

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: P198608

Luminaire Tested: **XNV-AF-01-LED-U-T2R-7030-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198608
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-7030-1200
Description: XNV ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 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: 6155 lumens
Efficiency: N/A
Efficacy: 93.3 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): 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

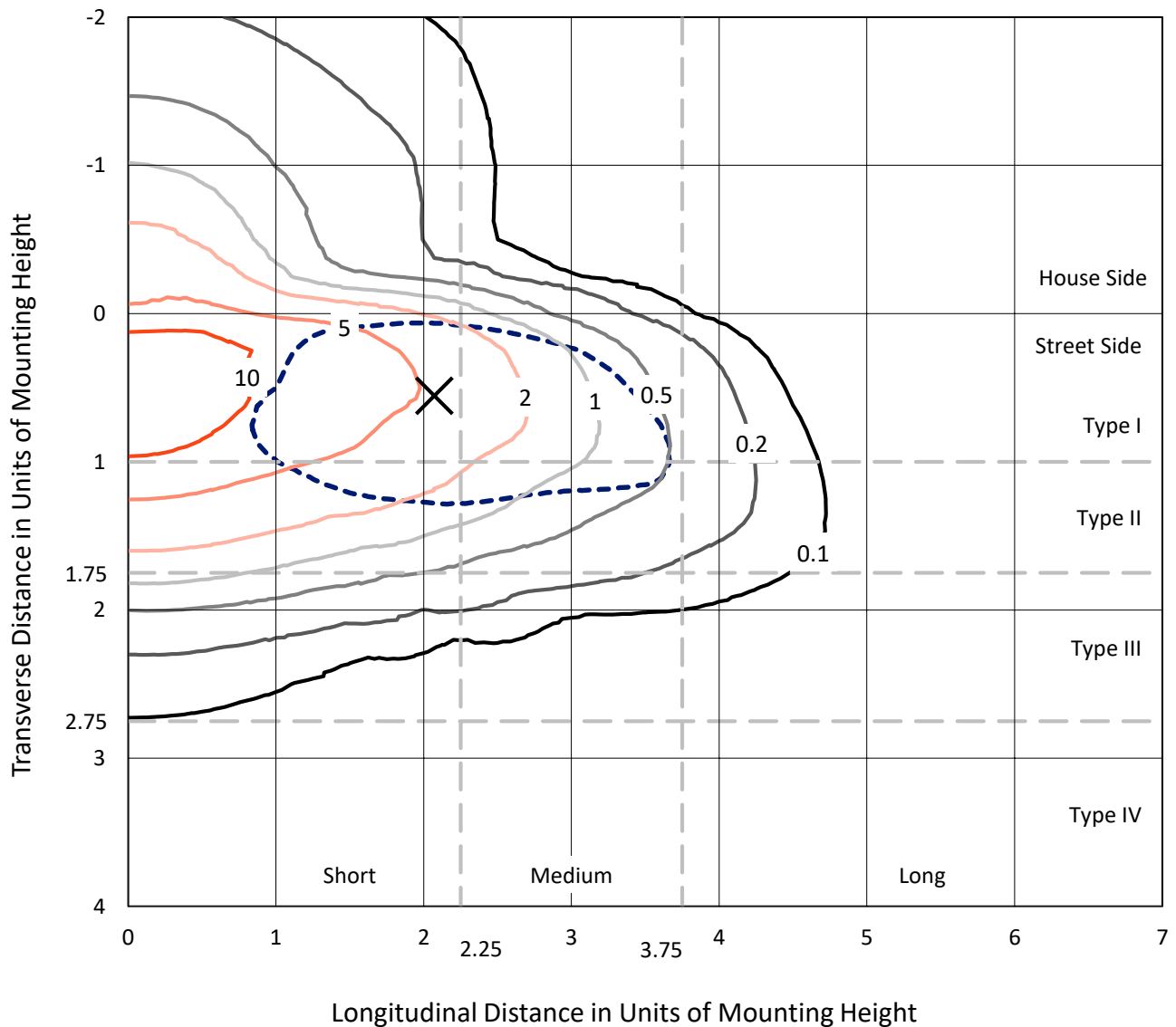


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Iso-Footcandle Lines of Horizontal Illumination

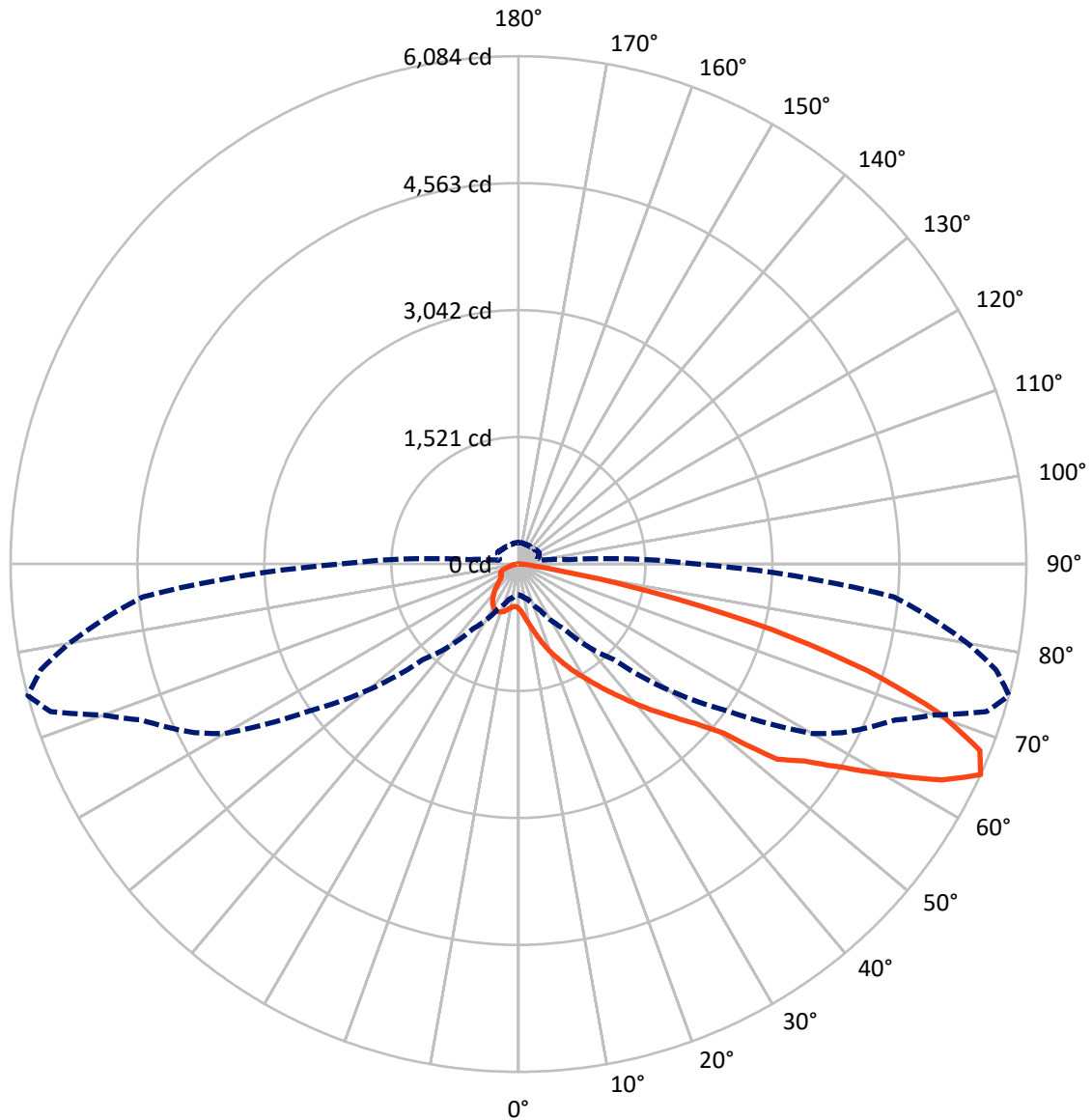
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 15.3 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	924.9	0.0	924.9
	% Fixture	15.0	0.0	15.0
Street Side	Lumens	5230.1	0.0	5230.1
	% Fixture	85.0	0.0	85.0
Total	Lumens	6155.0	0.0	6155.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.0	1.0
10°-20°	240.5	3.9
20°-30°	485.3	7.9
30°-40°	824.2	13.4
40°-50°	1149.5	18.7
50°-60°	1408.9	22.9
60°-70°	1325.6	21.5
70°-80°	581.3	9.4
80°-90°	76.9	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°	6155.0	100.0
0°-180°	6155.0	100.0

Coefficient of Utilization



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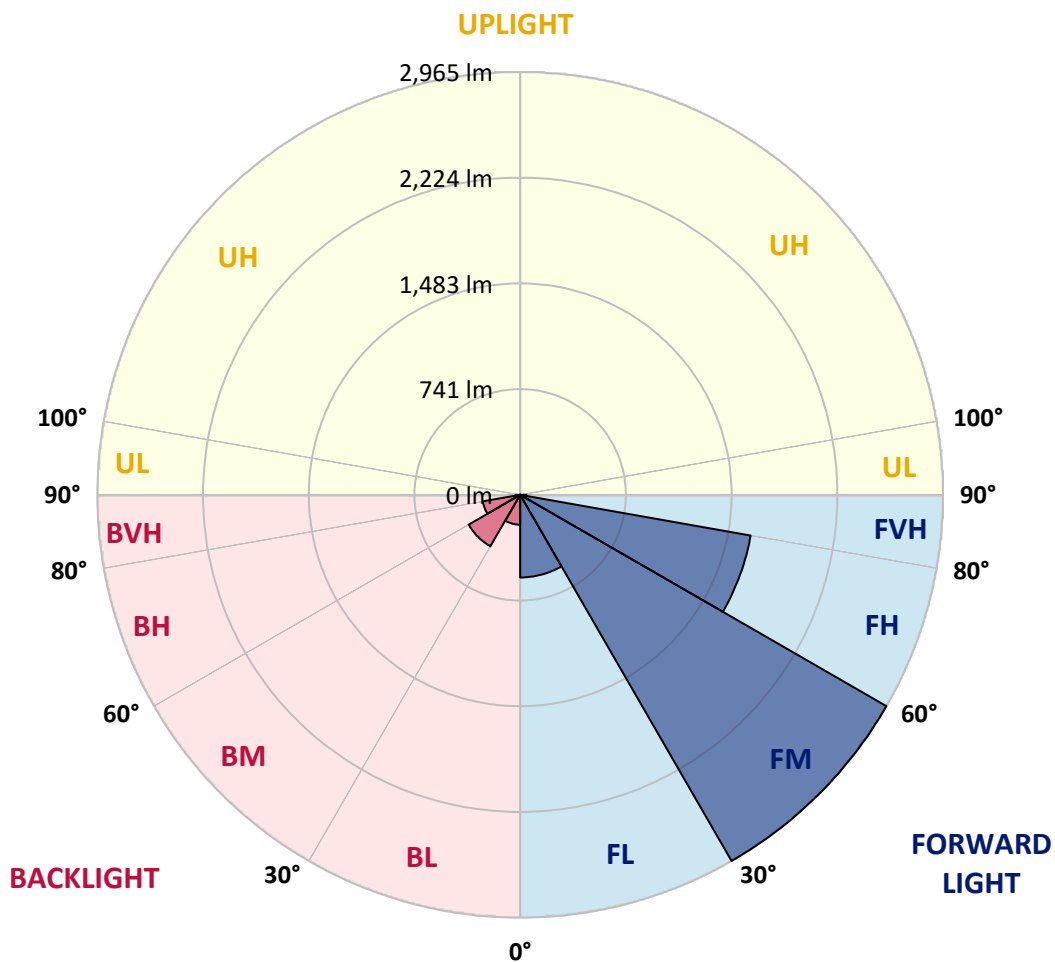
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	579.4	9.4			
FM (30°-60°)	2965.2	48.2			
FH (60°-80°)	1641.0	26.7			G1/1800
FVH (80°-90°)	44.6	0.7			G1/100
BL (0°-30°)	209.4	3.4	B1/500		
BM (30°-60°)	417.4	6.8	B1/1000		
BH (60°-80°)	265.8	4.3	B1/500		G1/500
BVH (80°-90°)	32.3	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°	533.3	533.3	533.3	533.3	533.3	533.3	533.3	533.3	533.3	533.3	533.3
2.5°	671.5	663.7	664.5	653.5	637.4	619.8	605.3	597.5	590.9	588.9	577.9
5°	878.2	868.5	864.9	839.9	802.3	757.7	713.4	696.2	682.1	673.5	652.3
7.5°	1047.4	1042.3	1037.6	1014.5	977.3	920.1	848.9	823.4	799.9	774.1	748.6
10°	1162.5	1160.6	1158.6	1142.5	1111.6	1061.9	985.1	957.3	928.0	895.1	861.8
12.5°	1249.4	1249.4	1251.0	1237.7	1218.9	1180.5	1110.8	1085.0	1055.2	1020.8	982.8
15°	1307.8	1309.3	1317.6	1321.5	1311.7	1287.0	1225.9	1203.2	1175.0	1141.0	1103.4
17.5°	1346.5	1349.7	1361.8	1374.7	1387.3	1378.7	1333.2	1312.1	1286.6	1255.3	1220.1
20°	1436.6	1432.7	1433.1	1429.2	1447.6	1454.2	1429.2	1411.5	1391.2	1362.6	1330.5
22.5°	1625.7	1618.3	1599.1	1550.2	1527.8	1525.5	1510.6	1501.2	1485.5	1467.5	1435.4
25°	1872.4	1863.8	1825.8	1745.1	1678.6	1617.1	1589.7	1583.8	1573.6	1561.5	1538.4
27.5°	2127.3	2117.9	2069.0	1967.2	1880.2	1756.1	1670.8	1662.9	1653.5	1648.4	1637.5
30°	2351.7	2341.5	2293.3	2189.9	2085.0	1937.0	1780.0	1752.6	1736.5	1738.1	1731.8
32.5°	2548.6	2539.6	2485.6	2380.2	2273.7	2130.0	1921.7	1879.1	1843.0	1829.7	1834.4
35°	2713.8	2705.6	2646.5	2540.4	2433.1	2313.7	2104.2	2040.0	1981.3	1944.4	1940.1
37.5°	2810.9	2806.2	2764.7	2674.7	2568.2	2480.5	2308.6	2237.3	2150.8	2097.1	2073.7
40°	2805.5	2810.6	2803.5	2762.8	2680.2	2616.3	2521.6	2451.1	2366.5	2286.7	2238.9
42.5°	2725.6	2732.6	2764.4	2785.5	2763.2	2724.4	2707.6	2655.1	2579.1	2494.6	2428.4
45°	2616.0	2622.2	2663.3	2739.7	2803.5	2814.5	2870.5	2844.2	2780.0	2708.0	2635.1
47.5°	2448.0	2460.1	2507.9	2629.3	2781.2	2886.9	3007.1	3019.3	2982.1	2922.5	2854.4
50°	2204.8	2220.9	2287.8	2460.5	2696.6	2961.3	3210.3	3256.5	3241.7	3181.4	3112.4
52.5°	1955.8	1971.9	2061.1	2244.8	2560.4	2991.8	3410.4	3528.7	3614.0	3676.3	3688.4
55°	1696.6	1714.6	1812.5	2023.9	2378.7	2953.1	3553.3	3687.6	3774.2	3839.2	3865.4
57.5°	1404.1	1424.5	1519.2	1733.0	2121.8	2797.2	3712.3	3902.6	4031.4	4131.7	4188.0
60°	1068.5	1094.0	1192.3	1407.6	1784.3	2498.9	3783.2	4064.7	4269.5	4419.8	4509.1
62.5°	677.4	703.2	805.4	1029.0	1400.2	2091.3	3582.7	3993.4	4342.7	4565.1	4728.8
65°	369.6	381.0	437.8	606.1	944.0	1622.6	3074.5	3558.8	4062.0	4377.2	4628.5
67.5°	277.2	278.8	284.7	325.8	502.8	1095.6	2403.7	2847.4	3406.1	3811.8	4112.1
70°	242.8	242.8	243.5	243.9	272.9	593.6	1628.5	2036.9	2549.0	2959.3	3332.5
72.5°	217.7	215.4	214.6	209.9	213.8	304.2	886.5	1253.4	1685.2	2145.7	2493.8
75°	187.9	187.6	187.6	182.9	185.2	214.2	384.5	601.4	936.2	1364.9	1707.6
77.5°	162.5	159.8	160.1	157.4	164.8	164.1	182.5	247.9	407.6	716.9	1001.2
80°	133.9	132.0	133.1	131.6	143.3	121.4	122.9	151.5	202.4	314.4	443.2
82.5°	99.1	99.8	107.3	106.5	120.6	81.8	90.1	113.2	136.3	156.6	170.3
85°	57.9	59.1	77.1	81.1	88.5	43.1	55.2	67.3	76.0	84.2	87.7
87.5°	6.3	8.2	43.1	44.2	39.5	12.9	22.3	28.2	30.1	32.1	28.2
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):

	67.5°	70°	72.5°	75°	77.5°	80°	85°	90°	95°	100°	102.5°
0°	533.3	533.3	533.3	533.3	533.3	533.3	533.3	533.3	533.3	533.3	533.3
2.5°	574.4	569.3	563.8	560.7	555.2	550.5	541.9	534.9	527.0	521.5	519.2
5°	641.8	629.6	616.7	607.3	595.5	585.4	565.8	542.3	534.9	519.2	515.3
7.5°	729.5	707.5	685.6	667.6	647.2	630.4	597.5	555.2	549.7	524.7	519.2
10°	832.4	800.3	767.8	740.0	710.3	684.4	635.9	576.4	570.5	538.4	532.9
12.5°	947.6	908.4	866.5	825.0	789.8	753.3	687.2	609.3	599.9	561.9	554.4
15°	1066.2	1023.9	975.4	925.2	881.8	833.6	750.2	652.3	635.1	590.5	580.3
17.5°	1183.3	1137.5	1086.6	1030.6	979.7	922.1	818.3	700.5	670.7	618.7	605.7
20°	1296.4	1249.8	1196.2	1141.4	1077.9	1012.2	888.0	747.9	702.4	642.1	625.3
22.5°	1399.4	1359.5	1305.8	1242.8	1178.6	1104.6	958.9	795.2	730.2	660.2	638.6
25°	1507.9	1471.5	1418.2	1357.5	1282.7	1200.5	1032.1	840.3	752.6	669.9	643.3
27.5°	1617.5	1586.2	1536.1	1472.2	1392.0	1300.7	1106.5	881.8	770.6	673.1	641.0
30°	1734.6	1710.3	1664.1	1592.8	1511.8	1410.8	1187.6	922.5	781.9	668.8	630.4
32.5°	1845.4	1844.6	1803.5	1729.5	1642.2	1531.0	1272.9	963.6	787.8	656.6	612.0
35°	1960.5	1976.6	1945.6	1875.1	1783.1	1659.8	1367.3	1007.5	788.2	635.1	588.1
37.5°	2091.3	2119.9	2106.2	2039.2	1942.5	1806.6	1478.1	1056.8	785.8	605.3	553.3
40°	2240.1	2279.2	2278.8	2222.4	2119.1	1971.1	1606.9	1112.0	780.4	568.1	512.1
42.5°	2410.4	2457.0	2469.9	2414.3	2309.8	2150.8	1754.5	1172.7	771.7	531.3	468.7
45°	2605.4	2646.5	2670.8	2619.1	2514.2	2346.6	1924.1	1241.6	761.2	484.0	419.0
47.5°	2814.1	2861.8	2898.3	2854.0	2742.0	2569.8	2124.9	1330.5	757.3	429.9	365.3
50°	3072.9	3122.2	3200.9	3181.0	3119.5	2980.9	2549.8	1540.4	758.8	378.6	320.3
52.5°	3715.0	3828.2	3927.7	3883.4	3737.4	3499.7	2895.1	1657.0	725.9	336.7	289.0
55°	3908.9	4037.3	4184.1	4165.7	4025.5	3785.9	3168.0	1754.5	694.2	306.2	268.6
57.5°	4247.9	4399.5	4604.6	4600.7	4428.8	4159.1	3519.3	1871.2	680.5	288.6	258.4
60°	4607.0	4800.0	5083.5	5127.8	4941.0	4660.2	3934.3	2014.5	682.5	278.8	252.6
62.5°	4869.3	5152.4	5564.7	5697.1	5477.0	5167.7	4365.0	2157.8	670.7	267.4	245.5
65°	4885.4	5293.0	5878.0	6083.9	5861.1	5463.7	4516.9	2129.6	600.2	252.2	234.1
67.5°	4493.8	5024.8	5735.4	5961.4	5733.5	5281.2	4250.7	1861.8	487.9	225.5	214.6
70°	3742.8	4359.1	5096.8	5348.6	5160.3	4702.5	3699.4	1487.1	364.5	190.3	185.2
72.5°	2892.4	3467.2	4137.1	4370.1	4226.0	3823.5	2917.8	1083.8	260.4	154.3	150.4
75°	2067.8	2557.2	3043.5	3132.4	2990.3	2620.7	1893.2	677.0	182.5	126.5	121.0
77.5°	1280.4	1598.7	1773.3	1659.0	1477.7	1228.3	770.6	334.4	121.4	103.0	97.5
80°	568.1	666.8	622.6	554.8	438.1	360.2	235.3	148.4	78.3	79.5	76.4
82.5°	191.1	202.0	196.6	195.4	176.2	154.3	99.8	64.2	43.9	50.9	49.7
85°	93.2	97.5	97.9	101.4	88.1	68.5	27.0	25.5	18.8	27.4	28.6
87.5°	28.2	28.6	25.8	28.2	22.7	15.7	5.1	7.0	3.5	6.7	6.7
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°	533.3	533.3	533.3	533.3	533.3	533.3	533.3	533.3	533.3	533.3	533.3
2.5°	514.9	513.3	510.6	507.5	506.7	502.8	501.6	499.6	498.4	496.5	494.9
5°	510.2	507.5	504.3	500.8	500.8	495.3	493.0	490.6	490.6	487.1	485.5
7.5°	514.9	511.4	507.8	504.7	505.9	499.6	497.3	494.9	494.5	491.0	489.4
10°	528.2	524.7	520.4	517.2	516.1	511.0	508.2	504.7	502.4	500.0	497.7
12.5°	548.6	543.9	538.4	531.7	529.0	524.7	520.4	515.7	510.2	507.8	504.3
15°	572.8	565.0	557.6	549.3	541.9	537.6	531.7	524.3	516.8	513.7	509.0
17.5°	592.8	584.6	574.0	564.2	550.9	547.4	539.2	530.2	518.0	516.8	509.8
20°	609.6	597.1	584.2	572.4	552.1	550.1	539.9	529.4	512.1	512.1	503.5
22.5°	619.0	601.8	586.5	570.9	545.4	543.9	532.1	519.6	498.4	499.2	488.7
25°	620.6	599.9	580.7	561.9	532.5	529.8	514.9	501.2	478.1	476.5	465.6
27.5°	614.3	590.1	567.7	545.0	513.3	507.5	491.0	474.6	451.9	447.9	436.2
30°	599.9	571.3	546.2	520.0	486.7	477.3	460.1	443.2	420.1	415.0	404.1
32.5°	576.8	544.3	516.5	490.2	453.4	441.7	424.4	407.6	385.3	381.4	371.2
35°	546.2	509.8	480.4	452.6	415.8	403.7	387.2	372.4	352.0	350.4	343.4
37.5°	507.8	469.9	438.5	411.9	377.1	370.8	354.0	343.0	326.2	327.7	324.2
40°	464.4	425.6	395.9	372.4	342.2	336.7	326.6	318.3	303.8	308.2	308.5
42.5°	420.5	381.8	354.7	333.6	307.8	304.2	297.2	292.5	281.5	290.1	293.7
45°	370.8	334.8	311.7	295.6	276.4	276.4	272.9	272.5	265.1	277.2	280.7
47.5°	322.6	294.4	278.4	268.6	255.3	261.6	260.4	263.5	258.0	270.6	273.7
50°	286.2	266.6	256.9	252.2	242.8	252.6	254.9	259.2	254.5	265.5	267.8
52.5°	263.1	250.2	244.7	243.5	236.9	249.0	252.9	256.9	251.4	261.6	261.2
55°	250.2	241.6	239.6	242.0	236.9	248.6	252.6	255.3	250.6	257.6	257.2
57.5°	245.5	240.8	242.0	245.5	242.0	251.8	253.7	256.9	252.2	255.3	256.9
60°	245.1	245.1	249.8	254.5	252.2	259.2	260.4	260.0	255.7	256.1	256.9
62.5°	242.8	248.6	256.5	263.9	263.1	271.7	272.5	267.4	263.9	260.0	258.8
65°	235.3	245.1	256.5	266.6	268.2	281.5	283.1	278.0	275.7	269.0	263.9
67.5°	218.9	231.4	244.7	257.2	260.0	278.0	281.5	283.5	284.7	280.4	273.7
70°	191.1	204.0	217.7	232.2	236.1	256.1	263.5	272.5	279.6	285.8	283.5
72.5°	155.4	167.2	178.9	192.3	198.1	218.9	228.7	244.3	255.3	271.3	278.0
75°	123.3	130.4	137.4	145.7	150.4	170.7	182.9	201.6	216.5	238.8	253.7
77.5°	97.1	100.6	104.2	107.7	109.6	121.0	130.8	149.6	166.8	195.0	216.9
80°	74.8	76.7	77.1	78.3	77.5	83.0	86.5	97.9	112.8	140.6	166.4
82.5°	48.2	49.7	50.5	52.5	48.6	55.6	57.9	59.1	67.0	87.3	105.7
85°	27.0	27.4	27.8	28.6	23.1	30.1	30.5	28.6	27.8	36.0	40.7
87.5°	6.7	6.3	6.7	6.7	2.7	6.3	6.3	4.3	3.1	5.9	4.7
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):

	135°	145°	155°	165°	175°	180°
0°	533.3	533.3	533.3	533.3	533.3	533.3
2.5°	491.4	490.6	491.0	489.0	488.3	488.7
5°	483.6	482.0	482.0	480.8	479.3	479.3
7.5°	487.1	484.0	482.8	480.4	478.1	478.5
10°	492.6	487.1	483.2	479.7	476.9	476.9
12.5°	496.1	486.3	480.4	475.7	472.6	472.6
15°	496.9	482.0	473.4	468.3	465.2	465.2
17.5°	492.2	473.4	462.4	455.8	452.2	453.0
20°	480.4	457.3	444.4	437.4	433.8	434.2
22.5°	462.0	435.4	420.5	412.3	408.8	408.8
25°	437.0	408.0	391.9	385.3	382.2	382.2
27.5°	408.4	378.6	364.5	359.4	357.5	357.5
30°	376.3	351.6	341.4	337.9	334.8	334.8
32.5°	349.3	331.6	328.1	323.4	315.2	314.8
35°	327.7	325.8	323.0	308.9	297.2	295.6
37.5°	316.0	327.7	310.5	286.2	276.8	276.4
40°	309.7	320.7	290.9	279.2	278.0	278.0
42.5°	294.8	302.7	289.7	283.1	283.1	283.5
45°	279.2	285.8	292.5	286.6	288.6	289.0
47.5°	268.2	281.5	292.5	287.4	291.3	293.7
50°	258.0	277.6	286.6	286.6	290.9	291.3
52.5°	255.7	272.1	281.1	285.4	285.8	283.9
55°	256.1	267.8	276.8	282.3	280.0	280.0
57.5°	255.7	265.5	273.3	275.3	276.4	276.4
60°	256.1	262.3	268.6	267.8	271.7	271.7
62.5°	257.2	258.0	261.2	260.4	266.3	266.3
65°	260.0	252.6	250.6	251.4	258.4	258.0
67.5°	265.1	245.1	238.8	239.2	249.4	247.9
70°	272.5	234.9	225.5	223.2	240.4	237.7
72.5°	274.9	223.2	208.3	206.0	216.1	208.3
75°	263.9	213.8	189.9	182.1	177.8	175.4
77.5°	235.3	207.9	170.7	154.3	147.6	146.0
80°	195.0	195.8	145.7	126.1	146.4	146.0
82.5°	147.2	169.2	116.7	109.2	106.1	88.5
85°	71.3	127.3	89.7	75.2	45.0	42.7
87.5°	6.3	53.3	51.7	33.7	15.3	14.5
90°	0.0	0.0	0.0	0.0	0.0	0.0

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