

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: P1028184

Luminaire Tested: S125DIP-B610D850UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1028184  
REPORT IS A COMBINATION OF REPORTS P1002408 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/6/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125DIP-B610D850UB40-4F0-XX-W2A-F1  
Description: Define 5 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}  
Light Source: -  
Ballast/Driver: -

**Summary**

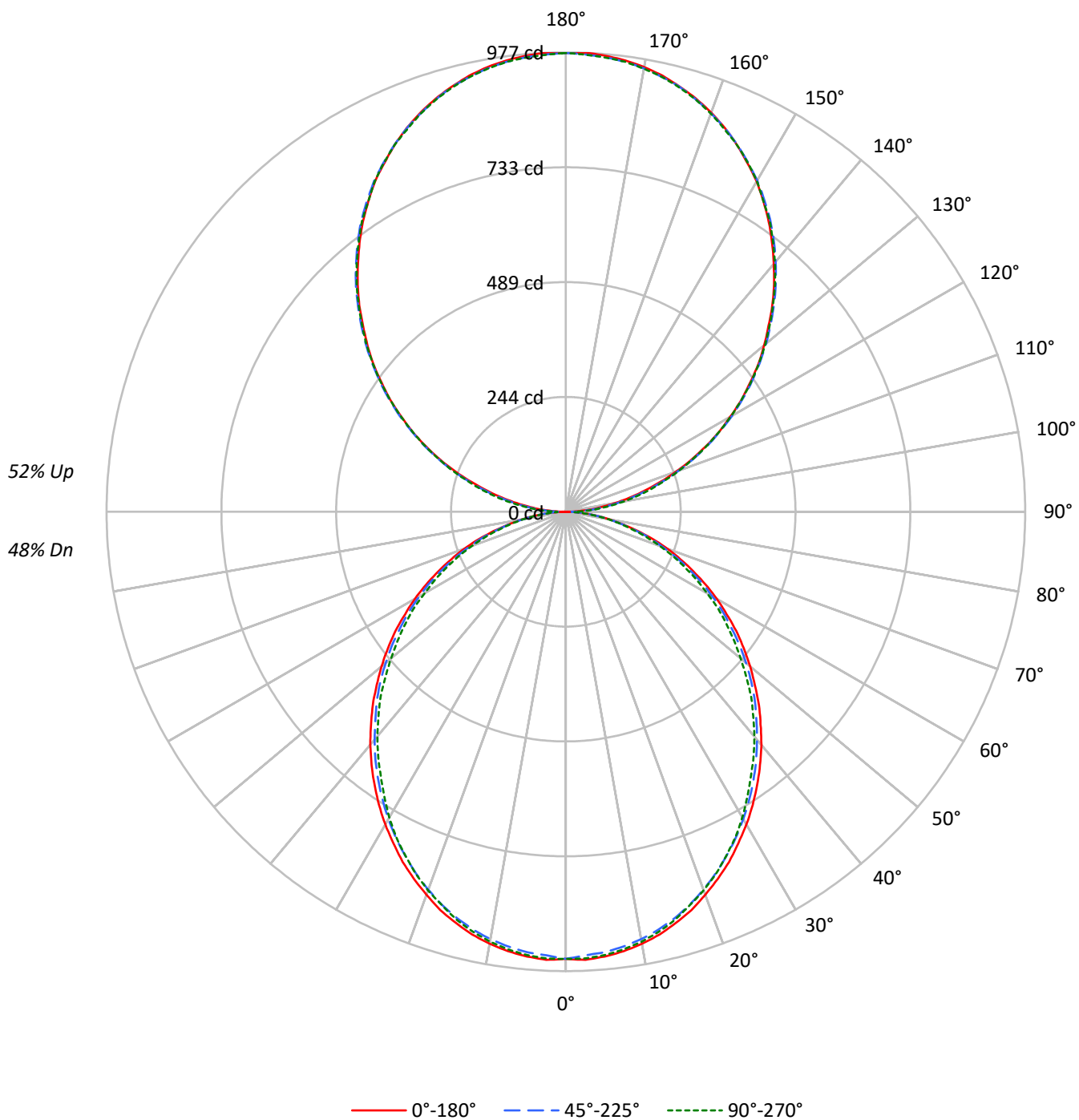
Lumens per Lamp: N/A  
Luminaire Lumens: 5200.0 lumens  
Efficiency: N/A  
Efficacy: 115.3 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

Input Watts (W): 45.1  
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   | 107 | 107 | 107 | 107 | 98 | 98 | 98 | 98 | 82 | 82 | 82 | 67 | 67 | 67 | 54 | 54 | 54 |
| 1   | 97  | 93  | 89  | 85  | 89 | 86 | 82 | 79 | 72 | 69 | 67 | 59 | 58 | 56 | 48 | 46 | 45 |
| 2   | 88  | 81  | 75  | 70  | 81 | 75 | 69 | 65 | 63 | 59 | 56 | 52 | 49 | 47 | 42 | 40 | 38 |
| 3   | 81  | 71  | 64  | 58  | 74 | 66 | 59 | 54 | 55 | 51 | 47 | 46 | 42 | 39 | 37 | 35 | 32 |
| 4   | 74  | 63  | 55  | 49  | 68 | 58 | 51 | 46 | 49 | 44 | 40 | 41 | 37 | 34 | 33 | 30 | 28 |
| 5   | 68  | 56  | 48  | 42  | 62 | 52 | 45 | 39 | 44 | 38 | 34 | 37 | 33 | 29 | 30 | 27 | 24 |
| 6   | 62  | 50  | 42  | 36  | 57 | 47 | 39 | 34 | 40 | 34 | 30 | 33 | 29 | 26 | 27 | 24 | 21 |
| 7   | 58  | 45  | 37  | 32  | 53 | 42 | 35 | 30 | 36 | 30 | 26 | 30 | 26 | 23 | 25 | 21 | 19 |
| 8   | 53  | 41  | 33  | 28  | 49 | 38 | 31 | 27 | 33 | 27 | 23 | 28 | 23 | 20 | 23 | 19 | 17 |
| 9   | 50  | 38  | 30  | 25  | 46 | 35 | 28 | 24 | 30 | 25 | 21 | 25 | 21 | 18 | 21 | 18 | 15 |
| 10  | 46  | 34  | 27  | 22  | 43 | 32 | 26 | 21 | 28 | 22 | 19 | 23 | 19 | 16 | 19 | 16 | 14 |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 6093 | 6093 | 6093 |
| 5°  | 6093 | 5951 | 5963 |
| 10° | 6043 | 5815 | 5796 |
| 15° | 5963 | 5652 | 5601 |
| 20° | 5856 | 5462 | 5377 |
| 25° | 5741 | 5256 | 5136 |
| 30° | 5602 | 5041 | 4883 |
| 35° | 5453 | 4816 | 4600 |
| 40° | 5300 | 4577 | 4348 |
| 45° | 5134 | 4345 | 4080 |
| 50° | 4952 | 4082 | 3767 |
| 55° | 4771 | 3791 | 3480 |
| 60° | 4556 | 3485 | 3146 |
| 65° | 4298 | 3131 | 2801 |
| 70° | 4035 | 2724 | 2403 |
| 75° | 3593 | 2243 | 1943 |
| 80° | 3063 | 1675 | 1429 |
| 85° | 2367 | 990  | 788  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5134 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 89.7   | 1.7       |
| 10°-20°   | 253.5  | 4.9       |
| 20°-30°   | 374.2  | 7.2       |
| 30°-40°   | 436.6  | 8.4       |
| 40°-50°   | 438.5  | 8.4       |
| 50°-60°   | 384.9  | 7.4       |
| 60°-70°   | 286.7  | 5.5       |
| 70°-80°   | 163.7  | 3.1       |
| 80°-90°   | 48.8   | 0.9       |
| 90°-100°  | 64.9   | 1.2       |
| 100°-110° | 192.8  | 3.7       |
| 110°-120° | 326.9  | 6.3       |
| 120°-130° | 430.4  | 8.3       |
| 130°-140° | 482.3  | 9.3       |
| 140°-150° | 472.7  | 9.1       |
| 150°-160° | 397.1  | 7.6       |
| 160°-170° | 264.0  | 5.1       |
| 170°-180° | 92.4   | 1.8       |
| 0°-30°    | 717.4  | 13.8      |
| 0°-40°    | 1154.0 | 22.2      |
| 0°-60°    | 1977.3 | 38.0      |
| 0°-90°    | 2476.5 | 47.6      |
| 90°-120°  | 584.6  | 11.2      |
| 90°-150°  | 1970.1 | 37.9      |
| 90°-180°  | 2723.0 | 52.4      |
| 0°-180°   | 5200.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0°   | 951 | 951   | 951 | 951   | 951 |      |
| 5°   | 949 | 948   | 940 | 947   | 946 | 90   |
| 15°  | 905 | 903   | 894 | 898   | 898 | 255  |
| 25°  | 822 | 818   | 808 | 810   | 807 | 378  |
| 35°  | 709 | 706   | 696 | 692   | 686 | 444  |
| 45°  | 581 | 578   | 569 | 560   | 558 | 447  |
| 55°  | 442 | 440   | 430 | 423   | 418 | 395  |
| 65°  | 299 | 297   | 289 | 282   | 279 | 296  |
| 75°  | 159 | 157   | 154 | 151   | 148 | 169  |
| 85°  | 41  | 42    | 42  | 41    | 40  | 45   |
| 90°  | 1   | 7     | 12  | 16    | 18  | 6    |
| 95°  | 49  | 51    | 58  | 64    | 65  | 52   |
| 105° | 173 | 177   | 182 | 186   | 188 | 185  |
| 115° | 327 | 330   | 332 | 331   | 330 | 324  |
| 125° | 478 | 482   | 483 | 482   | 481 | 428  |
| 135° | 621 | 626   | 626 | 626   | 624 | 479  |
| 145° | 753 | 756   | 758 | 758   | 756 | 470  |
| 155° | 861 | 861   | 862 | 865   | 861 | 397  |
| 165° | 936 | 935   | 936 | 939   | 934 | 264  |
| 175° | 974 | 970   | 970 | 975   | 970 | 93   |
| 180° | 976 | 976   | 976 | 976   | 976 |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 0°     | 950.9 | 950.9 | 950.9 | 950.9 | 950.9 |
| 2.5°   | 953.9 | 951.7 | 944.1 | 951.7 | 950.9 |
| 5°     | 949.4 | 947.9 | 940.4 | 947.2 | 946.4 |
| 7.5°   | 942.6 | 941.1 | 932.9 | 939.6 | 938.9 |
| 10°    | 932.9 | 931.4 | 923.1 | 929.1 | 928.3 |
| 12.5°  | 920.8 | 917.8 | 910.3 | 914.8 | 914.8 |
| 15°    | 905.0 | 902.8 | 894.5 | 898.3 | 898.3 |
| 17.5°  | 888.5 | 884.7 | 876.4 | 881.0 | 877.2 |
| 20°    | 866.7 | 865.2 | 855.4 | 860.6 | 856.9 |
| 22.5°  | 844.8 | 841.8 | 832.8 | 835.8 | 833.6 |
| 25°    | 821.5 | 817.8 | 808.0 | 809.5 | 807.2 |
| 27.5°  | 794.4 | 792.2 | 782.4 | 783.2 | 780.9 |
| 30°    | 768.1 | 765.8 | 754.6 | 753.1 | 750.8 |
| 32.5°  | 739.5 | 735.8 | 726.0 | 723.0 | 718.5 |
| 35°    | 709.4 | 706.4 | 695.9 | 692.1 | 686.1 |
| 37.5°  | 678.6 | 674.8 | 665.0 | 659.8 | 656.0 |
| 40°    | 647.0 | 643.2 | 632.7 | 625.9 | 623.7 |
| 42.5°  | 613.1 | 610.1 | 599.6 | 593.6 | 589.8 |
| 45°    | 580.8 | 577.8 | 568.7 | 559.7 | 557.5 |
| 47.5°  | 545.4 | 546.2 | 534.9 | 525.9 | 520.6 |
| 50°    | 511.6 | 509.3 | 500.3 | 490.5 | 485.2 |
| 52.5°  | 477.0 | 475.5 | 465.7 | 457.4 | 451.4 |
| 55°    | 442.4 | 440.1 | 429.6 | 422.8 | 417.5 |
| 57.5°  | 405.5 | 404.7 | 395.7 | 386.7 | 384.4 |
| 60°    | 370.9 | 367.9 | 359.6 | 352.1 | 346.8 |
| 62.5°  | 334.8 | 332.5 | 325.7 | 317.5 | 313.7 |
| 65°    | 298.7 | 297.2 | 288.9 | 282.1 | 279.1 |
| 67.5°  | 263.3 | 260.3 | 254.3 | 248.3 | 246.8 |
| 70°    | 230.2 | 226.4 | 219.7 | 215.2 | 212.2 |
| 72.5°  | 194.1 | 191.8 | 188.1 | 182.8 | 179.8 |
| 75°    | 158.7 | 157.2 | 153.5 | 151.2 | 148.2 |
| 77.5°  | 125.6 | 124.9 | 122.6 | 121.1 | 118.9 |
| 80°    | 94.8  | 94.8  | 93.3  | 92.5  | 91.0  |
| 82.5°  | 67.7  | 66.2  | 66.2  | 64.7  | 64.7  |
| 85°    | 41.4  | 42.1  | 42.1  | 41.4  | 39.9  |
| 87.5°  | 20.3  | 20.3  | 19.6  | 19.6  | 18.1  |
| 90°    | 0.8   | 6.8   | 12.2  | 15.9  | 18.2  |
| 92.5°  | 22.8  | 26.6  | 33.4  | 38.7  | 40.2  |
| 95°    | 49.4  | 50.9  | 58.5  | 63.8  | 65.3  |
| 97.5°  | 75.9  | 76.7  | 87.3  | 91.9  | 92.6  |
| 100°   | 106.3 | 106.3 | 116.2 | 123.0 | 124.5 |
| 102.5° | 139.0 | 142.8 | 146.6 | 154.2 | 156.4 |
| 105°   | 173.1 | 176.9 | 181.5 | 186.1 | 188.3 |
| 107.5° | 210.4 | 214.2 | 217.9 | 220.2 | 220.2 |
| 110°   | 249.1 | 252.9 | 255.2 | 257.4 | 256.7 |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 288.6 | 290.1 | 293.1 | 293.9 | 292.4 |
| 115°   | 327.3 | 330.3 | 331.9 | 331.1 | 330.3 |
| 117.5° | 366.8 | 367.6 | 369.1 | 369.8 | 366.8 |
| 120°   | 403.2 | 407.0 | 407.8 | 407.8 | 404.8 |
| 122.5° | 442.7 | 443.5 | 445.8 | 445.0 | 442.7 |
| 125°   | 477.7 | 482.2 | 483.0 | 481.5 | 480.7 |
| 127.5° | 516.4 | 518.7 | 519.4 | 518.7 | 517.2 |
| 130°   | 550.6 | 554.4 | 555.9 | 555.1 | 553.6 |
| 132.5° | 584.7 | 591.6 | 590.8 | 590.1 | 587.8 |
| 135°   | 621.2 | 625.8 | 626.5 | 626.5 | 623.5 |
| 137.5° | 655.4 | 659.9 | 661.4 | 662.2 | 658.4 |
| 140°   | 688.0 | 691.8 | 694.1 | 695.6 | 691.8 |
| 142.5° | 720.7 | 723.7 | 726.8 | 727.5 | 723.7 |
| 145°   | 752.6 | 755.6 | 757.9 | 757.9 | 755.6 |
| 147.5° | 782.2 | 784.5 | 786.0 | 788.3 | 782.2 |
| 150°   | 811.8 | 811.0 | 814.1 | 814.1 | 812.6 |
| 152.5° | 836.1 | 837.6 | 838.4 | 840.7 | 837.6 |
| 155°   | 861.2 | 861.2 | 861.9 | 865.0 | 861.2 |
| 157.5° | 883.9 | 882.4 | 883.2 | 886.2 | 880.9 |
| 160°   | 903.7 | 901.4 | 902.2 | 905.2 | 901.4 |
| 162.5° | 921.2 | 919.6 | 919.6 | 923.4 | 918.9 |
| 165°   | 936.3 | 934.8 | 935.6 | 938.6 | 934.1 |
| 167.5° | 950.0 | 947.0 | 947.0 | 951.5 | 947.0 |
| 170°   | 960.6 | 957.6 | 957.6 | 962.2 | 956.9 |
| 172.5° | 968.2 | 965.2 | 965.2 | 969.8 | 965.2 |
| 175°   | 973.6 | 970.5 | 970.5 | 975.1 | 969.8 |
| 177.5° | 977.4 | 974.3 | 973.6 | 978.1 | 972.8 |
| 180°   | 975.8 | 975.8 | 975.8 | 975.8 | 975.8 |

(END OF REPORT)