

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: P1034364

Luminaire Tested: S125DIW-B1090D470UB2750-4F0-XX-W2A-D1\_5000K

Issue Date: 5/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1034364  
REPORT IS A COMBINATION OF REPORTS P1002933 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125DIW-B1090D470UB2750-4F0-XX-W2A-D1\_5000K  
Description: Define 5 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}  
Light Source: -  
Ballast/Driver: -

**Summary**

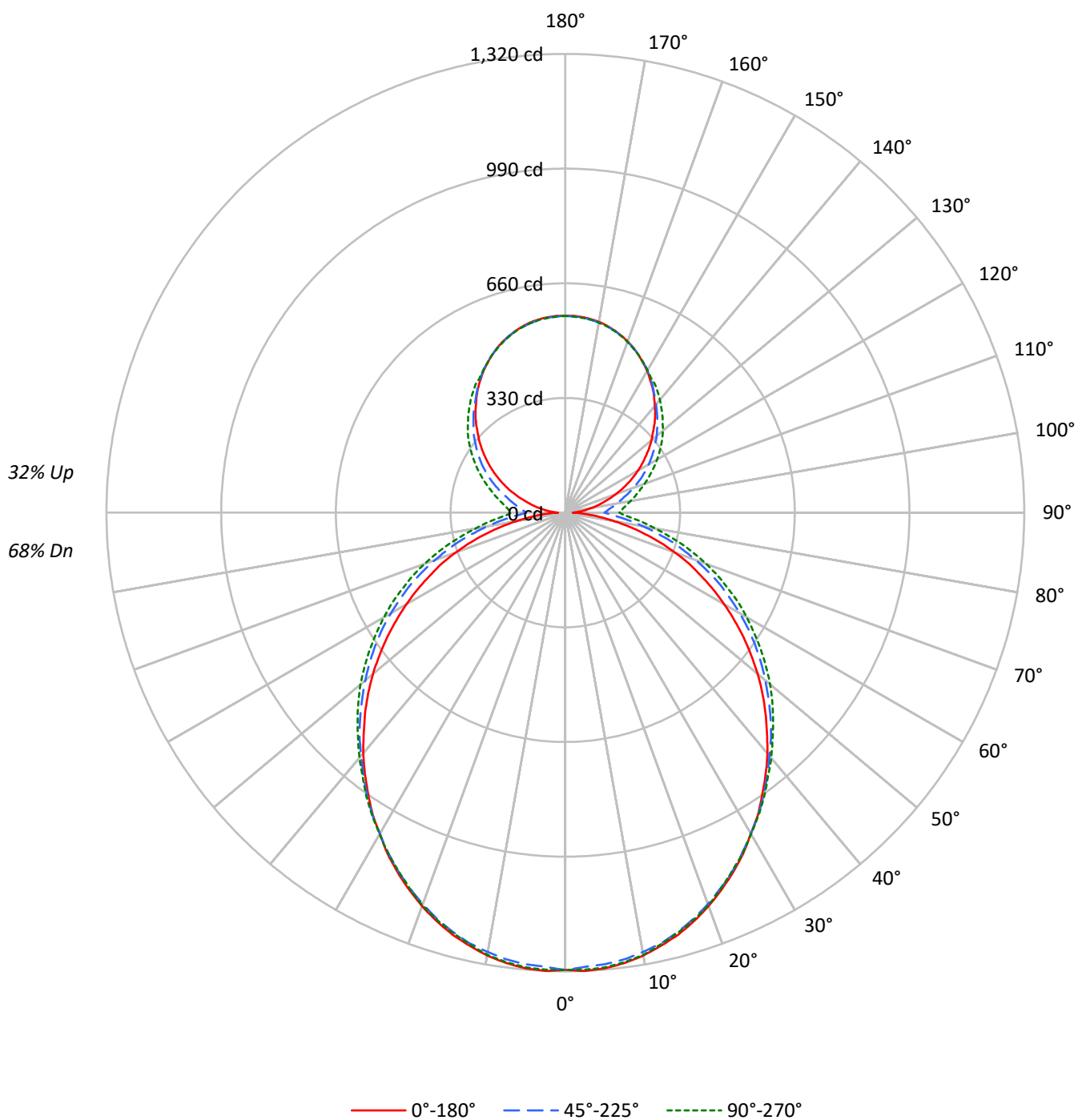
Lumens per Lamp: N/A  
Luminaire Lumens: 5658.0 lumens  
Efficiency: N/A  
Efficacy: 94.3 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')  
CIE Type: Semi-Direct

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 |
| RCR |     |     |     |     |     |     |     |     |    |    |    |  |    |    |    |  |    |
| 0   | 111 | 111 | 111 | 111 | 105 | 105 | 105 | 105 | 93 | 93 | 93 |  | 82 | 82 | 82 |  | 72 |
| 1   | 101 | 96  | 91  | 88  | 95  | 90  | 87  | 83  | 80 | 77 | 75 |  | 71 | 69 | 67 |  | 62 |
| 2   | 91  | 83  | 76  | 71  | 86  | 79  | 73  | 67  | 70 | 65 | 61 |  | 62 | 58 | 55 |  | 54 |
| 3   | 83  | 73  | 65  | 59  | 78  | 69  | 62  | 56  | 61 | 56 | 51 |  | 54 | 50 | 46 |  | 48 |
| 4   | 76  | 64  | 56  | 49  | 71  | 61  | 53  | 47  | 54 | 48 | 43 |  | 48 | 43 | 39 |  | 43 |
| 5   | 70  | 57  | 49  | 42  | 65  | 54  | 46  | 41  | 49 | 42 | 37 |  | 43 | 38 | 34 |  | 38 |
| 6   | 64  | 51  | 43  | 37  | 60  | 49  | 41  | 35  | 44 | 37 | 32 |  | 39 | 34 | 30 |  | 35 |
| 7   | 59  | 46  | 38  | 32  | 56  | 44  | 36  | 31  | 40 | 33 | 29 |  | 36 | 30 | 26 |  | 32 |
| 8   | 55  | 42  | 34  | 28  | 52  | 40  | 33  | 27  | 36 | 30 | 25 |  | 33 | 27 | 23 |  | 29 |
| 9   | 51  | 39  | 31  | 25  | 48  | 37  | 30  | 25  | 33 | 27 | 23 |  | 30 | 25 | 21 |  | 27 |
| 10  | 48  | 35  | 28  | 23  | 45  | 34  | 27  | 22  | 31 | 25 | 21 |  | 28 | 23 | 19 |  | 25 |

**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  | 2.2       |
| 10°-20°   | 353.5  | 6.2       |
| 20°-30°   | 525.7  | 9.3       |
| 30°-40°   | 622.6  | 11.0      |
| 40°-50°   | 643.7  | 11.4      |
| 50°-60°   | 593.0  | 10.5      |
| 60°-70°   | 479.3  | 8.5       |
| 70°-80°   | 320.7  | 5.7       |
| 80°-90°   | 166.7  | 2.9       |
| 90°-100°  | 131.0  | 2.3       |
| 100°-110° | 180.7  | 3.2       |
| 110°-120° | 235.8  | 4.2       |
| 120°-130° | 275.8  | 4.9       |
| 130°-140° | 291.2  | 5.1       |
| 140°-150° | 276.5  | 4.9       |
| 150°-160° | 230.4  | 4.1       |
| 160°-170° | 153.1  | 2.7       |
| 170°-180° | 53.6   | 0.9       |
| 0°-30°    | 1003.8 | 17.7      |
| 0°-40°    | 1626.4 | 28.7      |
| 0°-60°    | 2863.1 | 50.6      |
| 0°-90°    | 3829.8 | 67.7      |
| 90°-120°  | 547.5  | 9.7       |
| 90°-150°  | 1391.1 | 24.6      |
| 90°-180°  | 1828.0 | 32.3      |
| 0°-180°   | 5658.0 | 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°  | 45   | 80    | 128  | 160   | 170  | 43   |
| 105° | 112  | 135   | 176  | 205   | 215  | 119  |
| 115° | 198  | 208   | 243  | 266   | 273  | 196  |
| 125° | 282  | 284   | 310  | 330   | 336  | 253  |
| 135° | 363  | 364   | 374  | 391   | 395  | 280  |
| 145° | 438  | 438   | 440  | 446   | 450  | 273  |
| 155° | 500  | 500   | 500  | 502   | 500  | 230  |
| 165° | 543  | 542   | 543  | 545   | 542  | 153  |
| 175° | 565  | 563   | 563  | 566   | 563  | 54   |
| 180° | 566  | 566   | 566  | 566   | 566  |      |

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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  | 144.8  | 155.1  |
| 92.5°  | 31.3   | 70.9   | 120.0  | 151.5  | 161.5  |
| 95°    | 45.4   | 79.8   | 128.1  | 159.6  | 169.5  |
| 97.5°  | 59.6   | 91.0   | 139.7  | 169.4  | 179.0  |
| 100°   | 75.9   | 103.0  | 150.0  | 181.1  | 189.7  |
| 102.5° | 93.5   | 120.2  | 162.4  | 192.6  | 201.8  |
| 105°   | 112.1  | 135.0  | 176.3  | 204.7  | 215.1  |
| 107.5° | 132.3  | 152.6  | 192.3  | 219.4  | 227.2  |
| 110°   | 153.5  | 171.2  | 208.6  | 234.6  | 243.1  |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 176.4 | 188.9 | 225.6 | 249.2 | 257.3 |
| 115°   | 197.6 | 208.5 | 242.8 | 265.6 | 273.0 |
| 117.5° | 219.3 | 226.1 | 259.3 | 281.7 | 288.9 |
| 120°   | 240.5 | 246.5 | 276.6 | 298.5 | 304.5 |
| 122.5° | 262.1 | 263.8 | 293.4 | 313.7 | 320.1 |
| 125°   | 282.3 | 283.7 | 309.9 | 329.6 | 335.7 |
| 127.5° | 303.5 | 303.5 | 325.9 | 344.8 | 351.6 |
| 130°   | 323.3 | 324.2 | 343.1 | 360.8 | 366.4 |
| 132.5° | 341.9 | 345.8 | 358.3 | 375.8 | 379.7 |
| 135°   | 363.0 | 364.4 | 373.8 | 390.6 | 395.2 |
| 137.5° | 382.8 | 384.2 | 390.3 | 406.1 | 409.1 |
| 140°   | 400.5 | 402.7 | 405.3 | 420.4 | 423.3 |
| 142.5° | 419.4 | 419.9 | 421.6 | 433.7 | 436.7 |
| 145°   | 437.9 | 438.4 | 439.7 | 446.2 | 450.0 |
| 147.5° | 453.8 | 455.1 | 456.0 | 459.9 | 459.0 |
| 150°   | 471.0 | 470.6 | 472.3 | 472.3 | 472.7 |
| 152.5° | 485.1 | 486.0 | 486.4 | 487.7 | 486.0 |
| 155°   | 499.6 | 499.6 | 500.1 | 501.8 | 499.6 |
| 157.5° | 512.9 | 512.0 | 512.4 | 514.2 | 511.1 |
| 160°   | 524.3 | 523.0 | 523.4 | 525.2 | 523.0 |
| 162.5° | 534.4 | 533.6 | 533.6 | 535.8 | 533.1 |
| 165°   | 543.3 | 542.4 | 542.8 | 544.6 | 541.9 |
| 167.5° | 551.2 | 549.4 | 549.4 | 552.1 | 549.4 |
| 170°   | 557.4 | 555.6 | 555.6 | 558.2 | 555.1 |
| 172.5° | 561.8 | 560.0 | 560.0 | 562.6 | 560.0 |
| 175°   | 564.8 | 563.1 | 563.1 | 565.7 | 562.6 |
| 177.5° | 567.0 | 565.3 | 564.8 | 567.5 | 564.4 |
| 180°   | 566.2 | 566.2 | 566.2 | 566.2 | 566.2 |

(END OF REPORT)