

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: P1034725

Luminaire Tested: S125RDIW-B1090D470UB2750-4F0-XX-W2A-F\_2700K

Issue Date: 5/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1034725  
REPORT IS A COMBINATION OF REPORTS P1006066 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDIW-B1090D470UB2750-4F0-XX-W2A-F\_2700K  
Description: Define 5 Regressed Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473}  
{m-EER=0.52}  
Light Source: -  
Ballast/Driver: -

**Summary**

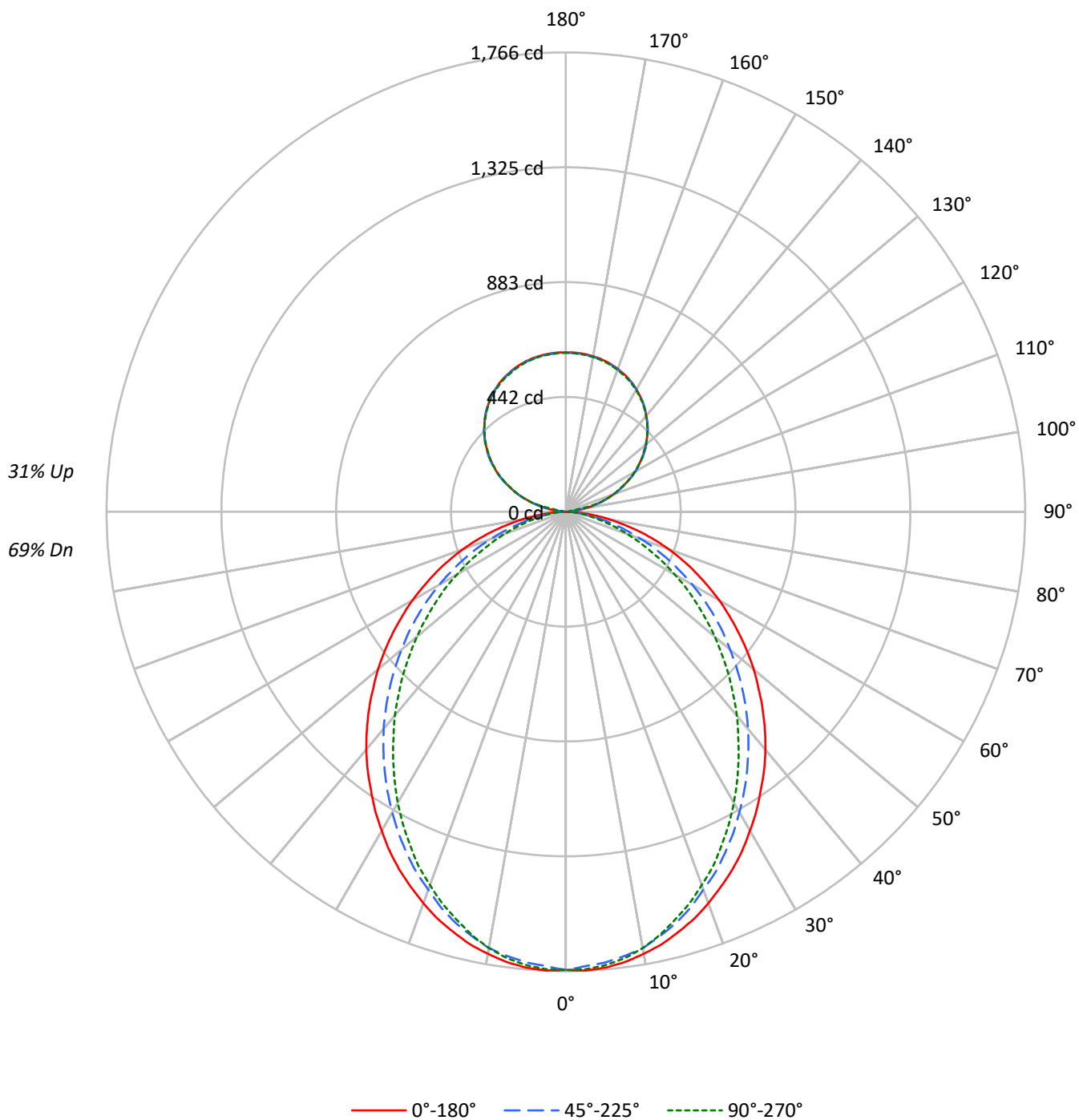
Lumens per Lamp: N/A  
Luminaire Lumens: 6042.0 lumens  
Efficiency: N/A  
Efficacy: 100.7 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')  
CIE Type: Semi-Direct

Input Watts (W): 60  
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   | 112 | 112 | 112 | 112 | 105 | 105 | 105 | 105 | 94 | 94 | 94 | 83 | 83 | 83 | 73 | 73 | 73 |
| 1   | 102 | 98  | 94  | 91  | 97  | 93  | 89  | 86  | 83 | 80 | 78 | 74 | 72 | 70 | 65 | 64 | 63 |
| 2   | 93  | 86  | 80  | 75  | 88  | 81  | 76  | 71  | 73 | 69 | 65 | 65 | 62 | 59 | 58 | 56 | 53 |
| 3   | 85  | 76  | 68  | 63  | 80  | 72  | 65  | 60  | 65 | 59 | 55 | 58 | 54 | 50 | 52 | 48 | 46 |
| 4   | 78  | 67  | 59  | 53  | 74  | 64  | 57  | 51  | 58 | 52 | 47 | 52 | 47 | 43 | 46 | 43 | 40 |
| 5   | 72  | 60  | 52  | 46  | 68  | 57  | 50  | 44  | 52 | 46 | 41 | 47 | 42 | 38 | 42 | 38 | 35 |
| 6   | 67  | 54  | 46  | 40  | 63  | 52  | 44  | 39  | 47 | 41 | 36 | 42 | 37 | 33 | 38 | 34 | 31 |
| 7   | 62  | 49  | 41  | 35  | 58  | 47  | 40  | 34  | 43 | 36 | 32 | 39 | 33 | 30 | 35 | 31 | 27 |
| 8   | 57  | 45  | 37  | 32  | 54  | 43  | 36  | 31  | 39 | 33 | 29 | 35 | 30 | 27 | 32 | 28 | 25 |
| 9   | 54  | 41  | 33  | 28  | 51  | 39  | 32  | 27  | 36 | 30 | 26 | 33 | 28 | 24 | 30 | 25 | 22 |
| 10  | 50  | 38  | 30  | 26  | 47  | 36  | 29  | 25  | 33 | 27 | 23 | 30 | 25 | 22 | 28 | 23 | 20 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 11287 | 11287 | 11287 |
| 5°  | 11288 | 11005 | 11023 |
| 10° | 11178 | 10728 | 10633 |
| 15° | 11019 | 10340 | 10121 |
| 20° | 10824 | 9873  | 9584  |
| 25° | 10599 | 9417  | 9008  |
| 30° | 10325 | 8915  | 8403  |
| 35° | 10044 | 8406  | 7760  |
| 40° | 9777  | 7883  | 7133  |
| 45° | 9456  | 7319  | 6475  |
| 50° | 9130  | 6720  | 5806  |
| 55° | 8753  | 6129  | 5113  |
| 60° | 8367  | 5454  | 4394  |
| 65° | 7907  | 4700  | 3619  |
| 70° | 7369  | 3827  | 2848  |
| 75° | 6627  | 2877  | 2075  |
| 80° | 5591  | 1864  | 1399  |
| 85° | 4185  | 1002  | 788   |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9456 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 165.8  | 2.7       |
| 10°-20°   | 463.3  | 7.7       |
| 20°-30°   | 671.8  | 11.1      |
| 30°-40°   | 765.4  | 12.7      |
| 40°-50°   | 746.0  | 12.3      |
| 50°-60°   | 627.8  | 10.4      |
| 60°-70°   | 440.0  | 7.3       |
| 70°-80°   | 225.6  | 3.7       |
| 80°-90°   | 57.2   | 0.9       |
| 90°-100°  | 20.8   | 0.3       |
| 100°-110° | 138.1  | 2.3       |
| 110°-120° | 248.6  | 4.1       |
| 120°-130° | 319.1  | 5.3       |
| 130°-140° | 343.2  | 5.7       |
| 140°-150° | 322.1  | 5.3       |
| 150°-160° | 260.6  | 4.3       |
| 160°-170° | 168.5  | 2.8       |
| 170°-180° | 58.1   | 1.0       |
| 0°-30°    | 1300.9 | 21.5      |
| 0°-40°    | 2066.3 | 34.2      |
| 0°-60°    | 3440.2 | 56.9      |
| 0°-90°    | 4162.9 | 68.9      |
| 90°-120°  | 407.4  | 6.7       |
| 90°-150°  | 1391.9 | 23.0      |
| 90°-180°  | 1879.0 | 31.1      |
| 0°-180°   | 6042.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1762 | 1762  | 1762 | 1762  | 1762 |      |
| 5°   | 1759 | 1754  | 1739 | 1752  | 1750 | 167  |
| 15°  | 1672 | 1664  | 1636 | 1635  | 1623 | 472  |
| 25°  | 1517 | 1497  | 1448 | 1430  | 1416 | 698  |
| 35°  | 1307 | 1275  | 1215 | 1176  | 1158 | 818  |
| 45°  | 1070 | 1031  | 958  | 905   | 885  | 825  |
| 55°  | 812  | 769   | 694  | 635   | 613  | 726  |
| 65°  | 550  | 504   | 434  | 380   | 361  | 544  |
| 75°  | 293  | 253   | 197  | 168   | 158  | 309  |
| 85°  | 73   | 49    | 43   | 41    | 40   | 80   |
| 90°  | 0    | 4     | 7    | 10    | 11   | 6    |
| 95°  | 26   | 24    | 7    | 10    | 10   | 32   |
| 105° | 133  | 135   | 135  | 135   | 135  | 141  |
| 115° | 250  | 253   | 253  | 251   | 248  | 248  |
| 125° | 356  | 359   | 359  | 357   | 356  | 318  |
| 135° | 444  | 447   | 446  | 445   | 442  | 342  |
| 145° | 515  | 516   | 516  | 516   | 513  | 322  |
| 155° | 567  | 564   | 565  | 566   | 563  | 261  |
| 165° | 598  | 595   | 596  | 599   | 595  | 169  |
| 175° | 612  | 609   | 610  | 613   | 609  | 58   |
| 180° | 612  | 612   | 612  | 612   | 612  |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1761.6 | 1761.6 | 1761.6 | 1761.6 | 1761.6 |
| 2.5°   | 1765.6 | 1761.6 | 1748.3 | 1761.6 | 1760.3 |
| 5°     | 1758.9 | 1753.6 | 1739.0 | 1752.3 | 1749.6 |
| 7.5°   | 1745.6 | 1740.3 | 1723.0 | 1733.6 | 1731.0 |
| 10°    | 1725.7 | 1721.7 | 1703.0 | 1707.0 | 1703.0 |
| 12.5°  | 1703.0 | 1697.7 | 1671.1 | 1673.8 | 1667.1 |
| 15°    | 1672.4 | 1664.5 | 1636.5 | 1635.2 | 1623.2 |
| 17.5°  | 1640.5 | 1628.5 | 1595.3 | 1588.6 | 1579.3 |
| 20°    | 1601.9 | 1588.6 | 1546.0 | 1539.4 | 1527.4 |
| 22.5°  | 1559.3 | 1546.0 | 1500.8 | 1486.2 | 1476.9 |
| 25°    | 1516.8 | 1496.8 | 1447.6 | 1430.3 | 1415.7 |
| 27.5°  | 1468.9 | 1444.9 | 1393.0 | 1370.4 | 1355.8 |
| 30°    | 1415.7 | 1390.4 | 1334.5 | 1303.9 | 1291.9 |
| 32.5°  | 1363.8 | 1333.2 | 1276.0 | 1241.4 | 1225.4 |
| 35°    | 1306.6 | 1274.6 | 1214.7 | 1176.2 | 1157.5 |
| 37.5°  | 1252.0 | 1213.4 | 1152.2 | 1107.0 | 1088.4 |
| 40°    | 1193.5 | 1153.5 | 1089.7 | 1039.1 | 1023.2 |
| 42.5°  | 1132.3 | 1091.0 | 1024.5 | 976.6  | 951.3  |
| 45°    | 1069.7 | 1031.1 | 958.0  | 904.7  | 884.8  |
| 47.5°  | 1004.5 | 964.6  | 891.4  | 836.9  | 814.3  |
| 50°    | 943.3  | 899.4  | 823.6  | 767.7  | 747.7  |
| 52.5°  | 876.8  | 831.6  | 761.0  | 699.8  | 679.9  |
| 55°    | 811.6  | 769.0  | 694.5  | 634.6  | 613.4  |
| 57.5°  | 745.1  | 699.8  | 628.0  | 569.5  | 550.8  |
| 60°    | 681.2  | 634.6  | 562.8  | 504.3  | 484.3  |
| 62.5°  | 613.4  | 569.5  | 496.3  | 443.1  | 423.1  |
| 65°    | 549.5  | 504.3  | 433.7  | 380.5  | 360.6  |
| 67.5°  | 485.6  | 440.4  | 372.5  | 322.0  | 306.0  |
| 70°    | 420.4  | 375.2  | 308.7  | 267.4  | 251.5  |
| 72.5°  | 356.6  | 312.7  | 251.5  | 214.2  | 204.9  |
| 75°    | 292.7  | 252.8  | 196.9  | 167.6  | 158.3  |
| 77.5°  | 227.5  | 195.6  | 149.0  | 126.4  | 118.4  |
| 80°    | 173.0  | 141.0  | 103.8  | 91.8   | 89.1   |
| 82.5°  | 119.7  | 91.8   | 69.2   | 65.2   | 63.9   |
| 85°    | 73.2   | 49.2   | 42.6   | 41.2   | 39.9   |
| 87.5°  | 30.6   | 21.3   | 20.0   | 20.0   | 18.6   |
| 90°    | 0.5    | 4.1    | 7.3    | 9.5    | 10.9   |
| 92.5°  | 8.6    | 4.5    | 7.3    | 9.5    | 10.0   |
| 95°    | 25.8   | 24.5   | 7.3    | 9.5    | 9.5    |
| 97.5°  | 48.5   | 51.2   | 8.2    | 9.1    | 9.5    |
| 100°   | 75.7   | 77.1   | 78.9   | 11.3   | 9.5    |
| 102.5° | 103.4  | 105.2  | 106.1  | 107.0  | 68.9   |
| 105°   | 133.3  | 135.1  | 135.1  | 135.1  | 134.7  |
| 107.5° | 164.2  | 164.2  | 165.1  | 165.5  | 163.7  |
| 110°   | 194.1  | 194.1  | 195.0  | 193.6  | 194.1  |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 222.2 | 223.6 | 224.0 | 222.2 | 221.3 |
| 115°   | 250.3 | 252.6 | 253.0 | 251.2 | 248.5 |
| 117.5° | 279.8 | 279.8 | 281.6 | 278.9 | 278.0 |
| 120°   | 307.0 | 306.5 | 307.9 | 307.0 | 304.7 |
| 122.5° | 331.0 | 333.3 | 333.8 | 332.8 | 330.1 |
| 125°   | 356.0 | 359.1 | 359.1 | 357.3 | 356.0 |
| 127.5° | 380.0 | 382.3 | 381.8 | 380.9 | 377.3 |
| 130°   | 401.8 | 404.0 | 404.5 | 403.1 | 400.9 |
| 132.5° | 423.5 | 426.3 | 424.9 | 424.9 | 422.6 |
| 135°   | 443.9 | 446.7 | 445.8 | 444.9 | 442.1 |
| 137.5° | 463.0 | 465.7 | 464.8 | 464.8 | 462.5 |
| 140°   | 481.6 | 482.5 | 482.0 | 482.9 | 480.2 |
| 142.5° | 498.4 | 498.8 | 499.7 | 499.7 | 497.0 |
| 145°   | 514.7 | 515.6 | 515.6 | 516.0 | 513.3 |
| 147.5° | 529.2 | 529.2 | 529.6 | 530.1 | 526.9 |
| 150°   | 542.8 | 541.9 | 542.8 | 543.7 | 540.1 |
| 152.5° | 555.9 | 553.7 | 554.6 | 555.5 | 552.3 |
| 155°   | 566.8 | 564.1 | 565.0 | 566.4 | 562.8 |
| 157.5° | 575.4 | 574.1 | 574.1 | 575.4 | 571.8 |
| 160°   | 584.5 | 581.8 | 582.3 | 584.1 | 580.4 |
| 162.5° | 591.8 | 589.1 | 589.5 | 592.2 | 588.1 |
| 165°   | 598.1 | 595.4 | 595.9 | 598.6 | 594.9 |
| 167.5° | 603.1 | 600.4 | 600.8 | 604.0 | 599.9 |
| 170°   | 607.2 | 604.0 | 604.5 | 608.1 | 604.0 |
| 172.5° | 609.9 | 606.7 | 607.6 | 610.8 | 606.7 |
| 175°   | 611.7 | 609.0 | 609.5 | 613.1 | 609.0 |
| 177.5° | 613.1 | 610.4 | 610.8 | 614.0 | 610.4 |
| 180°   | 611.7 | 611.7 | 611.7 | 611.7 | 611.7 |

(END OF REPORT)