

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: P198602

Luminaire Tested: **XNV-AF-01-LED-U-T2R-7030-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198602
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-7030-600
Description: XNV ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 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: 3697 lumens
Efficiency: N/A
Efficacy: 108.7 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

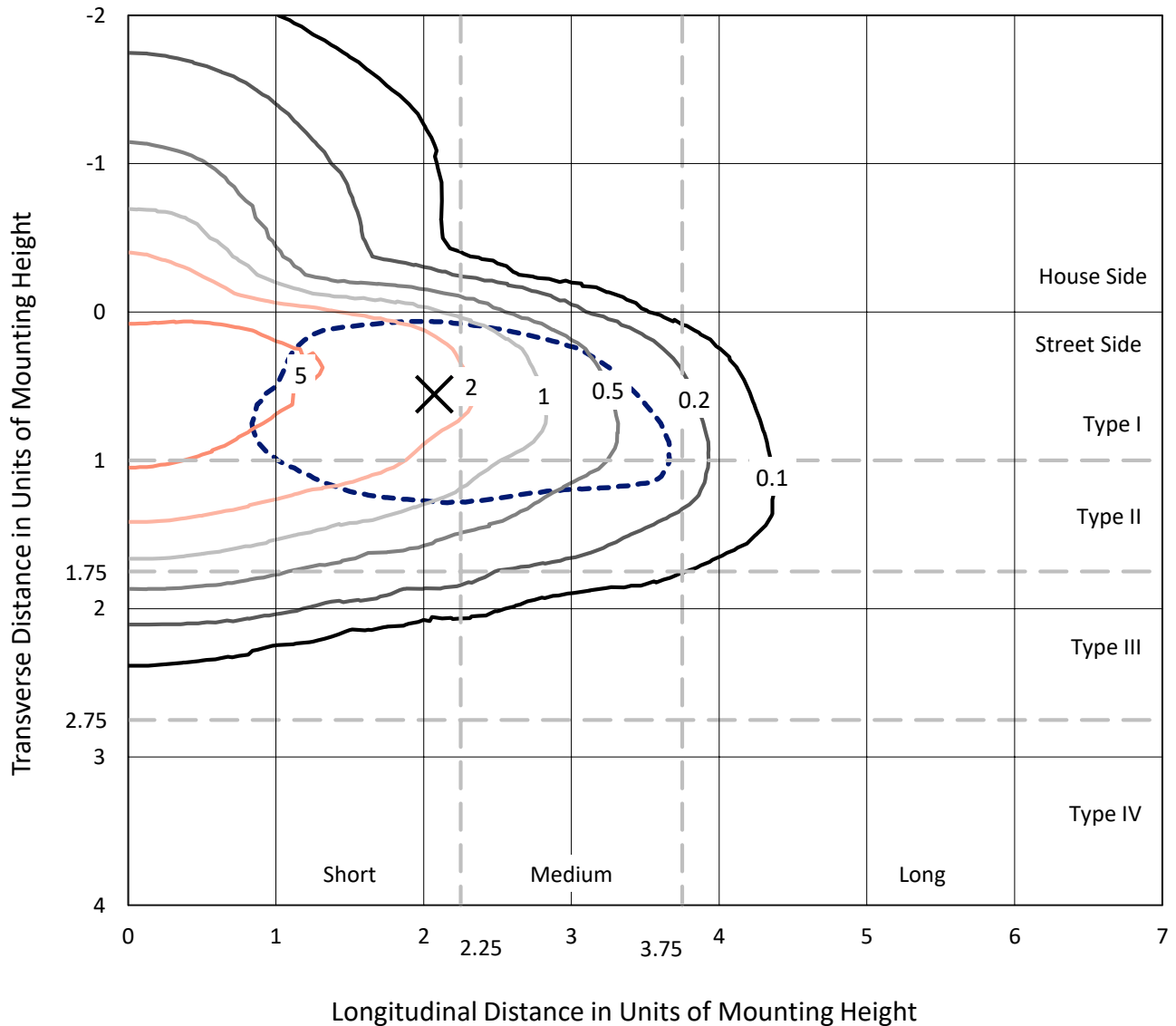


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Iso-Footcandle Lines of Horizontal Illumination

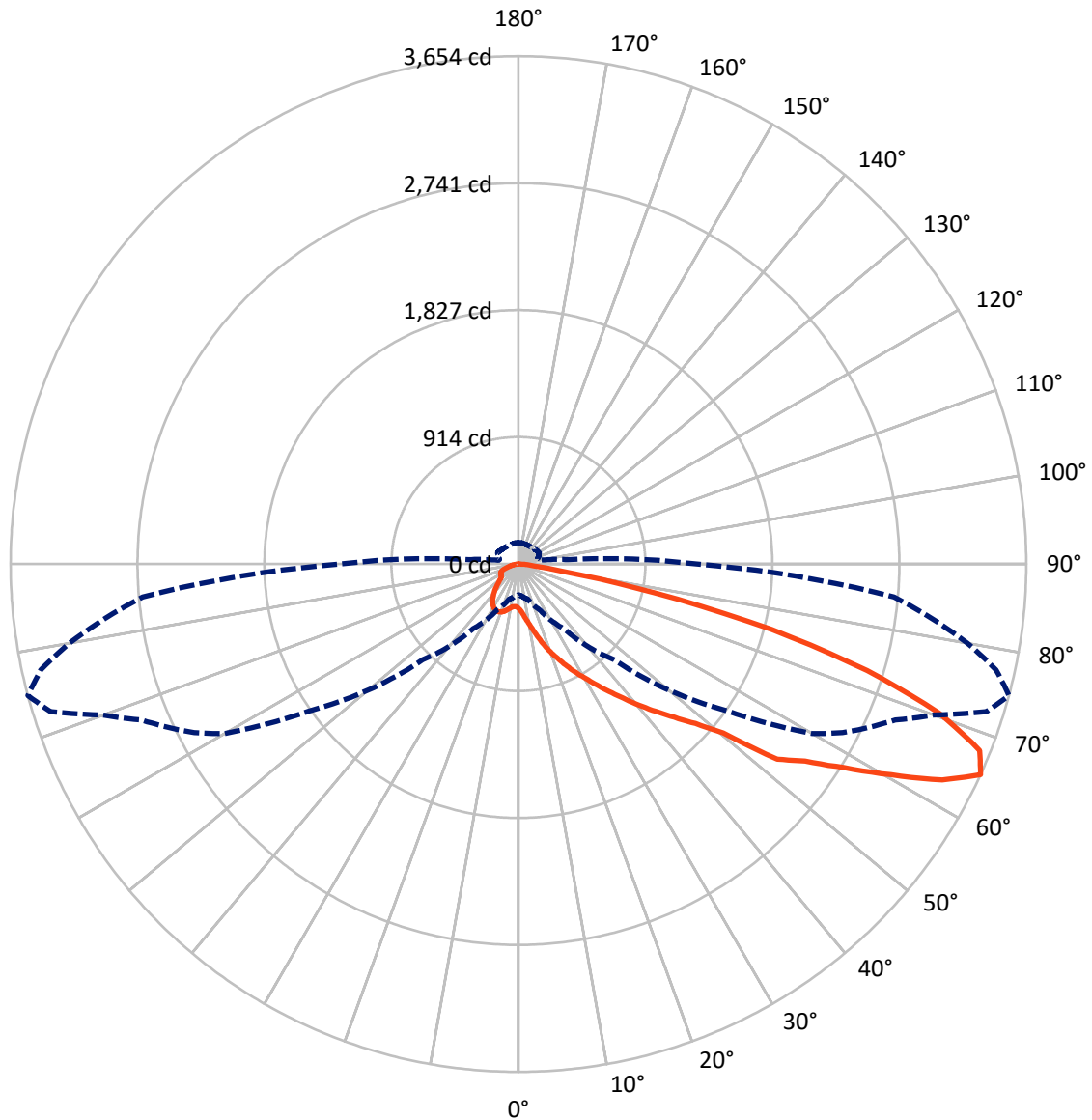
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.2 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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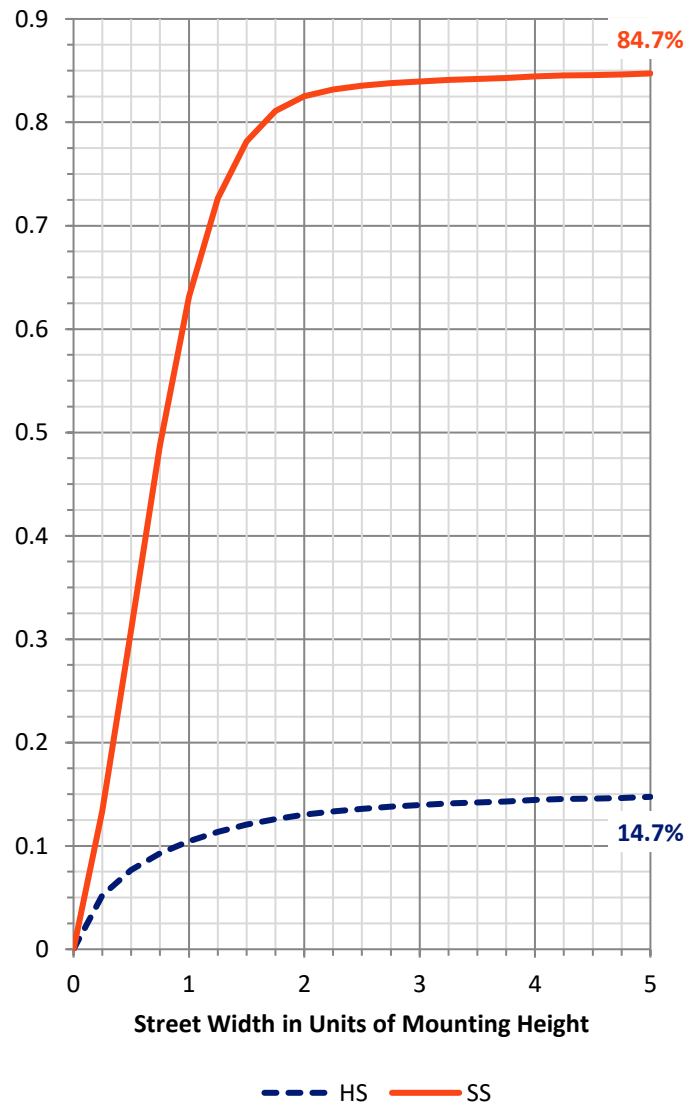
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	555.5	0.0	555.5
	% Fixture	15.0	0.0	15.0
Street Side	Lumens	3141.5	0.0	3141.5
	% Fixture	85.0	0.0	85.0
Total	Lumens	3697.0	0.0	3697.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.8	1.0
10°-20°	144.4	3.9
20°-30°	291.5	7.9
30°-40°	495.0	13.4
40°-50°	690.5	18.7
50°-60°	846.2	22.9
60°-70°	796.2	21.5
70°-80°	349.1	9.4
80°-90°	46.2	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°	3697.0	100.0
0°-180°	3697.0	100.0



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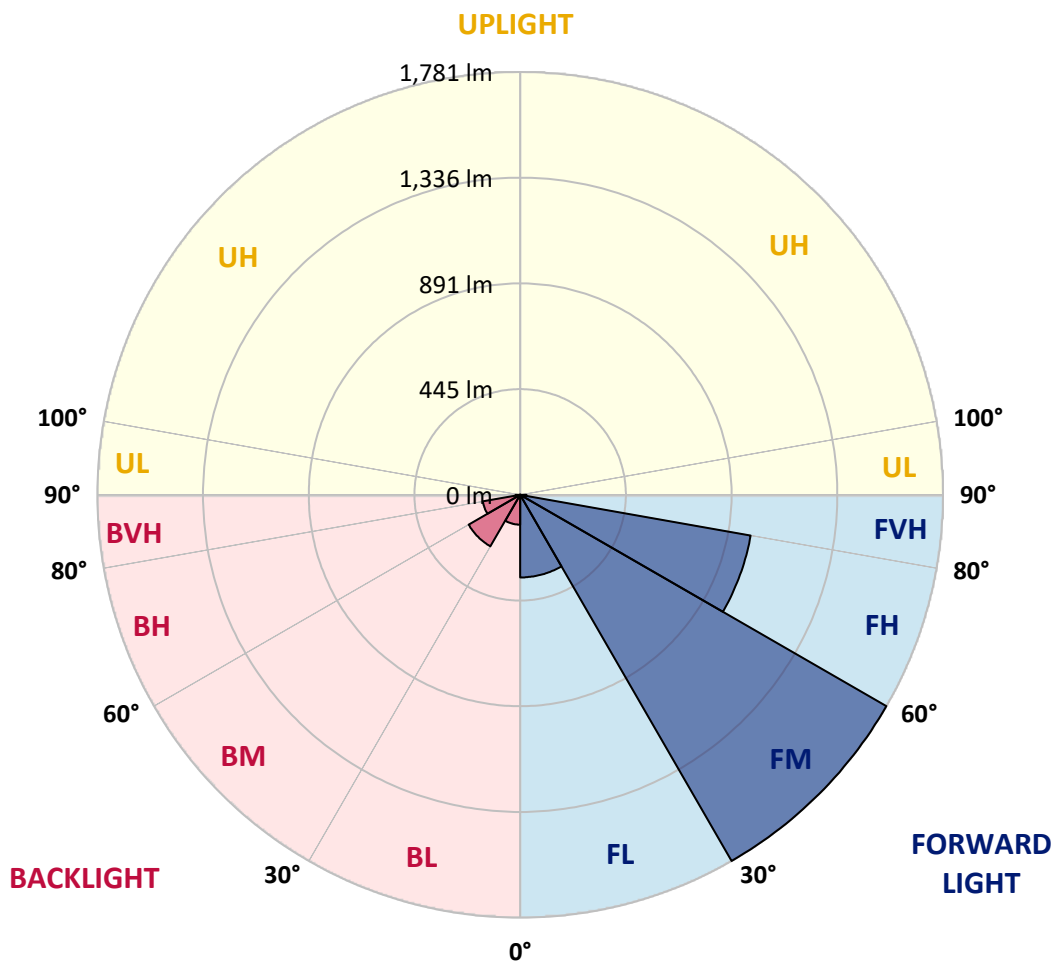
CATALOG NUMBER: XNV-AF-01-LED-U-T2R-7030-600

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	348.0	9.4			
FM	(30°-60°)	1781.1	48.2			
FH	(60°-80°)	985.7	26.7			G1/1800
FVH	(80°-90°)	26.8	0.7			G1/100
BL	(0°-30°)	125.8	3.4	B1/500		
BM	(30°-60°)	250.7	6.8	B1/1000		
BH	(60°-80°)	159.7	4.3	B1/500		G1/500
BVH	(80°-90°)	19.4	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-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°	320.3	320.3	320.3	320.3	320.3	320.3	320.3	320.3	320.3	320.3	320.3
2.5°	403.3	398.6	399.1	392.5	382.9	372.3	363.6	358.9	354.9	353.7	347.1
5°	527.5	521.6	519.5	504.5	481.9	455.1	428.5	418.2	409.7	404.5	391.8
7.5°	629.1	626.1	623.2	609.4	587.0	552.7	509.9	494.6	480.5	465.0	449.7
10°	698.3	697.1	695.9	686.3	667.7	637.8	591.7	575.0	557.4	537.6	517.6
12.5°	750.5	750.5	751.4	743.4	732.1	709.1	667.2	651.7	633.8	613.1	590.3
15°	785.5	786.5	791.4	793.8	787.9	773.1	736.4	722.7	705.8	685.3	662.8
17.5°	808.8	810.7	818.0	825.7	833.3	828.1	800.8	788.1	772.8	754.0	732.8
20°	862.9	860.5	860.8	858.4	869.5	873.5	858.4	847.8	835.6	818.4	799.2
22.5°	976.5	972.0	960.5	931.1	917.7	916.3	907.3	901.7	892.3	881.5	862.2
25°	1124.7	1119.5	1096.7	1048.2	1008.2	971.3	954.9	951.3	945.2	937.9	924.0
27.5°	1277.8	1272.1	1242.7	1181.6	1129.4	1054.8	1003.5	998.8	993.2	990.1	983.5
30°	1412.5	1406.4	1377.5	1315.4	1252.4	1163.5	1069.2	1052.7	1043.0	1044.0	1040.2
32.5°	1530.8	1525.4	1493.0	1429.7	1365.7	1279.4	1154.3	1128.7	1107.0	1099.0	1101.8
35°	1630.1	1625.1	1589.6	1525.9	1461.4	1389.7	1263.9	1225.3	1190.0	1167.9	1165.3
37.5°	1688.4	1685.6	1660.6	1606.6	1542.6	1489.9	1386.7	1343.8	1291.9	1259.7	1245.5
40°	1685.1	1688.2	1683.9	1659.5	1609.8	1571.5	1514.6	1472.3	1421.5	1373.5	1344.8
42.5°	1637.1	1641.4	1660.4	1673.1	1659.7	1636.4	1626.3	1594.8	1549.2	1498.4	1458.6
45°	1571.3	1575.0	1599.7	1645.6	1683.9	1690.5	1724.1	1708.4	1669.8	1626.5	1582.8
47.5°	1470.4	1477.7	1506.4	1579.3	1670.5	1734.0	1806.2	1813.5	1791.2	1755.4	1714.5
50°	1324.3	1334.0	1374.2	1477.9	1619.7	1778.7	1928.3	1956.0	1947.1	1910.9	1869.5
52.5°	1174.8	1184.4	1238.0	1348.3	1537.9	1797.1	2048.5	2119.5	2170.8	2208.2	2215.4
55°	1019.1	1029.9	1088.7	1215.7	1428.8	1773.8	2134.3	2215.0	2267.0	2306.0	2321.7
57.5°	843.4	855.6	912.5	1040.9	1274.5	1680.2	2229.8	2344.1	2421.5	2481.7	2515.5
60°	641.8	657.1	716.1	845.5	1071.7	1501.0	2272.4	2441.5	2564.5	2654.8	2708.4
62.5°	406.9	422.4	483.8	618.1	841.0	1256.1	2151.9	2398.7	2608.4	2742.0	2840.3
65°	222.0	228.8	262.9	364.1	567.0	974.6	1846.7	2137.6	2439.8	2629.1	2780.1
67.5°	166.5	167.5	171.0	195.7	302.0	658.0	1443.8	1710.3	2045.9	2289.5	2469.9
70°	145.8	145.8	146.3	146.5	163.9	356.5	978.1	1223.4	1531.1	1777.5	2001.7
72.5°	130.8	129.4	128.9	126.1	128.4	182.7	532.5	752.8	1012.2	1288.8	1497.9
75°	112.9	112.7	112.7	109.8	111.2	128.6	231.0	361.2	562.3	819.9	1025.6
77.5°	97.6	96.0	96.2	94.5	99.0	98.5	109.6	148.9	244.8	430.6	601.4
80°	80.4	79.3	80.0	79.0	86.1	72.9	73.8	91.0	121.6	188.9	266.2
82.5°	59.5	60.0	64.4	64.0	72.4	49.2	54.1	68.0	81.8	94.1	102.3
85°	34.8	35.5	46.3	48.7	53.2	25.9	33.2	40.5	45.6	50.6	52.7
87.5°	3.8	4.9	25.9	26.6	23.8	7.8	13.4	16.9	18.1	19.3	16.9
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):

	67.5°	70°	72.5°	75°	77.5°	80°	85°	90°	95°	100°	102.5°
0°	320.3	320.3	320.3	320.3	320.3	320.3	320.3	320.3	320.3	320.3	320.3
2.5°	345.0	342.0	338.7	336.8	333.5	330.7	325.5	321.3	316.6	313.3	311.9
5°	385.5	378.2	370.4	364.8	357.7	351.6	339.8	325.7	321.3	311.9	309.5
7.5°	438.2	425.0	411.8	401.0	388.8	378.6	358.9	333.5	330.2	315.1	311.9
10°	500.0	480.7	461.2	444.5	426.6	411.1	381.9	346.2	342.7	323.4	320.1
12.5°	569.1	545.6	520.5	495.5	474.4	452.5	412.8	365.9	360.3	337.5	333.0
15°	640.4	615.0	585.8	555.7	529.6	500.7	450.6	391.8	381.5	354.7	348.5
17.5°	710.7	683.2	652.6	619.0	588.4	553.9	491.5	420.7	402.9	371.6	363.8
20°	778.7	750.7	718.5	685.6	647.5	608.0	533.4	449.2	421.9	385.7	375.6
22.5°	840.6	816.6	784.3	746.5	707.9	663.5	576.0	477.7	438.6	396.5	383.6
25°	905.7	883.8	851.8	815.4	770.5	721.1	619.9	504.7	452.0	402.4	386.4
27.5°	971.6	952.7	922.6	884.3	836.1	781.3	664.6	529.6	462.8	404.3	385.0
30°	1041.9	1027.3	999.5	956.7	908.1	847.4	713.3	554.1	469.7	401.7	378.6
32.5°	1108.4	1108.0	1083.3	1038.8	986.4	919.6	764.6	578.8	473.2	394.4	367.6
35°	1177.6	1187.2	1168.6	1126.3	1071.0	997.0	821.3	605.1	473.4	381.5	353.2
37.5°	1256.1	1273.3	1265.1	1224.8	1166.8	1085.1	887.8	634.8	472.0	363.6	332.3
40°	1345.5	1369.0	1368.8	1334.9	1272.8	1183.9	965.2	667.9	468.7	341.3	307.6
42.5°	1447.8	1475.8	1483.5	1450.2	1387.4	1291.9	1053.9	704.4	463.6	319.1	281.5
45°	1564.9	1589.6	1604.2	1573.2	1510.1	1409.5	1155.7	745.8	457.2	290.7	251.6
47.5°	1690.3	1719.0	1740.8	1714.3	1647.0	1543.5	1276.4	799.2	454.8	258.2	219.4
50°	1845.7	1875.4	1922.6	1910.6	1873.7	1790.5	1531.5	925.2	455.8	227.4	192.4
52.5°	2231.4	2299.4	2359.1	2332.6	2244.8	2102.1	1739.0	995.3	436.0	202.3	173.6
55°	2347.9	2425.0	2513.2	2502.1	2417.9	2274.0	1902.9	1053.9	417.0	183.9	161.3
57.5°	2551.5	2642.5	2765.8	2763.4	2660.2	2498.1	2113.8	1124.0	408.8	173.3	155.2
60°	2767.2	2883.1	3053.4	3080.0	2967.8	2799.2	2363.1	1210.0	409.9	167.5	151.7
62.5°	2924.8	3094.8	3342.5	3421.9	3289.8	3104.0	2621.8	1296.1	402.9	160.6	147.5
65°	2934.4	3179.2	3530.6	3654.3	3520.5	3281.8	2713.1	1279.2	360.5	151.5	140.6
67.5°	2699.2	3018.1	3445.0	3580.7	3443.8	3172.2	2553.2	1118.3	293.0	135.5	128.9
70°	2248.1	2618.3	3061.4	3212.6	3099.5	2824.6	2222.0	893.2	219.0	114.3	111.2
72.5°	1737.3	2082.6	2485.0	2624.9	2538.4	2296.6	1752.6	651.0	156.4	92.7	90.3
75°	1242.0	1536.0	1828.1	1881.5	1796.1	1574.1	1137.1	406.6	109.6	76.0	72.7
77.5°	769.1	960.3	1065.2	996.5	887.6	737.8	462.8	200.8	72.9	61.9	58.6
80°	341.3	400.5	373.9	333.3	263.2	216.4	141.3	89.1	47.0	47.7	45.9
82.5°	114.8	121.4	118.1	117.4	105.8	92.7	60.0	38.6	26.3	30.6	29.9
85°	56.0	58.6	58.8	60.9	52.9	41.2	16.2	15.3	11.3	16.5	17.2
87.5°	16.9	17.2	15.5	16.9	13.6	9.4	3.1	4.2	2.1	4.0	4.0
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°	320.3	320.3	320.3	320.3	320.3	320.3	320.3	320.3	320.3	320.3	320.3
2.5°	309.3	308.3	306.7	304.8	304.3	302.0	301.3	300.1	299.4	298.2	297.3
5°	306.4	304.8	302.9	300.8	300.8	297.5	296.1	294.7	294.7	292.6	291.6
7.5°	309.3	307.2	305.0	303.2	303.9	300.1	298.7	297.3	297.0	294.9	294.0
10°	317.3	315.1	312.6	310.7	310.0	306.9	305.3	303.2	301.7	300.3	298.9
12.5°	329.5	326.7	323.4	319.4	317.7	315.1	312.6	309.7	306.4	305.0	302.9
15°	344.1	339.4	334.9	330.0	325.5	322.9	319.4	314.9	310.4	308.6	305.7
17.5°	356.1	351.1	344.8	338.9	330.9	328.8	323.9	318.4	311.2	310.4	306.2
20°	366.2	358.7	350.9	343.8	331.6	330.4	324.3	318.0	307.6	307.6	302.4
22.5°	371.8	361.5	352.3	342.9	327.6	326.7	319.6	312.1	299.4	299.9	293.5
25°	372.8	360.3	348.8	337.5	319.9	318.2	309.3	301.0	287.2	286.2	279.6
27.5°	369.0	354.4	341.0	327.4	308.3	304.8	294.9	285.0	271.4	269.1	262.0
30°	360.3	343.1	328.1	312.3	292.3	286.7	276.3	266.2	252.4	249.3	242.7
32.5°	346.4	326.9	310.2	294.5	272.3	265.3	254.9	244.8	231.4	229.1	223.0
35°	328.1	306.2	288.6	271.9	249.8	242.5	232.6	223.7	211.4	210.5	206.3
37.5°	305.0	282.2	263.4	247.4	226.5	222.7	212.6	206.0	195.9	196.9	194.7
40°	278.9	255.6	237.8	223.7	205.6	202.3	196.1	191.2	182.5	185.1	185.3
42.5°	252.6	229.3	213.1	200.4	184.9	182.7	178.5	175.7	169.1	174.3	176.4
45°	222.7	201.1	187.2	177.6	166.0	166.0	163.9	163.7	159.2	166.5	168.6
47.5°	193.8	176.9	167.2	161.3	153.3	157.1	156.4	158.3	155.0	162.5	164.4
50°	171.9	160.2	154.3	151.5	145.8	151.7	153.1	155.7	152.9	159.5	160.9
52.5°	158.0	150.3	147.0	146.3	142.3	149.6	151.9	154.3	151.0	157.1	156.9
55°	150.3	145.1	143.9	145.3	142.3	149.3	151.7	153.3	150.5	154.8	154.5
57.5°	147.5	144.6	145.3	147.5	145.3	151.2	152.4	154.3	151.5	153.3	154.3
60°	147.2	147.2	150.0	152.9	151.5	155.7	156.4	156.2	153.6	153.8	154.3
62.5°	145.8	149.3	154.0	158.5	158.0	163.2	163.7	160.6	158.5	156.2	155.5
65°	141.3	147.2	154.0	160.2	161.1	169.1	170.0	167.0	165.6	161.6	158.5
67.5°	131.5	139.0	147.0	154.5	156.2	167.0	169.1	170.3	171.0	168.4	164.4
70°	114.8	122.5	130.8	139.5	141.8	153.8	158.3	163.7	167.9	171.7	170.3
72.5°	93.4	100.4	107.5	115.5	119.0	131.5	137.3	146.8	153.3	163.0	167.0
75°	74.1	78.3	82.6	87.5	90.3	102.5	109.8	121.1	130.1	143.5	152.4
77.5°	58.3	60.4	62.6	64.7	65.9	72.7	78.6	89.8	100.2	117.1	130.3
80°	44.9	46.1	46.3	47.0	46.6	49.9	52.0	58.8	67.7	84.4	100.0
82.5°	28.9	29.9	30.3	31.5	29.2	33.4	34.8	35.5	40.2	52.4	63.5
85°	16.2	16.5	16.7	17.2	13.9	18.1	18.3	17.2	16.7	21.6	24.5
87.5°	4.0	3.8	4.0	4.0	1.6	3.8	3.8	2.6	1.9	3.5	2.8
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):

	135°	145°	155°	165°	175°	180°
0°	320.3	320.3	320.3	320.3	320.3	320.3
2.5°	295.2	294.7	294.9	293.7	293.3	293.5
5°	290.5	289.5	289.5	288.8	287.9	287.9
7.5°	292.6	290.7	290.0	288.6	287.2	287.4
10°	295.9	292.6	290.2	288.1	286.5	286.5
12.5°	298.0	292.1	288.6	285.8	283.9	283.9
15°	298.5	289.5	284.3	281.3	279.4	279.4
17.5°	295.6	284.3	277.8	273.8	271.6	272.1
20°	288.6	274.7	266.9	262.7	260.6	260.8
22.5°	277.5	261.5	252.6	247.7	245.5	245.5
25°	262.5	245.1	235.4	231.4	229.5	229.5
27.5°	245.3	227.4	219.0	215.9	214.7	214.7
30°	226.0	211.2	205.1	203.0	201.1	201.1
32.5°	209.8	199.2	197.1	194.3	189.3	189.1
35°	196.9	195.7	194.0	185.6	178.5	177.6
37.5°	189.8	196.9	186.5	171.9	166.3	166.0
40°	186.0	192.6	174.7	167.7	167.0	167.0
42.5°	177.1	181.8	174.0	170.0	170.0	170.3
45°	167.7	171.7	175.7	172.2	173.3	173.6
47.5°	161.1	169.1	175.7	172.6	175.0	176.4
50°	155.0	166.7	172.2	172.2	174.7	175.0
52.5°	153.6	163.5	168.9	171.5	171.7	170.5
55°	153.8	160.9	166.3	169.6	168.2	168.2
57.5°	153.6	159.5	164.2	165.3	166.0	166.0
60°	153.8	157.6	161.3	160.9	163.2	163.2
62.5°	154.5	155.0	156.9	156.4	159.9	159.9
65°	156.2	151.7	150.5	151.0	155.2	155.0
67.5°	159.2	147.2	143.5	143.7	149.8	148.9
70°	163.7	141.1	135.5	134.1	144.4	142.8
72.5°	165.1	134.1	125.1	123.7	129.8	125.1
75°	158.5	128.4	114.1	109.4	106.8	105.4
77.5°	141.3	124.9	102.5	92.7	88.7	87.7
80°	117.1	117.6	87.5	75.7	88.0	87.7
82.5°	88.4	101.6	70.1	65.6	63.7	53.2
85°	42.8	76.4	53.9	45.2	27.0	25.6
87.5°	3.8	32.0	31.0	20.2	9.2	8.7
90°	0.0	0.0	0.0	0.0	0.0	0.0

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