

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: P159535

Luminaire Tested: **VST-F03-LED-E-U-T3**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P159535
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-F03-LED-E-U-T3
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 AREA
Light Source: (21) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7574.3 lumens
Efficiency: N/A
Efficacy: 96.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 78.3
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

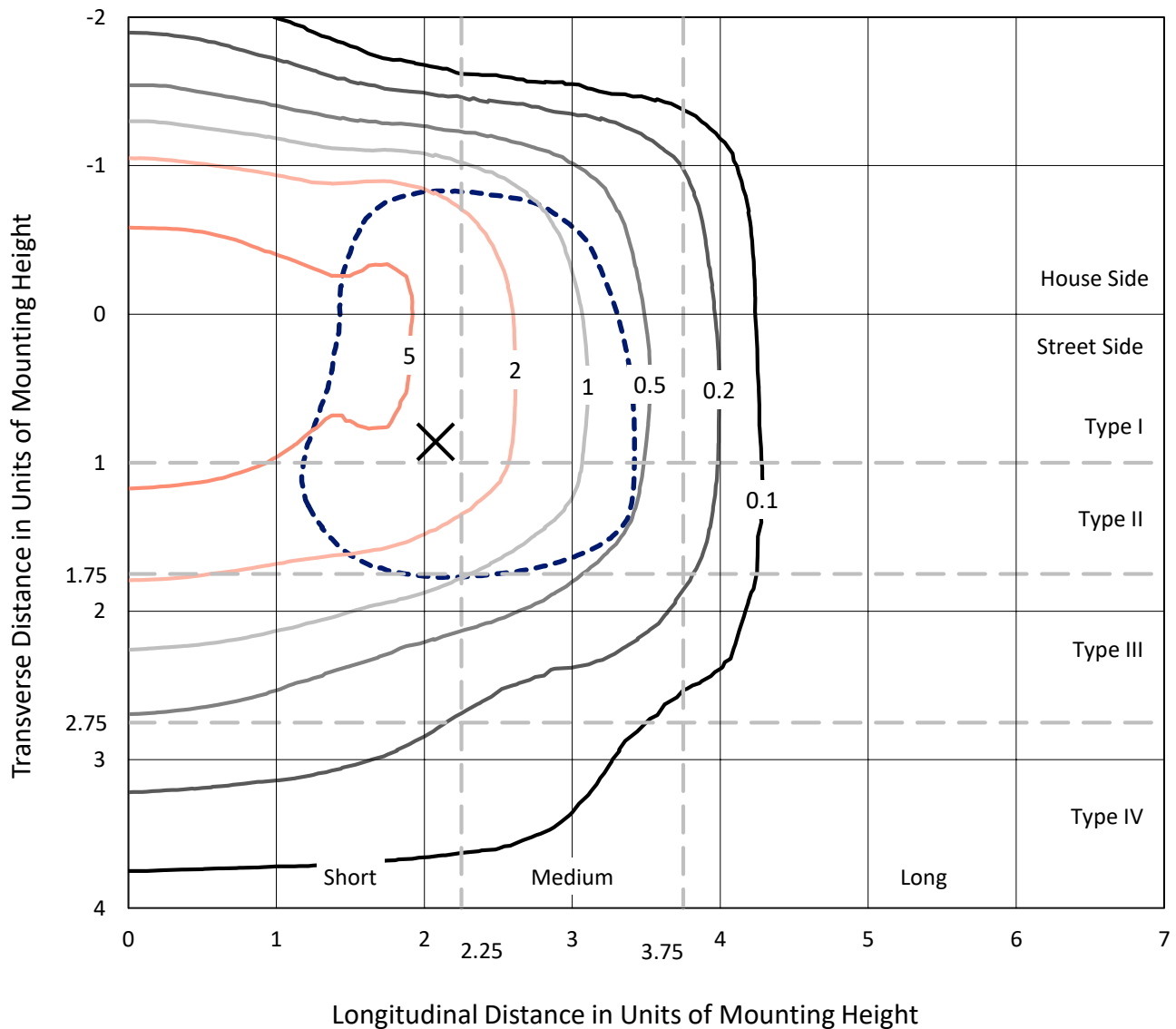


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

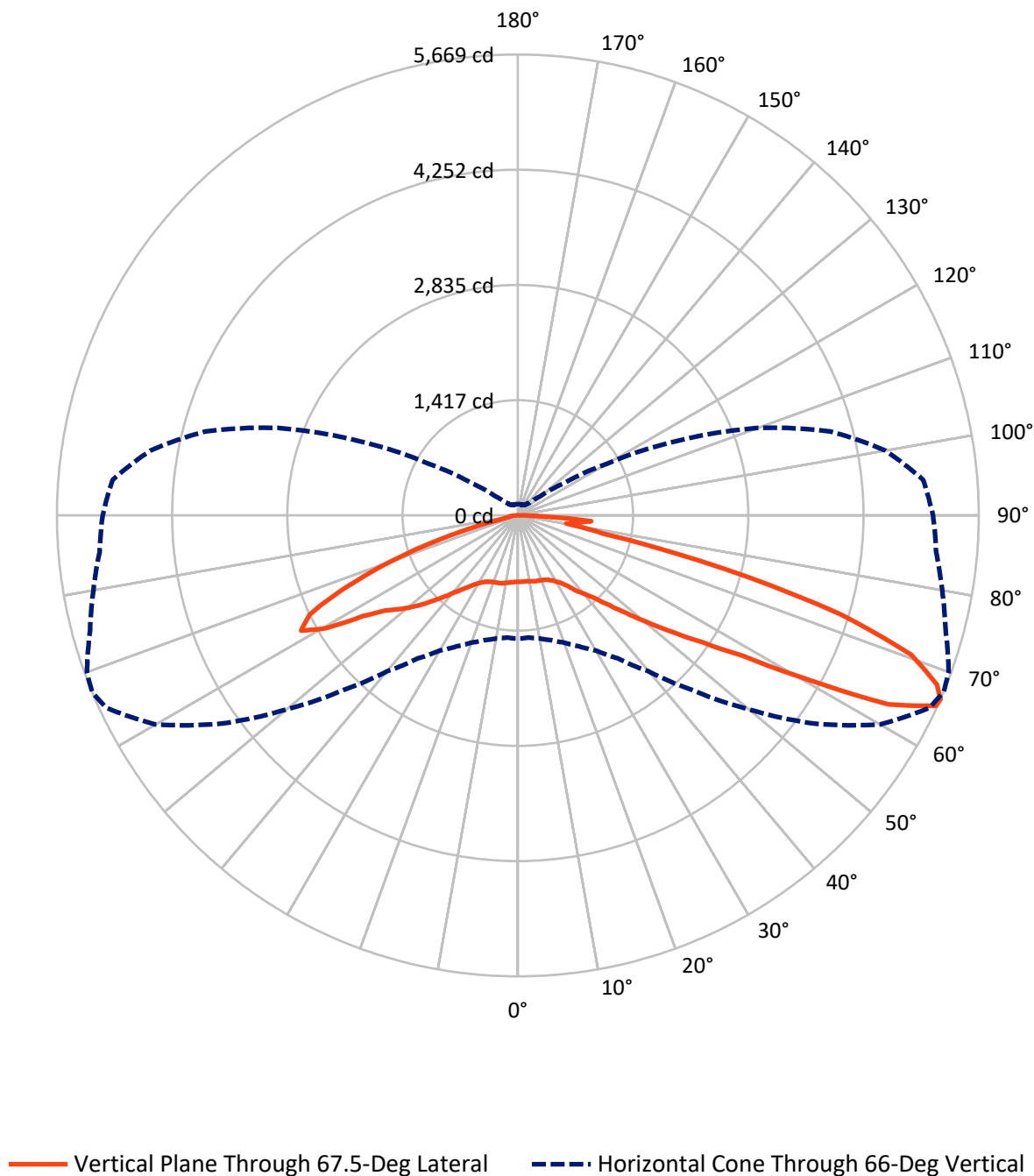


Based on 10 foot mounting height. Maximum calculated value = 8.2 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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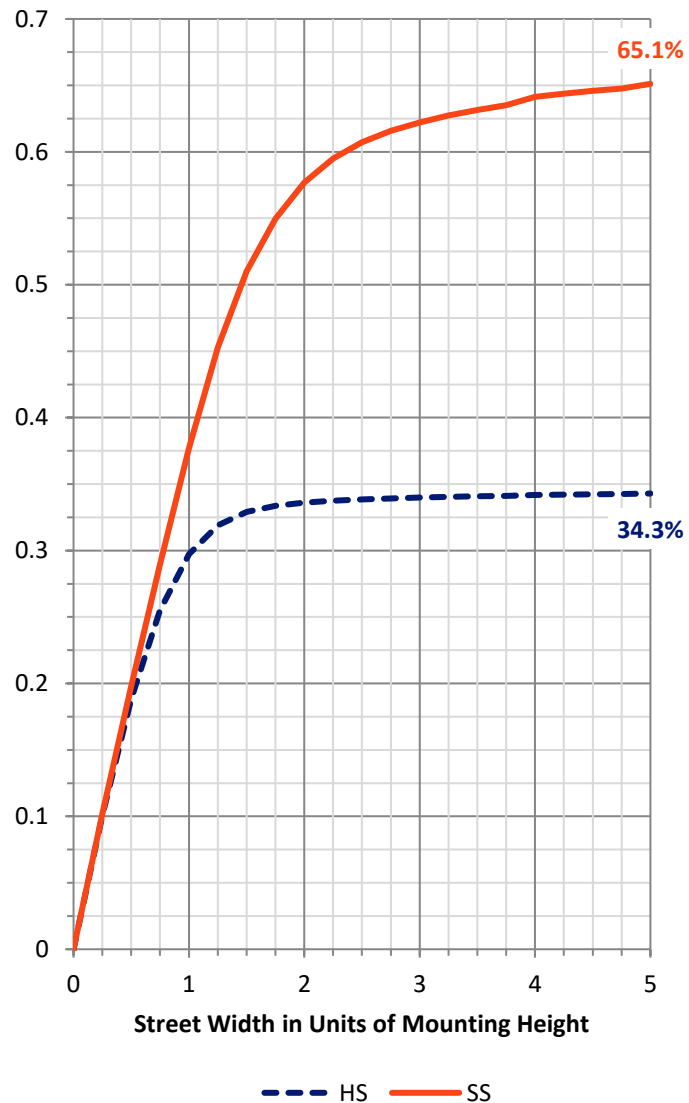
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2621.0	0.0	2621.0
	% Fixture	34.6	0.0	34.6
Street Side	Lumens	4953.2	0.0	4953.2
	% Fixture	65.4	0.0	65.4
Total	Lumens	7574.3	0.0	7574.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.4	1.0
10°-20°	232.2	3.1
20°-30°	399.2	5.3
30°-40°	645.2	8.5
40°-50°	1069.2	14.1
50°-60°	1678.0	22.2
60°-70°	2294.2	30.3
70°-80°	1008.9	13.3
80°-90°	168.9	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°	7574.3	100.0
0°-180°	7574.3	100.0

Coefficient of Utilization



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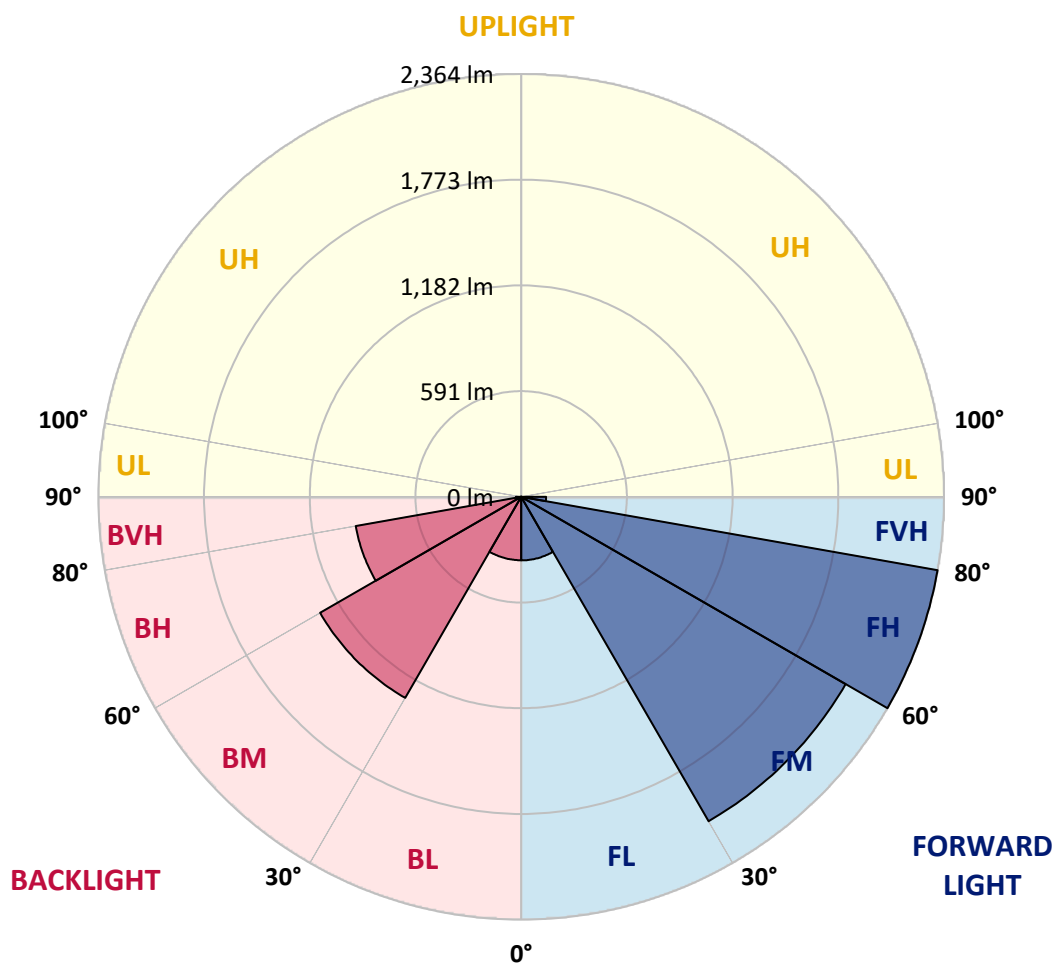
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	355.3	4.7			
FM	(30°-60°)	2094.5	27.7			
FH	(60°-80°)	2364.1	31.2			G2/5000
FVH	(80°-90°)	139.3	1.8			G2/225
BL	(0°-30°)	354.6	4.7	B1/500		
BM	(30°-60°)	1297.9	17.1	B2/2500		
BH	(60°-80°)	939.0	12.4	B2/1000		G2/1000
BVH	(80°-90°)	29.5	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°	817.3	817.3	817.3	817.3	817.3	817.3	817.3	817.3	817.3	817.3	817.3
2.5°	815.8	815.8	816.3	815.8	815.8	815.3	817.3	817.3	817.3	816.8	818.3
5°	813.8	813.8	814.3	814.3	814.8	814.3	815.8	816.3	816.3	816.3	817.7
7.5°	808.9	810.4	809.3	809.8	810.4	811.8	813.8	814.8	815.8	817.3	817.7
10°	798.4	800.9	800.4	801.9	802.4	806.9	808.4	810.4	813.8	815.8	817.3
12.5°	784.1	785.6	786.1	788.0	790.0	795.5	799.4	802.9	807.8	812.8	817.7
15°	772.7	773.7	773.7	775.7	778.6	783.6	788.5	794.5	801.9	810.4	818.3
17.5°	776.2	778.6	776.6	776.2	777.1	780.1	784.6	789.5	798.4	807.8	817.3
20°	799.0	799.4	798.4	796.0	794.0	794.5	794.5	795.5	800.9	808.4	815.8
22.5°	817.7	819.7	819.2	819.7	819.2	821.2	820.3	818.3	816.3	816.8	820.3
25°	834.1	836.1	836.1	837.6	840.1	844.0	847.0	846.5	843.5	839.6	838.1
27.5°	860.9	860.9	860.9	862.3	865.8	870.8	875.7	878.7	881.2	877.2	868.8
30°	902.9	903.5	902.0	902.5	904.9	911.4	917.3	921.8	926.8	926.2	915.4
32.5°	949.0	951.0	950.5	952.5	956.0	961.9	968.3	975.3	981.7	985.7	978.7
35°	1008.5	1010.5	1010.9	1013.9	1017.9	1026.8	1035.7	1044.6	1051.6	1054.5	1053.1
37.5°	1106.0	1106.5	1104.5	1100.1	1101.6	1108.5	1118.9	1133.3	1137.7	1140.7	1147.6
40°	1252.1	1250.7	1242.7	1238.8	1236.3	1239.3	1237.3	1248.7	1259.1	1259.6	1259.1
42.5°	1429.5	1425.0	1417.6	1416.6	1415.6	1414.6	1409.2	1409.6	1419.1	1421.6	1418.6
45°	1605.8	1600.4	1594.9	1599.8	1593.9	1609.3	1613.8	1625.6	1627.1	1632.1	1624.6
47.5°	1750.4	1750.9	1750.9	1757.9	1769.8	1799.0	1825.3	1848.0	1856.5	1868.3	1869.8
50°	1859.9	1862.9	1872.3	1894.6	1919.8	1968.9	2012.9	2054.1	2091.2	2105.1	2141.8
52.5°	1923.8	1931.7	1951.6	1988.7	2033.8	2097.2	2166.5	2236.3	2300.8	2355.2	2398.8
55°	1912.4	1918.4	1953.0	2011.0	2081.3	2166.5	2263.6	2364.7	2465.2	2557.3	2628.7
57.5°	1839.1	1843.1	1877.8	1943.1	2030.8	2145.2	2282.4	2432.5	2573.6	2722.3	2844.1
60°	1743.0	1748.9	1781.2	1832.6	1924.3	2046.1	2205.1	2408.7	2634.1	2867.9	3095.7
62.5°	1681.6	1680.1	1708.3	1754.4	1823.3	1933.7	2086.7	2328.0	2640.0	3035.3	3485.5
65°	1579.6	1575.1	1604.3	1656.8	1731.6	1838.6	1983.7	2215.6	2577.6	3098.7	3737.2
66°	1516.1	1507.3	1536.5	1589.5	1664.3	1778.2	1917.4	2146.2	2501.8	3036.8	3710.4
67.5°	1405.2	1400.8	1414.6	1456.2	1511.7	1618.7	1763.8	1994.2	2322.5	2850.5	3514.3
70°	1142.2	1132.3	1143.2	1162.0	1183.3	1209.5	1298.7	1481.5	1759.4	2271.0	2831.2
72.5°	778.1	773.2	793.5	822.2	879.2	905.9	941.1	970.8	1068.9	1431.5	1974.8
75°	591.9	594.9	620.6	668.2	741.5	820.7	898.0	926.2	893.5	865.3	1120.9
77.5°	331.9	349.2	380.4	440.8	518.6	630.5	765.2	913.9	988.1	969.8	906.9
80°	136.7	134.2	149.6	182.8	209.5	301.1	460.6	646.9	855.9	988.1	967.4
82.5°	38.2	39.1	50.5	64.9	83.7	106.5	166.4	267.5	435.9	678.1	887.6
85°	11.9	11.9	16.3	24.3	28.7	33.2	42.1	69.4	118.4	236.3	479.0
87.5°	2.5	2.5	3.5	7.0	7.4	7.4	9.4	12.9	11.4	10.4	46.6
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):

	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°	100°
0°	817.3	817.3	817.3	817.3	817.3	817.3	817.3	817.3	817.3	817.3	817.3
2.5°	816.8	815.8	816.3	816.8	816.3	816.3	815.8	815.3	815.8	815.8	817.3
5°	816.3	815.8	816.3	816.3	816.3	816.8	816.8	816.8	818.3	818.3	820.7
7.5°	817.3	817.3	818.3	818.3	818.3	818.3	818.8	819.7	822.2	821.7	826.2
10°	819.2	820.3	822.7	823.2	823.2	824.7	825.7	827.7	830.2	831.1	835.1
12.5°	821.7	826.7	831.1	832.1	833.6	836.1	837.6	838.6	843.0	844.5	849.5
15°	824.7	831.7	837.1	839.0	841.0	844.0	846.0	847.5	851.5	853.4	859.4
17.5°	825.2	833.1	839.6	842.5	845.0	848.5	851.5	854.4	858.9	861.8	867.8
20°	824.7	835.1	845.0	848.9	851.5	857.9	862.3	866.3	871.7	874.7	880.7
22.5°	830.2	842.0	855.4	860.3	864.3	873.2	879.2	885.6	892.6	894.5	899.0
25°	843.0	855.4	872.2	879.2	886.1	898.0	906.4	915.8	922.8	923.8	925.3
27.5°	864.8	876.2	896.5	906.9	918.3	935.2	947.5	956.9	966.8	966.8	965.9
30°	908.9	911.4	932.7	946.1	962.9	987.7	1006.0	1016.4	1023.8	1023.8	1015.4
32.5°	965.9	962.9	982.2	996.6	1019.9	1054.5	1079.3	1087.2	1095.1	1092.7	1078.3
35°	1048.1	1039.7	1050.5	1072.4	1098.6	1146.2	1171.9	1189.7	1194.7	1187.8	1165.0
37.5°	1151.6	1150.6	1156.1	1180.3	1209.5	1271.0	1297.2	1308.6	1304.6	1292.3	1252.1
40°	1261.1	1258.1	1254.7	1271.0	1303.7	1377.5	1424.0	1430.0	1424.5	1406.2	1355.7
42.5°	1407.2	1407.2	1390.9	1395.3	1422.5	1505.3	1560.2	1579.1	1579.6	1552.8	1485.4
45°	1608.3	1606.3	1577.6	1570.6	1591.4	1672.7	1743.5	1753.9	1753.9	1718.8	1645.0
47.5°	1850.0	1847.5	1819.3	1795.0	1799.0	1886.6	1945.6	1961.5	1947.6	1921.3	1833.7
50°	2122.4	2117.9	2089.3	2066.5	2056.6	2145.2	2195.2	2202.7	2182.4	2151.2	2056.1
52.5°	2398.8	2412.2	2395.3	2383.0	2386.4	2443.9	2495.4	2460.2	2449.8	2416.1	2320.6
55°	2686.6	2727.7	2764.9	2753.9	2766.8	2822.8	2832.7	2786.2	2767.3	2743.1	2636.6
57.5°	2976.4	3096.2	3218.0	3252.2	3283.9	3364.2	3352.8	3276.5	3290.9	3327.1	3207.2
60°	3381.0	3727.3	4036.3	4093.3	4191.8	4260.2	4275.5	4260.7	4327.6	4308.7	4202.8
62.5°	4002.7	4579.7	5009.6	5116.6	5215.7	5212.2	5160.2	5106.7	5172.6	5172.6	4895.7
65°	4446.4	5101.3	5561.4	5650.1	5646.1	5526.7	5403.9	5296.9	5287.5	5214.2	4809.5
66°	4467.2	5141.3	5592.1	5669.4	5639.6	5447.5	5300.3	5164.6	5106.7	5004.7	4590.1
67.5°	4280.0	5027.9	5492.0	5559.4	5481.2	5205.8	5003.2	4821.4	4737.2	4565.3	4175.0
70°	3510.8	4321.1	4996.3	5134.0	5045.3	4696.6	4419.2	4173.5	4012.6	3764.4	3483.1
72.5°	2562.8	3190.3	3921.4	4145.3	4131.4	3810.5	3587.1	3362.2	3150.7	2924.8	2719.3
75°	1665.7	2075.3	2483.0	2613.8	2550.9	2365.1	2205.1	2073.9	1873.3	1716.2	1678.1
77.5°	951.0	1162.0	1099.1	1082.8	1004.0	810.4	538.9	377.9	341.3	426.0	467.1
80°	904.9	820.3	671.6	605.8	556.7	379.4	199.1	140.2	122.8	125.8	135.2
82.5°	1020.4	1063.4	869.8	726.6	632.5	461.6	252.1	117.4	85.7	101.5	113.9
85°	764.8	1076.8	1067.4	904.4	742.0	532.0	298.2	89.6	51.5	71.3	93.1
87.5°	155.0	255.1	245.7	215.9	183.8	128.3	50.0	28.3	25.7	35.2	53.5
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°	817.3	817.3	817.3	817.3	817.3	817.3	817.3	817.3	817.3	817.3	817.3
2.5°	818.3	818.3	819.2	820.7	821.2	821.2	822.2	821.2	823.2	823.7	824.2
5°	822.7	824.2	825.2	827.7	829.1	830.2	831.7	830.6	832.6	833.1	834.1
7.5°	827.7	830.2	832.1	833.1	835.1	835.1	835.6	834.6	834.1	832.6	832.1
10°	836.6	838.1	840.5	839.6	838.6	835.1	832.1	827.7	825.2	820.7	818.3
12.5°	851.0	851.9	851.9	847.5	841.0	833.1	825.7	818.3	812.3	807.4	804.4
15°	860.9	862.9	860.3	853.9	844.5	833.6	823.7	813.8	805.9	799.4	795.5
17.5°	868.3	867.8	863.3	854.4	845.5	836.1	827.2	816.8	806.9	797.5	791.5
20°	879.7	874.7	866.8	857.4	848.0	840.1	833.1	823.2	812.8	799.9	791.0
22.5°	895.0	886.1	874.7	864.8	855.9	848.5	840.5	832.1	821.2	806.9	794.5
25°	916.8	901.5	888.6	878.7	870.8	862.3	853.4	842.5	831.7	816.8	801.9
27.5°	950.0	927.2	910.9	902.0	894.5	883.1	871.7	858.9	845.0	829.7	812.8
30°	990.1	962.9	944.1	936.1	927.2	914.3	902.0	884.2	864.8	846.5	825.7
32.5°	1037.2	1009.4	990.6	984.7	970.3	955.4	938.1	914.3	889.1	861.8	837.1
35°	1108.5	1073.3	1056.0	1042.1	1022.3	1004.5	975.3	944.1	907.9	871.7	841.0
37.5°	1181.8	1146.2	1128.3	1109.0	1083.2	1050.5	1011.4	966.8	918.8	874.3	836.6
40°	1279.9	1241.3	1218.5	1188.8	1147.1	1096.1	1038.2	977.3	918.8	863.3	817.7
42.5°	1394.3	1358.6	1323.5	1274.5	1207.6	1133.3	1052.0	973.8	902.9	839.0	791.0
45°	1552.8	1491.9	1435.9	1357.1	1259.6	1155.1	1053.5	957.4	875.7	804.9	751.4
47.5°	1731.1	1652.4	1553.3	1430.0	1296.7	1163.5	1039.2	926.8	832.6	755.9	697.4
50°	1936.7	1815.8	1663.7	1487.9	1315.6	1152.1	1005.0	875.2	773.2	685.0	622.6
52.5°	2171.9	1987.7	1763.8	1529.0	1312.6	1117.4	948.5	807.4	693.4	599.8	538.4
55°	2433.0	2174.9	1859.4	1555.3	1285.9	1050.1	859.9	711.8	594.4	502.3	448.3
57.5°	2893.1	2503.3	2041.7	1590.5	1229.9	948.1	747.4	590.9	484.9	406.7	355.1
60°	3748.0	3077.4	2386.9	1673.2	1145.6	820.3	605.8	463.6	374.9	318.0	279.8
62.5°	4277.0	3481.6	2555.3	1661.3	1009.0	645.4	449.8	343.7	273.9	236.3	212.5
65°	4151.7	3323.0	2349.8	1427.0	785.1	457.7	297.7	224.9	188.2	168.9	157.5
66°	3981.4	3145.7	2175.9	1277.9	684.0	382.4	245.7	188.7	161.9	147.6	141.7
67.5°	3624.2	2821.8	1876.7	1023.3	512.6	284.8	181.3	148.1	131.8	124.3	120.4
70°	3033.3	2273.5	1327.4	604.3	277.9	154.6	115.9	103.0	99.1	96.6	95.1
72.5°	2345.3	1645.9	775.7	297.2	140.2	100.1	88.1	82.7	81.2	81.2	81.7
75°	1477.5	946.1	347.2	143.2	95.1	80.8	75.3	72.8	73.3	73.8	73.3
77.5°	490.9	326.4	144.7	101.5	82.7	73.3	68.8	67.9	68.8	69.4	69.4
80°	141.2	123.4	104.5	89.6	75.8	68.3	64.4	63.9	66.4	66.8	65.9
82.5°	108.5	101.5	94.6	86.7	72.8	64.4	62.9	63.4	64.9	63.9	59.5
85°	99.5	98.6	70.9	70.3	63.4	61.4	59.9	60.4	58.9	53.5	48.5
87.5°	56.0	52.0	40.1	40.6	47.0	48.5	40.1	42.6	39.6	34.7	31.7
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):

	160°	165°	170°	175°	180°
0°	817.3	817.3	817.3	817.3	817.3
2.5°	825.2	824.7	824.7	826.2	824.2
5°	834.6	834.1	834.1	835.6	834.1
7.5°	830.2	828.7	827.7	827.2	827.2
10°	815.3	813.8	810.8	809.8	808.9
12.5°	799.9	798.4	795.0	795.0	794.0
15°	790.5	788.5	786.1	784.6	783.6
17.5°	785.6	782.6	779.6	778.1	777.1
20°	783.6	779.6	776.2	773.7	773.7
22.5°	784.1	779.2	775.1	772.2	771.2
25°	789.1	781.6	776.6	773.7	772.7
27.5°	796.0	787.1	780.6	776.6	775.1
30°	805.4	793.0	784.1	779.2	777.1
32.5°	811.8	794.5	783.1	776.2	773.7
35°	811.3	789.1	775.1	766.3	763.3
37.5°	802.4	776.2	757.9	746.9	742.0
40°	782.6	752.4	733.1	722.6	716.7
42.5°	753.8	721.2	703.9	692.5	686.0
45°	708.8	676.6	655.3	646.4	638.0
47.5°	646.4	613.7	595.4	582.5	577.0
50°	573.1	540.4	521.1	510.7	505.7
52.5°	492.8	461.6	447.8	437.9	430.9
55°	409.6	380.9	374.9	364.1	357.6
57.5°	331.4	314.5	309.1	298.2	292.7
60°	259.0	253.6	247.7	240.7	237.8
62.5°	200.6	195.7	194.2	189.7	189.2
65°	153.1	153.5	152.6	151.6	150.6
66°	139.2	138.7	139.2	138.2	137.7
67.5°	118.4	120.4	121.9	121.4	121.4
70°	96.1	97.6	99.5	99.1	99.1
72.5°	82.2	84.7	85.7	85.2	85.2
75°	74.3	76.8	76.8	75.8	75.3
77.5°	69.4	70.3	69.4	68.3	67.4
80°	64.4	63.4	61.9	60.4	59.5
82.5°	56.0	53.5	52.0	49.6	49.6
85°	45.1	43.1	39.6	37.1	34.7
87.5°	29.2	28.3	25.7	19.3	15.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)