

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: P1036131

Luminaire Tested: S125RDIW-B850D470UB30-4F0-XX-W2A-F1

Issue Date: 5/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1036131  
REPORT IS A COMBINATION OF REPORTS P1006955 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDIW-B850D470UB30-4F0-XX-W2A-F1  
Description: Define 5 Regressed Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589}  
{m-EER=0.647}  
Light Source: -  
Ballast/Driver: -

**Summary**

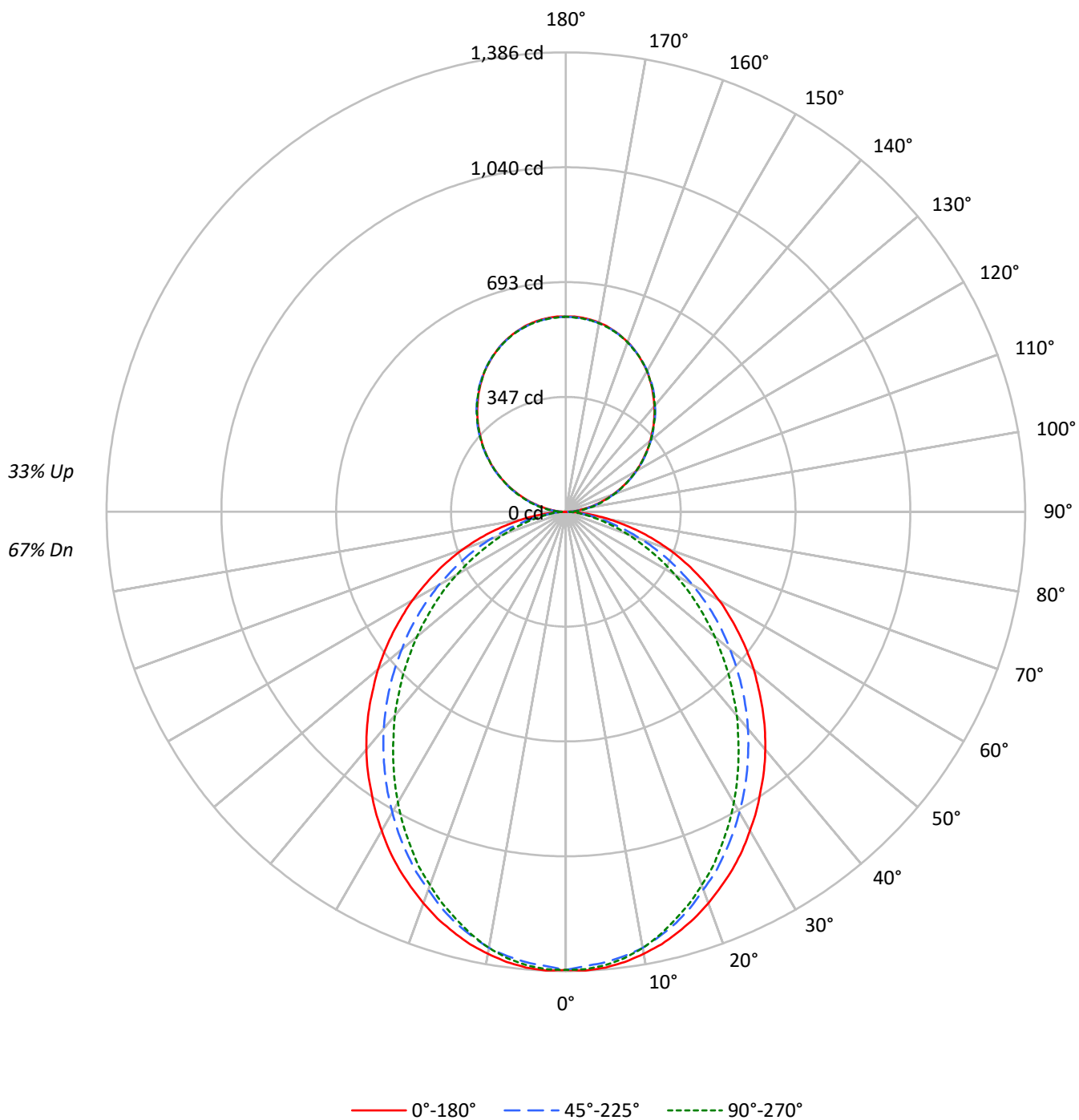
Lumens per Lamp: N/A  
Luminaire Lumens: 4910.0 lumens  
Efficiency: N/A  
Efficacy: 100.0 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')  
CIE Type: Semi-Direct

Input Watts (W): 49.1  
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   | 111 | 111 | 111 | 111 | 105 | 105 | 105 | 105 | 93 | 93 | 93 | 81 | 81 | 81 | 71 | 71 | 71 |
| 1   | 102 | 97  | 94  | 90  | 96  | 92  | 89  | 86  | 82 | 79 | 77 | 72 | 70 | 69 | 64 | 62 | 61 |
| 2   | 93  | 85  | 79  | 74  | 87  | 81  | 75  | 71  | 72 | 68 | 64 | 64 | 61 | 58 | 56 | 54 | 52 |
| 3   | 85  | 75  | 68  | 62  | 80  | 71  | 65  | 59  | 64 | 59 | 54 | 57 | 53 | 49 | 50 | 47 | 44 |
| 4   | 78  | 67  | 59  | 53  | 73  | 63  | 56  | 51  | 57 | 51 | 46 | 51 | 46 | 42 | 45 | 41 | 38 |
| 5   | 72  | 60  | 52  | 46  | 67  | 57  | 49  | 44  | 51 | 45 | 40 | 46 | 41 | 37 | 41 | 37 | 34 |
| 6   | 66  | 54  | 46  | 40  | 62  | 51  | 44  | 38  | 46 | 40 | 35 | 41 | 36 | 33 | 37 | 33 | 30 |
| 7   | 61  | 49  | 41  | 35  | 58  | 46  | 39  | 34  | 42 | 36 | 31 | 38 | 33 | 29 | 34 | 30 | 27 |
| 8   | 57  | 45  | 37  | 31  | 54  | 42  | 35  | 30  | 38 | 32 | 28 | 35 | 30 | 26 | 31 | 27 | 24 |
| 9   | 53  | 41  | 33  | 28  | 50  | 39  | 32  | 27  | 35 | 29 | 25 | 32 | 27 | 23 | 29 | 25 | 22 |
| 10  | 50  | 38  | 30  | 25  | 47  | 36  | 29  | 24  | 33 | 27 | 23 | 30 | 25 | 21 | 27 | 23 | 20 |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 8857 | 8857 | 8857 |
| 5°  | 8858 | 8636 | 8650 |
| 10° | 8772 | 8418 | 8344 |
| 15° | 8647 | 8114 | 7943 |
| 20° | 8494 | 7747 | 7521 |
| 25° | 8317 | 7389 | 7069 |
| 30° | 8102 | 6996 | 6594 |
| 35° | 7882 | 6596 | 6089 |
| 40° | 7672 | 6186 | 5597 |
| 45° | 7420 | 5743 | 5081 |
| 50° | 7165 | 5273 | 4556 |
| 55° | 6869 | 4810 | 4012 |
| 60° | 6566 | 4280 | 3448 |
| 65° | 6205 | 3689 | 2839 |
| 70° | 5783 | 3002 | 2234 |
| 75° | 5201 | 2257 | 1628 |
| 80° | 4385 | 1461 | 1099 |
| 85° | 3282 | 785  | 618  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 7420 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 130.1  | 2.6       |
| 10°-20°   | 363.6  | 7.4       |
| 20°-30°   | 527.2  | 10.7      |
| 30°-40°   | 600.6  | 12.2      |
| 40°-50°   | 585.4  | 11.9      |
| 50°-60°   | 492.7  | 10.0      |
| 60°-70°   | 345.2  | 7.0       |
| 70°-80°   | 177.0  | 3.6       |
| 80°-90°   | 45.1   | 0.9       |
| 90°-100°  | 39.1   | 0.8       |
| 100°-110° | 116.3  | 2.4       |
| 110°-120° | 197.2  | 4.0       |
| 120°-130° | 259.7  | 5.3       |
| 130°-140° | 291.0  | 5.9       |
| 140°-150° | 285.2  | 5.8       |
| 150°-160° | 239.6  | 4.9       |
| 160°-170° | 159.2  | 3.2       |
| 170°-180° | 55.7   | 1.1       |
| 0°-30°    | 1020.9 | 20.8      |
| 0°-40°    | 1621.5 | 33.0      |
| 0°-60°    | 2699.6 | 55.0      |
| 0°-90°    | 3266.9 | 66.5      |
| 90°-120°  | 352.7  | 7.2       |
| 90°-150°  | 1188.5 | 24.2      |
| 90°-180°  | 1643.0 | 33.5      |
| 0°-180°   | 4910.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1382 | 1382  | 1382 | 1382  | 1382 |      |
| 5°   | 1380 | 1376  | 1365 | 1375  | 1373 | 131  |
| 15°  | 1312 | 1306  | 1284 | 1283  | 1274 | 370  |
| 25°  | 1190 | 1175  | 1136 | 1122  | 1111 | 548  |
| 35°  | 1025 | 1000  | 953  | 923   | 908  | 642  |
| 45°  | 839  | 809   | 752  | 710   | 694  | 647  |
| 55°  | 637  | 604   | 545  | 498   | 481  | 570  |
| 65°  | 431  | 396   | 340  | 299   | 283  | 427  |
| 75°  | 230  | 198   | 154  | 132   | 124  | 243  |
| 85°  | 57   | 39    | 33   | 32    | 31   | 63   |
| 90°  | 0    | 4     | 7    | 10    | 11   | 5    |
| 95°  | 30   | 31    | 35   | 38    | 39   | 31   |
| 105° | 104  | 107   | 110  | 112   | 114  | 111  |
| 115° | 198  | 199   | 200  | 200   | 199  | 195  |
| 125° | 288  | 291   | 291  | 290   | 290  | 258  |
| 135° | 375  | 378   | 378  | 378   | 376  | 289  |
| 145° | 454  | 456   | 457  | 457   | 456  | 284  |
| 155° | 520  | 520   | 520  | 522   | 520  | 239  |
| 165° | 565  | 564   | 564  | 566   | 564  | 159  |
| 175° | 587  | 586   | 586  | 588   | 585  | 56   |
| 180° | 589  | 589   | 589  | 589   | 589  |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1382.3 | 1382.3 | 1382.3 | 1382.3 | 1382.3 |
| 2.5°   | 1385.5 | 1382.3 | 1371.9 | 1382.3 | 1381.3 |
| 5°     | 1380.3 | 1376.1 | 1364.6 | 1375.0 | 1373.0 |
| 7.5°   | 1369.8 | 1365.6 | 1352.1 | 1360.4 | 1358.3 |
| 10°    | 1354.2 | 1351.0 | 1336.4 | 1339.5 | 1336.4 |
| 12.5°  | 1336.4 | 1332.2 | 1311.4 | 1313.4 | 1308.2 |
| 15°    | 1312.4 | 1306.1 | 1284.2 | 1283.2 | 1273.8 |
| 17.5°  | 1287.3 | 1277.9 | 1251.8 | 1246.6 | 1239.3 |
| 20°    | 1257.1 | 1246.6 | 1213.2 | 1208.0 | 1198.6 |
| 22.5°  | 1223.7 | 1213.2 | 1177.7 | 1166.2 | 1158.9 |
| 25°    | 1190.2 | 1174.6 | 1135.9 | 1122.4 | 1110.9 |
| 27.5°  | 1152.7 | 1133.9 | 1093.1 | 1075.4 | 1063.9 |
| 30°    | 1110.9 | 1091.1 | 1047.2 | 1023.2 | 1013.8 |
| 32.5°  | 1070.2 | 1046.2 | 1001.3 | 974.1  | 961.6  |
| 35°    | 1025.3 | 1000.2 | 953.2  | 923.0  | 908.3  |
| 37.5°  | 982.5  | 952.2  | 904.2  | 868.7  | 854.0  |
| 40°    | 936.5  | 905.2  | 855.1  | 815.4  | 802.9  |
| 42.5°  | 888.5  | 856.1  | 803.9  | 766.3  | 746.5  |
| 45°    | 839.4  | 809.2  | 751.7  | 710.0  | 694.3  |
| 47.5°  | 788.3  | 757.0  | 699.5  | 656.7  | 639.0  |
| 50°    | 740.2  | 705.8  | 646.3  | 602.4  | 586.8  |
| 52.5°  | 688.0  | 652.5  | 597.2  | 549.2  | 533.5  |
| 55°    | 636.9  | 603.5  | 545.0  | 498.0  | 481.3  |
| 57.5°  | 584.7  | 549.2  | 492.8  | 446.9  | 432.2  |
| 60°    | 534.6  | 498.0  | 441.6  | 395.7  | 380.0  |
| 62.5°  | 481.3  | 446.9  | 389.4  | 347.7  | 332.0  |
| 65°    | 431.2  | 395.7  | 340.4  | 298.6  | 282.9  |
| 67.5°  | 381.1  | 345.6  | 292.3  | 252.7  | 240.1  |
| 70°    | 329.9  | 294.4  | 242.2  | 209.9  | 197.3  |
| 72.5°  | 279.8  | 245.4  | 197.3  | 168.1  | 160.8  |
| 75°    | 229.7  | 198.4  | 154.5  | 131.6  | 124.2  |
| 77.5°  | 178.5  | 153.5  | 116.9  | 99.2   | 92.9   |
| 80°    | 135.7  | 110.7  | 81.4   | 72.0   | 70.0   |
| 82.5°  | 94.0   | 72.0   | 54.3   | 51.2   | 50.1   |
| 85°    | 57.4   | 38.6   | 33.4   | 32.4   | 31.3   |
| 87.5°  | 24.0   | 16.7   | 15.7   | 15.7   | 14.6   |
| 90°    | 0.5    | 4.1    | 7.3    | 9.6    | 11.0   |
| 92.5°  | 13.7   | 16.0   | 20.2   | 23.4   | 24.3   |
| 95°    | 29.8   | 30.7   | 35.3   | 38.5   | 39.4   |
| 97.5°  | 45.8   | 46.3   | 52.7   | 55.4   | 55.9   |
| 100°   | 64.1   | 64.1   | 70.1   | 74.2   | 75.1   |
| 102.5° | 83.8   | 86.1   | 88.4   | 93.0   | 94.4   |
| 105°   | 104.5  | 106.7  | 109.5  | 112.2  | 113.6  |
| 107.5° | 126.9  | 129.2  | 131.5  | 132.9  | 132.9  |
| 110°   | 150.3  | 152.6  | 153.9  | 155.3  | 154.9  |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 174.1 | 175.0 | 176.8 | 177.3 | 176.4 |
| 115°   | 197.5 | 199.3 | 200.2 | 199.8 | 199.3 |
| 117.5° | 221.3 | 221.7 | 222.7 | 223.1 | 221.3 |
| 120°   | 243.3 | 245.6 | 246.0 | 246.0 | 244.2 |
| 122.5° | 267.1 | 267.6 | 268.9 | 268.5 | 267.1 |
| 125°   | 288.2 | 290.9 | 291.4 | 290.5 | 290.0 |
| 127.5° | 311.5 | 312.9 | 313.4 | 312.9 | 312.0 |
| 130°   | 332.2 | 334.5 | 335.4 | 334.9 | 334.0 |
| 132.5° | 352.8 | 356.9 | 356.4 | 356.0 | 354.6 |
| 135°   | 374.8 | 377.5 | 378.0 | 378.0 | 376.1 |
| 137.5° | 395.4 | 398.1 | 399.1 | 399.5 | 397.2 |
| 140°   | 415.1 | 417.4 | 418.8 | 419.7 | 417.4 |
| 142.5° | 434.8 | 436.6 | 438.5 | 438.9 | 436.6 |
| 145°   | 454.0 | 455.9 | 457.2 | 457.2 | 455.9 |
| 147.5° | 471.9 | 473.3 | 474.2 | 475.6 | 471.9 |
| 150°   | 489.8 | 489.3 | 491.1 | 491.1 | 490.2 |
| 152.5° | 504.4 | 505.3 | 505.8 | 507.2 | 505.3 |
| 155°   | 519.5 | 519.5 | 520.0 | 521.8 | 519.5 |
| 157.5° | 533.3 | 532.4 | 532.8 | 534.7 | 531.5 |
| 160°   | 545.2 | 543.8 | 544.3 | 546.1 | 543.8 |
| 162.5° | 555.7 | 554.8 | 554.8 | 557.1 | 554.4 |
| 165°   | 564.9 | 564.0 | 564.4 | 566.3 | 563.5 |
| 167.5° | 573.1 | 571.3 | 571.3 | 574.1 | 571.3 |
| 170°   | 579.6 | 577.7 | 577.7 | 580.5 | 577.3 |
| 172.5° | 584.1 | 582.3 | 582.3 | 585.1 | 582.3 |
| 175°   | 587.4 | 585.5 | 585.5 | 588.3 | 585.1 |
| 177.5° | 589.6 | 587.8 | 587.4 | 590.1 | 586.9 |
| 180°   | 588.7 | 588.7 | 588.7 | 588.7 | 588.7 |

(END OF REPORT)