

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: P1034673

Luminaire Tested: S125DIW-B850D470UB2750-4F0-XX-W2A-F\_5000K

Issue Date: 5/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1034673  
REPORT IS A COMBINATION OF REPORTS P1004266 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125DIW-B850D470UB2750-4F0-XX-W2A-F\_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**

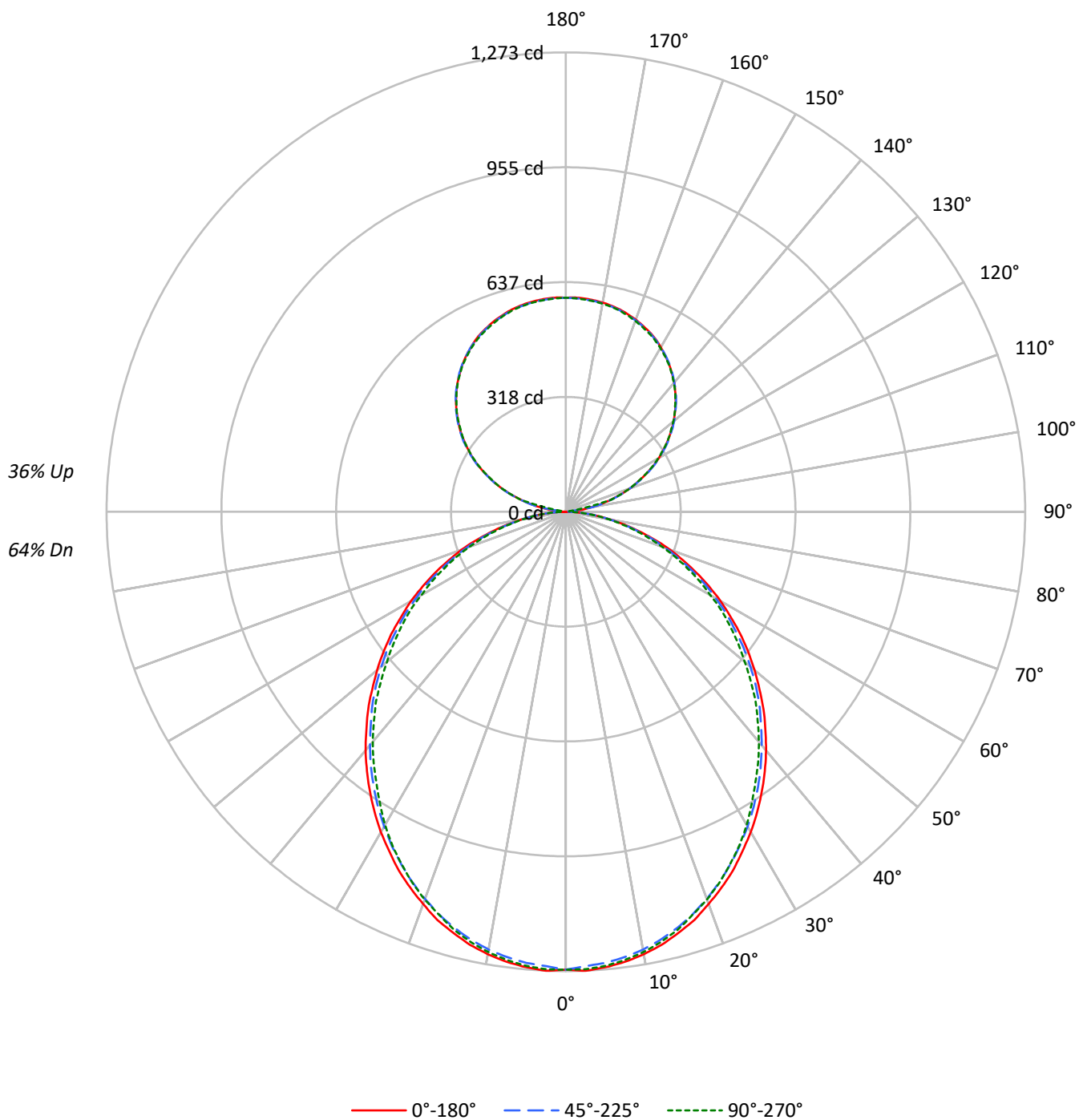
Lumens per Lamp: N/A  
Luminaire Lumens: 5126.0 lumens  
Efficiency: N/A  
Efficacy: 104.4 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')  
CIE Type: Semi-Direct

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 | 104 | 104 | 104 | 104 | 91 | 91 | 91 | 80 | 80 | 80 | 69 | 69 | 69 |
| 1   | 101 | 96  | 92  | 89  | 95  | 91  | 87  | 84  | 80 | 77 | 75 | 70 | 68 | 67 | 61 | 60 | 58 |
| 2   | 92  | 84  | 78  | 73  | 86  | 79  | 74  | 69  | 70 | 66 | 62 | 62 | 58 | 55 | 54 | 51 | 49 |
| 3   | 84  | 74  | 66  | 60  | 78  | 70  | 63  | 58  | 62 | 57 | 52 | 55 | 50 | 47 | 48 | 45 | 42 |
| 4   | 77  | 66  | 57  | 51  | 72  | 62  | 55  | 49  | 55 | 49 | 45 | 49 | 44 | 40 | 43 | 39 | 36 |
| 5   | 71  | 59  | 50  | 44  | 66  | 55  | 48  | 42  | 49 | 43 | 38 | 44 | 39 | 35 | 38 | 35 | 31 |
| 6   | 65  | 53  | 44  | 38  | 61  | 50  | 42  | 37  | 44 | 38 | 34 | 40 | 34 | 31 | 35 | 31 | 28 |
| 7   | 60  | 48  | 39  | 34  | 56  | 45  | 38  | 32  | 40 | 34 | 30 | 36 | 31 | 27 | 32 | 28 | 25 |
| 8   | 56  | 43  | 35  | 30  | 52  | 41  | 34  | 29  | 37 | 31 | 26 | 33 | 28 | 24 | 29 | 25 | 22 |
| 9   | 52  | 40  | 32  | 27  | 49  | 38  | 31  | 26  | 34 | 28 | 24 | 30 | 25 | 22 | 27 | 23 | 20 |
| 10  | 49  | 36  | 29  | 24  | 46  | 35  | 28  | 23  | 31 | 25 | 21 | 28 | 23 | 20 | 25 | 21 | 18 |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 8131 | 8131 | 8131 |
| 5°  | 8131 | 7942 | 7957 |
| 10° | 8064 | 7760 | 7735 |
| 15° | 7958 | 7542 | 7475 |
| 20° | 7815 | 7289 | 7175 |
| 25° | 7662 | 7014 | 6855 |
| 30° | 7476 | 6727 | 6517 |
| 35° | 7278 | 6427 | 6138 |
| 40° | 7073 | 6109 | 5802 |
| 45° | 6852 | 5799 | 5445 |
| 50° | 6608 | 5448 | 5028 |
| 55° | 6367 | 5060 | 4645 |
| 60° | 6080 | 4651 | 4199 |
| 65° | 5735 | 4178 | 3738 |
| 70° | 5385 | 3635 | 3206 |
| 75° | 4796 | 2992 | 2593 |
| 80° | 4088 | 2235 | 1907 |
| 85° | 3156 | 1321 | 1051 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6852 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 119.7  | 2.3       |
| 10°-20°   | 338.2  | 6.6       |
| 20°-30°   | 499.4  | 9.7       |
| 30°-40°   | 582.6  | 11.4      |
| 40°-50°   | 585.2  | 11.4      |
| 50°-60°   | 513.6  | 10.0      |
| 60°-70°   | 382.6  | 7.5       |
| 70°-80°   | 218.5  | 4.3       |
| 80°-90°   | 64.0   | 1.2       |
| 90°-100°  | 20.1   | 0.4       |
| 100°-110° | 133.9  | 2.6       |
| 110°-120° | 241.1  | 4.7       |
| 120°-130° | 309.4  | 6.0       |
| 130°-140° | 332.8  | 6.5       |
| 140°-150° | 312.4  | 6.1       |
| 150°-160° | 252.7  | 4.9       |
| 160°-170° | 163.4  | 3.2       |
| 170°-180° | 56.4   | 1.1       |
| 0°-30°    | 957.4  | 18.7      |
| 0°-40°    | 1540.0 | 30.0      |
| 0°-60°    | 2638.8 | 51.5      |
| 0°-90°    | 3303.9 | 64.5      |
| 90°-120°  | 395.1  | 7.7       |
| 90°-150°  | 1349.7 | 26.3      |
| 90°-180°  | 1822.0 | 35.5      |
| 0°-180°   | 5126.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1269 | 1269  | 1269 | 1269  | 1269 |      |
| 5°   | 1267 | 1265  | 1255 | 1264  | 1263 | 120  |
| 15°  | 1208 | 1205  | 1194 | 1199  | 1199 | 341  |
| 25°  | 1096 | 1091  | 1078 | 1080  | 1077 | 504  |
| 35°  | 947  | 943   | 929  | 924   | 916  | 592  |
| 45°  | 775  | 771   | 759  | 747   | 744  | 597  |
| 55°  | 590  | 587   | 573  | 564   | 557  | 527  |
| 65°  | 399  | 397   | 386  | 376   | 372  | 395  |
| 75°  | 212  | 210   | 205  | 202   | 198  | 226  |
| 85°  | 55   | 56    | 56   | 55    | 53   | 60   |
| 90°  | 0    | 4     | 7    | 9     | 11   | 5    |
| 95°  | 25   | 24    | 7    | 9     | 9    | 31   |
| 105° | 129  | 131   | 131  | 131   | 131  | 137  |
| 115° | 243  | 245   | 245  | 244   | 241  | 241  |
| 125° | 345  | 348   | 348  | 346   | 345  | 308  |
| 135° | 430  | 433   | 432  | 431   | 429  | 332  |
| 145° | 499  | 500   | 500  | 500   | 498  | 312  |
| 155° | 550  | 547   | 548  | 549   | 546  | 253  |
| 165° | 580  | 577   | 578  | 580   | 577  | 164  |
| 175° | 593  | 590   | 591  | 594   | 590  | 56   |
| 180° | 593  | 593   | 593  | 593   | 593  |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1269.0 | 1269.0 | 1269.0 | 1269.0 | 1269.0 |
| 2.5°   | 1273.1 | 1270.0 | 1260.0 | 1270.0 | 1269.0 |
| 5°     | 1267.0 | 1265.0 | 1255.0 | 1264.0 | 1263.0 |
| 7.5°   | 1258.0 | 1256.0 | 1244.9 | 1254.0 | 1253.0 |
| 10°    | 1244.9 | 1242.9 | 1231.9 | 1239.9 | 1238.9 |
| 12.5°  | 1228.9 | 1224.9 | 1214.8 | 1220.8 | 1220.8 |
| 15°    | 1207.8 | 1204.8 | 1193.7 | 1198.8 | 1198.8 |
| 17.5°  | 1185.7 | 1180.7 | 1169.6 | 1175.7 | 1170.6 |
| 20°    | 1156.6 | 1154.6 | 1141.5 | 1148.6 | 1143.5 |
| 22.5°  | 1127.5 | 1123.5 | 1111.4 | 1115.4 | 1112.4 |
| 25°    | 1096.4 | 1091.3 | 1078.3 | 1080.3 | 1077.3 |
| 27.5°  | 1060.2 | 1057.2 | 1044.1 | 1045.2 | 1042.1 |
| 30°    | 1025.1 | 1022.1 | 1007.0 | 1005.0 | 1002.0 |
| 32.5°  | 986.9  | 981.9  | 968.8  | 964.8  | 958.8  |
| 35°    | 946.8  | 942.7  | 928.7  | 923.7  | 915.6  |
| 37.5°  | 905.6  | 900.6  | 887.5  | 880.5  | 875.5  |
| 40°    | 863.4  | 858.4  | 844.4  | 835.3  | 832.3  |
| 42.5°  | 818.2  | 814.2  | 800.2  | 792.1  | 787.1  |
| 45°    | 775.1  | 771.1  | 759.0  | 747.0  | 744.0  |
| 47.5°  | 727.9  | 728.9  | 713.8  | 701.8  | 694.8  |
| 50°    | 682.7  | 679.7  | 667.7  | 654.6  | 647.6  |
| 52.5°  | 636.5  | 634.5  | 621.5  | 610.4  | 602.4  |
| 55°    | 590.3  | 587.3  | 573.3  | 564.2  | 557.2  |
| 57.5°  | 541.1  | 540.1  | 528.1  | 516.0  | 513.0  |
| 60°    | 495.0  | 490.9  | 479.9  | 469.9  | 462.8  |
| 62.5°  | 446.8  | 443.8  | 434.7  | 423.7  | 418.7  |
| 65°    | 398.6  | 396.6  | 385.5  | 376.5  | 372.5  |
| 67.5°  | 351.4  | 347.4  | 339.3  | 331.3  | 329.3  |
| 70°    | 307.2  | 302.2  | 293.2  | 287.1  | 283.1  |
| 72.5°  | 259.0  | 256.0  | 251.0  | 244.0  | 240.0  |
| 75°    | 211.8  | 209.8  | 204.8  | 201.8  | 197.8  |
| 77.5°  | 167.7  | 166.7  | 163.6  | 161.6  | 158.6  |
| 80°    | 126.5  | 126.5  | 124.5  | 123.5  | 121.5  |
| 82.5°  | 90.4   | 88.4   | 88.4   | 86.3   | 86.3   |
| 85°    | 55.2   | 56.2   | 56.2   | 55.2   | 53.2   |
| 87.5°  | 27.1   | 27.1   | 26.1   | 26.1   | 24.1   |
| 90°    | 0.4    | 4.0    | 7.0    | 9.2    | 10.6   |
| 92.5°  | 8.4    | 4.4    | 7.0    | 9.2    | 9.7    |
| 95°    | 25.1   | 23.7   | 7.0    | 9.2    | 9.2    |
| 97.5°  | 47.0   | 49.7   | 7.9    | 8.8    | 9.2    |
| 100°   | 73.4   | 74.8   | 76.5   | 11.0   | 9.2    |
| 102.5° | 100.3  | 102.0  | 102.9  | 103.8  | 66.8   |
| 105°   | 129.3  | 131.0  | 131.0  | 131.0  | 130.6  |
| 107.5° | 159.2  | 159.2  | 160.1  | 160.5  | 158.7  |
| 110°   | 188.2  | 188.2  | 189.1  | 187.8  | 188.2  |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 215.5 | 216.8 | 217.2 | 215.5 | 214.6 |
| 115°   | 242.7 | 244.9 | 245.4 | 243.6 | 241.0 |
| 117.5° | 271.3 | 271.3 | 273.1 | 270.4 | 269.5 |
| 120°   | 297.7 | 297.2 | 298.6 | 297.7 | 295.5 |
| 122.5° | 321.0 | 323.2 | 323.6 | 322.8 | 320.1 |
| 125°   | 345.2 | 348.3 | 348.3 | 346.5 | 345.2 |
| 127.5° | 368.5 | 370.7 | 370.2 | 369.4 | 365.8 |
| 130°   | 389.6 | 391.8 | 392.2 | 390.9 | 388.7 |
| 132.5° | 410.7 | 413.3 | 412.0 | 412.0 | 409.8 |
| 135°   | 430.5 | 433.1 | 432.2 | 431.4 | 428.7 |
| 137.5° | 449.0 | 451.6 | 450.7 | 450.7 | 448.5 |
| 140°   | 467.0 | 467.9 | 467.4 | 468.3 | 465.7 |
| 142.5° | 483.2 | 483.7 | 484.6 | 484.6 | 481.9 |
| 145°   | 499.1 | 500.0 | 500.0 | 500.4 | 497.8 |
| 147.5° | 513.2 | 513.2 | 513.6 | 514.0 | 511.0 |
| 150°   | 526.3 | 525.5 | 526.3 | 527.2 | 523.7 |
| 152.5° | 539.1 | 536.9 | 537.8 | 538.7 | 535.6 |
| 155°   | 549.6 | 547.0 | 547.9 | 549.2 | 545.7 |
| 157.5° | 558.0 | 556.7 | 556.7 | 558.0 | 554.5 |
| 160°   | 566.8 | 564.2 | 564.6 | 566.4 | 562.8 |
| 162.5° | 573.8 | 571.2 | 571.6 | 574.3 | 570.3 |
| 165°   | 580.0 | 577.3 | 577.8 | 580.4 | 576.9 |
| 167.5° | 584.8 | 582.2 | 582.6 | 585.7 | 581.7 |
| 170°   | 588.8 | 585.7 | 586.1 | 589.7 | 585.7 |
| 172.5° | 591.4 | 588.3 | 589.2 | 592.3 | 588.3 |
| 175°   | 593.2 | 590.5 | 591.0 | 594.5 | 590.5 |
| 177.5° | 594.5 | 591.9 | 592.3 | 595.4 | 591.9 |
| 180°   | 593.2 | 593.2 | 593.2 | 593.2 | 593.2 |

(END OF REPORT)