

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: P198750

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198750
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-SLR
Description: XNV ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR RIGHT 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

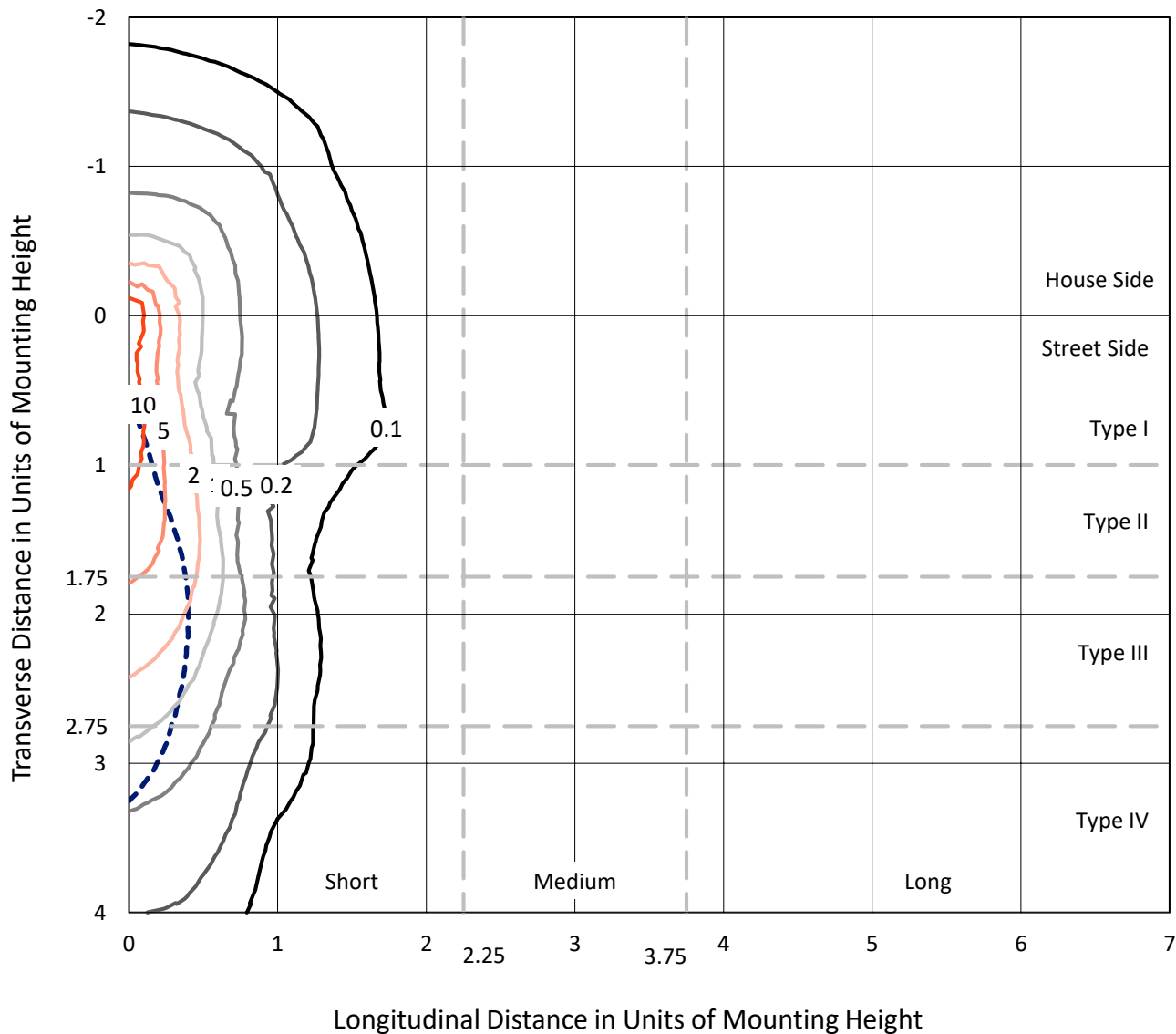


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

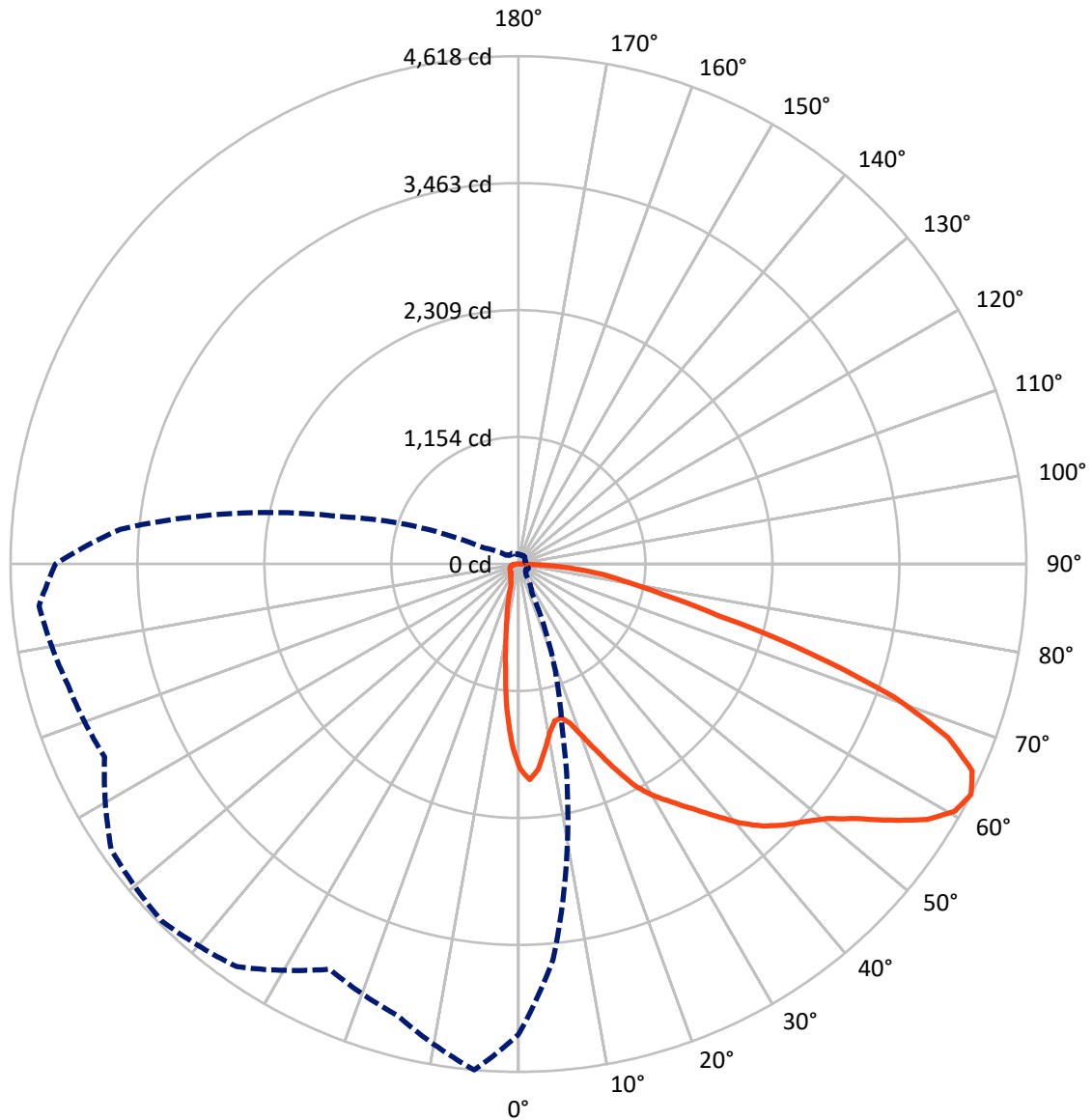


Based on 10 foot mounting height. Maximum calculated value = 18.6 fc
 Type IV - Short - Non-Cutoff

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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	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

Coefficient of Utilization

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



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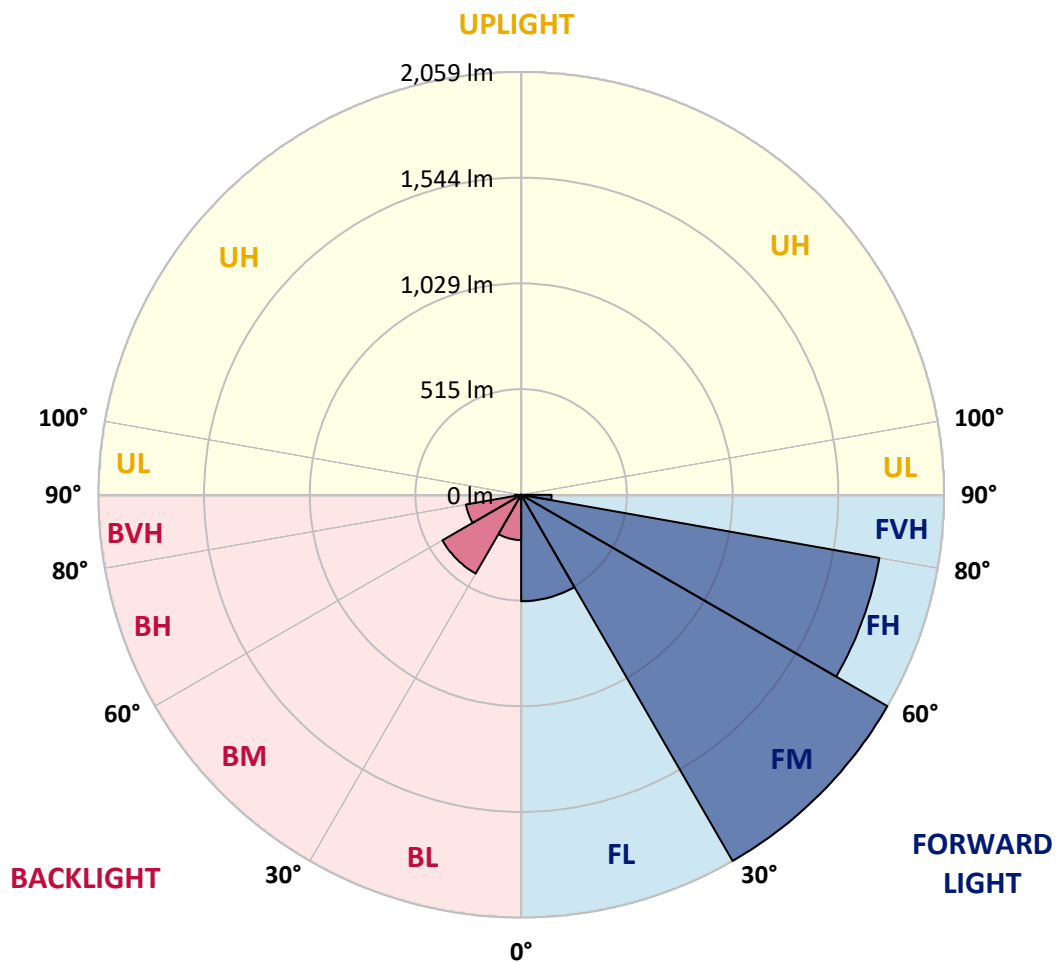
CATALOG NUMBER: XNV-AF-01-LED-U-SLR

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	1896.2	1834.0	1779.4	1711.2	1660.1	1598.0	1565.0	1540.9	1524.6	1511.5
5°	1796.4	1731.4	1612.6	1508.3	1395.8	1314.6	1219.6	1167.6	1135.6	1118.1	1110.2
7.5°	1608.2	1522.3	1368.5	1228.7	1088.0	986.5	914.4	837.6	796.8	770.3	761.5
10°	1443.8	1346.7	1163.3	1006.0	897.4	825.3	763.5	692.9	640.7	595.2	578.1
12.5°	1348.4	1235.4	1026.2	883.9	792.8	715.6	650.2	574.1	519.0	471.5	453.3
15°	1328.1	1202.1	968.7	806.3	694.6	601.5	523.0	440.2	386.3	347.1	334.4
17.5°	1389.2	1233.8	944.6	735.4	600.7	486.9	390.3	301.6	256.8	235.4	230.2
20°	1514.7	1303.5	933.0	671.6	509.5	374.8	269.9	204.8	182.7	176.4	175.9
22.5°	1680.0	1416.9	945.7	619.3	423.9	276.6	197.7	168.4	159.3	155.7	155.7
25°	1866.6	1570.2	979.5	579.3	348.6	215.1	170.3	154.6	147.0	143.4	143.8
27.5°	2094.8	1756.8	1025.4	542.4	294.8	188.6	159.3	145.8	138.3	134.7	135.1
30°	2266.8	1917.3	1065.0	508.7	267.1	177.9	153.3	140.7	132.4	127.2	126.7
32.5°	2427.6	2058.7	1097.1	484.6	251.2	158.9	138.7	129.2	122.0	116.1	114.9
35°	2605.5	2191.9	1112.2	483.8	240.9	143.4	126.7	115.3	108.1	101.5	100.2
37.5°	2807.2	2354.7	1124.8	488.6	235.4	133.5	121.2	110.2	104.2	97.5	95.9
40°	3017.2	2514.0	1134.8	492.4	234.6	126.7	116.9	107.0	101.1	93.9	92.3
42.5°	3197.4	2655.1	1148.3	490.9	229.0	125.6	114.1	104.2	98.6	91.6	89.5
45°	3341.7	2767.2	1169.2	490.5	220.7	128.4	113.3	103.4	96.7	89.1	87.6
47.5°	3476.0	2893.5	1213.6	489.0	211.5	127.6	117.6	102.6	95.9	88.4	87.2
50°	3629.7	3063.5	1289.3	477.0	198.9	122.0	125.6	101.8	93.9	87.2	85.9
52.5°	3843.6	3312.3	1401.4	455.6	181.5	116.1	126.7	101.5	90.7	84.8	83.2
55°	4095.3	3579.0	1522.3	424.7	158.5	105.8	120.4	99.8	87.6	81.2	78.9
57.5°	4289.7	3775.9	1606.6	380.3	136.0	99.8	107.4	96.3	83.6	77.2	75.3
60°	4344.5	3784.6	1621.7	327.2	124.4	95.9	92.3	105.0	80.4	73.7	71.7
62.5°	4279.1	3611.5	1523.5	290.0	120.4	92.0	84.0	100.2	77.2	70.5	68.5
65°	4085.4	3319.1	1303.5	284.5	124.4	88.4	79.7	80.0	74.1	67.3	65.4
67.5°	3632.9	2888.8	1026.9	288.1	129.2	84.8	76.5	72.9	70.5	64.5	62.2
70°	2954.6	2325.8	809.1	294.4	133.5	80.0	72.5	68.1	66.2	59.8	58.6
72.5°	2275.9	1861.4	638.3	290.0	137.9	75.3	67.0	63.4	61.0	55.0	53.9
75°	1616.2	1479.1	469.1	248.8	126.4	68.5	60.7	57.5	55.4	49.1	48.7
77.5°	1164.8	1107.9	326.5	187.0	99.8	60.3	53.5	50.7	49.5	42.4	42.4
80°	929.1	843.1	195.4	122.0	72.9	49.9	44.8	43.6	42.4	35.3	35.7
82.5°	667.6	584.8	124.8	76.1	53.5	38.1	34.9	34.5	32.5	26.2	26.2
85°	342.3	298.7	80.0	51.1	37.6	24.6	23.0	22.2	21.0	16.3	16.3
87.5°	66.6	91.6	44.4	25.0	18.2	8.7	8.7	7.6	8.7	5.9	6.3
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):

	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°	1536.5	1528.6	1523.1	1520.3	1560.3	1576.9	1595.9	1623.3	1641.9	1634.0	1659.3
5°	1147.4	1153.0	1165.7	1185.5	1241.4	1267.8	1284.9	1307.5	1323.7	1307.5	1334.4
7.5°	784.5	792.8	819.8	860.6	927.9	957.7	963.6	964.0	960.4	933.9	952.1
10°	577.7	561.0	567.0	596.3	656.5	683.0	685.9	678.7	677.5	666.9	687.4
12.5°	447.7	424.7	411.2	416.0	461.1	482.9	486.5	490.5	506.8	511.9	537.3
15°	334.0	322.1	312.2	307.9	337.6	354.7	356.6	366.1	383.1	387.9	409.7
17.5°	235.0	238.1	243.3	245.3	266.7	277.7	274.6	274.6	277.3	276.2	288.5
20°	179.5	185.9	195.7	205.2	224.6	231.0	223.1	213.2	206.8	203.7	206.4
22.5°	158.5	162.9	169.2	181.5	197.7	200.9	190.6	182.7	176.7	173.5	173.9
25°	147.0	151.4	156.5	166.4	180.2	181.9	172.4	167.3	162.4	159.3	158.5
27.5°	137.1	139.8	143.0	149.4	163.7	164.4	158.0	154.9	151.7	149.4	148.5
30°	128.0	129.2	130.3	136.7	147.4	148.5	145.4	143.8	142.6	141.1	141.1
32.5°	116.1	117.6	119.7	125.2	135.5	137.1	135.1	133.9	132.0	131.1	129.9
35°	101.8	105.8	110.2	116.9	128.0	128.8	126.4	122.9	118.0	116.9	116.1
37.5°	95.9	96.7	102.2	110.2	121.6	122.4	119.3	113.3	109.8	110.2	111.0
40°	92.0	93.1	96.3	104.2	115.7	116.9	114.1	109.8	106.2	106.6	107.8
42.5°	88.8	90.3	92.3	97.5	108.9	111.3	110.6	106.6	103.0	103.8	105.4
45°	87.2	88.4	88.4	92.0	103.0	106.6	107.0	103.8	101.1	101.8	103.8
47.5°	86.3	86.3	85.2	88.0	99.0	102.6	103.4	101.8	100.2	101.1	103.0
50°	85.2	83.6	82.4	84.8	95.9	99.0	99.8	98.6	99.4	101.1	102.2
52.5°	81.6	80.0	80.0	81.6	92.7	95.9	96.3	95.4	97.1	99.0	101.1
55°	77.2	77.2	77.6	79.3	91.1	93.5	93.1	92.3	93.9	96.3	98.3
57.5°	73.3	72.9	74.9	76.8	89.1	90.7	89.9	89.9	91.1	93.1	95.1
60°	70.9	68.9	70.5	73.7	87.2	88.8	87.6	87.2	89.1	90.7	92.3
62.5°	68.5	66.6	67.7	70.9	84.4	85.6	84.8	84.8	86.7	88.0	89.5
65°	65.0	64.1	65.0	68.1	82.0	82.4	82.4	82.9	84.4	85.2	86.7
67.5°	61.8	61.8	62.2	65.4	80.0	79.3	79.3	81.2	81.6	82.4	84.0
70°	57.8	58.6	58.6	62.6	78.5	75.7	76.1	77.6	78.5	79.3	79.7
72.5°	53.5	53.9	54.7	59.8	76.1	72.1	72.5	73.7	74.1	75.3	75.7
75°	48.7	49.1	50.3	57.1	74.5	68.5	67.7	68.5	69.4	70.2	69.8
77.5°	43.2	44.0	45.2	55.4	69.4	67.7	61.8	62.6	63.4	63.4	63.0
80°	36.4	37.6	39.6	53.1	58.6	65.4	55.0	55.4	55.9	55.9	55.0
82.5°	27.3	29.7	32.5	44.0	45.9	55.9	47.6	48.4	47.2	46.3	45.9
85°	17.8	19.8	23.7	30.5	33.7	44.0	39.2	39.6	37.2	36.8	36.8
87.5°	7.2	7.6	10.7	15.4	20.3	27.3	28.1	28.9	26.9	26.9	27.7
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°	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0	1863.0
2.5°	1697.8	1737.4	1783.0	1829.3	1867.4	1916.5	1964.1	2014.7	2040.5	2055.5	2098.0
5°	1376.5	1430.7	1495.3	1567.8	1628.0	1731.0	1842.0	1965.6	2025.0	2083.6	2194.6
7.5°	984.6	1037.7	1113.0	1206.9	1292.4	1428.3	1574.5	1741.8	1824.1	1919.3	2101.1
10°	731.0	787.3	855.4	935.1	1019.5	1160.9	1324.9	1512.7	1603.5	1710.9	1917.6
12.5°	592.7	658.5	729.1	800.4	872.9	967.9	1139.9	1348.7	1446.1	1554.4	1761.5
15°	462.4	532.9	609.0	686.6	758.7	864.9	1040.4	1287.3	1398.7	1503.2	1672.8
17.5°	327.2	393.8	479.5	573.7	678.3	803.9	1019.1	1314.3	1449.3	1558.7	1672.4
20°	223.1	269.0	354.7	466.4	595.5	754.8	1026.9	1408.9	1577.7	1697.8	1741.0
22.5°	178.3	200.1	257.9	371.6	524.2	719.1	1059.5	1538.9	1761.9	1908.1	1865.8
25°	162.0	174.3	204.5	293.6	460.8	695.4	1122.9	1710.5	1968.4	2116.6	2015.9
27.5°	152.1	162.9	182.3	241.3	406.1	679.9	1203.3	1912.5	2201.0	2322.6	2172.4
30°	145.8	156.5	174.3	216.8	364.9	656.9	1273.8	2097.2	2386.7	2465.6	2256.8
32.5°	133.5	141.9	156.5	194.2	334.0	629.9	1334.8	2262.4	2562.3	2588.5	2358.2
35°	120.8	129.6	144.2	175.9	315.8	609.0	1367.0	2408.9	2736.3	2711.3	2458.9
37.5°	116.1	123.3	136.7	162.9	305.9	595.2	1379.2	2553.2	2922.9	2847.2	2529.0
40°	112.9	119.3	131.1	154.2	303.1	582.1	1376.5	2690.3	3103.9	2987.8	2584.1
42.5°	110.6	116.1	127.2	148.2	295.5	569.8	1367.4	2808.7	3249.0	3109.1	2636.8
45°	108.5	114.5	125.6	151.4	281.7	556.3	1361.8	2916.9	3360.3	3211.3	2707.3
47.5°	107.8	114.5	126.0	150.6	266.7	541.2	1381.6	3036.9	3457.4	3297.3	2801.2
50°	106.6	114.1	134.7	143.4	246.0	522.6	1448.6	3180.0	3559.2	3393.9	2922.9
52.5°	104.6	113.8	143.8	137.9	219.5	496.8	1557.1	3382.1	3735.1	3582.2	3102.7
55°	102.2	114.5	137.5	129.2	191.4	463.6	1665.7	3659.0	4020.4	3885.7	3361.1
57.5°	99.4	113.3	129.9	121.2	168.0	421.6	1748.1	3886.1	4255.7	4198.7	3678.4
60°	97.5	116.1	116.9	116.5	152.9	381.6	1756.0	3871.4	4323.5	4402.0	3989.1
62.5°	95.1	118.5	106.6	112.9	145.4	344.3	1658.1	3631.7	4208.9	4375.8	4242.3
65°	92.0	103.4	101.1	109.8	145.4	324.5	1430.3	3232.7	3892.4	4128.5	4379.8
67.5°	88.8	93.9	97.1	105.4	148.5	305.9	1149.4	2726.8	3393.1	3729.6	4225.2
70°	84.4	88.8	92.7	101.5	147.0	292.8	904.6	2185.5	2792.6	3177.6	3797.7
72.5°	80.4	83.6	87.6	95.4	147.0	286.8	726.7	1714.4	2132.0	2456.5	3145.9
75°	74.5	77.2	80.8	89.5	144.2	262.3	545.5	1373.6	1559.9	1763.2	2482.3
77.5°	68.5	70.5	73.3	82.0	129.9	219.1	386.0	1063.9	1155.7	1268.3	1935.1
80°	61.0	62.6	64.5	73.3	107.8	170.0	251.2	832.1	864.2	918.4	1273.1
82.5°	52.3	54.7	55.0	63.0	86.7	123.3	149.4	570.2	569.8	649.4	898.3
85°	42.8	44.0	44.8	49.5	64.1	82.0	98.3	311.4	277.7	389.1	780.1
87.5°	32.1	30.9	32.1	33.2	42.4	48.4	52.7	57.5	34.5	70.5	453.7
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°	2120.6	2143.9	2130.1	2113.4	2071.8	2010.8	1964.1	1923.2
5°	2271.5	2314.6	2295.7	2233.8	2126.1	2003.7	1874.9	1796.4
7.5°	2252.4	2338.1	2330.5	2227.5	2073.0	1892.7	1711.6	1608.2
10°	2100.3	2220.4	2241.0	2135.6	1971.9	1770.3	1560.7	1443.8
12.5°	1934.7	2035.8	2077.7	2037.7	1883.6	1678.8	1465.2	1348.4
15°	1796.0	1847.1	1888.8	1914.5	1819.0	1646.2	1448.6	1328.1
17.5°	1693.4	1683.5	1718.4	1780.1	1784.1	1689.4	1523.8	1389.2
20°	1643.9	1566.2	1586.4	1673.2	1774.6	1799.2	1674.0	1514.7
22.5°	1641.1	1519.9	1523.8	1617.4	1801.9	1948.9	1861.4	1680.0
25°	1683.9	1514.7	1518.3	1611.4	1850.3	2099.9	2078.1	1866.6
27.5°	1756.8	1536.9	1534.5	1637.5	1914.9	2225.9	2296.8	2094.8
30°	1835.7	1569.0	1563.1	1679.6	1978.3	2303.6	2452.1	2266.8
32.5°	1933.9	1626.1	1605.4	1741.0	2040.9	2378.1	2584.9	2427.6
35°	2027.4	1709.7	1680.0	1828.9	2107.9	2460.9	2733.4	2605.5
37.5°	2122.9	1834.5	1817.8	1955.7	2202.5	2550.8	2903.4	2807.2
40°	2245.4	2011.9	2004.1	2139.9	2329.0	2649.0	3094.0	3017.2
42.5°	2377.2	2200.6	2193.8	2351.6	2485.9	2747.7	3257.3	3197.4
45°	2511.5	2429.2	2430.7	2577.3	2651.1	2840.8	3385.7	3341.7
47.5°	2670.1	2679.2	2735.9	2811.5	2811.9	2944.7	3499.3	3476.0
50°	2871.3	2981.1	3085.7	3097.6	2974.3	3081.7	3638.4	3629.7
52.5°	3099.1	3329.4	3451.0	3413.4	3132.9	3251.8	3844.0	3843.6
55°	3369.8	3693.5	3808.0	3743.8	3322.6	3473.2	4112.7	4095.3
57.5°	3650.3	4043.7	4136.1	4052.4	3560.0	3731.1	4382.1	4289.7
60°	3953.4	4345.3	4439.2	4313.6	3826.2	3988.3	4560.4	4344.5
62.5°	4152.0	4521.5	4589.0	4468.5	4064.7	4250.2	4617.9	4279.1
65°	4162.2	4404.3	4422.1	4379.4	4166.2	4477.6	4534.6	4085.4
67.5°	3879.3	3893.6	3917.0	3962.9	3949.4	4376.2	4213.7	3632.9
70°	3274.3	3084.1	3161.0	3205.3	3305.3	3892.4	3620.6	2954.6
72.5°	2503.7	2225.9	2313.1	2298.1	2505.6	3192.7	2769.9	2275.9
75°	1801.9	1517.9	1524.6	1525.4	1800.4	2548.5	1888.8	1616.2
77.5°	1224.7	1074.1	1096.3	1082.5	1204.9	1996.5	1359.8	1164.8
80°	837.6	833.6	838.4	805.9	803.5	1290.5	1006.8	929.1
82.5°	621.2	574.1	567.3	532.9	615.7	986.5	764.2	667.6
85°	490.1	317.7	276.2	333.2	533.3	907.8	466.0	342.3
87.5°	207.7	124.8	75.7	149.8	296.3	665.2	129.2	66.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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