

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: P198742

Luminaire Tested: **XNV-AF-01-LED-U-SLL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198742
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: XNV-AF-01-LED-U-SLL
Description: XNV ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR LEFT OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5464.6 lumens
Efficiency: N/A
Efficacy: 94.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 58
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

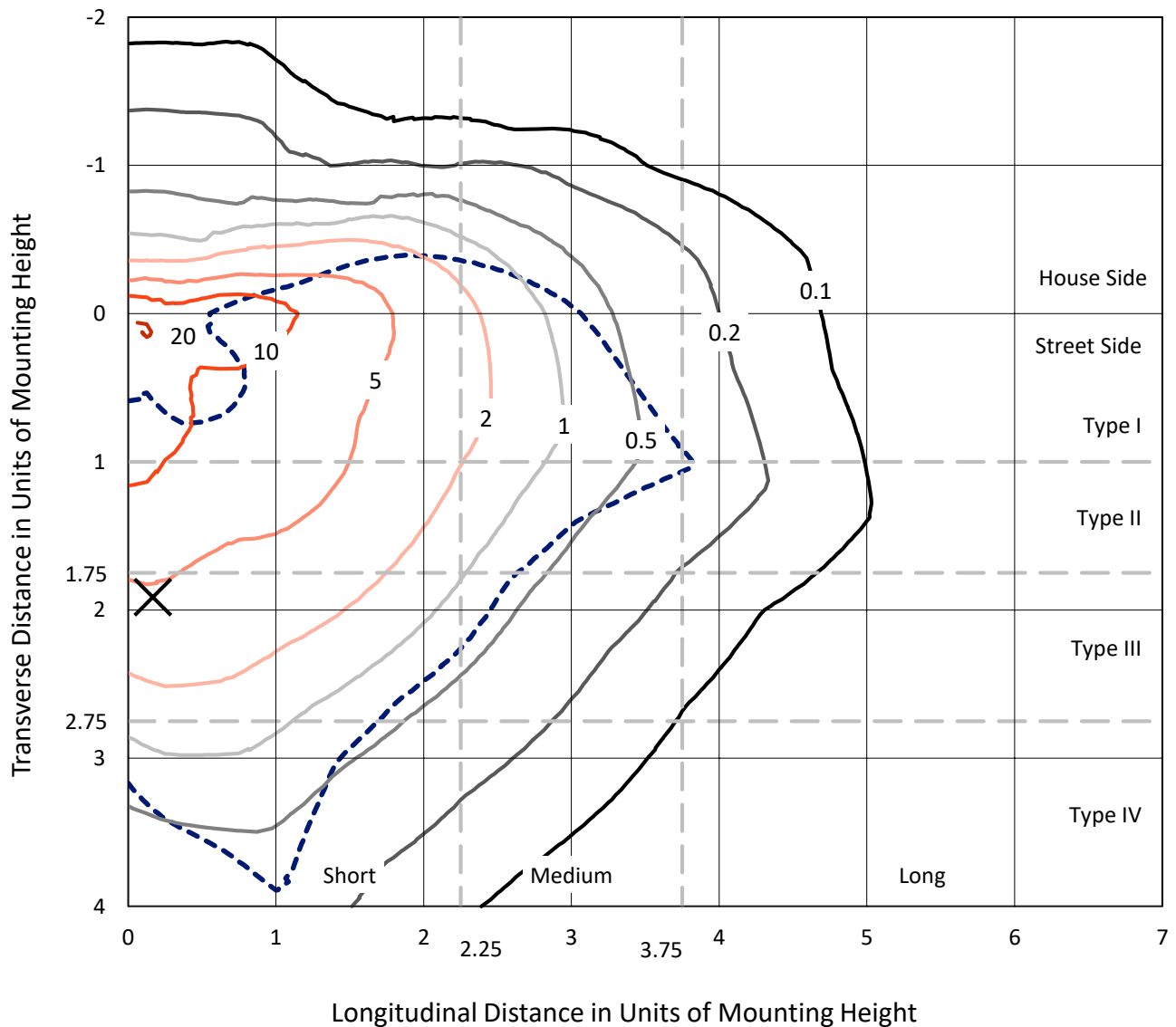


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

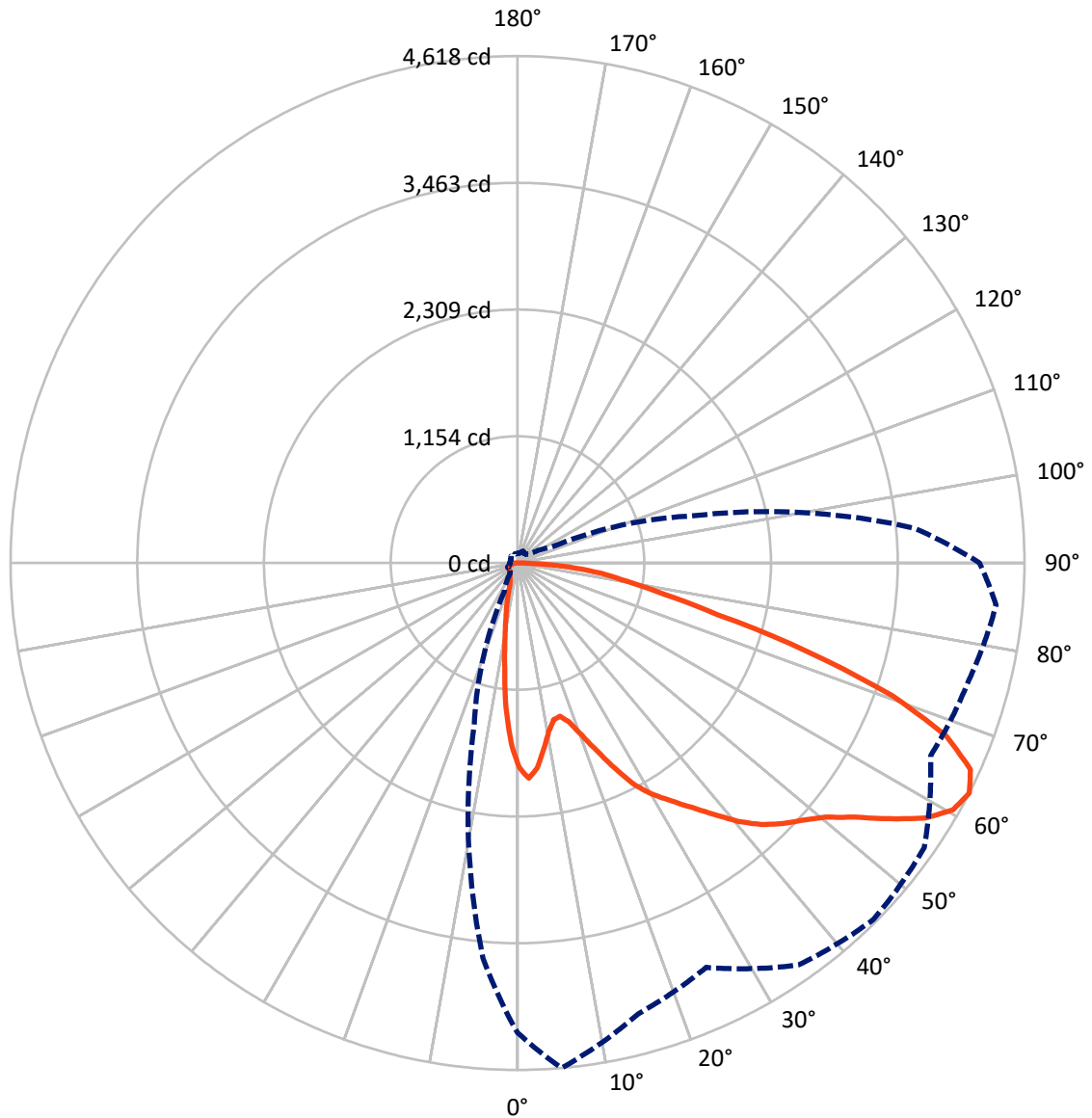


Based on 10 foot mounting height. Maximum calculated value = 21.4 fc
 Type IV - Short - Non-Cutoff

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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	968.1	0.0	968.1
	% Fixture	17.7	0.0	17.7
Street Side	Lumens	4496.5	0.0	4496.5
	% Fixture	82.3	0.0	82.3
Total	Lumens	5464.6	0.0	5464.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.5	2.5
10°-20°	247.5	4.5
20°-30°	355.9	6.5
30°-40°	545.1	10.0
40°-50°	797.0	14.6
50°-60°	1159.6	21.2
60°-70°	1343.6	24.6
70°-80°	700.4	12.8
80°-90°	180.0	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°	5464.6	100.0
0°-180°	5464.6	100.0

Coefficient of Utilization



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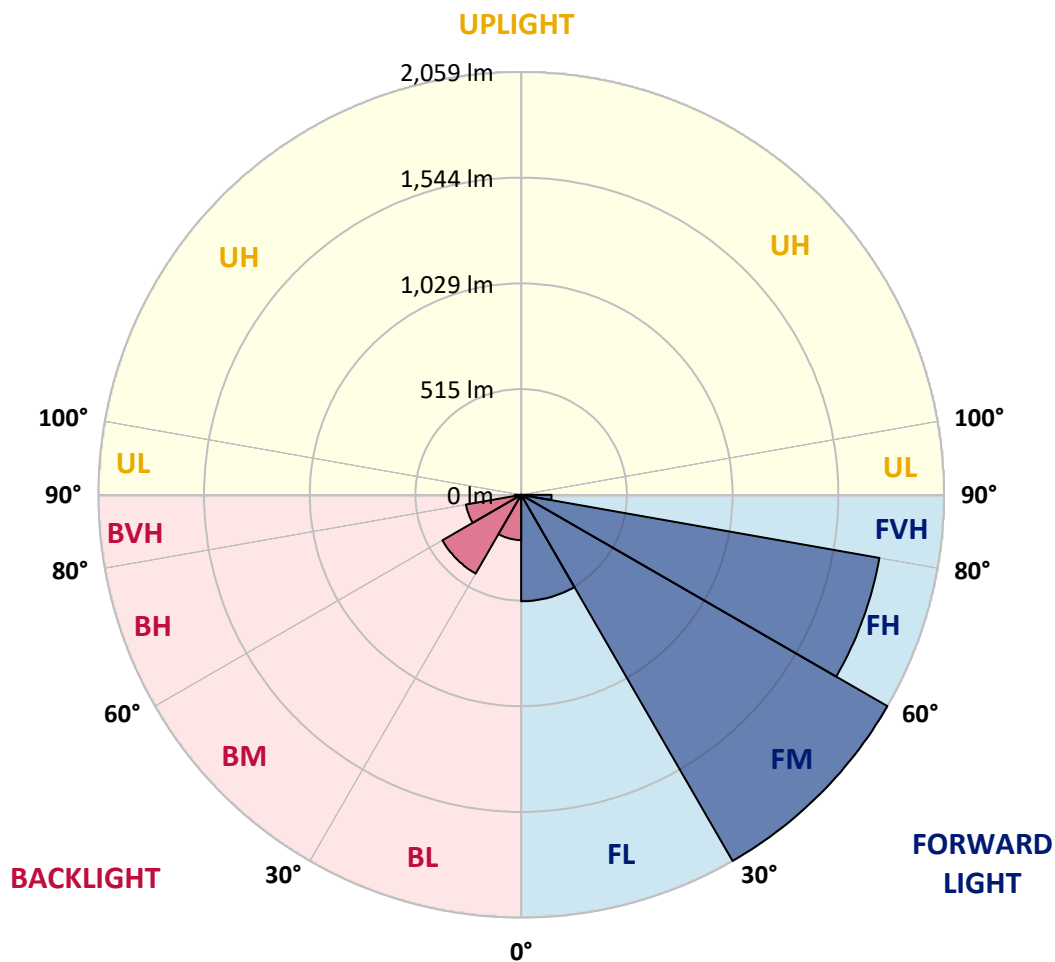
CATALOG NUMBER: XNV-AF-01-LED-U-SLL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	518.6	9.5			
FM	(30°-60°)	2058.8	37.7			
FH	(60°-80°)	1771.0	32.4			G1/1800
FVH	(80°-90°)	148.1	2.7			G2/225
BL	(0°-30°)	220.3	4.0	B1/500		
BM	(30°-60°)	442.9	8.1	B1/1000		
BH	(60°-80°)	273.0	5.0	B1/500		G1/500
BVH	(80°-90°)	31.9	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°	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0
2.5°	1923.2	1964.1	2010.8	2071.8	2113.4	2130.1	2143.9	2120.6	2098.0	2055.5	2040.5
5°	1796.4	1874.9	2003.7	2126.1	2233.8	2295.7	2314.6	2271.5	2194.6	2083.6	2025.0
7.5°	1608.2	1711.6	1892.7	2073.0	2227.5	2330.5	2338.1	2252.4	2101.1	1919.3	1824.1
10°	1443.8	1560.7	1770.3	1971.9	2135.6	2241.0	2220.4	2100.3	1917.6	1710.9	1603.5
12.5°	1348.4	1465.2	1678.8	1883.6	2037.7	2077.7	2035.8	1934.7	1761.5	1554.4	1446.1
15°	1328.1	1448.6	1646.2	1819.0	1914.5	1888.8	1847.1	1796.0	1672.8	1503.2	1398.7
17.5°	1389.2	1523.8	1689.4	1784.1	1780.1	1718.4	1683.5	1693.4	1672.4	1558.7	1449.3
20°	1514.7	1674.0	1799.2	1774.6	1673.2	1586.4	1566.2	1643.9	1741.0	1697.8	1577.7
22.5°	1680.0	1861.4	1948.9	1801.9	1617.4	1523.8	1519.9	1641.1	1865.8	1908.1	1761.9
25°	1866.6	2078.1	2099.9	1850.3	1611.4	1518.3	1514.7	1683.9	2015.9	2116.6	1968.4
27.5°	2094.8	2296.8	2225.9	1914.9	1637.5	1534.5	1536.9	1756.8	2172.4	2322.6	2201.0
30°	2266.8	2452.1	2303.6	1978.3	1679.6	1563.1	1569.0	1835.7	2256.8	2465.6	2386.7
32.5°	2427.6	2584.9	2378.1	2040.9	1741.0	1605.4	1626.1	1933.9	2358.2	2588.5	2562.3
35°	2605.5	2733.4	2460.9	2107.9	1828.9	1680.0	1709.7	2027.4	2458.9	2711.3	2736.3
37.5°	2807.2	2903.4	2550.8	2202.5	1955.7	1817.8	1834.5	2122.9	2529.0	2847.2	2922.9
40°	3017.2	3094.0	2649.0	2329.0	2139.9	2004.1	2011.9	2245.4	2584.1	2987.8	3103.9
42.5°	3197.4	3257.3	2747.7	2485.9	2351.6	2193.8	2200.6	2377.2	2636.8	3109.1	3249.0
45°	3341.7	3385.7	2840.8	2651.1	2577.3	2430.7	2429.2	2511.5	2707.3	3211.3	3360.3
47.5°	3476.0	3499.3	2944.7	2811.9	2811.5	2735.9	2679.2	2670.1	2801.2	3297.3	3457.4
50°	3629.7	3638.4	3081.7	2974.3	3097.6	3085.7	2981.1	2871.3	2922.9	3393.9	3559.2
52.5°	3843.6	3844.0	3251.8	3132.9	3413.4	3451.0	3329.4	3099.1	3102.7	3582.2	3735.1
55°	4095.3	4112.7	3473.2	3322.6	3743.8	3808.0	3693.5	3369.8	3361.1	3885.7	4020.4
57.5°	4289.7	4382.1	3731.1	3560.0	4052.4	4136.1	4043.7	3650.3	3678.4	4198.7	4255.7
60°	4344.5	4560.4	3988.3	3826.2	4313.6	4439.2	4345.3	3953.4	3989.1	4402.0	4323.5
62.5°	4279.1	4617.9	4250.2	4064.7	4468.5	4589.0	4521.5	4152.0	4242.3	4375.8	4208.9
65°	4085.4	4534.6	4477.6	4166.2	4379.4	4422.1	4404.3	4162.2	4379.8	4128.5	3892.4
67.5°	3632.9	4213.7	4376.2	3949.4	3962.9	3917.0	3893.6	3879.3	4225.2	3729.6	3393.1
70°	2954.6	3620.6	3892.4	3305.3	3205.3	3161.0	3084.1	3274.3	3797.7	3177.6	2792.6
72.5°	2275.9	2769.9	3192.7	2505.6	2298.1	2313.1	2225.9	2503.7	3145.9	2456.5	2132.0
75°	1616.2	1888.8	2548.5	1800.4	1525.4	1524.6	1517.9	1801.9	2482.3	1763.2	1559.9
77.5°	1164.8	1359.8	1996.5	1204.9	1082.5	1096.3	1074.1	1224.7	1935.1	1268.3	1155.7
80°	929.1	1006.8	1290.5	803.5	805.9	838.4	833.6	837.6	1273.1	918.4	864.2
82.5°	667.6	764.2	986.5	615.7	532.9	567.3	574.1	621.2	898.3	649.4	569.8
85°	342.3	466.0	907.8	533.3	333.2	276.2	317.7	490.1	780.1	389.1	277.7
87.5°	66.6	129.2	665.2	296.3	149.8	75.7	124.8	207.7	453.7	70.5	34.5
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°	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0
2.5°	2014.7	1964.1	1916.5	1867.4	1829.3	1783.0	1737.4	1697.8	1659.3	1634.0	1641.9
5°	1965.6	1842.0	1731.0	1628.0	1567.8	1495.3	1430.7	1376.5	1334.4	1307.5	1323.7
7.5°	1741.8	1574.5	1428.3	1292.4	1206.9	1113.0	1037.7	984.6	952.1	933.9	960.4
10°	1512.7	1324.9	1160.9	1019.5	935.1	855.4	787.3	731.0	687.4	666.9	677.5
12.5°	1348.7	1139.9	967.9	872.9	800.4	729.1	658.5	592.7	537.3	511.9	506.8
15°	1287.3	1040.4	864.9	758.7	686.6	609.0	532.9	462.4	409.7	387.9	383.1
17.5°	1314.3	1019.1	803.9	678.3	573.7	479.5	393.8	327.2	288.5	276.2	277.3
20°	1408.9	1026.9	754.8	595.5	466.4	354.7	269.0	223.1	206.4	203.7	206.8
22.5°	1538.9	1059.5	719.1	524.2	371.6	257.9	200.1	178.3	173.9	173.5	176.7
25°	1710.5	1122.9	695.4	460.8	293.6	204.5	174.3	162.0	158.5	159.3	162.4
27.5°	1912.5	1203.3	679.9	406.1	241.3	182.3	162.9	152.1	148.5	149.4	151.7
30°	2097.2	1273.8	656.9	364.9	216.8	174.3	156.5	145.8	141.1	141.1	142.6
32.5°	2262.4	1334.8	629.9	334.0	194.2	156.5	141.9	133.5	129.9	131.1	132.0
35°	2408.9	1367.0	609.0	315.8	175.9	144.2	129.6	120.8	116.1	116.9	118.0
37.5°	2553.2	1379.2	595.2	305.9	162.9	136.7	123.3	116.1	111.0	110.2	109.8
40°	2690.3	1376.5	582.1	303.1	154.2	131.1	119.3	112.9	107.8	106.6	106.2
42.5°	2808.7	1367.4	569.8	295.5	148.2	127.2	116.1	110.6	105.4	103.8	103.0
45°	2916.9	1361.8	556.3	281.7	151.4	125.6	114.5	108.5	103.8	101.8	101.1
47.5°	3036.9	1381.6	541.2	266.7	150.6	126.0	114.5	107.8	103.0	101.1	100.2
50°	3180.0	1448.6	522.6	246.0	143.4	134.7	114.1	106.6	102.2	101.1	99.4
52.5°	3382.1	1557.1	496.8	219.5	137.9	143.8	113.8	104.6	101.1	99.0	97.1
55°	3659.0	1665.7	463.6	191.4	129.2	137.5	114.5	102.2	98.3	96.3	93.9
57.5°	3886.1	1748.1	421.6	168.0	121.2	129.9	113.3	99.4	95.1	93.1	91.1
60°	3871.4	1756.0	381.6	152.9	116.5	116.9	116.1	97.5	92.3	90.7	89.1
62.5°	3631.7	1658.1	344.3	145.4	112.9	106.6	118.5	95.1	89.5	88.0	86.7
65°	3232.7	1430.3	324.5	145.4	109.8	101.1	103.4	92.0	86.7	85.2	84.4
67.5°	2726.8	1149.4	305.9	148.5	105.4	97.1	93.9	88.8	84.0	82.4	81.6
70°	2185.5	904.6	292.8	147.0	101.5	92.7	88.8	84.4	79.7	79.3	78.5
72.5°	1714.4	726.7	286.8	147.0	95.4	87.6	83.6	80.4	75.7	75.3	74.1
75°	1373.6	545.5	262.3	144.2	89.5	80.8	77.2	74.5	69.8	70.2	69.4
77.5°	1063.9	386.0	219.1	129.9	82.0	73.3	70.5	68.5	63.0	63.4	63.4
80°	832.1	251.2	170.0	107.8	73.3	64.5	62.6	61.0	55.0	55.9	55.9
82.5°	570.2	149.4	123.3	86.7	63.0	55.0	54.7	52.3	45.9	46.3	47.2
85°	311.4	98.3	82.0	64.1	49.5	44.8	44.0	42.8	36.8	36.8	37.2
87.5°	57.5	52.7	48.4	42.4	33.2	32.1	30.9	32.1	27.7	26.9	26.9
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°	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0
2.5°	1623.3	1595.9	1576.9	1560.3	1520.3	1523.1	1528.6	1536.5	1511.5	1524.6	1540.9
5°	1307.5	1284.9	1267.8	1241.4	1185.5	1165.7	1153.0	1147.4	1110.2	1118.1	1135.6
7.5°	964.0	963.6	957.7	927.9	860.6	819.8	792.8	784.5	761.5	770.3	796.8
10°	678.7	685.9	683.0	656.5	596.3	567.0	561.0	577.7	578.1	595.2	640.7
12.5°	490.5	486.5	482.9	461.1	416.0	411.2	424.7	447.7	453.3	471.5	519.0
15°	366.1	356.6	354.7	337.6	307.9	312.2	322.1	334.0	334.4	347.1	386.3
17.5°	274.6	274.6	277.7	266.7	245.3	243.3	238.1	235.0	230.2	235.4	256.8
20°	213.2	223.1	231.0	224.6	205.2	195.7	185.9	179.5	175.9	176.4	182.7
22.5°	182.7	190.6	200.9	197.7	181.5	169.2	162.9	158.5	155.7	155.7	159.3
25°	167.3	172.4	181.9	180.2	166.4	156.5	151.4	147.0	143.8	143.4	147.0
27.5°	154.9	158.0	164.4	163.7	149.4	143.0	139.8	137.1	135.1	134.7	138.3
30°	143.8	145.4	148.5	147.4	136.7	130.3	129.2	128.0	126.7	127.2	132.4
32.5°	133.9	135.1	137.1	135.5	125.2	119.7	117.6	116.1	114.9	116.1	122.0
35°	122.9	126.4	128.8	128.0	116.9	110.2	105.8	101.8	100.2	101.5	108.1
37.5°	113.3	119.3	122.4	121.6	110.2	102.2	96.7	95.9	95.9	97.5	104.2
40°	109.8	114.1	116.9	115.7	104.2	96.3	93.1	92.0	92.3	93.9	101.1
42.5°	106.6	110.6	111.3	108.9	97.5	92.3	90.3	88.8	89.5	91.6	98.6
45°	103.8	107.0	106.6	103.0	92.0	88.4	88.4	87.2	87.6	89.1	96.7
47.5°	101.8	103.4	102.6	99.0	88.0	85.2	86.3	86.3	87.2	88.4	95.9
50°	98.6	99.8	99.0	95.9	84.8	82.4	83.6	85.2	85.9	87.2	93.9
52.5°	95.4	96.3	95.9	92.7	81.6	80.0	80.0	81.6	83.2	84.8	90.7
55°	92.3	93.1	93.5	91.1	79.3	77.6	77.2	77.2	78.9	81.2	87.6
57.5°	89.9	89.9	90.7	89.1	76.8	74.9	72.9	73.3	75.3	77.2	83.6
60°	87.2	87.6	88.8	87.2	73.7	70.5	68.9	70.9	71.7	73.7	80.4
62.5°	84.8	84.8	85.6	84.4	70.9	67.7	66.6	68.5	68.5	70.5	77.2
65°	82.9	82.4	82.4	82.0	68.1	65.0	64.1	65.0	65.4	67.3	74.1
67.5°	81.2	79.3	79.3	80.0	65.4	62.2	61.8	61.8	62.2	64.5	70.5
70°	77.6	76.1	75.7	78.5	62.6	58.6	58.6	57.8	58.6	59.8	66.2
72.5°	73.7	72.5	72.1	76.1	59.8	54.7	53.9	53.5	53.9	55.0	61.0
75°	68.5	67.7	68.5	74.5	57.1	50.3	49.1	48.7	48.7	49.1	55.4
77.5°	62.6	61.8	67.7	69.4	55.4	45.2	44.0	43.2	42.4	42.4	49.5
80°	55.4	55.0	65.4	58.6	53.1	39.6	37.6	36.4	35.7	35.3	42.4
82.5°	48.4	47.6	55.9	45.9	44.0	32.5	29.7	27.3	26.2	26.2	32.5
85°	39.6	39.2	44.0	33.7	30.5	23.7	19.8	17.8	16.3	16.3	21.0
87.5°	28.9	28.1	27.3	20.3	15.4	10.7	7.6	7.2	6.3	5.9	8.7
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°	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0
2.5°	1565.0	1598.0	1660.1	1711.2	1779.4	1834.0	1896.2	1923.2
5°	1167.6	1219.6	1314.6	1395.8	1508.3	1612.6	1731.4	1796.4
7.5°	837.6	914.4	986.5	1088.0	1228.7	1368.5	1522.3	1608.2
10°	692.9	763.5	825.3	897.4	1006.0	1163.3	1346.7	1443.8
12.5°	574.1	650.2	715.6	792.8	883.9	1026.2	1235.4	1348.4
15°	440.2	523.0	601.5	694.6	806.3	968.7	1202.1	1328.1
17.5°	301.6	390.3	486.9	600.7	735.4	944.6	1233.8	1389.2
20°	204.8	269.9	374.8	509.5	671.6	933.0	1303.5	1514.7
22.5°	168.4	197.7	276.6	423.9	619.3	945.7	1416.9	1680.0
25°	154.6	170.3	215.1	348.6	579.3	979.5	1570.2	1866.6
27.5°	145.8	159.3	188.6	294.8	542.4	1025.4	1756.8	2094.8
30°	140.7	153.3	177.9	267.1	508.7	1065.0	1917.3	2266.8
32.5°	129.2	138.7	158.9	251.2	484.6	1097.1	2058.7	2427.6
35°	115.3	126.7	143.4	240.9	483.8	1112.2	2191.9	2605.5
37.5°	110.2	121.2	133.5	235.4	488.6	1124.8	2354.7	2807.2
40°	107.0	116.9	126.7	234.6	492.4	1134.8	2514.0	3017.2
42.5°	104.2	114.1	125.6	229.0	490.9	1148.3	2655.1	3197.4
45°	103.4	113.3	128.4	220.7	490.5	1169.2	2767.2	3341.7
47.5°	102.6	117.6	127.6	211.5	489.0	1213.6	2893.5	3476.0
50°	101.8	125.6	122.0	198.9	477.0	1289.3	3063.5	3629.7
52.5°	101.5	126.7	116.1	181.5	455.6	1401.4	3312.3	3843.6
55°	99.8	120.4	105.8	158.5	424.7	1522.3	3579.0	4095.3
57.5°	96.3	107.4	99.8	136.0	380.3	1606.6	3775.9	4289.7
60°	105.0	92.3	95.9	124.4	327.2	1621.7	3784.6	4344.5
62.5°	100.2	84.0	92.0	120.4	290.0	1523.5	3611.5	4279.1
65°	80.0	79.7	88.4	124.4	284.5	1303.5	3319.1	4085.4
67.5°	72.9	76.5	84.8	129.2	288.1	1026.9	2888.8	3632.9
70°	68.1	72.5	80.0	133.5	294.4	809.1	2325.8	2954.6
72.5°	63.4	67.0	75.3	137.9	290.0	638.3	1861.4	2275.9
75°	57.5	60.7	68.5	126.4	248.8	469.1	1479.1	1616.2
77.5°	50.7	53.5	60.3	99.8	187.0	326.5	1107.9	1164.8
80°	43.6	44.8	49.9	72.9	122.0	195.4	843.1	929.1
82.5°	34.5	34.9	38.1	53.5	76.1	124.8	584.8	667.6
85°	22.2	23.0	24.6	37.6	51.1	80.0	298.7	342.3
87.5°	7.6	8.7	8.7	18.2	25.0	44.4	91.6	66.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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