

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: P1009060

Luminaire Tested: S122DIP-B485D330UB40-4F0-XX-W2A-D

Issue Date: 5/6/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1009060  
REPORT IS A COMBINATION OF REPORTS P984223 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/6/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122DIP-B485D330UB40-4F0-XX-W2A-D  
Description: Define 2 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}  
Light Source: -  
Ballast/Driver: -

**Summary**

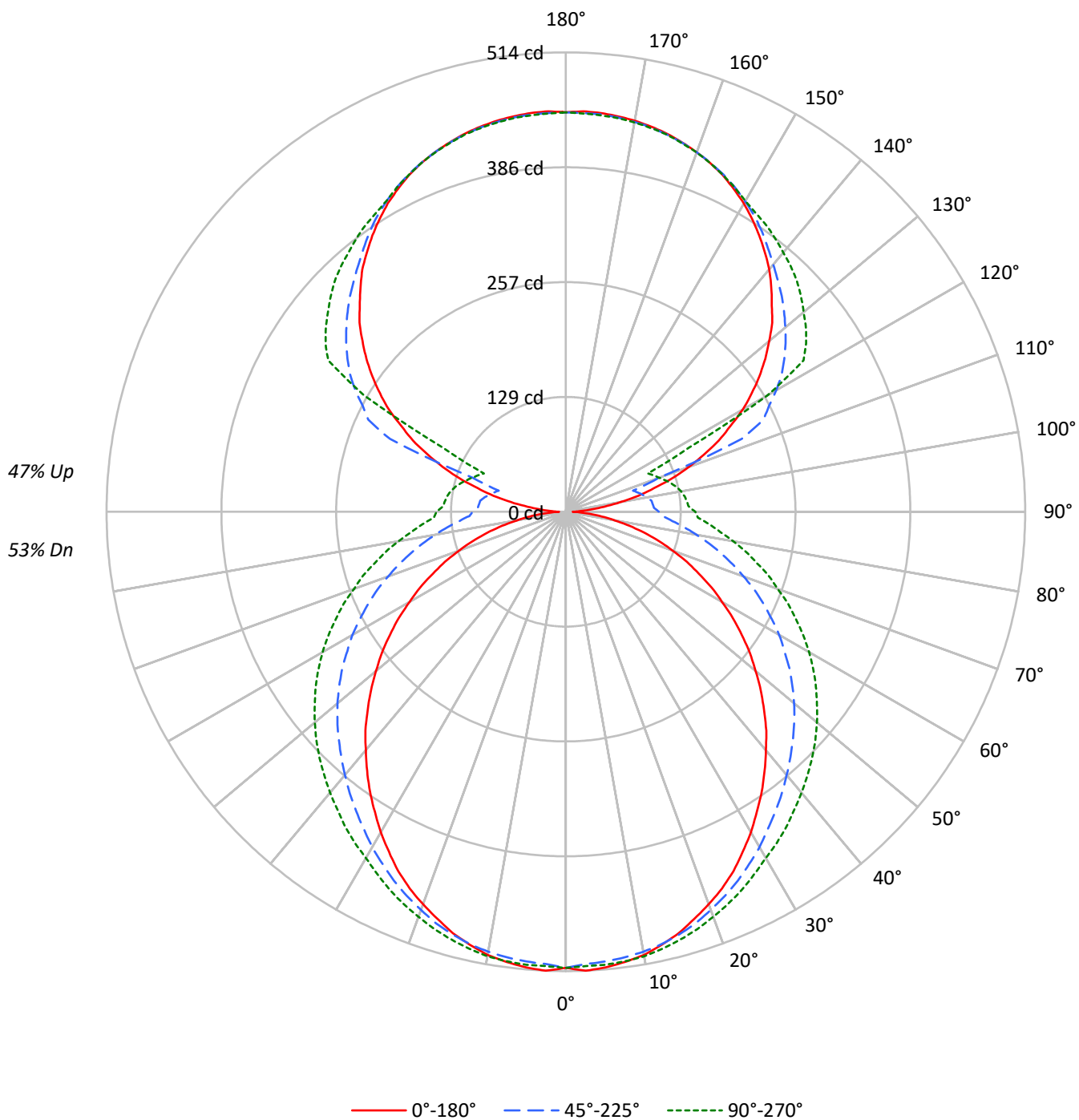
Lumens per Lamp: N/A  
Luminaire Lumens: 3258.0 lumens  
Efficiency: N/A  
Efficacy: 97.8 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42  
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

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   | 108 | 108 | 108 | 108 | 100 | 100 | 100 | 100 | 85 | 85 | 85 | 71 | 71 | 71 | 59 | 59 | 59 |
| 1   | 97  | 92  | 87  | 83  | 89  | 85  | 81  | 78  | 72 | 69 | 67 | 60 | 58 | 56 | 50 | 48 | 47 |
| 2   | 88  | 79  | 72  | 67  | 81  | 73  | 67  | 62  | 62 | 58 | 54 | 52 | 49 | 46 | 43 | 40 | 38 |
| 3   | 80  | 69  | 61  | 55  | 73  | 64  | 57  | 51  | 54 | 49 | 45 | 46 | 41 | 38 | 37 | 34 | 32 |
| 4   | 73  | 61  | 52  | 46  | 67  | 56  | 49  | 43  | 48 | 42 | 38 | 40 | 36 | 32 | 33 | 30 | 27 |
| 5   | 66  | 54  | 45  | 39  | 61  | 50  | 42  | 37  | 43 | 37 | 32 | 36 | 31 | 28 | 30 | 26 | 23 |
| 6   | 61  | 48  | 40  | 34  | 56  | 45  | 37  | 32  | 38 | 32 | 28 | 32 | 28 | 24 | 27 | 23 | 20 |
| 7   | 56  | 44  | 35  | 29  | 52  | 41  | 33  | 28  | 35 | 29 | 24 | 29 | 25 | 21 | 24 | 21 | 18 |
| 8   | 52  | 39  | 31  | 26  | 48  | 37  | 29  | 24  | 32 | 26 | 22 | 27 | 22 | 19 | 22 | 19 | 16 |
| 9   | 49  | 36  | 28  | 23  | 45  | 34  | 27  | 22  | 29 | 23 | 19 | 25 | 20 | 17 | 21 | 17 | 14 |
| 10  | 45  | 33  | 25  | 21  | 42  | 31  | 24  | 19  | 27 | 21 | 17 | 23 | 18 | 15 | 19 | 15 | 13 |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 8078 | 8078 | 8078 |
| 5°  | 8113 | 7733 | 7689 |
| 10° | 8059 | 7464 | 7356 |
| 15° | 7946 | 7188 | 7014 |
| 20° | 7802 | 6896 | 6690 |
| 25° | 7660 | 6618 | 6395 |
| 30° | 7461 | 6336 | 6104 |
| 35° | 7260 | 6063 | 5891 |
| 40° | 7049 | 5826 | 5678 |
| 45° | 6849 | 5612 | 5493 |
| 50° | 6631 | 5415 | 5310 |
| 55° | 6403 | 5205 | 5125 |
| 60° | 6127 | 4986 | 4929 |
| 65° | 5837 | 4736 | 4704 |
| 70° | 5509 | 4467 | 4462 |
| 75° | 5091 | 4198 | 4232 |
| 80° | 4431 | 3916 | 3996 |
| 85° | 3757 | 3653 | 3791 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6849 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 48.4   | 1.5       |
| 10°-20°   | 138.7  | 4.3       |
| 20°-30°   | 210.2  | 6.5       |
| 30°-40°   | 256.0  | 7.9       |
| 40°-50°   | 275.4  | 8.5       |
| 50°-60°   | 267.5  | 8.2       |
| 60°-70°   | 233.6  | 7.2       |
| 70°-80°   | 179.8  | 5.5       |
| 80°-90°   | 121.2  | 3.7       |
| 90°-100°  | 97.8   | 3.0       |
| 100°-110° | 115.6  | 3.5       |
| 110°-120° | 185.8  | 5.7       |
| 120°-130° | 264.0  | 8.1       |
| 130°-140° | 266.0  | 8.2       |
| 140°-150° | 240.1  | 7.4       |
| 150°-160° | 191.8  | 5.9       |
| 160°-170° | 123.6  | 3.8       |
| 170°-180° | 42.5   | 1.3       |
| 0°-30°    | 397.3  | 12.2      |
| 0°-40°    | 653.3  | 20.1      |
| 0°-60°    | 1196.2 | 36.7      |
| 0°-90°    | 1730.7 | 53.1      |
| 90°-120°  | 399.2  | 12.3      |
| 90°-150°  | 1169.3 | 35.9      |
| 90°-180°  | 1527.0 | 46.9      |
| 0°-180°   | 3258.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0°   | 510 | 510   | 510 | 510   | 510 |      |
| 5°   | 512 | 510   | 505 | 510   | 509 | 49   |
| 15°  | 488 | 490   | 490 | 496   | 496 | 137  |
| 25°  | 444 | 449   | 456 | 464   | 467 | 204  |
| 35°  | 382 | 395   | 409 | 425   | 430 | 239  |
| 45°  | 314 | 334   | 359 | 382   | 390 | 242  |
| 55°  | 240 | 267   | 305 | 332   | 342 | 215  |
| 65°  | 164 | 200   | 244 | 274   | 284 | 163  |
| 75°  | 91  | 132   | 180 | 212   | 221 | 96   |
| 85°  | 27  | 72    | 120 | 151   | 161 | 28   |
| 90°  | 8   | 54    | 104 | 135   | 145 | 6    |
| 95°  | 27  | 51    | 98  | 127   | 136 | 30   |
| 105° | 102 | 133   | 83  | 113   | 122 | 109  |
| 115° | 189 | 202   | 244 | 116   | 101 | 186  |
| 125° | 264 | 269   | 298 | 321   | 328 | 236  |
| 135° | 326 | 331   | 342 | 360   | 366 | 252  |
| 145° | 377 | 377   | 383 | 389   | 391 | 236  |
| 155° | 416 | 413   | 416 | 418   | 416 | 191  |
| 165° | 438 | 436   | 437 | 439   | 437 | 124  |
| 175° | 448 | 446   | 446 | 448   | 445 | 43   |
| 180° | 447 | 447   | 447 | 447   | 447 |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 0°     | 510.3 | 510.3 | 510.3 | 510.3 | 510.3 |
| 2.5°   | 514.0 | 511.7 | 506.6 | 510.3 | 508.8 |
| 5°     | 511.7 | 509.5 | 505.1 | 509.5 | 508.8 |
| 7.5°   | 508.0 | 506.6 | 502.9 | 508.0 | 507.3 |
| 10°    | 503.6 | 502.1 | 499.9 | 505.8 | 505.1 |
| 12.5°  | 496.2 | 497.0 | 495.5 | 501.4 | 500.7 |
| 15°    | 488.1 | 489.6 | 489.6 | 496.2 | 495.5 |
| 17.5°  | 477.7 | 480.7 | 482.9 | 489.6 | 489.6 |
| 20°    | 467.4 | 471.1 | 474.0 | 482.2 | 482.2 |
| 22.5°  | 456.3 | 460.7 | 465.2 | 473.3 | 474.8 |
| 25°    | 443.7 | 448.9 | 455.5 | 464.4 | 466.6 |
| 27.5°  | 428.9 | 437.1 | 444.4 | 455.5 | 457.0 |
| 30°    | 414.1 | 423.7 | 433.4 | 445.2 | 447.4 |
| 32.5°  | 397.9 | 409.0 | 420.8 | 434.8 | 439.3 |
| 35°    | 382.3 | 394.9 | 409.0 | 425.2 | 430.4 |
| 37.5°  | 365.3 | 379.4 | 397.1 | 414.9 | 420.0 |
| 40°    | 348.3 | 364.6 | 384.5 | 403.8 | 410.4 |
| 42.5°  | 332.0 | 348.3 | 372.0 | 393.4 | 400.1 |
| 45°    | 313.6 | 333.5 | 359.4 | 382.3 | 389.7 |
| 47.5°  | 295.8 | 317.3 | 346.8 | 370.5 | 378.6 |
| 50°    | 277.3 | 300.2 | 333.5 | 358.7 | 366.8 |
| 52.5°  | 259.6 | 284.0 | 319.5 | 345.4 | 354.2 |
| 55°    | 240.3 | 267.0 | 305.4 | 332.0 | 341.7 |
| 57.5°  | 221.9 | 251.4 | 289.9 | 318.7 | 328.3 |
| 60°    | 201.9 | 233.7 | 275.8 | 303.9 | 314.3 |
| 62.5°  | 184.1 | 217.4 | 259.6 | 289.9 | 299.5 |
| 65°    | 164.2 | 200.4 | 244.0 | 274.4 | 284.0 |
| 67.5°  | 146.4 | 184.1 | 228.5 | 258.8 | 269.2 |
| 70°    | 127.2 | 165.7 | 211.5 | 243.3 | 252.2 |
| 72.5°  | 109.4 | 149.4 | 196.0 | 227.0 | 238.1 |
| 75°    | 91.0  | 132.4 | 179.7 | 211.5 | 221.1 |
| 77.5°  | 73.2  | 116.1 | 164.2 | 196.0 | 206.3 |
| 80°    | 55.5  | 100.6 | 148.6 | 179.7 | 190.1 |
| 82.5°  | 40.7  | 85.0  | 133.9 | 164.9 | 174.5 |
| 85°    | 26.6  | 72.5  | 119.8 | 150.9 | 161.2 |
| 87.5°  | 16.3  | 60.6  | 108.0 | 138.3 | 147.9 |
| 90°    | 7.7   | 54.2  | 104.1 | 135.3 | 144.8 |
| 92.5°  | 14.8  | 52.7  | 98.8  | 128.2 | 137.4 |
| 95°    | 26.9  | 51.0  | 97.6  | 127.3 | 135.9 |
| 97.5°  | 43.0  | 48.3  | 96.4  | 124.7 | 133.9 |
| 100°   | 62.4  | 45.4  | 92.4  | 122.3 | 131.1 |
| 102.5° | 83.0  | 106.7 | 87.9  | 118.0 | 127.1 |
| 105°   | 102.0 | 133.1 | 83.3  | 112.8 | 122.2 |
| 107.5° | 125.0 | 150.8 | 78.8  | 107.5 | 116.9 |
| 110°   | 146.3 | 167.8 | 110.6 | 101.9 | 111.3 |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 167.0 | 184.6 | 213.1 | 97.4  | 106.5 |
| 115°   | 188.9 | 202.5 | 243.9 | 116.4 | 101.2 |
| 117.5° | 207.2 | 219.6 | 256.2 | 232.1 | 154.8 |
| 120°   | 228.6 | 236.4 | 271.8 | 296.4 | 260.9 |
| 122.5° | 246.7 | 252.7 | 286.4 | 308.4 | 315.3 |
| 125°   | 264.4 | 268.6 | 298.4 | 320.6 | 328.3 |
| 127.5° | 281.2 | 285.0 | 309.8 | 331.5 | 338.6 |
| 130°   | 297.1 | 301.4 | 320.6 | 341.9 | 347.4 |
| 132.5° | 313.2 | 316.6 | 331.3 | 351.2 | 356.9 |
| 135°   | 326.0 | 331.2 | 341.5 | 360.3 | 365.6 |
| 137.5° | 340.3 | 344.1 | 351.1 | 368.4 | 372.6 |
| 140°   | 354.2 | 356.0 | 361.1 | 375.8 | 378.6 |
| 142.5° | 365.8 | 367.4 | 371.6 | 383.1 | 385.1 |
| 145°   | 377.4 | 377.1 | 382.6 | 389.2 | 391.3 |
| 147.5° | 388.1 | 387.1 | 392.6 | 394.9 | 395.9 |
| 150°   | 398.4 | 396.1 | 401.3 | 403.3 | 401.6 |
| 152.5° | 407.1 | 404.6 | 409.4 | 411.3 | 409.1 |
| 155°   | 415.6 | 412.6 | 416.5 | 418.5 | 415.9 |
| 157.5° | 422.3 | 419.8 | 422.7 | 424.9 | 422.3 |
| 160°   | 428.2 | 426.2 | 428.2 | 430.1 | 427.8 |
| 162.5° | 433.3 | 431.4 | 433.0 | 435.3 | 432.4 |
| 165°   | 437.9 | 435.9 | 436.9 | 439.2 | 436.9 |
| 167.5° | 441.4 | 439.5 | 440.5 | 442.7 | 439.8 |
| 170°   | 444.3 | 442.4 | 443.0 | 445.3 | 442.4 |
| 172.5° | 446.3 | 444.3 | 445.0 | 447.2 | 444.3 |
| 175°   | 447.9 | 445.6 | 446.3 | 448.5 | 445.3 |
| 177.5° | 448.5 | 446.3 | 446.6 | 448.9 | 446.0 |
| 180°   | 446.9 | 446.9 | 446.9 | 446.9 | 446.9 |

(END OF REPORT)