

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: P1008422

Luminaire Tested: S122RDIP-B485D530UB2750-4F0-XX-W2A-F\_4000K

Issue Date: 5/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1008422  
REPORT IS A COMBINATION OF REPORTS P988312 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDIP-B485D530UB2750-4F0-XX-W2A-F\_4000K  
Description: Define 2 Regressed Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865}  
{m-EER=0.951}  
Light Source: -  
Ballast/Driver: -

**Summary**

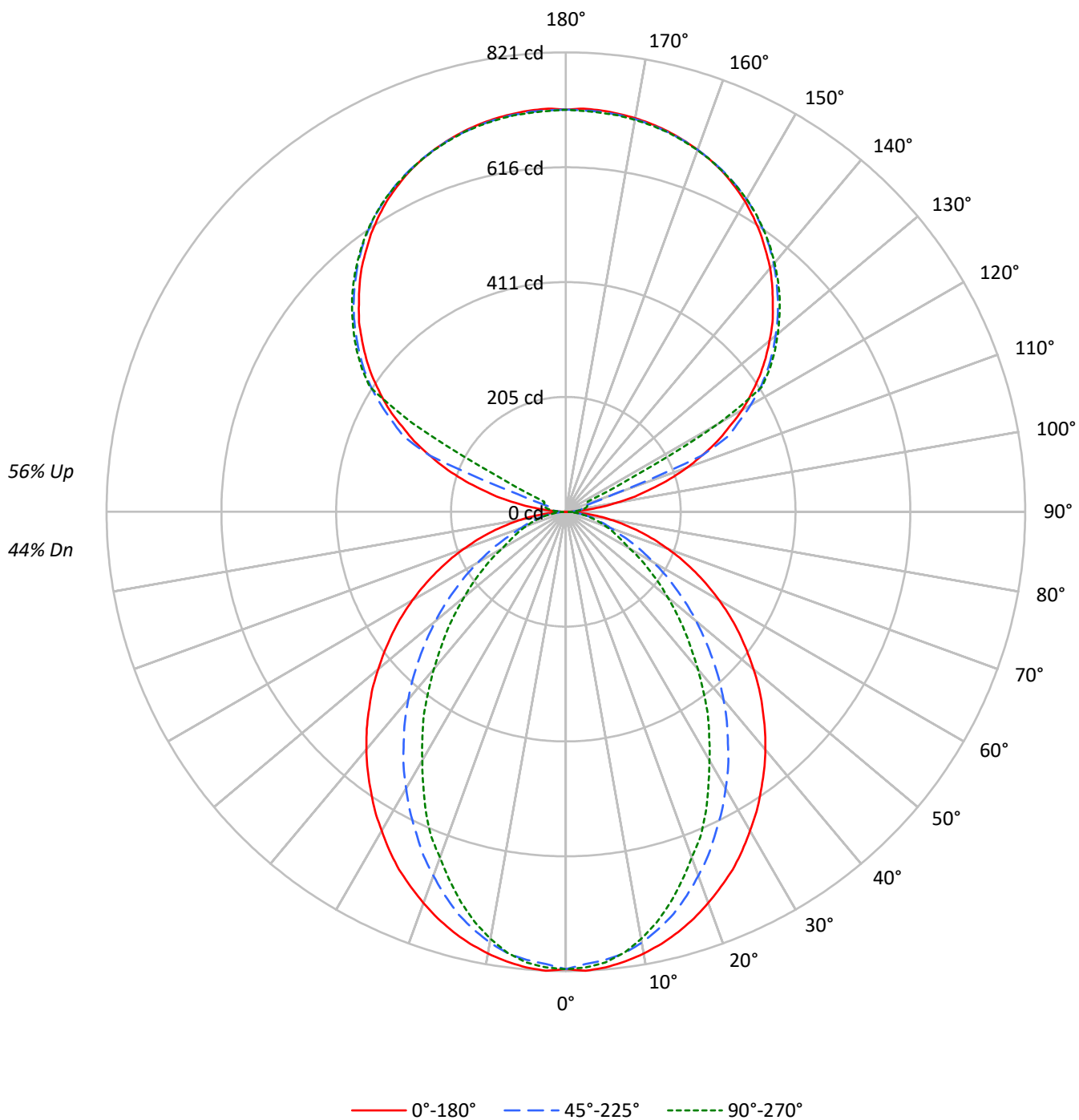
Lumens per Lamp: N/A  
Luminaire Lumens: 3789.0 lumens  
Efficiency: N/A  
Efficacy: 96.2 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16  
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

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   | 106 | 106 | 106 | 106 | 97 | 97 | 97 | 97 | 80 | 80 | 80 | 65 | 65 | 65 | 51 | 51 | 51 |
| 1   | 97  | 93  | 89  | 86  | 89 | 85 | 82 | 79 | 71 | 69 | 67 | 58 | 56 | 55 | 46 | 45 | 44 |
| 2   | 89  | 82  | 76  | 71  | 81 | 75 | 70 | 66 | 63 | 59 | 56 | 51 | 49 | 47 | 41 | 39 | 38 |
| 3   | 81  | 72  | 65  | 59  | 74 | 66 | 60 | 55 | 56 | 51 | 47 | 46 | 43 | 40 | 36 | 34 | 32 |
| 4   | 74  | 64  | 56  | 51  | 68 | 59 | 52 | 47 | 50 | 45 | 41 | 41 | 37 | 34 | 33 | 30 | 28 |
| 5   | 68  | 57  | 49  | 44  | 63 | 53 | 46 | 41 | 45 | 39 | 35 | 37 | 33 | 30 | 30 | 27 | 25 |
| 6   | 63  | 51  | 44  | 38  | 58 | 48 | 41 | 36 | 40 | 35 | 31 | 34 | 30 | 27 | 27 | 24 | 22 |
| 7   | 58  | 47  | 39  | 33  | 53 | 43 | 36 | 31 | 37 | 31 | 28 | 31 | 27 | 24 | 25 | 22 | 20 |
| 8   | 54  | 42  | 35  | 30  | 50 | 39 | 33 | 28 | 34 | 28 | 25 | 28 | 24 | 21 | 23 | 20 | 18 |
| 9   | 51  | 39  | 31  | 27  | 46 | 36 | 29 | 25 | 31 | 26 | 22 | 26 | 22 | 19 | 21 | 18 | 16 |
| 10  | 47  | 36  | 29  | 24  | 43 | 33 | 27 | 23 | 28 | 23 | 20 | 24 | 20 | 17 | 20 | 17 | 15 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 12939 | 12939 | 12939 |
| 5°  | 12960 | 12308 | 12218 |
| 10° | 12831 | 11675 | 11289 |
| 15° | 12655 | 10925 | 10231 |
| 20° | 12421 | 10072 | 9124  |
| 25° | 12184 | 9199  | 8111  |
| 30° | 11861 | 8347  | 7004  |
| 35° | 11547 | 7489  | 6054  |
| 40° | 11229 | 6645  | 5076  |
| 45° | 10857 | 5774  | 4223  |
| 50° | 10472 | 4936  | 3437  |
| 55° | 10072 | 4097  | 2730  |
| 60° | 9607  | 3276  | 2065  |
| 65° | 9072  | 2498  | 1678  |
| 70° | 8423  | 1812  | 1334  |
| 75° | 7613  | 1383  | 1020  |
| 80° | 6435  | 936   | 683   |
| 85° | 4492  | 430   | 332   |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10857 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 76.6   | 2.0       |
| 10°-20°   | 210.3  | 5.6       |
| 20°-30°   | 295.2  | 7.8       |
| 30°-40°   | 321.8  | 8.5       |
| 40°-50°   | 295.8  | 7.8       |
| 50°-60°   | 232.3  | 6.1       |
| 60°-70°   | 151.2  | 4.0       |
| 70°-80°   | 77.8   | 2.1       |
| 80°-90°   | 21.1   | 0.6       |
| 90°-100°  | 23.7   | 0.6       |
| 100°-110° | 88.3   | 2.3       |
| 110°-120° | 234.3  | 6.2       |
| 120°-130° | 388.6  | 10.3      |
| 130°-140° | 412.7  | 10.9      |
| 140°-150° | 383.6  | 10.1      |
| 150°-160° | 308.4  | 8.1       |
| 160°-170° | 198.7  | 5.2       |
| 170°-180° | 68.4   | 1.8       |
| 0°-30°    | 582.1  | 15.4      |
| 0°-40°    | 904.0  | 23.9      |
| 0°-60°    | 1432.1 | 37.8      |
| 0°-90°    | 1682.3 | 44.4      |
| 90°-120°  | 346.3  | 9.1       |
| 90°-150°  | 1531.2 | 40.4      |
| 90°-180°  | 2107.0 | 55.6      |
| 0°-180°   | 3789.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0°   | 817 | 817   | 817 | 817   | 817 |      |
| 5°   | 817 | 814   | 804 | 811   | 808 | 78   |
| 15°  | 777 | 769   | 744 | 730   | 723 | 219  |
| 25°  | 706 | 682   | 633 | 603   | 592 | 325  |
| 35°  | 608 | 570   | 505 | 459   | 442 | 381  |
| 45°  | 497 | 448   | 370 | 317   | 300 | 384  |
| 55°  | 378 | 320   | 240 | 196   | 182 | 338  |
| 65°  | 255 | 195   | 129 | 104   | 101 | 253  |
| 75°  | 136 | 84    | 59  | 54    | 53  | 144  |
| 85°  | 32  | 16    | 14  | 14    | 14  | 36   |
| 90°  | 0   | 6     | 10  | 13    | 14  | 4    |
| 95°  | 34  | 17    | 20  | 23    | 22  | 40   |
| 105° | 158 | 174   | 32  | 37    | 40  | 169  |
| 115° | 299 | 308   | 321 | 80    | 43  | 294  |
| 125° | 423 | 430   | 439 | 443   | 445 | 377  |
| 135° | 523 | 531   | 536 | 541   | 540 | 404  |
| 145° | 607 | 606   | 615 | 619   | 616 | 380  |
| 155° | 668 | 664   | 670 | 673   | 669 | 308  |
| 165° | 704 | 701   | 702 | 706   | 702 | 199  |
| 175° | 720 | 716   | 718 | 721   | 716 | 69   |
| 180° | 719 | 719   | 719 | 719   | 719 |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 0°     | 817.4 | 817.4 | 817.4 | 817.4 | 817.4 |
| 2.5°   | 821.1 | 817.4 | 809.2 | 816.6 | 815.1 |
| 5°     | 817.4 | 813.7 | 804.0 | 810.7 | 808.5 |
| 7.5°   | 810.7 | 806.3 | 795.9 | 798.9 | 795.2 |
| 10°    | 801.8 | 796.6 | 781.9 | 779.6 | 775.2 |
| 12.5°  | 790.7 | 784.1 | 764.1 | 759.7 | 751.5 |
| 15°    | 777.4 | 769.3 | 744.1 | 730.1 | 722.7 |
| 17.5°  | 761.9 | 750.0 | 719.0 | 702.7 | 690.9 |
| 20°    | 744.1 | 729.3 | 692.3 | 673.9 | 657.6 |
| 22.5°  | 724.9 | 707.9 | 665.0 | 639.8 | 628.7 |
| 25°    | 705.7 | 682.0 | 633.2 | 602.8 | 591.8 |
| 27.5°  | 682.7 | 657.6 | 603.6 | 568.8 | 551.8 |
| 30°    | 658.3 | 630.2 | 571.0 | 533.3 | 513.3 |
| 32.5°  | 634.7 | 600.6 | 540.0 | 495.6 | 477.1 |
| 35°    | 608.0 | 570.3 | 505.2 | 458.6 | 442.3 |
| 37.5°  | 582.1 | 541.5 | 472.7 | 421.6 | 403.1 |
| 40°    | 554.8 | 510.4 | 438.6 | 386.1 | 366.9 |
| 42.5°  | 526.7 | 479.3 | 404.6 | 349.9 | 331.4 |
| 45°    | 497.1 | 447.5 | 369.8 | 317.3 | 299.6 |
| 47.5°  | 469.0 | 416.4 | 336.6 | 284.0 | 267.8 |
| 50°    | 437.9 | 385.4 | 304.0 | 253.0 | 237.4 |
| 52.5°  | 407.6 | 352.1 | 272.9 | 224.1 | 210.1 |
| 55°    | 378.0 | 320.3 | 240.4 | 196.0 | 182.0 |
| 57.5°  | 347.7 | 288.5 | 211.6 | 170.1 | 158.3 |
| 60°    | 316.6 | 257.4 | 181.2 | 143.5 | 131.7 |
| 62.5°  | 286.3 | 227.1 | 155.3 | 119.8 | 113.9 |
| 65°    | 255.2 | 195.3 | 128.7 | 103.6 | 101.3 |
| 67.5°  | 225.6 | 165.7 | 103.6 | 91.0  | 88.8  |
| 70°    | 194.5 | 136.8 | 85.8  | 78.4  | 75.4  |
| 72.5°  | 165.0 | 110.2 | 71.7  | 65.8  | 64.4  |
| 75°    | 136.1 | 84.3  | 59.2  | 54.0  | 53.3  |
| 77.5°  | 107.3 | 59.9  | 46.6  | 43.6  | 42.2  |
| 80°    | 80.6  | 42.9  | 35.5  | 32.5  | 32.5  |
| 82.5°  | 56.2  | 28.8  | 24.4  | 22.9  | 22.9  |
| 85°    | 31.8  | 16.3  | 14.1  | 14.1  | 14.1  |
| 87.5°  | 11.8  | 5.9   | 5.9   | 5.2   | 5.2   |
| 90°    | 0.5   | 6.2   | 10.4  | 13.0  | 14.0  |
| 92.5°  | 13.0  | 10.9  | 12.5  | 13.5  | 14.0  |
| 95°    | 33.8  | 16.6  | 20.3  | 22.9  | 22.4  |
| 97.5°  | 60.8  | 18.2  | 26.5  | 28.1  | 28.6  |
| 100°   | 92.0  | 20.8  | 29.6  | 33.8  | 34.8  |
| 102.5° | 126.4 | 125.3 | 30.7  | 36.4  | 38.0  |
| 105°   | 158.1 | 173.7 | 31.7  | 37.4  | 39.5  |
| 107.5° | 195.0 | 208.0 | 32.8  | 38.5  | 40.6  |
| 110°   | 230.4 | 241.3 | 91.0  | 39.0  | 41.1  |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 263.6 | 273.0 | 264.2 | 40.0  | 41.6  |
| 115°   | 299.0 | 307.8 | 320.8 | 80.1  | 42.6  |
| 117.5° | 329.7 | 340.1 | 348.9 | 274.6 | 138.3 |
| 120°   | 364.0 | 371.8 | 381.1 | 387.4 | 317.2 |
| 122.5° | 393.1 | 401.4 | 411.8 | 414.9 | 415.5 |
| 125°   | 422.7 | 429.5 | 439.4 | 443.0 | 444.6 |
| 127.5° | 449.8 | 457.1 | 464.9 | 470.1 | 470.6 |
| 130°   | 475.3 | 483.6 | 489.3 | 495.0 | 494.5 |
| 132.5° | 501.3 | 508.0 | 513.7 | 518.4 | 517.9 |
| 135°   | 523.1 | 531.4 | 536.1 | 541.3 | 540.3 |
| 137.5° | 546.0 | 552.2 | 557.4 | 562.6 | 561.1 |
| 140°   | 568.3 | 572.5 | 578.2 | 582.9 | 580.3 |
| 142.5° | 587.1 | 590.7 | 597.5 | 601.6 | 599.0 |
| 145°   | 606.8 | 606.3 | 615.1 | 618.8 | 616.2 |
| 147.5° | 624.0 | 622.4 | 631.3 | 633.9 | 631.8 |
| 150°   | 640.6 | 637.0 | 645.3 | 648.4 | 645.8 |
| 152.5° | 654.7 | 650.5 | 658.3 | 661.4 | 657.8 |
| 155°   | 668.2 | 663.5 | 669.7 | 672.9 | 668.7 |
| 157.5° | 679.1 | 674.9 | 679.6 | 683.3 | 679.1 |
| 160°   | 688.5 | 685.3 | 688.5 | 691.6 | 687.9 |
| 162.5° | 696.8 | 693.7 | 696.3 | 699.9 | 695.2 |
| 165°   | 704.1 | 700.9 | 702.5 | 706.1 | 702.5 |
| 167.5° | 709.8 | 706.7 | 708.2 | 711.9 | 707.2 |
| 170°   | 714.5 | 711.3 | 712.4 | 716.0 | 711.3 |
| 172.5° | 717.6 | 714.5 | 715.5 | 719.1 | 714.5 |
| 175°   | 720.2 | 716.5 | 717.6 | 721.2 | 716.0 |
| 177.5° | 721.2 | 717.6 | 718.1 | 721.7 | 717.1 |
| 180°   | 718.6 | 718.6 | 718.6 | 718.6 | 718.6 |

(END OF REPORT)