

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: P1034887

Luminaire Tested: S125RDIW-B610D770UB2750-4F0-XX-W2A-F\_3500K

Issue Date: 5/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1034887  
REPORT IS A COMBINATION OF REPORTS P1006772 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDIW-B610D770UB2750-4F0-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**

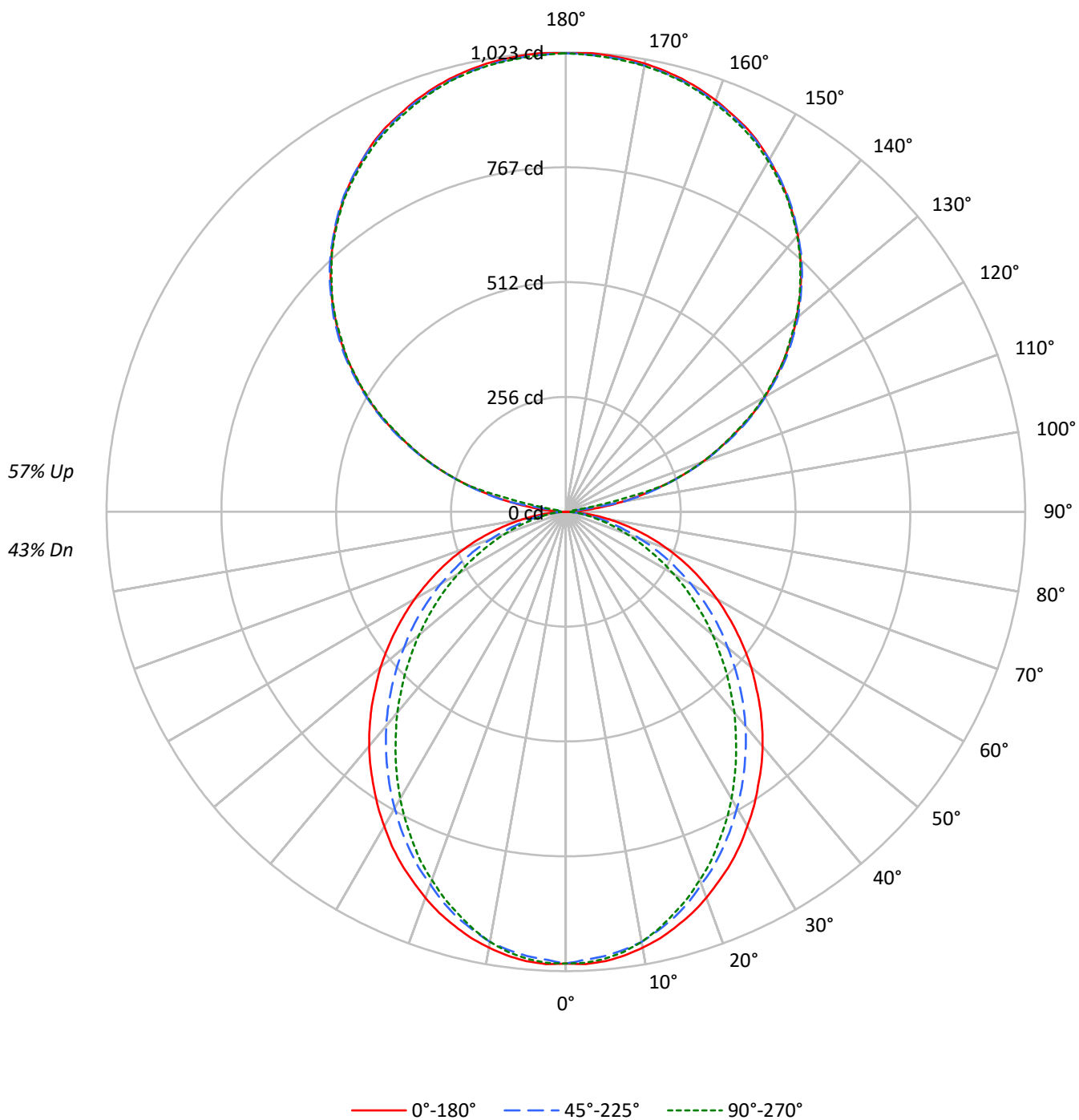
Lumens per Lamp: N/A  
Luminaire Lumens: 5515.0 lumens  
Efficiency: N/A  
Efficacy: 116.8 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

Input Watts (W): 47.2  
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

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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   | 106 | 106 | 106 | 106 | 96 | 96 | 96 | 96 | 80 | 80 | 80 | 64 | 64 | 64 | 50 | 50 | 50 |
| 1   | 96  | 92  | 88  | 85  | 88 | 84 | 81 | 78 | 70 | 68 | 66 | 57 | 55 | 54 | 44 | 43 | 42 |
| 2   | 88  | 81  | 75  | 70  | 80 | 74 | 69 | 65 | 62 | 58 | 55 | 50 | 47 | 45 | 39 | 38 | 36 |
| 3   | 80  | 71  | 64  | 58  | 73 | 65 | 59 | 54 | 54 | 50 | 46 | 44 | 41 | 38 | 35 | 33 | 31 |
| 4   | 74  | 63  | 55  | 49  | 67 | 58 | 51 | 46 | 48 | 43 | 39 | 40 | 36 | 33 | 31 | 29 | 27 |
| 5   | 68  | 56  | 48  | 42  | 62 | 52 | 45 | 40 | 43 | 38 | 34 | 36 | 32 | 29 | 28 | 26 | 23 |
| 6   | 62  | 50  | 42  | 37  | 57 | 46 | 39 | 34 | 39 | 34 | 30 | 32 | 28 | 25 | 26 | 23 | 21 |
| 7   | 58  | 45  | 38  | 32  | 52 | 42 | 35 | 30 | 35 | 30 | 26 | 29 | 25 | 22 | 23 | 21 | 18 |
| 8   | 53  | 41  | 34  | 28  | 49 | 38 | 31 | 27 | 32 | 27 | 23 | 27 | 23 | 20 | 22 | 19 | 16 |
| 9   | 50  | 38  | 30  | 25  | 45 | 35 | 28 | 24 | 30 | 24 | 21 | 25 | 21 | 18 | 20 | 17 | 15 |
| 10  | 46  | 35  | 27  | 23  | 42 | 32 | 26 | 21 | 27 | 22 | 19 | 23 | 19 | 16 | 18 | 16 | 14 |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 6446 | 6446 | 6446 |
| 5°  | 6447 | 6286 | 6295 |
| 10° | 6384 | 6127 | 6073 |
| 15° | 6294 | 5905 | 5780 |
| 20° | 6182 | 5639 | 5473 |
| 25° | 6054 | 5378 | 5144 |
| 30° | 5896 | 5092 | 4799 |
| 35° | 5736 | 4801 | 4432 |
| 40° | 5584 | 4502 | 4073 |
| 45° | 5400 | 4180 | 3698 |
| 50° | 5215 | 3838 | 3316 |
| 55° | 4999 | 3501 | 2920 |
| 60° | 4779 | 3115 | 2510 |
| 65° | 4515 | 2684 | 2066 |
| 70° | 4209 | 2186 | 1626 |
| 75° | 3786 | 1644 | 1185 |
| 80° | 3193 | 1065 | 799  |
| 85° | 2390 | 571  | 450  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5400 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 94.7   | 1.7       |
| 10°-20°   | 264.6  | 4.8       |
| 20°-30°   | 383.7  | 7.0       |
| 30°-40°   | 437.1  | 7.9       |
| 40°-50°   | 426.1  | 7.7       |
| 50°-60°   | 358.6  | 6.5       |
| 60°-70°   | 251.3  | 4.6       |
| 70°-80°   | 128.8  | 2.3       |
| 80°-90°   | 33.6   | 0.6       |
| 90°-100°  | 34.7   | 0.6       |
| 100°-110° | 230.4  | 4.2       |
| 110°-120° | 415.0  | 7.5       |
| 120°-130° | 532.7  | 9.7       |
| 130°-140° | 572.9  | 10.4      |
| 140°-150° | 537.7  | 9.7       |
| 150°-160° | 434.9  | 7.9       |
| 160°-170° | 281.3  | 5.1       |
| 170°-180° | 97.0   | 1.8       |
| 0°-30°    | 743.0  | 13.5      |
| 0°-40°    | 1180.1 | 21.4      |
| 0°-60°    | 1964.8 | 35.6      |
| 0°-90°    | 2378.5 | 43.1      |
| 90°-120°  | 680.1  | 12.3      |
| 90°-150°  | 2323.3 | 42.1      |
| 90°-180°  | 3136.0 | 56.9      |
| 0°-180°   | 5515.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1006 | 1006  | 1006 | 1006  | 1006 |      |
| 5°   | 1005 | 1002  | 993  | 1001  | 999  | 95   |
| 15°  | 955  | 951   | 935  | 934   | 927  | 269  |
| 25°  | 866  | 855   | 827  | 817   | 808  | 399  |
| 35°  | 746  | 728   | 694  | 672   | 661  | 467  |
| 45°  | 611  | 589   | 547  | 517   | 505  | 471  |
| 55°  | 464  | 439   | 397  | 362   | 350  | 414  |
| 65°  | 314  | 288   | 248  | 217   | 206  | 311  |
| 75°  | 167  | 144   | 112  | 96    | 90   | 177  |
| 85°  | 42   | 28    | 24   | 24    | 23   | 46   |
| 90°  | 1    | 7     | 12   | 16    | 18   | 5    |
| 95°  | 43   | 41    | 12   | 16    | 16   | 53   |
| 105° | 222  | 226   | 226  | 226   | 225  | 236  |
| 115° | 418  | 422   | 422  | 419   | 415  | 414  |
| 125° | 594  | 600   | 600  | 596   | 594  | 531  |
| 135° | 741  | 746   | 744  | 742   | 738  | 571  |
| 145° | 859  | 861   | 861  | 861   | 857  | 537  |
| 155° | 946  | 942   | 943  | 945   | 939  | 436  |
| 165° | 998  | 994   | 995  | 999   | 993  | 282  |
| 175° | 1021 | 1016  | 1017 | 1023  | 1016 | 97   |
| 180° | 1021 | 1021  | 1021 | 1021  | 1021 |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1006.1 | 1006.1 | 1006.1 | 1006.1 | 1006.1 |
| 2.5°   | 1008.4 | 1006.1 | 998.5  | 1006.1 | 1005.3 |
| 5°     | 1004.6 | 1001.5 | 993.2  | 1000.8 | 999.2  |
| 7.5°   | 997.0  | 993.9  | 984.0  | 990.1  | 988.6  |
| 10°    | 985.6  | 983.3  | 972.6  | 974.9  | 972.6  |
| 12.5°  | 972.6  | 969.6  | 954.4  | 955.9  | 952.1  |
| 15°    | 955.2  | 950.6  | 934.6  | 933.9  | 927.0  |
| 17.5°  | 936.9  | 930.1  | 911.1  | 907.3  | 902.0  |
| 20°    | 914.9  | 907.3  | 883.0  | 879.2  | 872.3  |
| 22.5°  | 890.6  | 883.0  | 857.1  | 848.8  | 843.5  |
| 25°    | 866.3  | 854.9  | 826.7  | 816.9  | 808.5  |
| 27.5°  | 838.9  | 825.2  | 795.6  | 782.7  | 774.3  |
| 30°    | 808.5  | 794.1  | 762.2  | 744.7  | 737.8  |
| 32.5°  | 778.9  | 761.4  | 728.7  | 709.0  | 699.8  |
| 35°    | 746.2  | 728.0  | 693.8  | 671.7  | 661.1  |
| 37.5°  | 715.0  | 693.0  | 658.1  | 632.2  | 621.6  |
| 40°    | 681.6  | 658.8  | 622.3  | 593.5  | 584.3  |
| 42.5°  | 646.7  | 623.1  | 585.1  | 557.7  | 543.3  |
| 45°    | 610.9  | 588.9  | 547.1  | 516.7  | 505.3  |
| 47.5°  | 573.7  | 550.9  | 509.1  | 478.0  | 465.0  |
| 50°    | 538.8  | 513.7  | 470.4  | 438.4  | 427.1  |
| 52.5°  | 500.8  | 474.9  | 434.6  | 399.7  | 388.3  |
| 55°    | 463.5  | 439.2  | 396.7  | 362.5  | 350.3  |
| 57.5°  | 425.5  | 399.7  | 358.7  | 325.2  | 314.6  |
| 60°    | 389.1  | 362.5  | 321.4  | 288.0  | 276.6  |
| 62.5°  | 350.3  | 325.2  | 283.4  | 253.0  | 241.6  |
| 65°    | 313.8  | 288.0  | 247.7  | 217.3  | 205.9  |
| 67.5°  | 277.4  | 251.5  | 212.8  | 183.9  | 174.8  |
| 70°    | 240.1  | 214.3  | 176.3  | 152.7  | 143.6  |
| 72.5°  | 203.6  | 178.6  | 143.6  | 122.3  | 117.0  |
| 75°    | 167.2  | 144.4  | 112.5  | 95.7   | 90.4   |
| 77.5°  | 129.9  | 111.7  | 85.1   | 72.2   | 67.6   |
| 80°    | 98.8   | 80.5   | 59.3   | 52.4   | 50.9   |
| 82.5°  | 68.4   | 52.4   | 39.5   | 37.2   | 36.5   |
| 85°    | 41.8   | 28.1   | 24.3   | 23.6   | 22.8   |
| 87.5°  | 17.5   | 12.2   | 11.4   | 11.4   | 10.6   |
| 90°    | 0.8    | 6.8    | 12.1   | 15.9   | 18.2   |
| 92.5°  | 14.4   | 7.6    | 12.1   | 15.9   | 16.7   |
| 95°    | 43.1   | 40.9   | 12.1   | 15.9   | 15.9   |
| 97.5°  | 81.0   | 85.5   | 13.6   | 15.1   | 15.9   |
| 100°   | 126.4  | 128.7  | 131.7  | 18.9   | 15.9   |
| 102.5° | 172.6  | 175.6  | 177.1  | 178.6  | 115.0  |
| 105°   | 222.5  | 225.6  | 225.6  | 225.6  | 224.8  |
| 107.5° | 274.0  | 274.0  | 275.5  | 276.3  | 273.2  |
| 110°   | 324.0  | 324.0  | 325.5  | 323.2  | 324.0  |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 370.9  | 373.2  | 373.9  | 370.9  | 369.4  |
| 115°   | 417.8  | 421.6  | 422.4  | 419.3  | 414.8  |
| 117.5° | 467.0  | 467.0  | 470.0  | 465.5  | 464.0  |
| 120°   | 512.4  | 511.7  | 513.9  | 512.4  | 508.6  |
| 122.5° | 552.5  | 556.3  | 557.1  | 555.6  | 551.0  |
| 125°   | 594.2  | 599.5  | 599.5  | 596.4  | 594.2  |
| 127.5° | 634.3  | 638.1  | 637.3  | 635.8  | 629.7  |
| 130°   | 670.6  | 674.4  | 675.2  | 672.9  | 669.1  |
| 132.5° | 706.9  | 711.5  | 709.2  | 709.2  | 705.4  |
| 135°   | 741.0  | 745.5  | 744.0  | 742.5  | 738.0  |
| 137.5° | 772.8  | 777.3  | 775.8  | 775.8  | 772.0  |
| 140°   | 803.8  | 805.3  | 804.6  | 806.1  | 801.6  |
| 142.5° | 831.8  | 832.6  | 834.1  | 834.1  | 829.6  |
| 145°   | 859.1  | 860.6  | 860.6  | 861.4  | 856.8  |
| 147.5° | 883.3  | 883.3  | 884.1  | 884.8  | 879.5  |
| 150°   | 906.0  | 904.5  | 906.0  | 907.5  | 901.5  |
| 152.5° | 928.0  | 924.2  | 925.7  | 927.2  | 921.9  |
| 155°   | 946.1  | 941.6  | 943.1  | 945.4  | 939.3  |
| 157.5° | 960.5  | 958.2  | 958.2  | 960.5  | 954.5  |
| 160°   | 975.6  | 971.1  | 971.9  | 974.9  | 968.8  |
| 162.5° | 987.8  | 983.2  | 984.0  | 988.5  | 981.7  |
| 165°   | 998.4  | 993.8  | 994.6  | 999.1  | 993.1  |
| 167.5° | 1006.7 | 1002.1 | 1002.9 | 1008.2 | 1001.4 |
| 170°   | 1013.5 | 1008.2 | 1009.0 | 1015.0 | 1008.2 |
| 172.5° | 1018.0 | 1012.7 | 1014.2 | 1019.5 | 1012.7 |
| 175°   | 1021.1 | 1016.5 | 1017.3 | 1023.3 | 1016.5 |
| 177.5° | 1023.3 | 1018.8 | 1019.5 | 1024.8 | 1018.8 |
| 180°   | 1021.1 | 1021.1 | 1021.1 | 1021.1 | 1021.1 |

(END OF REPORT)