

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: P271331

Luminaire Tested: **XNV2-AF-02-LED-U-SLL-7027-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P271331
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-7027-800
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 800mA 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: 7475.9 lumens
Efficiency: N/A
Efficacy: 88.0 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 - G2

Input Watts (W): 85
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

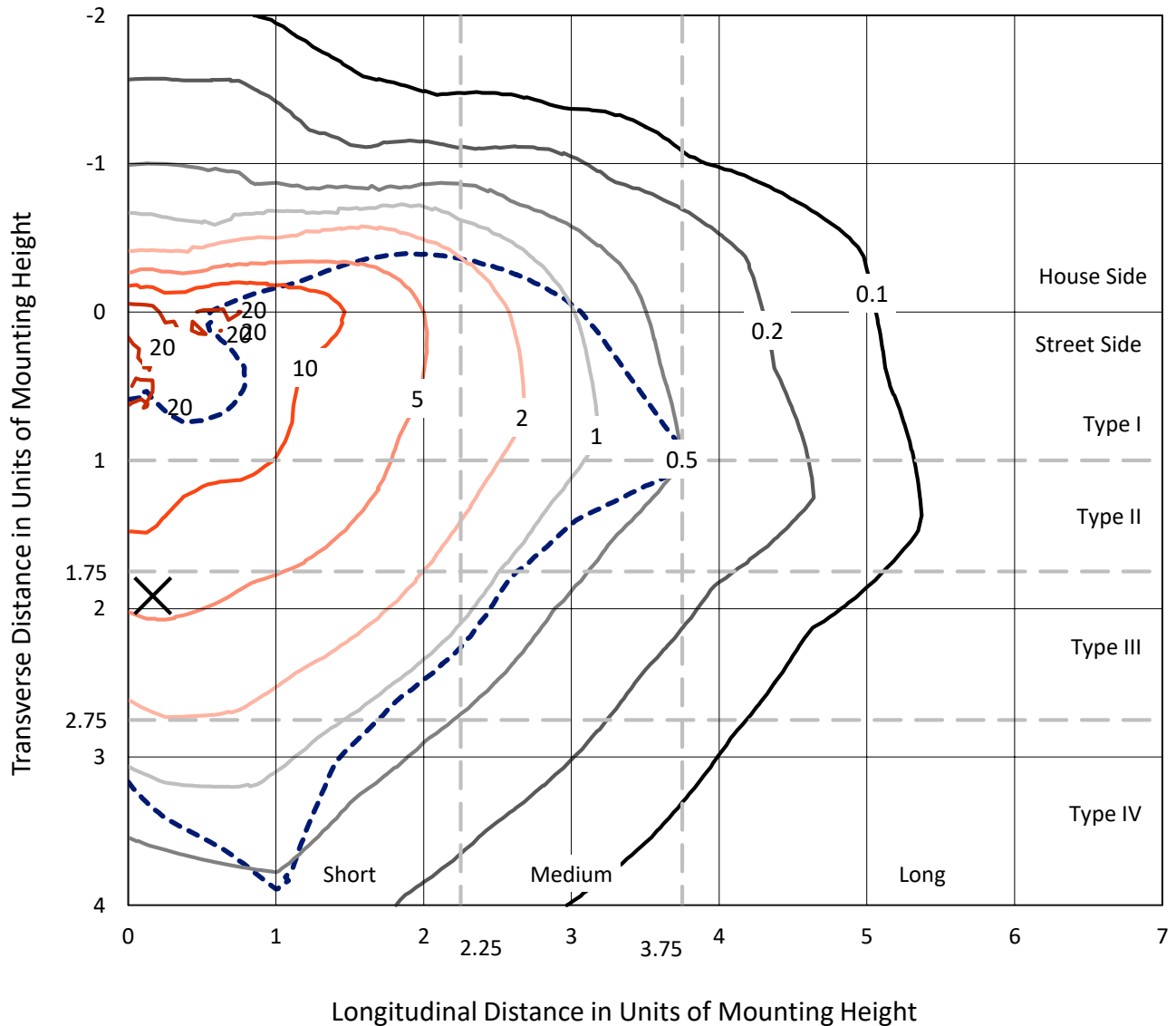


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

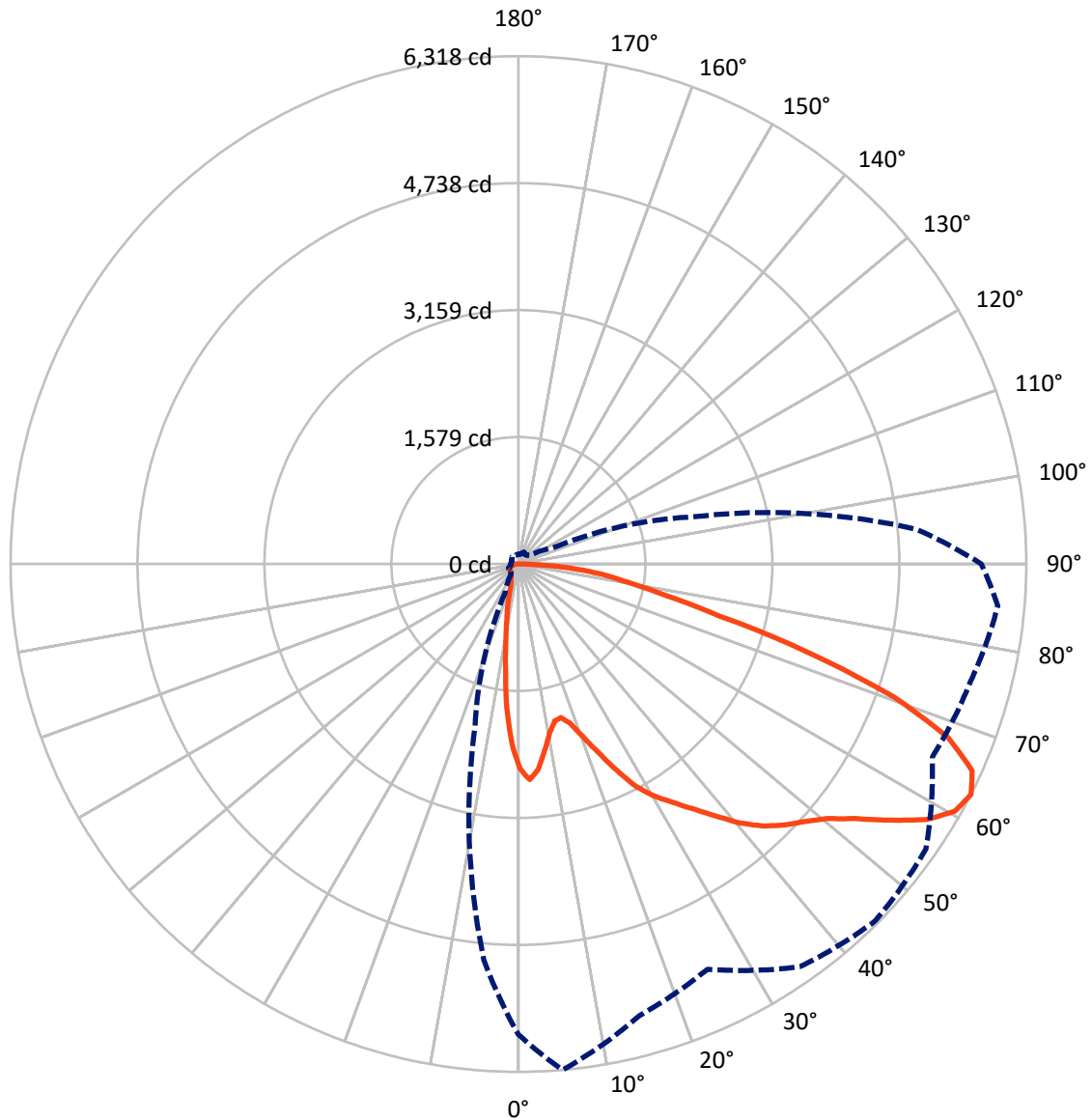


Based on 10 foot mounting height. Maximum calculated value = 29.3 fc
 Type IV - Short - Non-Cutoff

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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	1324.4	0.0	1324.4
	% Fixture	17.7	0.0	17.7
Street Side	Lumens	6151.6	0.0	6151.6
	% Fixture	82.3	0.0	82.3
Total	Lumens	7475.9	0.0	7475.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	185.4	2.5
10°-20°	338.5	4.5
20°-30°	486.9	6.5
30°-40°	745.8	10.0
40°-50°	1090.3	14.6
50°-60°	1586.4	21.2
60°-70°	1838.1	24.6
70°-80°	958.2	12.8
80°-90°	246.3	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°	7475.9	100.0
0°-180°	7475.9	100.0

Coefficient of Utilization



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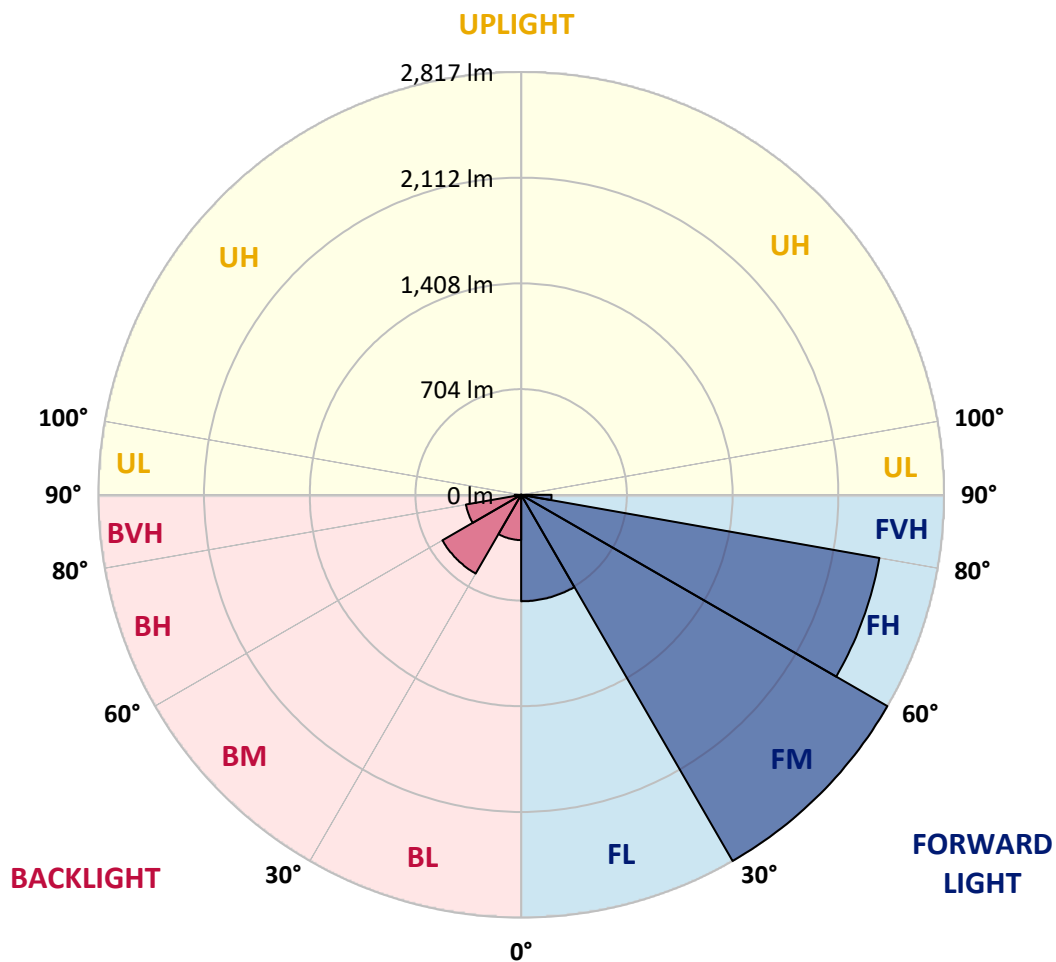
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	709.5	9.5			
FM	(30°-60°)	2816.6	37.7			
FH	(60°-80°)	2422.8	32.4			G2/5000
FVH	(80°-90°)	202.6	2.7			G2/225
BL	(0°-30°)	301.3	4.0	B1/500		
BM	(30°-60°)	606.0	8.1	B1/1000		
BH	(60°-80°)	373.4	5.0	B1/500		G1/500
BVH	(80°-90°)	43.7	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-G2

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8
2.5°	2631.0	2686.9	2750.9	2834.3	2891.3	2914.0	2933.0	2901.0	2870.2	2812.1	2791.6
5°	2457.7	2565.0	2741.1	2908.6	3056.0	3140.7	3166.6	3107.5	3002.3	2850.6	2770.5
7.5°	2200.2	2341.6	2589.4	2835.9	3047.4	3188.4	3198.7	3081.5	2874.4	2625.7	2495.6
10°	1975.3	2135.1	2421.9	2697.8	2921.6	3065.8	3037.6	2873.4	2623.5	2340.5	2193.7
12.5°	1844.6	2004.5	2296.6	2576.9	2787.7	2842.4	2785.0	2646.8	2410.0	2126.5	1978.4
15°	1816.9	1981.8	2252.2	2488.6	2619.2	2584.0	2527.0	2457.1	2288.5	2056.5	1913.4
17.5°	1900.5	2084.6	2311.2	2440.9	2435.5	2350.9	2303.2	2316.6	2288.0	2132.3	1982.7
20°	2072.2	2290.1	2461.4	2427.8	2289.1	2170.3	2142.6	2248.9	2381.8	2322.7	2158.4
22.5°	2298.3	2546.5	2666.3	2465.2	2212.6	2084.6	2079.2	2245.1	2552.5	2610.5	2410.5
25°	2553.6	2843.0	2872.8	2531.3	2204.5	2077.2	2072.2	2303.8	2757.9	2895.5	2692.8
27.5°	2865.9	3142.2	3045.3	2619.6	2240.3	2099.3	2102.7	2403.4	2972.0	3177.5	3011.1
30°	3101.0	3354.7	3151.4	2706.5	2297.8	2138.3	2146.5	2511.3	3087.5	3373.1	3265.2
32.5°	3321.2	3536.3	3253.3	2792.1	2381.8	2196.4	2224.6	2645.7	3226.3	3541.2	3505.4
35°	3564.5	3739.6	3366.7	2883.6	2502.0	2298.3	2338.9	2773.6	3364.0	3709.2	3743.3
37.5°	3840.4	3972.1	3489.6	3013.3	2675.5	2486.9	2509.7	2904.3	3459.9	3895.1	3998.6
40°	4127.7	4232.9	3624.1	3186.2	2927.5	2741.6	2752.4	3071.8	3535.2	4087.6	4246.4
42.5°	4374.2	4456.1	3759.0	3400.9	3217.0	3001.2	3010.5	3252.3	3607.4	4253.5	4444.8
45°	4571.7	4631.8	3886.4	3626.8	3525.9	3325.4	3323.3	3436.0	3703.8	4393.3	4597.0
47.5°	4755.4	4787.3	4028.4	3846.9	3846.4	3742.8	3665.4	3652.9	3832.3	4510.8	4729.8
50°	4965.7	4977.6	4216.0	4069.1	4237.8	4221.4	4078.3	3928.2	3998.6	4643.2	4869.3
52.5°	5258.4	5258.9	4448.5	4286.0	4669.7	4721.2	4554.8	4239.9	4244.8	4900.7	5109.9
55°	5602.5	5626.4	4751.6	4545.7	5121.7	5209.6	5053.0	4610.1	4598.2	5315.8	5500.1
57.5°	5868.7	5995.0	5104.4	4870.3	5544.0	5658.5	5532.1	4993.9	5032.3	5744.0	5822.2
60°	5943.5	6239.0	5456.2	5234.6	5901.2	6073.1	5944.7	5408.5	5457.4	6022.1	5914.8
62.5°	5854.1	6317.5	5814.5	5560.9	6113.1	6278.0	6185.8	5680.2	5803.7	5986.3	5758.1
65°	5589.1	6203.8	6125.6	5699.6	5991.2	6049.7	6025.4	5694.1	5991.8	5648.2	5325.1
67.5°	4970.1	5764.7	5986.9	5403.1	5421.5	5358.7	5326.7	5307.1	5780.4	5102.3	4642.1
70°	4042.1	4953.3	5325.1	4521.8	4385.2	4324.4	4219.2	4479.5	5195.4	4347.2	3820.3
72.5°	3113.5	3789.4	4367.7	3427.9	3143.9	3164.5	3045.3	3425.1	4303.8	3360.6	2916.7
75°	2211.0	2584.0	3486.4	2463.1	2086.9	2085.8	2076.6	2465.2	3396.0	2412.0	2134.1
77.5°	1593.7	1860.3	2731.3	1648.4	1480.9	1499.8	1469.4	1675.5	2647.3	1735.0	1581.1
80°	1271.1	1377.3	1765.4	1099.3	1102.5	1147.0	1140.5	1145.9	1741.6	1256.5	1182.2
82.5°	913.3	1045.5	1349.8	842.3	729.1	776.2	785.4	849.9	1228.8	888.5	779.5
85°	468.3	637.4	1241.8	729.7	455.9	377.7	434.7	670.6	1067.2	532.2	380.0
87.5°	91.1	176.6	910.2	405.5	205.0	103.6	170.8	284.0	620.6	96.5	47.2
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°	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8
2.5°	2756.3	2686.9	2621.9	2554.7	2502.6	2439.2	2376.8	2322.7	2270.0	2235.4	2246.2
5°	2689.0	2519.9	2368.2	2227.3	2144.9	2045.7	1957.3	1883.0	1825.6	1788.7	1811.0
7.5°	2382.8	2154.0	1954.1	1768.1	1651.1	1522.5	1419.6	1347.0	1302.5	1277.6	1314.0
10°	2069.5	1812.6	1588.3	1394.7	1279.2	1170.3	1077.1	1000.1	940.4	912.3	927.0
12.5°	1845.1	1559.5	1324.2	1194.1	1094.9	997.4	900.9	810.9	735.1	700.3	693.3
15°	1761.0	1423.5	1183.2	1038.0	939.4	833.1	729.1	632.5	560.5	530.7	524.2
17.5°	1798.0	1394.1	1099.9	927.9	784.8	655.9	538.9	447.7	394.6	377.7	379.4
20°	1927.6	1404.9	1032.6	814.8	637.9	485.2	368.0	305.2	282.3	278.7	283.0
22.5°	2105.3	1449.4	983.9	717.1	508.4	352.9	273.8	243.9	238.0	237.4	241.7
25°	2340.1	1536.1	951.2	630.4	401.6	279.7	238.5	221.7	216.9	217.8	222.2
27.5°	2616.5	1646.2	930.1	555.6	330.0	249.3	222.8	208.1	203.2	204.4	207.6
30°	2869.0	1742.7	898.8	499.2	296.5	238.5	214.1	199.5	193.0	193.0	195.1
32.5°	3095.1	1826.2	861.8	457.0	265.5	214.1	194.0	182.6	177.8	179.4	180.5
35°	3295.6	1870.0	833.1	432.1	240.7	197.3	177.2	165.3	158.8	159.9	161.5
37.5°	3492.9	1886.9	814.1	418.5	222.8	186.9	168.6	158.8	151.8	150.6	150.1
40°	3680.4	1883.0	796.3	414.7	210.8	179.4	163.1	154.5	147.4	145.9	145.3
42.5°	3842.6	1870.6	779.5	404.3	202.7	174.0	158.8	151.3	144.2	142.0	140.9
45°	3990.5	1863.1	761.0	385.5	207.1	171.8	156.7	148.5	142.0	139.2	138.2
47.5°	4154.8	1890.2	740.5	364.8	206.0	172.4	156.7	147.4	140.9	138.2	137.1
50°	4350.4	1981.8	715.0	336.7	196.2	184.3	156.1	145.9	139.9	138.2	136.1
52.5°	4626.9	2130.2	679.7	300.4	188.6	196.8	155.5	143.1	138.2	135.6	132.8
55°	5005.7	2278.8	634.3	261.8	176.6	188.0	156.7	139.9	134.4	131.7	128.5
57.5°	5316.3	2391.5	576.7	229.8	165.8	177.8	155.0	136.1	130.1	127.4	124.7
60°	5296.3	2402.3	521.9	209.2	159.4	159.9	158.8	133.4	126.3	124.1	122.0
62.5°	4968.3	2268.5	471.0	199.0	154.5	145.9	162.1	130.1	122.4	120.4	118.7
65°	4422.5	1956.8	443.9	199.0	150.1	138.2	141.5	125.8	118.7	116.5	115.4
67.5°	3730.3	1572.5	418.5	203.2	144.2	132.8	128.5	121.5	115.0	112.7	111.7
70°	2989.9	1237.4	400.6	201.1	138.8	126.8	121.5	115.4	109.0	108.4	107.3
72.5°	2345.5	994.2	392.4	201.1	130.7	119.8	114.4	110.0	103.6	102.9	101.4
75°	1879.3	746.4	358.9	197.3	122.4	110.6	105.7	101.9	95.4	95.9	94.9
77.5°	1455.4	527.9	299.8	177.8	112.2	100.3	96.5	93.8	86.1	86.7	86.7
80°	1138.3	343.6	232.5	147.4	100.3	88.4	85.7	83.5	75.4	76.4	76.4
82.5°	780.0	204.4	168.6	118.7	86.1	75.4	74.7	71.5	62.9	63.4	64.5
85°	426.1	134.4	112.2	87.9	67.7	61.3	60.1	58.5	50.5	50.5	50.9
87.5°	78.6	72.1	66.1	58.0	45.5	43.8	42.3	43.8	38.0	36.9	36.9
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°	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8
2.5°	2220.8	2183.4	2157.3	2134.6	2079.8	2083.6	2091.3	2102.0	2067.9	2085.8	2108.1
5°	1788.7	1757.9	1734.5	1698.2	1621.8	1594.8	1577.3	1569.8	1518.9	1529.6	1553.4
7.5°	1318.8	1318.3	1310.1	1269.5	1177.3	1121.5	1084.7	1073.3	1041.9	1053.7	1090.1
10°	928.5	938.3	934.4	898.1	815.8	775.6	767.5	790.2	790.9	814.1	876.4
12.5°	671.0	665.6	660.8	630.9	569.2	562.7	581.1	612.6	620.1	645.1	710.1
15°	500.9	487.8	485.2	461.8	421.1	427.1	440.7	457.0	457.4	474.8	528.6
17.5°	375.6	375.6	380.0	364.8	335.5	332.8	325.7	321.5	314.9	322.0	351.2
20°	291.6	305.2	316.1	307.3	280.8	267.8	254.2	245.5	240.7	241.3	249.9
22.5°	249.9	260.7	274.8	270.5	248.2	231.5	222.8	216.9	213.0	213.0	217.8
25°	228.8	235.7	248.8	246.7	227.7	214.1	207.1	201.1	196.8	196.2	201.1
27.5°	211.9	216.3	224.9	223.9	204.4	195.7	191.3	187.6	184.8	184.3	189.2
30°	196.8	199.0	203.2	201.6	186.9	178.4	176.6	175.1	173.5	174.0	181.1
32.5°	183.3	184.8	187.6	185.4	171.2	163.8	160.9	158.8	157.3	158.8	166.9
35°	168.1	173.0	176.2	175.1	159.9	150.6	144.7	139.2	137.1	138.8	148.0
37.5°	155.0	163.1	167.5	166.4	150.6	139.9	132.3	131.2	131.2	133.4	142.6
40°	150.1	156.1	159.9	158.3	142.6	131.7	127.4	125.8	126.3	128.5	138.2
42.5°	145.9	151.3	152.4	149.1	133.4	126.3	123.5	121.5	122.4	125.3	134.9
45°	142.0	146.3	145.9	140.9	125.8	120.9	120.9	119.3	119.8	122.0	132.3
47.5°	139.2	141.5	140.3	135.6	120.4	116.5	118.1	118.1	119.3	120.9	131.2
50°	134.9	136.6	135.6	131.2	116.1	112.7	114.4	116.5	117.6	119.3	128.5
52.5°	130.7	131.7	131.2	126.8	111.7	109.6	109.6	111.7	113.8	116.1	124.1
55°	126.3	127.4	127.9	124.7	108.4	106.2	105.7	105.7	107.8	111.1	119.8
57.5°	123.1	123.1	124.1	122.0	105.1	102.4	99.7	100.3	102.9	105.7	114.4
60°	119.3	119.8	121.5	119.3	100.8	96.5	94.3	97.0	98.2	100.8	110.0
62.5°	116.1	116.1	117.0	115.4	97.0	92.6	91.1	93.8	93.8	96.5	105.7
65°	113.2	112.7	112.7	112.2	93.2	88.9	87.9	88.9	89.4	92.2	101.4
67.5°	111.1	108.4	108.4	109.6	89.4	85.1	84.6	84.6	85.1	88.4	96.5
70°	106.2	104.1	103.6	107.3	85.7	80.2	80.2	79.1	80.2	81.8	90.5
72.5°	100.8	99.3	98.6	104.1	81.8	74.7	73.8	73.2	73.8	75.4	83.5
75°	93.8	92.6	93.8	101.9	78.1	68.8	67.3	66.7	66.7	67.3	75.8
77.5°	85.7	84.6	92.6	94.9	75.8	61.9	60.1	59.1	58.0	58.0	67.7
80°	75.8	75.4	89.4	80.2	72.7	54.2	51.6	49.9	48.8	48.2	58.0
82.5°	66.1	65.0	76.4	62.9	60.1	44.5	40.7	37.4	35.8	35.8	44.5
85°	54.2	53.7	60.1	46.1	41.7	32.5	27.0	24.4	22.2	22.2	28.7
87.5°	39.5	38.4	37.4	27.7	21.1	14.6	10.3	9.7	8.7	8.2	11.9
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):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8
2.5°	2141.1	2186.0	2271.2	2341.2	2434.3	2509.1	2594.2	2631.0
5°	1597.4	1668.4	1798.4	1909.6	2063.5	2206.1	2368.7	2457.7
7.5°	1145.9	1251.0	1349.8	1488.4	1680.9	1872.2	2082.5	2200.2
10°	948.0	1044.5	1129.1	1227.8	1376.3	1591.4	1842.5	1975.3
12.5°	785.4	889.5	979.0	1084.7	1209.3	1404.0	1690.2	1844.6
15°	602.3	715.5	822.8	950.1	1103.1	1325.3	1644.5	1816.9
17.5°	412.5	534.0	666.2	821.7	1006.0	1292.2	1687.9	1900.5
20°	280.2	369.2	512.8	697.1	918.7	1276.5	1783.3	2072.2
22.5°	230.3	270.5	378.4	579.9	847.2	1293.9	1938.4	2298.3
25°	211.5	233.1	294.4	477.0	792.5	1339.9	2148.1	2553.6
27.5°	199.5	217.8	258.1	403.2	742.1	1402.9	2403.4	2865.9
30°	192.4	209.8	243.4	365.3	695.9	1457.1	2623.0	3101.0
32.5°	176.6	189.7	217.4	343.6	662.9	1500.9	2816.5	3321.2
35°	157.7	173.5	196.2	329.6	661.8	1521.5	2998.6	3564.5
37.5°	150.6	165.8	182.6	322.0	668.3	1538.8	3221.4	3840.4
40°	146.3	159.9	173.5	320.9	673.8	1552.5	3439.3	4127.7
42.5°	142.6	156.1	171.8	313.2	671.7	1570.9	3632.2	4374.2
45°	141.5	155.0	175.6	301.9	671.0	1599.6	3785.6	4571.7
47.5°	140.3	160.9	174.5	289.4	668.9	1660.2	3958.6	4755.4
50°	139.2	171.8	166.9	272.0	652.6	1763.8	4191.1	4965.7
52.5°	138.8	173.5	158.8	248.2	623.3	1917.3	4531.5	5258.4
55°	136.6	164.7	144.7	216.9	581.1	2082.5	4896.3	5602.5
57.5°	131.7	147.0	136.6	185.9	520.4	2198.1	5165.8	5868.7
60°	143.6	126.3	131.2	170.1	447.7	2218.6	5177.7	5943.5
62.5°	137.1	115.0	125.8	164.7	396.8	2084.2	4940.8	5854.1
65°	109.6	109.0	120.9	170.1	389.1	1783.3	4540.8	5589.1
67.5°	99.7	104.7	116.1	176.6	394.0	1404.9	3952.1	4970.1
70°	93.2	99.3	109.6	182.6	402.7	1106.8	3181.7	4042.1
72.5°	86.7	91.5	102.9	188.6	396.8	873.2	2546.5	3113.5
75°	78.6	83.0	93.8	173.0	340.4	641.7	2023.4	2211.0
77.5°	69.3	73.2	82.4	136.6	255.8	446.6	1515.6	1593.7
80°	59.6	61.3	68.4	99.7	166.9	267.2	1153.5	1271.1
82.5°	47.2	47.7	52.0	73.2	104.1	170.8	800.1	913.3
85°	30.4	31.4	33.5	51.6	69.9	109.6	408.6	468.3
87.5°	10.3	11.9	11.9	25.0	34.1	60.7	125.3	91.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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