

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: P159754

Luminaire Tested: **VST-F03-LED-E-U-T4-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P159754
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33707)
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-T4-7030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 SHORT
Light Source: (21) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6732.5 lumens
Efficiency: N/A
Efficacy: 86.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B1 - 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

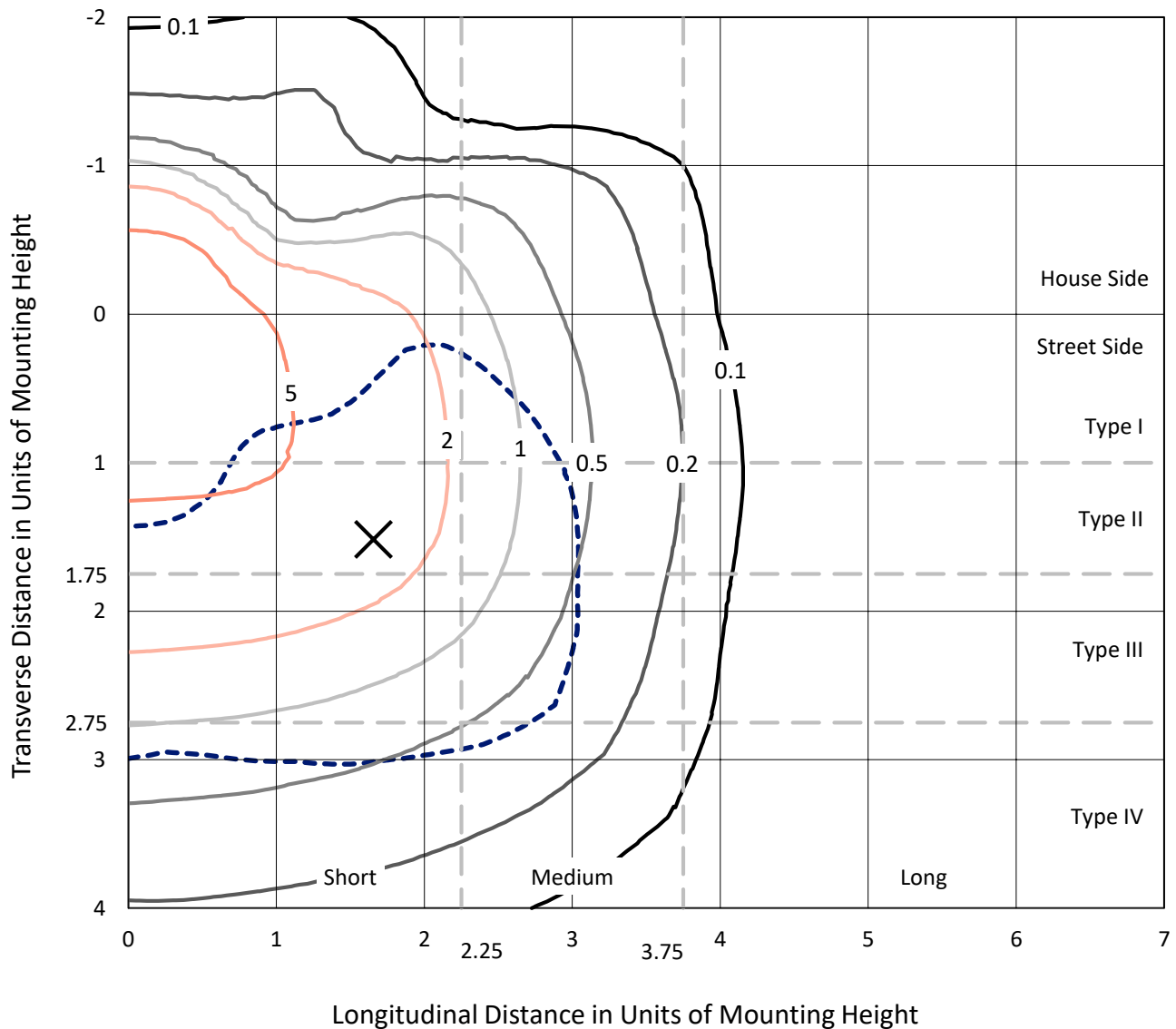


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

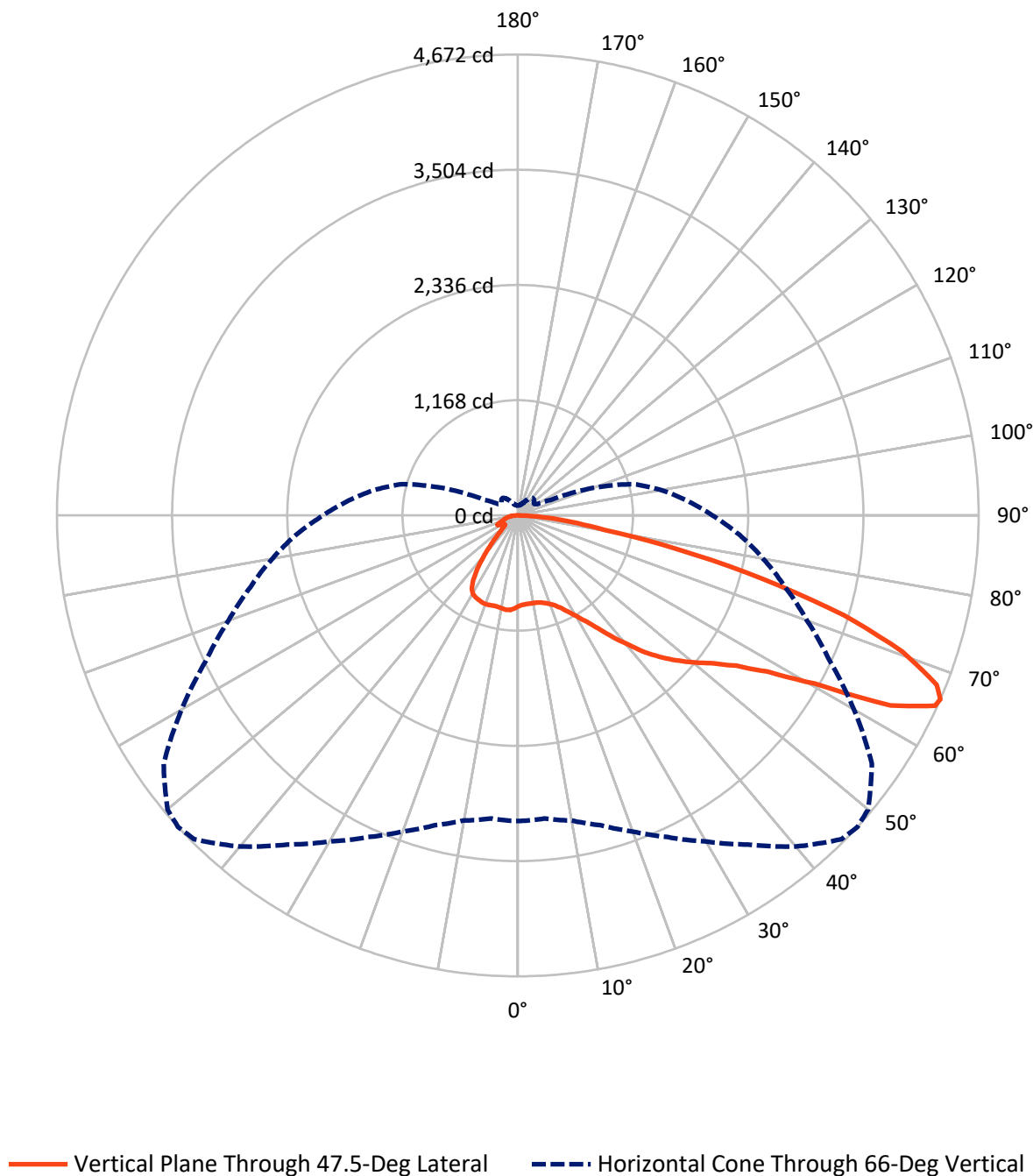


Based on 10 foot mounting height. Maximum calculated value = 9.4 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1393.9	0.0	1393.9
	% Fixture	20.7	0.0	20.7
Street Side	Lumens	5338.6	0.0	5338.6
	% Fixture	79.3	0.0	79.3
Total	Lumens	6732.5	0.0	6732.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.8	1.3
10°-20°	266.2	4.0
20°-30°	454.2	6.7
30°-40°	685.6	10.2
40°-50°	891.1	13.2
50°-60°	1222.5	18.2
60°-70°	1880.7	27.9
70°-80°	1087.1	16.1
80°-90°	156.2	2.3
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°	6732.5	100.0
0°-180°	6732.5	100.0

Coefficient of Utilization



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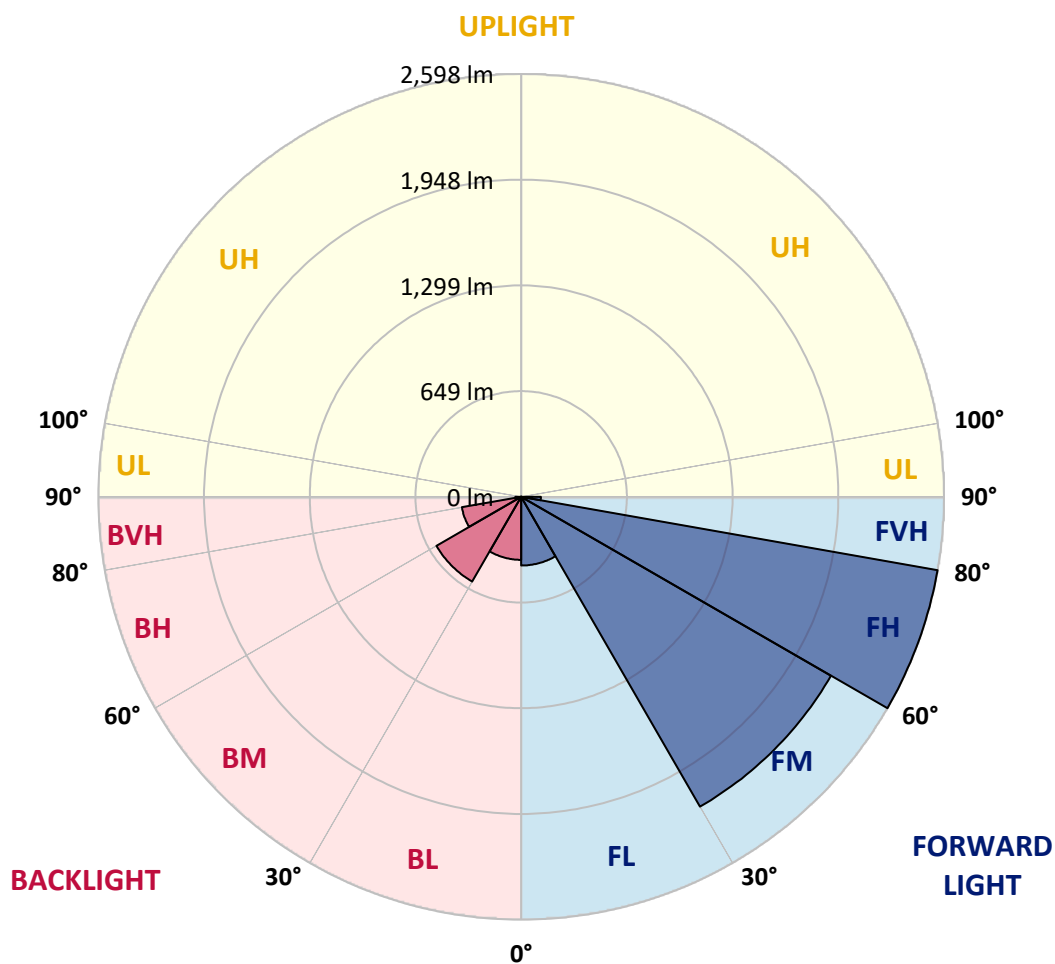
CATALOG NUMBER: VST-F03-LED-E-U-T4-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	422.0	6.3			
FM	(30°-60°)	2197.9	32.6			
FH	(60°-80°)	2597.8	38.6			G2/5000
FVH	(80°-90°)	120.9	1.8			G2/225
BL	(0°-30°)	387.2	5.8	B1/500		
BM	(30°-60°)	601.4	8.9	B1/1000		
BH	(60°-80°)	370.0	5.5	B1/500		G1/500
BVH	(80°-90°)	35.3	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-G2

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	47.5°
0°	921.1	921.1	921.1	921.1	921.1	921.1	921.1	921.1	921.1	921.1	921.1
2.5°	897.5	898.0	898.4	898.4	899.8	899.8	902.1	903.4	903.9	906.6	908.4
5°	880.8	880.4	880.8	881.7	884.0	885.8	890.3	893.5	896.2	900.7	903.0
7.5°	873.6	874.5	875.4	875.8	877.6	882.2	886.3	889.4	894.8	900.2	902.5
10°	883.1	884.5	883.1	884.0	884.0	888.1	889.9	892.1	896.2	901.2	902.5
12.5°	905.2	908.0	905.2	903.0	901.2	904.8	903.9	902.1	904.3	905.7	905.7
15°	941.9	941.9	940.1	936.9	932.4	932.8	928.7	924.7	922.9	919.7	917.5
17.5°	977.6	976.7	972.7	968.6	965.4	964.1	958.2	952.7	946.4	941.5	936.0
20°	1012.4	1016.1	1011.1	1005.2	1000.3	997.1	992.6	981.7	974.0	965.9	960.4
22.5°	1072.6	1069.4	1064.0	1055.5	1050.5	1045.0	1035.5	1023.8	1012.0	1002.1	995.3
25°	1134.6	1131.4	1123.7	1117.4	1110.2	1105.7	1095.2	1080.8	1069.4	1054.1	1045.0
27.5°	1201.1	1198.4	1189.3	1184.4	1179.4	1174.0	1164.9	1150.0	1139.6	1121.9	1112.5
30°	1276.2	1275.8	1263.5	1262.6	1255.4	1249.5	1243.2	1230.5	1220.1	1202.5	1191.2
32.5°	1356.3	1354.5	1345.9	1343.2	1348.1	1344.1	1335.0	1321.9	1308.3	1297.9	1285.3
35°	1470.3	1467.1	1462.1	1464.4	1467.6	1478.9	1464.8	1453.6	1437.2	1423.7	1406.0
37.5°	1553.5	1549.0	1554.9	1567.6	1585.6	1594.3	1606.4	1606.9	1599.2	1581.1	1565.8
40°	1630.0	1628.2	1641.7	1659.4	1692.8	1717.3	1740.4	1751.7	1754.4	1742.6	1719.5
42.5°	1694.7	1700.1	1718.2	1745.3	1792.4	1829.5	1872.5	1899.2	1915.9	1909.6	1899.2
45°	1771.6	1774.3	1796.5	1830.8	1875.7	1937.2	1993.7	2038.9	2068.4	2067.9	2056.1
47.5°	1867.9	1868.4	1887.4	1927.7	1975.6	2038.0	2109.5	2169.7	2208.6	2210.4	2201.3
50°	1982.4	1981.5	2002.3	2040.3	2091.4	2151.6	2227.6	2302.7	2357.0	2357.0	2343.8
52.5°	2129.9	2128.1	2139.4	2172.8	2222.2	2285.5	2361.1	2447.9	2506.7	2519.4	2490.9
55°	2326.7	2329.4	2332.1	2361.5	2403.6	2453.8	2540.6	2620.7	2699.5	2706.7	2689.9
57.5°	2554.2	2545.2	2564.6	2612.6	2660.5	2723.4	2785.0	2879.5	2972.7	2988.5	2986.3
60°	2909.8	2898.1	2918.0	2979.0	3032.0	3131.0	3236.5	3358.6	3469.0	3501.5	3462.2
62.5°	3236.9	3251.4	3278.5	3349.6	3426.4	3558.5	3716.9	3926.3	4135.8	4249.8	4241.6
65°	3207.5	3193.9	3245.9	3342.8	3482.1	3650.4	3847.2	4099.6	4401.4	4630.3	4650.7
66°	3098.5	3084.4	3140.5	3251.4	3410.6	3597.9	3816.4	4073.4	4381.9	4640.7	4671.9
67.5°	2918.4	2904.4	2967.7	3068.6	3232.8	3468.5	3704.7	3985.6	4306.4	4554.3	4579.6
70°	2570.9	2552.0	2601.3	2715.3	2848.3	3076.3	3301.1	3598.8	3928.1	4126.3	4135.8
72.5°	2177.8	2133.5	2186.0	2273.8	2368.7	2557.4	2753.3	2956.9	3219.2	3402.5	3454.9
75°	1580.2	1603.3	1618.7	1676.6	1739.5	1895.5	2010.4	2181.0	2384.1	2516.7	2558.8
77.5°	838.3	873.1	894.8	952.7	1056.8	1175.8	1300.2	1405.6	1539.1	1613.2	1664.8
80°	470.5	494.9	530.2	575.9	626.6	718.0	791.7	846.0	865.0	878.1	889.9
82.5°	258.8	320.8	373.2	404.9	434.8	471.4	515.3	560.5	575.0	553.3	542.0
85°	40.3	59.3	180.5	220.3	239.8	267.8	299.5	332.9	333.4	286.8	313.1
87.5°	11.3	12.7	25.8	38.9	38.0	30.8	38.0	69.2	40.7	20.3	23.5
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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CATALOG NUMBER: VST-F03-LED-E-U-T4-7030

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
0°	921.1	921.1	921.1	921.1	921.1	921.1	921.1	921.1	921.1	921.1	921.1
2.5°	909.3	910.2	912.5	914.8	917.0	919.3	920.6	922.9	924.7	927.4	930.6
5°	905.7	908.0	912.1	917.0	921.5	925.6	928.7	933.3	937.4	941.0	946.4
7.5°	905.7	910.2	917.0	922.4	926.5	931.5	936.5	941.0	945.5	949.1	952.7
10°	906.1	910.7	917.5	923.8	928.3	933.7	937.8	941.9	946.9	949.1	953.6
12.5°	908.0	909.8	914.8	921.1	926.5	931.9	936.0	940.1	945.5	946.4	949.6
15°	917.0	914.3	915.7	920.2	926.0	930.6	935.1	938.3	941.9	941.0	943.7
17.5°	933.7	926.9	924.2	924.7	927.4	930.6	932.4	932.8	933.3	929.2	929.7
20°	956.3	946.9	940.6	937.4	933.7	930.6	925.6	919.7	914.3	906.1	905.2
22.5°	990.3	976.3	969.5	960.9	950.0	936.5	924.2	909.8	898.0	885.8	881.3
25°	1039.6	1025.1	1017.9	1004.3	984.8	965.4	947.8	928.3	911.1	896.6	889.9
27.5°	1105.7	1091.2	1083.5	1069.4	1045.5	1026.1	1001.6	980.8	960.0	938.7	930.1
30°	1185.7	1173.1	1164.5	1153.1	1132.3	1111.1	1082.6	1050.5	1017.4	983.5	966.8
32.5°	1280.3	1266.2	1259.9	1246.8	1225.1	1202.9	1171.3	1130.1	1074.9	1021.5	988.0
35°	1398.4	1382.5	1375.3	1358.1	1332.8	1300.2	1266.2	1211.0	1136.4	1062.2	1007.5
37.5°	1556.2	1520.9	1497.0	1457.6	1416.9	1371.2	1322.8	1266.2	1178.0	1086.2	1010.2
40°	1696.0	1660.3	1614.1	1557.6	1494.2	1431.4	1376.2	1312.0	1216.0	1103.4	1001.6
42.5°	1869.8	1806.4	1732.7	1656.2	1572.1	1494.7	1429.1	1353.5	1241.8	1107.9	977.6
45°	2028.5	1953.0	1854.4	1752.6	1648.1	1550.8	1477.1	1392.9	1264.0	1107.9	948.7
47.5°	2173.3	2082.8	1964.8	1838.1	1716.4	1610.1	1526.4	1433.2	1295.2	1121.9	940.1
50°	2307.2	2203.1	2068.8	1921.8	1785.2	1671.6	1581.6	1484.8	1342.7	1158.1	960.9
52.5°	2448.4	2338.0	2174.2	2018.2	1867.5	1745.8	1649.9	1548.5	1404.2	1215.1	997.6
55°	2633.4	2504.0	2318.1	2146.1	1980.6	1846.2	1737.2	1625.0	1471.6	1279.4	1042.3
57.5°	2925.2	2737.4	2551.5	2328.1	2171.9	1995.1	1875.7	1746.7	1581.1	1363.1	1109.7
60°	3436.0	3205.2	2981.8	2724.8	2532.1	2347.0	2166.5	1998.2	1798.7	1552.2	1257.7
62.5°	4165.2	3930.8	3579.8	3265.4	2974.5	2729.3	2494.1	2280.1	2024.0	1754.4	1440.0
65°	4600.9	4332.6	3914.2	3491.6	3138.3	2834.3	2565.1	2303.2	2026.7	1763.9	1495.1
66°	4635.7	4381.9	3934.9	3488.4	3121.6	2806.2	2526.2	2255.2	1972.0	1720.4	1477.1
67.5°	4571.0	4352.5	3892.4	3426.9	3051.8	2711.2	2423.5	2139.4	1854.8	1621.9	1416.9
70°	4114.6	3956.6	3562.1	3126.1	2751.9	2451.5	2148.0	1874.7	1605.1	1409.2	1257.2
72.5°	3373.1	3173.1	2897.2	2604.0	2309.5	2043.0	1767.1	1534.5	1308.3	1165.8	1058.2
75°	2477.8	2297.7	1993.7	1810.9	1616.4	1449.0	1263.1	1042.8	882.2	810.7	784.4
77.5°	1570.7	1375.3	1118.8	917.0	788.5	677.7	534.3	424.8	340.2	354.2	392.2
80°	793.5	683.6	511.7	404.0	349.3	290.5	229.8	174.2	127.1	145.2	164.2
82.5°	509.4	425.3	338.8	266.9	225.3	198.6	158.8	115.4	86.0	96.8	118.5
85°	306.7	259.2	206.8	169.2	147.0	122.6	90.0	63.8	63.4	67.9	83.7
87.5°	46.6	66.5	38.5	41.2	43.4	46.6	41.2	34.9	30.3	39.4	49.7
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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	921.1	921.1	921.1	921.1	921.1	921.1	921.1	921.1	921.1	921.1	921.1
2.5°	933.7	934.7	936.5	938.7	938.3	941.5	943.3	941.5	945.5	945.5	947.8
5°	950.9	952.3	955.4	957.7	958.6	961.3	962.2	961.8	962.7	963.2	964.1
7.5°	955.9	959.5	960.9	962.2	962.7	963.6	963.6	962.7	962.7	962.2	963.2
10°	954.5	955.9	956.8	956.3	956.3	955.4	955.0	954.5	954.5	953.6	955.0
12.5°	950.0	950.0	950.0	949.1	949.1	948.7	948.7	948.7	949.6	950.0	952.3
15°	941.0	941.0	941.9	941.5	942.8	945.1	947.8	949.6	951.8	952.3	953.6
17.5°	926.9	927.4	930.1	936.0	941.9	948.7	953.6	955.0	953.2	948.7	945.5
20°	902.5	908.4	919.3	933.3	946.4	955.0	957.3	951.8	943.3	931.5	925.1
22.5°	880.8	892.6	912.1	935.1	951.4	957.3	950.5	937.8	922.4	908.9	899.3
25°	889.4	903.0	923.3	943.3	953.6	950.5	936.9	918.8	902.5	886.7	871.3
27.5°	925.6	939.2	953.6	959.5	955.9	944.2	925.1	905.7	884.0	861.4	842.3
30°	960.0	967.7	968.6	962.7	949.6	930.6	908.4	885.8	858.2	831.1	807.1
32.5°	970.9	961.8	945.5	928.7	910.7	891.2	865.4	835.6	806.2	775.4	748.7
35°	967.7	931.0	890.8	855.0	833.3	811.1	787.6	747.8	714.8	688.6	671.3
37.5°	939.2	872.2	810.2	758.2	724.3	698.0	663.2	630.2	601.7	589.9	575.9
40°	899.3	797.1	711.2	638.3	603.1	569.6	530.6	505.3	497.2	486.3	486.8
42.5°	842.3	709.4	598.5	514.8	476.4	439.7	412.1	397.2	397.7	388.6	390.4
45°	782.2	621.1	481.8	398.6	360.5	329.3	314.0	309.4	309.9	310.3	307.6
47.5°	745.6	552.4	386.3	302.2	268.7	251.1	242.9	240.7	241.1	241.6	238.4
50°	740.1	516.7	322.6	231.2	209.5	199.5	195.4	193.2	193.2	191.3	188.6
52.5°	755.5	507.6	291.4	200.4	179.6	170.6	167.4	165.6	162.8	159.2	154.3
55°	779.9	515.8	281.8	190.0	169.6	160.6	156.5	155.6	151.1	144.3	136.2
57.5°	825.2	545.2	288.2	192.7	171.5	163.3	160.6	159.7	153.4	143.0	132.5
60°	955.0	630.7	319.9	208.1	184.6	177.8	177.8	176.5	167.8	152.9	138.0
62.5°	1134.2	755.9	362.8	229.4	202.7	201.8	209.5	209.9	194.5	170.6	147.0
65°	1220.6	814.7	377.8	233.9	207.7	218.0	233.5	233.5	211.7	178.7	148.4
66°	1221.0	813.4	373.2	228.5	202.2	215.8	231.6	231.6	209.0	176.5	146.1
67.5°	1189.8	788.1	358.3	218.5	190.0	202.7	216.7	216.2	195.9	167.4	139.8
70°	1067.2	697.1	315.8	202.2	175.5	176.0	181.0	177.8	164.2	144.8	127.1
72.5°	920.2	583.1	273.7	191.8	164.2	155.6	151.6	148.9	140.2	128.5	117.6
75°	705.7	452.8	238.4	182.3	154.3	139.3	133.9	131.6	125.8	119.0	110.4
77.5°	432.5	310.3	202.2	166.9	143.0	129.4	123.5	119.0	113.1	106.7	100.9
80°	186.4	187.3	161.9	141.6	124.4	108.6	100.9	95.5	92.3	90.0	86.9
82.5°	130.3	134.3	123.5	109.9	95.0	83.7	76.9	75.5	76.0	76.0	75.1
85°	97.7	95.9	86.4	78.7	71.9	64.7	59.3	58.8	60.6	60.6	59.3
87.5°	56.5	57.0	48.8	45.7	47.5	40.7	37.1	37.6	42.1	41.6	40.7
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°	921.1	921.1	921.1	921.1	921.1
2.5°	947.8	949.1	948.7	950.0	948.7
5°	965.4	965.0	964.5	966.3	964.1
7.5°	962.7	963.2	963.2	963.2	962.7
10°	955.9	957.7	958.6	960.4	960.0
12.5°	953.6	956.3	959.1	961.8	962.2
15°	954.1	955.9	957.3	958.6	959.1
17.5°	942.4	941.9	940.6	939.6	938.7
20°	918.4	916.1	913.9	910.2	912.1
22.5°	888.5	882.2	874.9	869.0	868.6
25°	853.7	841.9	830.2	822.5	819.7
27.5°	822.9	808.9	796.7	789.9	788.1
30°	786.2	773.6	762.7	756.8	753.2
32.5°	732.0	722.0	708.5	703.9	703.5
35°	656.4	648.7	639.2	637.4	635.2
37.5°	570.9	568.2	563.7	558.2	557.3
40°	479.5	481.3	480.0	476.8	471.8
42.5°	391.3	394.5	394.9	397.2	399.5
45°	311.7	314.4	314.4	316.7	319.4
47.5°	239.3	237.5	238.9	241.1	242.5
50°	181.0	179.6	177.4	175.5	173.7
52.5°	145.7	143.0	136.6	134.8	133.0
55°	128.5	123.5	119.0	117.2	117.2
57.5°	123.5	117.2	112.2	109.9	109.0
60°	124.4	115.4	109.0	105.4	104.0
62.5°	128.5	115.8	107.2	103.1	101.8
65°	128.0	114.9	106.7	102.2	100.9
66°	125.8	113.6	105.8	101.8	100.9
67.5°	122.2	111.7	104.9	101.3	100.0
70°	114.9	108.1	103.1	100.0	98.6
72.5°	109.0	104.5	100.0	96.4	95.5
75°	103.6	99.1	95.0	93.2	91.9
77.5°	95.5	91.4	89.1	87.3	86.4
80°	84.6	81.9	79.1	77.3	76.0
82.5°	73.7	70.1	67.4	66.1	65.2
85°	60.2	57.9	53.8	51.1	50.6
87.5°	40.3	38.0	36.7	34.4	32.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)