

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: P1034367

Luminaire Tested: S125DIW-B1090D470UB2750-4F0-XX-W2A-D\_3500K

Issue Date: 5/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1034367  
REPORT IS A COMBINATION OF REPORTS P1002937 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-D\_3500K  
Description: Define 5 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}  
Light Source: -  
Ballast/Driver: -

**Summary**

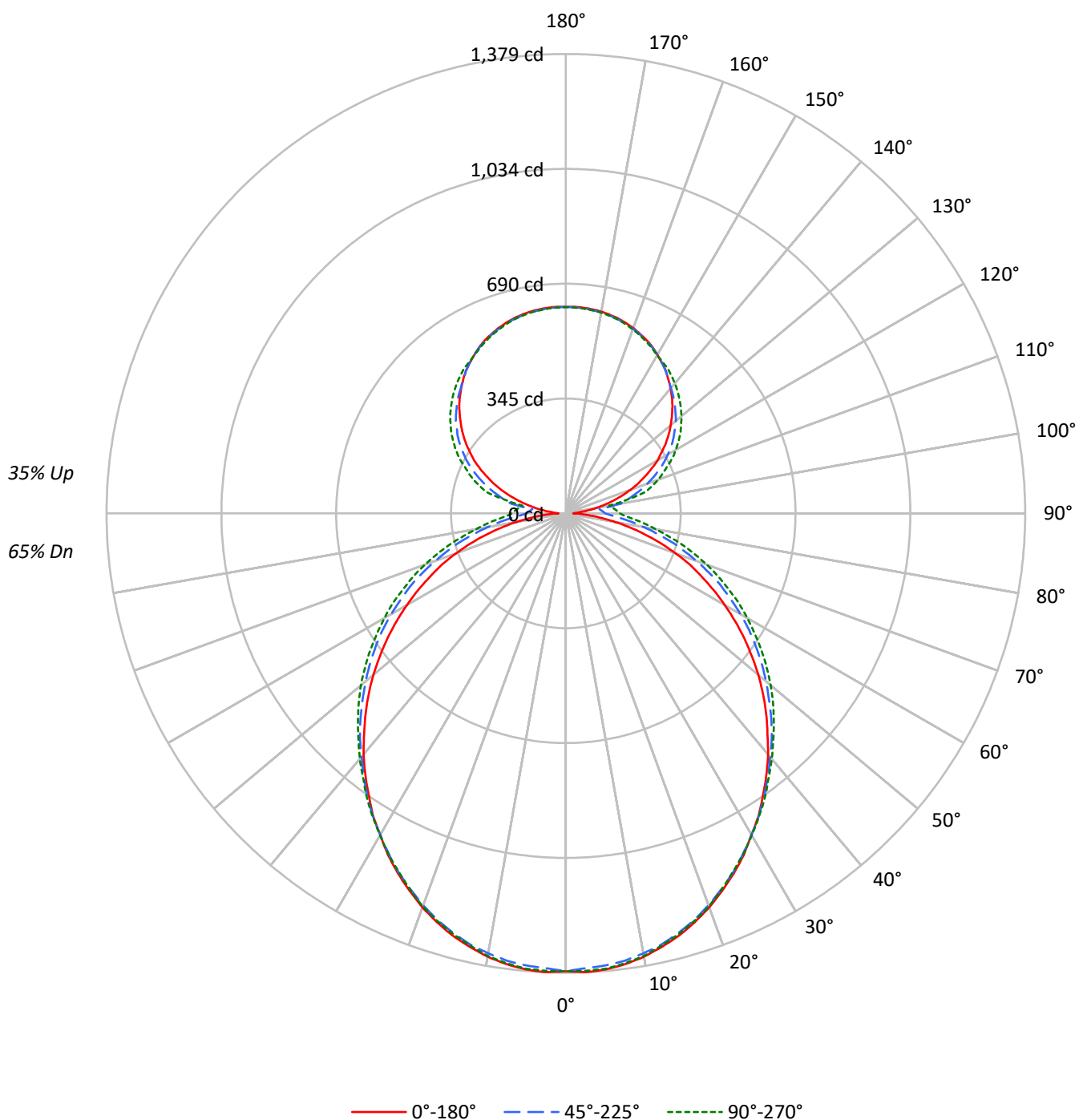
Lumens per Lamp: N/A  
Luminaire Lumens: 6162.0 lumens  
Efficiency: N/A  
Efficacy: 102.7 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')  
CIE Type: Semi-Direct

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 |    |  |    |    | 0  |
| 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°  | 8807 | 8807 | 8807 |
| 5°  | 8821 | 8622 | 8643 |
| 10° | 8755 | 8446 | 8422 |
| 15° | 8648 | 8241 | 8150 |
| 20° | 8504 | 7994 | 7880 |
| 25° | 8334 | 7731 | 7554 |
| 30° | 8127 | 7445 | 7257 |
| 35° | 7935 | 7180 | 6984 |
| 40° | 7738 | 6902 | 6708 |
| 45° | 7517 | 6661 | 6460 |
| 50° | 7304 | 6399 | 6236 |
| 55° | 7049 | 6149 | 5976 |
| 60° | 6770 | 5864 | 5709 |
| 65° | 6477 | 5564 | 5409 |
| 70° | 6142 | 5162 | 5097 |
| 75° | 5615 | 4765 | 4716 |
| 80° | 4922 | 4282 | 4295 |
| 85° | 4237 | 3899 | 4073 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 7517 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 130.1  | 2.1       |
| 10°-20°   | 369.2  | 6.0       |
| 20°-30°   | 549.1  | 8.9       |
| 30°-40°   | 650.3  | 10.6      |
| 40°-50°   | 672.3  | 10.9      |
| 50°-60°   | 619.3  | 10.1      |
| 60°-70°   | 500.6  | 8.1       |
| 70°-80°   | 335.0  | 5.4       |
| 80°-90°   | 174.1  | 2.8       |
| 90°-100°  | 118.5  | 1.9       |
| 100°-110° | 211.7  | 3.4       |
| 110°-120° | 299.9  | 4.9       |
| 120°-130° | 350.4  | 5.7       |
| 130°-140° | 359.5  | 5.8       |
| 140°-150° | 328.6  | 5.3       |
| 150°-160° | 263.9  | 4.3       |
| 160°-170° | 170.7  | 2.8       |
| 170°-180° | 58.9   | 1.0       |
| 0°-30°    | 1048.4 | 17.0      |
| 0°-40°    | 1698.6 | 27.6      |
| 0°-60°    | 2990.2 | 48.5      |
| 0°-90°    | 3999.8 | 64.9      |
| 90°-120°  | 630.2  | 10.2      |
| 90°-150°  | 1668.7 | 27.1      |
| 90°-180°  | 2162.0 | 35.1      |
| 0°-180°   | 6162.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1374 | 1374  | 1374 | 1374  | 1374 |      |
| 5°   | 1374 | 1372  | 1362 | 1373  | 1372 | 130  |
| 15°  | 1312 | 1314  | 1304 | 1312  | 1307 | 370  |
| 25°  | 1193 | 1197  | 1188 | 1194  | 1187 | 549  |
| 35°  | 1032 | 1042  | 1038 | 1042  | 1042 | 646  |
| 45°  | 850  | 865   | 872  | 881   | 883  | 656  |
| 55°  | 654  | 675   | 697  | 712   | 717  | 584  |
| 65°  | 450  | 481   | 513  | 534   | 539  | 447  |
| 75°  | 248  | 283   | 326  | 353   | 360  | 263  |
| 85°  | 74   | 119   | 166  | 195   | 206  | 77   |
| 90°  | 22   | 69    | 118  | 151   | 162  | 16   |
| 95°  | 44   | 77    | 106  | 138   | 147  | 46   |
| 105° | 147  | 171   | 211  | 238   | 247  | 156  |
| 115° | 262  | 273   | 309  | 331   | 337  | 259  |
| 125° | 366  | 368   | 395  | 414   | 420  | 327  |
| 135° | 452  | 454   | 462  | 479   | 483  | 349  |
| 145° | 523  | 522   | 522  | 529   | 532  | 327  |
| 155° | 574  | 571   | 572  | 574   | 570  | 265  |
| 165° | 606  | 603   | 604  | 606   | 602  | 171  |
| 175° | 620  | 617   | 617  | 621   | 617  | 59   |
| 180° | 620  | 620   | 620  | 620   | 620  |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1374.5 | 1374.5 | 1374.5 | 1374.5 | 1374.5 |
| 2.5°   | 1378.6 | 1375.9 | 1366.4 | 1375.9 | 1374.5 |
| 5°     | 1374.5 | 1371.8 | 1362.4 | 1373.2 | 1371.8 |
| 7.5°   | 1365.1 | 1363.7 | 1354.3 | 1363.7 | 1362.4 |
| 10°    | 1351.6 | 1351.6 | 1340.8 | 1350.3 | 1348.9 |
| 12.5°  | 1332.7 | 1334.1 | 1326.0 | 1332.7 | 1328.7 |
| 15°    | 1312.5 | 1313.9 | 1304.4 | 1312.5 | 1307.1 |
| 17.5°  | 1286.9 | 1289.6 | 1280.2 | 1286.9 | 1282.9 |
| 20°    | 1258.6 | 1261.3 | 1251.9 | 1255.9 | 1255.9 |
| 22.5°  | 1226.3 | 1231.7 | 1220.9 | 1226.3 | 1222.2 |
| 25°    | 1192.6 | 1196.6 | 1188.5 | 1193.9 | 1187.2 |
| 27.5°  | 1156.2 | 1161.6 | 1152.2 | 1156.2 | 1153.5 |
| 30°    | 1114.4 | 1122.5 | 1114.4 | 1117.1 | 1115.8 |
| 32.5°  | 1076.7 | 1083.4 | 1078.0 | 1080.7 | 1079.4 |
| 35°    | 1032.2 | 1041.7 | 1037.6 | 1041.7 | 1041.7 |
| 37.5°  | 989.1  | 997.2  | 995.8  | 1001.2 | 999.9  |
| 40°    | 944.6  | 955.4  | 954.1  | 959.5  | 962.2  |
| 42.5°  | 896.1  | 911.0  | 915.0  | 921.7  | 921.7  |
| 45°    | 850.3  | 865.1  | 871.9  | 881.3  | 882.7  |
| 47.5°  | 803.1  | 816.6  | 827.4  | 840.9  | 843.6  |
| 50°    | 754.6  | 769.5  | 784.3  | 799.1  | 803.1  |
| 52.5°  | 703.4  | 722.3  | 741.2  | 757.3  | 760.0  |
| 55°    | 653.6  | 675.1  | 696.7  | 711.5  | 716.9  |
| 57.5°  | 602.4  | 628.0  | 652.2  | 668.4  | 672.4  |
| 60°    | 551.2  | 578.1  | 605.1  | 625.3  | 629.3  |
| 62.5°  | 501.3  | 528.2  | 557.9  | 580.8  | 586.2  |
| 65°    | 450.1  | 481.1  | 513.4  | 533.6  | 539.0  |
| 67.5°  | 402.9  | 432.6  | 464.9  | 489.2  | 495.9  |
| 70°    | 350.4  | 381.4  | 416.4  | 442.0  | 450.1  |
| 72.5°  | 299.2  | 331.5  | 370.6  | 398.9  | 404.3  |
| 75°    | 248.0  | 283.0  | 326.1  | 353.1  | 359.8  |
| 77.5°  | 198.1  | 238.5  | 278.9  | 308.6  | 314.0  |
| 80°    | 152.3  | 192.7  | 238.5  | 268.2  | 273.6  |
| 82.5°  | 110.5  | 153.6  | 200.8  | 229.1  | 239.9  |
| 85°    | 74.1   | 118.6  | 165.8  | 195.4  | 206.2  |
| 87.5°  | 47.2   | 90.3   | 136.1  | 167.1  | 176.5  |
| 90°    | 22.1   | 68.8   | 117.8  | 151.1  | 161.9  |
| 92.5°  | 27.6   | 62.5   | 112.4  | 144.4  | 154.3  |
| 95°    | 43.7   | 77.4   | 105.7  | 137.6  | 147.1  |
| 97.5°  | 65.3   | 100.4  | 101.3  | 130.5  | 140.3  |
| 100°   | 91.5   | 121.2  | 166.1  | 126.0  | 132.2  |
| 102.5° | 118.2  | 145.6  | 188.4  | 216.2  | 185.7  |
| 105°   | 147.1  | 170.6  | 211.0  | 238.0  | 246.9  |
| 107.5° | 177.1  | 195.9  | 235.9  | 263.3  | 269.6  |
| 110°   | 206.0  | 222.2  | 260.8  | 285.0  | 295.0  |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 234.4 | 248.0 | 284.8 | 307.2 | 315.7 |
| 115°   | 261.6 | 273.3 | 308.9 | 331.2 | 336.6 |
| 117.5° | 290.1 | 296.9 | 332.4 | 352.5 | 361.0 |
| 120°   | 317.6 | 321.3 | 353.6 | 375.6 | 381.4 |
| 122.5° | 340.7 | 344.3 | 374.4 | 395.0 | 400.3 |
| 125°   | 365.9 | 367.7 | 394.7 | 414.5 | 419.8 |
| 127.5° | 388.9 | 389.9 | 412.3 | 431.6 | 436.0 |
| 130°   | 410.9 | 411.9 | 431.3 | 448.7 | 453.2 |
| 132.5° | 431.6 | 434.4 | 446.5 | 465.3 | 468.4 |
| 135°   | 452.3 | 453.7 | 462.2 | 478.8 | 482.8 |
| 137.5° | 471.6 | 473.0 | 477.4 | 493.6 | 496.7 |
| 140°   | 489.0 | 489.9 | 490.9 | 506.6 | 509.3 |
| 142.5° | 506.0 | 505.2 | 506.1 | 518.2 | 520.8 |
| 145°   | 522.6 | 522.2 | 522.2 | 529.3 | 532.0 |
| 147.5° | 536.0 | 536.0 | 536.4 | 539.6 | 539.1 |
| 150°   | 549.7 | 548.8 | 549.7 | 550.6 | 548.3 |
| 152.5° | 563.0 | 560.8 | 561.7 | 562.6 | 559.4 |
| 155°   | 574.1 | 571.3 | 572.2 | 573.6 | 569.9 |
| 157.5° | 582.8 | 581.4 | 581.4 | 582.8 | 579.1 |
| 160°   | 592.0 | 589.2 | 589.7 | 591.5 | 587.8 |
| 162.5° | 599.3 | 596.6 | 597.0 | 599.8 | 595.7 |
| 165°   | 605.8 | 603.0 | 603.5 | 606.2 | 602.5 |
| 167.5° | 610.8 | 608.1 | 608.5 | 611.7 | 607.6 |
| 170°   | 614.9 | 611.7 | 612.2 | 615.9 | 611.7 |
| 172.5° | 617.7 | 614.5 | 615.4 | 618.6 | 614.5 |
| 175°   | 619.5 | 616.8 | 617.2 | 620.9 | 616.8 |
| 177.5° | 620.9 | 618.2 | 618.6 | 621.8 | 618.2 |
| 180°   | 619.5 | 619.5 | 619.5 | 619.5 | 619.5 |

(END OF REPORT)