

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: P158453

Luminaire Tested: **VST-F05-LED-E-U-SL3-8030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P158453  
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-F05-LED-E-U-SL3-8030  
Description: VENTUS LED SITE/ROADWAY LUMINAIRE  
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL  
Light Source: (35) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10509.8 lumens  
Efficiency: N/A  
Efficacy: 78.8 lumens/watt  
Luminous Opening: Rectangular (W 0.83' x L: 1' x H: 0')  
IES Classification: Type III - Short - Semi-Cutoff  
BUG Rating: B2 - U0 - G2

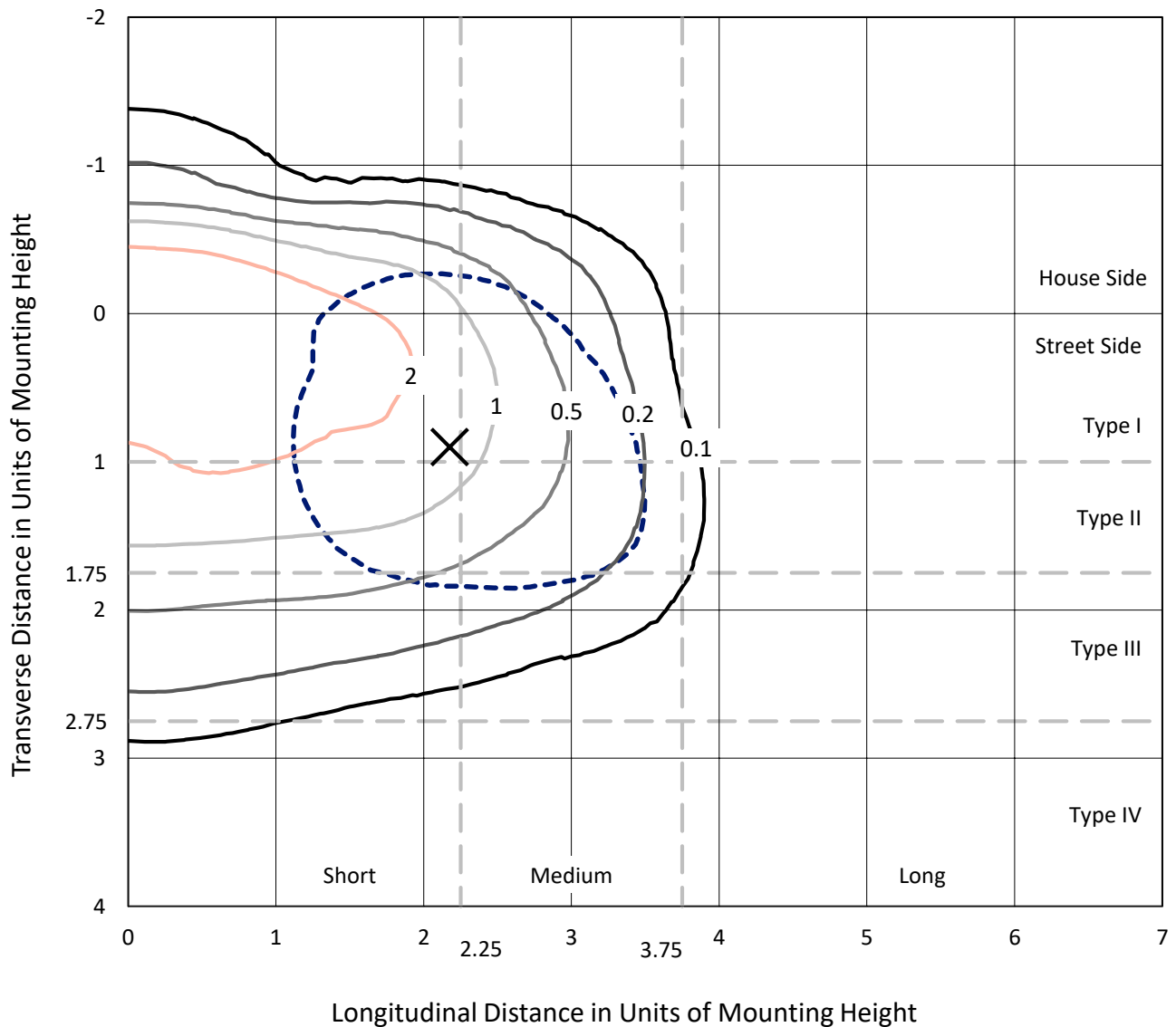
Input Watts (W): 133.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

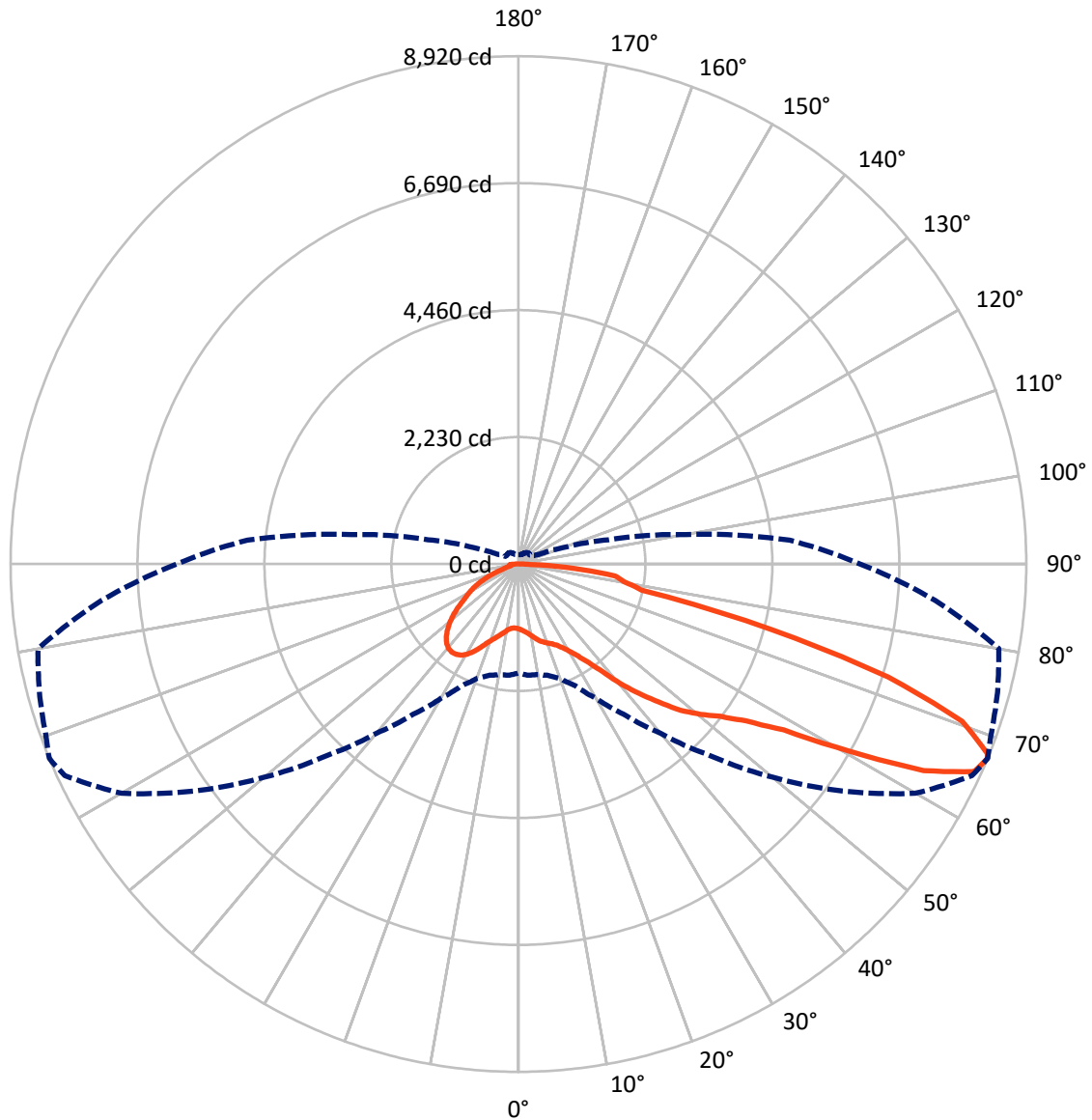
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 3.6 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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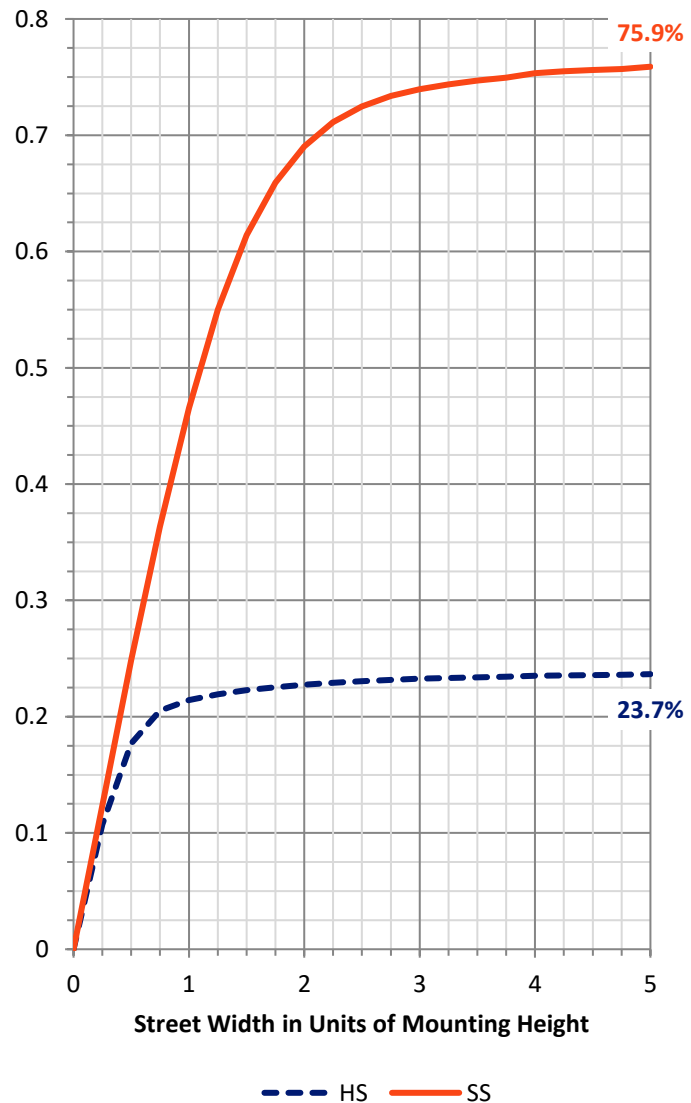
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2521.3	0.0	2521.3
	% Fixture	24.0	0.0	24.0
<b>Street Side</b>	Lumens	7988.5	0.0	7988.5
	% Fixture	76.0	0.0	76.0
<b>Total</b>	Lumens	10509.8	0.0	10509.8
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	113.2	1.1
10°-20°	385.7	3.7
20°-30°	688.7	6.6
30°-40°	1009.3	9.6
40°-50°	1559.5	14.8
50°-60°	2270.9	21.6
60°-70°	2958.2	28.1
70°-80°	1324.2	12.6
80°-90°	200.2	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°	10509.8	100.0
0°-180°	10509.8	100.0



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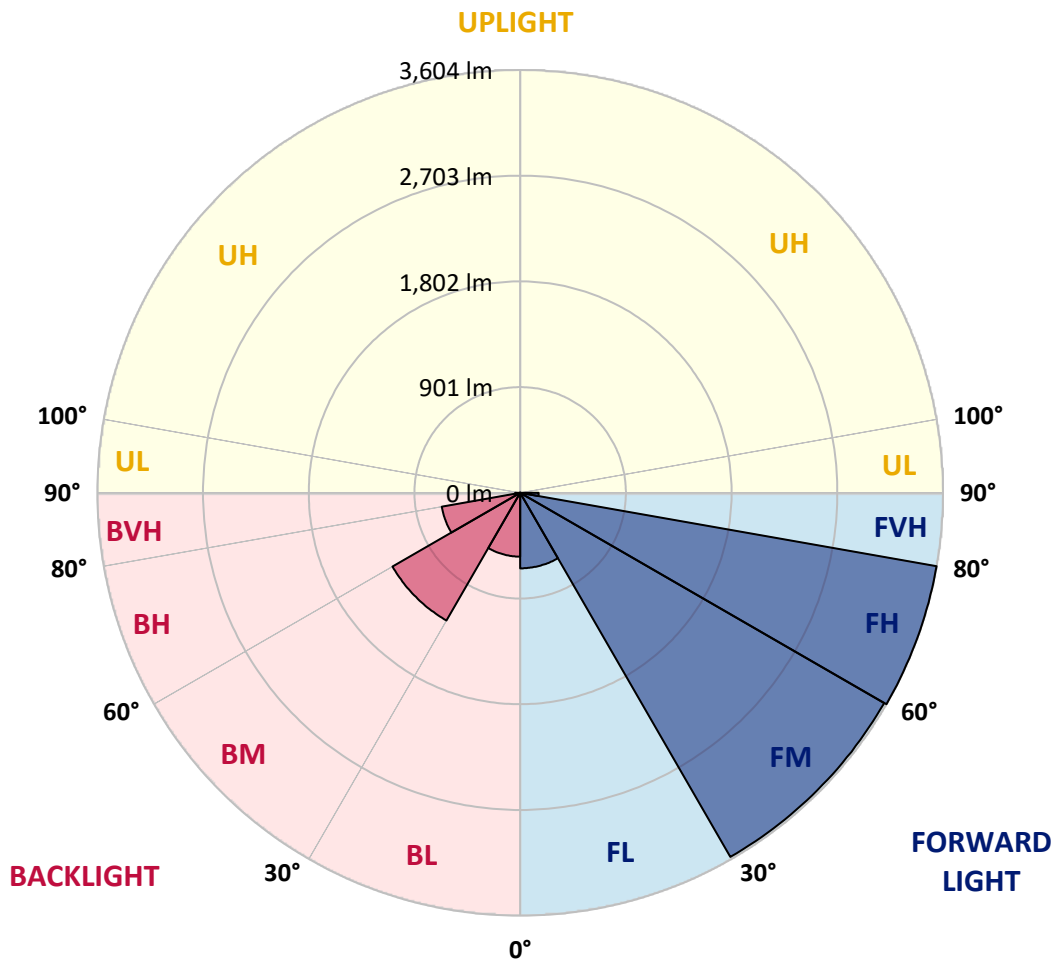
CATALOG NUMBER: VST-F05-LED-E-U-SL3-8030

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	643.9	6.1			
FM	(30°-60°)	3583.3	34.1			
FH	(60°-80°)	3604.0	34.3			G2/5000
FVH	(80°-90°)	157.2	1.5			G2/225
BL	(0°-30°)	543.7	5.2	B2/1000		
BM	(30°-60°)	1256.3	12.0	B2/2500		
BH	(60°-80°)	678.3	6.5	B2/1000		G2/1000
BVH	(80°-90°)	43.0	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 III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1139.2	1139.2	1139.2	1139.2	1139.2	1139.2	1139.2	1139.2	1139.2	1139.2	1139.2
2.5°	1183.8	1186.5	1187.2	1186.5	1187.2	1184.5	1183.8	1179.6	1181.7	1176.1	1174.7
5°	1247.9	1249.9	1251.3	1245.8	1247.2	1244.4	1240.9	1236.7	1231.1	1223.5	1218.6
7.5°	1310.6	1314.0	1313.3	1311.3	1306.4	1303.6	1296.6	1290.4	1280.6	1271.5	1265.3
10°	1394.9	1394.2	1394.2	1382.3	1375.4	1369.1	1356.5	1346.8	1337.0	1323.8	1316.8
12.5°	1492.4	1487.5	1485.4	1477.1	1462.4	1451.3	1433.2	1414.4	1397.0	1383.0	1371.9
15°	1586.5	1586.5	1580.9	1567.7	1553.7	1539.1	1513.3	1486.1	1457.6	1435.3	1424.1
17.5°	1672.2	1664.5	1659.6	1642.2	1627.6	1603.9	1575.3	1546.1	1510.5	1479.2	1457.6
20°	1734.9	1728.6	1718.1	1696.6	1671.5	1643.6	1610.2	1576.0	1537.7	1503.6	1479.2
22.5°	1771.1	1763.4	1747.4	1718.8	1684.7	1645.7	1606.7	1574.6	1539.8	1514.0	1493.8
25°	1789.9	1782.2	1760.7	1723.0	1677.0	1625.5	1580.9	1549.5	1529.3	1523.1	1520.3
27.5°	1789.2	1782.9	1760.0	1716.8	1657.5	1598.3	1550.2	1523.8	1521.7	1546.1	1564.2
30°	1771.1	1766.9	1746.0	1702.8	1640.8	1578.8	1534.2	1520.3	1541.9	1593.4	1638.0
32.5°	1753.0	1750.9	1736.3	1697.2	1644.3	1592.0	1561.4	1562.8	1607.4	1686.8	1758.6
35°	1755.1	1757.9	1755.8	1734.9	1701.4	1674.3	1659.6	1690.3	1760.0	1856.1	1952.3
37.5°	1773.2	1783.6	1796.9	1799.0	1799.7	1795.5	1826.1	1890.9	1992.7	2118.1	2268.6
40°	1812.9	1824.8	1863.1	1896.5	1939.7	1991.3	2053.3	2143.2	2269.3	2423.9	2608.6
42.5°	1936.2	1952.9	2000.3	2062.3	2141.8	2222.6	2315.3	2437.9	2592.6	2755.6	2949.3
45°	2097.2	2132.0	2184.3	2253.2	2372.4	2486.0	2605.8	2743.0	2907.5	3111.6	3306.7
47.5°	2297.8	2332.7	2408.6	2482.5	2623.2	2764.6	2895.6	3039.2	3217.5	3426.5	3642.5
50°	2473.4	2513.1	2580.7	2680.3	2843.4	3016.9	3161.8	3317.2	3467.0	3687.1	3905.2
52.5°	2611.4	2639.9	2704.7	2796.0	2977.8	3168.1	3351.3	3524.1	3701.8	3921.9	4124.0
55°	2628.8	2655.3	2718.7	2823.2	3007.8	3218.9	3430.0	3634.9	3886.4	4126.8	4394.3
57.5°	2553.5	2575.1	2639.2	2732.6	2912.4	3152.7	3419.6	3682.2	4004.1	4328.8	4655.6
60°	2446.9	2468.5	2518.7	2593.2	2755.6	3014.8	3326.2	3685.7	4113.5	4582.4	5063.2
62.5°	2329.9	2348.7	2389.1	2442.1	2584.9	2823.9	3180.6	3662.7	4202.7	4834.6	5576.0
65°	2132.7	2178.0	2195.4	2249.8	2392.6	2618.3	2981.3	3507.4	4166.5	4946.8	5897.9
67°	1914.6	1960.6	1969.7	2024.7	2139.0	2355.7	2724.9	3219.6	3879.4	4753.1	5826.8
67.5°	1845.0	1884.0	1897.9	1952.9	2060.9	2265.1	2615.5	3115.8	3791.6	4647.2	5741.1
70°	1356.5	1399.7	1415.1	1438.1	1515.4	1685.4	1917.4	2351.5	3023.1	3792.3	4843.0
72.5°	726.0	760.8	775.5	809.6	849.3	942.0	1119.7	1431.1	1855.4	2537.5	3445.4
75°	491.2	505.1	515.6	539.3	580.4	654.2	732.3	841.7	1098.1	1431.8	1960.6
77.5°	280.1	286.4	287.8	291.9	324.7	395.0	523.2	708.6	908.5	1037.4	1254.1
80°	121.2	133.8	143.5	137.3	135.2	149.8	187.4	279.4	547.6	869.5	1031.9
82.5°	65.5	71.1	79.4	80.1	84.3	89.2	96.8	115.0	161.6	326.1	711.4
85°	34.1	35.5	47.4	54.3	57.8	60.6	62.0	69.0	79.4	101.0	177.0
87.5°	4.9	7.0	8.4	11.1	12.5	13.2	15.3	19.5	23.0	27.9	47.4
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°	1139.2	1139.2	1139.2	1139.2	1139.2	1139.2	1139.2	1139.2	1139.2	1139.2	1139.2
2.5°	1168.4	1167.0	1162.9	1160.1	1157.3	1154.5	1151.0	1148.2	1143.3	1139.9	1135.7
5°	1211.6	1203.3	1197.7	1190.0	1188.6	1179.6	1170.5	1166.3	1158.0	1151.0	1142.6
7.5°	1255.5	1245.8	1236.7	1230.4	1227.0	1214.4	1205.4	1194.9	1185.1	1176.1	1166.3
10°	1307.1	1297.3	1287.6	1283.4	1277.1	1265.3	1257.6	1244.4	1234.6	1223.5	1210.2
12.5°	1360.7	1353.8	1346.8	1341.2	1338.4	1332.9	1321.7	1310.6	1297.3	1286.2	1270.8
15°	1408.1	1403.2	1400.4	1399.0	1399.0	1395.6	1385.1	1374.7	1360.7	1348.2	1331.5
17.5°	1441.5	1439.5	1441.5	1443.6	1446.4	1443.6	1441.5	1429.7	1420.6	1405.3	1388.6
20°	1461.1	1465.2	1475.7	1482.7	1488.9	1493.8	1495.9	1486.1	1474.3	1463.1	1452.0
22.5°	1482.0	1493.8	1511.9	1522.4	1532.8	1550.2	1554.4	1547.4	1538.4	1531.4	1519.6
25°	1516.8	1534.2	1565.6	1582.3	1596.9	1622.7	1626.2	1627.6	1625.5	1619.9	1605.3
27.5°	1571.1	1605.3	1647.1	1668.7	1684.7	1718.1	1731.4	1731.4	1725.8	1732.1	1732.1
30°	1665.9	1711.2	1765.5	1778.1	1803.2	1832.4	1854.0	1856.8	1857.5	1870.7	1890.2
32.5°	1811.5	1854.7	1915.3	1929.3	1950.9	1978.7	2003.1	2000.3	2006.6	2035.2	2060.9
35°	2023.3	2067.2	2106.9	2125.7	2135.5	2160.6	2169.6	2185.0	2203.8	2239.3	2235.8
37.5°	2336.9	2375.9	2381.4	2393.3	2381.4	2386.3	2393.3	2411.4	2461.6	2493.6	2442.1
40°	2714.5	2779.3	2773.0	2759.1	2732.6	2697.1	2709.6	2737.5	2791.8	2763.9	2625.3
42.5°	3070.5	3137.4	3124.9	3108.8	3050.3	3037.1	3035.7	3058.7	3087.9	3008.5	2768.8
45°	3421.0	3489.3	3467.7	3458.6	3419.6	3391.0	3414.7	3416.1	3408.4	3238.4	2894.2
47.5°	3782.6	3845.3	3831.3	3839.0	3798.6	3779.8	3781.9	3772.1	3700.4	3433.5	2991.8
50°	4074.5	4158.8	4167.2	4149.8	4128.2	4099.6	4172.7	4146.3	3986.7	3623.0	3085.8
52.5°	4301.6	4415.2	4458.4	4447.3	4429.8	4433.3	4570.6	4600.5	4336.5	3862.0	3189.7
55°	4570.6	4749.6	4820.0	4861.8	4843.7	4913.4	5227.6	5242.9	4822.8	4174.1	3324.8
57.5°	4958.7	5215.1	5437.3	5496.5	5553.7	5780.1	6290.1	6134.8	5454.0	4646.5	3496.2
60°	5548.8	6110.4	6471.3	6660.8	6794.6	7110.9	7595.8	7202.2	6240.7	5208.8	3711.5
62.5°	6375.1	7195.9	7799.3	7989.5	8044.5	8226.4	8577.5	7824.3	6669.2	5461.0	3730.3
65°	6990.3	7974.8	8697.3	8794.9	8729.4	8732.9	8824.9	7791.6	6509.6	5240.8	3407.0
67°	6949.9	8052.2	8792.1	8920.3	8829.7	8710.6	8567.1	7347.8	5996.8	4779.6	2983.4
67.5°	6887.9	7977.6	8751.0	8886.2	8803.3	8667.4	8457.7	7175.7	5837.3	4636.1	2897.0
70°	5954.3	7036.3	8078.0	8268.2	8303.0	8179.0	7590.2	6050.5	4739.2	3771.4	2249.8
72.5°	4634.7	5598.3	6628.7	6793.9	6927.6	6570.2	5524.4	4179.0	3454.4	2718.0	1629.0
75°	3060.1	4040.4	4560.1	4584.5	4413.8	3751.9	2699.2	2093.0	1926.5	1597.6	1008.2
77.5°	1637.3	2375.9	2390.5	2213.5	2132.7	1590.0	645.2	356.0	396.4	450.1	401.3
80°	1221.4	1513.3	1753.7	1885.4	1924.4	1363.5	333.7	188.8	165.1	150.5	148.4
82.5°	1101.5	1461.8	1638.7	1710.5	1692.4	1121.7	187.4	126.8	105.2	114.3	130.3
85°	432.0	780.3	1026.3	993.5	834.7	418.0	102.4	68.3	68.3	98.9	128.2
87.5°	88.5	160.2	217.4	207.6	186.7	80.8	50.2	41.1	41.8	80.1	121.2
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):**

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	1139.2	1139.2	1139.2	1139.2	1139.2	1139.2	1139.2	1139.2	1139.2	1139.2	1139.2
2.5°	1131.5	1127.3	1124.5	1121.7	1119.0	1117.6	1115.5	1115.5	1111.3	1109.9	1108.5
5°	1136.4	1129.4	1124.5	1118.3	1113.4	1109.2	1103.6	1102.2	1097.4	1093.9	1092.5
7.5°	1157.3	1146.8	1136.4	1128.7	1121.7	1112.7	1106.4	1100.8	1096.0	1092.5	1088.3
10°	1197.0	1185.8	1171.2	1157.3	1148.2	1134.3	1124.5	1114.8	1109.2	1105.0	1099.4
12.5°	1255.5	1239.5	1222.1	1205.4	1190.0	1171.9	1162.2	1150.3	1143.3	1139.9	1135.7
15°	1315.4	1298.0	1276.4	1260.4	1243.0	1229.0	1220.0	1209.5	1204.0	1199.8	1197.0
17.5°	1376.7	1356.5	1341.2	1325.2	1316.8	1306.4	1294.5	1281.3	1265.3	1255.5	1242.3
20°	1439.5	1424.1	1415.1	1406.0	1396.3	1381.6	1357.9	1330.8	1300.8	1272.2	1245.1
22.5°	1512.6	1503.6	1502.2	1493.8	1473.6	1438.8	1394.9	1344.0	1293.1	1245.8	1208.8
25°	1615.7	1615.7	1608.8	1574.6	1527.2	1464.5	1390.7	1317.5	1249.9	1185.1	1136.4
27.5°	1745.3	1740.4	1706.3	1635.9	1550.9	1453.4	1354.5	1261.8	1175.4	1104.3	1041.6
30°	1888.2	1854.0	1780.9	1670.1	1542.6	1417.2	1295.9	1188.6	1086.9	999.8	926.0
32.5°	2036.6	1953.6	1822.0	1670.1	1513.3	1362.8	1222.8	1091.1	974.7	877.2	789.4
35°	2171.0	2019.8	1831.7	1642.9	1456.2	1282.7	1120.4	971.2	831.9	726.7	630.5
37.5°	2293.0	2063.7	1821.3	1590.0	1373.3	1169.8	979.6	815.2	657.7	556.0	473.8
40°	2372.4	2072.8	1778.1	1507.0	1254.8	1017.2	806.8	622.9	498.2	405.5	350.5
42.5°	2421.9	2055.4	1708.4	1393.5	1095.3	825.6	605.5	446.6	353.9	302.4	281.5
45°	2449.7	2010.1	1605.3	1238.1	902.3	627.8	429.9	322.6	272.4	254.3	247.3
47.5°	2448.3	1936.9	1476.4	1058.3	689.1	437.5	304.5	251.5	237.6	232.0	230.6
50°	2433.7	1847.0	1325.2	863.3	497.5	305.2	241.1	225.7	222.3	218.8	217.4
52.5°	2413.5	1735.6	1158.0	673.0	353.2	243.9	218.8	214.6	211.8	208.3	206.9
55°	2375.9	1598.3	976.8	506.5	276.6	220.2	211.1	209.7	206.2	201.4	198.6
57.5°	2329.9	1459.0	803.3	395.7	244.6	214.6	209.7	207.6	202.8	197.2	191.6
60°	2313.2	1344.0	667.5	333.7	236.9	216.7	213.2	210.4	203.4	195.1	188.8
62.5°	2208.7	1214.4	569.9	309.4	241.1	225.7	224.3	220.2	209.7	200.0	190.2
65°	1938.3	1027.0	482.8	292.6	249.4	241.1	242.5	236.2	225.7	212.5	195.1
67°	1639.4	837.5	402.0	276.6	255.7	257.1	262.0	257.1	243.9	225.0	201.4
67.5°	1560.0	789.4	381.8	271.7	257.1	261.3	266.8	263.4	250.1	228.5	204.1
70°	1159.4	556.0	285.0	245.9	257.1	273.8	286.4	289.8	275.2	245.3	209.7
72.5°	816.6	358.8	218.8	213.2	233.4	255.7	279.4	291.2	274.5	241.8	202.1
75°	490.5	224.3	177.7	181.2	196.5	219.5	238.3	243.2	222.3	201.4	174.9
77.5°	227.1	149.1	139.3	144.2	158.9	169.3	169.3	159.6	143.5	131.0	125.4
80°	133.8	121.9	121.2	130.3	140.0	132.4	120.5	107.3	98.9	94.8	92.7
82.5°	125.4	130.3	138.7	140.7	133.1	114.3	99.6	86.4	82.2	80.1	78.0
85°	147.7	158.2	144.2	133.1	117.7	96.1	78.0	66.9	64.8	62.7	59.9
87.5°	136.6	130.3	113.6	97.5	80.8	58.5	42.5	38.3	41.1	40.4	39.0
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):**

	160°	165°	170°	175°	180°
0°	1139.2	1139.2	1139.2	1139.2	1139.2
2.5°	1109.2	1109.2	1106.4	1105.0	1108.5
5°	1089.7	1090.4	1088.3	1087.6	1088.3
7.5°	1085.5	1084.8	1083.4	1082.0	1083.4
10°	1098.1	1097.4	1095.3	1096.7	1094.6
12.5°	1135.7	1139.9	1139.2	1140.6	1143.3
15°	1197.0	1196.3	1194.2	1195.6	1197.7
17.5°	1231.8	1226.3	1221.4	1219.3	1219.3
20°	1223.5	1207.4	1199.1	1194.2	1192.8
22.5°	1174.0	1151.0	1133.6	1129.4	1125.9
25°	1093.2	1064.6	1042.3	1037.4	1028.4
27.5°	999.1	960.8	934.3	928.7	923.9
30°	875.8	831.9	801.2	781.7	788.0
32.5°	725.3	683.5	648.0	616.6	611.7
35°	560.2	514.2	482.8	468.9	459.8
37.5°	418.0	379.7	358.8	345.6	346.3
40°	319.8	299.6	288.4	279.4	280.1
42.5°	266.8	257.8	255.0	250.8	248.7
45°	241.8	239.0	239.7	235.5	234.1
47.5°	227.8	225.7	226.4	223.7	223.0
50°	216.7	215.3	216.0	213.9	213.2
52.5°	205.5	206.2	205.5	204.1	204.1
55°	195.8	195.1	196.5	194.4	194.4
57.5°	188.1	187.4	187.4	186.7	186.7
60°	183.9	181.2	180.5	180.5	181.2
62.5°	181.8	177.0	176.3	176.3	177.0
65°	182.5	174.9	172.1	171.4	170.7
67°	183.2	172.1	166.5	163.7	163.0
67.5°	183.9	170.7	164.4	161.6	160.2
70°	179.8	160.9	151.9	147.0	145.6
72.5°	169.3	149.1	138.0	131.7	130.3
75°	150.5	135.2	125.4	118.4	115.7
77.5°	116.4	109.4	105.9	101.7	100.3
80°	90.6	87.1	85.7	82.9	82.2
82.5°	75.2	71.8	69.7	66.2	64.1
85°	58.5	54.3	53.0	50.2	48.8
87.5°	38.3	36.2	35.5	32.0	30.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)