

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: P1034574

Luminaire Tested: S125DIW-B610D1560UB2750-4F0-XX-W2A-D1\_5000K

Issue Date: 5/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1034574  
REPORT IS A COMBINATION OF REPORTS P1003857 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125DIW-B610D1560UB2750-4F0-XX-W2A-D1\_5000K  
Description: Define 5 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}  
Light Source: -  
Ballast/Driver: -

**Summary**

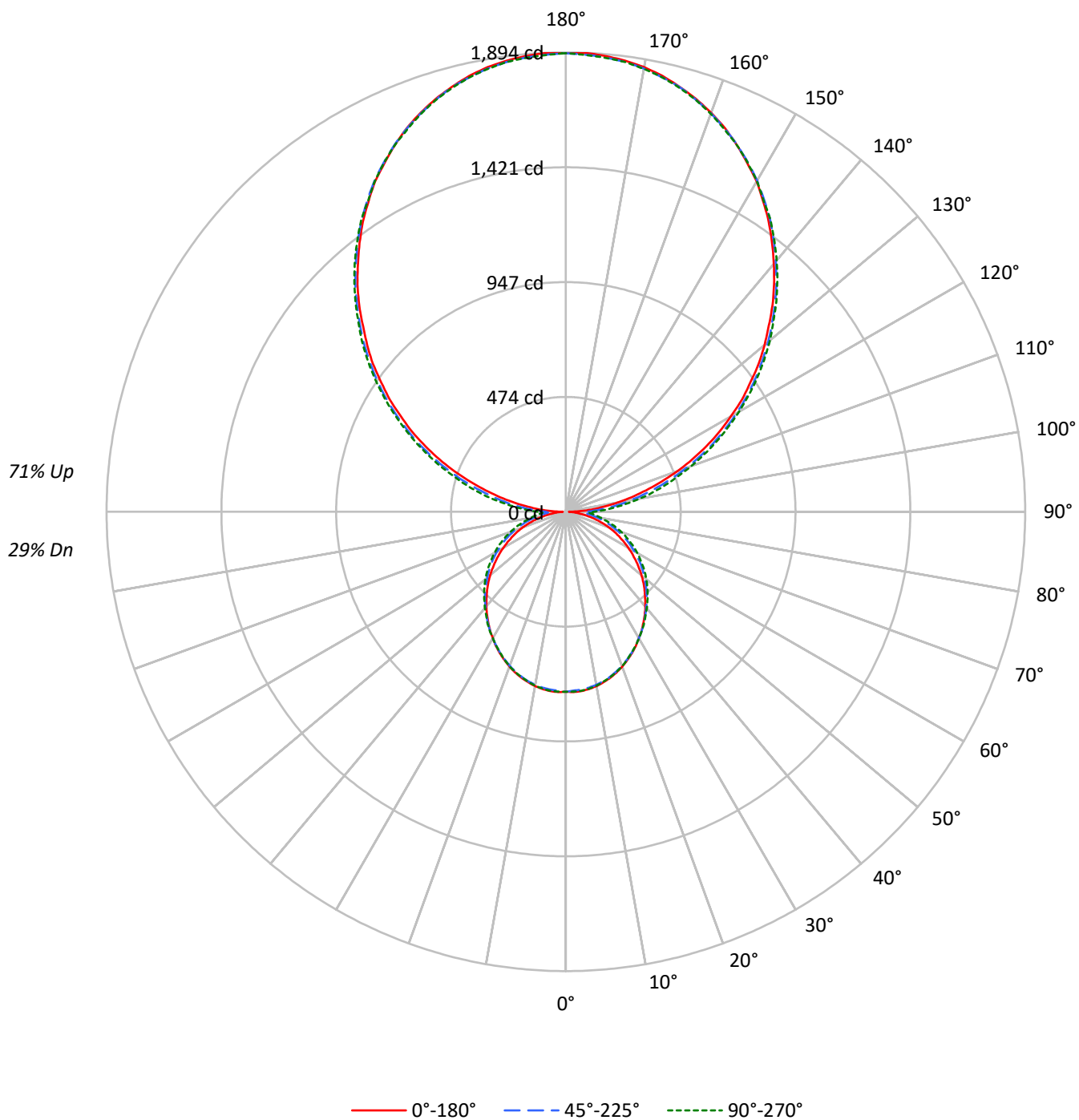
Lumens per Lamp: N/A  
Luminaire Lumens: 7579.0 lumens  
Efficiency: N/A  
Efficacy: 99.5 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')  
CIE Type: Semi-Indirect

Input Watts (W): 76.2  
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

TEST NUMBER: P1034574

CATALOG NUMBER: S125DIW-B610D1560UB2750-4F0-XX-W2A-D1\_5000K

### Luminous Intensity Polar Plot



TEST NUMBER: P1034574

CATALOG NUMBER: S125DIW-B610D1560UB2750-4F0-XX-W2A-D1\_5000K

**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 |
| RCR |     |     |     |     |    |    |    |    |    |    |    |  |    |    |    |  |    |
| 0   | 102 | 102 | 102 | 102 | 91 | 91 | 91 | 91 | 71 | 71 | 71 |  | 53 | 53 | 53 |  | 36 |
| 1   | 93  | 88  | 84  | 81  | 83 | 79 | 76 | 73 | 62 | 60 | 58 |  | 46 | 45 | 43 |  | 31 |
| 2   | 84  | 77  | 71  | 66  | 75 | 69 | 64 | 59 | 54 | 50 | 47 |  | 40 | 38 | 36 |  | 27 |
| 3   | 77  | 67  | 60  | 54  | 68 | 60 | 54 | 49 | 47 | 43 | 39 |  | 35 | 32 | 30 |  | 24 |
| 4   | 70  | 59  | 52  | 46  | 62 | 53 | 47 | 41 | 42 | 37 | 33 |  | 31 | 28 | 26 |  | 21 |
| 5   | 64  | 53  | 45  | 39  | 57 | 47 | 40 | 35 | 37 | 32 | 29 |  | 28 | 25 | 22 |  | 19 |
| 6   | 59  | 47  | 39  | 33  | 52 | 42 | 35 | 30 | 33 | 28 | 25 |  | 25 | 22 | 19 |  | 17 |
| 7   | 54  | 42  | 35  | 29  | 48 | 38 | 31 | 27 | 30 | 25 | 22 |  | 23 | 19 | 17 |  | 16 |
| 8   | 50  | 38  | 31  | 25  | 45 | 34 | 28 | 23 | 27 | 23 | 19 |  | 21 | 17 | 15 |  | 15 |
| 9   | 47  | 35  | 27  | 23  | 42 | 31 | 25 | 21 | 25 | 20 | 17 |  | 19 | 16 | 13 |  | 13 |
| 10  | 43  | 32  | 25  | 20  | 39 | 29 | 23 | 18 | 23 | 18 | 15 |  | 18 | 14 | 12 |  | 12 |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 4755 | 4755 | 4755 |
| 5°  | 4762 | 4655 | 4667 |
| 10° | 4727 | 4560 | 4547 |
| 15° | 4670 | 4450 | 4401 |
| 20° | 4592 | 4316 | 4255 |
| 25° | 4500 | 4174 | 4079 |
| 30° | 4388 | 4020 | 3918 |
| 35° | 4284 | 3877 | 3770 |
| 40° | 4178 | 3727 | 3622 |
| 45° | 4058 | 3596 | 3488 |
| 50° | 3943 | 3455 | 3367 |
| 55° | 3806 | 3320 | 3227 |
| 60° | 3655 | 3166 | 3083 |
| 65° | 3497 | 3004 | 2920 |
| 70° | 3316 | 2787 | 2752 |
| 75° | 3032 | 2573 | 2547 |
| 80° | 2656 | 2312 | 2319 |
| 85° | 2287 | 2104 | 2199 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4058 cd/sqm

TEST NUMBER: P1034574

CATALOG NUMBER: S125DIW-B610D1560UB2750-4F0-XX-W2A-D1\_5000K

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 70.2   | 0.9       |
| 10°-20°   | 199.4  | 2.6       |
| 20°-30°   | 296.5  | 3.9       |
| 30°-40°   | 351.1  | 4.6       |
| 40°-50°   | 363.0  | 4.8       |
| 50°-60°   | 334.4  | 4.4       |
| 60°-70°   | 270.3  | 3.6       |
| 70°-80°   | 180.9  | 2.4       |
| 80°-90°   | 96.4   | 1.3       |
| 90°-100°  | 178.4  | 2.4       |
| 100°-110° | 412.3  | 5.4       |
| 110°-120° | 659.5  | 8.7       |
| 120°-130° | 848.7  | 11.2      |
| 130°-140° | 940.9  | 12.4      |
| 140°-150° | 917.3  | 12.1      |
| 150°-160° | 769.4  | 10.2      |
| 160°-170° | 511.5  | 6.7       |
| 170°-180° | 179.0  | 2.4       |
| 0°-30°    | 566.0  | 7.5       |
| 0°-40°    | 917.1  | 12.1      |
| 0°-60°    | 1614.5 | 21.3      |
| 0°-90°    | 2162.0 | 28.5      |
| 90°-120°  | 1250.2 | 16.5      |
| 90°-150°  | 3957.1 | 52.2      |
| 90°-180°  | 5417.0 | 71.5      |
| 0°-180°   | 7579.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 742  | 742   | 742  | 742   | 742  |      |
| 5°   | 742  | 741   | 736  | 741   | 741  | 70   |
| 15°  | 709  | 709   | 704  | 709   | 706  | 200  |
| 25°  | 644  | 646   | 642  | 645   | 641  | 296  |
| 35°  | 557  | 562   | 560  | 562   | 562  | 349  |
| 45°  | 459  | 467   | 471  | 476   | 477  | 354  |
| 55°  | 353  | 364   | 376  | 384   | 387  | 315  |
| 65°  | 243  | 260   | 277  | 288   | 291  | 241  |
| 75°  | 134  | 153   | 176  | 191   | 194  | 142  |
| 85°  | 40   | 64    | 90   | 106   | 111  | 42   |
| 90°  | 13   | 48    | 83   | 107   | 117  | 15   |
| 95°  | 105  | 127   | 166  | 193   | 201  | 107  |
| 105° | 342  | 361   | 392  | 415   | 425  | 365  |
| 115° | 639  | 650   | 671  | 683   | 686  | 632  |
| 125° | 928  | 937   | 952  | 961   | 963  | 832  |
| 135° | 1205 | 1213  | 1220 | 1229  | 1227 | 929  |
| 145° | 1459 | 1464  | 1468 | 1472  | 1471 | 912  |
| 155° | 1669 | 1669  | 1670 | 1676  | 1669 | 769  |
| 165° | 1814 | 1811  | 1813 | 1819  | 1810 | 512  |
| 175° | 1886 | 1880  | 1880 | 1889  | 1879 | 179  |
| 180° | 1891 | 1891  | 1891 | 1891  | 1891 |      |

TEST NUMBER: P1034574

CATALOG NUMBER: S125DIW-B610D1560UB2750-4F0-XX-W2A-D1\_5000K

**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 0°     | 742.1 | 742.1 | 742.1 | 742.1 | 742.1 |
| 2.5°   | 744.3 | 742.9 | 737.8 | 742.9 | 742.1 |
| 5°     | 742.1 | 740.7 | 735.6 | 741.4 | 740.7 |
| 7.5°   | 737.0 | 736.3 | 731.2 | 736.3 | 735.6 |
| 10°    | 729.8 | 729.8 | 723.9 | 729.0 | 728.3 |
| 12.5°  | 719.6 | 720.3 | 715.9 | 719.6 | 717.4 |
| 15°    | 708.7 | 709.4 | 704.3 | 708.7 | 705.8 |
| 17.5°  | 694.8 | 696.3 | 691.2 | 694.8 | 692.7 |
| 20°    | 679.6 | 681.0 | 675.9 | 678.1 | 678.1 |
| 22.5°  | 662.1 | 665.0 | 659.2 | 662.1 | 659.9 |
| 25°    | 643.9 | 646.1 | 641.7 | 644.6 | 641.0 |
| 27.5°  | 624.3 | 627.2 | 622.1 | 624.3 | 622.8 |
| 30°    | 601.7 | 606.1 | 601.7 | 603.2 | 602.4 |
| 32.5°  | 581.3 | 585.0 | 582.1 | 583.5 | 582.8 |
| 35°    | 557.3 | 562.4 | 560.2 | 562.4 | 562.4 |
| 37.5°  | 534.0 | 538.4 | 537.7 | 540.6 | 539.9 |
| 40°    | 510.0 | 515.9 | 515.1 | 518.0 | 519.5 |
| 42.5°  | 483.8 | 491.8 | 494.0 | 497.7 | 497.7 |
| 45°    | 459.1 | 467.1 | 470.7 | 475.8 | 476.6 |
| 47.5°  | 433.6 | 440.9 | 446.7 | 454.0 | 455.5 |
| 50°    | 407.4 | 415.4 | 423.5 | 431.5 | 433.6 |
| 52.5°  | 379.8 | 390.0 | 400.2 | 408.9 | 410.4 |
| 55°    | 352.9 | 364.5 | 376.2 | 384.2 | 387.1 |
| 57.5°  | 325.2 | 339.1 | 352.1 | 360.9 | 363.1 |
| 60°    | 297.6 | 312.1 | 326.7 | 337.6 | 339.8 |
| 62.5°  | 270.7 | 285.2 | 301.2 | 313.6 | 316.5 |
| 65°    | 243.0 | 259.7 | 277.2 | 288.1 | 291.0 |
| 67.5°  | 217.5 | 233.6 | 251.0 | 264.1 | 267.8 |
| 70°    | 189.2 | 205.9 | 224.8 | 238.6 | 243.0 |
| 72.5°  | 161.5 | 179.0 | 200.1 | 215.4 | 218.3 |
| 75°    | 133.9 | 152.8 | 176.1 | 190.6 | 194.3 |
| 77.5°  | 107.0 | 128.8 | 150.6 | 166.6 | 169.5 |
| 80°    | 82.2  | 104.0 | 128.8 | 144.8 | 147.7 |
| 82.5°  | 59.7  | 82.9  | 108.4 | 123.7 | 129.5 |
| 85°    | 40.0  | 64.0  | 89.5  | 105.5 | 111.3 |
| 87.5°  | 25.5  | 48.7  | 73.5  | 90.2  | 95.3  |
| 90°    | 13.1  | 48.1  | 83.2  | 107.3 | 116.8 |
| 92.5°  | 54.3  | 82.8  | 121.5 | 147.8 | 155.9 |
| 95°    | 105.1 | 127.0 | 166.4 | 192.7 | 200.7 |
| 97.5°  | 155.8 | 174.8 | 219.4 | 243.5 | 250.1 |
| 100°   | 214.0 | 229.3 | 271.7 | 300.2 | 307.5 |
| 102.5° | 276.6 | 297.7 | 327.7 | 356.9 | 365.7 |
| 105°   | 342.0 | 361.0 | 391.7 | 415.1 | 424.6 |
| 107.5° | 413.4 | 430.9 | 459.4 | 478.4 | 482.7 |
| 110°   | 487.7 | 503.8 | 528.6 | 546.8 | 550.4 |

TEST NUMBER: P1034574

CATALOG NUMBER: S125DIW-B610D1560UB2750-4F0-XX-W2A-D1\_5000K

**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 564.2  | 573.7  | 599.3  | 613.8  | 616.0  |
| 115°   | 638.6  | 649.6  | 671.4  | 683.0  | 685.9  |
| 117.5° | 714.3  | 719.5  | 740.6  | 754.4  | 753.6  |
| 120°   | 784.9  | 794.5  | 812.8  | 825.1  | 823.6  |
| 122.5° | 860.7  | 862.9  | 883.3  | 893.6  | 893.5  |
| 125°   | 928.4  | 936.6  | 952.5  | 961.3  | 963.4  |
| 127.5° | 1002.8 | 1006.5 | 1020.3 | 1029.7 | 1031.1 |
| 130°   | 1069.0 | 1075.6 | 1088.7 | 1097.4 | 1098.2 |
| 132.5° | 1134.5 | 1147.7 | 1153.5 | 1162.2 | 1160.7 |
| 135°   | 1205.1 | 1213.2 | 1219.7 | 1229.2 | 1226.9 |
| 137.5° | 1271.3 | 1279.4 | 1285.2 | 1295.5 | 1291.0 |
| 140°   | 1333.8 | 1341.2 | 1346.4 | 1357.3 | 1352.9 |
| 142.5° | 1397.1 | 1402.3 | 1408.2 | 1416.1 | 1411.8 |
| 145°   | 1458.9 | 1464.1 | 1468.5 | 1472.1 | 1470.6 |
| 147.5° | 1515.6 | 1520.0 | 1522.9 | 1528.9 | 1518.5 |
| 150°   | 1573.0 | 1571.5 | 1577.4 | 1577.4 | 1575.1 |
| 152.5° | 1620.1 | 1623.0 | 1624.5 | 1628.9 | 1623.0 |
| 155°   | 1668.6 | 1668.6 | 1670.1 | 1676.0 | 1668.6 |
| 157.5° | 1712.8 | 1709.8 | 1711.3 | 1717.2 | 1706.9 |
| 160°   | 1751.0 | 1746.6 | 1748.1 | 1754.0 | 1746.6 |
| 162.5° | 1784.9 | 1781.9 | 1781.9 | 1789.3 | 1780.4 |
| 165°   | 1814.3 | 1811.3 | 1812.8 | 1818.7 | 1809.9 |
| 167.5° | 1840.8 | 1834.9 | 1834.9 | 1843.7 | 1834.9 |
| 170°   | 1861.4 | 1855.5 | 1855.5 | 1864.3 | 1854.0 |
| 172.5° | 1876.1 | 1870.2 | 1870.2 | 1879.0 | 1870.2 |
| 175°   | 1886.4 | 1880.5 | 1880.5 | 1889.3 | 1879.0 |
| 177.5° | 1893.7 | 1887.9 | 1886.4 | 1895.2 | 1884.9 |
| 180°   | 1890.8 | 1890.8 | 1890.8 | 1890.8 | 1890.8 |

(END OF REPORT)