

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: P450850

Luminaire Tested: **GALN-SA1C-830-U-T3**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P450850  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA1C-830-U-T3  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(1) 80 CRI, 3000K, 1050mA LIGHTSQUARE WITH 16 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5606 lumens  
Efficiency: N/A  
Efficacy: 98.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G1

Input Watts (W): 57  
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: 24 FT



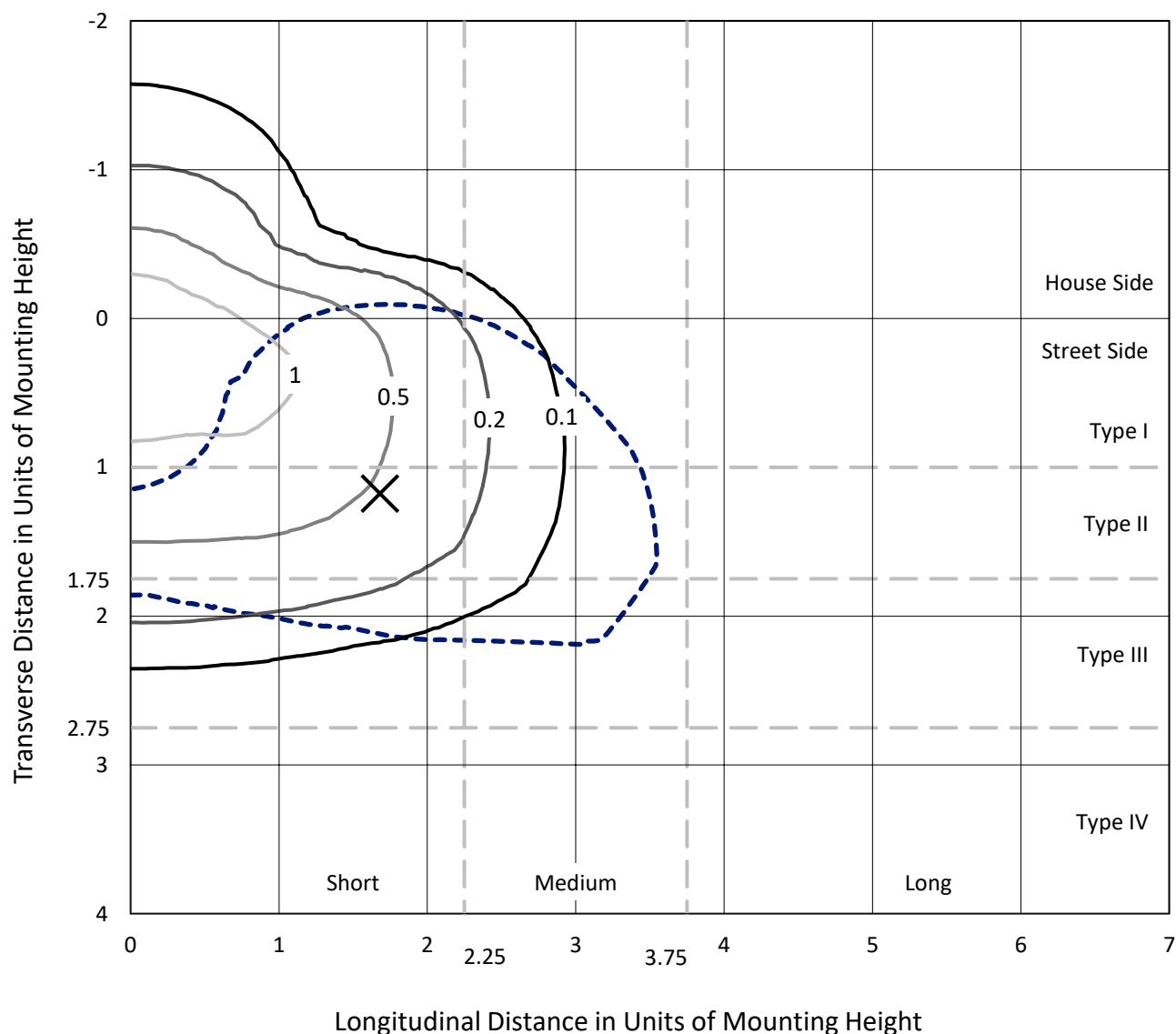
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd



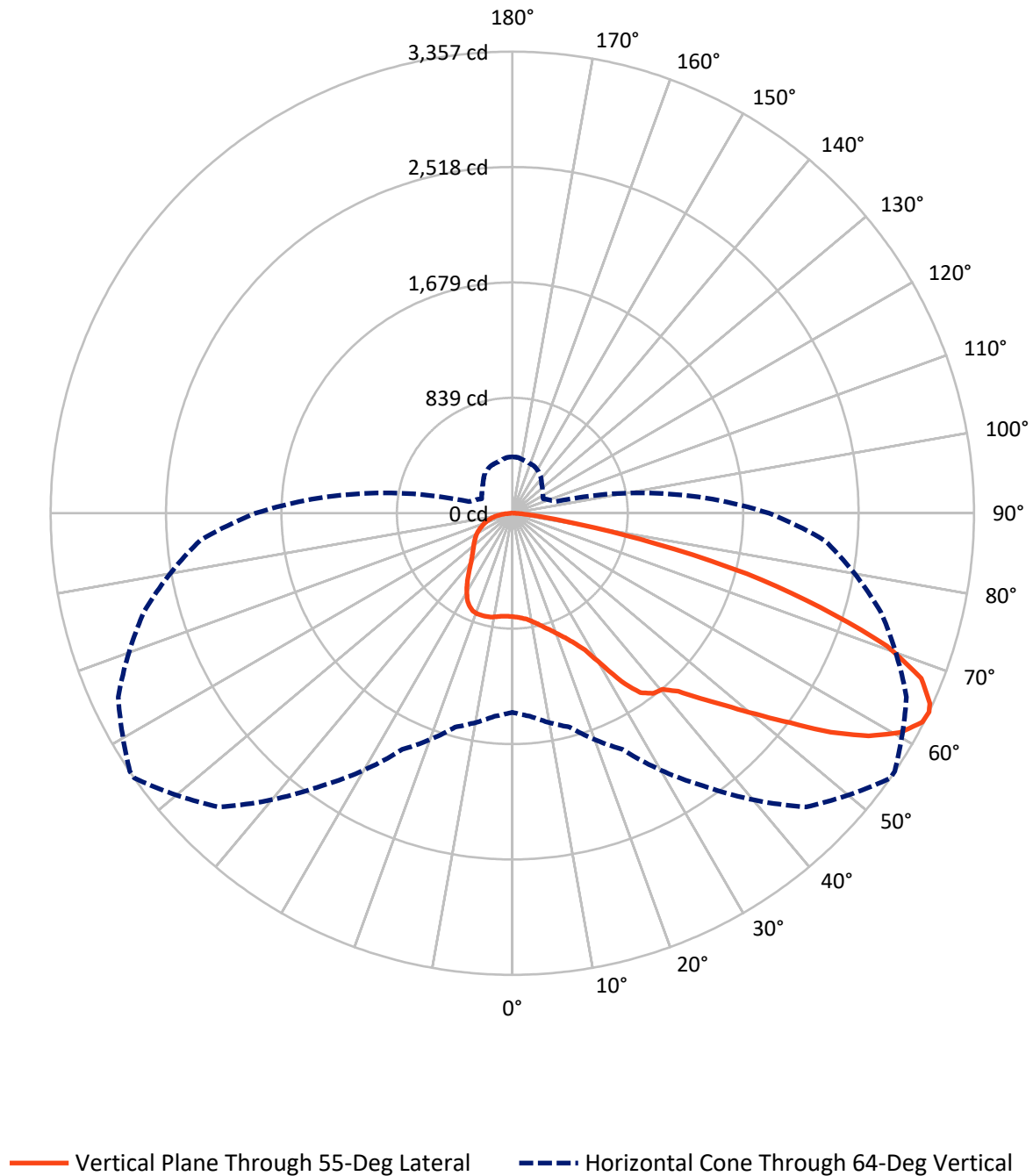
Based on 25 foot mounting height. Maximum calculated value = 1.4 fc

Type III - Short - N/A

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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 1361.8   | 0.0    | 1361.8 |
|                    | % Fixture | 24.3     | 0.0    | 24.3   |
| <b>Street Side</b> | Lumens    | 4244.2   | 0.0    | 4244.2 |
|                    | % Fixture | 75.7     | 0.0    | 75.7   |
| <b>Total</b>       | Lumens    | 5606.0   | 0.0    | 5606.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 73.2   | 1.3       |
| 10°-20°   | 230.9  | 4.1       |
| 20°-30°   | 411.0  | 7.3       |
| 30°-40°   | 632.3  | 11.3      |
| 40°-50°   | 896.4  | 16.0      |
| 50°-60°   | 1297.5 | 23.1      |
| 60°-70°   | 1342.8 | 24.0      |
| 70°-80°   | 628.8  | 11.2      |
| 80°-90°   | 93.1   | 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°    | 5606.0 | 100.0     |
| 0°-180°   | 5606.0 | 100.0     |

**Coefficient of Utilization**



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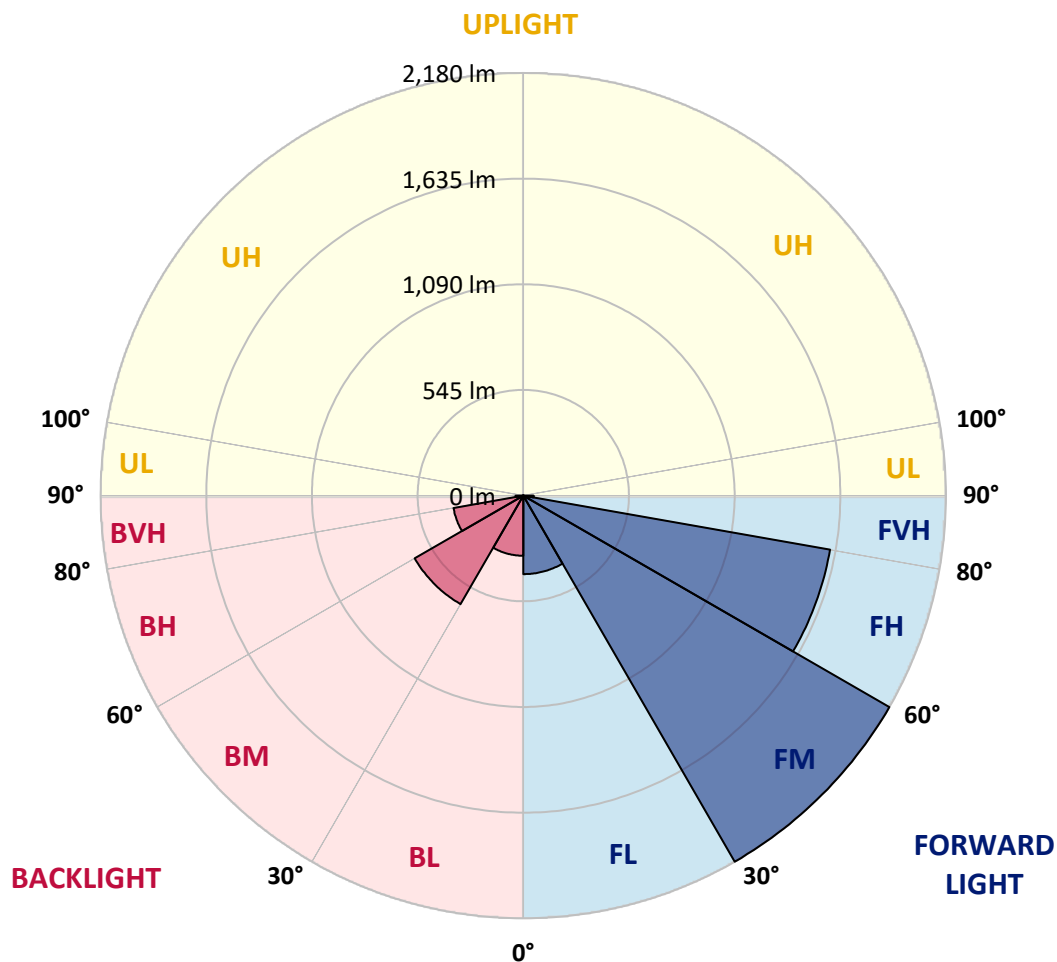
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 404.8  | 7.2       |                         |      |         |
| FM   | (30°-60°)   | 2179.8 | 38.9      |                         |      |         |
| FH   | (60°-80°)   | 1606.3 | 28.7      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 53.3   | 1.0       |                         |      | G1/100  |
| BL   | (0°-30°)    | 310.2  | 5.5       | B1/500                  |      |         |
| BM   | (30°-60°)   | 646.5  | 11.5      | B1/1000                 |      |         |
| BH   | (60°-80°)   | 365.3  | 6.5       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 39.8   | 0.7       |                         |      | 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 Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 56°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 752.2  | 752.2  | 752.2  | 752.2  | 752.2  | 752.2  | 752.2  | 752.2  | 752.2  | 752.2  | 752.2  |
| 2.5°  | 760.6  | 760.3  | 761.2  | 760.3  | 760.9  | 758.7  | 757.8  | 758.4  | 757.5  | 755.9  | 753.1  |
| 5°    | 770.0  | 769.7  | 770.0  | 768.7  | 769.3  | 768.1  | 765.9  | 766.5  | 765.0  | 761.5  | 757.5  |
| 7.5°  | 785.9  | 784.7  | 784.7  | 784.3  | 783.1  | 781.2  | 779.7  | 779.0  | 777.5  | 773.1  | 766.8  |
| 10°   | 806.5  | 806.5  | 806.8  | 804.3  | 805.9  | 802.5  | 800.9  | 800.6  | 795.3  | 789.7  | 780.9  |
| 12.5° | 833.7  | 835.3  | 834.3  | 833.1  | 832.5  | 831.2  | 825.9  | 827.2  | 821.2  | 811.5  | 800.9  |
| 15°   | 867.5  | 870.0  | 868.4  | 867.8  | 866.2  | 861.5  | 859.3  | 858.4  | 850.6  | 836.5  | 822.5  |
| 17.5° | 912.1  | 909.0  | 907.8  | 906.2  | 899.6  | 896.2  | 892.5  | 891.8  | 885.0  | 868.4  | 846.5  |
| 20°   | 951.2  | 955.6  | 953.1  | 951.5  | 945.0  | 938.4  | 935.6  | 934.6  | 928.7  | 910.6  | 875.6  |
| 22.5° | 997.8  | 998.7  | 999.6  | 995.9  | 992.8  | 987.8  | 982.8  | 981.2  | 979.0  | 960.3  | 917.5  |
| 25°   | 1047.5 | 1051.2 | 1048.1 | 1044.3 | 1040.6 | 1040.3 | 1045.0 | 1044.3 | 1043.4 | 1025.3 | 973.1  |
| 27.5° | 1128.4 | 1131.8 | 1132.8 | 1128.7 | 1114.3 | 1115.6 | 1126.2 | 1129.6 | 1144.0 | 1114.0 | 1044.6 |
| 30°   | 1174.0 | 1177.5 | 1185.3 | 1200.6 | 1223.4 | 1243.4 | 1269.0 | 1276.8 | 1290.6 | 1234.0 | 1129.6 |
| 32.5° | 1202.1 | 1203.4 | 1217.4 | 1245.9 | 1314.3 | 1389.0 | 1458.7 | 1461.5 | 1470.3 | 1390.9 | 1207.4 |
| 35°   | 1246.5 | 1247.4 | 1258.7 | 1289.9 | 1370.3 | 1494.6 | 1602.4 | 1605.9 | 1598.7 | 1439.6 | 1243.7 |
| 37.5° | 1301.2 | 1303.7 | 1310.9 | 1336.8 | 1432.8 | 1583.1 | 1662.1 | 1659.6 | 1595.9 | 1478.4 | 1307.8 |
| 40°   | 1380.9 | 1380.9 | 1372.4 | 1407.4 | 1498.7 | 1633.7 | 1683.1 | 1678.7 | 1661.8 | 1590.6 | 1405.3 |
| 42.5° | 1451.2 | 1449.9 | 1469.9 | 1493.7 | 1581.2 | 1711.8 | 1770.9 | 1778.1 | 1805.9 | 1731.5 | 1516.2 |
| 45°   | 1542.7 | 1548.4 | 1559.6 | 1602.7 | 1721.5 | 1845.2 | 1921.5 | 1928.4 | 1967.7 | 1897.4 | 1645.9 |
| 47.5° | 1635.2 | 1637.1 | 1672.4 | 1729.9 | 1895.2 | 2026.2 | 2088.7 | 2099.9 | 2135.8 | 2091.5 | 1785.6 |
| 50°   | 1700.9 | 1718.7 | 1775.2 | 1865.9 | 2074.3 | 2246.8 | 2295.5 | 2309.0 | 2372.4 | 2302.7 | 1948.4 |
| 52.5° | 1770.2 | 1787.7 | 1856.8 | 1994.9 | 2279.9 | 2472.4 | 2532.4 | 2541.5 | 2607.4 | 2516.5 | 2114.9 |
| 55°   | 1829.6 | 1845.9 | 1924.3 | 2109.3 | 2443.6 | 2702.7 | 2811.4 | 2800.8 | 2832.4 | 2681.1 | 2243.3 |
| 57.5° | 1839.3 | 1852.4 | 1951.2 | 2182.4 | 2566.8 | 2900.2 | 3056.1 | 3062.4 | 3025.8 | 2804.3 | 2349.3 |
| 60°   | 1764.3 | 1791.2 | 1904.6 | 2174.6 | 2622.1 | 3037.7 | 3238.6 | 3243.0 | 3139.2 | 2867.4 | 2391.5 |
| 62.5° | 1631.5 | 1628.7 | 1765.9 | 2049.0 | 2544.6 | 3068.9 | 3346.1 | 3341.4 | 3183.6 | 2837.1 | 2350.5 |
| 64°   | 1448.1 | 1481.8 | 1609.9 | 1894.6 | 2419.6 | 3020.8 | 3357.4 | 3354.9 | 3162.4 | 2773.9 | 2280.8 |
| 65°   | 1336.2 | 1334.3 | 1460.9 | 1768.4 | 2295.2 | 2948.3 | 3337.4 | 3333.9 | 3118.0 | 2717.4 | 2226.8 |
| 67.5° | 964.6  | 969.0  | 1094.0 | 1364.6 | 1865.9 | 2664.9 | 3207.1 | 3194.2 | 2943.0 | 2529.9 | 2021.2 |
| 70°   | 584.4  | 586.9  | 685.0  | 905.3  | 1339.3 | 2154.3 | 2890.8 | 2891.4 | 2675.2 | 2249.9 | 1720.2 |
| 72.5° | 307.8  | 314.4  | 353.7  | 514.0  | 813.4  | 1511.5 | 2345.2 | 2400.8 | 2296.8 | 1920.2 | 1359.0 |
| 75°   | 171.2  | 172.2  | 200.0  | 253.4  | 415.0  | 845.9  | 1762.7 | 1778.7 | 1818.4 | 1545.6 | 1005.0 |
| 77.5° | 130.6  | 132.5  | 141.2  | 163.7  | 225.9  | 392.2  | 1066.8 | 1146.8 | 1281.5 | 1089.6 | 573.4  |
| 80°   | 105.9  | 107.8  | 115.3  | 128.7  | 150.3  | 185.9  | 495.6  | 538.7  | 685.9  | 483.7  | 223.7  |
| 82.5° | 82.5   | 81.2   | 90.9   | 99.7   | 109.4  | 110.0  | 203.4  | 225.0  | 279.4  | 208.1  | 96.9   |
| 85°   | 61.2   | 61.2   | 69.1   | 67.2   | 70.6   | 64.4   | 89.7   | 99.1   | 111.9  | 88.4   | 45.0   |
| 87.5° | 24.4   | 26.9   | 45.3   | 40.6   | 31.6   | 25.3   | 33.1   | 35.0   | 38.7   | 34.7   | 18.7   |
| 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):**

|       | 90°    | 95°    | 105°  | 115°  | 125°  | 135°  | 145°  | 155°  | 165°  | 175°  | 180°  |
|-------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 752.2  | 752.2  | 752.2 | 752.2 | 752.2 | 752.2 | 752.2 | 752.2 | 752.2 | 752.2 | 752.2 |
| 2.5°  | 753.4  | 754.3  | 752.2 | 750.6 | 750.0 | 749.0 | 748.1 | 748.4 | 749.7 | 750.9 | 750.6 |
| 5°    | 757.2  | 757.5  | 753.7 | 751.8 | 750.6 | 749.3 | 749.3 | 750.3 | 752.8 | 754.7 | 754.7 |
| 7.5°  | 766.5  | 766.5  | 761.2 | 757.8 | 755.9 | 753.7 | 753.1 | 753.4 | 755.3 | 757.8 | 758.1 |
| 10°   | 781.2  | 780.0  | 773.1 | 767.8 | 764.3 | 759.0 | 754.3 | 751.8 | 752.8 | 754.3 | 754.3 |
| 12.5° | 799.0  | 795.6  | 786.8 | 779.7 | 771.2 | 761.2 | 751.5 | 746.5 | 746.2 | 747.8 | 747.2 |
| 15°   | 818.1  | 814.3  | 802.2 | 789.0 | 774.3 | 759.7 | 748.1 | 740.9 | 735.3 | 733.7 | 737.2 |
| 17.5° | 840.3  | 832.5  | 815.6 | 797.5 | 775.6 | 756.5 | 738.4 | 723.7 | 713.7 | 710.9 | 711.8 |
| 20°   | 867.2  | 856.8  | 834.0 | 805.6 | 774.7 | 745.3 | 717.2 | 697.5 | 681.2 | 676.2 | 676.8 |
| 22.5° | 904.3  | 886.5  | 853.1 | 809.7 | 766.8 | 724.0 | 685.0 | 659.3 | 639.7 | 631.8 | 636.5 |
| 25°   | 946.5  | 927.1  | 871.2 | 808.7 | 746.5 | 690.0 | 646.8 | 613.4 | 595.6 | 584.0 | 586.5 |
| 27.5° | 1004.6 | 970.3  | 890.6 | 800.3 | 717.5 | 648.4 | 598.4 | 566.9 | 550.6 | 544.7 | 547.5 |
| 30°   | 1079.0 | 1026.2 | 911.5 | 777.5 | 671.5 | 595.9 | 549.7 | 529.0 | 519.4 | 511.9 | 514.4 |
| 32.5° | 1132.8 | 1065.6 | 916.2 | 739.0 | 621.8 | 548.1 | 516.5 | 501.2 | 490.6 | 483.4 | 485.0 |
| 35°   | 1171.2 | 1099.0 | 914.0 | 691.8 | 570.0 | 508.7 | 490.3 | 477.8 | 460.6 | 445.0 | 442.2 |
| 37.5° | 1222.8 | 1140.9 | 898.1 | 640.3 | 518.7 | 482.2 | 469.0 | 445.9 | 421.2 | 400.3 | 399.4 |
| 40°   | 1301.8 | 1190.0 | 864.0 | 579.7 | 475.0 | 462.5 | 446.5 | 416.5 | 390.0 | 373.1 | 371.9 |
| 42.5° | 1383.4 | 1235.3 | 817.8 | 515.9 | 439.0 | 441.9 | 422.5 | 392.8 | 376.5 | 365.6 | 364.4 |
| 45°   | 1483.1 | 1284.3 | 767.8 | 460.6 | 412.5 | 422.5 | 401.5 | 384.4 | 374.7 | 367.5 | 365.6 |
| 47.5° | 1590.9 | 1334.6 | 711.5 | 410.9 | 390.0 | 404.7 | 392.8 | 385.0 | 379.7 | 374.7 | 372.5 |
| 50°   | 1707.1 | 1390.9 | 658.7 | 370.9 | 369.7 | 386.2 | 391.9 | 389.0 | 385.9 | 384.4 | 382.5 |
| 52.5° | 1834.6 | 1448.4 | 614.3 | 342.8 | 351.9 | 373.1 | 392.2 | 394.4 | 394.4 | 393.4 | 392.2 |
| 55°   | 1920.9 | 1488.4 | 569.4 | 320.0 | 333.7 | 362.5 | 391.5 | 400.0 | 403.1 | 401.9 | 400.6 |
| 57.5° | 1984.6 | 1510.2 | 512.8 | 300.3 | 318.4 | 352.2 | 388.1 | 400.6 | 403.7 | 405.3 | 404.7 |
| 60°   | 1997.7 | 1489.9 | 438.7 | 279.7 | 301.9 | 337.2 | 375.6 | 391.2 | 395.3 | 405.0 | 405.9 |
| 62.5° | 1938.7 | 1427.4 | 365.0 | 259.4 | 281.6 | 314.4 | 358.7 | 380.6 | 388.7 | 403.7 | 405.3 |
| 64°   | 1866.2 | 1357.4 | 324.0 | 246.6 | 268.4 | 301.5 | 350.3 | 377.8 | 388.4 | 408.4 | 409.7 |
| 65°   | 1813.0 | 1306.5 | 298.4 | 238.4 | 260.0 | 293.1 | 345.6 | 378.7 | 391.2 | 415.6 | 417.5 |
| 67.5° | 1617.4 | 1131.2 | 246.9 | 219.4 | 240.0 | 278.7 | 346.5 | 386.5 | 390.6 | 418.4 | 418.1 |
| 70°   | 1338.4 | 900.6  | 206.9 | 201.9 | 220.6 | 267.2 | 342.8 | 374.0 | 374.4 | 392.8 | 388.4 |
| 72.5° | 1002.1 | 665.6  | 179.4 | 183.7 | 199.1 | 239.7 | 323.7 | 357.2 | 351.9 | 354.4 | 350.0 |
| 75°   | 688.4  | 440.3  | 154.4 | 164.4 | 176.6 | 211.9 | 296.9 | 324.4 | 315.9 | 312.8 | 309.7 |
| 77.5° | 367.5  | 243.4  | 128.4 | 145.3 | 153.4 | 183.1 | 259.1 | 285.6 | 276.9 | 264.7 | 260.6 |
| 80°   | 148.7  | 114.7  | 103.4 | 120.3 | 125.0 | 147.5 | 215.6 | 232.2 | 225.6 | 204.4 | 197.5 |
| 82.5° | 74.7   | 68.7   | 81.2  | 94.7  | 95.0  | 105.3 | 160.3 | 175.9 | 161.2 | 135.3 | 129.4 |
| 85°   | 39.1   | 40.3   | 55.9  | 66.6  | 58.7  | 56.9  | 96.2  | 106.6 | 97.8  | 85.0  | 76.6  |
| 87.5° | 14.1   | 16.2   | 29.4  | 29.1  | 20.6  | 10.9  | 21.2  | 10.3  | 5.6   | 3.4   | 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   |

(END OF REPORT)