

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: io LED

Report Number: P182710

Luminaire Tested: **LDSQA4A09827D010TE LAR25NF 4LSQA1H 30°**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182710
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26800)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA4A09827D010TE LAR25NF 4LSQA1H 30°
Description: PORTFOLIO 4" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 25° NARROW FLOOD, 30° Tilt
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1119.1 lumens
Efficiency: N/A
Efficacy: 80.9 lumens/watt
Spacing Criteria (0/90/45): 2.38 / 0.59 / 1.18
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

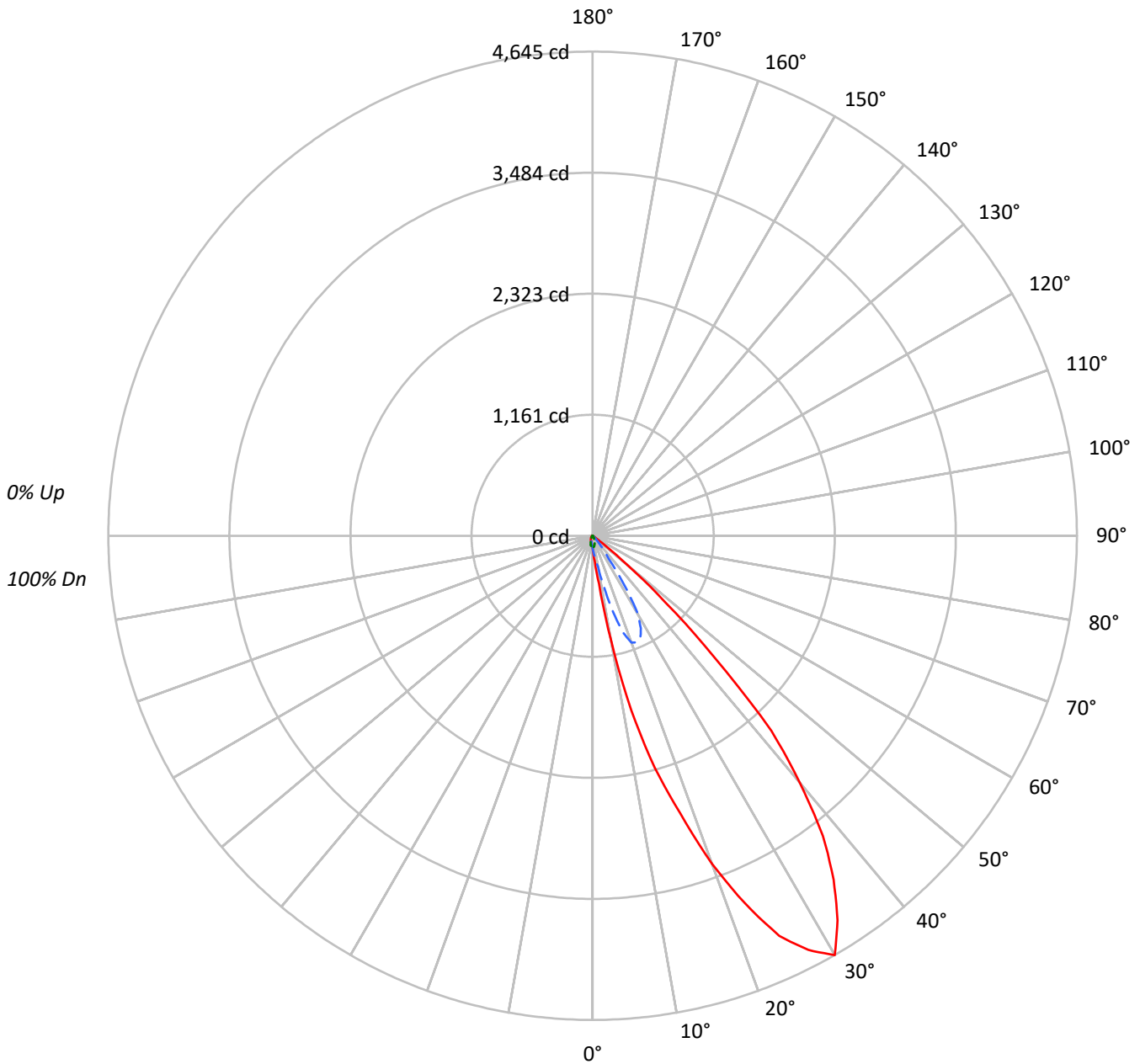
Input Watts (W): 13.84
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P182710

CATALOG NUMBER: LDSQA4A09827D010TE LAR25NF 4LSQA1H 30°

Luminous Intensity Polar Plot





TEST NUMBER: P182710

CATALOG NUMBER: LDSQA4A09827D010TE LAR25NF 4LSQA1H 30°

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|---|--|--|--|--|--|--|----|--|--|--|--|--|--|--|--|---|
| RF | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | |
| RC | 80 | | | | | | | | | 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 | 100 | | | | | | | | | | | | | | | | | | | |
| 1 | 113 | 109 | 106 | 104 | 110 | 107 | 105 | 102 | 103 | 101 | 99 | 99 | 98 | 96 | 96 | 95 | 93 | 91 | | | | | | | | | | | | | | | | | | | |
| 2 | 106 | 100 | 95 | 91 | 103 | 98 | 94 | 90 | 95 | 91 | 88 | 92 | 89 | 86 | 89 | 87 | 84 | 83 | | | | | | | | | | | | | | | | | | | |
| 3 | 99 | 91 | 86 | 81 | 97 | 90 | 85 | 80 | 87 | 83 | 79 | 85 | 81 | 78 | 82 | 79 | 76 | 75 | | | | | | | | | | | | | | | | | | | |
| 4 | 93 | 84 | 77 | 72 | 91 | 82 | 76 | 72 | 80 | 75 | 71 | 78 | 73 | 70 | 76 | 72 | 69 | 67 | | | | | | | | | | | | | | | | | | | |
| 5 | 87 | 77 | 70 | 64 | 85 | 76 | 69 | 64 | 74 | 68 | 64 | 72 | 67 | 63 | 70 | 66 | 62 | 61 | | | | | | | | | | | | | | | | | | | |
| 6 | 81 | 70 | 63 | 58 | 79 | 69 | 63 | 58 | 68 | 62 | 57 | 66 | 61 | 57 | 65 | 60 | 56 | 55 | | | | | | | | | | | | | | | | | | | |
| 7 | 76 | 64 | 57 | 52 | 74 | 64 | 57 | 52 | 62 | 56 | 52 | 61 | 56 | 51 | 60 | 55 | 51 | 49 | | | | | | | | | | | | | | | | | | | |
| 8 | 71 | 59 | 52 | 47 | 69 | 59 | 52 | 47 | 57 | 51 | 47 | 56 | 51 | 47 | 55 | 50 | 46 | 45 | | | | | | | | | | | | | | | | | | | |
| 9 | 66 | 55 | 48 | 43 | 65 | 54 | 47 | 43 | 53 | 47 | 43 | 52 | 46 | 42 | 51 | 46 | 42 | 41 | | | | | | | | | | | | | | | | | | | |
| 10 | 62 | 50 | 44 | 39 | 61 | 50 | 43 | 39 | 49 | 43 | 39 | 48 | 43 | 39 | 47 | 42 | 38 | 37 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° |
|-----|--------|-------|-------|
| 0° | 11325 | 11325 | 11325 |
| 5° | 25050 | 10707 | 7527 |
| 10° | 100298 | 9296 | 6286 |
| 15° | 231195 | 7402 | 5526 |
| 20° | 345123 | 5247 | 4928 |
| 25° | 452669 | 3495 | 4382 |
| 30° | 519622 | 2204 | 3837 |
| 35° | 476435 | 1407 | 3311 |
| 40° | 390704 | 923 | 2820 |
| 45° | 226506 | 644 | 2274 |
| 50° | 64188 | 467 | 1884 |
| 55° | 5878 | 439 | 1571 |
| 60° | 911 | 504 | 1318 |
| 65° | 229 | 481 | 963 |
| 70° | 283 | 595 | 736 |
| 75° | 374 | 786 | 786 |
| 80° | 0 | 1172 | 558 |
| 85° | 0 | 2334 | 556 |



TEST NUMBER: P182710

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 16.6 | 1.5 |
| 10°-20° | 148.8 | 13.3 |
| 20°-30° | 362.6 | 32.4 |
| 30°-40° | 393.0 | 35.1 |
| 40°-50° | 178.0 | 15.9 |
| 50°-60° | 13.8 | 1.2 |
| 60°-70° | 2.9 | 0.3 |
| 70°-80° | 2.1 | 0.2 |
| 80°-90° | 1.3 | 0.1 |
| 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° | 528.0 | 47.2 |
| 0°-40° | 920.9 | 82.3 |
| 0°-60° | 1112.8 | 99.4 |
| 0°-90° | 1119.1 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1119.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|-----|------|------|-----|------|------|------|
| 0° | 117 | 117 | 117 | 117 | 117 | |
| 5° | 258 | 190 | 110 | 83 | 77 | 46 |
| 15° | 2305 | 754 | 74 | 54 | 55 | 670 |
| 25° | 4235 | 1083 | 33 | 32 | 41 | 1930 |
| 35° | 4029 | 275 | 12 | 19 | 28 | 2478 |
| 45° | 1653 | 35 | 5 | 10 | 17 | 1305 |
| 55° | 35 | 5 | 3 | 6 | 9 | 80 |
| 65° | 1 | 2 | 2 | 4 | 4 | 2 |
| 75° | 1 | 2 | 2 | 3 | 2 | 1 |
| 85° | 0 | 2 | 2 | 2 | 0 | 0 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P182710

CATALOG NUMBER: LDSQA4A09827D010TE LAR25NF 4LSQA1H 30°

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 22.5° | 25° | 30° | 35° | 40° | 45° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 116.9 | 116.9 | 116.9 | 116.9 | 116.9 | 116.9 | 116.9 | 116.9 | 116.9 | 116.9 | 116.9 |
| 2.5° | 175.0 | 171.9 | 173.5 | 169.3 | 166.7 | 164.7 | 165.7 | 164.7 | 157.9 | 156.3 | 151.2 |
| 5° | 257.6 | 253.0 | 253.0 | 244.1 | 234.8 | 229.1 | 229.1 | 222.3 | 207.8 | 201.0 | 190.1 |
| 7.5° | 461.8 | 452.4 | 444.6 | 417.1 | 381.3 | 361.0 | 355.8 | 327.2 | 290.4 | 267.0 | 239.5 |
| 10° | 1019.6 | 980.7 | 953.1 | 881.5 | 785.4 | 725.6 | 700.2 | 601.5 | 484.1 | 395.8 | 315.8 |
| 12.5° | 1714.6 | 1661.6 | 1613.3 | 1495.9 | 1357.8 | 1263.8 | 1213.4 | 1067.9 | 839.9 | 676.8 | 506.4 |
| 15° | 2305.2 | 2248.1 | 2190.9 | 2048.1 | 1902.1 | 1820.6 | 1728.1 | 1535.4 | 1234.1 | 1002.5 | 754.2 |
| 17.5° | 2789.8 | 2757.6 | 2698.9 | 2489.6 | 2305.7 | 2178.5 | 2082.4 | 1830.4 | 1520.4 | 1256.0 | 975.0 |
| 20° | 3347.7 | 3268.2 | 3163.3 | 2909.3 | 2657.9 | 2498.4 | 2363.4 | 2056.4 | 1698.0 | 1394.1 | 1091.8 |
| 22.5° | 3817.2 | 3760.6 | 3610.0 | 3275.0 | 2905.1 | 2769.0 | 2603.9 | 2234.6 | 1812.3 | 1452.8 | 1105.3 |
| 25° | 4234.9 | 4146.0 | 3957.0 | 3558.6 | 3179.9 | 2948.2 | 2745.7 | 2331.2 | 1854.3 | 1457.0 | 1083.0 |
| 27.5° | 4479.5 | 4363.7 | 4141.4 | 3707.1 | 3275.0 | 3018.9 | 2794.5 | 2347.8 | 1827.8 | 1401.9 | 1001.4 |
| 30° | 4645.2 | 4414.6 | 4168.9 | 3708.7 | 3244.8 | 2983.0 | 2750.3 | 2264.2 | 1717.7 | 1276.2 | 864.3 |
| 32.5° | 4372.0 | 4238.5 | 4003.7 | 3561.2 | 3080.7 | 2825.1 | 2594.0 | 2082.9 | 1545.8 | 1089.7 | 601.5 |
| 35° | 4028.6 | 3920.6 | 3716.5 | 3277.0 | 2834.5 | 2593.5 | 2348.3 | 1850.2 | 1321.9 | 749.0 | 275.3 |
| 37.5° | 3629.7 | 3545.1 | 3325.3 | 2923.8 | 2534.3 | 2298.4 | 2052.8 | 1577.0 | 930.8 | 371.4 | 167.3 |
| 40° | 3089.5 | 3017.8 | 2837.6 | 2515.0 | 2156.1 | 1931.7 | 1705.3 | 1179.6 | 505.4 | 207.2 | 109.1 |
| 42.5° | 2539.5 | 2479.2 | 2315.1 | 2036.1 | 1720.8 | 1535.9 | 1336.5 | 718.9 | 251.4 | 130.4 | 60.8 |
| 45° | 1653.3 | 1578.0 | 1489.7 | 1361.9 | 1206.1 | 1092.3 | 857.0 | 347.0 | 149.1 | 72.7 | 34.8 |
| 47.5° | 947.9 | 898.1 | 753.2 | 594.2 | 482.5 | 440.5 | 320.5 | 161.5 | 82.1 | 42.1 | 21.3 |
| 50° | 425.9 | 393.7 | 330.4 | 269.1 | 194.8 | 152.2 | 129.3 | 81.0 | 40.5 | 22.9 | 14.5 |
| 52.5° | 104.9 | 107.0 | 101.3 | 88.8 | 79.0 | 67.0 | 58.2 | 37.9 | 21.3 | 14.0 | 9.3 |
| 55° | 34.8 | 35.3 | 32.2 | 30.6 | 28.0 | 26.0 | 23.9 | 17.1 | 13.0 | 12.5 | 4.7 |
| 57.5° | 12.5 | 12.5 | 13.0 | 11.9 | 11.4 | 10.9 | 10.4 | 8.8 | 7.8 | 4.7 | 2.6 |
| 60° | 4.7 | 4.7 | 4.7 | 5.2 | 5.2 | 5.2 | 5.7 | 5.2 | 3.6 | 2.6 | 2.1 |
| 62.5° | 2.1 | 2.1 | 2.1 | 2.1 | 2.6 | 2.6 | 3.1 | 2.6 | 2.1 | 2.1 | 1.6 |
| 65° | 1.0 | 1.0 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 |
| 67.5° | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.6 | 1.6 |
| 70° | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.6 | 1.6 |
| 72.5° | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.6 | 1.6 |
| 75° | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.6 |
| 77.5° | 0.0 | 0.0 | 0.0 | 0.5 | 0.5 | 0.5 | 0.5 | 1.0 | 1.0 | 1.0 | 1.6 |
| 80° | 0.0 | 0.0 | 0.0 | 0.5 | 0.5 | 0.5 | 0.5 | 1.0 | 1.0 | 1.0 | 1.6 |
| 82.5° | 0.0 | 0.0 | 0.0 | 0.5 | 0.5 | 0.5 | 0.5 | 1.0 | 1.0 | 1.0 | 1.6 |
| 85° | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.5 | 0.5 | 0.5 | 1.0 | 1.0 | 1.6 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.5 | 0.5 | 0.5 | 1.0 | 1.0 | 1.0 |
| 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: P182710

CATALOG NUMBER: LDSQA4A09827D010TE LAR25NF 4LSQA1H 30°

CANDELA DISTRIBUTION (continued):

| | 50° | 55° | 60° | 65° | 67.5° | 70° | 75° | 80° | 85° | 90° | 95° |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 116.9 | 116.9 | 116.9 | 116.9 | 116.9 | 116.9 | 116.9 | 116.9 | 116.9 | 116.9 | 116.9 |
| 2.5° | 146.0 | 142.8 | 136.6 | 131.9 | 128.3 | 127.8 | 124.7 | 119.5 | 117.4 | 113.8 | 110.6 |
| 5° | 179.7 | 171.9 | 162.1 | 152.7 | 146.0 | 142.3 | 131.4 | 121.5 | 115.8 | 110.1 | 104.9 |
| 7.5° | 216.1 | 198.4 | 181.3 | 166.2 | 156.9 | 151.2 | 138.2 | 122.1 | 111.7 | 103.4 | 96.6 |
| 10° | 261.8 | 225.4 | 195.8 | 172.4 | 160.0 | 152.2 | 136.6 | 117.4 | 104.4 | 94.5 | 87.8 |
| 12.5° | 366.2 | 267.0 | 209.3 | 175.6 | 160.0 | 149.1 | 130.4 | 111.2 | 96.6 | 84.7 | 77.4 |
| 15° | 544.9 | 372.9 | 248.3 | 177.1 | 154.8 | 142.3 | 121.0 | 100.8 | 86.2 | 73.8 | 67.0 |
| 17.5° | 713.2 | 490.9 | 310.1 | 188.0 | 151.7 | 132.5 | 108.6 | 88.8 | 73.8 | 61.8 | 56.1 |
| 20° | 800.4 | 549.5 | 344.4 | 196.3 | 146.5 | 120.0 | 94.0 | 75.8 | 61.3 | 50.9 | 46.2 |
| 22.5° | 802.5 | 544.4 | 327.8 | 177.1 | 127.3 | 102.8 | 80.5 | 62.3 | 49.9 | 41.0 | 37.4 |
| 25° | 753.2 | 481.5 | 269.6 | 138.2 | 102.8 | 86.2 | 67.0 | 50.9 | 39.0 | 32.7 | 30.1 |
| 27.5° | 660.2 | 389.6 | 198.9 | 99.7 | 80.5 | 68.6 | 52.5 | 39.0 | 29.6 | 25.5 | 23.9 |
| 30° | 510.6 | 241.0 | 110.1 | 73.8 | 60.8 | 51.4 | 37.9 | 26.0 | 22.3 | 19.7 | 18.7 |
| 32.5° | 253.5 | 117.9 | 77.9 | 52.5 | 41.6 | 32.7 | 23.9 | 19.2 | 17.1 | 15.6 | 15.1 |
| 35° | 137.6 | 84.7 | 48.8 | 31.7 | 24.9 | 20.8 | 16.1 | 13.5 | 12.5 | 11.9 | 11.9 |
| 37.5° | 96.1 | 50.4 | 29.6 | 19.2 | 15.6 | 14.0 | 11.4 | 9.9 | 9.3 | 9.3 | 9.3 |
| 40° | 53.0 | 30.1 | 18.2 | 12.5 | 10.4 | 9.3 | 7.8 | 7.3 | 7.3 | 7.3 | 7.8 |
| 42.5° | 30.6 | 18.7 | 12.5 | 8.8 | 7.3 | 6.8 | 5.7 | 5.2 | 5.7 | 5.7 | 6.2 |
| 45° | 19.7 | 14.0 | 8.3 | 6.2 | 5.2 | 4.7 | 4.2 | 4.2 | 4.7 | 4.7 | 5.2 |
| 47.5° | 14.0 | 9.9 | 5.7 | 4.2 | 3.1 | 3.1 | 3.1 | 3.1 | 3.6 | 4.2 | 4.7 |
| 50° | 8.3 | 5.2 | 3.1 | 2.6 | 2.1 | 2.1 | 2.1 | 2.6 | 3.1 | 3.1 | 3.6 |
| 52.5° | 4.7 | 3.1 | 2.1 | 2.1 | 1.6 | 1.6 | 2.1 | 2.1 | 2.6 | 3.1 | 3.6 |
| 55° | 2.6 | 2.1 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 2.1 | 2.1 | 2.6 | 3.1 |
| 57.5° | 2.1 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 2.1 | 2.1 | 2.6 | 2.6 |
| 60° | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 2.1 | 2.1 | 2.6 | 2.6 |
| 62.5° | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 2.1 | 2.1 | 2.1 | 2.1 | 2.6 |
| 65° | 1.6 | 1.6 | 1.6 | 2.1 | 1.6 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.6 |
| 67.5° | 1.6 | 1.6 | 1.6 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.6 |
| 70° | 1.6 | 1.6 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.6 |
| 72.5° | 1.6 | 1.6 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.6 |
| 75° | 1.6 | 1.6 | 1.6 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| 77.5° | 1.6 | 1.6 | 1.6 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| 80° | 1.6 | 1.6 | 1.6 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| 82.5° | 1.6 | 1.6 | 1.6 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| 85° | 1.6 | 1.6 | 1.6 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| 87.5° | 1.6 | 1.6 | 1.6 | 1.6 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| 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: P182710

CATALOG NUMBER: LDSQA4A09827D010TE LAR25NF 4LSQA1H 30°

CANDELA DISTRIBUTION (continued):

| | 100° | 105° | 110° | 112.5° | 115° | 120° | 125° | 130° | 135° | 140° | 145° |
|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 116.9 | 116.9 | 116.9 | 116.9 | 116.9 | 116.9 | 116.9 | 116.9 | 116.9 | 116.9 | 116.9 |
| 2.5° | 109.6 | 106.0 | 103.4 | 102.3 | 100.2 | 100.8 | 99.2 | 98.2 | 95.1 | 95.1 | 93.0 |
| 5° | 101.3 | 96.6 | 93.5 | 91.9 | 89.9 | 89.3 | 87.8 | 86.2 | 83.1 | 82.6 | 81.0 |
| 7.5° | 92.5 | 87.8 | 84.1 | 82.6 | 80.5 | 80.0 | 77.9 | 76.9 | 74.3 | 73.8 | 72.2 |
| 10° | 83.1 | 77.9 | 74.8 | 73.2 | 71.2 | 71.2 | 69.6 | 68.6 | 66.5 | 66.5 | 65.4 |
| 12.5° | 73.2 | 68.6 | 66.5 | 64.4 | 63.4 | 63.4 | 62.3 | 61.3 | 59.7 | 60.3 | 59.7 |
| 15° | 62.9 | 59.2 | 57.1 | 56.1 | 55.6 | 55.6 | 55.1 | 54.5 | 53.5 | 54.5 | 53.5 |
| 17.5° | 53.0 | 50.4 | 48.8 | 48.3 | 47.8 | 47.8 | 47.8 | 48.3 | 47.8 | 48.8 | 48.8 |
| 20° | 43.6 | 41.6 | 40.5 | 40.5 | 40.0 | 41.0 | 41.0 | 42.1 | 42.1 | 43.6 | 44.2 |
| 22.5° | 35.8 | 34.3 | 33.8 | 33.8 | 33.8 | 34.8 | 35.3 | 36.4 | 36.9 | 38.4 | 39.5 |
| 25° | 28.6 | 28.0 | 28.0 | 28.0 | 28.6 | 29.6 | 30.6 | 31.7 | 32.2 | 34.3 | 34.8 |
| 27.5° | 23.4 | 22.9 | 23.4 | 23.4 | 23.9 | 25.5 | 26.5 | 27.5 | 28.6 | 30.1 | 31.2 |
| 30° | 18.7 | 18.7 | 19.2 | 19.7 | 20.3 | 21.3 | 22.9 | 23.9 | 24.9 | 26.5 | 27.5 |
| 32.5° | 15.1 | 15.6 | 16.1 | 16.6 | 16.6 | 18.2 | 19.2 | 20.8 | 21.3 | 22.9 | 23.9 |
| 35° | 12.5 | 13.0 | 13.5 | 14.0 | 14.0 | 15.6 | 16.6 | 17.7 | 18.7 | 19.7 | 20.8 |
| 37.5° | 9.9 | 10.4 | 11.4 | 11.9 | 11.9 | 13.5 | 14.0 | 15.1 | 16.1 | 17.1 | 18.2 |
| 40° | 8.3 | 8.8 | 9.9 | 9.9 | 10.4 | 11.4 | 11.9 | 13.0 | 14.0 | 15.1 | 16.1 |
| 42.5° | 6.8 | 7.3 | 8.3 | 8.8 | 8.8 | 9.9 | 10.4 | 11.4 | 11.9 | 13.0 | 13.5 |
| 45° | 6.2 | 6.2 | 7.3 | 7.3 | 7.8 | 8.3 | 9.3 | 9.9 | 10.4 | 11.4 | 11.9 |
| 47.5° | 5.2 | 5.7 | 6.2 | 6.8 | 6.8 | 7.3 | 7.8 | 8.3 | 8.8 | 9.9 | 10.4 |
| 50° | 4.2 | 4.7 | 5.7 | 5.7 | 5.7 | 6.8 | 7.3 | 7.8 | 7.8 | 8.3 | 8.8 |
| 52.5° | 4.2 | 4.2 | 4.7 | 5.2 | 5.2 | 5.7 | 6.2 | 6.8 | 6.8 | 7.3 | 7.8 |
| 55° | 3.6 | 3.6 | 4.2 | 4.7 | 4.7 | 5.2 | 5.7 | 5.7 | 6.2 | 6.2 | 6.8 |
| 57.5° | 3.1 | 3.6 | 4.2 | 4.2 | 4.2 | 4.7 | 5.2 | 5.2 | 5.7 | 5.7 | 6.2 |
| 60° | 3.1 | 3.6 | 3.6 | 4.2 | 4.2 | 4.7 | 4.7 | 4.7 | 5.2 | 5.2 | 5.2 |
| 62.5° | 3.1 | 3.1 | 3.6 | 3.6 | 3.6 | 4.2 | 4.2 | 4.7 | 4.7 | 4.7 | 4.7 |
| 65° | 3.1 | 3.1 | 3.6 | 3.6 | 3.6 | 4.2 | 4.2 | 4.2 | 4.2 | 4.2 | 4.2 |
| 67.5° | 2.6 | 3.1 | 3.1 | 3.1 | 3.6 | 3.6 | 3.6 | 3.6 | 3.6 | 3.6 | 3.6 |
| 70° | 2.6 | 2.6 | 3.1 | 3.1 | 3.1 | 3.6 | 3.6 | 3.6 | 3.6 | 3.6 | 3.6 |
| 72.5° | 2.6 | 2.6 | 3.1 | 3.1 | 3.1 | 3.1 | 3.1 | 3.1 | 3.1 | 3.1 | 3.1 |
| 75° | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 | 3.1 | 3.1 | 3.1 | 3.1 | 2.6 | 2.6 |
| 77.5° | 2.1 | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 | 2.1 |
| 80° | 2.1 | 2.1 | 2.6 | 2.1 | 2.6 | 2.6 | 2.6 | 2.6 | 2.1 | 2.1 | 2.1 |
| 82.5° | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 1.6 | 1.6 |
| 85° | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 1.6 | 1.6 | 1.6 | 1.0 |
| 87.5° | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 1.6 | 1.6 | 1.6 | 1.0 | 1.0 |
| 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: P182710

CATALOG NUMBER: LDSQA4A09827D010TE LAR25NF 4LSQA1H 30°

CANDELA DISTRIBUTION (continued):

| | 150° | 155° | 157.5° | 160° | 165° | 170° | 175° | 180° |
|-------|-------|-------|--------|-------|-------|-------|-------|-------|
| 0° | 116.9 | 116.9 | 116.9 | 116.9 | 116.9 | 116.9 | 116.9 | 116.9 |
| 2.5° | 91.9 | 93.0 | 91.9 | 93.0 | 90.4 | 91.4 | 92.5 | 89.9 |
| 5° | 80.0 | 79.0 | 79.5 | 80.5 | 78.4 | 79.0 | 79.5 | 77.4 |
| 7.5° | 71.7 | 72.2 | 71.2 | 72.2 | 70.6 | 71.2 | 71.7 | 70.1 |
| 10° | 64.9 | 65.4 | 64.9 | 65.4 | 63.9 | 64.9 | 65.4 | 63.9 |
| 12.5° | 58.7 | 59.7 | 59.2 | 60.3 | 58.7 | 59.7 | 60.8 | 58.7 |
| 15° | 54.0 | 55.1 | 54.5 | 55.6 | 54.5 | 55.6 | 56.6 | 55.1 |
| 17.5° | 49.3 | 50.4 | 50.4 | 51.4 | 50.9 | 51.9 | 53.0 | 51.4 |
| 20° | 44.7 | 46.2 | 46.2 | 47.3 | 47.3 | 47.8 | 49.3 | 47.8 |
| 22.5° | 40.5 | 42.1 | 42.1 | 43.1 | 43.1 | 44.2 | 45.2 | 44.2 |
| 25° | 35.8 | 37.9 | 38.4 | 39.5 | 39.5 | 40.5 | 42.1 | 41.0 |
| 27.5° | 32.7 | 34.3 | 34.8 | 35.8 | 36.4 | 37.4 | 38.4 | 37.4 |
| 30° | 28.6 | 30.6 | 31.2 | 32.2 | 32.7 | 34.3 | 34.8 | 34.3 |
| 32.5° | 25.5 | 27.0 | 27.5 | 28.6 | 29.6 | 30.6 | 31.7 | 31.2 |
| 35° | 22.3 | 23.9 | 24.4 | 25.5 | 26.0 | 27.5 | 28.6 | 28.0 |
| 37.5° | 19.7 | 21.3 | 21.8 | 22.3 | 22.9 | 24.4 | 25.5 | 24.9 |
| 40° | 17.1 | 18.2 | 18.7 | 19.7 | 20.3 | 21.3 | 22.3 | 22.3 |
| 42.5° | 15.1 | 16.1 | 16.6 | 17.1 | 17.7 | 18.7 | 19.7 | 19.2 |
| 45° | 13.0 | 14.0 | 14.5 | 15.1 | 15.6 | 16.1 | 17.1 | 16.6 |
| 47.5° | 10.9 | 11.9 | 12.5 | 13.0 | 13.5 | 14.0 | 15.1 | 14.5 |
| 50° | 9.3 | 10.4 | 10.4 | 10.9 | 11.4 | 11.9 | 13.0 | 12.5 |
| 52.5° | 8.3 | 8.8 | 9.3 | 9.3 | 9.9 | 10.4 | 11.4 | 10.9 |
| 55° | 7.3 | 7.8 | 7.8 | 8.3 | 8.3 | 8.8 | 9.3 | 9.3 |
| 57.5° | 6.2 | 6.8 | 6.8 | 7.3 | 7.3 | 7.8 | 8.3 | 8.3 |
| 60° | 5.7 | 5.7 | 6.2 | 6.2 | 6.2 | 6.8 | 6.8 | 6.8 |
| 62.5° | 5.2 | 5.2 | 5.2 | 5.2 | 5.2 | 5.2 | 5.2 | 5.2 |
| 65° | 4.2 | 4.2 | 4.2 | 4.2 | 4.2 | 4.2 | 4.2 | 4.2 |
| 67.5° | 3.6 | 3.6 | 3.6 | 3.6 | 3.6 | 3.1 | 3.1 | 3.1 |
| 70° | 3.1 | 3.1 | 3.1 | 3.1 | 3.1 | 2.6 | 2.6 | 2.6 |
| 72.5° | 3.1 | 3.1 | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 | 2.1 |
| 75° | 2.6 | 2.6 | 2.6 | 2.6 | 2.1 | 2.1 | 2.1 | 2.1 |
| 77.5° | 2.1 | 2.1 | 2.1 | 2.1 | 1.6 | 1.6 | 1.6 | 1.6 |
| 80° | 2.1 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.0 |
| 82.5° | 1.6 | 1.6 | 1.6 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 85° | 1.0 | 1.0 | 1.0 | 1.0 | 0.5 | 0.5 | 0.5 | 0.5 |
| 87.5° | 1.0 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



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













(END OF REPORT)