

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: P1035052

Luminaire Tested: S125DIW-B1090D470UB50-4F0-XX-W2A-D

Issue Date: 5/6/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1035052  
REPORT IS A COMBINATION OF REPORTS P1002977 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/6/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125DIW-B1090D470UB50-4F0-XX-W2A-D  
Description: Define 5 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}  
Light Source: -  
Ballast/Driver: -

**Summary**

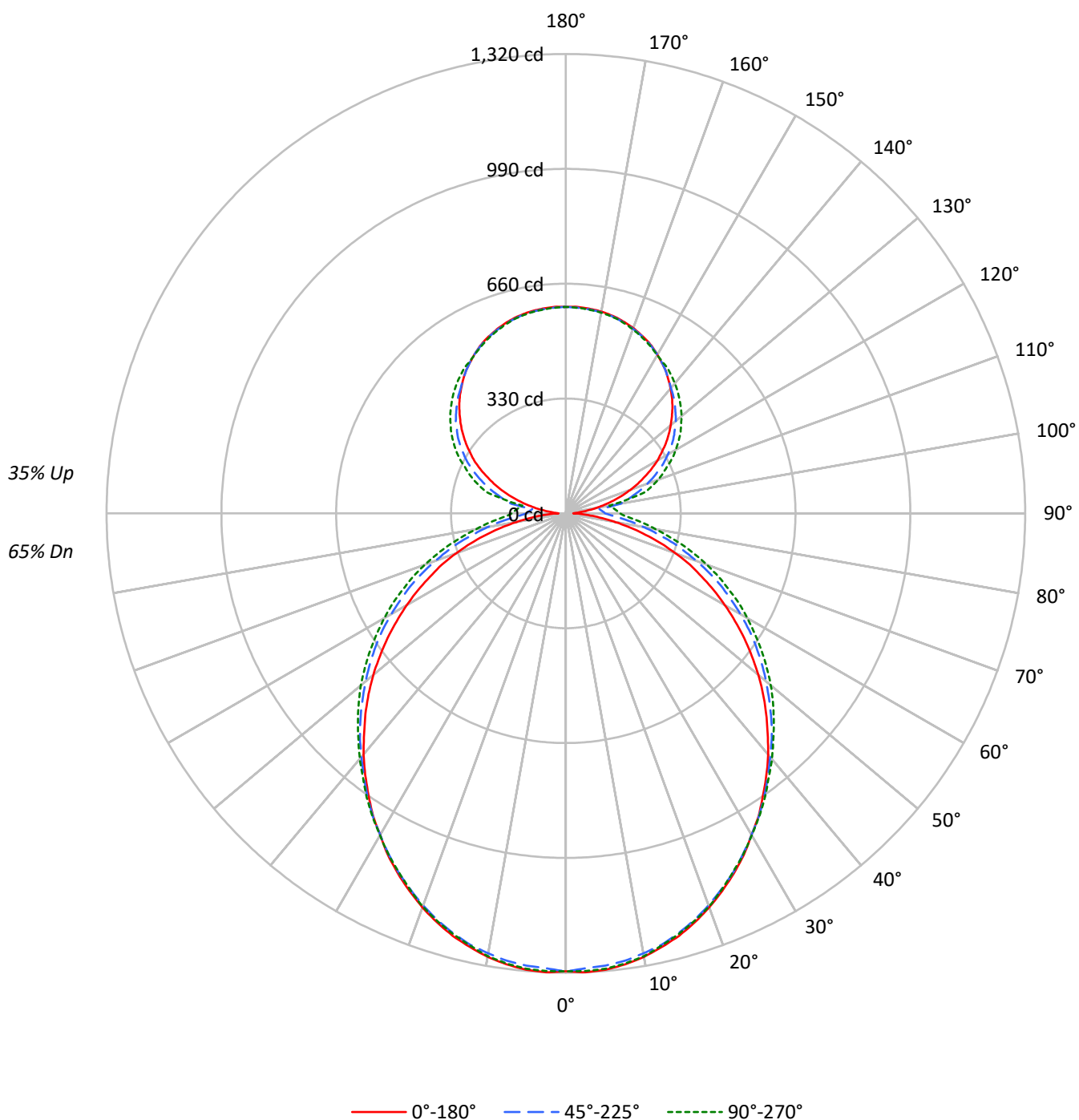
Lumens per Lamp: N/A  
Luminaire Lumens: 5900.0 lumens  
Efficiency: N/A  
Efficacy: 98.3 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')  
CIE Type: Semi-Direct

Input Watts (W): 60  
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 | 92 | 92 | 92 | 80 | 80 | 80 | 70 | 70 | 70 |
| 1   | 100 | 95  | 91  | 87  | 94  | 90  | 86  | 82  | 79 | 76 | 73 | 69 | 67 | 65 | 60 | 59 | 57 |
| 2   | 91  | 83  | 76  | 70  | 85  | 78  | 72  | 67  | 69 | 64 | 60 | 60 | 57 | 54 | 52 | 50 | 47 |
| 3   | 83  | 72  | 65  | 58  | 77  | 68  | 61  | 55  | 60 | 55 | 50 | 53 | 49 | 45 | 46 | 43 | 40 |
| 4   | 76  | 64  | 56  | 49  | 71  | 60  | 53  | 47  | 53 | 47 | 42 | 47 | 42 | 38 | 41 | 37 | 34 |
| 5   | 69  | 57  | 48  | 42  | 65  | 54  | 46  | 40  | 48 | 41 | 37 | 42 | 37 | 33 | 37 | 33 | 30 |
| 6   | 64  | 51  | 43  | 36  | 60  | 48  | 41  | 35  | 43 | 37 | 32 | 38 | 33 | 29 | 33 | 29 | 26 |
| 7   | 59  | 46  | 38  | 32  | 55  | 44  | 36  | 31  | 39 | 33 | 28 | 35 | 29 | 26 | 31 | 26 | 23 |
| 8   | 55  | 42  | 34  | 28  | 51  | 40  | 32  | 27  | 36 | 29 | 25 | 32 | 27 | 23 | 28 | 24 | 21 |
| 9   | 51  | 38  | 31  | 25  | 48  | 36  | 29  | 24  | 33 | 27 | 22 | 29 | 24 | 20 | 26 | 22 | 19 |
| 10  | 48  | 35  | 28  | 23  | 45  | 33  | 27  | 22  | 30 | 24 | 20 | 27 | 22 | 19 | 24 | 20 | 17 |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 8432 | 8432 | 8432 |
| 5°  | 8446 | 8256 | 8275 |
| 10° | 8382 | 8087 | 8064 |
| 15° | 8280 | 7891 | 7804 |
| 20° | 8143 | 7655 | 7545 |
| 25° | 7980 | 7403 | 7233 |
| 30° | 7782 | 7129 | 6949 |
| 35° | 7598 | 6875 | 6687 |
| 40° | 7410 | 6609 | 6423 |
| 45° | 7198 | 6378 | 6185 |
| 50° | 6994 | 6126 | 5971 |
| 55° | 6749 | 5888 | 5722 |
| 60° | 6481 | 5614 | 5467 |
| 65° | 6202 | 5327 | 5180 |
| 70° | 5881 | 4943 | 4881 |
| 75° | 5375 | 4562 | 4516 |
| 80° | 4712 | 4101 | 4112 |
| 85° | 4059 | 3732 | 3899 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 7198 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 124.5  | 2.1       |
| 10°-20°   | 353.5  | 6.0       |
| 20°-30°   | 525.7  | 8.9       |
| 30°-40°   | 622.6  | 10.6      |
| 40°-50°   | 643.7  | 10.9      |
| 50°-60°   | 593.0  | 10.1      |
| 60°-70°   | 479.3  | 8.1       |
| 70°-80°   | 320.7  | 5.4       |
| 80°-90°   | 166.7  | 2.8       |
| 90°-100°  | 113.5  | 1.9       |
| 100°-110° | 202.7  | 3.4       |
| 110°-120° | 287.2  | 4.9       |
| 120°-130° | 335.5  | 5.7       |
| 130°-140° | 344.2  | 5.8       |
| 140°-150° | 314.6  | 5.3       |
| 150°-160° | 252.7  | 4.3       |
| 160°-170° | 163.4  | 2.8       |
| 170°-180° | 56.4   | 1.0       |
| 0°-30°    | 1003.8 | 17.0      |
| 0°-40°    | 1626.4 | 27.6      |
| 0°-60°    | 2863.1 | 48.5      |
| 0°-90°    | 3829.8 | 64.9      |
| 90°-120°  | 603.4  | 10.2      |
| 90°-150°  | 1597.8 | 27.1      |
| 90°-180°  | 2070.0 | 35.1      |
| 0°-180°   | 5900.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1316 | 1316  | 1316 | 1316  | 1316 |      |
| 5°   | 1316 | 1314  | 1304 | 1315  | 1314 | 125  |
| 15°  | 1257 | 1258  | 1249 | 1257  | 1252 | 354  |
| 25°  | 1142 | 1146  | 1138 | 1143  | 1137 | 526  |
| 35°  | 988  | 997   | 994  | 997   | 997  | 619  |
| 45°  | 814  | 828   | 835  | 844   | 845  | 628  |
| 55°  | 626  | 646   | 667  | 681   | 686  | 559  |
| 65°  | 431  | 461   | 492  | 511   | 516  | 428  |
| 75°  | 237  | 271   | 312  | 338   | 344  | 252  |
| 85°  | 71   | 114   | 159  | 187   | 197  | 74   |
| 90°  | 21   | 66    | 113  | 145   | 155  | 16   |
| 95°  | 42   | 74    | 101  | 132   | 141  | 44   |
| 105° | 141  | 163   | 202  | 228   | 236  | 149  |
| 115° | 250  | 262   | 296  | 317   | 322  | 248  |
| 125° | 350  | 352   | 378  | 397   | 402  | 313  |
| 135° | 433  | 434   | 442  | 458   | 462  | 334  |
| 145° | 500  | 500   | 500  | 507   | 509  | 313  |
| 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°     | 1316.1 | 1316.1 | 1316.1 | 1316.1 | 1316.1 |
| 2.5°   | 1320.0 | 1317.4 | 1308.3 | 1317.4 | 1316.1 |
| 5°     | 1316.1 | 1313.5 | 1304.5 | 1314.8 | 1313.5 |
| 7.5°   | 1307.1 | 1305.8 | 1296.7 | 1305.8 | 1304.5 |
| 10°    | 1294.1 | 1294.1 | 1283.8 | 1292.9 | 1291.6 |
| 12.5°  | 1276.1 | 1277.4 | 1269.6 | 1276.1 | 1272.2 |
| 15°    | 1256.7 | 1258.0 | 1249.0 | 1256.7 | 1251.6 |
| 17.5°  | 1232.2 | 1234.8 | 1225.8 | 1232.2 | 1228.3 |
| 20°    | 1205.1 | 1207.7 | 1198.7 | 1202.5 | 1202.5 |
| 22.5°  | 1174.2 | 1179.3 | 1169.0 | 1174.2 | 1170.3 |
| 25°    | 1141.9 | 1145.8 | 1138.0 | 1143.2 | 1136.7 |
| 27.5°  | 1107.1 | 1112.2 | 1103.2 | 1107.1 | 1104.5 |
| 30°    | 1067.1 | 1074.8 | 1067.1 | 1069.6 | 1068.4 |
| 32.5°  | 1030.9 | 1037.4 | 1032.2 | 1034.8 | 1033.5 |
| 35°    | 988.4  | 997.4  | 993.5  | 997.4  | 997.4  |
| 37.5°  | 947.1  | 954.8  | 953.5  | 958.7  | 957.4  |
| 40°    | 904.5  | 914.8  | 913.5  | 918.7  | 921.3  |
| 42.5°  | 858.0  | 872.2  | 876.1  | 882.6  | 882.6  |
| 45°    | 814.2  | 828.4  | 834.8  | 843.8  | 845.1  |
| 47.5°  | 769.0  | 781.9  | 792.2  | 805.1  | 807.7  |
| 50°    | 722.6  | 736.7  | 750.9  | 765.1  | 769.0  |
| 52.5°  | 673.5  | 691.6  | 709.7  | 725.1  | 727.7  |
| 55°    | 625.8  | 646.4  | 667.1  | 681.3  | 686.4  |
| 57.5°  | 576.8  | 601.3  | 624.5  | 640.0  | 643.8  |
| 60°    | 527.7  | 553.5  | 579.3  | 598.7  | 602.6  |
| 62.5°  | 480.0  | 505.8  | 534.2  | 556.1  | 561.3  |
| 65°    | 431.0  | 460.6  | 491.6  | 511.0  | 516.1  |
| 67.5°  | 385.8  | 414.2  | 445.1  | 468.4  | 474.8  |
| 70°    | 335.5  | 365.1  | 398.7  | 423.2  | 431.0  |
| 72.5°  | 286.4  | 317.4  | 354.8  | 381.9  | 387.1  |
| 75°    | 237.4  | 271.0  | 312.2  | 338.1  | 344.5  |
| 77.5°  | 189.7  | 228.4  | 267.1  | 295.5  | 300.6  |
| 80°    | 145.8  | 184.5  | 228.4  | 256.8  | 261.9  |
| 82.5°  | 105.8  | 147.1  | 192.3  | 219.3  | 229.7  |
| 85°    | 71.0   | 113.5  | 158.7  | 187.1  | 197.4  |
| 87.5°  | 45.2   | 86.4   | 130.3  | 160.0  | 169.0  |
| 90°    | 21.0   | 65.9   | 112.8  | 144.7  | 155.1  |
| 92.5°  | 26.5   | 59.9   | 107.6  | 138.2  | 147.8  |
| 95°    | 41.9   | 74.0   | 101.2  | 131.8  | 140.8  |
| 97.5°  | 62.5   | 96.2   | 96.9   | 124.9  | 134.4  |
| 100°   | 87.6   | 116.1  | 159.1  | 120.7  | 126.6  |
| 102.5° | 113.2  | 139.4  | 180.3  | 207.0  | 177.8  |
| 105°   | 140.9  | 163.3  | 202.0  | 227.8  | 236.4  |
| 107.5° | 169.5  | 187.6  | 225.9  | 252.1  | 258.1  |
| 110°   | 197.2  | 212.7  | 249.7  | 273.0  | 282.4  |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 224.5 | 237.4 | 272.7 | 294.2 | 302.3 |
| 115°   | 250.4 | 261.7 | 295.7 | 317.1 | 322.3 |
| 117.5° | 277.8 | 284.2 | 318.3 | 337.5 | 345.6 |
| 120°   | 304.2 | 307.5 | 338.6 | 359.6 | 365.2 |
| 122.5° | 326.2 | 329.7 | 358.4 | 378.3 | 383.3 |
| 125°   | 350.4 | 352.2 | 378.0 | 396.8 | 402.0 |
| 127.5° | 372.4 | 373.3 | 394.7 | 413.3 | 417.4 |
| 130°   | 393.5 | 394.4 | 412.8 | 429.6 | 433.9 |
| 132.5° | 413.3 | 415.9 | 427.5 | 445.5 | 448.5 |
| 135°   | 433.1 | 434.4 | 442.5 | 458.5 | 462.2 |
| 137.5° | 451.6 | 452.9 | 457.2 | 472.6 | 475.6 |
| 140°   | 468.3 | 469.2 | 470.0 | 485.1 | 487.6 |
| 142.5° | 484.5 | 483.7 | 484.6 | 496.2 | 498.7 |
| 145°   | 500.4 | 500.0 | 500.0 | 506.9 | 509.4 |
| 147.5° | 513.2 | 513.2 | 513.6 | 516.6 | 516.2 |
| 150°   | 526.3 | 525.5 | 526.3 | 527.2 | 525.0 |
| 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)