

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: INVUE

Report Number: P95420

Luminaire Tested: **VFS-K-B20-7-LED-E1-VAT**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P95420  
REPORT SCALED FROM IESNA LM79-08 TEST DATA (P22788)  
Test Lab: INNOVATION CENTER  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: VFS-K-B20-7-LED-E1-VAT  
Description: ARCHITECTURAL FLOOD LUMINAIRE  
VERTICAL ASYMMETRIC RECTANGULAR DISTRIBUTION  
WITH 20 LED'S, 700mA DRIVE CURRENT  
Light Source: -  
Ballast/Driver: -

**Summary**

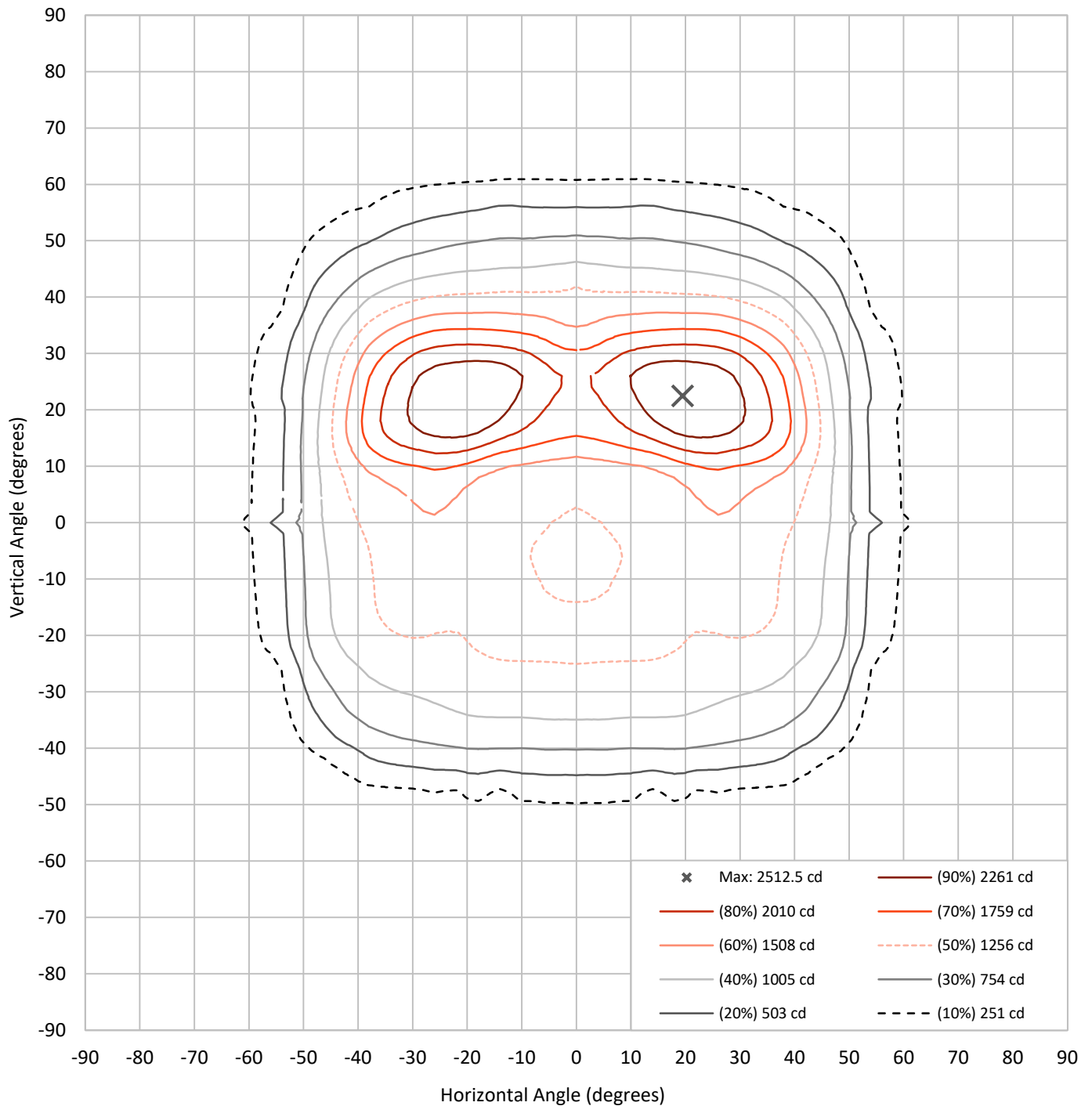
Lumens per Lamp:	N/A	NEMA Type:	6H x 6V
Luminaire Lumens:	3663.3 lumens	Max Intensity:	2512.5 candela
Efficiency:	N/A	Max Intensity Angle:	19.5°H x 22.5°V
Efficacy:	75.4 lumens/watt		
Luminous Opening:	(L: 0.83 ' x W: 0 ' x H: 0.5 ')		
Beam Angle (50%):	88.4°H x 62.2°V	Field Angle (10%):	119.7°H x 109.7°V
Beam Lumens:	2221.1 lumens	Field Lumens:	3519.4 lumens
Beam Efficiency:	60.6%	Field Efficiency:	96.1%
Input Watts (W):	48.6		
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:	25 FT		



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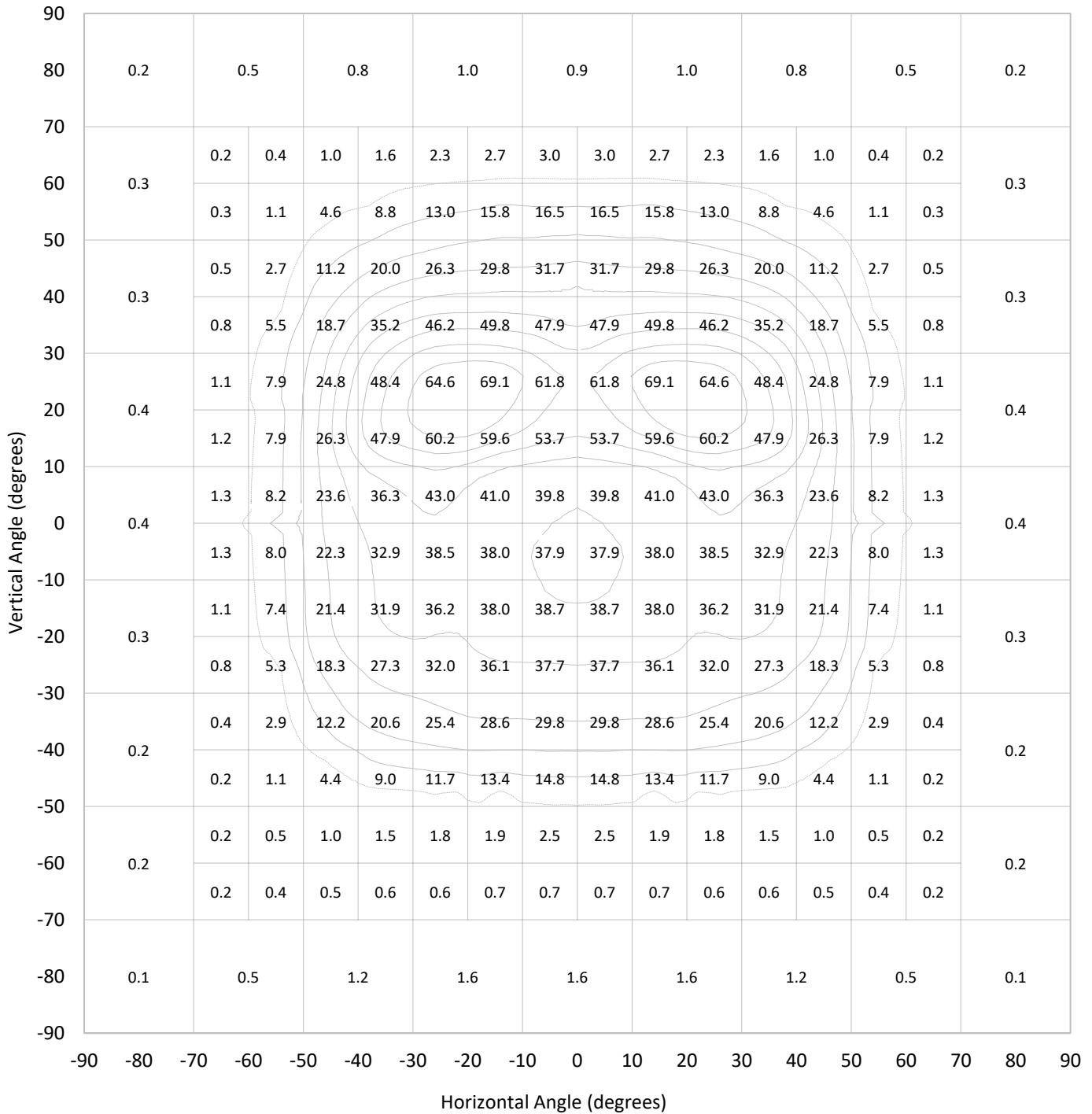
### Iso-Candela Plot





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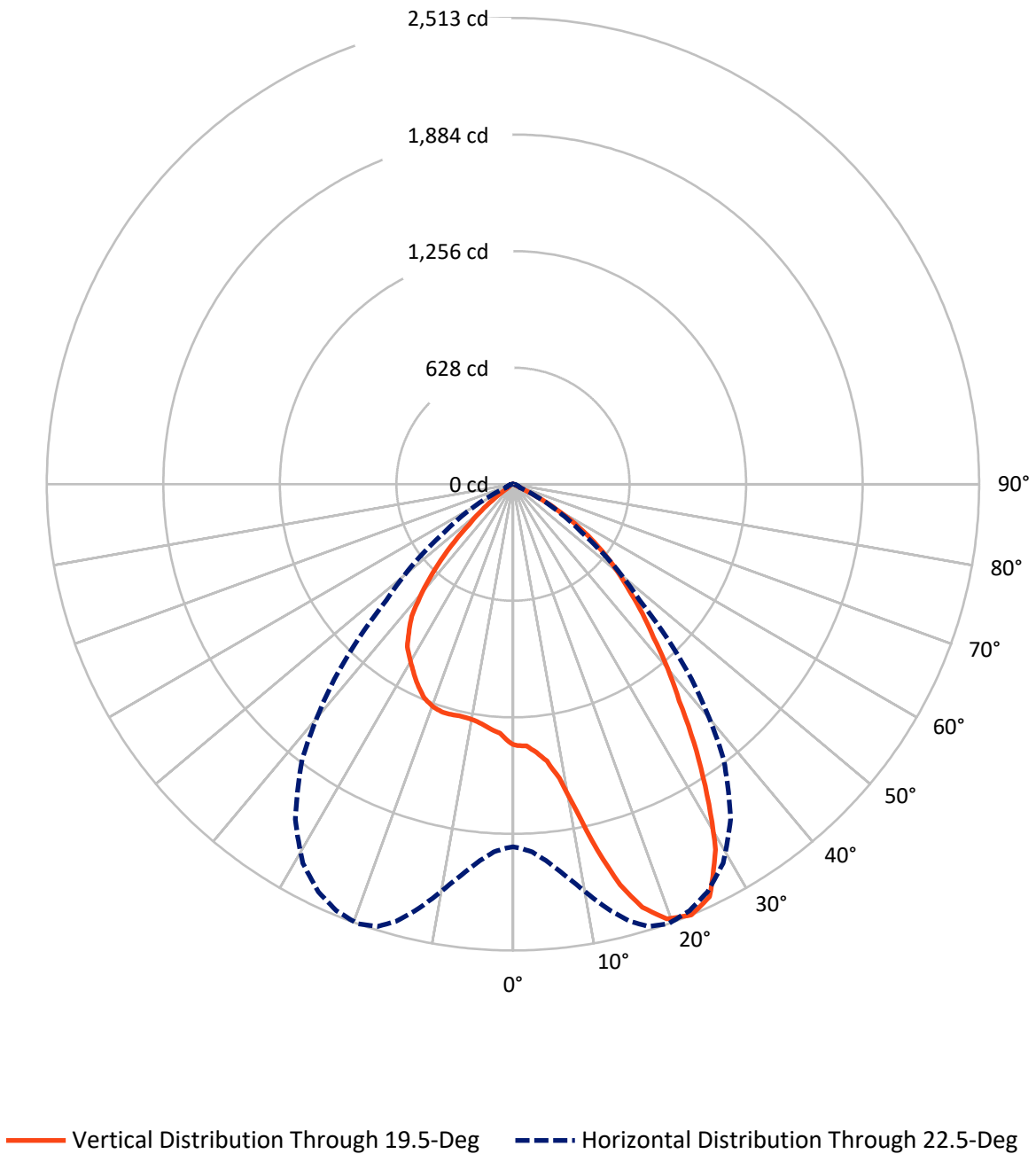
### Lumen Table



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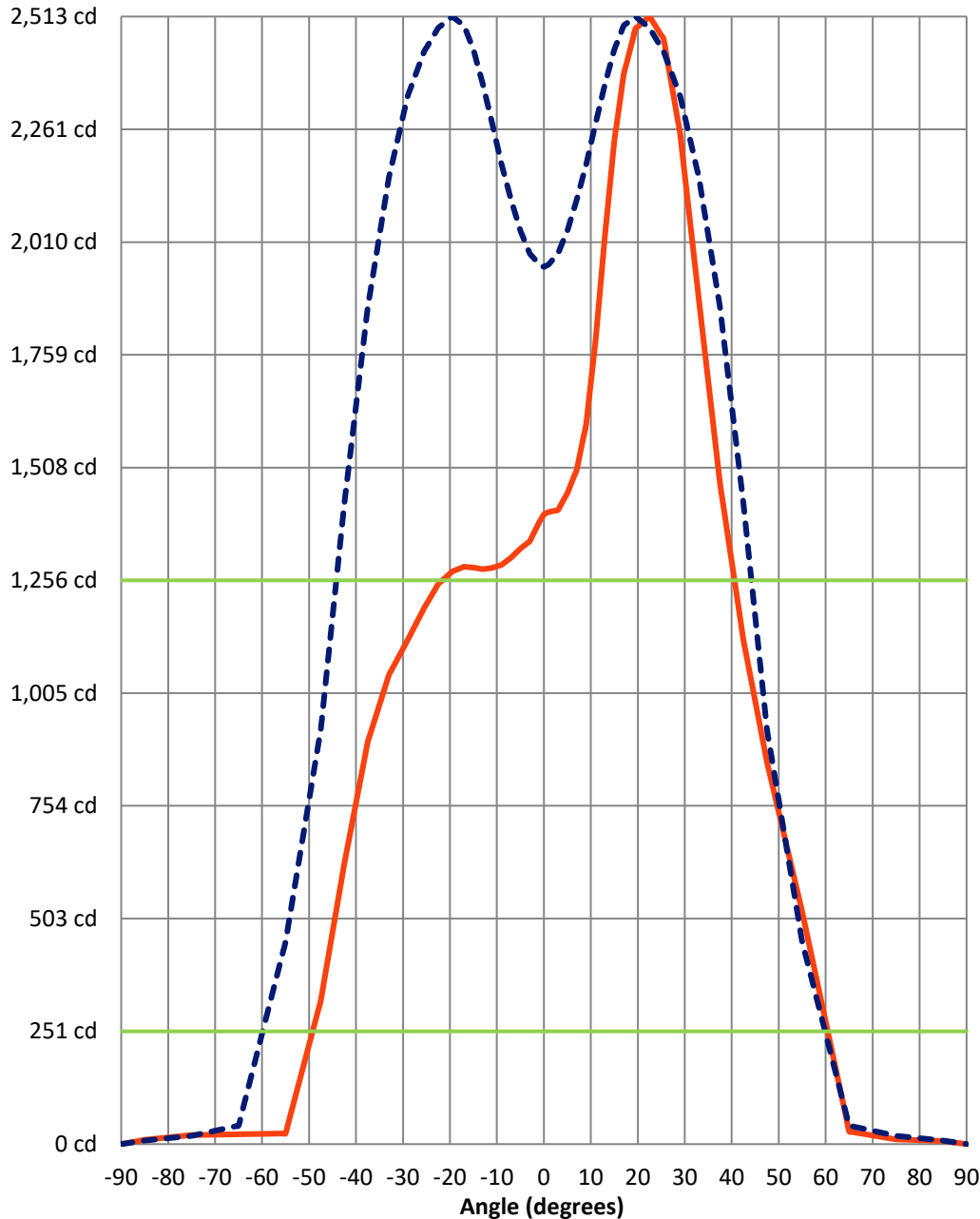
### Luminous Intensity Polar Plot



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### Luminous Intensity Plot



**Beam:**  
 H Angle: 88.4°  
 V Angle: 62.2°  
 Lumens: 2221.1  
 Efficiency: 60.6%

**Field:**  
 H Angle: 119.7°  
 V Angle: 109.7°  
 Lumens: 3519.4  
 Efficiency: 96.1%

**Spill:**  
 Lumens: 143.9  
 Efficiency: 3.9%

— Vertical Distribution through 19.5-Deg  
 - - - Horizontal Distribution through 22.5-Deg



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FIELD  
BEAM

**CANDELA DISTRIBUTION:**

	0°	1°	3°	5°	7°	9°	11°	13°	15°	17°	19.5°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	1.8	4.4	6.1	7.0	7.0	7.0	7.0	7.0	7.0
75°	7.0	7.9	10.5	9.6	6.1	5.3	7.0	7.9	8.8	9.6	10.5
65°	31.6	31.6	40.3	44.7	44.7	42.1	35.1	32.4	26.3	23.7	28.1
55°	553.4	549.9	547.2	549.0	548.1	551.6	565.6	574.4	561.3	533.2	517.4
47.5°	926.9	916.4	910.3	912.9	892.7	877.8	875.2	875.2	870.8	862.9	851.5
42.5°	1239.1	1230.4	1198.8	1177.7	1163.7	1162.8	1160.2	1159.3	1146.2	1125.1	1122.5
37.5°	1360.2	1364.5	1393.5	1431.2	1447.0	1454.9	1464.5	1477.7	1484.7	1483.8	1472.4
33°	1600.4	1600.4	1632.0	1700.4	1758.3	1795.1	1819.7	1839.9	1856.5	1870.5	1881.9
29°	1865.3	1865.3	1895.1	1958.2	2032.8	2107.3	2167.0	2211.7	2242.4	2255.5	2252.0
25.5°	1995.9	1999.5	2029.3	2088.9	2162.6	2245.9	2330.9	2395.8	2444.9	2466.9	2462.5
22.5°	1954.7	1960.0	1984.5	2035.4	2104.7	2182.7	2273.9	2361.6	2438.8	2492.3	2512.5
19.5°	1905.6	1910.0	1931.9	1973.1	2031.0	2098.6	2181.0	2273.1	2360.8	2435.3	2485.3
17°	1844.2	1849.5	1869.7	1905.6	1957.4	2020.5	2086.3	2158.2	2238.9	2316.0	2383.6
15°	1746.9	1753.9	1777.6	1805.6	1843.4	1894.2	1944.2	2000.3	2073.1	2152.9	2235.4
13°	1600.4	1608.3	1629.4	1649.6	1678.5	1724.1	1760.0	1799.5	1859.1	1935.4	2024.0
11°	1451.4	1460.1	1477.7	1491.7	1510.1	1540.8	1561.0	1589.0	1635.5	1701.3	1789.9
9°	1341.7	1346.1	1359.3	1370.7	1384.7	1411.0	1423.3	1441.7	1475.0	1523.3	1603.9
7°	1293.5	1297.9	1311.9	1323.3	1333.0	1355.8	1364.5	1375.9	1404.0	1436.5	1503.1
5°	1270.7	1273.3	1291.8	1298.8	1309.3	1331.2	1338.2	1346.1	1366.3	1390.8	1450.5
3°	1256.7	1259.3	1272.5	1282.1	1295.3	1311.9	1315.4	1324.2	1337.4	1357.5	1412.8
1°	1245.3	1246.2	1254.0	1264.6	1276.0	1288.2	1294.4	1303.2	1314.6	1345.2	1408.4
0°	1241.8	1242.6	1248.8	1257.6	1267.2	1277.7	1284.7	1293.5	1304.9	1339.1	1403.1
-1°	1239.1	1240.0	1245.3	1254.0	1261.9	1269.8	1276.8	1286.5	1297.0	1329.5	1385.6
-3°	1237.4	1237.4	1241.8	1247.9	1255.8	1261.1	1267.2	1276.0	1285.6	1304.9	1343.5
-5°	1234.8	1234.8	1238.3	1244.4	1251.4	1257.6	1264.6	1274.2	1284.7	1297.9	1326.8
-7°	1233.0	1233.0	1238.3	1243.5	1252.3	1258.4	1265.4	1275.1	1283.0	1289.1	1306.7
-9°	1237.4	1238.3	1242.6	1247.9	1255.8	1261.1	1267.2	1274.2	1280.4	1283.0	1290.9
-11°	1242.6	1242.6	1247.0	1253.2	1258.4	1263.7	1269.0	1276.8	1282.1	1282.1	1283.9
-13°	1247.0	1247.9	1250.5	1254.0	1261.1	1269.8	1276.8	1284.7	1288.2	1283.9	1281.2
-15°	1263.7	1262.8	1264.6	1268.1	1276.0	1286.5	1291.8	1295.3	1295.3	1290.0	1284.7
-17°	1292.6	1291.8	1293.5	1295.3	1302.3	1310.2	1315.4	1317.2	1311.0	1299.6	1286.5
-19.5°	1299.6	1300.5	1303.2	1304.0	1308.4	1312.8	1317.2	1318.1	1311.9	1298.8	1276.0
-22.5°	1295.3	1295.3	1293.5	1291.8	1293.5	1293.5	1295.3	1294.4	1287.4	1276.0	1247.9
-25.5°	1251.4	1249.7	1247.9	1243.5	1243.5	1238.3	1238.3	1236.5	1230.4	1218.1	1194.4
-29°	1175.1	1173.4	1171.6	1167.2	1163.7	1156.7	1157.6	1156.7	1151.4	1140.9	1123.4
-33°	1083.9	1082.2	1081.3	1079.5	1075.1	1066.4	1062.0	1062.9	1060.2	1056.7	1045.3
-37.5°	900.6	898.0	899.8	903.3	895.4	886.6	889.2	891.0	893.6	898.0	896.2
-42.5°	634.9	632.3	630.5	637.5	627.0	620.0	619.1	619.1	617.4	626.1	624.4
-47.5°	345.5	340.3	338.5	346.4	326.2	326.2	321.0	212.2	211.3	331.5	320.1
-55°	33.3	32.4	34.2	35.1	32.4	28.9	25.4	23.7	22.8	23.7	23.7
-65°	19.3	19.3	19.3	20.2	21.0	21.0	21.0	21.0	21.9	22.8	21.9
-75°	21.0	21.0	21.0	20.2	21.0	23.7	26.3	26.3	24.6	21.9	20.2
-85°	0.0	0.9	2.6	7.0	9.6	11.4	11.4	10.5	10.5	9.6	9.6
-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):**

	22.5°	25.5°	29°	33°	37.5°	42.5°	47.5°	55°	65°	75°	85°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.9	7.9
75°	11.4	11.4	11.4	10.5	11.4	9.6	8.8	8.8	10.5	8.8	7.9
65°	31.6	29.8	28.1	28.1	30.7	27.2	27.2	15.8	16.7	11.4	7.9
55°	492.0	470.9	435.8	384.1	280.6	245.5	149.1	38.6	21.9	15.8	7.9
47.5°	832.2	799.8	760.3	705.1	610.4	504.2	371.0	67.5	24.6	19.3	7.9
42.5°	1110.2	1084.8	1051.5	986.6	871.7	689.3	516.5	129.8	26.3	19.3	7.9
37.5°	1469.8	1458.4	1405.8	1313.7	1160.2	891.0	650.7	187.7	27.2	19.3	7.9
33°	1882.8	1863.5	1790.7	1652.2	1454.0	1108.5	770.0	331.5	31.6	19.3	7.9
29°	2232.7	2205.5	2118.7	1931.1	1679.4	1275.1	853.3	382.4	35.1	18.4	7.9
25.5°	2433.5	2393.2	2288.9	2087.2	1808.3	1374.2	894.5	420.1	37.7	18.4	7.9
22.5°	2487.0	2434.4	2335.3	2153.8	1864.4	1425.9	924.3	450.8	41.2	18.4	7.9
19.5°	2478.3	2430.9	2341.5	2184.5	1909.1	1473.3	959.4	370.1	45.6	18.4	7.9
17°	2401.1	2373.9	2301.1	2172.2	1923.2	1489.1	981.3	379.7	48.2	18.4	7.9
15°	2276.6	2259.9	2191.5	2079.3	1869.7	1468.0	992.7	385.9	50.9	18.4	7.9
13°	2079.3	2087.2	2019.6	1941.6	1772.3	1421.5	997.1	392.9	51.7	18.4	7.9
11°	1859.1	1891.6	1839.9	1786.4	1646.0	1357.5	989.2	398.1	52.6	17.5	7.9
9°	1676.7	1720.6	1675.9	1618.0	1521.5	1294.4	978.7	403.4	54.4	17.5	7.0
7°	1580.3	1626.8	1593.4	1534.7	1440.0	1251.4	971.7	407.8	56.1	17.5	7.0
5°	1526.8	1570.6	1546.1	1476.8	1393.5	1230.4	969.9	410.4	57.9	17.5	7.0
3°	1489.9	1532.0	1516.3	1435.6	1361.0	1213.7	969.0	411.3	58.8	17.5	7.0
1°	1460.1	1503.1	1489.9	1399.6	1330.3	1197.0	964.6	409.5	58.8	16.7	7.0
0°	1447.9	1489.9	1476.8	1383.8	1317.2	1188.3	962.0	554.2	59.6	17.5	7.0
-1°	1434.7	1475.9	1463.6	1368.0	1304.0	1178.6	958.5	406.9	59.6	17.5	7.0
-3°	1403.1	1442.6	1437.3	1349.6	1280.4	1161.1	947.1	403.4	58.8	16.7	7.0
-5°	1369.8	1411.0	1421.5	1347.9	1265.4	1145.3	935.7	398.1	57.9	17.5	7.0
-7°	1340.0	1386.5	1413.7	1359.3	1258.4	1135.7	926.9	392.0	56.1	17.5	7.0
-9°	1318.1	1368.9	1405.8	1367.2	1251.4	1126.0	918.2	386.7	53.5	17.5	7.0
-11°	1306.7	1356.6	1399.6	1369.8	1242.6	1119.0	912.0	379.7	52.6	18.4	7.0
-13°	1298.8	1343.5	1390.8	1367.2	1240.0	1112.9	905.0	373.6	50.9	17.5	7.0
-15°	1292.6	1325.1	1368.0	1353.1	1237.4	1107.6	904.1	366.6	50.0	16.7	7.0
-17°	1281.2	1299.6	1334.7	1319.8	1224.2	1100.6	906.8	358.7	48.2	15.8	7.0
-19.5°	1251.4	1255.8	1283.0	1263.7	1188.3	1076.0	890.1	342.0	45.6	14.9	7.0
-22.5°	1210.2	1201.4	1212.0	1196.2	1134.8	1023.4	841.9	307.8	40.3	13.2	7.0
-25.5°	1162.0	1141.8	1133.0	1114.6	1059.4	944.5	758.6	181.5	36.0	12.3	7.0
-29°	1099.7	1069.9	1044.5	1026.0	977.8	852.4	655.1	159.6	29.8	12.3	7.0
-33°	1019.9	988.3	958.5	934.0	884.8	753.3	538.5	128.9	23.7	11.4	7.0
-37.5°	870.8	845.4	814.7	777.9	716.5	592.8	393.8	93.0	17.5	10.5	7.9
-42.5°	607.7	592.8	567.4	537.6	478.8	301.7	192.1	60.5	15.8	9.6	7.9
-47.5°	211.3	266.6	216.6	207.0	201.7	157.0	109.6	36.8	14.0	9.6	7.9
-55°	27.2	28.9	35.1	36.0	35.1	31.6	29.8	28.1	12.3	8.8	7.9
-65°	21.9	21.9	21.0	20.2	21.9	23.7	21.0	21.9	10.5	7.9	7.9
-75°	18.4	18.4	21.0	21.9	20.2	19.3	14.9	12.3	8.8	7.9	7.9
-85°	9.6	8.8	8.8	8.8	8.8	8.8	7.9	7.9	7.9	7.9	7.9
-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):**

	90°
90°	0.0
85°	0.0
75°	0.0
65°	0.0
55°	0.0
47.5°	0.0
42.5°	0.0
37.5°	0.0
33°	0.0
29°	0.0
25.5°	0.0
22.5°	0.0
19.5°	0.0
17°	0.0
15°	0.0
13°	0.0
11°	0.0
9°	0.0
7°	0.0
5°	0.0
3°	0.0
1°	0.0
0°	0.0
-1°	0.0
-3°	0.0
-5°	0.0
-7°	0.0
-9°	0.0
-11°	0.0
-13°	0.0
-15°	0.0
-17°	0.0
-19.5°	0.0
-22.5°	0.0
-25.5°	0.0
-29°	0.0
-33°	0.0
-37.5°	0.0
-42.5°	0.0
-47.5°	0.0
-55°	0.0
-65°	0.0
-75°	0.0
-85°	0.0
-90°	0.0

(END OF REPORT)