

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: P450821

Luminaire Tested: **GALN-SA1C-827-U-T3**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P450821  
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-827-U-T3  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(1) 80 CRI, 2700K, 1050mA LIGHTSQUARE WITH 16 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5186 lumens  
Efficiency: N/A  
Efficacy: 91.0 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

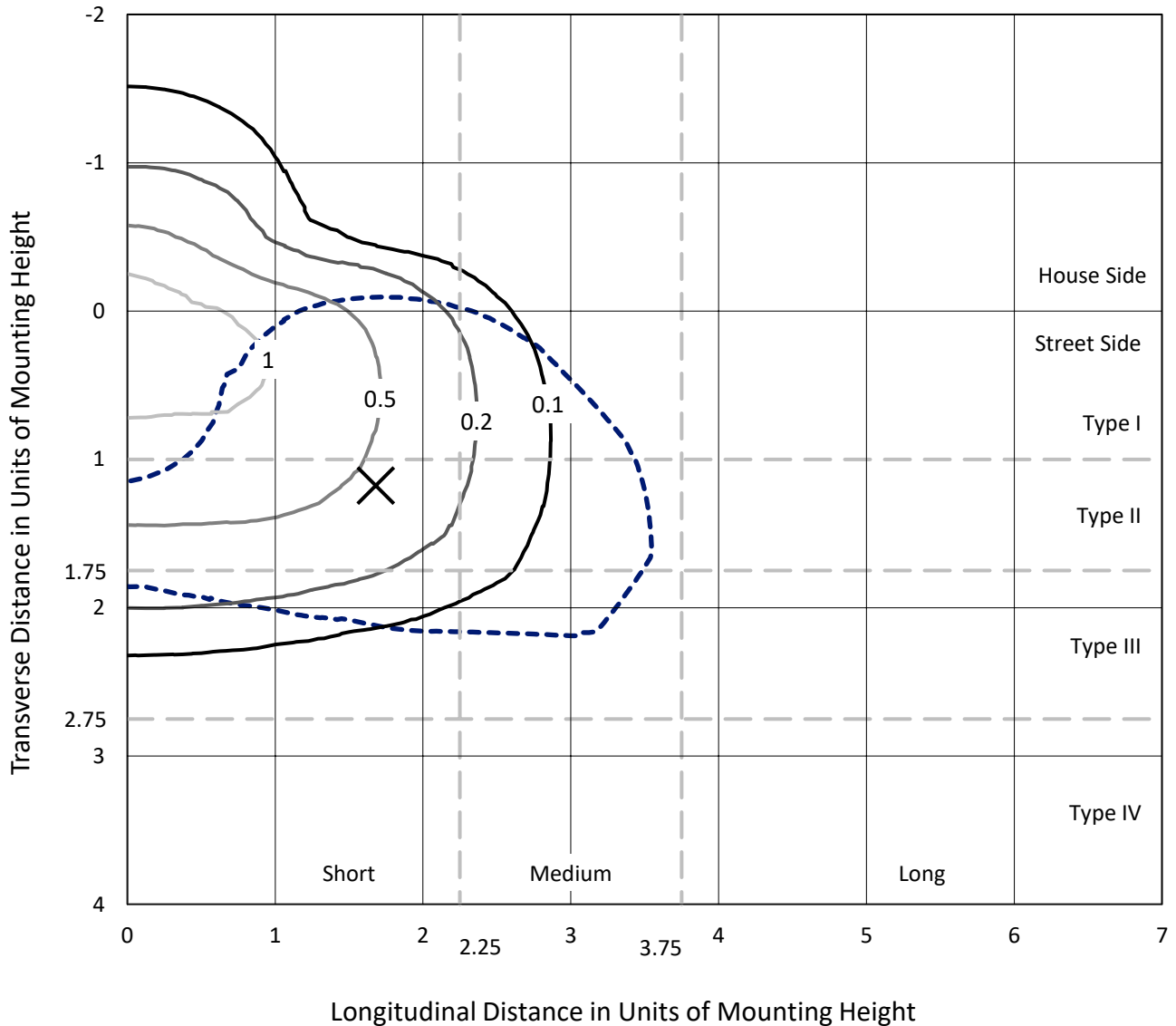
Input Watts (W): 57  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

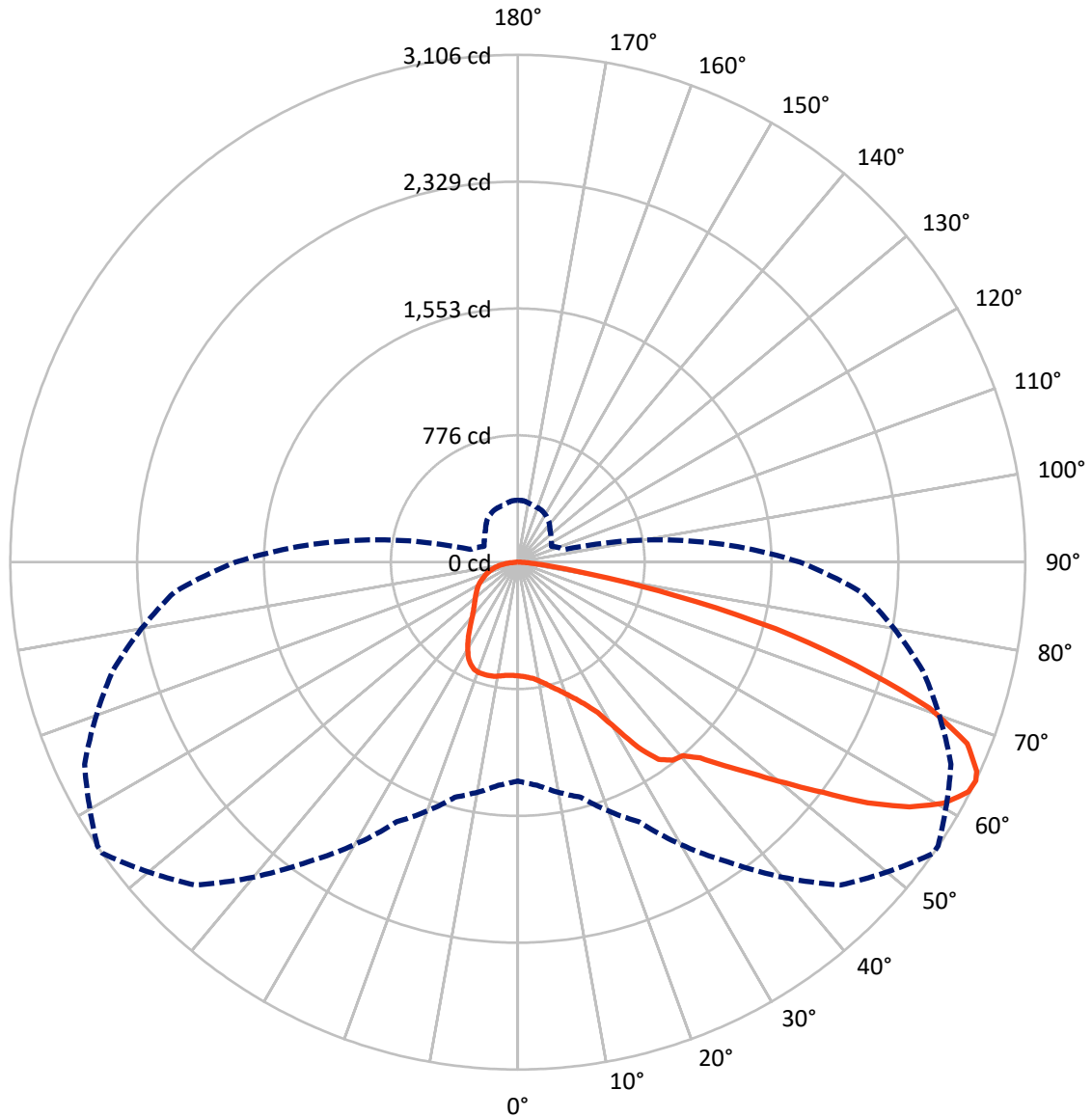
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.3 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral    - - - Horizontal Cone Through 64-Deg Vertical



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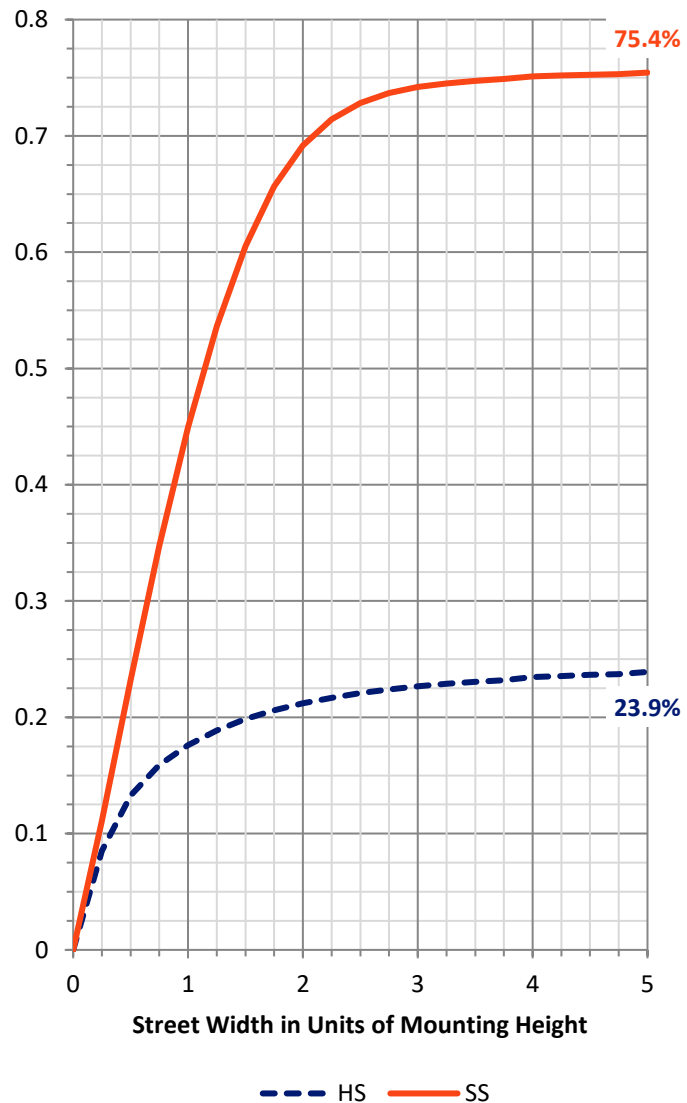
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 1259.8   | 0.0    | 1259.8 |
|                    | % Fixture | 24.3     | 0.0    | 24.3   |
| <b>Street Side</b> | Lumens    | 3926.2   | 0.0    | 3926.2 |
|                    | % Fixture | 75.7     | 0.0    | 75.7   |
| <b>Total</b>       | Lumens    | 5186.0   | 0.0    | 5186.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 67.7   | 1.3       |
| 10°-20°   | 213.6  | 4.1       |
| 20°-30°   | 380.2  | 7.3       |
| 30°-40°   | 585.0  | 11.3      |
| 40°-50°   | 829.2  | 16.0      |
| 50°-60°   | 1200.3 | 23.1      |
| 60°-70°   | 1242.2 | 24.0      |
| 70°-80°   | 581.7  | 11.2      |
| 80°-90°   | 86.1   | 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°    | 5186.0 | 100.0     |
| 0°-180°   | 5186.0 | 100.0     |



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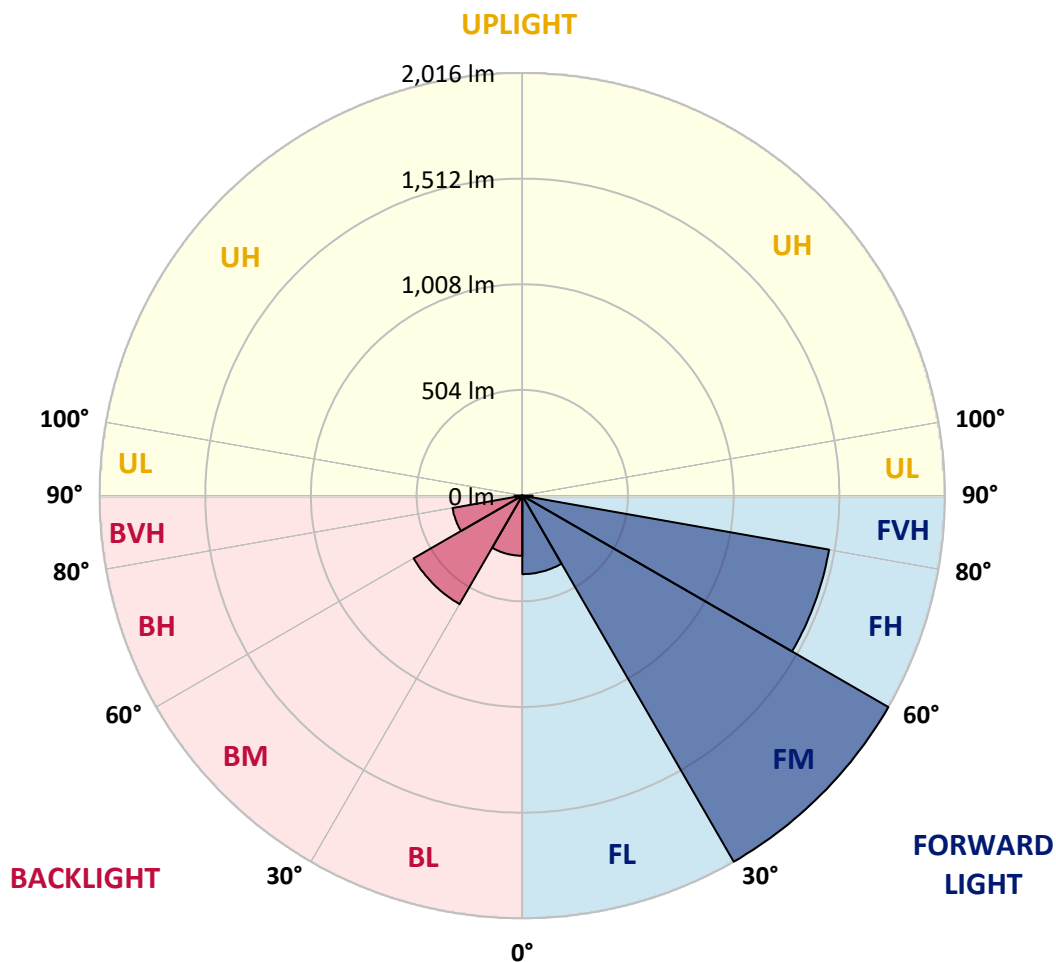
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 374.5  | 7.2       |                         |      |         |
| FM (30°-60°)   | 2016.5 | 38.9      |                         |      |         |
| FH (60°-80°)   | 1485.9 | 28.7      |                         |      | G1/1800 |
| FVH (80°-90°)  | 49.3   | 1.0       |                         |      | G1/100  |
| BL (0°-30°)    | 286.9  | 5.5       | B1/500                  |      |         |
| BM (30°-60°)   | 598.1  | 11.5      | B1/1000                 |      |         |
| BH (60°-80°)   | 338.0  | 6.5       | B1/500                  |      | G1/500  |
| BVH (80°-90°)  | 36.8   | 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°    | 695.8  | 695.8  | 695.8  | 695.8  | 695.8  | 695.8  | 695.8  | 695.8  | 695.8  | 695.8  | 695.8  |
| 2.5°  | 703.6  | 703.3  | 704.2  | 703.3  | 703.9  | 701.9  | 701.0  | 701.6  | 700.7  | 699.3  | 696.7  |
| 5°    | 712.3  | 712.0  | 712.3  | 711.1  | 711.7  | 710.5  | 708.5  | 709.1  | 707.7  | 704.5  | 700.7  |
| 7.5°  | 727.0  | 725.9  | 725.9  | 725.6  | 724.4  | 722.7  | 721.2  | 720.7  | 719.2  | 715.2  | 709.4  |
| 10°   | 746.1  | 746.1  | 746.4  | 744.1  | 745.5  | 742.3  | 740.9  | 740.6  | 735.7  | 730.5  | 722.4  |
| 12.5° | 771.3  | 772.7  | 771.8  | 770.7  | 770.1  | 768.9  | 764.0  | 765.2  | 759.7  | 750.7  | 740.9  |
| 15°   | 802.5  | 804.8  | 803.3  | 802.8  | 801.3  | 797.0  | 795.0  | 794.1  | 786.9  | 773.9  | 760.8  |
| 17.5° | 843.8  | 840.9  | 839.8  | 838.3  | 832.2  | 829.1  | 825.6  | 825.0  | 818.7  | 803.3  | 783.1  |
| 20°   | 879.9  | 884.0  | 881.7  | 880.2  | 874.2  | 868.1  | 865.5  | 864.6  | 859.1  | 842.4  | 810.0  |
| 22.5° | 923.0  | 923.9  | 924.8  | 921.3  | 918.4  | 913.8  | 909.1  | 907.7  | 905.7  | 888.3  | 848.7  |
| 25°   | 969.0  | 972.4  | 969.6  | 966.1  | 962.6  | 962.3  | 966.7  | 966.1  | 965.2  | 948.5  | 900.2  |
| 27.5° | 1043.9 | 1047.0 | 1047.9 | 1044.1 | 1030.8 | 1032.0 | 1041.8 | 1045.0 | 1058.3 | 1030.6 | 966.4  |
| 30°   | 1086.1 | 1089.2 | 1096.5 | 1110.6 | 1131.7 | 1150.2 | 1173.9 | 1181.2 | 1193.9 | 1141.6 | 1045.0 |
| 32.5° | 1112.1 | 1113.2 | 1126.2 | 1152.5 | 1215.9 | 1284.9 | 1349.4 | 1352.0 | 1360.1 | 1286.7 | 1117.0 |
| 35°   | 1153.1 | 1154.0 | 1164.4 | 1193.3 | 1267.6 | 1382.6 | 1482.4 | 1485.6 | 1478.9 | 1331.8 | 1150.5 |
| 37.5° | 1203.7 | 1206.0 | 1212.7 | 1236.7 | 1325.4 | 1464.5 | 1537.6 | 1535.3 | 1476.3 | 1367.6 | 1209.8 |
| 40°   | 1277.4 | 1277.4 | 1269.6 | 1302.0 | 1386.4 | 1511.3 | 1557.0 | 1552.9 | 1537.3 | 1471.4 | 1300.0 |
| 42.5° | 1342.5 | 1341.3 | 1359.8 | 1381.8 | 1462.7 | 1583.6 | 1638.2 | 1644.8 | 1670.6 | 1601.8 | 1402.6 |
| 45°   | 1427.2 | 1432.4 | 1442.8 | 1482.7 | 1592.5 | 1707.0 | 1777.5 | 1783.9 | 1820.3 | 1755.3 | 1522.6 |
| 47.5° | 1512.7 | 1514.5 | 1547.1 | 1600.3 | 1753.2 | 1874.4 | 1932.2 | 1942.6 | 1975.8 | 1934.8 | 1651.8 |
| 50°   | 1573.4 | 1589.9 | 1642.2 | 1726.1 | 1918.9 | 2078.5 | 2123.5 | 2136.0 | 2194.7 | 2130.2 | 1802.4 |
| 52.5° | 1637.6 | 1653.8 | 1717.7 | 1845.5 | 2109.1 | 2287.2 | 2342.7 | 2351.1 | 2412.0 | 2327.9 | 1956.5 |
| 55°   | 1692.5 | 1707.6 | 1780.1 | 1951.3 | 2260.6 | 2500.2 | 2600.8 | 2591.0 | 2620.2 | 2480.3 | 2075.3 |
| 57.5° | 1701.5 | 1713.6 | 1805.0 | 2018.9 | 2374.5 | 2682.9 | 2827.2 | 2832.9 | 2799.1 | 2594.2 | 2173.3 |
| 60°   | 1632.1 | 1657.0 | 1761.9 | 2011.7 | 2425.6 | 2810.1 | 2996.0 | 3000.0 | 2904.1 | 2652.6 | 2212.3 |
| 62.5° | 1509.3 | 1506.7 | 1633.6 | 1895.5 | 2353.9 | 2839.0 | 3095.4 | 3091.1 | 2945.1 | 2624.5 | 2174.4 |
| 64°   | 1339.6 | 1370.8 | 1489.3 | 1752.7 | 2238.3 | 2794.5 | 3105.8 | 3103.5 | 2925.4 | 2566.1 | 2110.0 |
| 65°   | 1236.1 | 1234.4 | 1351.4 | 1635.9 | 2123.3 | 2727.4 | 3087.3 | 3084.1 | 2884.4 | 2513.8 | 2060.0 |
| 67.5° | 892.4  | 896.4  | 1012.1 | 1262.4 | 1726.1 | 2465.2 | 2966.8 | 2954.9 | 2722.5 | 2340.4 | 1869.7 |
| 70°   | 540.6  | 542.9  | 633.7  | 837.5  | 1239.0 | 1992.9 | 2674.2 | 2674.8 | 2474.8 | 2081.3 | 1591.4 |
| 72.5° | 284.7  | 290.8  | 327.2  | 475.5  | 752.5  | 1398.3 | 2169.5 | 2221.0 | 2124.7 | 1776.4 | 1257.2 |
| 75°   | 158.4  | 159.3  | 185.0  | 234.4  | 383.9  | 782.5  | 1630.7 | 1645.4 | 1682.1 | 1429.8 | 929.7  |
| 77.5° | 120.8  | 122.6  | 130.7  | 151.5  | 209.0  | 362.8  | 986.9  | 1060.9 | 1185.5 | 1008.0 | 530.5  |
| 80°   | 98.0   | 99.7   | 106.7  | 119.1  | 139.0  | 172.0  | 458.5  | 498.4  | 634.5  | 447.5  | 207.0  |
| 82.5° | 76.3   | 75.2   | 84.1   | 92.2   | 101.2  | 101.8  | 188.2  | 208.1  | 258.4  | 192.5  | 89.6   |
| 85°   | 56.7   | 56.7   | 63.9   | 62.2   | 65.3   | 59.5   | 83.0   | 91.6   | 103.5  | 81.8   | 41.6   |
| 87.5° | 22.5   | 24.9   | 41.9   | 37.6   | 29.2   | 23.4   | 30.6   | 32.4   | 35.8   | 32.1   | 17.3   |
| 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°    | 695.8  | 695.8  | 695.8 | 695.8 | 695.8 | 695.8 | 695.8 | 695.8 | 695.8 | 695.8 | 695.8 |
| 2.5°  | 697.0  | 697.8  | 695.8 | 694.4 | 693.8 | 692.9 | 692.0 | 692.3 | 693.5 | 694.6 | 694.4 |
| 5°    | 700.4  | 700.7  | 697.3 | 695.5 | 694.4 | 693.2 | 693.2 | 694.1 | 696.4 | 698.1 | 698.1 |
| 7.5°  | 709.1  | 709.1  | 704.2 | 701.0 | 699.3 | 697.3 | 696.7 | 697.0 | 698.7 | 701.0 | 701.3 |
| 10°   | 722.7  | 721.5  | 715.2 | 710.3 | 707.1 | 702.2 | 697.8 | 695.5 | 696.4 | 697.8 | 697.8 |
| 12.5° | 739.2  | 736.0  | 727.9 | 721.2 | 713.4 | 704.2 | 695.2 | 690.6 | 690.3 | 691.8 | 691.2 |
| 15°   | 756.8  | 753.3  | 742.1 | 729.9 | 716.3 | 702.7 | 692.0 | 685.4 | 680.2 | 678.7 | 681.9 |
| 17.5° | 777.3  | 770.1  | 754.5 | 737.7 | 717.5 | 699.9 | 683.1 | 669.5 | 660.2 | 657.6 | 658.5 |
| 20°   | 802.2  | 792.6  | 771.5 | 745.2 | 716.6 | 689.4 | 663.4 | 645.2 | 630.2 | 625.6 | 626.1 |
| 22.5° | 836.6  | 820.1  | 789.2 | 749.0 | 709.4 | 669.8 | 633.7 | 609.9 | 591.7 | 584.5 | 588.8 |
| 25°   | 875.6  | 857.7  | 805.9 | 748.1 | 690.6 | 638.3 | 598.4 | 567.5 | 551.0 | 540.3 | 542.6 |
| 27.5° | 929.4  | 897.6  | 823.9 | 740.3 | 663.7 | 599.8 | 553.6 | 524.4 | 509.4 | 503.9 | 506.5 |
| 30°   | 998.2  | 949.3  | 843.2 | 719.2 | 621.2 | 551.3 | 508.5 | 489.4 | 480.4 | 473.5 | 475.8 |
| 32.5° | 1047.9 | 985.7  | 847.6 | 683.7 | 575.3 | 507.0 | 477.8 | 463.7 | 453.8 | 447.2 | 448.6 |
| 35°   | 1083.5 | 1016.7 | 845.5 | 640.0 | 527.3 | 470.6 | 453.6 | 442.0 | 426.1 | 411.6 | 409.0 |
| 37.5° | 1131.2 | 1055.4 | 830.8 | 592.3 | 479.9 | 446.0 | 433.9 | 412.5 | 389.7 | 370.3 | 369.4 |
| 40°   | 1204.3 | 1100.8 | 799.3 | 536.2 | 439.4 | 427.8 | 413.1 | 385.3 | 360.8 | 345.2 | 344.0 |
| 42.5° | 1279.7 | 1142.7 | 756.5 | 477.3 | 406.2 | 408.8 | 390.8 | 363.4 | 348.3 | 338.2 | 337.1 |
| 45°   | 1372.0 | 1188.1 | 710.3 | 426.1 | 381.6 | 390.8 | 371.5 | 355.6 | 346.6 | 340.0 | 338.2 |
| 47.5° | 1471.7 | 1234.6 | 658.2 | 380.1 | 360.8 | 374.4 | 363.4 | 356.1 | 351.2 | 346.6 | 344.6 |
| 50°   | 1579.2 | 1286.7 | 609.4 | 343.1 | 342.0 | 357.3 | 362.5 | 359.9 | 357.0 | 355.6 | 353.8 |
| 52.5° | 1697.2 | 1339.9 | 568.3 | 317.1 | 325.5 | 345.2 | 362.8 | 364.8 | 364.8 | 363.9 | 362.8 |
| 55°   | 1776.9 | 1376.9 | 526.7 | 296.0 | 308.7 | 335.3 | 362.2 | 370.0 | 372.9 | 371.8 | 370.6 |
| 57.5° | 1835.9 | 1397.1 | 474.4 | 277.8 | 294.6 | 325.8 | 359.0 | 370.6 | 373.5 | 374.9 | 374.4 |
| 60°   | 1848.1 | 1378.3 | 405.9 | 258.7 | 279.2 | 311.9 | 347.5 | 361.9 | 365.7 | 374.6 | 375.5 |
| 62.5° | 1793.4 | 1320.5 | 337.6 | 239.9 | 260.5 | 290.8 | 331.9 | 352.1 | 359.6 | 373.5 | 374.9 |
| 64°   | 1726.4 | 1255.7 | 299.8 | 228.1 | 248.3 | 279.0 | 324.1 | 349.5 | 359.3 | 377.8 | 379.0 |
| 65°   | 1677.2 | 1208.6 | 276.1 | 220.6 | 240.5 | 271.2 | 319.7 | 350.4 | 361.9 | 384.5 | 386.2 |
| 67.5° | 1496.3 | 1046.5 | 228.4 | 202.9 | 222.0 | 257.9 | 320.6 | 357.6 | 361.3 | 387.1 | 386.8 |
| 70°   | 1238.1 | 833.1  | 191.4 | 186.7 | 204.1 | 247.2 | 317.1 | 346.0 | 346.3 | 363.4 | 359.3 |
| 72.5° | 927.1  | 615.7  | 165.9 | 170.0 | 184.1 | 221.7 | 299.5 | 330.4 | 325.5 | 327.8 | 323.8 |
| 75°   | 636.8  | 407.3  | 142.8 | 152.1 | 163.3 | 196.0 | 274.6 | 300.1 | 292.3 | 289.4 | 286.5 |
| 77.5° | 340.0  | 225.2  | 118.8 | 134.4 | 141.9 | 169.4 | 239.6 | 264.2 | 256.1 | 244.8 | 241.1 |
| 80°   | 137.6  | 106.1  | 95.7  | 111.3 | 115.6 | 136.4 | 199.5 | 214.8 | 208.7 | 189.1 | 182.7 |
| 82.5° | 69.1   | 63.6   | 75.2  | 87.6  | 87.9  | 97.4  | 148.3 | 162.7 | 149.2 | 125.2 | 119.7 |
| 85°   | 36.1   | 37.3   | 51.7  | 61.6  | 54.3  | 52.6  | 89.0  | 98.6  | 90.5  | 78.6  | 70.8  |
| 87.5° | 13.0   | 15.0   | 27.2  | 26.9  | 19.1  | 10.1  | 19.7  | 9.5   | 5.2   | 3.2   | 4.0   |
| 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)