

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: P196213

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P196213  
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: NVN-AF-01-LED-U-SLL  
Description: NAVION 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: 5519.8 lumens  
Efficiency: N/A  
Efficacy: 93.6 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

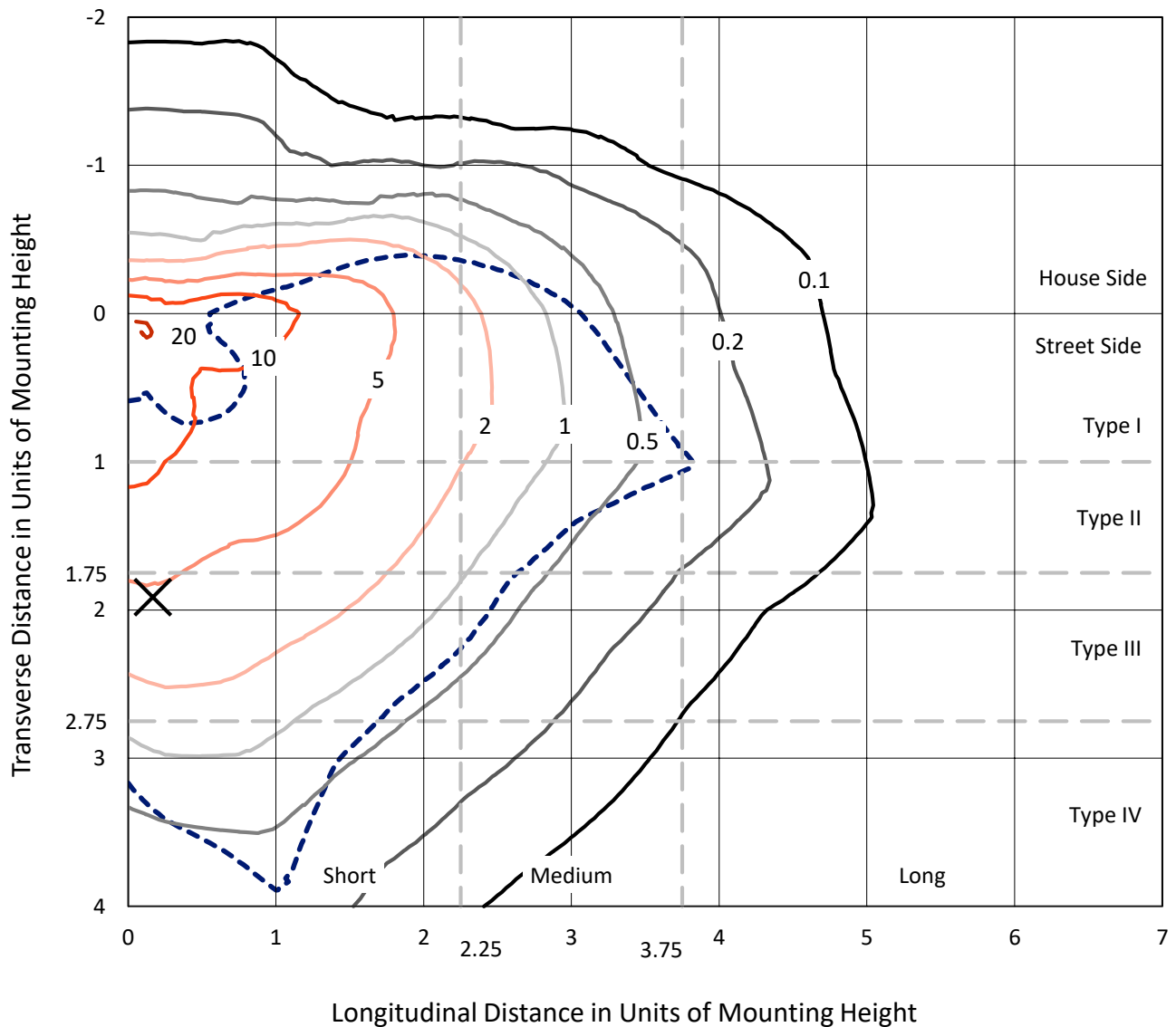
Input Watts (W): 59  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

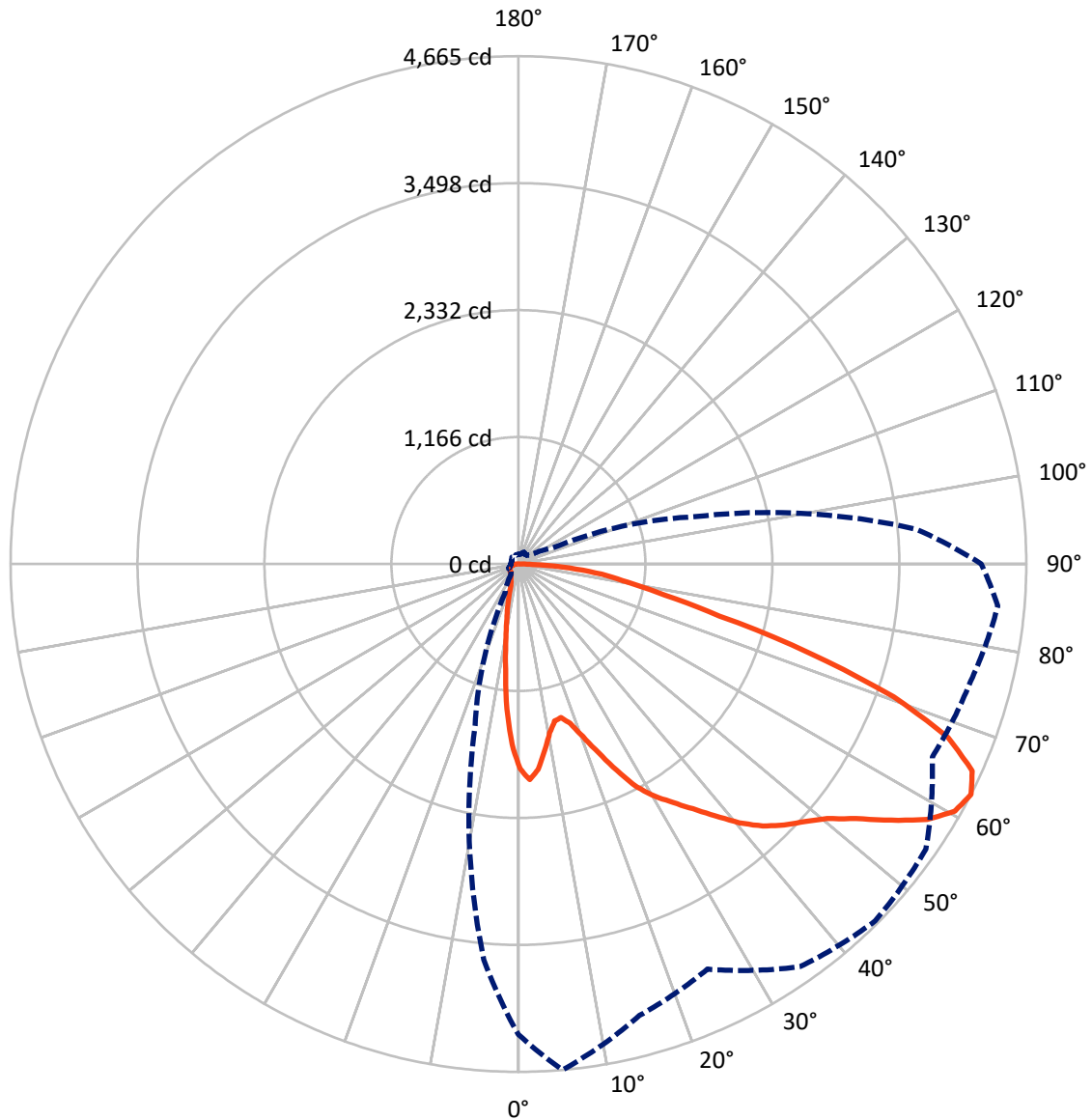
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 21.6 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
<b>House Side</b>	Lumens	977.8	0.0	977.8
	% Fixture	17.7	0.0	17.7
<b>Street Side</b>	Lumens	4542.0	0.0	4542.0
	% Fixture	82.3	0.0	82.3
<b>Total</b>	Lumens	5519.8	0.0	5519.8
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	136.9	2.5
10°-20°	250.0	4.5
20°-30°	359.5	6.5
30°-40°	550.6	10.0
40°-50°	805.0	14.6
50°-60°	1171.3	21.2
60°-70°	1357.2	24.6
70°-80°	707.5	12.8
80°-90°	181.9	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°	5519.8	100.0
0°-180°	5519.8	100.0

**Coefficient of Utilization**



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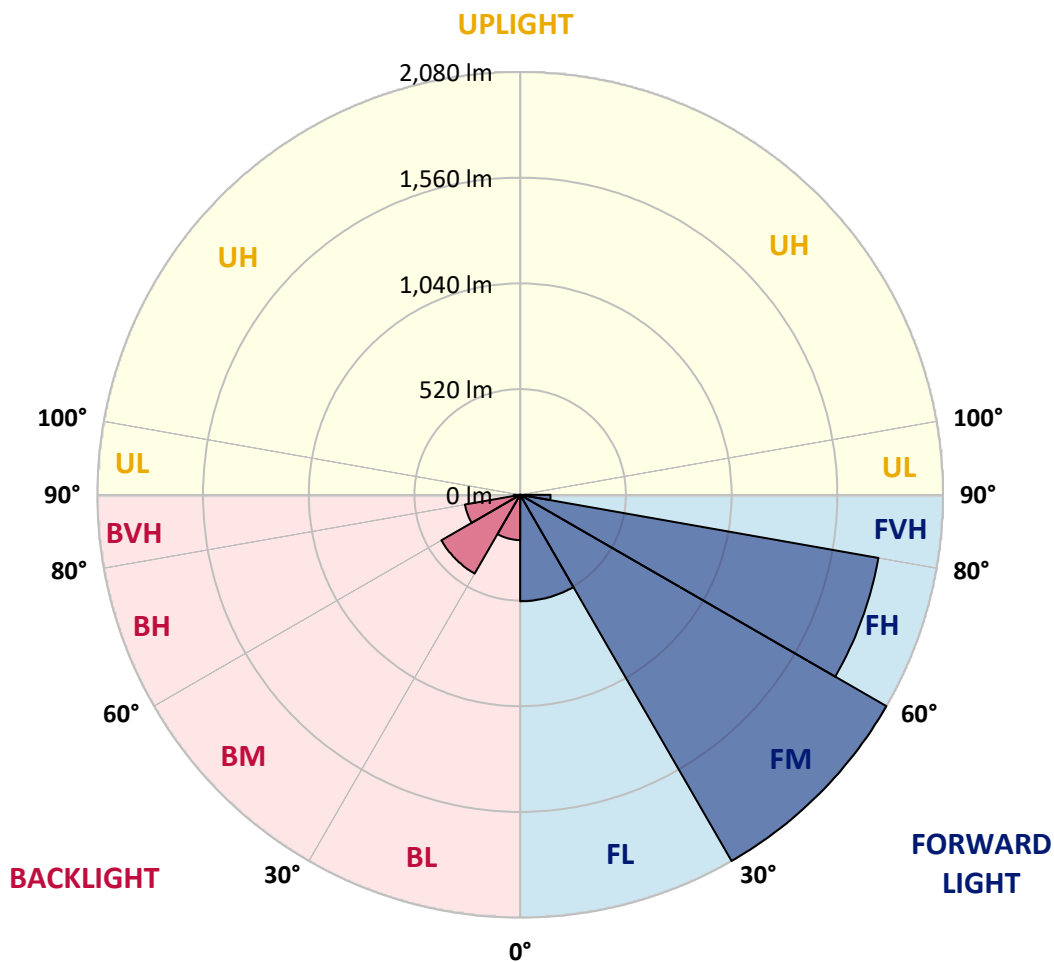
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	523.9	9.5			
FM (30°-60°)	2079.6	37.7			
FH (60°-80°)	1788.9	32.4			G1/1800
FVH (80°-90°)	149.6	2.7			G2/225
BL (0°-30°)	222.5	4.0	B1/500		
BM (30°-60°)	447.4	8.1	B1/1000		
BH (60°-80°)	275.7	5.0	B1/500		G1/500
BVH (80°-90°)	32.2	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°	1881.8	1881.8	1881.8	1881.8	1881.8	1881.8	1881.8	1881.8	1881.8	1881.8	1881.8
2.5°	1942.7	1983.9	2031.1	2092.8	2134.8	2151.6	2165.6	2142.0	2119.1	2076.3	2061.1
5°	1814.6	1893.8	2023.9	2147.6	2256.4	2318.8	2338.1	2294.5	2216.8	2104.7	2045.5
7.5°	1624.4	1729.0	1911.8	2094.0	2250.0	2354.1	2361.7	2275.2	2122.3	1938.7	1842.6
10°	1458.4	1576.5	1788.2	1991.9	2157.2	2263.6	2242.8	2121.6	1937.1	1728.2	1619.6
12.5°	1362.0	1480.0	1695.7	1902.6	2058.3	2098.8	2056.3	1954.2	1779.3	1570.0	1460.8
15°	1341.5	1463.2	1662.9	1837.4	1933.9	1907.8	1865.9	1814.2	1689.7	1518.5	1412.8
17.5°	1403.2	1539.2	1706.5	1802.1	1798.1	1735.7	1700.6	1710.6	1689.3	1574.4	1464.0
20°	1530.0	1690.9	1817.4	1792.6	1690.1	1602.5	1582.1	1660.5	1758.6	1715.0	1593.7
22.5°	1697.0	1880.2	1968.7	1820.2	1633.7	1539.2	1535.2	1657.7	1884.6	1927.4	1779.7
25°	1885.4	2099.1	2121.2	1869.0	1627.7	1533.6	1530.0	1701.0	2036.3	2138.0	1988.3
27.5°	2116.0	2320.1	2248.4	1934.3	1654.1	1550.1	1552.4	1774.6	2194.4	2346.0	2223.2
30°	2289.7	2477.0	2326.9	1998.3	1696.6	1578.8	1584.9	1854.2	2279.6	2490.6	2410.9
32.5°	2452.1	2611.0	2402.1	2061.6	1758.6	1621.7	1642.4	1953.4	2382.1	2614.7	2588.2
35°	2631.8	2761.1	2485.8	2129.2	1847.4	1697.0	1726.9	2047.9	2483.7	2738.6	2763.9
37.5°	2835.5	2932.8	2576.6	2224.8	1975.5	1836.2	1853.0	2144.4	2554.6	2875.9	2952.4
40°	3047.7	3125.3	2675.8	2352.5	2161.6	2024.3	2032.3	2268.0	2610.3	3018.0	3135.3
42.5°	3229.8	3290.2	2775.5	2510.9	2375.3	2216.0	2222.8	2401.3	2663.5	3140.5	3281.8
45°	3375.4	3419.8	2869.6	2677.9	2603.4	2455.3	2453.8	2537.0	2734.7	3243.8	3394.3
47.5°	3511.1	3534.7	2974.4	2840.3	2839.9	2763.5	2706.3	2697.1	2829.6	3330.6	3492.3
50°	3666.4	3675.2	3112.9	3004.4	3128.9	3116.9	3011.3	2900.4	2952.4	3428.2	3595.2
52.5°	3882.5	3882.9	3284.6	3164.5	3447.9	3485.9	3363.1	3130.5	3134.1	3618.4	3772.8
55°	4136.6	4154.3	3508.3	3356.2	3781.6	3846.5	3730.8	3403.9	3395.1	3925.0	4061.0
57.5°	4333.1	4426.4	3768.9	3596.0	4093.4	4177.8	4084.6	3687.2	3715.7	4241.2	4298.7
60°	4388.4	4606.6	4028.6	3864.9	4357.2	4484.0	4389.2	3993.4	4029.4	4446.5	4367.2
62.5°	4322.4	4664.6	4293.1	4105.8	4513.7	4635.3	4567.3	4193.9	4285.1	4420.0	4251.5
65°	4126.7	4580.5	4522.9	4208.3	4423.6	4466.8	4448.8	4204.3	4424.1	4170.3	3931.7
67.5°	3669.6	4256.3	4420.4	3989.4	4003.0	3956.6	3932.9	3918.5	4268.0	3767.2	3427.5
70°	2984.5	3657.2	3931.7	3338.6	3237.7	3192.9	3115.3	3307.4	3836.1	3209.7	2820.7
72.5°	2298.9	2797.9	3225.0	2531.0	2321.3	2336.5	2248.4	2528.9	3177.7	2481.4	2153.6
75°	1632.5	1907.8	2574.2	1818.6	1540.9	1540.1	1533.2	1820.2	2507.4	1781.0	1575.7
77.5°	1176.6	1373.5	2016.7	1217.1	1093.4	1107.4	1084.9	1237.1	1954.7	1281.1	1167.4
80°	938.6	1016.9	1303.5	811.6	814.1	846.9	842.1	846.1	1285.8	927.7	872.9
82.5°	674.3	772.0	996.6	622.0	538.3	573.2	579.9	627.6	907.3	655.9	575.5
85°	345.8	470.7	916.9	538.7	336.6	279.0	321.0	495.1	788.0	393.0	280.6
87.5°	67.2	130.4	672.0	299.3	151.3	76.4	126.0	209.7	458.3	71.2	34.8
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°	1881.8	1881.8	1881.8	1881.8	1881.8	1881.8	1881.8	1881.8	1881.8	1881.8	1881.8
2.5°	2035.1	1983.9	1935.8	1886.2	1847.8	1801.0	1755.0	1715.0	1676.1	1650.5	1658.5
5°	1985.4	1860.6	1748.5	1644.5	1583.6	1510.4	1445.2	1390.4	1347.9	1320.7	1337.1
7.5°	1759.4	1590.5	1442.8	1305.5	1219.1	1124.2	1048.2	994.5	961.7	943.3	970.2
10°	1528.0	1338.3	1172.6	1029.8	944.5	864.1	795.2	738.4	694.4	673.6	684.4
12.5°	1362.4	1151.4	977.7	881.7	808.4	736.4	665.1	598.7	542.7	517.1	511.9
15°	1300.3	1051.0	873.7	766.4	693.6	615.1	538.3	467.1	413.8	391.8	387.0
17.5°	1327.5	1029.4	812.0	685.2	579.5	484.3	397.8	330.6	291.3	279.0	280.2
20°	1423.1	1037.4	762.4	601.5	471.1	358.2	271.8	225.4	208.5	205.7	208.9
22.5°	1554.5	1070.2	726.4	529.5	375.4	260.5	202.1	180.1	175.7	175.3	178.5
25°	1727.8	1134.2	702.4	465.4	296.6	206.5	176.0	163.7	160.1	160.9	164.1
27.5°	1931.8	1215.5	686.8	410.2	243.8	184.1	164.5	153.6	150.1	150.9	153.2
30°	2118.3	1286.7	663.6	368.6	218.9	176.0	158.0	147.3	142.5	142.5	144.0
32.5°	2285.3	1348.4	636.4	337.4	196.1	158.0	143.3	134.8	131.2	132.5	133.3
35°	2433.3	1380.8	615.1	319.0	177.7	145.7	130.8	122.0	117.2	118.0	119.3
37.5°	2579.0	1393.2	601.1	308.9	164.5	138.1	124.5	117.2	112.0	111.3	110.9
40°	2717.5	1390.4	587.9	306.2	155.7	132.5	120.5	114.1	108.8	107.6	107.3
42.5°	2837.2	1381.2	575.5	298.6	149.7	128.5	117.2	111.7	106.5	104.9	104.0
45°	2946.4	1375.6	561.9	284.6	152.9	126.8	115.7	109.7	104.9	102.8	102.1
47.5°	3067.6	1395.5	546.7	269.3	152.1	127.3	115.7	108.8	104.0	102.1	101.3
50°	3212.2	1463.2	527.8	248.6	144.8	136.1	115.3	107.6	103.2	102.1	100.5
52.5°	3416.2	1572.9	501.9	221.7	139.3	145.3	114.9	105.7	102.1	100.0	98.1
55°	3696.0	1682.5	468.2	193.3	130.4	138.9	115.7	103.2	99.2	97.3	94.8
57.5°	3925.4	1765.7	425.9	169.7	122.4	131.2	114.5	100.5	96.1	94.0	92.1
60°	3910.5	1773.8	385.4	154.5	117.6	118.0	117.2	98.4	93.3	91.7	90.0
62.5°	3668.4	1674.9	347.8	146.9	114.1	107.6	119.7	96.1	90.4	88.9	87.7
65°	3265.4	1444.8	327.8	146.9	110.9	102.1	104.4	92.9	87.7	86.0	85.2
67.5°	2754.3	1161.0	308.9	150.1	106.5	98.1	94.8	89.6	84.8	83.3	82.4
70°	2207.6	913.7	295.7	148.4	102.5	93.6	89.6	85.2	80.4	80.0	79.3
72.5°	1731.8	734.0	289.8	148.4	96.5	88.5	84.5	81.2	76.4	76.0	74.9
75°	1387.5	551.1	264.9	145.7	90.4	81.6	78.1	75.3	70.5	70.8	70.1
77.5°	1074.6	389.8	221.4	131.2	82.9	74.1	71.2	69.3	63.6	64.0	64.0
80°	840.5	253.7	171.7	108.8	74.1	65.3	63.2	61.7	55.6	56.5	56.5
82.5°	575.9	150.9	124.5	87.7	63.6	55.6	55.2	52.8	46.4	46.9	47.7
85°	314.6	99.2	82.9	64.9	50.0	45.2	44.4	43.3	37.2	37.2	37.6
87.5°	58.0	53.2	48.8	42.9	33.7	32.4	31.2	32.4	28.0	27.2	27.2
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):**

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	1881.8	1881.8	1881.8	1881.8	1881.8	1881.8	1881.8	1881.8	1881.8	1881.8	1881.8
2.5°	1639.7	1612.1	1592.8	1576.1	1535.7	1538.4	1544.0	1552.0	1526.9	1540.1	1556.4
5°	1320.7	1297.9	1280.7	1253.9	1197.5	1177.4	1164.6	1159.0	1121.5	1129.4	1147.0
7.5°	973.7	973.3	967.3	937.3	869.3	828.1	800.9	792.5	769.3	778.1	804.9
10°	685.6	692.7	690.0	663.2	602.3	572.8	566.7	583.5	583.9	601.1	647.1
12.5°	495.5	491.4	487.8	465.9	420.2	415.4	429.0	452.2	457.9	476.3	524.3
15°	369.8	360.2	358.2	340.9	311.0	315.4	325.4	337.4	337.8	350.6	390.3
17.5°	277.3	277.3	280.6	269.3	247.8	245.7	240.5	237.3	232.5	237.7	259.3
20°	215.3	225.4	233.3	226.9	207.4	197.7	187.7	181.3	177.7	178.1	184.5
22.5°	184.5	192.5	203.0	199.7	183.3	170.9	164.5	160.1	157.3	157.3	160.9
25°	168.9	174.1	183.7	182.1	168.1	158.0	152.9	148.4	145.3	144.8	148.4
27.5°	156.5	159.7	166.1	165.3	150.9	144.4	141.3	138.5	136.5	136.1	139.6
30°	145.3	146.9	150.1	148.8	138.1	131.7	130.4	129.3	128.1	128.5	133.7
32.5°	135.2	136.5	138.5	136.9	126.4	120.9	118.9	117.2	116.1	117.2	123.3
35°	124.1	127.7	130.1	129.3	118.0	111.3	106.9	102.8	101.3	102.5	109.3
37.5°	114.5	120.5	123.7	122.9	111.3	103.2	97.7	96.9	96.9	98.4	105.3
40°	110.9	115.3	118.0	116.8	105.3	97.3	94.0	92.9	93.3	94.8	102.1
42.5°	107.6	111.7	112.4	110.1	98.4	93.3	91.2	89.6	90.4	92.5	99.6
45°	104.9	108.0	107.6	104.0	92.9	89.2	89.2	88.1	88.5	90.0	97.7
47.5°	102.8	104.4	103.6	100.0	88.9	86.0	87.3	87.3	88.1	89.2	96.9
50°	99.6	100.9	100.0	96.9	85.6	83.3	84.5	86.0	86.8	88.1	94.8
52.5°	96.5	97.3	96.9	93.6	82.4	80.8	80.8	82.4	84.1	85.6	91.7
55°	93.3	94.0	94.4	92.1	80.0	78.5	78.1	78.1	79.7	82.0	88.5
57.5°	90.8	90.8	91.7	90.0	77.6	75.6	73.7	74.1	76.0	78.1	84.5
60°	88.1	88.5	89.6	88.1	74.5	71.2	69.7	71.6	72.4	74.5	81.2
62.5°	85.6	85.6	86.4	85.2	71.6	68.4	67.2	69.3	69.3	71.2	78.1
65°	83.7	83.3	83.3	82.9	68.8	65.7	64.9	65.7	66.1	68.0	74.9
67.5°	82.0	80.0	80.0	80.8	66.1	62.8	62.4	62.4	62.8	65.3	71.2
70°	78.5	76.8	76.4	79.3	63.2	59.2	59.2	58.4	59.2	60.5	66.8
72.5°	74.5	73.2	72.8	76.8	60.5	55.2	54.4	54.0	54.4	55.6	61.7
75°	69.3	68.4	69.3	75.3	57.6	50.8	49.6	49.2	49.2	49.6	56.1
77.5°	63.2	62.4	68.4	70.1	56.1	45.6	44.4	43.6	42.9	42.9	50.0
80°	56.1	55.6	66.1	59.2	53.6	40.0	38.1	36.8	36.0	35.6	42.9
82.5°	48.8	48.0	56.5	46.4	44.4	32.8	30.0	27.6	26.4	26.4	32.8
85°	40.0	39.6	44.4	34.1	30.8	24.0	20.0	18.0	16.4	16.4	21.2
87.5°	29.3	28.4	27.6	20.5	15.7	10.8	7.6	7.2	6.4	6.0	8.8
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):**

	295°	305°	315°	325°	335°	345°	355°	360°
0°	1881.8	1881.8	1881.8	1881.8	1881.8	1881.8	1881.8	1881.8
2.5°	1580.9	1614.1	1676.9	1728.6	1797.4	1852.6	1915.5	1942.7
5°	1179.5	1231.8	1327.9	1409.9	1523.6	1628.8	1748.9	1814.6
7.5°	846.1	923.7	996.6	1099.0	1241.0	1382.3	1537.6	1624.4
10°	700.0	771.2	833.6	906.5	1016.2	1175.1	1360.3	1458.4
12.5°	579.9	656.7	722.8	800.9	892.9	1036.6	1247.9	1362.0
15°	444.7	528.3	607.5	701.5	814.5	978.6	1214.2	1341.5
17.5°	304.5	394.2	491.8	606.7	742.8	954.1	1246.3	1403.2
20°	206.9	272.5	378.6	514.6	678.3	942.5	1316.7	1530.0
22.5°	170.1	199.7	279.4	428.2	625.5	955.3	1431.2	1697.0
25°	156.1	172.1	217.3	352.2	585.1	989.3	1586.1	1885.4
27.5°	147.3	160.9	190.5	297.8	547.9	1035.7	1774.6	2116.0
30°	142.1	154.9	179.7	269.8	513.9	1075.7	1936.7	2289.7
32.5°	130.4	140.0	160.5	253.7	489.5	1108.2	2079.6	2452.1
35°	116.5	128.1	144.8	243.4	488.7	1123.4	2214.0	2631.8
37.5°	111.3	122.4	134.8	237.7	493.5	1136.2	2378.5	2835.5
40°	108.0	118.0	128.1	236.9	497.5	1146.2	2539.4	3047.7
42.5°	105.3	115.3	126.8	231.3	495.8	1159.8	2681.9	3229.8
45°	104.4	114.5	129.7	222.9	495.5	1181.0	2795.1	3375.4
47.5°	103.6	118.9	128.9	213.7	493.9	1225.9	2922.8	3511.1
50°	102.8	126.8	123.3	200.9	481.9	1302.3	3094.5	3666.4
52.5°	102.5	128.1	117.2	183.3	460.2	1415.6	3345.9	3882.5
55°	100.9	121.6	106.9	160.1	429.0	1537.6	3615.2	4136.6
57.5°	97.3	108.4	100.9	137.3	384.2	1622.9	3814.1	4333.1
60°	106.1	93.3	96.9	125.6	330.6	1638.1	3822.9	4388.4
62.5°	101.3	84.8	92.9	121.6	293.0	1538.8	3647.9	4322.4
65°	80.8	80.4	89.2	125.6	287.3	1316.7	3352.6	4126.7
67.5°	73.7	77.2	85.6	130.4	290.9	1037.4	2918.0	3669.6
70°	68.8	73.2	80.8	134.8	297.4	817.2	2349.3	2984.5
72.5°	64.0	67.6	76.0	139.3	293.0	644.8	1880.2	2298.9
75°	58.0	61.3	69.3	127.7	251.3	473.8	1494.0	1632.5
77.5°	51.2	54.0	60.9	100.9	188.9	329.8	1119.0	1176.6
80°	44.0	45.2	50.4	73.7	123.3	197.3	851.7	938.6
82.5°	34.8	35.2	38.5	54.0	76.8	126.0	590.8	674.3
85°	22.4	23.2	24.9	38.1	51.7	80.8	301.8	345.8
87.5°	7.6	8.8	8.8	18.4	25.2	44.8	92.5	67.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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