

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: P271264

Luminaire Tested: **XNV-AF-01-LED-U-T2R-7027-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P271264
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-7027-1200
Description: XNV ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 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: 6041 lumens
Efficiency: N/A
Efficacy: 91.5 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

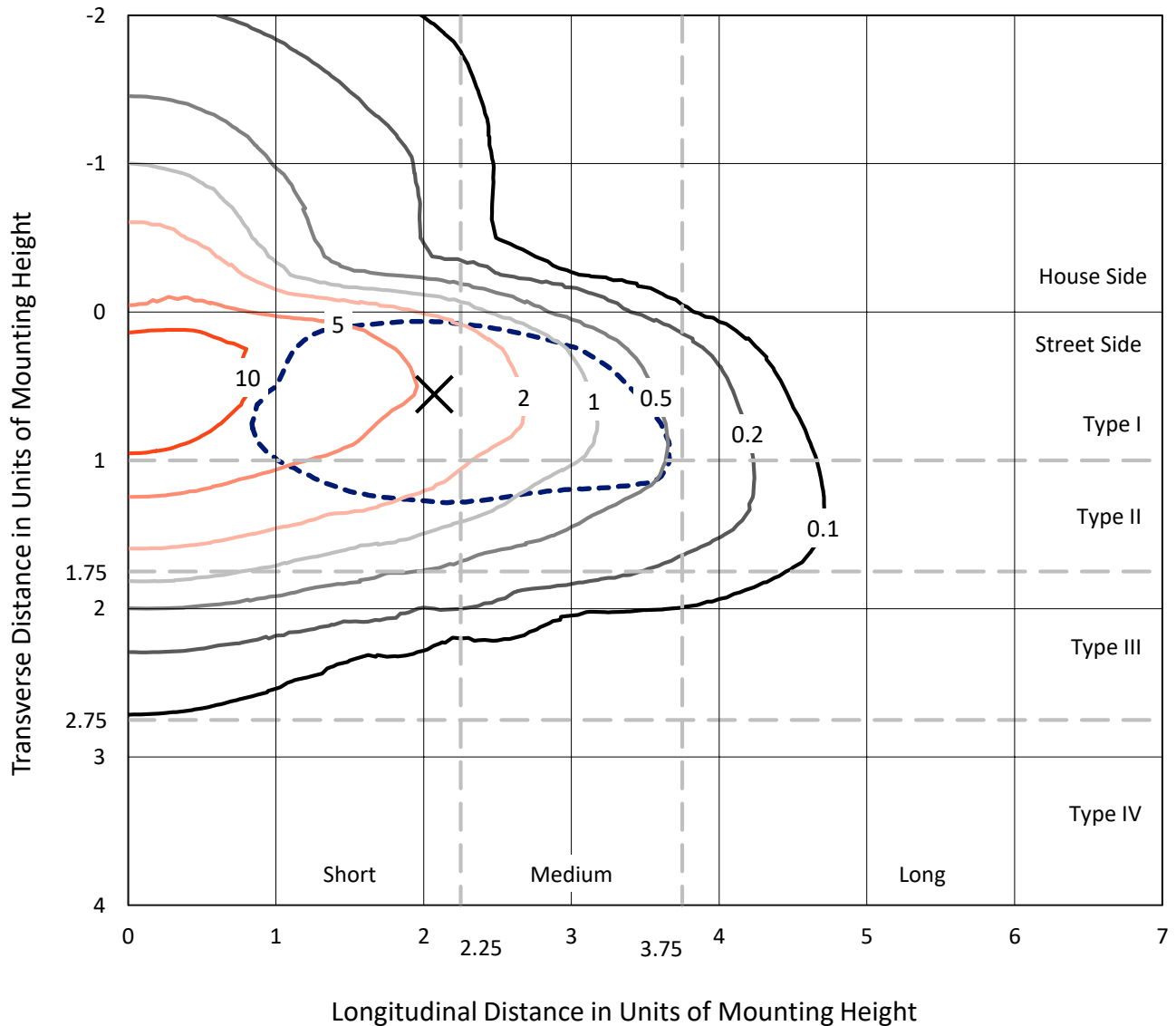


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

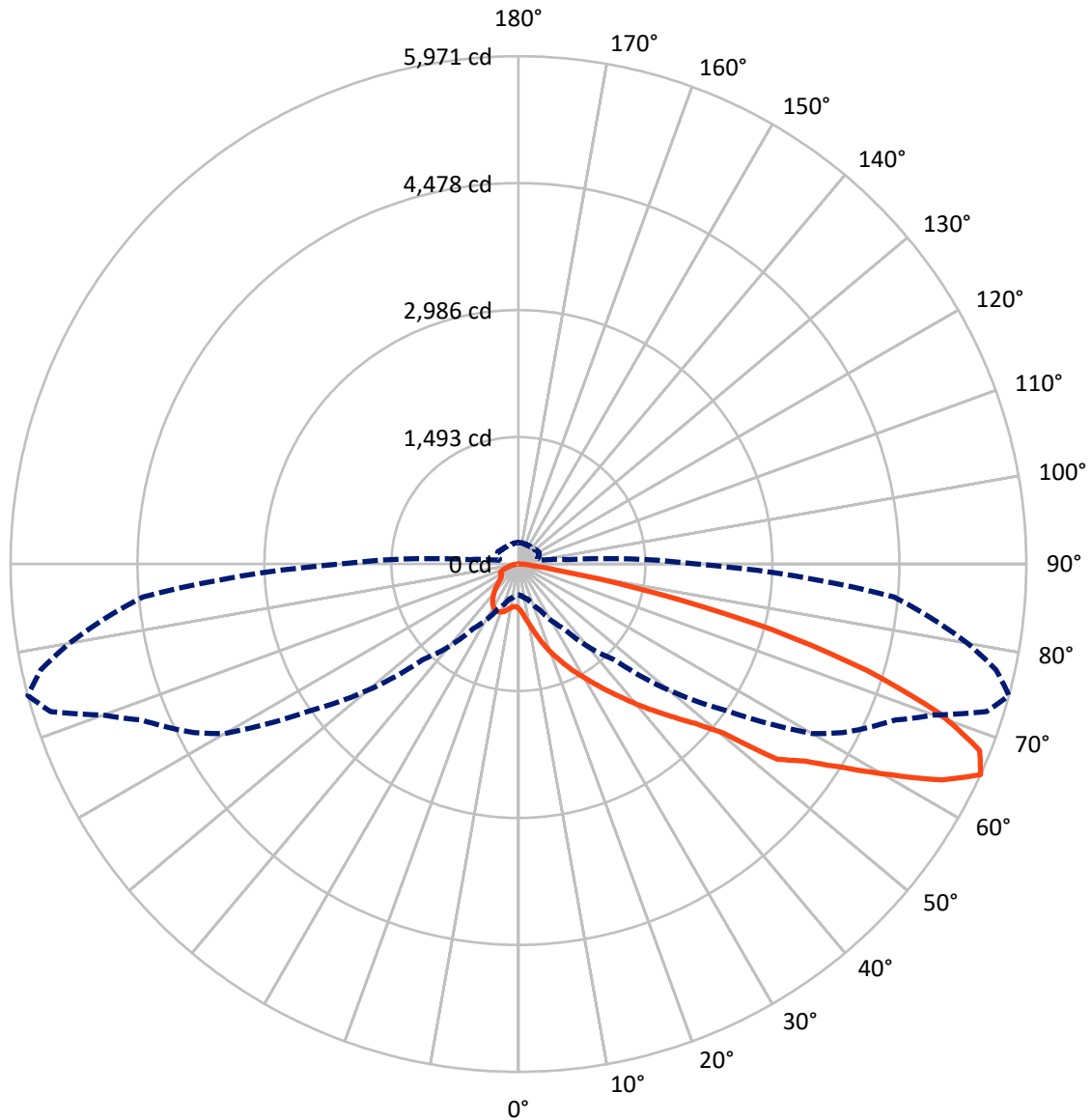


Based on 10 foot mounting height. Maximum calculated value = 15 fc
 Type II - Short - Semi-Cutoff

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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	907.8	0.0	907.8
	% Fixture	15.0	0.0	15.0
Street Side	Lumens	5133.3	0.0	5133.3
	% Fixture	85.0	0.0	85.0
Total	Lumens	6041.0	0.0	6041.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.8	1.0
10°-20°	236.0	3.9
20°-30°	476.3	7.9
30°-40°	808.9	13.4
40°-50°	1128.2	18.7
50°-60°	1382.8	22.9
60°-70°	1301.0	21.5
70°-80°	570.5	9.4
80°-90°	75.5	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°	6041.0	100.0
0°-180°	6041.0	100.0

Coefficient of Utilization



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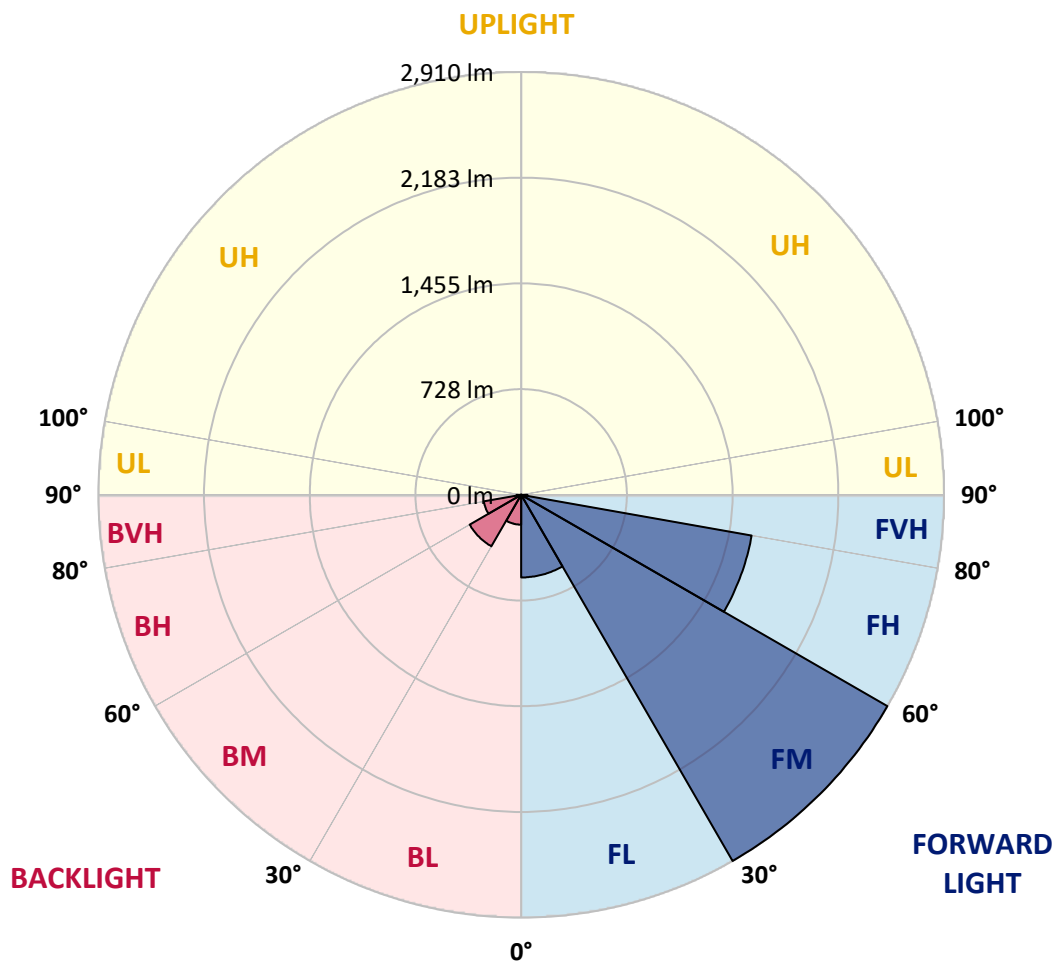
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	568.6	9.4			
FM (30°-60°)	2910.3	48.2			
FH (60°-80°)	1610.6	26.7			G1/1800
FVH (80°-90°)	43.8	0.7			G1/100
BL (0°-30°)	205.5	3.4	B1/500		
BM (30°-60°)	409.6	6.8	B1/1000		
BH (60°-80°)	260.9	4.3	B1/500		G1/500
BVH (80°-90°)	31.7	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°	523.4	523.4	523.4	523.4	523.4	523.4	523.4	523.4	523.4	523.4	523.4
2.5°	659.0	651.5	652.2	641.4	625.6	608.3	594.0	586.5	579.9	578.0	567.2
5°	862.0	852.4	848.9	824.4	787.5	743.6	700.1	683.3	669.4	661.1	640.2
7.5°	1028.0	1023.0	1018.4	995.7	959.2	903.1	833.2	808.1	785.1	759.7	734.8
10°	1140.9	1139.1	1137.2	1121.4	1091.0	1042.3	966.8	939.5	910.8	878.5	845.8
12.5°	1226.2	1226.2	1227.9	1214.8	1196.4	1158.6	1090.3	1064.9	1035.7	1001.9	964.6
15°	1283.6	1285.0	1293.2	1297.1	1287.5	1263.1	1203.2	1180.9	1153.2	1119.8	1082.9
17.5°	1321.5	1324.7	1336.6	1349.3	1361.7	1353.1	1308.6	1287.8	1262.7	1232.0	1197.5
20°	1410.0	1406.1	1406.6	1402.8	1420.8	1427.2	1402.8	1385.4	1365.5	1337.3	1305.9
22.5°	1595.6	1588.4	1569.5	1521.5	1499.5	1497.2	1482.7	1473.4	1457.9	1440.3	1408.8
25°	1837.8	1829.3	1791.9	1712.8	1647.5	1587.1	1560.3	1554.4	1544.5	1532.6	1510.0
27.5°	2087.9	2078.7	2030.7	1930.7	1845.4	1723.6	1639.9	1632.1	1622.9	1617.8	1607.2
30°	2308.1	2298.1	2250.9	2149.4	2046.3	1901.2	1747.1	1720.2	1704.4	1705.9	1699.8
32.5°	2501.4	2492.5	2439.5	2336.1	2231.6	2090.5	1886.1	1844.3	1808.8	1795.8	1800.5
35°	2663.6	2655.5	2597.4	2493.3	2388.1	2270.8	2065.3	2002.2	1944.7	1908.4	1904.1
37.5°	2758.9	2754.3	2713.5	2625.1	2520.6	2434.5	2265.9	2195.8	2110.9	2058.2	2035.3
40°	2753.6	2758.5	2751.6	2711.7	2630.5	2567.8	2474.9	2405.8	2322.7	2244.3	2197.4
42.5°	2675.2	2682.0	2713.2	2733.9	2712.1	2674.0	2657.5	2606.0	2531.3	2448.4	2383.5
45°	2567.5	2573.6	2614.0	2688.9	2751.6	2762.4	2817.4	2791.6	2728.5	2657.8	2586.3
47.5°	2402.6	2414.6	2461.4	2580.7	2729.7	2833.4	2951.4	2963.4	2926.9	2868.4	2801.5
50°	2163.9	2179.7	2245.5	2415.0	2646.6	2906.5	3150.9	3196.2	3181.6	3122.5	3054.7
52.5°	1919.6	1935.4	2023.0	2203.3	2513.0	2936.4	3347.3	3463.3	3547.0	3608.2	3620.1
55°	1665.2	1682.9	1779.0	1986.4	2334.7	2898.4	3487.5	3619.4	3704.3	3768.1	3793.8
57.5°	1378.1	1398.1	1491.0	1700.9	2082.5	2745.4	3643.5	3830.4	3956.8	4055.2	4110.5
60°	1048.7	1073.7	1170.2	1381.6	1751.2	2452.6	3713.1	3989.5	4190.5	4337.9	4425.6
62.5°	664.8	690.2	790.5	1010.0	1374.2	2052.5	3516.3	3919.5	4262.3	4480.6	4641.3
65°	362.7	374.0	429.7	594.9	926.5	1592.5	3017.5	3492.9	3986.8	4296.1	4542.8
67.5°	272.0	273.7	279.5	319.7	493.4	1075.4	2359.2	2794.6	3343.0	3741.3	4035.9
70°	238.3	238.3	238.9	239.4	267.9	582.6	1598.4	1999.2	2501.8	2904.5	3270.8
72.5°	213.6	211.5	210.7	206.0	209.8	298.5	870.1	1230.1	1654.0	2105.9	2447.6
75°	184.4	184.2	184.2	179.5	181.7	210.3	377.4	590.2	918.8	1339.6	1676.0
77.5°	159.4	156.8	157.2	154.5	161.8	161.1	179.1	243.4	400.0	703.6	982.7
80°	131.4	129.5	130.7	129.1	140.7	119.1	120.6	148.7	198.6	308.6	435.0
82.5°	97.2	97.9	105.3	104.6	118.3	80.3	88.5	111.1	133.8	153.7	167.2
85°	56.9	58.0	75.6	79.6	86.9	42.3	54.2	66.0	74.6	82.6	86.1
87.5°	6.2	8.1	42.3	43.4	38.7	12.7	21.9	27.7	29.6	31.5	27.7
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):

	67.5°	70°	72.5°	75°	77.5°	80°	85°	90°	95°	100°	102.5°
0°	523.4	523.4	523.4	523.4	523.4	523.4	523.4	523.4	523.4	523.4	523.4
2.5°	563.7	558.7	553.4	550.3	544.9	540.3	531.8	525.0	517.2	511.9	509.6
5°	629.9	617.9	605.3	596.0	584.4	574.6	555.3	532.2	525.0	509.6	505.7
7.5°	715.9	694.4	672.9	655.3	635.2	618.8	586.5	544.9	539.5	515.0	509.6
10°	817.0	785.5	753.6	726.3	697.2	671.8	624.1	565.8	560.0	528.5	523.1
12.5°	930.0	891.6	850.4	809.7	775.1	739.3	674.4	598.0	588.7	551.5	544.2
15°	1046.4	1004.9	957.4	908.0	865.4	818.1	736.3	640.2	623.3	579.5	569.5
17.5°	1161.4	1116.5	1066.5	1011.5	961.5	905.0	803.2	687.6	658.3	607.3	594.5
20°	1272.4	1226.6	1174.1	1120.2	1057.9	993.4	871.5	734.0	689.4	630.3	613.7
22.5°	1373.5	1334.3	1281.6	1219.8	1156.7	1084.2	941.2	780.4	716.7	647.9	626.7
25°	1480.0	1444.2	1392.0	1332.4	1259.0	1178.2	1013.0	824.7	738.6	657.5	631.4
27.5°	1587.6	1556.9	1507.6	1445.0	1366.2	1276.6	1086.1	865.4	756.4	660.7	629.2
30°	1702.5	1678.7	1633.3	1563.3	1483.8	1384.6	1165.6	905.4	767.4	656.4	618.8
32.5°	1811.3	1810.4	1770.1	1697.4	1611.7	1502.7	1249.4	945.7	773.3	644.4	600.6
35°	1924.2	1940.0	1909.5	1840.4	1750.1	1629.0	1342.0	988.9	773.6	623.3	577.3
37.5°	2052.5	2080.7	2067.2	2001.5	1906.6	1773.2	1450.8	1037.3	771.3	594.0	543.0
40°	2198.6	2237.0	2236.6	2181.3	2079.8	1934.6	1577.2	1091.4	766.0	557.6	502.6
42.5°	2365.7	2411.5	2424.2	2369.5	2267.1	2110.9	1722.1	1151.0	757.5	521.5	460.0
45°	2557.1	2597.4	2621.3	2570.6	2467.6	2303.2	1888.4	1218.6	747.1	475.1	411.2
47.5°	2762.0	2808.8	2844.7	2801.2	2691.2	2522.3	2085.5	1305.9	743.3	421.9	358.6
50°	3016.0	3064.4	3141.6	3122.1	3061.8	2925.7	2502.6	1511.8	744.8	371.5	314.3
52.5°	3646.2	3757.3	3854.9	3811.5	3668.1	3434.8	2841.5	1626.3	712.4	330.4	283.7
55°	3836.5	3962.6	4106.6	4088.5	3950.9	3715.7	3109.4	1722.1	681.4	300.6	263.7
57.5°	4169.3	4318.1	4519.4	4515.5	4346.8	4082.1	3454.2	1836.6	667.9	283.2	253.6
60°	4521.7	4711.2	4989.4	5032.8	4849.5	4573.9	3861.5	1977.2	669.9	273.7	247.9
62.5°	4779.2	5057.0	5461.6	5591.6	5375.5	5072.0	4284.1	2117.8	658.3	262.5	240.9
65°	4795.0	5195.0	5769.2	5971.3	5752.6	5362.5	4433.2	2090.1	589.1	247.6	229.7
67.5°	4410.6	4931.8	5629.1	5851.0	5627.3	5183.4	4172.0	1827.3	478.8	221.3	210.7
70°	3673.4	4278.4	5002.4	5249.5	5064.7	4615.4	3630.9	1459.6	357.7	186.8	181.7
72.5°	2838.9	3403.0	4060.5	4289.1	4147.7	3752.7	2863.7	1063.8	255.6	151.5	147.6
75°	2029.5	2509.9	2987.1	3074.4	2934.9	2572.1	1858.1	664.4	179.1	124.1	118.8
77.5°	1256.6	1569.1	1740.5	1628.3	1450.4	1205.5	756.4	328.2	119.1	101.1	95.7
80°	557.6	654.4	611.0	544.6	430.0	353.6	231.0	145.6	76.8	78.1	75.0
82.5°	187.6	198.3	193.0	191.8	173.0	151.5	97.9	63.1	43.1	49.9	48.8
85°	91.4	95.7	96.1	99.5	86.4	67.3	26.5	25.1	18.4	26.9	28.0
87.5°	27.7	28.0	25.3	27.7	22.3	15.5	5.0	6.8	3.5	6.6	6.6
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°	523.4	523.4	523.4	523.4	523.4	523.4	523.4	523.4	523.4	523.4	523.4
2.5°	505.3	503.8	501.2	498.1	497.3	493.4	492.4	490.4	489.1	487.3	485.8
5°	500.7	498.1	495.0	491.6	491.6	486.2	483.8	481.5	481.5	478.1	476.6
7.5°	505.3	502.0	498.4	495.3	496.6	490.4	488.0	485.8	485.4	481.9	480.4
10°	518.4	515.0	510.7	507.6	506.6	501.6	498.7	495.3	493.1	490.7	488.5
12.5°	538.4	533.9	528.5	521.8	519.2	515.0	510.7	506.1	500.7	498.4	495.0
15°	562.2	554.6	547.2	539.2	531.8	527.7	521.8	514.5	507.3	504.2	499.5
17.5°	581.8	573.7	563.3	553.7	540.7	537.2	529.2	520.4	508.4	507.3	500.4
20°	598.4	586.1	573.4	561.8	541.9	539.9	529.9	519.6	502.6	502.6	494.2
22.5°	607.6	590.6	575.6	560.4	535.3	533.9	522.3	510.0	489.1	489.9	479.6
25°	609.1	588.7	570.0	551.5	522.6	519.9	505.3	491.9	469.3	467.7	457.0
27.5°	602.9	579.1	557.2	534.9	503.8	498.1	481.9	465.9	443.6	439.6	428.1
30°	588.7	560.7	536.1	510.3	477.7	468.5	451.6	435.0	412.3	407.3	396.6
32.5°	566.1	534.2	507.0	481.1	445.0	433.5	416.5	400.0	378.1	374.4	364.4
35°	536.1	500.4	471.5	444.2	408.1	396.2	380.1	365.5	345.5	344.0	337.0
37.5°	498.4	461.2	430.4	404.2	370.1	364.0	347.5	336.7	320.2	321.7	318.2
40°	455.8	417.7	388.5	365.5	335.8	330.4	320.5	312.4	298.1	302.5	302.8
42.5°	412.7	374.8	348.2	327.4	302.1	298.5	291.7	287.1	276.3	284.8	288.3
45°	364.0	328.6	306.0	290.2	271.3	271.3	267.9	267.4	260.1	272.0	275.5
47.5°	316.7	289.0	273.3	263.7	250.5	256.7	255.6	258.6	253.2	265.5	268.7
50°	280.9	261.6	252.2	247.6	238.3	247.9	250.2	254.4	249.8	260.6	262.8
52.5°	258.3	245.5	240.1	238.9	232.5	244.3	248.2	252.2	246.8	256.7	256.3
55°	245.5	237.2	235.1	237.5	232.5	244.0	247.9	250.5	246.0	252.9	252.5
57.5°	240.9	236.3	237.5	240.9	237.5	247.2	249.0	252.2	247.6	250.5	252.2
60°	240.6	240.6	245.1	249.8	247.6	254.4	255.6	255.2	250.9	251.3	252.2
62.5°	238.3	244.0	251.7	259.0	258.3	266.6	267.4	262.5	259.0	255.2	254.0
65°	231.0	240.6	251.7	261.6	263.3	276.3	277.8	272.8	270.6	264.0	259.0
67.5°	214.9	227.1	240.1	252.5	255.2	272.8	276.3	278.3	279.5	275.2	268.7
70°	187.6	200.2	213.6	227.9	231.8	251.3	258.6	267.4	274.4	280.5	278.3
72.5°	152.5	164.1	175.6	188.7	194.5	214.9	224.4	239.8	250.5	266.3	272.8
75°	121.0	128.0	134.8	143.0	147.6	167.5	179.5	197.8	212.4	234.4	249.0
77.5°	95.3	98.8	102.2	105.7	107.5	118.8	128.4	146.9	163.8	191.3	212.9
80°	73.4	75.3	75.6	76.8	76.0	81.4	84.9	96.1	110.8	138.0	163.3
82.5°	47.3	48.8	49.5	51.6	47.7	54.5	56.9	58.0	65.8	85.7	103.8
85°	26.5	26.9	27.3	28.0	22.6	29.6	30.0	28.0	27.3	35.4	40.0
87.5°	6.6	6.2	6.6	6.6	2.6	6.2	6.2	4.2	3.1	5.7	4.6
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°	523.4	523.4	523.4	523.4	523.4	523.4
2.5°	482.3	481.5	481.9	480.0	479.2	479.6
5°	474.7	473.0	473.0	471.9	470.4	470.4
7.5°	478.1	475.1	473.9	471.5	469.3	469.6
10°	483.5	478.1	474.2	470.8	468.0	468.0
12.5°	486.9	477.3	471.5	466.8	463.9	463.9
15°	487.7	473.0	464.7	459.7	456.6	456.6
17.5°	483.1	464.7	453.9	447.4	443.9	444.7
20°	471.5	448.9	436.1	429.3	425.7	426.2
22.5°	453.5	427.4	412.7	404.6	401.3	401.3
25°	428.9	400.5	384.7	378.1	375.1	375.1
27.5°	400.9	371.5	357.7	352.8	350.9	350.9
30°	369.4	345.0	335.1	331.7	328.6	328.6
32.5°	342.9	325.5	322.0	317.5	309.3	308.9
35°	321.7	319.7	317.0	303.2	291.7	290.2
37.5°	310.2	321.7	304.7	280.9	271.6	271.3
40°	303.9	314.8	285.5	274.1	272.8	272.8
42.5°	289.3	297.1	284.4	277.8	277.8	278.3
45°	274.1	280.5	287.1	281.3	283.2	283.7
47.5°	263.3	276.3	287.1	282.1	285.9	288.3
50°	253.2	272.5	281.3	281.3	285.5	285.9
52.5°	250.9	267.1	275.9	280.1	280.5	278.7
55°	251.3	262.8	271.6	277.0	274.8	274.8
57.5°	250.9	260.6	268.2	270.2	271.3	271.3
60°	251.3	257.5	263.7	262.8	266.6	266.6
62.5°	252.5	253.2	256.3	255.6	261.3	261.3
65°	255.2	247.9	246.0	246.8	253.6	253.2
67.5°	260.1	240.6	234.4	234.7	244.8	243.4
70°	267.4	230.5	221.3	219.0	236.0	233.3
72.5°	269.9	219.0	204.5	202.2	212.1	204.5
75°	259.0	209.8	186.4	178.8	174.5	172.1
77.5°	231.0	204.1	167.5	151.5	144.8	143.3
80°	191.3	192.1	143.0	123.7	143.6	143.3
82.5°	144.4	166.0	114.5	107.2	104.2	86.9
85°	70.0	125.0	88.0	73.8	44.1	42.0
87.5°	6.2	52.3	50.8	33.1	15.0	14.3
90°	0.0	0.0	0.0	0.0	0.0	0.0

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