

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: P1008240

Luminaire Tested: S122DIP-B865D330UB2750-4F0-XX-W2A-D\_3000K

Issue Date: 5/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1008240  
REPORT IS A COMBINATION OF REPORTS P984793 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122DIP-B865D330UB2750-4F0-XX-W2A-D\_3000K  
Description: Define 2 Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}  
Light Source: -  
Ballast/Driver: -

**Summary**

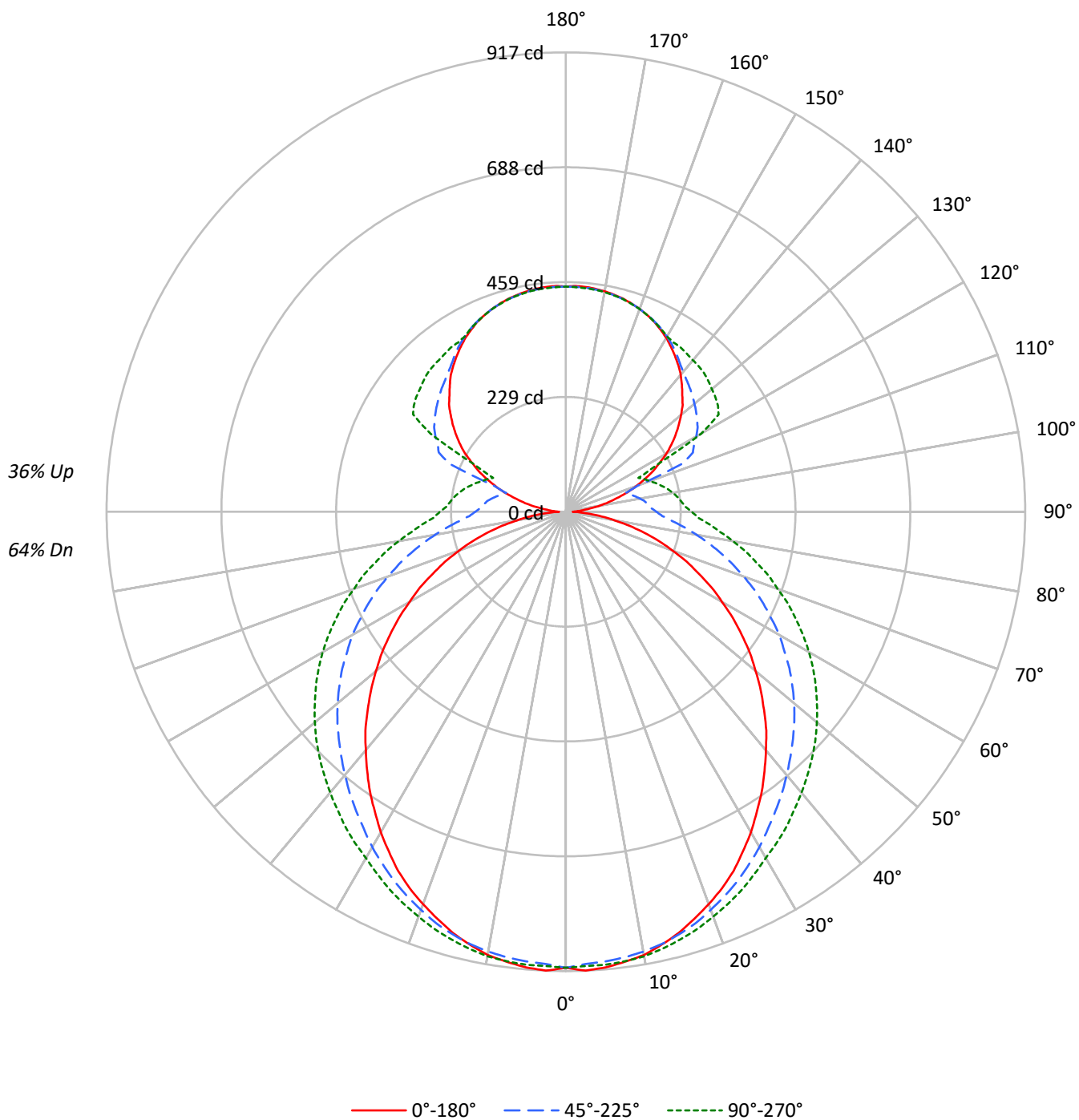
Lumens per Lamp: N/A  
Luminaire Lumens: 4792.0 lumens  
Efficiency: N/A  
Efficacy: 85.4 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42  
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')  
CIE Type: Semi-Direct

Input Watts (W): 56.1  
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   | 111 | 111 | 111 | 111 | 104 | 104 | 104 | 104 | 91 | 91 | 91 | 80 | 80 | 80 | 69 | 69 | 69 |
| 1   | 99  | 94  | 89  | 85  | 93  | 88  | 84  | 80  | 77 | 74 | 71 | 67 | 65 | 63 | 58 | 56 | 55 |
| 2   | 89  | 81  | 74  | 68  | 83  | 76  | 70  | 64  | 67 | 62 | 57 | 58 | 54 | 51 | 50 | 47 | 45 |
| 3   | 81  | 70  | 62  | 56  | 76  | 66  | 59  | 53  | 58 | 52 | 47 | 51 | 46 | 42 | 44 | 40 | 37 |
| 4   | 74  | 62  | 53  | 47  | 69  | 58  | 50  | 44  | 51 | 45 | 40 | 45 | 40 | 36 | 39 | 35 | 32 |
| 5   | 68  | 55  | 46  | 40  | 63  | 52  | 44  | 38  | 46 | 39 | 34 | 40 | 35 | 31 | 35 | 31 | 27 |
| 6   | 62  | 49  | 41  | 34  | 58  | 46  | 38  | 33  | 41 | 35 | 30 | 36 | 31 | 27 | 31 | 27 | 24 |
| 7   | 58  | 44  | 36  | 30  | 54  | 42  | 34  | 29  | 37 | 31 | 26 | 33 | 27 | 23 | 29 | 24 | 21 |
| 8   | 54  | 40  | 32  | 26  | 50  | 38  | 31  | 25  | 34 | 28 | 23 | 30 | 25 | 21 | 26 | 22 | 19 |
| 9   | 50  | 37  | 29  | 23  | 47  | 35  | 28  | 23  | 31 | 25 | 21 | 28 | 22 | 19 | 24 | 20 | 17 |
| 10  | 47  | 34  | 26  | 21  | 44  | 32  | 25  | 20  | 29 | 23 | 19 | 25 | 20 | 17 | 22 | 18 | 15 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 14408 | 14408 | 14408 |
| 5°  | 14473 | 13793 | 13716 |
| 10° | 14375 | 13315 | 13121 |
| 15° | 14172 | 12822 | 12511 |
| 20° | 13917 | 12303 | 11934 |
| 25° | 13665 | 11806 | 11409 |
| 30° | 13310 | 11300 | 10889 |
| 35° | 12952 | 10814 | 10507 |
| 40° | 12575 | 10392 | 10129 |
| 45° | 12215 | 10011 | 9799  |
| 50° | 11830 | 9659  | 9472  |
| 55° | 11423 | 9285  | 9140  |
| 60° | 10927 | 8895  | 8791  |
| 65° | 10409 | 8448  | 8389  |
| 70° | 9826  | 7969  | 7957  |
| 75° | 9079  | 7486  | 7549  |
| 80° | 7896  | 6986  | 7127  |
| 85° | 6710  | 6516  | 6763  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12215 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 86.3   | 1.8       |
| 10°-20°   | 247.5  | 5.2       |
| 20°-30°   | 375.0  | 7.8       |
| 30°-40°   | 456.6  | 9.5       |
| 40°-50°   | 491.3  | 10.3      |
| 50°-60°   | 477.1  | 10.0      |
| 60°-70°   | 416.7  | 8.7       |
| 70°-80°   | 320.7  | 6.7       |
| 80°-90°   | 215.6  | 4.5       |
| 90°-100°  | 163.0  | 3.4       |
| 100°-110° | 163.5  | 3.4       |
| 110°-120° | 218.0  | 4.6       |
| 120°-130° | 282.9  | 5.9       |
| 130°-140° | 275.0  | 5.7       |
| 140°-150° | 242.8  | 5.1       |
| 150°-160° | 193.0  | 4.0       |
| 160°-170° | 124.3  | 2.6       |
| 170°-180° | 42.8   | 0.9       |
| 0°-30°    | 708.7  | 14.8      |
| 0°-40°    | 1165.3 | 24.3      |
| 0°-60°    | 2133.7 | 44.5      |
| 0°-90°    | 3086.6 | 64.4      |
| 90°-120°  | 544.5  | 11.4      |
| 90°-150°  | 1345.3 | 28.1      |
| 90°-180°  | 1705.0 | 35.6      |
| 0°-180°   | 4792.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0°   | 910 | 910   | 910 | 910   | 910 |      |
| 5°   | 913 | 909   | 901 | 909   | 908 | 87   |
| 15°  | 871 | 873   | 873 | 885   | 884 | 245  |
| 25°  | 792 | 801   | 813 | 828   | 832 | 364  |
| 35°  | 682 | 704   | 730 | 758   | 768 | 426  |
| 45°  | 559 | 595   | 641 | 682   | 695 | 432  |
| 55°  | 429 | 476   | 545 | 592   | 609 | 383  |
| 65°  | 293 | 358   | 435 | 489   | 506 | 291  |
| 75°  | 162 | 236   | 320 | 377   | 394 | 172  |
| 85°  | 48  | 129   | 214 | 269   | 288 | 50   |
| 90°  | 14  | 94    | 181 | 235   | 252 | 10   |
| 95°  | 32  | 83    | 164 | 216   | 232 | 33   |
| 105° | 106 | 154   | 133 | 183   | 199 | 113  |
| 115° | 192 | 212   | 280 | 169   | 160 | 189  |
| 125° | 267 | 271   | 320 | 358   | 370 | 239  |
| 135° | 329 | 334   | 350 | 381   | 391 | 254  |
| 145° | 380 | 379   | 385 | 395   | 400 | 238  |
| 155° | 418 | 415   | 419 | 421   | 418 | 193  |
| 165° | 440 | 439   | 440 | 442   | 440 | 124  |
| 175° | 451 | 448   | 449 | 451   | 448 | 43   |
| 180° | 450 | 450   | 450 | 450   | 450 |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 0°     | 910.2 | 910.2 | 910.2 | 910.2 | 910.2 |
| 2.5°   | 916.8 | 912.8 | 903.6 | 910.2 | 907.6 |
| 5°     | 912.8 | 908.9 | 901.0 | 908.9 | 907.6 |
| 7.5°   | 906.2 | 903.6 | 897.0 | 906.2 | 904.9 |
| 10°    | 898.3 | 895.7 | 891.7 | 902.3 | 901.0 |
| 12.5°  | 885.1 | 886.5 | 883.8 | 894.4 | 893.1 |
| 15°    | 870.6 | 873.3 | 873.3 | 885.1 | 883.8 |
| 17.5°  | 852.2 | 857.4 | 861.4 | 873.3 | 873.3 |
| 20°    | 833.7 | 840.3 | 845.6 | 860.1 | 860.1 |
| 22.5°  | 813.9 | 821.8 | 829.7 | 844.2 | 846.9 |
| 25°    | 791.5 | 800.7 | 812.6 | 828.4 | 832.4 |
| 27.5°  | 765.1 | 779.6 | 792.8 | 812.6 | 815.2 |
| 30°    | 738.7 | 755.9 | 773.0 | 794.1 | 798.1 |
| 32.5°  | 709.7 | 729.5 | 750.6 | 775.6 | 783.6 |
| 35°    | 682.0 | 704.4 | 729.5 | 758.5 | 767.7 |
| 37.5°  | 651.6 | 676.7 | 708.4 | 740.0 | 749.3 |
| 40°    | 621.3 | 650.3 | 685.9 | 720.2 | 732.1 |
| 42.5°  | 592.3 | 621.3 | 663.5 | 701.8 | 713.6 |
| 45°    | 559.3 | 594.9 | 641.1 | 682.0 | 695.2 |
| 47.5°  | 527.7 | 565.9 | 618.7 | 660.9 | 675.4 |
| 50°    | 494.7 | 535.6 | 594.9 | 639.8 | 654.3 |
| 52.5°  | 463.0 | 506.5 | 569.9 | 616.0 | 631.9 |
| 55°    | 428.7 | 476.2 | 544.8 | 592.3 | 609.4 |
| 57.5°  | 395.7 | 448.5 | 517.1 | 568.5 | 585.7 |
| 60°    | 360.1 | 416.8 | 492.0 | 542.2 | 560.6 |
| 62.5°  | 328.5 | 387.8 | 463.0 | 517.1 | 534.2 |
| 65°    | 292.8 | 357.5 | 435.3 | 489.4 | 506.5 |
| 67.5°  | 261.2 | 328.5 | 407.6 | 461.7 | 480.2 |
| 70°    | 226.9 | 295.5 | 377.3 | 434.0 | 449.8 |
| 72.5°  | 195.2 | 266.5 | 349.6 | 405.0 | 424.8 |
| 75°    | 162.3 | 236.1 | 320.5 | 377.3 | 394.4 |
| 77.5°  | 130.6 | 207.1 | 292.8 | 349.6 | 368.0 |
| 80°    | 98.9  | 179.4 | 265.1 | 320.5 | 339.0 |
| 82.5°  | 72.6  | 151.7 | 238.8 | 294.2 | 311.3 |
| 85°    | 47.5  | 129.3 | 213.7 | 269.1 | 287.6 |
| 87.5°  | 29.0  | 108.2 | 192.6 | 246.7 | 263.8 |
| 90°    | 13.5  | 93.6  | 180.6 | 235.0 | 251.5 |
| 92.5°  | 20.0  | 88.6  | 170.1 | 222.2 | 238.3 |
| 95°    | 31.7  | 83.0  | 164.4 | 216.1 | 231.7 |
| 97.5°  | 47.3  | 77.4  | 159.1 | 208.9 | 225.0 |
| 100°   | 66.8  | 71.0  | 150.4 | 201.8 | 217.0 |
| 102.5° | 87.0  | 129.8 | 141.9 | 193.0 | 208.5 |
| 105°   | 105.5 | 153.6 | 133.2 | 183.0 | 198.8 |
| 107.5° | 128.6 | 168.4 | 124.7 | 173.2 | 189.0 |
| 110°   | 149.4 | 182.7 | 153.2 | 162.9 | 178.7 |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 170.3 | 197.2 | 252.4 | 154.4 | 169.8 |
| 115°   | 192.4 | 212.4 | 279.8 | 168.8 | 159.9 |
| 117.5° | 210.3 | 227.3 | 288.2 | 281.3 | 209.2 |
| 120°   | 231.8 | 241.8 | 300.5 | 341.3 | 311.9 |
| 122.5° | 250.0 | 256.5 | 311.8 | 349.3 | 361.6 |
| 125°   | 267.1 | 271.3 | 319.8 | 357.7 | 370.5 |
| 127.5° | 284.0 | 287.3 | 327.8 | 364.0 | 376.3 |
| 130°   | 300.0 | 303.9 | 335.2 | 370.4 | 380.6 |
| 132.5° | 316.2 | 319.2 | 342.6 | 375.8 | 386.1 |
| 135°   | 328.6 | 333.8 | 349.9 | 380.9 | 390.8 |
| 137.5° | 342.9 | 346.8 | 356.7 | 385.0 | 393.3 |
| 140°   | 356.9 | 358.2 | 364.4 | 388.4 | 394.8 |
| 142.5° | 368.6 | 369.6 | 373.8 | 392.2 | 397.2 |
| 145°   | 379.7 | 379.4 | 384.9 | 395.1 | 400.1 |
| 147.5° | 390.4 | 389.5 | 395.0 | 397.9 | 400.6 |
| 150°   | 400.8 | 398.6 | 403.8 | 405.7 | 404.1 |
| 152.5° | 409.6 | 407.0 | 411.9 | 413.9 | 411.6 |
| 155°   | 418.1 | 415.2 | 419.1 | 421.0 | 418.4 |
| 157.5° | 424.9 | 422.3 | 425.2 | 427.5 | 424.9 |
| 160°   | 430.8 | 428.8 | 430.8 | 432.7 | 430.5 |
| 162.5° | 436.0 | 434.0 | 435.7 | 437.9 | 435.0 |
| 165°   | 440.5 | 438.6 | 439.6 | 441.8 | 439.6 |
| 167.5° | 444.1 | 442.2 | 443.1 | 445.4 | 442.5 |
| 170°   | 447.0 | 445.1 | 445.7 | 448.0 | 445.1 |
| 172.5° | 449.0 | 447.0 | 447.7 | 450.0 | 447.0 |
| 175°   | 450.6 | 448.3 | 449.0 | 451.3 | 448.0 |
| 177.5° | 451.3 | 449.0 | 449.3 | 451.6 | 448.7 |
| 180°   | 449.6 | 449.6 | 449.6 | 449.6 | 449.6 |

(END OF REPORT)