

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: P196201

Luminaire Tested: **NVN-AF-01-LED-U-SLL-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P196201
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24264)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: NVN-AF-01-LED-U-SLL-600
Description: NAVION ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 615mA LIGHTSQUARE WITH 16 LEDS EACH AND SPILL LIGHT
ELIMINATOR LEFT OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3636.6 lumens
Efficiency: N/A
Efficacy: 107.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U0 - G1

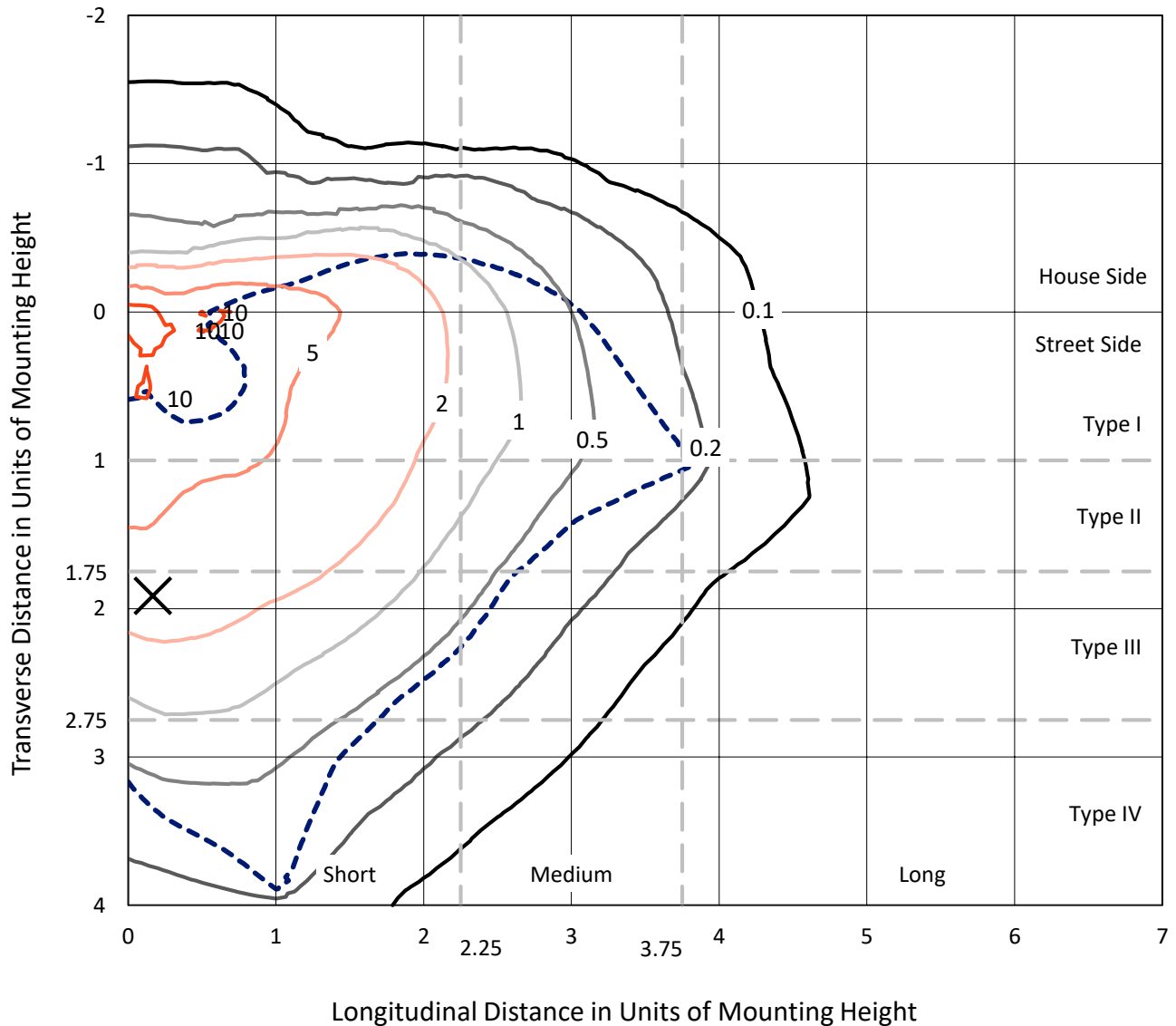
Input Watts (W): 34
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

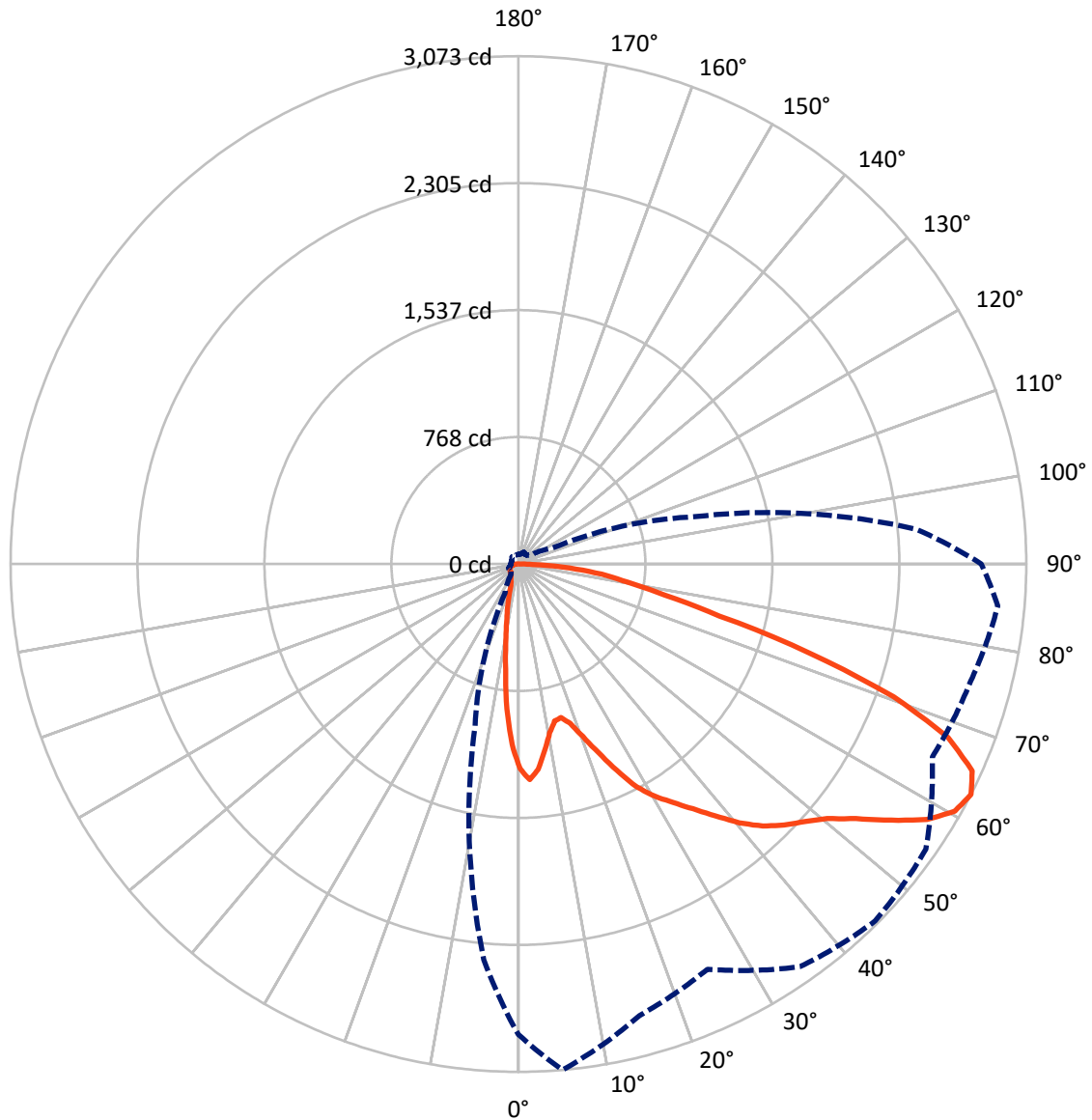
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 14.2 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 5-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	644.2	0.0	644.2
	% Fixture	17.7	0.0	17.7
Street Side	Lumens	2992.4	0.0	2992.4
	% Fixture	82.3	0.0	82.3
Total	Lumens	3636.6	0.0	3636.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.2	2.5
10°-20°	164.7	4.5
20°-30°	236.9	6.5
30°-40°	362.8	10.0
40°-50°	530.4	14.6
50°-60°	771.7	21.2
60°-70°	894.1	24.6
70°-80°	466.1	12.8
80°-90°	119.8	3.3
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°	3636.6	100.0
0°-180°	3636.6	100.0



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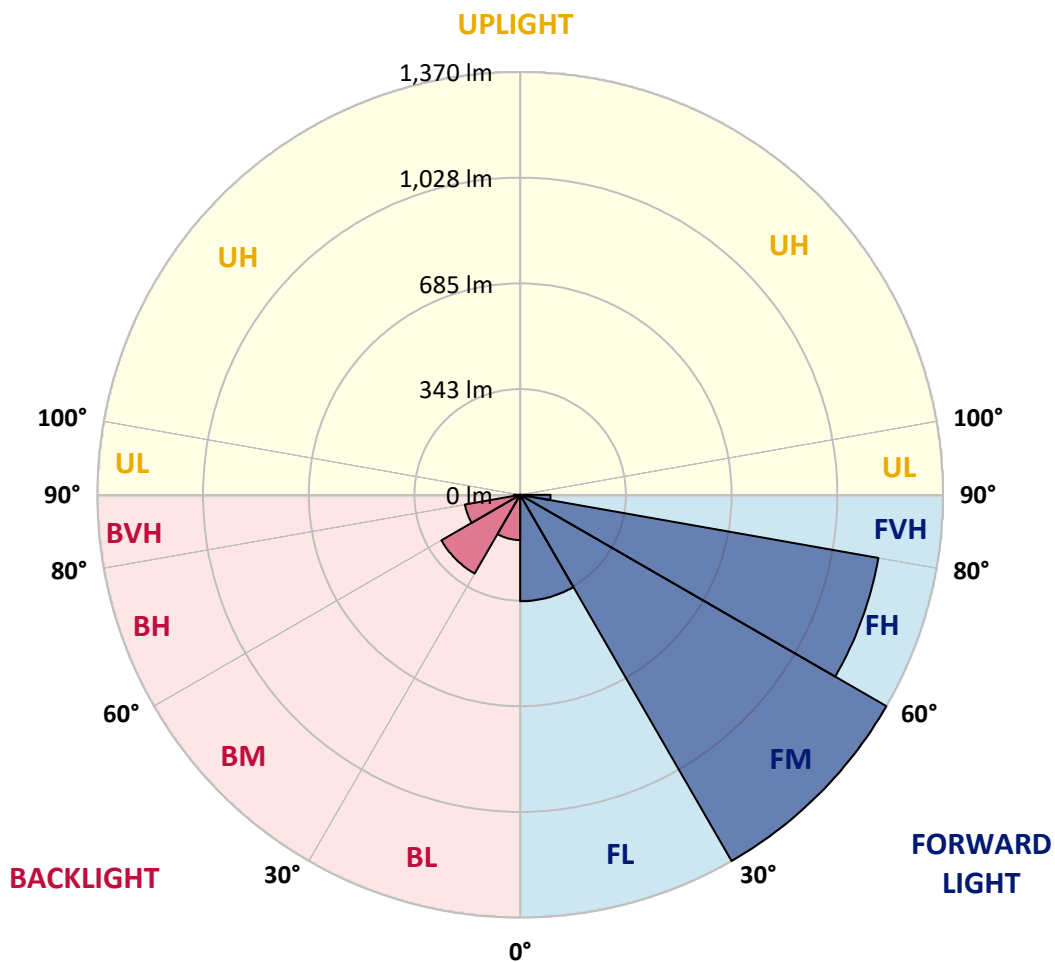
CATALOG NUMBER: NVN-AF-01-LED-U-SLL-600

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	345.1	9.5			
FM	(30°-60°)	1370.1	37.7			
FH	(60°-80°)	1178.6	32.4			G1/1800
FVH	(80°-90°)	98.6	2.7			G1/100
BL	(0°-30°)	146.6	4.0	B1/500		
BM	(30°-60°)	294.8	8.1	B1/1000		
BH	(60°-80°)	181.7	5.0	B1/500		G1/500
BVH	(80°-90°)	21.2	0.6			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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1239.8	1239.8	1239.8	1239.8	1239.8	1239.8	1239.8	1239.8	1239.8	1239.8	1239.8
2.5°	1279.8	1307.0	1338.1	1378.7	1406.5	1417.5	1426.7	1411.2	1396.1	1367.9	1357.9
5°	1195.5	1247.7	1333.4	1414.8	1486.6	1527.7	1540.4	1511.6	1460.5	1386.6	1347.6
7.5°	1070.2	1139.1	1259.6	1379.6	1482.4	1550.9	1555.9	1498.9	1398.3	1277.3	1213.9
10°	960.9	1038.6	1178.1	1312.3	1421.2	1491.4	1477.7	1397.8	1276.1	1138.5	1067.0
12.5°	897.2	975.1	1117.2	1253.5	1356.0	1382.7	1354.8	1287.5	1172.3	1034.4	962.4
15°	883.8	964.0	1095.6	1210.6	1274.1	1256.9	1229.3	1195.2	1113.2	1000.3	930.8
17.5°	924.4	1014.1	1124.3	1187.3	1184.7	1143.6	1120.3	1127.0	1113.0	1037.3	964.5
20°	1008.0	1114.0	1197.4	1181.0	1113.5	1055.8	1042.3	1093.9	1158.6	1129.8	1050.0
22.5°	1118.0	1238.7	1297.0	1199.2	1076.3	1014.1	1011.5	1092.1	1241.7	1269.9	1172.5
25°	1242.2	1382.9	1397.5	1231.3	1072.4	1010.4	1008.0	1120.6	1341.6	1408.5	1309.9
27.5°	1394.1	1528.5	1481.3	1274.3	1089.7	1021.2	1022.7	1169.1	1445.7	1545.7	1464.7
30°	1508.4	1631.9	1533.0	1316.5	1117.7	1040.1	1044.1	1221.6	1501.9	1640.8	1588.3
32.5°	1615.5	1720.2	1582.6	1358.2	1158.6	1068.4	1082.1	1287.0	1569.4	1722.5	1705.2
35°	1733.9	1819.1	1637.6	1402.8	1217.1	1118.0	1137.7	1349.2	1636.3	1804.3	1821.0
37.5°	1868.1	1932.1	1697.5	1465.8	1301.5	1209.7	1220.8	1412.8	1683.1	1894.7	1945.1
40°	2007.8	2059.0	1763.0	1549.9	1424.0	1333.6	1338.9	1494.2	1719.7	1988.3	2065.6
42.5°	2127.8	2167.6	1828.5	1654.3	1564.9	1460.0	1464.5	1582.0	1754.8	2069.0	2162.1
45°	2223.8	2253.0	1890.5	1764.2	1715.2	1617.6	1616.6	1671.4	1801.6	2137.0	2236.2
47.5°	2313.2	2328.7	1959.6	1871.3	1871.0	1820.6	1782.9	1776.9	1864.1	2194.2	2300.8
50°	2415.5	2421.3	2050.8	1979.4	2061.3	2053.5	1983.9	1910.9	1945.1	2258.6	2368.5
52.5°	2557.9	2558.2	2164.0	2084.9	2271.6	2296.6	2215.6	2062.5	2064.8	2383.9	2485.7
55°	2725.3	2736.9	2311.4	2211.1	2491.4	2534.2	2457.9	2242.5	2236.7	2585.8	2675.5
57.5°	2854.7	2916.2	2483.0	2369.1	2696.8	2752.5	2691.1	2429.2	2447.9	2794.1	2832.1
60°	2891.2	3034.9	2654.1	2546.3	2870.6	2954.2	2891.7	2630.9	2654.7	2929.4	2877.2
62.5°	2847.7	3073.1	2828.5	2705.0	2973.7	3053.8	3009.0	2763.0	2823.1	2912.0	2800.9
65°	2718.7	3017.7	2979.8	2772.5	2914.4	2942.8	2931.0	2769.8	2914.6	2747.4	2590.3
67.5°	2417.6	2804.1	2912.2	2628.3	2637.3	2606.7	2591.1	2581.6	2811.8	2482.0	2258.1
70°	1966.2	2409.5	2590.3	2199.5	2133.1	2103.6	2052.4	2179.0	2527.3	2114.6	1858.4
72.5°	1514.6	1843.4	2124.7	1667.5	1529.3	1539.3	1481.3	1666.2	2093.6	1634.8	1418.8
75°	1075.5	1256.9	1696.0	1198.1	1015.2	1014.6	1010.2	1199.2	1651.9	1173.3	1038.1
77.5°	775.2	904.9	1328.6	801.8	720.4	729.6	714.8	815.0	1287.8	844.0	769.2
80°	618.3	670.0	858.8	534.7	536.3	557.9	554.7	557.4	847.2	611.2	575.1
82.5°	444.3	508.6	656.5	409.8	354.7	377.6	382.1	413.5	597.7	432.2	379.2
85°	227.8	310.1	604.1	354.9	221.8	183.8	211.4	326.1	519.1	258.9	184.8
87.5°	44.3	85.9	442.7	197.2	99.6	50.3	83.1	138.2	301.9	47.0	22.9
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	1239.8	1239.8	1239.8	1239.8	1239.8	1239.8	1239.8	1239.8	1239.8	1239.8	1239.8
2.5°	1340.8	1307.0	1275.4	1242.7	1217.4	1186.5	1156.2	1129.8	1104.3	1087.4	1092.6
5°	1308.0	1225.8	1151.9	1083.4	1043.3	995.1	952.2	916.0	888.0	870.1	881.0
7.5°	1159.1	1047.8	950.5	860.1	803.1	740.6	690.6	655.2	633.6	621.4	639.1
10°	1006.7	881.7	772.5	678.4	622.3	569.3	524.0	486.5	457.5	443.8	450.9
12.5°	897.5	758.6	644.2	580.8	532.7	485.2	438.2	394.4	357.5	340.6	337.3
15°	856.7	692.4	575.6	504.9	457.0	405.3	354.7	307.7	272.6	258.1	255.0
17.5°	874.6	678.1	535.0	451.4	381.8	319.1	262.1	217.8	191.9	183.8	184.5
20°	937.6	683.4	502.3	396.3	310.4	236.0	179.0	148.4	137.4	135.5	137.6
22.5°	1024.1	705.0	478.5	348.8	247.3	171.7	133.2	118.7	115.8	115.5	117.6
25°	1138.2	747.3	462.8	306.7	195.4	136.1	116.0	107.8	105.5	106.0	108.1
27.5°	1272.8	800.8	452.5	270.3	160.6	121.3	108.3	101.3	98.9	99.4	101.0
30°	1395.6	847.7	437.2	242.8	144.2	116.0	104.1	97.1	93.9	93.9	94.9
32.5°	1505.6	888.3	419.2	222.3	129.2	104.1	94.4	88.9	86.4	87.3	87.8
35°	1603.2	909.7	405.3	210.1	117.0	96.0	86.2	80.4	77.2	77.7	78.6
37.5°	1699.1	917.8	396.1	203.6	108.3	90.9	82.0	77.2	73.9	73.3	73.0
40°	1790.4	916.0	387.3	201.7	102.6	87.3	79.4	75.2	71.7	70.9	70.7
42.5°	1869.1	909.9	379.2	196.7	98.6	84.6	77.2	73.6	70.2	69.0	68.5
45°	1941.2	906.2	370.2	187.5	100.8	83.6	76.2	72.2	69.0	67.7	67.2
47.5°	2021.0	919.4	360.2	177.5	100.1	83.9	76.2	71.7	68.5	67.2	66.7
50°	2116.3	964.0	347.8	163.8	95.4	89.6	75.9	70.9	68.0	67.2	66.2
52.5°	2250.7	1036.2	330.6	146.1	91.8	95.7	75.7	69.6	67.2	65.9	64.7
55°	2435.0	1108.5	308.5	127.4	85.9	91.5	76.2	68.0	65.4	64.0	62.5
57.5°	2586.1	1163.3	280.6	111.8	80.7	86.4	75.4	66.2	63.3	62.0	60.7
60°	2576.3	1168.6	253.9	101.8	77.5	77.7	77.2	64.9	61.5	60.4	59.3
62.5°	2416.8	1103.5	229.1	96.8	75.2	70.9	78.9	63.3	59.6	58.5	57.7
65°	2151.3	951.9	215.9	96.8	73.0	67.2	68.8	61.2	57.7	56.7	56.2
67.5°	1814.6	765.0	203.6	98.9	70.2	64.7	62.5	59.0	55.9	54.8	54.3
70°	1454.4	602.0	194.9	97.8	67.5	61.7	59.0	56.2	53.0	52.8	52.2
72.5°	1140.9	483.5	190.9	97.8	63.5	58.3	55.6	53.5	50.3	50.1	49.3
75°	914.1	363.0	174.5	96.0	59.6	53.8	51.5	49.6	46.4	46.6	46.1
77.5°	708.0	256.9	145.8	86.4	54.6	48.8	47.0	45.6	41.9	42.1	42.1
80°	553.7	167.2	113.1	71.7	48.8	43.0	41.6	40.6	36.6	37.1	37.1
82.5°	379.4	99.4	82.0	57.7	41.9	36.6	36.4	34.8	30.6	30.9	31.4
85°	207.2	65.4	54.6	42.8	32.9	29.8	29.3	28.4	24.6	24.6	24.8
87.5°	38.3	35.1	32.1	28.2	22.2	21.4	20.6	21.4	18.4	17.9	17.9
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):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	1239.8	1239.8	1239.8	1239.8	1239.8	1239.8	1239.8	1239.8	1239.8	1239.8	1239.8
2.5°	1080.2	1062.0	1049.4	1038.3	1011.7	1013.5	1017.2	1022.5	1005.9	1014.6	1025.4
5°	870.1	855.1	843.7	826.1	788.9	775.7	767.3	763.6	738.8	744.1	755.7
7.5°	641.5	641.3	637.3	617.6	572.6	545.5	527.6	522.1	506.8	512.6	530.2
10°	451.6	456.4	454.6	436.9	396.8	377.3	373.4	384.4	384.7	396.1	426.4
12.5°	326.4	323.8	321.4	306.9	276.8	273.7	282.6	298.0	301.7	313.7	345.5
15°	243.7	237.3	236.0	224.6	204.9	207.8	214.4	222.3	222.5	231.0	257.1
17.5°	182.7	182.7	184.8	177.5	163.3	161.9	158.5	156.3	153.2	156.6	170.8
20°	141.9	148.4	153.7	149.5	136.6	130.2	123.7	119.5	117.0	117.3	121.5
22.5°	121.5	126.8	133.7	131.6	120.8	112.6	108.3	105.5	103.6	103.6	106.0
25°	111.3	114.7	121.0	120.0	110.8	104.1	100.8	97.8	95.7	95.4	97.8
27.5°	103.1	105.2	109.5	108.9	99.4	95.2	93.1	91.2	89.9	89.6	92.1
30°	95.7	96.8	98.9	98.1	90.9	86.7	85.9	85.2	84.4	84.6	88.1
32.5°	89.1	89.9	91.2	90.2	83.4	79.6	78.4	77.2	76.4	77.2	81.2
35°	81.7	84.1	85.7	85.2	77.7	73.3	70.4	67.7	66.7	67.5	72.0
37.5°	75.4	79.4	81.4	80.9	73.3	68.0	64.3	63.8	63.8	64.9	69.4
40°	73.0	75.9	77.7	77.0	69.4	64.0	62.0	61.2	61.5	62.5	67.2
42.5°	70.9	73.6	74.1	72.5	64.9	61.5	60.1	59.0	59.6	60.9	65.7
45°	69.0	71.2	70.9	68.5	61.2	58.8	58.8	58.0	58.3	59.3	64.3
47.5°	67.7	68.8	68.3	65.9	58.5	56.7	57.5	57.5	58.0	58.8	63.8
50°	65.7	66.5	65.9	63.8	56.5	54.8	55.6	56.7	57.2	58.0	62.5
52.5°	63.5	64.0	63.8	61.7	54.3	53.3	53.3	54.3	55.3	56.5	60.4
55°	61.5	62.0	62.2	60.7	52.8	51.7	51.5	51.5	52.5	54.0	58.3
57.5°	59.8	59.8	60.4	59.3	51.1	49.8	48.5	48.8	50.1	51.5	55.6
60°	58.0	58.3	59.0	58.0	49.0	47.0	45.8	47.2	47.8	49.0	53.5
62.5°	56.5	56.5	57.0	56.2	47.2	45.1	44.3	45.6	45.6	47.0	51.5
65°	55.1	54.8	54.8	54.6	45.3	43.3	42.8	43.3	43.5	44.8	49.3
67.5°	54.0	52.8	52.8	53.3	43.5	41.4	41.1	41.1	41.4	43.0	47.0
70°	51.7	50.6	50.3	52.2	41.6	39.0	39.0	38.5	39.0	39.8	44.0
72.5°	49.0	48.3	48.0	50.6	39.8	36.4	35.9	35.6	35.9	36.6	40.6
75°	45.6	45.1	45.6	49.6	38.0	33.5	32.7	32.4	32.4	32.7	36.9
77.5°	41.6	41.1	45.1	46.1	36.9	30.1	29.3	28.7	28.2	28.2	32.9
80°	36.9	36.6	43.5	39.0	35.3	26.4	25.1	24.2	23.7	23.4	28.2
82.5°	32.1	31.6	37.1	30.6	29.3	21.6	19.7	18.2	17.4	17.4	21.6
85°	26.4	26.1	29.3	22.4	20.3	15.9	13.2	11.9	10.8	10.8	14.0
87.5°	19.2	18.7	18.2	13.4	10.3	7.2	5.0	4.7	4.2	4.0	5.8
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):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	1239.8	1239.8	1239.8	1239.8	1239.8	1239.8	1239.8	1239.8
2.5°	1041.5	1063.4	1104.8	1138.7	1184.2	1220.6	1261.9	1279.8
5°	777.0	811.6	874.8	928.9	1003.8	1073.2	1152.3	1195.5
7.5°	557.4	608.6	656.5	724.0	817.6	910.7	1013.0	1070.2
10°	461.1	508.1	549.2	597.2	669.4	774.2	896.2	960.9
12.5°	382.1	432.7	476.2	527.6	588.3	682.9	822.1	897.2
15°	293.0	348.0	400.3	462.2	536.5	644.7	799.9	883.8
17.5°	200.7	259.7	324.1	399.8	489.4	628.6	821.1	924.4
20°	136.4	179.5	249.4	339.1	446.9	620.9	867.5	1008.0
22.5°	112.0	131.6	184.0	282.1	412.1	629.4	942.9	1118.0
25°	102.8	113.3	143.2	232.0	385.4	651.8	1044.9	1242.2
27.5°	97.1	106.0	125.5	196.2	361.0	682.4	1169.1	1394.1
30°	93.6	102.1	118.4	177.7	338.6	708.7	1275.9	1508.4
32.5°	85.9	92.3	105.8	167.2	322.4	730.1	1370.0	1615.5
35°	76.7	84.4	95.4	160.3	321.9	740.1	1458.6	1733.9
37.5°	73.3	80.7	88.9	156.6	325.1	748.6	1567.0	1868.1
40°	71.2	77.7	84.4	156.1	327.8	755.1	1673.0	2007.8
42.5°	69.4	75.9	83.6	152.4	326.7	764.1	1766.8	2127.8
45°	68.8	75.4	85.4	146.9	326.4	778.1	1841.5	2223.8
47.5°	68.3	78.4	84.9	140.8	325.4	807.6	1925.6	2313.2
50°	67.7	83.6	81.2	132.4	317.4	857.9	2038.7	2415.5
52.5°	67.5	84.4	77.2	120.8	303.2	932.6	2204.3	2557.9
55°	66.5	80.2	70.4	105.5	282.6	1013.0	2381.7	2725.3
57.5°	64.0	71.5	66.5	90.4	253.1	1069.2	2512.8	2854.7
60°	69.9	61.5	63.8	82.8	217.8	1079.2	2518.6	2891.2
62.5°	66.7	55.9	61.2	80.2	193.0	1013.8	2403.3	2847.7
65°	53.3	53.0	58.8	82.8	189.3	867.5	2208.8	2718.7
67.5°	48.5	50.8	56.5	85.9	191.7	683.4	1922.4	2417.6
70°	45.3	48.3	53.3	88.9	195.9	538.4	1547.7	1966.2
72.5°	42.1	44.6	50.1	91.8	193.0	424.7	1238.7	1514.6
75°	38.3	40.3	45.6	84.1	165.6	312.2	984.3	1075.5
77.5°	33.8	35.6	40.1	66.5	124.5	217.3	737.2	775.2
80°	29.1	29.8	33.2	48.5	81.2	130.0	561.1	618.3
82.5°	22.9	23.2	25.3	35.6	50.6	83.1	389.1	444.3
85°	14.7	15.2	16.4	25.1	34.1	53.3	198.8	227.8
87.5°	5.0	5.8	5.8	12.2	16.6	29.6	60.9	44.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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