

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: P1013055

Luminaire Tested: S124DIP-B350D810UB2750-4F0-XX-W2A-F\_2700K

Issue Date: 5/6/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1013055  
REPORT IS A COMBINATION OF REPORTS P995978 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/6/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124DIP-B350D810UB2750-4F0-XX-W2A-F\_2700K  
Description: Define 4 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}  
Light Source: -  
Ballast/Driver: -

**Summary**

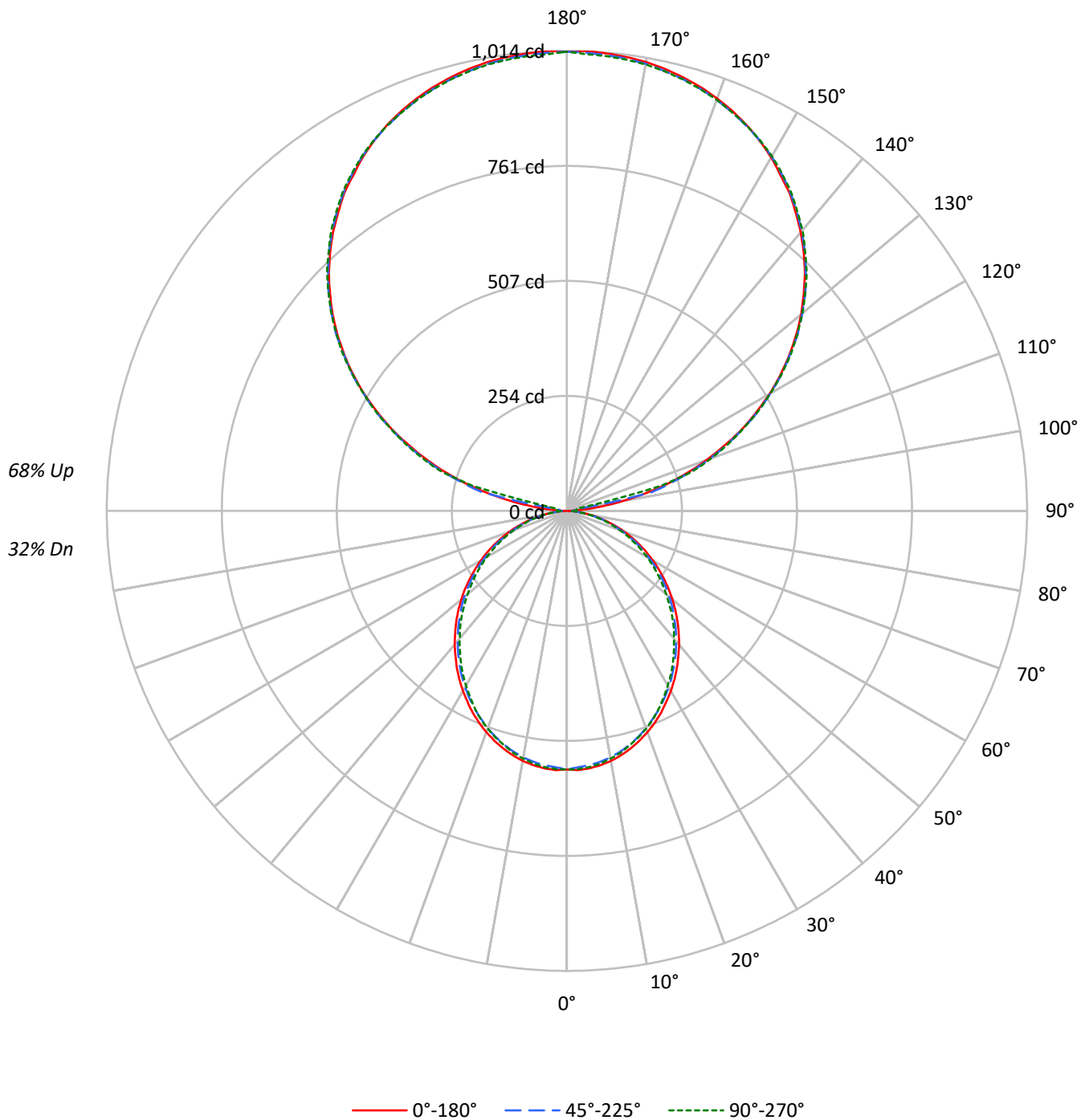
Lumens per Lamp: N/A  
Luminaire Lumens: 4597.0 lumens  
Efficiency: N/A  
Efficacy: 134.8 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')  
CIE Type: Semi-Indirect

Input Watts (W): 34.1  
Input Voltage (V): 120  
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: P1013055

CATALOG NUMBER: S124DIP-B350D810UB2750-4F0-XX-W2A-F\_2700K

### Luminous Intensity Polar Plot



TEST NUMBER: P1013055

CATALOG NUMBER: S124DIP-B350D810UB2750-4F0-XX-W2A-F\_2700K

**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 | 50 | 30 | 10 |
| RCR |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 0   | 103 | 103 | 103 | 103 | 93 | 93 | 93 | 93 | 73 | 73 | 73 | 56 | 56 | 56 | 39 | 39 | 39 | 39 | 39 | 39 |
| 1   | 94  | 89  | 86  | 82  | 84 | 81 | 77 | 75 | 64 | 62 | 60 | 49 | 47 | 46 | 35 | 34 | 33 | 33 | 33 | 33 |
| 2   | 85  | 78  | 72  | 67  | 76 | 70 | 65 | 61 | 56 | 53 | 50 | 43 | 41 | 38 | 31 | 29 | 28 | 28 | 28 | 28 |
| 3   | 78  | 69  | 61  | 56  | 70 | 62 | 56 | 51 | 49 | 45 | 42 | 38 | 35 | 33 | 27 | 25 | 24 | 24 | 24 | 24 |
| 4   | 71  | 61  | 53  | 47  | 64 | 55 | 48 | 43 | 44 | 39 | 35 | 34 | 30 | 28 | 24 | 22 | 20 | 20 | 20 | 20 |
| 5   | 65  | 54  | 46  | 40  | 58 | 49 | 42 | 37 | 39 | 34 | 30 | 30 | 27 | 24 | 22 | 20 | 18 | 18 | 18 | 18 |
| 6   | 60  | 48  | 40  | 35  | 54 | 44 | 37 | 32 | 35 | 30 | 26 | 27 | 24 | 21 | 20 | 17 | 16 | 16 | 16 | 16 |
| 7   | 55  | 43  | 36  | 30  | 50 | 39 | 33 | 28 | 32 | 27 | 23 | 25 | 21 | 18 | 18 | 16 | 14 | 14 | 14 | 14 |
| 8   | 51  | 39  | 32  | 27  | 46 | 36 | 29 | 25 | 29 | 24 | 20 | 23 | 19 | 16 | 17 | 14 | 12 | 12 | 12 | 12 |
| 9   | 48  | 36  | 28  | 24  | 43 | 33 | 26 | 22 | 26 | 22 | 18 | 21 | 17 | 15 | 15 | 13 | 11 | 11 | 11 | 11 |
| 10  | 44  | 33  | 26  | 21  | 40 | 30 | 24 | 19 | 24 | 20 | 16 | 19 | 16 | 13 | 14 | 12 | 10 | 10 | 10 | 10 |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 4648 | 4648 | 4648 |
| 5°  | 4652 | 4514 | 4520 |
| 10° | 4612 | 4389 | 4359 |
| 15° | 4546 | 4240 | 4176 |
| 20° | 4461 | 4079 | 3988 |
| 25° | 4367 | 3909 | 3784 |
| 30° | 4252 | 3724 | 3561 |
| 35° | 4134 | 3536 | 3346 |
| 40° | 4010 | 3333 | 3116 |
| 45° | 3879 | 3129 | 2902 |
| 50° | 3736 | 2932 | 2665 |
| 55° | 3580 | 2702 | 2429 |
| 60° | 3420 | 2450 | 2184 |
| 65° | 3238 | 2189 | 1907 |
| 70° | 3025 | 1876 | 1611 |
| 75° | 2712 | 1511 | 1289 |
| 80° | 2311 | 1093 | 907  |
| 85° | 1797 | 607  | 488  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3879 cd/sqm

TEST NUMBER: P1013055

CATALOG NUMBER: S124DIP-B350D810UB2750-4F0-XX-W2A-F\_2700K

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 53.7   | 1.2       |
| 10°-20°   | 151.4  | 3.3       |
| 20°-30°   | 222.8  | 4.8       |
| 30°-40°   | 258.9  | 5.6       |
| 40°-50°   | 258.9  | 5.6       |
| 50°-60°   | 226.5  | 4.9       |
| 60°-70°   | 168.1  | 3.7       |
| 70°-80°   | 95.4   | 2.1       |
| 80°-90°   | 29.4   | 0.6       |
| 90°-100°  | 33.6   | 0.7       |
| 100°-110° | 221.3  | 4.8       |
| 110°-120° | 422.5  | 9.2       |
| 120°-130° | 536.4  | 11.7      |
| 130°-140° | 573.8  | 12.5      |
| 140°-150° | 536.5  | 11.7      |
| 150°-160° | 432.7  | 9.4       |
| 160°-170° | 279.0  | 6.1       |
| 170°-180° | 96.2   | 2.1       |
| 0°-30°    | 427.8  | 9.3       |
| 0°-40°    | 686.8  | 14.9      |
| 0°-60°    | 1172.2 | 25.5      |
| 0°-90°    | 1465.1 | 31.9      |
| 90°-120°  | 677.4  | 14.7      |
| 90°-150°  | 2324.0 | 50.6      |
| 90°-180°  | 3132.0 | 68.1      |
| 0°-180°   | 4597.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 570  | 570   | 570  | 570   | 570  |      |
| 5°   | 570  | 568   | 563  | 568   | 567  | 54   |
| 15°  | 542  | 540   | 534  | 536   | 535  | 153  |
| 25°  | 491  | 488   | 481  | 482   | 480  | 226  |
| 35°  | 422  | 419   | 413  | 410   | 407  | 264  |
| 45°  | 345  | 342   | 334  | 329   | 328  | 266  |
| 55°  | 261  | 259   | 253  | 248   | 245  | 234  |
| 65°  | 177  | 174   | 170  | 165   | 163  | 175  |
| 75°  | 94   | 92    | 90   | 88    | 87   | 100  |
| 85°  | 25   | 25    | 24   | 24    | 23   | 27   |
| 90°  | 2    | 11    | 17   | 21    | 23   | 4    |
| 95°  | 42   | 16    | 17   | 21    | 22   | 51   |
| 105° | 228  | 232   | 236  | 243   | 216  | 238  |
| 115° | 425  | 428   | 427  | 428   | 428  | 419  |
| 125° | 598  | 601   | 600  | 602   | 603  | 534  |
| 135° | 742  | 741   | 744  | 746   | 747  | 572  |
| 145° | 855  | 858   | 858  | 858   | 860  | 535  |
| 155° | 938  | 939   | 936  | 940   | 937  | 432  |
| 165° | 989  | 986   | 986  | 992   | 985  | 280  |
| 175° | 1012 | 1008  | 1008 | 1015  | 1006 | 96   |
| 180° | 1012 | 1012  | 1012 | 1012  | 1012 |      |

TEST NUMBER: P1013055

CATALOG NUMBER: S124DIP-B350D810UB2750-4F0-XX-W2A-F\_2700K

**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 0°     | 570.0 | 570.0 | 570.0 | 570.0 | 570.0 |
| 2.5°   | 571.8 | 570.5 | 565.4 | 570.0 | 569.5 |
| 5°     | 569.5 | 567.7 | 562.7 | 567.7 | 566.8 |
| 7.5°   | 565.4 | 563.6 | 558.1 | 562.2 | 561.8 |
| 10°    | 559.5 | 557.7 | 551.7 | 555.4 | 554.5 |
| 12.5°  | 551.7 | 549.9 | 543.5 | 547.6 | 546.2 |
| 15°    | 542.1 | 540.3 | 533.5 | 536.2 | 534.8 |
| 17.5°  | 531.2 | 528.9 | 522.5 | 524.3 | 523.4 |
| 20°    | 518.8 | 516.6 | 509.7 | 511.1 | 510.2 |
| 22.5°  | 505.6 | 502.4 | 495.5 | 498.3 | 496.5 |
| 25°    | 491.0 | 487.8 | 481.4 | 481.8 | 480.0 |
| 27.5°  | 474.5 | 471.3 | 465.4 | 464.5 | 462.2 |
| 30°    | 458.1 | 454.4 | 448.5 | 446.7 | 444.4 |
| 32.5°  | 440.7 | 437.5 | 431.1 | 428.9 | 426.6 |
| 35°    | 422.5 | 419.3 | 412.9 | 409.7 | 407.4 |
| 37.5°  | 403.3 | 400.5 | 393.7 | 390.5 | 387.3 |
| 40°    | 384.6 | 380.9 | 374.1 | 369.5 | 367.2 |
| 42.5°  | 364.5 | 362.6 | 354.9 | 349.4 | 348.0 |
| 45°    | 344.8 | 341.6 | 334.3 | 329.3 | 327.9 |
| 47.5°  | 324.3 | 322.0 | 315.1 | 309.7 | 306.0 |
| 50°    | 303.3 | 301.4 | 295.0 | 288.7 | 285.9 |
| 52.5°  | 282.7 | 280.4 | 273.6 | 268.1 | 264.4 |
| 55°    | 260.8 | 259.4 | 253.0 | 247.5 | 244.8 |
| 57.5°  | 240.2 | 238.9 | 232.5 | 227.0 | 224.3 |
| 60°    | 218.8 | 216.5 | 210.6 | 206.4 | 204.2 |
| 62.5°  | 197.8 | 195.9 | 189.5 | 185.9 | 183.6 |
| 65°    | 176.8 | 174.5 | 169.9 | 165.3 | 163.1 |
| 67.5°  | 155.3 | 153.5 | 148.9 | 144.3 | 143.9 |
| 70°    | 135.6 | 132.5 | 128.8 | 125.1 | 123.8 |
| 72.5°  | 114.6 | 111.4 | 108.7 | 106.0 | 104.6 |
| 75°    | 94.1  | 91.8  | 89.5  | 87.7  | 87.2  |
| 77.5°  | 74.0  | 73.1  | 70.8  | 70.3  | 69.0  |
| 80°    | 56.2  | 54.8  | 53.9  | 53.0  | 52.5  |
| 82.5°  | 38.8  | 38.4  | 38.4  | 37.9  | 37.5  |
| 85°    | 24.7  | 24.7  | 23.7  | 23.7  | 23.3  |
| 87.5°  | 11.9  | 11.4  | 11.0  | 11.0  | 11.0  |
| 90°    | 2.3   | 10.6  | 16.7  | 21.2  | 22.7  |
| 92.5°  | 11.4  | 9.8   | 15.9  | 20.4  | 20.4  |
| 95°    | 41.6  | 15.9  | 16.7  | 21.2  | 22.0  |
| 97.5°  | 79.5  | 96.1  | 16.7  | 20.4  | 21.2  |
| 100°   | 124.2 | 137.8 | 33.3  | 20.4  | 21.2  |
| 102.5° | 174.1 | 183.2 | 192.3 | 22.0  | 22.0  |
| 105°   | 227.9 | 232.4 | 236.2 | 243.0 | 215.8 |
| 107.5° | 277.1 | 279.3 | 284.6 | 288.4 | 291.5 |
| 110°   | 327.0 | 329.3 | 333.8 | 335.4 | 337.6 |

TEST NUMBER: P1013055

CATALOG NUMBER: S124DIP-B350D810UB2750-4F0-XX-W2A-F\_2700K

**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 375.5  | 380.0  | 381.5  | 380.8  | 383.8  |
| 115°   | 425.4  | 427.7  | 427.0  | 428.5  | 428.5  |
| 117.5° | 470.1  | 473.1  | 475.4  | 474.7  | 474.7  |
| 120°   | 515.5  | 518.6  | 517.8  | 519.3  | 517.8  |
| 122.5° | 557.9  | 559.4  | 561.0  | 561.7  | 560.2  |
| 125°   | 598.0  | 601.1  | 599.6  | 601.8  | 602.6  |
| 127.5° | 636.7  | 637.4  | 641.2  | 640.4  | 639.7  |
| 130°   | 673.7  | 674.5  | 676.8  | 677.5  | 677.5  |
| 132.5° | 707.8  | 709.3  | 712.4  | 713.1  | 712.4  |
| 135°   | 741.9  | 741.1  | 744.2  | 745.7  | 747.2  |
| 137.5° | 772.2  | 772.2  | 775.9  | 777.5  | 776.7  |
| 140°   | 801.7  | 803.2  | 804.7  | 807.0  | 807.7  |
| 142.5° | 828.2  | 831.2  | 832.0  | 833.5  | 833.5  |
| 145°   | 855.4  | 857.7  | 857.7  | 858.5  | 860.0  |
| 147.5° | 876.6  | 881.2  | 880.4  | 881.2  | 881.9  |
| 150°   | 900.1  | 903.1  | 902.4  | 902.4  | 903.1  |
| 152.5° | 919.8  | 922.1  | 920.5  | 922.1  | 921.3  |
| 155°   | 937.9  | 938.7  | 936.4  | 939.5  | 937.2  |
| 157.5° | 953.8  | 953.8  | 950.8  | 954.6  | 950.8  |
| 160°   | 967.5  | 965.2  | 964.4  | 969.0  | 964.4  |
| 162.5° | 979.6  | 976.6  | 975.8  | 980.3  | 975.0  |
| 165°   | 989.4  | 985.6  | 985.6  | 991.7  | 984.9  |
| 167.5° | 997.8  | 994.0  | 993.2  | 1000.0 | 992.5  |
| 170°   | 1004.6 | 1000.0 | 1000.8 | 1006.8 | 999.3  |
| 172.5° | 1009.1 | 1004.6 | 1005.3 | 1011.4 | 1003.1 |
| 175°   | 1012.1 | 1007.6 | 1008.4 | 1015.2 | 1006.1 |
| 177.5° | 1014.4 | 1009.1 | 1010.6 | 1016.7 | 1007.6 |
| 180°   | 1012.1 | 1012.1 | 1012.1 | 1012.1 | 1012.1 |

(END OF REPORT)