

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: P1345857

Luminaire Tested: P3A13R35W2N902765DE010 E3A451MW\_5000K

Issue Date: 2/13/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1345857  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-77)  
Test Lab: INNOVATION CENTER  
Issue Date: 2/13/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: IRiS  
Catalog Number: P3A13R35W2N902765DE010 E3A451MW\_5000K  
Description: 3in Adjustable Tunable White LED luminaire with, R35 optic, 5000K CCT AND, 90CRI ,  
E3A451MW TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

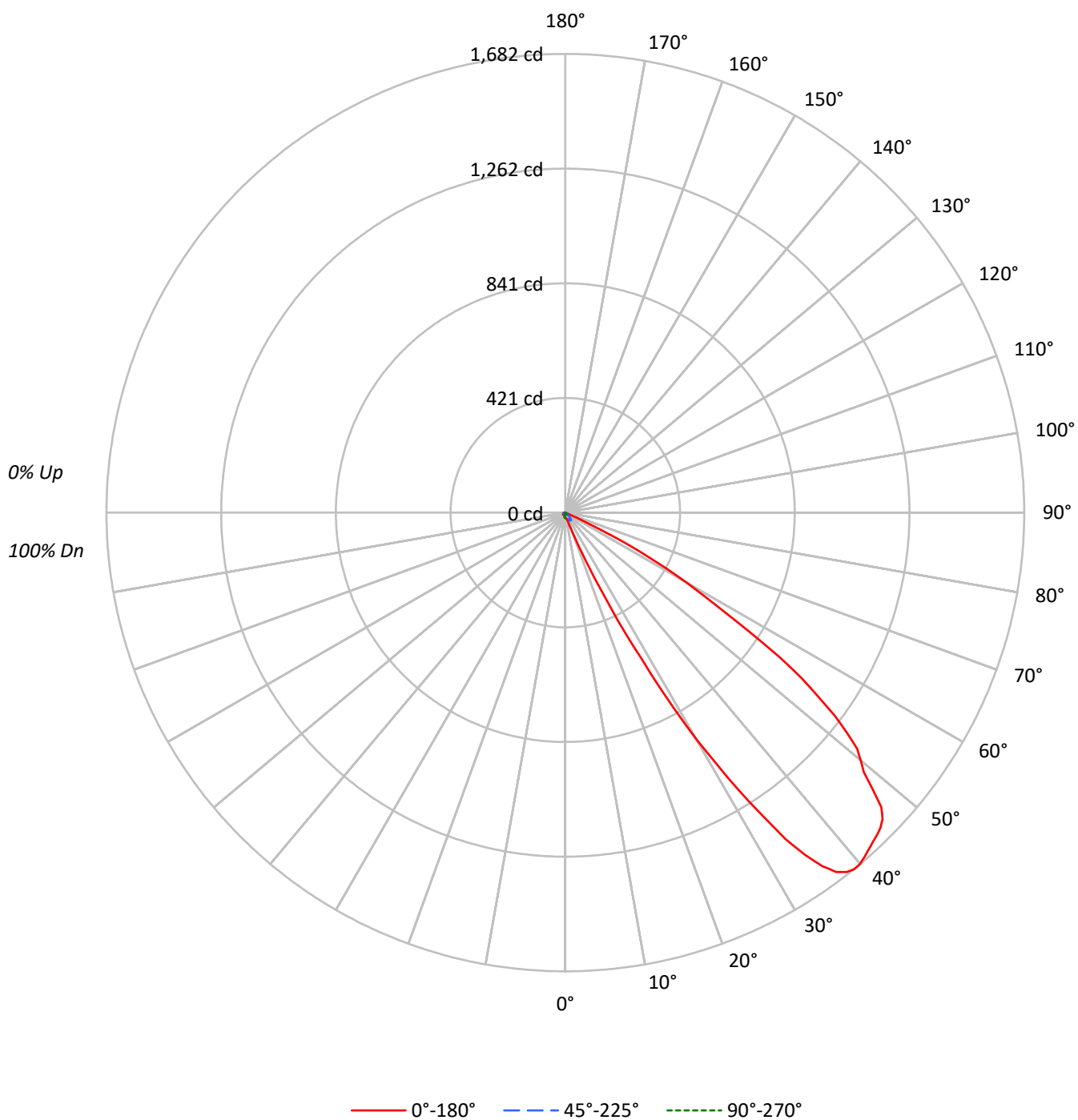
Lumens per Lamp: N/A  
Luminaire Lumens: 419.0 lumens  
Efficiency: N/A  
Efficacy: 34.1 lumens/watt  
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41  
Luminous Opening: Circular (Dia: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 12.3  
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: P1345857

CATALOG NUMBER: P3A13R35W2N902765DE010 E3A451MW\_5000K

### Luminous Intensity Polar Plot





TEST NUMBER: P1345857

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### COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |   |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|---|
| RF  | 20  |     |     |     | 20  |     |     |     | 20  |     |     |     | 20  |     |     |     | 20  |     |  |  |   |
| RC  | 80  |     |     |     | 70  |     |     |     | 50  |     |     |     | 30  |     |     |     | 10  |     |  |  | 0 |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 0   |  |  |   |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |   |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |  |  |   |
| 1   | 110 | 106 | 102 | 99  | 107 | 104 | 100 | 97  | 100 | 97  | 94  | 96  | 93  | 91  | 92  | 90  | 89  | 87  |  |  |   |
| 2   | 100 | 93  | 86  | 81  | 98  | 91  | 85  | 80  | 87  | 83  | 78  | 84  | 80  | 77  | 81  | 78  | 75  | 73  |  |  |   |
| 3   | 91  | 81  | 73  | 67  | 89  | 79  | 72  | 66  | 76  | 70  | 65  | 74  | 68  | 64  | 71  | 67  | 63  | 61  |  |  |   |
| 4   | 83  | 71  | 62  | 55  | 80  | 69  | 61  | 55  | 67  | 60  | 54  | 64  | 58  | 53  | 62  | 57  | 52  | 50  |  |  |   |
| 5   | 75  | 62  | 52  | 46  | 73  | 61  | 52  | 45  | 58  | 51  | 45  | 56  | 50  | 44  | 55  | 49  | 44  | 42  |  |  |   |
| 6   | 68  | 54  | 45  | 38  | 66  | 53  | 44  | 38  | 51  | 43  | 38  | 50  | 43  | 37  | 48  | 42  | 37  | 35  |  |  |   |
| 7   | 62  | 48  | 38  | 32  | 60  | 47  | 38  | 32  | 45  | 37  | 32  | 44  | 37  | 31  | 42  | 36  | 31  | 29  |  |  |   |
| 8   | 57  | 42  | 33  | 27  | 55  | 41  | 33  | 27  | 40  | 32  | 27  | 39  | 32  | 26  | 38  | 31  | 26  | 24  |  |  |   |
| 9   | 52  | 38  | 29  | 23  | 50  | 37  | 29  | 23  | 36  | 28  | 23  | 35  | 28  | 22  | 34  | 27  | 22  | 20  |  |  |   |
| 10  | 48  | 34  | 25  | 19  | 46  | 33  | 25  | 19  | 32  | 25  | 19  | 31  | 24  | 19  | 30  | 24  | 19  | 17  |  |  |   |

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

|     | 0°     | 45°  | 90°  | 135° | 180° |
|-----|--------|------|------|------|------|
| 0°  | 4232   | 4232 | 4232 | 4232 | 4232 |
| 5°  | 4578   | 4490 | 4160 | 3742 | 3654 |
| 10° | 4810   | 4386 | 3696 | 3206 | 3206 |
| 15° | 6879   | 4291 | 2997 | 2747 | 2838 |
| 20° | 17221  | 4597 | 2380 | 2380 | 2637 |
| 25° | 79892  | 5855 | 1839 | 2202 | 2468 |
| 30° | 242873 | 7951 | 1443 | 2000 | 2481 |
| 35° | 410479 | 9209 | 1205 | 1927 | 2436 |
| 40° | 481159 | 9103 | 973  | 1947 | 2605 |
| 45° | 506719 | 6450 | 806  | 2109 | 2822 |
| 50° | 482338 | 3855 | 785  | 2183 | 3104 |
| 55° | 404172 | 1606 | 879  | 2447 | 3632 |
| 60° | 226254 | 351  | 1009 | 2807 | 3991 |
| 65° | 39070  | 208  | 986  | 3165 | 4514 |
| 70° | 705    | 256  | 1218 | 3398 | 5065 |
| 75° | 678    | 339  | 1610 | 3813 | 5761 |
| 80° | 505    | 505  | 1894 | 4293 | 6693 |
| 85° | 0      | 1006 | 3774 | 4780 | 7548 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle:  $46^\circ$

Luminance: 510307 cd/sqm

TEST NUMBER: P1345857

CATALOG NUMBER: P3A13R35W2N902765DE010 E3A451MW\_5000K

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 1.7    | 0.4       |
| 10°-20°   | 4.9    | 1.2       |
| 20°-30°   | 25.7   | 6.1       |
| 30°-40°   | 111.0  | 26.5      |
| 40°-50°   | 158.4  | 37.8      |
| 50°-60°   | 98.1   | 23.4      |
| 60°-70°   | 14.9   | 3.6       |
| 70°-80°   | 2.8    | 0.7       |
| 80°-90°   | 1.4    | 0.3       |
| 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°    | 32.4   | 7.7       |
| 0°-40°    | 143.4  | 34.2      |
| 0°-60°    | 399.9  | 95.4      |
| 0°-90°    | 419.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 419.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0°  | 19   | 19  | 19  | 19   | 19   |      |
| 5°  | 21   | 20  | 19  | 17   | 17   | 2    |
| 15° | 30   | 19  | 13  | 12   | 12   | 11   |
| 25° | 330  | 24  | 8   | 9    | 10   | 198  |
| 35° | 1533 | 34  | 4   | 7    | 9    | 921  |
| 45° | 1634 | 21  | 3   | 7    | 9    | 1234 |
| 55° | 1057 | 4   | 2   | 6    | 10   | 900  |
| 65° | 75   | 0   | 2   | 6    | 9    | 154  |
| 75° | 1    | 0   | 2   | 4    | 7    | 1    |
| 85° | 0    | 0   | 2   | 2    | 3    | 0    |
| 90° | 0    | 0   | 0   | 0    | 0    |      |

TEST NUMBER: P1345857

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 25°   | 30°   | 45°  | 67.5° | 90°  | 112.5° |
|-------|--------|--------|--------|--------|--------|-------|-------|------|-------|------|--------|
| 0°    | 19.3   | 19.3   | 19.3   | 19.3   | 19.3   | 19.3  | 19.3  | 19.3 | 19.3  | 19.3 | 19.3   |
| 2.5°  | 20.0   | 20.0   | 20.0   | 20.0   | 20.0   | 20.0  | 20.0  | 20.0 | 20.0  | 19.3 | 18.9   |
| 5°    | 20.8   | 20.8   | 20.4   | 20.4   | 20.4   | 20.4  | 20.4  | 20.4 | 19.7  | 18.9 | 17.8   |
| 7.5°  | 21.2   | 21.2   | 20.8   | 20.8   | 20.8   | 20.8  | 20.4  | 20.0 | 19.3  | 17.8 | 16.6   |
| 10°   | 21.6   | 21.6   | 21.6   | 21.6   | 21.2   | 20.8  | 20.4  | 19.7 | 18.5  | 16.6 | 15.5   |
| 12.5° | 24.2   | 24.2   | 23.8   | 23.1   | 22.3   | 21.6  | 20.8  | 19.3 | 17.0  | 15.1 | 14.0   |
| 15°   | 30.3   | 29.9   | 29.1   | 28.0   | 26.5   | 24.6  | 23.1  | 18.9 | 15.5  | 13.2 | 12.5   |
| 17.5° | 42.4   | 41.6   | 40.5   | 36.7   | 33.3   | 29.9  | 26.9  | 18.9 | 14.0  | 11.7 | 11.0   |
| 20°   | 73.8   | 74.1   | 66.2   | 57.1   | 49.5   | 41.2  | 33.7  | 19.7 | 12.5  | 10.2 | 9.8    |
| 22.5° | 153.9  | 147.9  | 129.0  | 107.0  | 81.7   | 63.2  | 47.7  | 21.6 | 11.0  | 8.7  | 8.7    |
| 25°   | 330.2  | 307.1  | 261.4  | 197.4  | 139.2  | 98.7  | 69.2  | 24.2 | 9.8   | 7.6  | 7.9    |
| 27.5° | 602.9  | 582.1  | 490.2  | 369.2  | 245.1  | 149.0 | 93.8  | 27.6 | 8.7   | 6.4  | 7.2    |
| 30°   | 959.2  | 901.7  | 781.8  | 605.2  | 409.6  | 228.1 | 126.0 | 31.4 | 7.2   | 5.7  | 6.8    |
| 31°   | 1070.4 | 1043.9 | 897.9  | 700.1  | 480.0  | 270.8 | 139.6 | 32.5 | 6.8   | 5.7  | 6.4    |
| 32°   | 1202.4 | 1155.5 | 1024.6 | 804.1  | 551.5  | 309.0 | 155.8 | 33.7 | 6.4   | 4.9  | 6.4    |
| 33°   | 1320.4 | 1275.0 | 1115.8 | 895.7  | 623.7  | 352.5 | 173.2 | 34.0 | 5.7   | 4.9  | 6.1    |
| 34°   | 1444.5 | 1382.5 | 1224.7 | 991.4  | 697.8  | 399.4 | 189.1 | 34.4 | 5.3   | 4.5  | 6.1    |
| 35°   | 1533.4 | 1471.3 | 1318.5 | 1067.0 | 761.8  | 441.0 | 207.3 | 34.4 | 4.9   | 4.5  | 5.7    |
| 36°   | 1602.2 | 1547.7 | 1399.5 | 1144.9 | 825.3  | 478.5 | 221.6 | 34.4 | 4.2   | 4.2  | 5.7    |
| 37°   | 1649.5 | 1597.7 | 1453.9 | 1211.9 | 873.7  | 511.8 | 234.5 | 34.4 | 3.8   | 4.2  | 5.7    |
| 38°   | 1672.6 | 1629.4 | 1506.5 | 1260.7 | 920.6  | 537.9 | 244.7 | 33.7 | 3.4   | 3.8  | 5.3    |
| 39°   | 1682.4 | 1647.2 | 1538.7 | 1301.9 | 955.8  | 560.5 | 252.3 | 32.9 | 3.0   | 3.8  | 5.3    |
| 40°   | 1680.9 | 1650.2 | 1556.8 | 1330.3 | 984.2  | 576.1 | 256.4 | 31.8 | 2.6   | 3.4  | 5.3    |
| 41°   | 1672.2 | 1645.7 | 1566.3 | 1354.5 | 1001.2 | 586.6 | 257.6 | 30.6 | 2.3   | 3.4  | 4.9    |
| 42°   | 1662.4 | 1638.1 | 1569.3 | 1367.3 | 1012.2 | 590.1 | 254.6 | 29.1 | 2.3   | 3.0  | 4.9    |
| 43°   | 1652.1 | 1629.8 | 1569.3 | 1371.5 | 1014.8 | 587.8 | 249.6 | 26.5 | 1.9   | 3.0  | 4.9    |
| 44°   | 1643.8 | 1622.6 | 1564.4 | 1370.4 | 1009.1 | 579.1 | 240.6 | 23.5 | 1.5   | 3.0  | 4.9    |
| 45°   | 1634.0 | 1613.2 | 1558.0 | 1363.2 | 998.2  | 564.3 | 229.2 | 20.8 | 1.1   | 2.6  | 4.9    |
| 46°   | 1616.6 | 1600.3 | 1546.6 | 1348.4 | 980.8  | 543.9 | 214.8 | 18.9 | 0.8   | 2.6  | 4.5    |
| 47°   | 1582.9 | 1568.9 | 1524.7 | 1326.5 | 957.7  | 519.7 | 200.1 | 17.0 | 0.8   | 2.6  | 4.5    |
| 48°   | 1515.2 | 1514.8 | 1480.8 | 1285.6 | 921.0  | 489.4 | 184.6 | 15.1 | 0.8   | 2.6  | 4.5    |
| 49°   | 1449.8 | 1443.0 | 1400.6 | 1213.8 | 868.4  | 453.1 | 168.3 | 13.6 | 0.4   | 2.6  | 4.5    |
| 50°   | 1413.9 | 1399.1 | 1329.5 | 1129.0 | 801.1  | 402.8 | 150.9 | 11.3 | 0.4   | 2.3  | 4.5    |
| 51°   | 1376.4 | 1355.2 | 1273.1 | 1052.6 | 720.9  | 354.4 | 132.0 | 9.1  | 0.4   | 2.3  | 4.2    |
| 52°   | 1308.7 | 1288.7 | 1196.7 | 979.6  | 643.0  | 304.9 | 113.8 | 7.6  | 0.4   | 2.3  | 4.5    |
| 53°   | 1235.7 | 1207.0 | 1107.1 | 899.4  | 574.5  | 261.0 | 95.3  | 6.4  | 0.4   | 2.3  | 4.2    |
| 54°   | 1143.8 | 1130.9 | 1016.3 | 801.1  | 494.4  | 218.6 | 78.3  | 5.3  | 0.4   | 2.3  | 4.2    |
| 55°   | 1057.2 | 1038.3 | 919.1  | 700.5  | 421.7  | 179.3 | 65.4  | 4.2  | 0.4   | 2.3  | 4.2    |
| 56°   | 946.7  | 918.4  | 806.8  | 608.2  | 348.0  | 144.5 | 55.2  | 3.4  | 0.4   | 2.3  | 4.2    |
| 57°   | 815.1  | 784.8  | 696.7  | 505.7  | 273.1  | 110.1 | 46.1  | 2.6  | 0.4   | 2.3  | 4.2    |
| 58°   | 689.5  | 663.4  | 568.9  | 390.3  | 205.8  | 76.4  | 38.2  | 1.9  | 0.4   | 1.9  | 4.2    |
| 59°   | 595.7  | 567.0  | 473.2  | 300.3  | 143.0  | 56.4  | 28.7  | 1.5  | 0.4   | 2.3  | 4.2    |
| 60°   | 515.9  | 478.8  | 380.9  | 232.6  | 102.1  | 40.5  | 21.2  | 0.8  | 0.8   | 2.3  | 4.2    |
| 62.5° | 297.3  | 262.5  | 181.9  | 94.6   | 42.0   | 20.8  | 10.2  | 0.4  | 0.8   | 2.3  | 4.2    |
| 65°   | 75.3   | 66.9   | 43.5   | 20.4   | 11.7   | 7.2   | 3.8   | 0.4  | 0.8   | 1.9  | 3.8    |



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**CANDELA DISTRIBUTION (continued):**

|       | 0°  | 5°  | 10° | 15° | 20° | 25° | 30° | 45° | 67.5° | 90° | 112.5° |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-------|-----|--------|
| 67.5° | 2.6 | 2.6 | 2.6 | 2.3 | 1.9 | 1.5 | 0.8 | 0.4 | 0.8   | 1.9 | 3.8    |
| 70°   | 1.1 | 1.1 | 1.1 | 0.8 | 0.8 | 0.4 | 0.4 | 0.4 | 0.8   | 1.9 | 3.4    |
| 72.5° | 0.8 | 0.8 | 0.8 | 0.8 | 0.4 | 0.4 | 0.4 | 0.4 | 1.1   | 1.9 | 3.0    |
| 75°   | 0.8 | 0.8 | 0.8 | 0.8 | 0.4 | 0.4 | 0.4 | 0.4 | 1.1   | 1.9 | 3.0    |
| 77.5° | 0.8 | 0.8 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 1.1   | 1.5 | 2.6    |
| 80°   | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 1.1   | 1.5 | 2.3    |
| 82.5° | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 1.1   | 1.5 | 1.9    |
| 85°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.0 | 0.4 | 1.1   | 1.5 | 1.5    |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 1.1   | 1.5 | 1.1    |
| 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: P1345857

CATALOG NUMBER: P3A13R35W2N902765DE010 E3A451MW\_5000K

**CANDELA DISTRIBUTION (continued):**

|       | 135° | 157.5° | 180° |
|-------|------|--------|------|
| 0°    | 19.3 | 19.3   | 19.3 |
| 2.5°  | 18.2 | 18.2   | 18.2 |
| 5°    | 17.0 | 17.0   | 16.6 |
| 7.5°  | 15.9 | 15.5   | 15.5 |
| 10°   | 14.4 | 14.4   | 14.4 |
| 12.5° | 13.2 | 13.2   | 13.2 |
| 15°   | 12.1 | 12.5   | 12.5 |
| 17.5° | 11.0 | 11.7   | 11.7 |
| 20°   | 10.2 | 11.0   | 11.3 |
| 22.5° | 9.5  | 10.2   | 10.6 |
| 25°   | 9.1  | 9.8    | 10.2 |
| 27.5° | 8.3  | 9.5    | 10.2 |
| 30°   | 7.9  | 9.1    | 9.8  |
| 31°   | 7.9  | 9.1    | 9.5  |
| 32°   | 7.6  | 9.1    | 9.5  |
| 33°   | 7.6  | 9.1    | 9.5  |
| 34°   | 7.6  | 8.7    | 9.5  |
| 35°   | 7.2  | 8.7    | 9.1  |
| 36°   | 7.2  | 8.7    | 9.1  |
| 37°   | 7.2  | 8.7    | 9.5  |
| 38°   | 7.2  | 8.7    | 9.1  |
| 39°   | 6.8  | 8.7    | 9.1  |
| 40°   | 6.8  | 8.7    | 9.1  |
| 41°   | 6.8  | 8.7    | 9.1  |
| 42°   | 6.8  | 8.7    | 9.1  |
| 43°   | 6.8  | 8.7    | 9.1  |
| 44°   | 6.8  | 8.3    | 9.1  |
| 45°   | 6.8  | 8.3    | 9.1  |
| 46°   | 6.8  | 8.7    | 9.1  |
| 47°   | 6.8  | 8.7    | 9.5  |
| 48°   | 6.8  | 8.3    | 9.1  |
| 49°   | 6.4  | 8.3    | 9.1  |
| 50°   | 6.4  | 8.3    | 9.1  |
| 51°   | 6.4  | 8.7    | 9.5  |
| 52°   | 6.4  | 8.7    | 9.5  |
| 53°   | 6.4  | 8.7    | 9.5  |
| 54°   | 6.4  | 8.7    | 9.1  |
| 55°   | 6.4  | 8.7    | 9.5  |
| 56°   | 6.4  | 8.7    | 9.1  |
| 57°   | 6.4  | 8.7    | 9.1  |
| 58°   | 6.4  | 8.3    | 9.1  |
| 59°   | 6.4  | 8.3    | 9.1  |
| 60°   | 6.4  | 8.3    | 9.1  |
| 62.5° | 6.1  | 8.3    | 9.1  |
| 65°   | 6.1  | 7.9    | 8.7  |



TEST NUMBER: P1345857

CATALOG NUMBER: P3A13R35W2N902765DE010 E3A451MW\_5000K

**CANDELA DISTRIBUTION (continued):**

|       | 135° | 157.5° | 180° |
|-------|------|--------|------|
| 67.5° | 5.7  | 7.9    | 8.3  |
| 70°   | 5.3  | 7.6    | 7.9  |
| 72.5° | 4.9  | 7.2    | 7.6  |
| 75°   | 4.5  | 6.4    | 6.8  |
| 77.5° | 3.8  | 5.7    | 6.4  |
| 80°   | 3.4  | 4.9    | 5.3  |
| 82.5° | 2.6  | 4.2    | 4.5  |
| 85°   | 1.9  | 3.0    | 3.0  |
| 87.5° | 0.8  | 1.5    | 1.5  |
| 90°   | 0.0  | 0.0    | 0.0  |

(END OF REPORT)