

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: P450904

Luminaire Tested: **GALN-SA1D-727-U-T2**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P450904  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA1D-727-U-T2  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(1) 70 CRI, 2700K, 1200mA LIGHTSQUARE WITH 16 LEDS AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6584 lumens  
Efficiency: N/A  
Efficacy: 101.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G2

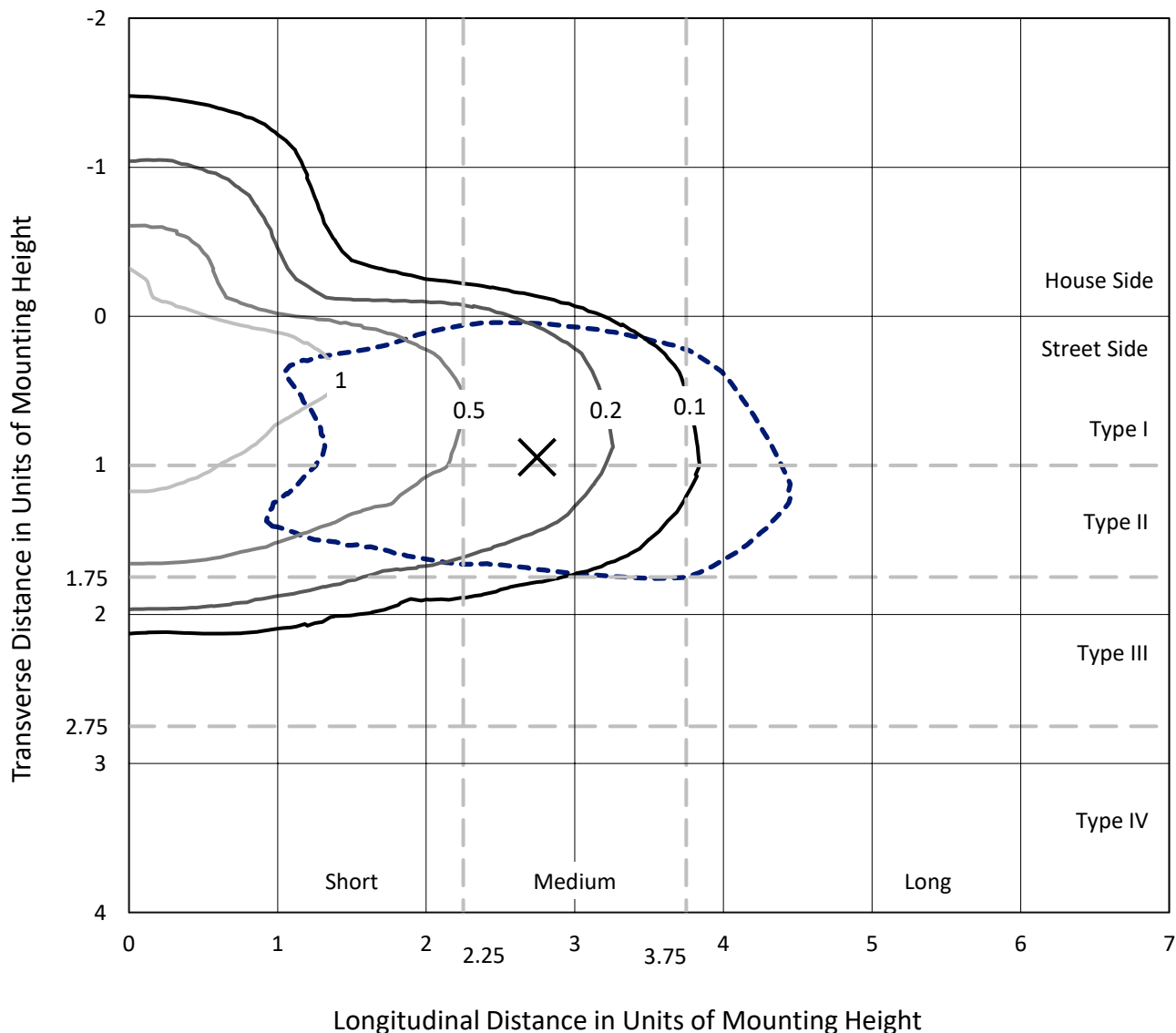
Input Watts (W): 65  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

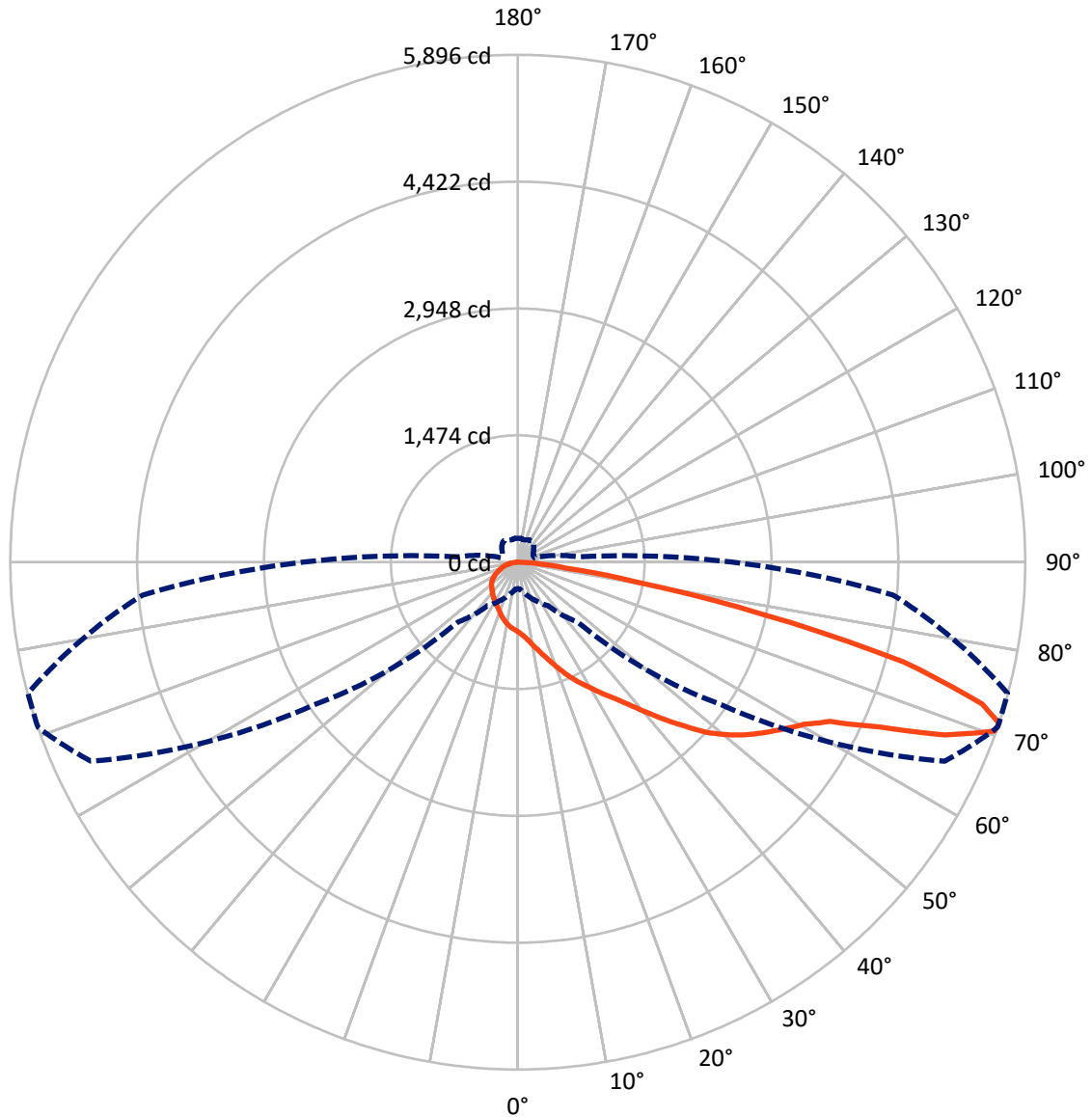
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.8 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 71-Deg Lateral    - - - Horizontal Cone Through 71-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 1184.1   | 0.0    | 1184.1 |
|                    | % Fixture | 18.0     | 0.0    | 18.0   |
| <b>Street Side</b> | Lumens    | 5399.9   | 0.0    | 5399.9 |
|                    | % Fixture | 82.0     | 0.0    | 82.0   |
| <b>Total</b>       | Lumens    | 6584.0   | 0.0    | 6584.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 81.1   | 1.2       |
| 10°-20°   | 263.6  | 4.0       |
| 20°-30°   | 460.7  | 7.0       |
| 30°-40°   | 685.2  | 10.4      |
| 40°-50°   | 1009.5 | 15.3      |
| 50°-60°   | 1413.3 | 21.5      |
| 60°-70°   | 1580.8 | 24.0      |
| 70°-80°   | 965.6  | 14.7      |
| 80°-90°   | 124.2  | 1.9       |
| 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°    | 6584.0 | 100.0     |
| 0°-180°   | 6584.0 | 100.0     |

**Coefficient of Utilization**



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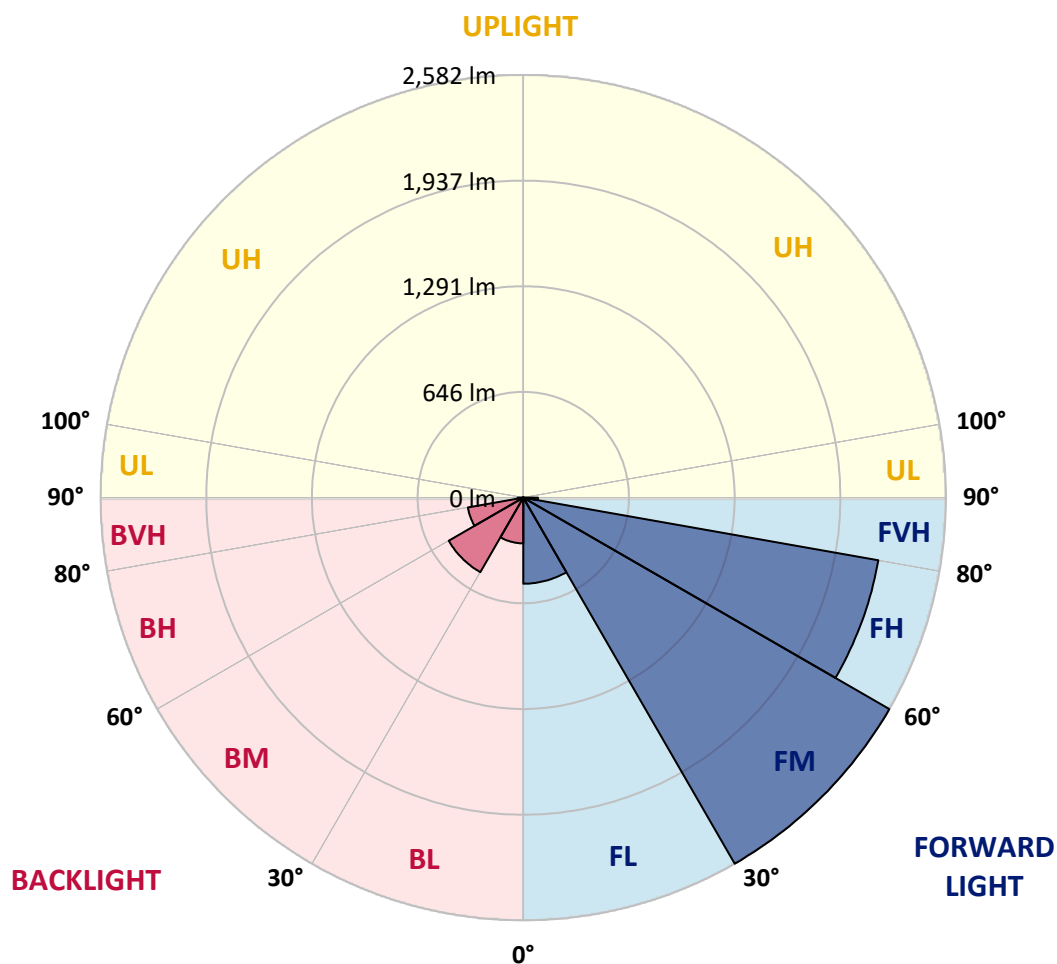
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 526.1  | 8.0       |                         |      |         |
| FM   | (30°-60°)   | 2582.1 | 39.2      |                         |      |         |
| FH   | (60°-80°)   | 2202.3 | 33.4      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 89.4   | 1.4       |                         |      | G1/100  |
| BL   | (0°-30°)    | 279.3  | 4.2       | B1/500                  |      |         |
| BM   | (30°-60°)   | 525.9  | 8.0       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 344.0  | 5.2       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 34.8   | 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 II Medium





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 71°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 808.1  | 808.1  | 808.1  | 808.1  | 808.1  | 808.1  | 808.1  | 808.1  | 808.1  | 808.1  | 808.1  |
| 2.5°  | 897.1  | 892.7  | 893.1  | 886.9  | 879.0  | 870.3  | 858.0  | 847.1  | 838.5  | 833.4  | 818.6  |
| 5°    | 994.1  | 989.7  | 984.3  | 970.9  | 965.1  | 943.8  | 916.6  | 892.0  | 873.2  | 862.7  | 833.0  |
| 7.5°  | 1072.6 | 1071.5 | 1070.1 | 1062.5 | 1047.6 | 1017.9 | 994.8  | 952.1  | 924.2  | 904.3  | 853.7  |
| 10°   | 1121.1 | 1122.9 | 1124.0 | 1125.4 | 1119.3 | 1103.7 | 1071.9 | 1017.9 | 982.5  | 957.1  | 880.4  |
| 12.5° | 1145.7 | 1147.5 | 1153.6 | 1167.0 | 1175.4 | 1173.5 | 1147.5 | 1094.7 | 1045.8 | 1012.5 | 909.0  |
| 15°   | 1160.9 | 1163.8 | 1174.6 | 1192.4 | 1220.2 | 1238.0 | 1225.3 | 1176.4 | 1122.9 | 1083.4 | 943.0  |
| 17.5° | 1177.5 | 1180.8 | 1192.7 | 1218.1 | 1254.6 | 1293.0 | 1306.7 | 1264.7 | 1206.5 | 1159.4 | 981.0  |
| 20°   | 1186.9 | 1191.3 | 1208.3 | 1241.6 | 1284.3 | 1340.0 | 1385.6 | 1363.5 | 1299.8 | 1247.7 | 1024.8 |
| 22.5° | 1202.1 | 1205.8 | 1220.2 | 1255.7 | 1306.7 | 1376.6 | 1464.5 | 1459.8 | 1403.7 | 1336.4 | 1072.9 |
| 25°   | 1243.4 | 1249.2 | 1256.4 | 1277.8 | 1327.0 | 1413.8 | 1530.0 | 1562.6 | 1504.3 | 1429.0 | 1117.1 |
| 27.5° | 1321.2 | 1325.9 | 1325.5 | 1328.4 | 1356.3 | 1446.0 | 1586.8 | 1664.2 | 1604.2 | 1522.7 | 1159.8 |
| 30°   | 1409.8 | 1411.7 | 1413.1 | 1406.6 | 1412.7 | 1479.0 | 1638.9 | 1764.8 | 1704.8 | 1619.0 | 1197.1 |
| 32.5° | 1517.7 | 1521.3 | 1509.0 | 1492.4 | 1487.3 | 1527.8 | 1682.0 | 1865.4 | 1823.8 | 1716.7 | 1234.0 |
| 35°   | 1645.1 | 1654.5 | 1629.5 | 1600.2 | 1579.6 | 1598.0 | 1739.9 | 1968.2 | 1945.8 | 1841.6 | 1282.8 |
| 37.5° | 1790.5 | 1802.1 | 1779.0 | 1721.4 | 1692.1 | 1697.2 | 1815.5 | 2095.2 | 2099.9 | 1983.8 | 1355.6 |
| 40°   | 1909.6 | 1924.8 | 1925.5 | 1844.1 | 1799.6 | 1805.4 | 1911.4 | 2232.0 | 2285.9 | 2159.6 | 1441.3 |
| 42.5° | 1988.1 | 2003.0 | 2018.5 | 1970.7 | 1924.1 | 1957.0 | 2023.2 | 2380.4 | 2495.1 | 2373.1 | 1561.1 |
| 45°   | 2074.2 | 2087.6 | 2096.3 | 2074.6 | 2048.5 | 2133.9 | 2158.2 | 2538.2 | 2718.0 | 2611.6 | 1692.1 |
| 47.5° | 2174.1 | 2189.0 | 2197.3 | 2176.6 | 2166.9 | 2289.2 | 2303.7 | 2685.4 | 2956.1 | 2843.2 | 1836.9 |
| 50°   | 2307.3 | 2318.5 | 2314.2 | 2301.1 | 2299.0 | 2408.2 | 2443.3 | 2823.3 | 3152.6 | 3092.5 | 1987.0 |
| 52.5° | 2473.0 | 2486.4 | 2491.1 | 2472.7 | 2464.3 | 2493.3 | 2555.9 | 2948.9 | 3331.4 | 3306.8 | 2147.3 |
| 55°   | 2573.3 | 2594.6 | 2666.3 | 2695.2 | 2715.1 | 2603.3 | 2677.1 | 3087.5 | 3491.7 | 3532.6 | 2319.6 |
| 57.5° | 2444.8 | 2472.3 | 2632.6 | 2777.4 | 2964.4 | 2878.3 | 2849.0 | 3232.2 | 3652.0 | 3751.5 | 2525.9 |
| 60°   | 2131.4 | 2137.6 | 2344.2 | 2610.9 | 2987.2 | 3231.9 | 3207.6 | 3462.4 | 3825.7 | 3972.2 | 2797.6 |
| 62.5° | 1478.6 | 1491.6 | 1735.9 | 2161.5 | 2705.7 | 3359.2 | 3817.7 | 3859.7 | 4074.7 | 4302.6 | 3196.0 |
| 65°   | 762.5  | 745.5  | 968.0  | 1358.5 | 2039.9 | 3056.7 | 4312.0 | 4590.3 | 4614.6 | 4819.4 | 3756.9 |
| 67.5° | 469.3  | 476.9  | 581.2  | 793.2  | 1206.1 | 2221.5 | 4260.3 | 5483.1 | 5355.3 | 5453.7 | 4277.7 |
| 70°   | 352.5  | 361.9  | 433.5  | 542.8  | 735.3  | 1270.2 | 3426.2 | 5699.5 | 5877.9 | 5852.5 | 4436.2 |
| 71°   | 306.5  | 316.3  | 390.8  | 494.0  | 617.7  | 980.3  | 2886.6 | 5472.9 | 5896.0 | 5891.6 | 4376.5 |
| 72.5° | 261.3  | 267.4  | 325.7  | 418.3  | 520.7  | 687.2  | 2168.7 | 4908.4 | 5644.5 | 5788.8 | 4163.3 |
| 75°   | 205.2  | 209.9  | 235.9  | 319.2  | 410.0  | 421.9  | 1163.8 | 3679.9 | 4635.9 | 4910.9 | 3466.0 |
| 77.5° | 167.2  | 170.4  | 183.8  | 237.0  | 316.3  | 298.9  | 610.5  | 2395.2 | 2904.4 | 3181.2 | 2041.7 |
| 80°   | 132.8  | 136.4  | 144.4  | 160.7  | 237.0  | 213.1  | 291.3  | 1213.7 | 1403.0 | 1400.1 | 814.9  |
| 82.5° | 103.1  | 104.2  | 113.6  | 118.0  | 162.1  | 151.3  | 157.8  | 513.9  | 569.2  | 588.0  | 294.2  |
| 85°   | 65.1   | 68.4   | 100.6  | 90.5   | 97.0   | 88.7   | 77.8   | 204.1  | 251.5  | 247.9  | 117.6  |
| 87.5° | 19.9   | 21.0   | 34.0   | 38.4   | 43.1   | 38.7   | 28.6   | 60.1   | 73.5   | 79.6   | 29.3   |
| 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°    | 808.1  | 808.1 | 808.1 | 808.1 | 808.1 | 808.1 | 808.1 | 808.1 | 808.1 | 808.1 | 808.1 |
| 2.5°  | 812.8  | 808.8 | 794.7 | 783.1 | 772.2 | 760.3 | 750.2 | 747.3 | 744.7 | 743.6 | 743.3 |
| 5°    | 820.4  | 808.4 | 780.6 | 757.8 | 739.7 | 723.0 | 712.5 | 707.8 | 703.1 | 703.1 | 704.6 |
| 7.5°  | 831.2  | 809.5 | 766.4 | 732.4 | 709.6 | 694.1 | 686.5 | 685.7 | 686.8 | 687.9 | 688.3 |
| 10°   | 843.2  | 808.8 | 745.8 | 703.5 | 683.2 | 676.0 | 676.3 | 682.5 | 688.3 | 692.6 | 693.3 |
| 12.5° | 854.7  | 804.4 | 721.6 | 676.3 | 663.3 | 664.8 | 674.9 | 688.6 | 699.9 | 706.0 | 706.4 |
| 15°   | 867.8  | 797.6 | 692.3 | 650.6 | 646.3 | 657.5 | 676.3 | 697.3 | 714.3 | 724.5 | 725.5 |
| 17.5° | 878.6  | 786.0 | 661.5 | 625.7 | 631.1 | 651.7 | 677.8 | 704.9 | 725.5 | 738.2 | 740.4 |
| 20°   | 890.9  | 771.1 | 629.7 | 601.8 | 617.4 | 645.2 | 674.9 | 704.2 | 725.5 | 737.9 | 740.7 |
| 22.5° | 900.7  | 750.2 | 599.3 | 582.2 | 605.0 | 637.3 | 665.1 | 688.6 | 706.0 | 712.5 | 716.9 |
| 25°   | 904.7  | 723.7 | 570.7 | 566.3 | 595.3 | 624.2 | 643.0 | 656.4 | 661.9 | 661.1 | 662.9 |
| 27.5° | 902.5  | 693.3 | 546.1 | 553.7 | 583.0 | 604.0 | 613.4 | 612.3 | 602.5 | 593.5 | 597.8 |
| 30°   | 893.5  | 657.2 | 525.4 | 540.6 | 567.1 | 578.6 | 577.2 | 563.1 | 544.6 | 527.6 | 528.7 |
| 32.5° | 877.2  | 618.1 | 506.3 | 525.8 | 544.6 | 549.7 | 539.9 | 521.5 | 495.0 | 473.0 | 469.7 |
| 35°   | 863.4  | 580.8 | 489.2 | 508.8 | 522.2 | 519.6 | 510.2 | 486.4 | 462.5 | 442.9 | 439.7 |
| 37.5° | 861.3  | 549.0 | 473.0 | 489.6 | 497.2 | 493.6 | 482.0 | 461.7 | 453.1 | 438.2 | 436.4 |
| 40°   | 872.8  | 526.5 | 456.3 | 469.3 | 473.0 | 470.1 | 457.4 | 445.8 | 453.8 | 450.2 | 450.2 |
| 42.5° | 904.3  | 514.6 | 441.5 | 449.1 | 452.0 | 454.1 | 445.1 | 435.3 | 445.1 | 428.5 | 423.0 |
| 45°   | 954.3  | 514.9 | 428.1 | 429.2 | 437.9 | 445.5 | 439.3 | 424.8 | 419.8 | 386.5 | 380.0 |
| 47.5° | 1027.7 | 527.2 | 417.2 | 410.4 | 425.9 | 438.6 | 429.9 | 408.9 | 386.5 | 364.4 | 360.4 |
| 50°   | 1113.5 | 549.3 | 407.5 | 390.8 | 410.0 | 429.9 | 423.4 | 398.8 | 375.6 | 362.2 | 359.7 |
| 52.5° | 1208.6 | 577.2 | 395.5 | 369.1 | 390.5 | 425.9 | 424.8 | 397.3 | 365.5 | 356.4 | 354.3 |
| 55°   | 1326.3 | 604.7 | 380.7 | 343.8 | 373.1 | 422.7 | 420.9 | 385.4 | 363.3 | 356.8 | 356.1 |
| 57.5° | 1463.0 | 644.5 | 359.3 | 318.1 | 353.2 | 409.3 | 405.3 | 378.2 | 356.1 | 351.4 | 351.0 |
| 60°   | 1683.4 | 706.4 | 328.9 | 294.6 | 332.9 | 385.8 | 390.8 | 365.9 | 344.5 | 343.4 | 343.1 |
| 62.5° | 1973.3 | 793.2 | 297.5 | 270.3 | 309.4 | 355.4 | 369.8 | 349.2 | 332.2 | 337.6 | 338.3 |
| 65°   | 2373.5 | 866.3 | 264.9 | 249.7 | 283.3 | 326.0 | 349.9 | 333.6 | 318.4 | 328.9 | 328.9 |
| 67.5° | 2634.4 | 867.8 | 235.2 | 228.3 | 256.9 | 301.4 | 328.9 | 315.2 | 300.7 | 318.4 | 319.2 |
| 70°   | 2580.1 | 760.3 | 210.6 | 205.9 | 231.2 | 275.0 | 305.8 | 294.9 | 278.3 | 294.2 | 288.4 |
| 71°   | 2492.6 | 700.6 | 200.8 | 197.2 | 221.1 | 262.4 | 294.9 | 285.9 | 269.2 | 279.7 | 276.5 |
| 72.5° | 2352.9 | 608.3 | 184.9 | 185.6 | 205.9 | 246.4 | 279.7 | 270.3 | 253.7 | 259.5 | 258.4 |
| 75°   | 1988.8 | 531.2 | 158.1 | 161.4 | 177.0 | 219.3 | 249.3 | 242.1 | 225.1 | 225.1 | 224.0 |
| 77.5° | 1243.4 | 371.3 | 131.4 | 133.2 | 150.2 | 187.8 | 214.2 | 208.1 | 191.8 | 186.4 | 184.9 |
| 80°   | 463.9  | 191.8 | 102.8 | 104.9 | 115.4 | 148.0 | 177.3 | 171.5 | 154.9 | 148.7 | 142.9 |
| 82.5° | 175.5  | 96.3  | 75.6  | 73.8  | 85.0  | 112.9 | 139.0 | 132.1 | 119.1 | 104.2 | 99.9  |
| 85°   | 66.2   | 47.8  | 46.3  | 44.9  | 49.9  | 66.9  | 86.1  | 84.7  | 70.9  | 60.4  | 59.3  |
| 87.5° | 17.4   | 15.6  | 18.1  | 13.4  | 14.1  | 12.7  | 13.0  | 5.4   | 2.5   | 1.1   | 0.7   |
| 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)