

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: STREETWORKS

Report Number: P299168

Luminaire Tested: **GAA-AF-03-LED-U-T3-7030-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299168  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24140)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAA-AF-03-LED-U-T3-7030-800  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(3) 70 CRI, 3000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

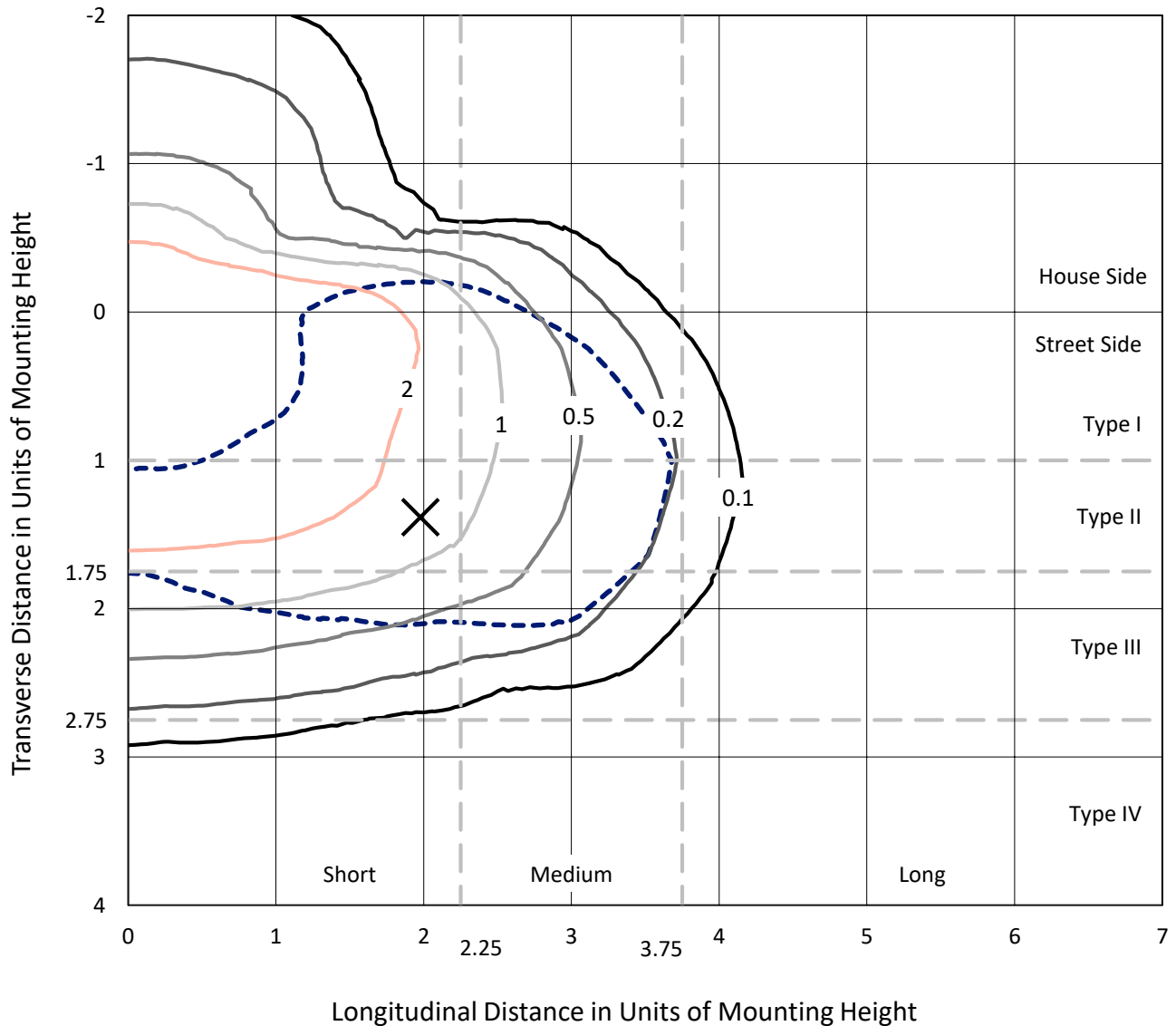
Lumens per Lamp: N/A  
Luminaire Lumens: 14154.7 lumens  
Efficiency: N/A  
Efficacy: 114.2 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Short - Full Cutoff  
BUG Rating: B2 - U0 - G2  
  
Input Watts (W): 124  
Input Voltage (V): NR  
Input Current (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: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

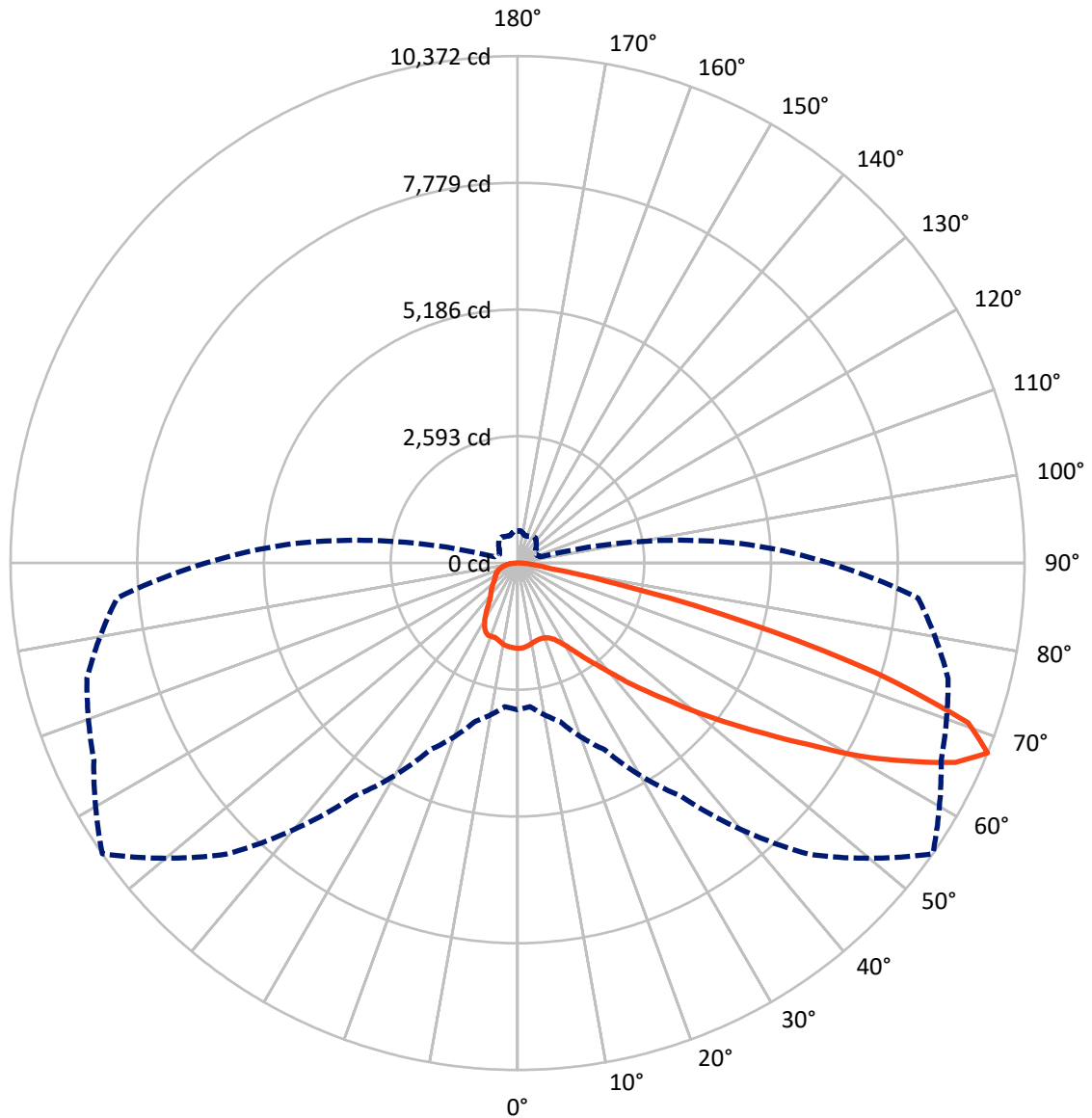
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 4.5 fc  
 Type III - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 3057.7   | 0.0    | 3057.7  |
|                    | % Fixture | 21.6     | 0.0    | 21.6    |
| <b>Street Side</b> | Lumens    | 11097.0  | 0.0    | 11097.0 |
|                    | % Fixture | 78.4     | 0.0    | 78.4    |
| <b>Total</b>       | Lumens    | 14154.7  | 0.0    | 14154.7 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 162.9   | 1.2       |
| 10°-20°   | 461.4   | 3.3       |
| 20°-30°   | 772.9   | 5.5       |
| 30°-40°   | 1271.0  | 9.0       |
| 40°-50°   | 2139.5  | 15.1      |
| 50°-60°   | 3367.4  | 23.8      |
| 60°-70°   | 4018.6  | 28.4      |
| 70°-80°   | 1725.7  | 12.2      |
| 80°-90°   | 235.3   | 1.7       |
| 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°    | 14154.7 | 100.0     |
| 0°-180°   | 14154.7 | 100.0     |

**Coefficient of Utilization**



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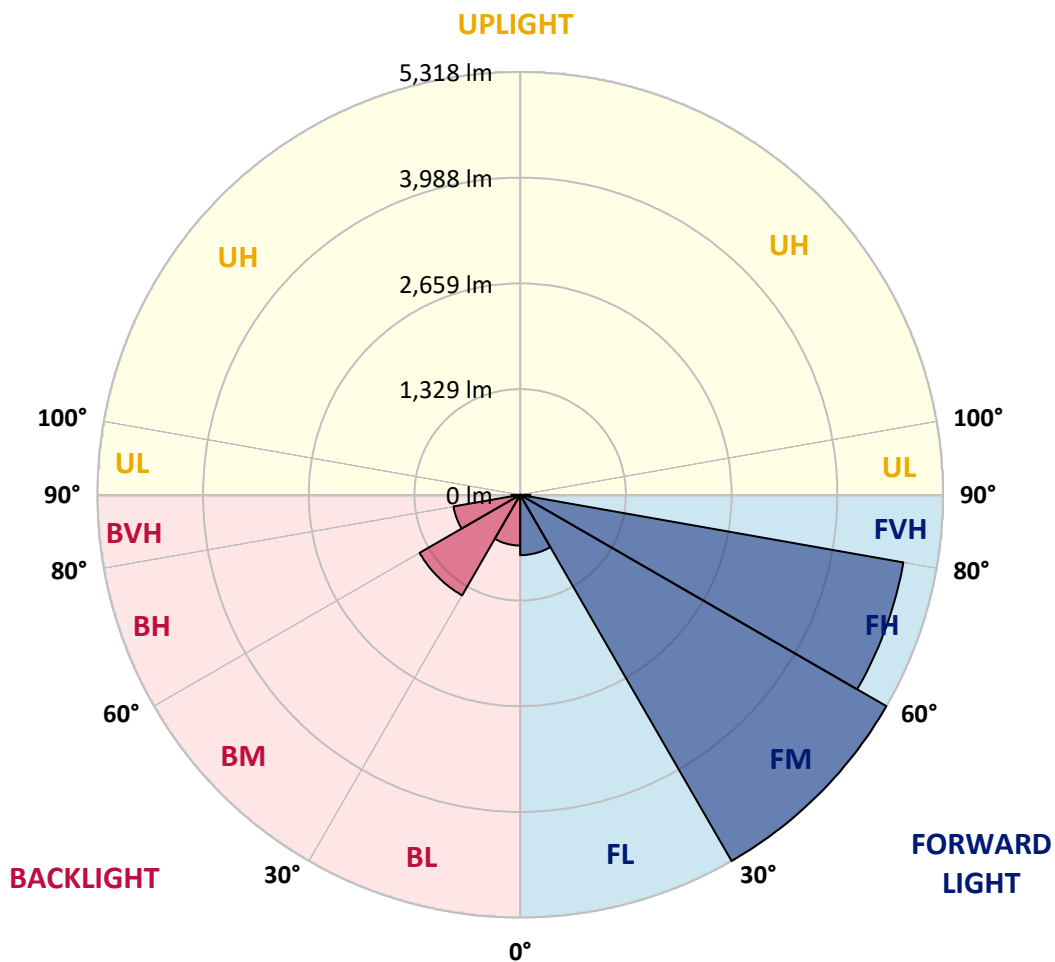
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 758.7  | 5.4       |                         |      |         |
| FM   | (30°-60°)   | 5317.6 | 37.6      |                         |      |         |
| FH   | (60°-80°)   | 4893.4 | 34.6      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 127.4  | 0.9       |                         |      | G2/225  |
| BL   | (0°-30°)    | 638.5  | 4.5       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 1460.3 | 10.3      | B2/2500                 |      |         |
| BH   | (60°-80°)   | 851.0  | 6.0       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 107.9  | 0.8       |                         |      | G2/225  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B2-U0-G2**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°     | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|---------|--------|--------|--------|--------|
| 0°    | 1745.4 | 1745.4 | 1745.4 | 1745.4 | 1745.4 | 1745.4 | 1745.4  | 1745.4 | 1745.4 | 1745.4 | 1745.4 |
| 2.5°  | 1730.4 | 1731.1 | 1732.4 | 1737.9 | 1742.7 | 1741.3 | 1742.0  | 1739.3 | 1738.6 | 1734.5 | 1738.6 |
| 5°    | 1708.5 | 1710.6 | 1711.2 | 1720.1 | 1725.6 | 1727.0 | 1724.9  | 1721.5 | 1717.4 | 1713.3 | 1715.4 |
| 7.5°  | 1658.6 | 1664.1 | 1664.8 | 1677.1 | 1686.0 | 1697.6 | 1698.3  | 1698.9 | 1696.9 | 1694.2 | 1698.3 |
| 10°   | 1627.2 | 1628.5 | 1627.8 | 1636.7 | 1643.6 | 1656.6 | 1664.1  | 1677.1 | 1682.5 | 1683.9 | 1686.6 |
| 12.5° | 1625.1 | 1623.7 | 1621.7 | 1621.7 | 1619.6 | 1625.1 | 1638.8  | 1657.2 | 1670.2 | 1674.3 | 1677.7 |
| 15°   | 1647.0 | 1646.3 | 1639.5 | 1629.2 | 1616.2 | 1612.1 | 1623.7  | 1644.2 | 1661.3 | 1670.2 | 1673.6 |
| 17.5° | 1696.2 | 1692.1 | 1681.2 | 1657.9 | 1629.9 | 1619.0 | 1620.3  | 1637.4 | 1657.2 | 1668.9 | 1672.3 |
| 20°   | 1786.5 | 1786.5 | 1763.2 | 1719.5 | 1669.5 | 1643.6 | 1631.3  | 1641.5 | 1660.7 | 1676.4 | 1681.2 |
| 22.5° | 1942.3 | 1943.7 | 1904.7 | 1832.9 | 1748.9 | 1693.5 | 1662.7  | 1660.7 | 1683.2 | 1701.0 | 1706.5 |
| 25°   | 2163.2 | 2157.7 | 2103.0 | 2000.4 | 1872.6 | 1781.0 | 1727.7  | 1715.4 | 1734.5 | 1754.3 | 1761.2 |
| 27.5° | 2420.2 | 2400.4 | 2335.4 | 2211.7 | 2046.3 | 1912.3 | 1830.2  | 1810.4 | 1828.8 | 1851.4 | 1858.2 |
| 30°   | 2674.6 | 2654.0 | 2576.8 | 2441.4 | 2257.5 | 2088.0 | 1970.4  | 1938.2 | 1964.2 | 1996.3 | 2000.4 |
| 32.5° | 2928.9 | 2928.9 | 2842.7 | 2684.8 | 2484.5 | 2297.8 | 2157.0  | 2118.7 | 2161.8 | 2200.8 | 2209.7 |
| 35°   | 3233.1 | 3234.5 | 3151.1 | 2961.0 | 2745.7 | 2548.1 | 2392.9  | 2364.8 | 2429.8 | 2457.1 | 2478.3 |
| 37.5° | 3607.1 | 3614.6 | 3507.3 | 3277.6 | 3041.7 | 2833.9 | 2649.3  | 2611.0 | 2675.9 | 2750.4 | 2818.8 |
| 40°   | 4011.1 | 4020.7 | 3902.4 | 3619.4 | 3383.5 | 3166.1 | 2966.5  | 2897.4 | 3005.5 | 3147.7 | 3235.9 |
| 42.5° | 4396.7 | 4446.0 | 4331.8 | 4040.5 | 3786.9 | 3562.0 | 3359.6  | 3259.1 | 3394.5 | 3609.1 | 3685.7 |
| 45°   | 4953.9 | 4989.5 | 4790.5 | 4526.6 | 4288.0 | 4036.4 | 3768.4  | 3662.5 | 3851.8 | 4122.6 | 4138.3 |
| 47.5° | 5325.2 | 5298.5 | 5197.3 | 5033.2 | 4882.2 | 4647.0 | 4243.6  | 4127.4 | 4379.0 | 4697.6 | 4609.4 |
| 50°   | 5522.8 | 5531.0 | 5517.3 | 5526.9 | 5532.3 | 5384.7 | 4826.1  | 4666.8 | 4966.9 | 5351.8 | 5148.8 |
| 52.5° | 5707.4 | 5652.7 | 5697.8 | 5922.0 | 6192.8 | 6138.1 | 5459.9  | 5293.7 | 5597.3 | 6077.9 | 5719.0 |
| 55°   | 5703.3 | 5619.8 | 5766.8 | 6162.7 | 6750.0 | 6812.9 | 6171.6  | 5980.1 | 6263.9 | 6856.6 | 6323.4 |
| 57.5° | 5501.6 | 5505.7 | 5732.0 | 6250.2 | 7138.3 | 7447.3 | 6997.5  | 6710.3 | 6970.8 | 7645.6 | 6875.1 |
| 60°   | 5224.0 | 5261.6 | 5587.7 | 6235.8 | 7449.4 | 7967.6 | 8010.7  | 7497.2 | 7663.4 | 8362.8 | 7331.8 |
| 62.5° | 4776.2 | 4815.8 | 5265.7 | 6086.8 | 7402.2 | 8468.7 | 8926.8  | 8390.1 | 8387.4 | 8797.6 | 7465.8 |
| 65°   | 4069.9 | 4058.3 | 4530.7 | 5529.6 | 7006.3 | 8839.3 | 9836.8  | 9162.0 | 8933.0 | 8804.4 | 7196.4 |
| 67.5° | 3001.4 | 2949.4 | 3354.8 | 4211.5 | 5823.6 | 8424.3 | 10372.1 | 9564.0 | 9118.9 | 8225.3 | 6373.3 |
| 70°   | 1557.4 | 1505.5 | 1833.6 | 2459.2 | 3830.0 | 6574.9 | 9779.3  | 9356.2 | 8708.0 | 6894.9 | 4992.9 |
| 72.5° | 665.9  | 657.0  | 790.3  | 1078.8 | 1852.8 | 3792.4 | 7668.1  | 8098.2 | 7471.9 | 5137.2 | 3432.8 |
| 75°   | 447.8  | 445.1  | 495.0  | 588.0  | 833.4  | 1539.0 | 4798.7  | 5748.4 | 5466.7 | 3185.3 | 1930.7 |
| 77.5° | 351.4  | 348.0  | 377.4  | 422.5  | 540.1  | 607.1  | 2129.7  | 3086.1 | 2856.4 | 1386.5 | 845.0  |
| 80°   | 274.8  | 272.1  | 290.6  | 315.2  | 388.3  | 382.9  | 700.8   | 1227.9 | 950.3  | 531.2  | 410.9  |
| 82.5° | 216.7  | 216.7  | 231.8  | 232.5  | 275.5  | 261.2  | 365.8   | 540.8  | 474.5  | 309.7  | 251.6  |
| 85°   | 198.3  | 198.3  | 214.0  | 173.7  | 179.8  | 164.8  | 227.0   | 320.6  | 300.8  | 127.2  | 109.4  |
| 87.5° | 99.8   | 97.1   | 179.8  | 153.8  | 97.8   | 87.5   | 110.8   | 155.2  | 166.8  | 70.4   | 54.7   |
| 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):**

|       | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1745.4 | 1745.4 | 1745.4 | 1745.4 | 1745.4 | 1745.4 | 1745.4 | 1745.4 | 1745.4 | 1745.4 |
| 2.5°  | 1737.2 | 1736.5 | 1737.9 | 1738.6 | 1744.1 | 1751.6 | 1755.0 | 1759.8 | 1762.5 | 1761.2 |
| 5°    | 1716.7 | 1718.1 | 1723.6 | 1727.7 | 1737.2 | 1749.5 | 1756.4 | 1761.8 | 1766.6 | 1764.6 |
| 7.5°  | 1699.6 | 1703.0 | 1711.2 | 1714.7 | 1720.1 | 1723.6 | 1722.9 | 1724.9 | 1729.0 | 1724.2 |
| 10°   | 1690.1 | 1694.2 | 1700.3 | 1695.5 | 1682.5 | 1664.1 | 1647.0 | 1638.1 | 1640.8 | 1637.4 |
| 12.5° | 1680.5 | 1686.0 | 1681.2 | 1658.6 | 1622.4 | 1598.4 | 1585.5 | 1586.8 | 1593.0 | 1594.3 |
| 15°   | 1675.0 | 1677.1 | 1656.6 | 1614.2 | 1577.2 | 1573.8 | 1580.7 | 1579.3 | 1580.0 | 1580.0 |
| 17.5° | 1675.0 | 1669.5 | 1631.3 | 1588.9 | 1573.1 | 1567.0 | 1545.8 | 1519.1 | 1507.5 | 1503.4 |
| 20°   | 1683.9 | 1669.5 | 1623.1 | 1595.0 | 1560.8 | 1508.2 | 1452.1 | 1402.9 | 1381.0 | 1374.9 |
| 22.5° | 1710.6 | 1686.0 | 1646.3 | 1597.8 | 1500.7 | 1412.5 | 1323.6 | 1264.8 | 1225.2 | 1218.3 |
| 25°   | 1764.6 | 1737.2 | 1692.1 | 1561.5 | 1405.0 | 1279.2 | 1178.0 | 1112.3 | 1072.7 | 1067.2 |
| 27.5° | 1858.9 | 1841.1 | 1716.7 | 1481.5 | 1277.8 | 1143.1 | 1049.4 | 998.9  | 969.5  | 967.4  |
| 30°   | 2001.1 | 1992.2 | 1704.4 | 1363.3 | 1121.2 | 1011.2 | 966.0  | 936.6  | 914.8  | 914.1  |
| 32.5° | 2228.1 | 2156.3 | 1664.1 | 1219.0 | 978.3  | 917.5  | 899.0  | 881.3  | 864.2  | 864.2  |
| 35°   | 2520.0 | 2289.0 | 1587.5 | 1064.5 | 891.5  | 865.5  | 842.3  | 814.3  | 791.7  | 790.3  |
| 37.5° | 2863.2 | 2371.0 | 1450.1 | 940.1  | 850.5  | 830.7  | 796.5  | 754.8  | 715.1  | 708.3  |
| 40°   | 3209.9 | 2395.6 | 1256.6 | 863.5  | 824.5  | 795.8  | 754.1  | 704.9  | 666.6  | 664.5  |
| 42.5° | 3527.8 | 2348.4 | 1051.5 | 810.8  | 798.5  | 760.3  | 716.5  | 672.7  | 642.7  | 642.0  |
| 45°   | 3794.4 | 2226.1 | 879.2  | 760.9  | 771.2  | 728.1  | 689.1  | 653.6  | 630.4  | 625.6  |
| 47.5° | 4045.3 | 2053.1 | 758.2  | 708.3  | 743.8  | 710.3  | 677.5  | 644.0  | 621.5  | 618.0  |
| 50°   | 4336.6 | 1866.4 | 673.4  | 657.0  | 719.9  | 704.2  | 687.1  | 652.2  | 614.6  | 610.5  |
| 52.5° | 4689.4 | 1705.1 | 607.1  | 611.9  | 701.5  | 712.4  | 711.7  | 675.5  | 609.8  | 604.4  |
| 55°   | 5083.2 | 1526.0 | 557.2  | 575.0  | 693.9  | 727.4  | 717.9  | 697.4  | 613.9  | 605.7  |
| 57.5° | 5470.8 | 1316.8 | 522.3  | 546.9  | 683.0  | 726.1  | 688.5  | 659.1  | 623.5  | 611.9  |
| 60°   | 5761.4 | 1035.8 | 495.7  | 522.3  | 659.1  | 703.5  | 656.3  | 617.4  | 621.5  | 612.6  |
| 62.5° | 5780.5 | 800.6  | 463.5  | 501.1  | 622.8  | 680.9  | 635.1  | 598.9  | 630.4  | 622.1  |
| 65°   | 5440.7 | 605.1  | 432.8  | 475.8  | 583.9  | 666.6  | 614.6  | 588.6  | 648.8  | 639.9  |
| 67.5° | 4580.7 | 486.8  | 406.8  | 449.9  | 544.9  | 636.5  | 596.2  | 579.1  | 665.2  | 649.5  |
| 70°   | 3307.0 | 415.0  | 381.5  | 418.4  | 510.0  | 602.3  | 579.8  | 562.0  | 620.8  | 596.2  |
| 72.5° | 2036.0 | 359.6  | 352.8  | 376.7  | 483.4  | 566.8  | 555.1  | 529.9  | 559.2  | 539.4  |
| 75°   | 1016.6 | 311.8  | 320.6  | 335.7  | 445.8  | 526.4  | 514.1  | 488.8  | 492.9  | 488.8  |
| 77.5° | 486.8  | 266.6  | 283.0  | 294.7  | 397.2  | 480.6  | 467.6  | 441.7  | 436.9  | 437.6  |
| 80°   | 308.3  | 222.9  | 238.6  | 246.8  | 354.8  | 427.3  | 414.3  | 388.3  | 443.0  | 410.9  |
| 82.5° | 192.8  | 181.2  | 185.3  | 200.3  | 309.0  | 371.9  | 354.8  | 331.6  | 399.3  | 315.9  |
| 85°   | 106.7  | 126.5  | 132.0  | 144.9  | 237.9  | 311.1  | 294.0  | 264.6  | 237.2  | 233.1  |
| 87.5° | 63.6   | 75.2   | 77.3   | 86.8   | 160.0  | 224.9  | 199.0  | 188.7  | 156.6  | 155.9  |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)