

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: P1010958

Luminaire Tested: S123RDIP-B560D585UB2750-4F0-XX-W2A-F\_5000K

Issue Date: 5/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1010958  
REPORT IS A COMBINATION OF REPORTS P993454 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDIP-B560D585UB2750-4F0-XX-W2A-F\_5000K  
Description: Define 3 Regressed Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015}  
{m-EER=1.115}  
Light Source: -  
Ballast/Driver: -

**Summary**

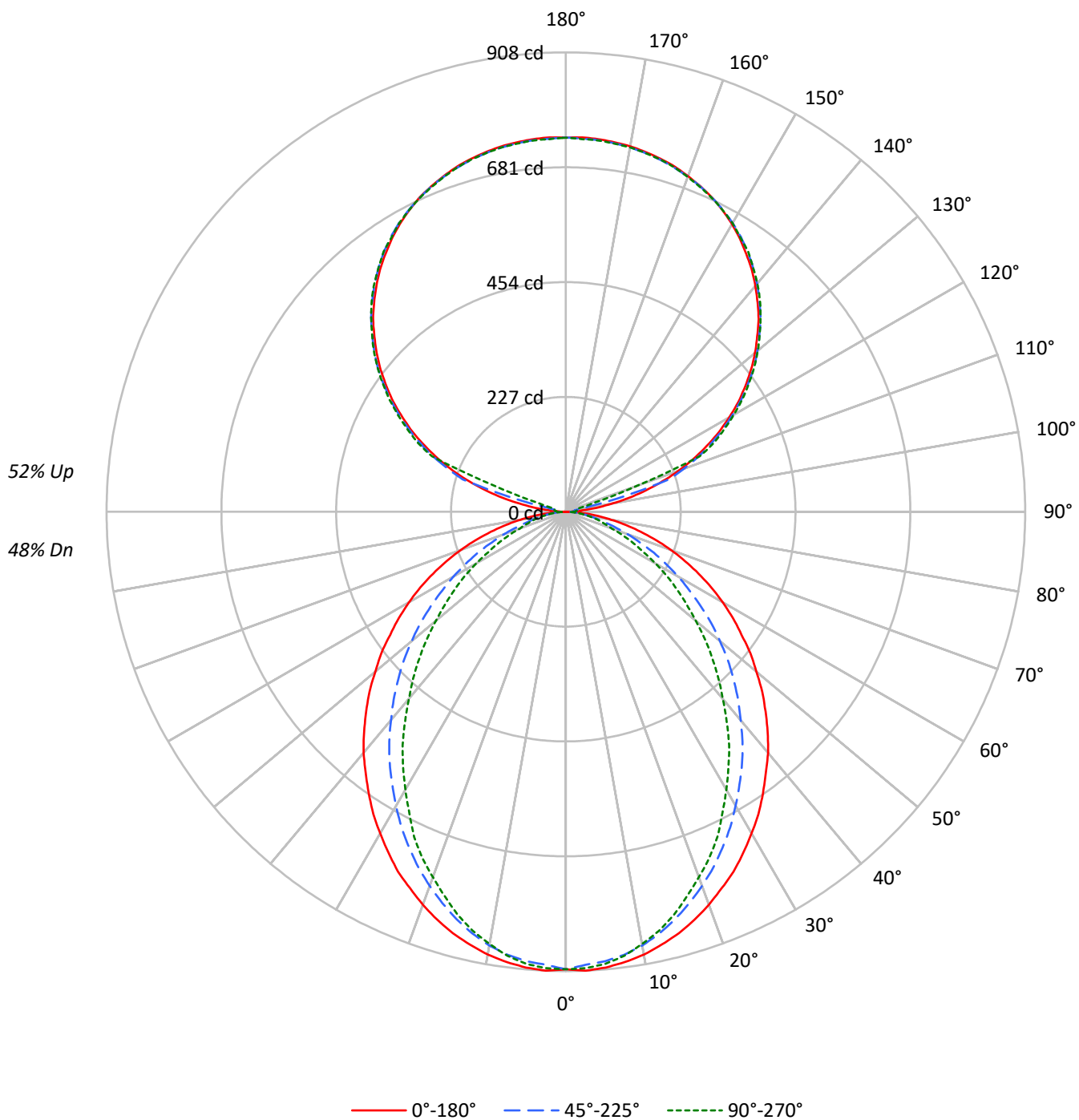
Lumens per Lamp: N/A  
Luminaire Lumens: 4299.0 lumens  
Efficiency: N/A  
Efficacy: 109.1 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22  
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

Input Watts (W): 39.4  
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   | 107 | 107 | 107 | 107 | 98 | 98 | 98 | 98 | 82 | 82 | 82 | 67 | 67 | 67 | 54 | 54 | 54 |
| 1   | 98  | 93  | 90  | 86  | 90 | 86 | 83 | 80 | 72 | 70 | 68 | 60 | 58 | 57 | 48 | 47 | 46 |
| 2   | 89  | 82  | 76  | 71  | 82 | 76 | 70 | 66 | 64 | 60 | 57 | 53 | 50 | 48 | 43 | 41 | 39 |
| 3   | 81  | 72  | 65  | 59  | 75 | 67 | 61 | 56 | 56 | 52 | 48 | 47 | 44 | 41 | 38 | 36 | 34 |
| 4   | 75  | 64  | 56  | 50  | 68 | 59 | 53 | 47 | 50 | 45 | 41 | 42 | 38 | 35 | 34 | 32 | 29 |
| 5   | 69  | 57  | 49  | 43  | 63 | 53 | 46 | 41 | 45 | 40 | 36 | 38 | 34 | 31 | 31 | 28 | 26 |
| 6   | 63  | 51  | 43  | 38  | 58 | 48 | 41 | 36 | 41 | 35 | 31 | 34 | 30 | 27 | 28 | 25 | 23 |
| 7   | 59  | 46  | 39  | 33  | 54 | 43 | 36 | 31 | 37 | 32 | 28 | 31 | 27 | 24 | 26 | 23 | 20 |
| 8   | 54  | 42  | 35  | 29  | 50 | 39 | 33 | 28 | 34 | 28 | 25 | 29 | 24 | 21 | 24 | 21 | 18 |
| 9   | 51  | 39  | 31  | 26  | 47 | 36 | 29 | 25 | 31 | 26 | 22 | 26 | 22 | 19 | 22 | 19 | 17 |
| 10  | 47  | 35  | 28  | 24  | 44 | 33 | 27 | 22 | 29 | 23 | 20 | 24 | 20 | 17 | 20 | 17 | 15 |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 9734 | 9734 | 9734 |
| 5°  | 9750 | 9389 | 9364 |
| 10° | 9673 | 9037 | 8858 |
| 15° | 9547 | 8600 | 8305 |
| 20° | 9383 | 8126 | 7685 |
| 25° | 9213 | 7632 | 7099 |
| 30° | 8996 | 7108 | 6406 |
| 35° | 8771 | 6593 | 5774 |
| 40° | 8559 | 6033 | 5077 |
| 45° | 8288 | 5486 | 4450 |
| 50° | 7991 | 4901 | 3801 |
| 55° | 7681 | 4275 | 3206 |
| 60° | 7385 | 3634 | 2602 |
| 65° | 7003 | 2977 | 2032 |
| 70° | 6523 | 2250 | 1451 |
| 75° | 5831 | 1523 | 1149 |
| 80° | 4978 | 1059 | 806  |
| 85° | 3737 | 571  | 423  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8288 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 85.0   | 2.0       |
| 10°-20°   | 236.5  | 5.5       |
| 20°-30°   | 340.5  | 7.9       |
| 30°-40°   | 383.4  | 8.9       |
| 40°-50°   | 366.8  | 8.5       |
| 50°-60°   | 300.2  | 7.0       |
| 60°-70°   | 202.4  | 4.7       |
| 70°-80°   | 101.5  | 2.4       |
| 80°-90°   | 28.0   | 0.7       |
| 90°-100°  | 26.1   | 0.6       |
| 100°-110° | 126.1  | 2.9       |
| 110°-120° | 309.0  | 7.2       |
| 120°-130° | 392.2  | 9.1       |
| 130°-140° | 419.0  | 9.7       |
| 140°-150° | 391.8  | 9.1       |
| 150°-160° | 316.0  | 7.4       |
| 160°-170° | 204.0  | 4.7       |
| 170°-180° | 70.3   | 1.6       |
| 0°-30°    | 662.0  | 15.4      |
| 0°-40°    | 1045.4 | 24.3      |
| 0°-60°    | 1712.5 | 39.8      |
| 0°-90°    | 2044.5 | 47.6      |
| 90°-120°  | 461.1  | 10.7      |
| 90°-150°  | 1664.2 | 38.7      |
| 90°-180°  | 2255.0 | 52.5      |
| 0°-180°   | 4299.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0°   | 904 | 904   | 904 | 904   | 904 |      |
| 5°   | 904 | 901   | 892 | 898   | 897 | 86   |
| 15°  | 862 | 854   | 834 | 830   | 825 | 243  |
| 25°  | 785 | 766   | 733 | 717   | 709 | 361  |
| 35°  | 679 | 653   | 607 | 576   | 562 | 425  |
| 45°  | 558 | 525   | 469 | 427   | 409 | 431  |
| 55°  | 424 | 388   | 326 | 283   | 268 | 380  |
| 65°  | 290 | 249   | 192 | 156   | 148 | 287  |
| 75°  | 153 | 118   | 78  | 70    | 69  | 163  |
| 85°  | 39  | 23    | 20  | 19    | 19  | 43   |
| 90°  | 0   | 6     | 13  | 15    | 16  | 4    |
| 95°  | 34  | 11    | 17  | 21    | 21  | 40   |
| 105° | 164 | 170   | 120 | 23    | 24  | 174  |
| 115° | 307 | 310   | 315 | 321   | 323 | 303  |
| 125° | 433 | 437   | 440 | 441   | 442 | 387  |
| 135° | 539 | 542   | 544 | 546   | 544 | 415  |
| 145° | 622 | 626   | 627 | 628   | 628 | 389  |
| 155° | 685 | 684   | 685 | 687   | 684 | 316  |
| 165° | 722 | 721   | 720 | 725   | 721 | 204  |
| 175° | 740 | 737   | 737 | 741   | 737 | 70   |
| 180° | 740 | 740   | 740 | 740   | 740 |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 0°     | 904.3 | 904.3 | 904.3 | 904.3 | 904.3 |
| 2.5°   | 908.0 | 905.0 | 896.2 | 904.3 | 902.8 |
| 5°     | 904.3 | 900.6 | 891.8 | 898.4 | 897.0 |
| 7.5°   | 897.7 | 894.0 | 883.0 | 887.4 | 885.2 |
| 10°    | 888.9 | 883.8 | 870.6 | 871.3 | 867.6 |
| 12.5°  | 876.4 | 870.6 | 853.7 | 853.0 | 848.6 |
| 15°    | 862.5 | 854.4 | 833.9 | 830.2 | 825.1 |
| 17.5°  | 845.6 | 836.8 | 811.2 | 803.8 | 796.5 |
| 20°    | 826.6 | 814.8 | 787.0 | 777.4 | 768.6 |
| 22.5°  | 805.3 | 791.4 | 761.3 | 748.8 | 740.8 |
| 25°    | 784.8 | 766.4 | 732.7 | 717.3 | 709.2 |
| 27.5°  | 759.8 | 740.0 | 703.4 | 682.8 | 670.3 |
| 30°    | 734.2 | 712.2 | 671.1 | 646.1 | 634.4 |
| 32.5°  | 708.5 | 682.8 | 638.8 | 610.9 | 598.5 |
| 35°    | 679.2 | 652.7 | 607.3 | 575.7 | 562.5 |
| 37.5°  | 649.8 | 621.2 | 573.5 | 538.3 | 522.2 |
| 40°    | 621.9 | 589.7 | 537.6 | 499.5 | 482.6 |
| 42.5°  | 590.4 | 558.1 | 503.9 | 461.3 | 446.7 |
| 45°    | 558.1 | 525.1 | 468.7 | 426.9 | 409.3 |
| 47.5°  | 526.6 | 489.9 | 434.2 | 388.7 | 373.3 |
| 50°    | 491.4 | 456.9 | 397.5 | 352.0 | 335.2 |
| 52.5°  | 459.9 | 421.7 | 363.0 | 315.4 | 300.7 |
| 55°    | 423.9 | 388.0 | 325.6 | 283.1 | 268.4 |
| 57.5°  | 391.6 | 352.8 | 289.7 | 249.4 | 236.9 |
| 60°    | 357.9 | 317.6 | 256.7 | 217.1 | 204.6 |
| 62.5°  | 324.2 | 283.8 | 223.0 | 186.3 | 173.1 |
| 65°    | 289.7 | 249.4 | 192.2 | 156.2 | 148.2 |
| 67.5°  | 255.2 | 214.2 | 158.4 | 131.3 | 122.5 |
| 70°    | 221.5 | 181.9 | 130.5 | 104.9 | 96.8  |
| 72.5°  | 187.8 | 148.9 | 103.4 | 83.6  | 81.4  |
| 75°    | 153.3 | 118.1 | 77.7  | 70.4  | 68.9  |
| 77.5°  | 121.7 | 89.5  | 60.9  | 56.5  | 55.0  |
| 80°    | 91.7  | 61.6  | 46.2  | 44.0  | 42.5  |
| 82.5°  | 63.1  | 38.1  | 33.0  | 30.8  | 30.8  |
| 85°    | 38.9  | 22.7  | 20.5  | 19.1  | 19.1  |
| 87.5°  | 17.6  | 9.5   | 9.5   | 8.8   | 8.1   |
| 90°    | 0.5   | 6.0   | 13.2  | 15.4  | 16.5  |
| 92.5°  | 12.6  | 9.3   | 14.3  | 18.1  | 18.7  |
| 95°    | 33.5  | 11.0  | 17.0  | 20.9  | 20.9  |
| 97.5°  | 61.0  | 45.6  | 17.6  | 22.0  | 22.5  |
| 100°   | 92.9  | 103.8 | 18.1  | 22.5  | 23.1  |
| 102.5° | 129.1 | 136.3 | 40.7  | 22.5  | 23.6  |
| 105°   | 163.7 | 169.8 | 120.3 | 23.1  | 24.2  |
| 107.5° | 200.5 | 205.5 | 213.7 | 129.1 | 57.1  |
| 110°   | 237.4 | 241.7 | 247.8 | 229.7 | 151.1 |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 272.5 | 276.4 | 282.4 | 287.4 | 286.3 |
| 115°   | 307.1 | 310.4 | 315.4 | 320.9 | 323.1 |
| 117.5° | 341.2 | 345.0 | 347.8 | 352.2 | 352.7 |
| 120°   | 372.5 | 377.5 | 379.1 | 383.5 | 383.5 |
| 122.5° | 404.4 | 408.2 | 410.4 | 413.2 | 413.7 |
| 125°   | 432.9 | 437.3 | 439.5 | 440.6 | 441.7 |
| 127.5° | 461.5 | 465.9 | 468.7 | 470.3 | 469.2 |
| 130°   | 487.9 | 492.3 | 494.5 | 496.7 | 495.6 |
| 132.5° | 513.2 | 517.6 | 519.2 | 521.4 | 519.8 |
| 135°   | 539.0 | 542.3 | 544.5 | 546.1 | 544.5 |
| 137.5° | 561.0 | 565.4 | 566.5 | 569.2 | 568.1 |
| 140°   | 582.9 | 586.2 | 587.9 | 590.1 | 589.0 |
| 142.5° | 603.3 | 606.6 | 608.2 | 609.9 | 608.2 |
| 145°   | 622.0 | 625.8 | 626.9 | 628.0 | 628.0 |
| 147.5° | 640.1 | 642.8 | 643.9 | 645.0 | 642.3 |
| 150°   | 656.6 | 658.2 | 659.3 | 660.4 | 658.8 |
| 152.5° | 671.4 | 672.0 | 672.5 | 674.7 | 672.0 |
| 155°   | 685.1 | 684.0 | 684.6 | 687.3 | 684.0 |
| 157.5° | 696.1 | 696.1 | 695.6 | 698.9 | 694.5 |
| 160°   | 706.0 | 705.5 | 704.9 | 708.2 | 704.4 |
| 162.5° | 715.4 | 713.7 | 713.2 | 717.0 | 713.7 |
| 165°   | 722.5 | 720.9 | 720.3 | 724.7 | 720.9 |
| 167.5° | 728.5 | 726.3 | 726.3 | 730.7 | 726.3 |
| 170°   | 733.5 | 731.3 | 731.3 | 735.7 | 731.3 |
| 172.5° | 736.8 | 734.0 | 734.6 | 739.0 | 734.0 |
| 175°   | 739.5 | 736.8 | 737.3 | 741.2 | 736.8 |
| 177.5° | 740.6 | 737.9 | 738.4 | 742.8 | 737.3 |
| 180°   | 739.5 | 739.5 | 739.5 | 739.5 | 739.5 |

(END OF REPORT)