

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: IRiS

Report Number: P1339036

Luminaire Tested: P3A05R409840DE010 E3A451MW

Issue Date: 2/13/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1339036  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-78)  
Test Lab: INNOVATION CENTER  
Issue Date: 2/13/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: IRiS  
Catalog Number: P3A05R409840DE010 E3A451MW  
Description: 3in Adjustable LED luminaire with, R40 optic, 4000K CCT AND, 98CRI , E3A451MW TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

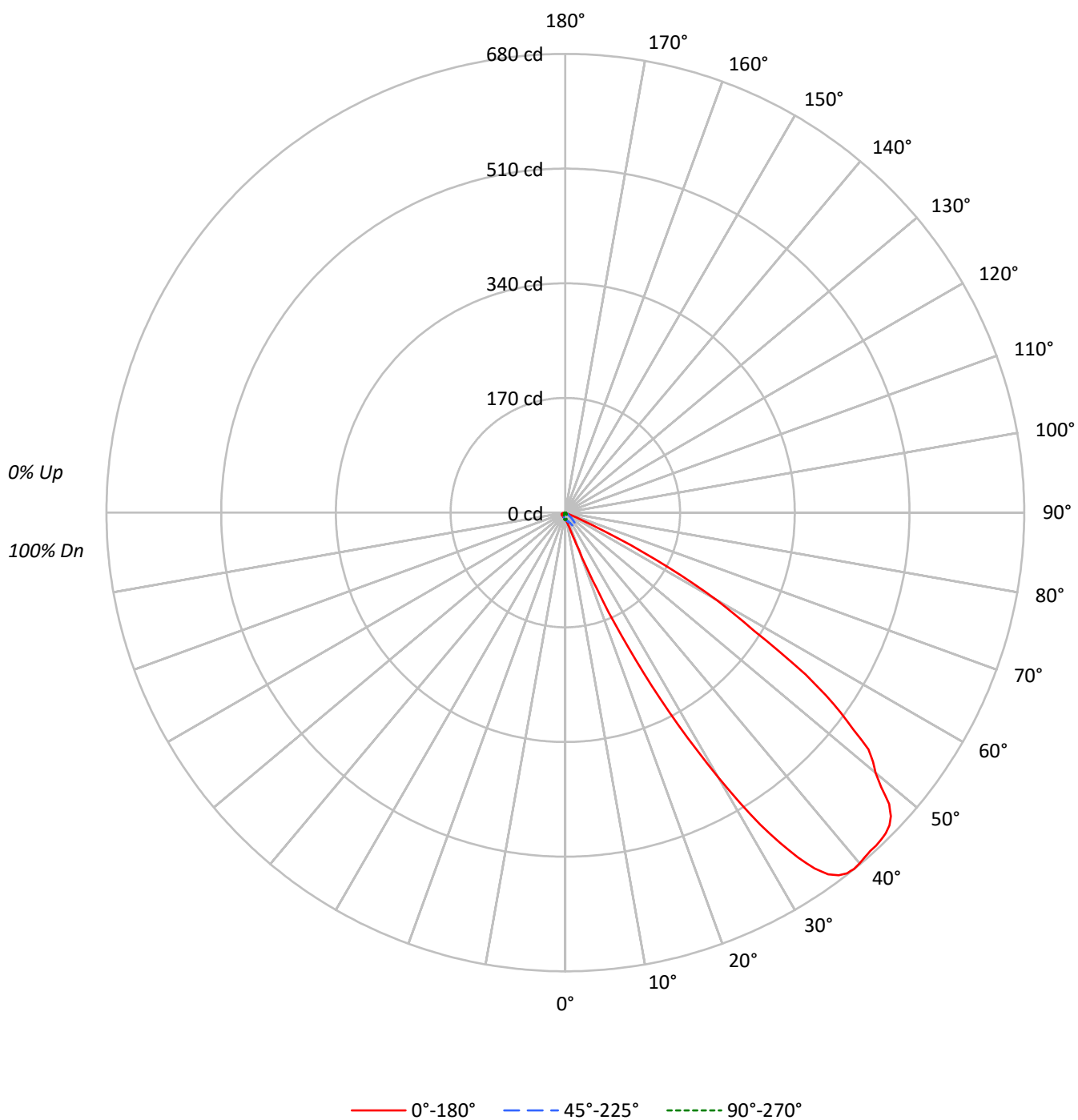
Lumens per Lamp: N/A  
Luminaire Lumens: 210.0 lumens  
Efficiency: N/A  
Efficacy: 29.2 lumens/watt  
Spacing Criteria (0/90/45): 3.99 / 0.74 / 1.54  
Luminous Opening: Circular (Dia: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 7.2  
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

TEST NUMBER: P1339036

CATALOG NUMBER: P3A05R409840DE010 E3A451MW

### Luminous Intensity Polar Plot



TEST NUMBER: P1339036

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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |     |     |     |     |     |     |     |  |     |     |     |  |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|-----|-----|-----|--|-----|
| RF  | 20  |     |     |     | 20  |     |     |     | 20  |     |     |  | 20  |     |     |  | 20  |
| RC  | 80  |     |     |     | 70  |     |     |     | 50  |     |     |  | 30  |     |     |  | 10  |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  |  | 50  | 30  | 10  |  | 50  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |  |     |     |     |  |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 |  | 106 | 106 | 106 |  | 102 |
| 1   | 110 | 106 | 102 | 99  | 107 | 104 | 100 | 97  | 99  | 97  | 94  |  | 96  | 93  | 91  |  | 92  |
| 2   | 100 | 93  | 86  | 81  | 98  | 91  | 85  | 80  | 87  | 82  | 78  |  | 84  | 80  | 76  |  | 81  |
| 3   | 91  | 81  | 73  | 66  | 89  | 79  | 72  | 66  | 76  | 70  | 65  |  | 73  | 68  | 64  |  | 71  |
| 4   | 82  | 70  | 62  | 55  | 80  | 69  | 61  | 54  | 67  | 59  | 54  |  | 64  | 58  | 53  |  | 62  |
| 5   | 75  | 62  | 52  | 46  | 73  | 60  | 52  | 45  | 58  | 51  | 45  |  | 56  | 50  | 44  |  | 54  |
| 6   | 68  | 54  | 45  | 38  | 66  | 53  | 44  | 38  | 51  | 43  | 38  |  | 50  | 43  | 37  |  | 48  |
| 7   | 62  | 48  | 39  | 32  | 60  | 47  | 38  | 32  | 45  | 37  | 32  |  | 44  | 37  | 31  |  | 42  |
| 8   | 57  | 42  | 33  | 27  | 55  | 42  | 33  | 27  | 40  | 32  | 27  |  | 39  | 32  | 27  |  | 38  |
| 9   | 52  | 38  | 29  | 23  | 51  | 37  | 29  | 23  | 36  | 28  | 23  |  | 35  | 28  | 23  |  | 34  |
| 10  | 48  | 34  | 25  | 20  | 47  | 33  | 25  | 20  | 32  | 25  | 20  |  | 31  | 24  | 20  |  | 30  |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°     | 45°  | 90°  | 135° | 180° |
|-----|--------|------|------|------|------|
| 0°  | 2368   | 2368 | 2368 | 2368 | 2368 |
| 5°  | 2641   | 2553 | 2333 | 2113 | 2069 |
| 10° | 3184   | 2694 | 2138 | 1937 | 1893 |
| 15° | 5199   | 2929 | 1839 | 1703 | 1748 |
| 20° | 13768  | 3454 | 1540 | 1540 | 1657 |
| 25° | 53108  | 4283 | 1210 | 1403 | 1621 |
| 30° | 114549 | 5722 | 987  | 1367 | 1621 |
| 35° | 172421 | 6773 | 830  | 1338 | 1660 |
| 40° | 194278 | 6784 | 716  | 1374 | 1775 |
| 45° | 208301 | 5272 | 651  | 1427 | 1923 |
| 50° | 204752 | 3275 | 580  | 1501 | 2115 |
| 55° | 180104 | 1606 | 573  | 1682 | 2370 |
| 60° | 114026 | 351  | 658  | 1842 | 2631 |
| 65° | 23297  | 104  | 675  | 2024 | 2906 |
| 70° | 513    | 128  | 769  | 2244 | 3334 |
| 75° | 508    | 339  | 847  | 2457 | 3728 |
| 80° | 505    | 253  | 1010 | 2652 | 4420 |
| 85° | 503    | 503  | 2013 | 3019 | 4780 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 212079 cd/sqm

TEST NUMBER: P1339036

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 1.0    | 0.5       |
| 10°-20°   | 3.3    | 1.6       |
| 20°-30°   | 16.3   | 7.8       |
| 30°-40°   | 53.1   | 25.3      |
| 40°-50°   | 73.1   | 34.8      |
| 50°-60°   | 50.9   | 24.3      |
| 60°-70°   | 9.7    | 4.6       |
| 70°-80°   | 1.8    | 0.8       |
| 80°-90°   | 0.8    | 0.4       |
| 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°-30°    | 20.6   | 9.8       |
| 0°-40°    | 73.7   | 35.1      |
| 0°-60°    | 197.8  | 94.2      |
| 0°-90°    | 210.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 210.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 45° | 90° | 135° | 180° | Flux |
|-----|-----|-----|-----|------|------|------|
| 0°  | 11  | 11  | 11  | 11   | 11   |      |
| 5°  | 12  | 12  | 11  | 10   | 9    | 1    |
| 15° | 23  | 13  | 8   | 8    | 8    | 8    |
| 25° | 220 | 18  | 5   | 6    | 7    | 113  |
| 35° | 644 | 25  | 3   | 5    | 6    | 389  |
| 45° | 672 | 17  | 2   | 5    | 6    | 511  |
| 55° | 471 | 4   | 2   | 4    | 6    | 403  |
| 65° | 45  | 0   | 1   | 4    | 6    | 79   |
| 75° | 1   | 0   | 1   | 3    | 4    | 1    |
| 85° | 0   | 0   | 1   | 1    | 2    | 0    |
| 90° | 0   | 0   | 0   | 0    | 0    |      |

TEST NUMBER: P1339036

CATALOG NUMBER: P3A05R409840DE010 E3A451MW

**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 5°    | 10°   | 15°   | 20°   | 25°   | 30°   | 35°  | 45°  | 67.5° | 90°  |
|-------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|------|
| 0°    | 10.8  | 10.8  | 10.8  | 10.8  | 10.8  | 10.8  | 10.8  | 10.8 | 10.8 | 10.8  | 10.8 |
| 2.5°  | 11.2  | 11.2  | 11.2  | 11.2  | 11.2  | 11.2  | 11.2  | 11.2 | 11.2 | 11.0  | 10.8 |
| 5°    | 12.0  | 12.0  | 12.0  | 12.0  | 11.8  | 11.8  | 11.8  | 11.6 | 11.6 | 11.2  | 10.6 |
| 7.5°  | 12.7  | 12.7  | 12.7  | 12.7  | 12.5  | 12.3  | 12.1  | 12.1 | 12.0 | 11.0  | 10.2 |
| 10°   | 14.3  | 14.3  | 14.1  | 13.9  | 13.7  | 13.3  | 13.1  | 12.7 | 12.1 | 10.8  | 9.6  |
| 12.5° | 17.4  | 17.0  | 16.8  | 16.4  | 15.8  | 15.0  | 14.3  | 13.7 | 12.3 | 10.4  | 9.1  |
| 15°   | 22.9  | 22.6  | 21.8  | 20.6  | 19.5  | 17.9  | 16.6  | 15.2 | 12.9 | 9.8   | 8.1  |
| 17.5° | 32.8  | 31.6  | 30.5  | 28.5  | 25.6  | 22.9  | 20.1  | 17.5 | 13.7 | 9.3   | 7.3  |
| 20°   | 59.0  | 58.2  | 51.3  | 45.9  | 37.2  | 31.0  | 25.3  | 21.0 | 14.8 | 8.7   | 6.6  |
| 22.5° | 121.7 | 113.6 | 102.2 | 83.7  | 65.2  | 48.0  | 34.9  | 26.4 | 16.0 | 7.9   | 5.8  |
| 25°   | 219.5 | 206.7 | 182.2 | 146.6 | 108.2 | 76.6  | 50.5  | 34.5 | 17.7 | 7.1   | 5.0  |
| 27.5° | 332.3 | 319.4 | 281.4 | 232.2 | 169.5 | 115.5 | 72.1  | 45.7 | 20.1 | 6.4   | 4.4  |
| 30°   | 452.4 | 441.4 | 393.2 | 325.2 | 238.9 | 161.8 | 96.6  | 57.1 | 22.6 | 5.6   | 3.9  |
| 31°   | 500.8 | 486.8 | 434.7 | 362.2 | 271.5 | 180.9 | 106.5 | 61.9 | 23.5 | 5.4   | 3.7  |
| 32°   | 545.4 | 529.4 | 475.4 | 397.7 | 298.0 | 201.5 | 117.3 | 66.1 | 24.3 | 5.0   | 3.5  |
| 33°   | 583.8 | 565.1 | 513.0 | 431.2 | 327.1 | 220.8 | 128.4 | 70.2 | 24.9 | 4.6   | 3.3  |
| 34°   | 616.4 | 600.2 | 544.2 | 465.0 | 352.9 | 239.3 | 139.4 | 74.2 | 25.3 | 4.4   | 3.1  |
| 35°   | 644.1 | 629.5 | 574.1 | 490.6 | 378.2 | 257.3 | 149.5 | 78.1 | 25.3 | 4.0   | 3.1  |
| 36°   | 662.8 | 650.1 | 600.0 | 516.9 | 399.4 | 272.5 | 157.9 | 81.6 | 25.3 | 3.7   | 2.9  |
| 37°   | 673.1 | 660.7 | 616.9 | 538.5 | 420.2 | 287.5 | 165.7 | 84.3 | 25.1 | 3.5   | 2.7  |
| 38°   | 678.3 | 667.5 | 629.5 | 556.0 | 434.7 | 298.3 | 172.4 | 86.4 | 24.9 | 3.1   | 2.7  |
| 39°   | 679.6 | 670.6 | 637.4 | 568.7 | 448.8 | 309.1 | 177.2 | 87.6 | 24.3 | 2.9   | 2.5  |
| 40°   | 678.7 | 670.8 | 641.6 | 580.1 | 459.6 | 317.6 | 180.7 | 87.9 | 23.7 | 2.5   | 2.5  |
| 41°   | 676.7 | 670.6 | 644.7 | 588.0 | 468.3 | 323.0 | 182.1 | 87.2 | 22.9 | 2.1   | 2.3  |
| 42°   | 675.0 | 668.2 | 646.1 | 593.4 | 474.2 | 325.7 | 181.9 | 85.6 | 21.8 | 1.9   | 2.3  |
| 43°   | 675.0 | 667.3 | 646.3 | 596.9 | 477.1 | 325.9 | 179.5 | 82.7 | 20.2 | 1.7   | 2.1  |
| 44°   | 673.8 | 666.7 | 647.2 | 599.2 | 477.9 | 324.2 | 175.9 | 79.6 | 18.5 | 1.5   | 2.1  |
| 45°   | 671.7 | 664.2 | 647.0 | 599.4 | 476.5 | 319.9 | 169.9 | 75.6 | 17.0 | 1.2   | 2.1  |
| 46°   | 667.7 | 660.9 | 645.3 | 598.0 | 472.5 | 313.8 | 162.8 | 71.5 | 15.2 | 1.0   | 1.9  |
| 47°   | 659.6 | 654.4 | 640.7 | 593.4 | 466.3 | 304.7 | 154.3 | 66.9 | 13.9 | 0.8   | 1.9  |
| 48°   | 645.7 | 642.0 | 632.8 | 583.2 | 454.6 | 293.5 | 145.2 | 61.9 | 12.5 | 0.8   | 1.9  |
| 49°   | 620.2 | 617.3 | 611.9 | 566.8 | 439.5 | 279.8 | 135.4 | 56.3 | 11.2 | 0.6   | 1.9  |
| 50°   | 600.2 | 597.1 | 586.1 | 539.2 | 417.9 | 262.5 | 124.6 | 50.7 | 9.6  | 0.4   | 1.7  |
| 51°   | 586.9 | 581.8 | 564.5 | 507.2 | 386.5 | 239.3 | 112.8 | 45.1 | 8.1  | 0.4   | 1.7  |
| 52°   | 570.1 | 562.6 | 541.0 | 478.5 | 357.7 | 216.2 | 100.1 | 39.5 | 7.1  | 0.4   | 1.7  |
| 53°   | 535.0 | 532.3 | 510.9 | 447.6 | 329.0 | 194.0 | 87.0  | 34.9 | 6.2  | 0.4   | 1.7  |
| 54°   | 504.3 | 500.3 | 471.1 | 404.8 | 297.8 | 169.3 | 73.5  | 30.9 | 5.2  | 0.4   | 1.7  |
| 55°   | 471.1 | 463.2 | 437.4 | 368.7 | 261.1 | 146.6 | 60.6  | 26.6 | 4.2  | 0.4   | 1.5  |
| 56°   | 429.3 | 422.4 | 394.6 | 330.2 | 227.4 | 123.4 | 50.7  | 21.8 | 3.3  | 0.4   | 1.5  |
| 57°   | 378.4 | 372.0 | 350.6 | 282.7 | 192.3 | 100.9 | 41.3  | 17.5 | 2.5  | 0.4   | 1.5  |
| 58°   | 329.2 | 322.1 | 297.6 | 237.2 | 155.2 | 80.0  | 34.5  | 14.3 | 1.9  | 0.4   | 1.5  |
| 59°   | 291.4 | 281.8 | 250.1 | 199.2 | 121.5 | 60.7  | 27.4  | 11.4 | 1.3  | 0.4   | 1.5  |
| 60°   | 260.0 | 252.1 | 219.3 | 165.9 | 95.3  | 44.7  | 20.2  | 8.7  | 0.8  | 0.4   | 1.5  |
| 62.5° | 150.6 | 148.5 | 119.0 | 85.4  | 44.9  | 20.8  | 10.0  | 4.0  | 0.4  | 0.6   | 1.5  |
| 65°   | 44.9  | 39.1  | 30.5  | 18.1  | 11.6  | 6.9   | 3.7   | 1.3  | 0.2  | 0.6   | 1.3  |



TEST NUMBER: P1339036

CATALOG NUMBER: P3A05R409840DE010 E3A451MW

**CANDELA DISTRIBUTION (continued):**

|       | 0°  | 5°  | 10° | 15° | 20° | 25° | 30° | 35° | 45° | 67.5° | 90° |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-----|
| 67.5° | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 0.8 | 0.4 | 0.2 | 0.6   | 1.3 |
| 70°   | 0.8 | 0.6 | 0.6 | 0.6 | 0.6 | 0.4 | 0.4 | 0.2 | 0.2 | 0.6   | 1.2 |
| 72.5° | 0.6 | 0.6 | 0.6 | 0.6 | 0.4 | 0.4 | 0.4 | 0.2 | 0.4 | 0.6   | 1.0 |
| 75°   | 0.6 | 0.4 | 0.4 | 0.4 | 0.4 | 0.2 | 0.2 | 0.2 | 0.4 | 0.6   | 1.0 |
| 77.5° | 0.4 | 0.4 | 0.4 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 0.6   | 1.0 |
| 80°   | 0.4 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.6   | 0.8 |
| 82.5° | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.6   | 0.8 |
| 85°   | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.6   | 0.8 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.6   | 0.6 |
| 90°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0   | 0.0 |

TEST NUMBER: P1339036

CATALOG NUMBER: P3A05R409840DE010 E3A451MW

**CANDELA DISTRIBUTION (continued):**

|       | 112.5° | 135° | 157.5° | 180° |
|-------|--------|------|--------|------|
| 0°    | 10.8   | 10.8 | 10.8   | 10.8 |
| 2.5°  | 10.4   | 10.2 | 10.0   | 10.0 |
| 5°    | 10.0   | 9.6  | 9.6    | 9.4  |
| 7.5°  | 9.4    | 9.1  | 9.1    | 9.1  |
| 10°   | 8.9    | 8.7  | 8.7    | 8.5  |
| 12.5° | 8.1    | 8.1  | 8.1    | 8.1  |
| 15°   | 7.5    | 7.5  | 7.7    | 7.7  |
| 17.5° | 6.7    | 6.9  | 7.3    | 7.5  |
| 20°   | 6.2    | 6.6  | 6.9    | 7.1  |
| 22.5° | 5.8    | 6.2  | 6.7    | 6.9  |
| 25°   | 5.2    | 5.8  | 6.6    | 6.7  |
| 27.5° | 4.8    | 5.6  | 6.2    | 6.6  |
| 30°   | 4.4    | 5.4  | 6.0    | 6.4  |
| 31°   | 4.4    | 5.2  | 6.0    | 6.4  |
| 32°   | 4.2    | 5.0  | 6.0    | 6.2  |
| 33°   | 4.2    | 5.0  | 6.0    | 6.2  |
| 34°   | 4.0    | 5.0  | 5.8    | 6.2  |
| 35°   | 4.0    | 5.0  | 5.8    | 6.2  |
| 36°   | 3.9    | 4.8  | 5.8    | 6.2  |
| 37°   | 3.9    | 4.8  | 5.8    | 6.2  |
| 38°   | 3.7    | 4.8  | 5.8    | 6.2  |
| 39°   | 3.7    | 4.8  | 5.8    | 6.2  |
| 40°   | 3.7    | 4.8  | 5.8    | 6.2  |
| 41°   | 3.5    | 4.8  | 5.8    | 6.2  |
| 42°   | 3.5    | 4.8  | 5.8    | 6.2  |
| 43°   | 3.5    | 4.6  | 5.8    | 6.2  |
| 44°   | 3.5    | 4.6  | 5.8    | 6.2  |
| 45°   | 3.3    | 4.6  | 5.8    | 6.2  |
| 46°   | 3.3    | 4.6  | 5.8    | 6.2  |
| 47°   | 3.3    | 4.6  | 5.8    | 6.2  |
| 48°   | 3.3    | 4.6  | 5.8    | 6.2  |
| 49°   | 3.3    | 4.6  | 5.8    | 6.2  |
| 50°   | 3.1    | 4.4  | 5.8    | 6.2  |
| 51°   | 3.1    | 4.4  | 5.8    | 6.2  |
| 52°   | 3.1    | 4.4  | 5.8    | 6.2  |
| 53°   | 3.1    | 4.4  | 5.8    | 6.2  |
| 54°   | 2.9    | 4.4  | 5.8    | 6.2  |
| 55°   | 2.9    | 4.4  | 5.8    | 6.2  |
| 56°   | 2.9    | 4.4  | 5.8    | 6.0  |
| 57°   | 2.9    | 4.4  | 5.6    | 6.0  |
| 58°   | 2.9    | 4.2  | 5.6    | 6.0  |
| 59°   | 2.9    | 4.2  | 5.6    | 6.0  |
| 60°   | 2.9    | 4.2  | 5.6    | 6.0  |
| 62.5° | 2.7    | 4.2  | 5.4    | 5.8  |
| 65°   | 2.5    | 3.9  | 5.4    | 5.6  |



TEST NUMBER: P1339036

CATALOG NUMBER: P3A05R409840DE010 E3A451MW

**CANDELA DISTRIBUTION (continued):**

|       | 112.5° | 135° | 157.5° | 180° |
|-------|--------|------|--------|------|
| 67.5° | 2.5    | 3.7  | 5.0    | 5.4  |
| 70°   | 2.3    | 3.5  | 4.8    | 5.2  |
| 72.5° | 1.9    | 3.3  | 4.4    | 4.8  |
| 75°   | 1.7    | 2.9  | 4.0    | 4.4  |
| 77.5° | 1.5    | 2.5  | 3.7    | 3.9  |
| 80°   | 1.3    | 2.1  | 3.1    | 3.5  |
| 82.5° | 1.0    | 1.5  | 2.5    | 2.7  |
| 85°   | 0.8    | 1.2  | 1.7    | 1.9  |
| 87.5° | 0.6    | 0.6  | 1.0    | 1.0  |
| 90°   | 0.0    | 0.0  | 0.0    | 0.0  |

(END OF REPORT)