

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: P198751

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198751
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
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 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: 10894.4 lumens
Efficiency: N/A
Efficacy: 98.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B2 - 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

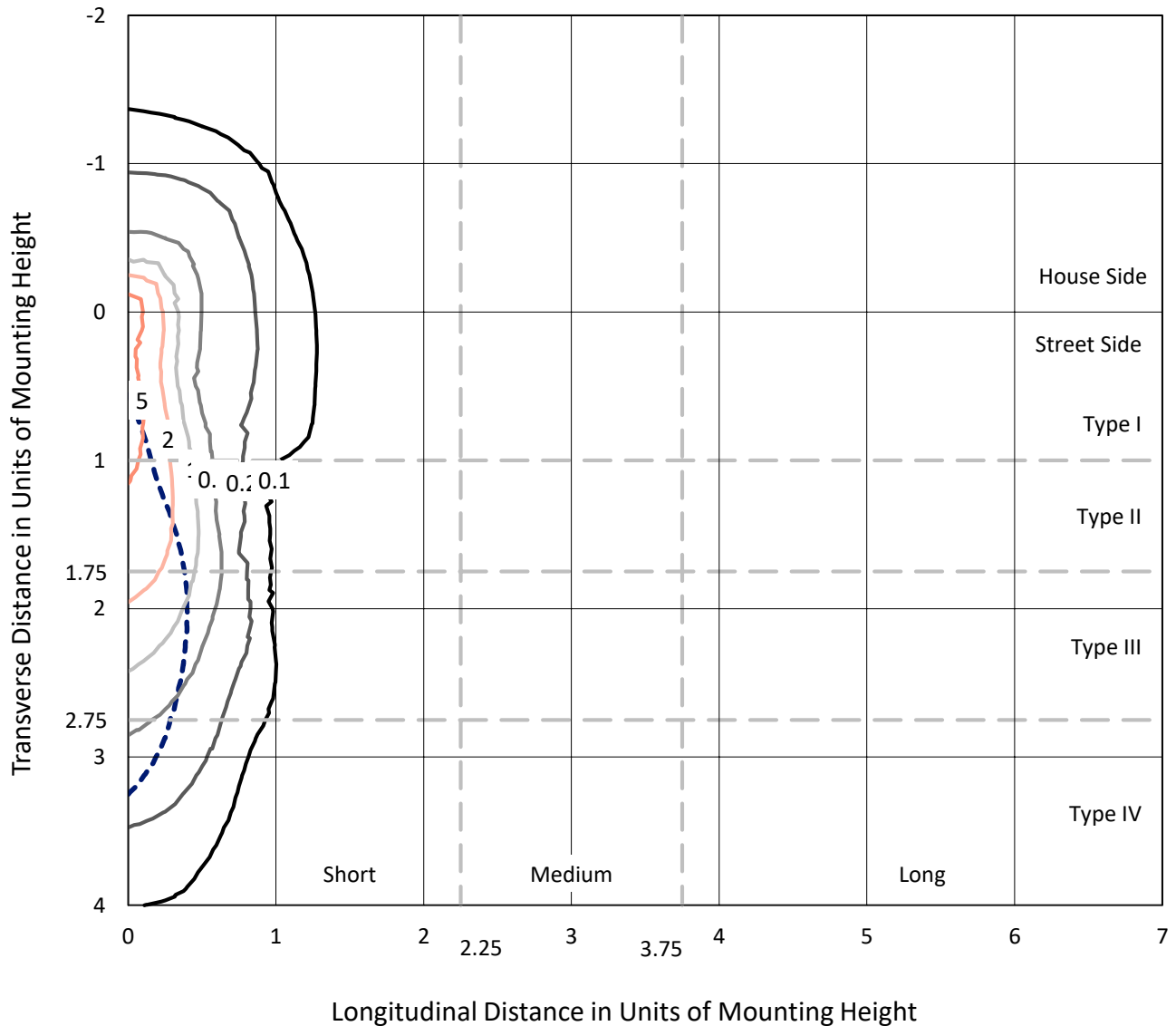




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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

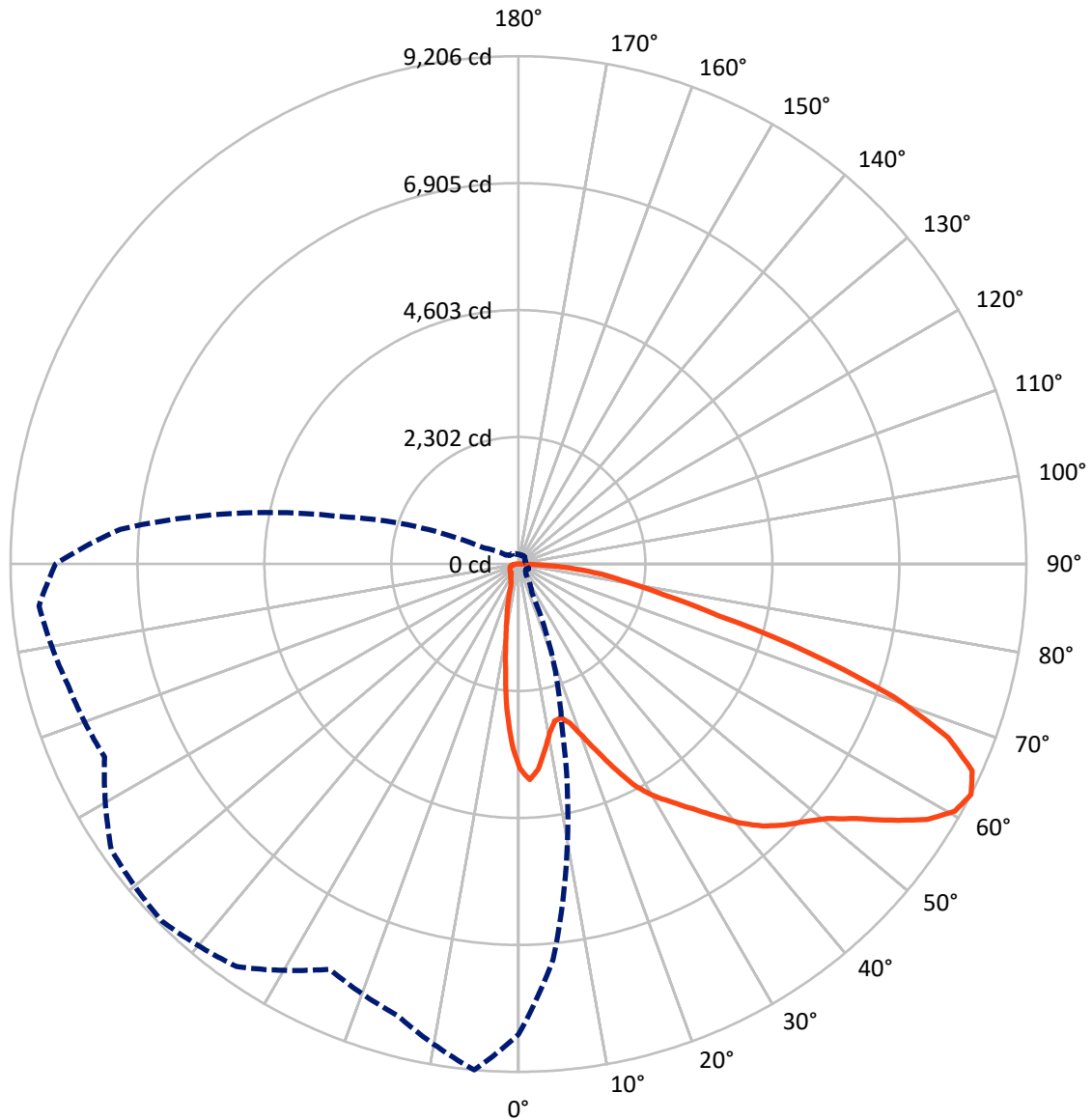


Based on 20 foot mounting height. Maximum calculated value = 9.3 fc
 Type IV - Short - Non-Cutoff

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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	1930.0	0.0	1930.0
	% Fixture	17.7	0.0	17.7
Street Side	Lumens	8964.5	0.0	8964.5
	% Fixture	82.3	0.0	82.3
Total	Lumens	10894.4	0.0	10894.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	270.1	2.5
10°-20°	493.4	4.5
20°-30°	709.6	6.5
30°-40°	1086.8	10.0
40°-50°	1588.9	14.6
50°-60°	2311.9	21.2
60°-70°	2678.6	24.6
70°-80°	1396.3	12.8
80°-90°	358.9	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°	10894.4	100.0
0°-180°	10894.4	100.0

Coefficient of Utilization



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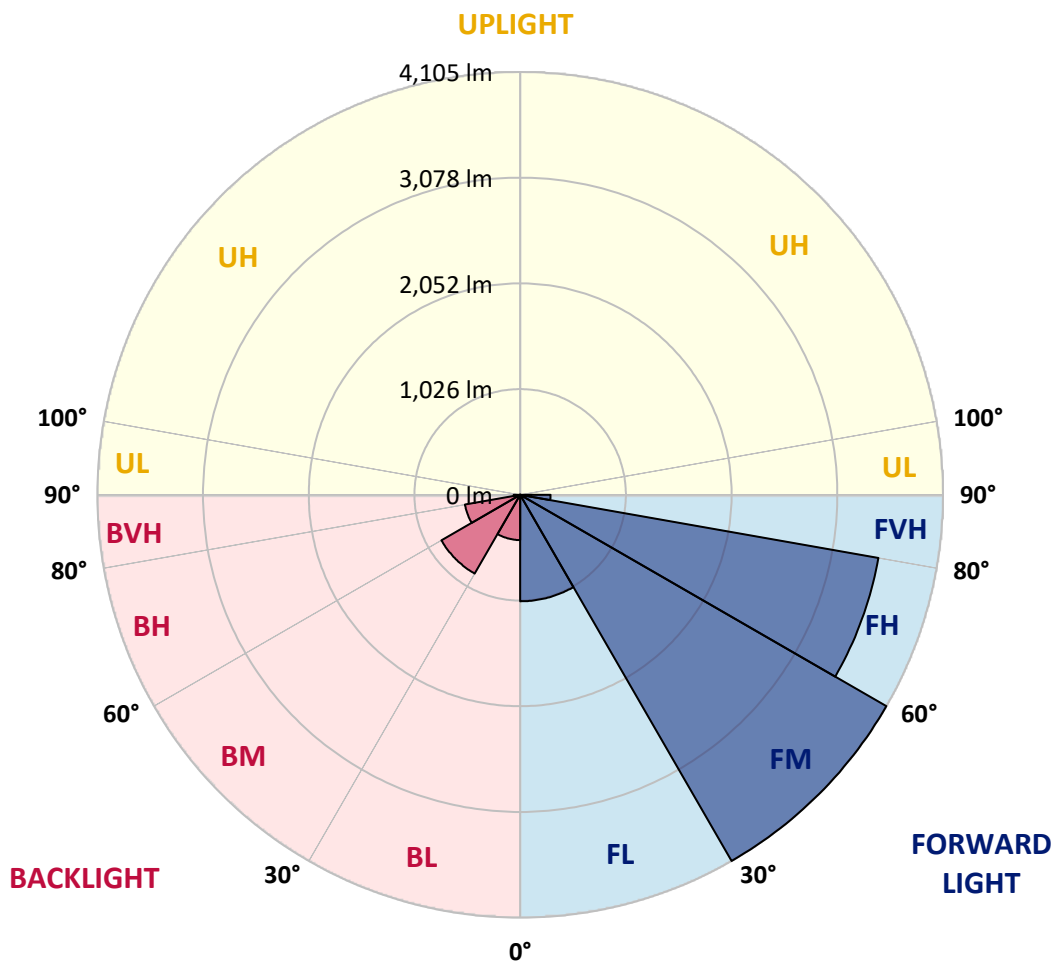
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1033.9	9.5			
FM	(30°-60°)	4104.5	37.7			
FH	(60°-80°)	3530.7	32.4			G2/5000
FVH	(80°-90°)	295.3	2.7			G3/500
BL	(0°-30°)	439.1	4.0	B1/500		
BM	(30°-60°)	883.0	8.1	B1/1000		
BH	(60°-80°)	544.2	5.0	B2/1000		G2/1000
BVH	(80°-90°)	63.6	0.6			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3714.1	3714.1	3714.1	3714.1	3714.1	3714.1	3714.1	3714.1	3714.1	3714.1	3714.1
2.5°	3834.2	3780.5	3656.4	3547.5	3411.6	3309.7	3185.7	3120.1	3071.9	3039.6	3013.5
5°	3581.5	3451.8	3214.9	3007.2	2782.8	2620.9	2431.3	2327.8	2263.9	2229.1	2213.4
7.5°	3206.2	3034.8	2728.3	2449.5	2169.1	1966.8	1823.1	1669.9	1588.5	1535.6	1518.2
10°	2878.4	2684.8	2319.1	2005.6	1789.1	1645.4	1522.2	1381.5	1277.3	1186.4	1152.5
12.5°	2688.0	2463.0	2045.8	1762.2	1580.6	1426.6	1296.2	1144.6	1034.8	940.0	903.7
15°	2647.8	2396.6	1931.3	1607.5	1384.7	1199.1	1042.7	877.6	770.2	691.9	666.7
17.5°	2769.4	2459.8	1883.2	1466.1	1197.5	970.8	778.1	601.1	511.9	469.2	458.9
20°	3019.8	2598.8	1860.2	1338.8	1015.8	747.3	538.0	408.4	364.2	351.5	350.7
22.5°	3349.1	2824.7	1885.5	1234.6	845.2	551.4	394.1	335.7	317.5	310.5	310.5
25°	3721.2	3130.4	1952.6	1154.8	695.1	428.9	339.6	308.1	293.1	285.9	286.7
27.5°	4176.2	3502.5	2044.3	1081.4	587.7	376.0	317.5	290.7	275.7	268.5	269.3
30°	4519.1	3822.4	2123.2	1014.3	532.4	354.7	305.7	280.4	263.8	253.6	252.8
32.5°	4839.8	4104.4	2187.3	966.1	500.8	316.7	276.5	257.5	243.3	231.4	229.0
35°	5194.4	4369.7	2217.2	964.4	480.3	285.9	252.8	229.9	215.6	202.2	199.9
37.5°	5596.5	4694.4	2242.5	974.0	469.2	266.2	241.7	219.6	207.8	194.4	191.2
40°	6015.2	5011.9	2262.3	981.8	467.6	252.8	233.0	213.3	201.4	187.2	184.0
42.5°	6374.5	5293.2	2289.2	978.7	456.5	250.4	227.5	207.8	196.7	182.5	178.5
45°	6662.1	5516.7	2331.0	977.9	440.0	255.9	225.9	206.1	192.7	177.7	174.6
47.5°	6929.8	5768.6	2419.5	974.8	421.8	254.3	234.6	204.6	191.2	176.2	173.8
50°	7236.4	6107.5	2570.4	951.0	396.5	243.3	250.4	203.1	187.2	173.8	171.4
52.5°	7662.8	6603.6	2793.9	908.4	361.8	231.4	252.8	202.2	180.9	169.0	165.9
55°	8164.5	7135.2	3034.8	846.8	316.0	210.9	240.1	199.1	174.6	161.9	157.2
57.5°	8552.3	7527.8	3203.1	758.3	271.0	199.1	214.1	191.9	166.6	154.1	150.1
60°	8661.3	7545.2	3233.0	652.4	248.1	191.2	184.0	209.3	160.4	146.9	143.0
62.5°	8531.0	7199.9	3037.1	578.2	240.1	183.2	167.5	199.9	154.1	140.6	136.7
65°	8144.7	6617.1	2598.8	567.1	248.1	176.2	158.8	159.6	147.7	134.3	130.3
67.5°	7242.6	5759.2	2047.4	574.3	257.5	169.0	152.4	145.4	140.6	128.8	124.0
70°	5890.4	4636.7	1613.0	586.9	266.2	159.6	144.5	135.8	132.0	119.3	116.9
72.5°	4537.2	3711.0	1272.6	578.2	274.9	150.1	133.5	126.3	121.6	109.8	107.4
75°	3222.0	2948.8	935.3	496.0	252.0	136.7	120.8	114.6	110.6	98.0	97.2
77.5°	2322.3	2208.6	650.9	372.9	199.1	120.1	106.6	101.1	98.7	84.5	84.5
80°	1852.4	1680.9	389.4	243.3	145.4	99.5	89.3	86.8	84.5	70.3	71.1
82.5°	1331.0	1165.9	248.8	151.7	106.6	75.8	69.6	68.7	64.8	52.2	52.2
85°	682.5	595.6	159.6	101.9	75.1	49.0	45.8	44.2	41.8	32.4	32.4
87.5°	132.7	182.5	88.5	49.7	36.3	17.4	17.4	15.0	17.4	11.9	12.7
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°	3714.1	3714.1	3714.1	3714.1	3714.1	3714.1	3714.1	3714.1	3714.1	3714.1	3714.1
2.5°	3063.2	3047.5	3036.4	3030.9	3110.7	3143.8	3181.7	3236.2	3273.3	3257.6	3308.1
5°	2287.5	2298.6	2323.9	2363.4	2474.7	2527.7	2561.7	2606.7	2639.1	2606.7	2660.4
7.5°	1564.0	1580.6	1634.3	1715.7	1849.9	1909.2	1921.0	1921.8	1914.8	1861.8	1898.2
10°	1151.6	1118.5	1130.4	1188.8	1308.9	1361.8	1367.3	1353.1	1350.7	1329.4	1370.4
12.5°	892.6	846.8	819.9	829.4	919.4	962.9	970.0	977.9	1010.3	1020.6	1071.1
15°	665.8	642.2	622.5	613.8	673.0	707.0	711.0	729.9	763.8	773.4	816.7
17.5°	468.4	474.8	485.0	489.0	531.6	553.7	547.4	547.4	552.9	550.6	575.0
20°	357.8	370.5	390.3	409.2	447.8	460.5	444.7	424.9	412.4	406.0	411.5
22.5°	316.0	324.7	337.3	361.8	394.1	400.5	379.9	364.2	352.3	346.0	346.8
25°	293.1	301.8	312.0	331.7	359.4	362.5	343.6	333.4	323.9	317.5	316.0
27.5°	273.3	278.9	285.2	297.8	326.2	327.9	315.2	308.8	302.5	297.8	296.2
30°	255.1	257.5	259.8	272.5	293.9	296.2	289.9	286.7	284.4	281.2	281.2
32.5°	231.4	234.6	238.6	249.6	270.2	273.3	269.3	267.0	263.0	261.5	259.1
35°	203.1	210.9	219.6	233.0	255.1	256.8	252.0	244.9	235.4	233.0	231.4
37.5°	191.2	192.7	203.8	219.6	242.5	244.1	237.7	225.9	218.8	219.6	221.2
40°	183.2	185.7	191.9	207.8	230.7	233.0	227.5	218.8	211.6	212.5	214.8
42.5°	177.0	180.1	184.0	194.4	217.2	222.0	220.3	212.5	205.4	206.9	210.1
45°	173.8	176.2	176.2	183.2	205.4	212.5	213.3	206.9	201.4	203.1	206.9
47.5°	172.2	172.2	169.8	175.3	197.4	204.6	206.1	203.1	199.9	201.4	205.4
50°	169.8	166.6	164.3	169.0	191.2	197.4	199.1	196.7	198.2	201.4	203.8
52.5°	162.8	159.6	159.6	162.8	184.8	191.2	191.9	190.4	193.5	197.4	201.4
55°	154.1	154.1	154.8	157.9	181.7	186.4	185.7	184.0	187.2	191.9	195.9
57.5°	146.2	145.4	149.2	153.2	177.7	180.9	179.3	179.3	181.7	185.7	189.6
60°	141.4	137.5	140.6	146.9	173.8	177.0	174.6	173.8	177.7	180.9	184.0
62.5°	136.7	132.7	135.0	141.4	168.3	170.6	169.0	169.0	173.0	175.3	178.5
65°	129.5	128.0	129.5	135.8	163.5	164.3	164.3	165.1	168.3	169.8	173.0
67.5°	123.3	123.3	124.0	130.3	159.6	157.9	157.9	161.9	162.8	164.3	167.5
70°	115.3	116.9	116.9	124.8	156.4	150.9	151.7	154.8	156.4	157.9	158.8
72.5°	106.6	107.4	109.0	119.3	151.7	143.7	144.5	146.9	147.7	150.1	150.9
75°	97.2	98.0	100.4	113.8	148.5	136.7	135.0	136.7	138.2	139.8	139.0
77.5°	86.1	87.7	90.0	110.6	138.2	135.0	123.3	124.8	126.3	126.3	125.6
80°	72.6	75.1	79.0	105.9	116.9	130.3	109.8	110.6	111.4	111.4	109.8
82.5°	54.5	59.2	64.8	87.7	91.7	111.4	94.8	96.4	94.0	92.4	91.7
85°	35.5	39.5	47.4	60.9	67.1	87.7	78.2	79.0	74.3	73.4	73.4
87.5°	14.2	15.0	21.3	30.8	40.3	54.5	56.1	57.7	53.7	53.7	55.3
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°	3714.1	3714.1	3714.1	3714.1	3714.1	3714.1	3714.1	3714.1	3714.1	3714.1	3714.1
2.5°	3384.7	3463.7	3554.5	3647.0	3722.8	3820.7	3915.5	4016.6	4068.0	4098.0	4182.5
5°	2744.2	2852.3	2981.1	3125.6	3245.7	3451.1	3672.3	3918.7	4037.2	4154.1	4375.3
7.5°	1962.9	2068.7	2218.9	2406.1	2576.7	2847.6	3139.0	3472.4	3636.7	3826.2	4188.9
10°	1457.4	1569.5	1705.4	1864.1	2032.4	2314.4	2641.5	3015.9	3196.7	3410.8	3823.2
12.5°	1181.7	1312.9	1453.4	1595.6	1740.1	1929.7	2272.6	2688.8	2883.2	3098.8	3511.9
15°	921.8	1062.4	1214.0	1368.9	1512.6	1724.4	2074.2	2566.4	2788.4	2996.9	3335.0
17.5°	652.4	785.1	955.7	1143.8	1352.3	1602.8	2031.7	2620.1	2889.4	3107.5	3334.2
20°	444.7	536.3	707.0	929.8	1187.2	1504.8	2047.4	2808.9	3145.4	3384.7	3470.9
22.5°	355.5	399.0	514.2	740.9	1045.0	1433.7	2112.2	3068.0	3512.7	3804.1	3719.7
25°	323.0	347.6	407.5	585.3	918.6	1386.3	2238.6	3410.0	3924.2	4219.7	4019.1
27.5°	303.3	324.7	363.4	481.1	809.7	1355.5	2398.9	3812.8	4387.9	4630.4	4331.1
30°	290.7	312.0	347.6	432.1	727.5	1309.7	2539.6	4181.0	4758.4	4915.6	4499.2
32.5°	266.2	282.7	312.0	387.1	665.8	1256.0	2661.2	4510.4	5108.3	5160.5	4701.5
35°	240.9	258.3	287.6	350.7	629.5	1214.0	2725.1	4802.7	5455.1	5405.3	4902.2
37.5°	231.4	245.6	272.5	324.7	609.8	1186.4	2749.7	5090.1	5827.1	5676.3	5041.9
40°	225.2	237.7	261.5	307.3	604.3	1160.3	2744.2	5363.4	6188.1	5956.6	5151.8
42.5°	220.3	231.4	253.6	295.4	589.2	1135.9	2726.0	5599.6	6477.2	6198.4	5256.8
45°	216.5	228.3	250.4	301.8	561.6	1109.0	2714.9	5815.3	6699.2	6402.1	5397.4
47.5°	214.8	228.3	251.2	300.1	531.6	1079.0	2754.4	6054.6	6892.7	6573.6	5584.6
50°	212.5	227.5	268.5	285.9	490.5	1041.9	2887.9	6339.7	7095.7	6766.3	5827.1
52.5°	208.6	226.7	286.7	274.9	437.6	990.5	3104.3	6742.6	7446.5	7141.5	6185.8
55°	203.8	228.3	274.0	257.5	381.6	924.2	3320.8	7294.8	8015.1	7746.6	6700.7
57.5°	198.2	225.9	259.1	241.7	334.9	840.5	3485.1	7747.4	8484.4	8370.6	7333.4
60°	194.4	231.4	233.0	232.2	304.9	760.7	3500.8	7718.2	8619.4	8775.8	7952.7
62.5°	189.6	236.2	212.5	225.2	289.9	686.4	3305.8	7240.2	8391.2	8723.7	8457.5
65°	183.2	206.1	201.4	218.8	289.9	646.9	2851.6	6444.8	7760.0	8230.8	8731.6
67.5°	177.0	187.2	193.5	210.1	296.2	609.8	2291.5	5436.2	6764.8	7435.3	8423.5
70°	168.3	177.0	184.8	202.2	293.1	583.7	1803.4	4357.2	5567.2	6335.0	7571.3
72.5°	160.4	166.6	174.6	190.4	293.1	571.9	1448.7	3417.9	4250.5	4897.4	6271.8
75°	148.5	154.1	161.1	178.5	287.6	522.9	1087.7	2738.6	3109.9	3515.1	4948.7
77.5°	136.7	140.6	146.2	163.5	259.1	436.8	769.4	2120.9	2304.2	2528.5	3857.9
80°	121.6	124.8	128.8	146.2	214.8	338.9	500.8	1658.8	1722.8	1831.0	2537.9
82.5°	104.2	109.0	109.8	125.6	173.0	245.6	297.8	1136.7	1135.9	1294.6	1790.7
85°	85.3	87.7	89.3	98.7	128.0	163.5	195.9	620.8	553.7	775.7	1555.3
87.5°	63.9	61.6	63.9	66.4	84.5	96.4	105.1	114.6	68.7	140.6	904.4
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°	3714.1	3714.1	3714.1	3714.1	3714.1	3714.1	3714.1	3714.1
2.5°	4227.5	4274.2	4246.5	4213.3	4130.4	4008.7	3915.5	3834.2
5°	4528.5	4614.6	4576.7	4453.5	4238.6	3994.5	3737.9	3581.5
7.5°	4490.7	4661.2	4646.2	4440.8	4132.8	3773.4	3412.4	3206.2
10°	4187.2	4426.6	4467.7	4257.6	3931.3	3529.3	3111.4	2878.4
12.5°	3857.1	4058.6	4142.2	4062.4	3755.3	3346.8	2921.0	2688.0
15°	3580.6	3682.5	3765.5	3816.8	3626.5	3282.0	2887.9	2647.8
17.5°	3376.0	3356.3	3425.9	3549.0	3556.9	3368.2	3038.0	2769.4
20°	3277.3	3122.5	3162.8	3335.7	3538.0	3587.0	3337.4	3019.8
22.5°	3271.8	3030.1	3038.0	3224.3	3592.5	3885.6	3711.0	3349.1
25°	3357.1	3019.8	3026.9	3212.6	3688.9	4186.5	4143.1	3721.2
27.5°	3502.5	3064.0	3059.3	3264.6	3817.7	4437.7	4579.0	4176.2
30°	3659.6	3128.0	3116.2	3348.4	3944.0	4592.5	4888.7	4519.1
32.5°	3855.5	3241.7	3200.7	3470.9	4068.8	4741.0	5153.3	4839.8
35°	4042.0	3408.5	3349.1	3646.2	4202.3	4906.1	5449.6	5194.4
37.5°	4232.3	3657.3	3624.1	3899.0	4391.1	5085.4	5788.4	5596.5
40°	4476.4	4011.1	3995.3	4266.3	4643.1	5281.3	6168.4	6015.2
42.5°	4739.4	4387.1	4373.7	4688.1	4955.9	5478.0	6493.8	6374.5
45°	5007.2	4842.9	4846.0	5138.3	5285.3	5663.6	6749.7	6662.1
47.5°	5323.1	5341.3	5454.3	5605.2	5606.0	5870.6	6976.4	6929.8
50°	5724.4	5943.2	6151.7	6175.5	5929.8	6143.8	7253.6	7236.4
52.5°	6178.6	6637.5	6880.1	6805.0	6245.7	6482.7	7663.6	7662.8
55°	6718.1	7363.5	7591.7	7463.8	6624.1	6924.3	8199.2	8164.5
57.5°	7277.4	8061.8	8245.8	8079.2	7097.3	7438.5	8736.3	8552.3
60°	7881.6	8662.9	8850.1	8599.6	7628.1	7951.2	9091.8	8661.3
62.5°	8277.4	9014.3	9148.7	8908.6	8103.6	8473.3	9206.4	8531.0
65°	8298.0	8780.6	8816.1	8730.8	8305.8	8926.7	9040.4	8144.7
67.5°	7733.9	7762.4	7809.0	7900.7	7873.8	8724.4	8400.6	7242.6
70°	6527.8	6148.7	6301.9	6390.3	6589.3	7760.0	7218.1	5890.4
72.5°	4991.4	4437.7	4611.5	4581.5	4995.4	6365.0	5522.2	4537.2
75°	3592.5	3026.1	3039.6	3041.1	3589.3	5080.7	3765.5	3222.0
77.5°	2441.6	2141.4	2185.6	2158.0	2402.1	3980.3	2710.9	2322.3
80°	1669.9	1662.0	1671.4	1606.6	1601.9	2572.7	2007.1	1852.4
82.5°	1238.6	1144.6	1131.2	1062.4	1227.5	1966.8	1523.7	1331.0
85°	977.1	633.5	550.6	664.3	1063.3	1809.7	928.9	682.5
87.5°	413.9	248.8	150.9	298.6	590.9	1326.3	257.5	132.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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