

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: PORTFOLIO

Report Number: P858299

Luminaire Tested: **LD4C10W2N2050D010 4LBSWNL1\_4000K**

Issue Date: 11/9/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P858299  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P251556)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 11/9/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LD4C10W2N2050D010 4LBSWNL\_4000K  
Description: 4 INCH 1000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 4000K, W2N2050 LEDS AND 4LBSWNL TRIM WITH FINISH  
  
Light Source: -  
Ballast/Driver: -

**Summary**

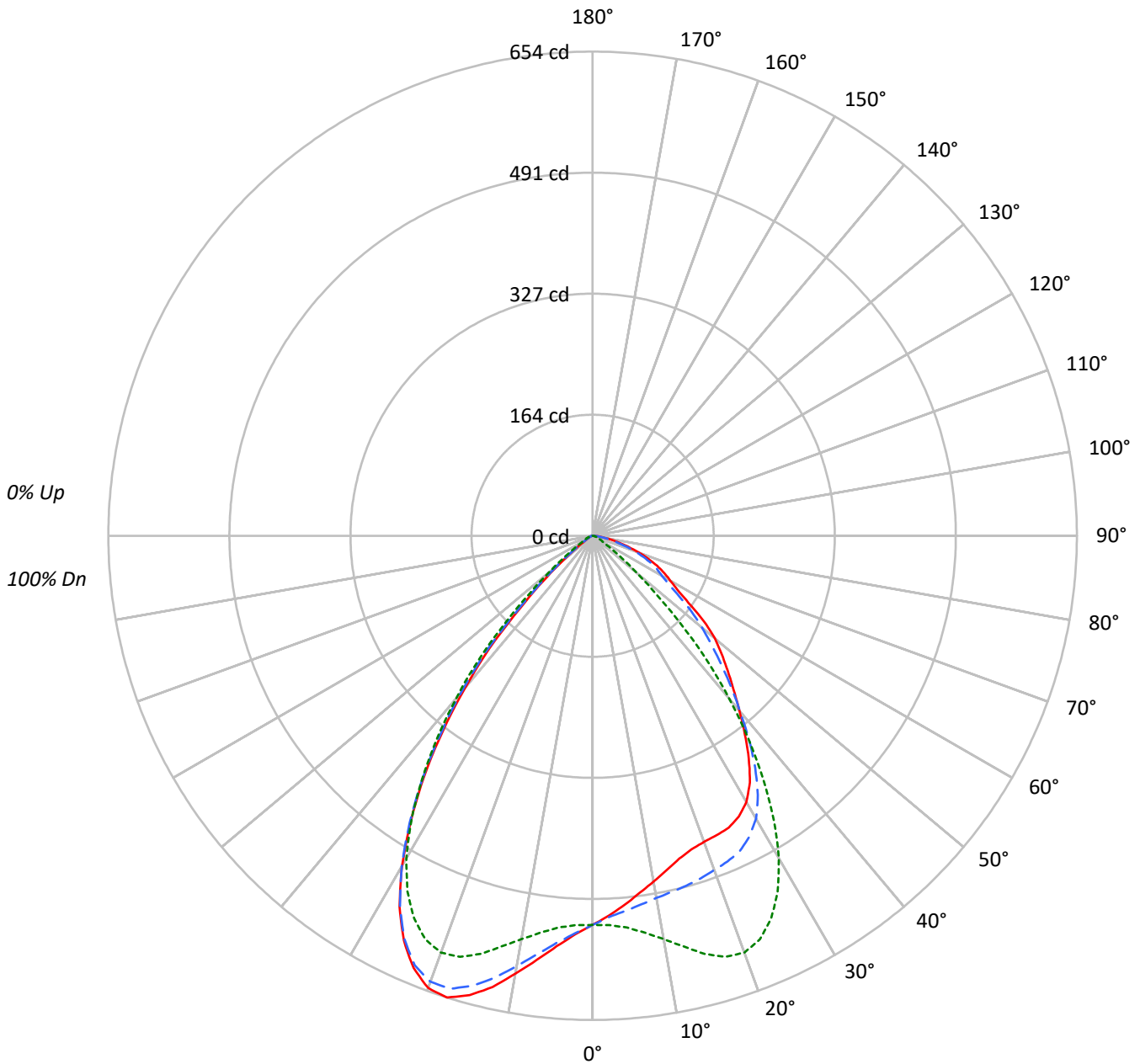
Lumens per Lamp: N/A  
Luminaire Lumens: 970.0 lumens  
Efficiency: N/A  
Efficacy: 74.6 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.19  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 13  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: P858299

CATALOG NUMBER: LD4C10W2N2050D010 4LBSWNL\_4000K

### Luminous Intensity Polar Plot





TEST NUMBER: P858299

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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 |    |    |    |  |  |  |  |   |
| 1   | 112 | 108 | 105 | 102 | 109 | 106 | 103 | 101 | 102 | 100 | 98  | 98  | 96  | 95  | 95  | 93  | 92  | 90  |    |    |    |  |  |  |  |   |
| 2   | 104 | 98  | 93  | 89  | 102 | 96  | 92  | 88  | 93  | 89  | 86  | 90  | 87  | 84  | 87  | 85  | 82  | 80  |    |    |    |  |  |  |  |   |
| 3   | 97  | 89  | 83  | 78  | 95  | 88  | 82  | 77  | 85  | 80  | 76  | 82  | 78  | 75  | 80  | 77  | 74  | 72  |    |    |    |  |  |  |  |   |
| 4   | 91  | 81  | 75  | 69  | 89  | 80  | 74  | 69  | 78  | 72  | 68  | 76  | 71  | 67  | 74  | 70  | 66  | 64  |    |    |    |  |  |  |  |   |
| 5   | 85  | 75  | 67  | 62  | 83  | 74  | 67  | 62  | 72  | 66  | 61  | 70  | 65  | 60  | 68  | 64  | 60  | 58  |    |    |    |  |  |  |  |   |
| 6   | 79  | 69  | 61  | 56  | 78  | 68  | 61  | 56  | 66  | 60  | 55  | 64  | 59  | 55  | 63  | 58  | 54  | 53  |    |    |    |  |  |  |  |   |
| 7   | 75  | 63  | 56  | 51  | 73  | 62  | 55  | 51  | 61  | 55  | 50  | 60  | 54  | 50  | 58  | 53  | 50  | 48  |    |    |    |  |  |  |  |   |
| 8   | 70  | 58  | 51  | 46  | 69  | 58  | 51  | 46  | 57  | 50  | 46  | 55  | 50  | 46  | 54  | 49  | 45  | 44  |    |    |    |  |  |  |  |   |
| 9   | 66  | 54  | 47  | 42  | 65  | 54  | 47  | 42  | 53  | 46  | 42  | 52  | 46  | 42  | 51  | 46  | 42  | 40  |    |    |    |  |  |  |  |   |
| 10  | 62  | 51  | 44  | 39  | 61  | 50  | 43  | 39  | 49  | 43  | 39  | 48  | 43  | 39  | 47  | 42  | 39  | 37  |    |    |    |  |  |  |  |   |

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

|     | 0°    | 90°   | 180°  |
|-----|-------|-------|-------|
| 0°  | 64572 | 64572 | 64572 |
| 5°  | 61686 | 65497 | 68629 |
| 10° | 59156 | 68998 | 74899 |
| 15° | 57425 | 74366 | 81692 |
| 20° | 57512 | 78325 | 84967 |
| 25° | 58966 | 77306 | 81766 |
| 30° | 58900 | 71355 | 73015 |
| 35° | 55161 | 60306 | 59481 |
| 40° | 49411 | 45995 | 42916 |
| 45° | 44825 | 29206 | 23959 |
| 50° | 41188 | 14812 | 10225 |
| 55° | 33799 | 6618  | 3384  |
| 60° | 29681 | 3710  | 1867  |
| 65° | 27936 | 2791  | 1395  |
| 70° | 23923 | 2227  | 1221  |
| 75° | 18227 | 1614  | 997   |
| 80° | 13088 | 990   | 495   |
| 85° | 9726  | 0     | 0     |



TEST NUMBER: P858299

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 51.1   | 5.3       |
| 10°-20°   | 159.1  | 16.4      |
| 20°-30°   | 246.2  | 25.4      |
| 30°-40°   | 242.6  | 25.0      |
| 40°-50°   | 148.9  | 15.4      |
| 50°-60°   | 66.2   | 6.8       |
| 60°-70°   | 37.0   | 3.8       |
| 70°-80°   | 16.0   | 1.7       |
| 80°-90°   | 2.9    | 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°    | 456.4  | 47.0      |
| 0°-40°    | 699.0  | 72.1      |
| 0°-60°    | 914.1  | 94.2      |
| 0°-90°    | 970.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 970.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 45° | 90° | 135° | 180° | Flux |
|-----|-----|-----|-----|------|------|------|
| 0°  | 526 | 526 | 526 | 526  | 526  |      |
| 5°  | 500 | 508 | 531 | 552  | 556  | 47   |
| 15° | 452 | 489 | 585 | 629  | 642  | 128  |
| 25° | 435 | 470 | 570 | 601  | 603  | 200  |
| 35° | 368 | 383 | 402 | 401  | 397  | 228  |
| 45° | 258 | 245 | 168 | 147  | 138  | 200  |
| 55° | 158 | 143 | 31  | 18   | 16   | 145  |
| 65° | 96  | 86  | 10  | 6    | 5    | 94   |
| 75° | 38  | 33  | 3   | 2    | 2    | 42   |
| 85° | 7   | 6   | 0   | 0    | 0    | 9    |
| 90° | 0   | 0   | 0   | 0    | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 5°    | 10°   | 15°   | 20°   | 22.5° | 25°   | 30°   | 35°   | 40°   | 45°   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 525.6 | 525.6 | 525.6 | 525.6 | 525.6 | 525.6 | 525.6 | 525.6 | 525.6 | 525.6 | 525.6 |
| 2.5°  | 513.3 | 513.3 | 513.3 | 513.3 | 514.7 | 512.6 | 514.7 | 514.7 | 516.7 | 517.4 | 515.4 |
| 5°    | 500.2 | 499.6 | 500.2 | 500.2 | 501.6 | 500.9 | 503.0 | 504.4 | 507.1 | 508.5 | 508.5 |
| 7.5°  | 486.5 | 486.5 | 486.5 | 487.9 | 489.9 | 489.3 | 491.3 | 493.4 | 497.5 | 500.2 | 502.3 |
| 10°   | 474.2 | 473.5 | 475.5 | 476.2 | 478.3 | 478.3 | 481.7 | 483.8 | 488.6 | 494.1 | 496.8 |
| 12.5° | 462.5 | 461.8 | 463.2 | 465.3 | 468.7 | 468.7 | 471.4 | 474.9 | 481.7 | 487.9 | 492.7 |
| 15°   | 451.5 | 452.2 | 454.3 | 455.6 | 459.8 | 459.8 | 463.2 | 467.3 | 474.9 | 482.4 | 489.3 |
| 17.5° | 444.0 | 444.7 | 446.0 | 448.1 | 452.2 | 452.2 | 455.6 | 460.5 | 468.7 | 476.9 | 485.2 |
| 20°   | 439.9 | 440.6 | 441.9 | 444.0 | 447.4 | 448.1 | 450.9 | 456.3 | 463.9 | 472.8 | 480.3 |
| 22.5° | 437.8 | 439.2 | 440.6 | 441.9 | 445.3 | 445.3 | 448.8 | 452.9 | 460.5 | 469.4 | 476.2 |
| 25°   | 435.0 | 436.4 | 437.1 | 439.2 | 441.9 | 441.9 | 444.0 | 448.8 | 455.6 | 463.2 | 470.1 |
| 27.5° | 427.5 | 428.9 | 429.6 | 431.6 | 434.4 | 433.7 | 436.4 | 439.9 | 446.0 | 452.9 | 458.4 |
| 30°   | 415.2 | 415.9 | 417.2 | 417.9 | 420.0 | 420.0 | 422.0 | 425.4 | 429.6 | 435.7 | 441.2 |
| 32.5° | 395.3 | 396.6 | 397.3 | 398.0 | 400.1 | 399.4 | 400.1 | 402.1 | 406.2 | 411.7 | 415.2 |
| 35°   | 367.8 | 370.6 | 370.6 | 371.9 | 372.6 | 371.9 | 371.9 | 374.7 | 376.7 | 380.8 | 382.9 |
| 37.5° | 337.6 | 339.7 | 339.0 | 340.4 | 341.1 | 339.0 | 340.4 | 341.1 | 343.8 | 345.8 | 346.5 |
| 40°   | 308.1 | 308.8 | 308.8 | 308.8 | 308.8 | 308.1 | 308.8 | 309.5 | 311.5 | 311.5 | 309.5 |
| 42.5° | 281.3 | 282.0 | 282.0 | 280.6 | 282.0 | 281.3 | 281.3 | 281.3 | 281.3 | 278.6 | 276.5 |
| 45°   | 258.0 | 258.7 | 258.7 | 258.0 | 258.0 | 256.6 | 256.0 | 255.3 | 253.2 | 249.8 | 245.0 |
| 47.5° | 236.0 | 237.4 | 238.1 | 236.7 | 236.0 | 234.7 | 234.7 | 230.6 | 227.8 | 223.7 | 216.9 |
| 50°   | 215.5 | 216.9 | 216.9 | 215.5 | 215.5 | 213.4 | 211.4 | 210.0 | 205.9 | 201.1 | 192.8 |
| 52.5° | 189.4 | 191.4 | 191.4 | 190.8 | 190.8 | 188.0 | 187.3 | 184.6 | 181.1 | 175.7 | 168.8 |
| 55°   | 157.8 | 160.6 | 159.9 | 159.2 | 157.8 | 157.8 | 157.8 | 155.8 | 153.7 | 149.6 | 142.7 |
| 57.5° | 135.2 | 135.9 | 135.9 | 135.2 | 135.2 | 133.8 | 133.8 | 131.8 | 131.1 | 126.9 | 121.5 |
| 60°   | 120.8 | 120.8 | 121.5 | 120.8 | 120.1 | 119.4 | 118.7 | 117.4 | 115.3 | 112.5 | 108.4 |
| 62.5° | 109.1 | 109.8 | 109.8 | 109.1 | 108.4 | 107.7 | 107.1 | 105.7 | 104.3 | 102.2 | 98.1  |
| 65°   | 96.1  | 97.4  | 96.8  | 96.1  | 95.4  | 94.7  | 94.7  | 93.3  | 91.9  | 90.6  | 86.5  |
| 67.5° | 81.6  | 82.3  | 83.0  | 81.6  | 81.6  | 81.0  | 81.0  | 79.6  | 78.9  | 76.2  | 73.4  |
| 70°   | 66.6  | 67.2  | 67.2  | 66.6  | 66.6  | 65.9  | 65.9  | 65.2  | 64.5  | 62.5  | 59.7  |
| 72.5° | 52.2  | 52.8  | 52.2  | 51.5  | 51.5  | 51.5  | 50.8  | 50.1  | 49.4  | 48.0  | 46.0  |
| 75°   | 38.4  | 38.4  | 39.1  | 38.4  | 37.7  | 37.7  | 37.0  | 37.0  | 35.7  | 35.0  | 32.9  |
| 77.5° | 27.4  | 28.1  | 27.4  | 27.4  | 26.8  | 26.1  | 26.1  | 25.4  | 25.4  | 24.7  | 23.3  |
| 80°   | 18.5  | 18.5  | 19.2  | 18.5  | 17.9  | 18.5  | 17.9  | 17.2  | 17.2  | 16.5  | 15.1  |
| 82.5° | 11.7  | 12.3  | 11.7  | 11.7  | 11.7  | 11.7  | 11.7  | 11.0  | 11.0  | 10.3  | 9.6   |
| 85°   | 6.9   | 6.9   | 6.9   | 6.9   | 6.9   | 6.9   | 6.9   | 6.2   | 6.2   | 6.2   | 5.5   |
| 87.5° | 3.4   | 3.4   | 2.7   | 2.7   | 3.4   | 3.4   | 3.4   | 2.7   | 2.7   | 2.7   | 2.7   |
| 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°    | 525.6 | 525.6 | 525.6 | 525.6 | 525.6 | 525.6 | 525.6 | 525.6 | 525.6 | 525.6 | 525.6 |
| 2.5°  | 518.1 | 518.8 | 520.1 | 522.2 | 522.2 | 520.8 | 524.3 | 524.3 | 525.6 | 526.3 | 529.1 |
| 5°    | 512.6 | 514.0 | 516.7 | 520.1 | 520.8 | 520.1 | 524.9 | 527.0 | 529.1 | 531.1 | 535.2 |
| 7.5°  | 507.8 | 510.5 | 515.4 | 520.1 | 522.2 | 522.2 | 529.8 | 532.5 | 536.6 | 540.7 | 545.5 |
| 10°   | 505.1 | 509.2 | 516.0 | 523.6 | 525.6 | 527.7 | 536.6 | 542.1 | 547.6 | 553.1 | 560.0 |
| 12.5° | 501.6 | 509.2 | 518.1 | 527.7 | 531.8 | 534.5 | 546.9 | 553.8 | 561.3 | 568.2 | 577.1 |
| 15°   | 500.9 | 509.9 | 521.5 | 533.9 | 539.4 | 543.5 | 557.2 | 566.8 | 575.7 | 584.7 | 593.6 |
| 17.5° | 498.2 | 509.2 | 523.6 | 537.3 | 544.2 | 549.7 | 565.4 | 577.1 | 587.4 | 596.3 | 606.6 |
| 20°   | 494.8 | 507.1 | 522.9 | 538.0 | 545.5 | 551.0 | 568.2 | 579.2 | 590.8 | 599.1 | 608.7 |
| 22.5° | 489.9 | 502.3 | 518.1 | 533.2 | 540.1 | 544.8 | 562.0 | 571.6 | 581.9 | 590.1 | 599.1 |
| 25°   | 481.7 | 493.4 | 507.1 | 519.5 | 526.3 | 530.4 | 545.5 | 554.5 | 562.0 | 570.3 | 578.5 |
| 27.5° | 470.1 | 479.0 | 490.6 | 499.6 | 503.7 | 507.8 | 520.1 | 527.7 | 534.5 | 541.4 | 546.9 |
| 30°   | 449.5 | 456.3 | 464.6 | 472.1 | 476.2 | 476.9 | 488.6 | 492.7 | 498.2 | 503.0 | 507.1 |
| 32.5° | 422.0 | 427.5 | 432.3 | 436.4 | 439.2 | 439.9 | 448.8 | 450.2 | 455.6 | 455.6 | 461.8 |
| 35°   | 387.0 | 389.8 | 393.2 | 393.2 | 395.3 | 393.2 | 399.4 | 400.7 | 401.4 | 402.1 | 406.9 |
| 37.5° | 347.2 | 348.6 | 350.7 | 346.5 | 346.5 | 344.5 | 346.5 | 347.9 | 345.2 | 345.2 | 348.6 |
| 40°   | 309.5 | 306.7 | 304.0 | 299.9 | 297.8 | 293.7 | 293.7 | 290.3 | 288.2 | 286.8 | 287.5 |
| 42.5° | 273.1 | 266.9 | 260.8 | 251.8 | 247.7 | 243.6 | 239.5 | 234.7 | 233.3 | 229.9 | 227.8 |
| 45°   | 238.1 | 229.2 | 221.0 | 206.6 | 198.3 | 194.2 | 185.3 | 175.7 | 169.5 | 168.1 | 162.6 |
| 47.5° | 208.6 | 195.6 | 181.8 | 164.7 | 156.5 | 148.9 | 135.9 | 127.6 | 119.4 | 115.3 | 111.8 |
| 50°   | 182.5 | 170.9 | 153.0 | 134.5 | 124.2 | 116.7 | 102.2 | 92.6  | 83.7  | 77.5  | 73.4  |
| 52.5° | 159.9 | 146.8 | 130.4 | 109.1 | 98.8  | 90.6  | 74.8  | 63.8  | 56.3  | 50.1  | 45.3  |
| 55°   | 134.5 | 124.2 | 107.7 | 87.8  | 77.5  | 67.9  | 54.2  | 42.6  | 35.0  | 30.9  | 27.4  |
| 57.5° | 116.0 | 107.1 | 91.3  | 72.1  | 62.5  | 53.5  | 39.8  | 30.2  | 24.0  | 19.9  | 17.9  |
| 60°   | 103.6 | 95.4  | 81.6  | 63.1  | 54.2  | 46.0  | 32.9  | 24.0  | 18.5  | 15.1  | 13.7  |
| 62.5° | 93.3  | 85.1  | 72.7  | 55.6  | 48.0  | 39.8  | 28.1  | 19.9  | 15.1  | 12.3  | 10.3  |
| 65°   | 81.6  | 74.1  | 63.1  | 48.0  | 41.2  | 34.3  | 24.0  | 16.5  | 12.3  | 9.6   | 8.2   |
| 67.5° | 69.3  | 62.5  | 52.8  | 39.8  | 34.3  | 28.8  | 19.2  | 13.7  | 10.3  | 8.2   | 6.9   |
| 70°   | 56.3  | 50.8  | 41.9  | 32.3  | 27.4  | 22.6  | 15.8  | 11.0  | 7.6   | 6.2   | 5.5   |
| 72.5° | 43.2  | 38.4  | 32.3  | 24.7  | 20.6  | 17.2  | 11.7  | 8.2   | 6.2   | 4.8   | 4.1   |
| 75°   | 30.9  | 27.4  | 22.6  | 17.9  | 15.1  | 12.3  | 8.9   | 6.2   | 4.1   | 3.4   | 2.7   |
| 77.5° | 21.3  | 19.2  | 15.8  | 12.3  | 10.3  | 8.9   | 6.2   | 4.1   | 3.4   | 2.7   | 2.1   |
| 80°   | 13.7  | 12.3  | 10.3  | 7.6   | 6.2   | 5.5   | 3.4   | 2.7   | 2.1   | 1.4   | 1.4   |
| 82.5° | 8.2   | 7.6   | 6.2   | 4.1   | 3.4   | 2.7   | 2.1   | 1.4   | 1.4   | 0.7   | 0.7   |
| 85°   | 4.8   | 4.1   | 2.7   | 2.1   | 2.1   | 1.4   | 1.4   | 0.7   | 0.7   | 0.0   | 0.0   |
| 87.5° | 2.1   | 1.4   | 1.4   | 0.7   | 0.7   | 0.7   | 0.7   | 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   |



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**CANDELA DISTRIBUTION (continued):**

|       | 100°  | 105°  | 110°  | 112.5° | 115°  | 120°  | 125°  | 130°  | 135°  | 140°  | 145°  |
|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 525.6 | 525.6 | 525.6 | 525.6  | 525.6 | 525.6 | 525.6 | 525.6 | 525.6 | 525.6 | 525.6 |
| 2.5°  | 527.7 | 531.1 | 530.4 | 532.5  | 531.8 | 531.8 | 535.2 | 533.9 | 537.3 | 537.3 | 538.0 |
| 5°    | 535.2 | 540.1 | 540.1 | 543.5  | 542.8 | 544.2 | 547.6 | 547.6 | 551.7 | 553.1 | 553.1 |
| 7.5°  | 546.2 | 552.4 | 553.8 | 557.2  | 557.9 | 560.6 | 563.4 | 564.1 | 569.6 | 570.9 | 571.6 |
| 10°   | 561.3 | 568.9 | 570.9 | 574.4  | 575.7 | 578.5 | 581.9 | 583.3 | 590.1 | 590.8 | 593.6 |
| 12.5° | 579.8 | 588.1 | 590.1 | 594.3  | 595.0 | 598.4 | 603.2 | 604.6 | 611.4 | 613.5 | 615.5 |
| 15°   | 597.7 | 605.2 | 608.7 | 612.8  | 613.5 | 617.6 | 621.7 | 623.1 | 629.3 | 632.0 | 634.1 |
| 17.5° | 610.0 | 619.0 | 621.0 | 626.5  | 626.5 | 629.9 | 634.1 | 635.4 | 641.6 | 643.7 | 645.0 |
| 20°   | 612.8 | 621.0 | 623.8 | 627.9  | 628.6 | 630.6 | 634.1 | 635.4 | 640.9 | 641.6 | 643.7 |
| 22.5° | 602.5 | 610.7 | 612.1 | 616.2  | 616.9 | 619.0 | 621.7 | 621.0 | 627.9 | 627.2 | 627.9 |
| 25°   | 580.5 | 588.1 | 588.1 | 592.9  | 592.2 | 594.3 | 595.6 | 595.0 | 601.1 | 601.1 | 601.1 |
| 27.5° | 549.0 | 555.8 | 556.5 | 560.0  | 557.9 | 558.6 | 560.0 | 559.3 | 563.4 | 563.4 | 563.4 |
| 30°   | 509.9 | 515.4 | 513.3 | 516.0  | 514.7 | 516.0 | 514.7 | 514.0 | 515.4 | 516.7 | 516.0 |
| 32.5° | 461.1 | 465.3 | 465.3 | 465.9  | 465.9 | 461.8 | 460.5 | 460.5 | 459.8 | 459.1 | 459.1 |
| 35°   | 404.9 | 408.3 | 406.9 | 406.9  | 406.2 | 402.1 | 400.1 | 398.7 | 400.7 | 396.6 | 399.4 |
| 37.5° | 347.2 | 347.9 | 345.8 | 345.2  | 341.7 | 341.7 | 338.3 | 335.5 | 336.9 | 336.2 | 333.5 |
| 40°   | 284.1 | 286.8 | 282.7 | 281.3  | 283.4 | 280.6 | 277.2 | 273.8 | 276.5 | 273.1 | 274.5 |
| 42.5° | 222.3 | 221.6 | 220.3 | 220.3  | 220.3 | 216.2 | 215.5 | 214.8 | 215.5 | 212.7 | 210.7 |
| 45°   | 160.6 | 158.5 | 156.5 | 156.5  | 153.7 | 152.3 | 152.3 | 150.3 | 146.8 | 146.8 | 142.7 |
| 47.5° | 108.4 | 103.6 | 102.2 | 101.6  | 100.2 | 100.2 | 98.8  | 97.4  | 96.8  | 93.3  | 93.3  |
| 50°   | 70.7  | 65.9  | 64.5  | 63.8   | 64.5  | 63.1  | 61.8  | 60.4  | 59.0  | 58.3  | 57.0  |
| 52.5° | 42.6  | 40.5  | 39.1  | 38.4   | 37.0  | 36.4  | 35.7  | 34.3  | 33.6  | 33.6  | 32.9  |
| 55°   | 25.4  | 23.3  | 20.6  | 20.6   | 20.6  | 19.9  | 19.2  | 18.5  | 17.9  | 17.9  | 17.2  |
| 57.5° | 15.8  | 14.4  | 13.0  | 12.3   | 12.3  | 12.3  | 11.7  | 11.7  | 11.7  | 11.7  | 11.0  |
| 60°   | 11.7  | 10.3  | 9.6   | 9.6    | 9.6   | 8.9   | 8.9   | 8.9   | 8.9   | 8.2   | 8.2   |
| 62.5° | 8.9   | 8.2   | 7.6   | 7.6    | 6.9   | 6.9   | 6.9   | 6.9   | 6.9   | 6.9   | 6.2   |
| 65°   | 7.6   | 6.2   | 6.2   | 5.5    | 5.5   | 5.5   | 5.5   | 5.5   | 5.5   | 5.5   | 5.5   |
| 67.5° | 5.5   | 4.8   | 4.8   | 4.8    | 4.8   | 4.1   | 4.1   | 4.1   | 4.1   | 4.1   | 4.1   |
| 70°   | 4.1   | 4.1   | 3.4   | 3.4    | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   |
| 72.5° | 3.4   | 2.7   | 2.7   | 2.7    | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   |
| 75°   | 2.7   | 2.7   | 2.1   | 2.1    | 2.1   | 2.1   | 2.1   | 2.1   | 2.1   | 2.1   | 2.1   |
| 77.5° | 2.1   | 2.1   | 2.1   | 1.4    | 1.4   | 1.4   | 1.4   | 1.4   | 1.4   | 1.4   | 1.4   |
| 80°   | 1.4   | 0.7   | 0.7   | 0.7    | 0.7   | 0.7   | 0.7   | 0.7   | 0.7   | 0.7   | 0.7   |
| 82.5° | 0.7   | 0.7   | 0.7   | 0.7    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 85°   | 0.0   | 0.0   | 0.0   | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 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: P858299

CATALOG NUMBER: LD4C10W2N2050D010 4LBSWNL1\_4000K

**CANDELA DISTRIBUTION (continued):**

|       | 150°  | 155°  | 157.5° | 160°  | 165°  | 170°  | 175°  | 180°  |
|-------|-------|-------|--------|-------|-------|-------|-------|-------|
| 0°    | 525.6 | 525.6 | 525.6  | 525.6 | 525.6 | 525.6 | 525.6 | 525.6 |
| 2.5°  | 538.0 | 541.4 | 538.0  | 538.0 | 540.1 | 539.4 | 540.7 | 538.7 |
| 5°    | 553.8 | 558.6 | 555.1  | 554.5 | 557.9 | 557.2 | 557.9 | 556.5 |
| 7.5°  | 573.0 | 577.8 | 574.4  | 574.4 | 577.8 | 577.1 | 579.2 | 577.8 |
| 10°   | 595.0 | 600.4 | 595.6  | 596.3 | 601.1 | 600.4 | 600.4 | 600.4 |
| 12.5° | 617.6 | 623.1 | 620.3  | 620.3 | 623.8 | 624.4 | 625.1 | 624.4 |
| 15°   | 636.1 | 641.6 | 638.2  | 638.2 | 643.0 | 642.3 | 643.0 | 642.3 |
| 17.5° | 647.1 | 652.6 | 648.5  | 648.5 | 652.6 | 652.6 | 653.3 | 654.0 |
| 20°   | 644.3 | 650.5 | 647.1  | 645.7 | 650.5 | 650.5 | 649.9 | 649.9 |
| 22.5° | 628.6 | 634.1 | 631.3  | 629.9 | 633.4 | 632.0 | 631.3 | 632.0 |
| 25°   | 601.1 | 606.6 | 601.1  | 601.1 | 603.9 | 603.2 | 603.9 | 603.2 |
| 27.5° | 564.1 | 568.2 | 562.7  | 562.0 | 564.8 | 563.4 | 562.7 | 564.8 |
| 30°   | 514.7 | 518.8 | 516.0  | 514.0 | 517.4 | 515.4 | 514.0 | 514.7 |
| 32.5° | 458.4 | 461.1 | 459.8  | 456.3 | 458.4 | 457.0 | 456.3 | 457.0 |
| 35°   | 396.6 | 400.1 | 394.6  | 393.9 | 397.3 | 394.6 | 393.2 | 396.6 |
| 37.5° | 332.8 | 336.9 | 332.1  | 332.8 | 330.8 | 331.4 | 330.1 | 332.1 |
| 40°   | 272.4 | 271.8 | 270.4  | 269.7 | 270.4 | 268.3 | 269.7 | 267.6 |
| 42.5° | 207.2 | 208.6 | 207.9  | 207.2 | 207.9 | 205.2 | 203.8 | 206.6 |
| 45°   | 144.1 | 143.4 | 142.1  | 140.7 | 140.7 | 140.0 | 140.0 | 137.9 |
| 47.5° | 92.6  | 91.9  | 89.2   | 89.9  | 91.3  | 89.9  | 87.8  | 90.6  |
| 50°   | 56.3  | 55.6  | 55.6   | 54.9  | 56.3  | 54.9  | 53.5  | 53.5  |
| 52.5° | 31.6  | 31.6  | 30.9   | 30.9  | 30.9  | 30.9  | 30.2  | 29.5  |
| 55°   | 17.2  | 16.5  | 16.5   | 16.5  | 15.8  | 15.8  | 15.8  | 15.8  |
| 57.5° | 11.0  | 11.0  | 11.0   | 11.0  | 11.0  | 11.0  | 10.3  | 10.3  |
| 60°   | 8.2   | 8.2   | 8.2    | 8.2   | 7.6   | 8.2   | 7.6   | 7.6   |
| 62.5° | 6.2   | 6.2   | 6.2    | 6.2   | 6.2   | 6.2   | 6.2   | 6.2   |
| 65°   | 4.8   | 4.8   | 4.8    | 4.8   | 4.8   | 4.8   | 4.8   | 4.8   |
| 67.5° | 4.1   | 4.1   | 4.1    | 4.1   | 4.1   | 4.1   | 4.1   | 4.1   |
| 70°   | 3.4   | 3.4   | 3.4    | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   |
| 72.5° | 2.7   | 2.7   | 2.7    | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   |
| 75°   | 2.1   | 2.1   | 2.1    | 2.1   | 2.1   | 2.1   | 2.1   | 2.1   |
| 77.5° | 1.4   | 1.4   | 1.4    | 1.4   | 1.4   | 1.4   | 1.4   | 1.4   |
| 80°   | 0.7   | 0.7   | 0.7    | 0.7   | 0.7   | 0.7   | 0.7   | 0.7   |
| 82.5° | 0.0   | 0.0   | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 85°   | 0.0   | 0.0   | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 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   |



Report Generated By 670246072 / DESKTOP-50001EG





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















(END OF REPORT)