

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: NEO-RAY

Report Number: P987670

Luminaire Tested: S122DW-B675DB2750-4F0-XX-W2A-D\_5000K

Issue Date: 5/2/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P987670  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/2/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122DW-B675DB2750-4F0-XX-W2A-D\_5000K  
Description: Define 2 Direct Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}  
Light Source: -  
Ballast/Driver: -

**Summary**

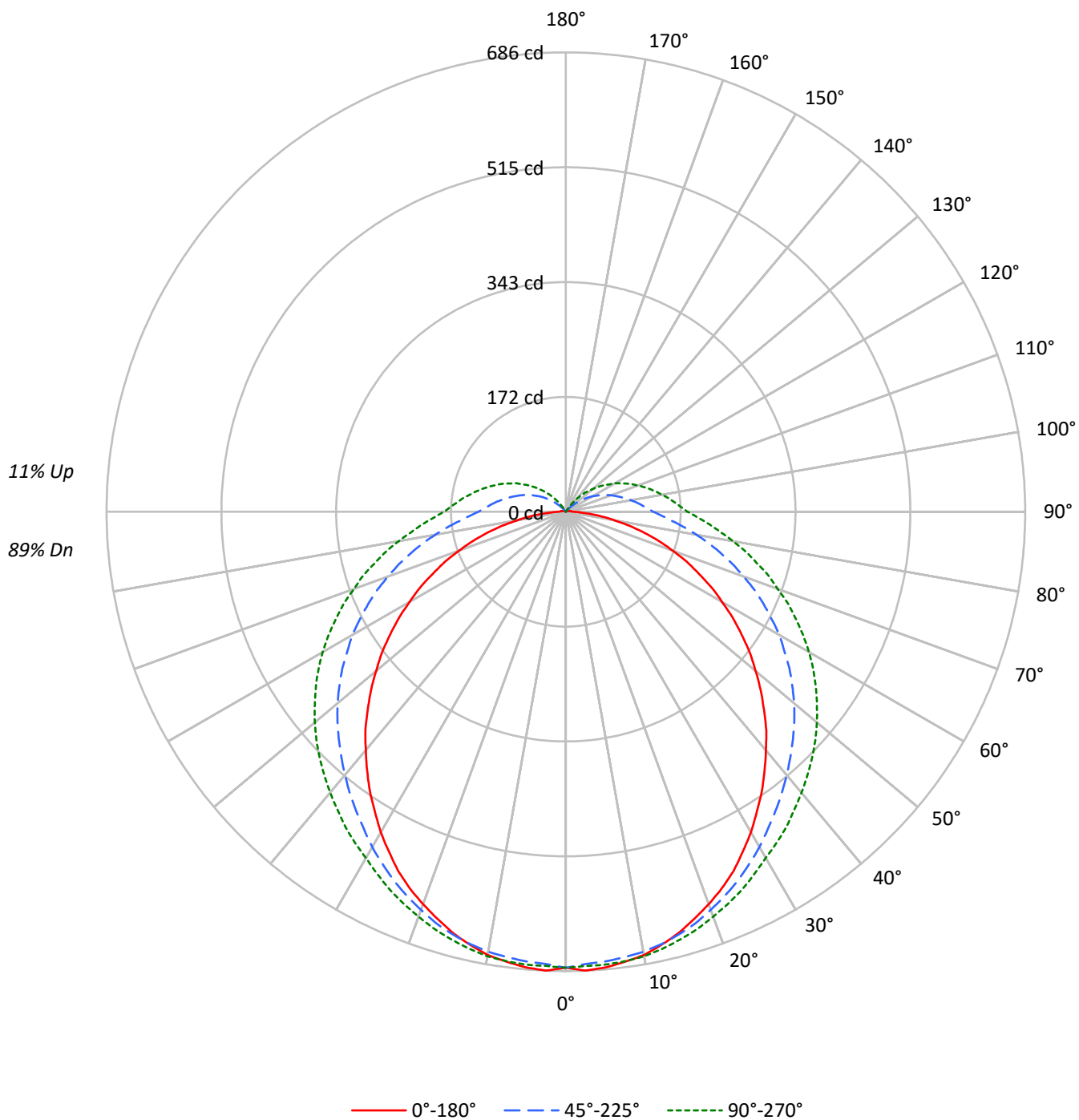
Lumens per Lamp: N/A  
Luminaire Lumens: 2598.0 lumens  
Efficiency: N/A  
Efficacy: 72.4 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 35.9  
Input Voltage (V):  
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



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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |     |     |     |     |     |     |     |    |    |    |    |    |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|
| RF  | 20  |     |     |     | 20  |     |     |     | 20  |     |     |    | 20 |    |    |    | 20 |
| RC  | 80  |     |     |     | 70  |     |     |     | 50  |     |     |    | 30 |    |    |    | 10 |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  | 50 | 30 | 10 | 50 | 30 | 10 |
| RCR |     |     |     |     |     |     |     |     |     |     |     |    |    |    |    |    |    |
| 0   | 116 | 116 | 116 | 116 | 112 | 112 | 112 | 112 | 105 | 105 | 105 | 98 | 98 | 98 | 92 | 92 | 92 |
| 1   | 104 | 98  | 93  | 88  | 100 | 95  | 90  | 86  | 88  | 85  | 81  | 82 | 79 | 77 | 77 | 75 | 72 |
| 2   | 94  | 84  | 77  | 70  | 90  | 81  | 74  | 68  | 76  | 70  | 65  | 71 | 66 | 62 | 66 | 62 | 59 |
| 3   | 85  | 73  | 64  | 57  | 81  | 71  | 63  | 56  | 66  | 59  | 54  | 62 | 56 | 51 | 58 | 53 | 49 |
| 4   | 77  | 64  | 55  | 48  | 74  | 62  | 54  | 47  | 58  | 51  | 45  | 55 | 48 | 43 | 51 | 46 | 42 |
| 5   | 71  | 57  | 48  | 41  | 68  | 56  | 47  | 40  | 52  | 44  | 39  | 49 | 42 | 37 | 46 | 40 | 36 |
| 6   | 65  | 51  | 42  | 35  | 63  | 50  | 41  | 35  | 47  | 39  | 34  | 44 | 37 | 32 | 42 | 36 | 31 |
| 7   | 60  | 46  | 37  | 31  | 58  | 45  | 37  | 31  | 43  | 35  | 30  | 40 | 34 | 29 | 38 | 32 | 28 |
| 8   | 56  | 42  | 34  | 28  | 54  | 41  | 33  | 27  | 39  | 32  | 26  | 37 | 30 | 25 | 35 | 29 | 25 |
| 9   | 52  | 39  | 30  | 25  | 50  | 38  | 30  | 24  | 36  | 29  | 24  | 34 | 27 | 23 | 32 | 26 | 22 |
| 10  | 49  | 36  | 28  | 22  | 47  | 35  | 27  | 22  | 33  | 26  | 21  | 31 | 25 | 21 | 30 | 24 | 20 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 10778 | 10778 | 10778 |
| 5°  | 10851 | 10710 | 10788 |
| 10° | 10801 | 10723 | 10834 |
| 15° | 10673 | 10706 | 10834 |
| 20° | 10505 | 10655 | 10838 |
| 25° | 10341 | 10617 | 10876 |
| 30° | 10100 | 10570 | 10912 |
| 35° | 9859  | 10545 | 11098 |
| 40° | 9604  | 10603 | 11317 |
| 45° | 9366  | 10736 | 11641 |
| 50° | 9112  | 10959 | 12052 |
| 55° | 8851  | 11246 | 12582 |
| 60° | 8529  | 11654 | 13278 |
| 65° | 8206  | 12195 | 14192 |
| 70° | 7854  | 13061 | 15574 |
| 75° | 7425  | 14666 | 18042 |
| 80° | 6746  | 18076 | 23117 |
| 85° | 6448  | 29041 | 39067 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 87.5°

Luminance: 71636 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 64.5   | 2.5       |
| 10°-20°   | 185.1  | 7.1       |
| 20°-30°   | 280.5  | 10.8      |
| 30°-40°   | 341.6  | 13.1      |
| 40°-50°   | 367.5  | 14.1      |
| 50°-60°   | 356.9  | 13.7      |
| 60°-70°   | 311.7  | 12.0      |
| 70°-80°   | 239.9  | 9.2       |
| 80°-90°   | 160.7  | 6.2       |
| 90°-100°  | 110.9  | 4.3       |
| 100°-110° | 81.0   | 3.1       |
| 110°-120° | 53.4   | 2.1       |
| 120°-130° | 29.8   | 1.1       |
| 130°-140° | 12.5   | 0.5       |
| 140°-150° | 2.1    | 0.1       |
| 150°-160° | 0.0    | 0.0       |
| 160°-170° | 0.0    | 0.0       |
| 170°-180° | 0.0    | 0.0       |
| 0°-30°    | 530.2  | 20.4      |
| 0°-40°    | 871.7  | 33.6      |
| 0°-60°    | 1596.1 | 61.4      |
| 0°-90°    | 2308.4 | 88.9      |
| 90°-120°  | 245.3  | 9.4       |
| 90°-150°  | 289.7  | 11.1      |
| 90°-180°  | 290.0  | 11.2      |
| 0°-180°   | 2598.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0°   | 681 | 681   | 681 | 681   | 681 |      |
| 5°   | 683 | 680   | 674 | 680   | 679 | 65   |
| 15°  | 651 | 653   | 653 | 662   | 661 | 183  |
| 25°  | 592 | 599   | 608 | 620   | 623 | 272  |
| 35°  | 510 | 527   | 546 | 567   | 574 | 319  |
| 45°  | 418 | 445   | 480 | 510   | 520 | 323  |
| 55°  | 321 | 356   | 408 | 443   | 456 | 287  |
| 65°  | 219 | 267   | 326 | 366   | 379 | 218  |
| 75°  | 121 | 177   | 240 | 282   | 295 | 128  |
| 85°  | 36  | 97    | 160 | 201   | 215 | 37   |
| 90°  | 10  | 67    | 130 | 170   | 182 | 7    |
| 95°  | 8   | 54    | 114 | 151   | 163 | 6    |
| 105° | 5   | 34    | 85  | 119   | 130 | 6    |
| 115° | 4   | 15    | 59  | 89    | 100 | 4    |
| 125° | 2   | 2     | 34  | 60    | 69  | 2    |
| 135° | 1   | 1     | 11  | 32    | 40  | 1    |
| 145° | 0   | 0     | 0   | 6     | 11  | 0    |
| 155° | 0   | 0     | 0   | 0     | 0   | 0    |
| 165° | 0   | 0     | 0   | 0     | 0   | 0    |
| 175° | 0   | 0     | 0   | 0     | 0   | 0    |
| 180° | 0   | 0     | 0   | 0     | 0   | 0    |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 0°     | 680.9 | 680.9 | 680.9 | 680.9 | 680.9 |
| 2.5°   | 685.8 | 682.9 | 675.9 | 680.9 | 678.9 |
| 5°     | 682.9 | 679.9 | 674.0 | 679.9 | 678.9 |
| 7.5°   | 677.9 | 675.9 | 671.0 | 677.9 | 676.9 |
| 10°    | 672.0 | 670.0 | 667.1 | 675.0 | 674.0 |
| 12.5°  | 662.1 | 663.1 | 661.1 | 669.0 | 668.1 |
| 15°    | 651.3 | 653.3 | 653.3 | 662.1 | 661.1 |
| 17.5°  | 637.5 | 641.4 | 644.4 | 653.3 | 653.3 |
| 20°    | 623.6 | 628.6 | 632.5 | 643.4 | 643.4 |
| 22.5°  | 608.8 | 614.8 | 620.7 | 631.5 | 633.5 |
| 25°    | 592.1 | 599.0 | 607.9 | 619.7 | 622.7 |
| 27.5°  | 572.3 | 583.2 | 593.1 | 607.9 | 609.8 |
| 30°    | 552.6 | 565.4 | 578.3 | 594.0 | 597.0 |
| 32.5°  | 530.9 | 545.7 | 561.5 | 580.2 | 586.1 |
| 35°    | 510.2 | 526.9 | 545.7 | 567.4 | 574.3 |
| 37.5°  | 487.5 | 506.2 | 529.9 | 553.6 | 560.5 |
| 40°    | 464.8 | 486.5 | 513.1 | 538.8 | 547.7 |
| 42.5°  | 443.1 | 464.8 | 496.4 | 525.0 | 533.8 |
| 45°    | 418.4 | 445.0 | 479.6 | 510.2 | 520.0 |
| 47.5°  | 394.7 | 423.3 | 462.8 | 494.4 | 505.2 |
| 50°    | 370.0 | 400.6 | 445.0 | 478.6 | 489.4 |
| 52.5°  | 346.4 | 378.9 | 426.3 | 460.8 | 472.7 |
| 55°    | 320.7 | 356.2 | 407.5 | 443.1 | 455.9 |
| 57.5°  | 296.0 | 335.5 | 386.8 | 425.3 | 438.1 |
| 60°    | 269.4 | 311.8 | 368.1 | 405.6 | 419.4 |
| 62.5°  | 245.7 | 290.1 | 346.4 | 386.8 | 399.6 |
| 65°    | 219.1 | 267.4 | 325.6 | 366.1 | 378.9 |
| 67.5°  | 195.4 | 245.7 | 304.9 | 345.4 | 359.2 |
| 70°    | 169.7 | 221.0 | 282.2 | 324.7 | 336.5 |
| 72.5°  | 146.0 | 199.3 | 261.5 | 302.9 | 317.7 |
| 75°    | 121.4 | 176.6 | 239.8 | 282.2 | 295.0 |
| 77.5°  | 97.7  | 154.9 | 219.1 | 261.5 | 275.3 |
| 80°    | 74.0  | 134.2 | 198.3 | 239.8 | 253.6 |
| 82.5°  | 54.3  | 113.5 | 178.6 | 220.1 | 232.9 |
| 85°    | 35.5  | 96.7  | 159.9 | 201.3 | 215.1 |
| 87.5°  | 21.7  | 80.9  | 144.1 | 184.5 | 197.4 |
| 90°    | 9.9   | 67.1  | 130.3 | 169.7 | 181.6 |
| 92.5°  | 8.9   | 61.2  | 121.4 | 159.9 | 171.7 |
| 95°    | 7.9   | 54.3  | 113.5 | 151.0 | 162.8 |
| 97.5°  | 6.9   | 49.3  | 106.6 | 143.1 | 154.9 |
| 100°   | 6.9   | 43.4  | 98.7  | 135.2 | 146.0 |
| 102.5° | 5.9   | 38.5  | 91.8  | 127.3 | 138.1 |
| 105°   | 4.9   | 33.6  | 84.9  | 119.4 | 130.3 |
| 107.5° | 4.9   | 28.6  | 78.0  | 111.5 | 122.4 |
| 110°   | 3.9   | 23.7  | 72.0  | 103.6 | 114.5 |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°  | 22.5° | 45°  | 67.5° | 90°   |
|--------|-----|-------|------|-------|-------|
| 112.5° | 3.9 | 19.7  | 65.1 | 96.7  | 107.6 |
| 115°   | 3.9 | 14.8  | 59.2 | 88.8  | 99.7  |
| 117.5° | 3.0 | 10.9  | 52.3 | 81.9  | 91.8  |
| 120°   | 3.0 | 6.9   | 46.4 | 74.0  | 84.9  |
| 122.5° | 3.0 | 3.9   | 40.5 | 67.1  | 76.0  |
| 125°   | 2.0 | 2.0   | 33.6 | 60.2  | 69.1  |
| 127.5° | 2.0 | 1.0   | 27.6 | 52.3  | 61.2  |
| 130°   | 2.0 | 1.0   | 21.7 | 45.4  | 53.3  |
| 132.5° | 2.0 | 1.0   | 15.8 | 38.5  | 46.4  |
| 135°   | 1.0 | 1.0   | 10.9 | 31.6  | 39.5  |
| 137.5° | 1.0 | 1.0   | 5.9  | 24.7  | 31.6  |
| 140°   | 1.0 | 0.0   | 2.0  | 17.8  | 23.7  |
| 142.5° | 1.0 | 0.0   | 0.0  | 11.8  | 16.8  |
| 145°   | 0.0 | 0.0   | 0.0  | 5.9   | 10.9  |
| 147.5° | 0.0 | 0.0   | 0.0  | 1.0   | 3.9   |
| 150°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0   |
| 152.5° | 0.0 | 0.0   | 0.0  | 0.0   | 0.0   |
| 155°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0   |
| 157.5° | 0.0 | 0.0   | 0.0  | 0.0   | 0.0   |
| 160°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0   |
| 162.5° | 0.0 | 0.0   | 0.0  | 0.0   | 0.0   |
| 165°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0   |
| 167.5° | 0.0 | 0.0   | 0.0  | 0.0   | 0.0   |
| 170°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0   |
| 172.5° | 0.0 | 0.0   | 0.0  | 0.0   | 0.0   |
| 175°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0   |
| 177.5° | 0.0 | 0.0   | 0.0  | 0.0   | 0.0   |
| 180°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0   |

(END OF REPORT)