

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: P193299

Luminaire Tested: **GLEON-AF-01-LED-E1-T4W-7030-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P193299  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24147)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLEON-AF-01-LED-E1-T4W-7030-800  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(1) 70 CRI, 3000K, 800mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4835.8 lumens  
Efficiency: N/A  
Efficacy: 109.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G2

Input Watts (W): 44  
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: 25 FT



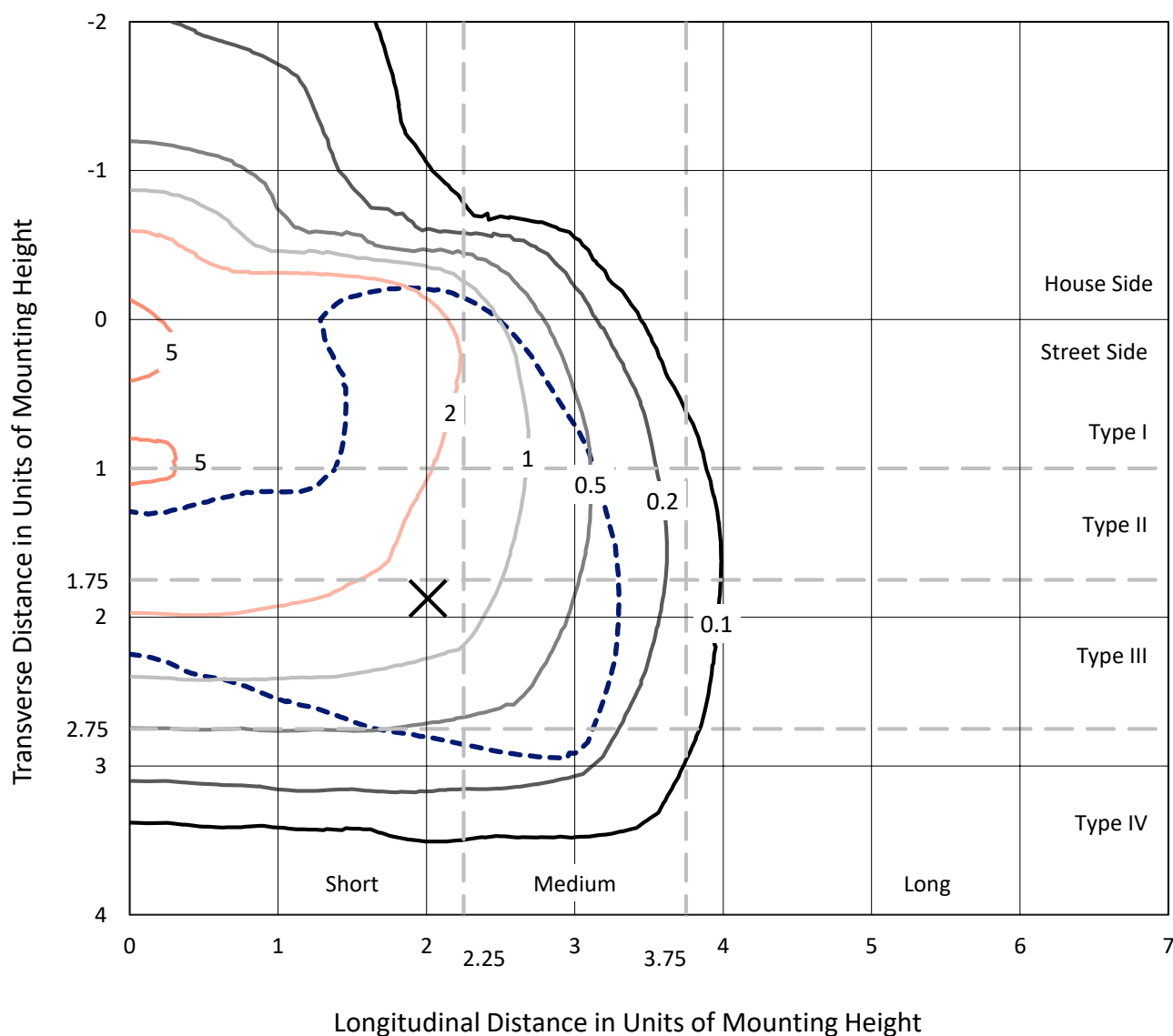
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## Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

--- 1/2 Max cd

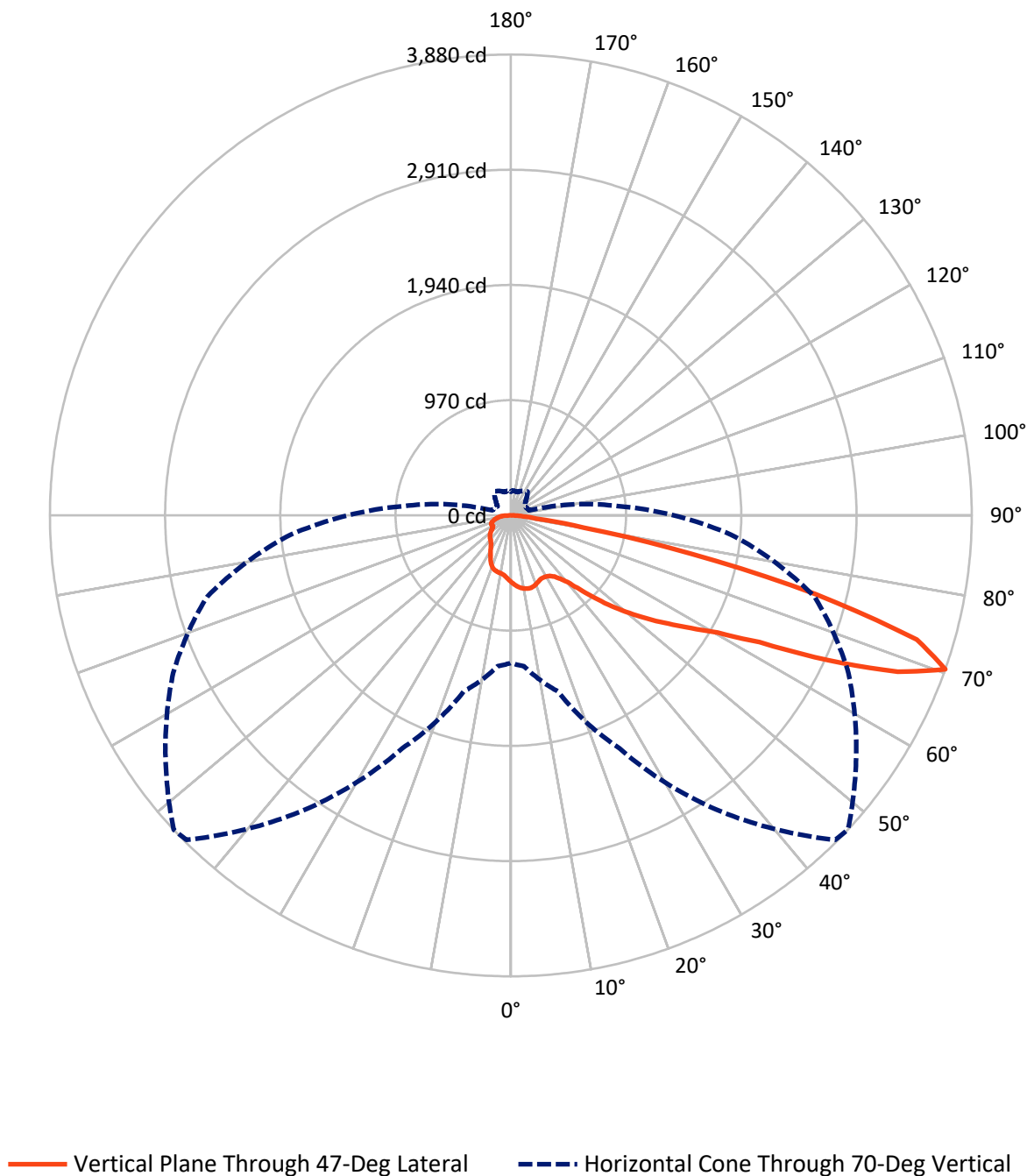


Based on 10 foot mounting height. Maximum calculated value = 6.5 fc  
 Type IV - Short - Semi-Cutoff

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## Luminous Intensity Polar Plot



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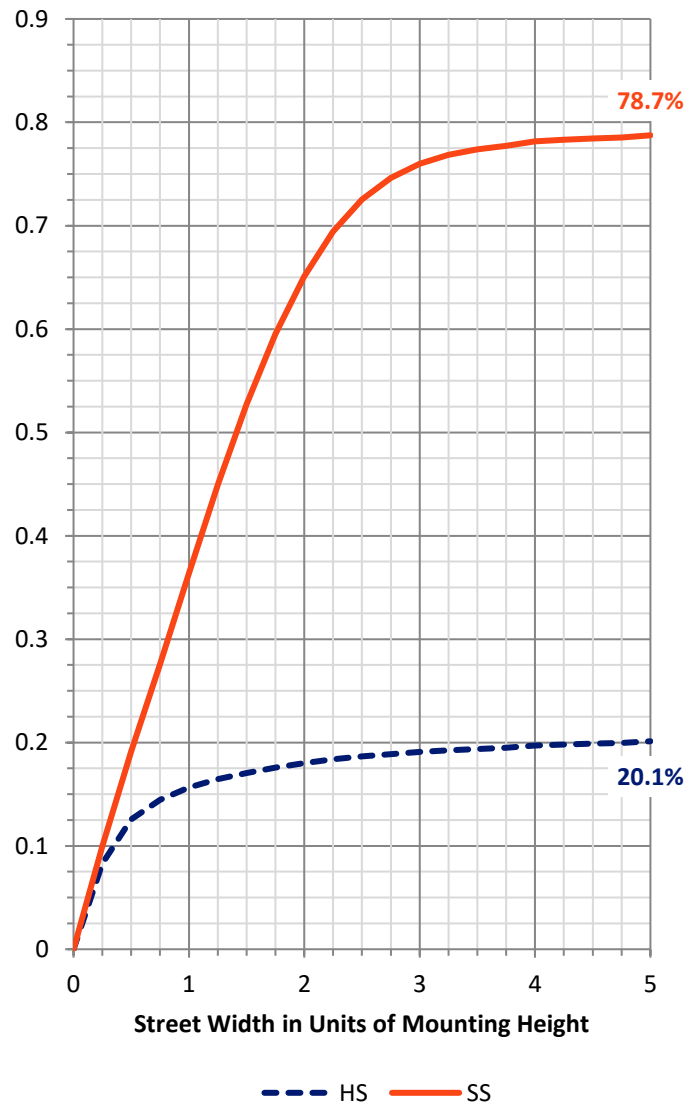
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 1008.8   | 0.0    | 1008.8 |
|                    | % Fixture | 20.9     | 0.0    | 20.9   |
| <b>Street Side</b> | Lumens    | 3827.0   | 0.0    | 3827.0 |
|                    | % Fixture | 79.1     | 0.0    | 79.1   |
| <b>Total</b>       | Lumens    | 4835.8   | 0.0    | 4835.8 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 53.8   | 1.1       |
| 10°-20°   | 157.7  | 3.3       |
| 20°-30°   | 232.9  | 4.8       |
| 30°-40°   | 338.5  | 7.0       |
| 40°-50°   | 609.3  | 12.6      |
| 50°-60°   | 1055.5 | 21.8      |
| 60°-70°   | 1506.5 | 31.2      |
| 70°-80°   | 773.3  | 16.0      |
| 80°-90°   | 108.3  | 2.2       |
| 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°    | 4835.8 | 100.0     |
| 0°-180°   | 4835.8 | 100.0     |

**Coefficient of Utilization**



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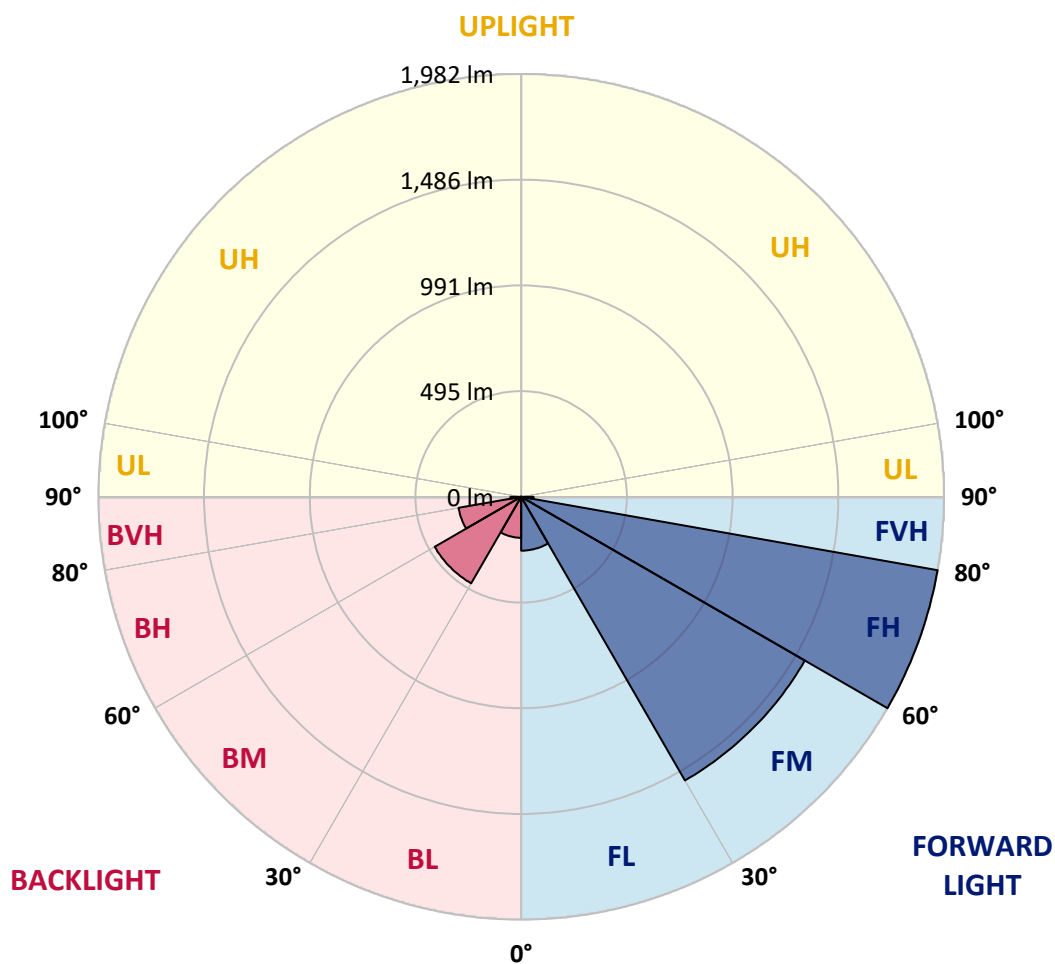
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 252.3  | 5.2       |                         |      |         |
| FM   | (30°-60°)   | 1535.0 | 31.7      |                         |      |         |
| FH   | (60°-80°)   | 1981.9 | 41.0      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 57.8   | 1.2       |                         |      | G1/100  |
| BL   | (0°-30°)    | 192.1  | 4.0       | B1/500                  |      |         |
| BM   | (30°-60°)   | 468.3  | 9.7       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 298.0  | 6.2       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 50.5   | 1.0       |                         |      | 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 IV Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 47°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 561.1  | 561.1  | 561.1  | 561.1  | 561.1  | 561.1  | 561.1  | 561.1  | 561.1  | 561.1  | 561.1  |
| 2.5°  | 594.1  | 592.8  | 592.4  | 591.4  | 590.3  | 584.4  | 583.2  | 579.0  | 573.1  | 566.9  | 560.6  |
| 5°    | 633.0  | 632.8  | 630.3  | 625.6  | 618.1  | 605.1  | 602.0  | 591.6  | 577.8  | 564.5  | 551.0  |
| 7.5°  | 667.5  | 665.3  | 660.4  | 650.9  | 637.8  | 620.1  | 615.9  | 601.6  | 582.5  | 564.3  | 546.1  |
| 10°   | 692.6  | 691.4  | 680.5  | 667.7  | 650.5  | 631.0  | 626.0  | 610.0  | 589.1  | 565.9  | 543.2  |
| 12.5° | 707.0  | 704.6  | 692.1  | 676.7  | 656.1  | 637.1  | 632.2  | 615.9  | 592.4  | 565.9  | 539.2  |
| 15°   | 706.1  | 704.4  | 691.9  | 675.0  | 654.3  | 637.5  | 633.0  | 616.9  | 591.6  | 563.4  | 534.1  |
| 17.5° | 687.2  | 687.9  | 677.3  | 660.6  | 643.6  | 631.0  | 626.9  | 612.0  | 586.9  | 558.8  | 527.9  |
| 20°   | 654.3  | 657.5  | 650.5  | 635.7  | 626.3  | 617.6  | 615.0  | 602.2  | 579.7  | 552.0  | 521.3  |
| 22.5° | 621.3  | 624.4  | 621.5  | 609.1  | 607.7  | 602.6  | 601.2  | 591.9  | 573.4  | 547.7  | 517.4  |
| 25°   | 597.1  | 600.0  | 599.5  | 588.6  | 592.8  | 592.6  | 591.4  | 586.9  | 572.0  | 547.7  | 518.0  |
| 27.5° | 590.5  | 591.4  | 590.5  | 580.6  | 586.5  | 591.2  | 590.3  | 589.6  | 576.2  | 554.5  | 526.9  |
| 30°   | 613.1  | 611.7  | 604.4  | 584.4  | 589.8  | 596.4  | 595.5  | 595.9  | 588.9  | 572.4  | 547.0  |
| 32.5° | 703.2  | 696.8  | 673.8  | 617.6  | 603.2  | 606.7  | 607.3  | 615.0  | 616.1  | 600.0  | 578.1  |
| 35°   | 838.0  | 830.9  | 801.1  | 706.5  | 644.8  | 632.6  | 632.6  | 644.4  | 651.4  | 639.5  | 626.3  |
| 37.5° | 980.8  | 973.1  | 957.0  | 829.9  | 732.4  | 677.5  | 676.5  | 684.6  | 694.8  | 697.5  | 700.9  |
| 40°   | 1143.2 | 1134.8 | 1139.3 | 968.1  | 854.5  | 755.4  | 738.7  | 732.8  | 760.1  | 778.3  | 804.5  |
| 42.5° | 1320.7 | 1317.0 | 1318.6 | 1122.2 | 993.5  | 871.9  | 848.2  | 817.8  | 850.7  | 883.0  | 938.2  |
| 45°   | 1485.3 | 1488.5 | 1486.9 | 1287.2 | 1148.4 | 1014.0 | 988.8  | 930.1  | 962.2  | 1017.5 | 1107.7 |
| 47.5° | 1629.2 | 1615.5 | 1636.7 | 1467.4 | 1321.7 | 1173.0 | 1142.0 | 1063.2 | 1095.9 | 1164.0 | 1316.6 |
| 50°   | 1804.0 | 1802.1 | 1771.1 | 1707.8 | 1531.4 | 1332.8 | 1292.1 | 1200.8 | 1251.6 | 1346.4 | 1579.8 |
| 52.5° | 1987.8 | 1953.7 | 1925.1 | 1894.8 | 1753.6 | 1496.6 | 1446.6 | 1338.0 | 1434.7 | 1553.8 | 1900.7 |
| 55°   | 2025.3 | 2010.1 | 2045.4 | 2096.4 | 1968.0 | 1666.6 | 1608.6 | 1510.0 | 1640.7 | 1791.1 | 2270.7 |
| 57.5° | 2105.9 | 2105.7 | 2178.5 | 2269.7 | 2188.7 | 1847.0 | 1788.5 | 1717.7 | 1872.4 | 2062.9 | 2663.6 |
| 60°   | 2160.2 | 2175.5 | 2311.1 | 2487.8 | 2405.4 | 2055.5 | 2001.6 | 1957.4 | 2135.9 | 2366.5 | 3029.8 |
| 62.5° | 2188.7 | 2209.3 | 2394.3 | 2576.2 | 2711.7 | 2402.5 | 2348.6 | 2284.9 | 2484.7 | 2699.7 | 3243.8 |
| 65°   | 2070.4 | 2111.0 | 2381.3 | 2652.6 | 2979.8 | 2965.1 | 2940.8 | 2828.8 | 2920.6 | 2962.9 | 3166.5 |
| 67.5° | 1742.8 | 1784.5 | 2099.3 | 2581.4 | 3171.4 | 3507.6 | 3512.6 | 3321.5 | 3188.7 | 2985.5 | 2662.2 |
| 70°   | 1241.7 | 1274.4 | 1534.9 | 2164.2 | 3025.5 | 3862.1 | 3879.7 | 3548.5 | 3135.4 | 2647.7 | 1860.0 |
| 72.5° | 589.6  | 609.5  | 856.1  | 1408.6 | 2400.9 | 3538.6 | 3572.7 | 3258.6 | 2666.0 | 1960.2 | 1014.7 |
| 75°   | 216.7  | 222.8  | 289.4  | 599.2  | 1392.5 | 2609.5 | 2649.7 | 2336.0 | 1767.3 | 975.9  | 386.6  |
| 77.5° | 129.9  | 133.9  | 162.4  | 252.9  | 547.7  | 1491.6 | 1551.1 | 1270.4 | 772.4  | 363.3  | 190.1  |
| 80°   | 90.8   | 93.6   | 116.5  | 157.5  | 258.8  | 568.3  | 621.3  | 518.6  | 307.7  | 229.9  | 138.3  |
| 82.5° | 61.4   | 62.9   | 81.8   | 106.3  | 172.0  | 203.0  | 219.1  | 230.5  | 207.5  | 171.0  | 87.7   |
| 85°   | 40.2   | 41.6   | 55.5   | 70.2   | 109.4  | 104.9  | 107.3  | 135.7  | 151.6  | 116.3  | 48.7   |
| 87.5° | 23.1   | 24.0   | 33.5   | 37.3   | 53.6   | 44.5   | 44.9   | 71.6   | 96.9   | 78.3   | 29.6   |
| 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°    | 561.1  | 561.1  | 561.1 | 561.1 | 561.1 | 561.1 | 561.1 | 561.1 | 561.1 | 561.1 | 561.1 |
| 2.5°  | 559.0  | 555.9  | 549.1 | 544.8 | 540.9 | 540.0 | 538.3 | 538.1 | 537.8 | 537.8 | 537.1 |
| 5°    | 546.6  | 541.4  | 530.8 | 524.9 | 520.0 | 519.4 | 519.2 | 520.4 | 520.8 | 521.3 | 520.6 |
| 7.5°  | 538.5  | 531.4  | 518.3 | 509.8 | 503.9 | 502.5 | 504.9 | 510.2 | 513.8 | 515.2 | 514.5 |
| 10°   | 533.6  | 524.9  | 509.5 | 500.4 | 495.5 | 494.7 | 497.7 | 504.1 | 511.5 | 514.3 | 514.1 |
| 12.5° | 527.9  | 518.0  | 501.8 | 492.2 | 489.4 | 490.8 | 494.7 | 500.6 | 508.2 | 512.7 | 512.9 |
| 15°   | 522.3  | 510.8  | 494.1 | 485.5 | 484.4 | 486.3 | 490.0 | 494.5 | 500.4 | 504.9 | 505.4 |
| 17.5° | 515.4  | 503.4  | 486.7 | 478.0 | 477.1 | 478.0 | 478.3 | 480.6 | 484.4 | 488.6 | 489.8 |
| 20°   | 508.2  | 495.9  | 478.5 | 469.9 | 465.6 | 461.8 | 457.6 | 458.1 | 459.2 | 463.5 | 464.5 |
| 22.5° | 503.0  | 490.8  | 472.2 | 460.2 | 448.8 | 437.6 | 429.2 | 428.0 | 428.4 | 431.9 | 433.1 |
| 25°   | 503.4  | 490.6  | 470.6 | 449.8 | 425.1 | 407.0 | 395.7 | 393.9 | 393.6 | 396.2 | 397.8 |
| 27.5° | 512.7  | 499.8  | 476.7 | 439.2 | 399.3 | 372.5 | 360.4 | 359.0 | 357.2 | 357.9 | 359.7 |
| 30°   | 533.0  | 521.0  | 491.4 | 428.4 | 371.3 | 338.6 | 326.0 | 324.7 | 322.1 | 320.9 | 322.4 |
| 32.5° | 566.5  | 556.6  | 513.1 | 418.0 | 343.3 | 309.6 | 296.8 | 293.8 | 292.2 | 290.7 | 291.9 |
| 35°   | 622.0  | 617.8  | 542.0 | 406.8 | 318.6 | 287.3 | 275.8 | 271.1 | 268.7 | 271.3 | 273.1 |
| 37.5° | 709.1  | 711.4  | 579.9 | 389.2 | 299.5 | 272.4 | 262.8 | 257.5 | 253.8 | 256.0 | 258.1 |
| 40°   | 832.3  | 833.9  | 621.8 | 364.2 | 283.0 | 263.8 | 253.4 | 248.4 | 243.5 | 239.8 | 239.5 |
| 42.5° | 994.3  | 977.6  | 662.9 | 337.2 | 264.0 | 258.3 | 246.8 | 240.7 | 233.2 | 222.8 | 220.7 |
| 45°   | 1186.2 | 1127.7 | 694.3 | 306.0 | 242.5 | 251.8 | 239.5 | 231.1 | 219.3 | 207.9 | 206.8 |
| 47.5° | 1407.4 | 1288.8 | 709.5 | 273.8 | 222.6 | 242.1 | 230.5 | 217.1 | 202.3 | 196.6 | 196.0 |
| 50°   | 1677.4 | 1480.0 | 716.8 | 242.5 | 205.2 | 229.3 | 217.7 | 201.9 | 189.3 | 188.3 | 187.5 |
| 52.5° | 1984.9 | 1710.1 | 719.3 | 216.9 | 190.7 | 212.9 | 207.0 | 191.7 | 181.8 | 182.8 | 182.8 |
| 55°   | 2306.8 | 1947.8 | 687.2 | 198.3 | 177.6 | 196.0 | 200.0 | 187.7 | 179.5 | 183.2 | 184.6 |
| 57.5° | 2602.2 | 2158.3 | 586.5 | 184.0 | 165.2 | 183.0 | 197.4 | 191.5 | 185.8 | 201.1 | 202.1 |
| 60°   | 2829.0 | 2282.8 | 438.0 | 171.0 | 156.0 | 178.5 | 204.2 | 205.9 | 207.3 | 243.7 | 248.7 |
| 62.5° | 2876.6 | 2241.4 | 301.1 | 160.9 | 151.8 | 182.4 | 216.7 | 216.9 | 215.2 | 240.7 | 243.7 |
| 65°   | 2658.5 | 1979.6 | 219.1 | 155.2 | 148.3 | 189.1 | 227.3 | 222.4 | 211.5 | 230.7 | 225.2 |
| 67.5° | 2111.2 | 1491.4 | 182.4 | 151.0 | 143.0 | 188.7 | 238.5 | 227.3 | 209.3 | 226.0 | 216.9 |
| 70°   | 1370.4 | 901.7  | 162.4 | 147.5 | 136.9 | 179.7 | 245.2 | 226.8 | 203.2 | 210.4 | 199.5 |
| 72.5° | 668.6  | 403.2  | 148.9 | 142.4 | 130.6 | 167.2 | 245.0 | 222.6 | 196.8 | 196.4 | 190.5 |
| 75°   | 261.5  | 184.6  | 136.7 | 134.6 | 119.7 | 153.2 | 238.3 | 216.5 | 189.3 | 181.8 | 179.7 |
| 77.5° | 153.2  | 131.7  | 121.2 | 123.0 | 106.8 | 139.1 | 228.7 | 205.9 | 179.0 | 170.1 | 167.7 |
| 80°   | 111.6  | 98.6   | 103.2 | 106.3 | 91.2  | 124.9 | 215.8 | 193.0 | 167.5 | 172.0 | 168.7 |
| 82.5° | 71.6   | 63.5   | 83.8  | 86.9  | 76.1  | 110.6 | 201.6 | 179.3 | 151.4 | 137.4 | 134.1 |
| 85°   | 36.5   | 40.2   | 62.4  | 66.1  | 58.6  | 90.8  | 184.4 | 161.1 | 133.0 | 114.2 | 116.3 |
| 87.5° | 20.4   | 27.6   | 39.8  | 44.5  | 41.4  | 69.9  | 149.5 | 133.0 | 108.5 | 88.2  | 77.7  |
| 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)