

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: P1035409

Luminaire Tested: S125DIW-B610D1050UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1035409  
REPORT IS A COMBINATION OF REPORTS P1003773 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/6/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125DIW-B610D1050UB50-4F0-XX-W2A-F1  
Description: Define 5 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}  
Light Source: -  
Ballast/Driver: -

**Summary**

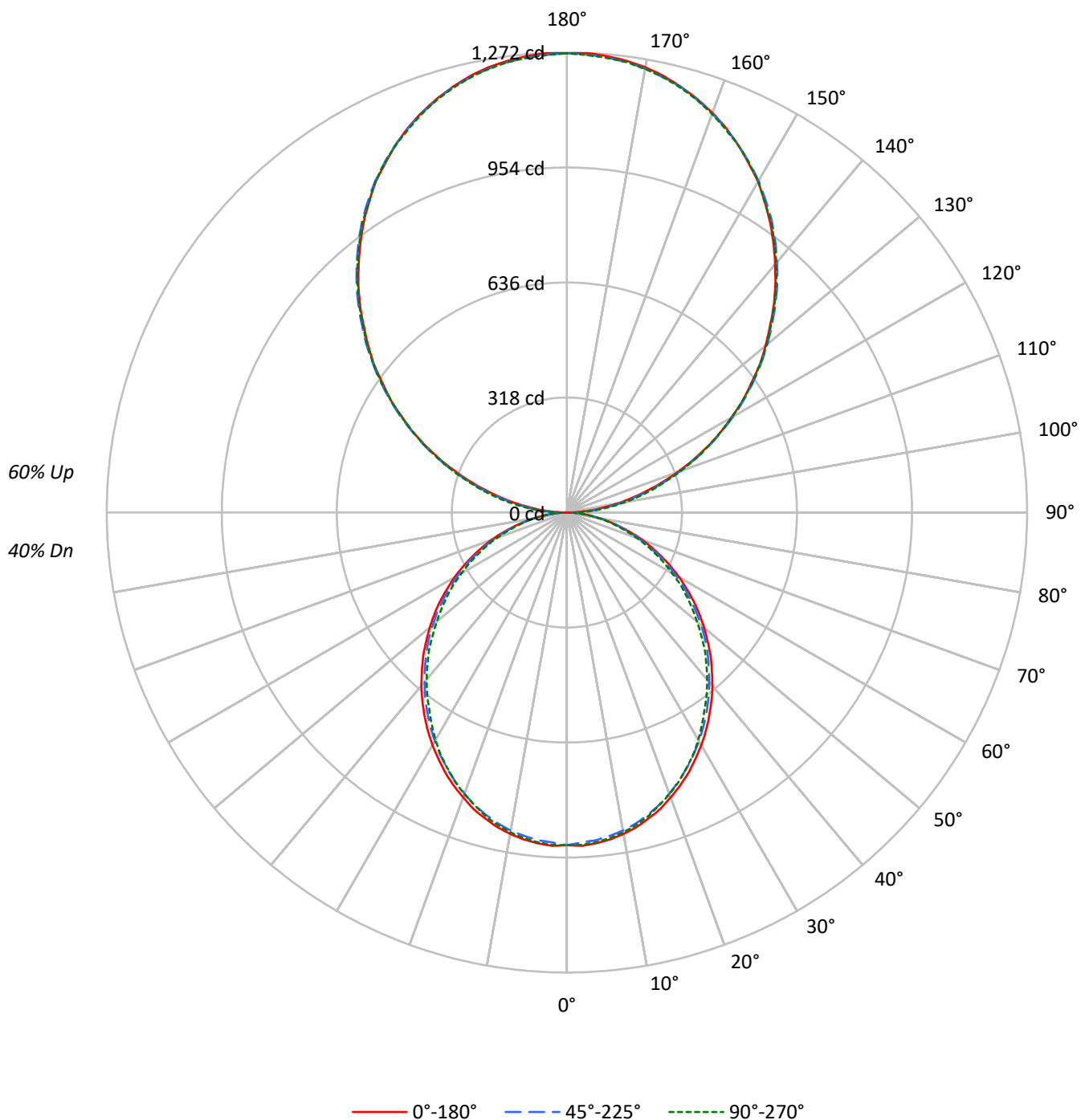
Lumens per Lamp: N/A  
Luminaire Lumens: 5940.0 lumens  
Efficiency: N/A  
Efficacy: 107.0 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

Input Watts (W): 55.5  
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 |    |  |    |    | 0  |
| 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  | 69  | 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   | 73  | 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°  | 5893 | 5893 | 5893 |
| 5°  | 5893 | 5756 | 5767 |
| 10° | 5845 | 5625 | 5607 |
| 15° | 5768 | 5466 | 5418 |
| 20° | 5664 | 5284 | 5200 |
| 25° | 5553 | 5084 | 4968 |
| 30° | 5419 | 4876 | 4723 |
| 35° | 5275 | 4658 | 4449 |
| 40° | 5127 | 4428 | 4206 |
| 45° | 4966 | 4203 | 3946 |
| 50° | 4789 | 3948 | 3645 |
| 55° | 4615 | 3667 | 3367 |
| 60° | 4406 | 3371 | 3044 |
| 65° | 4157 | 3028 | 2710 |
| 70° | 3904 | 2634 | 2324 |
| 75° | 3476 | 2168 | 1880 |
| 80° | 2963 | 1619 | 1381 |
| 85° | 2287 | 959  | 763  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4966 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 86.8   | 1.5       |
| 10°-20°   | 245.2  | 4.1       |
| 20°-30°   | 361.9  | 6.1       |
| 30°-40°   | 422.3  | 7.1       |
| 40°-50°   | 424.1  | 7.1       |
| 50°-60°   | 372.3  | 6.3       |
| 60°-70°   | 277.3  | 4.7       |
| 70°-80°   | 158.4  | 2.7       |
| 80°-90°   | 47.7   | 0.8       |
| 90°-100°  | 84.4   | 1.4       |
| 100°-110° | 250.9  | 4.2       |
| 110°-120° | 425.4  | 7.2       |
| 120°-130° | 560.1  | 9.4       |
| 130°-140° | 627.6  | 10.6      |
| 140°-150° | 615.2  | 10.4      |
| 150°-160° | 516.7  | 8.7       |
| 160°-170° | 343.5  | 5.8       |
| 170°-180° | 120.2  | 2.0       |
| 0°-30°    | 693.9  | 11.7      |
| 0°-40°    | 1116.2 | 18.8      |
| 0°-60°    | 1912.6 | 32.2      |
| 0°-90°    | 2396.0 | 40.3      |
| 90°-120°  | 760.7  | 12.8      |
| 90°-150°  | 2563.6 | 43.2      |
| 90°-180°  | 3544.0 | 59.7      |
| 0°-180°   | 5940.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 920  | 920   | 920  | 920   | 920  |      |
| 5°   | 918  | 917   | 910  | 916   | 915  | 87   |
| 15°  | 875  | 873   | 865  | 869   | 869  | 247  |
| 25°  | 795  | 791   | 782  | 783   | 781  | 366  |
| 35°  | 686  | 683   | 673  | 670   | 664  | 429  |
| 45°  | 562  | 559   | 550  | 541   | 539  | 433  |
| 55°  | 428  | 426   | 416  | 409   | 404  | 382  |
| 65°  | 289  | 287   | 279  | 273   | 270  | 287  |
| 75°  | 154  | 152   | 148  | 146   | 143  | 163  |
| 85°  | 40   | 41    | 41   | 40    | 39   | 44   |
| 90°  | 1    | 9     | 16   | 21    | 24   | 7    |
| 95°  | 64   | 66    | 76   | 83    | 85   | 67   |
| 105° | 225  | 230   | 236  | 242   | 245  | 240  |
| 115° | 426  | 430   | 432  | 431   | 430  | 421  |
| 125° | 622  | 628   | 628  | 626   | 626  | 557  |
| 135° | 808  | 814   | 815  | 815   | 811  | 623  |
| 145° | 979  | 983   | 986  | 986   | 983  | 612  |
| 155° | 1121 | 1121  | 1122 | 1126  | 1121 | 516  |
| 165° | 1218 | 1216  | 1218 | 1221  | 1216 | 344  |
| 175° | 1267 | 1263  | 1263 | 1269  | 1262 | 120  |
| 180° | 1270 | 1270  | 1270 | 1270  | 1270 |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 0°     | 919.8 | 919.8 | 919.8 | 919.8 | 919.8 |
| 2.5°   | 922.7 | 920.5 | 913.2 | 920.5 | 919.8 |
| 5°     | 918.3 | 916.9 | 909.6 | 916.2 | 915.4 |
| 7.5°   | 911.8 | 910.3 | 902.3 | 908.9 | 908.2 |
| 10°    | 902.3 | 900.9 | 892.9 | 898.7 | 898.0 |
| 12.5°  | 890.7 | 887.8 | 880.5 | 884.9 | 884.9 |
| 15°    | 875.4 | 873.2 | 865.2 | 868.9 | 868.9 |
| 17.5°  | 859.4 | 855.8 | 847.8 | 852.1 | 848.5 |
| 20°    | 838.3 | 836.8 | 827.4 | 832.5 | 828.8 |
| 22.5°  | 817.2 | 814.3 | 805.5 | 808.5 | 806.3 |
| 25°    | 794.6 | 791.0 | 781.5 | 783.0 | 780.8 |
| 27.5°  | 768.4 | 766.3 | 756.8 | 757.5 | 755.3 |
| 30°    | 743.0 | 740.8 | 729.9 | 728.4 | 726.2 |
| 32.5°  | 715.3 | 711.7 | 702.2 | 699.3 | 694.9 |
| 35°    | 686.2 | 683.3 | 673.1 | 669.5 | 663.6 |
| 37.5°  | 656.4 | 652.7 | 643.3 | 638.2 | 634.5 |
| 40°    | 625.8 | 622.2 | 612.0 | 605.4 | 603.3 |
| 42.5°  | 593.1 | 590.2 | 580.0 | 574.1 | 570.5 |
| 45°    | 561.8 | 558.9 | 550.1 | 541.4 | 539.2 |
| 47.5°  | 527.6 | 528.3 | 517.4 | 508.7 | 503.6 |
| 50°    | 494.8 | 492.6 | 483.9 | 474.5 | 469.4 |
| 52.5°  | 461.4 | 459.9 | 450.4 | 442.4 | 436.6 |
| 55°    | 427.9 | 425.7 | 415.5 | 409.0 | 403.9 |
| 57.5°  | 392.2 | 391.5 | 382.8 | 374.0 | 371.8 |
| 60°    | 358.7 | 355.8 | 347.8 | 340.6 | 335.5 |
| 62.5°  | 323.8 | 321.6 | 315.1 | 307.1 | 303.4 |
| 65°    | 288.9 | 287.4 | 279.4 | 272.9 | 270.0 |
| 67.5°  | 254.7 | 251.8 | 246.0 | 240.1 | 238.7 |
| 70°    | 222.7 | 219.0 | 212.5 | 208.1 | 205.2 |
| 72.5°  | 187.7 | 185.6 | 181.9 | 176.8 | 173.9 |
| 75°    | 153.5 | 152.1 | 148.4 | 146.3 | 143.4 |
| 77.5°  | 121.5 | 120.8 | 118.6 | 117.2 | 115.0 |
| 80°    | 91.7  | 91.7  | 90.2  | 89.5  | 88.0  |
| 82.5°  | 65.5  | 64.0  | 64.0  | 62.6  | 62.6  |
| 85°    | 40.0  | 40.8  | 40.8  | 40.0  | 38.6  |
| 87.5°  | 19.6  | 19.6  | 18.9  | 18.9  | 17.5  |
| 90°    | 1.0   | 8.9   | 15.8  | 20.8  | 23.7  |
| 92.5°  | 29.6  | 34.6  | 43.5  | 50.4  | 52.4  |
| 95°    | 64.2  | 66.2  | 76.1  | 83.0  | 85.0  |
| 97.5°  | 98.8  | 99.8  | 113.6 | 119.6 | 120.6 |
| 100°   | 138.3 | 138.3 | 151.2 | 160.1 | 162.1 |
| 102.5° | 180.8 | 185.8 | 190.7 | 200.6 | 203.6 |
| 105°   | 225.3 | 230.3 | 236.2 | 242.1 | 245.1 |
| 107.5° | 273.7 | 278.7 | 283.6 | 286.6 | 286.6 |
| 110°   | 324.1 | 329.1 | 332.0 | 335.0 | 334.0 |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 375.5  | 377.5  | 381.4  | 382.4  | 380.5  |
| 115°   | 425.9  | 429.9  | 431.8  | 430.9  | 429.9  |
| 117.5° | 477.3  | 478.3  | 480.3  | 481.3  | 477.3  |
| 120°   | 524.7  | 529.7  | 530.7  | 530.7  | 526.7  |
| 122.5° | 576.1  | 577.1  | 580.1  | 579.1  | 576.1  |
| 125°   | 621.6  | 627.5  | 628.5  | 626.5  | 625.5  |
| 127.5° | 672.0  | 674.9  | 675.9  | 674.9  | 673.0  |
| 130°   | 716.4  | 721.4  | 723.4  | 722.4  | 720.4  |
| 132.5° | 760.9  | 769.8  | 768.8  | 767.8  | 764.9  |
| 135°   | 808.4  | 814.3  | 815.3  | 815.3  | 811.3  |
| 137.5° | 852.8  | 858.7  | 860.7  | 861.7  | 856.8  |
| 140°   | 895.3  | 900.3  | 903.2  | 905.2  | 900.3  |
| 142.5° | 937.8  | 941.8  | 945.7  | 946.7  | 941.8  |
| 145°   | 979.3  | 983.3  | 986.2  | 986.2  | 983.3  |
| 147.5° | 1017.8 | 1020.8 | 1022.8 | 1025.8 | 1017.8 |
| 150°   | 1056.4 | 1055.4 | 1059.4 | 1059.4 | 1057.4 |
| 152.5° | 1088.0 | 1090.0 | 1091.0 | 1093.9 | 1090.0 |
| 155°   | 1120.6 | 1120.6 | 1121.6 | 1125.6 | 1120.6 |
| 157.5° | 1150.3 | 1148.3 | 1149.3 | 1153.2 | 1146.3 |
| 160°   | 1176.0 | 1173.0 | 1174.0 | 1177.9 | 1173.0 |
| 162.5° | 1198.7 | 1196.7 | 1196.7 | 1201.7 | 1195.7 |
| 165°   | 1218.5 | 1216.5 | 1217.5 | 1221.4 | 1215.5 |
| 167.5° | 1236.2 | 1232.3 | 1232.3 | 1238.2 | 1232.3 |
| 170°   | 1250.1 | 1246.1 | 1246.1 | 1252.1 | 1245.1 |
| 172.5° | 1260.0 | 1256.0 | 1256.0 | 1261.9 | 1256.0 |
| 175°   | 1266.9 | 1262.9 | 1262.9 | 1268.9 | 1261.9 |
| 177.5° | 1271.8 | 1267.9 | 1266.9 | 1272.8 | 1265.9 |
| 180°   | 1269.8 | 1269.8 | 1269.8 | 1269.8 | 1269.8 |

(END OF REPORT)