

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: P401604

Luminaire Tested: **ENC-SA1E-722-U-T2**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401604  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENC-SA1E-722-U-T2  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 2200K, 1050mA LIGHTSQUARE WITH 16 LEDS AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5147 lumens  
Efficiency: N/A  
Efficacy: 90.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Medium - Non-Cutoff  
BUG Rating: B1 - U0 - G1

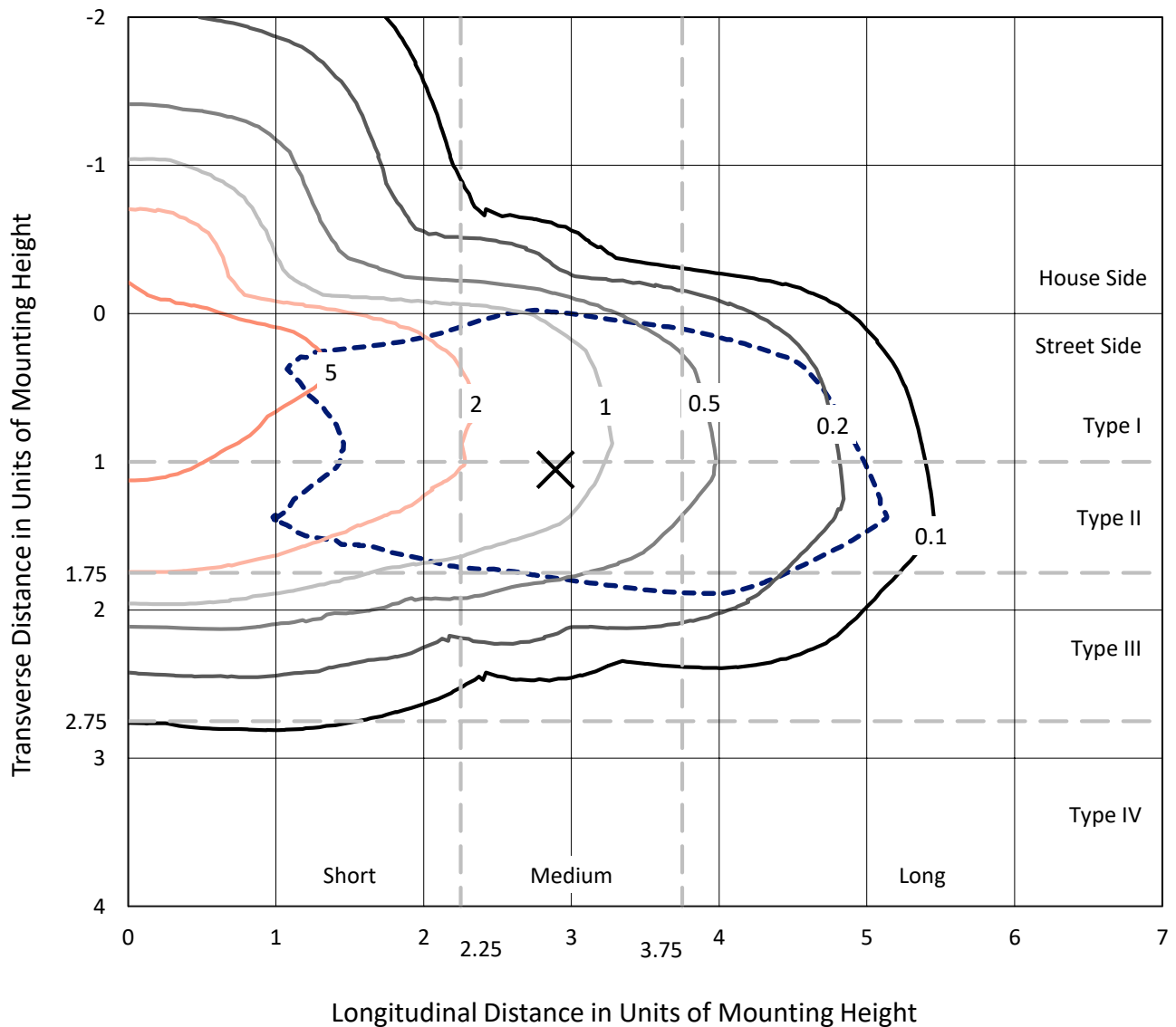
Input Watts (W): 57.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

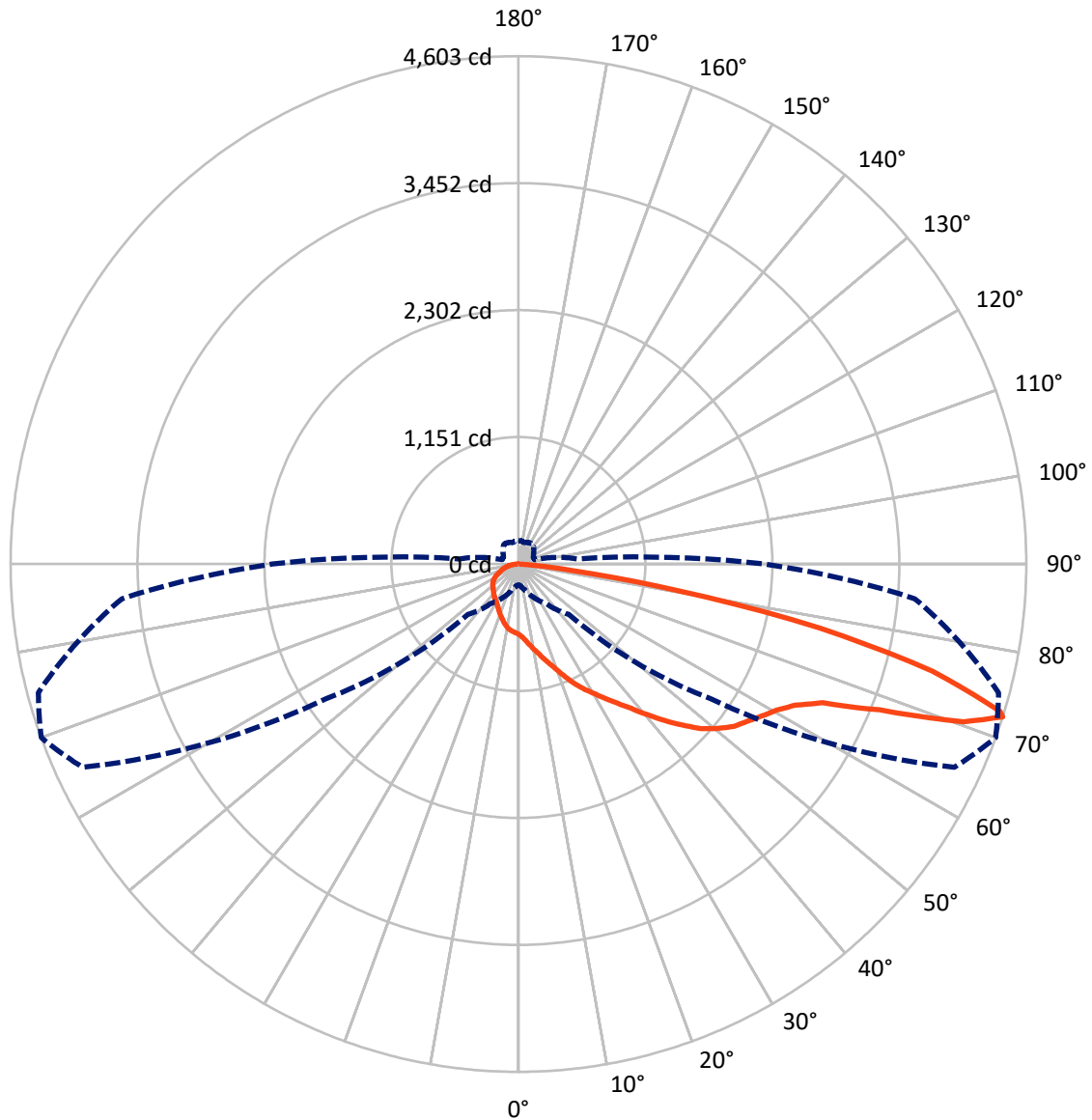
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 8.9 fc  
 Type III - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 70-Deg Lateral      - - - Horizontal Cone Through 72-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 956.4    | 0.0    | 956.4  |
|                    | % Fixture | 18.6     | 0.0    | 18.6   |
| <b>Street Side</b> | Lumens    | 4190.6   | 0.0    | 4190.6 |
|                    | % Fixture | 81.4     | 0.0    | 81.4   |
| <b>Total</b>       | Lumens    | 5147.0   | 0.0    | 5147.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 64.1   | 1.2       |
| 10°-20°   | 205.6  | 4.0       |
| 20°-30°   | 364.0  | 7.1       |
| 30°-40°   | 541.2  | 10.5      |
| 40°-50°   | 785.1  | 15.3      |
| 50°-60°   | 1072.6 | 20.8      |
| 60°-70°   | 1174.3 | 22.8      |
| 70°-80°   | 835.3  | 16.2      |
| 80°-90°   | 104.9  | 2.0       |
| 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°    | 5147.0 | 100.0     |
| 0°-180°   | 5147.0 | 100.0     |



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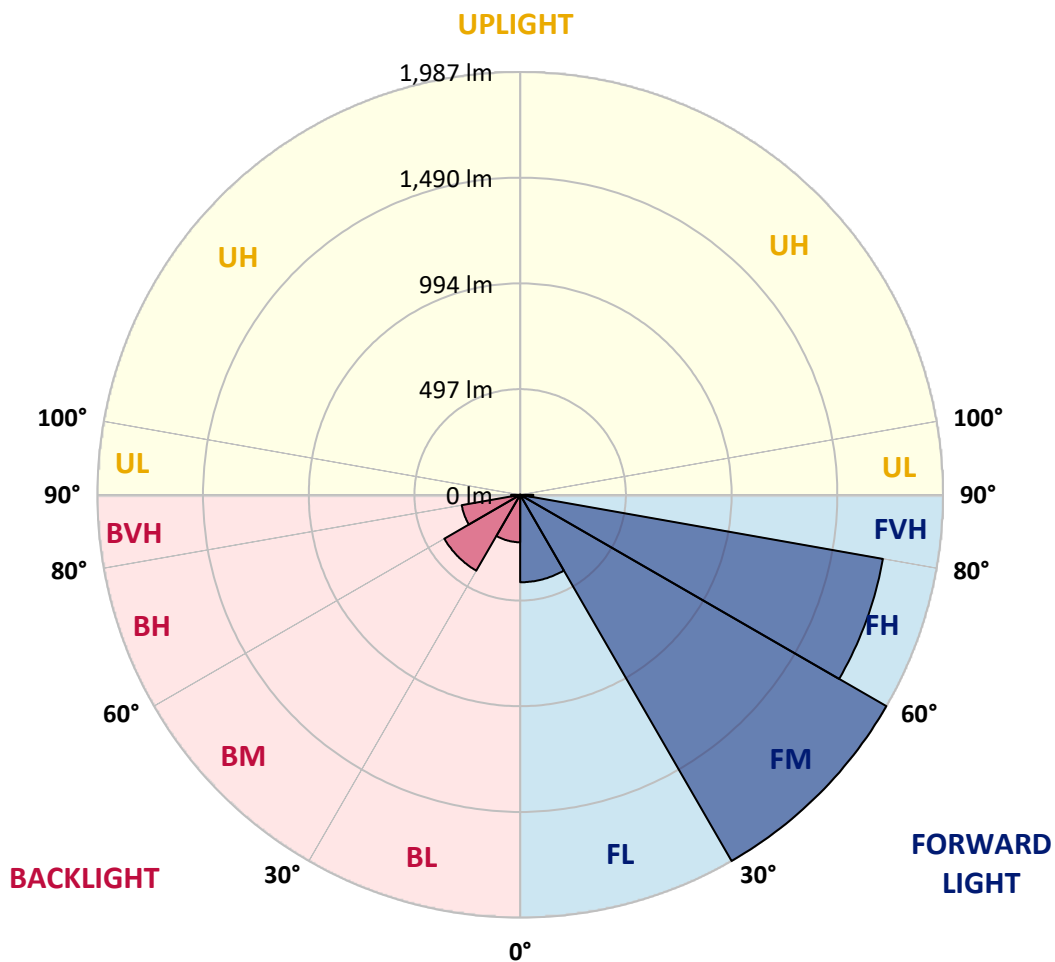
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 410.8  | 8.0       |                         |      |         |
| FM   | (30°-60°)   | 1987.1 | 38.6      |                         |      |         |
| FH   | (60°-80°)   | 1730.8 | 33.6      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 61.9   | 1.2       |                         |      | G1/100  |
| BL   | (0°-30°)    | 222.8  | 4.3       | B1/500                  |      |         |
| BM   | (30°-60°)   | 411.8  | 8.0       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 278.8  | 5.4       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 42.9   | 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-G1**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 70°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 637.4  | 637.4  | 637.4  | 637.4  | 637.4  | 637.4  | 637.4  | 637.4  | 637.4  | 637.4  | 637.4  |
| 2.5°  | 708.7  | 705.1  | 705.8  | 699.2  | 695.5  | 686.7  | 677.1  | 666.8  | 661.7  | 658.0  | 645.5  |
| 5°    | 777.8  | 777.8  | 780.8  | 775.6  | 761.7  | 747.0  | 730.1  | 707.3  | 697.7  | 684.5  | 659.5  |
| 7.5°  | 835.2  | 836.7  | 836.7  | 835.2  | 822.7  | 806.5  | 784.5  | 756.5  | 741.1  | 722.0  | 683.0  |
| 10°   | 864.6  | 868.3  | 871.2  | 873.4  | 871.9  | 862.4  | 837.4  | 808.7  | 787.4  | 762.4  | 710.2  |
| 12.5° | 879.3  | 880.8  | 885.9  | 896.9  | 905.8  | 913.1  | 894.7  | 860.9  | 839.6  | 809.5  | 739.6  |
| 15°   | 895.5  | 895.5  | 900.6  | 914.6  | 931.5  | 951.3  | 949.1  | 922.7  | 899.9  | 862.4  | 777.1  |
| 17.5° | 905.8  | 908.7  | 918.3  | 933.0  | 956.5  | 989.6  | 1006.5 | 991.8  | 962.4  | 922.7  | 817.5  |
| 20°   | 899.9  | 902.1  | 921.2  | 949.9  | 980.0  | 1022.7 | 1065.3 | 1065.3 | 1037.4 | 991.8  | 862.4  |
| 22.5° | 910.9  | 914.6  | 927.8  | 955.0  | 996.2  | 1051.3 | 1121.2 | 1145.4 | 1121.2 | 1071.2 | 914.6  |
| 25°   | 953.6  | 952.1  | 963.1  | 974.1  | 1009.4 | 1077.8 | 1169.0 | 1231.5 | 1209.4 | 1154.3 | 965.3  |
| 27.5° | 1015.3 | 1015.3 | 1021.2 | 1020.5 | 1033.0 | 1099.9 | 1210.9 | 1307.2 | 1288.8 | 1222.6 | 1007.2 |
| 30°   | 1086.6 | 1088.1 | 1086.6 | 1085.9 | 1083.7 | 1130.0 | 1248.4 | 1374.8 | 1365.3 | 1299.8 | 1045.5 |
| 32.5° | 1173.4 | 1177.1 | 1171.2 | 1156.5 | 1147.6 | 1173.4 | 1280.0 | 1450.6 | 1453.5 | 1376.3 | 1083.0 |
| 35°   | 1282.2 | 1288.1 | 1266.0 | 1244.7 | 1222.6 | 1234.4 | 1316.7 | 1521.9 | 1551.3 | 1463.0 | 1128.5 |
| 37.5° | 1391.0 | 1400.6 | 1396.9 | 1339.5 | 1308.7 | 1307.9 | 1371.1 | 1610.8 | 1660.1 | 1576.3 | 1193.2 |
| 40°   | 1482.9 | 1491.0 | 1495.4 | 1443.2 | 1400.6 | 1399.1 | 1451.3 | 1703.5 | 1793.9 | 1706.4 | 1269.7 |
| 42.5° | 1543.9 | 1551.3 | 1564.5 | 1533.6 | 1493.9 | 1512.3 | 1539.5 | 1795.4 | 1938.0 | 1865.2 | 1363.8 |
| 45°   | 1610.1 | 1616.0 | 1624.1 | 1606.4 | 1585.8 | 1638.8 | 1651.3 | 1897.6 | 2082.1 | 2035.8 | 1474.1 |
| 47.5° | 1680.7 | 1686.6 | 1691.0 | 1677.7 | 1670.4 | 1744.6 | 1760.8 | 2002.0 | 2227.7 | 2212.2 | 1581.4 |
| 50°   | 1758.6 | 1760.8 | 1765.2 | 1758.6 | 1760.8 | 1840.9 | 1851.2 | 2093.9 | 2343.1 | 2396.0 | 1693.2 |
| 52.5° | 1892.4 | 1895.3 | 1896.8 | 1865.2 | 1854.2 | 1902.0 | 1924.0 | 2191.6 | 2444.5 | 2548.9 | 1791.7 |
| 55°   | 1998.3 | 2008.6 | 2054.9 | 2034.3 | 2007.8 | 1945.3 | 1984.3 | 2270.3 | 2516.6 | 2691.6 | 1894.6 |
| 57.5° | 1911.5 | 1935.0 | 2050.5 | 2147.5 | 2221.8 | 2072.5 | 2055.6 | 2351.2 | 2599.7 | 2814.3 | 2014.5 |
| 60°   | 1659.3 | 1693.9 | 1861.5 | 2063.7 | 2304.1 | 2364.4 | 2201.9 | 2451.9 | 2690.1 | 2942.3 | 2143.1 |
| 62.5° | 1150.6 | 1185.9 | 1417.5 | 1740.2 | 2165.2 | 2531.3 | 2602.6 | 2630.5 | 2815.8 | 3073.1 | 2310.7 |
| 65°   | 551.4  | 587.4  | 778.6  | 1119.0 | 1710.1 | 2424.0 | 3069.5 | 3001.1 | 3027.6 | 3239.3 | 2557.8 |
| 67.5° | 350.7  | 369.8  | 444.8  | 609.5  | 994.7  | 1888.0 | 3237.1 | 3739.2 | 3529.0 | 3622.3 | 3049.6 |
| 70°   | 256.6  | 261.0  | 325.7  | 422.0  | 590.4  | 1102.8 | 2858.5 | 4445.8 | 4281.1 | 4270.8 | 3642.9 |
| 72°   | 189.7  | 197.0  | 247.0  | 336.7  | 436.7  | 644.8  | 2126.9 | 4359.7 | 4603.1 | 4505.3 | 3607.6 |
| 72.5° | 178.7  | 184.5  | 227.9  | 318.3  | 412.4  | 566.1  | 1905.6 | 4259.8 | 4563.4 | 4511.9 | 3540.0 |
| 75°   | 130.1  | 134.5  | 155.9  | 226.4  | 319.1  | 327.9  | 1017.5 | 3269.4 | 3875.2 | 4307.5 | 3209.2 |
| 77.5° | 89.7   | 92.6   | 103.7  | 139.0  | 218.4  | 222.0  | 431.6  | 2232.1 | 2796.7 | 3444.4 | 2468.1 |
| 80°   | 54.4   | 55.9   | 62.5   | 75.7   | 139.0  | 131.6  | 177.9  | 1166.8 | 1459.4 | 1872.6 | 1144.7 |
| 82.5° | 22.8   | 23.5   | 27.2   | 30.1   | 58.8   | 62.5   | 72.0   | 380.8  | 483.0  | 585.2  | 330.1  |
| 85°   | 0.0    | 0.0    | 0.7    | 0.7    | 1.5    | 6.6    | 10.3   | 47.1   | 71.3   | 85.3   | 59.6   |
| 87.5° | 0.0    | 0.0    | 0.7    | 0.7    | 0.7    | 1.5    | 1.5    | 2.2    | 2.9    | 2.9    | 4.4    |
| 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):**

|       | 90°    | 95°   | 105°  | 115°  | 125°  | 135°  | 145°  | 155°  | 165°  | 175°  | 180°  |
|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 637.4  | 637.4 | 637.4 | 637.4 | 637.4 | 637.4 | 637.4 | 637.4 | 637.4 | 637.4 | 637.4 |
| 2.5°  | 639.6  | 636.7 | 627.9 | 620.5 | 614.6 | 605.1 | 604.3 | 597.0 | 597.0 | 594.8 | 593.3 |
| 5°    | 649.9  | 640.4 | 622.7 | 606.5 | 594.8 | 580.8 | 574.2 | 566.1 | 561.0 | 558.0 | 558.8 |
| 7.5°  | 663.2  | 647.0 | 616.8 | 589.6 | 567.6 | 549.9 | 539.6 | 533.0 | 529.3 | 527.9 | 527.9 |
| 10°   | 681.5  | 656.5 | 607.3 | 566.1 | 538.2 | 524.9 | 519.8 | 519.1 | 519.8 | 520.5 | 521.3 |
| 12.5° | 702.1  | 663.2 | 589.6 | 538.2 | 516.1 | 511.0 | 513.9 | 520.5 | 526.4 | 528.6 | 528.6 |
| 15°   | 723.4  | 667.6 | 565.4 | 512.4 | 499.2 | 504.3 | 514.6 | 527.1 | 536.7 | 542.6 | 544.0 |
| 17.5° | 745.5  | 668.3 | 539.6 | 488.9 | 484.5 | 497.7 | 516.1 | 536.0 | 551.4 | 561.0 | 562.4 |
| 20°   | 769.0  | 666.8 | 509.5 | 467.6 | 469.8 | 491.8 | 517.6 | 544.8 | 565.4 | 577.9 | 579.3 |
| 22.5° | 794.8  | 660.9 | 480.1 | 447.0 | 457.3 | 486.0 | 516.1 | 547.7 | 569.8 | 584.5 | 587.4 |
| 25°   | 819.7  | 649.2 | 450.7 | 428.6 | 448.5 | 480.1 | 508.8 | 536.0 | 557.3 | 571.3 | 574.9 |
| 27.5° | 833.0  | 624.2 | 422.7 | 414.7 | 441.9 | 471.3 | 491.8 | 510.2 | 522.0 | 530.8 | 534.5 |
| 30°   | 835.2  | 588.9 | 399.9 | 405.1 | 434.5 | 458.8 | 470.5 | 473.5 | 471.3 | 474.2 | 470.5 |
| 32.5° | 830.8  | 550.7 | 381.6 | 397.7 | 422.7 | 441.1 | 444.1 | 435.2 | 422.0 | 403.6 | 404.4 |
| 35°   | 827.8  | 508.8 | 366.9 | 387.5 | 407.3 | 419.1 | 413.9 | 399.9 | 375.0 | 352.9 | 351.4 |
| 37.5° | 833.0  | 470.5 | 354.4 | 374.2 | 387.5 | 392.6 | 385.2 | 366.9 | 344.8 | 325.7 | 323.5 |
| 40°   | 847.7  | 442.6 | 342.6 | 359.5 | 366.1 | 369.8 | 361.0 | 344.8 | 336.0 | 322.0 | 319.8 |
| 42.5° | 876.4  | 423.5 | 331.6 | 343.3 | 346.3 | 350.0 | 341.1 | 330.1 | 338.2 | 335.3 | 335.3 |
| 45°   | 916.1  | 414.7 | 322.0 | 327.9 | 330.8 | 336.7 | 331.6 | 322.0 | 330.8 | 313.9 | 311.0 |
| 47.5° | 967.5  | 417.6 | 315.4 | 312.5 | 321.3 | 331.6 | 325.7 | 313.9 | 311.0 | 280.8 | 275.7 |
| 50°   | 1021.9 | 433.0 | 308.8 | 300.0 | 311.0 | 325.0 | 317.6 | 299.2 | 281.6 | 266.1 | 263.2 |
| 52.5° | 1085.9 | 458.8 | 302.9 | 286.0 | 299.2 | 317.6 | 312.5 | 292.6 | 274.2 | 263.2 | 261.0 |
| 55°   | 1156.5 | 483.8 | 295.6 | 269.8 | 283.8 | 315.4 | 313.9 | 288.2 | 263.9 | 258.8 | 257.3 |
| 57.5° | 1235.9 | 504.3 | 286.7 | 251.4 | 268.3 | 308.8 | 307.3 | 277.9 | 261.0 | 256.6 | 255.8 |
| 60°   | 1335.1 | 528.6 | 271.3 | 230.1 | 252.9 | 296.3 | 294.8 | 272.8 | 254.4 | 250.7 | 249.2 |
| 62.5° | 1470.4 | 573.5 | 244.8 | 210.3 | 236.7 | 274.2 | 283.1 | 262.5 | 244.8 | 244.1 | 244.1 |
| 65°   | 1693.2 | 660.2 | 217.6 | 193.4 | 218.4 | 252.9 | 267.6 | 250.7 | 236.0 | 239.7 | 239.7 |
| 67.5° | 2114.4 | 777.1 | 189.7 | 177.2 | 200.7 | 232.3 | 254.4 | 238.9 | 226.4 | 233.8 | 233.8 |
| 70°   | 2439.4 | 733.7 | 167.6 | 161.7 | 183.1 | 213.9 | 237.5 | 226.4 | 214.7 | 227.2 | 225.7 |
| 72°   | 2225.5 | 537.4 | 152.9 | 149.2 | 168.4 | 198.5 | 222.8 | 214.7 | 202.2 | 212.5 | 209.5 |
| 72.5° | 2136.5 | 488.2 | 148.5 | 145.6 | 163.9 | 195.6 | 219.8 | 211.7 | 198.5 | 208.8 | 204.4 |
| 75°   | 1863.7 | 411.7 | 129.4 | 127.9 | 145.6 | 175.7 | 200.7 | 196.3 | 183.1 | 188.9 | 184.5 |
| 77.5° | 1542.5 | 347.0 | 108.8 | 111.8 | 124.2 | 156.6 | 180.9 | 176.4 | 163.9 | 163.2 | 162.5 |
| 80°   | 723.4  | 193.4 | 89.7  | 91.9  | 104.4 | 133.8 | 155.9 | 152.9 | 141.2 | 139.7 | 137.5 |
| 82.5° | 209.5  | 92.6  | 69.1  | 70.6  | 83.8  | 109.5 | 133.8 | 132.3 | 123.5 | 121.3 | 116.2 |
| 85°   | 39.0   | 30.1  | 37.5  | 44.1  | 61.0  | 91.2  | 122.0 | 119.1 | 105.9 | 96.3  | 89.0  |
| 87.5° | 2.2    | 5.9   | 12.5  | 21.3  | 39.0  | 68.4  | 98.5  | 96.3  | 84.5  | 72.8  | 73.5  |
| 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)