

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: P651751

Luminaire Tested: **GALN-SA2A-840-U-T3-GRSBK**

Issue Date: 5/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P651751  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA2A-840-U-T3-GRSBK  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(2) 80 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
OPTICS WITH BLACK GLARE REDUCTION SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4618.8 lumens  
Efficiency: N/A  
Efficacy: 73.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G0

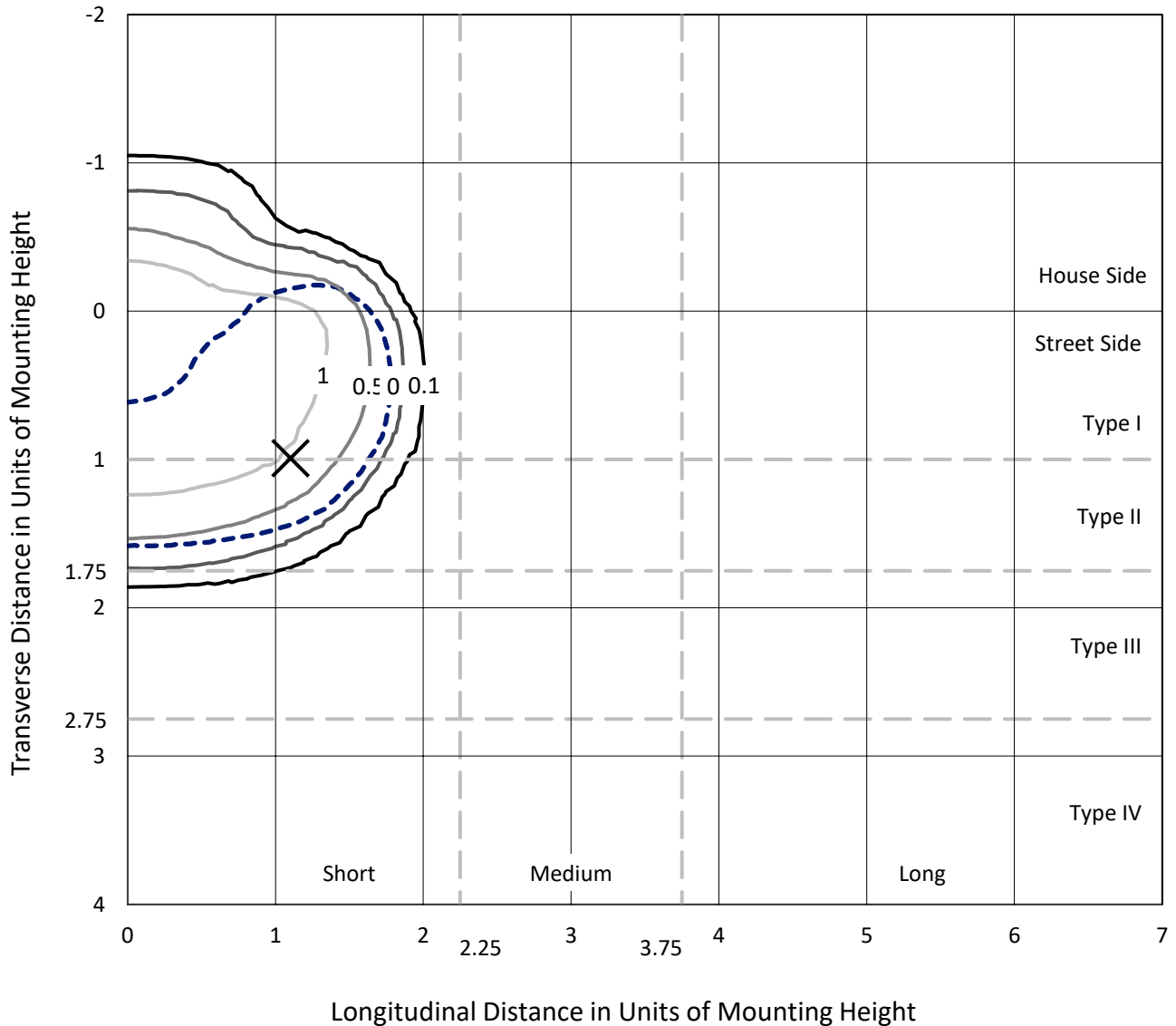
Input Watts (W): 63  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

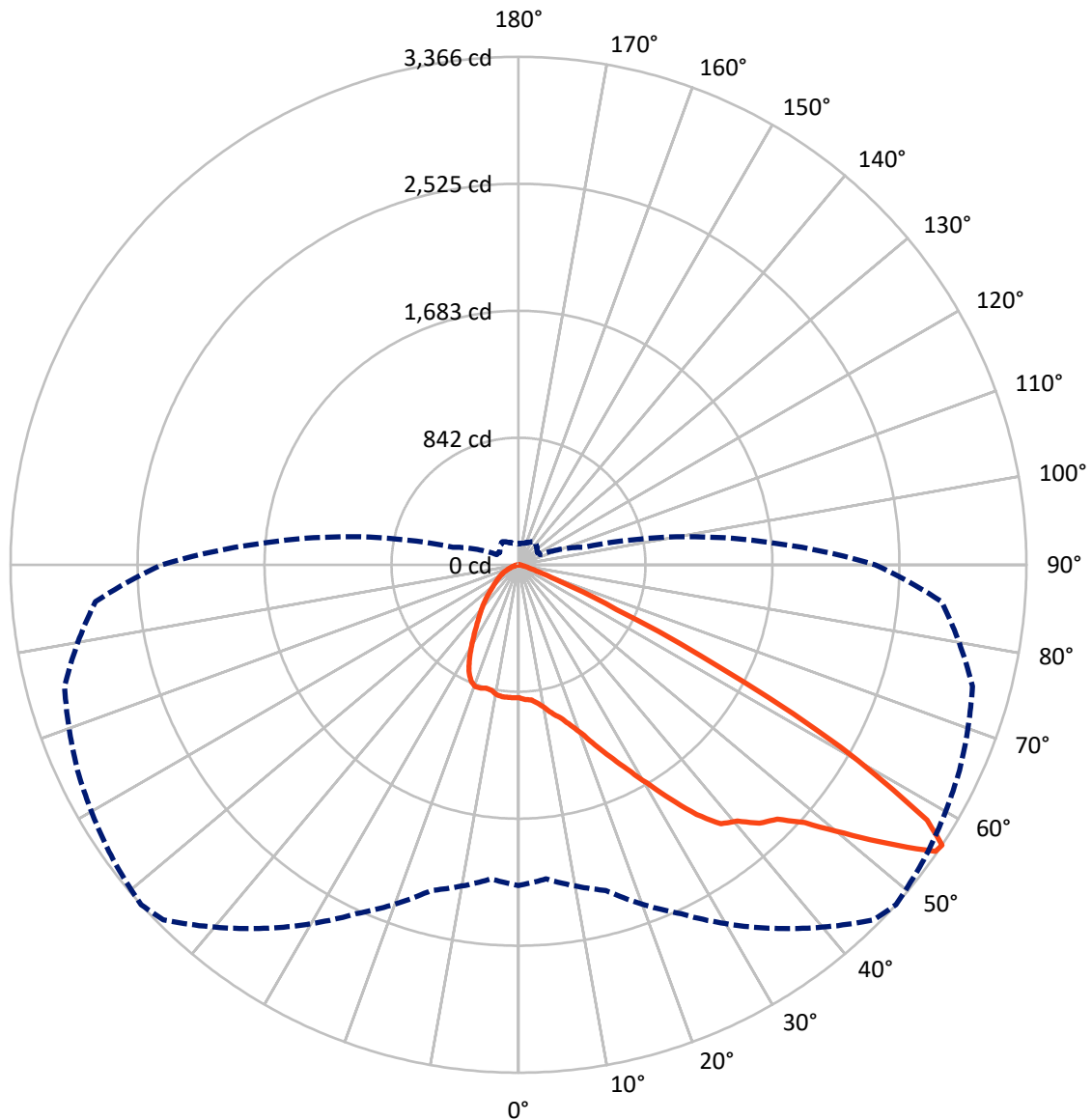
✕ Max cd  
 - - - 1/2 Max cd



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

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### Luminous Intensity Polar Plot



— Vertical Plane Through 48-Deg Lateral      - - - Horizontal Cone Through 56-Deg Vertical

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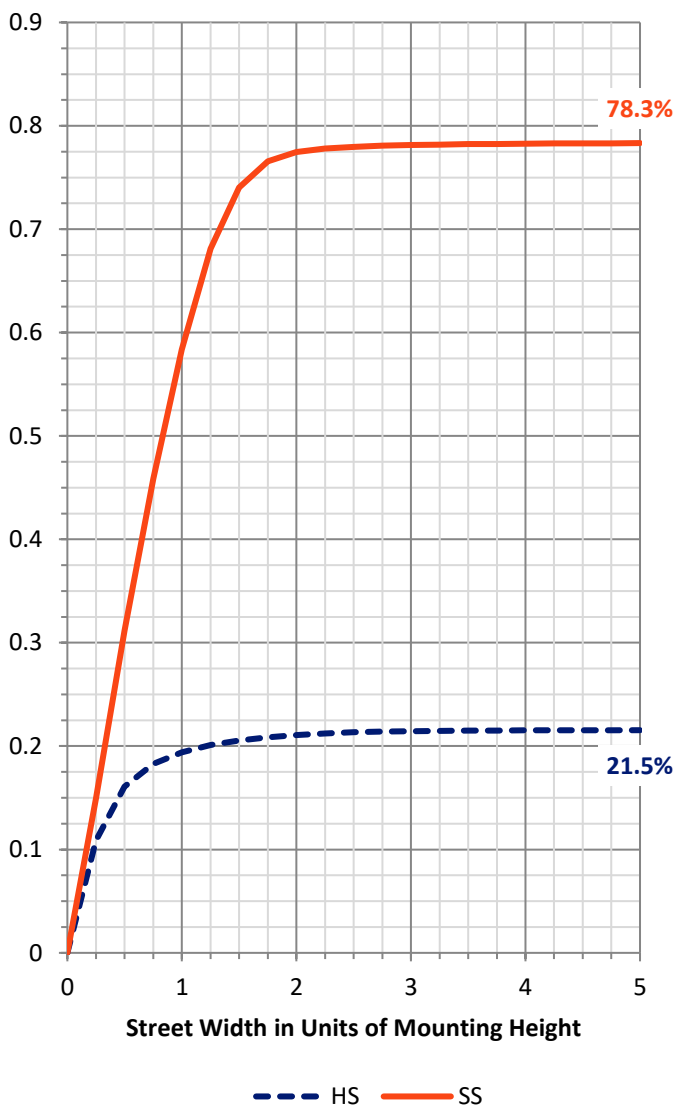
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 1004.5   | 0.0    | 1004.5 |
|                    | % Fixture | 21.7     | 0.0    | 21.7   |
| <b>Street Side</b> | Lumens    | 3614.3   | 0.0    | 3614.3 |
|                    | % Fixture | 78.3     | 0.0    | 78.3   |
| <b>Total</b>       | Lumens    | 4618.8   | 0.0    | 4618.8 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 85.9   | 1.9       |
| 10°-20°   | 274.6  | 5.9       |
| 20°-30°   | 498.1  | 10.8      |
| 30°-40°   | 782.5  | 16.9      |
| 40°-50°   | 1141.5 | 24.7      |
| 50°-60°   | 1375.2 | 29.8      |
| 60°-70°   | 402.7  | 8.7       |
| 70°-80°   | 51.1   | 1.1       |
| 80°-90°   | 7.2    | 0.2       |
| 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°    | 4618.8 | 100.0     |
| 0°-180°   | 4618.8 | 100.0     |

**Coefficient of Utilization**

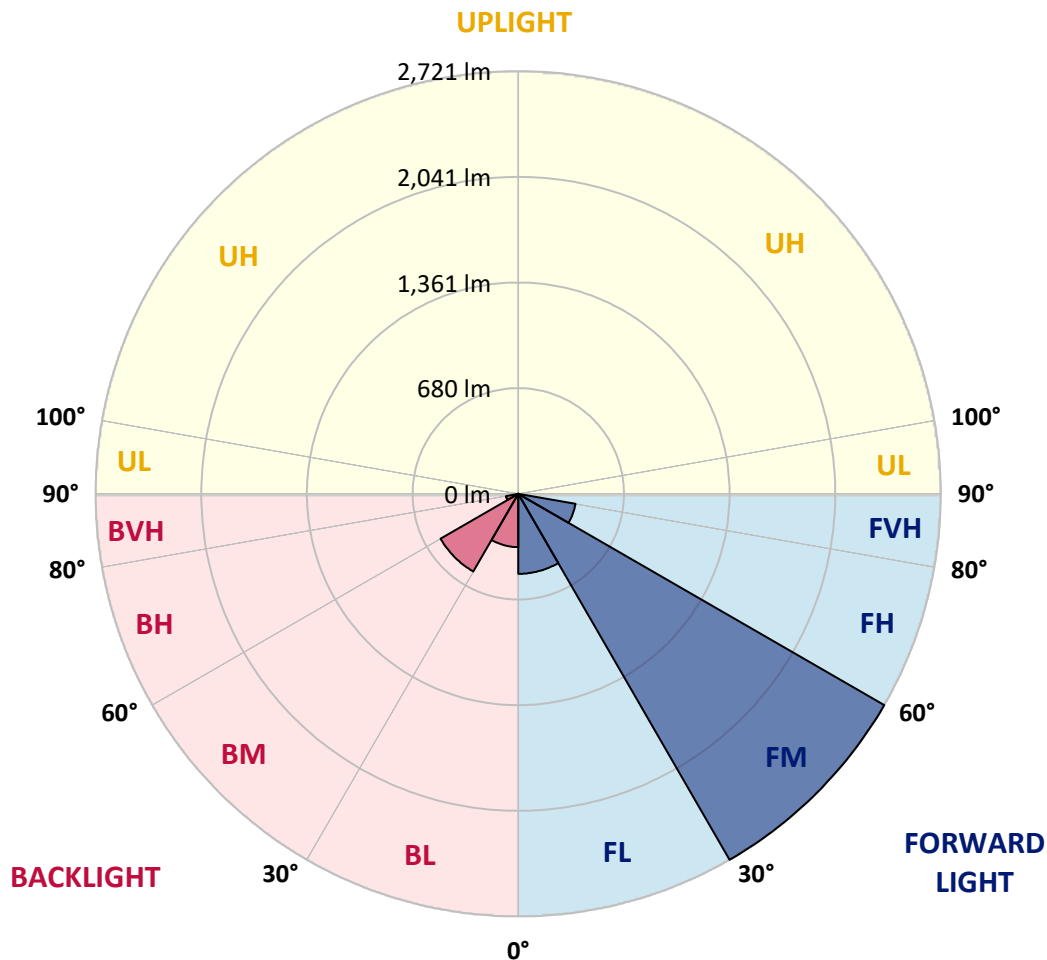


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |        |
|----------------|--------|-----------|-------------------------|------|--------|
|                |        |           | B                       | U    | G      |
| FL (0°-30°)    | 515.4  | 11.2      |                         |      |        |
| FM (30°-60°)   | 2721.4 | 58.9      |                         |      |        |
| FH (60°-80°)   | 373.9  | 8.1       |                         |      | G0/660 |
| FVH (80°-90°)  | 3.6    | 0.1       |                         |      | G0/10  |
| BL (0°-30°)    | 343.3  | 7.4       | B1/500                  |      |        |
| BM (30°-60°)   | 577.8  | 12.5      | B1/1000                 |      |        |
| BH (60°-80°)   | 79.8   | 1.7       | B0/110                  |      | G0/110 |
| BVH (80°-90°)  | 3.6    | 0.1       |                         |      | G0/10  |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |        |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |        |

**BUG Rating: B1-U0-G0**  
 Type II Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 48°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 882.2  | 882.2  | 882.2  | 882.2  | 882.2  | 882.2  | 882.2  | 882.2  | 882.2  | 882.2  | 882.2  |
| 2.5°  | 898.2  | 894.0  | 894.0  | 887.3  | 894.8  | 891.5  | 894.0  | 885.6  | 894.0  | 881.4  | 891.5  |
| 5°    | 902.4  | 903.2  | 899.9  | 904.1  | 904.1  | 909.1  | 900.7  | 908.3  | 912.5  | 903.2  | 899.0  |
| 7.5°  | 924.3  | 925.9  | 925.1  | 921.7  | 928.5  | 927.6  | 926.8  | 920.9  | 922.6  | 919.2  | 914.2  |
| 10°   | 967.2  | 966.3  | 970.5  | 962.1  | 957.1  | 962.9  | 964.6  | 955.4  | 948.6  | 946.1  | 930.1  |
| 12.5° | 1029.4 | 1019.3 | 1013.4 | 1005.0 | 1007.5 | 999.1  | 1014.2 | 998.3  | 994.9  | 979.8  | 963.8  |
| 15°   | 1079.8 | 1078.2 | 1079.0 | 1065.5 | 1050.4 | 1053.8 | 1053.8 | 1045.4 | 1040.3 | 1021.8 | 999.1  |
| 17.5° | 1183.3 | 1148.0 | 1155.5 | 1138.7 | 1126.1 | 1125.3 | 1117.7 | 1119.4 | 1105.9 | 1067.2 | 1032.7 |
| 20°   | 1264.0 | 1248.9 | 1237.1 | 1208.5 | 1189.2 | 1195.1 | 1191.7 | 1183.3 | 1179.1 | 1128.6 | 1079.8 |
| 22.5° | 1336.3 | 1341.4 | 1322.1 | 1314.5 | 1287.6 | 1290.1 | 1296.8 | 1289.3 | 1257.3 | 1205.2 | 1132.8 |
| 25°   | 1438.1 | 1432.2 | 1406.2 | 1396.9 | 1371.7 | 1380.9 | 1407.0 | 1401.1 | 1380.9 | 1286.7 | 1174.0 |
| 27.5° | 1558.4 | 1538.2 | 1543.2 | 1501.2 | 1476.8 | 1502.9 | 1534.0 | 1563.4 | 1506.2 | 1382.6 | 1222.8 |
| 30°   | 1643.3 | 1622.3 | 1620.6 | 1618.9 | 1613.0 | 1643.3 | 1679.5 | 1706.4 | 1660.1 | 1478.5 | 1303.6 |
| 32.5° | 1685.4 | 1690.4 | 1704.7 | 1699.7 | 1750.9 | 1813.1 | 1851.0 | 1889.6 | 1831.6 | 1634.9 | 1410.4 |
| 35°   | 1797.1 | 1765.2 | 1797.1 | 1800.5 | 1853.5 | 1985.5 | 2033.5 | 2126.0 | 2111.7 | 1856.0 | 1540.7 |
| 37.5° | 1862.7 | 1860.2 | 1864.4 | 1896.4 | 1947.7 | 2110.8 | 2178.9 | 2250.4 | 2223.5 | 1988.9 | 1703.0 |
| 40°   | 1971.2 | 1977.9 | 1977.1 | 2001.5 | 2057.8 | 2205.0 | 2232.8 | 2290.8 | 2293.3 | 2173.1 | 1941.8 |
| 42.5° | 2145.3 | 2118.4 | 2100.7 | 2126.0 | 2205.0 | 2286.6 | 2342.1 | 2330.3 | 2413.6 | 2396.8 | 2248.7 |
| 45°   | 2301.7 | 2317.7 | 2291.6 | 2333.7 | 2362.3 | 2406.0 | 2404.3 | 2429.6 | 2535.5 | 2615.4 | 2480.0 |
| 47.5° | 2448.1 | 2458.2 | 2470.8 | 2499.4 | 2561.6 | 2568.3 | 2554.0 | 2543.1 | 2689.4 | 2771.9 | 2659.2 |
| 50°   | 2535.5 | 2544.8 | 2603.7 | 2655.0 | 2771.0 | 2786.1 | 2794.6 | 2766.8 | 2866.0 | 2875.3 | 2828.2 |
| 52.5° | 2512.0 | 2522.1 | 2604.5 | 2773.5 | 2958.6 | 3097.3 | 3072.1 | 3025.0 | 3019.1 | 3055.3 | 2984.6 |
| 55°   | 2303.4 | 2294.2 | 2407.7 | 2670.9 | 3017.4 | 3350.5 | 3353.8 | 3304.2 | 3209.2 | 3184.8 | 2961.1 |
| 56°   | 2126.0 | 2089.8 | 2234.5 | 2552.4 | 2941.7 | 3328.6 | 3366.4 | 3313.5 | 3224.3 | 3115.0 | 2815.6 |
| 57.5° | 1741.6 | 1776.1 | 1919.9 | 2183.2 | 2680.2 | 3171.3 | 3193.2 | 3180.6 | 3113.3 | 2930.0 | 2477.5 |
| 60°   | 960.4  | 1021.0 | 1148.0 | 1470.1 | 1908.1 | 2433.8 | 2451.4 | 2554.0 | 2566.6 | 2243.7 | 1704.7 |
| 62.5° | 407.9  | 401.2  | 533.2  | 770.4  | 1086.6 | 1469.2 | 1502.0 | 1607.2 | 1626.5 | 1293.5 | 855.3  |
| 65°   | 165.7  | 174.9  | 241.4  | 387.7  | 574.4  | 669.4  | 715.7  | 750.2  | 814.1  | 534.0  | 315.4  |
| 67.5° | 109.3  | 108.5  | 142.1  | 221.2  | 309.5  | 298.6  | 298.6  | 315.4  | 291.8  | 217.8  | 136.2  |
| 70°   | 78.2   | 80.7   | 101.8  | 153.1  | 192.6  | 143.0  | 137.1  | 131.2  | 148.9  | 143.8  | 110.2  |
| 72.5° | 51.3   | 54.7   | 68.1   | 91.7   | 100.1  | 78.2   | 78.2   | 94.2   | 122.8  | 116.1  | 90.0   |
| 75°   | 33.6   | 34.5   | 42.0   | 53.0   | 49.6   | 40.4   | 44.6   | 63.1   | 89.1   | 85.8   | 63.9   |
| 77.5° | 22.7   | 23.5   | 28.6   | 34.5   | 27.8   | 22.7   | 24.4   | 32.0   | 43.7   | 43.7   | 33.6   |
| 80°   | 8.4    | 9.3    | 11.8   | 10.9   | 12.6   | 16.0   | 17.7   | 21.9   | 26.1   | 26.1   | 22.7   |
| 82.5° | 0.0    | 0.8    | 2.5    | 5.9    | 9.3    | 12.6   | 14.3   | 16.8   | 19.3   | 21.9   | 21.0   |
| 85°   | 0.0    | 0.8    | 2.5    | 4.2    | 6.7    | 7.6    | 8.4    | 5.9    | 5.0    | 5.0    | 4.2    |
| 87.5° | 0.0    | 0.0    | 0.8    | 0.8    | 0.8    | 0.8    | 0.8    | 0.8    | 1.7    | 0.8    | 0.8    |
| 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):**

|       | 90°    | 95°    | 105°   | 115°  | 125°  | 135°  | 145°  | 155°  | 165°  | 175°  | 180°  |
|-------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 882.2  | 882.2  | 882.2  | 882.2 | 882.2 | 882.2 | 882.2 | 882.2 | 882.2 | 882.2 | 882.2 |
| 2.5°  | 882.2  | 881.4  | 881.4  | 878.8 | 883.9 | 881.4 | 883.0 | 882.2 | 871.3 | 879.7 | 873.8 |
| 5°    | 891.5  | 897.3  | 888.1  | 886.4 | 879.7 | 882.2 | 882.2 | 873.8 | 881.4 | 880.5 | 878.8 |
| 7.5°  | 915.0  | 904.9  | 894.8  | 884.7 | 883.0 | 880.5 | 871.3 | 867.9 | 873.8 | 867.1 | 877.2 |
| 10°   | 925.1  | 926.8  | 911.6  | 898.2 | 885.6 | 867.9 | 855.3 | 847.7 | 838.5 | 848.6 | 854.5 |
| 12.5° | 971.4  | 954.5  | 928.5  | 907.4 | 864.5 | 846.9 | 834.3 | 830.9 | 846.9 | 850.3 | 844.4 |
| 15°   | 987.3  | 984.8  | 951.2  | 904.1 | 859.5 | 838.5 | 841.0 | 834.3 | 836.0 | 827.5 | 829.2 |
| 17.5° | 1020.1 | 991.5  | 952.0  | 893.1 | 858.7 | 853.6 | 838.5 | 811.6 | 796.4 | 789.7 | 795.6 |
| 20°   | 1056.3 | 1028.5 | 971.4  | 897.3 | 866.2 | 852.8 | 803.2 | 770.4 | 739.2 | 722.4 | 723.3 |
| 22.5° | 1088.3 | 1053.8 | 962.9  | 899.0 | 873.0 | 817.5 | 757.7 | 693.0 | 654.3 | 628.2 | 629.1 |
| 25°   | 1126.9 | 1078.2 | 966.3  | 902.4 | 855.3 | 761.1 | 675.3 | 612.2 | 566.0 | 548.3 | 554.2 |
| 27.5° | 1148.8 | 1093.3 | 984.8  | 910.0 | 809.0 | 681.2 | 588.7 | 529.8 | 502.9 | 494.5 | 493.7 |
| 30°   | 1214.4 | 1126.9 | 1007.5 | 894.8 | 731.7 | 595.4 | 509.6 | 473.5 | 447.4 | 439.8 | 441.5 |
| 32.5° | 1312.0 | 1188.3 | 1037.0 | 855.3 | 652.6 | 518.9 | 458.3 | 431.4 | 407.0 | 392.7 | 391.1 |
| 35°   | 1393.5 | 1293.5 | 1068.1 | 793.9 | 560.9 | 460.0 | 422.2 | 388.5 | 351.5 | 335.6 | 331.4 |
| 37.5° | 1549.1 | 1412.0 | 1061.3 | 701.4 | 473.5 | 416.3 | 383.5 | 342.3 | 310.3 | 288.5 | 285.9 |
| 40°   | 1755.9 | 1550.8 | 1028.5 | 588.7 | 408.7 | 377.6 | 342.3 | 302.8 | 263.2 | 244.7 | 243.0 |
| 42.5° | 2007.4 | 1720.7 | 968.8  | 474.3 | 344.0 | 338.9 | 307.0 | 261.6 | 226.2 | 212.8 | 213.6 |
| 45°   | 2211.7 | 1866.1 | 908.3  | 381.0 | 296.0 | 301.1 | 273.3 | 230.4 | 206.0 | 195.1 | 195.1 |
| 47.5° | 2393.4 | 1964.5 | 842.7  | 314.5 | 251.5 | 263.2 | 238.8 | 213.6 | 192.6 | 184.2 | 182.5 |
| 50°   | 2568.3 | 2064.6 | 777.1  | 254.8 | 214.5 | 226.2 | 223.7 | 203.5 | 186.7 | 176.6 | 177.5 |
| 52.5° | 2677.7 | 2080.5 | 693.8  | 208.6 | 187.5 | 201.0 | 209.4 | 190.9 | 172.4 | 166.5 | 164.8 |
| 55°   | 2543.9 | 1874.5 | 538.2  | 171.6 | 158.9 | 176.6 | 192.6 | 171.6 | 157.3 | 147.2 | 146.3 |
| 56°   | 2364.0 | 1676.1 | 449.9  | 158.1 | 150.5 | 169.9 | 186.7 | 164.0 | 148.0 | 142.1 | 137.9 |
| 57.5° | 2001.5 | 1371.7 | 332.2  | 140.4 | 139.6 | 158.1 | 177.5 | 156.4 | 137.9 | 132.9 | 132.9 |
| 60°   | 1248.0 | 772.0  | 201.0  | 117.7 | 121.1 | 140.4 | 159.8 | 139.6 | 122.8 | 122.8 | 125.3 |
| 62.5° | 568.5  | 321.3  | 121.9  | 100.1 | 104.3 | 121.1 | 142.1 | 126.2 | 116.9 | 126.2 | 127.8 |
| 65°   | 193.4  | 138.8  | 88.3   | 79.9  | 82.4  | 100.1 | 121.9 | 127.8 | 127.0 | 132.9 | 136.2 |
| 67.5° | 108.5  | 89.1   | 74.0   | 66.4  | 64.8  | 74.0  | 100.1 | 127.8 | 122.8 | 120.3 | 121.9 |
| 70°   | 91.7   | 75.7   | 65.6   | 58.9  | 56.3  | 59.7  | 77.4  | 96.7  | 86.6  | 84.1  | 82.4  |
| 72.5° | 74.0   | 63.1   | 57.2   | 53.0  | 45.4  | 38.7  | 35.3  | 37.0  | 41.2  | 43.7  | 47.9  |
| 75°   | 52.1   | 47.9   | 47.9   | 42.9  | 32.8  | 24.4  | 19.3  | 16.0  | 10.9  | 7.6   | 8.4   |
| 77.5° | 29.4   | 29.4   | 30.3   | 26.1  | 21.0  | 16.0  | 11.8  | 8.4   | 4.2   | 1.7   | 0.8   |
| 80°   | 20.2   | 21.9   | 23.5   | 21.0  | 17.7  | 14.3  | 10.1  | 5.9   | 2.5   | 0.0   | 0.0   |
| 82.5° | 20.2   | 22.7   | 24.4   | 21.0  | 17.7  | 13.5  | 10.1  | 5.9   | 2.5   | 0.8   | 0.0   |
| 85°   | 4.2    | 5.0    | 5.9    | 6.7   | 10.1  | 10.1  | 7.6   | 5.0   | 2.5   | 0.8   | 0.0   |
| 87.5° | 0.8    | 0.8    | 0.8    | 0.8   | 0.8   | 0.8   | 0.8   | 0.8   | 0.8   | 0.0   | 0.0   |
| 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)