

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: P674904

Luminaire Tested: **CCW-SA-1E-840-U-T2**

Issue Date: 04/25/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P674904  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 04/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCW-SA-1E-840-U-T2  
Description: INVUE CLEAR CURVE Wall Pack MOUNT LIGHT SQUARE LUMINAIRE @1050mA w/  
T2 distribution lens  
Light Source: (16) 4000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5814.7 lumens  
Efficiency: N/A  
Efficacy: 103.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G2

Input Watts (W): 56.1  
Input Voltage (V): 120  
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

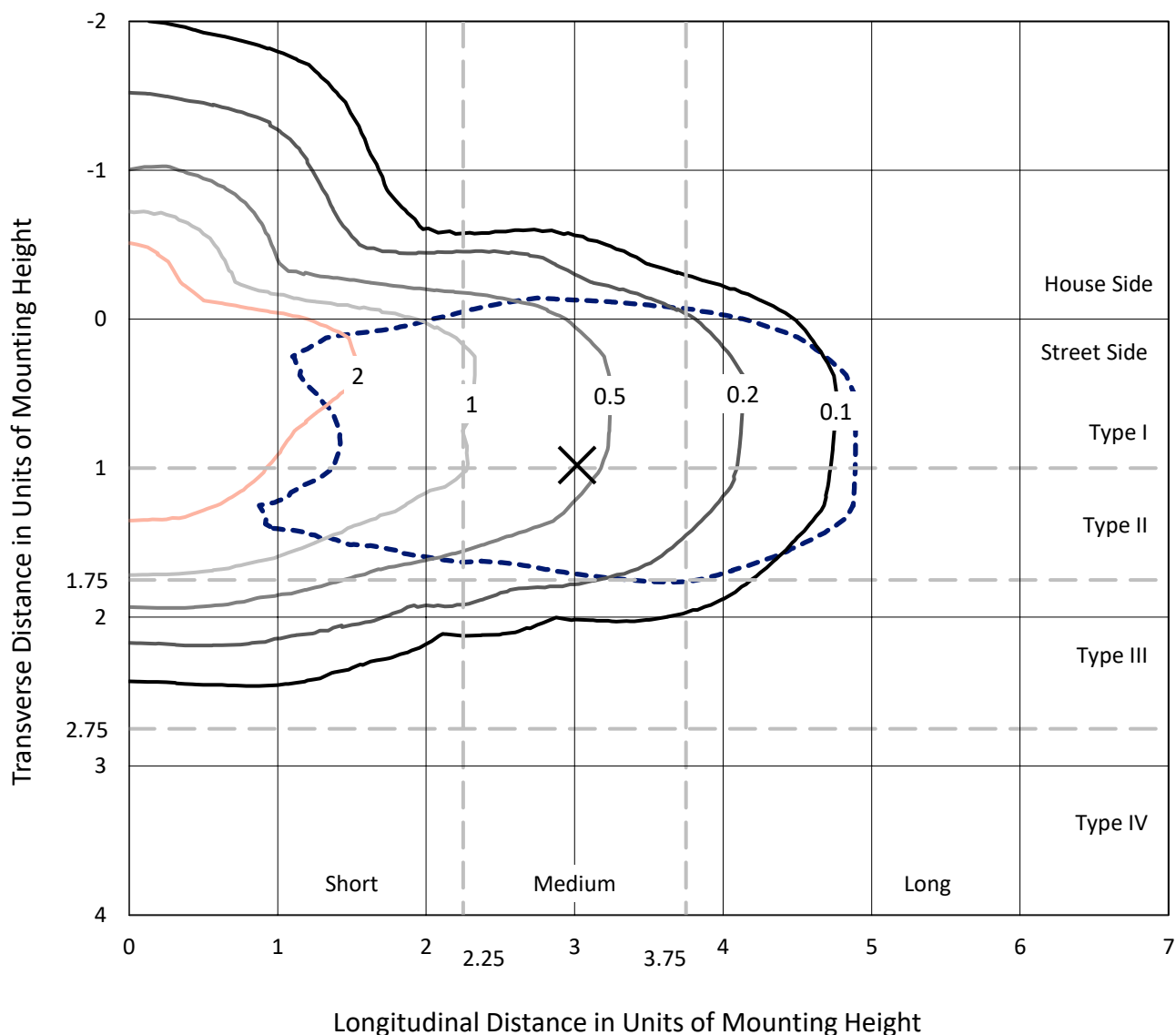
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

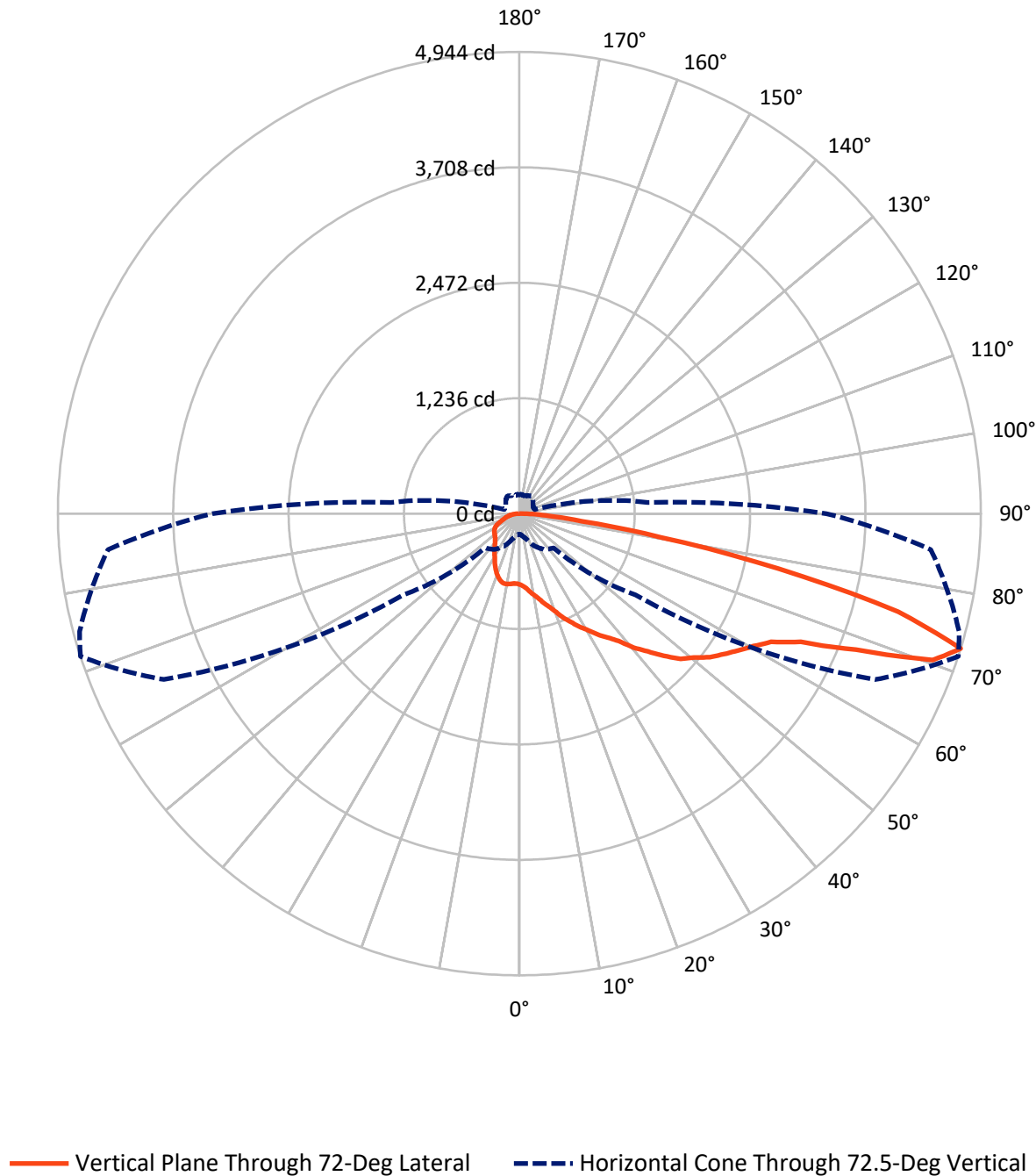
--- 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 4.2 fc  
 Type II - Medium - N/A

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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 1223.7   | 0.0    | 1223.7 |
|                    | % Fixture | 21.0     | 0.0    | 21.0   |
| <b>Street Side</b> | Lumens    | 4591.0   | 0.0    | 4591.0 |
|                    | % Fixture | 79.0     | 0.0    | 79.0   |
| <b>Total</b>       | Lumens    | 5814.7   | 0.0    | 5814.7 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 75.1   | 1.3       |
| 10°-20°   | 233.3  | 4.0       |
| 20°-30°   | 403.8  | 6.9       |
| 30°-40°   | 596.4  | 10.3      |
| 40°-50°   | 886.9  | 15.3      |
| 50°-60°   | 1215.9 | 20.9      |
| 60°-70°   | 1318.9 | 22.7      |
| 70°-80°   | 929.8  | 16.0      |
| 80°-90°   | 154.5  | 2.7       |
| 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°    | 5814.7 | 100.0     |
| 0°-180°   | 5814.7 | 100.0     |

**Coefficient of Utilization**



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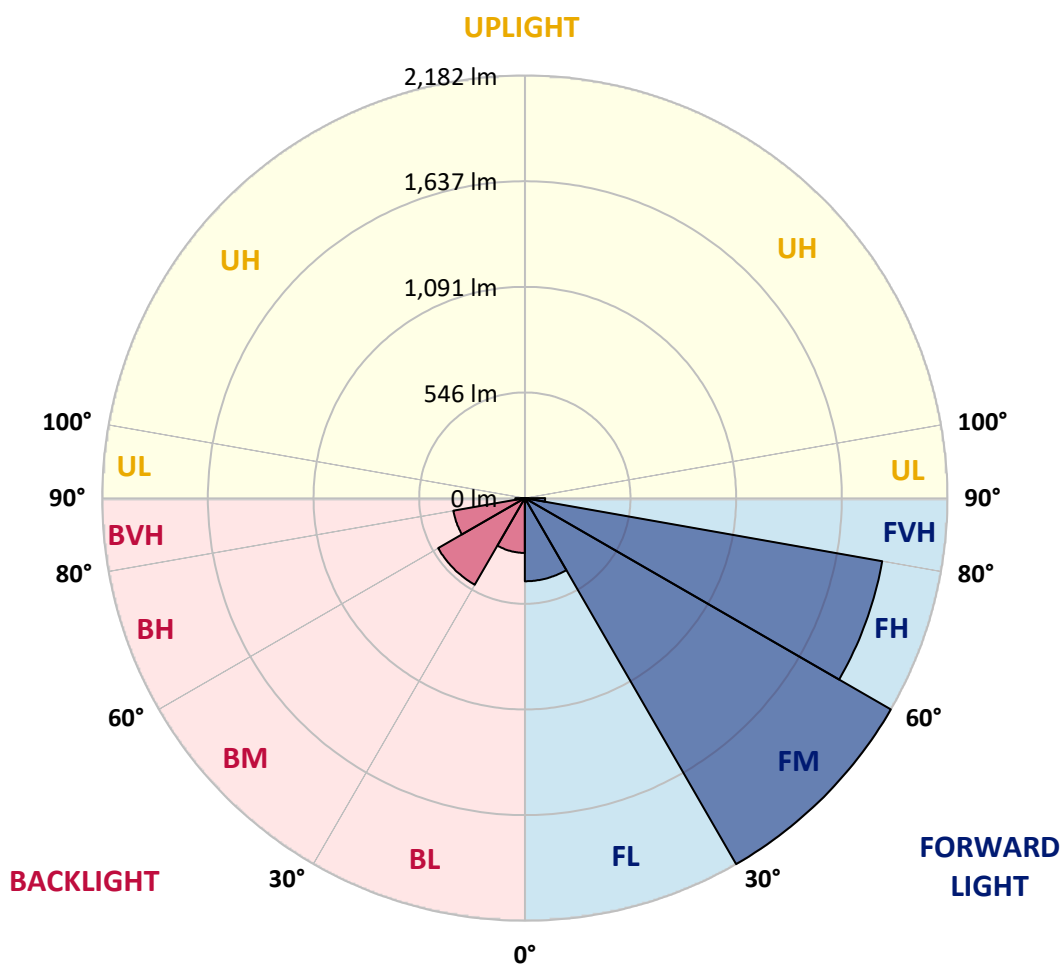
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 429.4  | 7.4       |                         |      |         |
| FM   | (30°-60°)   | 2182.4 | 37.5      |                         |      |         |
| FH   | (60°-80°)   | 1873.9 | 32.2      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 105.3  | 1.8       |                         |      | G2/225  |
| BL   | (0°-30°)    | 282.8  | 4.9       | B1/500                  |      |         |
| BM   | (30°-60°)   | 516.9  | 8.9       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 374.9  | 6.4       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 49.2   | 0.8       |                         |      | 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 II Medium





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 72°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 759.6  | 759.6  | 759.6  | 759.6  | 759.6  | 759.6  | 759.6  | 759.6  | 759.6  | 759.6  | 759.6  |
| 2.5°  | 819.6  | 819.6  | 813.2  | 811.1  | 811.1  | 793.9  | 796.0  | 785.3  | 776.7  | 776.7  | 768.1  |
| 5°    | 862.6  | 858.3  | 858.3  | 858.3  | 847.5  | 841.1  | 839.0  | 819.6  | 804.6  | 806.8  | 781.0  |
| 7.5°  | 873.3  | 875.4  | 877.6  | 888.3  | 881.9  | 886.2  | 881.9  | 860.4  | 849.7  | 839.0  | 815.3  |
| 10°   | 879.7  | 884.0  | 884.0  | 899.0  | 899.0  | 909.8  | 916.2  | 907.6  | 888.3  | 877.6  | 839.0  |
| 12.5° | 894.7  | 888.3  | 896.9  | 907.6  | 918.3  | 937.7  | 957.0  | 948.4  | 935.5  | 922.6  | 879.7  |
| 15°   | 894.7  | 896.9  | 903.3  | 920.5  | 937.7  | 957.0  | 991.3  | 1004.2 | 997.7  | 974.1  | 929.1  |
| 17.5° | 869.0  | 862.6  | 892.6  | 924.8  | 957.0  | 980.6  | 1025.6 | 1055.7 | 1051.4 | 1042.8 | 974.1  |
| 20°   | 871.1  | 877.6  | 888.3  | 916.2  | 967.7  | 1010.6 | 1066.4 | 1115.7 | 1126.5 | 1122.2 | 1034.2 |
| 22.5° | 909.8  | 911.9  | 922.6  | 935.5  | 976.3  | 1032.1 | 1115.7 | 1195.1 | 1214.4 | 1203.7 | 1100.7 |
| 25°   | 948.4  | 965.5  | 965.5  | 974.1  | 989.1  | 1047.1 | 1147.9 | 1259.5 | 1287.4 | 1289.5 | 1169.4 |
| 27.5° | 1010.6 | 1014.9 | 1027.8 | 1032.1 | 1044.9 | 1079.3 | 1184.4 | 1306.7 | 1371.1 | 1362.5 | 1231.6 |
| 30°   | 1083.6 | 1085.7 | 1094.3 | 1090.0 | 1092.1 | 1135.1 | 1218.7 | 1360.3 | 1448.3 | 1450.5 | 1298.1 |
| 32.5° | 1169.4 | 1186.5 | 1190.8 | 1162.9 | 1167.2 | 1178.0 | 1272.4 | 1424.7 | 1544.9 | 1529.9 | 1356.1 |
| 35°   | 1296.0 | 1302.4 | 1289.5 | 1276.7 | 1244.5 | 1238.0 | 1328.2 | 1489.1 | 1628.6 | 1645.7 | 1441.9 |
| 37.5° | 1452.6 | 1469.8 | 1452.6 | 1383.9 | 1349.6 | 1323.9 | 1396.8 | 1559.9 | 1729.4 | 1787.3 | 1527.7 |
| 40°   | 1598.5 | 1596.4 | 1579.2 | 1517.0 | 1456.9 | 1437.6 | 1495.5 | 1658.6 | 1886.0 | 1941.8 | 1652.2 |
| 42.5° | 1716.5 | 1710.1 | 1699.4 | 1652.2 | 1596.4 | 1564.2 | 1609.2 | 1761.6 | 2016.9 | 2124.2 | 1795.9 |
| 45°   | 1819.5 | 1810.9 | 1813.1 | 1759.4 | 1705.8 | 1723.0 | 1723.0 | 1879.6 | 2171.4 | 2304.4 | 1961.1 |
| 47.5° | 1916.1 | 1920.4 | 1913.9 | 1873.2 | 1832.4 | 1877.5 | 1853.8 | 2014.8 | 2323.7 | 2471.8 | 2100.6 |
| 50°   | 2027.6 | 2036.2 | 2014.8 | 1989.0 | 1952.5 | 1997.6 | 1967.6 | 2141.4 | 2422.4 | 2624.1 | 2268.0 |
| 52.5° | 2132.8 | 2141.4 | 2160.7 | 2128.5 | 2092.0 | 2128.5 | 2059.8 | 2259.4 | 2553.3 | 2772.2 | 2396.7 |
| 55°   | 2158.5 | 2154.2 | 2261.5 | 2295.9 | 2315.2 | 2205.7 | 2141.4 | 2360.2 | 2656.3 | 2866.6 | 2542.6 |
| 57.5° | 2040.5 | 2051.2 | 2197.2 | 2295.9 | 2501.8 | 2407.4 | 2233.6 | 2478.2 | 2763.6 | 2991.0 | 2677.8 |
| 60°   | 1746.6 | 1753.0 | 1935.4 | 2169.3 | 2469.7 | 2596.2 | 2482.5 | 2630.6 | 2881.6 | 3096.2 | 2830.1 |
| 62.5° | 1167.2 | 1216.6 | 1444.0 | 1810.9 | 2242.2 | 2647.7 | 2879.5 | 2888.1 | 3025.4 | 3229.2 | 3038.3 |
| 65°   | 615.8  | 639.4  | 817.5  | 1113.6 | 1699.4 | 2469.7 | 3252.8 | 3398.7 | 3312.9 | 3473.8 | 3338.6 |
| 67.5° | 403.4  | 412.0  | 508.5  | 675.9  | 980.6  | 1802.4 | 3295.7 | 4284.9 | 3890.1 | 3939.4 | 3819.3 |
| 70°   | 300.4  | 304.7  | 375.5  | 499.9  | 607.2  | 963.4  | 2701.4 | 4699.0 | 4696.8 | 4566.0 | 4390.0 |
| 72.5° | 221.0  | 227.4  | 276.8  | 381.9  | 467.8  | 519.2  | 1519.1 | 4203.3 | 4943.6 | 4877.1 | 4424.3 |
| 75°   | 173.8  | 178.1  | 203.8  | 296.1  | 377.6  | 341.2  | 770.3  | 3113.3 | 4192.6 | 4512.3 | 4048.9 |
| 77.5° | 141.6  | 145.9  | 160.9  | 214.6  | 302.5  | 263.9  | 369.1  | 2008.3 | 2843.0 | 3248.5 | 3098.3 |
| 80°   | 118.0  | 118.0  | 128.7  | 152.3  | 233.9  | 199.5  | 218.9  | 1128.6 | 1532.0 | 1690.8 | 1405.4 |
| 82.5° | 100.8  | 98.7   | 107.3  | 111.6  | 173.8  | 143.8  | 141.6  | 510.7  | 673.7  | 714.5  | 527.8  |
| 85°   | 64.4   | 66.5   | 100.8  | 96.6   | 113.7  | 98.7   | 79.4   | 242.5  | 317.6  | 324.0  | 197.4  |
| 87.5° | 25.7   | 25.7   | 42.9   | 53.6   | 64.4   | 60.1   | 38.6   | 109.4  | 139.5  | 139.5  | 55.8   |
| 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°    | 95°    | 105°  | 115°  | 125°  | 135°  | 145°  | 155°  | 165°  | 175°  | 180°  |
|-------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 759.6  | 759.6  | 759.6 | 759.6 | 759.6 | 759.6 | 759.6 | 759.6 | 759.6 | 759.6 | 759.6 |
| 2.5°  | 766.0  | 757.4  | 751.0 | 746.7 | 736.0 | 725.2 | 727.4 | 725.2 | 716.6 | 712.4 | 712.4 |
| 5°    | 774.6  | 766.0  | 755.3 | 738.1 | 727.4 | 714.5 | 718.8 | 710.2 | 701.6 | 708.1 | 697.3 |
| 7.5°  | 796.0  | 781.0  | 766.0 | 740.3 | 723.1 | 703.8 | 695.2 | 690.9 | 684.5 | 680.2 | 680.2 |
| 10°   | 826.1  | 804.6  | 776.7 | 738.1 | 710.2 | 680.2 | 675.9 | 667.3 | 660.9 | 660.9 | 658.7 |
| 12.5° | 856.1  | 832.5  | 785.3 | 723.1 | 675.9 | 654.4 | 652.3 | 654.4 | 658.7 | 660.9 | 663.0 |
| 15°   | 894.7  | 856.1  | 783.2 | 695.2 | 648.0 | 639.4 | 650.1 | 658.7 | 667.3 | 675.9 | 673.7 |
| 17.5° | 931.2  | 886.2  | 763.9 | 660.9 | 624.4 | 626.5 | 645.8 | 663.0 | 680.2 | 688.8 | 690.9 |
| 20°   | 980.6  | 914.1  | 736.0 | 620.1 | 600.8 | 620.1 | 645.8 | 667.3 | 686.6 | 697.3 | 699.5 |
| 22.5° | 1036.4 | 946.2  | 699.5 | 583.6 | 581.5 | 600.8 | 626.5 | 658.7 | 680.2 | 699.5 | 697.3 |
| 25°   | 1085.7 | 967.7  | 652.3 | 553.6 | 557.9 | 570.7 | 600.8 | 635.1 | 656.6 | 678.0 | 671.6 |
| 27.5° | 1117.9 | 972.0  | 602.9 | 532.1 | 532.1 | 545.0 | 572.9 | 594.3 | 613.7 | 630.8 | 633.0 |
| 30°   | 1154.4 | 963.4  | 547.1 | 504.2 | 504.2 | 521.4 | 532.1 | 545.0 | 555.7 | 560.0 | 564.3 |
| 32.5° | 1197.3 | 944.1  | 512.8 | 482.8 | 482.8 | 495.6 | 502.1 | 497.8 | 495.6 | 484.9 | 491.4 |
| 35°   | 1238.0 | 916.2  | 474.2 | 454.9 | 463.5 | 469.9 | 467.8 | 454.9 | 442.0 | 422.7 | 416.3 |
| 37.5° | 1287.4 | 888.3  | 439.9 | 424.8 | 439.9 | 442.0 | 442.0 | 427.0 | 409.8 | 386.2 | 386.2 |
| 40°   | 1362.5 | 866.8  | 412.0 | 405.5 | 420.5 | 418.4 | 407.7 | 396.9 | 403.4 | 390.5 | 390.5 |
| 42.5° | 1441.9 | 858.3  | 386.2 | 388.4 | 394.8 | 396.9 | 386.2 | 373.3 | 399.1 | 384.1 | 386.2 |
| 45°   | 1540.6 | 864.7  | 369.1 | 366.9 | 381.9 | 379.8 | 373.3 | 362.6 | 371.2 | 332.6 | 321.8 |
| 47.5° | 1632.8 | 877.6  | 360.5 | 351.9 | 369.1 | 373.3 | 364.8 | 341.2 | 328.3 | 304.7 | 300.4 |
| 50°   | 1716.5 | 905.5  | 351.9 | 334.7 | 351.9 | 360.5 | 345.5 | 319.7 | 304.7 | 289.7 | 289.7 |
| 52.5° | 1795.9 | 946.2  | 347.6 | 315.4 | 330.4 | 341.2 | 332.6 | 306.8 | 289.7 | 283.2 | 276.8 |
| 55°   | 1877.5 | 982.7  | 341.2 | 302.5 | 306.8 | 328.3 | 326.1 | 291.8 | 274.6 | 274.6 | 272.5 |
| 57.5° | 1993.3 | 1032.1 | 332.6 | 281.1 | 289.7 | 313.3 | 313.3 | 285.4 | 266.1 | 268.2 | 270.4 |
| 60°   | 2111.3 | 1090.0 | 324.0 | 259.6 | 266.1 | 298.2 | 302.5 | 276.8 | 259.6 | 261.8 | 259.6 |
| 62.5° | 2300.1 | 1197.3 | 306.8 | 233.9 | 246.8 | 278.9 | 289.7 | 266.1 | 251.0 | 255.3 | 255.3 |
| 65°   | 2585.5 | 1381.8 | 270.4 | 212.4 | 227.4 | 261.8 | 276.8 | 255.3 | 238.2 | 251.0 | 246.8 |
| 67.5° | 3044.7 | 1635.0 | 227.4 | 195.3 | 214.6 | 244.6 | 261.8 | 242.5 | 227.4 | 246.8 | 240.3 |
| 70°   | 3456.7 | 1759.4 | 195.3 | 180.2 | 195.3 | 225.3 | 244.6 | 229.6 | 214.6 | 233.9 | 225.3 |
| 72.5° | 3289.3 | 1379.7 | 169.5 | 163.1 | 178.1 | 203.8 | 227.4 | 212.4 | 197.4 | 208.1 | 199.5 |
| 75°   | 2838.7 | 1098.6 | 148.1 | 145.9 | 158.8 | 184.5 | 208.1 | 197.4 | 182.4 | 186.7 | 182.4 |
| 77.5° | 2152.1 | 907.6  | 126.6 | 124.4 | 135.2 | 165.2 | 186.7 | 178.1 | 163.1 | 160.9 | 160.9 |
| 80°   | 961.3  | 446.3  | 105.1 | 105.1 | 111.6 | 141.6 | 158.8 | 154.5 | 139.5 | 137.3 | 135.2 |
| 82.5° | 315.4  | 169.5  | 85.8  | 81.5  | 90.1  | 118.0 | 141.6 | 137.3 | 122.3 | 118.0 | 113.7 |
| 85°   | 126.6  | 81.5   | 62.2  | 62.2  | 70.8  | 98.7  | 126.6 | 118.0 | 98.7  | 88.0  | 88.0  |
| 87.5° | 42.9   | 34.3   | 32.2  | 32.2  | 45.1  | 66.5  | 94.4  | 79.4  | 70.8  | 62.2  | 64.4  |
| 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)