

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: P95419

Luminaire Tested: **VFS-K-B20-5-LED-E1-VAT**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P95419
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-B20-5-LED-E1-VAT
Description: ARCHITECTURAL FLOOD LUMINAIRE
VERTICAL ASYMMETRIC RECTANGULAR DISTRIBUTION
WITH 20 LED'S, 525mA DRIVE CURRENT
Light Source: -
Ballast/Driver: -

Summary

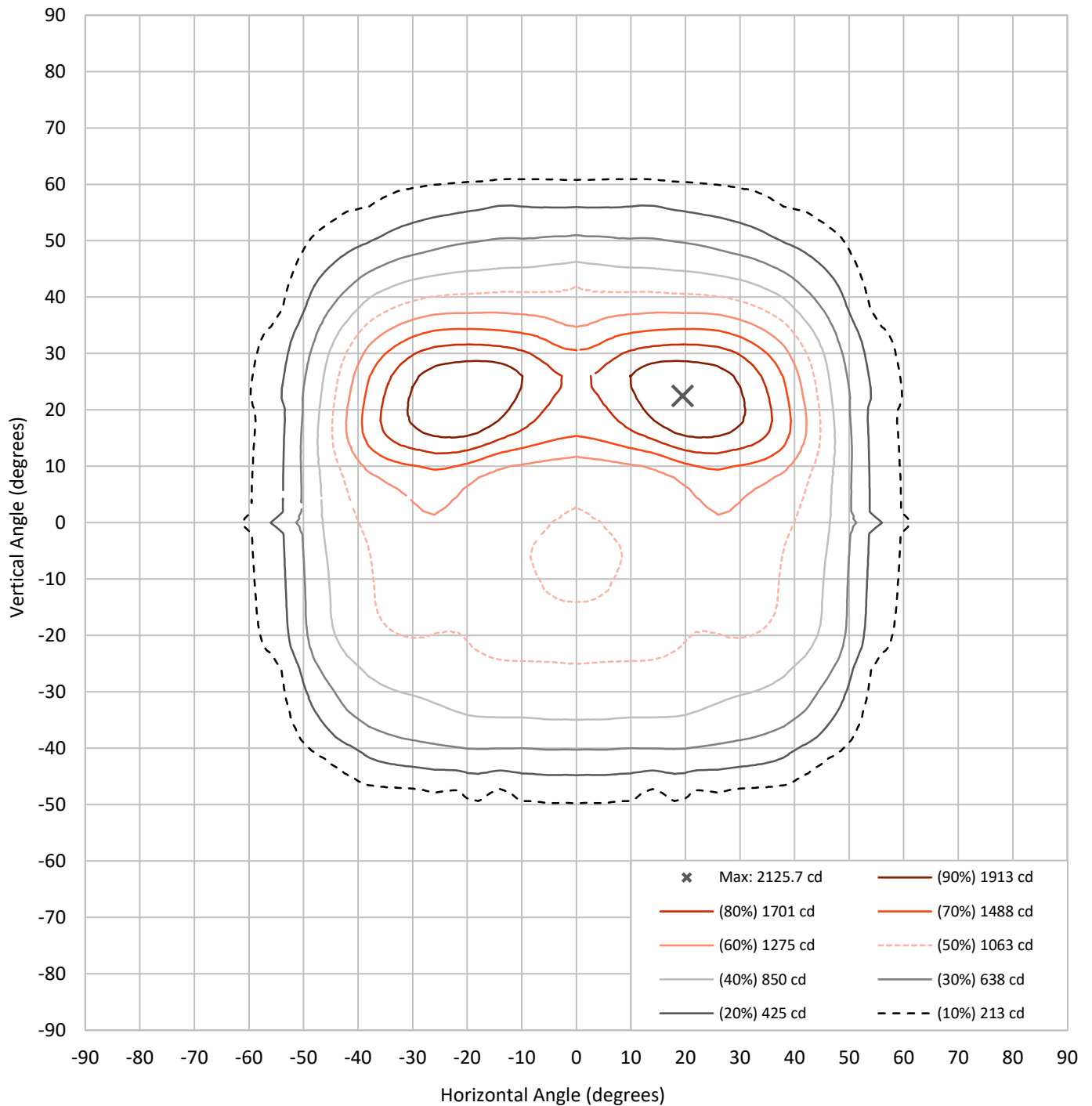
Lumens per Lamp:	N/A	NEMA Type:	6H x 6V
Luminaire Lumens:	3099.4 lumens	Max Intensity:	2125.7 candela
Efficiency:	N/A	Max Intensity Angle:	19.5°H x 22.5°V
Efficacy:	88.8 lumens/watt		
Luminous Opening:	(L: 0.83 ' x W: 0 ' x H: 0.5 ')		
Beam Angle (50%):	88.4°H x 62.2°V	Field Angle (10%):	119.7°H x 109.7°V
Beam Lumens:	1879.2 lumens	Field Lumens:	2977.7 lumens
Beam Efficiency:	60.6%	Field Efficiency:	96.1%
Input Watts (W):	34.9		
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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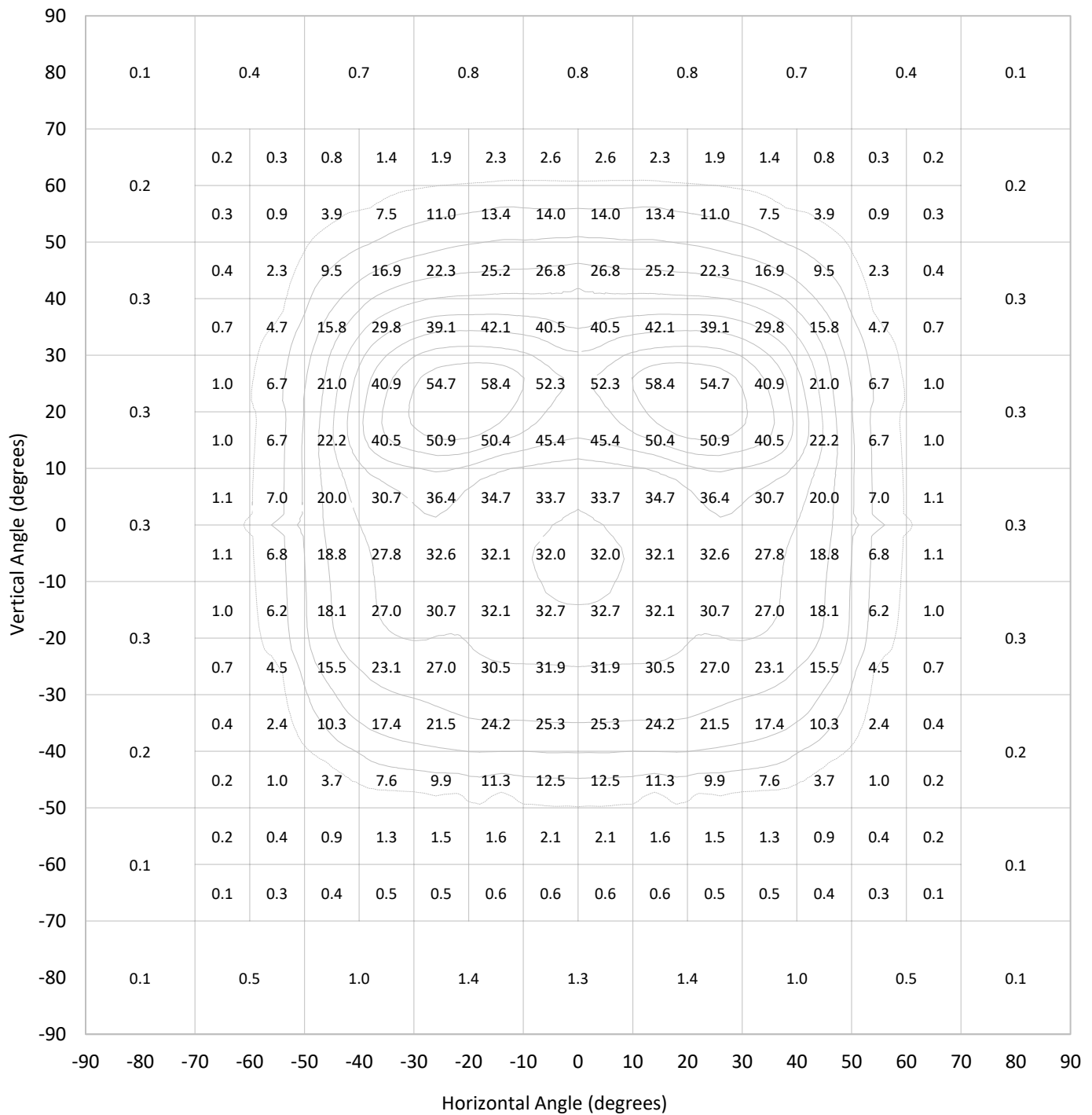
Iso-Candela Plot





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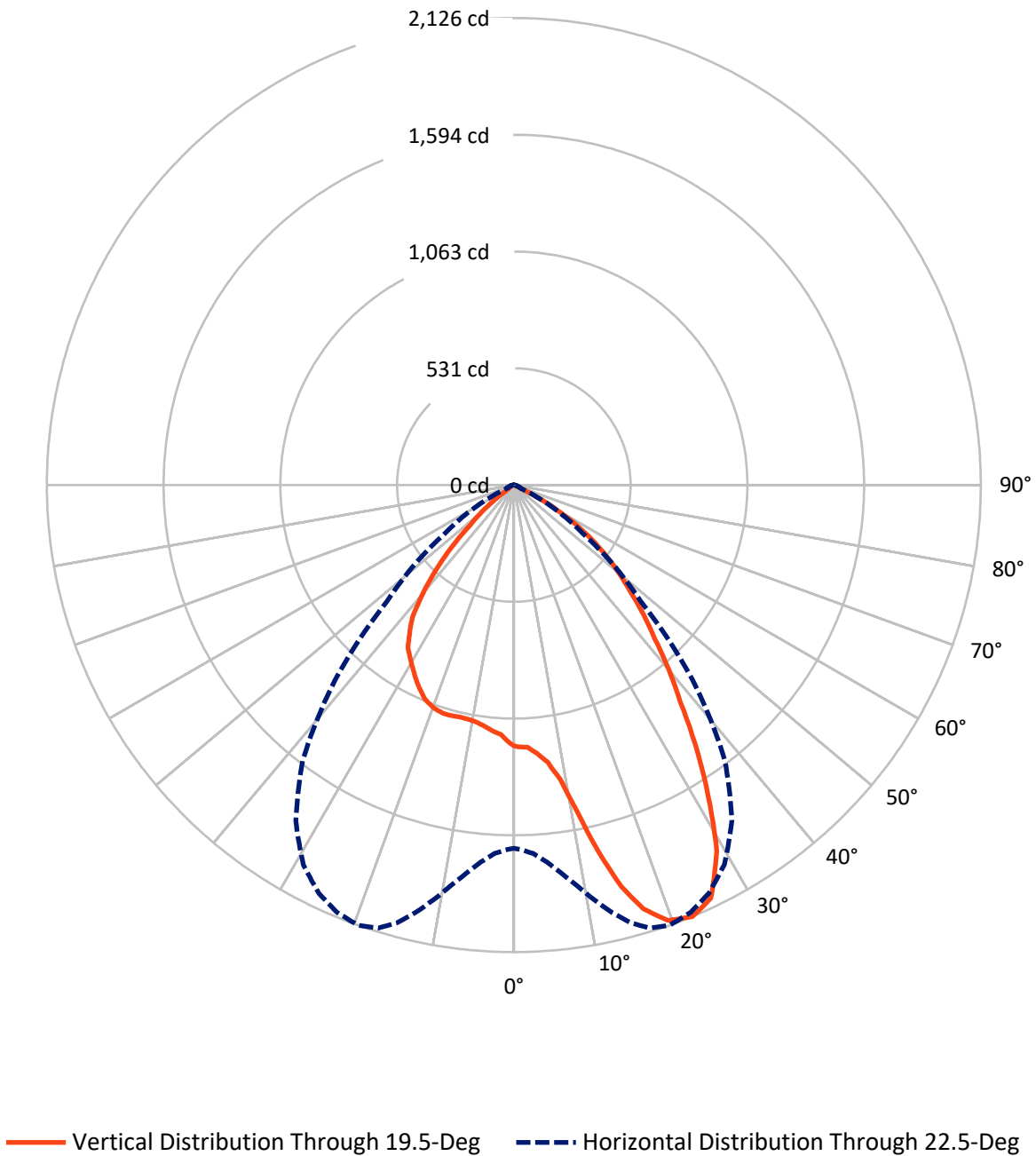
Lumen Table



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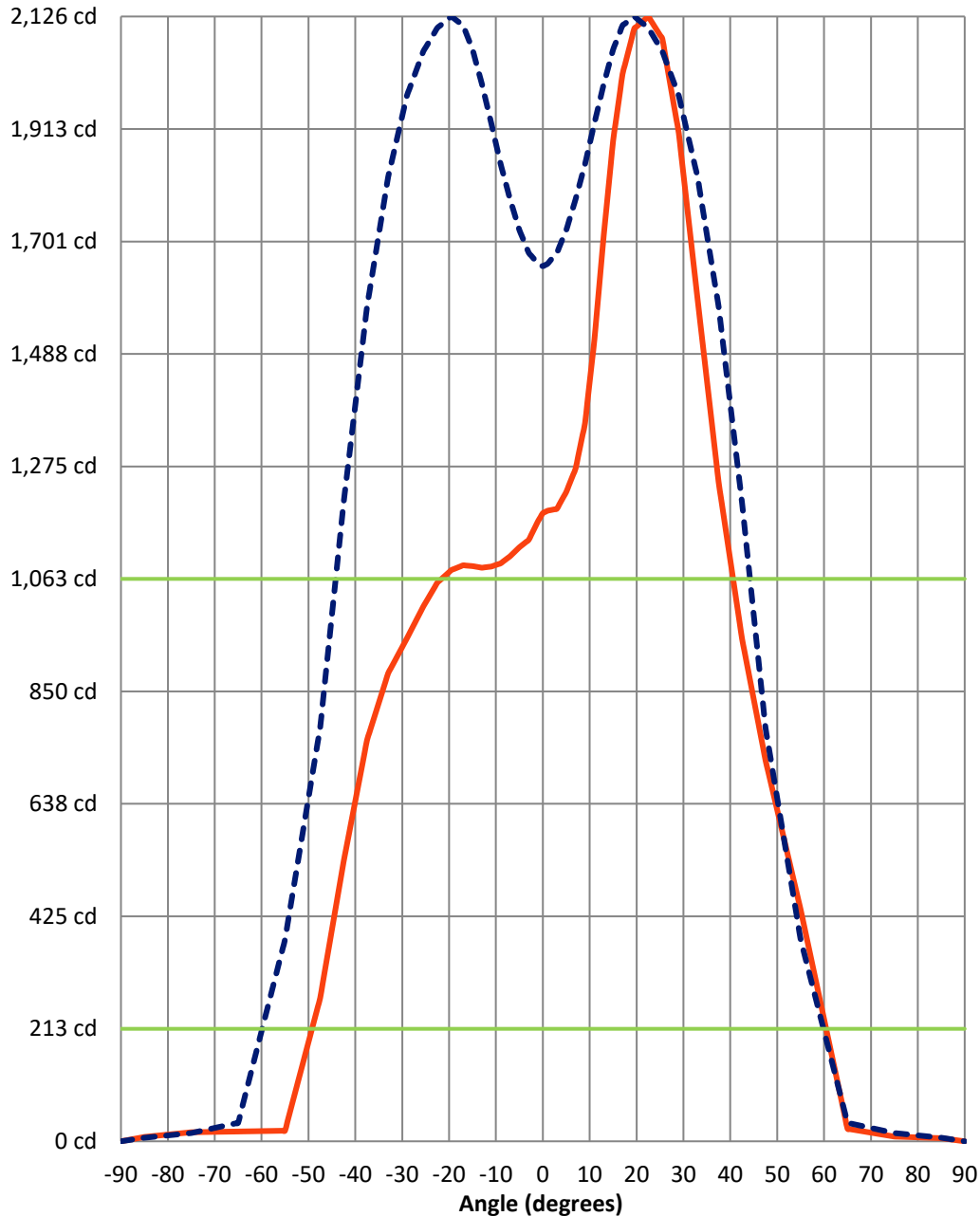
Luminous Intensity Polar Plot



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Luminous Intensity Plot



Beam:
 H Angle: 88.4°
 V Angle: 62.2°
 Lumens: 1879.2
 Efficiency: 60.6%

Field:
 H Angle: 119.7°
 V Angle: 109.7°
 Lumens: 2977.7
 Efficiency: 96.1%

Spill:
 Lumens: 121.7
 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	1.5	3.7	5.2	5.9	5.9	5.9	5.9	5.9	5.9
75°	5.9	6.7	8.9	8.2	5.2	4.5	5.9	6.7	7.4	8.2	8.9
65°	26.7	26.7	34.1	37.8	37.8	35.6	29.7	27.5	22.3	20.0	23.7
55°	468.2	465.2	463.0	464.5	463.7	466.7	478.6	486.0	474.9	451.1	437.8
47.5°	784.3	775.4	770.2	772.4	755.3	742.7	740.5	740.5	736.8	730.1	720.4
42.5°	1048.4	1041.0	1014.3	996.5	984.6	983.8	981.6	980.9	969.7	951.9	949.7
37.5°	1150.8	1154.5	1179.0	1210.9	1224.2	1230.9	1239.1	1250.2	1256.1	1255.4	1245.8
33°	1354.1	1354.1	1380.8	1438.7	1487.6	1518.8	1539.6	1556.6	1570.7	1582.6	1592.3
29°	1578.2	1578.2	1603.4	1656.8	1719.9	1782.9	1833.4	1871.2	1897.2	1908.3	1905.4
25.5°	1688.7	1691.7	1716.9	1767.4	1829.7	1900.2	1972.1	2027.0	2068.6	2087.1	2083.4
22.5°	1653.8	1658.3	1679.1	1722.1	1780.7	1846.8	1923.9	1998.1	2063.4	2108.7	2125.7
19.5°	1612.3	1616.0	1634.5	1669.4	1718.4	1775.5	1845.3	1923.2	1997.4	2060.4	2102.7
17°	1560.4	1564.8	1581.9	1612.3	1656.1	1709.5	1765.1	1826.0	1894.2	1959.5	2016.7
15°	1478.0	1483.9	1504.0	1527.7	1559.6	1602.6	1644.9	1692.4	1754.0	1821.5	1891.3
13°	1354.1	1360.8	1378.6	1395.6	1420.1	1458.7	1489.1	1522.5	1573.0	1637.5	1712.5
11°	1228.0	1235.4	1250.2	1262.1	1277.7	1303.6	1320.7	1344.4	1383.8	1439.4	1514.4
9°	1135.2	1138.9	1150.0	1159.7	1171.6	1193.8	1204.2	1219.8	1248.0	1288.8	1357.1
7°	1094.4	1098.1	1110.0	1119.6	1127.8	1147.1	1154.5	1164.1	1187.9	1215.3	1271.7
5°	1075.1	1077.3	1092.9	1098.9	1107.8	1126.3	1132.2	1138.9	1156.0	1176.8	1227.2
3°	1063.2	1065.5	1076.6	1084.8	1095.9	1110.0	1112.9	1120.4	1131.5	1148.6	1195.3
1°	1053.6	1054.3	1061.0	1069.9	1079.6	1089.9	1095.1	1102.6	1112.2	1138.2	1191.6
0°	1050.6	1051.4	1056.6	1064.0	1072.1	1081.0	1087.0	1094.4	1104.0	1133.0	1187.1
-1°	1048.4	1049.1	1053.6	1061.0	1067.7	1074.4	1080.3	1088.5	1097.4	1124.8	1172.3
-3°	1046.9	1046.9	1050.6	1055.8	1062.5	1066.9	1072.1	1079.6	1087.7	1104.0	1136.7
-5°	1044.7	1044.7	1047.7	1052.8	1058.8	1064.0	1069.9	1078.1	1087.0	1098.1	1122.6
-7°	1043.2	1043.2	1047.7	1052.1	1059.5	1064.7	1070.7	1078.8	1085.5	1090.7	1105.5
-9°	1046.9	1047.7	1051.4	1055.8	1062.5	1066.9	1072.1	1078.1	1083.3	1085.5	1092.2
-11°	1051.4	1051.4	1055.1	1060.3	1064.7	1069.2	1073.6	1080.3	1084.8	1084.8	1086.2
-13°	1055.1	1055.8	1058.0	1061.0	1066.9	1074.4	1080.3	1087.0	1089.9	1086.2	1084.0
-15°	1069.2	1068.4	1069.9	1072.9	1079.6	1088.5	1092.9	1095.9	1095.9	1091.4	1087.0
-17°	1093.7	1092.9	1094.4	1095.9	1101.8	1108.5	1112.9	1114.4	1109.2	1099.6	1088.5
-19.5°	1099.6	1100.3	1102.6	1103.3	1107.0	1110.7	1114.4	1115.2	1110.0	1098.9	1079.6
-22.5°	1095.9	1095.9	1094.4	1092.9	1094.4	1094.4	1095.9	1095.1	1089.2	1079.6	1055.8
-25.5°	1058.8	1057.3	1055.8	1052.1	1052.1	1047.7	1047.7	1046.2	1041.0	1030.6	1010.6
-29°	994.2	992.7	991.3	987.6	984.6	978.7	979.4	978.7	974.2	965.3	950.5
-33°	917.1	915.6	914.8	913.4	909.6	902.2	898.5	899.3	897.0	894.1	884.4
-37.5°	762.0	759.8	761.3	764.2	757.5	750.1	752.4	753.8	756.1	759.8	758.3
-42.5°	537.2	535.0	533.5	539.4	530.5	524.6	523.8	523.8	522.3	529.8	528.3
-47.5°	292.3	287.9	286.4	293.1	276.0	276.0	271.6	179.6	178.8	280.5	270.8
-55°	28.2	27.5	28.9	29.7	27.5	24.5	21.5	20.0	19.3	20.0	20.0
-65°	16.3	16.3	16.3	17.1	17.8	17.8	17.8	17.8	18.5	19.3	18.5
-75°	17.8	17.8	17.8	17.1	17.8	20.0	22.3	22.3	20.8	18.5	17.1
-85°	0.0	0.7	2.2	5.9	8.2	9.6	9.6	8.9	8.9	8.2	8.2
-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):

	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°	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	6.7	6.7
75°	9.6	9.6	9.6	8.9	9.6	8.2	7.4	7.4	8.9	7.4	6.7
65°	26.7	25.2	23.7	23.7	26.0	23.0	23.0	13.4	14.1	9.6	6.7
55°	416.2	398.4	368.8	325.0	237.4	207.8	126.1	32.6	18.5	13.4	6.7
47.5°	704.1	676.7	643.3	596.5	516.4	426.6	313.9	57.1	20.8	16.3	6.7
42.5°	939.3	917.8	889.6	834.7	737.5	583.2	437.0	109.8	22.3	16.3	6.7
37.5°	1243.5	1233.9	1189.4	1111.5	981.6	753.8	550.5	158.8	23.0	16.3	6.7
33°	1593.0	1576.7	1515.1	1397.9	1230.2	937.8	651.4	280.5	26.7	16.3	6.7
29°	1889.0	1866.0	1792.6	1633.8	1420.9	1078.8	721.9	323.5	29.7	15.6	6.7
25.5°	2059.0	2024.8	1936.5	1765.9	1529.9	1162.7	756.8	355.4	31.9	15.6	6.7
22.5°	2104.2	2059.7	1975.9	1822.3	1577.4	1206.4	782.0	381.4	34.9	15.6	6.7
19.5°	2096.8	2056.7	1981.0	1848.2	1615.3	1246.5	811.7	313.1	38.6	15.6	6.7
17°	2031.5	2008.5	1946.9	1837.8	1627.1	1259.9	830.3	321.3	40.8	15.6	6.7
15°	1926.1	1912.0	1854.2	1759.2	1581.9	1242.0	839.9	326.5	43.0	15.6	6.7
13°	1759.2	1765.9	1708.7	1642.7	1499.5	1202.7	843.6	332.4	43.8	15.6	6.7
11°	1573.0	1600.4	1556.6	1511.4	1392.7	1148.6	836.9	336.9	44.5	14.8	6.7
9°	1418.6	1455.7	1417.9	1368.9	1287.3	1095.1	828.0	341.3	46.0	14.8	5.9
7°	1337.0	1376.3	1348.2	1298.4	1218.3	1058.8	822.1	345.0	47.5	14.8	5.9
5°	1291.8	1328.9	1308.1	1249.5	1179.0	1041.0	820.6	347.2	49.0	14.8	5.9
3°	1260.6	1296.2	1282.9	1214.6	1151.5	1026.9	819.9	348.0	49.7	14.8	5.9
1°	1235.4	1271.7	1260.6	1184.2	1125.6	1012.8	816.2	346.5	49.7	14.1	5.9
0°	1225.0	1260.6	1249.5	1170.8	1114.4	1005.4	813.9	468.9	50.5	14.8	5.9
-1°	1213.9	1248.7	1238.3	1157.5	1103.3	997.2	811.0	344.3	50.5	14.8	5.9
-3°	1187.1	1220.5	1216.1	1141.9	1083.3	982.4	801.3	341.3	49.7	14.1	5.9
-5°	1158.9	1193.8	1202.7	1140.4	1070.7	969.0	791.7	336.9	49.0	14.8	5.9
-7°	1133.7	1173.0	1196.0	1150.0	1064.7	960.8	784.3	331.7	47.5	14.8	5.9
-9°	1115.2	1158.2	1189.4	1156.7	1058.8	952.7	776.8	327.2	45.3	14.8	5.9
-11°	1105.5	1147.8	1184.2	1158.9	1051.4	946.7	771.6	321.3	44.5	15.6	5.9
-13°	1098.9	1136.7	1176.8	1156.7	1049.1	941.6	765.7	316.1	43.0	14.8	5.9
-15°	1093.7	1121.1	1157.5	1144.9	1046.9	937.1	765.0	310.1	42.3	14.1	5.9
-17°	1084.0	1099.6	1129.3	1116.7	1035.8	931.2	767.2	303.5	40.8	13.4	5.9
-19.5°	1058.8	1062.5	1085.5	1069.2	1005.4	910.4	753.1	289.4	38.6	12.6	5.9
-22.5°	1023.9	1016.5	1025.4	1012.0	960.1	865.9	712.3	260.4	34.1	11.1	5.9
-25.5°	983.1	966.0	958.6	943.0	896.3	799.1	641.8	153.6	30.4	10.4	5.9
-29°	930.4	905.2	883.7	868.1	827.3	721.2	554.2	135.0	25.2	10.4	5.9
-33°	862.9	836.2	811.0	790.2	748.6	637.3	455.6	109.1	20.0	9.6	5.9
-37.5°	736.8	715.3	689.3	658.1	606.2	501.6	333.1	78.6	14.8	8.9	6.7
-42.5°	514.2	501.6	480.1	454.8	405.1	255.2	162.5	51.2	13.4	8.2	6.7
-47.5°	178.8	225.6	183.3	175.1	170.7	132.8	92.7	31.2	11.9	8.2	6.7
-55°	23.0	24.5	29.7	30.4	29.7	26.7	25.2	23.7	10.4	7.4	6.7
-65°	18.5	18.5	17.8	17.1	18.5	20.0	17.8	18.5	8.9	6.7	6.7
-75°	15.6	15.6	17.8	18.5	17.1	16.3	12.6	10.4	7.4	6.7	6.7
-85°	8.2	7.4	7.4	7.4	7.4	7.4	6.7	6.7	6.7	6.7	6.7
-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):

	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)