

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: P271333

Luminaire Tested: **XNV2-AF-02-LED-U-SLR-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P271333
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: XNV2-AF-02-LED-U-SLR-7027
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT
ELIMINATOR RIGHT OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9252.4 lumens
Efficiency: N/A
Efficacy: 83.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U0 - G3

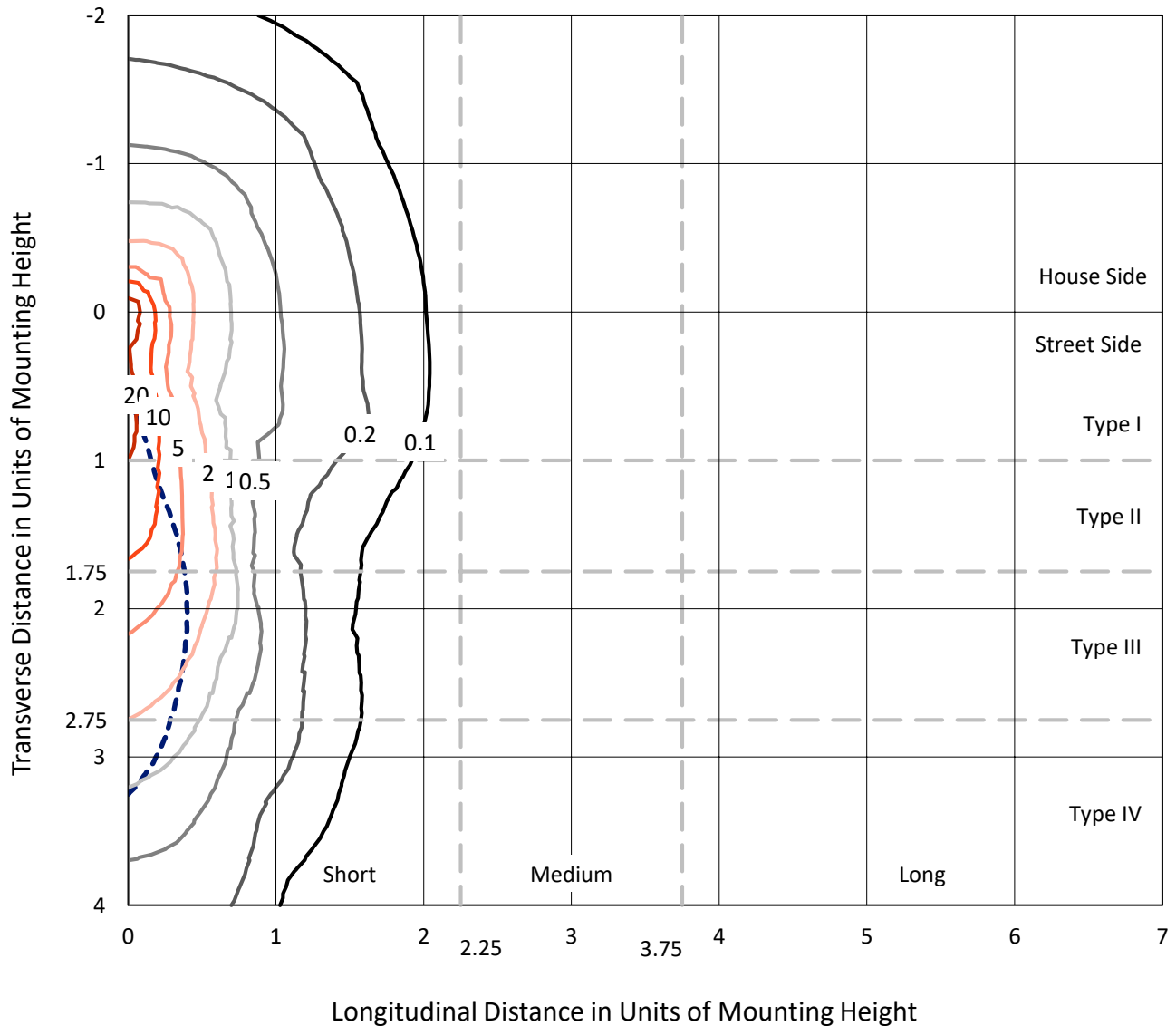
Input Watts (W): 111
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

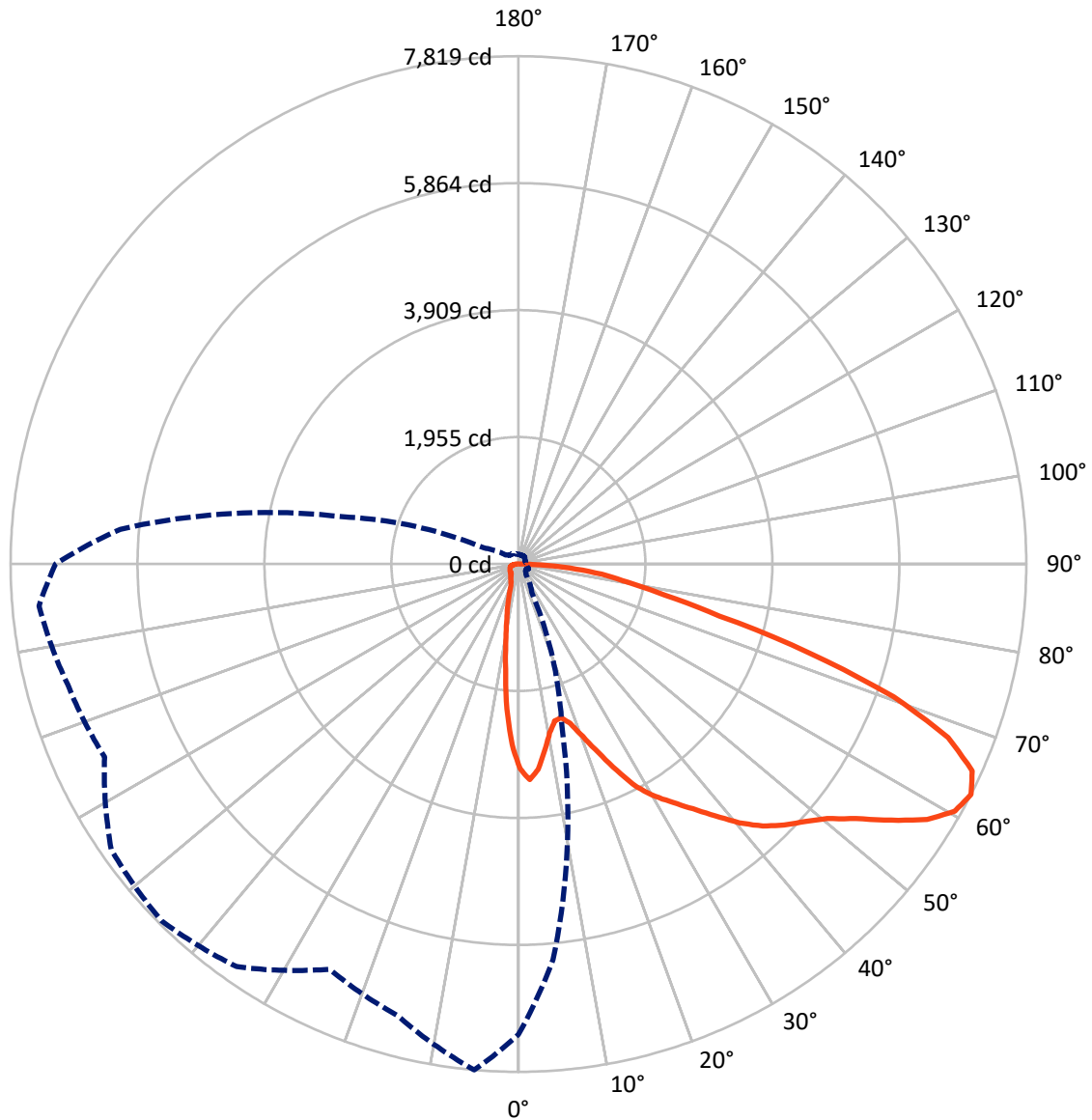
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 31.5 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 355-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1639.1	0.0	1639.1
	% Fixture	17.7	0.0	17.7
Street Side	Lumens	7613.3	0.0	7613.3
	% Fixture	82.3	0.0	82.3
Total	Lumens	9252.4	0.0	9252.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	229.4	2.5
10°-20°	419.0	4.5
20°-30°	602.6	6.5
30°-40°	923.0	10.0
40°-50°	1349.4	14.6
50°-60°	1963.4	21.2
60°-70°	2274.9	24.6
70°-80°	1185.9	12.8
80°-90°	304.8	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°	9252.4	100.0
0°-180°	9252.4	100.0



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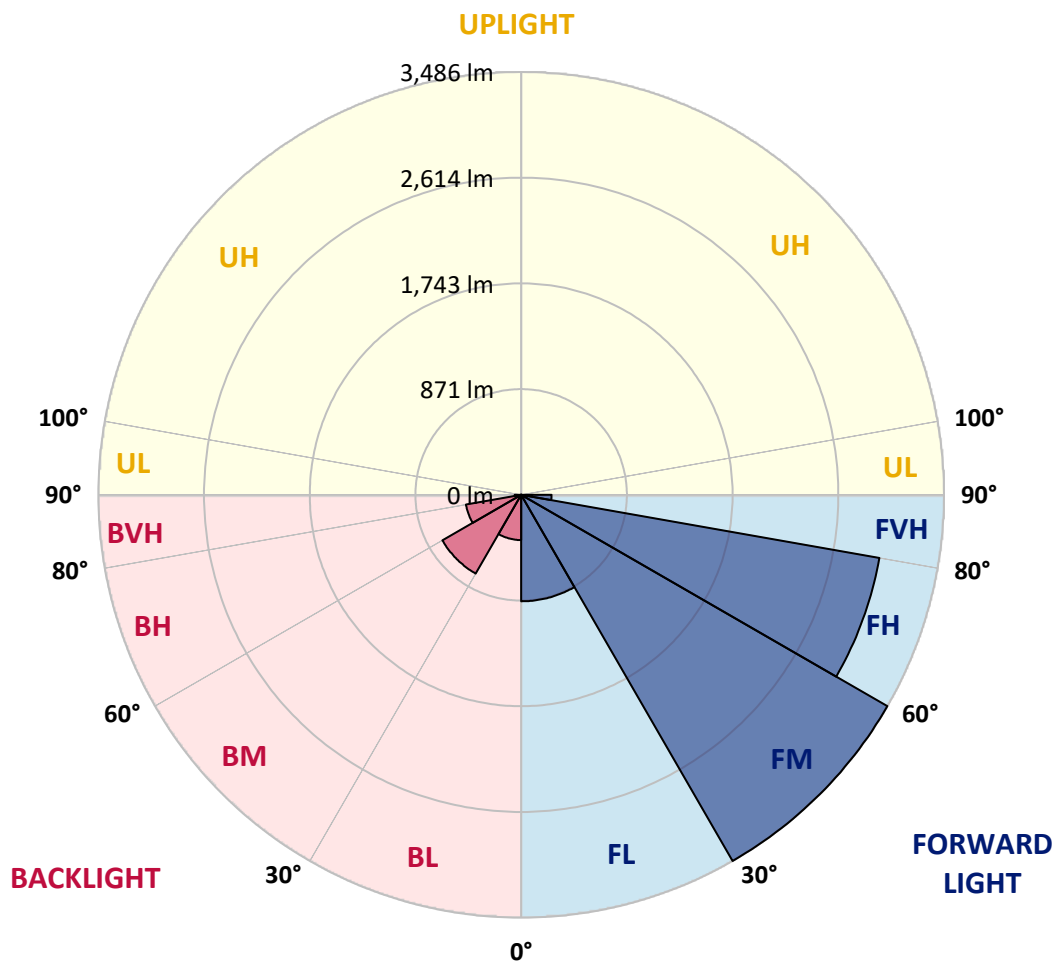
CATALOG NUMBER: XNV2-AF-02-LED-U-SLR-7027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	878.1	9.5			
FM (30°-60°)	3485.9	37.7			
FH (60°-80°)	2998.6	32.4			G2/5000
FVH (80°-90°)	250.8	2.7			G3/500
BL (0°-30°)	372.9	4.0	B1/500		
BM (30°-60°)	749.9	8.1	B1/1000		
BH (60°-80°)	462.2	5.0	B1/500		G1/500
BVH (80°-90°)	54.1	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-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3154.4	3154.4	3154.4	3154.4	3154.4	3154.4	3154.4	3154.4	3154.4	3154.4	3154.4
2.5°	3256.3	3210.7	3105.4	3012.7	2897.5	2810.8	2705.5	2649.9	2608.9	2581.4	2559.4
5°	3041.7	2931.6	2730.4	2553.9	2363.4	2225.9	2064.8	1977.0	1922.6	1893.2	1879.8
7.5°	2723.0	2577.3	2317.1	2080.4	1842.2	1670.4	1548.3	1418.2	1349.1	1304.1	1289.3
10°	2444.6	2280.2	1969.7	1703.2	1519.5	1397.4	1292.8	1173.4	1084.8	1007.5	978.8
12.5°	2283.0	2091.8	1737.5	1496.7	1342.3	1211.5	1100.9	972.1	878.8	798.4	767.4
15°	2248.6	2035.4	1640.2	1365.2	1176.1	1018.4	885.5	745.4	654.1	587.8	566.2
17.5°	2352.0	2089.0	1599.3	1245.1	1017.1	824.5	660.9	510.4	434.7	398.5	389.8
20°	2564.7	2207.0	1579.8	1137.1	862.7	634.7	456.9	346.8	309.2	298.5	297.9
22.5°	2844.5	2399.0	1601.3	1048.5	717.8	468.2	334.8	285.1	269.8	263.7	263.7
25°	3160.3	2658.5	1658.4	980.8	590.4	364.3	288.4	261.6	248.9	242.8	243.5
27.5°	3546.8	2974.6	1736.2	918.3	499.1	319.3	269.8	246.9	234.1	228.1	228.8
30°	3837.9	3246.2	1803.3	861.4	452.1	301.2	259.6	238.1	224.0	215.4	214.7
32.5°	4110.4	3485.8	1857.5	820.4	425.3	269.0	234.7	218.6	206.6	196.5	194.6
35°	4411.4	3711.2	1883.0	819.2	407.9	242.8	214.7	195.2	183.2	171.8	169.7
37.5°	4753.0	3986.9	1904.5	827.2	398.5	226.1	205.4	186.5	176.4	165.0	162.4
40°	5108.5	4256.6	1921.4	833.8	397.1	214.7	197.8	181.1	171.0	159.0	156.3
42.5°	5413.7	4495.4	1944.1	831.2	387.8	212.7	193.2	176.4	167.1	155.0	151.6
45°	5658.0	4685.2	1979.7	830.6	373.6	217.4	191.9	175.1	163.8	150.9	148.3
47.5°	5885.3	4899.3	2054.9	827.8	358.2	216.0	199.2	173.7	162.4	149.6	147.6
50°	6145.7	5187.1	2182.9	807.7	336.8	206.6	212.7	172.5	159.0	147.6	145.5
52.5°	6508.0	5608.3	2372.9	771.5	307.2	196.5	214.7	171.8	153.6	143.5	140.9
55°	6933.8	6059.7	2577.3	719.2	268.4	179.1	203.9	169.1	148.3	137.5	133.5
57.5°	7263.2	6393.1	2720.2	644.1	230.1	169.1	181.7	163.0	141.6	130.9	127.5
60°	7356.0	6408.0	2745.8	554.2	210.7	162.4	156.3	177.8	136.3	124.8	121.5
62.5°	7245.2	6114.9	2579.5	491.1	203.9	155.6	142.2	169.7	130.9	119.5	116.1
65°	6917.0	5619.6	2207.0	481.8	210.7	149.6	134.8	135.6	125.5	114.1	110.8
67.5°	6151.1	4891.2	1738.8	487.7	218.6	143.5	129.4	123.4	119.5	109.4	105.3
70°	5002.5	3937.9	1369.8	498.4	226.1	135.6	122.8	115.4	112.0	101.2	99.4
72.5°	3853.4	3151.7	1080.8	491.1	233.5	127.5	113.4	107.3	103.3	93.2	91.3
75°	2736.3	2504.3	794.3	421.2	213.9	116.1	102.6	97.2	94.0	83.3	82.6
77.5°	1972.3	1875.8	552.7	316.7	169.1	102.0	90.5	85.9	83.8	71.8	71.8
80°	1573.1	1427.5	330.8	206.6	123.4	84.5	75.7	73.8	71.8	59.6	60.4
82.5°	1130.3	990.2	211.3	128.7	90.5	64.4	59.0	58.4	54.9	44.2	44.2
85°	579.6	505.8	135.6	86.5	63.7	41.6	38.8	37.5	35.6	27.5	27.5
87.5°	112.6	155.0	75.2	42.3	30.8	14.7	14.7	12.8	14.7	10.2	10.7
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	3154.4	3154.4	3154.4	3154.4	3154.4	3154.4	3154.4	3154.4	3154.4	3154.4	3154.4
2.5°	2601.5	2588.1	2578.8	2574.1	2641.8	2670.0	2702.2	2748.5	2780.1	2766.6	2809.4
5°	1942.8	1952.1	1973.7	2007.3	2101.8	2146.7	2175.5	2213.9	2241.4	2213.9	2259.4
7.5°	1328.2	1342.3	1388.1	1457.1	1571.1	1621.4	1631.5	1632.2	1626.1	1581.1	1612.1
10°	978.2	949.9	960.0	1009.7	1111.7	1156.6	1161.2	1149.1	1147.1	1129.0	1163.9
12.5°	758.1	719.2	696.4	704.5	780.8	817.7	823.7	830.6	858.1	866.8	909.7
15°	565.6	545.5	528.7	521.2	571.5	600.3	603.8	619.9	648.8	656.8	693.6
17.5°	397.8	403.2	412.0	415.2	451.5	470.3	465.0	465.0	469.6	467.6	488.4
20°	303.8	314.6	331.5	347.6	380.3	391.1	377.6	360.8	350.2	344.8	349.5
22.5°	268.4	275.7	286.5	307.2	334.8	340.1	322.8	309.2	299.1	293.8	294.6
25°	248.9	256.2	265.0	281.8	305.2	307.8	291.8	283.1	275.1	269.8	268.4
27.5°	232.1	236.9	242.2	253.0	277.0	278.5	267.6	262.3	256.9	253.0	251.5
30°	216.8	218.6	220.8	231.5	249.5	251.5	246.1	243.5	241.6	238.8	238.8
32.5°	196.5	199.2	202.6	212.0	229.4	232.1	228.8	226.7	223.4	222.1	220.1
35°	172.5	179.1	186.5	197.8	216.8	218.0	213.9	208.0	200.0	197.8	196.5
37.5°	162.4	163.8	173.1	186.5	205.9	207.2	201.8	191.9	185.8	186.5	187.8
40°	155.6	157.7	163.0	176.4	195.9	197.8	193.2	185.8	179.8	180.5	182.4
42.5°	150.2	152.9	156.3	165.0	184.5	188.6	187.1	180.5	174.5	175.8	178.5
45°	147.6	149.6	149.6	155.6	174.5	180.5	181.1	175.8	171.0	172.5	175.8
47.5°	146.2	146.2	144.3	148.8	167.8	173.7	175.1	172.5	169.7	171.0	174.5
50°	144.3	141.6	139.5	143.5	162.4	167.8	169.1	167.1	168.4	171.0	173.1
52.5°	138.2	135.6	135.6	138.2	156.9	162.4	163.0	161.7	164.4	167.8	171.0
55°	130.9	130.9	131.5	134.1	154.2	158.3	157.7	156.3	159.0	163.0	166.4
57.5°	124.1	123.4	126.8	130.2	150.9	153.6	152.4	152.4	154.2	157.7	160.9
60°	120.1	116.7	119.5	124.8	147.6	150.2	148.3	147.6	150.9	153.6	156.3
62.5°	116.1	112.6	114.8	120.1	142.9	144.8	143.5	143.5	147.0	148.8	151.6
65°	110.0	108.7	110.0	115.4	138.9	139.5	139.5	140.2	142.9	144.3	147.0
67.5°	104.7	104.7	105.3	110.8	135.6	134.1	134.1	137.5	138.2	139.5	142.2
70°	97.9	99.4	99.4	106.0	132.8	128.1	128.7	131.5	132.8	134.1	134.8
72.5°	90.5	91.3	92.5	101.2	128.7	122.1	122.8	124.8	125.5	127.5	128.1
75°	82.6	83.3	85.2	96.6	126.1	116.1	114.8	116.1	117.4	118.8	118.0
77.5°	73.1	74.5	76.4	94.0	117.4	114.8	104.7	106.0	107.3	107.3	106.7
80°	61.8	63.7	67.2	89.9	99.4	110.8	93.2	94.0	94.6	94.6	93.2
82.5°	46.4	50.3	54.9	74.5	77.9	94.6	80.5	81.8	79.8	78.5	77.9
85°	30.3	33.5	40.2	51.7	57.0	74.5	66.5	67.2	63.1	62.4	62.4
87.5°	12.0	12.8	18.1	26.2	34.2	46.4	47.6	49.0	45.6	45.6	46.9
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°	3154.4	3154.4	3154.4	3154.4	3154.4	3154.4	3154.4	3154.4	3154.4	3154.4	3154.4
2.5°	2874.5	2941.7	3018.8	3097.4	3161.8	3244.9	3325.3	3411.3	3454.9	3480.4	3552.2
5°	2330.6	2422.4	2531.9	2654.5	2756.4	2930.9	3118.7	3328.1	3428.7	3528.1	3715.7
7.5°	1667.1	1756.9	1884.5	2043.5	2188.4	2418.3	2666.0	2949.0	3088.6	3249.6	3557.5
10°	1237.8	1332.9	1448.3	1583.3	1726.2	1965.6	2243.2	2561.2	2714.9	2896.8	3247.0
12.5°	1003.5	1114.9	1234.5	1355.2	1477.9	1638.9	1930.1	2283.6	2448.6	2631.8	2982.6
15°	783.0	902.3	1031.2	1162.5	1284.7	1464.4	1761.7	2179.6	2368.1	2545.2	2832.4
17.5°	554.2	666.8	811.7	971.3	1148.6	1361.1	1725.5	2225.2	2454.0	2639.1	2831.6
20°	377.6	455.5	600.3	789.6	1008.3	1278.0	1738.8	2385.5	2671.3	2874.5	2947.7
22.5°	301.9	338.8	436.8	629.3	887.5	1217.7	1793.8	2605.5	2983.4	3230.8	3159.0
25°	274.4	295.2	346.1	497.1	780.2	1177.4	1901.3	2896.0	3332.8	3583.7	3413.3
27.5°	257.6	275.7	308.6	408.5	687.7	1151.2	2037.4	3238.2	3726.6	3932.5	3678.3
30°	246.9	265.0	295.2	367.0	617.9	1112.3	2156.8	3550.8	4041.1	4174.8	3821.2
32.5°	226.1	240.1	265.0	328.7	565.6	1066.6	2260.0	3830.6	4338.4	4382.7	3992.8
35°	204.6	219.4	244.2	297.9	534.8	1031.2	2314.5	4078.8	4632.9	4590.6	4163.3
37.5°	196.5	208.6	231.5	275.7	518.0	1007.5	2335.2	4323.0	4948.9	4820.8	4282.0
40°	191.2	201.8	222.1	261.0	513.2	985.5	2330.6	4555.0	5255.4	5058.9	4375.3
42.5°	187.1	196.5	215.4	250.8	500.4	964.7	2315.1	4755.6	5501.0	5264.2	4464.4
45°	183.9	193.9	212.7	256.2	477.0	941.9	2305.7	4938.8	5689.4	5437.3	4584.0
47.5°	182.4	193.9	213.3	254.8	451.5	916.5	2339.2	5142.1	5853.9	5582.7	4743.0
50°	180.5	193.2	228.1	242.8	416.6	884.8	2452.6	5384.3	6026.2	5746.5	4948.9
52.5°	177.1	192.5	243.5	233.5	371.7	841.3	2636.4	5726.3	6324.1	6065.1	5253.4
55°	173.1	193.9	232.8	218.6	324.0	784.8	2820.3	6195.3	6807.1	6579.0	5690.9
57.5°	168.4	191.9	220.1	205.4	284.5	713.9	2959.7	6579.6	7205.7	7108.9	6228.2
60°	165.0	196.5	197.8	197.3	258.9	646.1	2973.2	6554.9	7320.3	7453.1	6754.1
62.5°	160.9	200.6	180.5	191.2	246.1	583.0	2807.6	6149.0	7126.4	7409.0	7182.8
65°	155.6	175.1	171.0	185.8	246.1	549.5	2421.8	5473.5	6590.4	6990.3	7415.6
67.5°	150.2	159.0	164.4	178.5	251.5	518.0	1946.2	4616.7	5745.2	6314.7	7153.9
70°	142.9	150.2	156.9	171.8	248.9	495.8	1531.5	3700.4	4728.1	5380.2	6430.1
72.5°	136.3	141.6	148.3	161.7	248.9	485.8	1230.4	2902.8	3609.8	4159.2	5326.5
75°	126.1	130.9	136.8	151.6	244.2	444.1	923.7	2325.8	2641.1	2985.2	4202.9
77.5°	116.1	119.5	124.1	138.9	220.1	371.0	653.3	1801.2	1956.9	2147.4	3276.5
80°	103.3	106.0	109.4	124.1	182.4	287.7	425.3	1408.8	1463.1	1555.1	2155.5
82.5°	88.6	92.5	93.2	106.7	147.0	208.6	253.0	965.4	964.7	1099.5	1520.8
85°	72.5	74.5	75.7	83.8	108.7	138.9	166.4	527.2	470.3	658.7	1320.9
87.5°	54.3	52.3	54.3	56.4	71.8	81.8	89.2	97.2	58.4	119.5	768.1
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°	3154.4	3154.4	3154.4	3154.4	3154.4	3154.4	3154.4	3154.4
2.5°	3590.3	3630.1	3606.4	3578.3	3507.9	3404.5	3325.3	3256.3
5°	3846.0	3919.1	3886.8	3782.3	3599.8	3392.4	3174.5	3041.7
7.5°	3813.8	3958.7	3946.0	3771.5	3509.9	3204.7	2898.1	2723.0
10°	3556.2	3759.4	3794.4	3615.9	3338.8	2997.4	2642.5	2444.6
12.5°	3275.8	3446.8	3517.9	3450.2	3189.3	2842.3	2480.8	2283.0
15°	3040.9	3127.4	3198.0	3241.5	3079.8	2787.4	2452.6	2248.6
17.5°	2867.2	2850.4	2909.5	3014.2	3020.8	2860.6	2580.1	2352.0
20°	2783.4	2651.8	2686.1	2833.1	3004.7	3046.3	2834.3	2564.7
22.5°	2778.6	2573.4	2580.1	2738.5	3051.1	3300.0	3151.7	2844.5
25°	2851.1	2564.7	2570.7	2728.3	3132.8	3555.5	3518.7	3160.3
27.5°	2974.6	2602.2	2598.2	2772.6	3242.3	3768.7	3888.9	3546.8
30°	3108.0	2656.6	2646.4	2843.8	3349.6	3900.4	4151.8	3837.9
32.5°	3274.4	2753.1	2718.4	2947.7	3455.5	4026.5	4376.6	4110.4
35°	3432.8	2894.7	2844.5	3096.6	3569.0	4166.7	4628.2	4411.4
37.5°	3594.4	3106.0	3077.9	3311.3	3729.3	4319.0	4916.0	4753.0
40°	3801.6	3406.6	3393.2	3623.3	3943.3	4485.2	5238.6	5108.5
42.5°	4025.0	3725.9	3714.5	3981.5	4208.9	4652.3	5515.1	5413.7
45°	4252.5	4113.0	4115.7	4363.8	4488.7	4810.0	5732.4	5658.0
47.5°	4520.9	4536.4	4632.2	4760.4	4761.0	4985.8	5925.0	5885.3
50°	4861.6	5047.4	5224.6	5244.8	5036.1	5217.9	6160.3	6145.7
52.5°	5247.4	5637.1	5843.0	5779.3	5304.4	5505.6	6508.6	6508.0
55°	5705.6	6253.7	6447.6	6338.9	5625.7	5880.7	6963.4	6933.8
57.5°	6180.6	6846.7	7002.9	6861.4	6027.5	6317.4	7419.6	7263.2
60°	6693.7	7357.2	7516.2	7303.5	6478.3	6752.7	7721.6	7356.0
62.5°	7029.9	7655.7	7769.8	7565.9	6882.3	7196.2	7818.8	7245.2
65°	7047.3	7457.2	7487.4	7414.9	7054.0	7581.2	7677.9	6917.0
67.5°	6568.2	6592.4	6632.0	6709.8	6687.1	7409.5	7134.5	6151.1
70°	5543.9	5221.8	5352.0	5427.2	5596.3	6590.4	6130.3	5002.5
72.5°	4239.1	3768.7	3916.4	3890.9	4242.4	5405.7	4690.0	3853.4
75°	3051.1	2570.1	2581.4	2582.7	3048.4	4314.9	3198.0	2736.3
77.5°	2073.6	1818.7	1856.3	1832.7	2040.1	3380.4	2302.4	1972.3
80°	1418.2	1411.4	1419.5	1364.5	1360.6	2184.9	1704.7	1573.1
82.5°	1051.8	972.1	960.6	902.3	1042.6	1670.4	1294.1	1130.3
85°	829.9	538.1	467.6	564.1	902.9	1536.9	788.9	579.6
87.5°	351.5	211.3	128.1	253.6	501.9	1126.4	218.6	112.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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