

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: P200198

Luminaire Tested: **GAP-AF-02-LED-U-T3R-800**

Issue Date: 3/3/2020

#### Test Information

Test Method: LM-79-08  
Report Number: P200198  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P40129)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAP-AF-02-LED-U-T3R-800  
Description: GALLEON PEDESTRIAN LUMINAIRE  
(2) 70 CRI, 4000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

#### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 10497.5 lumens  
Efficiency: N/A  
Efficacy: 122.1 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type III - Short - Full Cutoff  
BUG Rating: B1 - U0 - G2

Input Watts (W): 86  
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



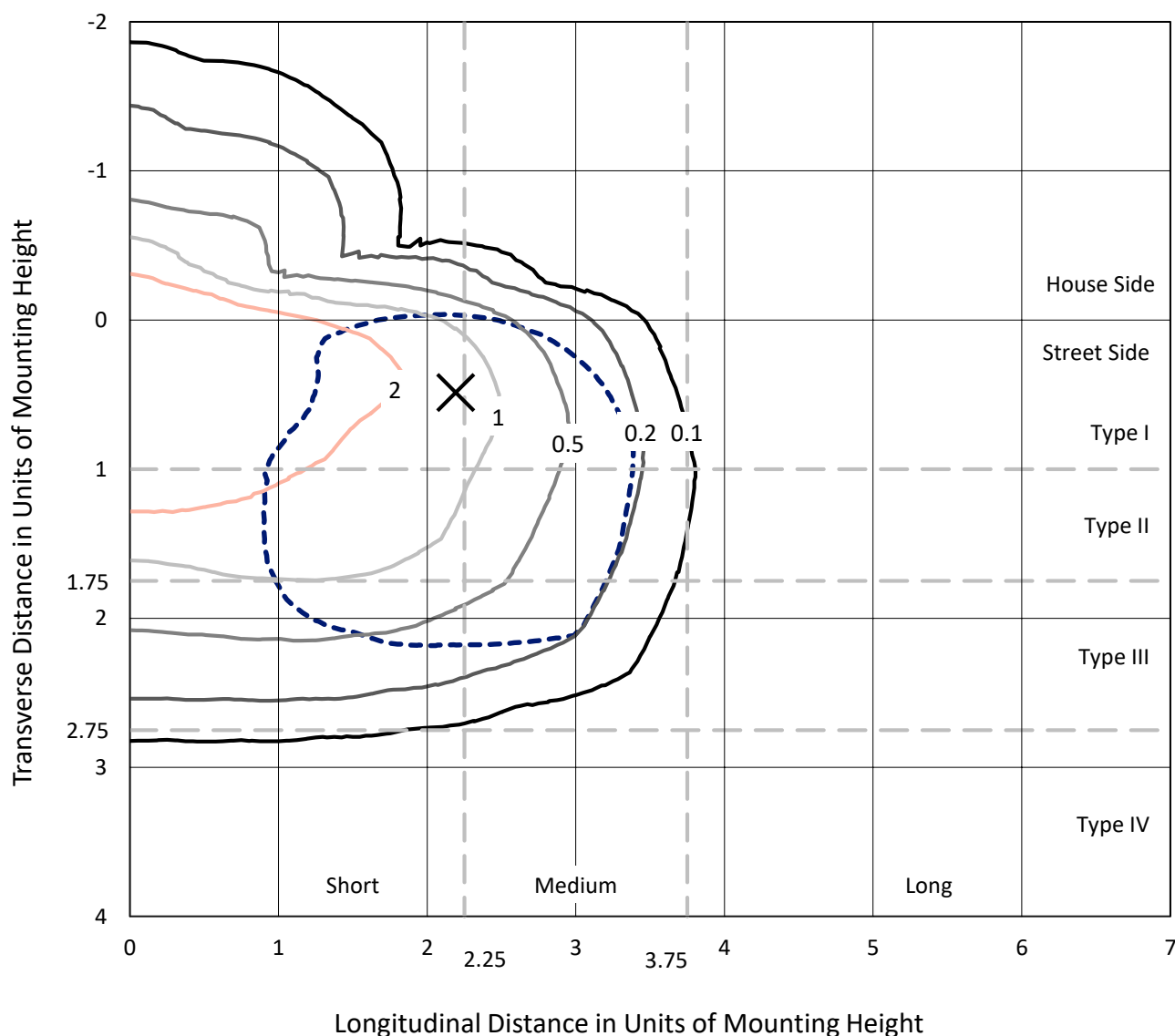
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CATALOG NUMBER: GAP-AF-02-LED-U-T3R-800

## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

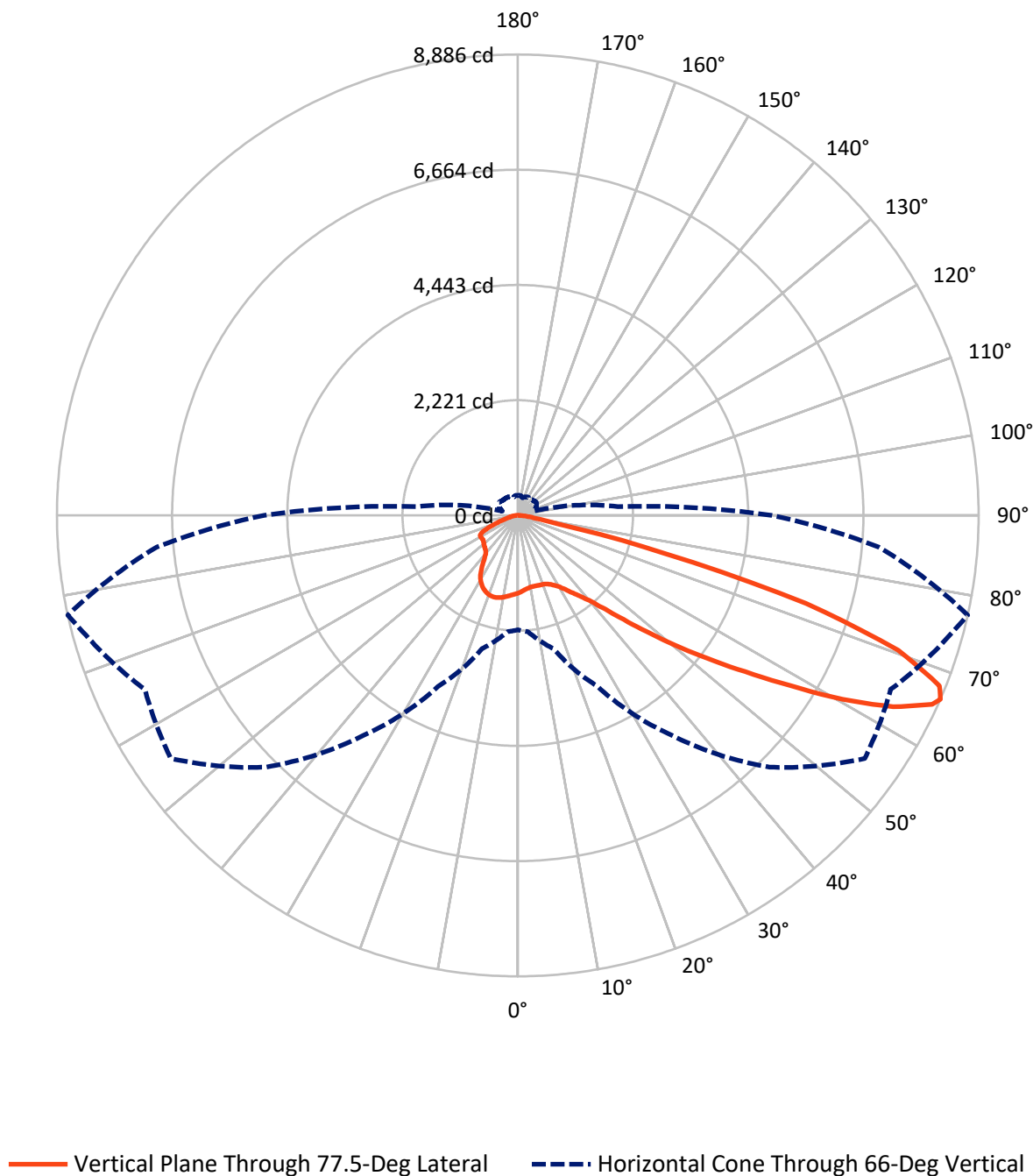


Based on 20 foot mounting height. Maximum calculated value = 4.6 fc  
 Type III - Short - Full Cutoff

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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 1793.4   | 0.0    | 1793.4  |
|                    | % Fixture | 17.1     | 0.0    | 17.1    |
| <b>Street Side</b> | Lumens    | 8704.1   | 0.0    | 8704.1  |
|                    | % Fixture | 82.9     | 0.0    | 82.9    |
| <b>Total</b>       | Lumens    | 10497.5  | 0.0    | 10497.5 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 133.7   | 1.3       |
| 10°-20°   | 377.1   | 3.6       |
| 20°-30°   | 643.5   | 6.1       |
| 30°-40°   | 1030.1  | 9.8       |
| 40°-50°   | 1591.4  | 15.2      |
| 50°-60°   | 2257.2  | 21.5      |
| 60°-70°   | 3019.5  | 28.8      |
| 70°-80°   | 1311.3  | 12.5      |
| 80°-90°   | 133.7   | 1.3       |
| 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°    | 10497.5 | 100.0     |
| 0°-180°   | 10497.5 | 100.0     |

**Coefficient of Utilization**



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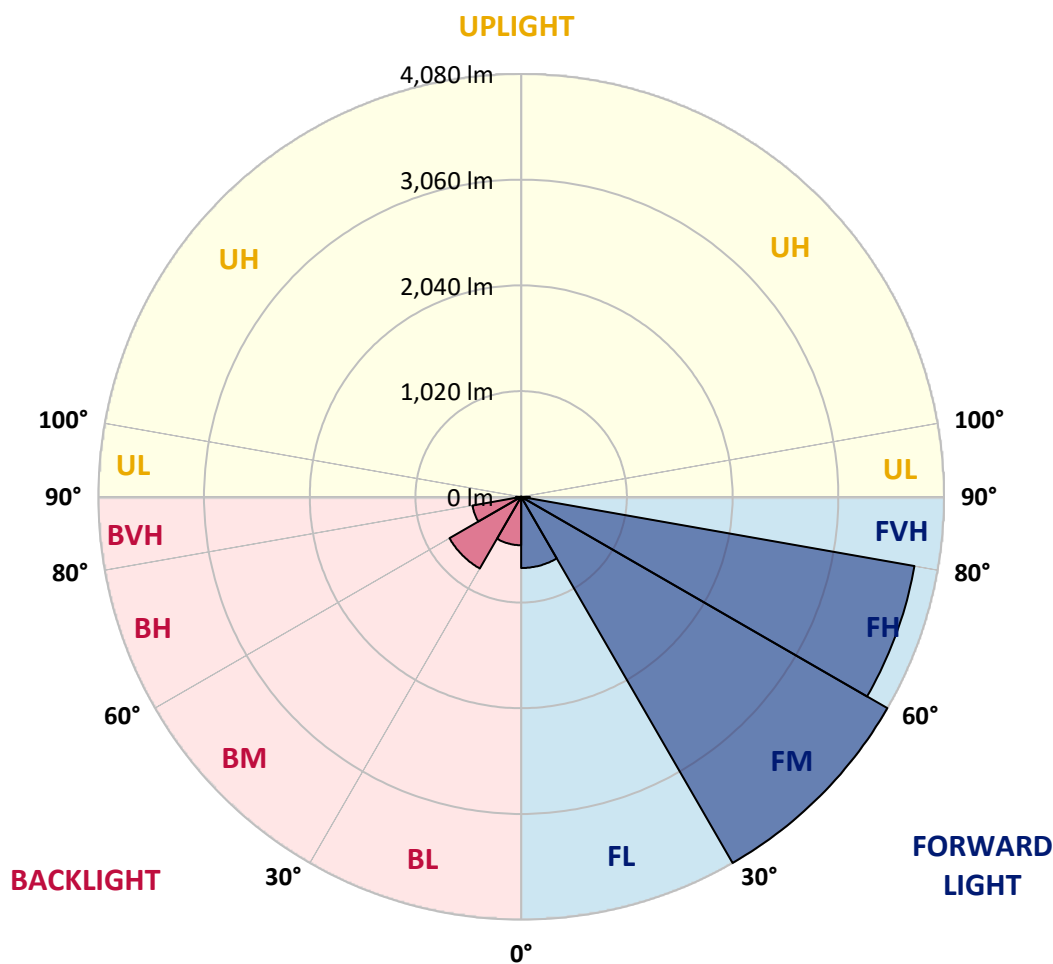
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 687.1  | 6.5       |                         |      |         |
| FM   | (30°-60°)   | 4079.9 | 38.9      |                         |      |         |
| FH   | (60°-80°)   | 3853.2 | 36.7      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 83.9   | 0.8       |                         |      | G1/100  |
| BL   | (0°-30°)    | 467.1  | 4.4       | B1/500                  |      |         |
| BM   | (30°-60°)   | 798.9  | 7.6       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 477.6  | 4.5       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 49.8   | 0.5       |                         |      | 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 III Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 77.5°  | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1496.0 | 1496.0 | 1496.0 | 1496.0 | 1496.0 | 1496.0 | 1496.0 | 1496.0 | 1496.0 | 1496.0 | 1496.0 |
| 2.5°  | 1323.3 | 1332.3 | 1339.7 | 1346.6 | 1360.5 | 1383.3 | 1409.6 | 1431.0 | 1461.7 | 1467.6 | 1484.0 |
| 5°    | 1201.9 | 1201.9 | 1207.8 | 1218.2 | 1237.1 | 1271.2 | 1306.9 | 1354.6 | 1421.6 | 1437.5 | 1481.0 |
| 7.5°  | 1142.8 | 1143.2 | 1146.7 | 1155.7 | 1172.1 | 1203.3 | 1242.5 | 1298.5 | 1389.3 | 1415.6 | 1490.0 |
| 10°   | 1164.6 | 1159.6 | 1152.3 | 1147.8 | 1150.2 | 1168.6 | 1205.8 | 1268.3 | 1369.4 | 1403.2 | 1509.9 |
| 12.5° | 1286.7 | 1277.3 | 1251.4 | 1217.2 | 1184.5 | 1171.1 | 1192.9 | 1253.9 | 1361.0 | 1400.2 | 1536.2 |
| 15°   | 1486.0 | 1482.1 | 1434.0 | 1363.0 | 1283.7 | 1217.2 | 1202.3 | 1248.4 | 1362.1 | 1403.7 | 1567.4 |
| 17.5° | 1736.0 | 1730.5 | 1667.1 | 1563.9 | 1434.5 | 1305.0 | 1235.5 | 1252.9 | 1365.5 | 1409.6 | 1597.6 |
| 20°   | 1988.5 | 1971.6 | 1903.2 | 1780.1 | 1614.0 | 1424.6 | 1290.6 | 1264.3 | 1369.9 | 1416.1 | 1629.4 |
| 22.5° | 2176.9 | 2163.0 | 2101.6 | 1982.1 | 1790.6 | 1562.9 | 1364.5 | 1284.1 | 1384.4 | 1434.9 | 1668.5 |
| 25°   | 2342.7 | 2343.6 | 2282.6 | 2167.0 | 1969.2 | 1709.8 | 1459.8 | 1337.2 | 1421.1 | 1473.7 | 1722.1 |
| 27.5° | 2547.5 | 2535.6 | 2478.5 | 2363.9 | 2145.7 | 1858.0 | 1574.8 | 1410.1 | 1475.6 | 1528.7 | 1792.5 |
| 30°   | 2792.5 | 2784.1 | 2718.1 | 2588.2 | 2341.6 | 2017.3 | 1706.3 | 1494.9 | 1546.1 | 1601.1 | 1884.8 |
| 32.5° | 3080.7 | 3076.7 | 3008.3 | 2841.1 | 2567.8 | 2204.8 | 1860.5 | 1607.1 | 1651.1 | 1708.2 | 2017.3 |
| 35°   | 3418.9 | 3419.4 | 3338.6 | 3137.7 | 2815.4 | 2423.0 | 2035.6 | 1751.4 | 1779.1 | 1838.7 | 2175.0 |
| 37.5° | 3627.3 | 3652.5 | 3622.3 | 3417.5 | 3095.6 | 2667.0 | 2262.8 | 1942.9 | 1925.0 | 1985.0 | 2344.1 |
| 40°   | 3671.9 | 3702.7 | 3798.4 | 3694.3 | 3409.0 | 2935.9 | 2464.2 | 2126.8 | 2104.5 | 2178.0 | 2561.9 |
| 42.5° | 3609.4 | 3652.0 | 3854.5 | 3927.8 | 3741.9 | 3267.2 | 2735.0 | 2400.1 | 2371.9 | 2470.6 | 2832.7 |
| 45°   | 3572.2 | 3604.0 | 3838.1 | 4049.4 | 4030.5 | 3641.7 | 3079.7 | 2743.3 | 2733.0 | 2862.4 | 3145.2 |
| 47.5° | 3507.7 | 3536.5 | 3761.7 | 4077.7 | 4200.1 | 3984.9 | 3493.9 | 3163.0 | 3183.3 | 3353.0 | 3497.8 |
| 50°   | 3542.5 | 3554.3 | 3676.4 | 4005.8 | 4249.2 | 4236.3 | 3956.6 | 3649.1 | 3718.5 | 3930.4 | 3897.1 |
| 52.5° | 3537.5 | 3568.3 | 3666.5 | 3887.7 | 4255.7 | 4391.6 | 4412.5 | 4191.2 | 4337.5 | 4580.6 | 4340.1 |
| 55°   | 2860.0 | 2916.5 | 3549.9 | 3858.0 | 4278.5 | 4543.8 | 4818.2 | 4762.7 | 5035.5 | 5318.6 | 4840.0 |
| 57.5° | 2731.0 | 2766.7 | 3117.9 | 3920.5 | 4399.5 | 4834.6 | 5269.5 | 5391.6 | 5847.9 | 6176.8 | 5449.1 |
| 60°   | 2705.7 | 2749.8 | 3113.5 | 3996.8 | 4645.1 | 5308.2 | 5938.6 | 6152.9 | 6836.4 | 7196.6 | 6155.4 |
| 62.5° | 2626.8 | 2674.4 | 3084.2 | 3986.8 | 4993.7 | 5963.5 | 6795.3 | 6962.4 | 7773.8 | 8124.1 | 6746.2 |
| 65°   | 2376.8 | 2421.5 | 2845.5 | 3826.7 | 5228.9 | 6662.8 | 7809.1 | 7704.5 | 8513.9 | 8777.3 | 7040.8 |
| 66°   | 2205.7 | 2249.4 | 2657.6 | 3638.2 | 5174.3 | 6861.2 | 8168.2 | 7934.1 | 8679.5 | 8885.9 | 6983.3 |
| 67.5° | 1892.8 | 1926.9 | 2292.5 | 3216.1 | 4884.2 | 6916.8 | 8470.2 | 8106.7 | 8696.9 | 8769.9 | 6654.4 |
| 70°   | 1195.8 | 1205.8 | 1490.0 | 2220.1 | 3697.3 | 5998.7 | 8010.4 | 7678.2 | 7979.7 | 7782.3 | 5578.6 |
| 72.5° | 518.8  | 515.4  | 715.2  | 1129.4 | 2093.2 | 4025.1 | 6479.8 | 6335.4 | 6259.5 | 5809.2 | 3905.0 |
| 75°   | 288.7  | 292.7  | 371.5  | 524.3  | 850.7  | 1977.1 | 4238.8 | 4056.3 | 3424.9 | 2922.5 | 1770.7 |
| 77.5° | 231.6  | 237.1  | 308.0  | 372.0  | 382.0  | 689.5  | 1983.5 | 1614.0 | 971.7  | 779.7  | 492.0  |
| 80°   | 183.0  | 192.9  | 268.8  | 289.7  | 257.5  | 284.2  | 640.9  | 512.4  | 384.4  | 352.6  | 254.9  |
| 82.5° | 144.8  | 151.8  | 230.7  | 219.2  | 180.0  | 191.5  | 307.0  | 299.1  | 250.0  | 227.7  | 147.3  |
| 85°   | 104.1  | 117.0  | 189.5  | 165.2  | 118.0  | 129.0  | 203.9  | 195.4  | 143.3  | 117.0  | 65.0   |
| 87.5° | 42.7   | 55.5   | 133.9  | 109.7  | 66.0   | 60.0   | 101.7  | 95.7   | 67.9   | 49.6   | 32.2   |
| 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°    | 1496.0 | 1496.0 | 1496.0 | 1496.0 | 1496.0 | 1496.0 | 1496.0 | 1496.0 | 1496.0 | 1496.0 | 1496.0 |
| 2.5°  | 1494.4 | 1506.4 | 1521.7 | 1531.2 | 1536.2 | 1539.6 | 1545.1 | 1544.6 | 1546.1 | 1546.5 | 1548.5 |
| 5°    | 1504.4 | 1524.2 | 1546.5 | 1552.5 | 1552.5 | 1547.0 | 1541.6 | 1532.7 | 1529.2 | 1528.2 | 1529.2 |
| 7.5°  | 1530.1 | 1552.0 | 1571.4 | 1564.4 | 1549.6 | 1527.7 | 1499.4 | 1474.6 | 1461.2 | 1456.8 | 1455.8 |
| 10°   | 1562.9 | 1589.2 | 1597.1 | 1570.8 | 1527.2 | 1474.6 | 1418.5 | 1377.9 | 1354.6 | 1348.1 | 1346.2 |
| 12.5° | 1602.6 | 1627.4 | 1616.5 | 1560.9 | 1480.1 | 1395.3 | 1317.9 | 1252.9 | 1204.3 | 1188.9 | 1188.0 |
| 15°   | 1646.2 | 1665.6 | 1627.4 | 1530.1 | 1409.6 | 1284.6 | 1146.7 | 1034.6 | 974.2  | 954.8  | 953.3  |
| 17.5° | 1686.9 | 1696.9 | 1621.0 | 1476.6 | 1306.0 | 1103.6 | 920.6  | 834.3  | 813.5  | 818.4  | 819.4  |
| 20°   | 1721.6 | 1721.6 | 1599.1 | 1399.7 | 1142.8 | 865.0  | 749.4  | 748.0  | 762.8  | 777.7  | 780.7  |
| 22.5° | 1759.8 | 1737.0 | 1560.9 | 1291.1 | 911.7  | 707.8  | 690.9  | 704.8  | 721.7  | 738.1  | 740.5  |
| 25°   | 1806.9 | 1749.5 | 1507.8 | 1126.5 | 716.7  | 642.8  | 649.3  | 660.7  | 669.1  | 679.5  | 681.0  |
| 27.5° | 1859.5 | 1765.3 | 1438.0 | 899.8  | 622.0  | 602.1  | 607.1  | 611.1  | 610.1  | 614.1  | 615.0  |
| 30°   | 1922.5 | 1783.6 | 1342.2 | 703.4  | 582.8  | 567.4  | 558.5  | 555.1  | 555.1  | 561.5  | 564.0  |
| 32.5° | 2006.8 | 1810.9 | 1204.8 | 602.6  | 564.0  | 542.7  | 513.8  | 500.9  | 506.0  | 527.7  | 532.8  |
| 35°   | 2099.6 | 1840.2 | 1018.8 | 568.5  | 560.0  | 531.2  | 486.6  | 462.8  | 463.3  | 483.7  | 490.1  |
| 37.5° | 2200.8 | 1877.4 | 815.0  | 562.0  | 569.0  | 531.7  | 472.2  | 439.5  | 426.1  | 426.1  | 428.5  |
| 40°   | 2330.2 | 1915.6 | 659.7  | 566.4  | 587.8  | 537.7  | 464.7  | 421.1  | 383.4  | 384.4  | 386.4  |
| 42.5° | 2498.9 | 1948.3 | 576.3  | 575.8  | 610.6  | 545.6  | 464.2  | 396.8  | 364.1  | 386.4  | 406.7  |
| 45°   | 2686.4 | 1964.7 | 539.6  | 584.3  | 628.9  | 550.6  | 456.3  | 392.8  | 366.5  | 433.0  | 471.7  |
| 47.5° | 2902.1 | 1955.3 | 519.4  | 587.3  | 633.4  | 550.6  | 447.4  | 402.2  | 383.9  | 501.5  | 546.6  |
| 50°   | 3138.7 | 1928.0 | 499.5  | 581.3  | 631.9  | 549.5  | 455.8  | 411.6  | 390.4  | 513.3  | 544.6  |
| 52.5° | 3417.0 | 1905.1 | 478.6  | 568.5  | 621.4  | 544.1  | 465.7  | 407.7  | 370.0  | 466.8  | 488.6  |
| 55°   | 3734.4 | 1911.6 | 455.3  | 550.0  | 605.1  | 533.7  | 462.3  | 391.9  | 348.7  | 411.2  | 424.6  |
| 57.5° | 4140.2 | 1988.5 | 427.6  | 526.7  | 582.8  | 516.4  | 449.9  | 384.4  | 342.3  | 373.0  | 380.9  |
| 60°   | 4592.9 | 2122.4 | 392.8  | 503.4  | 555.1  | 488.6  | 440.5  | 387.9  | 345.2  | 370.0  | 374.0  |
| 62.5° | 4925.3 | 2200.3 | 363.0  | 469.2  | 517.3  | 457.8  | 428.5  | 392.3  | 353.1  | 380.4  | 379.4  |
| 65°   | 5015.6 | 2072.3 | 325.9  | 419.1  | 466.3  | 425.5  | 413.7  | 397.3  | 356.6  | 388.8  | 384.4  |
| 66°   | 4889.1 | 1934.4 | 309.5  | 395.8  | 440.5  | 409.7  | 406.2  | 396.8  | 355.2  | 389.8  | 382.4  |
| 67.5° | 4582.1 | 1651.7 | 281.2  | 361.6  | 399.3  | 385.9  | 394.3  | 392.3  | 351.2  | 388.8  | 378.5  |
| 70°   | 3736.9 | 1126.9 | 240.6  | 301.1  | 332.4  | 339.7  | 371.5  | 376.4  | 338.3  | 371.5  | 348.7  |
| 72.5° | 2611.0 | 686.5  | 212.8  | 233.6  | 268.8  | 289.7  | 340.2  | 354.7  | 320.9  | 324.4  | 302.6  |
| 75°   | 1261.8 | 364.6  | 192.9  | 181.1  | 208.8  | 242.0  | 302.6  | 324.9  | 293.6  | 271.3  | 263.4  |
| 77.5° | 393.3  | 222.7  | 163.7  | 145.9  | 163.7  | 195.4  | 253.0  | 284.7  | 261.4  | 227.2  | 224.2  |
| 80°   | 211.3  | 163.7  | 126.0  | 117.0  | 129.5  | 153.2  | 198.9  | 237.6  | 224.6  | 203.9  | 182.0  |
| 82.5° | 139.3  | 106.2  | 93.3   | 90.7   | 98.7   | 117.0  | 147.8  | 196.9  | 196.9  | 174.6  | 126.9  |
| 85°   | 71.9   | 65.0   | 63.9   | 63.9   | 68.9   | 77.8   | 100.7  | 151.8  | 161.7  | 92.3   | 76.4   |
| 87.5° | 35.7   | 37.2   | 34.7   | 36.2   | 38.7   | 38.2   | 48.1   | 76.4   | 91.2   | 56.1   | 46.6   |
| 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)