

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: PORTFOLIO

Report Number: P1315159

Luminaire Tested: LDSQA3D02R409735DE010 3LSQCA45R 1MW

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1315159  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-78)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/29/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PORTFOLIO  
Catalog Number: LDSQA3D02R409735DE010 3LSQCA45R 1MW  
Description: 3in Adjustable LED luminaire with, R40 optic, 3500K CCT AND, 97CRI , 3LSQCA45R 1MW TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

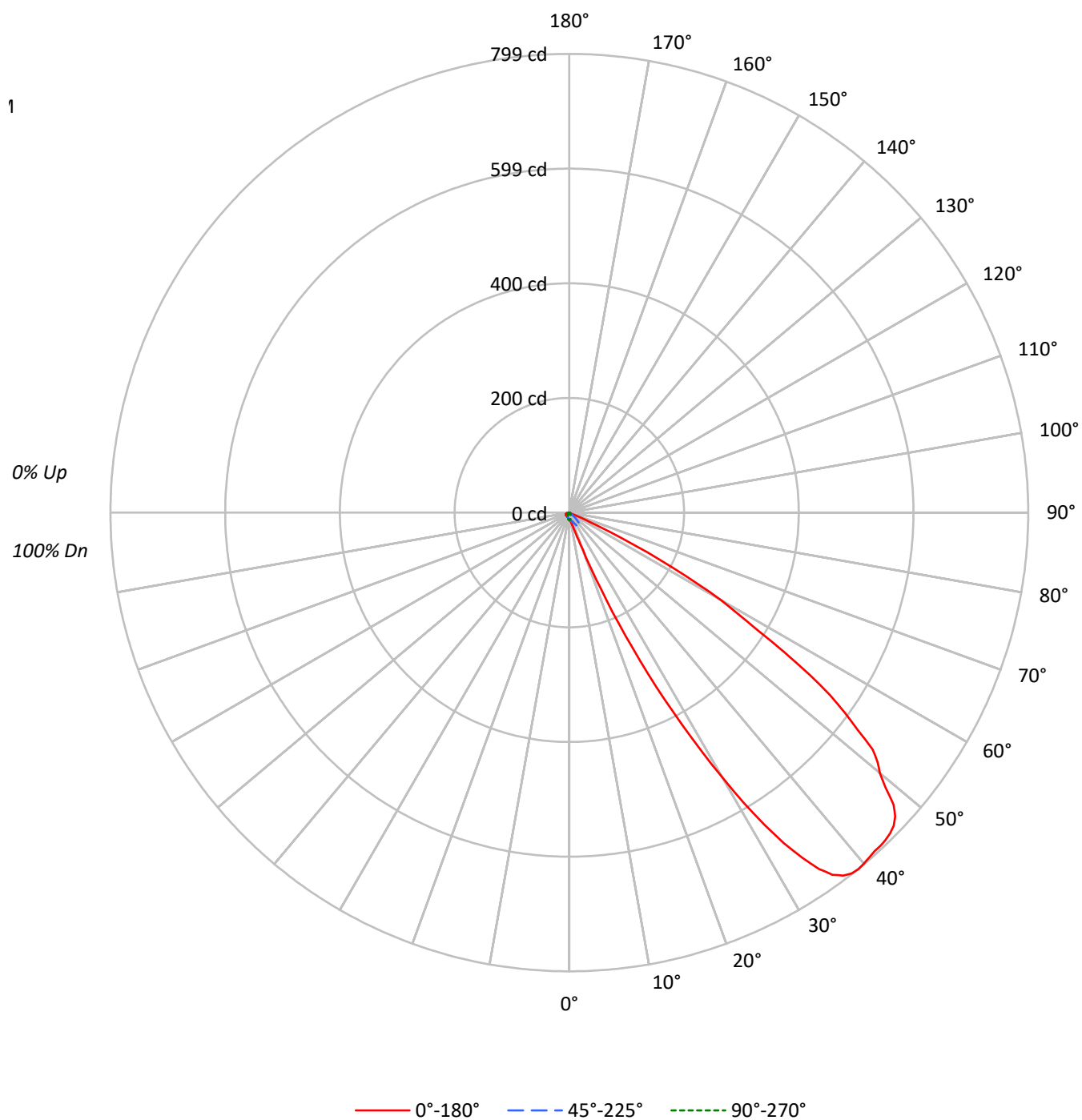
Lumens per Lamp: N/A  
Luminaire Lumens: 247.0 lumens  
Efficiency: N/A  
Efficacy: 68.6 lumens/watt  
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.54  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 3.6  
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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### Luminous Intensity Polar Plot



TEST NUMBER: P1315159

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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  | 30  | 10  | 50  | 30  | 10  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 102 | 102 | 100 |
| 1   | 110 | 106 | 102 | 99  | 107 | 104 | 100 | 97  | 99  | 97  | 94  | 96  | 93  | 91  | 92  | 90  | 88  | 88  | 88  | 86  |
| 2   | 100 | 93  | 86  | 81  | 98  | 91  | 85  | 80  | 87  | 82  | 78  | 84  | 80  | 76  | 81  | 78  | 75  | 75  | 75  | 72  |
| 3   | 91  | 81  | 73  | 66  | 89  | 79  | 72  | 66  | 76  | 70  | 65  | 73  | 68  | 64  | 71  | 66  | 62  | 62  | 62  | 60  |
| 4   | 82  | 70  | 62  | 55  | 80  | 69  | 61  | 54  | 67  | 59  | 54  | 64  | 58  | 53  | 62  | 57  | 52  | 52  | 52  | 50  |
| 5   | 75  | 62  | 52  | 46  | 73  | 60  | 52  | 45  | 58  | 51  | 45  | 56  | 50  | 44  | 54  | 49  | 44  | 44  | 44  | 42  |
| 6   | 68  | 54  | 45  | 38  | 66  | 53  | 44  | 38  | 51  | 43  | 38  | 50  | 43  | 37  | 48  | 42  | 37  | 37  | 37  | 35  |
| 7   | 62  | 48  | 39  | 32  | 60  | 47  | 38  | 32  | 45  | 37  | 32  | 44  | 37  | 31  | 42  | 36  | 31  | 31  | 31  | 29  |
| 8   | 57  | 42  | 33  | 27  | 55  | 42  | 33  | 27  | 40  | 32  | 27  | 39  | 32  | 27  | 38  | 31  | 26  | 26  | 26  | 24  |
| 9   | 52  | 38  | 29  | 23  | 51  | 37  | 29  | 23  | 36  | 28  | 23  | 35  | 28  | 23  | 34  | 27  | 23  | 23  | 23  | 21  |
| 10  | 48  | 34  | 25  | 20  | 47  | 33  | 25  | 20  | 32  | 25  | 20  | 31  | 24  | 20  | 30  | 24  | 19  | 19  | 19  | 18  |

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

|     | 0°     | 45°  | 90°  | 135° | 180° |
|-----|--------|------|------|------|------|
| 0°  | 2187   | 2187 | 2187 | 2187 | 2187 |
| 5°  | 2438   | 2351 | 2161 | 1954 | 1919 |
| 10° | 2938   | 2501 | 1976 | 1784 | 1749 |
| 15° | 4814   | 2710 | 1694 | 1569 | 1623 |
| 20° | 12719  | 3207 | 1411 | 1411 | 1540 |
| 25° | 49046  | 3972 | 1121 | 1292 | 1501 |
| 30° | 105836 | 5270 | 895  | 1273 | 1491 |
| 35° | 159282 | 6244 | 757  | 1240 | 1535 |
| 40° | 179452 | 6272 | 652  | 1281 | 1641 |
| 45° | 192436 | 4871 | 609  | 1315 | 1778 |
| 50° | 189132 | 3028 | 536  | 1393 | 1956 |
| 55° | 166405 | 1501 | 540  | 1561 | 2192 |
| 60° | 105331 | 310  | 620  | 1722 | 2411 |
| 65° | 21557  | 82   | 652  | 1834 | 2690 |
| 70° | 453    | 101  | 705  | 2065 | 3072 |
| 75° | 466    | 333  | 732  | 2262 | 3460 |
| 80° | 496    | 198  | 893  | 2479 | 4066 |
| 85° | 395    | 395  | 1778 | 2766 | 4545 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 195910 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 1.2    | 0.5       |
| 10°-20°   | 3.9    | 1.6       |
| 20°-30°   | 19.2   | 7.8       |
| 30°-40°   | 62.4   | 25.3      |
| 40°-50°   | 86.0   | 34.8      |
| 50°-60°   | 59.9   | 24.3      |
| 60°-70°   | 11.4   | 4.6       |
| 70°-80°   | 2.1    | 0.8       |
| 80°-90°   | 0.9    | 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°    | 24.3   | 9.8       |
| 0°-40°    | 86.7   | 35.1      |
| 0°-60°    | 232.6  | 94.2      |
| 0°-90°    | 247.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 247.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 45° | 90° | 135° | 180° | Flux |
|-----|-----|-----|-----|------|------|------|
| 0°  | 13  | 13  | 13  | 13   | 13   |      |
| 5°  | 14  | 14  | 12  | 11   | 11   | 1    |
| 15° | 27  | 15  | 10  | 9    | 9    | 10   |
| 25° | 258 | 21  | 6   | 7    | 8    | 133  |
| 35° | 758 | 30  | 4   | 6    | 7    | 458  |
| 45° | 790 | 20  | 2   | 5    | 7    | 601  |
| 55° | 554 | 5   | 2   | 5    | 7    | 474  |
| 65° | 53  | 0   | 2   | 4    | 7    | 93   |
| 75° | 1   | 0   | 1   | 3    | 5    | 1    |
| 85° | 0   | 0   | 1   | 1    | 2    | 0    |
| 90° | 0   | 0   | 0   | 0    | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 5°    | 10°   | 15°   | 20°   | 25°   | 30°   | 35°   | 45°  | 67.5° | 90°  |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|------|
| 0°    | 12.7  | 12.7  | 12.7  | 12.7  | 12.7  | 12.7  | 12.7  | 12.7  | 12.7 | 12.7  | 12.7 |
| 2.5°  | 13.2  | 13.2  | 13.2  | 13.2  | 13.2  | 13.2  | 13.2  | 13.2  | 13.2 | 12.9  | 12.7 |
| 5°    | 14.1  | 14.1  | 14.1  | 14.1  | 13.8  | 13.8  | 13.8  | 13.6  | 13.6 | 13.2  | 12.5 |
| 7.5°  | 15.0  | 15.0  | 15.0  | 15.0  | 14.7  | 14.5  | 14.3  | 14.3  | 14.1 | 12.9  | 12.0 |
| 10°   | 16.8  | 16.8  | 16.6  | 16.3  | 16.1  | 15.7  | 15.4  | 15.0  | 14.3 | 12.7  | 11.3 |
| 12.5° | 20.4  | 20.0  | 19.7  | 19.3  | 18.6  | 17.7  | 16.8  | 16.1  | 14.5 | 12.2  | 10.7 |
| 15°   | 27.0  | 26.5  | 25.6  | 24.3  | 22.9  | 21.1  | 19.5  | 17.9  | 15.2 | 11.6  | 9.5  |
| 17.5° | 38.6  | 37.2  | 35.8  | 33.6  | 30.2  | 27.0  | 23.6  | 20.6  | 16.1 | 10.9  | 8.6  |
| 20°   | 69.4  | 68.5  | 60.3  | 54.0  | 43.8  | 36.5  | 29.7  | 24.7  | 17.5 | 10.2  | 7.7  |
| 22.5° | 143.1 | 133.6 | 120.2 | 98.4  | 76.7  | 56.5  | 41.1  | 31.1  | 18.8 | 9.3   | 6.8  |
| 25°   | 258.1 | 243.2 | 214.4 | 172.4 | 127.3 | 90.1  | 59.4  | 40.6  | 20.9 | 8.4   | 5.9  |
| 27.5° | 390.8 | 375.6 | 331.0 | 273.1 | 199.4 | 135.9 | 84.8  | 53.8  | 23.6 | 7.5   | 5.2  |
| 30°   | 532.2 | 519.2 | 462.5 | 382.4 | 281.0 | 190.3 | 113.6 | 67.1  | 26.5 | 6.6   | 4.5  |
| 31°   | 589.1 | 572.5 | 511.3 | 426.0 | 319.4 | 212.8 | 125.2 | 72.8  | 27.7 | 6.4   | 4.3  |
| 32°   | 641.5 | 622.7 | 559.1 | 467.7 | 350.5 | 237.0 | 137.9 | 77.8  | 28.6 | 5.9   | 4.1  |
| 33°   | 686.6 | 664.6 | 603.4 | 507.2 | 384.7 | 259.7 | 151.1 | 82.6  | 29.3 | 5.4   | 3.9  |
| 34°   | 725.0 | 705.9 | 640.1 | 546.9 | 415.1 | 281.5 | 164.0 | 87.3  | 29.7 | 5.2   | 3.6  |
| 35°   | 757.6 | 740.4 | 675.3 | 577.1 | 444.8 | 302.6 | 175.8 | 91.9  | 29.7 | 4.8   | 3.6  |
| 36°   | 779.6 | 764.7 | 705.7 | 607.9 | 469.8 | 320.5 | 185.8 | 96.0  | 29.7 | 4.3   | 3.4  |
| 37°   | 791.7 | 777.1 | 725.6 | 633.3 | 494.3 | 338.2 | 194.9 | 99.1  | 29.5 | 4.1   | 3.2  |
| 38°   | 797.8 | 785.1 | 740.4 | 654.0 | 511.3 | 350.9 | 202.8 | 101.6 | 29.3 | 3.6   | 3.2  |
| 39°   | 799.4 | 788.7 | 749.7 | 668.9 | 527.8 | 363.6 | 208.5 | 103.0 | 28.6 | 3.4   | 2.9  |
| 40°   | 798.2 | 788.9 | 754.7 | 682.3 | 540.5 | 373.6 | 212.5 | 103.4 | 27.9 | 2.9   | 2.9  |
| 41°   | 796.0 | 788.7 | 758.3 | 691.6 | 550.8 | 379.9 | 214.1 | 102.5 | 27.0 | 2.5   | 2.7  |
| 42°   | 793.9 | 786.0 | 759.9 | 698.0 | 557.8 | 383.1 | 213.9 | 100.7 | 25.6 | 2.3   | 2.7  |
| 43°   | 793.9 | 784.8 | 760.1 | 702.1 | 561.2 | 383.4 | 211.2 | 97.3  | 23.8 | 2.0   | 2.5  |
| 44°   | 792.6 | 784.2 | 761.3 | 704.8 | 562.1 | 381.3 | 206.9 | 93.7  | 21.8 | 1.8   | 2.5  |
| 45°   | 790.1 | 781.2 | 761.0 | 705.0 | 560.5 | 376.3 | 199.8 | 88.9  | 20.0 | 1.4   | 2.5  |
| 46°   | 785.3 | 777.4 | 759.0 | 703.4 | 555.7 | 369.1 | 191.4 | 84.2  | 17.9 | 1.1   | 2.3  |
| 47°   | 775.8 | 769.7 | 753.5 | 698.0 | 548.5 | 358.4 | 181.5 | 78.7  | 16.3 | 0.9   | 2.3  |
| 48°   | 759.4 | 755.1 | 744.2 | 685.9 | 534.7 | 345.2 | 170.8 | 72.8  | 14.7 | 0.9   | 2.3  |
| 49°   | 729.5 | 726.1 | 719.7 | 666.7 | 517.0 | 329.1 | 159.2 | 66.2  | 13.2 | 0.7   | 2.3  |
| 50°   | 705.9 | 702.3 | 689.4 | 634.2 | 491.6 | 308.7 | 146.5 | 59.7  | 11.3 | 0.5   | 2.0  |
| 51°   | 690.3 | 684.4 | 663.9 | 596.6 | 454.6 | 281.5 | 132.7 | 53.1  | 9.5  | 0.5   | 2.0  |
| 52°   | 670.5 | 661.7 | 636.3 | 562.8 | 420.8 | 254.3 | 117.7 | 46.5  | 8.4  | 0.5   | 2.0  |
| 53°   | 629.2 | 626.1 | 600.9 | 526.5 | 387.0 | 228.2 | 102.3 | 41.1  | 7.3  | 0.5   | 2.0  |
| 54°   | 593.2 | 588.4 | 554.2 | 476.1 | 350.2 | 199.2 | 86.4  | 36.3  | 6.1  | 0.5   | 2.0  |
| 55°   | 554.2 | 544.9 | 514.5 | 433.7 | 307.1 | 172.4 | 71.2  | 31.3  | 5.0  | 0.5   | 1.8  |
| 56°   | 504.9 | 496.8 | 464.1 | 388.3 | 267.4 | 145.2 | 59.7  | 25.6  | 3.9  | 0.5   | 1.8  |
| 57°   | 445.1 | 437.6 | 412.4 | 332.5 | 226.2 | 118.6 | 48.5  | 20.6  | 2.9  | 0.5   | 1.8  |
| 58°   | 387.2 | 378.8 | 350.0 | 279.0 | 182.6 | 94.1  | 40.6  | 16.8  | 2.3  | 0.5   | 1.8  |
| 59°   | 342.7 | 331.4 | 294.2 | 234.3 | 142.9 | 71.5  | 32.2  | 13.4  | 1.6  | 0.5   | 1.8  |
| 60°   | 305.8 | 296.5 | 257.9 | 195.1 | 112.1 | 52.6  | 23.8  | 10.2  | 0.9  | 0.5   | 1.8  |
| 62.5° | 177.2 | 174.7 | 140.0 | 100.5 | 52.9  | 24.5  | 11.8  | 4.8   | 0.5  | 0.7   | 1.8  |
| 65°   | 52.9  | 46.0  | 35.8  | 21.3  | 13.6  | 8.2   | 4.3   | 1.6   | 0.2  | 0.7   | 1.6  |



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**CANDELA DISTRIBUTION (continued):**

|       | 0°  | 5°  | 10° | 15° | 20° | 25° | 30° | 35° | 45° | 67.5° | 90° |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-----|
| 67.5° | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 0.9 | 0.5 | 0.2 | 0.7   | 1.6 |
| 70°   | 0.9 | 0.7 | 0.7 | 0.7 | 0.7 | 0.5 | 0.5 | 0.2 | 0.2 | 0.7   | 1.4 |
| 72.5° | 0.7 | 0.7 | 0.7 | 0.7 | 0.5 | 0.5 | 0.5 | 0.2 | 0.5 | 0.7   | 1.1 |
| 75°   | 0.7 | 0.5 | 0.5 | 0.5 | 0.5 | 0.2 | 0.2 | 0.2 | 0.5 | 0.7   | 1.1 |
| 77.5° | 0.5 | 0.5 | 0.5 | 0.5 | 0.2 | 0.2 | 0.2 | 0.2 | 0.5 | 0.7   | 1.1 |
| 80°   | 0.5 | 0.5 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.7   | 0.9 |
| 82.5° | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.7   | 0.9 |
| 85°   | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.7   | 0.9 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.7   | 0.7 |
| 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: P1315159

CATALOG NUMBER: LDSQA3D02R409735DE010 3LSQCA45R 1MW

**CANDELA DISTRIBUTION (continued):**

|       | 112.5° | 135° | 157.5° | 180° |
|-------|--------|------|--------|------|
| 0°    | 12.7   | 12.7 | 12.7   | 12.7 |
| 2.5°  | 12.2   | 12.0 | 11.8   | 11.8 |
| 5°    | 11.8   | 11.3 | 11.3   | 11.1 |
| 7.5°  | 11.1   | 10.7 | 10.7   | 10.7 |
| 10°   | 10.4   | 10.2 | 10.2   | 10.0 |
| 12.5° | 9.5    | 9.5  | 9.5    | 9.5  |
| 15°   | 8.8    | 8.8  | 9.1    | 9.1  |
| 17.5° | 7.9    | 8.2  | 8.6    | 8.8  |
| 20°   | 7.3    | 7.7  | 8.2    | 8.4  |
| 22.5° | 6.8    | 7.3  | 7.9    | 8.2  |
| 25°   | 6.1    | 6.8  | 7.7    | 7.9  |
| 27.5° | 5.7    | 6.6  | 7.3    | 7.7  |
| 30°   | 5.2    | 6.4  | 7.0    | 7.5  |
| 31°   | 5.2    | 6.1  | 7.0    | 7.5  |
| 32°   | 5.0    | 5.9  | 7.0    | 7.3  |
| 33°   | 5.0    | 5.9  | 7.0    | 7.3  |
| 34°   | 4.8    | 5.9  | 6.8    | 7.3  |
| 35°   | 4.8    | 5.9  | 6.8    | 7.3  |
| 36°   | 4.5    | 5.7  | 6.8    | 7.3  |
| 37°   | 4.5    | 5.7  | 6.8    | 7.3  |
| 38°   | 4.3    | 5.7  | 6.8    | 7.3  |
| 39°   | 4.3    | 5.7  | 6.8    | 7.3  |
| 40°   | 4.3    | 5.7  | 6.8    | 7.3  |
| 41°   | 4.1    | 5.7  | 6.8    | 7.3  |
| 42°   | 4.1    | 5.7  | 6.8    | 7.3  |
| 43°   | 4.1    | 5.4  | 6.8    | 7.3  |
| 44°   | 4.1    | 5.4  | 6.8    | 7.3  |
| 45°   | 3.9    | 5.4  | 6.8    | 7.3  |
| 46°   | 3.9    | 5.4  | 6.8    | 7.3  |
| 47°   | 3.9    | 5.4  | 6.8    | 7.3  |
| 48°   | 3.9    | 5.4  | 6.8    | 7.3  |
| 49°   | 3.9    | 5.4  | 6.8    | 7.3  |
| 50°   | 3.6    | 5.2  | 6.8    | 7.3  |
| 51°   | 3.6    | 5.2  | 6.8    | 7.3  |
| 52°   | 3.6    | 5.2  | 6.8    | 7.3  |
| 53°   | 3.6    | 5.2  | 6.8    | 7.3  |
| 54°   | 3.4    | 5.2  | 6.8    | 7.3  |
| 55°   | 3.4    | 5.2  | 6.8    | 7.3  |
| 56°   | 3.4    | 5.2  | 6.8    | 7.0  |
| 57°   | 3.4    | 5.2  | 6.6    | 7.0  |
| 58°   | 3.4    | 5.0  | 6.6    | 7.0  |
| 59°   | 3.4    | 5.0  | 6.6    | 7.0  |
| 60°   | 3.4    | 5.0  | 6.6    | 7.0  |
| 62.5° | 3.2    | 5.0  | 6.4    | 6.8  |
| 65°   | 2.9    | 4.5  | 6.4    | 6.6  |





TEST NUMBER: P1315159

CATALOG NUMBER: LDSQA3D02R409735DE010 3LSQCA45R 1MW

**CANDELA DISTRIBUTION (continued):**

|       | 112.5° | 135° | 157.5° | 180° |
|-------|--------|------|--------|------|
| 67.5° | 2.9    | 4.3  | 5.9    | 6.4  |
| 70°   | 2.7    | 4.1  | 5.7    | 6.1  |
| 72.5° | 2.3    | 3.9  | 5.2    | 5.7  |
| 75°   | 2.0    | 3.4  | 4.8    | 5.2  |
| 77.5° | 1.8    | 2.9  | 4.3    | 4.5  |
| 80°   | 1.6    | 2.5  | 3.6    | 4.1  |
| 82.5° | 1.1    | 1.8  | 2.9    | 3.2  |
| 85°   | 0.9    | 1.4  | 2.0    | 2.3  |
| 87.5° | 0.7    | 0.7  | 1.1    | 1.1  |
| 90°   | 0.0    | 0.0  | 0.0    | 0.0  |

(END OF REPORT)