

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: P834054

Luminaire Tested: **TTN-D3-830-U-WQ-CG-UPL3**

Issue Date: 5/15/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P834054  
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-D3-830-U-WQ-CG-UPL3  
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT  
3000K, 80 CRI LEDS AND WIDE DISTRIBUTION WITH CLEAR GLASS  
Light Source: -  
Ballast/Driver: -

**Summary**

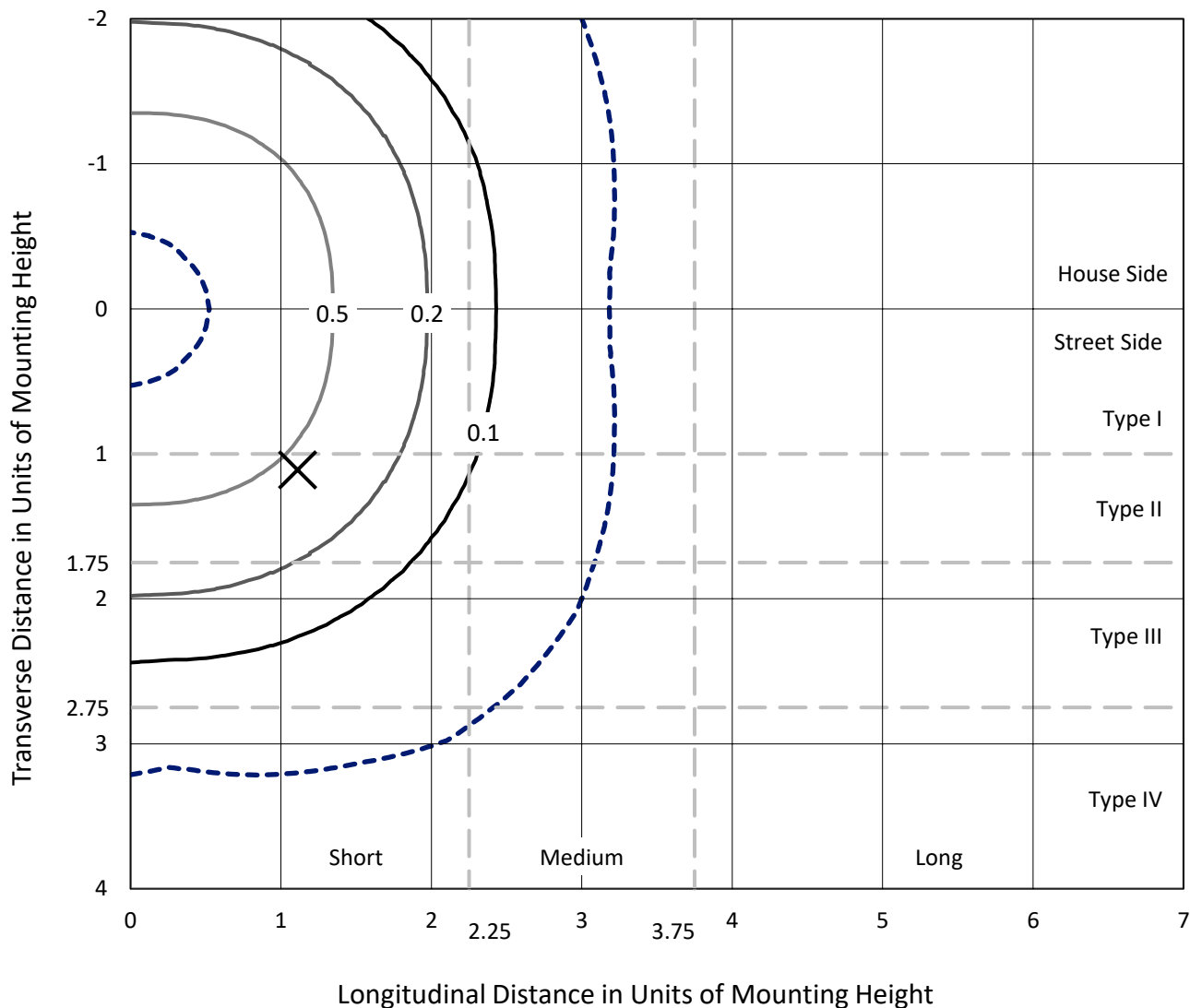
Lumens per Lamp: N/A  
Luminaire Lumens: 6728.7 lumens  
Efficiency: N/A  
Efficacy: 101.6 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')  
IES Classification: Type V - Short  
BUG Rating: B3 - U4 - G1  
  
Input Watts (W): 66.2  
Input Voltage (V): NR  
Input Current (Ain): 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

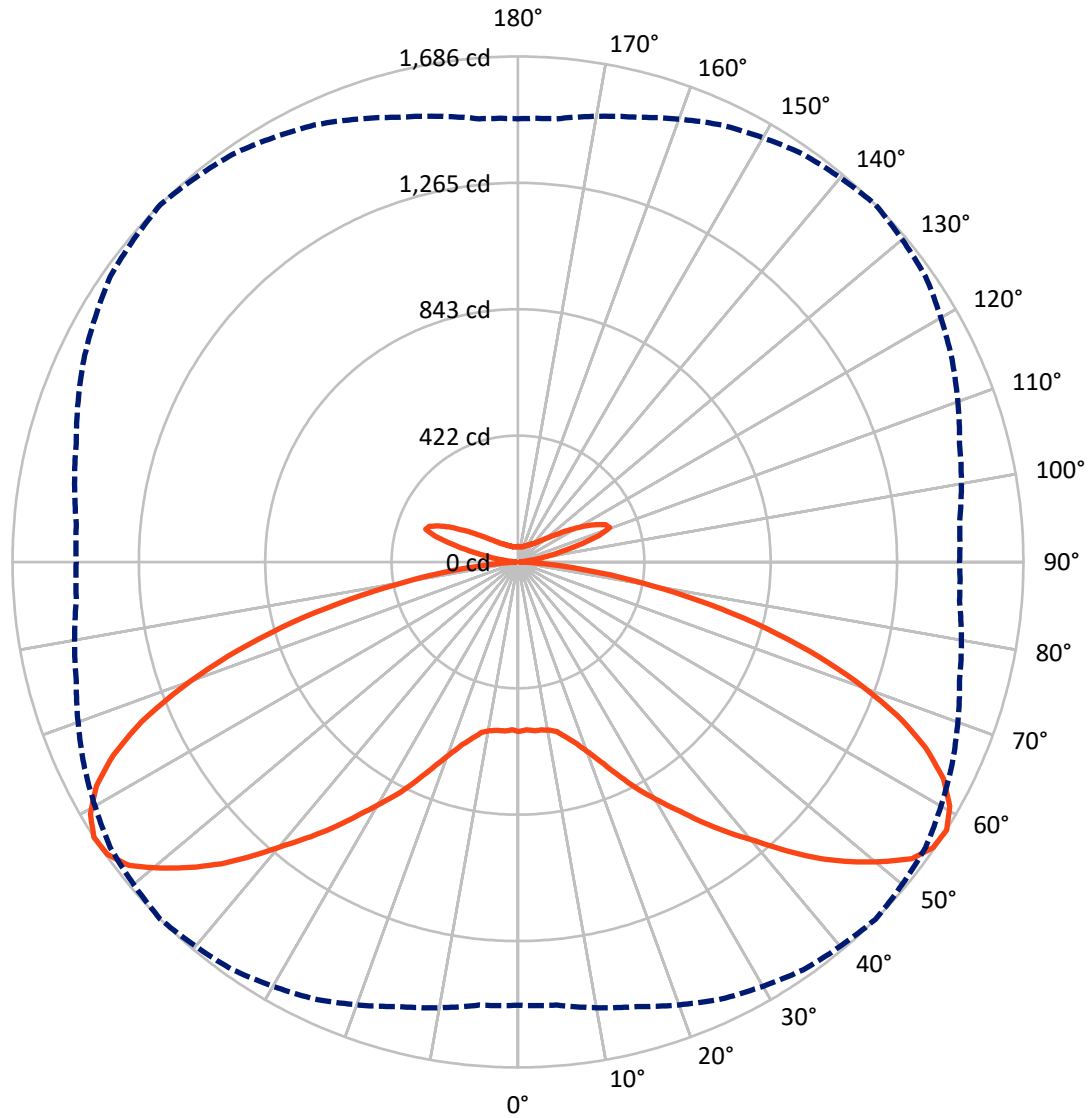
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1 fc  
 Type V - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 57.5-Deg Vertical

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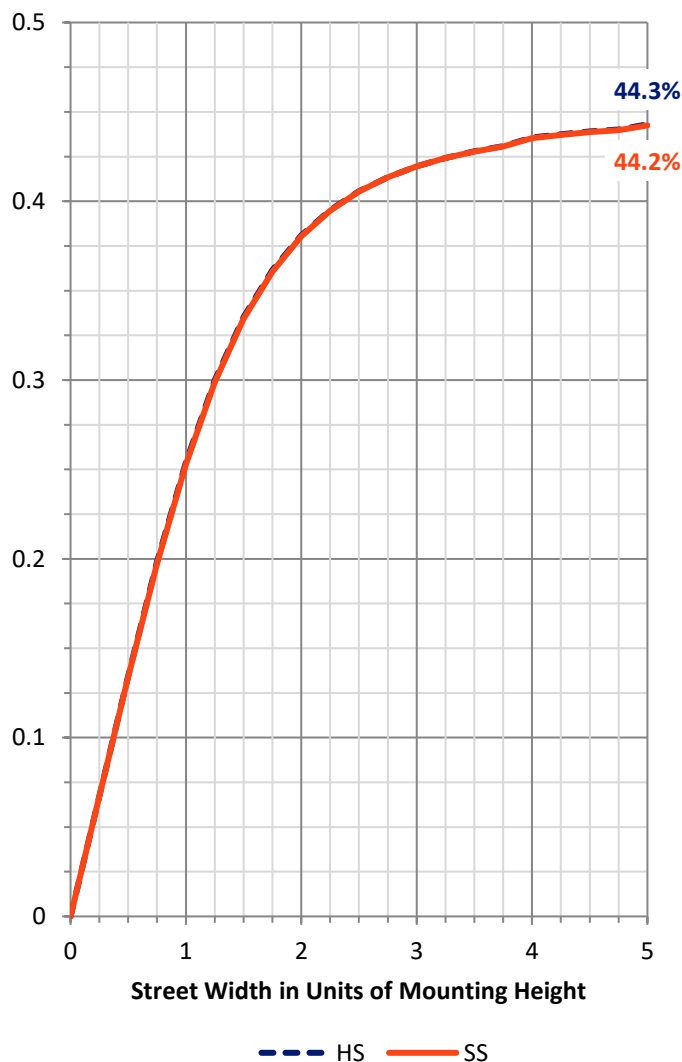
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 2994.0   | 370.3  | 3364.3 |
|                    | % Fixture | 44.5     | 5.5    | 50.0   |
| <b>Street Side</b> | Lumens    | 2994.0   | 370.3  | 3364.3 |
|                    | % Fixture | 44.5     | 5.5    | 50.0   |
| <b>Total</b>       | Lumens    | 5988.0   | 740.7  | 6728.7 |
|                    | % Fixture | 89.0     | 11.0   | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 53.9   | 0.8       |
| 10°-20°   | 174.4  | 2.6       |
| 20°-30°   | 366.9  | 5.5       |
| 30°-40°   | 661.4  | 9.8       |
| 40°-50°   | 1051.4 | 15.6      |
| 50°-60°   | 1402.8 | 20.8      |
| 60°-70°   | 1355.4 | 20.1      |
| 70°-80°   | 785.4  | 11.7      |
| 80°-90°   | 136.4  | 2.0       |
| 90°-100°  | 16.5   | 0.2       |
| 100°-110° | 168.0  | 2.5       |
| 110°-120° | 245.6  | 3.7       |
| 120°-130° | 142.5  | 2.1       |
| 130°-140° | 75.5   | 1.1       |
| 140°-150° | 44.9   | 0.7       |
| 150°-160° | 27.6   | 0.4       |
| 160°-170° | 15.1   | 0.2       |
| 170°-180° | 4.9    | 0.1       |
| 0°-90°    | 5988.0 | 89.0      |
| 0°-180°   | 6728.7 | 100.0     |

**Coefficient of Utilization**

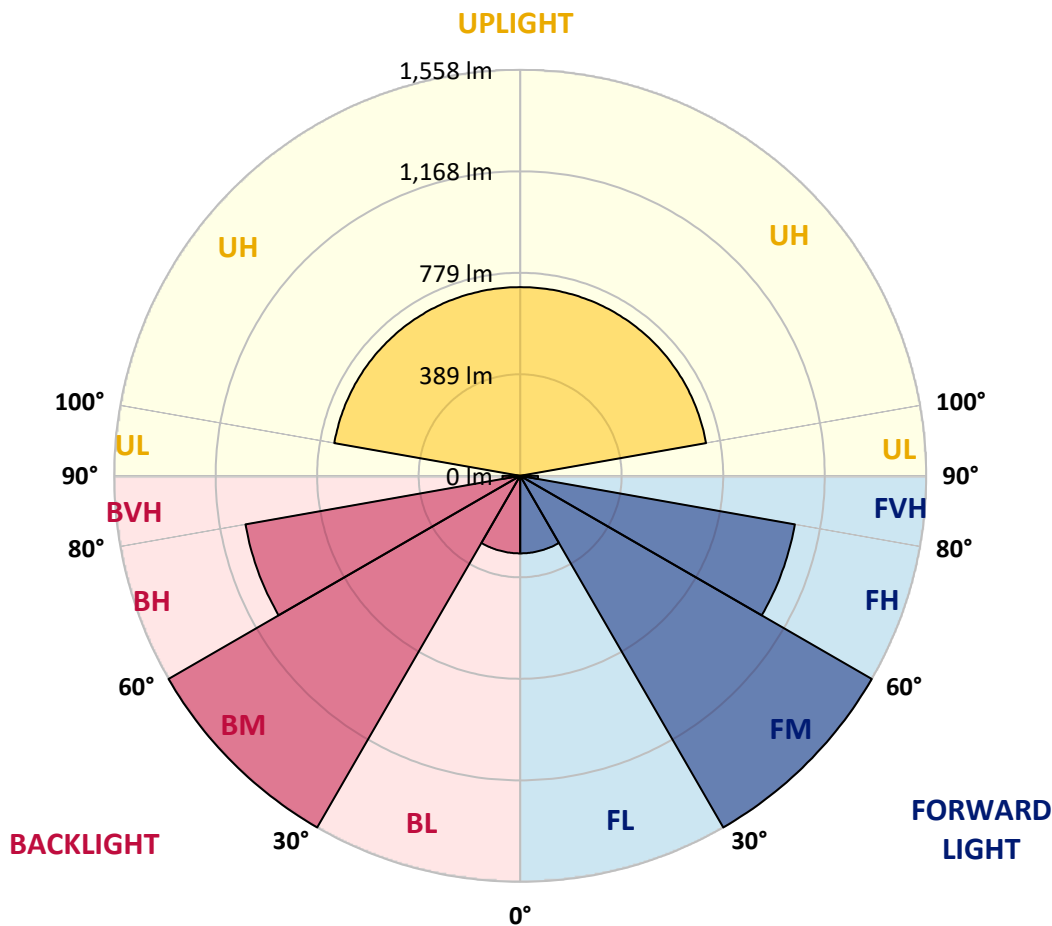


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |         |         |
|----------------|--------|-----------|-------------------------|---------|---------|
|                |        |           | B                       | U       | G       |
| FL (0°-30°)    | 297.6  | 4.4       |                         |         |         |
| FM (30°-60°)   | 1557.8 | 23.2      |                         |         |         |
| FH (60°-80°)   | 1070.4 | 15.9      |                         |         | G1/1800 |
| FVH (80°-90°)  | 68.2   | 1.0       |                         |         | G1/100  |
| BL (0°-30°)    | 297.6  | 4.4       | B1/500                  |         |         |
| BM (30°-60°)   | 1557.8 | 23.2      | B2/2500                 |         |         |
| BH (60°-80°)   | 1070.4 | 15.9      | B3/2500                 |         | G1/1800 |
| BVH (80°-90°)  | 68.2   | 1.0       |                         |         | G1/100  |
| UL (90°-100°)  | 16.5   | 0.2       |                         | U2/50   |         |
| UH (100°-180°) | 724.2  | 10.8      |                         | U4/1000 |         |

**BUG Rating: B3-U4-G1**  
 Type V Short





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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    | 90°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 565.6  | 565.6  | 565.6  | 565.6  | 565.6  | 565.6  | 565.6  | 565.6  | 565.6  | 565.6  | 565.6  |
| 2.5°   | 560.4  | 560.4  | 560.4  | 560.4  | 560.4  | 560.4  | 560.4  | 560.4  | 560.4  | 560.4  | 560.4  |
| 5°     | 565.6  | 565.6  | 565.6  | 565.6  | 565.6  | 565.6  | 565.6  | 565.6  | 565.6  | 565.6  | 565.6  |
| 7.5°   | 560.4  | 560.4  | 565.6  | 565.6  | 565.6  | 565.6  | 565.6  | 565.6  | 565.6  | 560.4  | 560.4  |
| 10°    | 565.6  | 565.6  | 565.6  | 570.8  | 570.8  | 570.8  | 570.8  | 570.8  | 565.6  | 565.6  | 565.6  |
| 12.5°  | 576.0  | 576.0  | 581.1  | 581.1  | 581.1  | 581.1  | 581.1  | 581.1  | 581.1  | 576.0  | 576.0  |
| 15°    | 601.9  | 601.9  | 601.9  | 607.1  | 607.1  | 607.1  | 607.1  | 607.1  | 601.9  | 601.9  | 601.9  |
| 17.5°  | 627.8  | 627.8  | 633.0  | 633.0  | 638.2  | 638.2  | 638.2  | 633.0  | 633.0  | 633.0  | 633.0  |
| 20°    | 664.2  | 664.2  | 669.4  | 669.4  | 674.5  | 679.7  | 679.7  | 674.5  | 669.4  | 669.4  | 669.4  |
| 22.5°  | 710.9  | 716.0  | 716.0  | 716.0  | 721.2  | 731.6  | 726.4  | 721.2  | 716.0  | 716.0  | 716.0  |
| 25°    | 767.9  | 773.1  | 778.3  | 778.3  | 783.5  | 793.9  | 793.9  | 778.3  | 778.3  | 778.3  | 778.3  |
| 27.5°  | 835.4  | 840.6  | 845.8  | 845.8  | 851.0  | 861.3  | 856.1  | 845.8  | 845.8  | 840.6  | 840.6  |
| 30°    | 897.7  | 902.8  | 908.0  | 913.2  | 918.4  | 923.6  | 923.6  | 913.2  | 908.0  | 902.8  | 897.7  |
| 32.5°  | 959.9  | 959.9  | 970.3  | 980.7  | 991.1  | 991.1  | 996.2  | 980.7  | 970.3  | 959.9  | 954.7  |
| 35°    | 1022.2 | 1027.4 | 1032.6 | 1048.1 | 1063.7 | 1068.9 | 1063.7 | 1048.1 | 1032.6 | 1022.2 | 1022.2 |
| 37.5°  | 1089.6 | 1094.8 | 1100.0 | 1120.8 | 1136.3 | 1146.7 | 1136.3 | 1120.8 | 1100.0 | 1089.6 | 1084.5 |
| 40°    | 1162.3 | 1167.5 | 1172.7 | 1198.6 | 1214.2 | 1224.5 | 1209.0 | 1193.4 | 1172.7 | 1162.3 | 1157.1 |
| 42.5°  | 1229.7 | 1240.1 | 1250.5 | 1281.6 | 1307.6 | 1317.9 | 1302.4 | 1276.4 | 1255.7 | 1229.7 | 1224.5 |
| 45°    | 1312.8 | 1323.1 | 1338.7 | 1369.8 | 1395.8 | 1411.3 | 1390.6 | 1364.6 | 1333.5 | 1312.8 | 1307.6 |
| 47.5°  | 1380.2 | 1390.6 | 1406.2 | 1447.7 | 1484.0 | 1494.4 | 1473.6 | 1442.5 | 1401.0 | 1375.0 | 1369.8 |
| 50°    | 1432.1 | 1442.5 | 1473.6 | 1520.3 | 1561.8 | 1572.2 | 1551.4 | 1509.9 | 1463.2 | 1426.9 | 1421.7 |
| 52.5°  | 1473.6 | 1484.0 | 1520.3 | 1582.6 | 1629.3 | 1644.8 | 1618.9 | 1572.2 | 1509.9 | 1468.4 | 1463.2 |
| 55°    | 1494.4 | 1499.6 | 1546.3 | 1613.7 | 1660.4 | 1681.2 | 1655.2 | 1603.3 | 1535.9 | 1489.2 | 1484.0 |
| 57.5°  | 1478.8 | 1484.0 | 1535.9 | 1608.5 | 1660.4 | 1686.3 | 1660.4 | 1598.1 | 1525.5 | 1478.8 | 1473.6 |
| 60°    | 1447.7 | 1447.7 | 1494.4 | 1577.4 | 1639.7 | 1655.2 | 1629.3 | 1567.0 | 1489.2 | 1442.5 | 1437.3 |
| 62.5°  | 1390.6 | 1385.4 | 1442.5 | 1515.1 | 1577.4 | 1593.0 | 1572.2 | 1509.9 | 1432.1 | 1385.4 | 1380.2 |
| 65°    | 1281.6 | 1271.2 | 1354.3 | 1421.7 | 1478.8 | 1494.4 | 1478.8 | 1421.7 | 1349.1 | 1276.4 | 1266.1 |
| 67.5°  | 1151.9 | 1136.3 | 1214.2 | 1292.0 | 1343.9 | 1364.6 | 1343.9 | 1297.2 | 1214.2 | 1141.5 | 1136.3 |
| 70°    | 1017.0 | 1001.4 | 1063.7 | 1131.2 | 1188.2 | 1198.6 | 1177.9 | 1131.2 | 1053.3 | 1006.6 | 1006.6 |
| 72.5°  | 856.1  | 840.6  | 897.7  | 949.5  | 1006.6 | 1017.0 | 996.2  | 954.7  | 897.7  | 851.0  | 845.8  |
| 75°    | 679.7  | 664.2  | 716.0  | 757.6  | 814.6  | 819.8  | 809.4  | 762.7  | 716.0  | 669.4  | 669.4  |
| 77.5°  | 503.3  | 487.7  | 529.3  | 565.6  | 612.3  | 612.3  | 607.1  | 570.8  | 529.3  | 498.1  | 498.1  |
| 80°    | 332.1  | 321.7  | 358.0  | 373.6  | 415.1  | 415.1  | 409.9  | 384.0  | 352.8  | 332.1  | 326.9  |
| 82.5°  | 186.8  | 176.4  | 207.6  | 212.7  | 243.9  | 243.9  | 238.7  | 217.9  | 197.2  | 181.6  | 181.6  |
| 85°    | 72.6   | 62.3   | 83.0   | 88.2   | 103.8  | 103.8  | 98.6   | 93.4   | 77.8   | 67.5   | 67.5   |
| 87.5°  | 5.2    | 5.2    | 10.4   | 10.4   | 15.6   | 15.6   | 15.6   | 10.4   | 10.4   | 5.2    | 5.2    |
| 90°    | 6.3    | 6.3    | 7.6    | 7.6    | 7.6    | 7.6    | 7.6    | 7.6    | 7.6    | 6.3    | 6.3    |
| 92.5°  | 6.3    | 6.3    | 6.3    | 8.9    | 10.1   | 8.9    | 10.1   | 7.6    | 7.6    | 6.3    | 6.3    |
| 95°    | 7.6    | 7.6    | 8.9    | 11.4   | 13.9   | 15.2   | 15.2   | 8.9    | 8.9    | 7.6    | 7.6    |
| 97.5°  | 10.1   | 11.4   | 11.4   | 13.9   | 22.8   | 41.8   | 25.3   | 12.7   | 12.7   | 11.4   | 10.1   |
| 100°   | 16.5   | 17.7   | 17.7   | 31.7   | 67.2   | 90.0   | 64.6   | 32.9   | 24.1   | 17.7   | 17.7   |
| 102.5° | 53.2   | 55.8   | 68.4   | 102.6  | 152.1  | 138.1  | 116.6  | 110.2  | 76.0   | 60.8   | 58.3   |
| 105°   | 135.6  | 134.3  | 144.5  | 171.1  | 212.9  | 209.1  | 192.6  | 174.9  | 150.8  | 139.4  | 139.4  |
| 107.5° | 178.7  | 178.7  | 187.5  | 210.4  | 242.0  | 282.6  | 286.4  | 226.8  | 198.9  | 186.3  | 185.0  |
| 110°   | 201.5  | 201.5  | 209.1  | 228.1  | 269.9  | 326.9  | 324.4  | 280.0  | 245.8  | 229.4  | 226.8  |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 5°    | 15°   | 25°   | 35°   | 45°   | 55°   | 65°   | 75°   | 85°   | 90°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 206.5 | 207.8 | 218.0 | 247.1 | 292.7 | 318.1 | 306.7 | 288.9 | 273.7 | 261.0 | 258.5 |
| 115°   | 214.2 | 214.2 | 225.6 | 253.4 | 278.8 | 288.9 | 276.2 | 262.3 | 252.2 | 247.1 | 249.6 |
| 117.5° | 211.6 | 215.4 | 218.0 | 233.2 | 249.6 | 257.2 | 250.9 | 231.9 | 224.3 | 221.8 | 218.0 |
| 120°   | 196.4 | 196.4 | 198.9 | 206.5 | 215.4 | 219.2 | 216.7 | 204.0 | 197.7 | 196.4 | 193.9 |
| 122.5° | 174.9 | 176.1 | 174.9 | 178.7 | 185.0 | 188.8 | 186.3 | 176.1 | 173.6 | 173.6 | 171.1 |
| 125°   | 153.3 | 153.3 | 152.1 | 154.6 | 158.4 | 157.1 | 158.4 | 153.3 | 152.1 | 152.1 | 150.8 |
| 127.5° | 138.1 | 136.9 | 134.3 | 135.6 | 136.9 | 136.9 | 138.1 | 133.1 | 134.3 | 135.6 | 134.3 |
| 130°   | 122.9 | 122.9 | 120.4 | 120.4 | 120.4 | 117.8 | 120.4 | 117.8 | 119.1 | 120.4 | 121.6 |
| 132.5° | 109.0 | 109.0 | 105.2 | 103.9 | 103.9 | 103.9 | 105.2 | 103.9 | 106.4 | 109.0 | 109.0 |
| 135°   | 97.6  | 97.6  | 93.8  | 95.0  | 95.0  | 93.8  | 95.0  | 93.8  | 96.3  | 97.6  | 97.6  |
| 137.5° | 88.7  | 88.7  | 86.2  | 86.2  | 86.2  | 84.9  | 86.2  | 86.2  | 87.4  | 90.0  | 91.2  |
| 140°   | 81.1  | 81.1  | 79.8  | 79.8  | 78.6  | 79.8  | 79.8  | 79.8  | 81.1  | 82.4  | 82.4  |
| 142.5° | 77.3  | 76.0  | 74.8  | 73.5  | 74.8  | 74.8  | 74.8  | 73.5  | 74.8  | 77.3  | 77.3  |
| 145°   | 71.0  | 71.0  | 69.7  | 69.7  | 69.7  | 71.0  | 69.7  | 69.7  | 71.0  | 71.0  | 72.2  |
| 147.5° | 67.2  | 67.2  | 65.9  | 67.2  | 67.2  | 67.2  | 67.2  | 65.9  | 67.2  | 67.2  | 68.4  |
| 150°   | 65.9  | 64.6  | 63.4  | 64.6  | 64.6  | 63.4  | 63.4  | 63.4  | 63.4  | 64.6  | 64.6  |
| 152.5° | 62.1  | 62.1  | 60.8  | 62.1  | 60.8  | 60.8  | 60.8  | 60.8  | 60.8  | 62.1  | 63.4  |
| 155°   | 59.6  | 59.6  | 58.3  | 59.6  | 59.6  | 59.6  | 59.6  | 59.6  | 59.6  | 59.6  | 59.6  |
| 157.5° | 57.0  | 58.3  | 57.0  | 57.0  | 57.0  | 57.0  | 57.0  | 57.0  | 57.0  | 58.3  | 58.3  |
| 160°   | 55.8  | 55.8  | 55.8  | 55.8  | 54.5  | 54.5  | 54.5  | 55.8  | 55.8  | 55.8  | 57.0  |
| 162.5° | 54.5  | 54.5  | 54.5  | 54.5  | 53.2  | 53.2  | 53.2  | 53.2  | 54.5  | 54.5  | 55.8  |
| 165°   | 54.5  | 53.2  | 53.2  | 53.2  | 52.0  | 52.0  | 52.0  | 52.0  | 53.2  | 54.5  | 53.2  |
| 167.5° | 52.0  | 52.0  | 52.0  | 52.0  | 52.0  | 50.7  | 50.7  | 52.0  | 52.0  | 52.0  | 53.2  |
| 170°   | 52.0  | 52.0  | 50.7  | 50.7  | 50.7  | 50.7  | 50.7  | 50.7  | 50.7  | 50.7  | 52.0  |
| 172.5° | 52.0  | 52.0  | 52.0  | 52.0  | 50.7  | 50.7  | 50.7  | 50.7  | 50.7  | 52.0  | 52.0  |
| 175°   | 52.0  | 52.0  | 52.0  | 52.0  | 50.7  | 50.7  | 50.7  | 52.0  | 52.0  | 52.0  | 50.7  |
| 177.5° | 52.0  | 52.0  | 52.0  | 52.0  | 50.7  | 52.0  | 52.0  | 52.0  | 52.0  | 52.0  | 52.0  |
| 180°   | 52.0  | 52.0  | 52.0  | 52.0  | 52.0  | 52.0  | 52.0  | 52.0  | 52.0  | 52.0  | 52.0  |

(END OF REPORT)