

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: P1009522

Luminaire Tested: S122DIP-B865D530UB27-4F0-XX-W2A-D

Issue Date: 5/6/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1009522  
REPORT IS A COMBINATION OF REPORTS P984841 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/6/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122DIP-B865D530UB27-4F0-XX-W2A-D  
Description: Define 2 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}  
Light Source: -  
Ballast/Driver: -

**Summary**

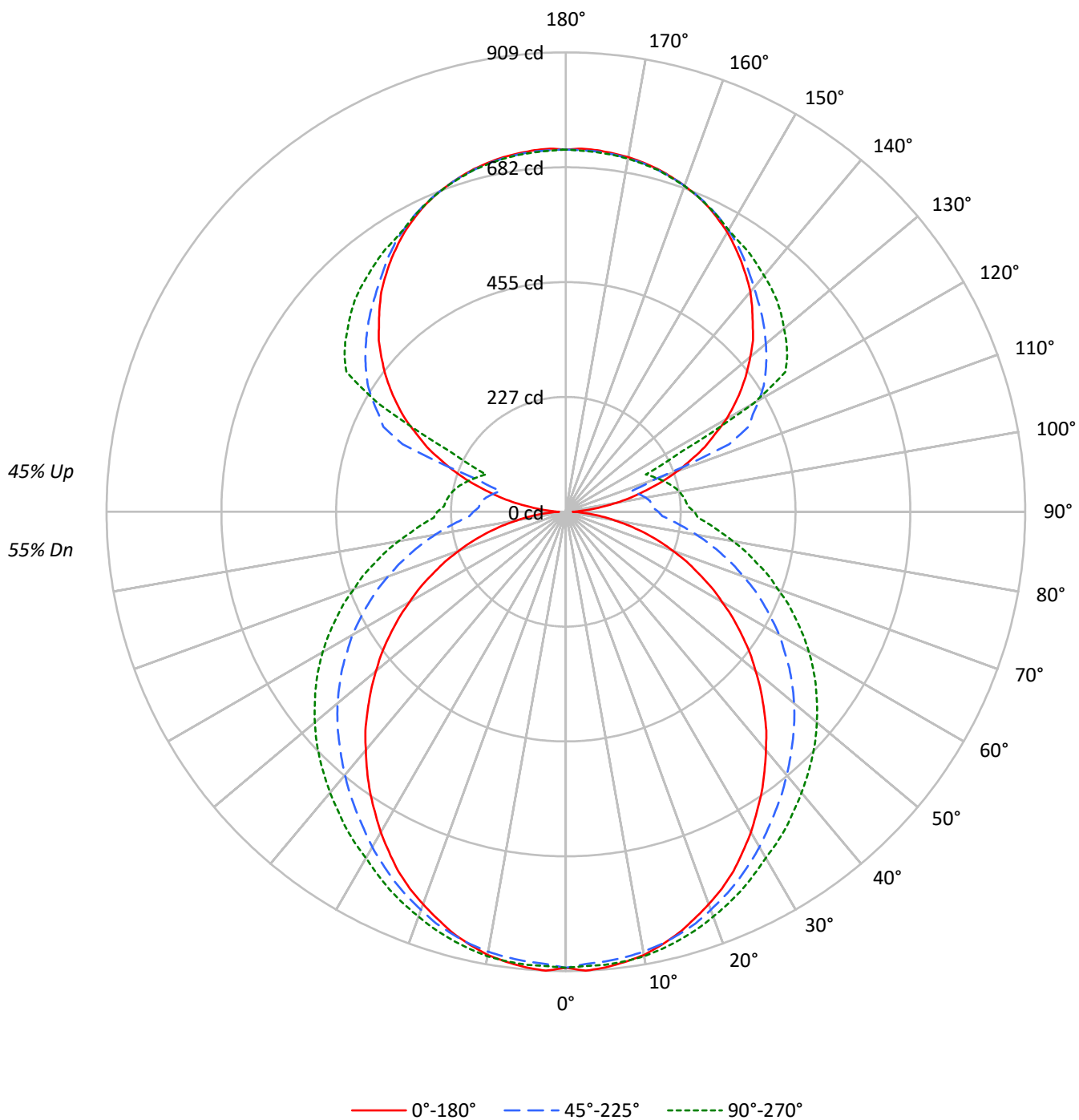
Lumens per Lamp: N/A  
Luminaire Lumens: 5545.0 lumens  
Efficiency: N/A  
Efficacy: 89.1 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42  
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

Input Watts (W): 62.2  
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   | 108 | 108 | 108 | 108 | 101 | 101 | 101 | 101 | 86 | 86 | 86 | 73 | 73 | 73 | 61 | 61 | 61 |
| 1   | 97  | 92  | 88  | 84  | 90  | 86  | 82  | 78  | 73 | 70 | 67 | 62 | 60 | 57 | 51 | 50 | 48 |
| 2   | 88  | 80  | 73  | 67  | 81  | 74  | 68  | 63  | 63 | 59 | 55 | 53 | 50 | 47 | 44 | 42 | 39 |
| 3   | 80  | 69  | 61  | 55  | 74  | 64  | 57  | 52  | 55 | 50 | 45 | 47 | 42 | 39 | 39 | 35 | 33 |
| 4   | 73  | 61  | 53  | 46  | 67  | 57  | 49  | 43  | 49 | 43 | 38 | 41 | 37 | 33 | 34 | 31 | 28 |
| 5   | 67  | 54  | 46  | 39  | 61  | 50  | 43  | 37  | 43 | 37 | 32 | 37 | 32 | 28 | 31 | 27 | 24 |
| 6   | 61  | 49  | 40  | 34  | 57  | 45  | 37  | 32  | 39 | 33 | 28 | 33 | 28 | 24 | 28 | 24 | 21 |
| 7   | 57  | 44  | 35  | 29  | 52  | 41  | 33  | 28  | 35 | 29 | 25 | 30 | 25 | 21 | 25 | 21 | 18 |
| 8   | 53  | 40  | 32  | 26  | 49  | 37  | 30  | 25  | 32 | 26 | 22 | 27 | 23 | 19 | 23 | 19 | 16 |
| 9   | 49  | 36  | 28  | 23  | 45  | 34  | 27  | 22  | 29 | 24 | 19 | 25 | 20 | 17 | 21 | 17 | 15 |
| 10  | 46  | 33  | 26  | 21  | 42  | 31  | 24  | 20  | 27 | 21 | 17 | 23 | 19 | 15 | 20 | 16 | 13 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 14283 | 14283 | 14283 |
| 5°  | 14349 | 13674 | 13596 |
| 10° | 14252 | 13200 | 13008 |
| 15° | 14050 | 12710 | 12404 |
| 20° | 13797 | 12196 | 11829 |
| 25° | 13546 | 11704 | 11310 |
| 30° | 13195 | 11202 | 10795 |
| 35° | 12840 | 10720 | 10417 |
| 40° | 12465 | 10303 | 10041 |
| 45° | 12110 | 9925  | 9714  |
| 50° | 11727 | 9576  | 9390  |
| 55° | 11325 | 9205  | 9062  |
| 60° | 10833 | 8819  | 8716  |
| 65° | 10320 | 8376  | 8318  |
| 70° | 9740  | 7899  | 7888  |
| 75° | 9001  | 7423  | 7484  |
| 80° | 7832  | 6928  | 7066  |
| 85° | 6653  | 6461  | 6704  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12110 cd/sqm

TEST NUMBER: P1009522

CATALOG NUMBER: S122DIP-B865D530UB27-4F0-XX-W2A-D

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 85.5   | 1.5       |
| 10°-20°   | 245.3  | 4.4       |
| 20°-30°   | 371.7  | 6.7       |
| 30°-40°   | 452.7  | 8.2       |
| 40°-50°   | 487.0  | 8.8       |
| 50°-60°   | 473.0  | 8.5       |
| 60°-70°   | 413.1  | 7.4       |
| 70°-80°   | 317.9  | 5.7       |
| 80°-90°   | 214.2  | 3.9       |
| 90°-100°  | 170.5  | 3.1       |
| 100°-110° | 195.4  | 3.5       |
| 110°-120° | 304.4  | 5.5       |
| 120°-130° | 426.9  | 7.7       |
| 130°-140° | 428.1  | 7.7       |
| 140°-150° | 385.3  | 6.9       |
| 150°-160° | 307.5  | 5.5       |
| 160°-170° | 198.2  | 3.6       |
| 170°-180° | 68.2   | 1.2       |
| 0°-30°    | 702.6  | 12.7      |
| 0°-40°    | 1155.3 | 20.8      |
| 0°-60°    | 2115.3 | 38.1      |
| 0°-90°    | 3060.4 | 55.2      |
| 90°-120°  | 670.3  | 12.1      |
| 90°-150°  | 1910.7 | 34.5      |
| 90°-180°  | 2485.0 | 44.8      |
| 0°-180°   | 5545.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0°   | 902 | 902   | 902 | 902   | 902 |      |
| 5°   | 905 | 901   | 893 | 901   | 900 | 86   |
| 15°  | 863 | 866   | 866 | 878   | 876 | 243  |
| 25°  | 785 | 794   | 806 | 821   | 825 | 361  |
| 35°  | 676 | 698   | 723 | 752   | 761 | 423  |
| 45°  | 554 | 590   | 636 | 676   | 689 | 428  |
| 55°  | 425 | 472   | 540 | 587   | 604 | 380  |
| 65°  | 290 | 354   | 432 | 485   | 502 | 288  |
| 75°  | 161 | 234   | 318 | 374   | 391 | 170  |
| 85°  | 47  | 128   | 212 | 267   | 285 | 50   |
| 90°  | 14  | 95    | 183 | 238   | 255 | 11   |
| 95°  | 44  | 88    | 171 | 223   | 238 | 48   |
| 105° | 164 | 218   | 144 | 196   | 212 | 176  |
| 115° | 303 | 327   | 398 | 198   | 175 | 298  |
| 125° | 424 | 431   | 483 | 522   | 535 | 379  |
| 135° | 523 | 531   | 549 | 582   | 591 | 404  |
| 145° | 605 | 605   | 613 | 625   | 629 | 379  |
| 155° | 666 | 662   | 668 | 671   | 667 | 307  |
| 165° | 702 | 699   | 700 | 704   | 700 | 198  |
| 175° | 718 | 714   | 716 | 719   | 714 | 68   |
| 180° | 717 | 717   | 717 | 717   | 717 |      |

TEST NUMBER: P1009522

CATALOG NUMBER: S122DIP-B865D530UB27-4F0-XX-W2A-D

**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 0°     | 902.3 | 902.3 | 902.3 | 902.3 | 902.3 |
| 2.5°   | 908.9 | 905.0 | 895.8 | 902.3 | 899.7 |
| 5°     | 905.0 | 901.0 | 893.2 | 901.0 | 899.7 |
| 7.5°   | 898.4 | 895.8 | 889.3 | 898.4 | 897.1 |
| 10°    | 890.6 | 888.0 | 884.0 | 894.5 | 893.2 |
| 12.5°  | 877.5 | 878.8 | 876.2 | 886.6 | 885.3 |
| 15°    | 863.1 | 865.7 | 865.7 | 877.5 | 876.2 |
| 17.5°  | 844.8 | 850.0 | 854.0 | 865.7 | 865.7 |
| 20°    | 826.5 | 833.0 | 838.3 | 852.6 | 852.6 |
| 22.5°  | 806.9 | 814.7 | 822.6 | 836.9 | 839.6 |
| 25°    | 784.6 | 793.8 | 805.6 | 821.3 | 825.2 |
| 27.5°  | 758.5 | 772.9 | 785.9 | 805.6 | 808.2 |
| 30°    | 732.3 | 749.3 | 766.3 | 787.3 | 791.2 |
| 32.5°  | 703.6 | 723.2 | 744.1 | 768.9 | 776.8 |
| 35°    | 676.1 | 698.3 | 723.2 | 751.9 | 761.1 |
| 37.5°  | 646.0 | 670.9 | 702.3 | 733.6 | 742.8 |
| 40°    | 615.9 | 644.7 | 680.0 | 714.0 | 725.8 |
| 42.5°  | 587.2 | 615.9 | 657.8 | 695.7 | 707.5 |
| 45°    | 554.5 | 589.8 | 635.6 | 676.1 | 689.2 |
| 47.5°  | 523.1 | 561.0 | 613.3 | 655.2 | 669.6 |
| 50°    | 490.4 | 530.9 | 589.8 | 634.3 | 648.6 |
| 52.5°  | 459.0 | 502.2 | 564.9 | 610.7 | 626.4 |
| 55°    | 425.0 | 472.1 | 540.1 | 587.2 | 604.2 |
| 57.5°  | 392.3 | 444.6 | 512.6 | 563.6 | 580.6 |
| 60°    | 357.0 | 413.2 | 487.8 | 537.5 | 555.8 |
| 62.5°  | 325.6 | 384.5 | 459.0 | 512.6 | 529.6 |
| 65°    | 290.3 | 354.4 | 431.6 | 485.2 | 502.2 |
| 67.5°  | 258.9 | 325.6 | 404.1 | 457.7 | 476.0 |
| 70°    | 224.9 | 292.9 | 374.0 | 430.2 | 445.9 |
| 72.5°  | 193.5 | 264.2 | 346.5 | 401.5 | 421.1 |
| 75°    | 160.9 | 234.1 | 317.8 | 374.0 | 391.0 |
| 77.5°  | 129.5 | 205.3 | 290.3 | 346.5 | 364.9 |
| 80°    | 98.1  | 177.9 | 262.9 | 317.8 | 336.1 |
| 82.5°  | 71.9  | 150.4 | 236.7 | 291.6 | 308.6 |
| 85°    | 47.1  | 128.2 | 211.9 | 266.8 | 285.1 |
| 87.5°  | 28.8  | 107.2 | 190.9 | 244.5 | 261.5 |
| 90°    | 13.6  | 95.1  | 183.0 | 237.9 | 254.6 |
| 92.5°  | 24.8  | 92.0  | 173.3 | 225.4 | 241.5 |
| 95°    | 44.2  | 88.5  | 170.6 | 222.9 | 238.1 |
| 97.5°  | 69.9  | 83.5  | 167.6 | 217.6 | 233.8 |
| 100°   | 101.0 | 78.2  | 160.4 | 212.9 | 228.2 |
| 102.5° | 133.8 | 176.0 | 152.2 | 205.0 | 221.0 |
| 105°   | 164.1 | 217.7 | 144.1 | 195.5 | 212.0 |
| 107.5° | 200.9 | 245.3 | 136.0 | 186.2 | 202.6 |
| 110°   | 234.9 | 272.0 | 186.2 | 176.2 | 192.7 |

TEST NUMBER: P1009522

CATALOG NUMBER: S122DIP-B865D530UB27-4F0-XX-W2A-D

**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 268.1 | 298.4 | 349.7 | 168.1 | 184.0 |
| 115°   | 303.3 | 326.6 | 398.4 | 197.5 | 174.6 |
| 117.5° | 332.6 | 353.5 | 417.2 | 382.3 | 259.5 |
| 120°   | 366.9 | 379.9 | 441.6 | 484.4 | 428.8 |
| 122.5° | 395.9 | 405.5 | 464.3 | 502.7 | 515.0 |
| 125°   | 424.1 | 430.9 | 482.6 | 521.6 | 534.8 |
| 127.5° | 451.1 | 457.1 | 500.1 | 538.0 | 550.3 |
| 130°   | 476.5 | 483.5 | 516.7 | 553.8 | 563.7 |
| 132.5° | 502.4 | 507.9 | 533.2 | 567.9 | 577.9 |
| 135°   | 522.9 | 531.2 | 549.0 | 581.6 | 591.0 |
| 137.5° | 545.7 | 552.0 | 563.6 | 593.7 | 601.3 |
| 140°   | 568.0 | 570.9 | 579.2 | 604.7 | 610.1 |
| 142.5° | 586.7 | 589.0 | 595.8 | 615.6 | 619.5 |
| 145°   | 605.1 | 604.6 | 613.4 | 624.8 | 628.8 |
| 147.5° | 622.2 | 620.6 | 629.5 | 633.4 | 635.2 |
| 150°   | 638.8 | 635.2 | 643.5 | 646.6 | 644.0 |
| 152.5° | 652.8 | 648.6 | 656.4 | 659.5 | 655.9 |
| 155°   | 666.3 | 661.6 | 667.8 | 670.9 | 666.8 |
| 157.5° | 677.2 | 673.0 | 677.7 | 681.3 | 677.2 |
| 160°   | 686.5 | 683.4 | 686.5 | 689.6 | 686.0 |
| 162.5° | 694.8 | 691.7 | 694.3 | 697.9 | 693.2 |
| 165°   | 702.1 | 698.9 | 700.5 | 704.1 | 700.5 |
| 167.5° | 707.8 | 704.6 | 706.2 | 709.8 | 705.2 |
| 170°   | 712.4 | 709.3 | 710.4 | 714.0 | 709.3 |
| 172.5° | 715.5 | 712.4 | 713.5 | 717.1 | 712.4 |
| 175°   | 718.1 | 714.5 | 715.5 | 719.2 | 714.0 |
| 177.5° | 719.2 | 715.5 | 716.1 | 719.7 | 715.0 |
| 180°   | 716.6 | 716.6 | 716.6 | 716.6 | 716.6 |

(END OF REPORT)