

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: P148729

Luminaire Tested: **VXS-E02-LED-E1-RW-7030**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P148729  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33677)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: VXS-E02-LED-E1-RW-7030  
Description: VISION SITE SMALL LED LUMINAIRE  
(2) LIGHTBARS WITH AccuLED OPTICS - RECTANGULAR WIDE  
Light Source: (42) 3000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5706.5 lumens  
Efficiency: N/A  
Efficacy: 109.5 lumens/watt  
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')  
IES Classification: Type I - Short - Full Cutoff  
BUG Rating: B3 - U0 - G3

Input Watts (W): 52.1  
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



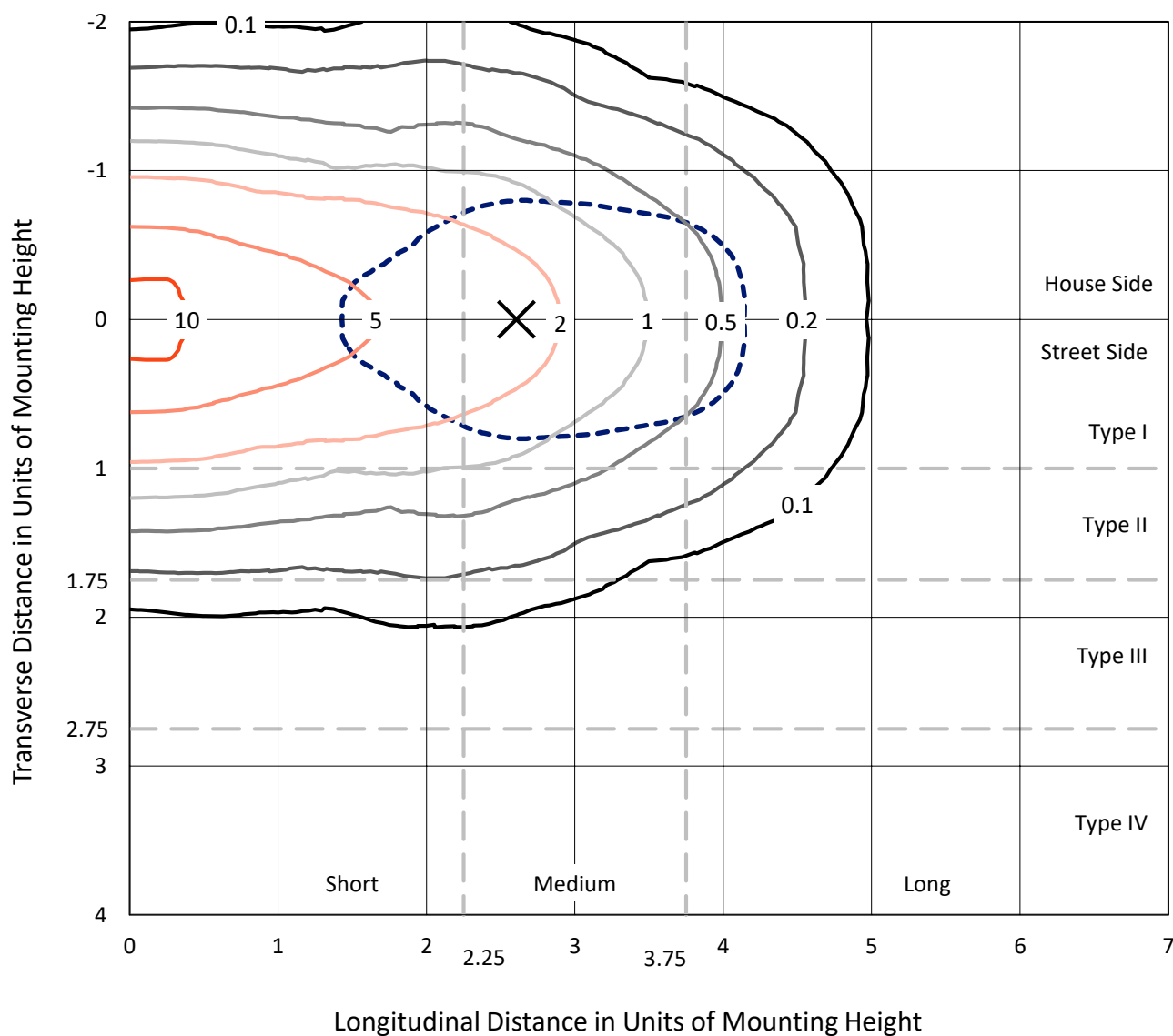
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CATALOG NUMBER: VXS-E02-LED-E1-RW-7030

## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

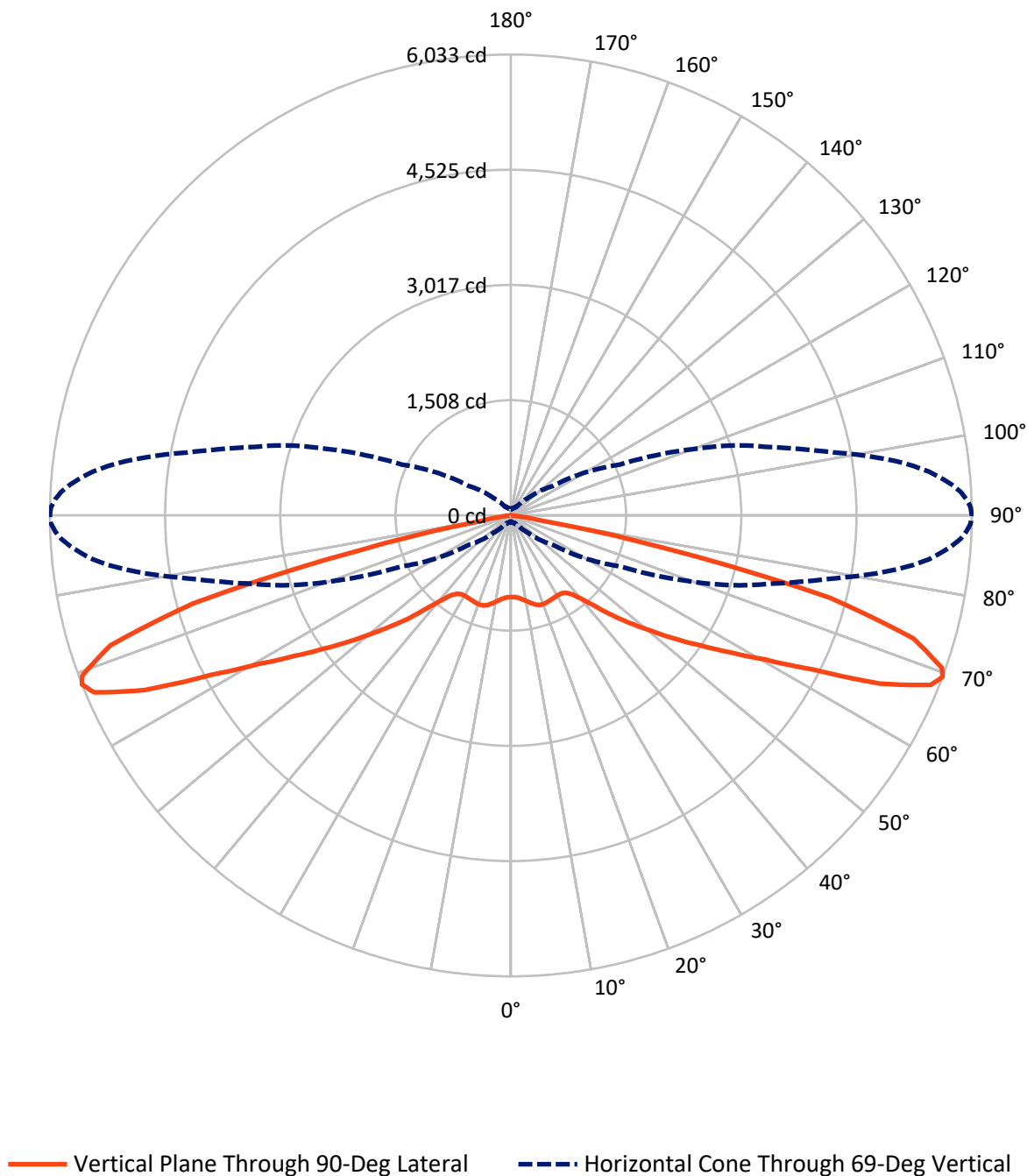


Based on 10 foot mounting height. Maximum calculated value = 10.9 fc  
Type I - Short - Full Cutoff

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## Luminous Intensity Polar Plot



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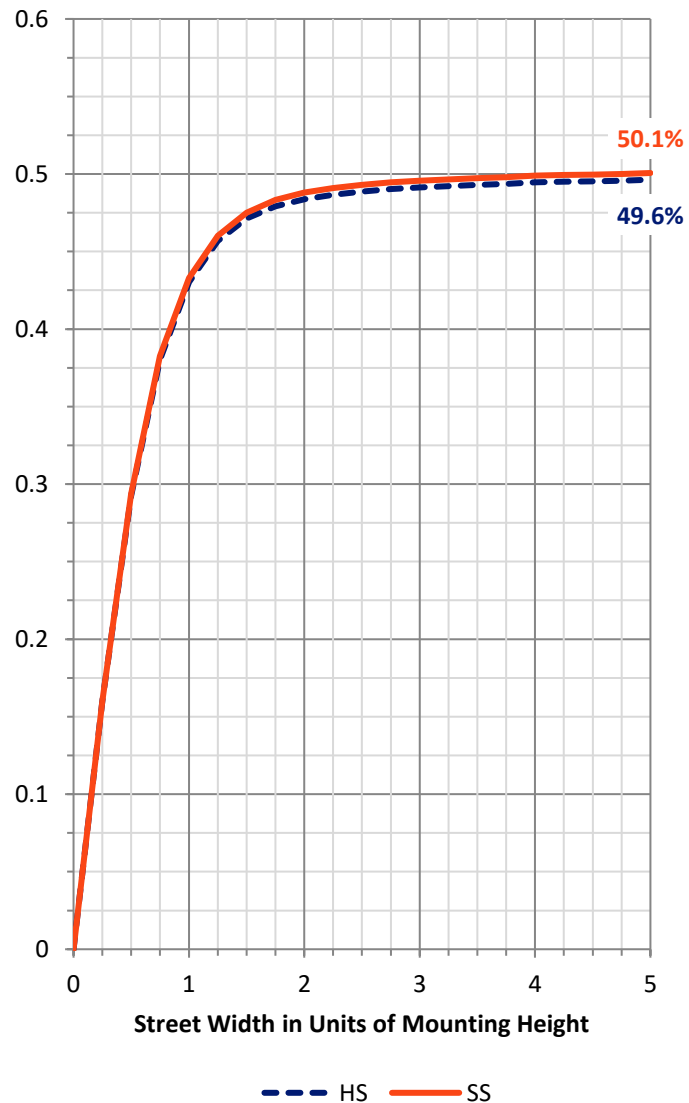
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 2853.3   | 0.0    | 2853.3 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Street Side</b> | Lumens    | 2853.3   | 0.0    | 2853.3 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Total</b>       | Lumens    | 5706.5   | 0.0    | 5706.5 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 104.9  | 1.8       |
| 10°-20°   | 330.9  | 5.8       |
| 20°-30°   | 536.0  | 9.4       |
| 30°-40°   | 668.0  | 11.7      |
| 40°-50°   | 834.8  | 14.6      |
| 50°-60°   | 1030.8 | 18.1      |
| 60°-70°   | 1280.8 | 22.4      |
| 70°-80°   | 850.3  | 14.9      |
| 80°-90°   | 70.2   | 1.2       |
| 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°    | 5706.5 | 100.0     |
| 0°-180°   | 5706.5 | 100.0     |

**Coefficient of Utilization**



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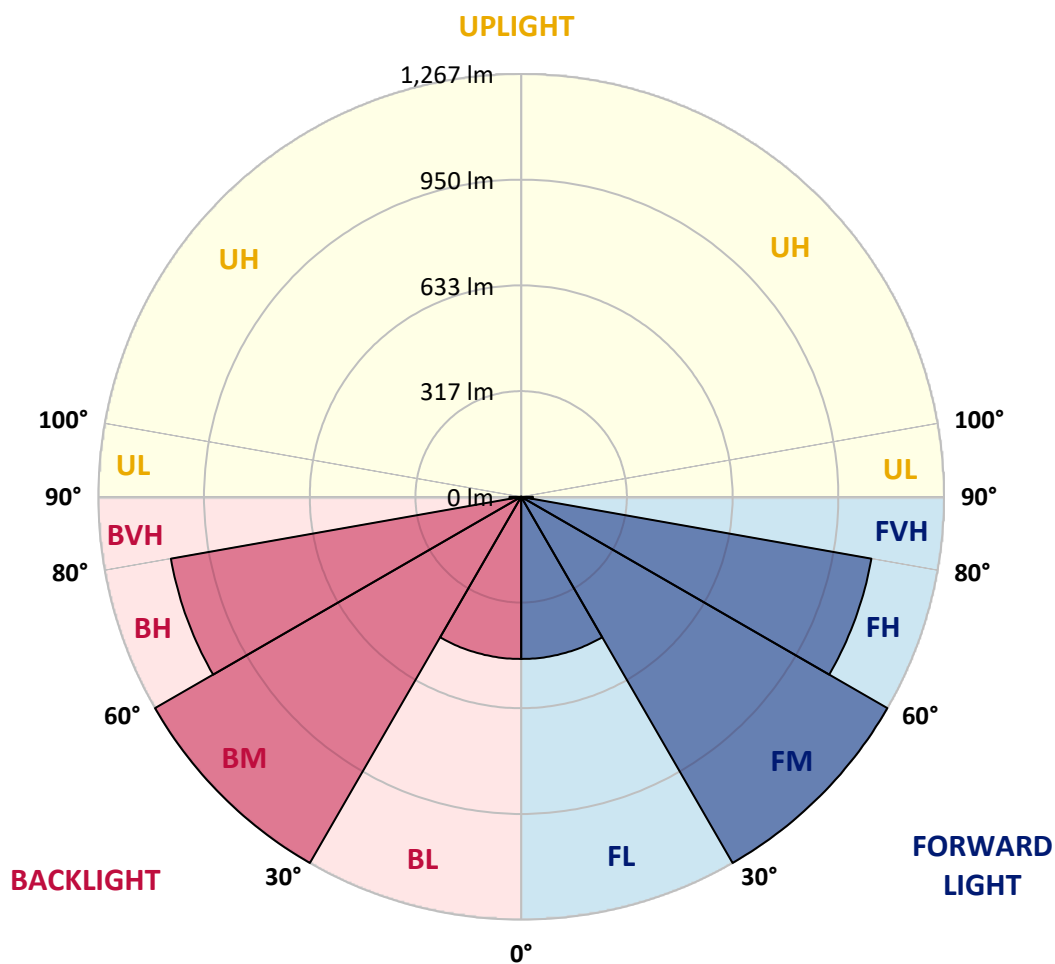
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 485.9  | 8.5       |                         |      |         |
| FM   | (30°-60°)   | 1266.8 | 22.2      |                         |      |         |
| FH   | (60°-80°)   | 1065.5 | 18.7      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 35.1   | 0.6       |                         |      | G1/100  |
| BL   | (0°-30°)    | 485.9  | 8.5       | B1/500                  |      |         |
| BM   | (30°-60°)   | 1266.8 | 22.2      | B2/2500                 |      |         |
| BH   | (60°-80°)   | 1065.5 | 18.7      | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 35.1   | 0.6       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G3**

Type I Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 66°    | 67°    | 68°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1069.2 | 1069.2 | 1069.2 | 1069.2 | 1069.2 | 1069.2 | 1069.2 | 1069.2 | 1069.2 | 1069.2 | 1069.2 |
| 2.5°  | 1074.1 | 1075.0 | 1074.4 | 1075.6 | 1075.4 | 1075.3 | 1074.7 | 1073.6 | 1073.4 | 1073.2 | 1073.1 |
| 5°    | 1084.4 | 1083.2 | 1085.0 | 1086.8 | 1086.2 | 1086.6 | 1086.2 | 1086.2 | 1086.1 | 1086.0 | 1085.9 |
| 7.5°  | 1095.4 | 1095.2 | 1096.4 | 1101.2 | 1101.8 | 1103.6 | 1105.8 | 1107.2 | 1107.3 | 1107.4 | 1107.4 |
| 10°   | 1104.8 | 1105.1 | 1108.2 | 1115.2 | 1118.8 | 1124.6 | 1130.4 | 1135.0 | 1135.3 | 1135.7 | 1136.0 |
| 12.5° | 1112.5 | 1112.8 | 1117.4 | 1128.3 | 1137.1 | 1148.1 | 1160.6 | 1167.6 | 1168.2 | 1168.8 | 1169.4 |
| 15°   | 1113.0 | 1113.9 | 1121.9 | 1139.8 | 1157.5 | 1175.4 | 1190.4 | 1199.8 | 1200.3 | 1200.8 | 1201.3 |
| 17.5° | 1105.2 | 1105.8 | 1119.2 | 1145.6 | 1175.2 | 1203.2 | 1218.8 | 1222.9 | 1223.1 | 1223.3 | 1223.5 |
| 20°   | 1084.4 | 1086.0 | 1104.8 | 1144.2 | 1189.2 | 1225.7 | 1241.9 | 1236.1 | 1235.5 | 1234.9 | 1234.4 |
| 22.5° | 1050.9 | 1050.7 | 1075.4 | 1128.3 | 1192.0 | 1243.4 | 1257.7 | 1242.4 | 1240.6 | 1238.8 | 1237.0 |
| 25°   | 996.8  | 1000.4 | 1029.4 | 1092.7 | 1176.4 | 1247.4 | 1269.0 | 1245.8 | 1243.2 | 1240.6 | 1238.0 |
| 27.5° | 938.0  | 940.2  | 970.9  | 1038.8 | 1140.2 | 1233.6 | 1274.4 | 1252.6 | 1249.7 | 1246.8 | 1243.9 |
| 30°   | 869.4  | 872.2  | 905.1  | 976.0  | 1082.0 | 1198.4 | 1272.9 | 1267.8 | 1264.4 | 1261.0 | 1257.6 |
| 32.5° | 802.6  | 805.6  | 835.1  | 912.8  | 1020.8 | 1149.9 | 1263.8 | 1289.4 | 1285.9 | 1282.4 | 1278.9 |
| 35°   | 733.2  | 737.7  | 773.6  | 852.1  | 961.7  | 1096.0 | 1249.8 | 1317.0 | 1315.1 | 1313.2 | 1311.3 |
| 37.5° | 675.6  | 676.5  | 711.2  | 793.6  | 907.0  | 1044.6 | 1231.2 | 1352.1 | 1353.5 | 1354.9 | 1356.3 |
| 40°   | 611.3  | 617.1  | 651.8  | 738.9  | 857.3  | 1001.0 | 1213.5 | 1399.6 | 1406.9 | 1414.1 | 1421.4 |
| 42.5° | 553.8  | 554.4  | 589.6  | 679.6  | 803.4  | 966.0  | 1203.8 | 1456.8 | 1472.4 | 1487.9 | 1503.5 |
| 45°   | 493.2  | 495.6  | 527.6  | 614.4  | 741.3  | 924.6  | 1203.6 | 1522.9 | 1547.7 | 1572.5 | 1597.4 |
| 47.5° | 436.0  | 436.8  | 470.6  | 551.4  | 670.1  | 866.7  | 1201.4 | 1593.8 | 1627.6 | 1661.4 | 1695.3 |
| 50°   | 381.2  | 380.2  | 413.4  | 491.1  | 599.8  | 791.0  | 1182.8 | 1674.2 | 1716.9 | 1759.6 | 1802.3 |
| 52.5° | 318.5  | 322.8  | 357.1  | 431.4  | 535.8  | 714.0  | 1128.6 | 1762.2 | 1813.2 | 1864.3 | 1915.4 |
| 55°   | 257.0  | 258.8  | 295.6  | 365.0  | 471.0  | 642.1  | 1034.2 | 1843.2 | 1903.4 | 1963.6 | 2023.8 |
| 57.5° | 189.4  | 194.9  | 227.1  | 295.6  | 405.2  | 581.5  | 914.2  | 1885.2 | 1958.4 | 2031.7 | 2105.0 |
| 60°   | 133.7  | 137.9  | 166.5  | 224.0  | 333.1  | 517.9  | 811.0  | 1861.8 | 1957.0 | 2052.2 | 2147.4 |
| 62.5° | 104.1  | 107.4  | 130.4  | 167.8  | 259.7  | 454.2  | 737.0  | 1785.9 | 1915.5 | 2045.0 | 2174.6 |
| 65°   | 91.3   | 94.4   | 115.0  | 134.3  | 194.0  | 389.4  | 696.6  | 1705.8 | 1877.1 | 2048.4 | 2219.7 |
| 67.5° | 82.5   | 86.2   | 104.1  | 117.6  | 158.0  | 339.8  | 685.9  | 1655.3 | 1849.3 | 2043.3 | 2237.3 |
| 69°   | 78.6   | 82.2   | 98.4   | 109.6  | 146.7  | 322.1  | 667.7  | 1575.8 | 1768.7 | 1961.6 | 2154.4 |
| 70°   | 76.1   | 79.2   | 94.1   | 105.6  | 143.1  | 309.9  | 637.2  | 1476.6 | 1666.0 | 1855.4 | 2044.8 |
| 72.5° | 70.6   | 72.2   | 85.2   | 96.6   | 132.8  | 250.6  | 490.2  | 1096.6 | 1260.8 | 1425.0 | 1589.2 |
| 75°   | 62.4   | 64.2   | 76.4   | 87.4   | 103.6  | 155.6  | 310.2  | 678.3  | 800.9  | 923.4  | 1046.0 |
| 77.5° | 53.8   | 55.4   | 66.0   | 83.4   | 80.4   | 97.1   | 185.4  | 377.5  | 448.6  | 519.7  | 590.8  |
| 80°   | 43.3   | 45.0   | 54.6   | 82.8   | 66.4   | 75.5   | 133.3  | 264.0  | 283.2  | 302.3  | 321.5  |
| 82.5° | 31.6   | 33.2   | 42.7   | 67.0   | 50.8   | 57.0   | 101.6  | 223.7  | 230.4  | 237.0  | 243.7  |
| 85°   | 16.2   | 16.4   | 27.1   | 40.8   | 32.3   | 29.6   | 57.2   | 153.1  | 157.4  | 161.6  | 165.9  |
| 87.5° | 2.8    | 2.8    | 6.1    | 7.0    | 8.0    | 4.8    | 7.3    | 26.2   | 27.0   | 27.8   | 28.6   |
| 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):**

|       | 69°    | 70°    | 71°    | 72°    | 73°    | 74°    | 75°    | 76°    | 77°    | 78°    | 79°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1069.2 | 1069.2 | 1069.2 | 1069.2 | 1069.2 | 1069.2 | 1069.2 | 1069.2 | 1069.2 | 1069.2 | 1069.2 |
| 2.5°  | 1072.9 | 1072.8 | 1072.2 | 1072.3 | 1072.7 | 1072.5 | 1072.8 | 1072.9 | 1073.3 | 1072.2 | 1071.9 |
| 5°    | 1085.8 | 1085.7 | 1085.6 | 1085.5 | 1085.8 | 1085.7 | 1086.0 | 1086.4 | 1086.3 | 1085.6 | 1085.5 |
| 7.5°  | 1107.5 | 1107.6 | 1107.9 | 1107.6 | 1108.2 | 1107.8 | 1107.2 | 1108.2 | 1108.9 | 1109.0 | 1109.6 |
| 10°   | 1136.3 | 1136.7 | 1137.7 | 1137.6 | 1138.6 | 1138.5 | 1138.6 | 1139.7 | 1140.4 | 1140.6 | 1141.2 |
| 12.5° | 1170.0 | 1170.6 | 1171.2 | 1171.7 | 1172.8 | 1172.2 | 1173.7 | 1174.3 | 1175.2 | 1177.0 | 1176.1 |
| 15°   | 1201.8 | 1202.3 | 1203.9 | 1204.1 | 1205.0 | 1205.5 | 1206.8 | 1207.4 | 1207.6 | 1209.1 | 1209.4 |
| 17.5° | 1223.7 | 1223.9 | 1224.5 | 1224.3 | 1225.2 | 1224.8 | 1225.8 | 1226.2 | 1227.0 | 1227.8 | 1229.2 |
| 20°   | 1233.8 | 1233.2 | 1232.9 | 1232.5 | 1231.9 | 1230.9 | 1231.2 | 1231.6 | 1231.8 | 1232.5 | 1233.5 |
| 22.5° | 1235.2 | 1233.4 | 1231.6 | 1230.4 | 1228.5 | 1227.0 | 1225.4 | 1225.5 | 1225.6 | 1225.5 | 1226.2 |
| 25°   | 1235.4 | 1232.8 | 1230.0 | 1226.5 | 1223.9 | 1220.4 | 1217.4 | 1217.2 | 1216.4 | 1216.5 | 1216.8 |
| 27.5° | 1241.0 | 1238.1 | 1234.0 | 1230.0 | 1224.4 | 1219.7 | 1215.1 | 1213.4 | 1211.8 | 1210.7 | 1210.3 |
| 30°   | 1254.2 | 1250.8 | 1246.0 | 1240.9 | 1234.8 | 1227.5 | 1220.8 | 1218.8 | 1216.4 | 1214.3 | 1212.6 |
| 32.5° | 1275.4 | 1272.0 | 1266.6 | 1261.3 | 1253.2 | 1246.0 | 1239.4 | 1236.1 | 1232.7 | 1229.1 | 1225.7 |
| 35°   | 1309.4 | 1307.5 | 1302.7 | 1298.0 | 1292.1 | 1286.5 | 1280.5 | 1276.8 | 1271.2 | 1268.3 | 1264.2 |
| 37.5° | 1357.7 | 1359.1 | 1359.1 | 1359.7 | 1357.8 | 1355.1 | 1350.8 | 1346.9 | 1345.0 | 1337.4 | 1332.5 |
| 40°   | 1428.7 | 1435.9 | 1442.6 | 1447.8 | 1452.3 | 1456.8 | 1460.8 | 1458.4 | 1459.2 | 1457.2 | 1454.3 |
| 42.5° | 1519.0 | 1534.6 | 1548.8 | 1563.0 | 1573.3 | 1589.3 | 1600.6 | 1604.1 | 1613.1 | 1616.6 | 1623.1 |
| 45°   | 1622.2 | 1647.1 | 1671.0 | 1693.0 | 1713.5 | 1736.5 | 1758.8 | 1775.4 | 1793.6 | 1814.2 | 1834.8 |
| 47.5° | 1729.1 | 1762.9 | 1798.0 | 1826.8 | 1856.5 | 1890.5 | 1920.2 | 1945.2 | 1977.8 | 2008.0 | 2041.2 |
| 50°   | 1845.0 | 1887.7 | 1927.8 | 1963.2 | 2001.4 | 2040.6 | 2081.2 | 2118.0 | 2162.1 | 2210.4 | 2262.7 |
| 52.5° | 1966.5 | 2017.6 | 2064.0 | 2108.4 | 2153.2 | 2198.1 | 2241.4 | 2293.3 | 2347.6 | 2411.5 | 2476.8 |
| 55°   | 2084.0 | 2144.2 | 2196.8 | 2246.3 | 2297.6 | 2347.7 | 2392.4 | 2461.9 | 2528.6 | 2604.7 | 2690.0 |
| 57.5° | 2178.2 | 2251.5 | 2312.2 | 2370.9 | 2428.8 | 2482.1 | 2537.0 | 2615.3 | 2700.4 | 2789.4 | 2897.6 |
| 60°   | 2242.6 | 2337.9 | 2415.3 | 2486.0 | 2556.9 | 2624.0 | 2687.1 | 2789.5 | 2890.7 | 3001.4 | 3136.0 |
| 62.5° | 2304.2 | 2433.7 | 2534.7 | 2631.1 | 2726.9 | 2812.9 | 2891.4 | 3020.2 | 3152.4 | 3289.2 | 3449.4 |
| 65°   | 2391.0 | 2562.2 | 2711.0 | 2845.3 | 2977.9 | 3104.3 | 3221.6 | 3384.9 | 3551.9 | 3731.8 | 3923.1 |
| 67.5° | 2431.3 | 2625.3 | 2818.9 | 3000.0 | 3168.4 | 3328.6 | 3479.3 | 3676.6 | 3873.0 | 4081.7 | 4312.8 |
| 69°   | 2347.3 | 2540.1 | 2747.2 | 2945.0 | 3131.0 | 3300.9 | 3464.0 | 3665.5 | 3869.8 | 4082.8 | 4316.0 |
| 70°   | 2234.2 | 2423.6 | 2632.5 | 2839.3 | 3017.2 | 3194.2 | 3363.2 | 3563.2 | 3770.0 | 3983.6 | 4227.7 |
| 72.5° | 1753.4 | 1917.6 | 2121.3 | 2322.1 | 2500.5 | 2678.1 | 2842.3 | 3046.9 | 3255.2 | 3479.5 | 3710.6 |
| 75°   | 1168.6 | 1291.2 | 1443.0 | 1629.2 | 1792.8 | 1949.8 | 2108.9 | 2281.9 | 2485.1 | 2670.1 | 2881.5 |
| 77.5° | 661.9  | 732.9  | 821.1  | 942.2  | 1059.7 | 1153.6 | 1267.1 | 1348.5 | 1466.5 | 1568.3 | 1675.9 |
| 80°   | 340.7  | 359.8  | 386.1  | 415.2  | 431.8  | 429.1  | 446.0  | 429.3  | 433.0  | 419.4  | 404.8  |
| 82.5° | 250.4  | 257.0  | 269.0  | 274.8  | 274.3  | 255.1  | 234.8  | 206.5  | 181.6  | 155.4  | 131.4  |
| 85°   | 170.2  | 174.5  | 177.5  | 181.9  | 180.7  | 172.4  | 154.0  | 129.6  | 105.6  | 84.7   | 67.8   |
| 87.5° | 29.4   | 30.3   | 30.1   | 32.6   | 32.7   | 30.3   | 24.9   | 21.3   | 17.9   | 13.4   | 9.4    |
| 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):**

|       | 80°    | 81°    | 82°    | 83°    | 84°    | 85°    | 86°    | 87°    | 88°    | 89°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1069.2 | 1069.2 | 1069.2 | 1069.2 | 1069.2 | 1069.2 | 1069.2 | 1069.2 | 1069.2 | 1069.2 | 1069.2 |
| 2.5°  | 1071.6 | 1071.6 | 1072.2 | 1071.6 | 1071.6 | 1071.6 | 1071.4 | 1072.0 | 1071.7 | 1070.8 | 1069.8 |
| 5°    | 1085.6 | 1084.8 | 1084.4 | 1085.0 | 1085.6 | 1084.5 | 1085.3 | 1086.3 | 1084.8 | 1085.1 | 1084.5 |
| 7.5°  | 1109.1 | 1108.8 | 1108.5 | 1109.1 | 1109.2 | 1108.8 | 1109.2 | 1108.2 | 1107.6 | 1108.5 | 1109.4 |
| 10°   | 1140.4 | 1140.2 | 1140.8 | 1140.8 | 1142.0 | 1141.4 | 1141.1 | 1142.0 | 1141.4 | 1140.8 | 1141.0 |
| 12.5° | 1177.3 | 1176.4 | 1177.9 | 1178.0 | 1178.8 | 1178.8 | 1178.5 | 1178.8 | 1178.5 | 1177.6 | 1177.0 |
| 15°   | 1210.2 | 1209.0 | 1209.2 | 1211.7 | 1211.4 | 1212.0 | 1212.0 | 1211.4 | 1211.2 | 1210.8 | 1211.1 |
| 17.5° | 1230.0 | 1229.4 | 1229.4 | 1230.6 | 1231.5 | 1231.2 | 1231.2 | 1231.2 | 1230.8 | 1231.2 | 1231.8 |
| 20°   | 1233.6 | 1233.6 | 1233.9 | 1235.2 | 1236.7 | 1235.8 | 1235.8 | 1236.4 | 1235.8 | 1236.4 | 1236.7 |
| 22.5° | 1226.6 | 1227.2 | 1227.8 | 1229.4 | 1229.6 | 1229.6 | 1229.7 | 1230.0 | 1230.6 | 1230.6 | 1231.2 |
| 25°   | 1216.9 | 1217.5 | 1218.4 | 1219.6 | 1220.9 | 1220.9 | 1220.8 | 1221.4 | 1221.4 | 1221.8 | 1222.1 |
| 27.5° | 1209.6 | 1210.2 | 1211.1 | 1212.3 | 1213.8 | 1213.8 | 1213.8 | 1214.4 | 1214.4 | 1214.8 | 1215.3 |
| 30°   | 1210.5 | 1209.3 | 1210.2 | 1210.8 | 1211.7 | 1211.7 | 1211.4 | 1211.7 | 1212.0 | 1212.0 | 1212.3 |
| 32.5° | 1223.6 | 1220.9 | 1220.0 | 1219.6 | 1220.0 | 1219.0 | 1218.7 | 1218.1 | 1217.5 | 1217.6 | 1217.2 |
| 35°   | 1258.3 | 1254.0 | 1253.7 | 1251.3 | 1248.8 | 1246.4 | 1246.8 | 1245.0 | 1245.6 | 1244.0 | 1242.8 |
| 37.5° | 1329.5 | 1324.6 | 1327.8 | 1322.6 | 1319.2 | 1316.8 | 1314.0 | 1310.4 | 1308.2 | 1311.0 | 1311.0 |
| 40°   | 1457.1 | 1453.8 | 1452.8 | 1453.7 | 1450.7 | 1452.2 | 1445.6 | 1443.6 | 1439.7 | 1442.4 | 1446.1 |
| 42.5° | 1633.4 | 1631.2 | 1642.8 | 1644.9 | 1646.2 | 1648.0 | 1649.2 | 1639.2 | 1638.8 | 1636.8 | 1630.7 |
| 45°   | 1851.0 | 1863.9 | 1863.2 | 1877.3 | 1877.9 | 1873.6 | 1875.4 | 1870.8 | 1869.0 | 1862.4 | 1870.6 |
| 47.5° | 2074.8 | 2099.2 | 2108.4 | 2111.4 | 2123.0 | 2125.6 | 2114.8 | 2111.0 | 2117.4 | 2106.5 | 2108.0 |
| 50°   | 2315.0 | 2341.2 | 2362.6 | 2376.8 | 2385.1 | 2385.6 | 2377.4 | 2375.6 | 2381.4 | 2360.7 | 2370.5 |
| 52.5° | 2551.3 | 2590.9 | 2631.0 | 2652.4 | 2667.6 | 2668.8 | 2675.2 | 2667.6 | 2670.6 | 2665.8 | 2675.5 |
| 55°   | 2784.2 | 2852.6 | 2899.9 | 2941.6 | 2968.1 | 2991.0 | 2993.0 | 3001.2 | 3001.9 | 3011.9 | 3001.9 |
| 57.5° | 3011.9 | 3086.6 | 3168.7 | 3242.7 | 3283.8 | 3309.7 | 3334.0 | 3367.2 | 3374.5 | 3370.6 | 3377.0 |
| 60°   | 3280.8 | 3396.2 | 3507.8 | 3593.1 | 3664.0 | 3732.0 | 3768.4 | 3820.5 | 3828.8 | 3851.3 | 3831.8 |
| 62.5° | 3620.6 | 3787.9 | 3939.6 | 4054.3 | 4162.1 | 4267.8 | 4347.5 | 4387.8 | 4412.1 | 4459.3 | 4443.7 |
| 65°   | 4141.8 | 4342.6 | 4543.3 | 4707.8 | 4858.7 | 4984.5 | 5105.6 | 5163.5 | 5227.4 | 5294.4 | 5306.5 |
| 67.5° | 4571.0 | 4819.8 | 5046.0 | 5246.2 | 5429.2 | 5569.0 | 5695.0 | 5795.2 | 5873.2 | 5922.5 | 5926.4 |
| 69°   | 4590.5 | 4849.0 | 5094.6 | 5309.6 | 5500.5 | 5649.1 | 5781.8 | 5893.2 | 5969.0 | 6019.6 | 6033.0 |
| 70°   | 4497.4 | 4761.9 | 5023.7 | 5240.8 | 5436.3 | 5588.2 | 5728.9 | 5835.1 | 5919.6 | 5971.2 | 5989.1 |
| 72.5° | 3973.4 | 4255.9 | 4535.7 | 4726.0 | 4925.7 | 5106.6 | 5219.2 | 5327.6 | 5446.9 | 5462.5 | 5511.8 |
| 75°   | 3132.1 | 3369.6 | 3586.8 | 3732.2 | 3899.1 | 4061.4 | 4171.9 | 4200.5 | 4262.9 | 4341.5 | 4313.5 |
| 77.5° | 1815.1 | 1888.2 | 2028.2 | 2064.2 | 2033.8 | 2104.4 | 2127.8 | 2077.9 | 2075.4 | 2121.4 | 2030.1 |
| 80°   | 402.2  | 379.3  | 408.0  | 386.6  | 387.2  | 387.8  | 381.5  | 379.1  | 383.6  | 379.0  | 372.6  |
| 82.5° | 111.4  | 107.8  | 108.4  | 107.2  | 109.4  | 107.8  | 106.9  | 109.3  | 109.0  | 108.6  | 110.8  |
| 85°   | 53.6   | 53.0   | 52.0   | 51.8   | 50.6   | 49.0   | 46.6   | 46.6   | 47.8   | 45.9   | 46.8   |
| 87.5° | 7.0    | 6.7    | 6.8    | 7.9    | 7.0    | 5.8    | 5.8    | 5.8    | 5.5    | 5.5    | 5.5    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)