

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: P182744

Luminaire Tested: **LDSQA4A09835D010TE LAR35FL 4LSQA1H 30°**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182744
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26801)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA4A09835D010TE LAR35FL 4LSQA1H 30°
Description: PORTFOLIO 4" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 35° FLOOD, 30° Tilt
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1184.3 lumens
Efficiency: N/A
Efficacy: 85.6 lumens/watt
Spacing Criteria (0/90/45): 2.46 / 0.59 / 1.2
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

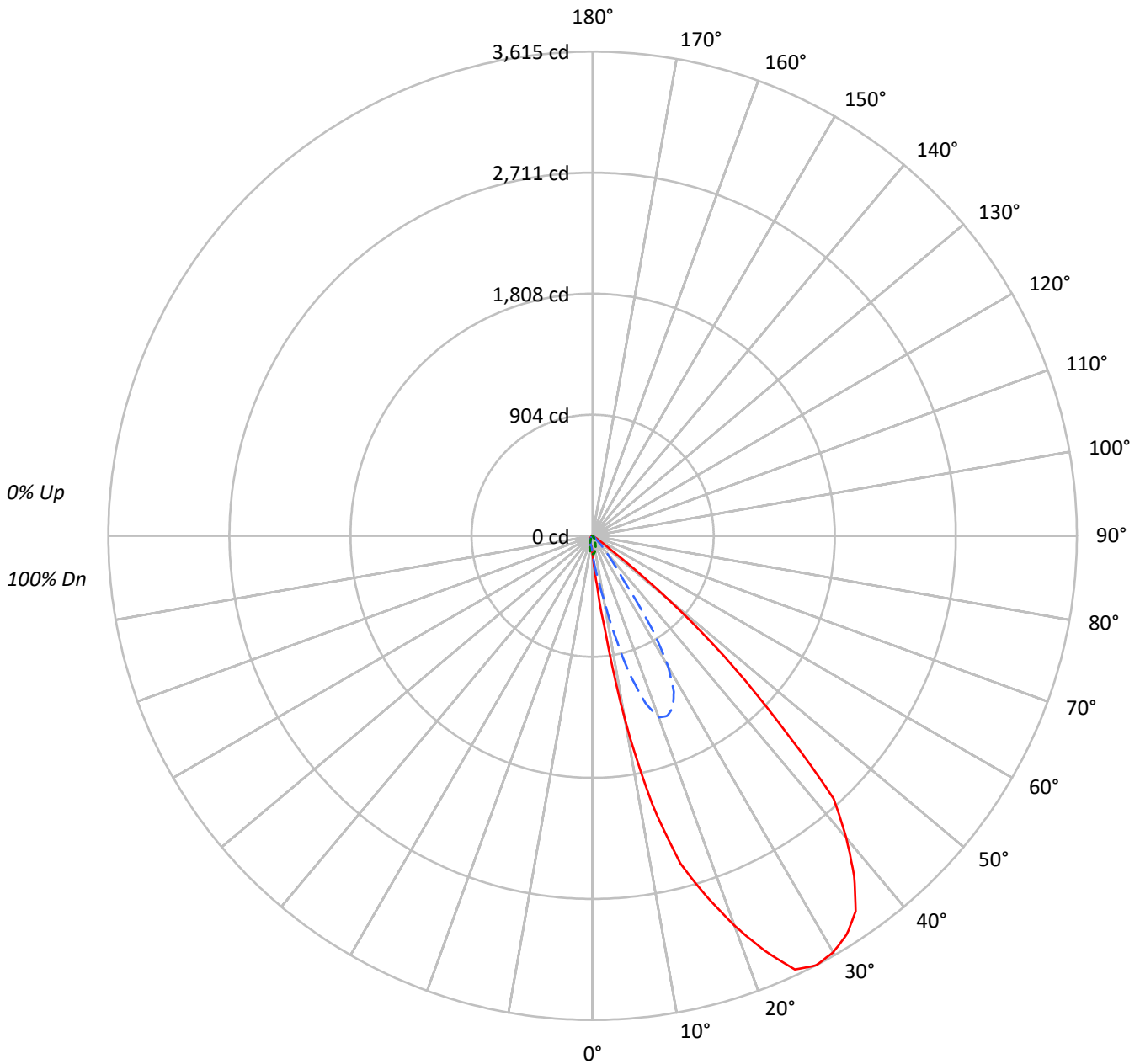
Input Watts (W): 13.84
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P182744

CATALOG NUMBER: LDSQA4A09835D010TE LAR35FL 4LSQA1H 30°

Luminous Intensity Polar Plot





TEST NUMBER: P182744

CATALOG NUMBER: LDSQA4A09835D010TE LAR35FL 4LSQA1H 30°

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 | 100 | | | | | | | | |
| 1 | 112 | 109 | 106 | 104 | 110 | 107 | 105 | 102 | 103 | 101 | 99 | 99 | 98 | 96 | 96 | 94 | 93 | 91 | | | | | | | | |
| 2 | 106 | 100 | 95 | 91 | 103 | 98 | 94 | 90 | 95 | 91 | 88 | 92 | 89 | 86 | 89 | 87 | 84 | 83 | | | | | | | | |
| 3 | 99 | 91 | 85 | 81 | 97 | 90 | 84 | 80 | 87 | 83 | 79 | 85 | 81 | 77 | 82 | 79 | 76 | 74 | | | | | | | | |
| 4 | 92 | 83 | 77 | 72 | 91 | 82 | 76 | 71 | 80 | 75 | 71 | 78 | 73 | 70 | 76 | 72 | 69 | 67 | | | | | | | | |
| 5 | 86 | 76 | 69 | 64 | 85 | 75 | 69 | 64 | 74 | 68 | 63 | 72 | 67 | 63 | 70 | 66 | 62 | 60 | | | | | | | | |
| 6 | 81 | 70 | 63 | 58 | 79 | 69 | 62 | 58 | 68 | 62 | 57 | 66 | 61 | 57 | 65 | 60 | 56 | 55 | | | | | | | | |
| 7 | 75 | 64 | 57 | 52 | 74 | 64 | 57 | 52 | 62 | 56 | 52 | 61 | 55 | 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 | 39 | 37 | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° |
|-----|--------|-------|-------|
| 0° | 13388 | 13388 | 13388 |
| 5° | 35203 | 12749 | 8324 |
| 10° | 138013 | 11037 | 6935 |
| 15° | 254092 | 8695 | 6138 |
| 20° | 319288 | 6144 | 5588 |
| 25° | 381908 | 4051 | 4981 |
| 30° | 401619 | 2550 | 4363 |
| 35° | 404850 | 1537 | 3784 |
| 40° | 372544 | 1024 | 3225 |
| 45° | 265059 | 740 | 2672 |
| 50° | 109522 | 573 | 2200 |
| 55° | 6317 | 557 | 1925 |
| 60° | 736 | 523 | 1569 |
| 65° | 252 | 619 | 1123 |
| 70° | 312 | 623 | 765 |
| 75° | 412 | 823 | 823 |
| 80° | 0 | 1227 | 893 |
| 85° | 0 | 2445 | 1223 |



TEST NUMBER: P182744

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 21.7 | 1.8 |
| 10°-20° | 173.5 | 14.7 |
| 20°-30° | 358.9 | 30.3 |
| 30°-40° | 390.7 | 33.0 |
| 40°-50° | 214.2 | 18.1 |
| 50°-60° | 18.5 | 1.6 |
| 60°-70° | 3.0 | 0.3 |
| 70°-80° | 2.2 | 0.2 |
| 80°-90° | 1.4 | 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° | 554.2 | 46.8 |
| 0°-40° | 944.9 | 79.8 |
| 0°-60° | 1177.7 | 99.4 |
| 0°-90° | 1184.3 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1184.3 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|-----|------|------|-----|------|------|------|
| 0° | 138 | 138 | 138 | 138 | 138 | |
| 5° | 362 | 248 | 131 | 90 | 86 | 66 |
| 15° | 2534 | 1065 | 87 | 58 | 61 | 707 |
| 25° | 3573 | 1417 | 38 | 36 | 47 | 1613 |
| 35° | 3423 | 388 | 13 | 21 | 32 | 2101 |
| 45° | 1935 | 40 | 5 | 11 | 20 | 1477 |
| 55° | 37 | 4 | 3 | 7 | 11 | 128 |
| 65° | 1 | 2 | 3 | 4 | 5 | 2 |
| 75° | 1 | 2 | 2 | 3 | 2 | 1 |
| 85° | 0 | 1 | 2 | 2 | 1 | 0 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P182744

CATALOG NUMBER: LDSQA4A09835D010TE LAR35FL 4LSQA1H 30°

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 22.5° | 25° | 30° | 35° | 40° | 45° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 138.2 | 138.2 | 138.2 | 138.2 | 138.2 | 138.2 | 138.2 | 138.2 | 138.2 | 138.2 | 138.2 |
| 2.5° | 217.3 | 209.7 | 208.6 | 209.7 | 204.3 | 203.8 | 204.8 | 200.5 | 196.7 | 192.9 | 189.7 |
| 5° | 362.0 | 346.3 | 341.4 | 334.9 | 318.7 | 313.2 | 312.1 | 294.8 | 278.0 | 262.3 | 247.7 |
| 7.5° | 703.4 | 672.0 | 655.2 | 622.7 | 572.8 | 550.6 | 538.7 | 481.8 | 428.7 | 380.4 | 336.5 |
| 10° | 1403.0 | 1320.7 | 1280.6 | 1219.3 | 1110.4 | 1056.8 | 1017.7 | 874.7 | 733.8 | 598.3 | 479.1 |
| 12.5° | 2047.4 | 2001.9 | 1942.8 | 1910.3 | 1733.6 | 1665.9 | 1601.4 | 1403.0 | 1188.4 | 969.5 | 752.2 |
| 15° | 2533.5 | 2466.8 | 2404.0 | 2388.8 | 2250.1 | 2171.0 | 2099.4 | 1894.0 | 1638.8 | 1360.2 | 1064.9 |
| 17.5° | 2819.1 | 2771.4 | 2711.8 | 2683.1 | 2520.5 | 2456.6 | 2375.3 | 2176.4 | 1928.2 | 1650.7 | 1307.7 |
| 20° | 3097.1 | 3026.7 | 2942.7 | 2899.3 | 2719.4 | 2645.7 | 2553.6 | 2344.4 | 2081.5 | 1786.7 | 1443.7 |
| 22.5° | 3351.3 | 3260.2 | 3141.0 | 3073.8 | 2871.7 | 2790.4 | 2687.4 | 2460.9 | 2176.4 | 1839.3 | 1455.1 |
| 25° | 3572.9 | 3490.5 | 3331.8 | 3214.2 | 2975.7 | 2879.8 | 2760.0 | 2523.2 | 2210.5 | 1835.0 | 1416.6 |
| 27.5° | 3615.2 | 3559.9 | 3417.4 | 3281.4 | 3012.0 | 2905.3 | 2781.2 | 2536.2 | 2186.7 | 1774.8 | 1313.1 |
| 30° | 3590.3 | 3530.6 | 3416.3 | 3277.6 | 2996.9 | 2889.0 | 2760.0 | 2480.9 | 2093.5 | 1634.4 | 1123.4 |
| 32.5° | 3530.1 | 3478.6 | 3342.1 | 3195.7 | 2922.1 | 2809.9 | 2673.9 | 2351.4 | 1933.6 | 1411.2 | 826.4 |
| 35° | 3423.3 | 3345.9 | 3181.1 | 3060.8 | 2803.4 | 2688.0 | 2521.6 | 2178.5 | 1694.6 | 1014.5 | 387.5 |
| 37.5° | 3206.0 | 3130.7 | 3012.0 | 2900.9 | 2650.0 | 2514.0 | 2338.4 | 1937.9 | 1256.2 | 553.3 | 239.5 |
| 40° | 2945.9 | 2880.9 | 2777.4 | 2669.5 | 2411.0 | 2254.4 | 2060.9 | 1514.7 | 739.2 | 311.6 | 147.4 |
| 42.5° | 2663.0 | 2595.8 | 2478.8 | 2353.0 | 2071.2 | 1906.0 | 1696.8 | 980.3 | 389.6 | 183.7 | 80.2 |
| 45° | 1934.7 | 1874.5 | 1789.4 | 1698.9 | 1535.8 | 1416.6 | 1141.3 | 514.8 | 215.7 | 97.5 | 39.6 |
| 47.5° | 1323.9 | 1252.4 | 1095.2 | 905.0 | 733.8 | 627.6 | 472.0 | 223.3 | 110.6 | 48.8 | 23.3 |
| 50° | 726.7 | 650.9 | 570.6 | 444.4 | 297.5 | 244.4 | 190.2 | 107.8 | 49.9 | 24.4 | 13.0 |
| 52.5° | 178.3 | 157.7 | 144.2 | 132.8 | 105.1 | 94.8 | 80.2 | 45.0 | 22.8 | 13.5 | 9.2 |
| 55° | 37.4 | 34.7 | 33.1 | 32.5 | 29.8 | 28.7 | 24.9 | 17.3 | 12.5 | 8.7 | 4.3 |
| 57.5° | 10.8 | 10.3 | 10.8 | 10.8 | 10.8 | 10.3 | 10.3 | 7.6 | 7.0 | 4.3 | 2.7 |
| 60° | 3.8 | 3.8 | 3.8 | 4.3 | 4.3 | 4.3 | 4.9 | 4.9 | 3.8 | 2.7 | 2.2 |
| 62.5° | 1.6 | 1.6 | 1.6 | 2.2 | 2.2 | 2.7 | 2.7 | 2.7 | 2.2 | 2.2 | 1.6 |
| 65° | 1.1 | 1.1 | 1.1 | 1.1 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 |
| 67.5° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.6 |
| 70° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.6 |
| 72.5° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.6 |
| 75° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.6 |
| 77.5° | 0.0 | 0.0 | 0.0 | 0.5 | 0.5 | 0.5 | 0.5 | 1.1 | 1.1 | 1.1 | 1.6 |
| 80° | 0.0 | 0.0 | 0.0 | 0.5 | 0.5 | 0.5 | 0.5 | 1.1 | 1.1 | 1.1 | 1.1 |
| 82.5° | 0.0 | 0.0 | 0.0 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 1.1 | 1.1 | 1.1 |
| 85° | 0.0 | 0.0 | 0.0 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 1.1 | 1.1 | 1.1 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 1.1 | 1.1 | 1.1 |
| 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: P182744

CATALOG NUMBER: LDSQA4A09835D010TE LAR35FL 4LSQA1H 30°

CANDELA DISTRIBUTION (continued):

| | 50° | 55° | 60° | 65° | 67.5° | 70° | 75° | 80° | 85° | 90° | 95° |
|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 138.2 | 138.2 | 138.2 | 138.2 | 138.2 | 138.2 | 138.2 | 138.2 | 138.2 | 138.2 | 138.2 |
| 2.5° | 180.5 | 175.0 | 168.5 | 161.5 | 160.4 | 156.6 | 151.2 | 143.6 | 140.9 | 135.5 | 130.6 |
| 5° | 226.5 | 211.9 | 196.7 | 183.2 | 178.8 | 172.9 | 163.1 | 149.6 | 140.9 | 131.1 | 123.0 |
| 7.5° | 288.3 | 254.7 | 223.8 | 199.4 | 191.8 | 182.1 | 166.9 | 149.6 | 136.6 | 123.0 | 112.2 |
| 10° | 370.7 | 302.4 | 249.3 | 209.7 | 197.3 | 184.3 | 164.2 | 143.1 | 127.9 | 112.2 | 100.8 |
| 12.5° | 529.5 | 372.3 | 273.1 | 215.1 | 197.8 | 181.0 | 155.5 | 132.8 | 115.4 | 99.7 | 88.3 |
| 15° | 752.7 | 505.1 | 321.4 | 218.9 | 192.4 | 171.8 | 142.0 | 118.7 | 101.3 | 86.7 | 75.9 |
| 17.5° | 941.3 | 630.8 | 385.9 | 229.8 | 188.6 | 159.9 | 126.3 | 102.4 | 85.6 | 72.6 | 63.9 |
| 20° | 1033.5 | 687.2 | 415.1 | 231.4 | 177.8 | 142.0 | 107.8 | 85.1 | 70.5 | 59.6 | 52.0 |
| 22.5° | 1022.6 | 668.2 | 388.0 | 202.7 | 150.1 | 119.8 | 89.4 | 68.8 | 56.4 | 47.7 | 42.3 |
| 25° | 950.0 | 585.8 | 316.5 | 155.0 | 117.1 | 97.0 | 69.9 | 53.7 | 43.9 | 37.9 | 33.6 |
| 27.5° | 828.1 | 470.4 | 230.9 | 109.5 | 88.9 | 73.7 | 52.0 | 41.2 | 33.6 | 29.3 | 26.6 |
| 30° | 637.8 | 300.8 | 132.8 | 78.6 | 64.5 | 52.6 | 39.0 | 29.8 | 25.5 | 22.8 | 20.6 |
| 32.5° | 328.9 | 146.3 | 88.3 | 56.4 | 45.5 | 37.9 | 27.1 | 21.7 | 19.0 | 17.3 | 16.3 |
| 35° | 180.5 | 104.0 | 61.2 | 36.3 | 29.3 | 24.4 | 18.4 | 15.2 | 14.1 | 13.0 | 13.0 |
| 37.5° | 124.1 | 64.5 | 34.1 | 21.7 | 17.9 | 15.2 | 12.5 | 10.8 | 10.3 | 10.3 | 10.3 |
| 40° | 71.5 | 34.1 | 19.5 | 13.5 | 11.4 | 10.3 | 8.7 | 8.1 | 8.1 | 8.1 | 8.7 |
| 42.5° | 36.9 | 20.1 | 13.0 | 9.2 | 8.1 | 7.0 | 6.0 | 6.0 | 6.0 | 6.5 | 7.0 |
| 45° | 21.7 | 13.5 | 8.7 | 6.0 | 5.4 | 4.9 | 4.3 | 4.3 | 4.9 | 5.4 | 6.0 |
| 47.5° | 13.5 | 9.2 | 5.4 | 3.8 | 3.3 | 3.3 | 3.3 | 3.3 | 3.8 | 4.3 | 4.9 |
| 50° | 9.2 | 4.9 | 3.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.7 | 3.3 | 3.8 | 4.3 |
| 52.5° | 4.9 | 2.7 | 2.2 | 1.6 | 1.6 | 1.6 | 2.2 | 2.2 | 2.7 | 3.3 | 3.8 |
| 55° | 2.7 | 2.2 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 2.2 | 2.7 | 3.3 | 3.8 |
| 57.5° | 2.2 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 2.2 | 2.2 | 2.7 | 3.3 |
| 60° | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 2.2 | 2.2 | 2.7 | 3.3 |
| 62.5° | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 2.2 | 2.2 | 2.7 | 2.7 |
| 65° | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 2.2 | 2.2 | 2.7 | 2.7 |
| 67.5° | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 2.2 | 2.2 | 2.2 | 2.7 |
| 70° | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 2.2 | 2.2 | 2.2 | 2.2 | 2.7 |
| 72.5° | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 2.2 | 2.2 | 2.2 | 2.2 |
| 75° | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.7 |
| 77.5° | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 |
| 80° | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 |
| 82.5° | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 |
| 85° | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 |
| 87.5° | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 |
| 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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CATALOG NUMBER: LDSQA4A09835D010TE LAR35FL 4LSQA1H 30°

CANDELA DISTRIBUTION (continued):

| | 100° | 105° | 110° | 112.5° | 115° | 120° | 125° | 130° | 135° | 140° | 145° |
|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 138.2 | 138.2 | 138.2 | 138.2 | 138.2 | 138.2 | 138.2 | 138.2 | 138.2 | 138.2 | 138.2 |
| 2.5° | 127.9 | 123.6 | 119.2 | 119.2 | 117.1 | 113.8 | 112.7 | 109.5 | 107.3 | 106.2 | 105.1 |
| 5° | 117.1 | 110.6 | 104.6 | 104.0 | 101.3 | 97.5 | 95.9 | 92.7 | 90.5 | 89.4 | 88.9 |
| 7.5° | 104.6 | 98.1 | 92.1 | 91.0 | 88.9 | 86.2 | 84.5 | 81.8 | 80.7 | 79.7 | 79.1 |
| 10° | 92.7 | 86.2 | 81.8 | 80.7 | 79.1 | 77.0 | 75.3 | 73.7 | 72.6 | 72.1 | 72.1 |
| 12.5° | 80.7 | 75.9 | 72.1 | 71.0 | 69.9 | 68.3 | 67.2 | 66.1 | 65.6 | 65.6 | 65.6 |
| 15° | 69.9 | 65.6 | 62.3 | 62.3 | 61.2 | 60.2 | 60.2 | 59.1 | 58.5 | 59.1 | 59.6 |
| 17.5° | 59.1 | 55.8 | 53.1 | 53.1 | 52.6 | 52.0 | 52.0 | 52.0 | 52.6 | 53.1 | 54.2 |
| 20° | 48.8 | 46.1 | 45.0 | 45.0 | 44.4 | 45.0 | 45.0 | 45.5 | 46.1 | 47.7 | 49.3 |
| 22.5° | 39.6 | 37.9 | 36.9 | 37.4 | 37.4 | 37.9 | 38.5 | 39.6 | 40.6 | 42.3 | 43.9 |
| 25° | 32.0 | 30.9 | 30.3 | 30.9 | 31.4 | 32.0 | 33.1 | 34.1 | 35.8 | 37.4 | 39.6 |
| 27.5° | 25.5 | 24.9 | 24.9 | 25.5 | 26.0 | 27.1 | 28.7 | 29.8 | 31.4 | 33.1 | 35.2 |
| 30° | 20.6 | 20.1 | 20.6 | 21.7 | 22.2 | 23.3 | 24.4 | 26.0 | 27.6 | 29.3 | 31.4 |
| 32.5° | 16.3 | 16.8 | 17.3 | 17.9 | 18.4 | 20.1 | 21.1 | 22.2 | 23.8 | 25.5 | 27.6 |
| 35° | 13.5 | 14.1 | 14.6 | 15.2 | 15.7 | 16.8 | 17.9 | 19.0 | 20.6 | 22.2 | 24.4 |
| 37.5° | 10.8 | 11.4 | 11.9 | 13.0 | 13.5 | 14.1 | 15.7 | 16.3 | 17.9 | 19.0 | 21.1 |
| 40° | 9.2 | 9.8 | 10.3 | 10.8 | 11.4 | 12.5 | 13.5 | 14.1 | 15.2 | 16.8 | 18.4 |
| 42.5° | 7.6 | 8.1 | 8.7 | 9.2 | 9.8 | 10.8 | 11.4 | 12.5 | 13.5 | 14.6 | 15.7 |
| 45° | 6.5 | 7.0 | 7.6 | 8.1 | 8.7 | 9.2 | 9.8 | 10.8 | 11.4 | 12.5 | 13.5 |
| 47.5° | 5.4 | 6.0 | 7.0 | 7.0 | 7.6 | 8.1 | 8.7 | 9.2 | 10.3 | 10.8 | 11.9 |
| 50° | 4.9 | 5.4 | 6.0 | 6.5 | 6.5 | 7.0 | 7.6 | 8.1 | 8.7 | 9.2 | 10.3 |
| 52.5° | 4.3 | 4.9 | 5.4 | 5.4 | 6.0 | 6.5 | 7.0 | 7.0 | 7.6 | 8.1 | 8.7 |
| 55° | 3.8 | 4.3 | 4.9 | 4.9 | 5.4 | 6.0 | 6.0 | 6.5 | 7.0 | 7.0 | 7.6 |
| 57.5° | 3.8 | 3.8 | 4.3 | 4.3 | 4.9 | 4.9 | 5.4 | 6.0 | 6.0 | 6.5 | 7.0 |
| 60° | 3.3 | 3.8 | 3.8 | 4.3 | 4.3 | 4.9 | 4.9 | 5.4 | 5.4 | 6.0 | 6.0 |
| 62.5° | 3.3 | 3.3 | 3.8 | 3.8 | 4.3 | 4.3 | 4.9 | 4.9 | 4.9 | 5.4 | 5.4 |
| 65° | 3.3 | 3.3 | 3.8 | 3.8 | 3.8 | 4.3 | 4.3 | 4.3 | 4.3 | 4.9 | 4.9 |
| 67.5° | 2.7 | 3.3 | 3.3 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 4.3 | 4.3 | 4.3 |
| 70° | 2.7 | 3.3 | 3.3 | 3.3 | 3.3 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 |
| 72.5° | 2.7 | 2.7 | 2.7 | 2.7 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 |
| 75° | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 |
| 77.5° | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 |
| 80° | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.7 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 |
| 82.5° | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 1.6 | 1.6 |
| 85° | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 1.6 | 1.6 | 1.6 | 1.6 |
| 87.5° | 2.2 | 2.2 | 2.2 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.1 | 1.1 |
| 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: P182744

CATALOG NUMBER: LDSQA4A09835D010TE LAR35FL 4LSQA1H 30°

CANDELA DISTRIBUTION (continued):

| | 150° | 155° | 157.5° | 160° | 165° | 170° | 175° | 180° |
|-------|-------|-------|--------|-------|-------|-------|-------|-------|
| 0° | 138.2 | 138.2 | 138.2 | 138.2 | 138.2 | 138.2 | 138.2 | 138.2 |
| 2.5° | 103.5 | 102.4 | 103.5 | 102.4 | 102.4 | 100.3 | 101.9 | 100.8 |
| 5° | 87.3 | 86.2 | 87.3 | 86.7 | 85.6 | 85.1 | 86.2 | 85.6 |
| 7.5° | 78.0 | 77.0 | 78.0 | 78.0 | 77.0 | 76.4 | 77.5 | 77.0 |
| 10° | 71.0 | 70.5 | 71.0 | 71.0 | 70.5 | 69.9 | 71.0 | 70.5 |
| 12.5° | 65.0 | 64.5 | 65.6 | 65.6 | 65.0 | 65.0 | 66.1 | 65.0 |
| 15° | 59.6 | 59.6 | 60.7 | 60.7 | 60.7 | 60.7 | 61.8 | 61.2 |
| 17.5° | 54.2 | 55.3 | 56.4 | 56.9 | 56.9 | 56.9 | 58.0 | 58.0 |
| 20° | 49.9 | 50.9 | 52.0 | 52.6 | 53.1 | 53.1 | 54.2 | 54.2 |
| 22.5° | 45.0 | 46.1 | 47.7 | 48.2 | 48.8 | 49.3 | 50.4 | 50.4 |
| 25° | 40.6 | 41.7 | 43.4 | 43.9 | 45.0 | 45.5 | 46.6 | 46.6 |
| 27.5° | 36.3 | 37.9 | 39.0 | 40.1 | 40.6 | 41.7 | 42.8 | 42.8 |
| 30° | 32.5 | 34.1 | 35.2 | 36.3 | 36.9 | 37.9 | 39.0 | 39.0 |
| 32.5° | 28.7 | 30.3 | 31.4 | 32.5 | 33.6 | 34.1 | 35.8 | 35.8 |
| 35° | 25.5 | 26.6 | 28.2 | 28.7 | 29.8 | 30.9 | 32.0 | 32.0 |
| 37.5° | 22.2 | 23.3 | 24.4 | 25.5 | 26.6 | 27.1 | 28.2 | 28.7 |
| 40° | 19.5 | 20.6 | 21.7 | 22.2 | 23.3 | 24.4 | 24.9 | 25.5 |
| 42.5° | 16.8 | 17.9 | 19.0 | 19.5 | 20.6 | 21.1 | 22.2 | 22.2 |
| 45° | 14.6 | 15.7 | 16.3 | 16.8 | 17.9 | 18.4 | 19.5 | 19.5 |
| 47.5° | 12.5 | 13.5 | 14.1 | 14.6 | 15.2 | 15.7 | 16.8 | 16.8 |
| 50° | 10.8 | 11.4 | 11.9 | 12.5 | 13.0 | 14.1 | 14.6 | 14.6 |
| 52.5° | 9.2 | 10.3 | 10.3 | 10.8 | 11.4 | 11.9 | 12.5 | 13.0 |
| 55° | 8.1 | 8.7 | 9.2 | 9.2 | 9.8 | 10.3 | 10.8 | 11.4 |
| 57.5° | 7.0 | 7.6 | 8.1 | 8.1 | 8.7 | 8.7 | 9.2 | 9.8 |
| 60° | 6.5 | 6.5 | 7.0 | 7.0 | 7.0 | 7.6 | 7.6 | 8.1 |
| 62.5° | 5.4 | 5.4 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 |
| 65° | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 |
| 67.5° | 4.3 | 4.3 | 4.3 | 4.3 | 3.8 | 3.8 | 3.8 | 3.8 |
| 70° | 3.8 | 3.8 | 3.8 | 3.8 | 3.3 | 3.3 | 3.3 | 2.7 |
| 72.5° | 3.3 | 3.3 | 3.3 | 3.3 | 2.7 | 2.7 | 2.2 | 2.2 |
| 75° | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.2 | 2.2 | 2.2 |
| 77.5° | 2.7 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 1.6 |
| 80° | 2.2 | 2.2 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 |
| 82.5° | 1.6 | 1.6 | 1.6 | 1.6 | 1.1 | 1.1 | 1.1 | 1.1 |
| 85° | 1.6 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 87.5° | 1.1 | 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)