

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: P983228

Luminaire Tested: S124IW-B470UB27-4F0-XX-W2A-1

Issue Date: 5/2/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P983228  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/2/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124IW-B470UB27-4F0-XX-W2A-1  
Description: Define 4 Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}  
Light Source: -  
Ballast/Driver: -

**Summary**

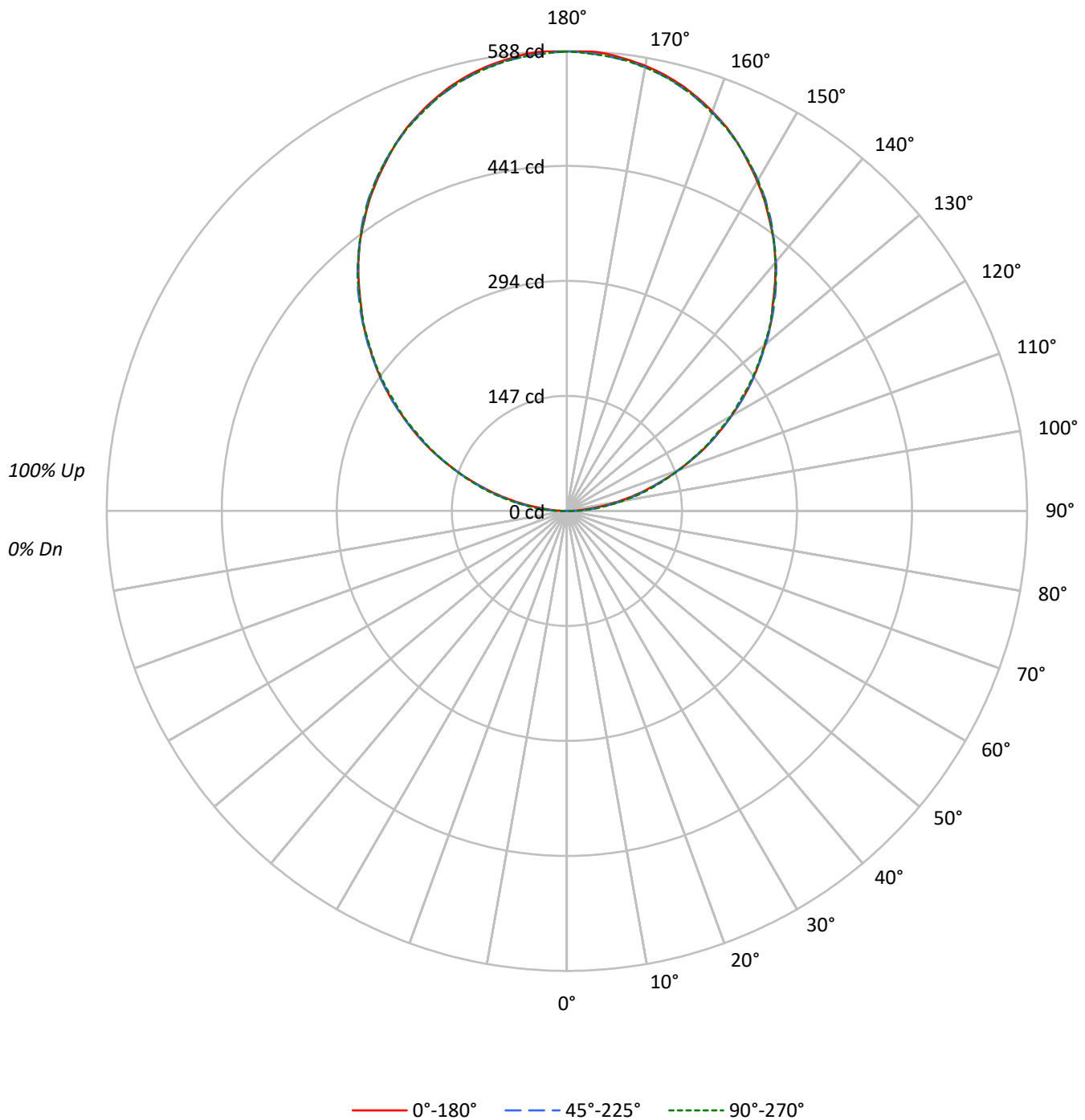
Lumens per Lamp: N/A  
Luminaire Lumens: 1631.0 lumens  
Efficiency: N/A  
Efficacy: 123.6 lumens/watt  
Spacing Criteria (0/90/45): - / - / -  
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')  
CIE Type: Indirect

Input Watts (W): 13.2  
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: P983228

CATALOG NUMBER: S124IW-B470UB27-4F0-XX-W2A-1

### Luminous Intensity Polar Plot



TEST NUMBER: P983228

CATALOG NUMBER: S124IW-B470UB27-4F0-XX-W2A-1

**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

TEST NUMBER: P983228

CATALOG NUMBER: S124IW-B470UB27-4F0-XX-W2A-1

**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°   | 1.3    | 0.1       |
| 90°-100°  | 38.3   | 2.3       |
| 100°-110° | 114.7  | 7.0       |
| 110°-120° | 194.8  | 11.9      |
| 120°-130° | 256.9  | 15.8      |
| 130°-140° | 288.6  | 17.7      |
| 140°-150° | 283.6  | 17.4      |
| 150°-160° | 238.5  | 14.6      |
| 160°-170° | 158.7  | 9.7       |
| 170°-180° | 55.6   | 3.4       |
| 0°-30°    | 0.0    | 0.0       |
| 0°-40°    | 0.0    | 0.0       |
| 0°-60°    | 0.0    | 0.0       |
| 0°-90°    | 1.3    | 0.1       |
| 90°-120°  | 347.8  | 21.3      |
| 90°-150°  | 1176.9 | 72.2      |
| 90°-180°  | 1630.0 | 99.9      |
| 0°-180°   | 1631.0 | 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°  | 1   | 6     | 10  | 13    | 14  | 2    |
| 95°  | 27  | 31    | 34  | 36    | 36  | 30   |
| 105° | 106 | 106   | 108 | 110   | 111 | 112  |
| 115° | 198 | 198   | 197 | 197   | 196 | 195  |
| 125° | 288 | 288   | 288 | 287   | 286 | 257  |
| 135° | 372 | 375   | 375 | 374   | 372 | 288  |
| 145° | 452 | 454   | 454 | 454   | 452 | 283  |
| 155° | 518 | 518   | 517 | 519   | 517 | 238  |
| 165° | 564 | 562   | 562 | 564   | 562 | 159  |
| 175° | 586 | 584   | 584 | 587   | 584 | 56   |
| 180° | 587 | 587   | 587 | 587   | 587 |      |

TEST NUMBER: P983228

CATALOG NUMBER: S124IW-B470UB27-4F0-XX-W2A-1

**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°    | 1.4   | 6.4   | 10.0  | 12.7  | 13.6  |
| 92.5°  | 11.8  | 17.7  | 20.0  | 21.4  | 21.8  |
| 95°    | 27.3  | 31.3  | 34.5  | 35.9  | 35.9  |
| 97.5°  | 43.6  | 47.2  | 50.9  | 52.7  | 52.7  |
| 100°   | 63.6  | 65.4  | 69.5  | 70.4  | 70.4  |
| 102.5° | 84.5  | 84.9  | 88.6  | 89.9  | 90.4  |
| 105°   | 105.8 | 106.3 | 108.1 | 109.5 | 110.8 |
| 107.5° | 128.1 | 128.6 | 129.0 | 130.8 | 130.4 |
| 110°   | 150.8 | 151.7 | 151.3 | 150.4 | 151.7 |

TEST NUMBER: P983228

CATALOG NUMBER: S124IW-B470UB27-4F0-XX-W2A-1

**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 174.4 | 174.4 | 173.5 | 173.5 | 173.5 |
| 115°   | 198.1 | 198.1 | 197.2 | 196.7 | 196.2 |
| 117.5° | 220.3 | 220.3 | 219.9 | 218.5 | 217.1 |
| 120°   | 242.6 | 244.4 | 243.0 | 240.8 | 241.7 |
| 122.5° | 265.7 | 266.2 | 265.7 | 264.4 | 262.1 |
| 125°   | 288.5 | 288.5 | 288.0 | 287.1 | 286.2 |
| 127.5° | 308.9 | 310.3 | 309.4 | 308.5 | 308.0 |
| 130°   | 330.7 | 332.1 | 332.1 | 331.2 | 329.3 |
| 132.5° | 353.0 | 353.9 | 353.4 | 352.5 | 352.1 |
| 135°   | 372.0 | 374.8 | 374.8 | 373.9 | 372.5 |
| 137.5° | 393.4 | 394.8 | 395.7 | 394.3 | 394.8 |
| 140°   | 414.7 | 415.7 | 415.7 | 415.2 | 414.7 |
| 142.5° | 434.3 | 435.2 | 434.7 | 434.7 | 434.7 |
| 145°   | 452.0 | 453.8 | 454.3 | 453.8 | 452.5 |
| 147.5° | 470.2 | 472.4 | 472.0 | 471.5 | 471.1 |
| 150°   | 486.5 | 488.3 | 488.3 | 488.3 | 487.9 |
| 152.5° | 502.0 | 502.9 | 503.3 | 504.7 | 503.3 |
| 155°   | 517.9 | 517.9 | 517.4 | 519.2 | 517.4 |
| 157.5° | 531.5 | 530.6 | 530.6 | 532.0 | 530.6 |
| 160°   | 543.3 | 542.9 | 542.4 | 543.8 | 541.5 |
| 162.5° | 554.2 | 552.8 | 552.4 | 555.1 | 552.8 |
| 165°   | 563.8 | 562.4 | 561.5 | 564.2 | 562.4 |
| 167.5° | 571.5 | 569.7 | 569.7 | 572.4 | 569.7 |
| 170°   | 577.8 | 575.6 | 576.0 | 578.7 | 575.6 |
| 172.5° | 582.4 | 580.6 | 580.6 | 583.7 | 580.6 |
| 175°   | 586.5 | 584.2 | 583.7 | 586.9 | 583.7 |
| 177.5° | 588.3 | 586.0 | 586.0 | 589.2 | 585.6 |
| 180°   | 587.4 | 587.4 | 587.4 | 587.4 | 587.4 |

(END OF REPORT)