

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: P1315326

Luminaire Tested: LDSQA3D05R409735DE010 3LSQCA45R 1MMS

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1315326  
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: LDSQA3D05R409735DE010 3LSQCA45R 1MMS  
Description: 3in Adjustable LED luminaire with, R40 optic, 3500K CCT AND, 97CRI , 3LSQCA45R 1MMS TRII  
Light Source: -  
Ballast/Driver: -

**Summary**

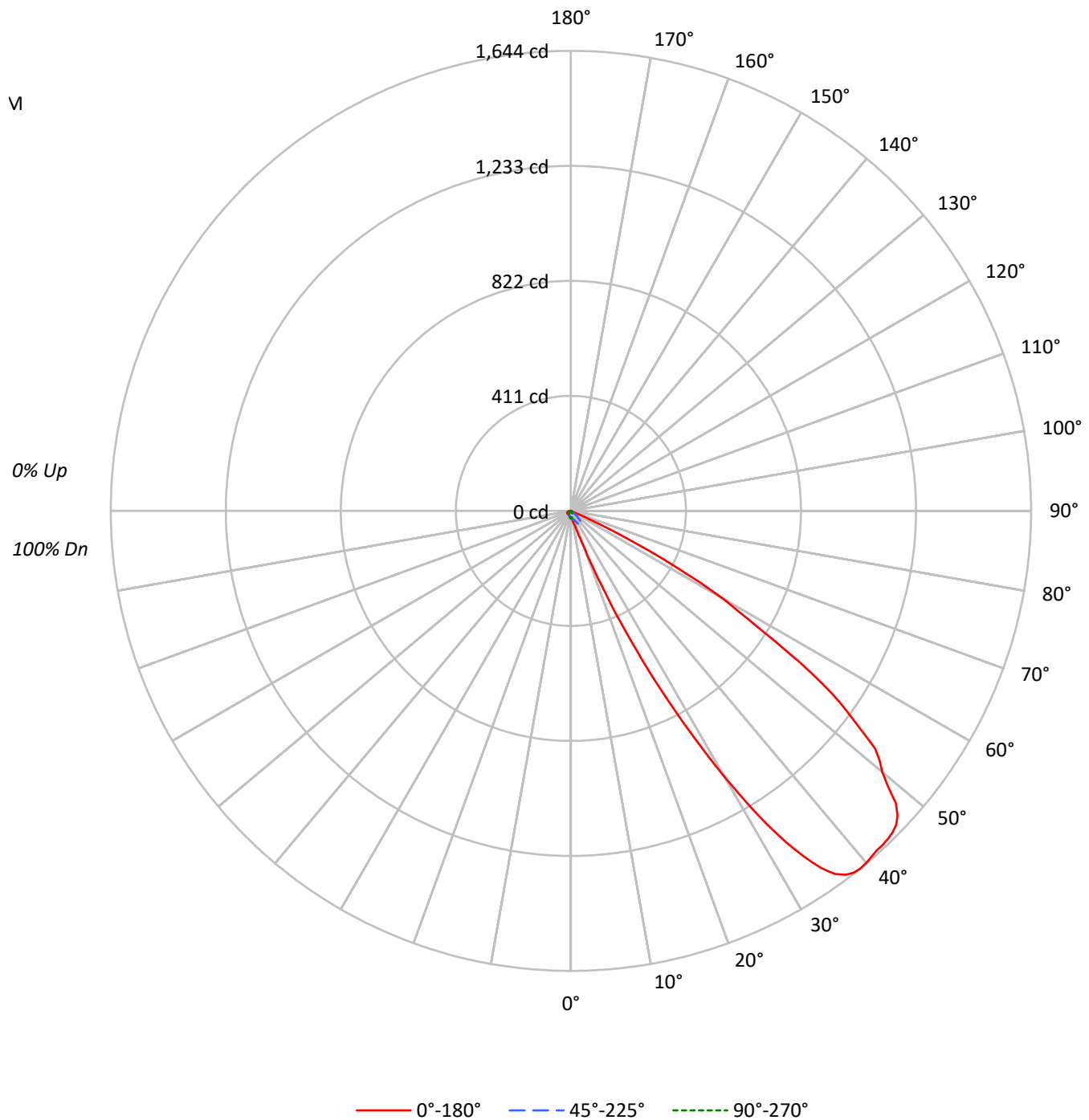
Lumens per Lamp: N/A  
Luminaire Lumens: 508.0 lumens  
Efficiency: N/A  
Efficacy: 70.6 lumens/watt  
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.54  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 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: P1315326

CATALOG NUMBER: LDSQA3D05R409735DE010 3LSQCA45R 1MMS

### Luminous Intensity Polar Plot



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

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

|     | 0°     | 45°   | 90°  | 135° | 180° |
|-----|--------|-------|------|------|------|
| 0°  | 4495   | 4495  | 4495 | 4495 | 4495 |
| 5°  | 4996   | 4841  | 4443 | 4028 | 3959 |
| 10° | 6033   | 5141  | 4075 | 3672 | 3585 |
| 15° | 9896   | 5581  | 3495 | 3245 | 3334 |
| 20° | 26172  | 6580  | 2914 | 2914 | 3171 |
| 25° | 100885 | 8152  | 2299 | 2660 | 3097 |
| 30° | 217658 | 10858 | 1849 | 2605 | 3063 |
| 35° | 327604 | 12846 | 1577 | 2544 | 3133 |
| 40° | 369088 | 12905 | 1371 | 2630 | 3350 |
| 45° | 395760 | 10010 | 1242 | 2728 | 3629 |
| 50° | 388982 | 6243  | 1125 | 2867 | 3992 |
| 55° | 342207 | 3093  | 1111 | 3213 | 4474 |
| 60° | 216622 | 654   | 1274 | 3548 | 4994 |
| 65° | 44297  | 204   | 1345 | 3790 | 5501 |
| 70° | 957    | 252   | 1410 | 4230 | 6345 |
| 75° | 932    | 599   | 1530 | 4658 | 7120 |
| 80° | 893    | 496   | 1884 | 5058 | 8331 |
| 85° | 988    | 988   | 3754 | 5533 | 9287 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 402906 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 2.4    | 0.5       |
| 10°-20°   | 8.0    | 1.6       |
| 20°-30°   | 39.5   | 7.8       |
| 30°-40°   | 128.3  | 25.3      |
| 40°-50°   | 176.9  | 34.8      |
| 50°-60°   | 123.2  | 24.3      |
| 60°-70°   | 23.4   | 4.6       |
| 70°-80°   | 4.2    | 0.8       |
| 80°-90°   | 2.0    | 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°    | 50.0   | 9.8       |
| 0°-40°    | 178.3  | 35.1      |
| 0°-60°    | 478.5  | 94.2      |
| 0°-90°    | 508.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 508.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0°  | 26   | 26  | 26  | 26   | 26   |      |
| 5°  | 29   | 28  | 26  | 23   | 23   | 3    |
| 15° | 56   | 31  | 20  | 18   | 19   | 20   |
| 25° | 531  | 43  | 12  | 14   | 16   | 273  |
| 35° | 1558 | 61  | 8   | 12   | 15   | 942  |
| 45° | 1625 | 41  | 5   | 11   | 15   | 1236 |
| 55° | 1140 | 10  | 4   | 11   | 15   | 974  |
| 65° | 109  | 0   | 3   | 9    | 14   | 192  |
| 75° | 1    | 1   | 2   | 7    | 11   | 1    |
| 85° | 0    | 0   | 2   | 3    | 5    | 0    |
| 90° | 0    | 0   | 0   | 0    | 0    |      |

TEST NUMBER: P1315326

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 25°   | 30°   | 35°   | 45°  | 67.5° | 90°  |
|-------|--------|--------|--------|--------|--------|-------|-------|-------|------|-------|------|
| 0°    | 26.1   | 26.1   | 26.1   | 26.1   | 26.1   | 26.1  | 26.1  | 26.1  | 26.1 | 26.1  | 26.1 |
| 2.5°  | 27.1   | 27.1   | 27.1   | 27.1   | 27.1   | 27.1  | 27.1  | 27.1  | 27.1 | 26.6  | 26.1 |
| 5°    | 28.9   | 28.9   | 28.9   | 28.9   | 28.5   | 28.5  | 28.5  | 28.0  | 28.0 | 27.1  | 25.7 |
| 7.5°  | 30.8   | 30.8   | 30.8   | 30.8   | 30.3   | 29.9  | 29.4  | 29.4  | 28.9 | 26.6  | 24.7 |
| 10°   | 34.5   | 34.5   | 34.1   | 33.6   | 33.1   | 32.2  | 31.7  | 30.8  | 29.4 | 26.1  | 23.3 |
| 12.5° | 42.0   | 41.1   | 40.6   | 39.7   | 38.3   | 36.4  | 34.5  | 33.1  | 29.9 | 25.2  | 21.9 |
| 15°   | 55.5   | 54.6   | 52.7   | 49.9   | 47.1   | 43.4  | 40.1  | 36.9  | 31.3 | 23.8  | 19.6 |
| 17.5° | 79.3   | 76.5   | 73.7   | 69.0   | 62.0   | 55.5  | 48.5  | 42.5  | 33.1 | 22.4  | 17.7 |
| 20°   | 142.8  | 140.9  | 124.1  | 111.0  | 90.0   | 75.1  | 61.1  | 50.9  | 35.9 | 21.0  | 15.9 |
| 22.5° | 294.4  | 274.8  | 247.3  | 202.5  | 157.7  | 116.2 | 84.4  | 63.9  | 38.7 | 19.1  | 14.0 |
| 25°   | 530.9  | 500.1  | 440.9  | 354.6  | 261.7  | 185.2 | 122.2 | 83.5  | 42.9 | 17.3  | 12.1 |
| 27.5° | 803.8  | 772.6  | 680.7  | 561.7  | 410.1  | 279.4 | 174.5 | 110.6 | 48.5 | 15.4  | 10.7 |
| 30°   | 1094.5 | 1067.9 | 951.2  | 786.6  | 578.0  | 391.4 | 233.7 | 138.1 | 54.6 | 13.5  | 9.3  |
| 31°   | 1211.6 | 1177.5 | 1051.6 | 876.1  | 656.9  | 437.6 | 257.5 | 149.8 | 56.9 | 13.1  | 8.9  |
| 32°   | 1319.3 | 1280.6 | 1150.0 | 962.0  | 720.8  | 487.5 | 283.6 | 160.0 | 58.8 | 12.1  | 8.4  |
| 33°   | 1412.2 | 1366.9 | 1241.0 | 1043.2 | 791.2  | 534.2 | 310.7 | 169.8 | 60.2 | 11.2  | 7.9  |
| 34°   | 1491.0 | 1451.8 | 1316.5 | 1124.8 | 853.7  | 579.0 | 337.3 | 179.6 | 61.1 | 10.7  | 7.5  |
| 35°   | 1558.2 | 1522.7 | 1388.9 | 1186.8 | 914.9  | 622.3 | 361.6 | 188.9 | 61.1 | 9.8   | 7.5  |
| 36°   | 1603.5 | 1572.7 | 1451.4 | 1250.3 | 966.2  | 659.2 | 382.1 | 197.3 | 61.1 | 8.9   | 7.0  |
| 37°   | 1628.2 | 1598.3 | 1492.4 | 1302.5 | 1016.6 | 695.6 | 400.7 | 203.9 | 60.6 | 8.4   | 6.5  |
| 38°   | 1640.8 | 1614.7 | 1522.7 | 1345.0 | 1051.6 | 721.7 | 417.1 | 209.0 | 60.2 | 7.5   | 6.5  |
| 39°   | 1644.0 | 1622.1 | 1541.9 | 1375.8 | 1085.6 | 747.8 | 428.7 | 211.8 | 58.8 | 7.0   | 6.1  |
| 40°   | 1641.7 | 1622.6 | 1552.1 | 1403.3 | 1111.7 | 768.4 | 437.1 | 212.7 | 57.4 | 6.1   | 6.1  |
| 41°   | 1637.0 | 1622.1 | 1559.6 | 1422.4 | 1132.7 | 781.4 | 440.4 | 210.9 | 55.5 | 5.1   | 5.6  |
| 42°   | 1632.8 | 1616.5 | 1562.9 | 1435.5 | 1147.2 | 788.0 | 439.9 | 207.1 | 52.7 | 4.7   | 5.6  |
| 43°   | 1632.8 | 1614.2 | 1563.3 | 1443.9 | 1154.2 | 788.4 | 434.3 | 200.1 | 49.0 | 4.2   | 5.1  |
| 44°   | 1630.0 | 1612.8 | 1565.7 | 1449.5 | 1156.1 | 784.2 | 425.5 | 192.7 | 44.8 | 3.7   | 5.1  |
| 45°   | 1624.9 | 1606.7 | 1565.2 | 1450.0 | 1152.8 | 774.0 | 411.0 | 182.9 | 41.1 | 2.8   | 5.1  |
| 46°   | 1615.1 | 1598.8 | 1561.0 | 1446.7 | 1143.0 | 759.0 | 393.7 | 173.1 | 36.9 | 2.3   | 4.7  |
| 47°   | 1595.5 | 1582.9 | 1549.8 | 1435.5 | 1128.1 | 737.1 | 373.2 | 161.9 | 33.6 | 1.9   | 4.7  |
| 48°   | 1561.9 | 1553.1 | 1530.7 | 1410.8 | 1099.6 | 710.1 | 351.3 | 149.8 | 30.3 | 1.9   | 4.7  |
| 49°   | 1500.4 | 1493.4 | 1480.3 | 1371.1 | 1063.2 | 676.9 | 327.5 | 136.2 | 27.1 | 1.4   | 4.7  |
| 50°   | 1451.8 | 1444.4 | 1417.8 | 1304.4 | 1011.0 | 634.9 | 301.4 | 122.7 | 23.3 | 0.9   | 4.2  |
| 51°   | 1419.6 | 1407.5 | 1365.5 | 1227.0 | 934.9  | 579.0 | 272.9 | 109.2 | 19.6 | 0.9   | 4.2  |
| 52°   | 1379.1 | 1360.9 | 1308.6 | 1157.5 | 865.4  | 523.0 | 242.1 | 95.6  | 17.3 | 0.9   | 4.2  |
| 53°   | 1294.1 | 1287.6 | 1235.8 | 1082.8 | 795.9  | 469.3 | 210.4 | 84.4  | 14.9 | 0.9   | 4.2  |
| 54°   | 1220.0 | 1210.2 | 1139.7 | 979.2  | 720.3  | 409.6 | 177.7 | 74.6  | 12.6 | 0.9   | 4.2  |
| 55°   | 1139.7 | 1120.6 | 1058.1 | 892.0  | 631.7  | 354.6 | 146.5 | 64.4  | 10.3 | 0.9   | 3.7  |
| 56°   | 1038.5 | 1021.7 | 954.5  | 798.7  | 550.0  | 298.6 | 122.7 | 52.7  | 7.9  | 0.9   | 3.7  |
| 57°   | 915.3  | 899.9  | 848.1  | 683.9  | 465.1  | 244.0 | 99.8  | 42.5  | 6.1  | 0.9   | 3.7  |
| 58°   | 796.4  | 779.1  | 719.9  | 573.8  | 375.6  | 193.6 | 83.5  | 34.5  | 4.7  | 0.9   | 3.7  |
| 59°   | 704.9  | 681.6  | 605.1  | 481.9  | 293.9  | 147.0 | 66.2  | 27.5  | 3.3  | 0.9   | 3.7  |
| 60°   | 628.9  | 609.8  | 530.4  | 401.2  | 230.5  | 108.2 | 49.0  | 21.0  | 1.9  | 0.9   | 3.7  |
| 62.5° | 364.4  | 359.2  | 287.8  | 206.7  | 108.7  | 50.4  | 24.3  | 9.8   | 0.9  | 1.4   | 3.7  |
| 65°   | 108.7  | 94.7   | 73.7   | 43.9   | 28.0   | 16.8  | 8.9   | 3.3   | 0.5  | 1.4   | 3.3  |



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**CANDELA DISTRIBUTION (continued):**

|       | 0°  | 5°  | 10° | 15° | 20° | 25° | 30° | 35° | 45° | 67.5° | 90° |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-----|
| 67.5° | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 1.9 | 0.9 | 0.5 | 1.4   | 3.3 |
| 70°   | 1.9 | 1.4 | 1.4 | 1.4 | 1.4 | 0.9 | 0.9 | 0.5 | 0.5 | 1.4   | 2.8 |
| 72.5° | 1.4 | 1.4 | 1.4 | 1.4 | 0.9 | 0.9 | 0.9 | 0.5 | 0.9 | 1.4   | 2.3 |
| 75°   | 1.4 | 0.9 | 0.9 | 0.9 | 0.9 | 0.5 | 0.5 | 0.5 | 0.9 | 1.4   | 2.3 |
| 77.5° | 0.9 | 0.9 | 0.9 | 0.9 | 0.5 | 0.5 | 0.5 | 0.5 | 0.9 | 1.4   | 2.3 |
| 80°   | 0.9 | 0.9 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 1.4   | 1.9 |
| 82.5° | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 1.4   | 1.9 |
| 85°   | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 1.4   | 1.9 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.5 | 1.4   | 1.4 |
| 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: P1315326

CATALOG NUMBER: LDSQA3D05R409735DE010 3LSQCA45R 1MMS

**CANDELA DISTRIBUTION (continued):**

|       | 112.5° | 135° | 157.5° | 180° |
|-------|--------|------|--------|------|
| 0°    | 26.1   | 26.1 | 26.1   | 26.1 |
| 2.5°  | 25.2   | 24.7 | 24.3   | 24.3 |
| 5°    | 24.3   | 23.3 | 23.3   | 22.9 |
| 7.5°  | 22.9   | 21.9 | 21.9   | 21.9 |
| 10°   | 21.5   | 21.0 | 21.0   | 20.5 |
| 12.5° | 19.6   | 19.6 | 19.6   | 19.6 |
| 15°   | 18.2   | 18.2 | 18.7   | 18.7 |
| 17.5° | 16.3   | 16.8 | 17.7   | 18.2 |
| 20°   | 14.9   | 15.9 | 16.8   | 17.3 |
| 22.5° | 14.0   | 14.9 | 16.3   | 16.8 |
| 25°   | 12.6   | 14.0 | 15.9   | 16.3 |
| 27.5° | 11.7   | 13.5 | 14.9   | 15.9 |
| 30°   | 10.7   | 13.1 | 14.5   | 15.4 |
| 31°   | 10.7   | 12.6 | 14.5   | 15.4 |
| 32°   | 10.3   | 12.1 | 14.5   | 14.9 |
| 33°   | 10.3   | 12.1 | 14.5   | 14.9 |
| 34°   | 9.8    | 12.1 | 14.0   | 14.9 |
| 35°   | 9.8    | 12.1 | 14.0   | 14.9 |
| 36°   | 9.3    | 11.7 | 14.0   | 14.9 |
| 37°   | 9.3    | 11.7 | 14.0   | 14.9 |
| 38°   | 8.9    | 11.7 | 14.0   | 14.9 |
| 39°   | 8.9    | 11.7 | 14.0   | 14.9 |
| 40°   | 8.9    | 11.7 | 14.0   | 14.9 |
| 41°   | 8.4    | 11.7 | 14.0   | 14.9 |
| 42°   | 8.4    | 11.7 | 14.0   | 14.9 |
| 43°   | 8.4    | 11.2 | 14.0   | 14.9 |
| 44°   | 8.4    | 11.2 | 14.0   | 14.9 |
| 45°   | 7.9    | 11.2 | 14.0   | 14.9 |
| 46°   | 7.9    | 11.2 | 14.0   | 14.9 |
| 47°   | 7.9    | 11.2 | 14.0   | 14.9 |
| 48°   | 7.9    | 11.2 | 14.0   | 14.9 |
| 49°   | 7.9    | 11.2 | 14.0   | 14.9 |
| 50°   | 7.5    | 10.7 | 14.0   | 14.9 |
| 51°   | 7.5    | 10.7 | 14.0   | 14.9 |
| 52°   | 7.5    | 10.7 | 14.0   | 14.9 |
| 53°   | 7.5    | 10.7 | 14.0   | 14.9 |
| 54°   | 7.0    | 10.7 | 14.0   | 14.9 |
| 55°   | 7.0    | 10.7 | 14.0   | 14.9 |
| 56°   | 7.0    | 10.7 | 14.0   | 14.5 |
| 57°   | 7.0    | 10.7 | 13.5   | 14.5 |
| 58°   | 7.0    | 10.3 | 13.5   | 14.5 |
| 59°   | 7.0    | 10.3 | 13.5   | 14.5 |
| 60°   | 7.0    | 10.3 | 13.5   | 14.5 |
| 62.5° | 6.5    | 10.3 | 13.1   | 14.0 |
| 65°   | 6.1    | 9.3  | 13.1   | 13.5 |





TEST NUMBER: P1315326

CATALOG NUMBER: LDSQA3D05R409735DE010 3LSQCA45R 1MMS

**CANDELA DISTRIBUTION (continued):**

|       | 112.5° | 135° | 157.5° | 180° |
|-------|--------|------|--------|------|
| 67.5° | 6.1    | 8.9  | 12.1   | 13.1 |
| 70°   | 5.6    | 8.4  | 11.7   | 12.6 |
| 72.5° | 4.7    | 7.9  | 10.7   | 11.7 |
| 75°   | 4.2    | 7.0  | 9.8    | 10.7 |
| 77.5° | 3.7    | 6.1  | 8.9    | 9.3  |
| 80°   | 3.3    | 5.1  | 7.5    | 8.4  |
| 82.5° | 2.3    | 3.7  | 6.1    | 6.5  |
| 85°   | 1.9    | 2.8  | 4.2    | 4.7  |
| 87.5° | 1.4    | 1.4  | 2.3    | 2.3  |
| 90°   | 0.0    | 0.0  | 0.0    | 0.0  |

(END OF REPORT)