

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: P1028005

Luminaire Tested: S125DIP-B610D1090UB40-4F0-XX-W2A-F4

Issue Date: 5/6/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1028005  
REPORT IS A COMBINATION OF REPORTS P1002169 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/6/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125DIP-B610D1090UB40-4F0-XX-W2A-F4  
Description: Define 5 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}  
Light Source: -  
Ballast/Driver: -

**Summary**

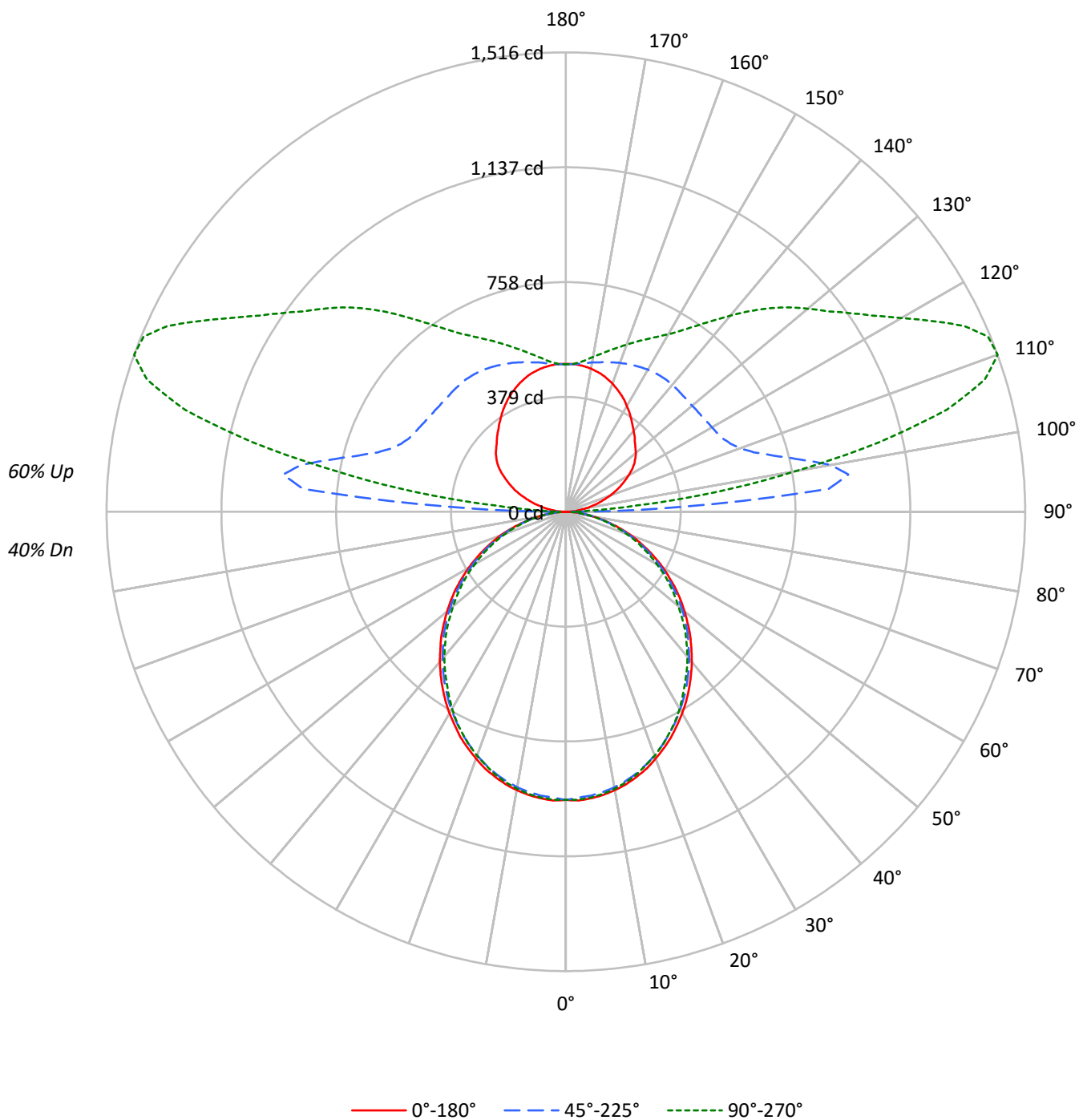
Lumens per Lamp: N/A  
Luminaire Lumens: 6145.5 lumens  
Efficiency: N/A  
Efficacy: 117.1 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

Input Watts (W): 52.5  
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   | 105 | 105 | 105 | 105 | 95 | 95 | 95 | 95 | 78 | 78 | 78 | 62 | 62 | 62 | 47 | 47 | 47 |
| 1   | 96  | 91  | 87  | 84  | 87 | 83 | 80 | 77 | 68 | 66 | 64 | 54 | 53 | 51 | 42 | 41 | 40 |
| 2   | 87  | 80  | 74  | 68  | 79 | 73 | 68 | 63 | 60 | 56 | 53 | 48 | 45 | 43 | 37 | 35 | 33 |
| 3   | 79  | 70  | 63  | 57  | 72 | 64 | 58 | 53 | 53 | 48 | 44 | 42 | 39 | 36 | 32 | 30 | 28 |
| 4   | 72  | 62  | 54  | 48  | 66 | 57 | 50 | 45 | 47 | 42 | 38 | 38 | 34 | 31 | 29 | 26 | 24 |
| 5   | 66  | 55  | 47  | 41  | 60 | 50 | 43 | 38 | 42 | 36 | 32 | 34 | 30 | 27 | 26 | 23 | 21 |
| 6   | 61  | 49  | 41  | 36  | 56 | 45 | 38 | 33 | 38 | 32 | 28 | 30 | 26 | 23 | 24 | 21 | 19 |
| 7   | 57  | 44  | 37  | 31  | 51 | 41 | 34 | 29 | 34 | 29 | 25 | 28 | 24 | 21 | 22 | 19 | 17 |
| 8   | 52  | 40  | 33  | 27  | 48 | 37 | 30 | 26 | 31 | 26 | 22 | 25 | 21 | 18 | 20 | 17 | 15 |
| 9   | 49  | 37  | 29  | 24  | 44 | 34 | 27 | 23 | 28 | 23 | 20 | 23 | 19 | 16 | 18 | 15 | 13 |
| 10  | 45  | 34  | 26  | 22  | 41 | 31 | 25 | 20 | 26 | 21 | 18 | 21 | 18 | 15 | 17 | 14 | 12 |

**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   | 1.5       |
| 10°-20°   | 253.5  | 4.1       |
| 20°-30°   | 374.2  | 6.1       |
| 30°-40°   | 436.6  | 7.1       |
| 40°-50°   | 438.5  | 7.1       |
| 50°-60°   | 384.9  | 6.3       |
| 60°-70°   | 286.7  | 4.7       |
| 70°-80°   | 163.7  | 2.7       |
| 80°-90°   | 49.2   | 0.8       |
| 90°-100°  | 367.0  | 6.0       |
| 100°-110° | 762.4  | 12.4      |
| 110°-120° | 712.1  | 11.6      |
| 120°-130° | 576.2  | 9.4       |
| 130°-140° | 463.0  | 7.5       |
| 140°-150° | 349.5  | 5.7       |
| 150°-160° | 246.1  | 4.0       |
| 160°-170° | 145.0  | 2.4       |
| 170°-180° | 47.2   | 0.8       |
| 0°-30°    | 717.4  | 11.7      |
| 0°-40°    | 1154.0 | 18.8      |
| 0°-60°    | 1977.3 | 32.2      |
| 0°-90°    | 2477.0 | 40.3      |
| 90°-120°  | 1841.6 | 30.0      |
| 90°-150°  | 3230.3 | 52.6      |
| 90°-180°  | 3669.0 | 59.7      |
| 0°-180°   | 6145.5 | 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   | 9     | 16  | 21    | 23   | 5    |
| 95°  | 32  | 96    | 871 | 395   | 231  | 34   |
| 105° | 111 | 155   | 712 | 1403  | 1302 | 117  |
| 115° | 198 | 239   | 572 | 1233  | 1450 | 195  |
| 125° | 275 | 322   | 548 | 981   | 1143 | 244  |
| 135° | 322 | 388   | 544 | 822   | 949  | 250  |
| 145° | 375 | 430   | 546 | 681   | 749  | 235  |
| 155° | 428 | 461   | 533 | 602   | 628  | 197  |
| 165° | 468 | 481   | 511 | 542   | 550  | 132  |
| 175° | 486 | 486   | 490 | 496   | 494  | 46   |
| 180° | 487 | 487   | 487 | 487   | 487  |      |

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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°    | 1.0   | 8.9   | 15.7  | 20.6   | 22.6   |
| 92.5°  | 14.7  | 80.6  | 392.1 | 104.6  | 72.7   |
| 95°    | 32.4  | 95.8  | 870.7 | 395.0  | 230.9  |
| 97.5°  | 50.1  | 103.7 | 940.5 | 713.4  | 506.1  |
| 100°   | 68.8  | 118.9 | 887.4 | 1008.3 | 766.5  |
| 102.5° | 89.4  | 136.2 | 794.0 | 1257.8 | 1057.4 |
| 105°   | 111.0 | 155.2 | 712.5 | 1402.8 | 1302.1 |
| 107.5° | 131.7 | 175.4 | 651.5 | 1443.6 | 1449.5 |
| 110°   | 154.3 | 196.6 | 611.3 | 1404.8 | 1516.3 |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5°  | 90°    |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 176.9 | 217.7 | 587.7 | 1323.7 | 1508.5 |
| 115°   | 198.5 | 239.3 | 571.9 | 1232.8 | 1450.5 |
| 117.5° | 218.2 | 261.4 | 563.1 | 1150.3 | 1363.0 |
| 120°   | 237.8 | 282.5 | 557.2 | 1081.0 | 1278.5 |
| 122.5° | 258.5 | 303.2 | 552.3 | 1025.5 | 1203.8 |
| 125°   | 275.2 | 322.4 | 548.4 | 980.8  | 1142.9 |
| 127.5° | 288.9 | 341.0 | 546.4 | 942.4  | 1086.9 |
| 130°   | 301.7 | 358.7 | 544.4 | 903.6  | 1042.7 |
| 132.5° | 311.5 | 374.4 | 544.4 | 861.8  | 998.4  |
| 135°   | 322.3 | 387.6 | 544.4 | 822.0  | 949.3  |
| 137.5° | 336.1 | 400.0 | 545.4 | 780.2  | 898.2  |
| 140°   | 347.9 | 410.3 | 546.4 | 742.0  | 844.2  |
| 142.5° | 361.6 | 420.1 | 547.4 | 709.0  | 794.0  |
| 145°   | 375.4 | 429.9 | 546.4 | 680.6  | 748.8  |
| 147.5° | 390.1 | 438.8 | 544.4 | 656.0  | 708.5  |
| 150°   | 402.9 | 446.6 | 541.5 | 635.8  | 676.1  |
| 152.5° | 416.7 | 454.5 | 537.5 | 618.6  | 650.6  |
| 155°   | 428.5 | 460.9 | 532.6 | 601.9  | 628.0  |
| 157.5° | 439.3 | 467.3 | 527.7 | 586.2  | 607.3  |
| 160°   | 450.1 | 472.2 | 522.8 | 570.4  | 586.7  |
| 162.5° | 458.9 | 477.1 | 516.9 | 556.2  | 568.0  |
| 165°   | 467.8 | 480.6 | 511.0 | 542.0  | 550.3  |
| 167.5° | 473.7 | 482.5 | 505.1 | 528.7  | 533.6  |
| 170°   | 479.6 | 485.0 | 500.2 | 515.9  | 518.9  |
| 172.5° | 483.5 | 486.0 | 494.3 | 505.6  | 505.1  |
| 175°   | 486.4 | 486.4 | 490.4 | 496.3  | 494.3  |
| 177.5° | 488.4 | 486.4 | 487.4 | 490.4  | 487.4  |
| 180°   | 487.4 | 487.4 | 487.4 | 487.4  | 487.4  |

(END OF REPORT)