

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: P1008098

Luminaire Tested: S122DIP-B485D330UB2750-4F0-XX-W2A-F\_5000K

Issue Date: 5/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1008098  
REPORT IS A COMBINATION OF REPORTS P984201 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122DIP-B485D330UB2750-4F0-XX-W2A-F\_5000K  
Description: Define 2 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}  
Light Source: -  
Ballast/Driver: -

**Summary**

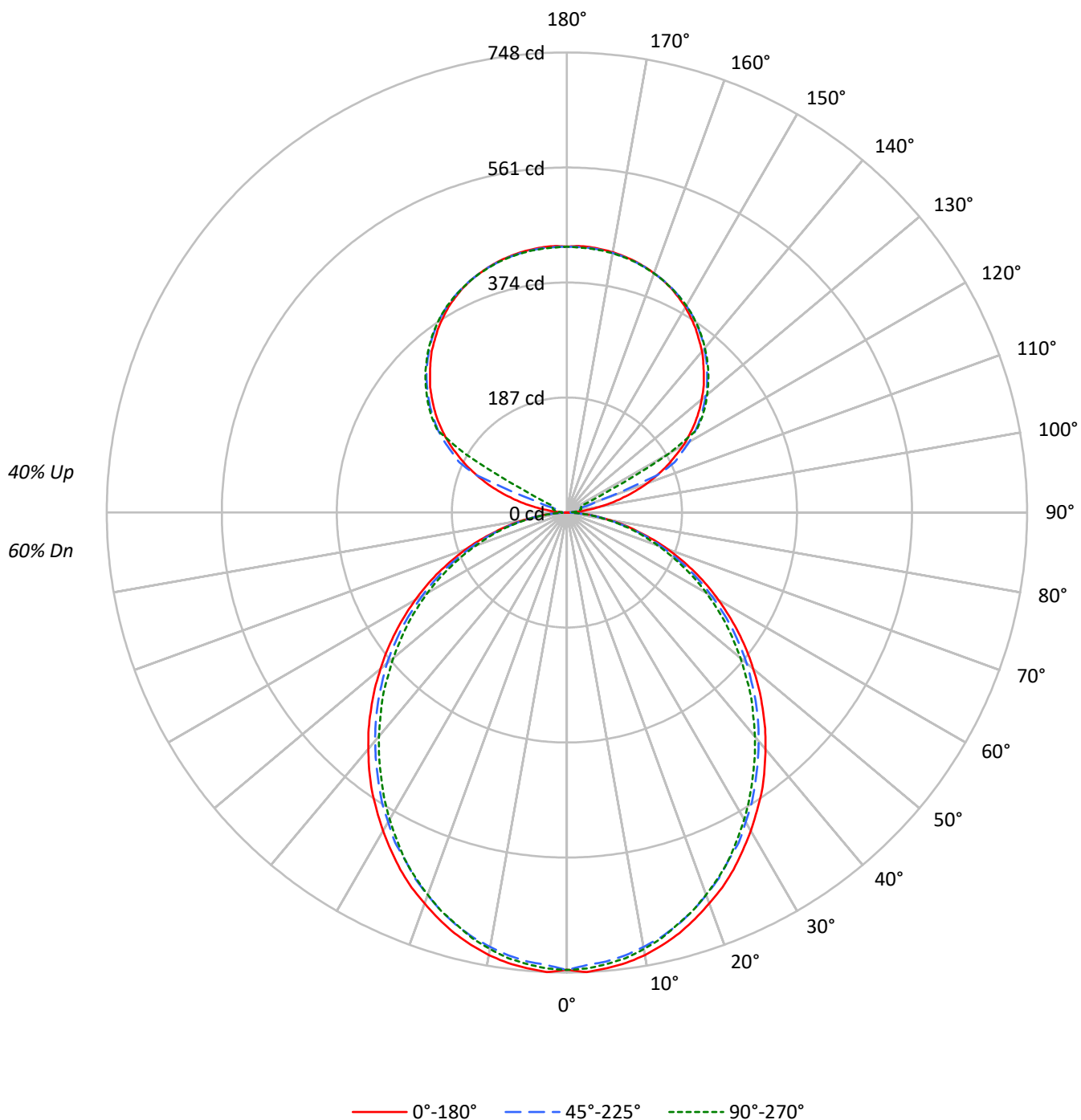
Lumens per Lamp: N/A  
Luminaire Lumens: 3160.0 lumens  
Efficiency: N/A  
Efficacy: 94.9 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29  
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

Input Watts (W): 33.3  
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   | 109 | 109 | 109 | 109 | 102 | 102 | 102 | 102 | 89 | 89 | 89 | 77 | 77 | 77 | 65 | 65 | 65 |
| 1   | 100 | 96  | 92  | 88  | 93  | 89  | 86  | 83  | 78 | 75 | 73 | 67 | 66 | 64 | 58 | 56 | 55 |
| 2   | 91  | 84  | 77  | 72  | 85  | 78  | 73  | 68  | 68 | 64 | 61 | 59 | 56 | 53 | 51 | 48 | 46 |
| 3   | 83  | 73  | 66  | 60  | 77  | 69  | 62  | 57  | 60 | 55 | 51 | 52 | 48 | 45 | 45 | 42 | 40 |
| 4   | 76  | 65  | 57  | 51  | 71  | 61  | 54  | 48  | 54 | 48 | 43 | 47 | 42 | 39 | 40 | 37 | 34 |
| 5   | 70  | 58  | 50  | 44  | 65  | 55  | 47  | 42  | 48 | 42 | 38 | 42 | 37 | 34 | 36 | 33 | 30 |
| 6   | 64  | 52  | 44  | 38  | 60  | 49  | 42  | 36  | 43 | 37 | 33 | 38 | 33 | 29 | 33 | 29 | 26 |
| 7   | 60  | 47  | 39  | 33  | 56  | 44  | 37  | 32  | 39 | 33 | 29 | 35 | 30 | 26 | 30 | 26 | 23 |
| 8   | 55  | 43  | 35  | 30  | 52  | 40  | 33  | 28  | 36 | 30 | 26 | 32 | 27 | 23 | 28 | 24 | 21 |
| 9   | 52  | 39  | 32  | 26  | 48  | 37  | 30  | 25  | 33 | 27 | 23 | 29 | 24 | 21 | 26 | 22 | 19 |
| 10  | 48  | 36  | 29  | 24  | 45  | 34  | 27  | 23  | 30 | 25 | 21 | 27 | 22 | 19 | 24 | 20 | 17 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 11772 | 11772 | 11772 |
| 5°  | 11791 | 11220 | 11141 |
| 10° | 11695 | 10709 | 10497 |
| 15° | 11524 | 10194 | 9819  |
| 20° | 11291 | 9633  | 9177  |
| 25° | 11061 | 9048  | 8536  |
| 30° | 10771 | 8498  | 7863  |
| 35° | 10497 | 7919  | 7203  |
| 40° | 10160 | 7345  | 6579  |
| 45° | 9824  | 6777  | 5966  |
| 50° | 9455  | 6199  | 5332  |
| 55° | 9070  | 5582  | 4729  |
| 60° | 8636  | 4912  | 4104  |
| 65° | 8159  | 4233  | 3447  |
| 70° | 7557  | 3489  | 2783  |
| 75° | 6718  | 2689  | 2149  |
| 80° | 5708  | 1829  | 1383  |
| 85° | 4139  | 851   | 588   |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9824 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 70.0   | 2.2       |
| 10°-20°   | 196.9  | 6.2       |
| 20°-30°   | 289.4  | 9.2       |
| 30°-40°   | 336.1  | 10.6      |
| 40°-50°   | 335.7  | 10.6      |
| 50°-60°   | 292.7  | 9.3       |
| 60°-70°   | 216.4  | 6.8       |
| 70°-80°   | 122.4  | 3.9       |
| 80°-90°   | 33.1   | 1.0       |
| 90°-100°  | 14.3   | 0.5       |
| 100°-110° | 53.1   | 1.7       |
| 110°-120° | 140.9  | 4.5       |
| 120°-130° | 233.7  | 7.4       |
| 130°-140° | 248.3  | 7.9       |
| 140°-150° | 230.7  | 7.3       |
| 150°-160° | 185.5  | 5.9       |
| 160°-170° | 119.5  | 3.8       |
| 170°-180° | 41.1   | 1.3       |
| 0°-30°    | 556.3  | 17.6      |
| 0°-40°    | 892.4  | 28.2      |
| 0°-60°    | 1520.9 | 48.1      |
| 0°-90°    | 1892.8 | 59.9      |
| 90°-120°  | 208.3  | 6.6       |
| 90°-150°  | 921.1  | 29.1      |
| 90°-180°  | 1267.0 | 40.1      |
| 0°-180°   | 3160.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0°   | 744 | 744   | 744 | 744   | 744 |      |
| 5°   | 744 | 741   | 733 | 739   | 737 | 71   |
| 15°  | 708 | 704   | 694 | 697   | 694 | 199  |
| 25°  | 641 | 635   | 623 | 624   | 623 | 295  |
| 35°  | 553 | 546   | 534 | 530   | 526 | 345  |
| 45°  | 450 | 445   | 434 | 426   | 423 | 347  |
| 55°  | 340 | 336   | 328 | 319   | 315 | 304  |
| 65°  | 230 | 225   | 218 | 212   | 208 | 227  |
| 75°  | 120 | 119   | 115 | 111   | 112 | 128  |
| 85°  | 29  | 29    | 28  | 26    | 25  | 33   |
| 90°  | 0   | 4     | 6   | 8     | 8   | 3    |
| 95°  | 20  | 10    | 12  | 14    | 13  | 24   |
| 105° | 95  | 104   | 19  | 22    | 24  | 102  |
| 115° | 180 | 185   | 193 | 48    | 26  | 177  |
| 125° | 254 | 258   | 264 | 266   | 267 | 227  |
| 135° | 315 | 320   | 322 | 326   | 325 | 243  |
| 145° | 365 | 365   | 370 | 372   | 371 | 228  |
| 155° | 402 | 399   | 403 | 405   | 402 | 185  |
| 165° | 424 | 422   | 423 | 425   | 423 | 120  |
| 175° | 433 | 431   | 432 | 434   | 431 | 41   |
| 180° | 432 | 432   | 432 | 432   | 432 |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 0°     | 743.7 | 743.7 | 743.7 | 743.7 | 743.7 |
| 2.5°   | 748.0 | 744.4 | 736.5 | 743.7 | 742.2 |
| 5°     | 743.7 | 740.8 | 732.9 | 738.7 | 737.2 |
| 7.5°   | 738.7 | 734.4 | 726.5 | 732.2 | 730.8 |
| 10°    | 730.8 | 725.8 | 717.2 | 722.9 | 720.8 |
| 12.5°  | 720.1 | 715.8 | 707.2 | 710.8 | 709.3 |
| 15°    | 707.9 | 703.6 | 694.3 | 697.2 | 693.6 |
| 17.5°  | 692.9 | 688.6 | 679.3 | 682.9 | 679.3 |
| 20°    | 676.4 | 672.2 | 662.1 | 664.3 | 661.4 |
| 22.5°  | 660.0 | 653.6 | 644.3 | 644.3 | 642.8 |
| 25°    | 640.7 | 635.0 | 622.8 | 624.2 | 622.8 |
| 27.5°  | 619.2 | 614.2 | 604.9 | 602.8 | 599.2 |
| 30°    | 597.8 | 592.1 | 581.3 | 579.2 | 576.3 |
| 32.5°  | 574.9 | 570.6 | 559.2 | 554.9 | 552.0 |
| 35°    | 552.7 | 545.6 | 534.2 | 529.9 | 526.3 |
| 37.5°  | 527.7 | 521.3 | 509.8 | 504.8 | 501.3 |
| 40°    | 502.0 | 496.3 | 484.8 | 478.4 | 475.5 |
| 42.5°  | 476.9 | 471.2 | 459.8 | 452.6 | 448.3 |
| 45°    | 449.8 | 444.8 | 434.0 | 426.2 | 423.3 |
| 47.5°  | 423.3 | 418.3 | 406.9 | 399.0 | 394.7 |
| 50°    | 395.4 | 391.9 | 381.8 | 371.8 | 368.3 |
| 52.5°  | 368.3 | 363.3 | 354.0 | 346.1 | 341.1 |
| 55°    | 340.4 | 336.1 | 327.5 | 318.9 | 315.3 |
| 57.5°  | 312.5 | 308.9 | 299.6 | 291.0 | 288.2 |
| 60°    | 284.6 | 281.7 | 271.7 | 263.9 | 261.7 |
| 62.5°  | 257.4 | 252.4 | 245.3 | 238.1 | 235.3 |
| 65°    | 229.5 | 225.2 | 218.1 | 211.7 | 208.1 |
| 67.5°  | 200.9 | 197.4 | 190.9 | 185.9 | 183.1 |
| 70°    | 174.5 | 171.6 | 165.2 | 160.2 | 157.3 |
| 72.5°  | 147.3 | 144.4 | 140.9 | 135.9 | 133.7 |
| 75°    | 120.1 | 118.7 | 115.1 | 110.8 | 112.3 |
| 77.5°  | 95.8  | 93.0  | 91.5  | 89.4  | 87.2  |
| 80°    | 71.5  | 70.8  | 69.4  | 67.2  | 65.8  |
| 82.5°  | 48.6  | 48.6  | 47.9  | 45.0  | 45.0  |
| 85°    | 29.3  | 28.6  | 27.9  | 25.7  | 25.0  |
| 87.5°  | 12.9  | 11.4  | 10.0  | 7.9   | 7.2   |
| 90°    | 0.3   | 3.8   | 6.3   | 7.8   | 8.4   |
| 92.5°  | 7.8   | 6.6   | 7.5   | 8.1   | 8.4   |
| 95°    | 20.3  | 10.0  | 12.2  | 13.8  | 13.4  |
| 97.5°  | 36.6  | 10.9  | 16.0  | 16.9  | 17.2  |
| 100°   | 55.4  | 12.5  | 17.8  | 20.3  | 21.0  |
| 102.5° | 76.0  | 75.4  | 18.5  | 21.9  | 22.8  |
| 105°   | 95.1  | 104.5 | 19.1  | 22.5  | 23.8  |
| 107.5° | 117.3 | 125.1 | 19.7  | 23.1  | 24.4  |
| 110°   | 138.6 | 145.1 | 54.7  | 23.5  | 24.7  |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 158.6 | 164.2 | 158.9 | 24.1  | 25.0  |
| 115°   | 179.8 | 185.2 | 193.0 | 48.2  | 25.6  |
| 117.5° | 198.3 | 204.6 | 209.9 | 165.1 | 83.2  |
| 120°   | 218.9 | 223.6 | 229.3 | 233.0 | 190.8 |
| 122.5° | 236.5 | 241.5 | 247.7 | 249.6 | 249.9 |
| 125°   | 254.3 | 258.4 | 264.3 | 266.5 | 267.4 |
| 127.5° | 270.6 | 274.9 | 279.6 | 282.8 | 283.1 |
| 130°   | 285.9 | 290.9 | 294.3 | 297.8 | 297.5 |
| 132.5° | 301.5 | 305.6 | 309.0 | 311.8 | 311.5 |
| 135°   | 314.7 | 319.7 | 322.5 | 325.6 | 325.0 |
| 137.5° | 328.4 | 332.2 | 335.3 | 338.4 | 337.5 |
| 140°   | 341.9 | 344.4 | 347.8 | 350.6 | 349.1 |
| 142.5° | 353.1 | 355.3 | 359.4 | 361.9 | 360.3 |
| 145°   | 365.0 | 364.7 | 370.0 | 372.2 | 370.6 |
| 147.5° | 375.3 | 374.4 | 379.7 | 381.3 | 380.0 |
| 150°   | 385.3 | 383.2 | 388.2 | 390.0 | 388.5 |
| 152.5° | 393.8 | 391.3 | 396.0 | 397.9 | 395.7 |
| 155°   | 401.9 | 399.1 | 402.9 | 404.7 | 402.2 |
| 157.5° | 408.5 | 406.0 | 408.8 | 411.0 | 408.5 |
| 160°   | 414.1 | 412.2 | 414.1 | 416.0 | 413.8 |
| 162.5° | 419.1 | 417.2 | 418.8 | 421.0 | 418.2 |
| 165°   | 423.5 | 421.6 | 422.6 | 424.8 | 422.6 |
| 167.5° | 426.9 | 425.1 | 426.0 | 428.2 | 425.4 |
| 170°   | 429.8 | 427.9 | 428.5 | 430.7 | 427.9 |
| 172.5° | 431.6 | 429.8 | 430.4 | 432.6 | 429.8 |
| 175°   | 433.2 | 431.0 | 431.6 | 433.8 | 430.7 |
| 177.5° | 433.8 | 431.6 | 431.9 | 434.1 | 431.3 |
| 180°   | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 |

(END OF REPORT)