

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: P300296

Luminaire Tested: **GAA-AF-01-LED-U-T4FT-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300296  
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: STREETWORKS  
Catalog Number: GAA-AF-01-LED-U-T4FT-7027  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(1) 70 CRI, 2700K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV Forward Throw OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

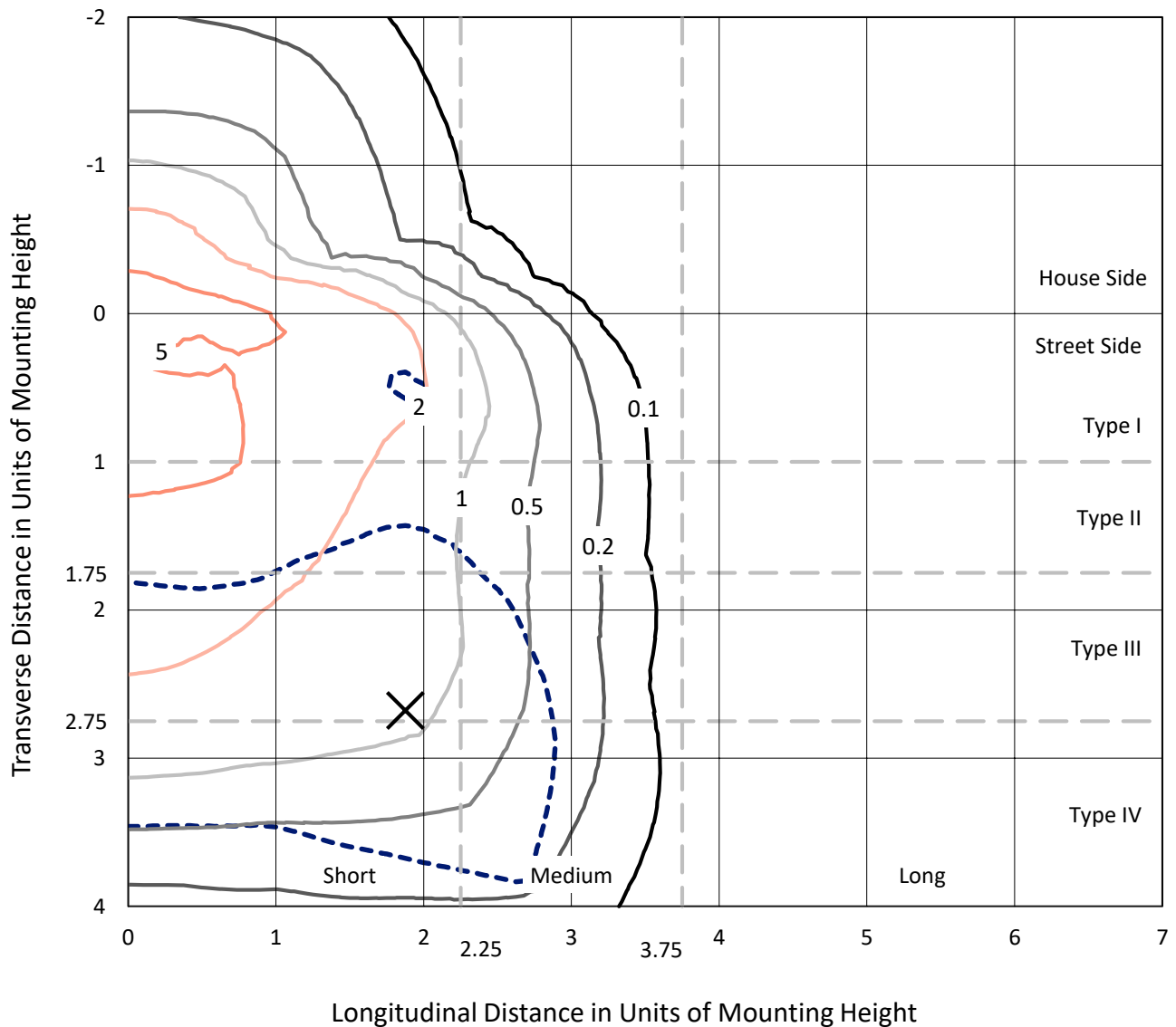
Lumens per Lamp: N/A  
Luminaire Lumens: 5429 lumens  
Efficiency: N/A  
Efficacy: 92.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 59  
Input Voltage (V): NR  
Input Current (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

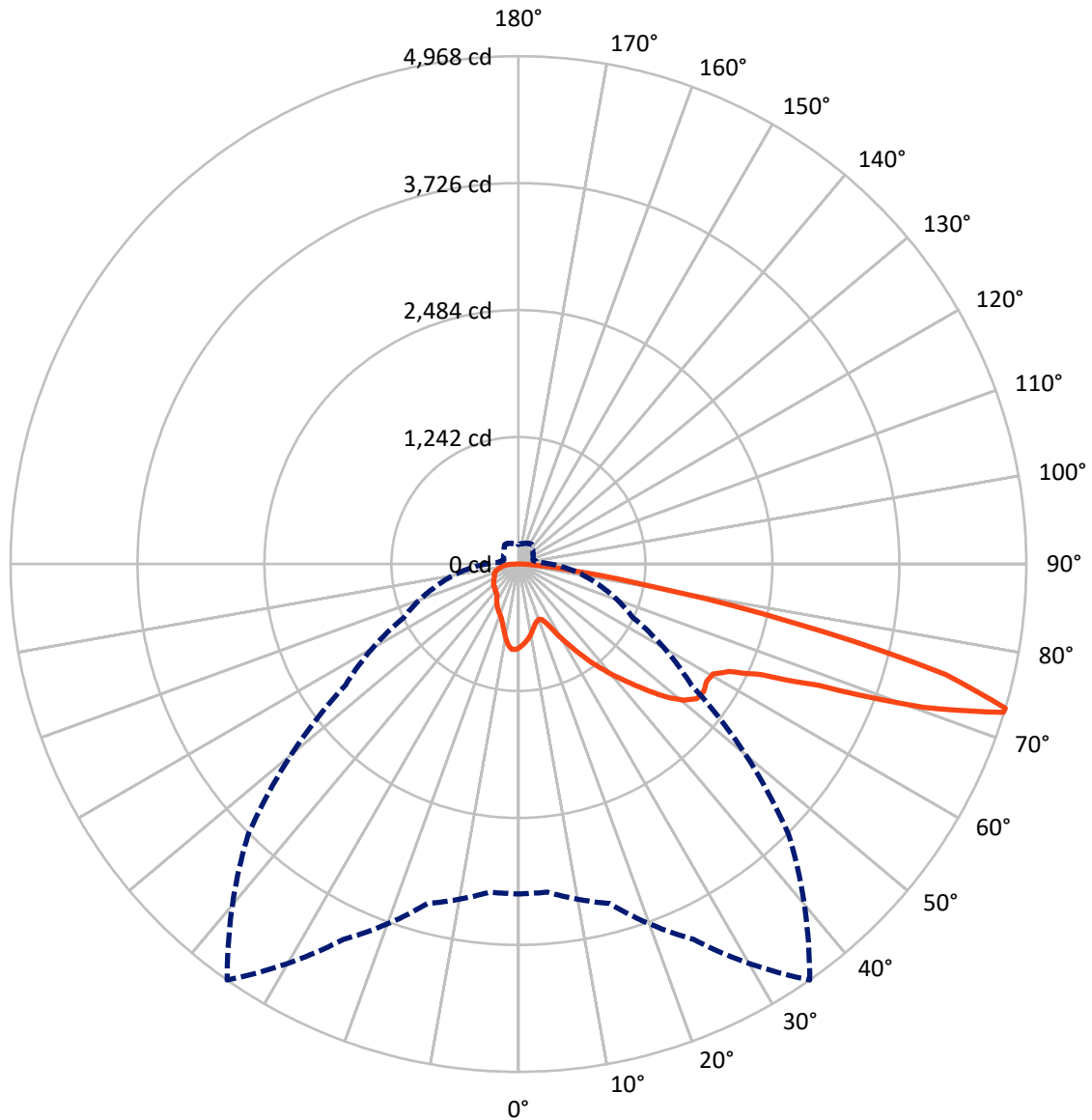
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 8.2 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral    - - - Horizontal Cone Through 73-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 1035.5   | 0.0    | 1035.5 |
|                    | % Fixture | 19.1     | 0.0    | 19.1   |
| <b>Street Side</b> | Lumens    | 4393.6   | 0.0    | 4393.6 |
|                    | % Fixture | 80.9     | 0.0    | 80.9   |
| <b>Total</b>       | Lumens    | 5429.0   | 0.0    | 5429.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 74.2   | 1.4       |
| 10°-20°   | 185.1  | 3.4       |
| 20°-30°   | 299.3  | 5.5       |
| 30°-40°   | 501.9  | 9.2       |
| 40°-50°   | 773.7  | 14.3      |
| 50°-60°   | 1037.9 | 19.1      |
| 60°-70°   | 1382.7 | 25.5      |
| 70°-80°   | 1054.6 | 19.4      |
| 80°-90°   | 119.5  | 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°    | 5429.0 | 100.0     |
| 0°-180°   | 5429.0 | 100.0     |



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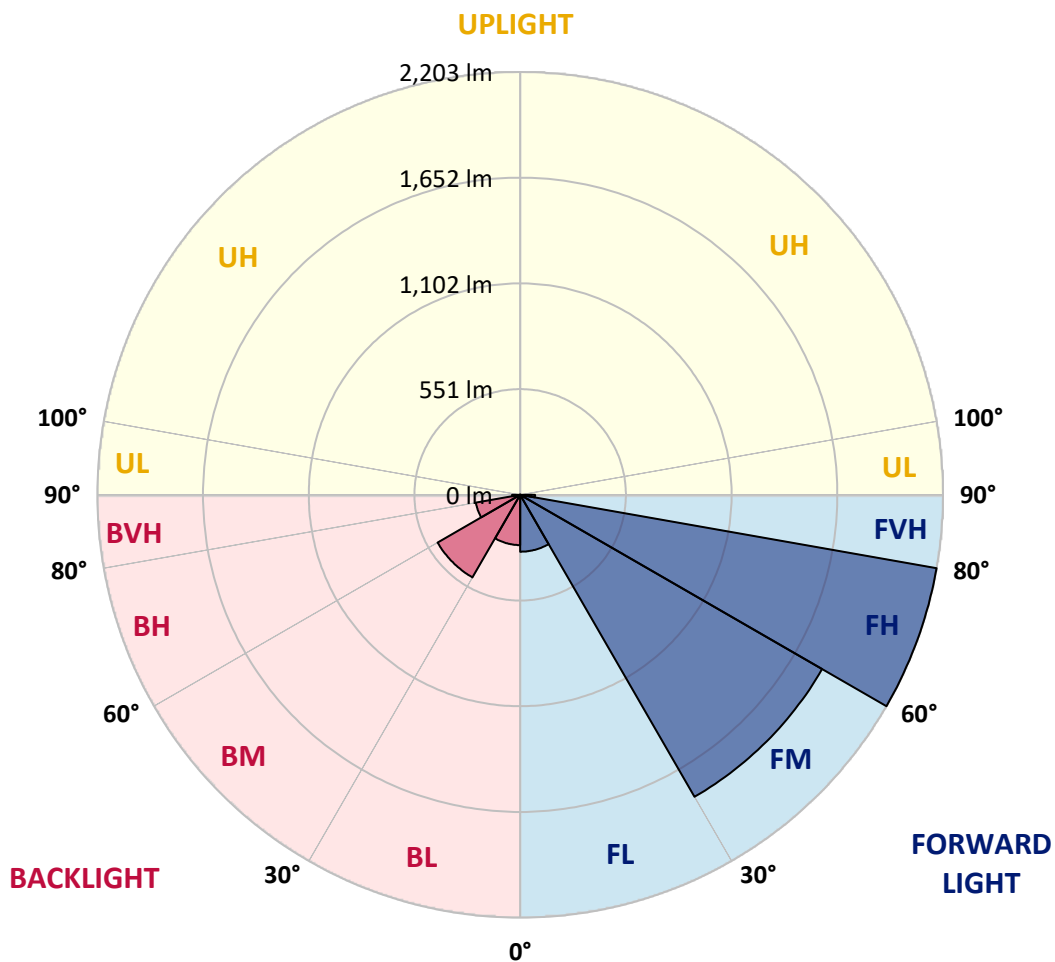
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 296.6  | 5.5       |                         |      |         |
| FM   | (30°-60°)   | 1816.6 | 33.5      |                         |      |         |
| FH   | (60°-80°)   | 2203.1 | 40.6      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 77.3   | 1.4       |                         |      | G1/100  |
| BL   | (0°-30°)    | 262.0  | 4.8       | B1/500                  |      |         |
| BM   | (30°-60°)   | 496.9  | 9.2       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 234.3  | 4.3       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 42.3   | 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 IV Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 819.4  | 819.4  | 819.4  | 819.4  | 819.4  | 819.4  | 819.4  | 819.4  | 819.4  | 819.4  | 819.4  |
| 2.5°  | 787.1  | 788.6  | 786.8  | 789.2  | 793.1  | 797.3  | 800.1  | 804.3  | 809.0  | 815.5  | 817.1  |
| 5°    | 750.1  | 752.4  | 752.4  | 756.6  | 764.1  | 770.9  | 777.2  | 784.0  | 793.9  | 805.1  | 809.5  |
| 7.5°  | 709.4  | 710.7  | 713.0  | 719.3  | 730.2  | 739.9  | 748.8  | 759.7  | 773.3  | 788.1  | 795.9  |
| 10°   | 660.4  | 662.2  | 665.9  | 674.7  | 689.6  | 702.9  | 715.6  | 730.8  | 748.0  | 766.5  | 776.4  |
| 12.5° | 625.7  | 625.2  | 626.7  | 633.3  | 646.3  | 662.5  | 681.0  | 700.3  | 721.4  | 743.0  | 755.0  |
| 15°   | 614.0  | 611.1  | 605.1  | 603.5  | 610.6  | 626.7  | 648.1  | 671.8  | 697.1  | 723.2  | 738.1  |
| 17.5° | 621.3  | 616.3  | 599.9  | 587.9  | 586.9  | 599.1  | 621.8  | 648.4  | 677.6  | 709.4  | 727.9  |
| 20°   | 667.2  | 655.4  | 615.0  | 587.1  | 577.5  | 583.5  | 603.3  | 631.4  | 665.9  | 708.1  | 731.8  |
| 22.5° | 776.9  | 759.7  | 673.9  | 622.1  | 589.5  | 582.2  | 597.0  | 627.0  | 667.2  | 724.3  | 754.5  |
| 25°   | 936.7  | 912.2  | 775.1  | 709.1  | 641.9  | 603.0  | 606.4  | 637.2  | 685.7  | 761.8  | 798.3  |
| 27.5° | 1062.9 | 1047.0 | 907.3  | 831.9  | 737.3  | 659.3  | 636.9  | 662.7  | 723.5  | 823.3  | 860.6  |
| 30°   | 1138.0 | 1128.4 | 1048.6 | 971.1  | 859.0  | 749.0  | 695.3  | 710.7  | 782.7  | 908.6  | 939.3  |
| 32.5° | 1225.1 | 1219.3 | 1180.2 | 1109.1 | 990.4  | 866.9  | 787.9  | 782.4  | 861.9  | 1011.0 | 1025.1 |
| 35°   | 1315.3 | 1313.5 | 1290.5 | 1239.4 | 1131.5 | 1022.2 | 910.7  | 873.6  | 948.2  | 1117.4 | 1108.5 |
| 37.5° | 1399.2 | 1396.1 | 1382.8 | 1353.1 | 1279.0 | 1189.1 | 1035.8 | 967.2  | 1041.3 | 1219.1 | 1179.7 |
| 40°   | 1553.8 | 1529.3 | 1483.7 | 1461.3 | 1428.2 | 1329.6 | 1135.1 | 1054.6 | 1137.7 | 1316.1 | 1241.2 |
| 42.5° | 1742.3 | 1702.4 | 1617.4 | 1586.7 | 1582.0 | 1440.4 | 1202.9 | 1139.3 | 1235.0 | 1412.3 | 1301.7 |
| 45°   | 1890.7 | 1853.1 | 1779.9 | 1741.0 | 1758.2 | 1540.8 | 1271.0 | 1229.8 | 1335.1 | 1513.2 | 1364.0 |
| 47.5° | 2048.9 | 1990.0 | 1893.0 | 1904.7 | 1942.3 | 1635.7 | 1340.3 | 1327.0 | 1444.9 | 1626.0 | 1441.5 |
| 50°   | 2054.7 | 2009.5 | 1967.1 | 2037.2 | 2095.6 | 1723.0 | 1427.1 | 1428.9 | 1579.1 | 1768.1 | 1544.4 |
| 52.5° | 1935.5 | 1925.9 | 1993.4 | 2103.7 | 2187.9 | 1792.1 | 1525.9 | 1534.3 | 1750.9 | 1931.3 | 1657.6 |
| 55°   | 1893.8 | 1882.8 | 1960.8 | 2080.5 | 2200.4 | 1849.2 | 1633.1 | 1648.2 | 1958.7 | 2103.4 | 1767.9 |
| 57.5° | 1995.5 | 1971.2 | 1976.4 | 2069.5 | 2169.9 | 1911.8 | 1749.9 | 1780.4 | 2184.5 | 2253.8 | 1838.8 |
| 60°   | 2279.6 | 2227.8 | 2129.2 | 2126.9 | 2186.3 | 2005.6 | 1884.9 | 1922.2 | 2419.1 | 2325.8 | 1811.1 |
| 62.5° | 2678.3 | 2626.4 | 2441.8 | 2321.6 | 2312.8 | 2160.5 | 2050.7 | 2060.6 | 2554.7 | 2228.3 | 1642.5 |
| 65°   | 3109.7 | 3063.3 | 2857.1 | 2687.4 | 2605.5 | 2417.0 | 2243.4 | 2122.4 | 2510.4 | 1960.0 | 1347.3 |
| 67.5° | 3633.5 | 3583.7 | 3406.4 | 3249.7 | 3171.0 | 2831.0 | 2378.7 | 2063.3 | 2229.1 | 1518.4 | 968.5  |
| 70°   | 3999.8 | 3949.0 | 3879.1 | 4006.1 | 4198.7 | 3428.3 | 2396.2 | 1822.6 | 1664.9 | 1009.2 | 582.9  |
| 72.5° | 3521.9 | 3498.2 | 3625.7 | 4160.4 | 4962.9 | 3790.7 | 2166.0 | 1327.0 | 967.0  | 535.8  | 337.4  |
| 73°   | 3226.8 | 3221.6 | 3439.0 | 4052.2 | 4968.3 | 3734.9 | 2065.1 | 1233.4 | 829.3  | 474.0  | 308.4  |
| 75°   | 1457.1 | 1499.1 | 1975.7 | 3095.1 | 4316.6 | 3077.7 | 1453.5 | 707.6  | 468.5  | 327.5  | 232.8  |
| 77.5° | 350.1  | 364.7  | 618.1  | 1469.9 | 2726.0 | 1834.1 | 658.6  | 349.9  | 299.6  | 231.2  | 170.0  |
| 80°   | 149.1  | 154.1  | 238.0  | 543.1  | 1283.5 | 738.6  | 303.5  | 234.4  | 207.3  | 161.4  | 119.1  |
| 82.5° | 82.9   | 88.1   | 135.0  | 246.4  | 518.0  | 251.8  | 185.1  | 163.2  | 136.4  | 97.2   | 77.4   |
| 85°   | 46.9   | 49.8   | 79.0   | 137.7  | 219.5  | 101.2  | 110.8  | 108.5  | 76.9   | 50.1   | 38.1   |
| 87.5° | 22.2   | 24.0   | 38.1   | 63.9   | 86.0   | 39.6   | 56.3   | 62.0   | 48.2   | 30.5   | 19.8   |
| 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):**

|       | 95°    | 105°  | 115°  | 125°  | 135°  | 145°  | 155°  | 165°  | 175°  | 180°  |
|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 819.4  | 819.4 | 819.4 | 819.4 | 819.4 | 819.4 | 819.4 | 819.4 | 819.4 | 819.4 |
| 2.5°  | 818.9  | 823.6 | 829.1 | 831.9 | 834.5 | 837.7 | 840.8 | 840.8 | 841.3 | 841.6 |
| 5°    | 813.2  | 822.8 | 831.4 | 835.1 | 835.8 | 835.8 | 835.1 | 830.9 | 827.2 | 828.8 |
| 7.5°  | 801.2  | 815.2 | 822.5 | 821.2 | 811.3 | 799.9 | 790.2 | 778.5 | 772.5 | 771.4 |
| 10°   | 784.0  | 800.1 | 801.4 | 788.4 | 763.9 | 739.4 | 719.0 | 699.2 | 689.8 | 687.5 |
| 12.5° | 764.9  | 779.8 | 771.4 | 744.6 | 705.2 | 669.5 | 643.7 | 623.6 | 614.8 | 612.4 |
| 15°   | 749.5  | 759.7 | 738.6 | 696.4 | 646.8 | 609.0 | 587.6 | 572.8 | 566.5 | 564.7 |
| 17.5° | 741.5  | 743.5 | 705.0 | 647.9 | 595.2 | 563.7 | 550.4 | 543.3 | 541.0 | 539.7 |
| 20°   | 745.4  | 730.8 | 672.9 | 602.8 | 553.0 | 530.8 | 527.7 | 525.9 | 525.3 | 524.5 |
| 22.5° | 764.9  | 726.9 | 643.4 | 560.0 | 515.9 | 506.3 | 508.9 | 508.6 | 508.1 | 507.6 |
| 25°   | 799.9  | 730.2 | 614.8 | 519.3 | 484.9 | 482.8 | 487.5 | 487.5 | 485.4 | 485.4 |
| 27.5° | 846.0  | 737.3 | 582.7 | 480.7 | 456.8 | 457.0 | 460.7 | 459.6 | 457.3 | 455.7 |
| 30°   | 902.3  | 741.7 | 545.1 | 446.1 | 430.4 | 429.4 | 430.4 | 426.0 | 419.0 | 418.4 |
| 32.5° | 959.9  | 736.2 | 501.6 | 415.3 | 402.5 | 400.2 | 399.4 | 393.2 | 385.1 | 382.7 |
| 35°   | 1012.1 | 716.2 | 457.3 | 390.8 | 375.9 | 370.7 | 374.4 | 372.3 | 365.0 | 363.2 |
| 37.5° | 1050.1 | 678.9 | 417.4 | 369.2 | 356.9 | 355.6 | 358.0 | 358.7 | 350.1 | 348.3 |
| 40°   | 1075.7 | 628.3 | 383.2 | 350.9 | 353.3 | 348.3 | 340.5 | 335.0 | 332.4 | 331.6 |
| 42.5° | 1096.3 | 575.6 | 354.6 | 342.3 | 354.0 | 339.7 | 322.8 | 313.9 | 318.6 | 320.7 |
| 45°   | 1120.0 | 524.3 | 330.6 | 331.6 | 350.1 | 329.8 | 310.5 | 301.9 | 303.7 | 304.2 |
| 47.5° | 1152.6 | 461.7 | 304.8 | 314.4 | 337.1 | 323.0 | 302.9 | 290.7 | 282.1 | 278.2 |
| 50°   | 1197.7 | 387.7 | 277.9 | 295.1 | 324.3 | 318.1 | 291.2 | 278.2 | 262.3 | 258.6 |
| 52.5° | 1229.0 | 318.6 | 255.8 | 279.0 | 312.9 | 308.2 | 281.8 | 264.9 | 248.2 | 245.1 |
| 55°   | 1212.0 | 264.6 | 236.5 | 261.0 | 297.7 | 295.9 | 274.0 | 251.3 | 238.3 | 235.7 |
| 57.5° | 1127.3 | 230.5 | 221.6 | 244.0 | 279.2 | 285.5 | 263.6 | 239.9 | 230.5 | 228.6 |
| 60°   | 965.7  | 209.1 | 212.2 | 232.6 | 264.1 | 275.0 | 253.1 | 233.6 | 227.3 | 226.0 |
| 62.5° | 749.3  | 194.8 | 205.2 | 224.2 | 252.4 | 267.7 | 247.4 | 232.8 | 230.5 | 228.9 |
| 65°   | 536.8  | 183.3 | 197.6 | 215.9 | 241.7 | 261.0 | 245.3 | 231.8 | 232.3 | 231.0 |
| 67.5° | 364.7  | 173.1 | 188.5 | 206.5 | 231.2 | 255.0 | 242.5 | 228.1 | 234.6 | 233.1 |
| 70°   | 255.2  | 163.2 | 177.8 | 194.5 | 218.2 | 246.6 | 237.2 | 222.6 | 222.1 | 215.9 |
| 72.5° | 199.2  | 150.2 | 163.2 | 177.8 | 201.5 | 234.9 | 226.8 | 210.4 | 201.8 | 195.3 |
| 73°   | 190.1  | 147.0 | 159.6 | 174.2 | 197.9 | 232.0 | 223.9 | 207.0 | 197.4 | 191.4 |
| 75°   | 157.2  | 133.5 | 145.0 | 158.0 | 182.2 | 218.5 | 209.9 | 191.6 | 179.4 | 175.7 |
| 77.5° | 123.6  | 114.2 | 125.1 | 136.9 | 160.6 | 198.7 | 189.0 | 171.5 | 164.8 | 161.6 |
| 80°   | 91.5   | 94.6  | 104.3 | 114.7 | 139.2 | 177.5 | 168.9 | 151.5 | 181.7 | 174.2 |
| 82.5° | 64.4   | 71.7  | 80.6  | 89.9  | 116.8 | 156.9 | 146.5 | 128.5 | 133.0 | 110.5 |
| 85°   | 38.1   | 46.9  | 55.3  | 63.4  | 84.2  | 130.1 | 121.0 | 102.5 | 83.9  | 80.0  |
| 87.5° | 22.2   | 26.1  | 28.4  | 36.8  | 57.9  | 98.0  | 85.3  | 75.9  | 43.5  | 29.5  |
| 90°   | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)