

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: P1004618

Luminaire Tested: S125DR-B610DB2750-4F0-XX-W2A-D\_3000K

Issue Date: 5/2/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1004618  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-17)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/2/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125DR-B610DB2750-4F0-XX-W2A-D\_3000K  
Description: Define 5 Direct Recessed with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}  
Light Source: -  
Ballast/Driver: -

**Summary**

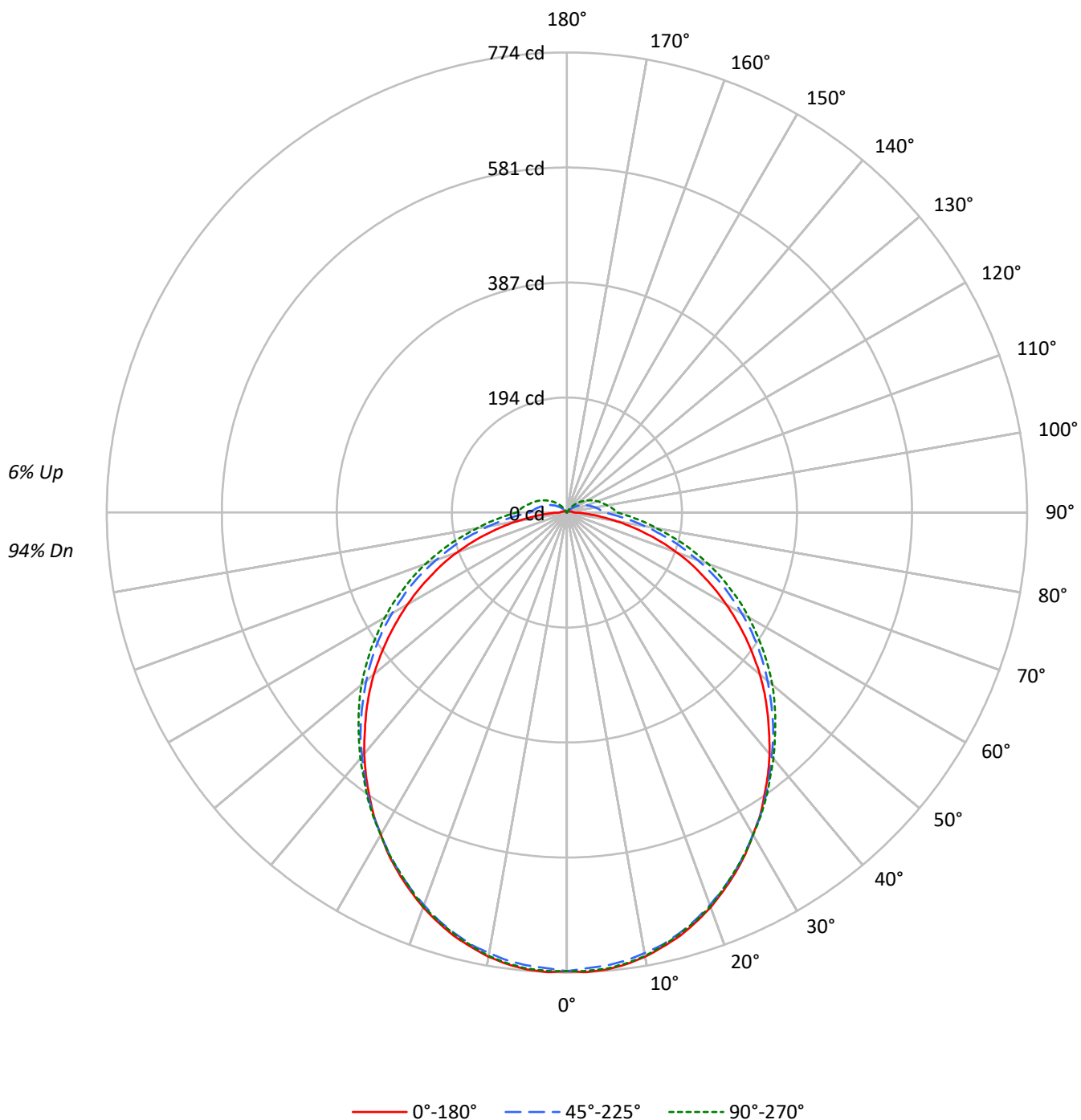
Lumens per Lamp: N/A  
Luminaire Lumens: 2391.0 lumens  
Efficiency: N/A  
Efficacy: 99.6 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34  
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 24  
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

TEST NUMBER: P1004618

CATALOG NUMBER: S125DR-B610DB2750-4F0-XX-W2A-D\_3000K

### Luminous Intensity Polar Plot



TEST NUMBER: P1004618

CATALOG NUMBER: S125DR-B610DB2750-4F0-XX-W2A-D\_3000K

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |    |    |    |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|
| RF  | 20  |     |     |     | 20  |     |     |     | 20  |     |     |     | 20  |     |    |    | 20 |    |    |    |
| RC  | 80  |     |     |     | 70  |     |     |     | 50  |     |     |     | 30  |     |    |    | 10 |    |    | 0  |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50 | 30 | 10 | 50 | 30 | 10 |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |    |    |    |    |
| 0   | 118 | 118 | 118 | 118 | 114 | 114 | 114 | 114 | 108 | 108 | 108 | 102 | 102 | 102 | 96 | 96 | 96 | 94 |    |    |
| 1   | 106 | 101 | 96  | 92  | 103 | 98  | 94  | 90  | 93  | 89  | 86  | 88  | 85  | 82  | 83 | 81 | 79 | 76 |    |    |
| 2   | 96  | 88  | 80  | 74  | 93  | 85  | 78  | 73  | 81  | 75  | 70  | 76  | 72  | 68  | 72 | 69 | 65 | 63 |    |    |
| 3   | 88  | 77  | 68  | 61  | 84  | 75  | 67  | 60  | 71  | 64  | 59  | 67  | 61  | 57  | 64 | 59 | 55 | 53 |    |    |
| 4   | 80  | 68  | 59  | 52  | 77  | 66  | 58  | 51  | 63  | 55  | 50  | 60  | 53  | 48  | 57 | 51 | 47 | 45 |    |    |
| 5   | 74  | 60  | 51  | 44  | 71  | 59  | 50  | 44  | 56  | 49  | 43  | 53  | 47  | 42  | 51 | 45 | 41 | 39 |    |    |
| 6   | 68  | 54  | 45  | 39  | 66  | 53  | 45  | 38  | 51  | 43  | 38  | 48  | 42  | 37  | 46 | 40 | 36 | 34 |    |    |
| 7   | 63  | 49  | 40  | 34  | 61  | 48  | 40  | 34  | 46  | 39  | 33  | 44  | 37  | 33  | 42 | 36 | 32 | 30 |    |    |
| 8   | 59  | 45  | 36  | 30  | 57  | 44  | 36  | 30  | 42  | 35  | 30  | 40  | 34  | 29  | 39 | 33 | 29 | 27 |    |    |
| 9   | 55  | 41  | 33  | 27  | 53  | 40  | 33  | 27  | 39  | 32  | 27  | 37  | 31  | 26  | 36 | 30 | 26 | 24 |    |    |
| 10  | 51  | 38  | 30  | 25  | 50  | 37  | 30  | 25  | 36  | 29  | 24  | 35  | 28  | 24  | 33 | 28 | 23 | 22 |    |    |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 4945 | 4945 | 4945 |
| 5°  | 4964 | 4920 | 4954 |
| 10° | 4938 | 4898 | 4928 |
| 15° | 4889 | 4859 | 4869 |
| 20° | 4819 | 4793 | 4808 |
| 25° | 4734 | 4718 | 4713 |
| 30° | 4630 | 4630 | 4635 |
| 35° | 4533 | 4558 | 4575 |
| 40° | 4436 | 4481 | 4519 |
| 45° | 4327 | 4436 | 4491 |
| 50° | 4224 | 4390 | 4495 |
| 55° | 4100 | 4370 | 4497 |
| 60° | 3966 | 4354 | 4529 |
| 65° | 3831 | 4371 | 4589 |
| 70° | 3685 | 4380 | 4734 |
| 75° | 3446 | 4533 | 5001 |
| 80° | 3155 | 4941 | 5667 |
| 85° | 3058 | 6844 | 8513 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 87.5°

Luminance: 14556 cd/sqm

TEST NUMBER: P1004618

CATALOG NUMBER: S125DR-B610DB2750-4F0-XX-W2A-D\_3000K

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 73.0   | 3.1       |
| 10°-20°   | 207.3  | 8.7       |
| 20°-30°   | 308.3  | 12.9      |
| 30°-40°   | 365.1  | 15.3      |
| 40°-50°   | 377.5  | 15.8      |
| 50°-60°   | 347.7  | 14.5      |
| 60°-70°   | 281.1  | 11.8      |
| 70°-80°   | 188.1  | 7.9       |
| 80°-90°   | 97.2   | 4.1       |
| 90°-100°  | 54.8   | 2.3       |
| 100°-110° | 40.4   | 1.7       |
| 110°-120° | 27.0   | 1.1       |
| 120°-130° | 15.3   | 0.6       |
| 130°-140° | 6.7    | 0.3       |
| 140°-150° | 1.3    | 0.1       |
| 150°-160° | 0.0    | 0.0       |
| 160°-170° | 0.0    | 0.0       |
| 170°-180° | 0.0    | 0.0       |
| 0°-30°    | 588.7  | 24.6      |
| 0°-40°    | 953.8  | 39.9      |
| 0°-60°    | 1679.1 | 70.2      |
| 0°-90°    | 2245.5 | 93.9      |
| 90°-120°  | 122.1  | 5.1       |
| 90°-150°  | 145.5  | 6.1       |
| 90°-180°  | 145.0  | 6.1       |
| 0°-180°   | 2391.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0°   | 772 | 772   | 772 | 772   | 772 |      |
| 5°   | 772 | 770   | 765 | 771   | 770 | 73   |
| 15°  | 737 | 738   | 732 | 737   | 734 | 208  |
| 25°  | 670 | 672   | 667 | 670   | 667 | 308  |
| 35°  | 580 | 585   | 583 | 585   | 585 | 363  |
| 45°  | 478 | 486   | 490 | 495   | 496 | 368  |
| 55°  | 367 | 379   | 391 | 400   | 403 | 328  |
| 65°  | 253 | 270   | 288 | 300   | 303 | 251  |
| 75°  | 139 | 159   | 183 | 198   | 202 | 148  |
| 85°  | 42  | 67    | 93  | 110   | 116 | 43   |
| 90°  | 12  | 36    | 62  | 80    | 85  | 8    |
| 95°  | 10  | 30    | 55  | 72    | 77  | 8    |
| 105° | 7   | 19    | 42  | 57    | 62  | 7    |
| 115° | 4   | 10    | 30  | 43    | 48  | 5    |
| 125° | 3   | 2     | 17  | 30    | 33  | 3    |
| 135° | 2   | 1     | 6   | 16    | 20  | 1    |
| 145° | 1   | 0     | 0   | 4     | 7   | 0    |
| 155° | 0   | 0     | 0   | 0     | 0   | 0    |
| 165° | 0   | 0     | 0   | 0     | 0   | 0    |
| 175° | 0   | 0     | 0   | 0     | 0   | 0    |
| 180° | 0   | 0     | 0   | 0     | 0   | 0    |

TEST NUMBER: P1004618

CATALOG NUMBER: S125DR-B610DB2750-4F0-XX-W2A-D\_3000K

**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 0°     | 771.8 | 771.8 | 771.8 | 771.8 | 771.8 |
| 2.5°   | 774.1 | 772.6 | 767.3 | 772.6 | 771.8 |
| 5°     | 771.8 | 770.3 | 765.0 | 771.1 | 770.3 |
| 7.5°   | 766.5 | 765.8 | 760.5 | 765.8 | 765.0 |
| 10°    | 759.0 | 759.0 | 752.9 | 758.2 | 757.5 |
| 12.5°  | 748.4 | 749.1 | 744.6 | 748.4 | 746.1 |
| 15°    | 737.0 | 737.8 | 732.5 | 737.0 | 734.0 |
| 17.5°  | 722.6 | 724.2 | 718.9 | 722.6 | 720.4 |
| 20°    | 706.8 | 708.3 | 703.0 | 705.2 | 705.2 |
| 22.5°  | 688.6 | 691.6 | 685.6 | 688.6 | 686.3 |
| 25°    | 669.7 | 671.9 | 667.4 | 670.4 | 666.7 |
| 27.5°  | 649.2 | 652.3 | 647.0 | 649.2 | 647.7 |
| 30°    | 625.8 | 630.3 | 625.8 | 627.3 | 626.5 |
| 32.5°  | 604.6 | 608.4 | 605.4 | 606.9 | 606.1 |
| 35°    | 579.6 | 584.9 | 582.7 | 584.9 | 584.9 |
| 37.5°  | 555.4 | 560.0 | 559.2 | 562.2 | 561.5 |
| 40°    | 530.4 | 536.5 | 535.7 | 538.8 | 540.3 |
| 42.5°  | 503.2 | 511.5 | 513.8 | 517.6 | 517.6 |
| 45°    | 477.5 | 485.8 | 489.6 | 494.9 | 495.6 |
| 47.5°  | 451.0 | 458.6 | 464.6 | 472.2 | 473.7 |
| 50°    | 423.8 | 432.1 | 440.4 | 448.7 | 451.0 |
| 52.5°  | 395.0 | 405.6 | 416.2 | 425.3 | 426.8 |
| 55°    | 367.0 | 379.1 | 391.2 | 399.5 | 402.6 |
| 57.5°  | 338.2 | 352.6 | 366.2 | 375.3 | 377.6 |
| 60°    | 309.5 | 324.6 | 339.8 | 351.1 | 353.4 |
| 62.5°  | 281.5 | 296.6 | 313.3 | 326.1 | 329.2 |
| 65°    | 252.7 | 270.1 | 288.3 | 299.7 | 302.7 |
| 67.5°  | 226.3 | 242.9 | 261.1 | 274.7 | 278.5 |
| 70°    | 196.7 | 214.1 | 233.8 | 248.2 | 252.7 |
| 72.5°  | 168.0 | 186.1 | 208.1 | 224.0 | 227.0 |
| 75°    | 139.2 | 158.9 | 183.1 | 198.3 | 202.0 |
| 77.5°  | 111.2 | 133.9 | 156.6 | 173.3 | 176.3 |
| 80°    | 85.5  | 108.2 | 133.9 | 150.6 | 153.6 |
| 82.5°  | 62.0  | 86.3  | 112.7 | 128.6 | 134.7 |
| 85°    | 41.6  | 66.6  | 93.1  | 109.7 | 115.8 |
| 87.5°  | 26.5  | 50.7  | 76.4  | 93.8  | 99.1  |
| 90°    | 12.1  | 36.3  | 62.0  | 79.5  | 84.8  |
| 92.5°  | 10.6  | 32.5  | 59.0  | 75.7  | 81.0  |
| 95°    | 9.8   | 29.5  | 55.2  | 71.9  | 77.2  |
| 97.5°  | 9.1   | 27.2  | 52.2  | 68.1  | 73.4  |
| 100°   | 8.3   | 24.2  | 48.4  | 64.3  | 68.9  |
| 102.5° | 7.6   | 21.9  | 45.4  | 60.5  | 65.1  |
| 105°   | 6.8   | 18.9  | 41.6  | 56.8  | 62.0  |
| 107.5° | 6.1   | 16.6  | 38.6  | 53.7  | 58.3  |
| 110°   | 5.3   | 14.4  | 35.6  | 49.9  | 55.2  |

TEST NUMBER: P1004618

CATALOG NUMBER: S125DR-B610DB2750-4F0-XX-W2A-D\_3000K

**CANDELA DISTRIBUTION (continued):**

|        | 0°  | 22.5° | 45°  | 67.5° | 90°  |
|--------|-----|-------|------|-------|------|
| 112.5° | 5.3 | 12.1  | 32.5 | 46.2  | 51.5 |
| 115°   | 4.5 | 9.8   | 29.5 | 43.1  | 47.7 |
| 117.5° | 3.8 | 7.6   | 26.5 | 39.3  | 44.6 |
| 120°   | 3.8 | 6.1   | 23.5 | 36.3  | 40.9 |
| 122.5° | 3.0 | 3.8   | 20.4 | 32.5  | 37.1 |
| 125°   | 3.0 | 2.3   | 17.4 | 29.5  | 33.3 |
| 127.5° | 2.3 | 1.5   | 14.4 | 25.7  | 30.3 |
| 130°   | 2.3 | 1.5   | 12.1 | 22.7  | 26.5 |
| 132.5° | 1.5 | 1.5   | 9.1  | 19.7  | 22.7 |
| 135°   | 1.5 | 0.8   | 6.1  | 15.9  | 19.7 |
| 137.5° | 1.5 | 0.8   | 3.8  | 12.9  | 15.9 |
| 140°   | 0.8 | 0.8   | 1.5  | 9.8   | 12.9 |
| 142.5° | 0.8 | 0.0   | 0.0  | 6.8   | 9.8  |
| 145°   | 0.8 | 0.0   | 0.0  | 3.8   | 6.8  |
| 147.5° | 0.0 | 0.0   | 0.0  | 1.5   | 3.0  |
| 150°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.8  |
| 152.5° | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 155°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 157.5° | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 160°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 162.5° | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 165°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 167.5° | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 170°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 172.5° | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 175°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 177.5° | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 180°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |

(END OF REPORT)