

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: P271336

Luminaire Tested: **XNV2-AF-02-LED-U-SLR-7027-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P271336
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-7027-1200
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1200mA 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: 10150.5 lumens
Efficiency: N/A
Efficacy: 79.3 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): 128
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

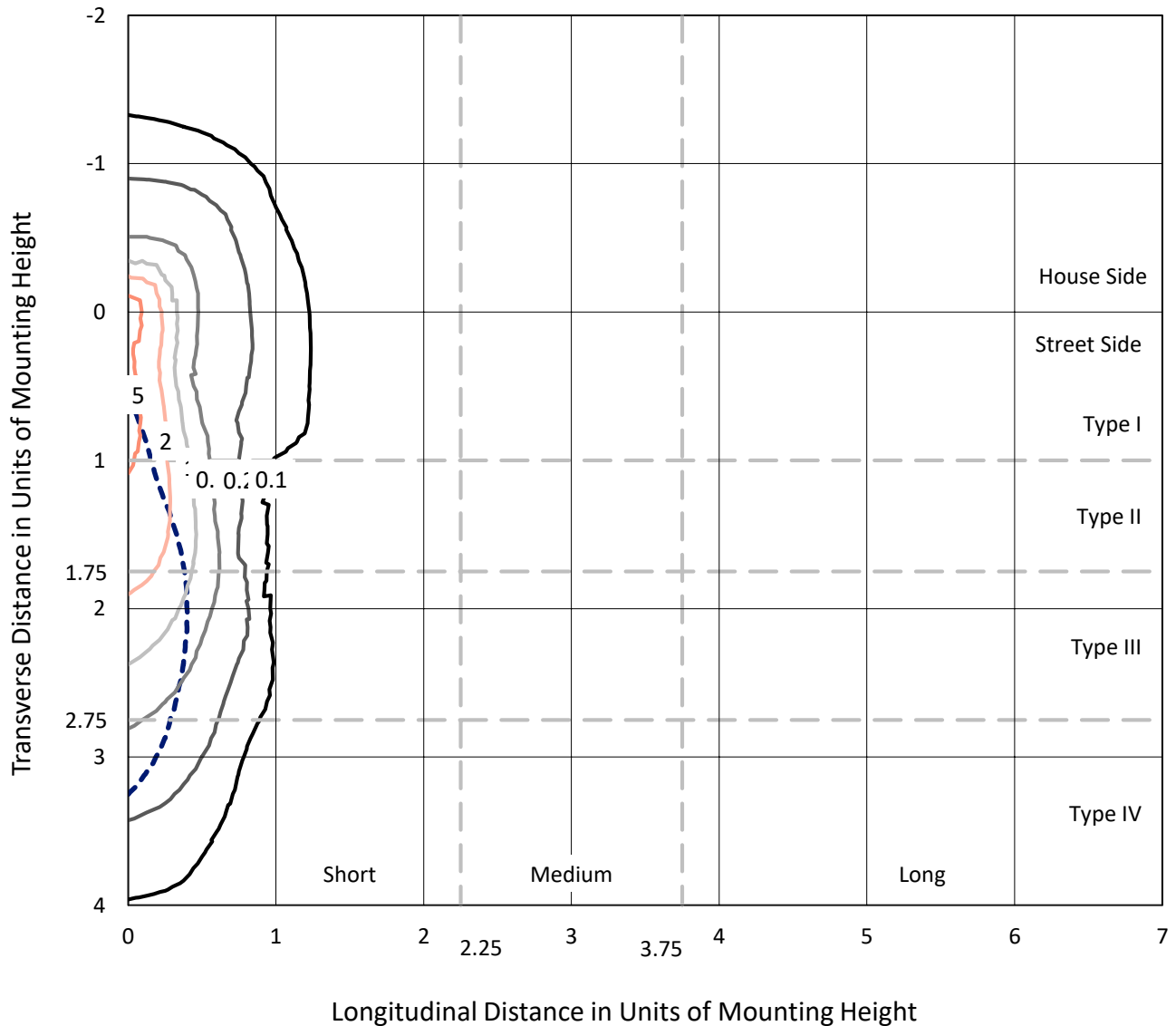


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

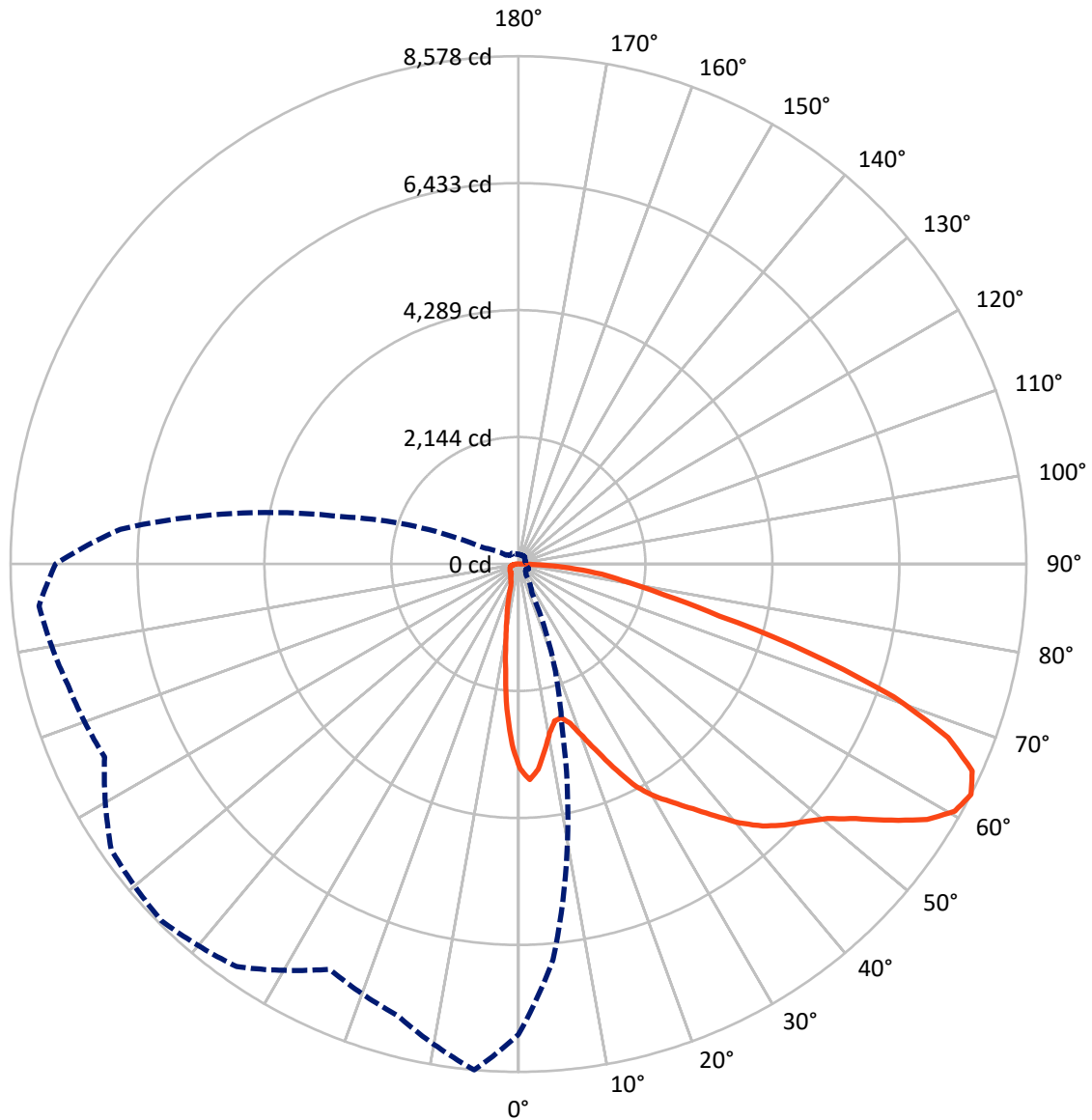


Based on 20 foot mounting height. Maximum calculated value = 8.7 fc
 Type IV - Short - Non-Cutoff

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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	1798.2	0.0	1798.2
	% Fixture	17.7	0.0	17.7
Street Side	Lumens	8352.3	0.0	8352.3
	% Fixture	82.3	0.0	82.3
Total	Lumens	10150.5	0.0	10150.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	251.7	2.5
10°-20°	459.7	4.5
20°-30°	661.1	6.5
30°-40°	1012.6	10.0
40°-50°	1480.4	14.6
50°-60°	2154.0	21.2
60°-70°	2495.7	24.6
70°-80°	1301.0	12.8
80°-90°	334.4	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°	10150.5	100.0
0°-180°	10150.5	100.0

Coefficient of Utilization



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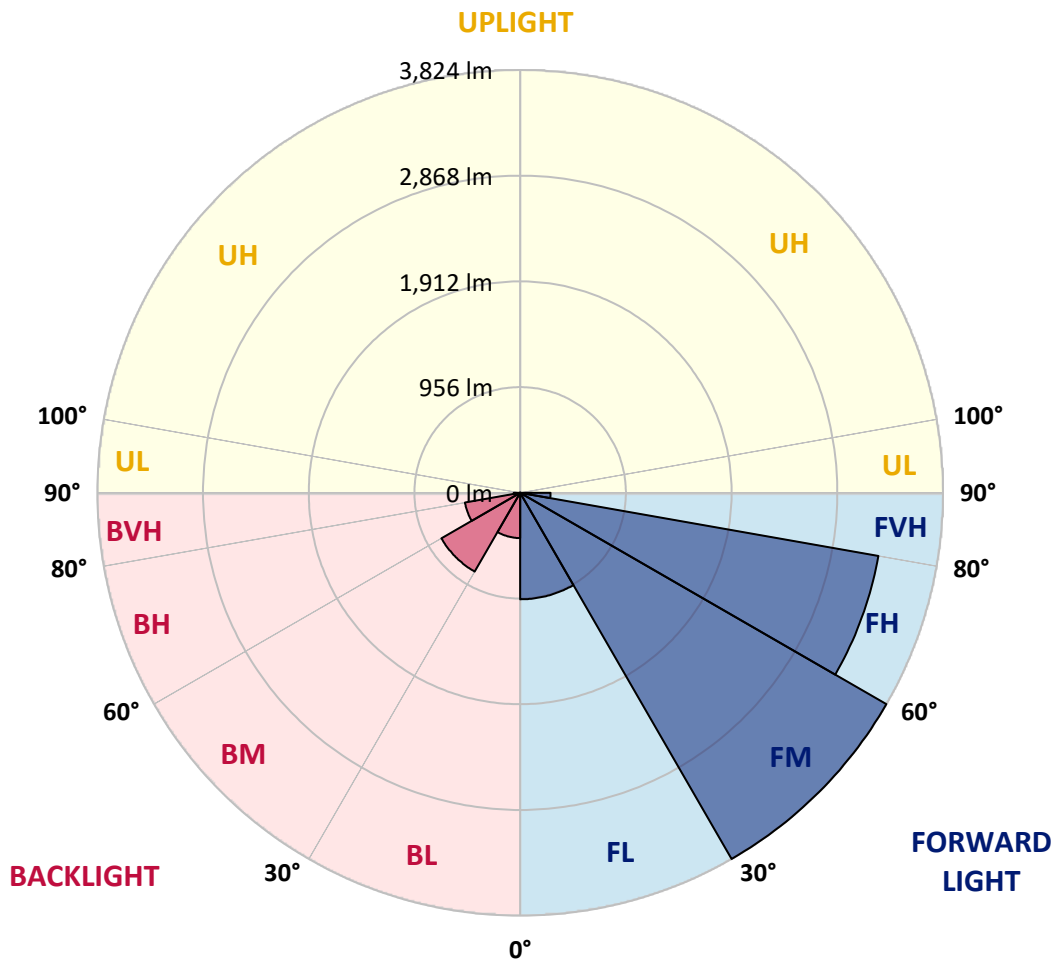
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	963.3	9.5			
FM	(30°-60°)	3824.2	37.7			
FH	(60°-80°)	3289.6	32.4			G2/5000
FVH	(80°-90°)	275.1	2.7			G3/500
BL	(0°-30°)	409.1	4.0	B1/500		
BM	(30°-60°)	822.7	8.1	B1/1000		
BH	(60°-80°)	507.0	5.0	B2/1000		G2/1000
BVH	(80°-90°)	59.3	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°	3460.5	3460.5	3460.5	3460.5	3460.5	3460.5	3460.5	3460.5	3460.5	3460.5	3460.5
2.5°	3572.4	3522.3	3406.8	3305.3	3178.7	3083.7	2968.1	2907.1	2862.2	2831.9	2807.7
5°	3336.8	3216.1	2995.4	2801.9	2592.8	2442.0	2265.3	2168.9	2109.3	2076.9	2062.1
7.5°	2987.3	2827.5	2542.1	2282.2	2020.9	1832.5	1698.7	1555.9	1480.0	1430.7	1414.6
10°	2681.9	2501.5	2160.9	1868.7	1667.0	1533.0	1418.2	1287.2	1190.1	1105.5	1073.7
12.5°	2504.5	2294.7	1906.2	1641.9	1472.6	1329.1	1207.7	1066.4	964.2	875.8	841.9
15°	2466.9	2232.8	1799.5	1497.7	1290.1	1117.2	971.4	817.6	717.6	644.8	621.2
17.5°	2580.3	2291.8	1754.5	1366.0	1115.8	904.6	724.9	560.1	476.9	437.1	427.7
20°	2813.6	2421.3	1733.2	1247.4	946.5	696.2	501.2	380.5	339.3	327.5	326.8
22.5°	3120.5	2631.9	1756.7	1150.3	787.5	513.7	367.2	312.8	295.8	289.3	289.3
25°	3467.1	2916.6	1819.2	1076.0	647.7	399.7	316.5	287.0	273.1	266.3	267.2
27.5°	3891.1	3263.3	1904.6	1007.4	547.5	350.2	295.8	270.7	256.8	250.2	250.9
30°	4210.4	3561.3	1978.2	944.9	496.0	330.4	284.9	261.2	245.7	236.3	235.5
32.5°	4509.2	3824.1	2037.8	900.1	466.6	295.2	257.5	239.9	226.7	215.7	213.4
35°	4839.7	4071.4	2065.8	898.7	447.4	266.3	235.5	214.2	201.0	188.5	186.2
37.5°	5214.3	4373.8	2089.4	907.5	437.1	248.0	225.2	204.6	193.6	181.1	178.1
40°	5604.3	4669.7	2107.9	914.8	435.7	235.5	217.1	198.7	187.7	174.5	171.4
42.5°	5939.2	4931.6	2132.8	911.9	425.3	233.3	212.0	193.6	183.3	170.0	166.4
45°	6207.1	5140.0	2171.8	911.2	409.9	238.5	210.6	192.1	179.7	165.6	162.7
47.5°	6456.6	5374.7	2254.2	908.1	393.0	237.1	218.6	190.6	178.1	164.1	162.0
50°	6742.1	5690.5	2394.8	886.1	369.5	226.7	233.3	189.2	174.5	162.0	159.7
52.5°	7139.5	6152.6	2603.1	846.4	337.0	215.7	235.5	188.5	168.5	157.6	154.6
55°	7606.8	6647.9	2827.5	788.9	294.4	196.5	223.8	185.5	162.7	150.8	146.5
57.5°	7968.2	7013.7	2984.3	706.5	252.5	185.5	199.5	178.9	155.2	143.5	139.9
60°	8069.8	7030.0	3012.2	608.0	231.1	178.1	171.4	195.0	149.4	136.9	133.2
62.5°	7948.5	6708.4	2829.8	538.8	223.8	170.8	156.0	186.2	143.5	131.1	127.3
65°	7588.5	6165.2	2421.3	528.5	231.1	164.1	148.0	148.7	137.6	125.1	121.5
67.5°	6748.1	5365.9	1907.6	535.0	239.9	157.6	142.0	135.5	131.1	120.0	115.5
70°	5488.0	4320.0	1502.9	546.8	248.0	148.7	134.7	126.7	122.9	111.1	109.0
72.5°	4227.3	3457.5	1185.7	538.8	256.0	139.9	124.3	117.8	113.4	102.2	100.2
75°	3002.0	2747.3	871.4	462.2	234.7	127.3	112.6	106.7	103.0	91.3	90.5
77.5°	2163.7	2057.7	606.4	347.4	185.5	111.8	99.4	94.2	91.9	78.7	78.7
80°	1725.9	1566.1	362.8	226.7	135.5	92.7	83.2	80.9	78.7	65.4	66.3
82.5°	1240.1	1086.3	231.9	141.4	99.4	70.6	64.8	64.0	60.4	48.6	48.6
85°	635.9	555.0	148.7	95.0	69.9	45.6	42.7	41.2	38.9	30.2	30.2
87.5°	123.6	170.0	82.5	46.4	33.9	16.2	16.2	14.0	16.2	11.0	11.8
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	3460.5	3460.5	3460.5	3460.5	3460.5	3460.5	3460.5	3460.5	3460.5	3460.5	3460.5
2.5°	2854.1	2839.4	2829.0	2823.9	2898.2	2929.2	2964.4	3015.3	3049.8	3035.2	3082.3
5°	2131.4	2141.6	2165.3	2202.0	2305.8	2355.0	2386.7	2428.7	2458.8	2428.7	2478.8
7.5°	1457.2	1472.6	1522.6	1598.5	1723.6	1778.9	1789.9	1790.6	1783.9	1734.6	1768.6
10°	1073.0	1042.2	1053.2	1107.6	1219.4	1268.8	1273.9	1260.7	1258.4	1238.7	1276.9
12.5°	831.7	788.9	763.9	772.7	856.7	897.1	903.8	911.2	941.3	950.9	997.9
15°	620.4	598.4	579.9	571.9	627.0	658.6	662.4	680.0	711.6	720.5	761.0
17.5°	436.4	442.3	451.8	455.6	495.2	515.8	510.0	510.0	515.2	512.9	535.7
20°	333.5	345.2	363.5	381.2	417.4	429.1	414.4	396.0	384.1	378.2	383.4
22.5°	294.4	302.5	314.2	337.0	367.2	373.2	354.0	339.3	328.2	322.3	323.1
25°	273.1	281.1	290.7	309.0	334.9	337.9	320.2	310.5	301.7	295.8	294.4
27.5°	254.6	259.8	265.7	277.4	303.9	305.5	293.7	287.7	281.9	277.4	276.0
30°	237.7	239.9	242.2	254.0	273.8	276.0	270.1	267.2	264.9	261.9	261.9
32.5°	215.7	218.6	222.3	232.7	251.6	254.6	250.9	248.7	245.1	243.6	241.5
35°	189.2	196.5	204.6	217.1	237.7	239.2	234.7	228.2	219.4	217.1	215.7
37.5°	178.1	179.7	189.9	204.6	226.0	227.5	221.5	210.6	203.8	204.6	206.2
40°	170.8	173.0	178.9	193.6	215.0	217.1	212.0	203.8	197.3	197.9	200.2
42.5°	164.8	167.9	171.4	181.1	202.4	206.8	205.4	197.9	191.3	192.9	195.8
45°	162.0	164.1	164.1	170.8	191.3	197.9	198.7	192.9	187.7	189.2	192.9
47.5°	160.4	160.4	158.2	163.4	184.1	190.6	192.1	189.2	186.2	187.7	191.3
50°	158.2	155.2	153.2	157.6	178.1	184.1	185.5	183.3	184.7	187.7	189.9
52.5°	151.6	148.7	148.7	151.6	172.2	178.1	178.9	177.3	180.3	184.1	187.7
55°	143.5	143.5	144.3	147.2	169.3	173.7	173.0	171.4	174.5	178.9	182.5
57.5°	136.2	135.5	139.1	142.8	165.6	168.5	167.1	167.1	169.3	173.0	176.6
60°	131.7	128.1	131.1	136.9	162.0	164.8	162.7	162.0	165.6	168.5	171.4
62.5°	127.3	123.6	125.9	131.7	156.8	159.0	157.6	157.6	161.2	163.4	166.4
65°	120.7	119.3	120.7	126.7	152.4	153.2	153.2	153.8	156.8	158.2	161.2
67.5°	114.9	114.9	115.5	121.5	148.7	147.2	147.2	150.8	151.6	153.2	156.0
70°	107.4	109.0	109.0	116.3	145.7	140.6	141.4	144.3	145.7	147.2	148.0
72.5°	99.4	100.2	101.6	111.1	141.4	133.9	134.7	136.9	137.6	139.9	140.6
75°	90.5	91.3	93.5	106.0	138.3	127.3	125.9	127.3	128.7	130.3	129.5
77.5°	80.2	81.7	83.9	103.0	128.7	125.9	114.9	116.3	117.8	117.8	117.0
80°	67.7	69.9	73.7	98.6	109.0	121.5	102.2	103.0	103.8	103.8	102.2
82.5°	50.8	55.2	60.4	81.7	85.3	103.8	88.4	89.8	87.6	86.1	85.3
85°	33.1	36.8	44.1	56.7	62.5	81.7	72.9	73.7	69.2	68.5	68.5
87.5°	13.2	14.0	19.9	28.7	37.5	50.8	52.2	53.7	50.0	50.0	51.6
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°	3460.5	3460.5	3460.5	3460.5	3460.5	3460.5	3460.5	3460.5	3460.5	3460.5	3460.5
2.5°	3153.6	3227.3	3311.8	3398.0	3468.5	3559.9	3648.1	3742.3	3790.2	3818.2	3896.9
5°	2556.8	2657.5	2777.5	2912.2	3024.1	3215.5	3421.6	3651.2	3761.6	3870.4	4076.5
7.5°	1828.9	1927.6	2067.3	2241.7	2400.7	2653.1	2924.7	3235.2	3388.3	3565.1	3902.9
10°	1357.9	1462.4	1588.9	1736.9	1893.6	2156.4	2461.0	2809.9	2978.4	3177.9	3562.0
12.5°	1101.1	1223.2	1354.1	1486.7	1621.4	1798.0	2117.3	2505.3	2686.3	2887.2	3272.0
15°	858.9	989.8	1131.1	1275.5	1409.4	1606.6	1932.7	2391.2	2598.0	2792.2	3107.2
17.5°	608.0	731.6	890.5	1065.7	1260.0	1493.3	1892.9	2441.2	2692.2	2895.2	3106.5
20°	414.4	499.6	658.6	866.2	1106.2	1402.1	1907.6	2617.1	2930.6	3153.6	3233.8
22.5°	331.1	371.7	479.2	690.3	973.8	1335.8	1967.9	2858.4	3272.9	3544.4	3465.7
25°	301.0	323.7	379.8	545.4	855.9	1291.7	2085.8	3177.1	3656.3	3931.5	3744.6
27.5°	282.5	302.5	338.5	448.3	754.3	1262.8	2235.2	3552.4	4088.2	4314.2	4035.2
30°	270.7	290.7	323.7	402.6	677.9	1220.3	2366.1	3895.5	4433.4	4579.9	4192.0
32.5°	248.0	263.5	290.7	360.6	620.4	1170.2	2479.4	4202.4	4759.5	4808.1	4380.4
35°	224.4	240.7	267.9	326.8	586.6	1131.1	2539.1	4474.6	5082.6	5036.2	4567.4
37.5°	215.7	228.9	254.0	302.5	568.2	1105.5	2561.8	4742.5	5429.1	5288.6	4697.6
40°	209.8	221.5	243.6	286.3	563.0	1081.1	2556.8	4997.2	5765.5	5549.9	4800.0
42.5°	205.4	215.7	236.3	275.2	549.0	1058.4	2539.8	5217.3	6035.0	5775.2	4897.9
45°	201.7	212.7	233.3	281.1	523.3	1033.3	2529.4	5418.1	6241.8	5964.9	5028.8
47.5°	200.2	212.7	234.1	279.6	495.2	1005.4	2566.3	5641.1	6422.1	6124.7	5203.3
50°	197.9	212.0	250.2	266.3	457.1	970.8	2690.8	5906.9	6611.2	6304.2	5429.1
52.5°	194.4	211.2	267.2	256.0	407.7	922.9	2892.4	6282.1	6937.9	6653.8	5763.3
55°	189.9	212.7	255.4	239.9	355.5	861.0	3094.0	6796.7	7467.8	7217.6	6243.2
57.5°	184.7	210.6	241.5	225.2	312.0	783.1	3247.1	7218.3	7904.9	7799.1	6832.7
60°	181.1	215.7	217.1	216.4	284.0	708.8	3261.7	7191.1	8030.8	8176.6	7409.7
62.5°	176.6	220.1	197.9	209.8	270.1	639.6	3080.0	6745.8	7818.2	8128.0	7879.9
65°	170.8	192.1	187.7	203.8	270.1	602.8	2656.8	6004.7	7230.1	7668.7	8135.3
67.5°	164.8	174.5	180.3	195.8	276.0	568.2	2135.0	5065.0	6302.8	6927.5	7848.3
70°	156.8	164.8	172.2	188.5	273.1	543.8	1680.2	4059.6	5187.1	5902.5	7054.2
72.5°	149.4	155.2	162.7	177.3	273.1	532.9	1349.8	3184.5	3960.2	4563.0	5843.6
75°	138.3	143.5	150.1	166.4	267.9	487.2	1013.4	2551.5	2897.6	3275.0	4610.8
77.5°	127.3	131.1	136.2	152.4	241.5	407.0	716.8	1976.0	2146.8	2355.8	3594.5
80°	113.4	116.3	120.0	136.2	200.2	315.8	466.6	1545.5	1605.1	1706.1	2364.7
82.5°	97.1	101.6	102.2	117.0	161.2	228.9	277.4	1059.0	1058.4	1206.2	1668.4
85°	79.5	81.7	83.2	91.9	119.3	152.4	182.5	578.5	515.8	722.7	1449.1
87.5°	59.6	57.4	59.6	61.9	78.7	89.8	97.8	106.7	64.0	131.1	842.7
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):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	3460.5	3460.5	3460.5	3460.5	3460.5	3460.5	3460.5	3460.5
2.5°	3938.9	3982.2	3956.6	3925.7	3848.3	3735.1	3648.1	3572.4
5°	4219.2	4299.5	4264.2	4149.5	3949.2	3721.8	3482.5	3336.8
7.5°	4183.9	4342.9	4328.9	4137.7	3850.6	3515.6	3179.5	2987.3
10°	3901.3	4124.4	4162.7	3966.8	3662.8	3288.2	2899.0	2681.9
12.5°	3593.7	3781.3	3859.4	3785.1	3498.8	3118.2	2721.5	2504.5
15°	3336.1	3431.0	3508.3	3556.2	3378.9	3057.9	2690.8	2466.9
17.5°	3145.5	3127.1	3191.9	3306.8	3314.0	3138.1	2830.5	2580.3
20°	3053.5	2909.3	2946.8	3108.0	3296.4	3342.1	3109.5	2813.6
22.5°	3048.4	2823.2	2830.5	3004.2	3347.2	3620.2	3457.5	3120.5
25°	3127.9	2813.6	2820.1	2993.2	3436.9	3900.6	3860.1	3467.1
27.5°	3263.3	2854.9	2850.4	3041.8	3556.8	4134.7	4266.4	3891.1
30°	3409.7	2914.5	2903.4	3119.8	3674.6	4278.8	4554.9	4210.4
32.5°	3592.2	3020.5	2982.2	3233.8	3790.9	4417.2	4801.4	4509.2
35°	3766.0	3175.7	3120.5	3397.2	3915.4	4571.0	5077.4	4839.7
37.5°	3943.3	3407.5	3376.5	3632.7	4091.2	4738.1	5393.2	5214.3
40°	4170.7	3737.2	3722.4	3974.9	4326.0	4920.6	5747.1	5604.3
42.5°	4415.8	4087.6	4075.0	4368.0	4617.5	5103.9	6050.4	5939.2
45°	4665.3	4512.1	4515.2	4787.4	4924.2	5276.9	6288.9	6207.1
47.5°	4959.6	4976.6	5081.8	5222.3	5223.1	5469.7	6500.0	6456.6
50°	5333.5	5537.4	5731.6	5753.7	5524.8	5724.3	6758.4	6742.1
52.5°	5756.7	6184.3	6410.2	6340.3	5819.3	6040.1	7140.3	7139.5
55°	6259.4	6860.6	7073.3	6954.0	6171.7	6451.4	7639.2	7606.8
57.5°	6780.4	7511.3	7682.8	7527.4	6612.7	6930.6	8139.7	7968.2
60°	7343.5	8071.4	8245.7	8012.4	7107.2	7408.2	8470.9	8069.8
62.5°	7712.2	8398.9	8523.9	8300.2	7550.3	7894.7	8577.6	7948.5
65°	7731.4	8181.0	8214.1	8134.6	7738.7	8317.1	8423.0	7588.5
67.5°	7205.8	7232.3	7275.7	7361.2	7336.1	8128.8	7827.0	6748.1
70°	6082.1	5728.8	5871.5	5954.0	6139.3	7230.1	6725.3	5488.0
72.5°	4650.5	4134.7	4296.6	4268.6	4654.3	5930.4	5145.1	4227.3
75°	3347.2	2819.5	2831.9	2833.4	3344.2	4733.7	3508.3	3002.0
77.5°	2274.9	1995.1	2036.4	2010.6	2238.0	3708.6	2525.9	2163.7
80°	1555.9	1548.5	1557.3	1496.9	1492.5	2397.0	1870.1	1725.9
82.5°	1154.1	1066.4	1053.9	989.8	1143.7	1832.5	1419.7	1240.1
85°	910.4	590.2	512.9	618.9	990.7	1686.1	865.4	635.9
87.5°	385.6	231.9	140.6	278.1	550.5	1235.7	239.9	123.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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