

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: P158643

Luminaire Tested: **VST-F02-LED-E-U-SL4-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158643
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33714)
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-SL4-8030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL
Light Source: (14) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4042.4 lumens
Efficiency: N/A
Efficacy: 73.5 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')
IES Classification: Type IV - Short - Full 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

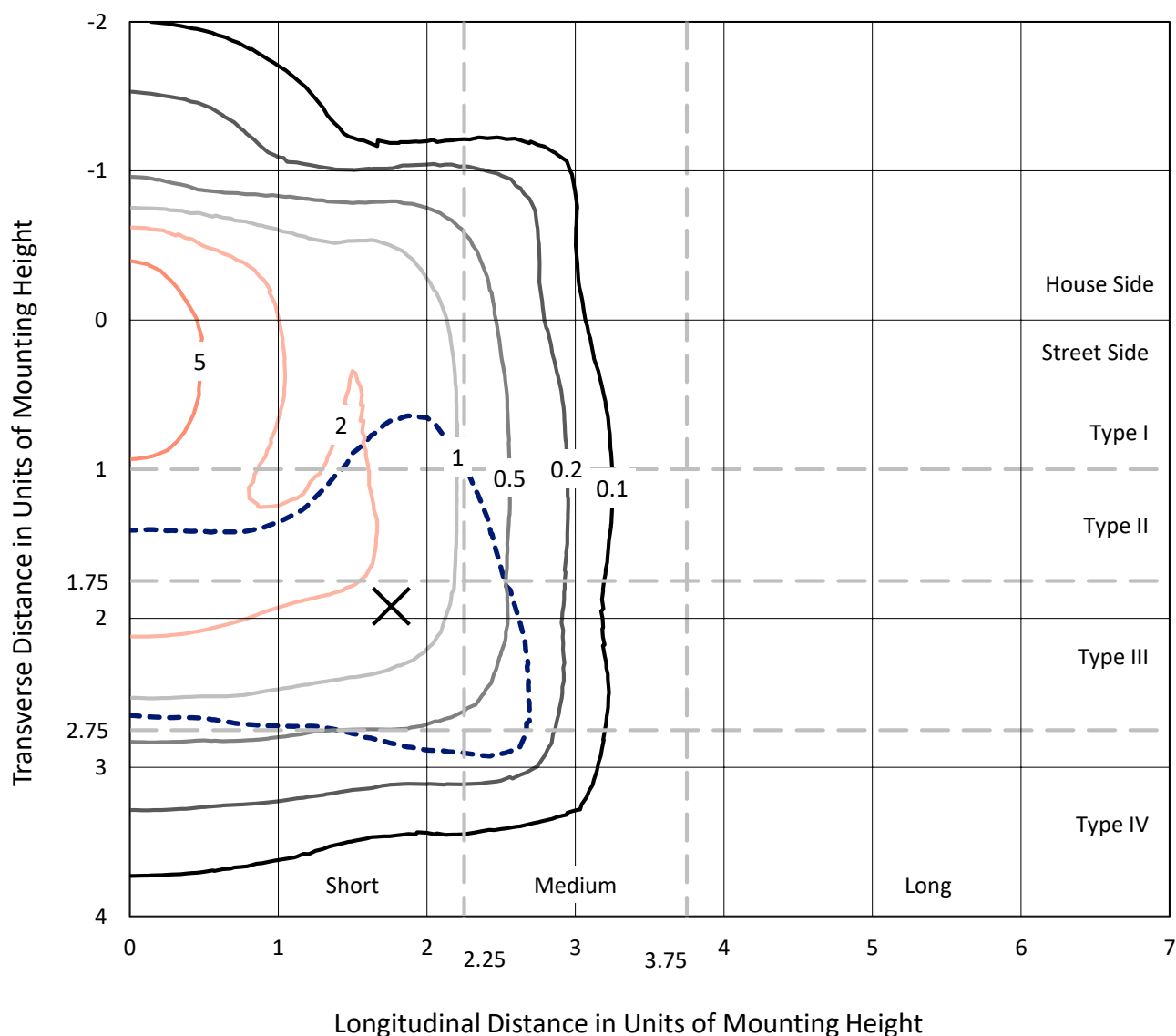


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

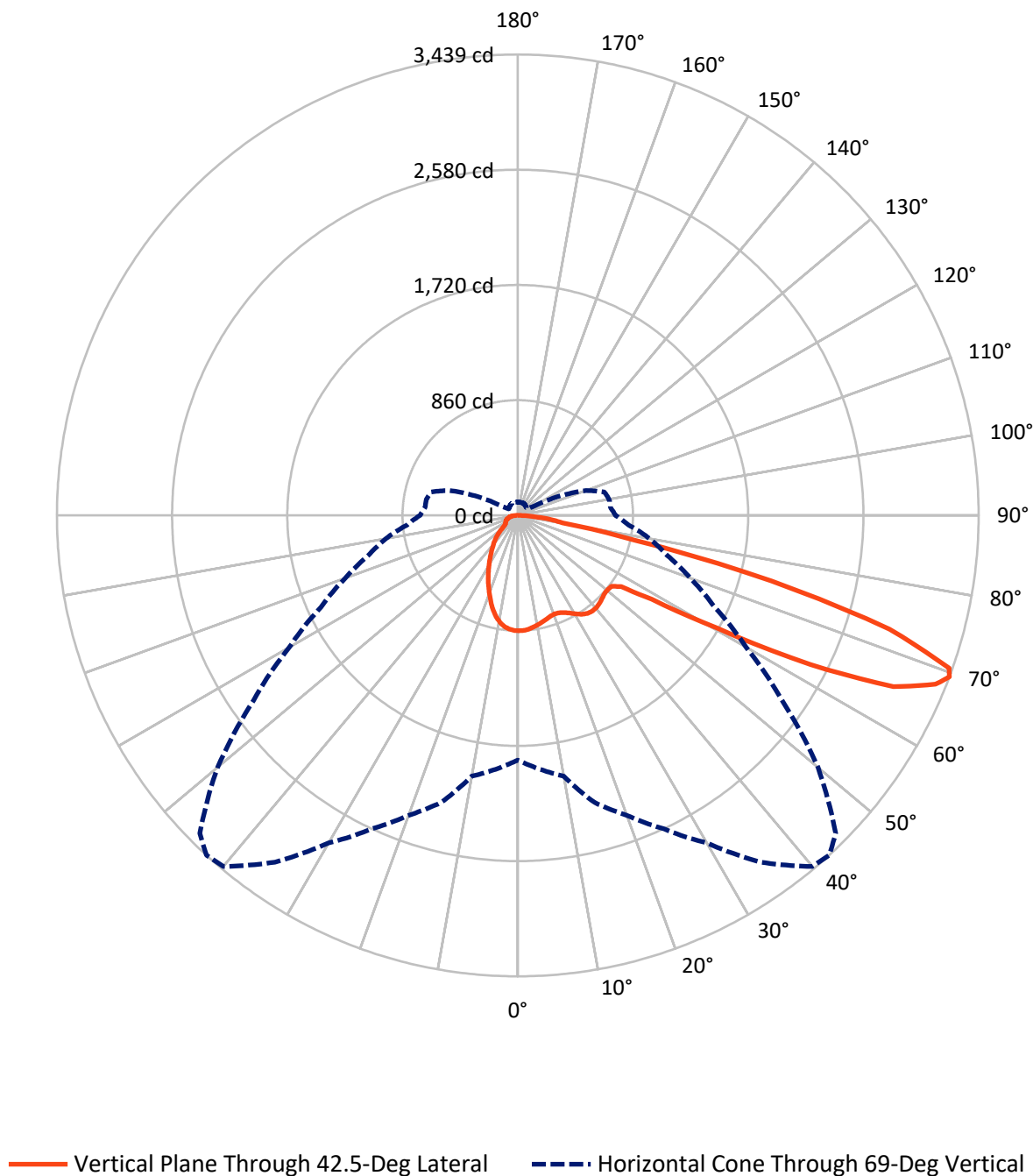


Based on 10 foot mounting height. Maximum calculated value = 8.6 fc
 Type IV - Short - Full Cutoff

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Luminous Intensity Polar Plot



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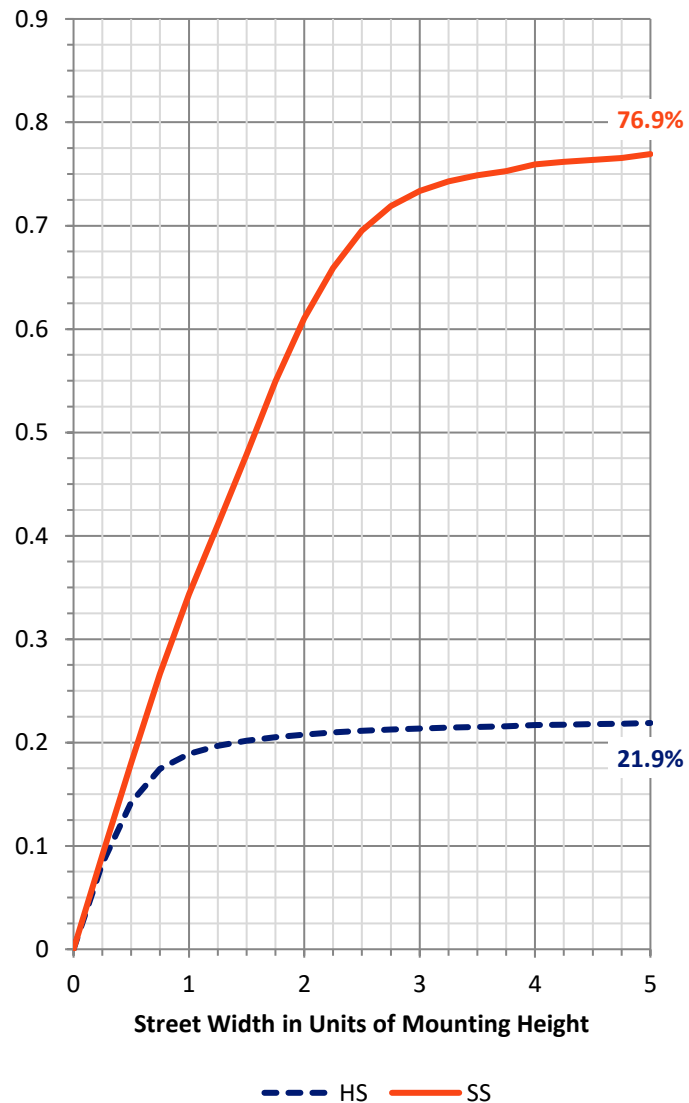
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	898.7	0.0	898.7
	% Fixture	22.2	0.0	22.2
Street Side	Lumens	3143.7	0.0	3143.7
	% Fixture	77.8	0.0	77.8
Total	Lumens	4042.4	0.0	4042.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.1	2.0
10°-20°	216.0	5.3
20°-30°	314.9	7.8
30°-40°	401.5	9.9
40°-50°	467.1	11.6
50°-60°	710.8	17.6
60°-70°	1255.5	31.1
70°-80°	518.1	12.8
80°-90°	78.2	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°	4042.4	100.0
0°-180°	4042.4	100.0

Coefficient of Utilization



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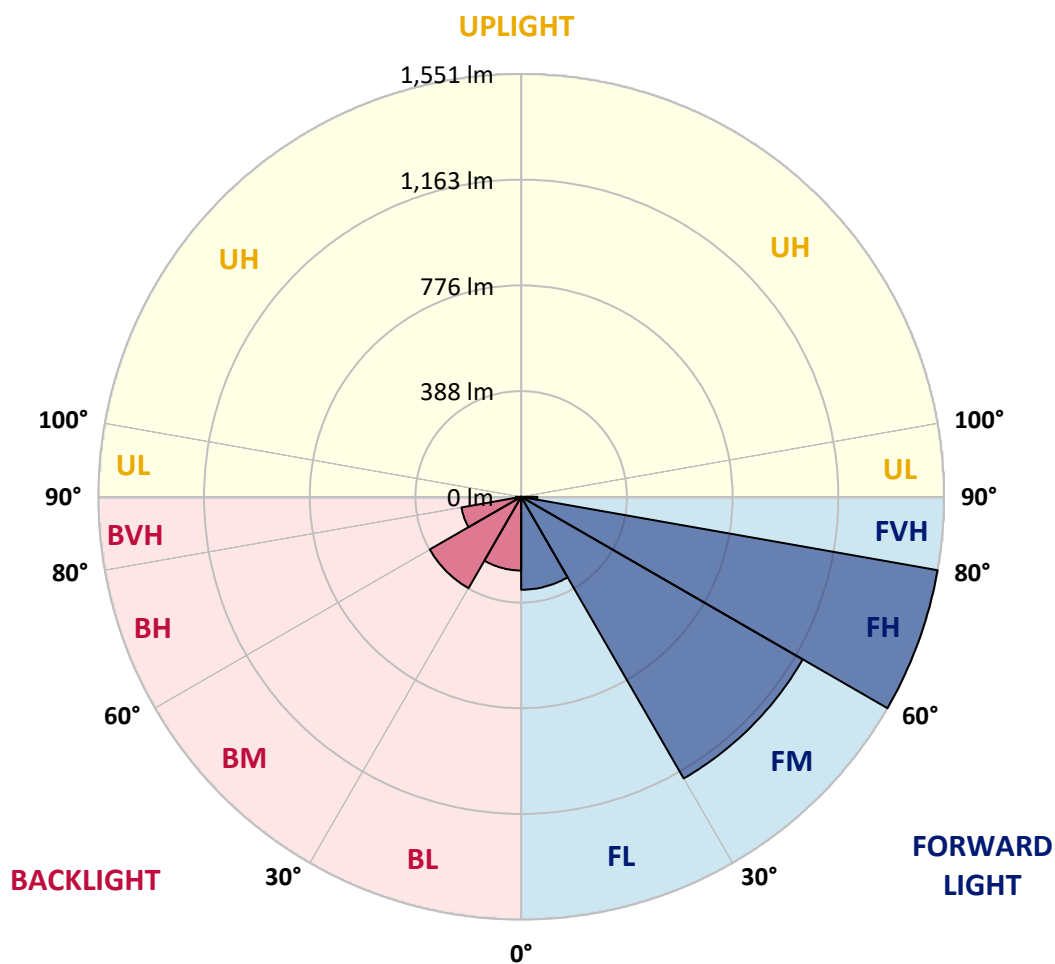
CATALOG NUMBER: VST-F02-LED-E-U-SL4-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	340.9	8.4			
FM	(30°-60°)	1192.6	29.5			
FH	(60°-80°)	1551.1	38.4			G1/1800
FVH	(80°-90°)	59.2	1.5			G1/100
BL	(0°-30°)	270.2	6.7	B1/500		
BM	(30°-60°)	386.8	9.6	B1/1000		
BH	(60°-80°)	222.6	5.5	B1/500		G1/500
BVH	(80°-90°)	19.1	0.5			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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	42.5°	45°
0°	860.9	860.9	860.9	860.9	860.9	860.9	860.9	860.9	860.9	860.9	860.9
2.5°	858.1	861.2	860.0	860.0	860.9	859.5	859.5	860.0	858.7	859.5	859.2
5°	855.1	856.7	856.1	856.1	856.1	855.1	854.5	854.2	852.2	852.2	851.4
7.5°	848.3	848.9	849.7	848.6	848.3	848.0	846.1	845.0	842.8	840.8	841.4
10°	839.4	839.2	840.5	839.7	838.6	837.8	836.1	834.1	831.6	829.1	828.8
12.5°	829.4	829.1	830.2	829.7	828.8	827.2	825.8	822.4	818.5	815.5	815.2
15°	823.0	822.1	823.3	822.1	820.7	819.1	816.6	812.4	805.4	802.4	799.9
17.5°	829.1	827.7	828.3	826.9	824.9	820.5	814.6	805.7	795.7	790.4	786.5
20°	850.6	848.0	848.6	847.3	842.8	836.9	825.8	810.2	793.1	784.5	778.4
22.5°	881.2	879.3	880.1	878.7	874.3	865.3	848.6	826.3	802.1	789.5	779.8
25°	927.8	929.5	930.0	923.6	921.1	904.6	881.5	850.6	818.2	803.5	790.1
27.5°	980.2	980.2	982.7	980.2	975.2	955.9	923.3	886.0	844.4	824.4	808.2
30°	1031.2	1030.6	1035.4	1034.8	1026.7	1005.0	967.9	922.5	875.1	852.5	831.9
32.5°	1085.2	1086.9	1090.0	1088.9	1078.3	1048.1	1003.6	954.2	904.4	879.5	856.4
35°	1143.8	1144.6	1145.7	1145.2	1123.7	1085.8	1029.8	974.6	922.7	898.3	874.3
37.5°	1202.3	1201.4	1200.1	1188.1	1163.5	1110.9	1045.7	986.3	932.0	905.5	880.7
40°	1254.7	1249.9	1245.5	1226.8	1189.2	1125.1	1051.8	989.1	931.1	903.8	879.5
42.5°	1283.4	1278.1	1268.9	1245.5	1199.8	1126.5	1047.6	980.7	922.5	895.4	871.5
45°	1288.7	1284.8	1275.8	1249.7	1197.3	1117.6	1034.8	967.1	909.7	882.6	860.0
47.5°	1276.1	1273.1	1264.4	1238.5	1186.4	1104.2	1020.0	952.6	897.1	871.7	850.0
50°	1256.9	1254.1	1247.5	1223.8	1174.1	1095.0	1012.5	945.1	892.9	869.8	849.7
52.5°	1288.1	1290.4	1270.9	1244.9	1187.2	1103.1	1020.8	952.9	900.5	877.6	856.7
55°	1773.4	1770.2	1652.9	1554.5	1378.7	1219.3	1100.3	1014.7	958.7	935.9	916.3
57.5°	2304.2	2293.7	2245.4	2153.5	1964.5	1712.3	1483.0	1287.8	1210.9	1178.0	1180.3
60°	2477.6	2481.5	2471.2	2438.6	2370.8	2239.6	2065.1	1918.6	1774.1	1703.6	1711.7
62.5°	2573.8	2580.7	2589.6	2582.4	2560.4	2530.0	2507.9	2521.3	2501.3	2450.6	2410.1
65°	2587.1	2601.4	2630.9	2654.3	2665.7	2694.4	2761.9	2923.5	3071.2	3080.9	3009.9
67.5°	2322.4	2361.7	2425.7	2534.2	2627.0	2729.0	2891.8	3137.5	3355.5	3362.7	3296.4
69°	1826.0	1901.5	1976.5	2218.7	2381.7	2581.6	2822.3	3158.2	3419.3	3439.4	3355.7
70°	1463.2	1508.0	1572.7	1816.0	2059.6	2314.3	2663.2	3090.2	3375.5	3416.0	3323.7
72.5°	878.5	895.7	918.0	1005.2	1130.6	1357.5	1820.2	2519.4	2847.4	2901.5	2784.2
75°	568.0	566.9	568.8	593.0	600.3	643.8	789.5	1296.2	1857.5	1955.6	1815.1
77.5°	427.8	431.7	425.6	427.8	425.8	437.5	442.0	464.0	733.3	903.2	807.7
80°	377.6	379.6	379.9	378.7	365.1	364.0	371.2	358.7	333.3	338.3	324.1
82.5°	215.5	215.2	217.7	236.6	244.4	270.1	280.6	286.5	264.5	248.0	224.3
85°	139.6	140.8	143.5	149.4	143.5	145.7	143.2	148.3	136.0	126.2	112.9
87.5°	57.1	57.1	60.8	66.1	61.6	60.5	51.8	51.3	43.5	39.3	30.7
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):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
0°	860.9	860.9	860.9	860.9	860.9	860.9	860.9	860.9	860.9	860.9	860.9
2.5°	857.5	859.2	858.4	859.5	858.7	858.7	857.5	857.3	858.1	857.0	857.3
5°	850.0	850.3	848.9	849.5	847.8	847.3	846.4	844.1	845.6	844.1	844.7
7.5°	839.2	838.3	836.3	833.6	831.6	830.8	829.1	826.0	826.6	824.1	825.5
10°	825.2	822.4	819.1	814.9	812.1	809.6	806.0	802.4	800.4	798.2	797.9
12.5°	809.6	806.3	801.8	795.4	789.2	785.1	779.5	773.1	771.1	767.5	765.6
15°	792.6	787.3	782.0	774.8	768.1	761.7	754.1	746.0	740.8	735.2	731.0
17.5°	777.3	771.1	764.2	757.2	749.9	742.1	732.7	722.6	714.8	704.5	696.2
20°	765.3	757.5	750.5	743.3	735.2	725.7	714.3	701.5	688.4	676.9	667.2
22.5°	760.6	748.3	739.9	732.7	724.6	713.5	699.5	684.5	668.6	652.7	639.9
25°	764.5	746.3	733.3	724.6	717.7	706.2	690.6	672.2	653.8	634.9	617.6
27.5°	775.9	752.8	733.8	720.1	712.1	700.6	684.2	664.7	643.0	621.8	600.6
30°	793.7	763.6	739.7	720.4	707.9	694.8	677.5	655.0	632.9	608.6	585.5
32.5°	811.0	775.0	746.3	721.6	702.3	685.3	666.1	643.8	620.1	594.7	570.8
35°	823.3	782.6	748.9	719.0	693.7	672.5	651.8	629.6	606.4	580.5	556.0
37.5°	829.1	786.8	749.2	712.3	682.3	658.9	636.8	614.8	593.0	568.6	545.4
40°	828.8	786.5	745.2	703.7	668.6	643.8	622.0	600.6	580.3	558.8	537.9
42.5°	822.7	782.0	739.7	695.3	658.9	631.3	608.6	588.1	570.8	551.8	534.2
45°	813.2	774.5	733.8	691.4	656.0	628.4	604.5	584.4	569.1	551.8	536.8
47.5°	806.0	770.3	734.6	698.4	664.7	636.0	610.6	588.6	575.5	561.5	551.0
50°	807.1	772.3	737.4	702.6	670.8	641.8	617.3	597.2	587.8	584.2	581.6
52.5°	812.9	775.3	745.8	724.9	714.0	692.3	677.8	665.2	672.2	658.6	642.4
55°	887.6	875.4	904.1	931.1	965.4	978.2	965.9	963.7	974.9	928.6	822.4
57.5°	1196.2	1227.9	1272.2	1295.6	1324.1	1316.6	1288.1	1264.4	1236.5	1182.5	1050.1
60°	1720.9	1697.0	1676.9	1620.3	1574.0	1520.0	1459.8	1408.3	1358.9	1281.2	1137.9
62.5°	2261.6	2095.2	1956.2	1821.8	1713.7	1624.0	1536.7	1459.3	1384.6	1276.1	1122.0
65°	2729.3	2378.9	2117.8	1920.8	1762.7	1626.5	1514.4	1407.4	1312.4	1185.3	1032.8
67.5°	2939.4	2500.4	2120.6	1838.3	1619.5	1434.4	1289.5	1127.9	1021.4	940.0	854.2
69°	2923.8	2407.6	1969.3	1621.7	1370.3	1154.6	999.1	830.5	728.5	694.0	692.0
70°	2849.6	2250.5	1792.6	1445.9	1158.2	943.9	794.8	643.5	548.5	524.8	566.9
72.5°	2326.6	1590.2	1123.4	857.8	659.6	521.5	425.3	337.5	269.5	233.5	241.3
75°	1314.1	736.3	476.0	359.8	304.1	251.4	215.7	184.0	166.4	135.2	107.0
77.5°	477.7	316.0	251.4	217.4	154.1	106.2	88.9	77.8	70.5	70.5	67.1
80°	302.1	238.0	166.1	113.7	84.2	73.3	64.1	56.3	51.8	50.7	51.8
82.5°	188.7	145.7	93.1	71.3	59.9	53.8	46.8	41.0	37.3	36.5	38.2
85°	93.1	72.2	56.6	50.5	47.4	44.0	38.8	33.2	32.0	34.3	40.1
87.5°	27.8	24.8	20.3	21.2	22.3	21.7	17.3	15.1	14.2	18.7	29.3
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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	860.9	860.9	860.9	860.9	860.9	860.9	860.9	860.9	860.9	860.9	860.9
2.5°	857.8	857.5	858.1	857.3	857.8	858.1	857.5	860.0	858.4	858.7	859.8
5°	845.3	844.7	847.0	846.4	847.5	848.6	848.0	851.7	850.3	851.4	853.6
7.5°	824.4	825.5	825.8	825.8	828.0	831.6	832.4	834.7	834.7	837.8	840.0
10°	796.5	796.8	798.5	798.2	800.9	804.8	805.4	809.3	810.7	815.8	818.8
12.5°	764.2	762.8	762.5	762.2	765.8	770.0	770.6	777.3	780.1	784.5	789.5
15°	727.9	724.3	723.2	725.5	724.6	727.1	729.6	733.3	737.2	746.0	750.5
17.5°	692.6	685.3	683.3	680.8	678.4	678.4	679.4	683.9	692.0	696.7	706.7
20°	656.3	647.7	640.7	634.0	628.2	625.9	626.2	631.8	637.7	645.5	655.0
22.5°	625.9	612.8	600.8	592.0	580.0	579.7	578.0	579.7	586.1	588.1	593.3
25°	599.8	582.2	566.0	551.5	539.8	533.7	532.0	531.5	528.4	527.6	523.7
27.5°	579.4	558.2	537.3	519.8	505.3	496.9	486.3	478.8	467.9	465.1	458.2
30°	562.7	539.8	517.0	494.1	477.7	462.7	444.8	431.7	415.0	404.1	394.6
32.5°	546.5	523.4	500.3	477.7	452.3	428.9	405.5	385.1	366.5	349.7	335.8
35°	533.2	511.1	487.7	460.4	428.1	394.4	366.2	343.1	317.5	299.9	282.3
37.5°	524.5	504.4	481.0	443.4	401.9	365.6	333.6	305.5	279.2	252.8	233.0
40°	520.6	503.0	473.8	427.8	379.0	338.9	303.5	272.3	238.9	209.0	187.9
42.5°	520.3	502.5	463.7	410.5	360.1	316.3	277.0	239.7	202.6	172.0	151.1
45°	525.4	501.7	453.2	396.0	343.4	297.7	250.8	205.4	163.9	141.0	129.9
47.5°	538.7	503.0	444.5	382.6	327.5	275.1	220.7	167.8	133.5	122.9	122.9
50°	562.7	511.1	442.3	373.2	311.6	248.9	184.0	135.4	118.1	118.1	121.5
52.5°	599.5	528.1	446.2	366.5	291.8	214.3	144.9	116.8	113.4	116.5	121.0
55°	684.2	558.2	451.5	355.1	261.7	170.0	119.6	110.3	111.8	115.4	119.6
57.5°	839.7	622.6	457.1	330.0	213.2	131.0	108.4	107.9	110.3	113.7	117.4
60°	942.0	704.5	471.3	292.1	161.3	108.1	102.8	106.2	109.3	112.0	114.8
62.5°	942.0	727.7	481.9	249.7	121.3	98.4	99.2	104.5	108.1	109.5	111.2
65°	881.8	685.3	445.9	203.5	98.6	92.8	95.9	101.2	104.5	105.6	107.0
67.5°	770.6	605.3	375.7	153.3	88.1	88.1	92.0	95.9	98.6	100.9	103.1
69°	670.0	543.2	330.8	129.9	83.9	84.4	88.3	91.7	95.0	97.8	100.6
70°	597.5	496.6	299.6	117.9	81.4	81.7	85.6	89.2	92.2	95.3	98.6
72.5°	319.9	343.1	227.7	96.7	74.9	75.8	79.4	82.8	85.6	88.6	91.7
75°	109.0	147.4	144.9	79.1	67.7	70.0	72.2	75.2	78.9	80.8	82.5
77.5°	63.8	66.1	77.2	64.4	61.0	62.2	64.7	67.1	70.3	72.2	73.6
80°	53.5	53.2	53.5	52.4	53.2	55.7	57.4	60.8	63.5	64.1	63.8
82.5°	43.5	45.7	46.0	45.4	47.9	49.9	51.3	53.2	53.0	53.5	54.6
85°	38.8	38.5	40.4	40.7	40.7	39.3	39.6	39.6	39.6	40.4	40.7
87.5°	38.8	32.3	25.1	22.6	23.7	22.3	21.2	20.9	23.2	25.4	24.8
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°	860.9	860.9	860.9	860.9	860.9
2.5°	860.3	861.2	860.6	860.6	861.2
5°	854.5	855.8	855.3	855.8	855.8
7.5°	841.1	843.1	844.4	845.8	845.0
10°	821.9	825.2	827.5	829.1	828.3
12.5°	793.1	796.2	800.9	803.8	801.5
15°	753.8	762.5	765.3	769.2	767.0
17.5°	712.9	718.2	721.6	725.2	727.4
20°	658.3	662.5	666.9	668.6	666.1
22.5°	592.5	594.7	593.9	596.4	591.4
25°	520.3	521.7	520.9	523.1	518.9
27.5°	452.0	451.7	452.0	449.3	446.5
30°	386.3	383.8	382.6	378.5	377.6
32.5°	327.5	318.8	314.3	308.2	306.8
35°	268.7	256.4	248.3	241.3	238.3
37.5°	216.0	201.2	191.8	185.6	184.8
40°	170.8	157.2	150.5	147.2	146.6
42.5°	139.3	133.5	131.8	131.8	131.8
45°	127.1	126.8	128.2	129.3	129.6
47.5°	124.6	126.2	128.2	129.9	130.4
50°	124.6	126.2	127.6	129.3	129.9
52.5°	124.0	125.4	125.9	127.1	127.6
55°	122.3	123.2	123.2	123.7	124.3
57.5°	119.6	120.1	119.3	119.8	121.3
60°	116.8	117.4	115.9	117.4	118.1
62.5°	113.7	114.0	113.4	114.5	114.5
65°	108.7	108.1	109.0	109.8	110.1
67.5°	103.7	102.3	103.1	103.4	104.0
69°	99.8	98.9	99.2	99.8	100.3
70°	97.0	96.4	97.0	97.8	98.6
72.5°	90.0	90.3	92.2	93.9	95.6
75°	83.6	85.6	88.1	91.7	93.7
77.5°	75.8	77.2	79.1	83.0	86.7
80°	65.5	66.3	66.6	68.0	67.7
82.5°	53.2	52.4	51.8	51.3	51.0
85°	38.2	37.9	35.7	34.0	34.0
87.5°	22.9	21.7	20.6	19.2	18.4
90°	0.0	0.0	0.0	0.0	0.0

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