

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: P1318661

Luminaire Tested: LDSQA3D20R359830D010 3LSQCA45R 1MMS

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1318661  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-77)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/29/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PORTFOLIO  
Catalog Number: LDSQA3D20R359830D010 3LSQCA45R 1MMS  
Description: 3in Adjustable LED luminaire with, R35 optic, 3000K CCT AND, 98CRI , 3LSQCA45R 1MMS TRII  
Light Source: -  
Ballast/Driver: -

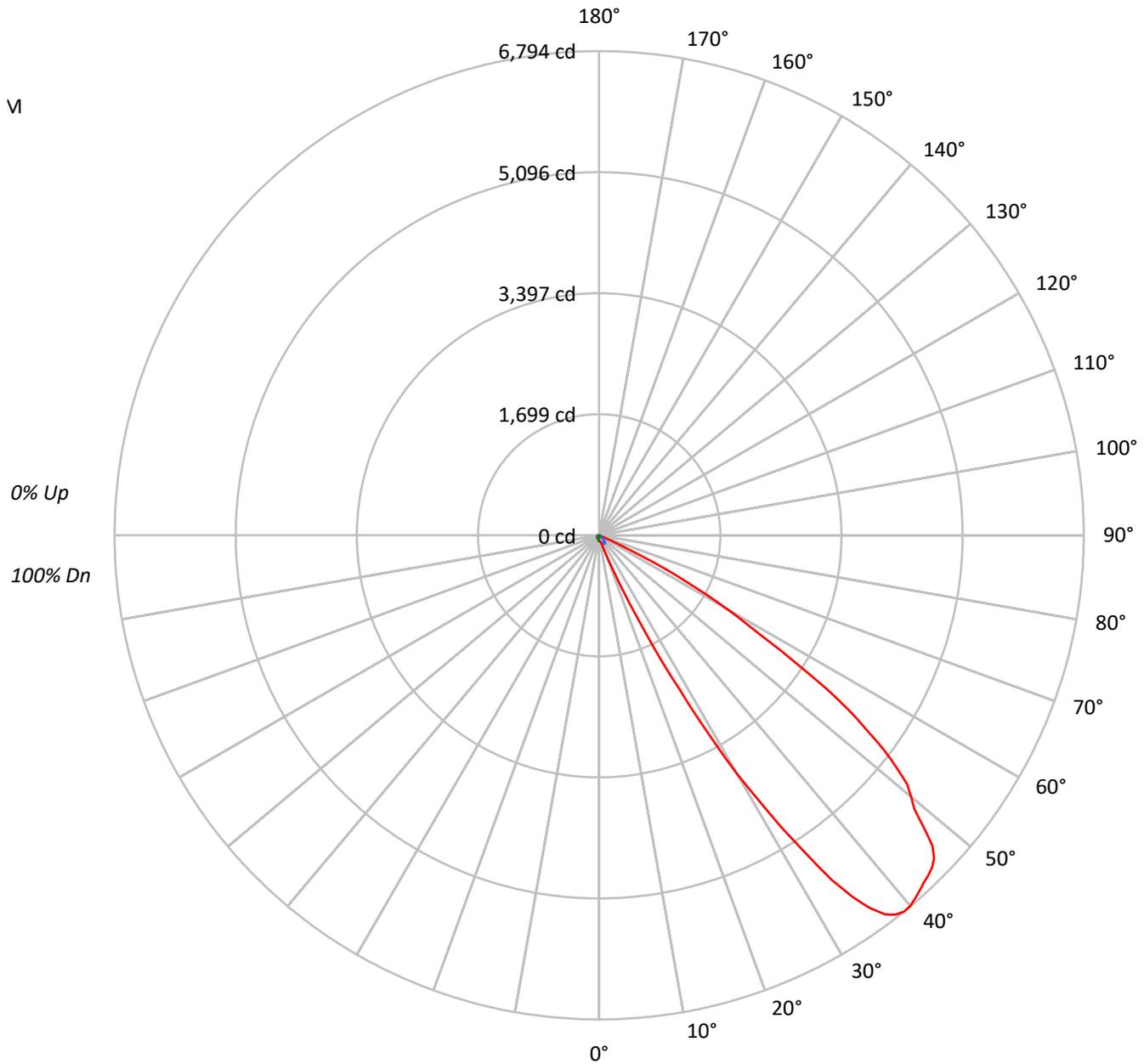
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1692.0 lumens  
Efficiency: N/A  
Efficacy: 61.8 lumens/watt  
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 27.4  
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



— 0°-180°    - - - 45°-225°    ····· 90°-270°



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

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

|     | 0°      | 45°   | 90°   | 135°  | 180°  |
|-----|---------|-------|-------|-------|-------|
| 0°  | 13416   | 13416 | 13416 | 13416 | 13416 |
| 5°  | 14522   | 14263 | 13208 | 11877 | 11618 |
| 10° | 15232   | 13885 | 11752 | 10143 | 10143 |
| 15° | 21788   | 13622 | 9539  | 8719  | 8986  |
| 20° | 54579   | 14552 | 7551  | 7551  | 8394  |
| 25° | 253382  | 18585 | 5796  | 6974  | 7829  |
| 30° | 770306  | 25216 | 4554  | 6384  | 7895  |
| 35° | 1301837 | 29224 | 3847  | 6097  | 7716  |
| 40° | 1526015 | 28844 | 3080  | 6183  | 8251  |
| 45° | 1607079 | 20459 | 2606  | 6698  | 8939  |
| 50° | 1529724 | 12271 | 2465  | 6966  | 9833  |
| 55° | 1281844 | 5044  | 2762  | 7807  | 11470 |
| 60° | 717617  | 1068  | 3169  | 8956  | 12641 |
| 65° | 123884  | 611   | 3097  | 9943  | 14304 |
| 70° | 2316    | 755   | 3827  | 10776 | 16164 |
| 75° | 2063    | 998   | 5057  | 12177 | 18299 |
| 80° | 1488    | 1488  | 6050  | 13588 | 21224 |
| 85° | 0       | 2964  | 12054 | 15018 | 24108 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 46°  
 Luminance: 1618474 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 7.0    | 0.4       |
| 10°-20°   | 19.9   | 1.2       |
| 20°-30°   | 103.8  | 6.1       |
| 30°-40°   | 448.4  | 26.5      |
| 40°-50°   | 639.6  | 37.8      |
| 50°-60°   | 396.1  | 23.4      |
| 60°-70°   | 60.3   | 3.6       |
| 70°-80°   | 11.3   | 0.7       |
| 80°-90°   | 5.6    | 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°    | 130.8  | 7.7       |
| 0°-40°    | 579.1  | 34.2      |
| 0°-60°    | 1614.8 | 95.4      |
| 0°-90°    | 1692.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1692.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0°  | 78   | 78  | 78  | 78   | 78   |      |
| 5°  | 84   | 82  | 76  | 69   | 67   | 8    |
| 15° | 122  | 76  | 54  | 49   | 50   | 44   |
| 25° | 1333 | 98  | 30  | 37   | 41   | 798  |
| 35° | 6192 | 139 | 18  | 29   | 37   | 3718 |
| 45° | 6598 | 84  | 11  | 28   | 37   | 4985 |
| 55° | 4269 | 17  | 9   | 26   | 38   | 3636 |
| 65° | 304  | 2   | 8   | 24   | 35   | 621  |
| 75° | 3    | 2   | 8   | 18   | 28   | 3    |
| 85° | 0    | 2   | 6   | 8    | 12   | 1    |
| 90° | 0    | 0   | 0   | 0    | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 45°   | 67.5° | 90°  | 112.5° |
|-------|--------|--------|--------|--------|--------|--------|--------|-------|-------|------|--------|
| 0°    | 77.9   | 77.9   | 77.9   | 77.9   | 77.9   | 77.9   | 77.9   | 77.9  | 77.9  | 77.9 | 77.9   |
| 2.5°  | 81.0   | 81.0   | 81.0   | 81.0   | 81.0   | 81.0   | 81.0   | 81.0  | 81.0  | 77.9 | 76.4   |
| 5°    | 84.0   | 84.0   | 82.5   | 82.5   | 82.5   | 82.5   | 82.5   | 82.5  | 79.4  | 76.4 | 71.8   |
| 7.5°  | 85.5   | 85.5   | 84.0   | 84.0   | 84.0   | 84.0   | 82.5   | 81.0  | 77.9  | 71.8 | 67.2   |
| 10°   | 87.1   | 87.1   | 87.1   | 87.1   | 85.5   | 84.0   | 82.5   | 79.4  | 74.8  | 67.2 | 62.6   |
| 12.5° | 97.8   | 97.8   | 96.2   | 93.2   | 90.1   | 87.1   | 84.0   | 77.9  | 68.7  | 61.1 | 56.5   |
| 15°   | 122.2  | 120.7  | 117.6  | 113.0  | 106.9  | 99.3   | 93.2   | 76.4  | 62.6  | 53.5 | 50.4   |
| 17.5° | 171.1  | 168.0  | 163.4  | 148.2  | 134.4  | 120.7  | 108.4  | 76.4  | 56.5  | 47.3 | 44.3   |
| 20°   | 297.8  | 299.4  | 267.3  | 230.6  | 200.1  | 166.5  | 135.9  | 79.4  | 50.4  | 41.2 | 39.7   |
| 22.5° | 621.6  | 597.2  | 520.8  | 432.3  | 329.9  | 255.1  | 192.5  | 87.1  | 44.3  | 35.1 | 35.1   |
| 25°   | 1333.4 | 1240.2 | 1055.4 | 797.3  | 562.1  | 398.6  | 279.5  | 97.8  | 39.7  | 30.5 | 32.1   |
| 27.5° | 2434.7 | 2350.7 | 1979.5 | 1490.7 | 989.8  | 601.8  | 378.8  | 111.5 | 35.1  | 26.0 | 29.0   |
| 30°   | 3873.5 | 3641.3 | 3157.1 | 2443.8 | 1654.2 | 921.0  | 508.6  | 126.8 | 29.0  | 22.9 | 27.5   |
| 31°   | 4322.5 | 4215.6 | 3626.0 | 2827.2 | 1938.3 | 1093.6 | 563.6  | 131.4 | 27.5  | 22.9 | 26.0   |
| 32°   | 4855.6 | 4666.2 | 4137.7 | 3247.2 | 2226.9 | 1247.9 | 629.3  | 135.9 | 26.0  | 19.9 | 26.0   |
| 33°   | 5332.1 | 5148.8 | 4505.8 | 3616.9 | 2518.7 | 1423.5 | 699.5  | 137.5 | 22.9  | 19.9 | 24.4   |
| 34°   | 5833.1 | 5582.6 | 4945.7 | 4003.3 | 2818.0 | 1612.9 | 763.7  | 139.0 | 21.4  | 18.3 | 24.4   |
| 35°   | 6192.0 | 5941.6 | 5324.5 | 4308.8 | 3076.2 | 1780.9 | 837.0  | 139.0 | 19.9  | 18.3 | 22.9   |
| 36°   | 6470.0 | 6250.1 | 5651.4 | 4623.4 | 3332.8 | 1932.2 | 895.1  | 139.0 | 16.8  | 16.8 | 22.9   |
| 37°   | 6661.0 | 6451.7 | 5871.3 | 4893.8 | 3528.3 | 2066.6 | 947.0  | 139.0 | 15.3  | 16.8 | 22.9   |
| 38°   | 6754.1 | 6580.0 | 6083.6 | 5090.8 | 3717.7 | 2172.0 | 988.2  | 135.9 | 13.7  | 15.3 | 21.4   |
| 39°   | 6793.8 | 6651.8 | 6213.4 | 5257.3 | 3859.7 | 2263.6 | 1018.8 | 132.9 | 12.2  | 15.3 | 21.4   |
| 40°   | 6787.7 | 6664.0 | 6286.7 | 5371.8 | 3974.3 | 2326.2 | 1035.6 | 128.3 | 10.7  | 13.7 | 21.4   |
| 41°   | 6752.6 | 6645.7 | 6324.9 | 5469.6 | 4043.0 | 2369.0 | 1040.2 | 123.7 | 9.2   | 13.7 | 19.9   |
| 42°   | 6712.9 | 6615.1 | 6337.2 | 5521.5 | 4087.3 | 2382.7 | 1027.9 | 117.6 | 9.2   | 12.2 | 19.9   |
| 43°   | 6671.6 | 6581.5 | 6337.2 | 5538.3 | 4098.0 | 2373.6 | 1008.1 | 106.9 | 7.6   | 12.2 | 19.9   |
| 44°   | 6638.0 | 6552.5 | 6317.3 | 5533.7 | 4075.1 | 2338.4 | 971.4  | 94.7  | 6.1   | 12.2 | 19.9   |
| 45°   | 6598.3 | 6514.3 | 6291.3 | 5504.7 | 4030.8 | 2278.9 | 925.6  | 84.0  | 4.6   | 10.7 | 19.9   |
| 46°   | 6528.1 | 6462.4 | 6245.5 | 5445.2 | 3960.5 | 2196.4 | 867.6  | 76.4  | 3.1   | 10.7 | 18.3   |
| 47°   | 6392.1 | 6335.6 | 6156.9 | 5356.6 | 3867.4 | 2098.6 | 808.0  | 68.7  | 3.1   | 10.7 | 18.3   |
| 48°   | 6118.7 | 6117.2 | 5979.7 | 5191.6 | 3719.2 | 1976.4 | 745.4  | 61.1  | 3.1   | 10.7 | 18.3   |
| 49°   | 5854.5 | 5827.0 | 5655.9 | 4901.4 | 3506.9 | 1829.8 | 679.7  | 55.0  | 1.5   | 10.7 | 18.3   |
| 50°   | 5709.4 | 5649.8 | 5368.8 | 4559.3 | 3235.0 | 1626.7 | 609.4  | 45.8  | 1.5   | 9.2  | 18.3   |
| 51°   | 5558.2 | 5472.6 | 5141.2 | 4250.7 | 2911.2 | 1431.2 | 533.1  | 36.7  | 1.5   | 9.2  | 16.8   |
| 52°   | 5284.8 | 5203.8 | 4832.7 | 3955.9 | 2596.6 | 1231.1 | 459.7  | 30.5  | 1.5   | 9.2  | 18.3   |
| 53°   | 4990.0 | 4873.9 | 4470.7 | 3632.1 | 2320.1 | 1053.9 | 384.9  | 26.0  | 1.5   | 9.2  | 16.8   |
| 54°   | 4618.8 | 4566.9 | 4104.1 | 3235.0 | 1996.3 | 882.8  | 316.2  | 21.4  | 1.5   | 9.2  | 16.8   |
| 55°   | 4269.1 | 4192.7 | 3711.6 | 2828.7 | 1703.0 | 724.0  | 264.2  | 16.8  | 1.5   | 9.2  | 16.8   |
| 56°   | 3823.1 | 3708.5 | 3257.9 | 2456.0 | 1405.2 | 583.5  | 223.0  | 13.7  | 1.5   | 9.2  | 16.8   |
| 57°   | 3291.5 | 3169.3 | 2813.5 | 2042.1 | 1102.8 | 444.5  | 186.3  | 10.7  | 1.5   | 9.2  | 16.8   |
| 58°   | 2784.4 | 2679.0 | 2297.2 | 1576.3 | 830.9  | 308.5  | 154.3  | 7.6   | 1.5   | 7.6  | 16.8   |
| 59°   | 2405.6 | 2289.6 | 1910.8 | 1212.7 | 577.4  | 227.6  | 116.1  | 6.1   | 1.5   | 9.2  | 16.8   |
| 60°   | 2083.4 | 1933.7 | 1538.1 | 939.3  | 412.4  | 163.4  | 85.5   | 3.1   | 3.1   | 9.2  | 16.8   |
| 62.5° | 1200.5 | 1060.0 | 734.7  | 381.8  | 169.5  | 84.0   | 41.2   | 1.5   | 3.1   | 9.2  | 16.8   |
| 65°   | 304.0  | 270.3  | 175.7  | 82.5   | 47.3   | 29.0   | 15.3   | 1.5   | 3.1   | 7.6  | 15.3   |



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**CANDELA DISTRIBUTION (continued):**

|       | 0°   | 5°   | 10°  | 15° | 20° | 25° | 30° | 45° | 67.5° | 90° | 112.5° |
|-------|------|------|------|-----|-----|-----|-----|-----|-------|-----|--------|
| 67.5° | 10.7 | 10.7 | 10.7 | 9.2 | 7.6 | 6.1 | 3.1 | 1.5 | 3.1   | 7.6 | 15.3   |
| 70°   | 4.6  | 4.6  | 4.6  | 3.1 | 3.1 | 1.5 | 1.5 | 1.5 | 3.1   | 7.6 | 13.7   |
| 72.5° | 3.1  | 3.1  | 3.1  | 3.1 | 1.5 | 1.5 | 1.5 | 1.5 | 4.6   | 7.6 | 12.2   |
| 75°   | 3.1  | 3.1  | 3.1  | 3.1 | 1.5 | 1.5 | 1.5 | 1.5 | 4.6   | 7.6 | 12.2   |
| 77.5° | 3.1  | 3.1  | 1.5  | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 4.6   | 6.1 | 10.7   |
| 80°   | 1.5  | 1.5  | 1.5  | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 4.6   | 6.1 | 9.2    |
| 82.5° | 1.5  | 1.5  | 1.5  | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 4.6   | 6.1 | 7.6    |
| 85°   | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 1.5 | 0.0 | 1.5 | 4.6   | 6.1 | 6.1    |
| 87.5° | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 1.5 | 4.6   | 6.1 | 4.6    |
| 90°   | 0.0  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0   | 0.0 | 0.0    |



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**CANDELA DISTRIBUTION (continued):**

|       | 135° | 157.5° | 180° |
|-------|------|--------|------|
| 0°    | 77.9 | 77.9   | 77.9 |
| 2.5°  | 73.3 | 73.3   | 73.3 |
| 5°    | 68.7 | 68.7   | 67.2 |
| 7.5°  | 64.2 | 62.6   | 62.6 |
| 10°   | 58.0 | 58.0   | 58.0 |
| 12.5° | 53.5 | 53.5   | 53.5 |
| 15°   | 48.9 | 50.4   | 50.4 |
| 17.5° | 44.3 | 47.3   | 47.3 |
| 20°   | 41.2 | 44.3   | 45.8 |
| 22.5° | 38.2 | 41.2   | 42.8 |
| 25°   | 36.7 | 39.7   | 41.2 |
| 27.5° | 33.6 | 38.2   | 41.2 |
| 30°   | 32.1 | 36.7   | 39.7 |
| 31°   | 32.1 | 36.7   | 38.2 |
| 32°   | 30.5 | 36.7   | 38.2 |
| 33°   | 30.5 | 36.7   | 38.2 |
| 34°   | 30.5 | 35.1   | 38.2 |
| 35°   | 29.0 | 35.1   | 36.7 |
| 36°   | 29.0 | 35.1   | 36.7 |
| 37°   | 29.0 | 35.1   | 38.2 |
| 38°   | 29.0 | 35.1   | 36.7 |
| 39°   | 27.5 | 35.1   | 36.7 |
| 40°   | 27.5 | 35.1   | 36.7 |
| 41°   | 27.5 | 35.1   | 36.7 |
| 42°   | 27.5 | 35.1   | 36.7 |
| 43°   | 27.5 | 35.1   | 36.7 |
| 44°   | 27.5 | 33.6   | 36.7 |
| 45°   | 27.5 | 33.6   | 36.7 |
| 46°   | 27.5 | 35.1   | 36.7 |
| 47°   | 27.5 | 35.1   | 38.2 |
| 48°   | 27.5 | 33.6   | 36.7 |
| 49°   | 26.0 | 33.6   | 36.7 |
| 50°   | 26.0 | 33.6   | 36.7 |
| 51°   | 26.0 | 35.1   | 38.2 |
| 52°   | 26.0 | 35.1   | 38.2 |
| 53°   | 26.0 | 35.1   | 38.2 |
| 54°   | 26.0 | 35.1   | 36.7 |
| 55°   | 26.0 | 35.1   | 38.2 |
| 56°   | 26.0 | 35.1   | 36.7 |
| 57°   | 26.0 | 35.1   | 36.7 |
| 58°   | 26.0 | 33.6   | 36.7 |
| 59°   | 26.0 | 33.6   | 36.7 |
| 60°   | 26.0 | 33.6   | 36.7 |
| 62.5° | 24.4 | 33.6   | 36.7 |
| 65°   | 24.4 | 32.1   | 35.1 |



TEST NUMBER: P1318661

CATALOG NUMBER: LDSQA3D20R359830D010 3LSQCA45R 1MMS

**CANDELA DISTRIBUTION (continued):**

|       | 135° | 157.5° | 180° |
|-------|------|--------|------|
| 67.5° | 22.9 | 32.1   | 33.6 |
| 70°   | 21.4 | 30.5   | 32.1 |
| 72.5° | 19.9 | 29.0   | 30.5 |
| 75°   | 18.3 | 26.0   | 27.5 |
| 77.5° | 15.3 | 22.9   | 26.0 |
| 80°   | 13.7 | 19.9   | 21.4 |
| 82.5° | 10.7 | 16.8   | 18.3 |
| 85°   | 7.6  | 12.2   | 12.2 |
| 87.5° | 3.1  | 6.1    | 6.1  |
| 90°   | 0.0  | 0.0    | 0.0  |

(END OF REPORT)