

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: P159523

Luminaire Tested: **VST-F02-LED-E-U-T3-8030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P159523  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33706)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: VST-F02-LED-E-U-T3-8030  
Description: VENTUS LED SITE/ROADWAY LUMINAIRE  
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 AREA  
Light Source: (14) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4261.7 lumens  
Efficiency: N/A  
Efficacy: 77.5 lumens/watt  
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B2 - U0 - G2

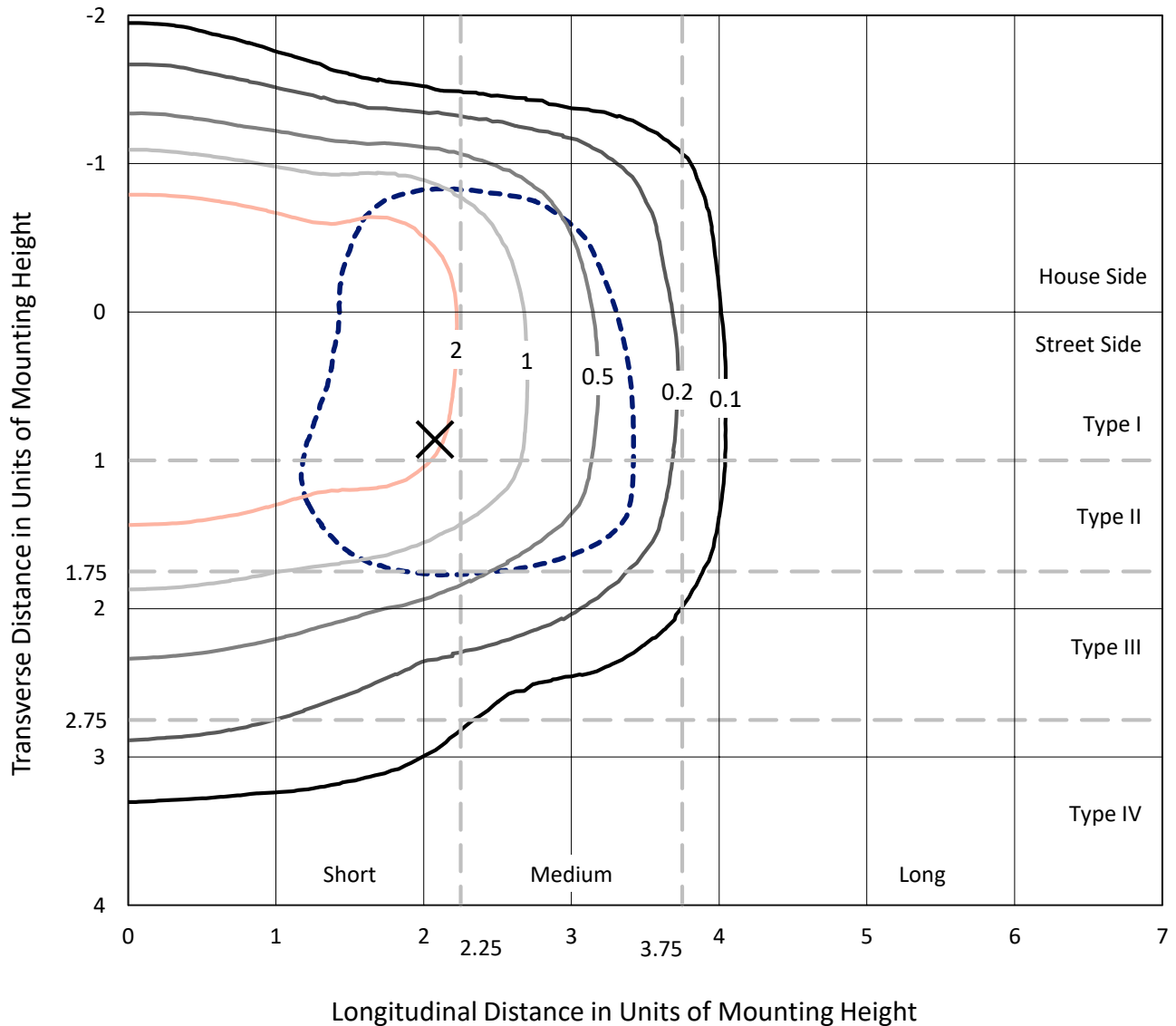
Input Watts (W): 55  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

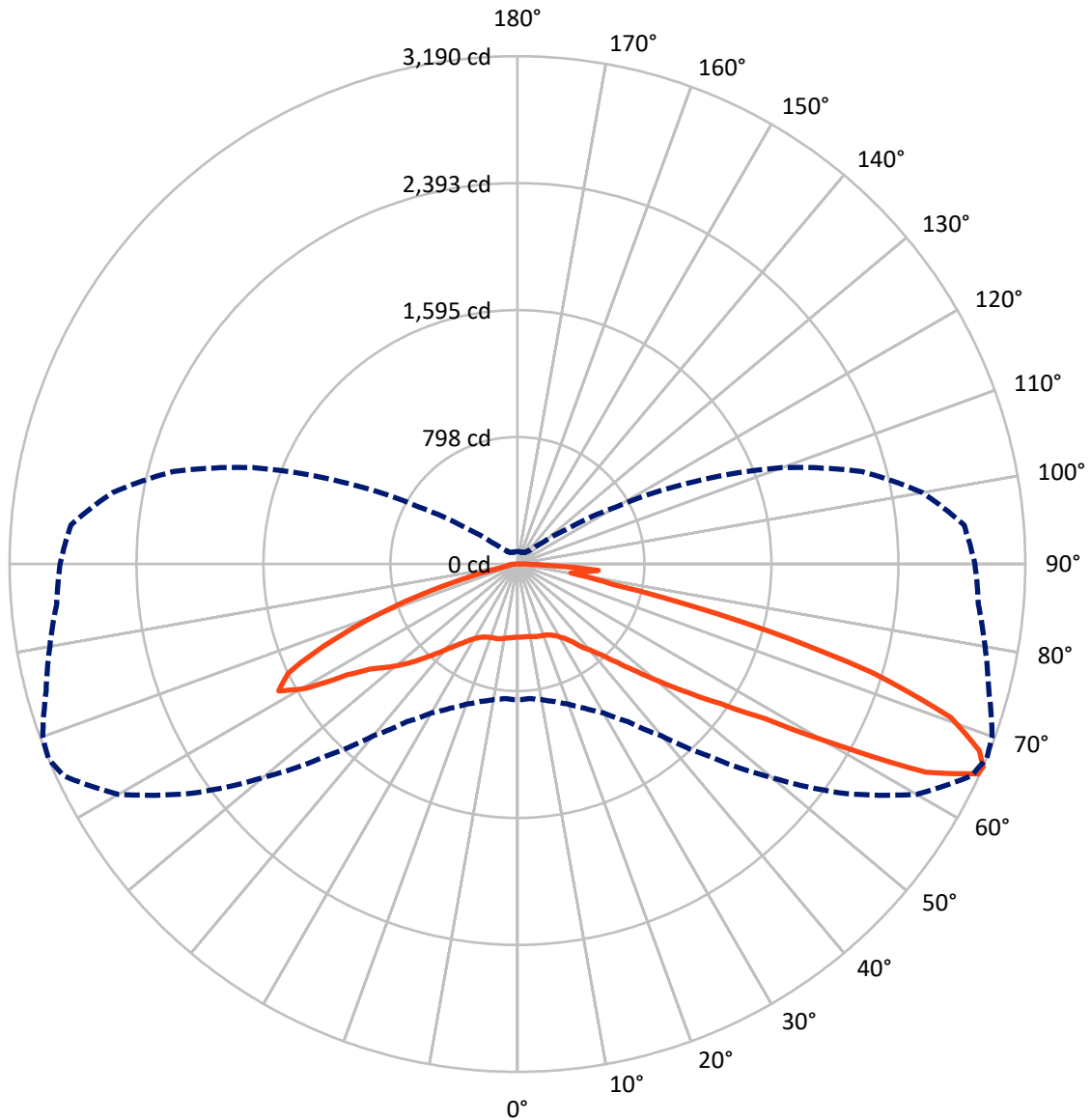
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.6 fc  
 Type II - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 67.5-Deg Lateral    - - - Horizontal Cone Through 66-Deg Vertical



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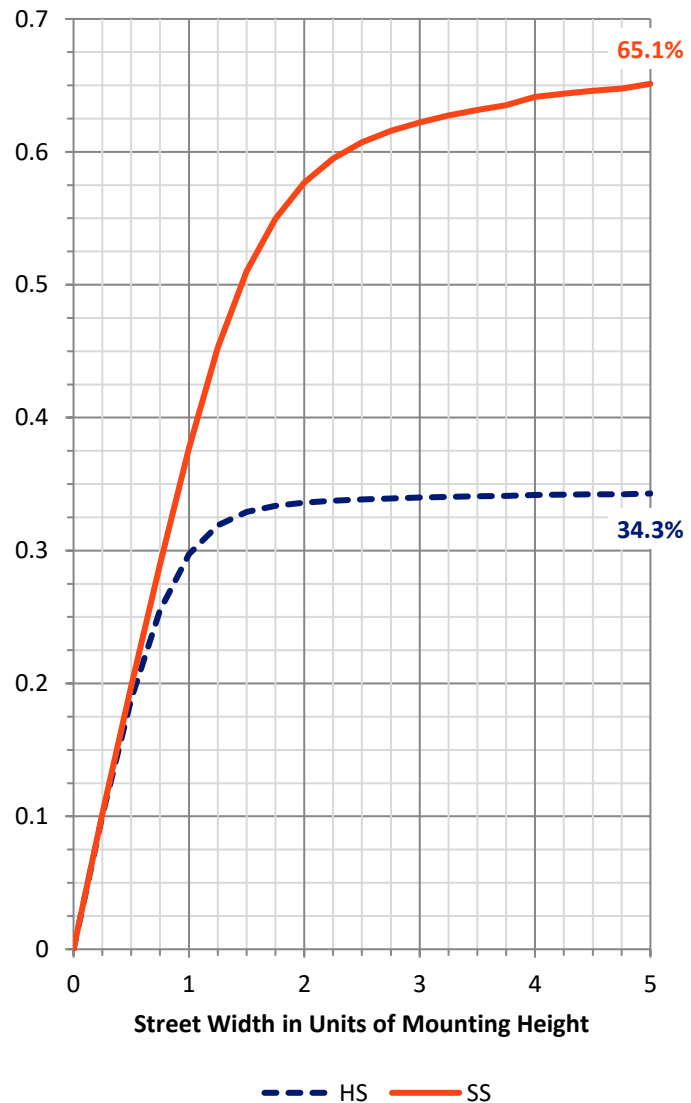
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1474.8	0.0	1474.8
	% Fixture	34.6	0.0	34.6
<b>Street Side</b>	Lumens	2787.0	0.0	2787.0
	% Fixture	65.4	0.0	65.4
<b>Total</b>	Lumens	4261.7	0.0	4261.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	44.1	1.0
10°-20°	130.7	3.1
20°-30°	224.6	5.3
30°-40°	363.0	8.5
40°-50°	601.6	14.1
50°-60°	944.2	22.2
60°-70°	1290.9	30.3
70°-80°	567.7	13.3
80°-90°	95.0	2.2
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°	4261.7	100.0
0°-180°	4261.7	100.0

**Coefficient of Utilization**



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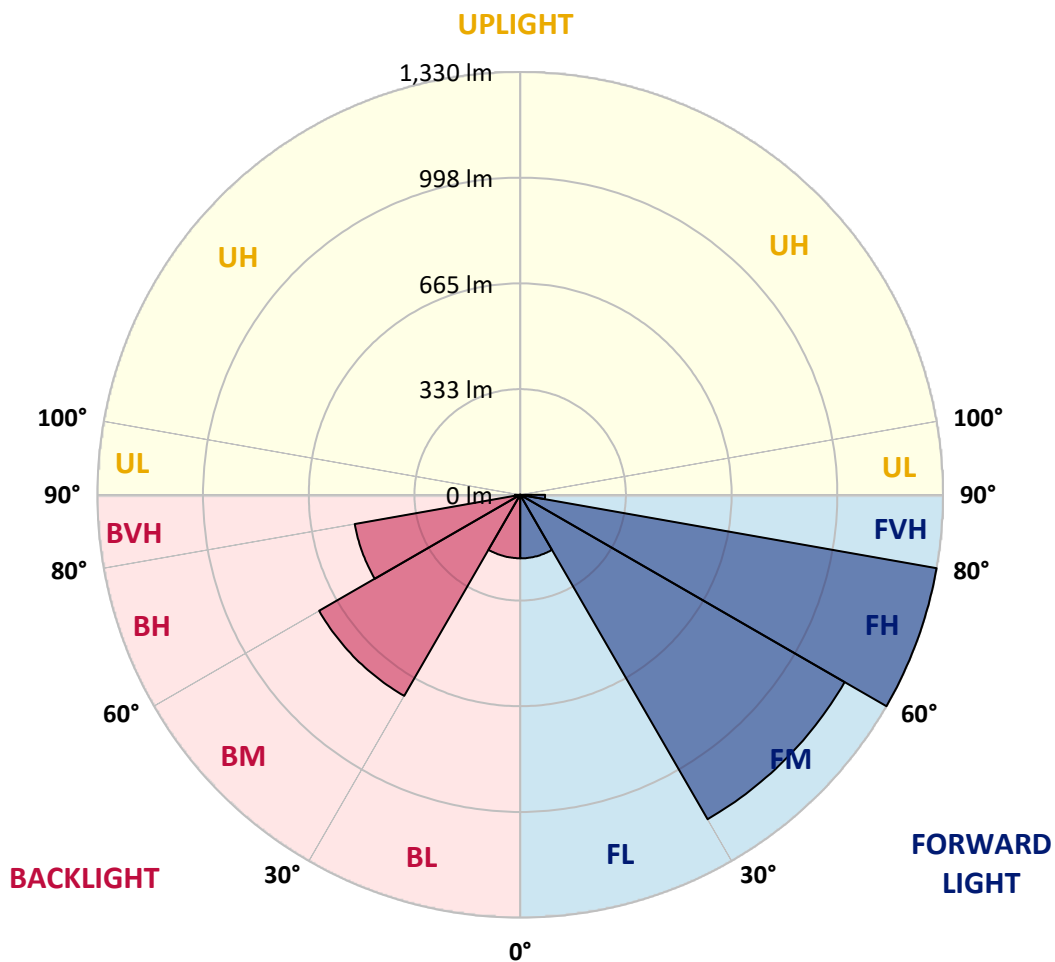
CATALOG NUMBER: VST-F02-LED-E-U-T3-8030

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	199.9	4.7			
FM (30°-60°)	1178.5	27.7			
FH (60°-80°)	1330.2	31.2			G1/1800
FVH (80°-90°)	78.4	1.8			G1/100
BL (0°-30°)	199.5	4.7	B1/500		
BM (30°-60°)	730.3	17.1	B1/1000		
BH (60°-80°)	528.3	12.4	B2/1000		G2/1000
BVH (80°-90°)	16.6	0.4			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	459.8	459.8	459.8	459.8	459.8	459.8	459.8	459.8	459.8	459.8	459.8
2.5°	459.0	459.0	459.3	459.0	459.0	458.8	459.8	459.8	459.8	459.5	460.4
5°	457.9	457.9	458.2	458.2	458.5	458.2	459.0	459.3	459.3	459.3	460.1
7.5°	455.1	455.9	455.4	455.6	455.9	456.8	457.9	458.5	459.0	459.8	460.1
10°	449.3	450.7	450.4	451.2	451.5	454.0	454.8	455.9	457.9	459.0	459.8
12.5°	441.2	442.0	442.3	443.4	444.5	447.6	449.8	451.7	454.6	457.3	460.1
15°	434.8	435.3	435.3	436.4	438.1	440.9	443.7	447.0	451.2	455.9	460.4
17.5°	436.7	438.1	437.0	436.7	437.3	439.0	441.5	444.2	449.3	454.6	459.8
20°	449.5	449.8	449.3	447.8	446.8	447.0	447.0	447.6	450.7	454.8	459.0
22.5°	460.1	461.2	461.0	461.2	461.0	462.1	461.5	460.4	459.3	459.5	461.5
25°	469.3	470.5	470.5	471.3	472.7	474.9	476.6	476.3	474.6	472.4	471.5
27.5°	484.4	484.4	484.4	485.2	487.1	490.0	492.7	494.4	495.8	493.6	488.8
30°	508.1	508.3	507.5	507.8	509.2	512.8	516.1	518.6	521.5	521.2	515.0
32.5°	534.0	535.1	534.8	535.9	537.9	541.2	544.9	548.8	552.4	554.6	550.7
35°	567.4	568.6	568.8	570.5	572.7	577.7	582.7	587.8	591.7	593.3	592.5
37.5°	622.3	622.6	621.5	619.0	619.8	623.7	629.6	637.7	640.1	641.8	645.7
40°	704.5	703.7	699.2	697.0	695.6	697.3	696.2	702.6	708.4	708.7	708.4
42.5°	804.3	801.8	797.6	797.0	796.5	796.0	792.9	793.1	798.5	799.9	798.2
45°	903.5	900.5	897.4	900.2	896.8	905.5	908.0	914.7	915.5	918.3	914.1
47.5°	984.9	985.2	985.2	989.1	995.8	1012.2	1027.0	1039.8	1044.5	1051.3	1052.1
50°	1046.5	1048.1	1053.5	1066.0	1080.2	1107.8	1132.6	1155.7	1176.7	1184.5	1205.1
52.5°	1082.5	1086.9	1098.1	1118.9	1144.3	1180.0	1219.0	1258.3	1294.6	1325.2	1349.7
55°	1076.0	1079.4	1098.9	1131.5	1171.1	1219.0	1273.6	1330.5	1387.1	1438.9	1479.1
57.5°	1034.8	1037.0	1056.5	1093.3	1142.6	1207.0	1284.2	1368.7	1448.1	1531.7	1600.3
60°	980.7	984.1	1002.2	1031.2	1082.7	1151.3	1240.7	1355.3	1482.1	1613.6	1741.9
62.5°	946.1	945.4	961.2	987.1	1025.9	1088.0	1174.1	1309.9	1485.4	1707.8	1961.2
65°	888.8	886.3	902.7	932.2	974.3	1034.5	1116.2	1246.6	1450.3	1743.5	2102.8
66°	853.1	848.0	864.5	894.3	936.4	1000.5	1078.8	1207.6	1407.7	1708.7	2087.7
67.5°	790.7	788.2	796.0	819.4	850.6	910.8	992.5	1122.0	1306.8	1603.9	1977.4
70°	642.7	637.1	643.2	653.8	665.8	680.6	730.7	833.6	989.9	1277.8	1593.0
72.5°	437.8	435.1	446.5	462.7	494.7	509.8	529.5	546.2	601.4	805.4	1111.1
75°	333.1	334.7	349.2	376.0	417.2	461.8	505.3	521.2	502.7	486.9	630.7
77.5°	186.7	196.5	214.0	248.0	291.8	354.8	430.6	514.2	556.0	545.7	510.3
80°	76.9	75.5	84.2	102.8	117.9	169.4	259.2	364.0	481.6	556.0	544.3
82.5°	21.5	22.0	28.4	36.5	47.1	59.9	93.7	150.5	245.3	381.5	499.4
85°	6.7	6.7	9.2	13.7	16.1	18.7	23.7	39.0	66.6	133.0	269.5
87.5°	1.4	1.4	2.0	3.9	4.2	4.2	5.3	7.3	6.4	5.9	26.2
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):**

	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°	100°
0°	459.8	459.8	459.8	459.8	459.8	459.8	459.8	459.8	459.8	459.8	459.8
2.5°	459.5	459.0	459.3	459.5	459.3	459.3	459.0	458.8	459.0	459.0	459.8
5°	459.3	459.0	459.3	459.3	459.3	459.5	459.5	459.5	460.4	460.4	461.8
7.5°	459.8	459.8	460.4	460.4	460.4	460.4	460.7	461.2	462.7	462.4	464.9
10°	461.0	461.5	462.9	463.2	463.2	464.0	464.6	465.7	467.1	467.6	469.9
12.5°	462.4	465.1	467.6	468.2	469.0	470.5	471.3	471.8	474.4	475.2	478.0
15°	464.0	467.9	471.0	472.1	473.2	474.9	476.0	476.8	479.1	480.2	483.5
17.5°	464.3	468.8	472.4	474.1	475.4	477.4	479.1	480.7	483.2	484.9	488.3
20°	464.0	469.9	475.4	477.7	479.1	482.7	485.2	487.4	490.5	492.2	495.5
22.5°	467.1	473.8	481.3	484.1	486.3	491.3	494.7	498.3	502.2	503.3	505.9
25°	474.4	481.3	490.8	494.7	498.6	505.3	510.0	515.3	519.2	519.8	520.6
27.5°	486.6	493.0	504.4	510.3	516.7	526.2	533.2	538.4	544.0	544.0	543.5
30°	511.4	512.8	524.8	532.3	541.8	555.7	566.0	571.9	576.1	576.1	571.3
32.5°	543.5	541.8	552.7	560.8	573.8	593.3	607.3	611.8	616.2	614.8	606.7
35°	589.7	585.0	591.1	603.4	618.1	644.9	659.4	669.4	672.2	668.3	655.5
37.5°	647.9	647.4	650.5	664.1	680.6	715.1	729.9	736.3	734.1	727.1	704.5
40°	709.6	707.9	706.0	715.1	733.5	775.0	801.2	804.6	801.5	791.2	762.8
42.5°	791.8	791.8	782.6	785.1	800.4	847.0	877.9	888.5	888.8	873.7	835.8
45°	904.9	903.8	887.6	883.7	895.4	941.2	981.0	986.9	986.9	967.1	925.6
47.5°	1040.9	1039.5	1023.7	1010.0	1012.2	1061.5	1094.7	1103.6	1095.8	1081.1	1031.7
50°	1194.2	1191.7	1175.5	1162.7	1157.2	1207.0	1235.2	1239.4	1227.9	1210.4	1156.9
52.5°	1349.7	1357.3	1347.8	1340.8	1342.7	1375.1	1404.1	1384.3	1378.4	1359.5	1305.7
55°	1511.6	1534.7	1555.7	1549.6	1556.8	1588.3	1593.8	1567.7	1557.1	1543.4	1483.5
57.5°	1674.7	1742.1	1810.7	1829.9	1847.8	1892.9	1886.5	1843.6	1851.7	1872.0	1804.6
60°	1902.4	2097.2	2271.1	2303.1	2358.6	2397.1	2405.7	2397.3	2435.0	2424.4	2364.7
62.5°	2252.1	2576.8	2818.7	2878.9	2934.7	2932.7	2903.5	2873.3	2910.4	2910.4	2754.6
65°	2501.8	2870.3	3129.2	3179.0	3176.8	3109.7	3040.6	2980.4	2975.0	2933.8	2706.1
66°	2513.5	2892.8	3146.5	3190.0	3173.2	3065.1	2982.3	2905.9	2873.3	2815.9	2582.6
67.5°	2408.2	2829.0	3090.2	3128.0	3084.1	2929.1	2815.1	2712.8	2665.4	2568.7	2349.1
70°	1975.4	2431.3	2811.2	2888.6	2838.8	2642.6	2486.5	2348.3	2257.7	2118.1	1959.8
72.5°	1442.0	1795.1	2206.4	2332.4	2324.6	2144.0	2018.3	1891.8	1772.8	1645.7	1530.1
75°	937.3	1167.7	1397.1	1470.7	1435.3	1330.7	1240.7	1166.9	1054.0	965.7	944.2
77.5°	535.1	653.8	618.4	609.2	564.9	455.9	303.2	212.6	192.0	239.7	262.8
80°	509.2	461.5	377.9	340.9	313.3	213.5	112.0	78.9	69.1	70.8	76.1
82.5°	574.1	598.4	489.4	408.8	355.9	259.7	141.8	66.1	48.2	57.1	64.1
85°	430.3	605.9	600.6	508.9	417.5	299.3	167.8	50.5	29.0	40.1	52.4
87.5°	87.2	143.5	138.2	121.5	103.4	72.2	28.1	15.9	14.5	19.8	30.1
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):**

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	459.8	459.8	459.8	459.8	459.8	459.8	459.8	459.8	459.8	459.8	459.8
2.5°	460.4	460.4	461.0	461.8	462.1	462.1	462.7	462.1	463.2	463.4	463.7
5°	462.9	463.7	464.3	465.7	466.6	467.1	467.9	467.4	468.5	468.8	469.3
7.5°	465.7	467.1	468.2	468.8	469.9	469.9	470.2	469.6	469.3	468.5	468.2
10°	470.7	471.5	472.9	472.4	471.8	469.9	468.2	465.7	464.3	461.8	460.4
12.5°	478.8	479.3	479.3	476.8	473.2	468.8	464.6	460.4	457.1	454.3	452.6
15°	484.4	485.5	484.1	480.5	475.2	469.0	463.4	457.9	453.4	449.8	447.6
17.5°	488.6	488.3	485.8	480.7	475.7	470.5	465.4	459.5	454.0	448.7	445.4
20°	494.9	492.2	487.7	482.4	477.1	472.7	468.8	463.2	457.3	450.1	445.1
22.5°	503.6	498.6	492.2	486.6	481.6	477.4	472.9	468.2	462.1	454.0	447.0
25°	515.9	507.2	500.0	494.4	490.0	485.2	480.2	474.1	467.9	459.5	451.2
27.5°	534.5	521.7	512.5	507.5	503.3	496.9	490.5	483.2	475.4	466.8	457.3
30°	557.1	541.8	531.2	526.7	521.7	514.4	507.5	497.5	486.6	476.3	464.6
32.5°	583.6	568.0	557.4	554.0	545.9	537.6	527.8	514.4	500.3	484.9	471.0
35°	623.7	604.0	594.2	586.4	575.2	565.2	548.8	531.2	510.8	490.5	473.2
37.5°	665.0	644.9	634.9	624.0	609.5	591.1	569.1	544.0	517.0	491.9	470.7
40°	720.1	698.4	685.6	668.9	645.5	616.7	584.2	549.8	517.0	485.8	460.1
42.5°	784.5	764.5	744.7	717.1	679.4	637.7	592.0	547.9	508.1	472.1	445.1
45°	873.7	839.4	808.0	763.6	708.7	649.9	592.8	538.7	492.7	452.9	422.8
47.5°	974.0	929.7	874.0	804.6	729.6	654.7	584.7	521.5	468.5	425.3	392.4
50°	1089.7	1021.7	936.1	837.2	740.2	648.2	565.5	492.5	435.1	385.4	350.3
52.5°	1222.1	1118.4	992.5	860.3	738.5	628.7	533.7	454.3	390.2	337.5	302.9
55°	1369.0	1223.8	1046.2	875.1	723.5	590.8	483.8	400.5	334.4	282.6	252.2
57.5°	1627.9	1408.5	1148.8	894.9	692.0	533.4	420.5	332.5	272.8	228.8	199.8
60°	2108.9	1731.5	1343.0	941.4	644.6	461.5	340.9	260.9	211.0	178.9	157.4
62.5°	2406.5	1958.9	1437.8	934.7	567.7	363.1	253.1	193.4	154.1	133.0	119.6
65°	2336.0	1869.8	1322.1	802.9	441.7	257.5	167.5	126.5	105.9	95.0	88.6
66°	2240.2	1770.0	1224.3	719.0	384.9	215.2	138.2	106.2	91.1	83.0	79.7
67.5°	2039.2	1587.7	1056.0	575.8	288.4	160.3	102.0	83.3	74.2	70.0	67.7
70°	1706.7	1279.2	746.9	340.0	156.4	86.9	65.2	58.0	55.7	54.4	53.5
72.5°	1319.6	926.1	436.4	167.2	78.9	56.3	49.6	46.6	45.7	45.7	46.0
75°	831.4	532.3	195.4	80.5	53.5	45.4	42.4	41.0	41.2	41.5	41.2
77.5°	276.2	183.7	81.4	57.1	46.6	41.2	38.8	38.2	38.8	39.0	39.0
80°	79.4	69.4	58.8	50.5	42.7	38.5	36.2	35.9	37.3	37.6	37.1
82.5°	61.0	57.1	53.2	48.8	41.0	36.2	35.4	35.7	36.5	35.9	33.4
85°	56.0	55.4	39.8	39.6	35.7	34.6	33.7	34.0	33.2	30.1	27.3
87.5°	31.5	29.3	22.6	22.9	26.5	27.3	22.6	23.9	22.3	19.5	17.8
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):**

	160°	165°	170°	175°	180°
0°	459.8	459.8	459.8	459.8	459.8
2.5°	464.3	464.0	464.0	464.9	463.7
5°	469.6	469.3	469.3	470.2	469.3
7.5°	467.1	466.3	465.7	465.4	465.4
10°	458.8	457.9	456.2	455.6	455.1
12.5°	450.1	449.3	447.3	447.3	446.8
15°	444.8	443.7	442.3	441.5	440.9
17.5°	442.0	440.3	438.7	437.8	437.3
20°	440.9	438.7	436.7	435.3	435.3
22.5°	441.2	438.4	436.1	434.5	433.9
25°	443.9	439.8	437.0	435.3	434.8
27.5°	447.8	442.9	439.2	437.0	436.1
30°	453.2	446.2	441.2	438.4	437.3
32.5°	456.8	447.0	440.6	436.7	435.3
35°	456.5	443.9	436.1	431.2	429.5
37.5°	451.5	436.7	426.4	420.3	417.5
40°	440.3	423.4	412.4	406.6	403.3
42.5°	424.2	405.8	396.0	389.6	386.0
45°	398.8	380.7	368.7	363.7	359.0
47.5°	363.7	345.3	335.0	327.7	324.7
50°	322.4	304.1	293.2	287.3	284.5
52.5°	277.3	259.7	251.9	246.4	242.5
55°	230.5	214.3	211.0	204.8	201.2
57.5°	186.4	177.0	173.9	167.8	164.7
60°	145.7	142.7	139.3	135.4	133.8
62.5°	112.9	110.1	109.3	106.7	106.4
65°	86.1	86.4	85.9	85.3	84.7
66°	78.3	78.1	78.3	77.8	77.5
67.5°	66.6	67.7	68.6	68.3	68.3
70°	54.1	54.9	56.0	55.7	55.7
72.5°	46.3	47.6	48.2	47.9	47.9
75°	41.8	43.2	43.2	42.7	42.4
77.5°	39.0	39.6	39.0	38.5	37.9
80°	36.2	35.7	34.9	34.0	33.4
82.5°	31.5	30.1	29.3	27.8	27.8
85°	25.4	24.2	22.3	20.9	19.5
87.5°	16.4	15.9	14.5	10.9	8.6
90°	0.0	0.0	0.0	0.0	0.0

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