

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: P158423

Luminaire Tested: **VST-F02-LED-E-U-SL3-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158423
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33713)
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-SL3-8030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL
Light Source: (14) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4203.9 lumens
Efficiency: N/A
Efficacy: 76.4 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')
IES Classification: Type III - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G1

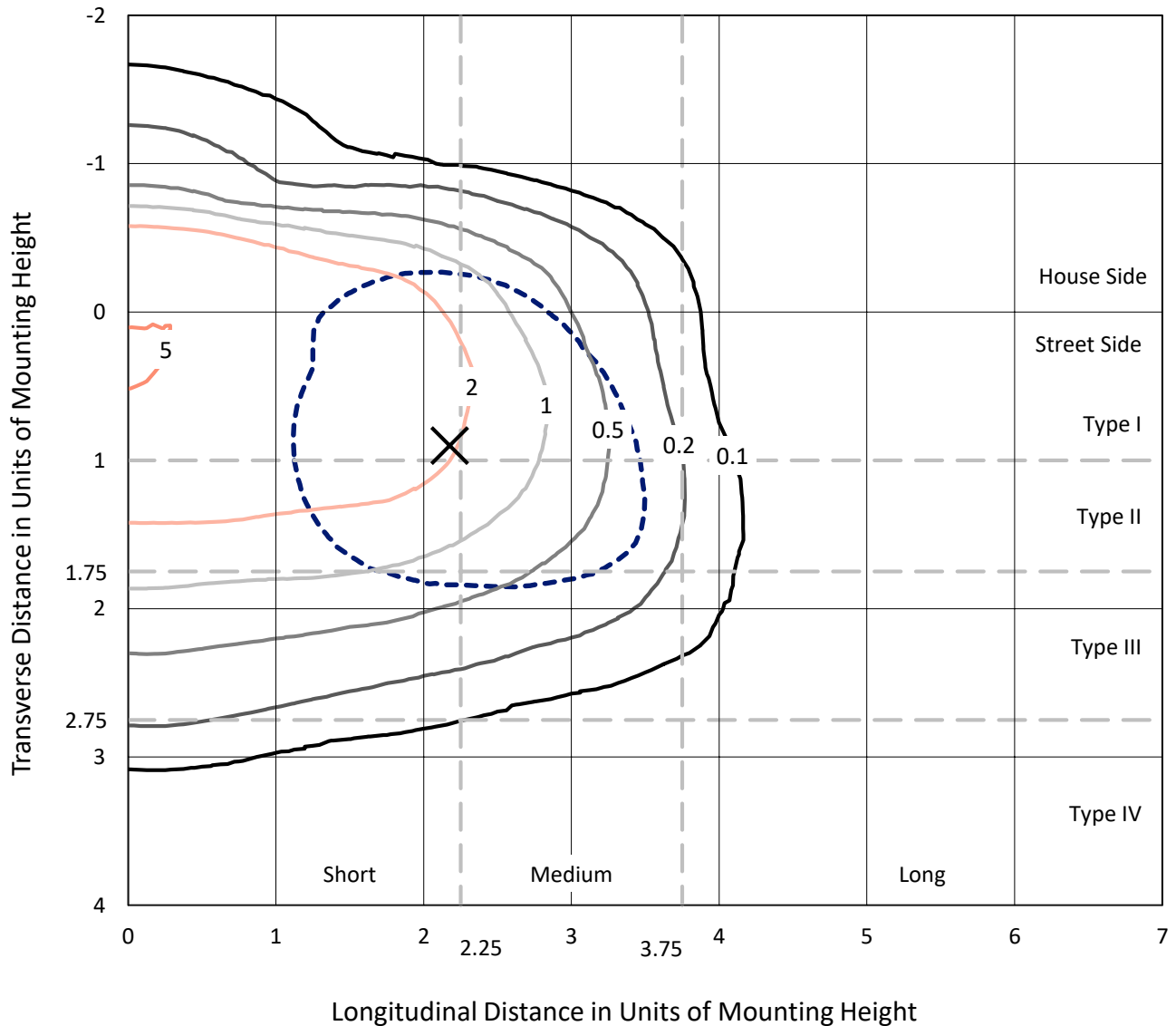
Input Watts (W): 55
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

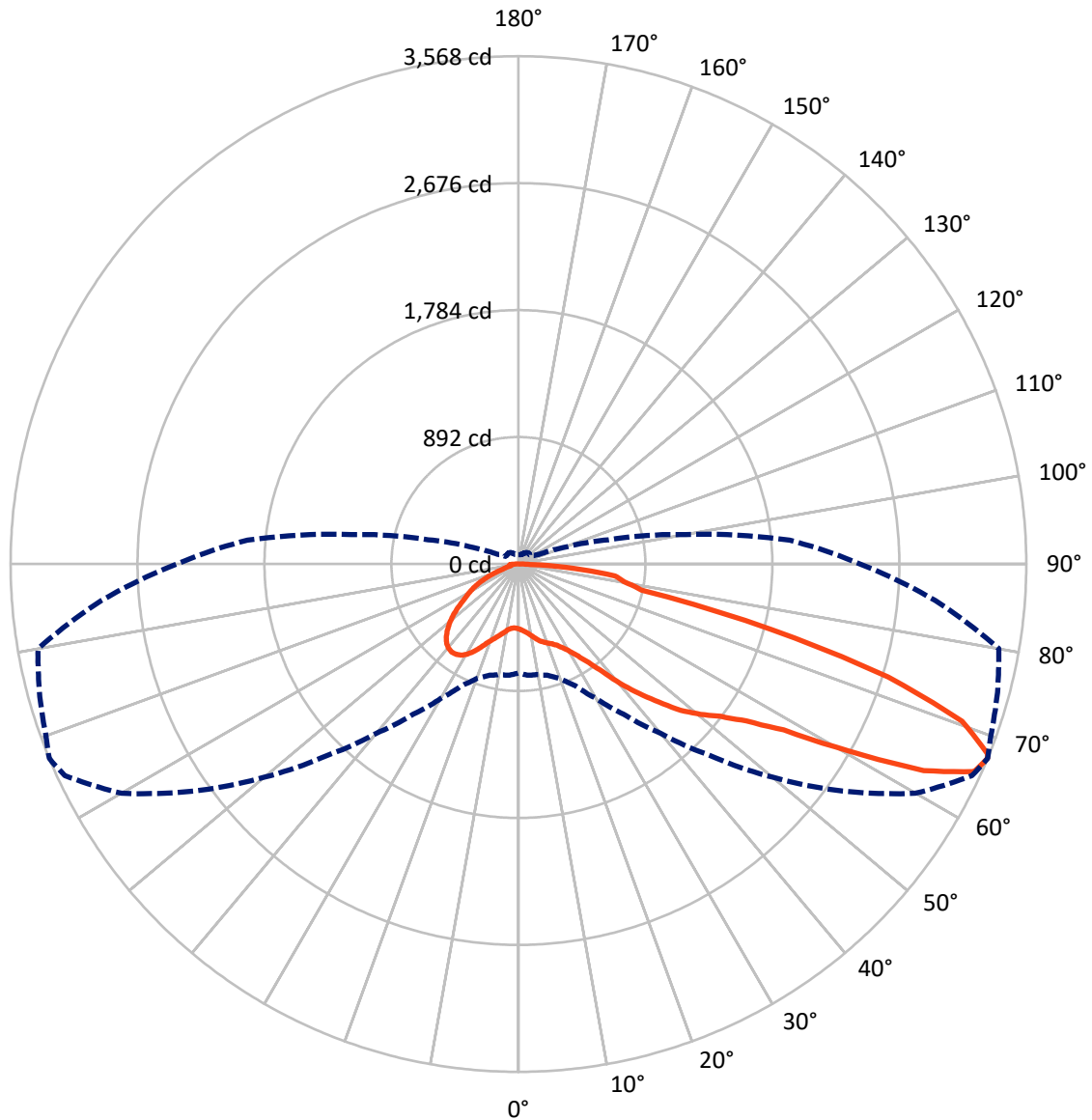
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.7 fc
 Type III - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 67.5-Deg Lateral - - - Horizontal Cone Through 67-Deg Vertical

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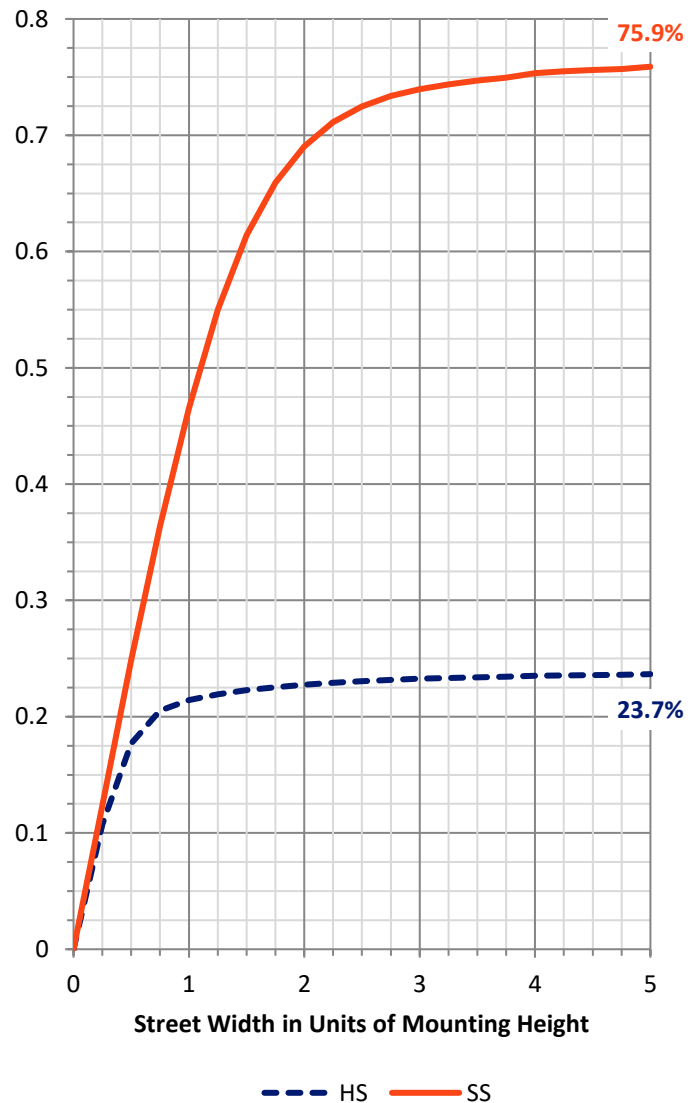
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1008.5	0.0	1008.5
	% Fixture	24.0	0.0	24.0
Street Side	Lumens	3195.4	0.0	3195.4
	% Fixture	76.0	0.0	76.0
Total	Lumens	4203.9	0.0	4203.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.3	1.1
10°-20°	154.3	3.7
20°-30°	275.5	6.6
30°-40°	403.7	9.6
40°-50°	623.8	14.8
50°-60°	908.3	21.6
60°-70°	1183.3	28.1
70°-80°	529.7	12.6
80°-90°	80.1	1.9
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°	4203.9	100.0
0°-180°	4203.9	100.0



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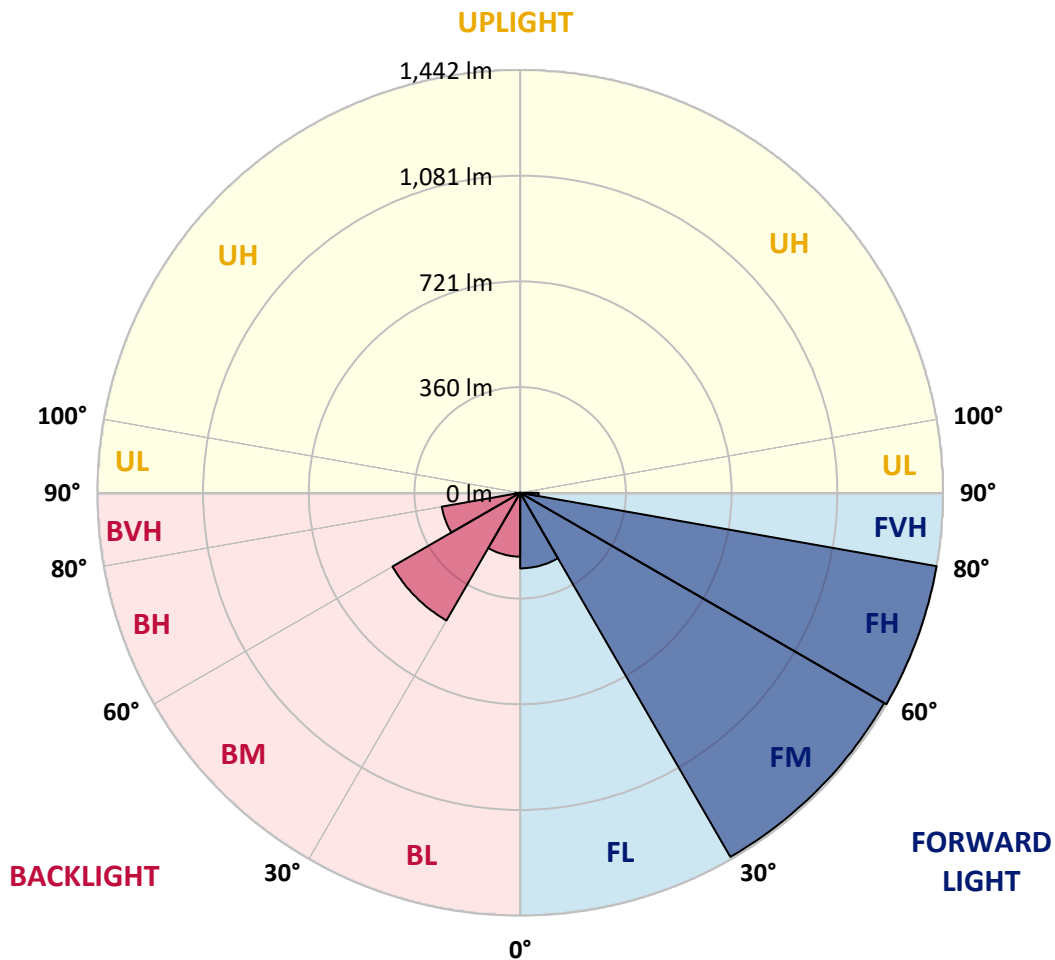
CATALOG NUMBER: VST-F02-LED-E-U-SL3-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	257.6	6.1			
FM	(30°-60°)	1433.3	34.1			
FH	(60°-80°)	1441.6	34.3			G1/1800
FVH	(80°-90°)	62.9	1.5			G1/100
BL	(0°-30°)	217.5	5.2	B1/500		
BM	(30°-60°)	502.5	12.0	B1/1000		
BH	(60°-80°)	271.3	6.5	B1/500		G1/500
BVH	(80°-90°)	17.2	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	455.6	455.6	455.6	455.6	455.6	455.6	455.6	455.6	455.6	455.6	455.6
2.5°	473.5	474.6	474.9	474.6	474.9	473.8	473.5	471.8	472.7	470.5	469.9
5°	499.1	500.0	500.5	498.3	498.8	497.8	496.4	494.7	492.5	489.4	487.4
7.5°	524.2	525.6	525.4	524.5	522.5	521.5	518.6	516.1	512.2	508.6	506.1
10°	557.9	557.6	557.6	552.9	550.1	547.6	542.6	538.7	534.8	529.5	526.7
12.5°	596.9	595.0	594.2	590.8	585.0	580.5	573.3	565.7	558.8	553.2	548.8
15°	634.6	634.6	632.3	627.1	621.5	615.7	605.3	594.5	583.0	574.1	569.6
17.5°	668.9	665.8	663.8	656.9	651.0	641.6	630.1	618.4	604.2	591.7	583.0
20°	694.0	691.4	687.2	678.6	668.6	657.4	644.0	630.4	615.1	601.4	591.7
22.5°	708.4	705.4	698.9	687.5	673.9	658.3	642.7	629.8	615.9	605.6	597.5
25°	716.0	712.9	704.3	689.2	670.8	650.2	632.3	619.8	611.8	609.2	608.1
27.5°	715.7	713.2	704.0	686.7	663.0	639.3	620.1	609.5	608.6	618.4	625.7
30°	708.4	706.7	698.4	681.1	656.3	631.5	613.7	608.1	616.7	637.4	655.2
32.5°	701.2	700.4	694.5	678.9	657.7	636.8	624.5	625.1	643.0	674.7	703.4
35°	702.1	703.1	702.3	694.0	680.6	669.7	663.8	676.1	704.0	742.4	780.9
37.5°	709.3	713.5	718.7	719.6	719.9	718.2	730.4	756.4	797.0	847.3	907.4
40°	725.2	729.9	745.2	758.6	775.9	796.5	821.3	857.3	907.7	969.6	1043.5
42.5°	774.5	781.2	800.2	824.9	856.7	889.0	926.1	975.2	1037.0	1102.3	1179.7
45°	838.9	852.8	873.7	901.3	949.0	994.4	1042.3	1097.2	1163.0	1244.6	1322.7
47.5°	919.1	933.1	963.4	993.0	1049.3	1105.9	1158.2	1215.7	1287.0	1370.6	1457.0
50°	989.3	1005.2	1032.3	1072.1	1137.4	1206.7	1264.7	1326.8	1386.8	1474.9	1562.1
52.5°	1044.5	1056.0	1081.9	1118.4	1191.1	1267.2	1340.5	1409.6	1480.7	1568.8	1649.6
55°	1051.5	1062.1	1087.4	1129.3	1203.1	1287.5	1372.0	1453.9	1554.5	1650.7	1757.7
57.5°	1021.4	1030.1	1055.7	1093.0	1165.0	1261.1	1367.8	1472.9	1601.6	1731.5	1862.2
60°	978.8	987.4	1007.5	1037.3	1102.3	1205.9	1330.5	1474.3	1645.4	1833.0	2025.3
62.5°	932.0	939.5	955.6	976.8	1034.0	1129.6	1272.2	1465.1	1681.1	1933.9	2230.4
65°	853.1	871.2	878.2	899.9	957.1	1047.4	1192.6	1402.9	1666.6	1978.7	2359.1
67°	765.8	784.3	787.9	809.9	855.6	942.2	1090.0	1287.8	1551.8	1901.3	2330.7
67.5°	738.0	753.6	759.2	781.2	824.4	906.1	1046.2	1246.3	1516.7	1858.9	2296.4
70°	542.6	559.9	566.0	575.2	606.2	674.2	767.0	940.6	1209.2	1516.9	1937.2
72.5°	290.4	304.3	310.2	323.8	339.7	376.8	447.8	572.5	742.1	1015.0	1378.1
75°	196.5	202.1	206.2	215.7	232.1	261.7	292.9	336.7	439.2	572.7	784.3
77.5°	112.0	114.5	115.1	116.8	129.9	158.0	209.3	283.4	363.4	415.0	501.7
80°	48.5	53.5	57.4	54.9	54.1	59.9	74.9	111.8	219.1	347.8	412.7
82.5°	26.2	28.4	31.8	32.0	33.7	35.7	38.8	46.0	64.7	130.4	284.5
85°	13.7	14.2	19.0	21.7	23.2	24.2	24.8	27.6	31.8	40.4	70.8
87.5°	2.0	2.8	3.4	4.4	5.0	5.3	6.1	7.8	9.2	11.2	19.0
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°	455.6	455.6	455.6	455.6	455.6	455.6	455.6	455.6	455.6	455.6	455.6
2.5°	467.4	466.8	465.1	464.0	462.9	461.8	460.4	459.3	457.3	455.9	454.3
5°	484.6	481.3	479.1	476.0	475.4	471.8	468.2	466.6	463.2	460.4	457.1
7.5°	502.2	498.3	494.7	492.2	490.8	485.8	482.2	478.0	474.1	470.5	466.6
10°	522.8	518.9	515.0	513.4	510.8	506.1	503.0	497.8	493.9	489.4	484.1
12.5°	544.3	541.5	538.7	536.5	535.4	533.2	528.7	524.2	518.9	514.4	508.3
15°	563.2	561.3	560.2	559.6	559.6	558.2	554.0	549.8	544.3	539.3	532.6
17.5°	576.6	575.8	576.6	577.4	578.6	577.4	576.6	571.9	568.3	562.1	555.4
20°	584.4	586.1	590.3	593.0	595.6	597.5	598.4	594.5	589.7	585.2	580.8
22.5°	592.8	597.5	604.7	608.9	613.1	620.1	621.8	619.0	615.4	612.5	607.9
25°	606.7	613.7	626.2	632.9	638.8	649.1	650.5	651.0	650.2	647.9	642.1
27.5°	628.4	642.1	658.9	667.5	673.9	687.2	692.6	692.6	690.3	692.8	692.8
30°	666.4	684.5	706.2	711.2	721.3	733.0	741.6	742.7	743.0	748.3	756.1
32.5°	724.6	741.9	766.1	771.7	780.4	791.5	801.2	800.2	802.6	814.1	824.4
35°	809.3	826.9	842.8	850.3	854.2	864.2	867.8	874.0	881.5	895.7	894.3
37.5°	934.7	950.3	952.6	957.3	952.6	954.5	957.3	964.6	984.6	997.4	976.8
40°	1085.8	1111.7	1109.2	1103.6	1093.0	1078.8	1083.8	1095.0	1116.7	1105.6	1050.1
42.5°	1228.2	1255.0	1249.9	1243.6	1220.1	1214.8	1214.3	1223.5	1235.2	1203.4	1107.5
45°	1368.4	1395.7	1387.1	1383.4	1367.8	1356.4	1365.9	1366.4	1363.4	1295.4	1157.7
47.5°	1513.0	1538.1	1532.5	1535.6	1519.4	1511.9	1512.8	1508.9	1480.1	1373.4	1196.7
50°	1629.8	1663.5	1666.9	1659.9	1651.3	1639.9	1669.1	1658.5	1594.7	1449.2	1234.3
52.5°	1720.7	1766.1	1783.4	1778.9	1771.9	1773.4	1828.3	1840.2	1734.6	1544.8	1275.8
55°	1828.3	1899.8	1928.0	1944.7	1937.5	1965.4	2091.1	2097.2	1929.1	1669.7	1329.9
57.5°	1983.5	2086.0	2174.9	2198.6	2221.5	2312.0	2516.0	2453.9	2181.6	1858.6	1398.5
60°	2219.5	2444.2	2588.5	2664.3	2717.8	2844.4	3038.3	2880.8	2496.2	2083.5	1484.6
62.5°	2550.1	2878.4	3119.7	3195.8	3217.8	3290.5	3431.0	3129.7	2667.7	2184.4	1492.1
65°	2796.1	3190.0	3478.9	3518.0	3491.8	3493.1	3529.9	3116.6	2603.8	2096.3	1362.8
67°	2780.0	3220.9	3516.8	3568.1	3531.9	3484.3	3426.8	2939.1	2398.7	1911.8	1193.3
67.5°	2755.2	3191.0	3500.4	3554.5	3521.3	3467.0	3383.0	2870.3	2334.9	1854.4	1158.8
70°	2381.7	2814.5	3231.2	3307.3	3321.2	3271.6	3036.1	2420.2	1895.7	1508.6	899.9
72.5°	1853.9	2239.3	2651.5	2717.5	2771.0	2628.1	2209.7	1671.6	1381.7	1087.2	651.6
75°	1224.0	1616.2	1824.1	1833.8	1765.5	1500.8	1079.6	837.2	770.6	639.1	403.3
77.5°	655.0	950.3	956.2	885.4	853.1	636.0	258.1	142.4	158.6	180.1	160.5
80°	488.6	605.3	701.5	754.1	769.7	545.4	133.5	75.5	66.1	60.2	59.3
82.5°	440.6	584.7	655.5	684.2	676.9	448.7	74.9	50.7	42.1	45.7	52.1
85°	172.8	312.1	410.5	397.4	333.9	167.2	41.0	27.3	27.3	39.6	51.3
87.5°	35.4	64.1	86.9	83.0	74.7	32.3	20.0	16.4	16.7	32.0	48.5
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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	455.6	455.6	455.6	455.6	455.6	455.6	455.6	455.6	455.6	455.6	455.6
2.5°	452.6	450.9	449.8	448.7	447.6	447.0	446.2	446.2	444.5	443.9	443.4
5°	454.6	451.7	449.8	447.3	445.4	443.7	441.5	440.9	439.0	437.5	437.0
7.5°	462.9	458.8	454.6	451.5	448.7	445.1	442.6	440.3	438.4	437.0	435.3
10°	478.8	474.4	468.5	462.9	459.3	453.7	449.8	445.9	443.7	442.0	439.8
12.5°	502.2	495.8	488.8	482.2	476.0	468.8	464.9	460.1	457.3	455.9	454.3
15°	526.2	519.2	510.5	504.2	497.2	491.6	488.0	483.8	481.6	479.9	478.8
17.5°	550.7	542.6	536.5	530.1	526.7	522.5	517.8	512.5	506.1	502.2	496.9
20°	575.8	569.6	566.0	562.4	558.5	552.7	543.2	532.3	520.3	508.9	498.0
22.5°	605.0	601.4	600.8	597.5	589.4	575.5	557.9	537.6	517.3	498.3	483.5
25°	646.3	646.3	643.5	629.8	610.9	585.8	556.3	527.0	500.0	474.1	454.6
27.5°	698.1	696.2	682.5	654.4	620.4	581.3	541.8	504.7	470.2	441.7	416.6
30°	755.3	741.6	712.3	668.0	617.0	566.9	518.4	475.4	434.8	399.9	370.4
32.5°	814.6	781.4	728.8	668.0	605.3	545.1	489.1	436.4	389.9	350.9	315.8
35°	868.4	808.0	732.7	657.2	582.5	513.1	448.1	388.5	332.8	290.7	252.2
37.5°	917.2	825.5	728.5	636.0	549.3	467.9	391.9	326.1	263.1	222.4	189.5
40°	949.0	829.1	711.2	602.8	501.9	406.9	322.7	249.2	199.3	162.2	140.2
42.5°	968.8	822.1	683.3	557.4	438.1	330.2	242.2	178.6	141.6	121.0	112.6
45°	979.9	804.1	642.1	495.2	360.9	251.1	172.0	129.1	109.0	101.7	98.9
47.5°	979.3	774.8	590.6	423.4	275.6	175.0	121.8	100.6	95.0	92.8	92.2
50°	973.5	738.8	530.1	345.3	199.0	122.0	96.4	90.3	88.9	87.5	86.9
52.5°	965.4	694.2	463.2	269.2	141.3	97.6	87.5	85.9	84.7	83.3	82.8
55°	950.3	639.3	390.7	202.6	110.6	88.1	84.4	83.9	82.5	80.5	79.4
57.5°	932.0	583.6	321.4	158.3	97.8	85.9	83.9	83.0	81.1	78.9	76.6
60°	925.3	537.6	267.0	133.5	94.7	86.7	85.3	84.2	81.4	78.1	75.5
62.5°	883.4	485.8	228.0	123.7	96.4	90.3	89.8	88.1	83.9	80.0	76.1
65°	775.3	410.8	193.1	117.1	99.8	96.4	97.0	94.5	90.3	85.0	78.1
67°	655.7	335.0	160.8	110.6	102.3	102.8	104.8	102.8	97.6	90.0	80.5
67.5°	624.0	315.8	152.7	108.7	102.8	104.5	106.7	105.4	100.1	91.4	81.7
70°	463.7	222.4	114.0	98.4	102.8	109.5	114.5	115.9	110.1	98.1	83.9
72.5°	326.6	143.5	87.5	85.3	93.4	102.3	111.8	116.5	109.8	96.7	80.8
75°	196.2	89.8	71.0	72.5	78.6	87.8	95.3	97.3	88.9	80.5	70.0
77.5°	90.8	59.6	55.7	57.7	63.5	67.7	67.7	63.8	57.4	52.4	50.2
80°	53.5	48.8	48.5	52.1	56.0	53.0	48.2	42.9	39.6	37.9	37.1
82.5°	50.2	52.1	55.4	56.3	53.2	45.7	39.8	34.6	32.9	32.0	31.2
85°	59.1	63.2	57.7	53.2	47.1	38.5	31.2	26.8	25.9	25.1	23.9
87.5°	54.6	52.1	45.4	39.0	32.3	23.4	17.0	15.3	16.4	16.1	15.6
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):

	160°	165°	170°	175°	180°
0°	455.6	455.6	455.6	455.6	455.6
2.5°	443.7	443.7	442.6	442.0	443.4
5°	435.9	436.1	435.3	435.1	435.3
7.5°	434.2	433.9	433.4	432.8	433.4
10°	439.2	439.0	438.1	438.7	437.8
12.5°	454.3	455.9	455.6	456.2	457.3
15°	478.8	478.5	477.7	478.3	479.1
17.5°	492.7	490.5	488.6	487.7	487.7
20°	489.4	483.0	479.6	477.7	477.1
22.5°	469.6	460.4	453.4	451.7	450.4
25°	437.3	425.8	416.9	415.0	411.4
27.5°	399.7	384.3	373.7	371.5	369.5
30°	350.3	332.8	320.5	312.7	315.2
32.5°	290.1	273.4	259.2	246.7	244.7
35°	224.1	205.7	193.1	187.6	184.0
37.5°	167.2	151.9	143.5	138.2	138.5
40°	127.9	119.8	115.4	111.8	112.0
42.5°	106.7	103.1	102.0	100.3	99.5
45°	96.7	95.6	95.9	94.2	93.7
47.5°	91.1	90.3	90.6	89.5	89.2
50°	86.7	86.1	86.4	85.6	85.3
52.5°	82.2	82.5	82.2	81.7	81.7
55°	78.3	78.1	78.6	77.8	77.8
57.5°	75.2	74.9	74.9	74.7	74.7
60°	73.6	72.5	72.2	72.2	72.5
62.5°	72.7	70.8	70.5	70.5	70.8
65°	73.0	70.0	68.8	68.6	68.3
67°	73.3	68.8	66.6	65.5	65.2
67.5°	73.6	68.3	65.8	64.7	64.1
70°	71.9	64.4	60.8	58.8	58.3
72.5°	67.7	59.6	55.2	52.7	52.1
75°	60.2	54.1	50.2	47.4	46.3
77.5°	46.6	43.7	42.4	40.7	40.1
80°	36.2	34.9	34.3	33.2	32.9
82.5°	30.1	28.7	27.8	26.5	25.6
85°	23.4	21.7	21.2	20.0	19.5
87.5°	15.3	14.5	14.2	12.8	12.2
90°	0.0	0.0	0.0	0.0	0.0

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