

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: P1007736

Luminaire Tested: S124IP-B590UB50-4F0-XX-W2A-1

Issue Date: 5/5/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1007736  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/5/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124IP-B590UB50-4F0-XX-W2A-1  
Description: Define 4 Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}  
Light Source: -  
Ballast/Driver: -

**Summary**

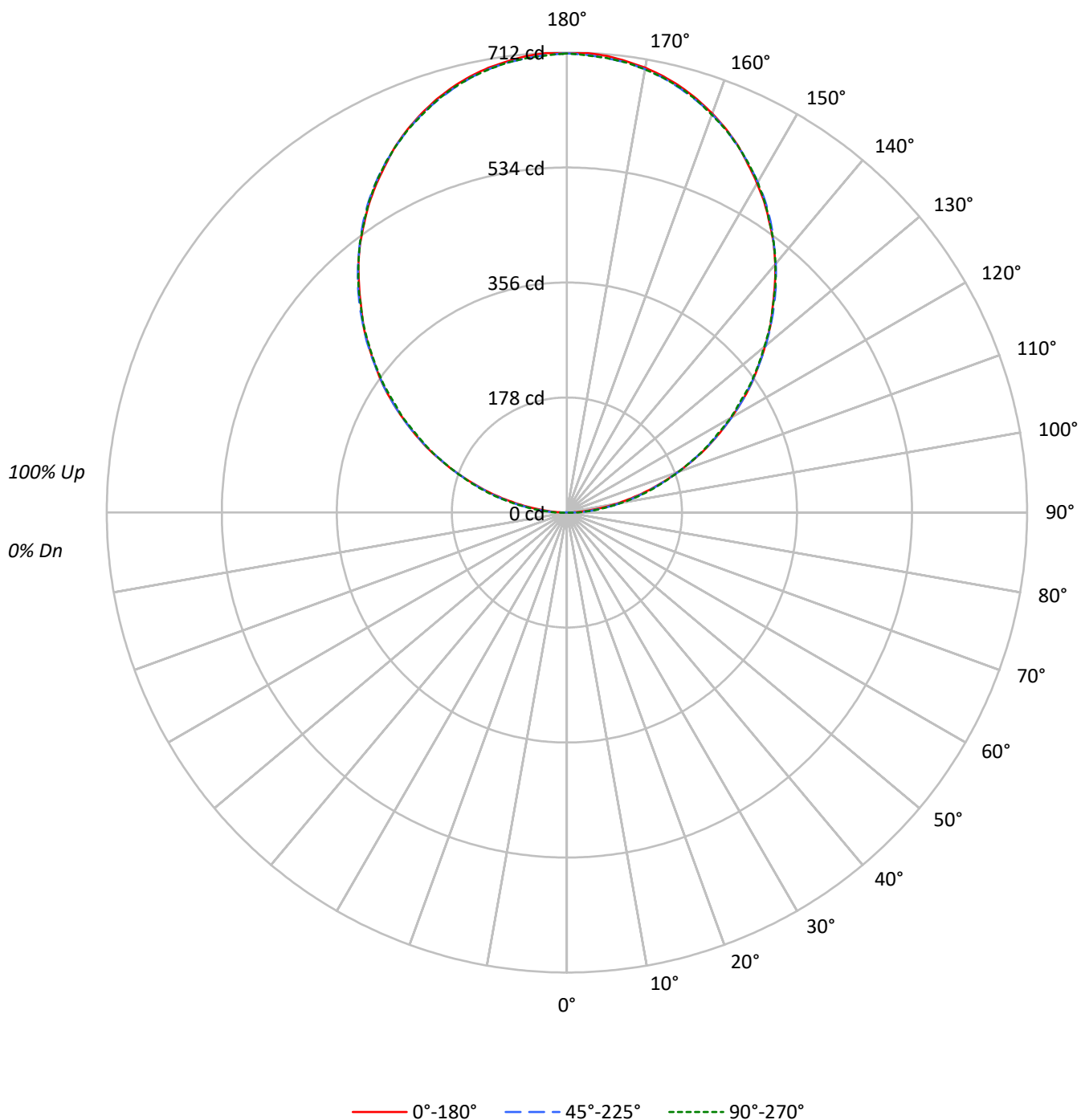
Lumens per Lamp: N/A  
Luminaire Lumens: 1973.0 lumens  
Efficiency: N/A  
Efficacy: 128.1 lumens/watt  
Spacing Criteria (0/90/45): - / - / -  
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')  
CIE Type: Indirect

Input Watts (W): 15.4  
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°   | 1.5    | 0.1       |
| 90°-100°  | 46.3   | 2.3       |
| 100°-110° | 138.7  | 7.0       |
| 110°-120° | 235.6  | 11.9      |
| 120°-130° | 310.8  | 15.8      |
| 130°-140° | 349.1  | 17.7      |
| 140°-150° | 343.1  | 17.4      |
| 150°-160° | 288.6  | 14.6      |
| 160°-170° | 192.0  | 9.7       |
| 170°-180° | 67.2   | 3.4       |
| 0°-30°    | 0.0    | 0.0       |
| 0°-40°    | 0.0    | 0.0       |
| 0°-60°    | 0.0    | 0.0       |
| 0°-90°    | 1.5    | 0.1       |
| 90°-120°  | 420.7  | 21.3      |
| 90°-150°  | 1423.7 | 72.2      |
| 90°-180°  | 1971.0 | 99.9      |
| 0°-180°   | 1973.0 | 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   | 8     | 12  | 15    | 16  | 2    |
| 95°  | 33  | 38    | 42  | 43    | 43  | 36   |
| 105° | 128 | 129   | 131 | 132   | 134 | 136  |
| 115° | 240 | 240   | 238 | 238   | 237 | 236  |
| 125° | 349 | 349   | 348 | 347   | 346 | 311  |
| 135° | 450 | 453   | 453 | 452   | 451 | 348  |
| 145° | 547 | 549   | 550 | 549   | 547 | 342  |
| 155° | 626 | 626   | 626 | 628   | 626 | 288  |
| 165° | 682 | 680   | 679 | 682   | 680 | 192  |
| 175° | 709 | 707   | 706 | 710   | 706 | 67   |
| 180° | 710 | 710   | 710 | 710   | 710 |      |

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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°    | 1.6   | 7.7   | 12.1  | 15.4  | 16.5  |
| 92.5°  | 14.3  | 21.4  | 24.2  | 25.8  | 26.4  |
| 95°    | 33.0  | 37.9  | 41.8  | 43.4  | 43.4  |
| 97.5°  | 52.8  | 57.2  | 61.5  | 63.7  | 63.7  |
| 100°   | 76.9  | 79.1  | 84.1  | 85.2  | 85.2  |
| 102.5° | 102.2 | 102.8 | 107.2 | 108.8 | 109.4 |
| 105°   | 128.0 | 128.6 | 130.8 | 132.4 | 134.1 |
| 107.5° | 155.0 | 155.5 | 156.1 | 158.3 | 157.7 |
| 110°   | 182.4 | 183.5 | 183.0 | 181.9 | 183.5 |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 211.0 | 211.0 | 209.9 | 209.9 | 209.9 |
| 115°   | 239.6 | 239.6 | 238.5 | 237.9 | 237.4 |
| 117.5° | 266.5 | 266.5 | 266.0 | 264.3 | 262.7 |
| 120°   | 293.4 | 295.6 | 294.0 | 291.2 | 292.3 |
| 122.5° | 321.5 | 322.0 | 321.5 | 319.8 | 317.1 |
| 125°   | 348.9 | 348.9 | 348.4 | 347.3 | 346.2 |
| 127.5° | 373.7 | 375.3 | 374.2 | 373.1 | 372.6 |
| 130°   | 400.1 | 401.7 | 401.7 | 400.6 | 398.4 |
| 132.5° | 427.0 | 428.1 | 427.5 | 426.4 | 425.9 |
| 135°   | 450.1 | 453.4 | 453.4 | 452.3 | 450.6 |
| 137.5° | 475.9 | 477.5 | 478.6 | 477.0 | 477.5 |
| 140°   | 501.7 | 502.8 | 502.8 | 502.3 | 501.7 |
| 142.5° | 525.3 | 526.4 | 525.9 | 525.9 | 525.9 |
| 145°   | 546.8 | 549.0 | 549.5 | 549.0 | 547.3 |
| 147.5° | 568.8 | 571.5 | 571.0 | 570.4 | 569.9 |
| 150°   | 588.5 | 590.7 | 590.7 | 590.7 | 590.2 |
| 152.5° | 607.2 | 608.3 | 608.9 | 610.5 | 608.9 |
| 155°   | 626.5 | 626.5 | 625.9 | 628.1 | 625.9 |
| 157.5° | 642.9 | 641.8 | 641.8 | 643.5 | 641.8 |
| 160°   | 657.2 | 656.7 | 656.1 | 657.8 | 655.0 |
| 162.5° | 670.4 | 668.8 | 668.2 | 671.5 | 668.8 |
| 165°   | 682.0 | 680.3 | 679.2 | 682.5 | 680.3 |
| 167.5° | 691.3 | 689.1 | 689.1 | 692.4 | 689.1 |
| 170°   | 699.0 | 696.3 | 696.8 | 700.1 | 696.3 |
| 172.5° | 704.5 | 702.3 | 702.3 | 706.1 | 702.3 |
| 175°   | 709.4 | 706.7 | 706.1 | 710.0 | 706.1 |
| 177.5° | 711.6 | 708.9 | 708.9 | 712.7 | 708.3 |
| 180°   | 710.5 | 710.5 | 710.5 | 710.5 | 710.5 |

(END OF REPORT)