

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: P1026485

Luminaire Tested: S124RDIP-B575D590UB35-4F0-XX-W2A-F1

Issue Date: 5/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1026485  
REPORT IS A COMBINATION OF REPORTS P999565 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDIP-B575D590UB35-4F0-XX-W2A-F1  
Description: Define 4 Regressed Direct/Indirect Pendant with 3500K BioUP LEDs {m-DER=0.721}  
{m-EER=0.792}  
Light Source: -  
Ballast/Driver: -

**Summary**

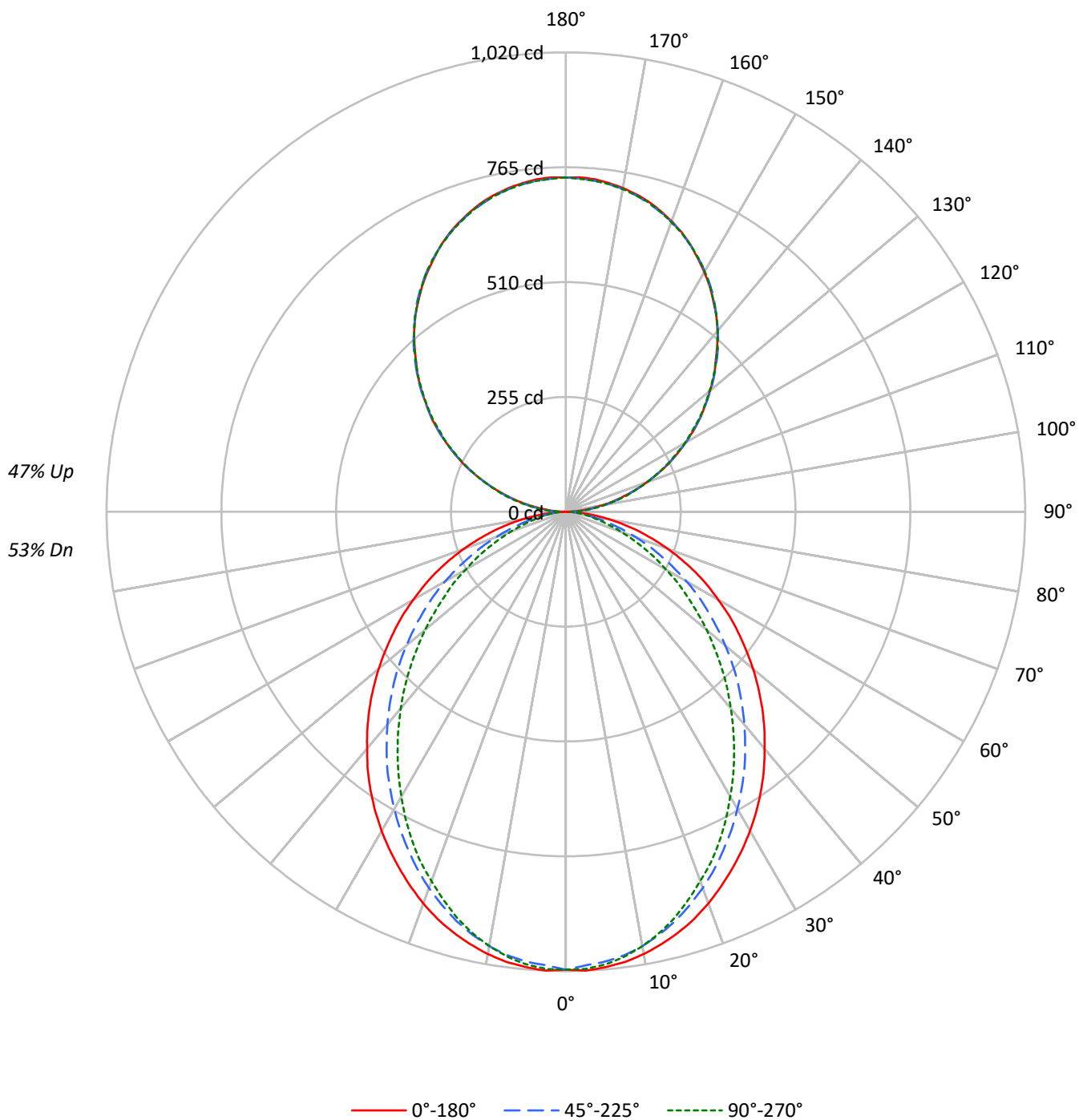
Lumens per Lamp: N/A  
Luminaire Lumens: 4410.0 lumens  
Efficiency: N/A  
Efficacy: 111.9 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

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   | 108 | 108 | 108 | 108 | 100 | 100 | 100 | 100 | 85 | 85 | 85 | 72 | 72 | 72 | 59 | 59 | 59 |
| 1   | 99  | 95  | 91  | 87  | 91  | 88  | 85  | 82  | 75 | 73 | 71 | 63 | 62 | 60 | 53 | 52 | 51 |
| 2   | 90  | 83  | 77  | 72  | 83  | 77  | 72  | 67  | 66 | 62 | 59 | 56 | 53 | 51 | 47 | 45 | 43 |
| 3   | 82  | 73  | 66  | 60  | 76  | 68  | 62  | 57  | 59 | 54 | 50 | 50 | 46 | 43 | 42 | 39 | 37 |
| 4   | 76  | 65  | 57  | 51  | 70  | 61  | 54  | 48  | 52 | 47 | 43 | 45 | 41 | 37 | 37 | 34 | 32 |
| 5   | 69  | 58  | 50  | 44  | 64  | 54  | 47  | 42  | 47 | 41 | 37 | 40 | 36 | 32 | 34 | 31 | 28 |
| 6   | 64  | 52  | 44  | 38  | 59  | 49  | 42  | 36  | 42 | 37 | 32 | 36 | 32 | 29 | 31 | 27 | 25 |
| 7   | 59  | 47  | 39  | 34  | 55  | 44  | 37  | 32  | 38 | 33 | 29 | 33 | 29 | 25 | 28 | 25 | 22 |
| 8   | 55  | 43  | 35  | 30  | 51  | 40  | 33  | 28  | 35 | 30 | 26 | 30 | 26 | 23 | 26 | 22 | 20 |
| 9   | 51  | 39  | 32  | 27  | 48  | 37  | 30  | 25  | 32 | 27 | 23 | 28 | 24 | 20 | 24 | 21 | 18 |
| 10  | 48  | 36  | 29  | 24  | 45  | 34  | 27  | 23  | 30 | 24 | 21 | 26 | 22 | 19 | 22 | 19 | 16 |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 8290 | 8290 | 8290 |
| 5°  | 8291 | 8044 | 8044 |
| 10° | 8221 | 7790 | 7698 |
| 15° | 8108 | 7474 | 7287 |
| 20° | 7959 | 7114 | 6820 |
| 25° | 7775 | 6724 | 6364 |
| 30° | 7594 | 6328 | 5852 |
| 35° | 7394 | 5926 | 5350 |
| 40° | 7159 | 5493 | 4836 |
| 45° | 6936 | 5064 | 4326 |
| 50° | 6684 | 4596 | 3809 |
| 55° | 6412 | 4115 | 3275 |
| 60° | 6109 | 3604 | 2748 |
| 65° | 5816 | 3019 | 2240 |
| 70° | 5401 | 2403 | 1712 |
| 75° | 4867 | 1748 | 1198 |
| 80° | 4068 | 1073 | 860  |
| 85° | 3056 | 618  | 474  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
Vertical Angle: 45°  
Luminance: 6936 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 95.6   | 2.2       |
| 10°-20°   | 266.5  | 6.0       |
| 20°-30°   | 384.8  | 8.7       |
| 30°-40°   | 436.1  | 9.9       |
| 40°-50°   | 421.1  | 9.5       |
| 50°-60°   | 350.1  | 7.9       |
| 60°-70°   | 241.6  | 5.5       |
| 70°-80°   | 122.1  | 2.8       |
| 80°-90°   | 32.6   | 0.7       |
| 90°-100°  | 48.4   | 1.1       |
| 100°-110° | 144.9  | 3.3       |
| 110°-120° | 246.2  | 5.6       |
| 120°-130° | 324.7  | 7.4       |
| 130°-140° | 364.7  | 8.3       |
| 140°-150° | 358.4  | 8.1       |
| 150°-160° | 301.4  | 6.8       |
| 160°-170° | 200.6  | 4.5       |
| 170°-180° | 70.2   | 1.6       |
| 0°-30°    | 747.0  | 16.9      |
| 0°-40°    | 1183.1 | 26.8      |
| 0°-60°    | 1954.3 | 44.3      |
| 0°-90°    | 2350.6 | 53.3      |
| 90°-120°  | 439.5  | 10.0      |
| 90°-150°  | 1487.2 | 33.7      |
| 90°-180°  | 2059.0 | 46.7      |
| 0°-180°   | 4410.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1017 | 1017  | 1017 | 1017  | 1017 |      |
| 5°   | 1015 | 1012  | 1003 | 1010  | 1009 | 96   |
| 15°  | 967  | 960   | 940  | 939   | 933  | 272  |
| 25°  | 874  | 860   | 828  | 815   | 807  | 403  |
| 35°  | 756  | 731   | 692  | 666   | 652  | 472  |
| 45°  | 616  | 588   | 541  | 503   | 489  | 475  |
| 55°  | 467  | 436   | 385  | 345   | 330  | 418  |
| 65°  | 318  | 284   | 234  | 201   | 192  | 314  |
| 75°  | 169  | 140   | 104  | 86    | 81   | 178  |
| 85°  | 42   | 26    | 24   | 23    | 23   | 46   |
| 90°  | 2    | 8     | 13   | 16    | 17   | 5    |
| 95°  | 34   | 40    | 44   | 45    | 45   | 37   |
| 105° | 134  | 134   | 137  | 138   | 140  | 142  |
| 115° | 250  | 250   | 249  | 249   | 248  | 247  |
| 125° | 364  | 364   | 364  | 363   | 362  | 325  |
| 135° | 470  | 474   | 474  | 472   | 471  | 364  |
| 145° | 571  | 574   | 574  | 574   | 572  | 358  |
| 155° | 654  | 654   | 654  | 656   | 654  | 301  |
| 165° | 712  | 711   | 710  | 713   | 711  | 201  |
| 175° | 741  | 738   | 738  | 742   | 738  | 70   |
| 180° | 742  | 742   | 742  | 742   | 742  |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1016.6 | 1016.6 | 1016.6 | 1016.6 | 1016.6 |
| 2.5°   | 1019.7 | 1016.6 | 1008.1 | 1016.6 | 1015.8 |
| 5°     | 1015.1 | 1011.9 | 1002.6 | 1010.4 | 1008.8 |
| 7.5°   | 1008.1 | 1004.9 | 993.3  | 998.7  | 996.4  |
| 10°    | 997.2  | 993.3  | 979.3  | 982.4  | 979.3  |
| 12.5°  | 983.1  | 978.5  | 961.3  | 962.9  | 958.2  |
| 15°    | 966.8  | 959.8  | 940.3  | 938.8  | 933.3  |
| 17.5°  | 948.1  | 938.0  | 915.4  | 911.5  | 903.7  |
| 20°    | 925.5  | 915.4  | 889.0  | 882.7  | 872.6  |
| 22.5°  | 900.6  | 889.0  | 860.2  | 850.0  | 842.3  |
| 25°    | 874.2  | 860.2  | 828.2  | 815.0  | 807.2  |
| 27.5°  | 846.9  | 829.8  | 796.3  | 780.8  | 769.9  |
| 30°    | 818.1  | 798.7  | 762.1  | 742.6  | 730.2  |
| 32.5°  | 787.8  | 765.2  | 727.0  | 703.7  | 692.0  |
| 35°    | 755.8  | 730.9  | 692.0  | 665.5  | 651.5  |
| 37.5°  | 722.4  | 696.7  | 653.9  | 625.1  | 611.1  |
| 40°    | 686.6  | 660.9  | 616.5  | 583.8  | 569.8  |
| 42.5°  | 652.3  | 625.1  | 578.4  | 544.9  | 530.1  |
| 45°    | 616.5  | 587.7  | 541.0  | 502.9  | 488.8  |
| 47.5°  | 579.9  | 550.3  | 502.1  | 462.4  | 446.8  |
| 50°    | 542.6  | 512.2  | 462.4  | 423.5  | 408.7  |
| 52.5°  | 504.4  | 474.8  | 423.5  | 383.8  | 368.2  |
| 55°    | 467.1  | 435.9  | 385.3  | 344.8  | 330.1  |
| 57.5°  | 430.5  | 397.8  | 348.0  | 306.7  | 295.8  |
| 60°    | 390.8  | 359.6  | 309.8  | 269.3  | 256.9  |
| 62.5°  | 355.0  | 322.3  | 270.9  | 234.3  | 225.0  |
| 65°    | 317.6  | 284.1  | 234.3  | 200.8  | 191.5  |
| 67.5°  | 278.7  | 246.8  | 200.1  | 170.5  | 159.6  |
| 70°    | 242.1  | 209.4  | 165.0  | 139.3  | 131.6  |
| 72.5°  | 203.2  | 174.4  | 133.1  | 112.1  | 105.1  |
| 75°    | 168.9  | 140.1  | 103.5  | 85.6   | 81.0   |
| 77.5°  | 133.1  | 108.2  | 77.1   | 64.6   | 63.1   |
| 80°    | 98.9   | 76.3   | 52.9   | 50.6   | 49.8   |
| 82.5°  | 69.3   | 49.0   | 38.1   | 36.6   | 35.8   |
| 85°    | 42.0   | 26.5   | 24.1   | 22.6   | 22.6   |
| 87.5°  | 17.9   | 11.7   | 10.9   | 10.1   | 10.9   |
| 90°    | 1.7    | 8.0    | 12.6   | 16.1   | 17.2   |
| 92.5°  | 14.9   | 22.4   | 25.3   | 27.0   | 27.6   |
| 95°    | 34.4   | 39.6   | 43.6   | 45.3   | 45.3   |
| 97.5°  | 55.1   | 59.7   | 64.3   | 66.6   | 66.6   |
| 100°   | 80.4   | 82.7   | 87.8   | 89.0   | 89.0   |
| 102.5° | 106.8  | 107.3  | 111.9  | 113.7  | 114.2  |
| 105°   | 133.8  | 134.3  | 136.6  | 138.3  | 140.1  |
| 107.5° | 161.9  | 162.5  | 163.0  | 165.3  | 164.7  |
| 110°   | 190.6  | 191.7  | 191.2  | 190.0  | 191.7  |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 220.4 | 220.4 | 219.3 | 219.3 | 219.3 |
| 115°   | 250.3 | 250.3 | 249.1 | 248.6 | 248.0 |
| 117.5° | 278.4 | 278.4 | 277.8 | 276.1 | 274.4 |
| 120°   | 306.5 | 308.8 | 307.1 | 304.2 | 305.4 |
| 122.5° | 335.8 | 336.4 | 335.8 | 334.1 | 331.2 |
| 125°   | 364.5 | 364.5 | 363.9 | 362.8 | 361.6 |
| 127.5° | 390.3 | 392.1 | 390.9 | 389.8 | 389.2 |
| 130°   | 417.9 | 419.6 | 419.6 | 418.5 | 416.2 |
| 132.5° | 446.0 | 447.2 | 446.6 | 445.5 | 444.9 |
| 135°   | 470.1 | 473.6 | 473.6 | 472.4 | 470.7 |
| 137.5° | 497.1 | 498.8 | 500.0 | 498.3 | 498.8 |
| 140°   | 524.1 | 525.2 | 525.2 | 524.7 | 524.1 |
| 142.5° | 548.8 | 549.9 | 549.4 | 549.4 | 549.4 |
| 145°   | 571.2 | 573.5 | 574.0 | 573.5 | 571.7 |
| 147.5° | 594.1 | 597.0 | 596.4 | 595.8 | 595.3 |
| 150°   | 614.8 | 617.1 | 617.1 | 617.1 | 616.5 |
| 152.5° | 634.3 | 635.5 | 636.0 | 637.8 | 636.0 |
| 155°   | 654.4 | 654.4 | 653.8 | 656.1 | 653.8 |
| 157.5° | 671.6 | 670.5 | 670.5 | 672.2 | 670.5 |
| 160°   | 686.5 | 686.0 | 685.4 | 687.1 | 684.3 |
| 162.5° | 700.3 | 698.6 | 698.0 | 701.5 | 698.6 |
| 165°   | 712.4 | 710.7 | 709.5 | 713.0 | 710.7 |
| 167.5° | 722.1 | 719.8 | 719.8 | 723.3 | 719.8 |
| 170°   | 730.2 | 727.3 | 727.9 | 731.3 | 727.3 |
| 172.5° | 735.9 | 733.6 | 733.6 | 737.6 | 733.6 |
| 175°   | 741.1 | 738.2 | 737.6 | 741.7 | 737.6 |
| 177.5° | 743.4 | 740.5 | 740.5 | 744.5 | 739.9 |
| 180°   | 742.2 | 742.2 | 742.2 | 742.2 | 742.2 |

(END OF REPORT)