921.0	870.3	814.5	700.3	570.1	510.6	454.5	436.5
27.5°	1097.4	1076.2	1042.2	998.9	944.4	882.5	750.7	598.3	522.8	456.7	434.9
30°	1176.9	1160.4	1129.0	1080.7	1025.7	957.2	805.7	625.9	530.5	453.7	427.7
32.5°	1252.0	1251.5	1223.6	1173.4	1114.2	1038.7	863.7	653.8	534.5	445.5	415.2
35°	1330.1	1341.0	1320.0	1272.2	1209.8	1126.1	927.7	683.5	534.8	430.9	399.0
37.5°	1418.9	1438.3	1429.0	1383.5	1317.9	1225.7	1002.9	717.0	533.2	410.7	375.4
40°	1519.8	1546.4	1546.1	1507.9	1437.7	1337.3	1090.3	754.5	529.5	385.5	347.5
42.5°	1635.4	1667.0	1675.8	1638.0	1567.1	1459.3	1190.4	795.6	523.6	360.5	318.0
45°	1767.7	1795.6	1812.0	1777.0	1705.8	1592.1	1305.4	842.4	516.4	328.4	284.3
47.5°	1909.3	1941.7	1966.4	1936.4	1860.4	1743.5	1441.7	902.7	513.8	291.7	247.9
50°	2084.9	2118.3	2171.7	2158.2	2116.5	2022.4	1730.0	1045.1	514.8	256.9	217.3
52.5°	2520.6	2597.3	2664.8	2634.8	2535.7	2374.4	1964.3	1124.3	492.5	228.5	196.1
55°	2652.1	2739.2	2838.8	2826.3	2731.2	2568.6	2149.4	1190.4	471.0	207.7	182.2
57.5°	2882.1	2984.9	3124.1	3121.5	3004.8	2821.8	2387.7	1269.6	461.7	195.8	175.3
60°	3125.7	3256.7	3449.0	3479.0	3352.3	3161.8	2669.3	1366.8	463.0	189.1	171.3
62.5°	3303.7	3495.8	3775.5	3865.3	3716.0	3506.1	2961.5	1464.0	455.1	181.4	166.6
65°	3314.6	3591.2	3988.0	4127.8	3976.6	3707.0	3064.6	1444.9	407.3	171.1	158.9
67.5°	3048.9	3409.2	3891.3	4044.6	3890.0	3583.2	2884.0	1263.2	331.0	153.0	145.6
70°	2539.4	2957.6	3458.1	3628.9	3501.1	3190.5	2509.9	1009.0	247.3	129.1	125.7
72.5°	1962.4	2352.4	2806.9	2965.0	2867.2	2594.1	1979.7	735.3	176.7	104.7	102.0
75°	1402.9	1735.0	2065.0	2125.3	2028.8	1778.0	1284.5	459.3	123.8	85.8	82.1
77.5°	868.7	1084.7	1203.2	1125.6	1002.6	833.4	522.8	226.9	82.4	69.9	66.1
80°	385.5	452.4	422.4	376.4	297.3	244.4	159.7	100.7	53.1	53.9	51.8
82.5°	129.6	137.1	133.4	132.6	119.5	104.7	67.7	43.6	29.8	34.5	33.7
85°	63.2	66.1	66.4	68.8	59.8	46.5	18.3	17.3	12.8	18.6	19.4
87.5°	19.1	19.4	17.5	19.1	15.4	10.6	3.5	4.8	2.4	4.5	4.5
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°	361.8	361.8	361.8	361.8	361.8	361.8	361.8	361.8	361.8	361.8	361.8
2.5°	349.3	348.3	346.4	344.3	343.8	341.1	340.3	339.0	338.2	336.9	335.8
5°	346.2	344.3	342.2	339.8	339.8	336.1	334.5	332.9	332.9	330.5	329.4
7.5°	349.3	346.9	344.6	342.4	343.2	339.0	337.4	335.8	335.5	333.1	332.1
10°	358.4	356.0	353.1	350.9	350.1	346.7	344.8	342.4	340.8	339.2	337.7
12.5°	372.2	369.0	365.3	360.8	358.9	356.0	353.1	349.9	346.2	344.6	342.2
15°	388.7	383.3	378.3	372.7	367.7	364.7	360.8	355.7	350.7	348.5	345.4
17.5°	402.2	396.6	389.5	382.8	373.8	371.4	365.8	359.7	351.5	350.7	345.9
20°	413.6	405.1	396.4	388.4	374.6	373.2	366.3	359.2	347.5	347.5	341.6
22.5°	420.0	408.3	398.0	387.3	370.1	369.0	361.0	352.5	338.2	338.7	331.5
25°	421.1	407.0	394.0	381.2	361.3	359.4	349.3	340.0	324.4	323.3	315.9
27.5°	416.8	400.3	385.2	369.8	348.3	344.3	333.1	322.0	306.6	303.9	295.9
30°	407.0	387.6	370.6	352.8	330.2	323.8	312.1	300.7	285.0	281.6	274.2
32.5°	391.3	369.3	350.4	332.6	307.6	299.7	288.0	276.5	261.4	258.7	251.8
35°	370.6	345.9	326.0	307.1	282.1	273.9	262.7	252.6	238.8	237.8	233.0
37.5°	344.6	318.8	297.5	279.5	255.8	251.6	240.2	232.7	221.3	222.4	220.0
40°	315.1	288.8	268.6	252.6	232.2	228.5	221.6	216.0	206.1	209.1	209.3
42.5°	285.3	259.0	240.7	226.3	208.8	206.4	201.6	198.4	191.0	196.9	199.2
45°	251.6	227.1	211.5	200.6	187.6	187.6	185.2	184.9	179.8	188.1	190.5
47.5°	218.9	199.8	188.9	182.2	173.2	177.5	176.7	178.8	175.1	183.6	185.7
50°	194.2	180.9	174.3	171.1	164.7	171.3	172.9	175.9	172.7	180.1	181.7
52.5°	178.5	169.8	166.0	165.2	160.7	169.0	171.6	174.3	170.6	177.5	177.2
55°	169.8	163.9	162.6	164.2	160.7	168.7	171.3	173.2	170.0	174.8	174.5
57.5°	166.6	163.4	164.2	166.6	164.2	170.8	172.1	174.3	171.1	173.2	174.3
60°	166.3	166.3	169.5	172.7	171.1	175.9	176.7	176.4	173.5	173.7	174.3
62.5°	164.7	168.7	174.0	179.1	178.5	184.4	184.9	181.4	179.1	176.4	175.6
65°	159.7	166.3	174.0	180.9	182.0	191.0	192.1	188.6	187.0	182.5	179.1
67.5°	148.5	157.0	166.0	174.5	176.4	188.6	191.0	192.3	193.1	190.2	185.7
70°	129.6	138.4	147.7	157.5	160.2	173.7	178.8	184.9	189.7	193.9	192.3
72.5°	105.5	113.4	121.4	130.4	134.4	148.5	155.1	165.8	173.2	184.1	188.6
75°	83.7	88.5	93.2	98.8	102.0	115.8	124.1	136.8	146.9	162.1	172.1
77.5°	65.9	68.3	70.7	73.1	74.4	82.1	88.7	101.5	113.2	132.3	147.2
80°	50.7	52.1	52.3	53.1	52.6	56.3	58.7	66.4	76.5	95.4	112.9
82.5°	32.7	33.7	34.3	35.6	32.9	37.7	39.3	40.1	45.4	59.2	71.7
85°	18.3	18.6	18.9	19.4	15.7	20.5	20.7	19.4	18.9	24.4	27.6
87.5°	4.5	4.3	4.5	4.5	1.9	4.3	4.3	2.9	2.1	4.0	3.2
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):

	135°	145°	155°	165°	175°	180°
0°	361.8	361.8	361.8	361.8	361.8	361.8
2.5°	333.4	332.9	333.1	331.8	331.3	331.5
5°	328.1	327.0	327.0	326.2	325.2	325.2
7.5°	330.5	328.4	327.6	326.0	324.4	324.6
10°	334.2	330.5	327.8	325.4	323.6	323.6
12.5°	336.6	329.9	326.0	322.8	320.6	320.6
15°	337.1	327.0	321.2	317.7	315.6	315.6
17.5°	333.9	321.2	313.7	309.2	306.8	307.4
20°	326.0	310.3	301.5	296.7	294.3	294.6
22.5°	313.5	295.4	285.3	279.7	277.3	277.3
25°	296.5	276.8	265.9	261.4	259.3	259.3
27.5°	277.1	256.9	247.3	243.9	242.5	242.5
30°	255.3	238.6	231.7	229.3	227.1	227.1
32.5°	237.0	225.0	222.6	219.4	213.9	213.6
35°	222.4	221.0	219.2	209.6	201.6	200.6
37.5°	214.4	222.4	210.7	194.2	187.8	187.6
40°	210.1	217.6	197.4	189.4	188.6	188.6
42.5°	200.0	205.4	196.6	192.1	192.1	192.3
45°	189.4	193.9	198.4	194.5	195.8	196.1
47.5°	182.0	191.0	198.4	195.0	197.6	199.2
50°	175.1	188.4	194.5	194.5	197.4	197.6
52.5°	173.5	184.6	190.7	193.7	193.9	192.6
55°	173.7	181.7	187.8	191.5	189.9	189.9
57.5°	173.5	180.1	185.4	186.8	187.6	187.6
60°	173.7	178.0	182.2	181.7	184.4	184.4
62.5°	174.5	175.1	177.2	176.7	180.6	180.6
65°	176.4	171.3	170.0	170.6	175.3	175.1
67.5°	179.8	166.3	162.1	162.3	169.2	168.2
70°	184.9	159.4	153.0	151.4	163.1	161.3
72.5°	186.5	151.4	141.3	139.7	146.6	141.3
75°	179.1	145.0	128.8	123.5	120.6	119.0
77.5°	159.7	141.1	115.8	104.7	100.2	99.1
80°	132.3	132.8	98.8	85.5	99.4	99.1
82.5°	99.9	114.8	79.2	74.1	72.0	60.0
85°	48.3	86.3	60.8	51.0	30.6	29.0
87.5°	4.3	36.1	35.1	22.8	10.4	9.8
90°	0.0	0.0	0.0	0.0	0.0	0.0

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