

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: P833896

Luminaire Tested: **TTN-D3-735-U-RW-CG-UPL1**

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P833896
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (G3-2308-121-4) AND
Test Lab: INNOVATION CENTER
Issue Date: 5/15/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: TTN-D3-735-U-RW-CG-UPL1
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
3500K, 70 CRI LEDS AND RECTANGULAR DISTRIBUTION WITH CLEAR GLASS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6398.9 lumens
Efficiency: N/A
Efficacy: 103.5 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type II - Short
BUG Rating: B3 - U3 - G3

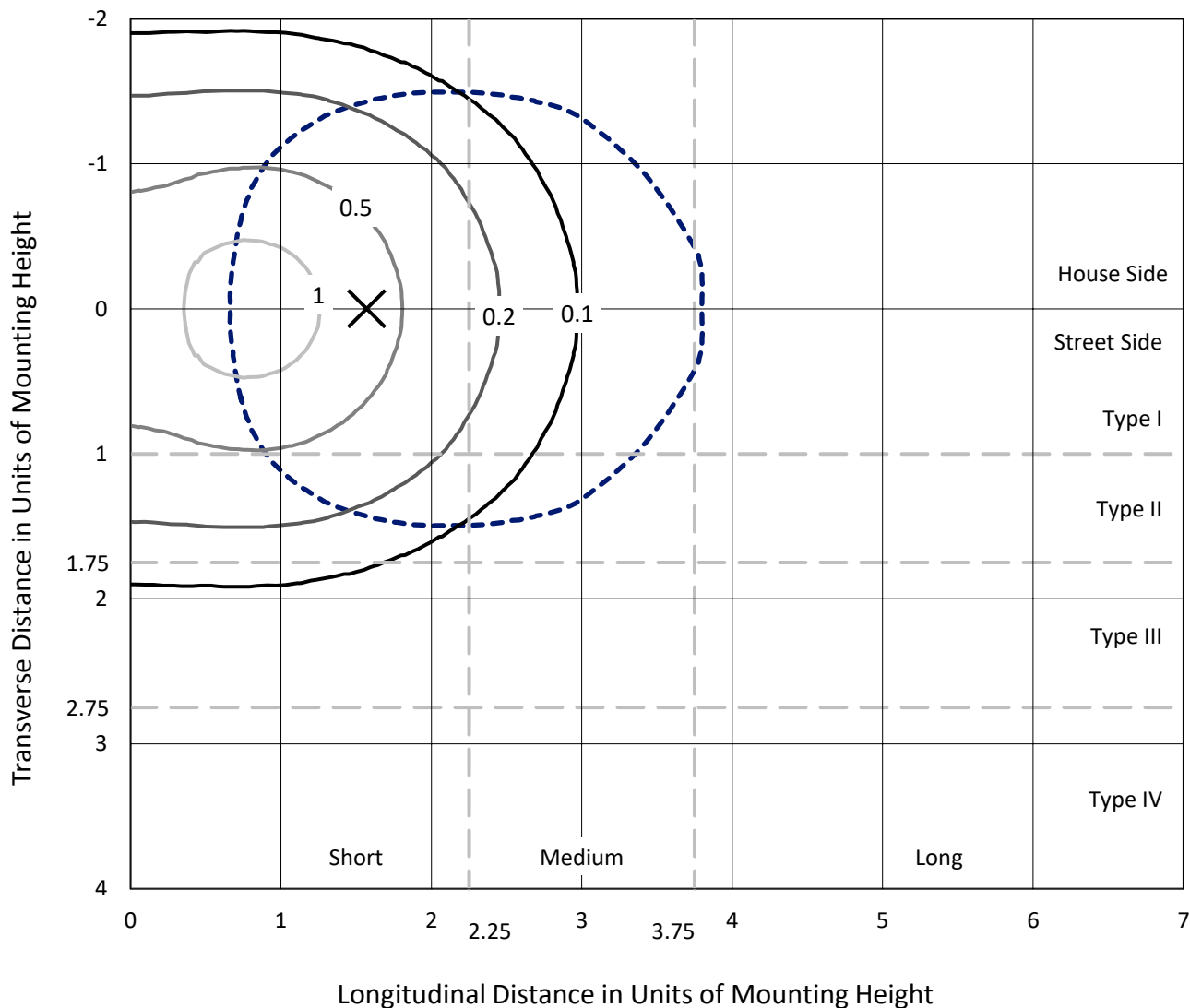
Input Watts (W): 61.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

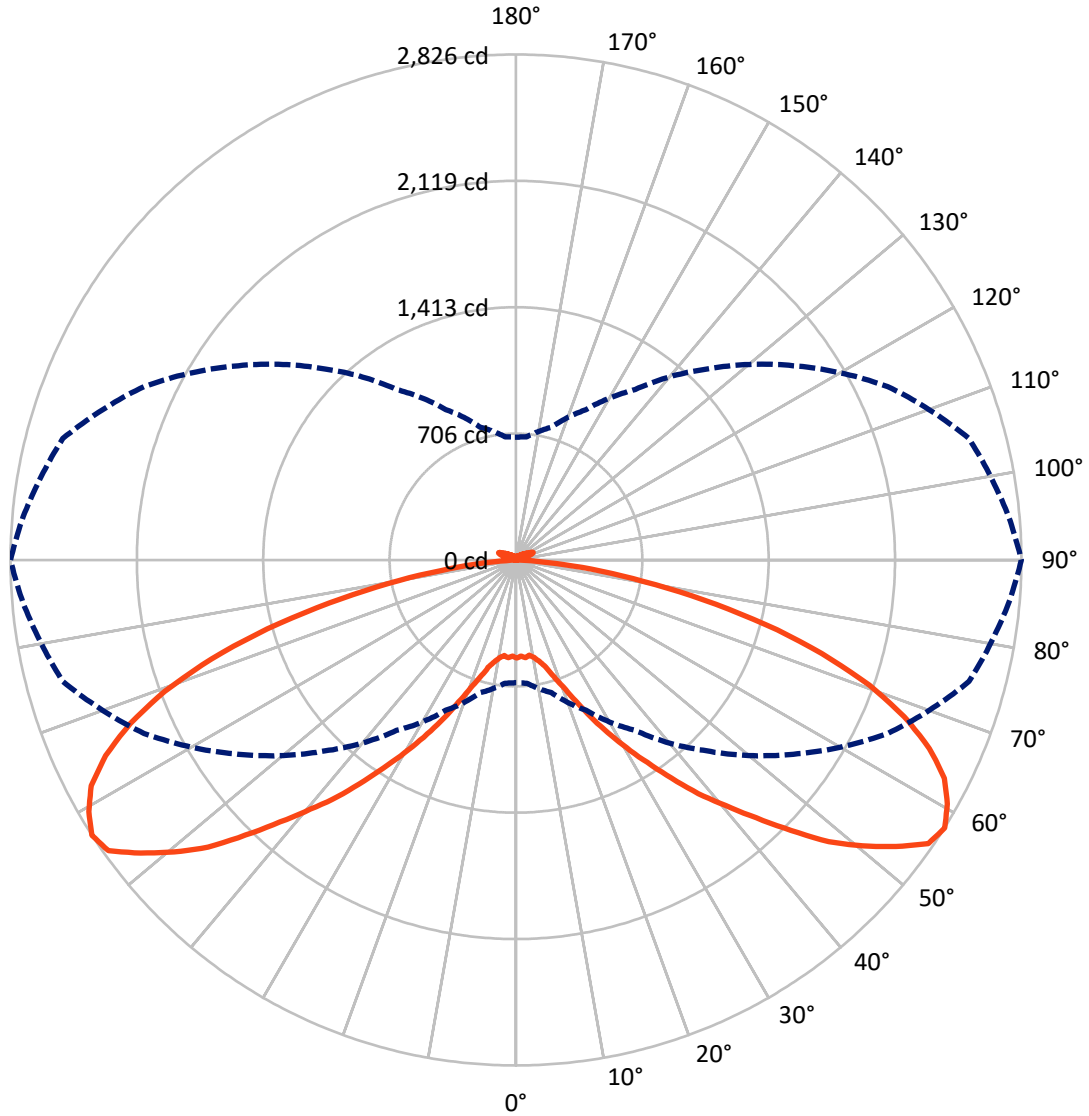
✕ Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



— Vertical Plane Through 90-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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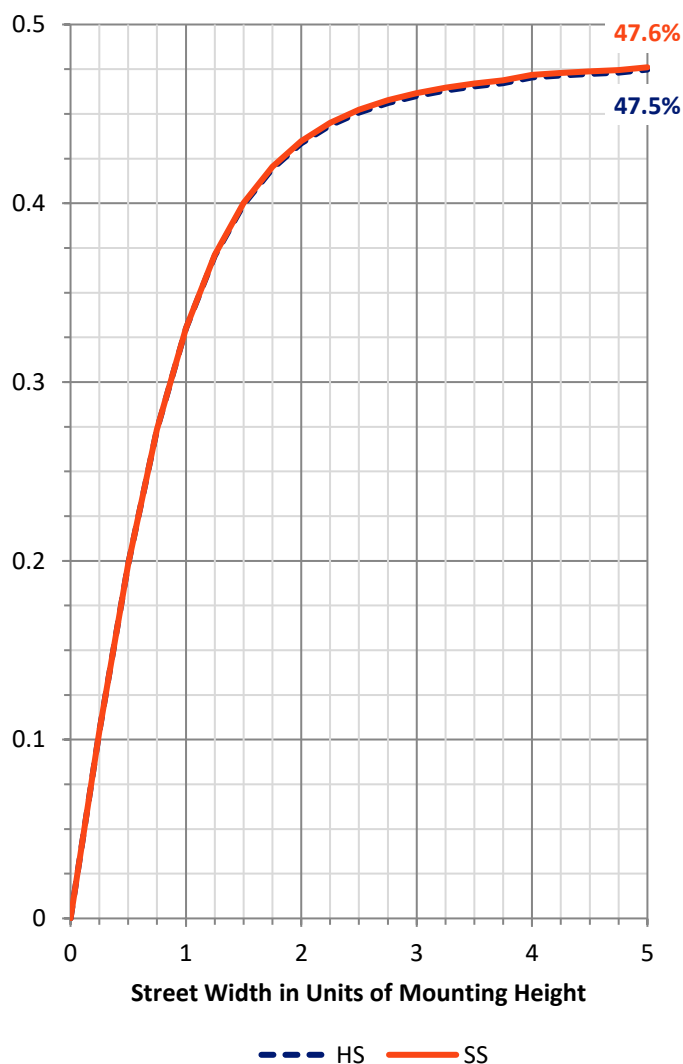
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 3049.2 | 150.2 | 3199.4 |
| | % Fixture | 47.7 | 2.3 | 50.0 |
| Street Side | Lumens | 3049.2 | 150.2 | 3199.4 |
| | % Fixture | 47.7 | 2.3 | 50.0 |
| Total | Lumens | 6098.4 | 300.5 | 6398.9 |
| | % Fixture | 95.3 | 4.7 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 52.2 | 0.8 |
| 10°-20° | 168.5 | 2.6 |
| 20°-30° | 358.6 | 5.6 |
| 30°-40° | 661.0 | 10.3 |
| 40°-50° | 1064.2 | 16.6 |
| 50°-60° | 1440.4 | 22.5 |
| 60°-70° | 1400.5 | 21.9 |
| 70°-80° | 814.8 | 12.7 |
| 80°-90° | 138.2 | 2.2 |
| 90°-100° | 6.7 | 0.1 |
| 100°-110° | 68.2 | 1.1 |
| 110°-120° | 99.6 | 1.6 |
| 120°-130° | 57.8 | 0.9 |
| 130°-140° | 30.6 | 0.5 |
| 140°-150° | 18.2 | 0.3 |
| 150°-160° | 11.2 | 0.2 |
| 160°-170° | 6.1 | 0.1 |
| 170°-180° | 2.0 | 0.0 |
| 0°-90° | 6098.4 | 95.3 |
| 0°-180° | 6398.9 | 100.0 |

Coefficient of Utilization

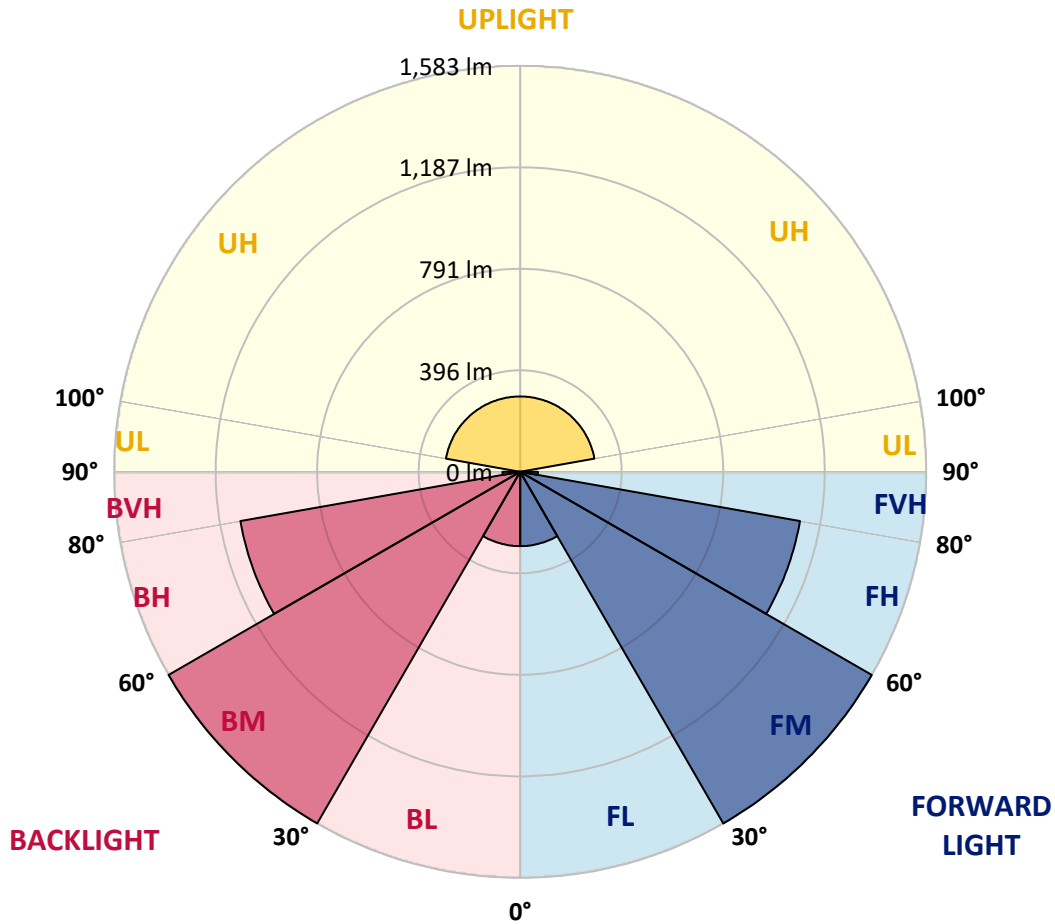


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|--------|---------|
| | | | B | U | G |
| FL (0°-30°) | 289.7 | 4.5 | | | |
| FM (30°-60°) | 1582.8 | 24.7 | | | |
| FH (60°-80°) | 1107.7 | 17.3 | | | G1/1800 |
| FVH (80°-90°) | 69.1 | 1.1 | | | G1/100 |
| BL (0°-30°) | 289.7 | 4.5 | B1/500 | | |
| BM (30°-60°) | 1582.8 | 24.7 | B2/2500 | | |
| BH (60°-80°) | 1107.7 | 17.3 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 69.1 | 1.1 | | | G1/100 |
| UL (90°-100°) | 6.7 | 0.1 | | U1/10 | |
| UH (100°-180°) | 293.8 | 4.6 | | U3/500 | |

BUG Rating: B3-U3-G3
 Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|--------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 548.7 | 548.7 | 548.7 | 548.7 | 548.7 | 548.7 | 548.7 | 548.7 | 548.7 | 548.7 | 548.7 |
| 2.5° | 548.7 | 548.7 | 548.7 | 548.7 | 543.2 | 543.2 | 543.2 | 537.7 | 537.7 | 537.7 | 537.7 |
| 5° | 548.7 | 548.7 | 548.7 | 554.2 | 554.2 | 554.2 | 548.7 | 548.7 | 548.7 | 548.7 | 548.7 |
| 7.5° | 548.7 | 554.2 | 554.2 | 548.7 | 548.7 | 543.2 | 543.2 | 543.2 | 537.7 | 537.7 | 537.7 |
| 10° | 548.7 | 548.7 | 548.7 | 548.7 | 543.2 | 543.2 | 548.7 | 548.7 | 554.2 | 554.2 | 554.2 |
| 12.5° | 543.2 | 543.2 | 548.7 | 548.7 | 548.7 | 554.2 | 565.1 | 570.6 | 576.1 | 581.6 | 581.6 |
| 15° | 548.7 | 548.7 | 554.2 | 559.6 | 565.1 | 576.1 | 592.6 | 609.0 | 620.0 | 625.5 | 620.0 |
| 17.5° | 548.7 | 554.2 | 559.6 | 570.6 | 587.1 | 603.5 | 631.0 | 652.9 | 674.9 | 680.3 | 685.8 |
| 20° | 559.6 | 559.6 | 565.1 | 587.1 | 614.5 | 641.9 | 680.3 | 718.7 | 746.2 | 757.2 | 757.2 |
| 22.5° | 565.1 | 570.6 | 576.1 | 603.5 | 647.4 | 691.3 | 746.2 | 790.1 | 828.5 | 850.4 | 855.9 |
| 25° | 581.6 | 581.6 | 592.6 | 631.0 | 685.8 | 751.7 | 823.0 | 888.8 | 938.2 | 965.6 | 971.1 |
| 27.5° | 592.6 | 598.0 | 614.5 | 663.9 | 735.2 | 817.5 | 916.3 | 993.1 | 1053.4 | 1086.4 | 1091.8 |
| 30° | 603.5 | 609.0 | 641.9 | 696.8 | 784.6 | 883.3 | 998.6 | 1097.3 | 1174.1 | 1212.5 | 1218.0 |
| 32.5° | 620.0 | 625.5 | 663.9 | 724.2 | 828.5 | 949.2 | 1080.9 | 1201.6 | 1311.3 | 1344.2 | 1349.7 |
| 35° | 636.4 | 641.9 | 685.8 | 757.2 | 877.9 | 1015.0 | 1168.7 | 1311.3 | 1443.0 | 1486.9 | 1497.9 |
| 37.5° | 652.9 | 658.4 | 702.3 | 790.1 | 927.2 | 1086.4 | 1267.4 | 1437.5 | 1580.2 | 1640.5 | 1657.0 |
| 40° | 669.4 | 674.9 | 724.2 | 823.0 | 976.6 | 1163.2 | 1371.7 | 1558.2 | 1722.8 | 1794.1 | 1805.1 |
| 42.5° | 680.3 | 685.8 | 740.7 | 850.4 | 1026.0 | 1234.5 | 1481.4 | 1689.9 | 1865.5 | 1958.7 | 1969.7 |
| 45° | 696.8 | 702.3 | 762.6 | 888.8 | 1069.9 | 1316.8 | 1585.6 | 1838.0 | 2041.0 | 2145.3 | 2156.2 |
| 47.5° | 707.8 | 713.3 | 779.1 | 910.8 | 1119.3 | 1393.6 | 1695.4 | 1969.7 | 2211.1 | 2320.8 | 2353.8 |
| 50° | 713.3 | 718.7 | 790.1 | 932.7 | 1152.2 | 1448.5 | 1783.2 | 2101.4 | 2359.3 | 2496.4 | 2512.9 |
| 52.5° | 713.3 | 724.2 | 795.6 | 949.2 | 1174.1 | 1497.9 | 1854.5 | 2211.1 | 2501.9 | 2655.5 | 2661.0 |
| 55° | 707.8 | 713.3 | 790.1 | 943.7 | 1185.1 | 1519.8 | 1903.9 | 2277.0 | 2600.7 | 2748.8 | 2798.2 |
| 57.5° | 685.8 | 691.3 | 768.1 | 927.2 | 1163.2 | 1508.8 | 1892.9 | 2293.4 | 2622.6 | 2765.3 | 2825.6 |
| 60° | 652.9 | 663.9 | 735.2 | 888.8 | 1130.2 | 1470.4 | 1860.0 | 2260.5 | 2589.7 | 2765.3 | 2770.8 |
| 62.5° | 614.5 | 620.0 | 691.3 | 839.5 | 1080.9 | 1410.1 | 1799.6 | 2194.7 | 2512.9 | 2693.9 | 2688.5 |
| 65° | 559.6 | 565.1 | 625.5 | 779.1 | 993.1 | 1294.8 | 1678.9 | 2090.4 | 2364.7 | 2556.8 | 2540.3 |
| 67.5° | 499.3 | 504.8 | 559.6 | 696.8 | 888.8 | 1168.7 | 1514.3 | 1914.8 | 2156.2 | 2353.8 | 2342.8 |
| 70° | 433.4 | 433.4 | 482.8 | 598.0 | 779.1 | 1026.0 | 1333.3 | 1684.4 | 1925.8 | 2090.4 | 2095.9 |
| 72.5° | 356.6 | 356.6 | 400.5 | 499.3 | 652.9 | 861.4 | 1124.8 | 1437.5 | 1635.0 | 1777.7 | 1788.6 |
| 75° | 279.8 | 274.3 | 312.7 | 395.0 | 515.7 | 685.8 | 888.8 | 1157.7 | 1311.3 | 1448.5 | 1443.0 |
| 77.5° | 197.5 | 197.5 | 219.5 | 285.3 | 373.1 | 510.3 | 658.4 | 872.4 | 976.6 | 1091.8 | 1069.9 |
| 80° | 126.2 | 126.2 | 137.2 | 186.5 | 246.9 | 340.2 | 433.4 | 592.6 | 663.9 | 751.7 | 724.2 |
| 82.5° | 65.8 | 60.4 | 71.3 | 98.8 | 131.7 | 186.5 | 241.4 | 345.7 | 378.6 | 444.4 | 422.5 |
| 85° | 21.9 | 21.9 | 21.9 | 32.9 | 49.4 | 71.3 | 93.3 | 148.1 | 153.6 | 197.5 | 181.1 |
| 87.5° | 5.5 | 0.0 | 0.0 | 5.5 | 5.5 | 5.5 | 5.5 | 16.5 | 16.5 | 32.9 | 21.9 |
| 90° | 2.6 | 2.6 | 3.1 | 3.1 | 3.1 | 3.1 | 3.1 | 3.1 | 3.1 | 2.6 | 2.6 |
| 92.5° | 2.6 | 2.6 | 2.6 | 3.6 | 4.1 | 3.6 | 4.1 | 3.1 | 3.1 | 2.6 | 2.6 |
| 95° | 3.1 | 3.1 | 3.6 | 4.6 | 5.7 | 6.2 | 6.2 | 3.6 | 3.6 | 3.1 | 3.1 |
| 97.5° | 4.1 | 4.6 | 4.6 | 5.7 | 9.3 | 17.0 | 10.3 | 5.1 | 5.1 | 4.6 | 4.1 |
| 100° | 6.7 | 7.2 | 7.2 | 12.9 | 27.2 | 36.5 | 26.2 | 13.4 | 9.8 | 7.2 | 7.2 |
| 102.5° | 21.6 | 22.6 | 27.8 | 41.6 | 61.7 | 56.0 | 47.3 | 44.7 | 30.8 | 24.7 | 23.6 |
| 105° | 55.0 | 54.5 | 58.6 | 69.4 | 86.4 | 84.8 | 78.1 | 70.9 | 61.2 | 56.5 | 56.5 |
| 107.5° | 72.5 | 72.5 | 76.1 | 85.3 | 98.2 | 114.6 | 116.2 | 92.0 | 80.7 | 75.6 | 75.0 |
| 110° | 81.7 | 81.7 | 84.8 | 92.5 | 109.5 | 132.6 | 131.6 | 113.6 | 99.7 | 93.0 | 92.0 |



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CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|--------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 83.8 | 84.3 | 88.4 | 100.2 | 118.7 | 129.0 | 124.4 | 117.2 | 111.0 | 105.9 | 104.9 |
| 115° | 86.9 | 86.9 | 91.5 | 102.8 | 113.1 | 117.2 | 112.1 | 106.4 | 102.3 | 100.2 | 101.3 |
| 117.5° | 85.8 | 87.4 | 88.4 | 94.6 | 101.3 | 104.4 | 101.8 | 94.1 | 91.0 | 90.0 | 88.4 |
| 120° | 79.7 | 79.7 | 80.7 | 83.8 | 87.4 | 88.9 | 87.9 | 82.8 | 80.2 | 79.7 | 78.6 |
| 122.5° | 70.9 | 71.5 | 70.9 | 72.5 | 75.0 | 76.6 | 75.6 | 71.5 | 70.4 | 70.4 | 69.4 |
| 125° | 62.2 | 62.2 | 61.7 | 62.7 | 64.3 | 63.7 | 64.3 | 62.2 | 61.7 | 61.7 | 61.2 |
| 127.5° | 56.0 | 55.5 | 54.5 | 55.0 | 55.5 | 55.5 | 56.0 | 54.0 | 54.5 | 55.0 | 54.5 |
| 130° | 49.9 | 49.9 | 48.8 | 48.8 | 48.8 | 47.8 | 48.8 | 47.8 | 48.3 | 48.8 | 49.3 |
| 132.5° | 44.2 | 44.2 | 42.7 | 42.2 | 42.2 | 42.2 | 42.7 | 42.2 | 43.2 | 44.2 | 44.2 |
| 135° | 39.6 | 39.6 | 38.0 | 38.6 | 38.6 | 38.0 | 38.6 | 38.0 | 39.1 | 39.6 | 39.6 |
| 137.5° | 36.0 | 36.0 | 35.0 | 35.0 | 35.0 | 34.4 | 35.0 | 35.0 | 35.5 | 36.5 | 37.0 |
| 140° | 32.9 | 32.9 | 32.4 | 32.4 | 31.9 | 32.4 | 32.4 | 32.4 | 32.9 | 33.4 | 33.4 |
| 142.5° | 31.4 | 30.8 | 30.3 | 29.8 | 30.3 | 30.3 | 30.3 | 29.8 | 30.3 | 31.4 | 31.4 |
| 145° | 28.8 | 28.8 | 28.3 | 28.3 | 28.3 | 28.8 | 28.3 | 28.3 | 28.8 | 28.8 | 29.3 |
| 147.5° | 27.2 | 27.2 | 26.7 | 27.2 | 27.2 | 27.2 | 27.2 | 26.7 | 27.2 | 27.2 | 27.8 |
| 150° | 26.7 | 26.2 | 25.7 | 26.2 | 26.2 | 25.7 | 25.7 | 25.7 | 25.7 | 26.2 | 26.2 |
| 152.5° | 25.2 | 25.2 | 24.7 | 25.2 | 24.7 | 24.7 | 24.7 | 24.7 | 24.7 | 25.2 | 25.7 |
| 155° | 24.2 | 24.2 | 23.6 | 24.2 | 24.2 | 24.2 | 24.2 | 24.2 | 24.2 | 24.2 | 24.2 |
| 157.5° | 23.1 | 23.6 | 23.1 | 23.1 | 23.1 | 23.1 | 23.1 | 23.1 | 23.1 | 23.6 | 23.6 |
| 160° | 22.6 | 22.6 | 22.6 | 22.6 | 22.1 | 22.1 | 22.1 | 22.6 | 22.6 | 22.6 | 23.1 |
| 162.5° | 22.1 | 22.1 | 22.1 | 22.1 | 21.6 | 21.6 | 21.6 | 21.6 | 22.1 | 22.1 | 22.6 |
| 165° | 22.1 | 21.6 | 21.6 | 21.6 | 21.1 | 21.1 | 21.1 | 21.1 | 21.6 | 22.1 | 21.6 |
| 167.5° | 21.1 | 21.1 | 21.1 | 21.1 | 21.1 | 20.6 | 20.6 | 21.1 | 21.1 | 21.1 | 21.6 |
| 170° | 21.1 | 21.1 | 20.6 | 20.6 | 20.6 | 20.6 | 20.6 | 20.6 | 20.6 | 20.6 | 21.1 |
| 172.5° | 21.1 | 21.1 | 21.1 | 21.1 | 20.6 | 20.6 | 20.6 | 20.6 | 20.6 | 21.1 | 21.1 |
| 175° | 21.1 | 21.1 | 21.1 | 21.1 | 20.6 | 20.6 | 20.6 | 21.1 | 21.1 | 21.1 | 20.6 |
| 177.5° | 21.1 | 21.1 | 21.1 | 21.1 | 20.6 | 21.1 | 21.1 | 21.1 | 21.1 | 21.1 | 21.1 |
| 180° | 21.1 | 21.1 | 21.1 | 21.1 | 21.1 | 21.1 | 21.1 | 21.1 | 21.1 | 21.1 | 21.1 |

(END OF REPORT)