

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: P1007768

Luminaire Tested: S124IP-B810UB50-4F0-XX-W2A

Issue Date: 5/5/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1007768  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/5/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124IP-B810UB50-4F0-XX-W2A  
Description: Define 4 Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}  
Light Source: -  
Ballast/Driver: -

**Summary**

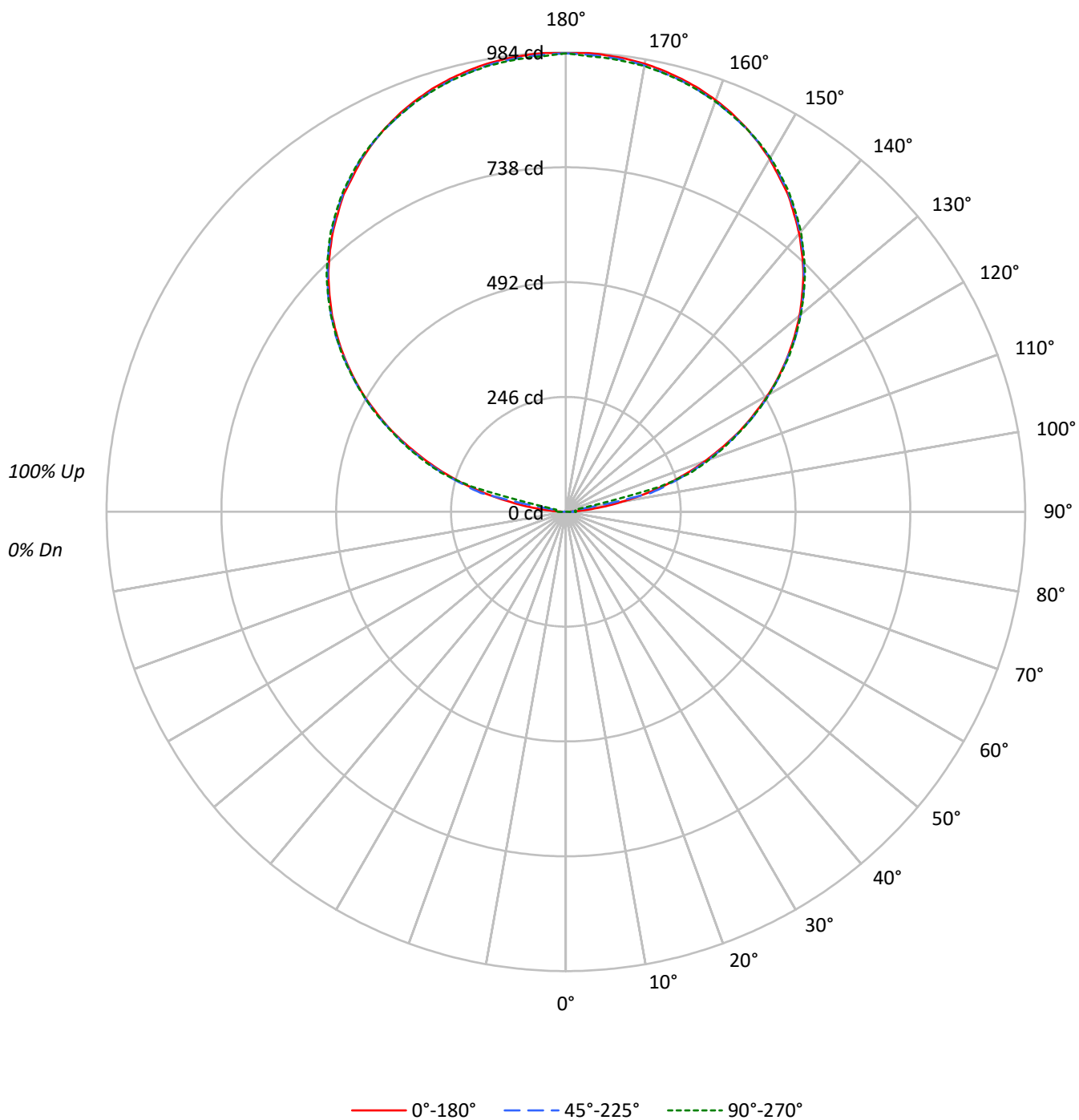
Lumens per Lamp: N/A  
Luminaire Lumens: 3040.0 lumens  
Efficiency: N/A  
Efficacy: 144.1 lumens/watt  
Spacing Criteria (0/90/45): - / - / -  
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')  
CIE Type: Indirect

Input Watts (W): 21.1  
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   | 95 | 95 | 95 | 95 | 81 | 81 | 81 | 81 | 56 | 56 | 56 | 32 | 32 | 32 | 10 | 10 | 10 |
| 1   | 87 | 83 | 79 | 76 | 74 | 71 | 68 | 65 | 48 | 47 | 45 | 28 | 27 | 26 | 9  | 9  | 8  |
| 2   | 79 | 72 | 66 | 62 | 67 | 62 | 57 | 53 | 42 | 40 | 37 | 24 | 23 | 22 | 8  | 7  | 7  |
| 3   | 72 | 63 | 56 | 51 | 61 | 54 | 49 | 44 | 37 | 34 | 31 | 21 | 20 | 18 | 7  | 6  | 6  |
| 4   | 65 | 56 | 48 | 43 | 56 | 48 | 42 | 37 | 33 | 29 | 26 | 19 | 17 | 16 | 6  | 6  | 5  |
| 5   | 60 | 49 | 42 | 36 | 51 | 42 | 36 | 32 | 29 | 25 | 22 | 17 | 15 | 13 | 5  | 5  | 4  |
| 6   | 55 | 44 | 36 | 31 | 47 | 38 | 32 | 27 | 26 | 22 | 19 | 15 | 13 | 11 | 5  | 4  | 4  |
| 7   | 50 | 39 | 32 | 27 | 43 | 34 | 28 | 23 | 23 | 19 | 17 | 14 | 11 | 10 | 4  | 4  | 3  |
| 8   | 47 | 35 | 28 | 23 | 40 | 30 | 24 | 20 | 21 | 17 | 14 | 12 | 10 | 9  | 4  | 3  | 3  |
| 9   | 43 | 32 | 25 | 20 | 37 | 27 | 22 | 18 | 19 | 15 | 13 | 11 | 9  | 8  | 4  | 3  | 3  |
| 10  | 40 | 29 | 22 | 18 | 34 | 25 | 19 | 16 | 17 | 14 | 11 | 10 | 8  | 7  | 3  | 3  | 2  |

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

|     | 0° | 45° | 90° |
|-----|----|-----|-----|
| 0°  | 0  | 0   | 0   |
| 5°  | 0  | 0   | 0   |
| 10° | 0  | 0   | 0   |
| 15° | 0  | 0   | 0   |
| 20° | 0  | 0   | 0   |
| 25° | 0  | 0   | 0   |
| 30° | 0  | 0   | 0   |
| 35° | 0  | 0   | 0   |
| 40° | 0  | 0   | 0   |
| 45° | 0  | 0   | 0   |
| 50° | 0  | 0   | 0   |
| 55° | 0  | 0   | 0   |
| 60° | 0  | 0   | 0   |
| 65° | 0  | 0   | 0   |
| 70° | 0  | 0   | 0   |
| 75° | 0  | 0   | 0   |
| 80° | 0  | 0   | 0   |
| 85° | 0  | 0   | 0   |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
Vertical Angle: 0°  
Luminance: 0 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 0.0    | 0.0       |
| 10°-20°   | 0.0    | 0.0       |
| 20°-30°   | 0.0    | 0.0       |
| 30°-40°   | 0.0    | 0.0       |
| 40°-50°   | 0.0    | 0.0       |
| 50°-60°   | 0.0    | 0.0       |
| 60°-70°   | 0.0    | 0.0       |
| 70°-80°   | 0.0    | 0.0       |
| 80°-90°   | 2.0    | 0.1       |
| 90°-100°  | 32.6   | 1.1       |
| 100°-110° | 214.6  | 7.1       |
| 110°-120° | 409.8  | 13.5      |
| 120°-130° | 520.3  | 17.1      |
| 130°-140° | 556.6  | 18.3      |
| 140°-150° | 520.4  | 17.1      |
| 150°-160° | 419.7  | 13.8      |
| 160°-170° | 270.7  | 8.9       |
| 170°-180° | 93.3   | 3.1       |
| 0°-30°    | 0.0    | 0.0       |
| 0°-40°    | 0.0    | 0.0       |
| 0°-60°    | 0.0    | 0.0       |
| 0°-90°    | 2.0    | 0.1       |
| 90°-120°  | 657.0  | 21.6      |
| 90°-150°  | 2254.3 | 74.2      |
| 90°-180°  | 3038.0 | 99.9      |
| 0°-180°   | 3040.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0°   | 0   | 0     | 0   | 0     | 0   |      |
| 5°   | 0   | 0     | 0   | 0     | 0   | 0    |
| 15°  | 0   | 0     | 0   | 0     | 0   | 0    |
| 25°  | 0   | 0     | 0   | 0     | 0   | 0    |
| 35°  | 0   | 0     | 0   | 0     | 0   | 0    |
| 45°  | 0   | 0     | 0   | 0     | 0   | 0    |
| 55°  | 0   | 0     | 0   | 0     | 0   | 0    |
| 65°  | 0   | 0     | 0   | 0     | 0   | 0    |
| 75°  | 0   | 0     | 0   | 0     | 0   | 0    |
| 85°  | 0   | 0     | 0   | 0     | 0   | 0    |
| 90°  | 2   | 10    | 16  | 21    | 22  | 2    |
| 95°  | 40  | 15    | 16  | 21    | 21  | 50   |
| 105° | 221 | 225   | 229 | 236   | 209 | 231  |
| 115° | 413 | 415   | 414 | 416   | 416 | 406  |
| 125° | 580 | 583   | 582 | 584   | 584 | 518  |
| 135° | 720 | 719   | 722 | 723   | 725 | 554  |
| 145° | 830 | 832   | 832 | 833   | 834 | 518  |
| 155° | 910 | 911   | 908 | 911   | 909 | 420  |
| 165° | 960 | 956   | 956 | 962   | 955 | 271  |
| 175° | 982 | 977   | 978 | 985   | 976 | 93   |
| 180° | 982 | 982   | 982 | 982   | 982 |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 0°     | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 2.5°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 5°     | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 7.5°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 10°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 12.5°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 15°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 17.5°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 20°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 22.5°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 25°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 27.5°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 30°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 32.5°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 35°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 37.5°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 40°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 42.5°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 45°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 47.5°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 50°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 52.5°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 55°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 57.5°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 60°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 62.5°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 65°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 67.5°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 70°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 72.5°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 75°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 77.5°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 80°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 82.5°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 85°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 87.5°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 90°    | 2.2   | 10.3  | 16.2  | 20.6  | 22.0  |
| 92.5°  | 11.0  | 9.5   | 15.4  | 19.8  | 19.8  |
| 95°    | 40.4  | 15.4  | 16.2  | 20.6  | 21.3  |
| 97.5°  | 77.1  | 93.3  | 16.2  | 19.8  | 20.6  |
| 100°   | 120.4 | 133.6 | 32.3  | 19.8  | 20.6  |
| 102.5° | 168.9 | 177.7 | 186.5 | 21.3  | 21.3  |
| 105°   | 221.0 | 225.4 | 229.1 | 235.7 | 209.3 |
| 107.5° | 268.8 | 271.0 | 276.1 | 279.8 | 282.7 |
| 110°   | 317.2 | 319.4 | 323.8 | 325.3 | 327.5 |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 364.2 | 368.6 | 370.1 | 369.4 | 372.3 |
| 115°   | 412.7 | 414.9 | 414.2 | 415.6 | 415.6 |
| 117.5° | 456.0 | 458.9 | 461.2 | 460.4 | 460.4 |
| 120°   | 500.1 | 503.0 | 502.3 | 503.7 | 502.3 |
| 122.5° | 541.2 | 542.7 | 544.1 | 544.9 | 543.4 |
| 125°   | 580.1 | 583.0 | 581.6 | 583.8 | 584.5 |
| 127.5° | 617.6 | 618.3 | 622.0 | 621.2 | 620.5 |
| 130°   | 653.5 | 654.3 | 656.5 | 657.2 | 657.2 |
| 132.5° | 686.6 | 688.1 | 691.0 | 691.7 | 691.0 |
| 135°   | 719.6 | 718.9 | 721.8 | 723.3 | 724.8 |
| 137.5° | 749.0 | 749.0 | 752.7 | 754.1 | 753.4 |
| 140°   | 777.6 | 779.1 | 780.6 | 782.8 | 783.5 |
| 142.5° | 803.3 | 806.3 | 807.0 | 808.5 | 808.5 |
| 145°   | 829.8 | 832.0 | 832.0 | 832.7 | 834.2 |
| 147.5° | 850.3 | 854.7 | 854.0 | 854.7 | 855.5 |
| 150°   | 873.1 | 876.0 | 875.3 | 875.3 | 876.0 |
| 152.5° | 892.2 | 894.4 | 892.9 | 894.4 | 893.7 |
| 155°   | 909.8 | 910.6 | 908.3 | 911.3 | 909.1 |
| 157.5° | 925.2 | 925.2 | 922.3 | 926.0 | 922.3 |
| 160°   | 938.5 | 936.3 | 935.5 | 939.9 | 935.5 |
| 162.5° | 950.2 | 947.3 | 946.5 | 950.9 | 945.8 |
| 165°   | 959.8 | 956.1 | 956.1 | 962.0 | 955.3 |
| 167.5° | 967.8 | 964.2 | 963.4 | 970.0 | 962.7 |
| 170°   | 974.4 | 970.0 | 970.8 | 976.6 | 969.3 |
| 172.5° | 978.8 | 974.4 | 975.2 | 981.0 | 973.0 |
| 175°   | 981.8 | 977.4 | 978.1 | 984.7 | 975.9 |
| 177.5° | 984.0 | 978.8 | 980.3 | 986.2 | 977.4 |
| 180°   | 981.8 | 981.8 | 981.8 | 981.8 | 981.8 |

(END OF REPORT)