

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: P198743

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198743
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-SLL
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR LEFT 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

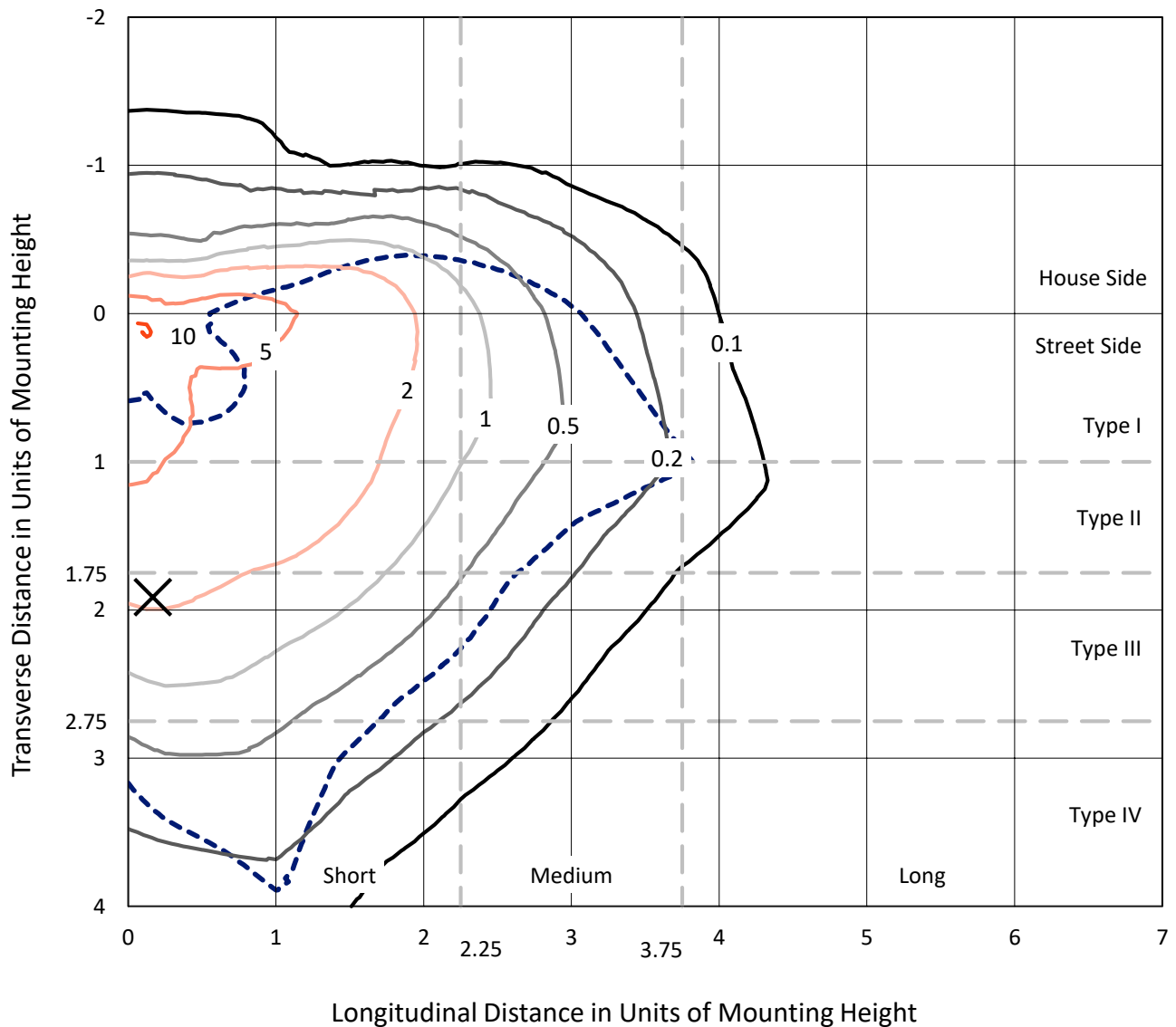
Input Watts (W): 111
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

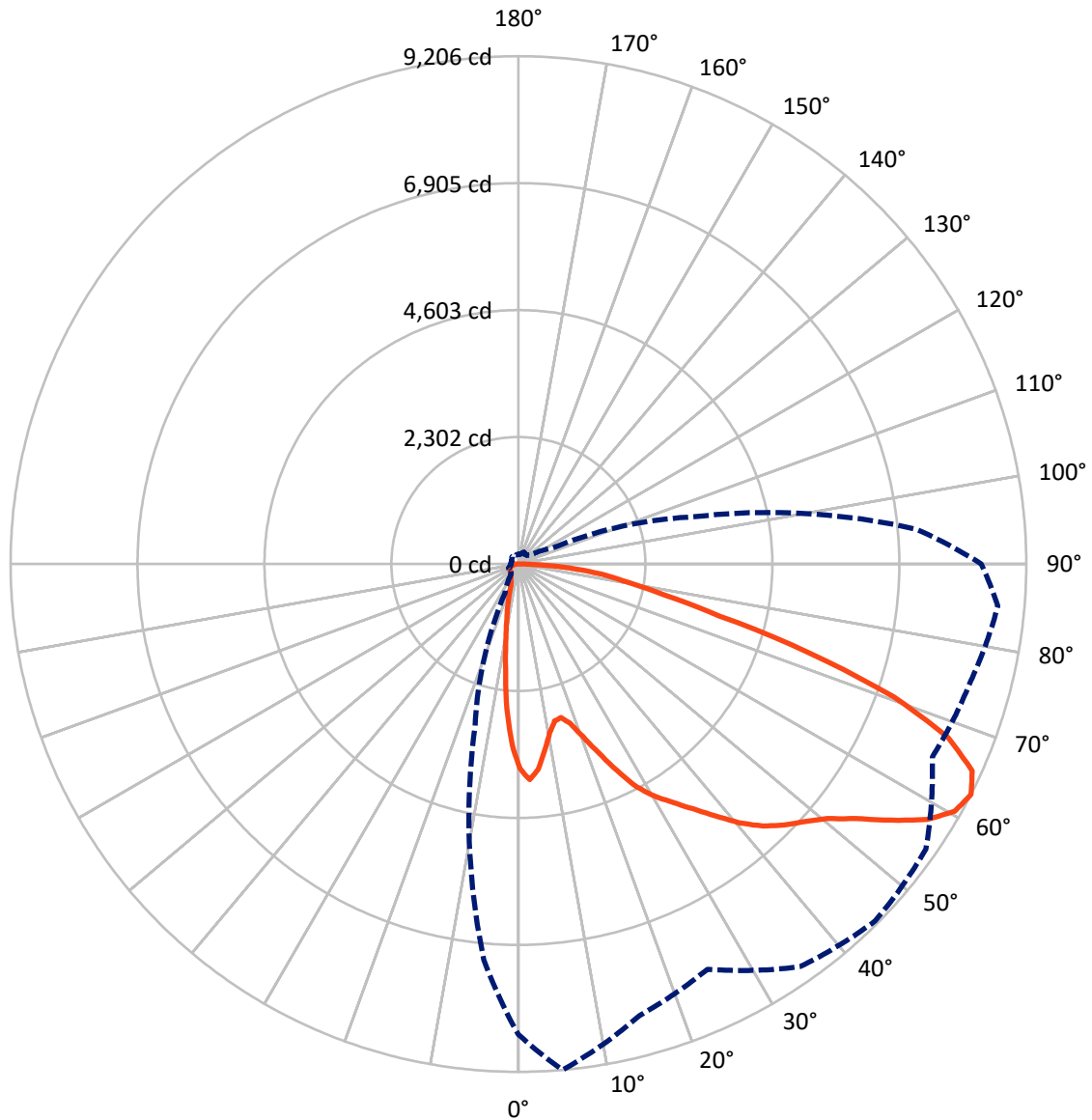


Based on 20 foot mounting height. Maximum calculated value = 10.7 fc
 Type IV - Short - Non-Cutoff

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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	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

Coefficient of Utilization

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



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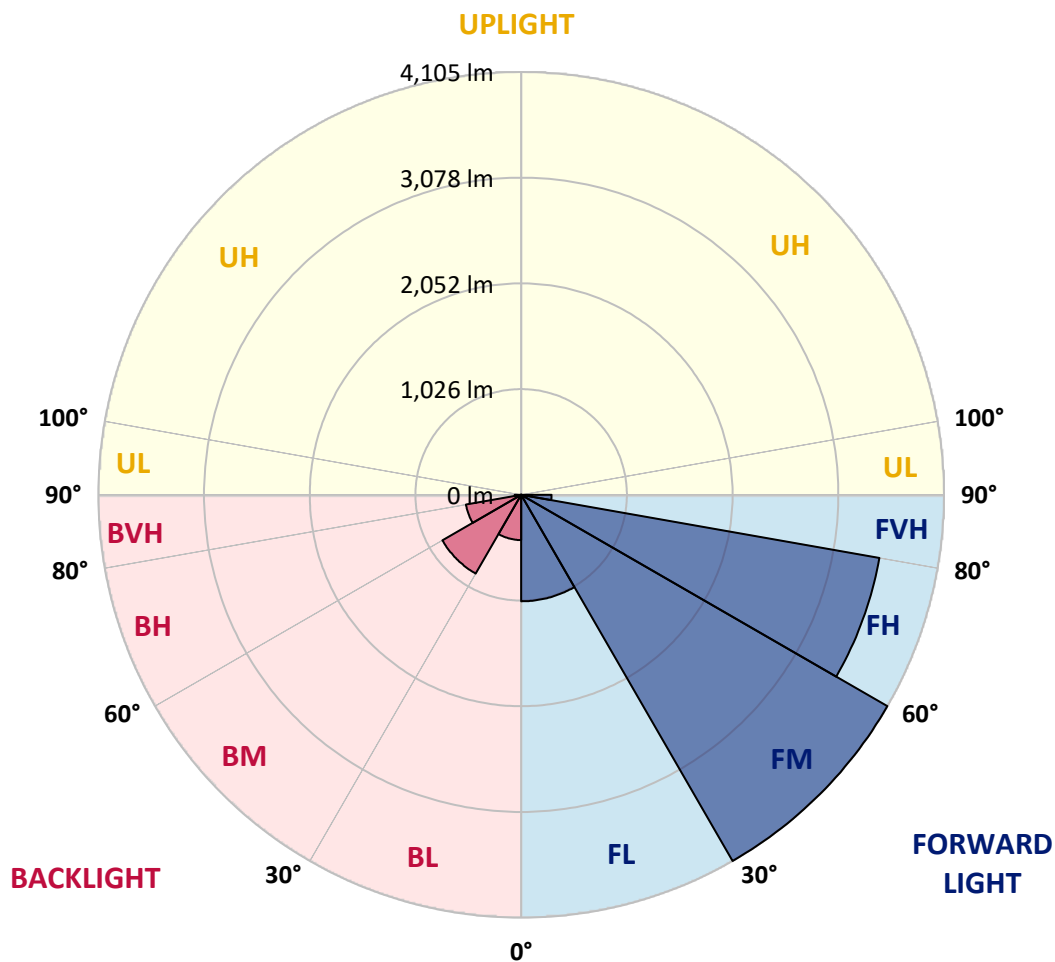
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

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	3915.5	4008.7	4130.4	4213.3	4246.5	4274.2	4227.5	4182.5	4098.0	4068.0
5°	3581.5	3737.9	3994.5	4238.6	4453.5	4576.7	4614.6	4528.5	4375.3	4154.1	4037.2
7.5°	3206.2	3412.4	3773.4	4132.8	4440.8	4646.2	4661.2	4490.7	4188.9	3826.2	3636.7
10°	2878.4	3111.4	3529.3	3931.3	4257.6	4467.7	4426.6	4187.2	3823.2	3410.8	3196.7
12.5°	2688.0	2921.0	3346.8	3755.3	4062.4	4142.2	4058.6	3857.1	3511.9	3098.8	2883.2
15°	2647.8	2887.9	3282.0	3626.5	3816.8	3765.5	3682.5	3580.6	3335.0	2996.9	2788.4
17.5°	2769.4	3038.0	3368.2	3556.9	3549.0	3425.9	3356.3	3376.0	3334.2	3107.5	2889.4
20°	3019.8	3337.4	3587.0	3538.0	3335.7	3162.8	3122.5	3277.3	3470.9	3384.7	3145.4
22.5°	3349.1	3711.0	3885.6	3592.5	3224.3	3038.0	3030.1	3271.8	3719.7	3804.1	3512.7
25°	3721.2	4143.1	4186.5	3688.9	3212.6	3026.9	3019.8	3357.1	4019.1	4219.7	3924.2
27.5°	4176.2	4579.0	4437.7	3817.7	3264.6	3059.3	3064.0	3502.5	4331.1	4630.4	4387.9
30°	4519.1	4888.7	4592.5	3944.0	3348.4	3116.2	3128.0	3659.6	4499.2	4915.6	4758.4
32.5°	4839.8	5153.3	4741.0	4068.8	3470.9	3200.7	3241.7	3855.5	4701.5	5160.5	5108.3
35°	5194.4	5449.6	4906.1	4202.3	3646.2	3349.1	3408.5	4042.0	4902.2	5405.3	5455.1
37.5°	5596.5	5788.4	5085.4	4391.1	3899.0	3624.1	3657.3	4232.3	5041.9	5676.3	5827.1
40°	6015.2	6168.4	5281.3	4643.1	4266.3	3995.3	4011.1	4476.4	5151.8	5956.6	6188.1
42.5°	6374.5	6493.8	5478.0	4955.9	4688.1	4373.7	4387.1	4739.4	5256.8	6198.4	6477.2
45°	6662.1	6749.7	5663.6	5285.3	5138.3	4846.0	4842.9	5007.2	5397.4	6402.1	6699.2
47.5°	6929.8	6976.4	5870.6	5606.0	5605.2	5454.3	5341.3	5323.1	5584.6	6573.6	6892.7
50°	7236.4	7253.6	6143.8	5929.8	6175.5	6151.7	5943.2	5724.4	5827.1	6766.3	7095.7
52.5°	7662.8	7663.6	6482.7	6245.7	6805.0	6880.1	6637.5	6178.6	6185.8	7141.5	7446.5
55°	8164.5	8199.2	6924.3	6624.1	7463.8	7591.7	7363.5	6718.1	6700.7	7746.6	8015.1
57.5°	8552.3	8736.3	7438.5	7097.3	8079.2	8245.8	8061.8	7277.4	7333.4	8370.6	8484.4
60°	8661.3	9091.8	7951.2	7628.1	8599.6	8850.1	8662.9	7881.6	7952.7	8775.8	8619.4
62.5°	8531.0	9206.4	8473.3	8103.6	8908.6	9148.7	9014.3	8277.4	8457.5	8723.7	8391.2
65°	8144.7	9040.4	8926.7	8305.8	8730.8	8816.1	8780.6	8298.0	8731.6	8230.8	7760.0
67.5°	7242.6	8400.6	8724.4	7873.8	7900.7	7809.0	7762.4	7733.9	8423.5	7435.3	6764.8
70°	5890.4	7218.1	7760.0	6589.3	6390.3	6301.9	6148.7	6527.8	7571.3	6335.0	5567.2
72.5°	4537.2	5522.2	6365.0	4995.4	4581.5	4611.5	4437.7	4991.4	6271.8	4897.4	4250.5
75°	3222.0	3765.5	5080.7	3589.3	3041.1	3039.6	3026.1	3592.5	4948.7	3515.1	3109.9
77.5°	2322.3	2710.9	3980.3	2402.1	2158.0	2185.6	2141.4	2441.6	3857.9	2528.5	2304.2
80°	1852.4	2007.1	2572.7	1601.9	1606.6	1671.4	1662.0	1669.9	2537.9	1831.0	1722.8
82.5°	1331.0	1523.7	1966.8	1227.5	1062.4	1131.2	1144.6	1238.6	1790.7	1294.6	1135.9
85°	682.5	928.9	1809.7	1063.3	664.3	550.6	633.5	977.1	1555.3	775.7	553.7
87.5°	132.7	257.5	1326.3	590.9	298.6	150.9	248.8	413.9	904.4	140.6	68.7
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°	4016.6	3915.5	3820.7	3722.8	3647.0	3554.5	3463.7	3384.7	3308.1	3257.6	3273.3
5°	3918.7	3672.3	3451.1	3245.7	3125.6	2981.1	2852.3	2744.2	2660.4	2606.7	2639.1
7.5°	3472.4	3139.0	2847.6	2576.7	2406.1	2218.9	2068.7	1962.9	1898.2	1861.8	1914.8
10°	3015.9	2641.5	2314.4	2032.4	1864.1	1705.4	1569.5	1457.4	1370.4	1329.4	1350.7
12.5°	2688.8	2272.6	1929.7	1740.1	1595.6	1453.4	1312.9	1181.7	1071.1	1020.6	1010.3
15°	2566.4	2074.2	1724.4	1512.6	1368.9	1214.0	1062.4	921.8	816.7	773.4	763.8
17.5°	2620.1	2031.7	1602.8	1352.3	1143.8	955.7	785.1	652.4	575.0	550.6	552.9
20°	2808.9	2047.4	1504.8	1187.2	929.8	707.0	536.3	444.7	411.5	406.0	412.4
22.5°	3068.0	2112.2	1433.7	1045.0	740.9	514.2	399.0	355.5	346.8	346.0	352.3
25°	3410.0	2238.6	1386.3	918.6	585.3	407.5	347.6	323.0	316.0	317.5	323.9
27.5°	3812.8	2398.9	1355.5	809.7	481.1	363.4	324.7	303.3	296.2	297.8	302.5
30°	4181.0	2539.6	1309.7	727.5	432.1	347.6	312.0	290.7	281.2	281.2	284.4
32.5°	4510.4	2661.2	1256.0	665.8	387.1	312.0	282.7	266.2	259.1	261.5	263.0
35°	4802.7	2725.1	1214.0	629.5	350.7	287.6	258.3	240.9	231.4	233.0	235.4
37.5°	5090.1	2749.7	1186.4	609.8	324.7	272.5	245.6	231.4	221.2	219.6	218.8
40°	5363.4	2744.2	1160.3	604.3	307.3	261.5	237.7	225.2	214.8	212.5	211.6
42.5°	5599.6	2726.0	1135.9	589.2	295.4	253.6	231.4	220.3	210.1	206.9	205.4
45°	5815.3	2714.9	1109.0	561.6	301.8	250.4	228.3	216.5	206.9	203.1	201.4
47.5°	6054.6	2754.4	1079.0	531.6	300.1	251.2	228.3	214.8	205.4	201.4	199.9
50°	6339.7	2887.9	1041.9	490.5	285.9	268.5	227.5	212.5	203.8	201.4	198.2
52.5°	6742.6	3104.3	990.5	437.6	274.9	286.7	226.7	208.6	201.4	197.4	193.5
55°	7294.8	3320.8	924.2	381.6	257.5	274.0	228.3	203.8	195.9	191.9	187.2
57.5°	7747.4	3485.1	840.5	334.9	241.7	259.1	225.9	198.2	189.6	185.7	181.7
60°	7718.2	3500.8	760.7	304.9	232.2	233.0	231.4	194.4	184.0	180.9	177.7
62.5°	7240.2	3305.8	686.4	289.9	225.2	212.5	236.2	189.6	178.5	175.3	173.0
65°	6444.8	2851.6	646.9	289.9	218.8	201.4	206.1	183.2	173.0	169.8	168.3
67.5°	5436.2	2291.5	609.8	296.2	210.1	193.5	187.2	177.0	167.5	164.3	162.8
70°	4357.2	1803.4	583.7	293.1	202.2	184.8	177.0	168.3	158.8	157.9	156.4
72.5°	3417.9	1448.7	571.9	293.1	190.4	174.6	166.6	160.4	150.9	150.1	147.7
75°	2738.6	1087.7	522.9	287.6	178.5	161.1	154.1	148.5	139.0	139.8	138.2
77.5°	2120.9	769.4	436.8	259.1	163.5	146.2	140.6	136.7	125.6	126.3	126.3
80°	1658.8	500.8	338.9	214.8	146.2	128.8	124.8	121.6	109.8	111.4	111.4
82.5°	1136.7	297.8	245.6	173.0	125.6	109.8	109.0	104.2	91.7	92.4	94.0
85°	620.8	195.9	163.5	128.0	98.7	89.3	87.7	85.3	73.4	73.4	74.3
87.5°	114.6	105.1	96.4	84.5	66.4	63.9	61.6	63.9	55.3	53.7	53.7
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):

	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°	3236.2	3181.7	3143.8	3110.7	3030.9	3036.4	3047.5	3063.2	3013.5	3039.6	3071.9
5°	2606.7	2561.7	2527.7	2474.7	2363.4	2323.9	2298.6	2287.5	2213.4	2229.1	2263.9
7.5°	1921.8	1921.0	1909.2	1849.9	1715.7	1634.3	1580.6	1564.0	1518.2	1535.6	1588.5
10°	1353.1	1367.3	1361.8	1308.9	1188.8	1130.4	1118.5	1151.6	1152.5	1186.4	1277.3
12.5°	977.9	970.0	962.9	919.4	829.4	819.9	846.8	892.6	903.7	940.0	1034.8
15°	729.9	711.0	707.0	673.0	613.8	622.5	642.2	665.8	666.7	691.9	770.2
17.5°	547.4	547.4	553.7	531.6	489.0	485.0	474.8	468.4	458.9	469.2	511.9
20°	424.9	444.7	460.5	447.8	409.2	390.3	370.5	357.8	350.7	351.5	364.2
22.5°	364.2	379.9	400.5	394.1	361.8	337.3	324.7	316.0	310.5	310.5	317.5
25°	333.4	343.6	362.5	359.4	331.7	312.0	301.8	293.1	286.7	285.9	293.1
27.5°	308.8	315.2	327.9	326.2	297.8	285.2	278.9	273.3	269.3	268.5	275.7
30°	286.7	289.9	296.2	293.9	272.5	259.8	257.5	255.1	252.8	253.6	263.8
32.5°	267.0	269.3	273.3	270.2	249.6	238.6	234.6	231.4	229.0	231.4	243.3
35°	244.9	252.0	256.8	255.1	233.0	219.6	210.9	203.1	199.9	202.2	215.6
37.5°	225.9	237.7	244.1	242.5	219.6	203.8	192.7	191.2	191.2	194.4	207.8
40°	218.8	227.5	233.0	230.7	207.8	191.9	185.7	183.2	184.0	187.2	201.4
42.5°	212.5	220.3	222.0	217.2	194.4	184.0	180.1	177.0	178.5	182.5	196.7
45°	206.9	213.3	212.5	205.4	183.2	176.2	176.2	173.8	174.6	177.7	192.7
47.5°	203.1	206.1	204.6	197.4	175.3	169.8	172.2	172.2	173.8	176.2	191.2
50°	196.7	199.1	197.4	191.2	169.0	164.3	166.6	169.8	171.4	173.8	187.2
52.5°	190.4	191.9	191.2	184.8	162.8	159.6	159.6	162.8	165.9	169.0	180.9
55°	184.0	185.7	186.4	181.7	157.9	154.8	154.1	154.1	157.2	161.9	174.6
57.5°	179.3	179.3	180.9	177.7	153.2	149.2	145.4	146.2	150.1	154.1	166.6
60°	173.8	174.6	177.0	173.8	146.9	140.6	137.5	141.4	143.0	146.9	160.4
62.5°	169.0	169.0	170.6	168.3	141.4	135.0	132.7	136.7	136.7	140.6	154.1
65°	165.1	164.3	164.3	163.5	135.8	129.5	128.0	129.5	130.3	134.3	147.7
67.5°	161.9	157.9	157.9	159.6	130.3	124.0	123.3	123.3	124.0	128.8	140.6
70°	154.8	151.7	150.9	156.4	124.8	116.9	116.9	115.3	116.9	119.3	132.0
72.5°	146.9	144.5	143.7	151.7	119.3	109.0	107.4	106.6	107.4	109.8	121.6
75°	136.7	135.0	136.7	148.5	113.8	100.4	98.0	97.2	97.2	98.0	110.6
77.5°	124.8	123.3	135.0	138.2	110.6	90.0	87.7	86.1	84.5	84.5	98.7
80°	110.6	109.8	130.3	116.9	105.9	79.0	75.1	72.6	71.1	70.3	84.5
82.5°	96.4	94.8	111.4	91.7	87.7	64.8	59.2	54.5	52.2	52.2	64.8
85°	79.0	78.2	87.7	67.1	60.9	47.4	39.5	35.5	32.4	32.4	41.8
87.5°	57.7	56.1	54.5	40.3	30.8	21.3	15.0	14.2	12.7	11.9	17.4
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°	3120.1	3185.7	3309.7	3411.6	3547.5	3656.4	3780.5	3834.2
5°	2327.8	2431.3	2620.9	2782.8	3007.2	3214.9	3451.8	3581.5
7.5°	1669.9	1823.1	1966.8	2169.1	2449.5	2728.3	3034.8	3206.2
10°	1381.5	1522.2	1645.4	1789.1	2005.6	2319.1	2684.8	2878.4
12.5°	1144.6	1296.2	1426.6	1580.6	1762.2	2045.8	2463.0	2688.0
15°	877.6	1042.7	1199.1	1384.7	1607.5	1931.3	2396.6	2647.8
17.5°	601.1	778.1	970.8	1197.5	1466.1	1883.2	2459.8	2769.4
20°	408.4	538.0	747.3	1015.8	1338.8	1860.2	2598.8	3019.8
22.5°	335.7	394.1	551.4	845.2	1234.6	1885.5	2824.7	3349.1
25°	308.1	339.6	428.9	695.1	1154.8	1952.6	3130.4	3721.2
27.5°	290.7	317.5	376.0	587.7	1081.4	2044.3	3502.5	4176.2
30°	280.4	305.7	354.7	532.4	1014.3	2123.2	3822.4	4519.1
32.5°	257.5	276.5	316.7	500.8	966.1	2187.3	4104.4	4839.8
35°	229.9	252.8	285.9	480.3	964.4	2217.2	4369.7	5194.4
37.5°	219.6	241.7	266.2	469.2	974.0	2242.5	4694.4	5596.5
40°	213.3	233.0	252.8	467.6	981.8	2262.3	5011.9	6015.2
42.5°	207.8	227.5	250.4	456.5	978.7	2289.2	5293.2	6374.5
45°	206.1	225.9	255.9	440.0	977.9	2331.0	5516.7	6662.1
47.5°	204.6	234.6	254.3	421.8	974.8	2419.5	5768.6	6929.8
50°	203.1	250.4	243.3	396.5	951.0	2570.4	6107.5	7236.4
52.5°	202.2	252.8	231.4	361.8	908.4	2793.9	6603.6	7662.8
55°	199.1	240.1	210.9	316.0	846.8	3034.8	7135.2	8164.5
57.5°	191.9	214.1	199.1	271.0	758.3	3203.1	7527.8	8552.3
60°	209.3	184.0	191.2	248.1	652.4	3233.0	7545.2	8661.3
62.5°	199.9	167.5	183.2	240.1	578.2	3037.1	7199.9	8531.0
65°	159.6	158.8	176.2	248.1	567.1	2598.8	6617.1	8144.7
67.5°	145.4	152.4	169.0	257.5	574.3	2047.4	5759.2	7242.6
70°	135.8	144.5	159.6	266.2	586.9	1613.0	4636.7	5890.4
72.5°	126.3	133.5	150.1	274.9	578.2	1272.6	3711.0	4537.2
75°	114.6	120.8	136.7	252.0	496.0	935.3	2948.8	3222.0
77.5°	101.1	106.6	120.1	199.1	372.9	650.9	2208.6	2322.3
80°	86.8	89.3	99.5	145.4	243.3	389.4	1680.9	1852.4
82.5°	68.7	69.6	75.8	106.6	151.7	248.8	1165.9	1331.0
85°	44.2	45.8	49.0	75.1	101.9	159.6	595.6	682.5
87.5°	15.0	17.4	17.4	36.3	49.7	88.5	182.5	132.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)