

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: P1008941

Luminaire Tested: S122DIP-B290D725UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1008941  
REPORT IS A COMBINATION OF REPORTS P984056 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/6/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122DIP-B290D725UB50-4F0-XX-W2A-F1  
Description: Define 2 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}  
Light Source: -  
Ballast/Driver: -

**Summary**

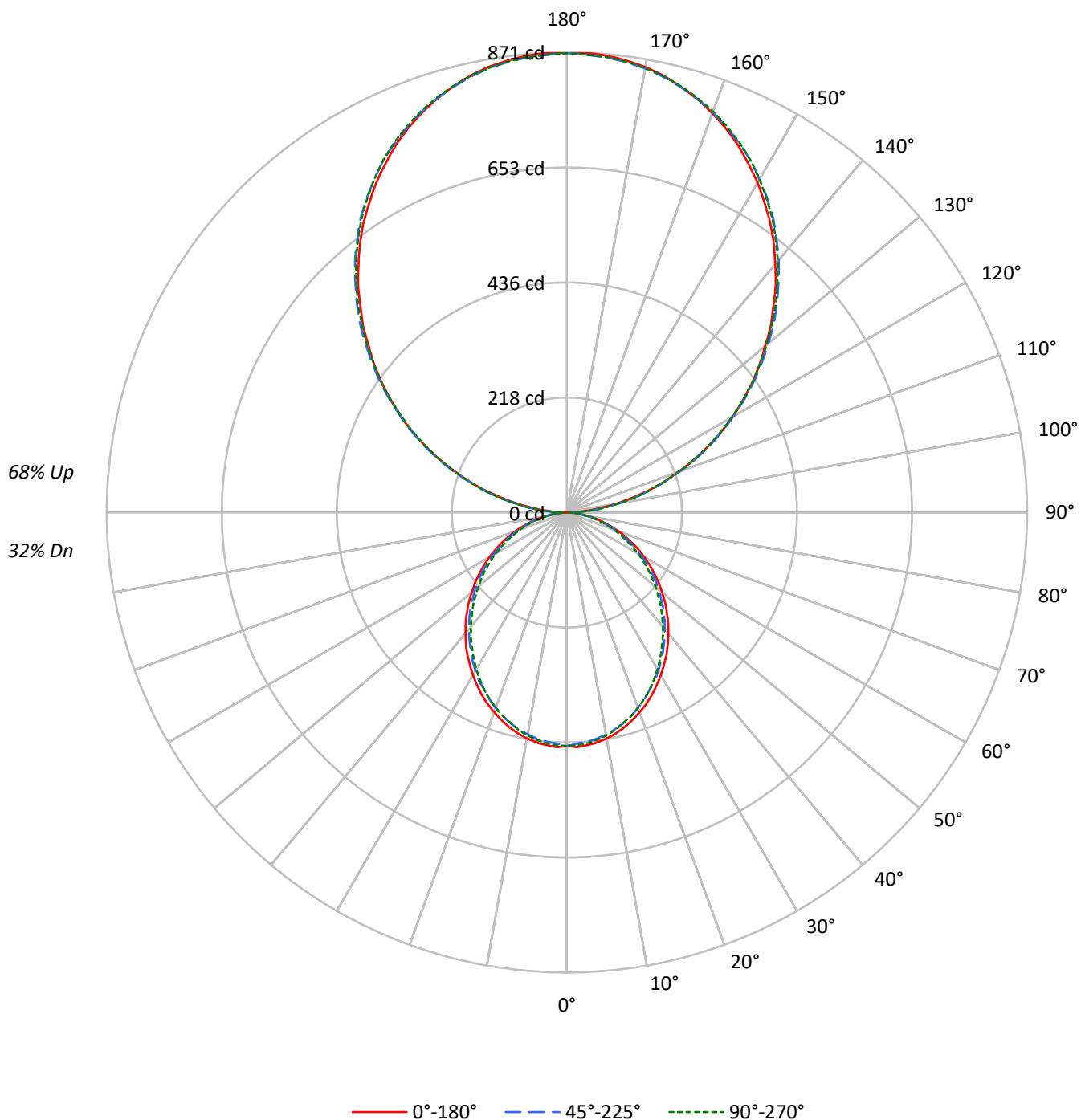
Lumens per Lamp: N/A  
Luminaire Lumens: 3559.0 lumens  
Efficiency: N/A  
Efficacy: 104.4 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29  
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')  
CIE Type: Semi-Indirect

Input Watts (W): 34.1  
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   | 103 | 103 | 103 | 103 | 92 | 92 | 92 | 92 | 73 | 73 | 73 | 56 | 56 | 56 | 39 | 39 | 39 |
| 1   | 94  | 89  | 86  | 82  | 84 | 81 | 77 | 75 | 64 | 62 | 60 | 49 | 47 | 46 | 35 | 34 | 33 |
| 2   | 85  | 78  | 72  | 67  | 76 | 70 | 65 | 61 | 56 | 53 | 50 | 43 | 40 | 38 | 31 | 29 | 28 |
| 3   | 78  | 69  | 61  | 56  | 70 | 62 | 56 | 51 | 49 | 45 | 42 | 38 | 35 | 32 | 27 | 25 | 24 |
| 4   | 71  | 61  | 53  | 47  | 64 | 55 | 48 | 43 | 44 | 39 | 35 | 34 | 30 | 28 | 24 | 22 | 20 |
| 5   | 65  | 54  | 46  | 40  | 58 | 49 | 42 | 37 | 39 | 34 | 30 | 30 | 27 | 24 | 22 | 20 | 18 |
| 6   | 60  | 48  | 40  | 35  | 54 | 44 | 37 | 32 | 35 | 30 | 26 | 27 | 24 | 21 | 20 | 17 | 16 |
| 7   | 55  | 43  | 36  | 30  | 50 | 39 | 33 | 28 | 32 | 27 | 23 | 25 | 21 | 18 | 18 | 16 | 14 |
| 8   | 51  | 39  | 32  | 27  | 46 | 36 | 29 | 25 | 29 | 24 | 20 | 22 | 19 | 16 | 16 | 14 | 12 |
| 9   | 48  | 36  | 28  | 24  | 43 | 33 | 26 | 22 | 26 | 22 | 18 | 21 | 17 | 15 | 15 | 13 | 11 |
| 10  | 44  | 33  | 26  | 21  | 40 | 30 | 24 | 19 | 24 | 20 | 16 | 19 | 16 | 13 | 14 | 12 | 10 |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 7000 | 7000 | 7000 |
| 5°  | 7011 | 6672 | 6625 |
| 10° | 6953 | 6368 | 6242 |
| 15° | 6852 | 6062 | 5838 |
| 20° | 6714 | 5728 | 5457 |
| 25° | 6578 | 5380 | 5075 |
| 30° | 6405 | 5054 | 4676 |
| 35° | 6243 | 4708 | 4283 |
| 40° | 6041 | 4368 | 3911 |
| 45° | 5840 | 4030 | 3548 |
| 50° | 5622 | 3686 | 3170 |
| 55° | 5393 | 3318 | 2812 |
| 60° | 5134 | 2922 | 2440 |
| 65° | 4852 | 2517 | 2049 |
| 70° | 4491 | 2074 | 1654 |
| 75° | 3994 | 1600 | 1279 |
| 80° | 3393 | 1086 | 822  |
| 85° | 2458 | 506  | 350  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
Vertical Angle: 45°  
Luminance: 5840 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 41.6   | 1.2       |
| 10°-20°   | 117.1  | 3.3       |
| 20°-30°   | 172.1  | 4.8       |
| 30°-40°   | 199.9  | 5.6       |
| 40°-50°   | 199.6  | 5.6       |
| 50°-60°   | 174.1  | 4.9       |
| 60°-70°   | 128.7  | 3.6       |
| 70°-80°   | 72.8   | 2.0       |
| 80°-90°   | 21.7   | 0.6       |
| 90°-100°  | 53.8   | 1.5       |
| 100°-110° | 171.0  | 4.8       |
| 110°-120° | 292.7  | 8.2       |
| 120°-130° | 384.9  | 10.8      |
| 130°-140° | 432.0  | 12.1      |
| 140°-150° | 423.7  | 11.9      |
| 150°-160° | 355.4  | 10.0      |
| 160°-170° | 235.7  | 6.6       |
| 170°-180° | 82.4   | 2.3       |
| 0°-30°    | 330.8  | 9.3       |
| 0°-40°    | 530.7  | 14.9      |
| 0°-60°    | 904.3  | 25.4      |
| 0°-90°    | 1127.5 | 31.7      |
| 90°-120°  | 517.5  | 14.5      |
| 90°-150°  | 1758.1 | 49.4      |
| 90°-180°  | 2432.0 | 68.3      |
| 0°-180°   | 3559.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0°   | 442 | 442   | 442 | 442   | 442 |      |
| 5°   | 442 | 440   | 436 | 439   | 438 | 42   |
| 15°  | 421 | 418   | 413 | 415   | 412 | 119  |
| 25°  | 381 | 378   | 370 | 371   | 370 | 175  |
| 35°  | 329 | 324   | 318 | 315   | 313 | 205  |
| 45°  | 267 | 264   | 258 | 253   | 252 | 206  |
| 55°  | 202 | 200   | 195 | 190   | 188 | 181  |
| 65°  | 136 | 134   | 130 | 126   | 124 | 135  |
| 75°  | 71  | 71    | 68  | 66    | 67  | 76   |
| 85°  | 17  | 17    | 17  | 15    | 15  | 19   |
| 90°  | 1   | 10    | 26  | 24    | 25  | 3    |
| 95°  | 38  | 46    | 47  | 47    | 46  | 43   |
| 105° | 158 | 160   | 162 | 163   | 163 | 167  |
| 115° | 294 | 298   | 296 | 296   | 294 | 290  |
| 125° | 427 | 434   | 432 | 429   | 429 | 382  |
| 135° | 553 | 561   | 562 | 562   | 559 | 427  |
| 145° | 671 | 676   | 680 | 681   | 678 | 419  |
| 155° | 767 | 769   | 771 | 775   | 773 | 353  |
| 165° | 834 | 834   | 834 | 839   | 835 | 235  |
| 175° | 868 | 866   | 865 | 870   | 865 | 82   |
| 180° | 870 | 870   | 870 | 870   | 870 |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 0°     | 442.2 | 442.2 | 442.2 | 442.2 | 442.2 |
| 2.5°   | 444.7 | 442.6 | 437.9 | 442.2 | 441.3 |
| 5°     | 442.2 | 440.5 | 435.8 | 439.2 | 438.4 |
| 7.5°   | 439.2 | 436.7 | 432.0 | 435.4 | 434.5 |
| 10°    | 434.5 | 431.6 | 426.5 | 429.9 | 428.6 |
| 12.5°  | 428.2 | 425.6 | 420.5 | 422.6 | 421.8 |
| 15°    | 420.9 | 418.4 | 412.9 | 414.6 | 412.4 |
| 17.5°  | 412.0 | 409.5 | 403.9 | 406.0 | 403.9 |
| 20°    | 402.2 | 399.7 | 393.7 | 395.0 | 393.3 |
| 22.5°  | 392.4 | 388.6 | 383.1 | 383.1 | 382.2 |
| 25°    | 381.0 | 377.6 | 370.3 | 371.2 | 370.3 |
| 27.5°  | 368.2 | 365.2 | 359.7 | 358.4 | 356.3 |
| 30°    | 355.5 | 352.1 | 345.7 | 344.4 | 342.7 |
| 32.5°  | 341.8 | 339.3 | 332.5 | 329.9 | 328.2 |
| 35°    | 328.7 | 324.4 | 317.6 | 315.1 | 312.9 |
| 37.5°  | 313.8 | 310.0 | 303.2 | 300.2 | 298.1 |
| 40°    | 298.5 | 295.1 | 288.3 | 284.4 | 282.7 |
| 42.5°  | 283.6 | 280.2 | 273.4 | 269.1 | 266.6 |
| 45°    | 267.4 | 264.5 | 258.1 | 253.4 | 251.7 |
| 47.5°  | 251.7 | 248.7 | 241.9 | 237.3 | 234.7 |
| 50°    | 235.1 | 233.0 | 227.0 | 221.1 | 219.0 |
| 52.5°  | 219.0 | 216.0 | 210.5 | 205.8 | 202.8 |
| 55°    | 202.4 | 199.8 | 194.7 | 189.6 | 187.5 |
| 57.5°  | 185.8 | 183.7 | 178.2 | 173.0 | 171.3 |
| 60°    | 169.2 | 167.5 | 161.6 | 156.9 | 155.6 |
| 62.5°  | 153.1 | 150.1 | 145.8 | 141.6 | 139.9 |
| 65°    | 136.5 | 133.9 | 129.7 | 125.9 | 123.7 |
| 67.5°  | 119.5 | 117.4 | 113.5 | 110.5 | 108.8 |
| 70°    | 103.7 | 102.0 | 98.2  | 95.2  | 93.5  |
| 72.5°  | 87.6  | 85.9  | 83.8  | 80.8  | 79.5  |
| 75°    | 71.4  | 70.6  | 68.5  | 65.9  | 66.8  |
| 77.5°  | 57.0  | 55.3  | 54.4  | 53.1  | 51.9  |
| 80°    | 42.5  | 42.1  | 41.2  | 40.0  | 39.1  |
| 82.5°  | 28.9  | 28.9  | 28.5  | 26.8  | 26.8  |
| 85°    | 17.4  | 17.0  | 16.6  | 15.3  | 14.9  |
| 87.5°  | 7.7   | 6.8   | 6.0   | 4.7   | 4.3   |
| 90°    | 0.7   | 9.5   | 25.7  | 24.2  | 25.0  |
| 92.5°  | 16.1  | 22.0  | 22.8  | 23.5  | 23.5  |
| 95°    | 38.2  | 45.5  | 47.0  | 47.0  | 45.5  |
| 97.5°  | 63.9  | 70.5  | 73.4  | 73.4  | 73.4  |
| 100°   | 93.2  | 99.1  | 101.3 | 101.3 | 100.5 |
| 102.5° | 124.0 | 128.4 | 131.4 | 132.1 | 131.4 |
| 105°   | 157.8 | 160.0 | 161.5 | 162.9 | 162.9 |
| 107.5° | 191.6 | 194.5 | 194.5 | 195.2 | 191.6 |
| 110°   | 223.8 | 228.3 | 228.3 | 228.3 | 226.0 |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 259.1 | 263.5 | 262.7 | 260.5 | 259.1 |
| 115°   | 293.6 | 298.0 | 296.5 | 295.8 | 293.6 |
| 117.5° | 328.1 | 333.9 | 330.3 | 328.1 | 325.9 |
| 120°   | 362.6 | 368.4 | 362.6 | 362.6 | 360.4 |
| 122.5° | 394.1 | 401.5 | 397.8 | 395.6 | 394.1 |
| 125°   | 427.1 | 433.8 | 431.5 | 429.3 | 428.6 |
| 127.5° | 459.4 | 467.5 | 464.6 | 461.6 | 459.4 |
| 130°   | 489.5 | 499.1 | 497.6 | 496.1 | 493.2 |
| 132.5° | 523.3 | 530.6 | 531.4 | 527.7 | 525.5 |
| 135°   | 552.6 | 560.7 | 562.2 | 561.5 | 559.3 |
| 137.5° | 584.9 | 591.5 | 593.0 | 592.3 | 589.3 |
| 140°   | 613.6 | 620.2 | 623.8 | 623.8 | 620.9 |
| 142.5° | 642.9 | 649.5 | 651.7 | 652.5 | 649.5 |
| 145°   | 670.8 | 675.9 | 680.4 | 681.1 | 678.1 |
| 147.5° | 695.8 | 702.4 | 705.3 | 706.8 | 703.8 |
| 150°   | 721.4 | 725.9 | 728.8 | 731.0 | 728.8 |
| 152.5° | 744.2 | 748.6 | 752.3 | 755.2 | 752.3 |
| 155°   | 767.0 | 769.2 | 771.4 | 775.0 | 772.8 |
| 157.5° | 786.8 | 788.2 | 789.7 | 794.8 | 791.2 |
| 160°   | 804.4 | 805.9 | 806.6 | 811.0 | 808.1 |
| 162.5° | 820.5 | 820.5 | 821.3 | 826.4 | 822.7 |
| 165°   | 834.5 | 833.7 | 833.7 | 838.9 | 835.2 |
| 167.5° | 847.0 | 844.7 | 844.7 | 849.9 | 846.2 |
| 170°   | 856.5 | 854.3 | 853.6 | 858.7 | 854.3 |
| 172.5° | 863.1 | 860.9 | 860.2 | 865.3 | 860.9 |
| 175°   | 868.2 | 866.0 | 864.6 | 869.7 | 865.3 |
| 177.5° | 871.2 | 869.0 | 867.5 | 871.9 | 867.5 |
| 180°   | 869.7 | 869.7 | 869.7 | 869.7 | 869.7 |

(END OF REPORT)