

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: P1034927

Luminaire Tested: S125RDIW-B850D470UB2750-4F0-XX-W2A-F\_3500K

Issue Date: 5/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1034927  
REPORT IS A COMBINATION OF REPORTS P1006948 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDIW-B850D470UB2750-4F0-XX-W2A-F\_3500K  
Description: Define 5 Regressed Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721}  
{m-EER=0.792}  
Light Source: -  
Ballast/Driver: -

**Summary**

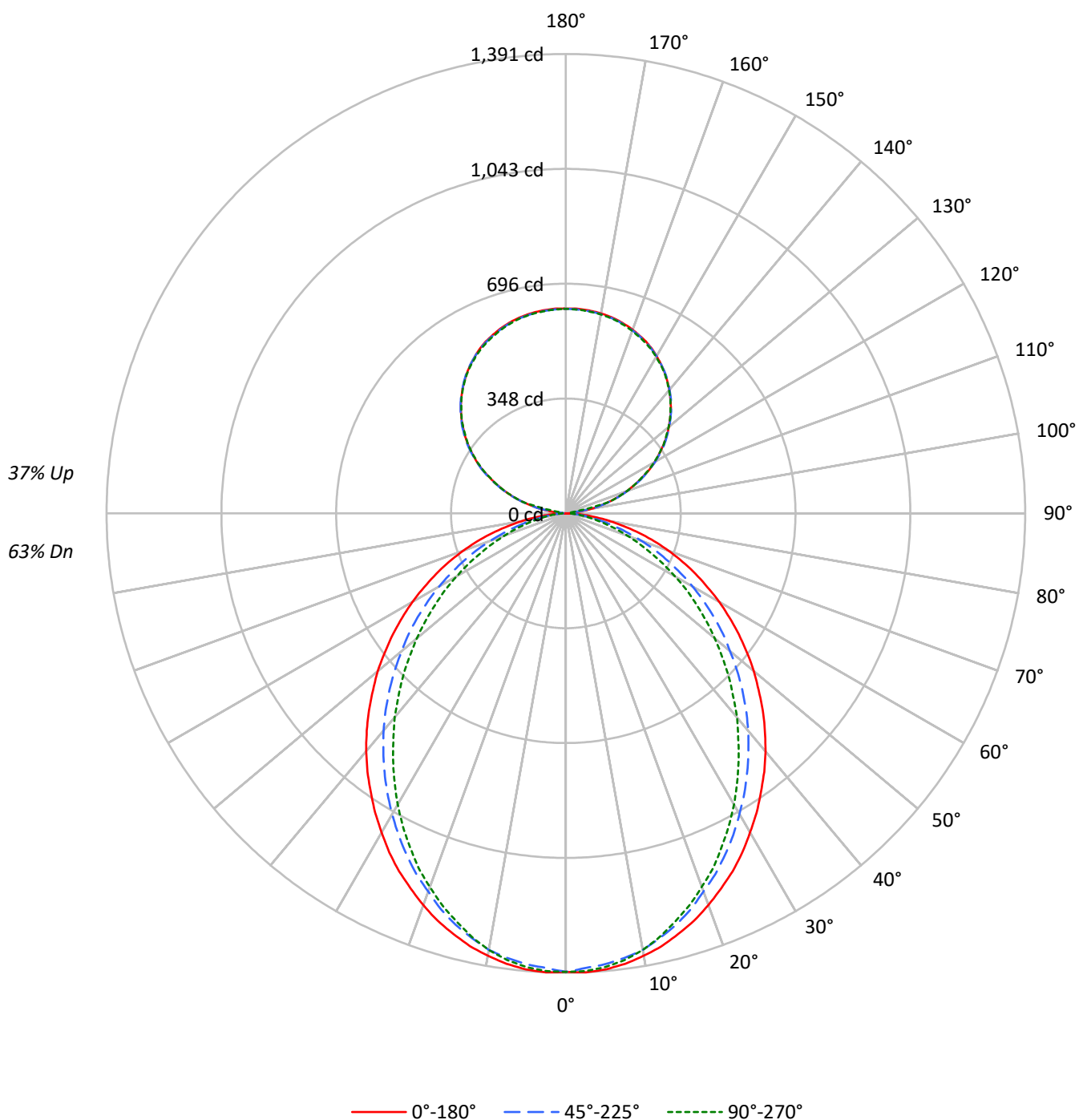
Lumens per Lamp: N/A  
Luminaire Lumens: 5184.0 lumens  
Efficiency: N/A  
Efficacy: 105.6 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')  
CIE Type: Semi-Direct

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 | 50 | 30 | 10 |
| RCR |     |     |     |     |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |
| 0   | 110 | 110 | 110 | 110 | 103 | 103 | 103 | 103 | 91 | 91 | 91 | 79 | 79 | 79 | 68 | 68 | 68 | 68 | 68 | 68 |
| 1   | 101 | 97  | 93  | 89  | 95  | 91  | 88  | 85  | 80 | 78 | 75 | 70 | 68 | 67 | 61 | 60 | 58 | 58 | 58 | 58 |
| 2   | 92  | 85  | 79  | 74  | 86  | 80  | 74  | 70  | 71 | 66 | 63 | 62 | 59 | 56 | 54 | 52 | 50 | 50 | 50 | 50 |
| 3   | 84  | 75  | 67  | 62  | 79  | 71  | 64  | 59  | 62 | 57 | 53 | 55 | 51 | 48 | 48 | 45 | 42 | 42 | 42 | 42 |
| 4   | 77  | 66  | 58  | 52  | 72  | 63  | 56  | 50  | 56 | 50 | 46 | 49 | 45 | 41 | 43 | 40 | 37 | 37 | 37 | 37 |
| 5   | 71  | 59  | 51  | 45  | 67  | 56  | 49  | 43  | 50 | 44 | 39 | 44 | 40 | 36 | 39 | 35 | 32 | 32 | 32 | 32 |
| 6   | 66  | 53  | 45  | 39  | 61  | 51  | 43  | 38  | 45 | 39 | 35 | 40 | 35 | 32 | 35 | 32 | 28 | 28 | 28 | 28 |
| 7   | 61  | 48  | 40  | 35  | 57  | 46  | 39  | 33  | 41 | 35 | 31 | 37 | 32 | 28 | 32 | 28 | 25 | 25 | 25 | 25 |
| 8   | 57  | 44  | 36  | 31  | 53  | 42  | 35  | 30  | 38 | 32 | 27 | 34 | 29 | 25 | 30 | 26 | 23 | 23 | 23 | 23 |
| 9   | 53  | 40  | 33  | 28  | 50  | 38  | 31  | 27  | 35 | 29 | 25 | 31 | 26 | 23 | 28 | 24 | 21 | 21 | 21 | 21 |
| 10  | 49  | 37  | 30  | 25  | 46  | 35  | 29  | 24  | 32 | 26 | 22 | 29 | 24 | 21 | 26 | 22 | 19 | 19 | 19 | 19 |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 8895 | 8895 | 8895 |
| 5°  | 8896 | 8673 | 8687 |
| 10° | 8809 | 8454 | 8380 |
| 15° | 8684 | 8149 | 7976 |
| 20° | 8530 | 7781 | 7553 |
| 25° | 8353 | 7421 | 7099 |
| 30° | 8137 | 7026 | 6622 |
| 35° | 7915 | 6625 | 6115 |
| 40° | 7705 | 6213 | 5621 |
| 45° | 7452 | 5768 | 5103 |
| 50° | 7196 | 5296 | 4576 |
| 55° | 6898 | 4830 | 4030 |
| 60° | 6594 | 4298 | 3463 |
| 65° | 6230 | 3704 | 2852 |
| 70° | 5807 | 3016 | 2245 |
| 75° | 5224 | 2268 | 1636 |
| 80° | 4405 | 1469 | 1104 |
| 85° | 3299 | 790  | 622  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 7452 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 130.7  | 2.5       |
| 10°-20°   | 365.1  | 7.0       |
| 20°-30°   | 529.4  | 10.2      |
| 30°-40°   | 603.2  | 11.6      |
| 40°-50°   | 587.9  | 11.3      |
| 50°-60°   | 494.8  | 9.5       |
| 60°-70°   | 346.7  | 6.7       |
| 70°-80°   | 177.7  | 3.4       |
| 80°-90°   | 45.2   | 0.9       |
| 90°-100°  | 21.0   | 0.4       |
| 100°-110° | 139.8  | 2.7       |
| 110°-120° | 251.8  | 4.9       |
| 120°-130° | 323.2  | 6.2       |
| 130°-140° | 347.6  | 6.7       |
| 140°-150° | 326.2  | 6.3       |
| 150°-160° | 263.9  | 5.1       |
| 160°-170° | 170.7  | 3.3       |
| 170°-180° | 58.9   | 1.1       |
| 0°-30°    | 1025.3 | 19.8      |
| 0°-40°    | 1628.5 | 31.4      |
| 0°-60°    | 2711.2 | 52.3      |
| 0°-90°    | 3280.9 | 63.3      |
| 90°-120°  | 412.6  | 8.0       |
| 90°-150°  | 1409.7 | 27.2      |
| 90°-180°  | 1903.0 | 36.7      |
| 0°-180°   | 5184.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1388 | 1388  | 1388 | 1388  | 1388 |      |
| 5°   | 1386 | 1382  | 1370 | 1381  | 1379 | 131  |
| 15°  | 1318 | 1312  | 1290 | 1289  | 1279 | 372  |
| 25°  | 1195 | 1180  | 1141 | 1127  | 1116 | 550  |
| 35°  | 1030 | 1004  | 957  | 927   | 912  | 645  |
| 45°  | 843  | 813   | 755  | 713   | 697  | 650  |
| 55°  | 640  | 606   | 547  | 500   | 483  | 572  |
| 65°  | 433  | 397   | 342  | 300   | 284  | 429  |
| 75°  | 231  | 199   | 155  | 132   | 125  | 244  |
| 85°  | 58   | 39    | 34   | 32    | 32   | 63   |
| 90°  | 0    | 4     | 7    | 10    | 11   | 5    |
| 95°  | 26   | 25    | 7    | 10    | 10   | 32   |
| 105° | 135  | 137   | 137  | 137   | 136  | 143  |
| 115° | 254  | 256   | 256  | 254   | 252  | 251  |
| 125° | 360  | 364   | 364  | 362   | 360  | 322  |
| 135° | 450  | 452   | 451  | 450   | 448  | 347  |
| 145° | 521  | 522   | 522  | 523   | 520  | 326  |
| 155° | 574  | 571   | 572  | 574   | 570  | 265  |
| 165° | 606  | 603   | 604  | 606   | 602  | 171  |
| 175° | 620  | 617   | 617  | 621   | 617  | 59   |
| 180° | 620  | 620   | 620  | 620   | 620  |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1388.3 | 1388.3 | 1388.3 | 1388.3 | 1388.3 |
| 2.5°   | 1391.4 | 1388.3 | 1377.8 | 1388.3 | 1387.2 |
| 5°     | 1386.2 | 1382.0 | 1370.4 | 1380.9 | 1378.8 |
| 7.5°   | 1375.7 | 1371.5 | 1357.9 | 1366.3 | 1364.2 |
| 10°    | 1360.0 | 1356.8 | 1342.1 | 1345.3 | 1342.1 |
| 12.5°  | 1342.1 | 1337.9 | 1317.0 | 1319.1 | 1313.8 |
| 15°    | 1318.0 | 1311.7 | 1289.7 | 1288.7 | 1279.2 |
| 17.5°  | 1292.9 | 1283.4 | 1257.2 | 1252.0 | 1244.6 |
| 20°    | 1262.4 | 1252.0 | 1218.4 | 1213.2 | 1203.7 |
| 22.5°  | 1228.9 | 1218.4 | 1182.8 | 1171.2 | 1163.9 |
| 25°    | 1195.3 | 1179.6 | 1140.8 | 1127.2 | 1115.7 |
| 27.5°  | 1157.6 | 1138.7 | 1097.8 | 1080.0 | 1068.5 |
| 30°    | 1115.7 | 1095.7 | 1051.7 | 1027.6 | 1018.1 |
| 32.5°  | 1074.8 | 1050.6 | 1005.6 | 978.3  | 965.7  |
| 35°    | 1029.7 | 1004.5 | 957.3  | 926.9  | 912.2  |
| 37.5°  | 986.7  | 956.3  | 908.0  | 872.4  | 857.7  |
| 40°    | 940.5  | 909.1  | 858.8  | 818.9  | 806.3  |
| 42.5°  | 892.3  | 859.8  | 807.4  | 769.6  | 749.7  |
| 45°    | 843.0  | 812.6  | 755.0  | 713.0  | 697.3  |
| 47.5°  | 791.7  | 760.2  | 702.5  | 659.5  | 641.7  |
| 50°    | 743.4  | 708.8  | 649.1  | 605.0  | 589.3  |
| 52.5°  | 691.0  | 655.3  | 599.8  | 551.5  | 535.8  |
| 55°    | 639.6  | 606.1  | 547.3  | 500.2  | 483.4  |
| 57.5°  | 587.2  | 551.5  | 494.9  | 448.8  | 434.1  |
| 60°    | 536.9  | 500.2  | 443.5  | 397.4  | 381.7  |
| 62.5°  | 483.4  | 448.8  | 391.1  | 349.2  | 333.4  |
| 65°    | 433.0  | 397.4  | 341.8  | 299.9  | 284.2  |
| 67.5°  | 382.7  | 347.1  | 293.6  | 253.7  | 241.2  |
| 70°    | 331.3  | 295.7  | 243.3  | 210.8  | 198.2  |
| 72.5°  | 281.0  | 246.4  | 198.2  | 168.8  | 161.5  |
| 75°    | 230.7  | 199.2  | 155.2  | 132.1  | 124.8  |
| 77.5°  | 179.3  | 154.1  | 117.4  | 99.6   | 93.3   |
| 80°    | 136.3  | 111.1  | 81.8   | 72.3   | 70.3   |
| 82.5°  | 94.4   | 72.3   | 54.5   | 51.4   | 50.3   |
| 85°    | 57.7   | 38.8   | 33.6   | 32.5   | 31.5   |
| 87.5°  | 24.1   | 16.8   | 15.7   | 15.7   | 14.7   |
| 90°    | 0.5    | 4.1    | 7.3    | 9.6    | 11.0   |
| 92.5°  | 8.7    | 4.6    | 7.3    | 9.6    | 10.1   |
| 95°    | 26.2   | 24.8   | 7.3    | 9.6    | 9.6    |
| 97.5°  | 49.1   | 51.9   | 8.3    | 9.2    | 9.6    |
| 100°   | 76.7   | 78.1   | 79.9   | 11.5   | 9.6    |
| 102.5° | 104.7  | 106.5  | 107.5  | 108.4  | 69.8   |
| 105°   | 135.0  | 136.9  | 136.9  | 136.9  | 136.4  |
| 107.5° | 166.3  | 166.3  | 167.2  | 167.6  | 165.8  |
| 110°   | 196.6  | 196.6  | 197.5  | 196.1  | 196.6  |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 225.0 | 226.4 | 226.9 | 225.0 | 224.1 |
| 115°   | 253.5 | 255.8 | 256.3 | 254.4 | 251.7 |
| 117.5° | 283.4 | 283.4 | 285.2 | 282.4 | 281.5 |
| 120°   | 310.9 | 310.5 | 311.8 | 310.9 | 308.6 |
| 122.5° | 335.3 | 337.6 | 338.0 | 337.1 | 334.3 |
| 125°   | 360.5 | 363.7 | 363.7 | 361.9 | 360.5 |
| 127.5° | 384.9 | 387.2 | 386.7 | 385.8 | 382.1 |
| 130°   | 406.9 | 409.2 | 409.7 | 408.3 | 406.0 |
| 132.5° | 428.9 | 431.7 | 430.3 | 430.3 | 428.0 |
| 135°   | 449.6 | 452.4 | 451.4 | 450.5 | 447.8 |
| 137.5° | 468.9 | 471.7 | 470.7 | 470.7 | 468.4 |
| 140°   | 487.7 | 488.6 | 488.2 | 489.1 | 486.4 |
| 142.5° | 504.7 | 505.2 | 506.1 | 506.1 | 503.3 |
| 145°   | 521.3 | 522.2 | 522.2 | 522.6 | 519.9 |
| 147.5° | 536.0 | 536.0 | 536.4 | 536.9 | 533.7 |
| 150°   | 549.7 | 548.8 | 549.7 | 550.6 | 547.0 |
| 152.5° | 563.0 | 560.8 | 561.7 | 562.6 | 559.4 |
| 155°   | 574.1 | 571.3 | 572.2 | 573.6 | 569.9 |
| 157.5° | 582.8 | 581.4 | 581.4 | 582.8 | 579.1 |
| 160°   | 592.0 | 589.2 | 589.7 | 591.5 | 587.8 |
| 162.5° | 599.3 | 596.6 | 597.0 | 599.8 | 595.7 |
| 165°   | 605.8 | 603.0 | 603.5 | 606.2 | 602.5 |
| 167.5° | 610.8 | 608.1 | 608.5 | 611.7 | 607.6 |
| 170°   | 614.9 | 611.7 | 612.2 | 615.9 | 611.7 |
| 172.5° | 617.7 | 614.5 | 615.4 | 618.6 | 614.5 |
| 175°   | 619.5 | 616.8 | 617.2 | 620.9 | 616.8 |
| 177.5° | 620.9 | 618.2 | 618.6 | 621.8 | 618.2 |
| 180°   | 619.5 | 619.5 | 619.5 | 619.5 | 619.5 |

(END OF REPORT)