

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: P647746

Luminaire Tested: **GALN-SA1A-835-U-T4W-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P647746  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-27)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA1A-835-U-T4W-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(1) 80 CRI, 3500K, 615mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV WIDE OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2620.7 lumens  
Efficiency: N/A  
Efficacy: 79.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B0 - U0 - G1

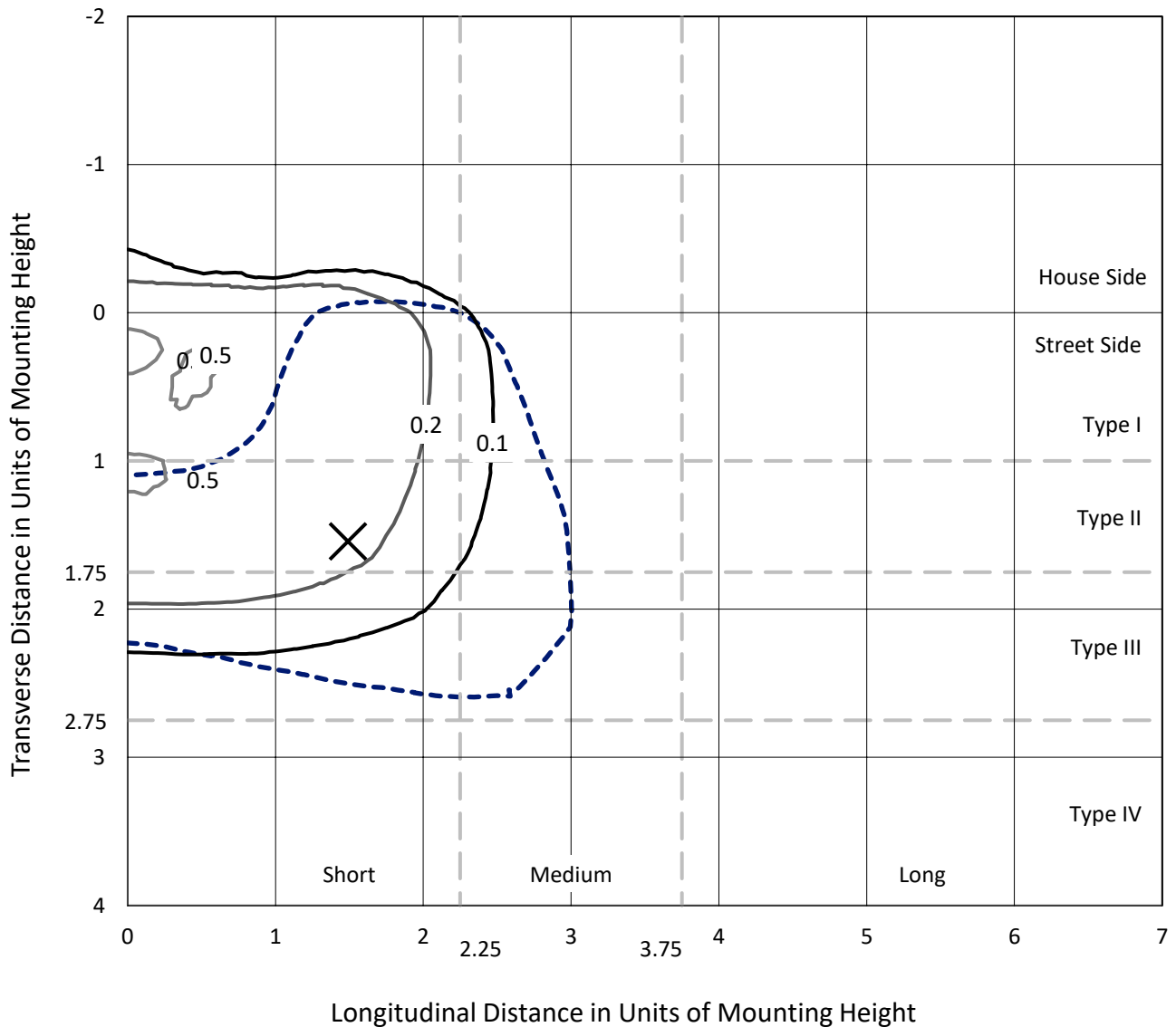
Input Watts (W): 33  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

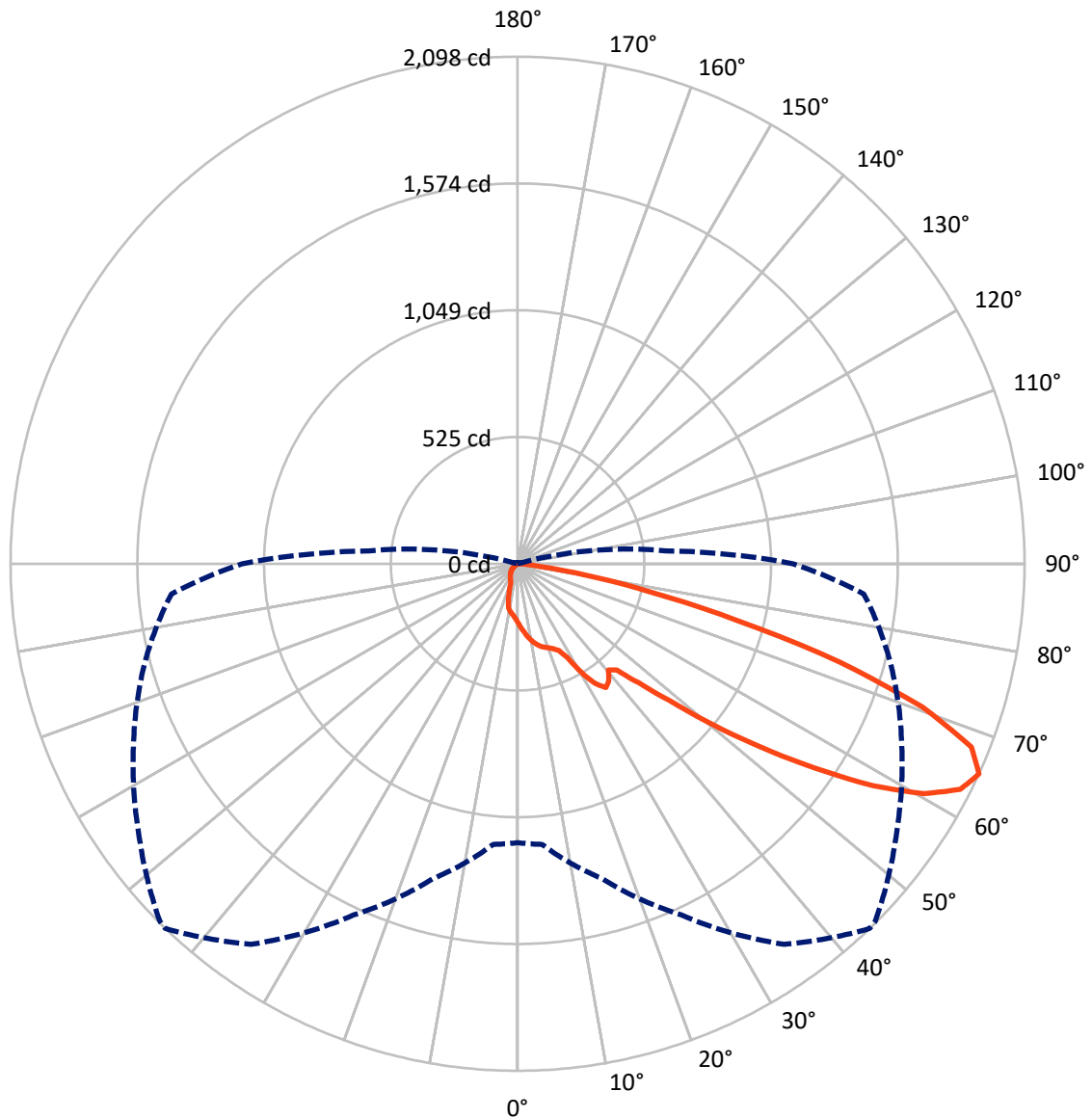
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.6 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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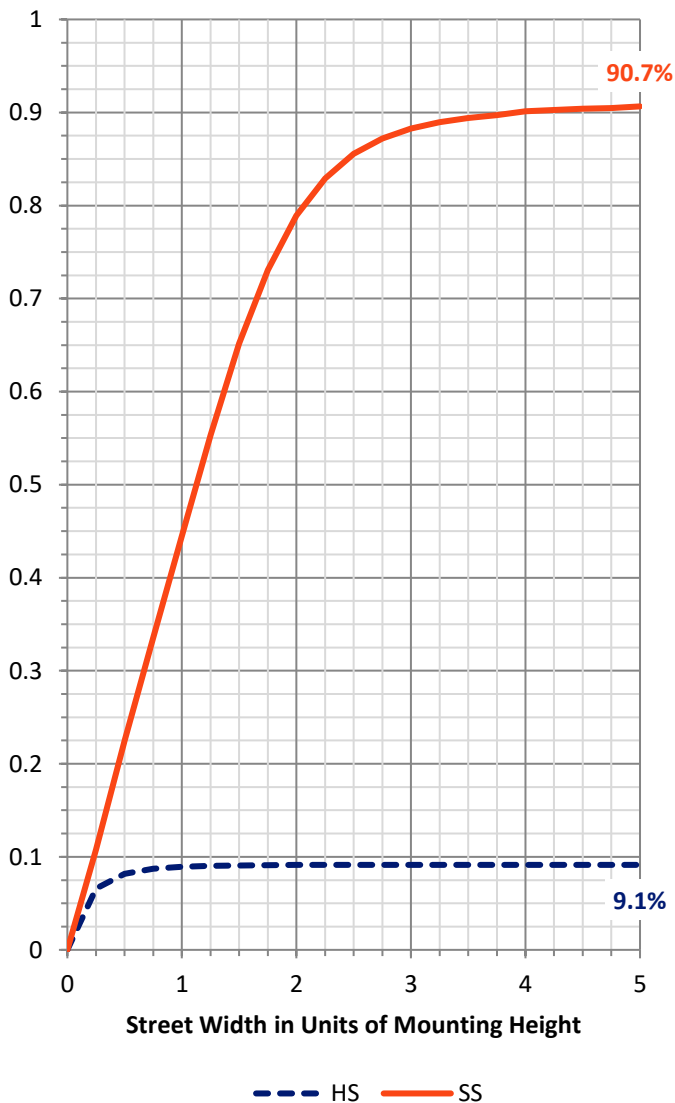
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 241.4    | 0.0    | 241.4  |
|                    | % Fixture | 9.2      | 0.0    | 9.2    |
| <b>Street Side</b> | Lumens    | 2379.2   | 0.0    | 2379.2 |
|                    | % Fixture | 90.8     | 0.0    | 90.8   |
| <b>Total</b>       | Lumens    | 2620.7   | 0.0    | 2620.7 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 24.3   | 0.9       |
| 10°-20°   | 73.0   | 2.8       |
| 20°-30°   | 123.8  | 4.7       |
| 30°-40°   | 205.8  | 7.9       |
| 40°-50°   | 359.4  | 13.7      |
| 50°-60°   | 702.1  | 26.8      |
| 60°-70°   | 814.7  | 31.1      |
| 70°-80°   | 296.7  | 11.3      |
| 80°-90°   | 20.9   | 0.8       |
| 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°    | 2620.7 | 100.0     |
| 0°-180°   | 2620.7 | 100.0     |

**Coefficient of Utilization**

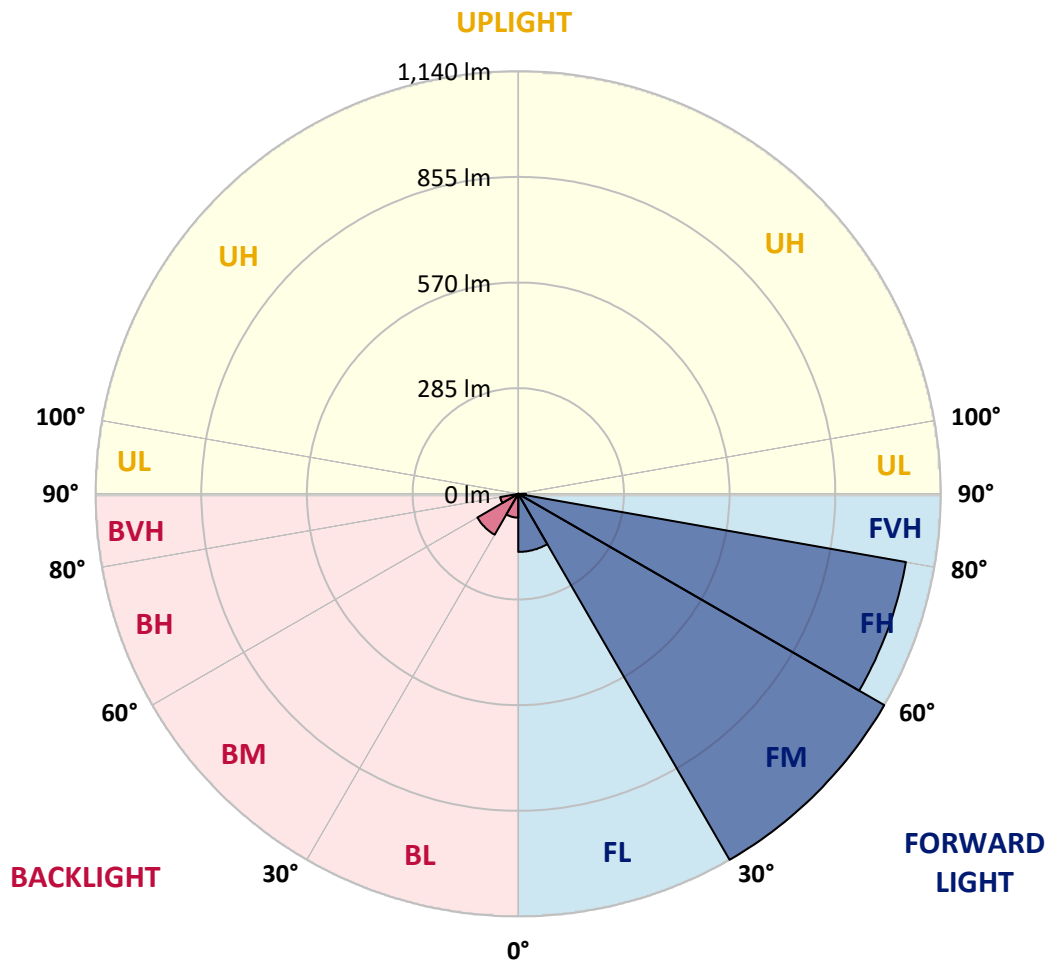


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 156.7  | 6.0       |                         |      |         |
| FM (30°-60°)   | 1140.0 | 43.5      |                         |      |         |
| FH (60°-80°)   | 1061.9 | 40.5      |                         |      | G1/1800 |
| FVH (80°-90°)  | 20.6   | 0.8       |                         |      | G1/100  |
| BL (0°-30°)    | 64.3   | 2.5       | B0/110                  |      |         |
| BM (30°-60°)   | 127.4  | 4.9       | B0/220                  |      |         |
| BH (60°-80°)   | 49.4   | 1.9       | B0/110                  |      | G0/110  |
| BVH (80°-90°)  | 0.3    | 0.0       |                         |      | G0/10   |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B0-U0-G1**  
 Type III Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 44°    | 45°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 243.9  | 243.9  | 243.9  | 243.9  | 243.9  | 243.9  | 243.9  | 243.9  | 243.9  | 243.9  | 243.9  |
| 2.5°  | 274.5  | 273.3  | 272.7  | 269.5  | 267.2  | 264.1  | 264.1  | 260.3  | 256.0  | 251.1  | 246.7  |
| 5°    | 305.2  | 303.2  | 300.6  | 297.8  | 292.1  | 284.2  | 284.2  | 276.2  | 266.9  | 258.7  | 249.7  |
| 7.5°  | 334.7  | 332.9  | 328.4  | 323.0  | 313.8  | 305.4  | 304.8  | 293.2  | 282.2  | 269.7  | 256.9  |
| 10°   | 360.5  | 359.1  | 355.2  | 344.8  | 335.2  | 324.2  | 324.0  | 311.0  | 298.2  | 283.0  | 267.2  |
| 12.5° | 378.5  | 378.7  | 373.6  | 363.6  | 351.3  | 340.8  | 340.1  | 327.2  | 313.8  | 297.4  | 278.0  |
| 15°   | 391.3  | 391.3  | 386.1  | 374.9  | 363.6  | 354.5  | 353.7  | 342.4  | 328.6  | 310.8  | 289.8  |
| 17.5° | 394.9  | 396.1  | 390.5  | 380.5  | 371.5  | 363.5  | 363.2  | 353.8  | 342.8  | 325.6  | 301.8  |
| 20°   | 393.5  | 394.7  | 390.3  | 382.5  | 376.3  | 371.7  | 371.1  | 367.2  | 357.0  | 340.8  | 314.6  |
| 22.5° | 390.5  | 391.7  | 388.5  | 383.9  | 380.9  | 382.3  | 381.3  | 384.5  | 379.1  | 359.5  | 329.8  |
| 25°   | 391.1  | 392.3  | 389.9  | 387.3  | 389.9  | 398.5  | 401.1  | 414.9  | 410.1  | 383.1  | 346.2  |
| 27.5° | 409.9  | 412.3  | 408.9  | 410.1  | 419.3  | 439.3  | 444.4  | 468.2  | 446.9  | 413.1  | 371.8  |
| 30°   | 451.8  | 450.1  | 443.7  | 449.6  | 481.6  | 524.1  | 522.7  | 518.9  | 485.6  | 447.8  | 402.3  |
| 32.5° | 489.8  | 488.4  | 488.0  | 513.0  | 571.1  | 591.7  | 590.8  | 553.9  | 520.2  | 487.4  | 432.4  |
| 35°   | 505.3  | 499.9  | 498.6  | 559.3  | 656.5  | 629.2  | 623.0  | 568.3  | 562.4  | 530.6  | 463.0  |
| 37.5° | 551.7  | 547.9  | 529.3  | 566.9  | 622.4  | 613.4  | 608.5  | 593.1  | 607.1  | 568.9  | 497.6  |
| 40°   | 647.4  | 636.8  | 620.0  | 583.1  | 574.1  | 577.9  | 582.7  | 625.0  | 660.2  | 621.2  | 543.9  |
| 42.5° | 766.4  | 764.0  | 732.7  | 664.1  | 596.6  | 601.7  | 608.0  | 691.5  | 736.6  | 699.9  | 619.4  |
| 45°   | 909.1  | 912.6  | 867.5  | 786.4  | 697.9  | 702.3  | 711.3  | 789.6  | 839.8  | 822.2  | 738.1  |
| 47.5° | 1038.9 | 1036.3 | 1021.1 | 936.8  | 855.1  | 845.2  | 859.9  | 915.6  | 982.8  | 985.6  | 885.5  |
| 50°   | 1169.5 | 1183.3 | 1160.6 | 1127.6 | 1066.9 | 1046.3 | 1040.9 | 1068.2 | 1170.7 | 1157.3 | 1062.5 |
| 52.5° | 1357.1 | 1364.3 | 1321.9 | 1313.5 | 1327.3 | 1260.4 | 1255.0 | 1261.6 | 1353.3 | 1307.2 | 1195.1 |
| 55°   | 1475.1 | 1470.9 | 1455.0 | 1520.7 | 1575.4 | 1491.9 | 1485.1 | 1458.4 | 1504.9 | 1413.2 | 1322.6 |
| 57.5° | 1512.3 | 1518.3 | 1555.2 | 1673.9 | 1803.2 | 1732.4 | 1720.0 | 1644.3 | 1614.2 | 1511.9 | 1440.0 |
| 60°   | 1495.7 | 1506.7 | 1586.2 | 1762.8 | 1942.2 | 1931.7 | 1921.0 | 1793.9 | 1692.8 | 1594.4 | 1522.3 |
| 62.5° | 1377.4 | 1392.8 | 1520.0 | 1747.0 | 1989.3 | 2055.6 | 2042.4 | 1887.2 | 1745.0 | 1634.4 | 1536.7 |
| 65°   | 1154.3 | 1165.7 | 1348.3 | 1603.4 | 1922.4 | 2098.0 | 2093.3 | 1916.4 | 1753.2 | 1597.8 | 1438.1 |
| 67.5° | 822.9  | 861.7  | 1030.9 | 1351.3 | 1724.6 | 2025.5 | 2033.8 | 1881.4 | 1676.1 | 1439.4 | 1190.9 |
| 70°   | 517.2  | 543.7  | 665.1  | 967.4  | 1382.5 | 1777.0 | 1804.1 | 1721.0 | 1454.7 | 1122.0 | 797.2  |
| 72.5° | 246.7  | 266.4  | 352.8  | 612.4  | 975.9  | 1398.2 | 1419.6 | 1412.8 | 1124.9 | 706.9  | 411.3  |
| 75°   | 109.9  | 117.4  | 168.4  | 312.6  | 630.0  | 939.8  | 995.3  | 1004.5 | 702.9  | 345.9  | 160.0  |
| 77.5° | 56.1   | 56.3   | 78.9   | 151.4  | 314.6  | 560.7  | 571.7  | 603.9  | 381.1  | 152.4  | 55.7   |
| 80°   | 29.8   | 31.9   | 41.9   | 71.5   | 163.2  | 276.2  | 274.8  | 302.0  | 169.0  | 74.7   | 18.6   |
| 82.5° | 13.4   | 14.8   | 23.6   | 37.4   | 79.7   | 104.8  | 112.9  | 123.6  | 72.5   | 47.7   | 8.2    |
| 85°   | 4.0    | 4.8    | 11.6   | 18.8   | 28.8   | 30.2   | 33.8   | 43.7   | 41.0   | 33.8   | 4.2    |
| 87.5° | 0.6    | 0.6    | 4.8    | 5.2    | 4.2    | 5.4    | 5.6    | 6.2    | 13.2   | 12.4   | 2.2    |
| 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°    | 243.9  | 243.9 | 243.9 | 243.9 | 243.9 | 243.9 | 243.9 | 243.9 | 243.9 | 243.9 | 243.9 |
| 2.5°  | 244.3  | 242.9 | 237.9 | 233.7 | 230.1 | 227.9 | 225.3 | 223.7 | 222.9 | 222.3 | 222.5 |
| 5°    | 245.3  | 241.9 | 233.3 | 226.5 | 221.3 | 215.6 | 211.9 | 209.7 | 208.7 | 207.0 | 207.0 |
| 7.5°  | 251.0  | 245.5 | 233.5 | 223.1 | 214.1 | 206.5 | 199.3 | 196.6 | 194.8 | 194.4 | 194.0 |
| 10°   | 258.9  | 252.1 | 235.7 | 221.3 | 208.4 | 198.0 | 187.8 | 178.8 | 171.8 | 167.6 | 167.0 |
| 12.5° | 269.0  | 259.1 | 239.1 | 220.1 | 203.7 | 185.3 | 158.2 | 140.0 | 127.8 | 123.9 | 124.6 |
| 15°   | 278.1  | 267.6 | 242.5 | 219.1 | 194.8 | 153.6 | 122.9 | 102.1 | 95.9  | 95.3  | 95.5  |
| 17.5° | 289.2  | 276.6 | 246.5 | 217.7 | 170.6 | 117.4 | 91.3  | 85.7  | 86.9  | 88.9  | 88.7  |
| 20°   | 300.6  | 286.2 | 251.3 | 209.3 | 136.2 | 88.3  | 80.7  | 81.3  | 83.1  | 84.9  | 85.3  |
| 22.5° | 312.8  | 297.1 | 256.9 | 189.0 | 103.9 | 76.9  | 76.5  | 77.3  | 79.1  | 81.1  | 81.5  |
| 25°   | 329.6  | 311.0 | 261.1 | 162.6 | 78.7  | 71.1  | 71.9  | 73.3  | 74.9  | 77.1  | 77.5  |
| 27.5° | 351.3  | 329.6 | 263.3 | 128.2 | 68.1  | 65.9  | 66.1  | 68.1  | 70.1  | 72.1  | 72.1  |
| 30°   | 379.3  | 351.9 | 258.9 | 96.9  | 62.9  | 60.8  | 60.1  | 61.3  | 63.9  | 65.9  | 66.1  |
| 32.5° | 404.3  | 372.9 | 247.3 | 74.1  | 59.0  | 56.3  | 54.3  | 54.5  | 55.4  | 56.7  | 56.8  |
| 35°   | 429.3  | 393.3 | 227.5 | 62.2  | 55.0  | 51.8  | 48.9  | 47.3  | 46.4  | 45.9  | 46.4  |
| 37.5° | 461.4  | 418.7 | 201.1 | 56.7  | 51.7  | 47.7  | 43.5  | 40.1  | 37.3  | 35.5  | 35.9  |
| 40°   | 502.6  | 454.0 | 169.8 | 53.1  | 48.5  | 43.7  | 38.1  | 33.7  | 28.8  | 27.2  | 26.5  |
| 42.5° | 570.7  | 507.5 | 136.9 | 50.0  | 45.3  | 39.5  | 32.4  | 26.5  | 22.0  | 20.4  | 20.8  |
| 45°   | 678.2  | 575.0 | 105.5 | 46.8  | 42.0  | 34.8  | 27.2  | 20.8  | 17.2  | 16.4  | 16.8  |
| 47.5° | 820.8  | 662.3 | 81.3  | 43.2  | 38.1  | 29.8  | 21.5  | 16.4  | 14.3  | 14.0  | 13.8  |
| 50°   | 955.0  | 743.5 | 67.9  | 39.2  | 33.3  | 24.8  | 17.6  | 13.8  | 12.4  | 12.2  | 12.2  |
| 52.5° | 1076.4 | 801.8 | 55.3  | 34.6  | 28.0  | 20.4  | 14.8  | 12.2  | 11.0  | 10.4  | 10.4  |
| 55°   | 1184.3 | 839.8 | 44.9  | 29.0  | 22.0  | 16.2  | 12.8  | 11.0  | 9.6   | 8.8   | 8.6   |
| 57.5° | 1265.8 | 844.5 | 33.7  | 23.3  | 16.4  | 12.6  | 11.0  | 9.6   | 8.0   | 7.0   | 6.6   |
| 60°   | 1300.6 | 804.6 | 24.8  | 17.6  | 12.2  | 10.0  | 8.8   | 7.8   | 6.0   | 5.0   | 4.8   |
| 62.5° | 1265.6 | 727.1 | 18.4  | 13.4  | 9.4   | 7.4   | 6.2   | 5.8   | 4.2   | 3.0   | 2.8   |
| 65°   | 1140.0 | 615.2 | 14.6  | 10.2  | 7.0   | 5.4   | 4.0   | 3.8   | 2.6   | 1.4   | 1.2   |
| 67.5° | 913.4  | 481.8 | 11.6  | 7.6   | 5.0   | 3.6   | 2.6   | 2.4   | 1.4   | 0.4   | 0.4   |
| 70°   | 594.0  | 308.0 | 9.4   | 5.6   | 3.2   | 2.4   | 1.6   | 1.2   | 0.8   | 0.2   | 0.0   |
| 72.5° | 293.8  | 144.0 | 7.6   | 4.4   | 2.2   | 1.2   | 0.6   | 0.4   | 0.6   | 0.0   | 0.0   |
| 75°   | 113.9  | 51.3  | 5.6   | 3.0   | 1.2   | 0.6   | 0.4   | 0.0   | 0.2   | 0.0   | 0.0   |
| 77.5° | 37.8   | 17.0  | 3.4   | 1.6   | 0.8   | 0.4   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 80°   | 14.0   | 6.6   | 1.8   | 1.0   | 0.4   | 0.2   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 82.5° | 5.6    | 2.6   | 1.2   | 0.8   | 0.4   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 85°   | 2.8    | 1.6   | 0.8   | 0.6   | 0.4   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 87.5° | 2.0    | 1.2   | 0.8   | 0.6   | 0.4   | 0.2   | 0.0   | 0.0   | 0.0   | 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)