

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: P1338416

Luminaire Tested: P3A05R359727DE010 E3CA451MB

Issue Date: 2/13/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1338416  
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: P3A05R359727DE010 E3CA451MB  
Description: 3in Adjustable LED luminaire with, R35 optic, 2700K CCT AND, 97CRI , E3CA451MB TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

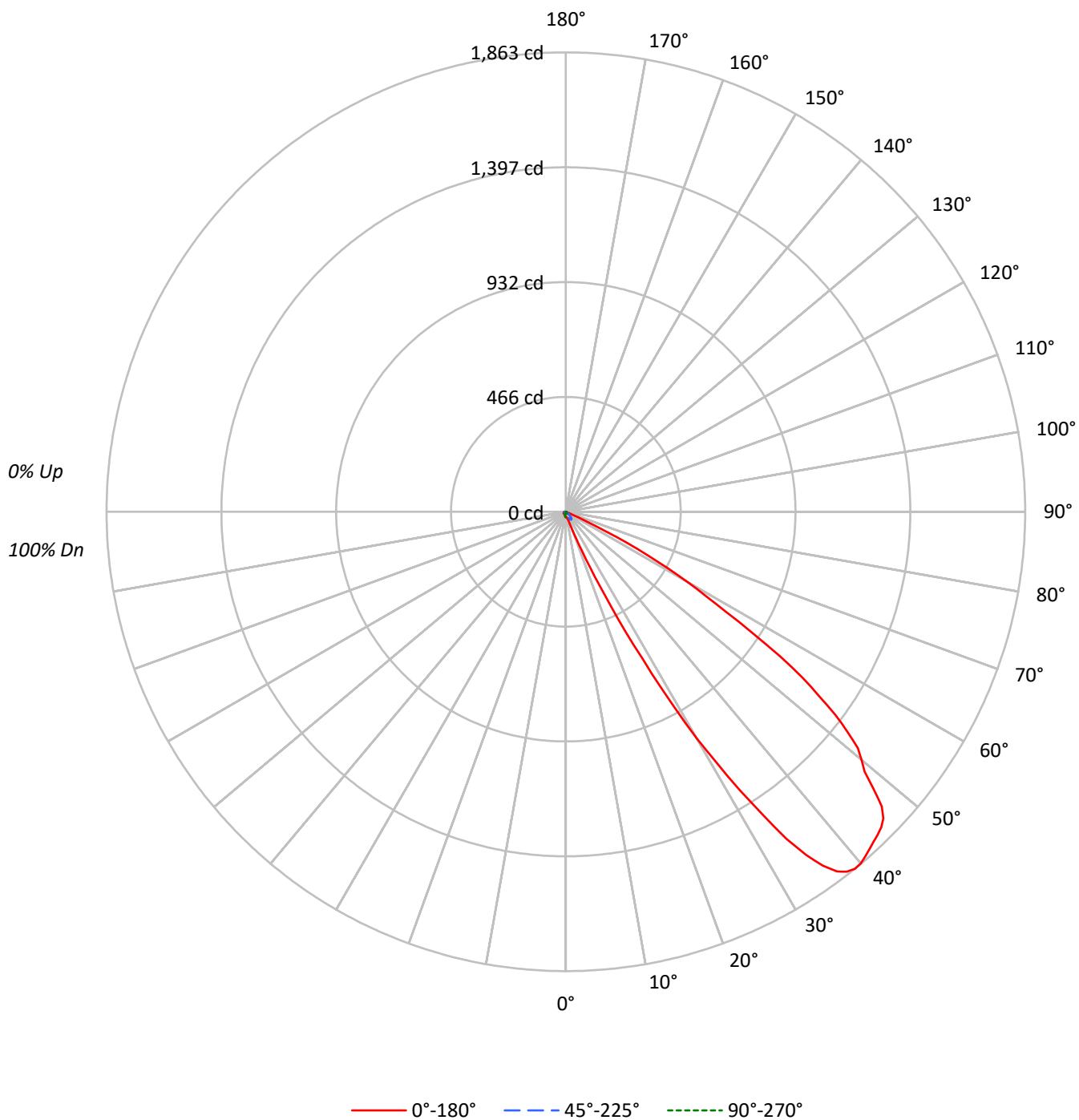
Lumens per Lamp: N/A  
Luminaire Lumens: 464.0 lumens  
Efficiency: N/A  
Efficacy: 64.4 lumens/watt  
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41  
Luminous Opening: Circular (Dia: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 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: P1338416

CATALOG NUMBER: P3A05R359727DE010 E3CA451MB

### Luminous Intensity Polar Plot



TEST NUMBER: P1338416

CATALOG NUMBER: P3A05R359727DE010 E3CA451MB

**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°  | 4693   | 4693  | 4693 | 4693 | 4693 |
| 5°  | 5063   | 4975  | 4600 | 4138 | 4050 |
| 10° | 5322   | 4854  | 4097 | 3540 | 3540 |
| 15° | 7605   | 4745  | 3337 | 3042 | 3133 |
| 20° | 19065  | 5087  | 2637 | 2637 | 2940 |
| 25° | 88481  | 6484  | 2032 | 2444 | 2734 |
| 30° | 268953 | 8811  | 1595 | 2228 | 2760 |
| 35° | 454568 | 10199 | 1338 | 2142 | 2704 |
| 40° | 532827 | 10076 | 1088 | 2147 | 2891 |
| 45° | 561144 | 7133  | 899  | 2326 | 3132 |
| 50° | 534123 | 4298  | 853  | 2422 | 3446 |
| 55° | 447564 | 1759  | 956  | 2714 | 4014 |
| 60° | 250550 | 351   | 1096 | 3114 | 4429 |
| 65° | 43273  | 208   | 1090 | 3476 | 4981 |
| 70° | 833    | 256   | 1346 | 3783 | 5642 |
| 75° | 678    | 339   | 1779 | 4236 | 6354 |
| 80° | 505    | 505   | 2147 | 4799 | 7450 |
| 85° | 0      | 1006  | 4277 | 5284 | 8554 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 565107 cd/sqm

TEST NUMBER: P1338416

CATALOG NUMBER: P3A05R359727DE010 E3CA451MB

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 1.9    | 0.4       |
| 10°-20°   | 5.5    | 1.2       |
| 20°-30°   | 28.5   | 6.1       |
| 30°-40°   | 123.0  | 26.5      |
| 40°-50°   | 175.4  | 37.8      |
| 50°-60°   | 108.6  | 23.4      |
| 60°-70°   | 16.5   | 3.6       |
| 70°-80°   | 3.1    | 0.7       |
| 80°-90°   | 1.6    | 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°    | 35.9   | 7.7       |
| 0°-40°    | 158.8  | 34.2      |
| 0°-60°    | 442.8  | 95.4      |
| 0°-90°    | 464.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 464.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0°  | 21   | 21  | 21  | 21   | 21   |      |
| 5°  | 23   | 23  | 21  | 19   | 18   | 2    |
| 15° | 34   | 21  | 15  | 13   | 14   | 12   |
| 25° | 366  | 27  | 8   | 10   | 11   | 219  |
| 35° | 1698 | 38  | 5   | 8    | 10   | 1020 |
| 45° | 1810 | 23  | 3   | 8    | 10   | 1367 |
| 55° | 1171 | 5   | 2   | 7    | 10   | 997  |
| 65° | 83   | 0   | 2   | 7    | 10   | 170  |
| 75° | 1    | 0   | 2   | 5    | 8    | 1    |
| 85° | 0    | 0   | 2   | 2    | 3    | 0    |
| 90° | 0    | 0   | 0   | 0    | 0    |      |

TEST NUMBER: P1338416

CATALOG NUMBER: P3A05R359727DE010 E3CA451MB

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 25°   | 30°   | 45°  | 67.5° | 90°  | 112.5° |
|-------|--------|--------|--------|--------|--------|-------|-------|------|-------|------|--------|
| 0°    | 21.4   | 21.4   | 21.4   | 21.4   | 21.4   | 21.4  | 21.4  | 21.4 | 21.4  | 21.4 | 21.4   |
| 2.5°  | 22.2   | 22.2   | 22.2   | 22.2   | 22.2   | 22.2  | 22.2  | 22.2 | 22.2  | 21.4 | 20.9   |
| 5°    | 23.0   | 23.0   | 22.6   | 22.6   | 22.6   | 22.6  | 22.6  | 22.6 | 21.8  | 20.9 | 19.7   |
| 7.5°  | 23.5   | 23.5   | 23.0   | 23.0   | 23.0   | 23.0  | 22.6  | 22.2 | 21.4  | 19.7 | 18.4   |
| 10°   | 23.9   | 23.9   | 23.9   | 23.9   | 23.5   | 23.0  | 22.6  | 21.8 | 20.5  | 18.4 | 17.2   |
| 12.5° | 26.8   | 26.8   | 26.4   | 25.6   | 24.7   | 23.9  | 23.0  | 21.4 | 18.8  | 16.8 | 15.5   |
| 15°   | 33.5   | 33.1   | 32.3   | 31.0   | 29.3   | 27.2  | 25.6  | 20.9 | 17.2  | 14.7 | 13.8   |
| 17.5° | 46.9   | 46.1   | 44.8   | 40.6   | 36.9   | 33.1  | 29.7  | 20.9 | 15.5  | 13.0 | 12.1   |
| 20°   | 81.7   | 82.1   | 73.3   | 63.2   | 54.9   | 45.7  | 37.3  | 21.8 | 13.8  | 11.3 | 10.9   |
| 22.5° | 170.5  | 163.8  | 142.8  | 118.5  | 90.5   | 69.9  | 52.8  | 23.9 | 12.1  | 9.6  | 9.6    |
| 25°   | 365.7  | 340.1  | 289.4  | 218.6  | 154.1  | 109.3 | 76.7  | 26.8 | 10.9  | 8.4  | 8.8    |
| 27.5° | 667.7  | 644.6  | 542.8  | 408.8  | 271.4  | 165.0 | 103.9 | 30.6 | 9.6   | 7.1  | 8.0    |
| 30°   | 1062.2 | 998.6  | 865.8  | 670.2  | 453.6  | 252.6 | 139.5 | 34.8 | 8.0   | 6.3  | 7.5    |
| 31°   | 1185.4 | 1156.1 | 994.4  | 775.3  | 531.5  | 299.9 | 154.6 | 36.0 | 7.5   | 6.3  | 7.1    |
| 32°   | 1331.6 | 1279.6 | 1134.7 | 890.5  | 610.7  | 342.2 | 172.6 | 37.3 | 7.1   | 5.4  | 7.1    |
| 33°   | 1462.2 | 1412.0 | 1235.6 | 991.9  | 690.7  | 390.4 | 191.8 | 37.7 | 6.3   | 5.4  | 6.7    |
| 34°   | 1599.6 | 1530.9 | 1356.3 | 1097.8 | 772.8  | 442.3 | 209.4 | 38.1 | 5.9   | 5.0  | 6.7    |
| 35°   | 1698.1 | 1629.4 | 1460.1 | 1181.6 | 843.6  | 488.4 | 229.5 | 38.1 | 5.4   | 5.0  | 6.3    |
| 36°   | 1774.3 | 1714.0 | 1549.8 | 1267.9 | 914.0  | 529.9 | 245.5 | 38.1 | 4.6   | 4.6  | 6.3    |
| 37°   | 1826.6 | 1769.3 | 1610.1 | 1342.0 | 967.6  | 566.7 | 259.7 | 38.1 | 4.2   | 4.6  | 6.3    |
| 38°   | 1852.2 | 1804.4 | 1668.3 | 1396.1 | 1019.5 | 595.6 | 271.0 | 37.3 | 3.8   | 4.2  | 5.9    |
| 39°   | 1863.1 | 1824.1 | 1703.9 | 1441.7 | 1058.5 | 620.7 | 279.4 | 36.4 | 3.4   | 4.2  | 5.9    |
| 40°   | 1861.4 | 1827.5 | 1724.0 | 1473.1 | 1089.9 | 637.9 | 284.0 | 35.2 | 2.9   | 3.8  | 5.9    |
| 41°   | 1851.8 | 1822.5 | 1734.5 | 1499.9 | 1108.7 | 649.7 | 285.2 | 33.9 | 2.5   | 3.8  | 5.4    |
| 42°   | 1840.9 | 1814.1 | 1737.8 | 1514.2 | 1120.9 | 653.4 | 281.9 | 32.3 | 2.5   | 3.4  | 5.4    |
| 43°   | 1829.6 | 1804.9 | 1737.8 | 1518.8 | 1123.8 | 650.9 | 276.4 | 29.3 | 2.1   | 3.4  | 5.4    |
| 44°   | 1820.4 | 1796.9 | 1732.4 | 1517.5 | 1117.5 | 641.3 | 266.4 | 26.0 | 1.7   | 3.4  | 5.4    |
| 45°   | 1809.5 | 1786.4 | 1725.3 | 1509.6 | 1105.4 | 624.9 | 253.8 | 23.0 | 1.3   | 2.9  | 5.4    |
| 46°   | 1790.2 | 1772.2 | 1712.7 | 1493.2 | 1086.1 | 602.3 | 237.9 | 20.9 | 0.8   | 2.9  | 5.0    |
| 47°   | 1752.9 | 1737.4 | 1688.4 | 1468.9 | 1060.6 | 575.5 | 221.6 | 18.8 | 0.8   | 2.9  | 5.0    |
| 48°   | 1678.0 | 1677.5 | 1639.8 | 1423.7 | 1019.9 | 542.0 | 204.4 | 16.8 | 0.8   | 2.9  | 5.0    |
| 49°   | 1605.5 | 1597.9 | 1551.0 | 1344.1 | 961.7  | 501.8 | 186.4 | 15.1 | 0.4   | 2.9  | 5.0    |
| 50°   | 1565.7 | 1549.4 | 1472.3 | 1250.3 | 887.1  | 446.1 | 167.1 | 12.6 | 0.4   | 2.5  | 5.0    |
| 51°   | 1524.2 | 1500.8 | 1409.9 | 1165.7 | 798.3  | 392.5 | 146.2 | 10.1 | 0.4   | 2.5  | 4.6    |
| 52°   | 1449.3 | 1427.1 | 1325.3 | 1084.8 | 712.1  | 337.6 | 126.1 | 8.4  | 0.4   | 2.5  | 5.0    |
| 53°   | 1368.4 | 1336.6 | 1226.0 | 996.0  | 636.2  | 289.0 | 105.6 | 7.1  | 0.4   | 2.5  | 4.6    |
| 54°   | 1266.6 | 1252.4 | 1125.5 | 887.1  | 547.4  | 242.1 | 86.7  | 5.9  | 0.4   | 2.5  | 4.6    |
| 55°   | 1170.7 | 1149.8 | 1017.8 | 775.7  | 467.0  | 198.5 | 72.5  | 4.6  | 0.4   | 2.5  | 4.6    |
| 56°   | 1048.4 | 1017.0 | 893.4  | 673.5  | 385.4  | 160.0 | 61.2  | 3.8  | 0.4   | 2.5  | 4.6    |
| 57°   | 902.6  | 869.1  | 771.5  | 560.0  | 302.4  | 121.9 | 51.1  | 2.9  | 0.4   | 2.5  | 4.6    |
| 58°   | 763.6  | 734.7  | 630.0  | 432.3  | 227.9  | 84.6  | 42.3  | 2.1  | 0.4   | 2.1  | 4.6    |
| 59°   | 659.7  | 627.9  | 524.0  | 332.6  | 158.3  | 62.4  | 31.8  | 1.7  | 0.4   | 2.5  | 4.6    |
| 60°   | 571.3  | 530.3  | 421.8  | 257.6  | 113.1  | 44.8  | 23.5  | 0.8  | 0.8   | 2.5  | 4.6    |
| 62.5° | 329.2  | 290.7  | 201.5  | 104.7  | 46.5   | 23.0  | 11.3  | 0.4  | 0.8   | 2.5  | 4.6    |
| 65°   | 83.4   | 74.1   | 48.2   | 22.6   | 13.0   | 8.0   | 4.2   | 0.4  | 0.8   | 2.1  | 4.2    |



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**CANDELA DISTRIBUTION (continued):**

|       | 0°  | 5°  | 10° | 15° | 20° | 25° | 30° | 45° | 67.5° | 90° | 112.5° |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-------|-----|--------|
| 67.5° | 2.9 | 2.9 | 2.9 | 2.5 | 2.1 | 1.7 | 0.8 | 0.4 | 0.8   | 2.1 | 4.2    |
| 70°   | 1.3 | 1.3 | 1.3 | 0.8 | 0.8 | 0.4 | 0.4 | 0.4 | 0.8   | 2.1 | 3.8    |
| 72.5° | 0.8 | 0.8 | 0.8 | 0.8 | 0.4 | 0.4 | 0.4 | 0.4 | 1.3   | 2.1 | 3.4    |
| 75°   | 0.8 | 0.8 | 0.8 | 0.8 | 0.4 | 0.4 | 0.4 | 0.4 | 1.3   | 2.1 | 3.4    |
| 77.5° | 0.8 | 0.8 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 1.3   | 1.7 | 2.9    |
| 80°   | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 1.3   | 1.7 | 2.5    |
| 82.5° | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 1.3   | 1.7 | 2.1    |
| 85°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.0 | 0.4 | 1.3   | 1.7 | 1.7    |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 1.3   | 1.7 | 1.3    |
| 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: P1338416

CATALOG NUMBER: P3A05R359727DE010 E3CA451MB

**CANDELA DISTRIBUTION (continued):**

|       | 135° | 157.5° | 180° |
|-------|------|--------|------|
| 0°    | 21.4 | 21.4   | 21.4 |
| 2.5°  | 20.1 | 20.1   | 20.1 |
| 5°    | 18.8 | 18.8   | 18.4 |
| 7.5°  | 17.6 | 17.2   | 17.2 |
| 10°   | 15.9 | 15.9   | 15.9 |
| 12.5° | 14.7 | 14.7   | 14.7 |
| 15°   | 13.4 | 13.8   | 13.8 |
| 17.5° | 12.1 | 13.0   | 13.0 |
| 20°   | 11.3 | 12.1   | 12.6 |
| 22.5° | 10.5 | 11.3   | 11.7 |
| 25°   | 10.1 | 10.9   | 11.3 |
| 27.5° | 9.2  | 10.5   | 11.3 |
| 30°   | 8.8  | 10.1   | 10.9 |
| 31°   | 8.8  | 10.1   | 10.5 |
| 32°   | 8.4  | 10.1   | 10.5 |
| 33°   | 8.4  | 10.1   | 10.5 |
| 34°   | 8.4  | 9.6    | 10.5 |
| 35°   | 8.0  | 9.6    | 10.1 |
| 36°   | 8.0  | 9.6    | 10.1 |
| 37°   | 8.0  | 9.6    | 10.5 |
| 38°   | 8.0  | 9.6    | 10.1 |
| 39°   | 7.5  | 9.6    | 10.1 |
| 40°   | 7.5  | 9.6    | 10.1 |
| 41°   | 7.5  | 9.6    | 10.1 |
| 42°   | 7.5  | 9.6    | 10.1 |
| 43°   | 7.5  | 9.6    | 10.1 |
| 44°   | 7.5  | 9.2    | 10.1 |
| 45°   | 7.5  | 9.2    | 10.1 |
| 46°   | 7.5  | 9.6    | 10.1 |
| 47°   | 7.5  | 9.6    | 10.5 |
| 48°   | 7.5  | 9.2    | 10.1 |
| 49°   | 7.1  | 9.2    | 10.1 |
| 50°   | 7.1  | 9.2    | 10.1 |
| 51°   | 7.1  | 9.6    | 10.5 |
| 52°   | 7.1  | 9.6    | 10.5 |
| 53°   | 7.1  | 9.6    | 10.5 |
| 54°   | 7.1  | 9.6    | 10.1 |
| 55°   | 7.1  | 9.6    | 10.5 |
| 56°   | 7.1  | 9.6    | 10.1 |
| 57°   | 7.1  | 9.6    | 10.1 |
| 58°   | 7.1  | 9.2    | 10.1 |
| 59°   | 7.1  | 9.2    | 10.1 |
| 60°   | 7.1  | 9.2    | 10.1 |
| 62.5° | 6.7  | 9.2    | 10.1 |
| 65°   | 6.7  | 8.8    | 9.6  |



TEST NUMBER: P1338416

CATALOG NUMBER: P3A05R359727DE010 E3CA451MB

**CANDELA DISTRIBUTION (continued):**

|       | 135° | 157.5° | 180° |
|-------|------|--------|------|
| 67.5° | 6.3  | 8.8    | 9.2  |
| 70°   | 5.9  | 8.4    | 8.8  |
| 72.5° | 5.4  | 8.0    | 8.4  |
| 75°   | 5.0  | 7.1    | 7.5  |
| 77.5° | 4.2  | 6.3    | 7.1  |
| 80°   | 3.8  | 5.4    | 5.9  |
| 82.5° | 2.9  | 4.6    | 5.0  |
| 85°   | 2.1  | 3.4    | 3.4  |
| 87.5° | 0.8  | 1.7    | 1.7  |
| 90°   | 0.0  | 0.0    | 0.0  |

(END OF REPORT)