

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: P1011193

Luminaire Tested: S123DIP-B1000D585UB50-4F0-XX-W2A-F

Issue Date: 5/6/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1011193  
REPORT IS A COMBINATION OF REPORTS P989256 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/6/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123DIP-B1000D585UB50-4F0-XX-W2A-F  
Description: Define 3 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}  
Light Source: -  
Ballast/Driver: -

**Summary**

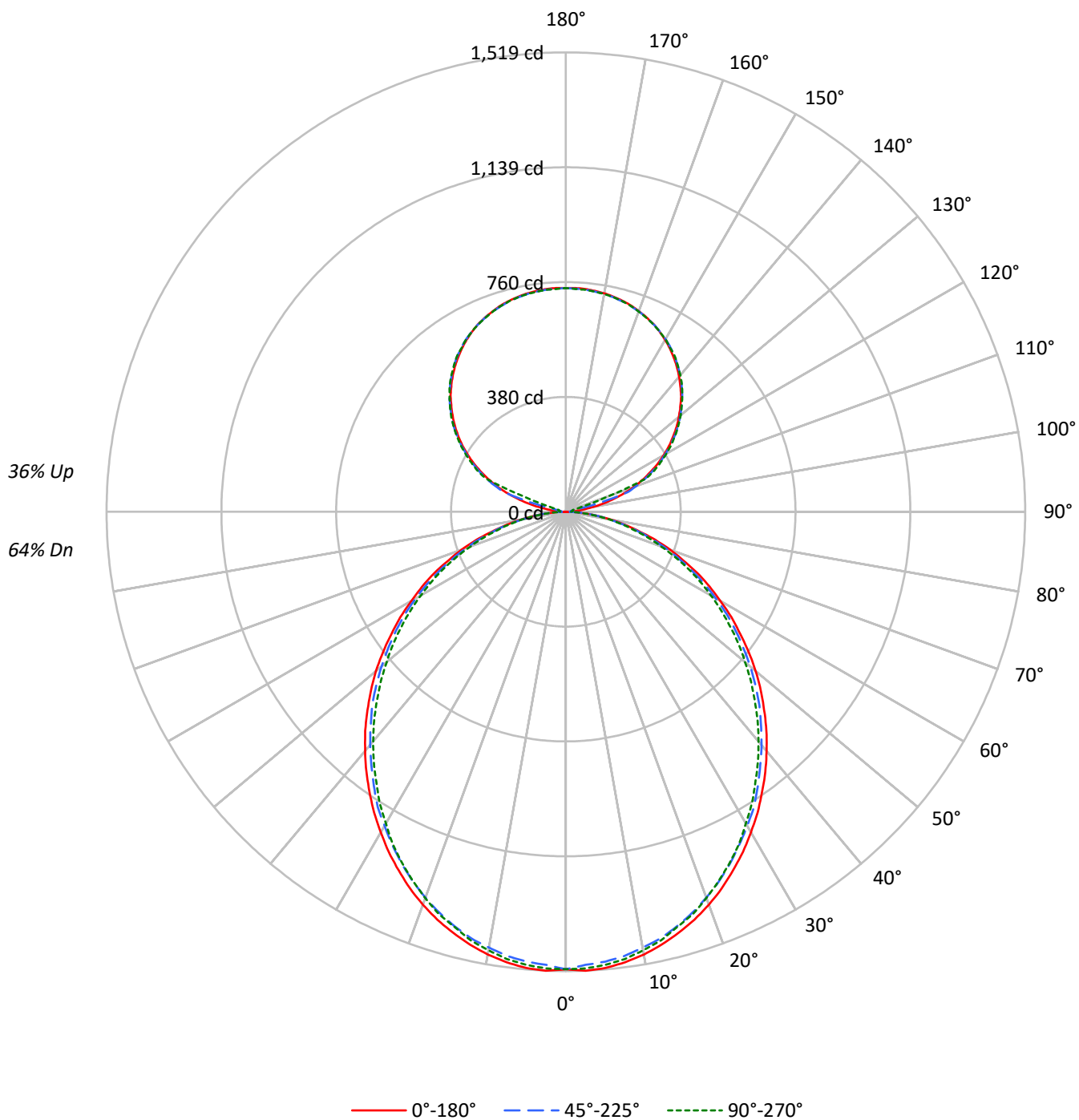
Lumens per Lamp: N/A  
Luminaire Lumens: 6193.0 lumens  
Efficiency: N/A  
Efficacy: 99.6 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3  
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')  
CIE Type: Semi-Direct

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   | 110 | 110 | 110 | 110 | 104 | 104 | 104 | 104 | 91 | 91 | 91 | 79 | 79 | 79 | 69 | 69 | 69 |
| 1   | 101 | 96  | 92  | 89  | 94  | 91  | 87  | 84  | 80 | 77 | 75 | 70 | 68 | 66 | 61 | 59 | 58 |
| 2   | 92  | 84  | 78  | 72  | 86  | 79  | 74  | 69  | 70 | 65 | 62 | 61 | 58 | 55 | 53 | 51 | 49 |
| 3   | 84  | 74  | 66  | 60  | 78  | 70  | 63  | 57  | 62 | 56 | 52 | 54 | 50 | 47 | 47 | 44 | 41 |
| 4   | 77  | 65  | 57  | 51  | 72  | 62  | 54  | 49  | 55 | 49 | 44 | 48 | 44 | 40 | 42 | 39 | 36 |
| 5   | 70  | 58  | 50  | 44  | 66  | 55  | 48  | 42  | 49 | 43 | 38 | 43 | 38 | 35 | 38 | 34 | 31 |
| 6   | 65  | 52  | 44  | 38  | 61  | 50  | 42  | 37  | 44 | 38 | 33 | 39 | 34 | 30 | 34 | 30 | 27 |
| 7   | 60  | 47  | 39  | 34  | 56  | 45  | 37  | 32  | 40 | 34 | 30 | 36 | 31 | 27 | 31 | 27 | 24 |
| 8   | 56  | 43  | 35  | 30  | 52  | 41  | 34  | 29  | 37 | 31 | 26 | 33 | 28 | 24 | 29 | 25 | 22 |
| 9   | 52  | 39  | 32  | 27  | 49  | 37  | 30  | 26  | 34 | 28 | 24 | 30 | 25 | 22 | 27 | 23 | 20 |
| 10  | 49  | 36  | 29  | 24  | 46  | 34  | 28  | 23  | 31 | 25 | 21 | 28 | 23 | 20 | 25 | 21 | 18 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 16283 | 16283 | 16283 |
| 5°  | 16323 | 15721 | 15697 |
| 10° | 16178 | 15189 | 15033 |
| 15° | 15953 | 14635 | 14309 |
| 20° | 15696 | 14022 | 13592 |
| 25° | 15362 | 13373 | 12824 |
| 30° | 14997 | 12702 | 12018 |
| 35° | 14614 | 12016 | 11216 |
| 40° | 14214 | 11298 | 10428 |
| 45° | 13773 | 10596 | 9603  |
| 50° | 13326 | 9815  | 8776  |
| 55° | 12751 | 9001  | 7939  |
| 60° | 12158 | 8103  | 7047  |
| 65° | 11603 | 7132  | 6116  |
| 70° | 10802 | 6054  | 5032  |
| 75° | 9647  | 4793  | 3906  |
| 80° | 8333  | 3369  | 2763  |
| 85° | 6493  | 1810  | 1383  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 13773 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 142.6  | 2.3       |
| 10°-20°   | 402.7  | 6.5       |
| 20°-30°   | 594.7  | 9.6       |
| 30°-40°   | 694.6  | 11.2      |
| 40°-50°   | 698.3  | 11.3      |
| 50°-60°   | 613.4  | 9.9       |
| 60°-70°   | 456.8  | 7.4       |
| 70°-80°   | 260.0  | 4.2       |
| 80°-90°   | 75.4   | 1.2       |
| 90°-100°  | 26.1   | 0.4       |
| 100°-110° | 126.1  | 2.0       |
| 110°-120° | 309.0  | 5.0       |
| 120°-130° | 392.2  | 6.3       |
| 130°-140° | 419.0  | 6.8       |
| 140°-150° | 391.8  | 6.3       |
| 150°-160° | 316.0  | 5.1       |
| 160°-170° | 204.0  | 3.3       |
| 170°-180° | 70.3   | 1.1       |
| 0°-30°    | 1140.0 | 18.4      |
| 0°-40°    | 1834.6 | 29.6      |
| 0°-60°    | 3146.3 | 50.8      |
| 0°-90°    | 3938.5 | 63.6      |
| 90°-120°  | 461.1  | 7.4       |
| 90°-150°  | 1664.2 | 26.9      |
| 90°-180°  | 2255.0 | 36.4      |
| 0°-180°   | 6193.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1513 | 1513  | 1513 | 1513  | 1513 |      |
| 5°   | 1514 | 1508  | 1493 | 1506  | 1504 | 144  |
| 15°  | 1441 | 1436  | 1419 | 1430  | 1422 | 406  |
| 25°  | 1308 | 1301  | 1284 | 1285  | 1281 | 603  |
| 35°  | 1132 | 1124  | 1107 | 1099  | 1093 | 708  |
| 45°  | 927  | 922   | 905  | 890   | 883  | 716  |
| 55°  | 704  | 702   | 686  | 671   | 665  | 630  |
| 65°  | 480  | 474   | 460  | 450   | 446  | 474  |
| 75°  | 254  | 248   | 244  | 238   | 234  | 271  |
| 85°  | 68   | 65    | 65   | 62    | 62   | 73   |
| 90°  | 0    | 6     | 13   | 15    | 16   | 6    |
| 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°     | 1512.7 | 1512.7 | 1512.7 | 1512.7 | 1512.7 |
| 2.5°   | 1519.2 | 1514.0 | 1499.7 | 1512.7 | 1511.4 |
| 5°     | 1514.0 | 1507.5 | 1493.2 | 1506.2 | 1503.6 |
| 7.5°   | 1502.3 | 1495.8 | 1481.5 | 1493.2 | 1491.9 |
| 10°    | 1486.7 | 1480.2 | 1463.3 | 1475.0 | 1472.4 |
| 12.5°  | 1465.9 | 1460.7 | 1445.1 | 1452.9 | 1451.6 |
| 15°    | 1441.2 | 1436.0 | 1419.1 | 1429.5 | 1421.7 |
| 17.5°  | 1413.9 | 1407.4 | 1390.5 | 1398.3 | 1395.7 |
| 20°    | 1382.7 | 1374.9 | 1358.0 | 1363.2 | 1359.3 |
| 22.5°  | 1347.6 | 1339.7 | 1322.8 | 1326.7 | 1321.5 |
| 25°    | 1308.5 | 1300.7 | 1283.8 | 1285.1 | 1281.2 |
| 27.5°  | 1268.2 | 1260.4 | 1242.2 | 1243.5 | 1239.6 |
| 30°    | 1224.0 | 1217.5 | 1199.3 | 1199.3 | 1190.2 |
| 32.5°  | 1179.8 | 1170.7 | 1157.6 | 1148.5 | 1144.6 |
| 35°    | 1131.6 | 1123.8 | 1106.9 | 1099.1 | 1092.6 |
| 37.5°  | 1083.5 | 1073.1 | 1056.2 | 1047.1 | 1043.2 |
| 40°    | 1032.8 | 1025.0 | 1006.8 | 996.4  | 991.2  |
| 42.5°  | 982.0  | 972.9  | 954.7  | 944.3  | 939.1  |
| 45°    | 927.4  | 922.2  | 905.3  | 889.7  | 883.2  |
| 47.5°  | 874.1  | 866.3  | 850.7  | 835.1  | 829.9  |
| 50°    | 819.5  | 813.0  | 796.0  | 781.7  | 773.9  |
| 52.5°  | 762.2  | 758.3  | 740.1  | 728.4  | 720.6  |
| 55°    | 703.7  | 702.4  | 685.5  | 671.2  | 664.7  |
| 57.5°  | 649.1  | 643.9  | 630.9  | 617.8  | 610.0  |
| 60°    | 589.2  | 587.9  | 572.3  | 560.6  | 554.1  |
| 62.5°  | 535.9  | 532.0  | 516.4  | 504.7  | 500.8  |
| 65°    | 480.0  | 473.5  | 460.5  | 450.1  | 446.1  |
| 67.5°  | 420.1  | 414.9  | 404.5  | 395.4  | 390.2  |
| 70°    | 366.8  | 359.0  | 351.2  | 342.1  | 335.6  |
| 72.5°  | 310.9  | 305.7  | 296.6  | 288.8  | 286.2  |
| 75°    | 253.6  | 248.4  | 244.5  | 238.0  | 234.1  |
| 77.5°  | 202.9  | 200.3  | 195.1  | 189.9  | 189.9  |
| 80°    | 153.5  | 149.6  | 147.0  | 145.7  | 145.7  |
| 82.5°  | 105.4  | 105.4  | 105.4  | 102.8  | 101.5  |
| 85°    | 67.6   | 65.0   | 65.0   | 62.4   | 62.4   |
| 87.5°  | 33.8   | 29.9   | 28.6   | 27.3   | 27.3   |
| 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)