

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: P198604

Luminaire Tested: **XNV-AF-01-LED-U-T2R-7030-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198604
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-7030-800
Description: XNV ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 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: 4532 lumens
Efficiency: N/A
Efficacy: 103.0 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

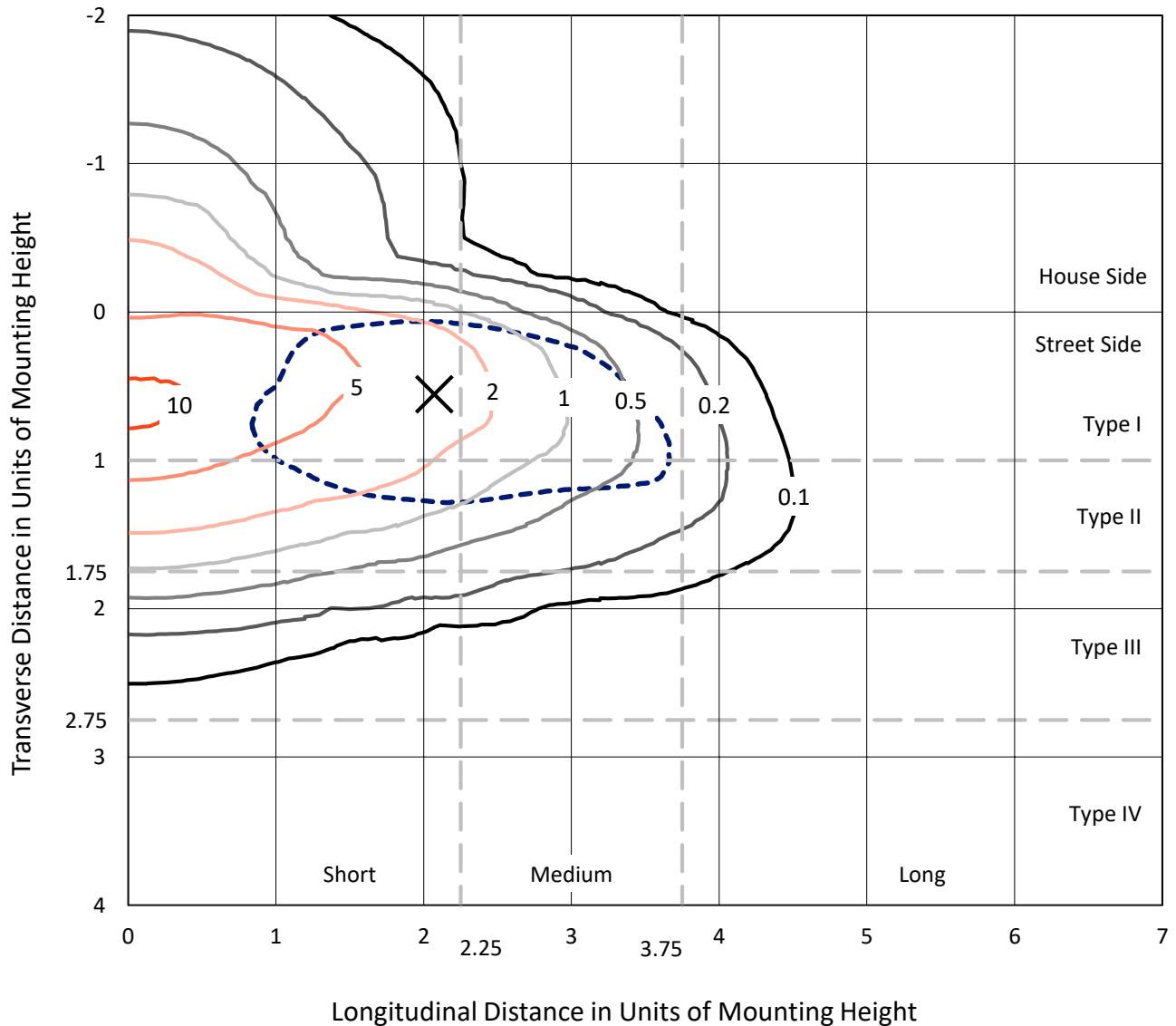
Input Watts (W): 44
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

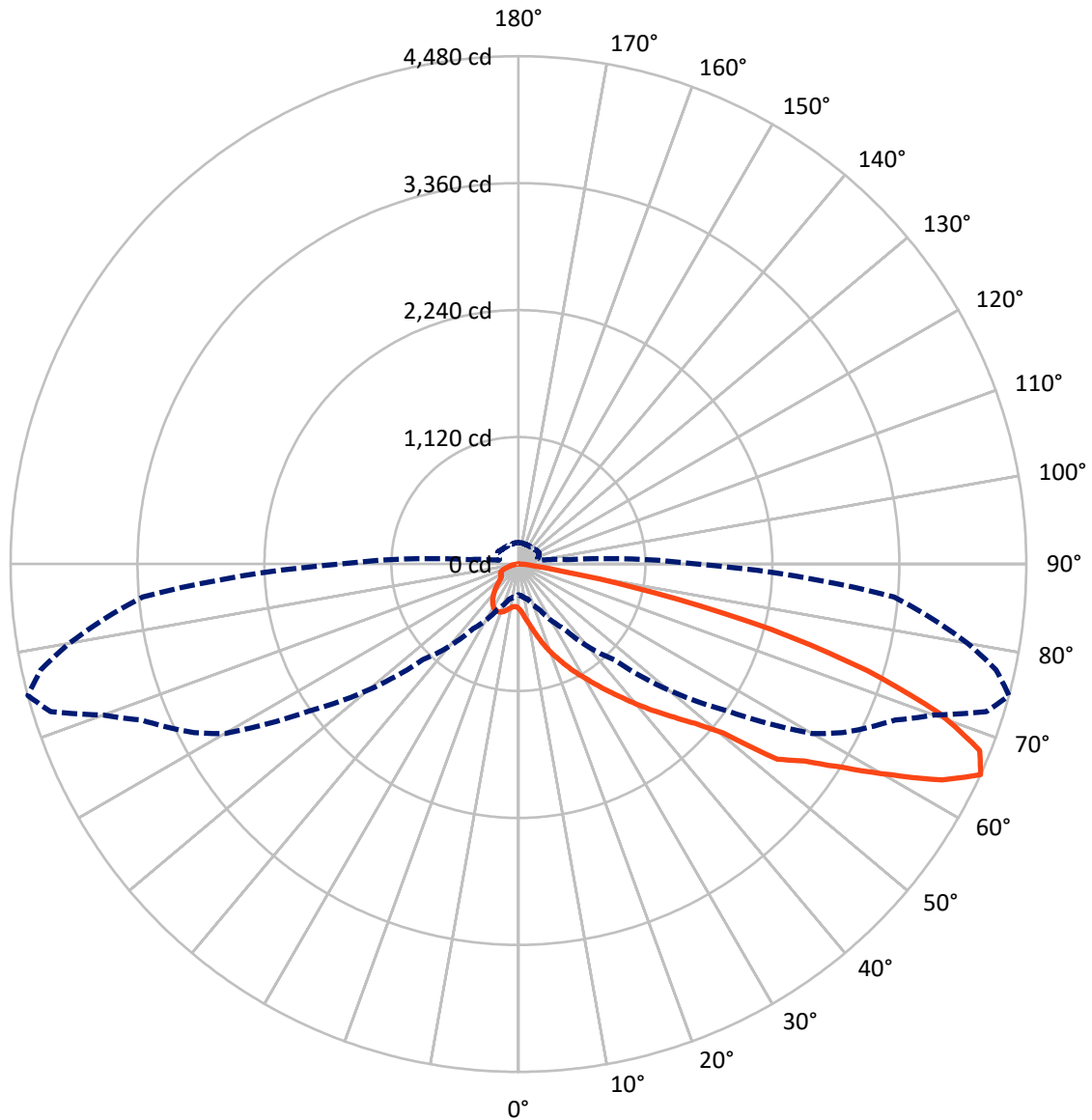
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 11.3 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	681.0	0.0	681.0
	% Fixture	15.0	0.0	15.0
Street Side	Lumens	3851.0	0.0	3851.0
	% Fixture	85.0	0.0	85.0
Total	Lumens	4532.0	0.0	4532.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.4	1.0
10°-20°	177.1	3.9
20°-30°	357.3	7.9
30°-40°	606.8	13.4
40°-50°	846.4	18.7
50°-60°	1037.4	22.9
60°-70°	976.0	21.5
70°-80°	428.0	9.4
80°-90°	56.6	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°	4532.0	100.0
0°-180°	4532.0	100.0



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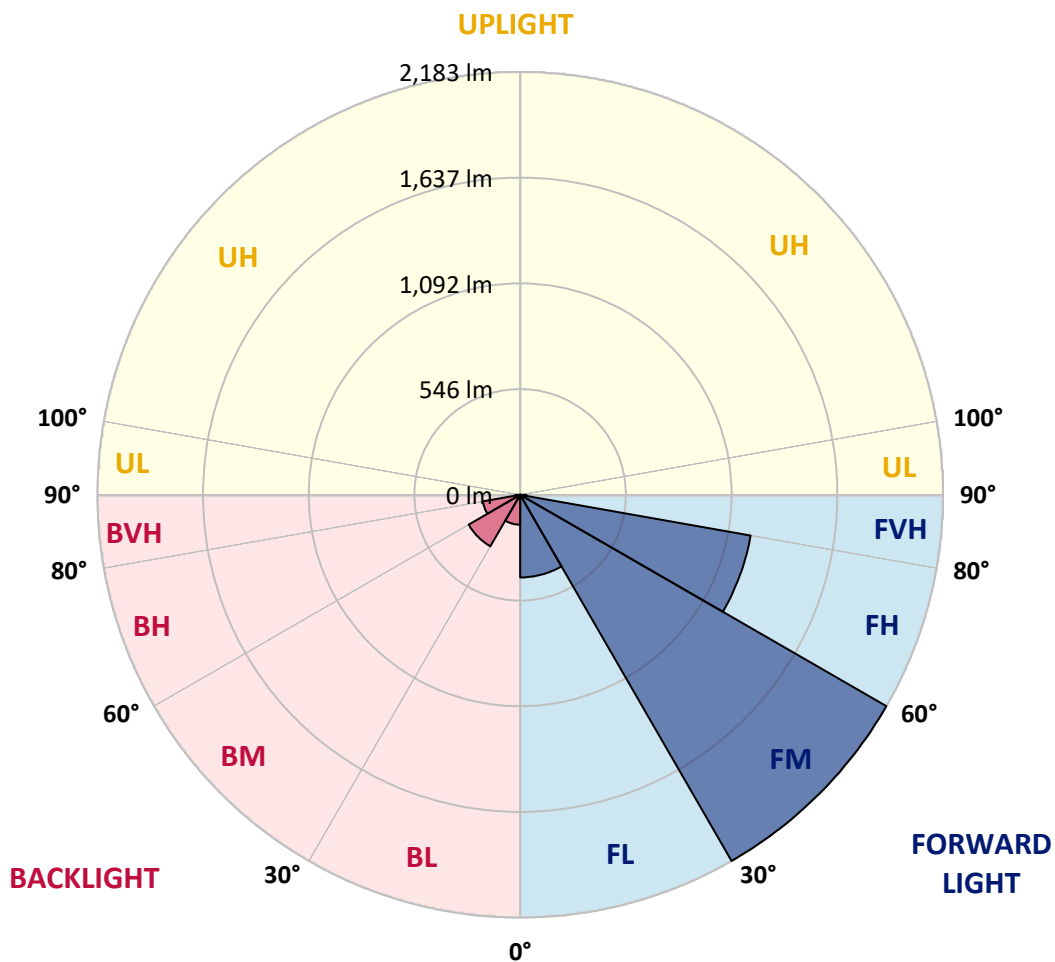
CATALOG NUMBER: XNV-AF-01-LED-U-T2R-7030-800

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	426.6	9.4			
FM	(30°-60°)	2183.3	48.2			
FH	(60°-80°)	1208.3	26.7			G1/1800
FVH	(80°-90°)	32.8	0.7			G1/100
BL	(0°-30°)	154.2	3.4	B1/500		
BM	(30°-60°)	307.3	6.8	B1/1000		
BH	(60°-80°)	195.7	4.3	B1/500		G1/500
BVH	(80°-90°)	23.8	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°	392.7	392.7	392.7	392.7	392.7	392.7	392.7	392.7	392.7	392.7	392.7
2.5°	494.4	488.7	489.3	481.2	469.4	456.4	445.7	440.0	435.1	433.6	425.5
5°	646.7	639.5	636.9	618.4	590.7	557.9	525.3	512.6	502.2	495.9	480.3
7.5°	771.2	767.5	764.0	747.0	719.6	677.5	625.0	606.3	589.0	570.0	551.2
10°	856.0	854.5	853.1	841.3	818.5	781.9	725.4	704.9	683.3	659.1	634.6
12.5°	920.0	920.0	921.1	911.3	897.5	869.2	817.9	798.9	777.0	751.6	723.6
15°	962.9	964.1	970.1	973.0	965.8	947.7	902.7	886.0	865.2	840.1	812.4
17.5°	991.5	993.8	1002.7	1012.2	1021.5	1015.1	981.7	966.1	947.4	924.3	898.4
20°	1057.8	1054.9	1055.2	1052.3	1065.9	1070.8	1052.3	1039.3	1024.3	1003.3	979.7
22.5°	1197.0	1191.6	1177.4	1141.4	1125.0	1123.2	1112.3	1105.4	1093.8	1080.6	1056.9
25°	1378.7	1372.3	1344.4	1285.0	1236.0	1190.7	1170.5	1166.2	1158.7	1149.8	1132.7
27.5°	1566.4	1559.4	1523.4	1448.4	1384.4	1293.0	1230.2	1224.4	1217.5	1213.8	1205.7
30°	1731.6	1724.1	1688.6	1612.5	1535.2	1426.2	1310.6	1290.4	1278.6	1279.8	1275.2
32.5°	1876.6	1869.9	1830.2	1752.6	1674.2	1568.4	1415.0	1383.6	1357.0	1347.2	1350.7
35°	1998.2	1992.2	1948.6	1870.5	1791.5	1703.6	1549.3	1502.1	1458.8	1431.7	1428.5
37.5°	2069.7	2066.3	2035.7	1969.4	1891.0	1826.4	1699.8	1647.4	1583.7	1544.2	1526.9
40°	2065.7	2069.4	2064.3	2034.3	1973.4	1926.4	1856.7	1804.8	1742.5	1683.7	1648.5
42.5°	2006.9	2012.1	2035.4	2051.0	2034.6	2006.0	1993.6	1955.0	1899.1	1836.8	1788.1
45°	1926.2	1930.8	1961.0	2017.3	2064.3	2072.3	2113.6	2094.2	2047.0	1993.9	1940.3
47.5°	1802.5	1811.4	1846.6	1936.0	2047.8	2125.7	2214.2	2223.1	2195.7	2151.9	2101.7
50°	1623.4	1635.3	1684.6	1811.7	1985.5	2180.4	2363.8	2397.8	2386.9	2342.5	2291.7
52.5°	1440.1	1451.9	1517.6	1652.8	1885.2	2202.9	2511.1	2598.2	2661.0	2706.9	2715.8
55°	1249.2	1262.5	1334.6	1490.2	1751.4	2174.4	2616.4	2715.2	2779.0	2826.8	2846.1
57.5°	1033.9	1048.9	1118.6	1276.0	1562.3	2059.6	2733.4	2873.5	2968.4	3042.2	3083.7
60°	786.8	805.5	877.9	1036.5	1313.8	1840.0	2785.6	2992.9	3143.7	3254.4	3320.1
62.5°	498.8	517.8	593.0	757.7	1031.0	1539.8	2638.0	2940.4	3197.6	3361.3	3481.8
65°	272.2	280.5	322.3	446.3	695.1	1194.7	2263.8	2620.4	2990.9	3223.0	3408.0
67.5°	204.1	205.3	209.6	239.9	370.2	806.7	1769.9	2096.5	2508.0	2806.6	3027.8
70°	178.7	178.7	179.3	179.6	200.9	437.1	1199.1	1499.8	1876.9	2179.0	2453.8
72.5°	160.3	158.6	158.0	154.5	157.4	224.0	652.7	922.9	1240.9	1579.9	1836.2
75°	138.4	138.1	138.1	134.6	136.4	157.7	283.1	442.8	689.3	1005.0	1257.3
77.5°	119.6	117.6	117.9	115.9	121.4	120.8	134.3	182.5	300.1	527.9	737.2
80°	98.6	97.2	98.0	96.9	105.5	89.4	90.5	111.6	149.1	231.5	326.4
82.5°	72.9	73.5	79.0	78.4	88.8	60.3	66.3	83.3	100.3	115.3	125.4
85°	42.7	43.5	56.8	59.7	65.2	31.7	40.7	49.6	55.9	62.0	64.6
87.5°	4.6	6.1	31.7	32.6	29.1	9.5	16.4	20.8	22.2	23.6	20.8
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):

	67.5°	70°	72.5°	75°	77.5°	80°	85°	90°	95°	100°	102.5°
0°	392.7	392.7	392.7	392.7	392.7	392.7	392.7	392.7	392.7	392.7	392.7
2.5°	422.9	419.2	415.2	412.9	408.8	405.4	399.0	393.8	388.1	384.0	382.3
5°	472.5	463.6	454.1	447.2	438.5	431.0	416.6	399.3	393.8	382.3	379.4
7.5°	537.1	521.0	504.8	491.6	476.6	464.2	440.0	408.8	404.8	386.3	382.3
10°	612.9	589.3	565.4	544.9	523.0	504.0	468.2	424.4	420.1	396.4	392.4
12.5°	697.7	668.9	638.0	607.5	581.5	554.7	506.0	448.6	441.7	413.7	408.2
15°	785.1	753.9	718.2	681.3	649.3	613.8	552.4	480.3	467.6	434.8	427.3
17.5°	871.3	837.5	800.0	758.8	721.3	679.0	602.6	515.8	493.9	455.5	446.0
20°	954.6	920.3	880.8	840.4	793.7	745.3	653.9	550.7	517.2	472.8	460.4
22.5°	1030.4	1001.0	961.5	915.1	867.8	813.3	706.1	585.5	537.7	486.1	470.2
25°	1110.3	1083.4	1044.2	999.6	944.5	883.9	760.0	618.7	554.1	493.3	473.7
27.5°	1191.0	1167.9	1131.0	1084.0	1024.9	957.7	814.7	649.3	567.4	495.6	472.0
30°	1277.2	1259.3	1225.3	1172.8	1113.1	1038.8	874.4	679.2	575.7	492.4	464.2
32.5°	1358.8	1358.2	1327.9	1273.4	1209.1	1127.3	937.3	709.5	580.1	483.5	450.6
35°	1443.5	1455.4	1432.6	1380.7	1312.9	1222.1	1006.8	741.8	580.4	467.6	433.0
37.5°	1539.8	1560.9	1550.8	1501.5	1430.3	1330.2	1088.3	778.1	578.6	445.7	407.4
40°	1649.4	1678.2	1677.9	1636.4	1560.3	1451.3	1183.2	818.8	574.6	418.3	377.1
42.5°	1774.8	1809.1	1818.6	1777.7	1700.7	1583.7	1291.9	863.5	568.2	391.2	345.1
45°	1918.4	1948.6	1966.5	1928.5	1851.2	1727.8	1416.7	914.2	560.5	356.3	308.5
47.5°	2072.0	2107.2	2134.0	2101.4	2019.0	1892.1	1564.6	979.7	557.6	316.6	269.0
50°	2262.6	2298.9	2356.9	2342.2	2296.9	2194.9	1877.4	1134.2	558.7	278.8	235.8
52.5°	2735.4	2818.7	2892.0	2859.4	2751.9	2576.9	2131.7	1220.1	534.5	247.9	212.8
55°	2878.1	2972.7	3080.8	3067.3	2964.1	2787.6	2332.7	1291.9	511.2	225.5	197.8
57.5°	3127.8	3239.4	3390.5	3387.6	3261.0	3062.4	2591.3	1377.8	501.1	212.5	190.3
60°	3392.2	3534.3	3743.1	3775.6	3638.1	3431.4	2896.9	1483.3	502.5	205.3	186.0
62.5°	3585.3	3793.8	4097.4	4194.8	4032.8	3805.0	3214.0	1588.8	493.9	196.9	180.8
65°	3597.2	3897.3	4328.0	4479.7	4315.6	4023.0	3325.9	1568.1	442.0	185.7	172.4
67.5°	3308.9	3699.8	4223.1	4389.4	4221.6	3888.6	3129.8	1370.9	359.2	166.1	158.0
70°	2755.9	3209.7	3752.9	3938.2	3799.6	3462.5	2723.9	1095.0	268.4	140.1	136.4
72.5°	2129.7	2552.9	3046.2	3217.8	3111.7	2815.3	2148.4	798.0	191.7	113.6	110.7
75°	1522.5	1882.9	2241.0	2306.4	2201.8	1929.6	1393.9	498.5	134.3	93.1	89.1
77.5°	942.8	1177.1	1305.7	1221.5	1088.1	904.4	567.4	246.2	89.4	75.8	71.8
80°	418.3	491.0	458.4	408.5	322.6	265.2	173.3	109.3	57.7	58.5	56.2
82.5°	140.7	148.8	144.7	143.9	129.7	113.6	73.5	47.3	32.3	37.5	36.6
85°	68.6	71.8	72.1	74.7	64.9	50.5	19.9	18.7	13.8	20.2	21.0
87.5°	20.8	21.0	19.0	20.8	16.7	11.5	3.7	5.2	2.6	4.9	4.9
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):

	105°	107.5°	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°
0°	392.7	392.7	392.7	392.7	392.7	392.7	392.7	392.7	392.7	392.7	392.7
2.5°	379.1	378.0	375.9	373.6	373.1	370.2	369.3	367.9	367.0	365.6	364.4
5°	375.7	373.6	371.3	368.7	368.7	364.7	363.0	361.2	361.2	358.7	357.5
7.5°	379.1	376.5	373.9	371.6	372.5	367.9	366.1	364.4	364.1	361.5	360.4
10°	388.9	386.3	383.2	380.8	380.0	376.2	374.2	371.6	369.9	368.2	366.4
12.5°	403.9	400.5	396.4	391.5	389.5	386.3	383.2	379.7	375.7	373.9	371.3
15°	421.8	416.0	410.5	404.5	399.0	395.8	391.5	386.0	380.6	378.3	374.8
17.5°	436.5	430.4	422.7	415.4	405.6	403.0	397.0	390.4	381.4	380.6	375.4
20°	448.9	439.7	430.1	421.5	406.5	405.1	397.6	389.8	377.1	377.1	370.8
22.5°	455.8	443.1	431.9	420.3	401.6	400.5	391.8	382.6	367.0	367.6	359.8
25°	457.0	441.7	427.6	413.7	392.1	390.1	379.1	369.0	352.0	350.9	342.8
27.5°	452.3	434.5	418.0	401.3	378.0	373.6	361.5	349.4	332.7	329.8	321.2
30°	441.7	420.6	402.2	382.9	358.4	351.4	338.8	326.4	309.4	305.6	297.5
32.5°	424.7	400.7	380.3	361.0	333.9	325.2	312.5	300.1	283.7	280.8	273.3
35°	402.2	375.4	353.7	333.3	306.2	297.2	285.1	274.2	259.2	258.0	252.8
37.5°	373.9	346.0	322.9	303.3	277.6	273.0	260.6	252.6	240.2	241.3	238.7
40°	341.9	313.4	291.5	274.2	252.0	247.9	240.4	234.4	223.7	226.9	227.2
42.5°	309.6	281.1	261.2	245.6	226.6	224.0	218.8	215.4	207.3	213.6	216.2
45°	273.0	246.5	229.5	217.7	203.5	203.5	200.9	200.7	195.2	204.1	206.7
47.5°	237.6	216.8	205.0	197.8	188.0	192.6	191.7	194.0	190.0	199.2	201.5
50°	210.8	196.3	189.1	185.7	178.7	186.0	187.7	190.9	187.4	195.5	197.2
52.5°	193.7	184.2	180.2	179.3	174.4	183.4	186.2	189.1	185.1	192.6	192.3
55°	184.2	177.9	176.4	178.2	174.4	183.1	186.0	188.0	184.5	189.7	189.4
57.5°	180.8	177.3	178.2	180.8	178.2	185.4	186.8	189.1	185.7	188.0	189.1
60°	180.5	180.5	183.9	187.4	185.7	190.9	191.7	191.4	188.3	188.6	189.1
62.5°	178.7	183.1	188.8	194.3	193.7	200.1	200.7	196.9	194.3	191.4	190.6
65°	173.3	180.5	188.8	196.3	197.5	207.3	208.4	204.7	203.0	198.1	194.3
67.5°	161.2	170.4	180.2	189.4	191.4	204.7	207.3	208.7	209.6	206.4	201.5
70°	140.7	150.2	160.3	171.0	173.8	188.6	194.0	200.7	205.8	210.5	208.7
72.5°	114.5	123.1	131.8	141.6	145.9	161.2	168.4	179.9	188.0	199.8	204.7
75°	90.8	96.0	101.2	107.2	110.7	125.7	134.6	148.5	159.4	175.9	186.8
77.5°	71.5	74.1	76.7	79.3	80.7	89.1	96.3	110.1	122.8	143.6	159.7
80°	55.1	56.5	56.8	57.7	57.1	61.1	63.7	72.1	83.0	103.5	122.5
82.5°	35.5	36.6	37.2	38.6	35.7	40.9	42.7	43.5	49.3	64.3	77.8
85°	19.9	20.2	20.5	21.0	17.0	22.2	22.5	21.0	20.5	26.5	30.0
87.5°	4.9	4.6	4.9	4.9	2.0	4.6	4.6	3.2	2.3	4.3	3.5
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°	392.7	392.7	392.7	392.7	392.7	392.7
2.5°	361.8	361.2	361.5	360.1	359.5	359.8
5°	356.1	354.9	354.9	354.0	352.9	352.9
7.5°	358.7	356.3	355.5	353.7	352.0	352.3
10°	362.7	358.7	355.8	353.2	351.2	351.2
12.5°	365.3	358.1	353.7	350.3	348.0	348.0
15°	365.9	354.9	348.6	344.8	342.5	342.5
17.5°	362.4	348.6	340.5	335.6	333.0	333.6
20°	353.7	336.7	327.2	322.0	319.4	319.7
22.5°	340.2	320.6	309.6	303.6	301.0	301.0
25°	321.7	300.4	288.6	283.7	281.4	281.4
27.5°	300.7	278.8	268.4	264.7	263.2	263.2
30°	277.1	258.9	251.4	248.8	246.5	246.5
32.5°	257.2	244.2	241.6	238.1	232.1	231.8
35°	241.3	239.9	237.9	227.5	218.8	217.7
37.5°	232.7	241.3	228.6	210.8	203.8	203.5
40°	228.0	236.1	214.2	205.6	204.7	204.7
42.5°	217.1	222.9	213.3	208.4	208.4	208.7
45°	205.6	210.5	215.4	211.0	212.5	212.8
47.5°	197.5	207.3	215.4	211.6	214.5	216.2
50°	190.0	204.4	211.0	211.0	214.2	214.5
52.5°	188.3	200.4	207.0	210.2	210.5	209.0
55°	188.6	197.2	203.8	207.9	206.1	206.1
57.5°	188.3	195.5	201.2	202.7	203.5	203.5
60°	188.6	193.2	197.8	197.2	200.1	200.1
62.5°	189.4	190.0	192.3	191.7	196.0	196.0
65°	191.4	186.0	184.5	185.1	190.3	190.0
67.5°	195.2	180.5	175.9	176.2	183.6	182.5
70°	200.7	173.0	166.1	164.3	177.0	175.0
72.5°	202.4	164.3	153.4	151.6	159.1	153.4
75°	194.3	157.4	139.8	134.1	130.9	129.2
77.5°	173.3	153.1	125.7	113.6	108.7	107.5
80°	143.6	144.2	107.2	92.8	107.8	107.5
82.5°	108.4	124.5	85.9	80.4	78.1	65.2
85°	52.5	93.7	66.0	55.4	33.2	31.4
87.5°	4.6	39.2	38.1	24.8	11.2	10.7
90°	0.0	0.0	0.0	0.0	0.0	0.0

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