

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: McGRAW-EDISON

Report Number: P193251

Luminaire Tested: **GLEON-AF-03-LED-E1-T4FT-7030-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P193251  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24295)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLEON-AF-03-LED-E1-T4FT-7030-600  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(3) 70 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV  
FORWARD THROW OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11649.2 lumens  
Efficiency: N/A  
Efficacy: 121.3 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B2 - U0 - G2

Input Watts (W): 96  
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

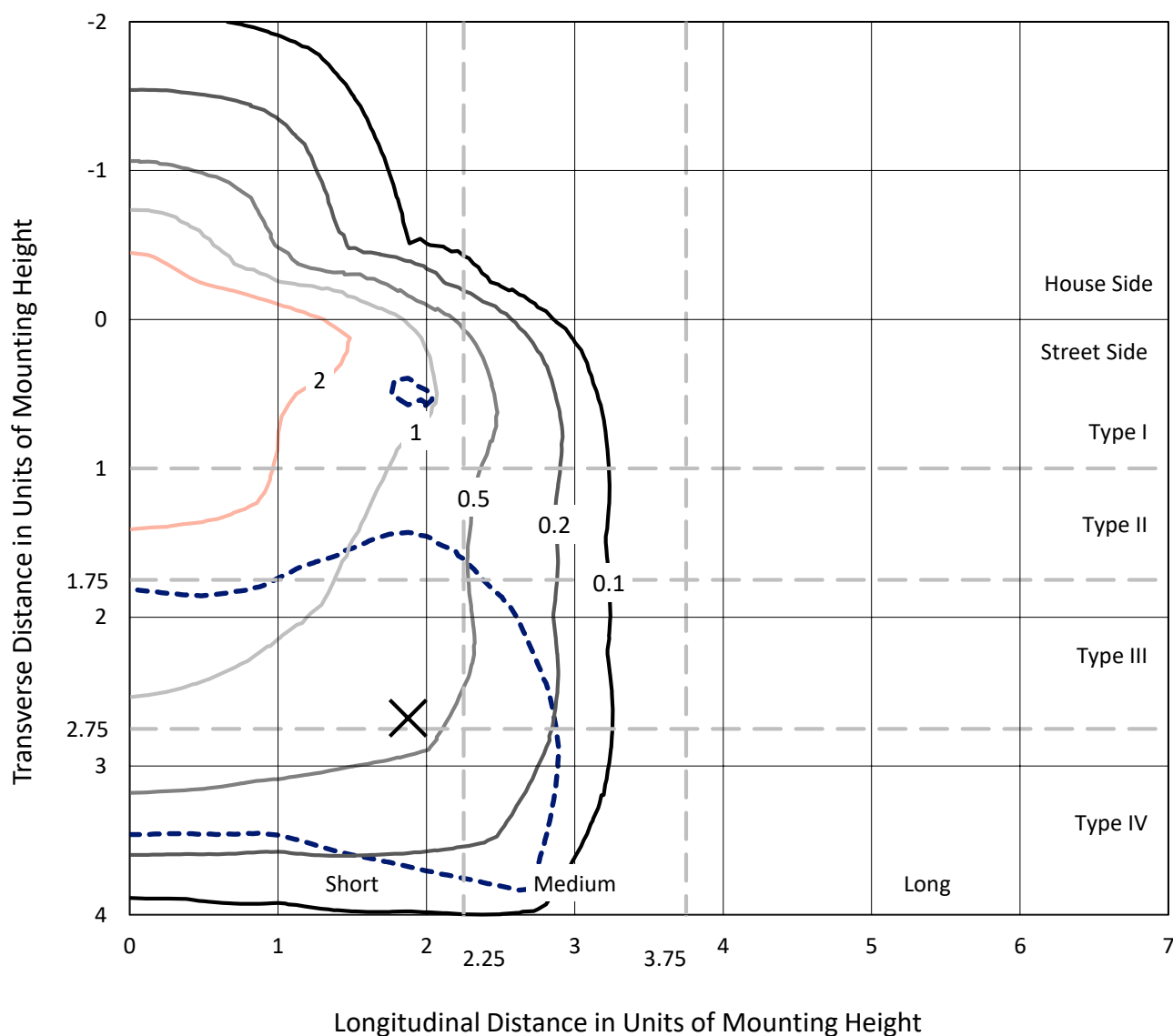


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

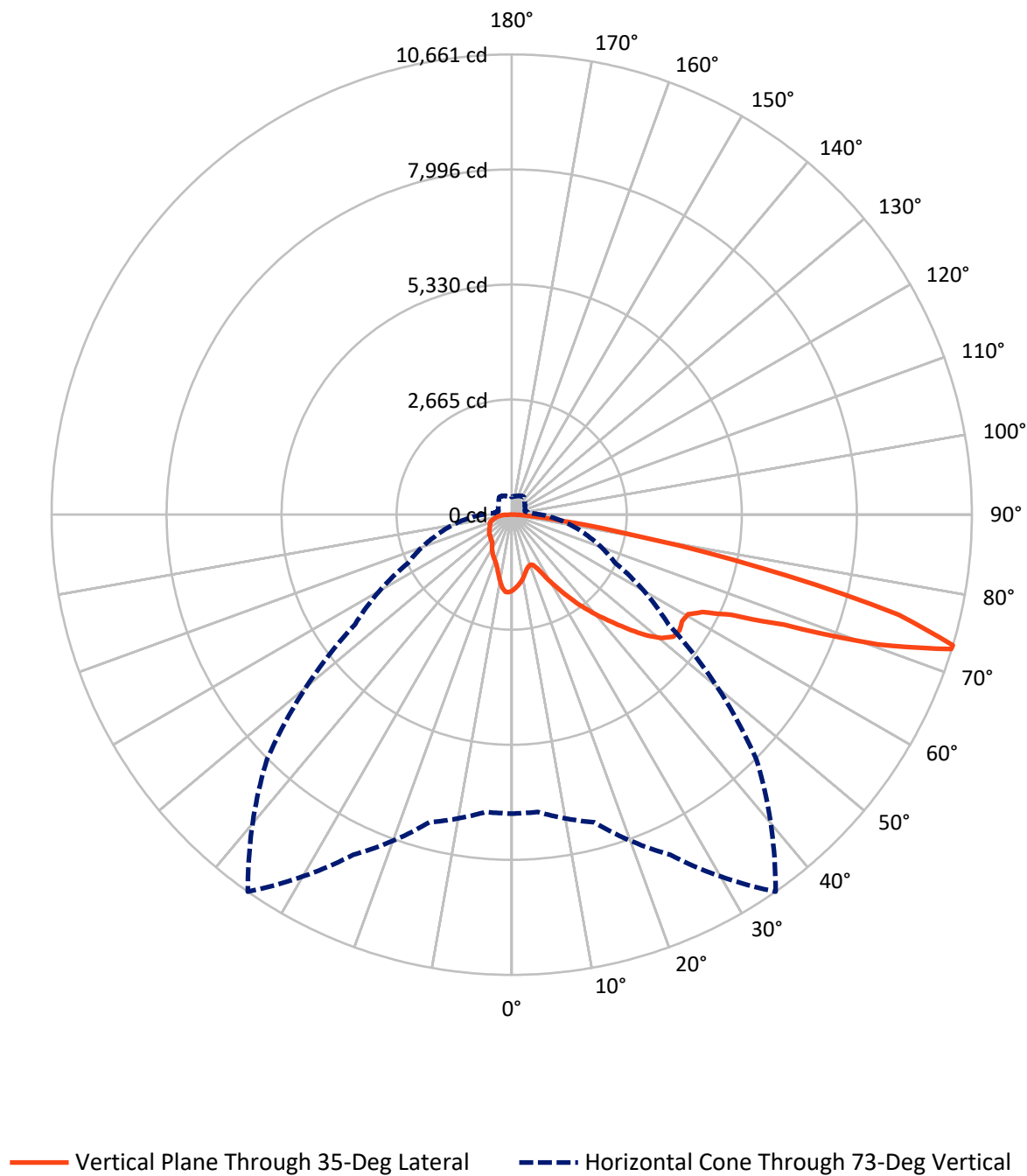


Based on 20 foot mounting height. Maximum calculated value = 4.4 fc  
 Type IV - Short - Non-Cutoff

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## Luminous Intensity Polar Plot



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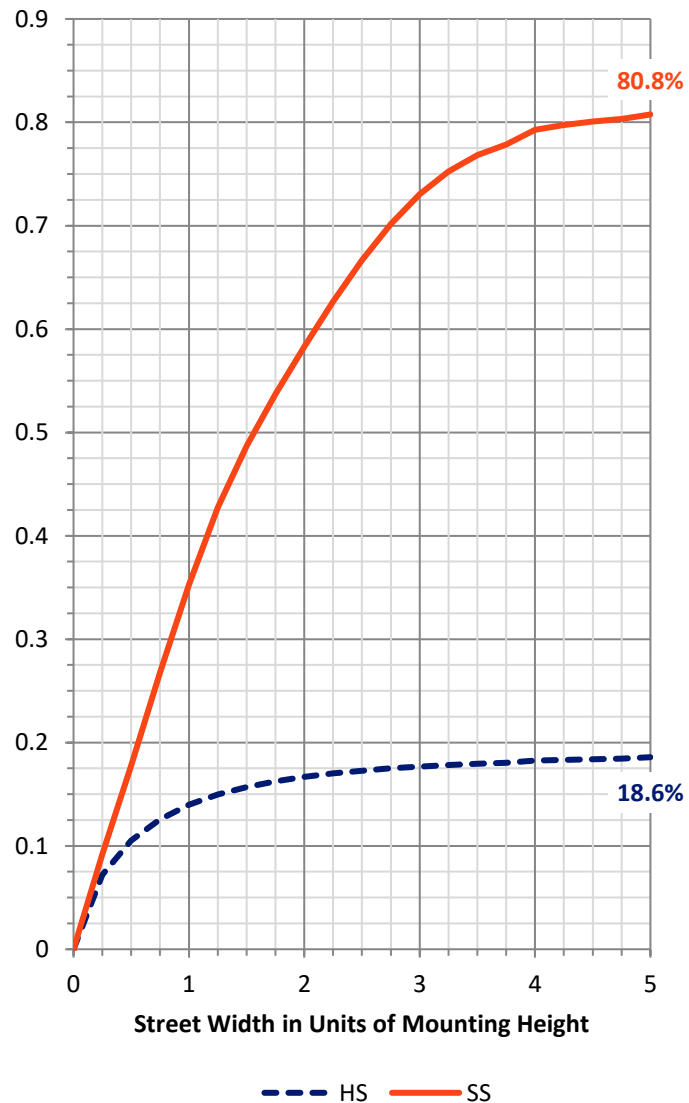
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2221.8   | 0.0    | 2221.8  |
|                    | % Fixture | 19.1     | 0.0    | 19.1    |
| <b>Street Side</b> | Lumens    | 9427.4   | 0.0    | 9427.4  |
|                    | % Fixture | 80.9     | 0.0    | 80.9    |
| <b>Total</b>       | Lumens    | 11649.2  | 0.0    | 11649.2 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 159.2   | 1.4       |
| 10°-20°   | 397.3   | 3.4       |
| 20°-30°   | 642.2   | 5.5       |
| 30°-40°   | 1076.9  | 9.2       |
| 40°-50°   | 1660.1  | 14.3      |
| 50°-60°   | 2227.1  | 19.1      |
| 60°-70°   | 2967.0  | 25.5      |
| 70°-80°   | 2262.9  | 19.4      |
| 80°-90°   | 256.5   | 2.2       |
| 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°    | 11649.2 | 100.0     |
| 0°-180°   | 11649.2 | 100.0     |

**Coefficient of Utilization**



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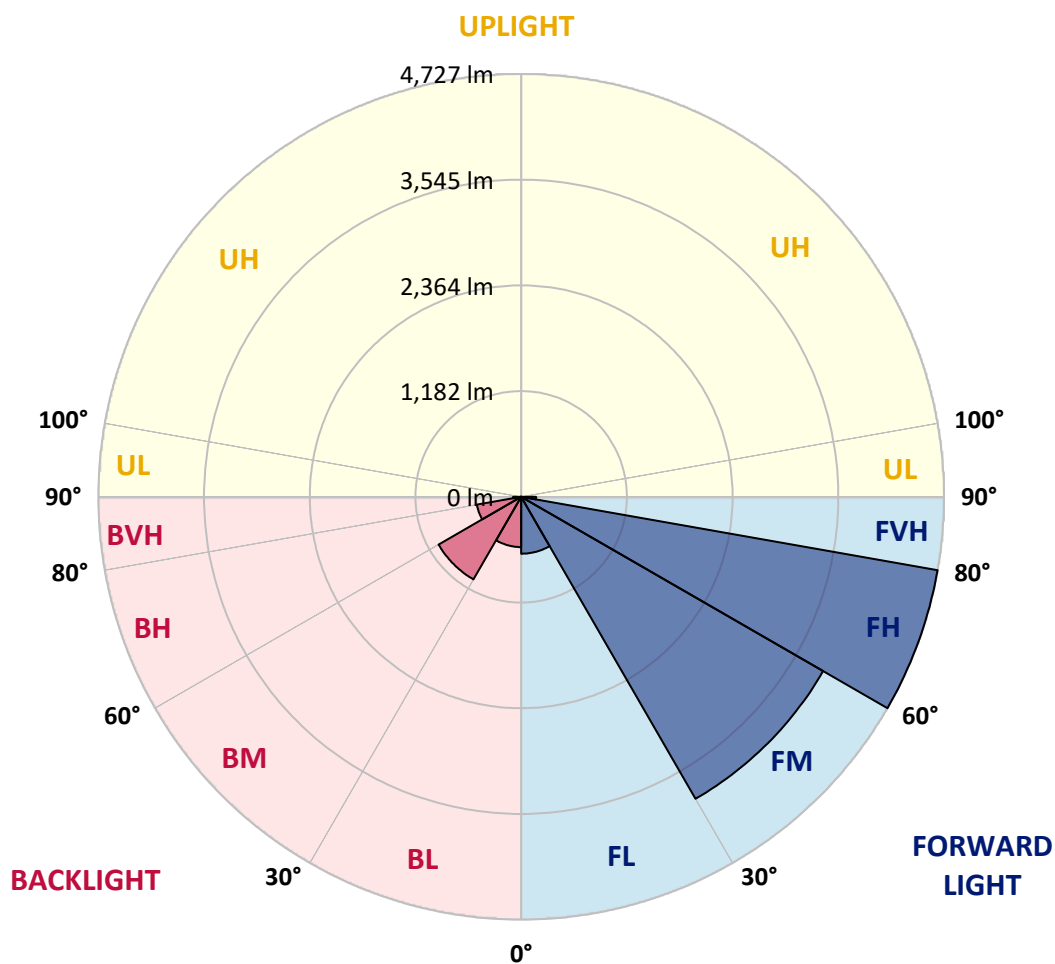
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 636.4  | 5.5       |                         |      |         |
| FM   | (30°-60°)   | 3897.9 | 33.5      |                         |      |         |
| FH   | (60°-80°)   | 4727.2 | 40.6      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 165.8  | 1.4       |                         |      | G2/225  |
| BL   | (0°-30°)    | 562.2  | 4.8       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 1066.2 | 9.2       | B2/2500                 |      |         |
| BH   | (60°-80°)   | 502.7  | 4.3       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 90.7   | 0.8       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

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

Type IV Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°     | 45°    | 55°    | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|---------|--------|--------|--------|--------|--------|--------|
| 0°    | 1758.2 | 1758.2 | 1758.2 | 1758.2 | 1758.2  | 1758.2 | 1758.2 | 1758.2 | 1758.2 | 1758.2 | 1758.2 |
| 2.5°  | 1688.8 | 1692.2 | 1688.3 | 1693.3 | 1701.7  | 1710.7 | 1716.8 | 1725.7 | 1735.8 | 1749.8 | 1753.2 |
| 5°    | 1609.4 | 1614.5 | 1614.5 | 1623.4 | 1639.7  | 1654.1 | 1667.7 | 1682.1 | 1703.5 | 1727.5 | 1737.0 |
| 7.5°  | 1522.2 | 1524.9 | 1529.9 | 1543.4 | 1566.9  | 1587.6 | 1606.6 | 1630.1 | 1659.2 | 1691.2 | 1707.8 |
| 10°   | 1417.0 | 1420.9 | 1428.8 | 1447.8 | 1479.6  | 1508.3 | 1535.5 | 1568.0 | 1604.9 | 1644.7 | 1665.8 |
| 12.5° | 1342.6 | 1341.4 | 1344.9 | 1358.8 | 1386.8  | 1421.5 | 1461.3 | 1502.6 | 1547.8 | 1594.3 | 1620.1 |
| 15°   | 1317.4 | 1311.2 | 1298.4 | 1295.0 | 1310.1  | 1344.9 | 1390.7 | 1441.5 | 1495.9 | 1551.8 | 1583.7 |
| 17.5° | 1333.1 | 1322.5 | 1287.2 | 1261.5 | 1259.2  | 1285.6 | 1334.2 | 1391.3 | 1453.9 | 1522.2 | 1561.9 |
| 20°   | 1431.6 | 1406.3 | 1319.7 | 1259.8 | 1239.1  | 1252.0 | 1294.5 | 1355.0 | 1428.8 | 1519.4 | 1570.3 |
| 22.5° | 1667.1 | 1630.1 | 1446.0 | 1334.7 | 1264.7  | 1249.2 | 1281.1 | 1345.4 | 1431.6 | 1554.0 | 1618.9 |
| 25°   | 2010.0 | 1957.4 | 1663.2 | 1521.6 | 1377.3  | 1293.9 | 1301.2 | 1367.2 | 1471.2 | 1634.6 | 1712.9 |
| 27.5° | 2280.7 | 2246.6 | 1946.8 | 1785.1 | 1582.0  | 1414.8 | 1366.7 | 1422.0 | 1552.3 | 1766.6 | 1846.6 |
| 30°   | 2441.8 | 2421.1 | 2249.9 | 2083.8 | 1843.3  | 1607.2 | 1491.9 | 1524.9 | 1679.4 | 1949.5 | 2015.5 |
| 32.5° | 2628.7 | 2616.3 | 2532.4 | 2379.7 | 2125.2  | 1860.0 | 1690.6 | 1678.8 | 1849.4 | 2169.4 | 2199.6 |
| 35°   | 2822.2 | 2818.4 | 2769.0 | 2659.5 | 2427.8  | 2193.5 | 1954.0 | 1874.6 | 2034.6 | 2397.5 | 2378.6 |
| 37.5° | 3002.3 | 2995.7 | 2967.2 | 2903.3 | 2744.5  | 2551.4 | 2222.6 | 2075.4 | 2234.3 | 2615.7 | 2531.3 |
| 40°   | 3334.0 | 3281.5 | 3183.6 | 3135.5 | 3064.5  | 2853.0 | 2435.7 | 2262.9 | 2441.3 | 2824.0 | 2663.3 |
| 42.5° | 3738.6 | 3653.0 | 3470.6 | 3404.6 | 3394.4  | 3090.7 | 2581.1 | 2444.6 | 2650.0 | 3030.3 | 2793.1 |
| 45°   | 4056.8 | 3976.3 | 3819.0 | 3735.8 | 3772.7  | 3306.0 | 2727.1 | 2638.7 | 2864.8 | 3246.8 | 2926.8 |
| 47.5° | 4396.4 | 4270.0 | 4061.9 | 4087.1 | 4167.5  | 3509.7 | 2875.9 | 2847.4 | 3100.2 | 3489.0 | 3093.0 |
| 50°   | 4408.7 | 4311.9 | 4220.8 | 4371.3 | 4496.6  | 3697.2 | 3062.2 | 3066.2 | 3388.3 | 3793.9 | 3314.0 |
| 52.5° | 4153.1 | 4132.4 | 4277.3 | 4513.9 | 4694.6  | 3845.4 | 3274.3 | 3292.1 | 3757.0 | 4144.1 | 3556.7 |
| 55°   | 4063.6 | 4040.1 | 4207.3 | 4464.2 | 4721.4  | 3967.9 | 3504.2 | 3536.6 | 4202.8 | 4513.3 | 3793.4 |
| 57.5° | 4281.8 | 4229.8 | 4240.9 | 4440.7 | 4656.0  | 4102.1 | 3754.8 | 3820.2 | 4687.3 | 4836.2 | 3945.6 |
| 60°   | 4891.5 | 4780.2 | 4568.6 | 4563.6 | 4691.3  | 4303.5 | 4044.6 | 4124.5 | 5190.8 | 4990.5 | 3886.3 |
| 62.5° | 5746.8 | 5635.5 | 5239.4 | 4981.5 | 4962.5  | 4635.9 | 4400.3 | 4421.6 | 5481.6 | 4781.3 | 3524.2 |
| 65°   | 6672.7 | 6573.0 | 6130.5 | 5766.3 | 5590.8  | 5186.3 | 4813.8 | 4554.2 | 5386.6 | 4205.6 | 2891.0 |
| 67.5° | 7796.5 | 7689.6 | 7309.2 | 6973.0 | 6804.1  | 6074.6 | 5104.0 | 4427.1 | 4783.0 | 3258.0 | 2078.2 |
| 70°   | 8582.6 | 8473.4 | 8323.5 | 8595.9 | 9009.3  | 7356.2 | 5141.5 | 3910.8 | 3572.4 | 2165.5 | 1250.8 |
| 72.5° | 7557.1 | 7506.2 | 7779.7 | 8927.1 | 10649.0 | 8133.8 | 4647.6 | 2847.4 | 2074.9 | 1149.6 | 723.9  |
| 73°   | 6923.9 | 6912.7 | 7379.2 | 8695.0 | 10660.8 | 8014.1 | 4431.1 | 2646.6 | 1779.5 | 1016.9 | 661.8  |
| 75°   | 3126.6 | 3216.6 | 4239.3 | 6641.4 | 9262.1  | 6603.8 | 3118.7 | 1518.2 | 1005.3 | 702.6  | 499.6  |
| 77.5° | 751.2  | 782.7  | 1326.4 | 3154.0 | 5849.2  | 3935.4 | 1413.0 | 750.7  | 642.8  | 496.1  | 364.7  |
| 80°   | 320.0  | 330.6  | 510.8  | 1165.2 | 2754.0  | 1584.8 | 651.1  | 502.9  | 444.6  | 346.3  | 255.6  |
| 82.5° | 177.9  | 189.1  | 289.7  | 528.6  | 1111.6  | 540.4  | 397.1  | 350.1  | 292.6  | 208.6  | 166.2  |
| 85°   | 100.7  | 106.8  | 169.5  | 295.3  | 471.0   | 217.1  | 237.7  | 232.7  | 165.0  | 107.4  | 81.7   |
| 87.5° | 47.5   | 51.5   | 81.7   | 137.0  | 184.6   | 85.0   | 120.8  | 133.2  | 103.5  | 65.4   | 42.5   |
| 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°    | 1758.2 | 1758.2 | 1758.2 | 1758.2 | 1758.2 | 1758.2 | 1758.2 | 1758.2 | 1758.2 | 1758.2 |
| 2.5°  | 1757.1 | 1767.2 | 1779.0 | 1785.1 | 1790.6 | 1797.5 | 1804.1 | 1804.1 | 1805.2 | 1805.7 |
| 5°    | 1744.8 | 1765.5 | 1783.9 | 1791.8 | 1793.5 | 1793.5 | 1791.8 | 1782.9 | 1775.0 | 1778.4 |
| 7.5°  | 1719.0 | 1749.2 | 1765.0 | 1762.2 | 1740.9 | 1716.3 | 1695.6 | 1670.3 | 1657.6 | 1655.3 |
| 10°   | 1682.1 | 1716.8 | 1719.6 | 1691.7 | 1639.1 | 1586.5 | 1542.8 | 1500.3 | 1480.3 | 1475.2 |
| 12.5° | 1641.3 | 1673.2 | 1655.3 | 1597.7 | 1513.2 | 1436.5 | 1381.1 | 1338.1 | 1319.1 | 1314.1 |
| 15°   | 1608.3 | 1630.1 | 1584.8 | 1494.2 | 1387.9 | 1306.7 | 1261.0 | 1229.0 | 1215.6 | 1211.6 |
| 17.5° | 1591.0 | 1595.4 | 1512.7 | 1390.1 | 1277.1 | 1209.5 | 1180.9 | 1165.8 | 1160.8 | 1157.9 |
| 20°   | 1599.3 | 1568.0 | 1443.9 | 1293.4 | 1186.5 | 1138.9 | 1132.3 | 1128.3 | 1127.2 | 1125.6 |
| 22.5° | 1641.3 | 1559.6 | 1380.6 | 1201.7 | 1107.2 | 1086.4 | 1091.9 | 1091.4 | 1090.3 | 1089.2 |
| 25°   | 1716.3 | 1566.9 | 1319.1 | 1114.3 | 1040.4 | 1036.0 | 1046.0 | 1046.0 | 1041.7 | 1041.7 |
| 27.5° | 1815.4 | 1582.0 | 1250.3 | 1031.5 | 980.0  | 980.6  | 988.5  | 986.3  | 981.2  | 977.9  |
| 30°   | 1936.1 | 1591.5 | 1169.7 | 957.1  | 923.6  | 921.4  | 923.6  | 914.1  | 898.9  | 897.9  |
| 32.5° | 2059.7 | 1579.8 | 1076.3 | 891.1  | 863.7  | 858.7  | 857.0  | 843.6  | 826.2  | 821.2  |
| 35°   | 2171.6 | 1536.7 | 981.2  | 838.6  | 806.7  | 795.5  | 803.3  | 798.8  | 783.2  | 779.2  |
| 37.5° | 2253.4 | 1456.8 | 895.6  | 792.1  | 765.8  | 763.0  | 768.1  | 769.7  | 751.2  | 747.4  |
| 40°   | 2308.1 | 1348.1 | 822.2  | 753.1  | 758.0  | 747.4  | 730.6  | 718.8  | 713.3  | 711.6  |
| 42.5° | 2352.4 | 1235.1 | 760.8  | 734.6  | 759.7  | 728.9  | 692.6  | 673.6  | 683.6  | 688.2  |
| 45°   | 2403.2 | 1125.0 | 709.3  | 711.6  | 751.2  | 707.7  | 666.3  | 647.8  | 651.7  | 652.9  |
| 47.5° | 2473.2 | 990.8  | 653.9  | 674.6  | 723.3  | 693.1  | 650.0  | 623.8  | 605.3  | 596.9  |
| 50°   | 2569.9 | 831.8  | 596.3  | 633.2  | 695.9  | 682.5  | 624.9  | 596.9  | 562.8  | 554.9  |
| 52.5° | 2637.1 | 683.6  | 548.8  | 598.5  | 671.3  | 661.2  | 604.8  | 568.3  | 532.5  | 525.9  |
| 55°   | 2600.7 | 567.8  | 507.4  | 560.0  | 638.8  | 634.9  | 588.0  | 539.3  | 511.4  | 505.8  |
| 57.5° | 2418.9 | 494.5  | 475.5  | 523.6  | 599.2  | 612.5  | 565.5  | 514.6  | 494.5  | 490.6  |
| 60°   | 2072.1 | 448.6  | 455.4  | 499.0  | 566.7  | 590.2  | 543.2  | 501.3  | 487.9  | 485.0  |
| 62.5° | 1607.7 | 417.9  | 440.2  | 481.1  | 541.5  | 574.4  | 530.9  | 499.6  | 494.5  | 491.1  |
| 65°   | 1151.8 | 393.3  | 424.0  | 463.2  | 518.6  | 560.0  | 526.4  | 497.3  | 498.4  | 495.6  |
| 67.5° | 782.7  | 371.5  | 404.5  | 443.0  | 496.1  | 547.1  | 520.3  | 489.5  | 503.4  | 500.1  |
| 70°   | 547.7  | 350.1  | 381.6  | 417.4  | 468.1  | 529.3  | 509.0  | 477.8  | 476.6  | 463.2  |
| 72.5° | 427.4  | 322.2  | 350.1  | 381.6  | 432.4  | 504.0  | 486.6  | 451.5  | 433.0  | 419.0  |
| 73°   | 407.9  | 315.5  | 342.3  | 373.6  | 424.6  | 497.9  | 480.5  | 444.1  | 423.5  | 410.6  |
| 75°   | 337.3  | 286.4  | 311.1  | 339.0  | 391.0  | 468.8  | 450.3  | 411.2  | 384.9  | 377.1  |
| 77.5° | 265.2  | 245.1  | 268.6  | 293.7  | 344.6  | 426.2  | 405.6  | 368.1  | 353.6  | 346.8  |
| 80°   | 196.3  | 203.1  | 223.8  | 246.2  | 298.8  | 381.0  | 362.5  | 325.0  | 389.9  | 373.6  |
| 82.5° | 138.2  | 153.8  | 172.8  | 193.0  | 250.6  | 336.7  | 314.3  | 275.8  | 285.2  | 237.2  |
| 85°   | 81.7   | 100.7  | 118.5  | 135.9  | 180.8  | 279.1  | 259.6  | 219.8  | 180.2  | 171.7  |
| 87.5° | 47.5   | 55.9   | 60.9   | 78.8   | 124.2  | 210.4  | 182.9  | 162.8  | 93.4   | 63.3   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)