

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: P274347

Luminaire Tested: **LD4B15DE010W2N2050 EU4B1020W2N902050 4LBLWWOLI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P274347
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-11)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD4B15DE010W2N2050 EU4B1020W2N902050 4LBLWW0LI
Description: PORTFOLIO 4" W2N RN DOWNLIGHT, LENSED WALLWASH WITH SPECULAR FINISH
Light Source: W2N 2000K-5000K CCT TUNING RANGE
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1002.0 lumens
Efficiency: N/A
Efficacy: 45.5 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.03 / 1.12
Luminous Opening: Circular (Dia: 0.38' x H: 0')
CIE Type: Direct

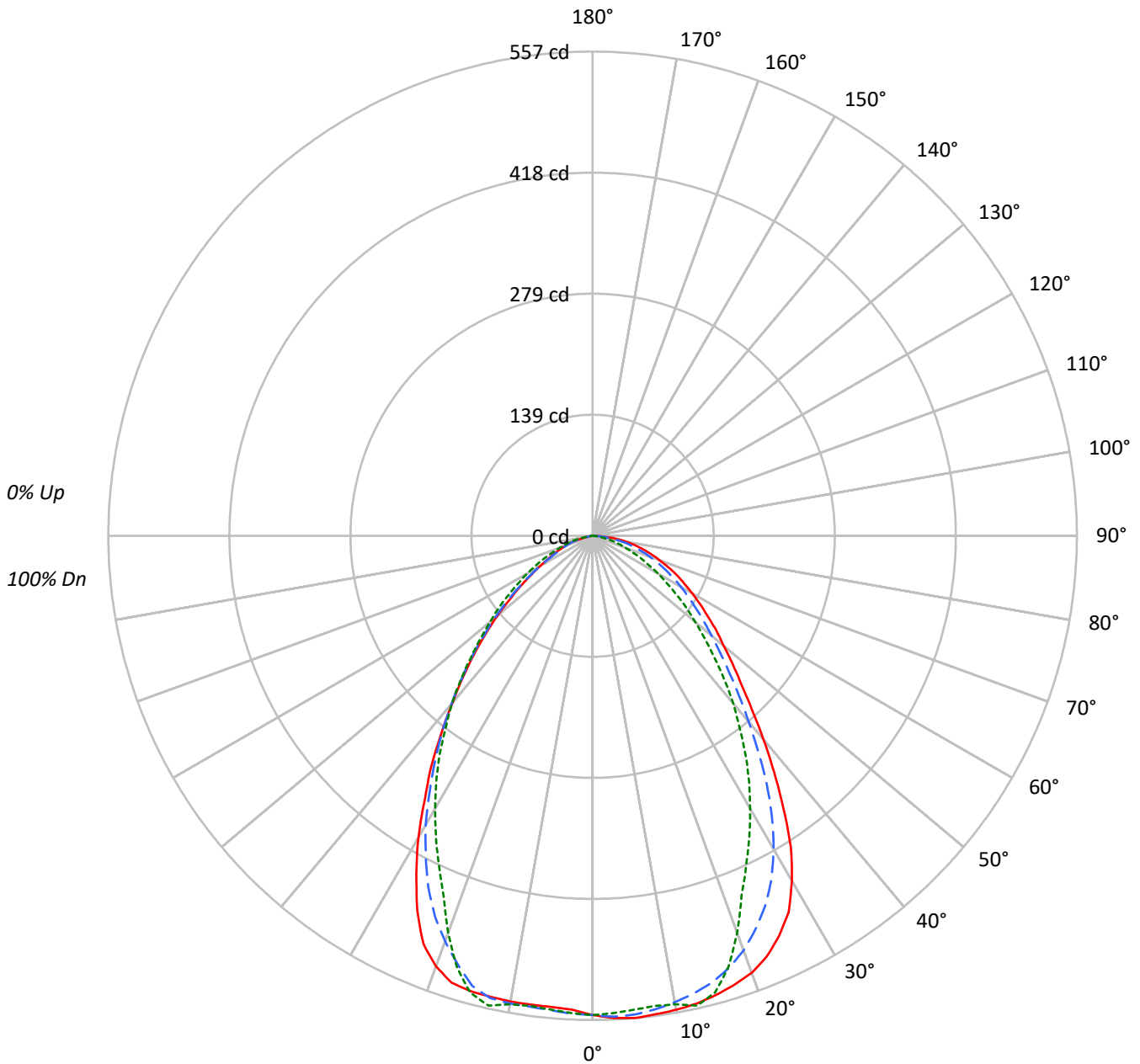
Input Watts (W): 22
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P274347

CATALOG NUMBER: LD4B15DE010W2N2050 EU4B1020W2N902050 4LBLWW0LI

Luminous Intensity Polar Plot





TEST NUMBER: P274347

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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 | 100 | 100 | 100 | 100 |
| 1 | 111 | 107 | 103 | 100 | 108 | 105 | 102 | 99 | 101 | 98 | 96 | 97 | 95 | 93 | 93 | 91 | 90 | 88 | 88 | 88 | 88 |
| 2 | 103 | 96 | 90 | 85 | 100 | 94 | 89 | 84 | 90 | 86 | 82 | 87 | 84 | 80 | 84 | 81 | 79 | 77 | 77 | 77 | 77 |
| 3 | 95 | 86 | 79 | 74 | 93 | 84 | 78 | 73 | 82 | 76 | 72 | 79 | 74 | 70 | 77 | 73 | 69 | 67 | 67 | 67 | 67 |
| 4 | 88 | 78 | 70 | 64 | 86 | 76 | 69 | 64 | 74 | 68 | 63 | 72 | 67 | 62 | 70 | 65 | 62 | 60 | 60 | 60 | 60 |
| 5 | 82 | 71 | 63 | 57 | 80 | 70 | 62 | 57 | 68 | 61 | 56 | 66 | 60 | 56 | 64 | 59 | 55 | 53 | 53 | 53 | 53 |
| 6 | 76 | 65 | 57 | 51 | 75 | 64 | 56 | 51 | 62 | 55 | 50 | 60 | 54 | 50 | 59 | 54 | 50 | 48 | 48 | 48 | 48 |
| 7 | 71 | 59 | 51 | 46 | 70 | 59 | 51 | 46 | 57 | 50 | 46 | 56 | 50 | 45 | 54 | 49 | 45 | 43 | 43 | 43 | 43 |
| 8 | 67 | 55 | 47 | 42 | 65 | 54 | 47 | 42 | 53 | 46 | 41 | 52 | 46 | 41 | 51 | 45 | 41 | 39 | 39 | 39 | 39 |
| 9 | 63 | 51 | 43 | 38 | 62 | 50 | 43 | 38 | 49 | 43 | 38 | 48 | 42 | 38 | 47 | 42 | 38 | 36 | 36 | 36 | 36 |
| 10 | 59 | 47 | 40 | 35 | 58 | 47 | 40 | 35 | 46 | 39 | 35 | 45 | 39 | 35 | 44 | 39 | 35 | 33 | 33 | 33 | 33 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° |
|-----|-------|-------|-------|
| 0° | 53729 | 53729 | 53729 |
| 5° | 54482 | 53533 | 53220 |
| 10° | 54795 | 54152 | 53835 |
| 15° | 55210 | 54887 | 54726 |
| 20° | 55497 | 50384 | 54657 |
| 25° | 54584 | 44938 | 51283 |
| 30° | 51575 | 40749 | 45115 |
| 35° | 45484 | 36442 | 38464 |
| 40° | 38866 | 31984 | 31882 |
| 45° | 33313 | 27290 | 26628 |
| 50° | 29778 | 23289 | 21697 |
| 55° | 27475 | 19914 | 17161 |
| 60° | 25690 | 16860 | 13547 |
| 65° | 24606 | 13975 | 11184 |
| 70° | 23252 | 11284 | 9432 |
| 75° | 22518 | 9112 | 6703 |
| 80° | 21776 | 4995 | 1796 |
| 85° | 19010 | 2684 | 895 |



TEST NUMBER: P274347

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 52.4 | 5.2 |
| 10°-20° | 150.7 | 15.0 |
| 20°-30° | 209.0 | 20.9 |
| 30°-40° | 206.3 | 20.6 |
| 40°-50° | 161.8 | 16.1 |
| 50°-60° | 112.1 | 11.2 |
| 60°-70° | 68.7 | 6.9 |
| 70°-80° | 34.3 | 3.4 |
| 80°-90° | 6.9 | 0.7 |
| 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° | 412.0 | 41.1 |
| 0°-40° | 618.3 | 61.7 |
| 0°-60° | 892.2 | 89.0 |
| 0°-90° | 1002.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1002.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|-----|-----|-----|-----|------|------|------|
| 0° | 551 | 551 | 551 | 551 | 551 | |
| 5° | 557 | 553 | 547 | 548 | 544 | 53 |
| 15° | 547 | 532 | 544 | 536 | 542 | 155 |
| 25° | 508 | 470 | 418 | 447 | 477 | 232 |
| 35° | 382 | 349 | 306 | 316 | 323 | 239 |
| 45° | 242 | 222 | 198 | 196 | 193 | 189 |
| 55° | 162 | 145 | 117 | 104 | 101 | 146 |
| 65° | 107 | 92 | 61 | 45 | 48 | 105 |
| 75° | 60 | 50 | 24 | 19 | 18 | 63 |
| 85° | 17 | 10 | 2 | 1 | 1 | 19 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P274347

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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 22.5° | 25° | 30° | 35° | 40° | 45° |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 551.3 | 551.3 | 551.3 | 551.3 | 551.3 | 551.3 | 551.3 | 551.3 | 551.3 | 551.3 | 551.3 |
| 2.5° | 555.3 | 553.7 | 552.9 | 555.3 | 554.5 | 556.1 | 555.3 | 554.5 | 552.9 | 553.7 | 553.7 |
| 5° | 556.9 | 554.5 | 553.7 | 555.3 | 555.3 | 556.9 | 556.1 | 554.5 | 552.9 | 553.7 | 552.9 |
| 7.5° | 555.3 | 553.7 | 553.7 | 554.5 | 553.7 | 555.3 | 553.7 | 552.1 | 550.4 | 551.3 | 549.6 |
| 10° | 553.7 | 551.3 | 551.3 | 551.3 | 551.3 | 552.9 | 551.3 | 548.8 | 546.4 | 546.4 | 544.8 |
| 12.5° | 551.3 | 548.8 | 548.8 | 549.6 | 548.0 | 549.6 | 548.0 | 544.0 | 541.6 | 540.7 | 539.1 |
| 15° | 547.2 | 544.8 | 544.8 | 544.8 | 543.2 | 544.0 | 541.6 | 537.5 | 534.3 | 534.3 | 531.9 |
| 17.5° | 541.6 | 539.1 | 538.3 | 538.3 | 535.9 | 536.7 | 534.3 | 530.2 | 525.4 | 523.8 | 521.3 |
| 20° | 535.1 | 531.9 | 530.2 | 530.2 | 527.8 | 528.6 | 525.4 | 520.5 | 514.1 | 511.6 | 507.6 |
| 22.5° | 523.8 | 522.2 | 519.7 | 518.9 | 516.5 | 515.7 | 512.5 | 506.0 | 500.3 | 496.3 | 489.8 |
| 25° | 507.6 | 506.8 | 504.4 | 503.6 | 500.3 | 498.7 | 495.5 | 488.2 | 482.5 | 476.1 | 469.6 |
| 27.5° | 488.2 | 485.0 | 483.4 | 480.9 | 477.7 | 476.9 | 472.9 | 466.4 | 457.5 | 453.5 | 445.4 |
| 30° | 458.3 | 456.7 | 455.1 | 452.6 | 449.4 | 447.8 | 445.4 | 438.1 | 430.8 | 423.5 | 416.3 |
| 32.5° | 424.4 | 421.1 | 418.7 | 419.5 | 415.5 | 413.8 | 409.8 | 403.3 | 396.9 | 392.0 | 383.9 |
| 35° | 382.3 | 381.5 | 380.7 | 379.1 | 375.9 | 375.0 | 371.8 | 367.0 | 359.7 | 354.0 | 349.2 |
| 37.5° | 342.7 | 340.3 | 338.7 | 338.7 | 335.4 | 335.4 | 333.0 | 327.4 | 323.3 | 319.3 | 312.8 |
| 40° | 305.5 | 301.5 | 301.5 | 301.5 | 298.3 | 299.1 | 297.5 | 291.8 | 287.8 | 282.9 | 278.9 |
| 42.5° | 270.8 | 269.2 | 268.4 | 266.7 | 265.1 | 265.1 | 263.5 | 260.3 | 256.2 | 253.0 | 249.0 |
| 45° | 241.7 | 240.9 | 240.1 | 239.3 | 237.6 | 236.8 | 236.0 | 231.2 | 228.7 | 225.5 | 221.5 |
| 47.5° | 218.2 | 216.6 | 215.8 | 215.0 | 213.4 | 212.6 | 211.0 | 207.7 | 205.3 | 202.1 | 198.8 |
| 50° | 196.4 | 195.6 | 194.8 | 194.8 | 193.2 | 192.4 | 190.8 | 188.3 | 184.3 | 182.7 | 178.6 |
| 52.5° | 179.4 | 177.8 | 176.2 | 176.2 | 174.6 | 174.6 | 172.2 | 169.7 | 165.7 | 164.1 | 160.8 |
| 55° | 161.7 | 160.8 | 160.0 | 160.0 | 158.4 | 157.6 | 156.8 | 153.6 | 150.3 | 147.9 | 144.7 |
| 57.5° | 146.3 | 145.5 | 144.7 | 144.7 | 143.1 | 142.3 | 141.5 | 139.0 | 135.8 | 134.2 | 130.1 |
| 60° | 131.8 | 131.8 | 130.9 | 130.1 | 129.3 | 128.5 | 127.7 | 125.3 | 122.9 | 120.4 | 117.2 |
| 62.5° | 118.8 | 118.0 | 117.2 | 116.4 | 116.4 | 115.6 | 114.8 | 111.5 | 109.9 | 107.5 | 104.3 |
| 65° | 106.7 | 105.1 | 105.1 | 104.3 | 104.3 | 103.5 | 102.7 | 99.4 | 97.8 | 95.4 | 92.1 |
| 67.5° | 93.8 | 93.0 | 92.1 | 92.1 | 91.3 | 91.3 | 90.5 | 88.1 | 85.7 | 84.1 | 80.8 |
| 70° | 81.6 | 81.6 | 80.8 | 80.8 | 80.0 | 79.2 | 79.2 | 77.6 | 75.2 | 72.7 | 69.5 |
| 72.5° | 71.1 | 70.3 | 69.5 | 69.5 | 68.7 | 68.7 | 67.9 | 66.3 | 64.7 | 63.0 | 59.0 |
| 75° | 59.8 | 59.0 | 59.0 | 59.0 | 58.2 | 58.2 | 57.4 | 55.8 | 54.2 | 52.5 | 50.1 |
| 77.5° | 49.3 | 49.3 | 48.5 | 48.5 | 47.7 | 47.7 | 47.7 | 46.1 | 44.5 | 42.8 | 39.6 |
| 80° | 38.8 | 38.8 | 38.8 | 38.0 | 37.2 | 37.2 | 37.2 | 35.6 | 33.9 | 32.3 | 29.9 |
| 82.5° | 28.3 | 27.5 | 27.5 | 26.7 | 25.9 | 25.9 | 25.9 | 24.2 | 23.4 | 21.0 | 19.4 |
| 85° | 17.0 | 16.2 | 16.2 | 15.4 | 14.5 | 14.5 | 14.5 | 13.7 | 12.1 | 11.3 | 9.7 |
| 87.5° | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 5.7 | 5.7 | 4.8 | 4.8 | 4.0 | 4.0 |
| 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):

| | 50° | 55° | 60° | 65° | 67.5° | 70° | 75° | 80° | 85° | 90° | 95° |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 551.3 | 551.3 | 551.3 | 551.3 | 551.3 | 551.3 | 551.3 | 551.3 | 551.3 | 551.3 | 551.3 |
| 2.5° | 553.7 | 552.9 | 552.9 | 552.1 | 552.9 | 551.3 | 551.3 | 551.3 | 551.3 | 549.6 | 549.6 |
| 5° | 552.1 | 552.1 | 551.3 | 550.4 | 551.3 | 549.6 | 550.4 | 549.6 | 549.6 | 547.2 | 547.2 |
| 7.5° | 548.8 | 548.0 | 546.4 | 545.6 | 546.4 | 545.6 | 545.6 | 545.6 | 547.2 | 545.6 | 545.6 |
| 10° | 543.2 | 542.4 | 540.7 | 539.9 | 539.9 | 539.1 | 540.7 | 542.4 | 545.6 | 547.2 | 550.4 |
| 12.5° | 537.5 | 535.9 | 535.1 | 535.1 | 535.9 | 535.9 | 539.1 | 543.2 | 551.3 | 553.7 | 556.9 |
| 15° | 530.2 | 529.4 | 529.4 | 531.9 | 535.1 | 537.5 | 544.0 | 546.4 | 547.2 | 544.0 | 542.4 |
| 17.5° | 520.5 | 520.5 | 521.3 | 523.8 | 526.2 | 526.2 | 527.0 | 525.4 | 523.8 | 519.7 | 514.9 |
| 20° | 504.4 | 503.6 | 501.9 | 501.9 | 501.9 | 498.7 | 500.3 | 494.7 | 490.6 | 485.8 | 478.5 |
| 22.5° | 484.2 | 480.1 | 474.5 | 470.4 | 468.0 | 466.4 | 462.3 | 455.9 | 451.0 | 447.8 | 444.6 |
| 25° | 462.3 | 455.9 | 447.8 | 441.3 | 437.3 | 436.5 | 430.8 | 425.2 | 421.9 | 417.9 | 416.3 |
| 27.5° | 437.3 | 430.0 | 420.3 | 413.8 | 410.6 | 408.2 | 403.3 | 397.7 | 393.6 | 390.4 | 388.0 |
| 30° | 408.2 | 400.9 | 392.8 | 384.7 | 381.5 | 377.5 | 372.6 | 368.6 | 364.5 | 362.1 | 360.5 |
| 32.5° | 375.9 | 368.6 | 360.5 | 354.8 | 350.8 | 347.6 | 343.5 | 339.5 | 336.2 | 334.6 | 333.0 |
| 35° | 342.7 | 335.4 | 329.0 | 323.3 | 320.1 | 317.7 | 314.4 | 309.6 | 307.2 | 306.3 | 304.7 |
| 37.5° | 307.2 | 302.3 | 296.6 | 291.8 | 289.4 | 286.1 | 284.5 | 280.5 | 280.5 | 277.2 | 277.2 |
| 40° | 274.0 | 270.8 | 265.1 | 261.1 | 259.5 | 257.0 | 254.6 | 253.0 | 252.2 | 251.4 | 250.6 |
| 42.5° | 244.9 | 240.1 | 236.8 | 233.6 | 231.2 | 229.6 | 229.6 | 227.1 | 226.3 | 223.9 | 223.1 |
| 45° | 218.2 | 215.8 | 210.2 | 207.7 | 206.9 | 204.5 | 203.7 | 202.1 | 199.6 | 198.0 | 197.2 |
| 47.5° | 194.8 | 192.4 | 189.1 | 185.9 | 184.3 | 182.7 | 181.1 | 178.6 | 177.0 | 174.6 | 173.8 |
| 50° | 175.4 | 171.4 | 168.1 | 165.7 | 163.3 | 162.5 | 160.8 | 157.6 | 156.0 | 153.6 | 153.6 |
| 52.5° | 157.6 | 154.4 | 150.3 | 147.9 | 145.5 | 143.9 | 141.5 | 139.0 | 136.6 | 135.8 | 133.4 |
| 55° | 142.3 | 138.2 | 134.2 | 130.9 | 128.5 | 126.1 | 125.3 | 122.1 | 118.8 | 117.2 | 115.6 |
| 57.5° | 127.7 | 123.7 | 118.8 | 114.8 | 113.2 | 111.5 | 109.1 | 105.9 | 103.5 | 101.0 | 99.4 |
| 60° | 113.2 | 109.9 | 105.1 | 101.0 | 99.4 | 97.0 | 94.6 | 91.3 | 88.9 | 86.5 | 84.9 |
| 62.5° | 101.0 | 96.2 | 92.1 | 88.1 | 85.7 | 84.1 | 80.8 | 78.4 | 75.2 | 72.7 | 70.3 |
| 65° | 88.9 | 84.1 | 80.0 | 76.0 | 74.4 | 71.9 | 69.5 | 66.3 | 63.0 | 60.6 | 57.4 |
| 67.5° | 76.8 | 72.7 | 68.7 | 64.7 | 63.0 | 61.4 | 58.2 | 55.0 | 51.7 | 49.3 | 46.1 |
| 70° | 66.3 | 62.2 | 58.2 | 55.0 | 53.3 | 51.7 | 48.5 | 45.3 | 42.8 | 39.6 | 37.2 |
| 72.5° | 56.6 | 53.3 | 49.3 | 46.1 | 44.5 | 42.8 | 39.6 | 37.2 | 33.9 | 32.3 | 29.9 |
| 75° | 46.9 | 43.6 | 40.4 | 37.2 | 35.6 | 33.9 | 31.5 | 29.1 | 26.7 | 24.2 | 22.6 |
| 77.5° | 37.2 | 33.9 | 30.7 | 28.3 | 26.7 | 25.9 | 23.4 | 21.0 | 18.6 | 17.0 | 14.5 |
| 80° | 27.5 | 24.2 | 21.8 | 19.4 | 17.8 | 17.0 | 14.5 | 12.9 | 11.3 | 8.9 | 8.1 |
| 82.5° | 17.0 | 14.5 | 12.9 | 11.3 | 10.5 | 9.7 | 8.1 | 6.5 | 5.7 | 4.8 | 4.0 |
| 85° | 8.9 | 8.1 | 6.5 | 5.7 | 4.8 | 4.8 | 4.0 | 3.2 | 2.4 | 2.4 | 1.6 |
| 87.5° | 3.2 | 2.4 | 2.4 | 1.6 | 1.6 | 1.6 | 1.6 | 0.8 | 0.8 | 0.8 | 0.8 |
| 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):

| | 100° | 105° | 110° | 112.5° | 115° | 120° | 125° | 130° | 135° | 140° | 145° |
|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 551.3 | 551.3 | 551.3 | 551.3 | 551.3 | 551.3 | 551.3 | 551.3 | 551.3 | 551.3 | 551.3 |
| 2.5° | 548.0 | 548.8 | 549.6 | 550.4 | 549.6 | 549.6 | 551.3 | 548.0 | 550.4 | 550.4 | 547.2 |
| 5° | 546.4 | 548.0 | 547.2 | 548.8 | 547.2 | 547.2 | 548.0 | 546.4 | 548.0 | 548.0 | 545.6 |
| 7.5° | 544.8 | 546.4 | 546.4 | 547.2 | 546.4 | 546.4 | 547.2 | 544.8 | 546.4 | 546.4 | 544.0 |
| 10° | 552.1 | 553.7 | 552.9 | 552.1 | 549.6 | 548.0 | 548.8 | 544.8 | 546.4 | 546.4 | 544.0 |
| 12.5° | 554.5 | 553.7 | 550.4 | 548.8 | 547.2 | 545.6 | 546.4 | 543.2 | 544.8 | 544.8 | 543.2 |
| 15° | 538.3 | 536.7 | 534.3 | 535.1 | 533.5 | 532.7 | 534.3 | 532.7 | 535.9 | 537.5 | 535.9 |
| 17.5° | 510.8 | 510.0 | 508.4 | 508.4 | 508.4 | 509.2 | 511.6 | 511.6 | 516.5 | 519.7 | 521.3 |
| 20° | 475.3 | 474.5 | 475.3 | 476.9 | 477.7 | 480.9 | 486.6 | 489.8 | 496.3 | 501.9 | 506.0 |
| 22.5° | 442.9 | 444.6 | 447.0 | 450.2 | 451.0 | 455.1 | 462.3 | 465.6 | 473.7 | 480.1 | 484.2 |
| 25° | 415.5 | 417.9 | 419.5 | 421.9 | 422.7 | 427.6 | 434.1 | 438.1 | 447.0 | 451.8 | 456.7 |
| 27.5° | 388.0 | 391.2 | 392.0 | 395.3 | 395.3 | 400.1 | 405.8 | 409.8 | 415.5 | 420.3 | 424.4 |
| 30° | 361.3 | 362.1 | 364.5 | 365.3 | 367.0 | 371.8 | 375.0 | 377.5 | 383.9 | 386.4 | 388.8 |
| 32.5° | 332.2 | 335.4 | 337.1 | 337.9 | 337.1 | 341.1 | 344.3 | 345.9 | 348.4 | 351.6 | 353.2 |
| 35° | 304.7 | 306.3 | 307.2 | 308.8 | 309.6 | 310.4 | 312.0 | 312.8 | 316.0 | 316.9 | 317.7 |
| 37.5° | 277.2 | 279.7 | 278.9 | 279.7 | 279.7 | 280.5 | 282.1 | 281.3 | 283.7 | 284.5 | 283.7 |
| 40° | 249.8 | 249.8 | 251.4 | 250.6 | 251.4 | 250.6 | 252.2 | 252.2 | 252.2 | 253.0 | 252.2 |
| 42.5° | 222.3 | 223.1 | 222.3 | 223.9 | 222.3 | 223.1 | 223.1 | 222.3 | 223.1 | 222.3 | 222.3 |
| 45° | 197.2 | 197.2 | 197.2 | 197.2 | 195.6 | 195.6 | 197.2 | 196.4 | 195.6 | 194.8 | 194.0 |
| 47.5° | 173.0 | 173.8 | 172.2 | 173.0 | 172.2 | 171.4 | 170.5 | 170.5 | 169.7 | 168.1 | 167.3 |
| 50° | 152.8 | 151.2 | 150.3 | 151.2 | 150.3 | 149.5 | 148.7 | 147.1 | 146.3 | 144.7 | 143.9 |
| 52.5° | 132.6 | 130.9 | 129.3 | 129.3 | 128.5 | 126.9 | 126.1 | 124.5 | 123.7 | 122.1 | 122.1 |
| 55° | 114.8 | 113.2 | 111.5 | 110.7 | 109.1 | 107.5 | 106.7 | 105.1 | 104.3 | 102.7 | 101.0 |
| 57.5° | 97.8 | 95.4 | 93.8 | 93.0 | 92.1 | 89.7 | 88.9 | 87.3 | 85.7 | 84.1 | 83.3 |
| 60° | 82.4 | 80.0 | 77.6 | 76.8 | 76.0 | 73.6 | 72.7 | 70.3 | 69.5 | 67.9 | 67.1 |
| 62.5° | 67.9 | 66.3 | 63.0 | 62.2 | 60.6 | 59.0 | 56.6 | 55.8 | 55.0 | 55.8 | 55.8 |
| 65° | 55.0 | 52.5 | 50.1 | 49.3 | 47.7 | 46.1 | 45.3 | 44.5 | 45.3 | 45.3 | 46.1 |
| 67.5° | 43.6 | 41.2 | 38.8 | 38.8 | 38.0 | 36.4 | 36.4 | 36.4 | 37.2 | 37.2 | 38.0 |
| 70° | 34.8 | 33.1 | 31.5 | 30.7 | 30.7 | 29.9 | 30.7 | 30.7 | 31.5 | 31.5 | 31.5 |
| 72.5° | 27.5 | 26.7 | 25.9 | 25.1 | 25.1 | 25.1 | 25.1 | 25.1 | 25.1 | 25.1 | 25.9 |
| 75° | 21.0 | 20.2 | 19.4 | 19.4 | 18.6 | 18.6 | 18.6 | 18.6 | 18.6 | 18.6 | 17.8 |
| 77.5° | 13.7 | 12.9 | 12.1 | 12.1 | 11.3 | 10.5 | 10.5 | 9.7 | 9.7 | 9.7 | 9.7 |
| 80° | 7.3 | 6.5 | 5.7 | 4.8 | 4.8 | 4.0 | 4.0 | 4.0 | 4.0 | 3.2 | 3.2 |
| 82.5° | 3.2 | 2.4 | 2.4 | 2.4 | 2.4 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 |
| 85° | 1.6 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 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: P274347

CATALOG NUMBER: LD4B15DE010W2N2050 EU4B1020W2N902050 4LBLWW0LI

CANDELA DISTRIBUTION (continued):

| | 150° | 155° | 157.5° | 160° | 165° | 170° | 175° | 180° |
|-------|-------|-------|--------|-------|-------|-------|-------|-------|
| 0° | 551.3 | 551.3 | 551.3 | 551.3 | 551.3 | 551.3 | 551.3 | 551.3 |
| 2.5° | 548.8 | 547.2 | 548.8 | 549.6 | 548.0 | 547.2 | 548.8 | 545.6 |
| 5° | 548.0 | 545.6 | 546.4 | 547.2 | 545.6 | 544.8 | 546.4 | 544.0 |
| 7.5° | 546.4 | 545.6 | 546.4 | 547.2 | 544.8 | 544.8 | 546.4 | 544.0 |
| 10° | 546.4 | 544.8 | 545.6 | 547.2 | 545.6 | 545.6 | 547.2 | 544.0 |
| 12.5° | 545.6 | 543.2 | 545.6 | 546.4 | 544.8 | 544.8 | 546.4 | 543.2 |
| 15° | 539.9 | 539.9 | 540.7 | 542.4 | 541.6 | 542.4 | 544.8 | 542.4 |
| 17.5° | 527.8 | 529.4 | 532.7 | 535.1 | 536.7 | 538.3 | 540.7 | 539.1 |
| 20° | 513.3 | 515.7 | 519.7 | 522.2 | 525.4 | 526.2 | 530.2 | 527.0 |
| 22.5° | 490.6 | 495.5 | 498.7 | 501.1 | 503.6 | 506.0 | 509.2 | 508.4 |
| 25° | 463.2 | 466.4 | 468.8 | 471.2 | 474.5 | 476.1 | 477.7 | 476.9 |
| 27.5° | 430.0 | 431.6 | 434.9 | 436.5 | 438.1 | 439.7 | 442.9 | 438.9 |
| 30° | 393.6 | 394.4 | 396.1 | 398.5 | 398.5 | 400.1 | 401.7 | 400.9 |
| 32.5° | 356.5 | 356.5 | 358.1 | 359.7 | 358.9 | 359.7 | 362.9 | 358.9 |
| 35° | 320.1 | 319.3 | 321.7 | 322.5 | 322.5 | 321.7 | 324.1 | 323.3 |
| 37.5° | 284.5 | 285.3 | 286.1 | 286.9 | 285.3 | 286.9 | 286.9 | 285.3 |
| 40° | 252.2 | 251.4 | 253.0 | 253.8 | 253.0 | 253.8 | 253.8 | 250.6 |
| 42.5° | 223.1 | 221.5 | 222.3 | 223.1 | 222.3 | 223.1 | 222.3 | 220.7 |
| 45° | 194.8 | 194.0 | 194.0 | 194.8 | 193.2 | 193.2 | 193.2 | 193.2 |
| 47.5° | 168.1 | 167.3 | 168.1 | 168.1 | 166.5 | 166.5 | 167.3 | 166.5 |
| 50° | 143.9 | 143.1 | 143.1 | 143.1 | 142.3 | 142.3 | 143.1 | 143.1 |
| 52.5° | 122.1 | 120.4 | 120.4 | 120.4 | 120.4 | 120.4 | 121.2 | 119.6 |
| 55° | 100.2 | 100.2 | 100.2 | 100.2 | 101.0 | 101.0 | 101.0 | 101.0 |
| 57.5° | 82.4 | 83.3 | 83.3 | 84.1 | 83.3 | 84.1 | 84.1 | 83.3 |
| 60° | 68.7 | 67.9 | 68.7 | 68.7 | 69.5 | 69.5 | 69.5 | 69.5 |
| 62.5° | 56.6 | 56.6 | 56.6 | 57.4 | 57.4 | 57.4 | 58.2 | 57.4 |
| 65° | 46.9 | 46.9 | 47.7 | 47.7 | 47.7 | 48.5 | 48.5 | 48.5 |
| 67.5° | 38.8 | 38.8 | 38.8 | 38.8 | 39.6 | 39.6 | 40.4 | 39.6 |
| 70° | 32.3 | 32.3 | 32.3 | 32.3 | 32.3 | 33.1 | 33.1 | 33.1 |
| 72.5° | 25.9 | 25.9 | 25.9 | 25.9 | 26.7 | 26.7 | 26.7 | 26.7 |
| 75° | 17.8 | 17.8 | 17.8 | 18.6 | 17.8 | 17.8 | 17.8 | 17.8 |
| 77.5° | 8.9 | 8.9 | 8.9 | 8.9 | 8.9 | 8.1 | 8.1 | 8.1 |
| 80° | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | 2.4 | 3.2 |
| 82.5° | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 0.8 |
| 85° | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 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)