

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: P1009160

Luminaire Tested: S122DIP-B485D725UB50-4F0-XX-W2A-D1

Issue Date: 5/6/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1009160  
REPORT IS A COMBINATION OF REPORTS P984353 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/6/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122DIP-B485D725UB50-4F0-XX-W2A-D1  
Description: Define 2 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}  
Light Source: -  
Ballast/Driver: -

**Summary**

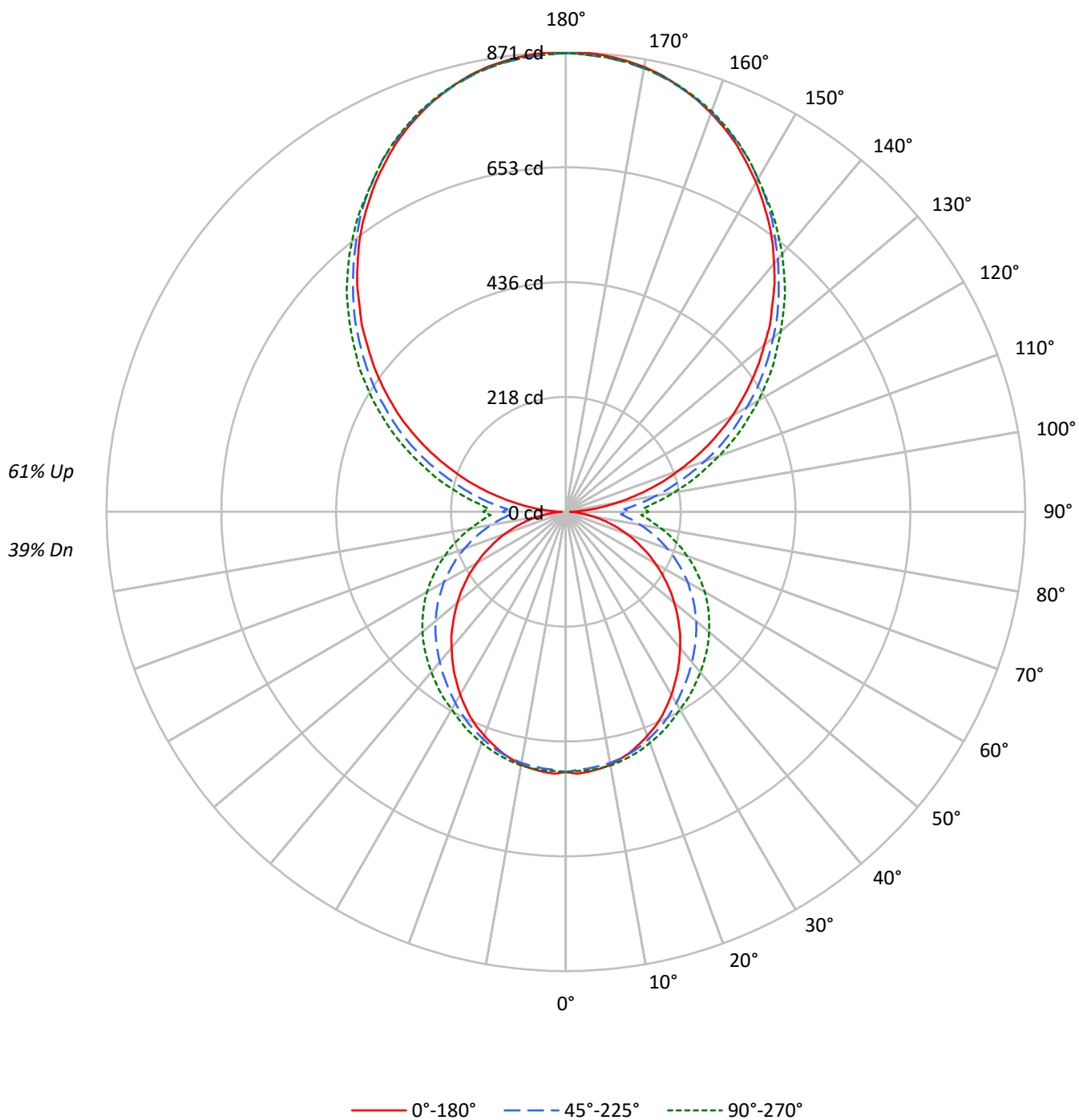
Lumens per Lamp: N/A  
Luminaire Lumens: 4317.0 lumens  
Efficiency: N/A  
Efficacy: 95.7 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42  
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')  
CIE Type: Semi-Indirect

Input Watts (W): 45.1  
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 |    |    |    |    | 0  |
| RW  | 70  | 50  | 30  | 10  | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 |
| RCR |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 0   | 104 | 104 | 104 | 104 | 95 | 95 | 95 | 95 | 77 | 77 | 77 | 61 | 61 | 61 | 46 | 46 | 46 | 39 |    |    |
| 1   | 94  | 89  | 85  | 81  | 85 | 81 | 77 | 74 | 66 | 63 | 61 | 52 | 50 | 48 | 39 | 37 | 36 | 30 |    |    |
| 2   | 85  | 77  | 71  | 65  | 77 | 70 | 65 | 60 | 57 | 53 | 49 | 45 | 42 | 39 | 33 | 31 | 30 | 24 |    |    |
| 3   | 77  | 68  | 60  | 54  | 70 | 61 | 55 | 49 | 50 | 45 | 41 | 39 | 36 | 33 | 29 | 27 | 25 | 20 |    |    |
| 4   | 71  | 59  | 51  | 45  | 64 | 54 | 47 | 42 | 44 | 39 | 34 | 35 | 31 | 28 | 26 | 23 | 21 | 17 |    |    |
| 5   | 65  | 53  | 44  | 38  | 58 | 48 | 41 | 35 | 39 | 34 | 29 | 31 | 27 | 24 | 23 | 20 | 18 | 15 |    |    |
| 6   | 59  | 47  | 39  | 33  | 54 | 43 | 36 | 30 | 35 | 30 | 25 | 28 | 24 | 21 | 21 | 18 | 16 | 13 |    |    |
| 7   | 55  | 42  | 34  | 29  | 49 | 39 | 32 | 27 | 32 | 26 | 22 | 25 | 21 | 18 | 19 | 16 | 14 | 11 |    |    |
| 8   | 51  | 38  | 31  | 25  | 46 | 35 | 28 | 23 | 29 | 23 | 20 | 23 | 19 | 16 | 17 | 15 | 12 | 10 |    |    |
| 9   | 47  | 35  | 27  | 22  | 43 | 32 | 25 | 21 | 26 | 21 | 17 | 21 | 17 | 14 | 16 | 13 | 11 | 9  |    |    |
| 10  | 44  | 32  | 25  | 20  | 40 | 29 | 23 | 18 | 24 | 19 | 16 | 19 | 15 | 13 | 15 | 12 | 10 | 8  |    |    |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 7812 | 7812 | 7812 |
| 5°  | 7847 | 7478 | 7437 |
| 10° | 7795 | 7220 | 7114 |
| 15° | 7684 | 6952 | 6784 |
| 20° | 7545 | 6669 | 6470 |
| 25° | 7408 | 6401 | 6186 |
| 30° | 7216 | 6127 | 5904 |
| 35° | 7023 | 5863 | 5698 |
| 40° | 6819 | 5635 | 5491 |
| 45° | 6622 | 5428 | 5312 |
| 50° | 6414 | 5238 | 5135 |
| 55° | 6193 | 5035 | 4955 |
| 60° | 5926 | 4824 | 4767 |
| 65° | 5645 | 4580 | 4548 |
| 70° | 5327 | 4319 | 4315 |
| 75° | 4923 | 4060 | 4092 |
| 80° | 4279 | 3789 | 3864 |
| 85° | 3630 | 3534 | 3666 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6622 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 46.8   | 1.1       |
| 10°-20°   | 134.2  | 3.1       |
| 20°-30°   | 203.3  | 4.7       |
| 30°-40°   | 247.6  | 5.7       |
| 40°-50°   | 266.4  | 6.2       |
| 50°-60°   | 258.7  | 6.0       |
| 60°-70°   | 225.9  | 5.2       |
| 70°-80°   | 173.9  | 4.0       |
| 80°-90°   | 118.9  | 2.8       |
| 90°-100°  | 134.1  | 3.1       |
| 100°-110° | 229.7  | 5.3       |
| 110°-120° | 331.4  | 7.7       |
| 120°-130° | 406.4  | 9.4       |
| 130°-140° | 441.1  | 10.2      |
| 140°-150° | 425.2  | 9.8       |
| 150°-160° | 355.4  | 8.2       |
| 160°-170° | 235.7  | 5.5       |
| 170°-180° | 82.4   | 1.9       |
| 0°-30°    | 384.3  | 8.9       |
| 0°-40°    | 631.8  | 14.6      |
| 0°-60°    | 1156.9 | 26.8      |
| 0°-90°    | 1675.5 | 38.8      |
| 90°-120°  | 695.3  | 16.1      |
| 90°-150°  | 1968.0 | 45.6      |
| 90°-180°  | 2641.0 | 61.2      |
| 0°-180°   | 4317.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0°   | 494 | 494   | 494 | 494   | 494 |      |
| 5°   | 495 | 493   | 488 | 493   | 492 | 47   |
| 15°  | 472 | 474   | 474 | 480   | 479 | 133  |
| 25°  | 429 | 434   | 441 | 449   | 451 | 197  |
| 35°  | 370 | 382   | 396 | 411   | 416 | 231  |
| 45°  | 303 | 323   | 348 | 370   | 377 | 234  |
| 55°  | 232 | 258   | 295 | 321   | 330 | 208  |
| 65°  | 159 | 194   | 236 | 265   | 275 | 158  |
| 75°  | 88  | 128   | 174 | 204   | 214 | 93   |
| 85°  | 26  | 70    | 116 | 146   | 156 | 27   |
| 90°  | 8   | 58    | 120 | 147   | 157 | 7    |
| 95°  | 44  | 85    | 129 | 156   | 164 | 47   |
| 105° | 161 | 184   | 223 | 249   | 257 | 171  |
| 115° | 296 | 309   | 339 | 360   | 366 | 293  |
| 125° | 428 | 435   | 456 | 473   | 479 | 383  |
| 135° | 553 | 561   | 570 | 584   | 588 | 428  |
| 145° | 671 | 676   | 680 | 685   | 686 | 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°     | 493.5 | 493.5 | 493.5 | 493.5 | 493.5 |
| 2.5°   | 497.1 | 494.9 | 489.9 | 493.5 | 492.1 |
| 5°     | 494.9 | 492.8 | 488.5 | 492.8 | 492.1 |
| 7.5°   | 491.3 | 489.9 | 486.3 | 491.3 | 490.6 |
| 10°    | 487.1 | 485.6 | 483.5 | 489.2 | 488.5 |
| 12.5°  | 479.9 | 480.6 | 479.2 | 484.9 | 484.2 |
| 15°    | 472.0 | 473.5 | 473.5 | 479.9 | 479.2 |
| 17.5°  | 462.0 | 464.9 | 467.0 | 473.5 | 473.5 |
| 20°    | 452.0 | 455.6 | 458.4 | 466.3 | 466.3 |
| 22.5°  | 441.3 | 445.6 | 449.9 | 457.7 | 459.2 |
| 25°    | 429.1 | 434.1 | 440.6 | 449.2 | 451.3 |
| 27.5°  | 414.8 | 422.7 | 429.8 | 440.6 | 442.0 |
| 30°    | 400.5 | 409.8 | 419.1 | 430.6 | 432.7 |
| 32.5°  | 384.8 | 395.5 | 407.0 | 420.5 | 424.8 |
| 35°    | 369.8 | 381.9 | 395.5 | 411.2 | 416.3 |
| 37.5°  | 353.3 | 366.9 | 384.1 | 401.2 | 406.2 |
| 40°    | 336.9 | 352.6 | 371.9 | 390.5 | 396.9 |
| 42.5°  | 321.1 | 336.9 | 359.7 | 380.5 | 386.9 |
| 45°    | 303.2 | 322.6 | 347.6 | 369.8 | 376.9 |
| 47.5°  | 286.1 | 306.8 | 335.4 | 358.3 | 366.2 |
| 50°    | 268.2 | 290.4 | 322.6 | 346.9 | 354.7 |
| 52.5°  | 251.0 | 274.6 | 309.0 | 334.0 | 342.6 |
| 55°    | 232.4 | 258.2 | 295.4 | 321.1 | 330.4 |
| 57.5°  | 214.6 | 243.2 | 280.4 | 308.3 | 317.6 |
| 60°    | 195.3 | 226.0 | 266.8 | 294.0 | 304.0 |
| 62.5°  | 178.1 | 210.3 | 251.0 | 280.4 | 289.7 |
| 65°    | 158.8 | 193.8 | 236.0 | 265.3 | 274.6 |
| 67.5°  | 141.6 | 178.1 | 221.0 | 250.3 | 260.3 |
| 70°    | 123.0 | 160.2 | 204.5 | 235.3 | 243.9 |
| 72.5°  | 105.9 | 144.5 | 189.5 | 219.6 | 230.3 |
| 75°    | 88.0  | 128.0 | 173.8 | 204.5 | 213.8 |
| 77.5°  | 70.8  | 112.3 | 158.8 | 189.5 | 199.5 |
| 80°    | 53.6  | 97.3  | 143.8 | 173.8 | 183.8 |
| 82.5°  | 39.3  | 82.2  | 129.5 | 159.5 | 168.8 |
| 85°    | 25.7  | 70.1  | 115.9 | 145.9 | 155.9 |
| 87.5°  | 15.7  | 58.6  | 104.4 | 133.7 | 143.0 |
| 90°    | 7.9   | 58.1  | 120.1 | 147.2 | 156.6 |
| 92.5°  | 22.5  | 66.3  | 110.8 | 139.4 | 147.9 |
| 95°    | 43.9  | 84.8  | 129.2 | 156.4 | 163.5 |
| 97.5°  | 68.9  | 106.3 | 150.6 | 177.1 | 185.7 |
| 100°   | 98.2  | 130.6 | 172.8 | 199.3 | 206.4 |
| 102.5° | 128.3 | 156.3 | 197.9 | 224.4 | 231.5 |
| 105°   | 161.4 | 184.3 | 223.0 | 249.4 | 257.3 |
| 107.5° | 195.2 | 215.2 | 251.0 | 276.0 | 280.3 |
| 110°   | 226.7 | 245.5 | 280.5 | 303.4 | 309.0 |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 262.0 | 277.8 | 309.9 | 330.6 | 337.1 |
| 115°   | 296.5 | 308.7 | 339.4 | 360.2 | 365.8 |
| 117.5° | 330.2 | 341.8 | 368.2 | 387.5 | 392.4 |
| 120°   | 364.7 | 373.4 | 396.2 | 416.2 | 421.9 |
| 122.5° | 396.2 | 404.4 | 427.1 | 444.2 | 449.2 |
| 125°   | 428.5 | 435.2 | 455.8 | 472.9 | 478.7 |
| 127.5° | 460.8 | 468.2 | 484.6 | 499.5 | 503.7 |
| 130°   | 490.9 | 499.8 | 513.3 | 529.0 | 531.8 |
| 132.5° | 524.7 | 531.3 | 542.8 | 555.6 | 559.1 |
| 135°   | 553.3 | 561.4 | 570.1 | 584.4 | 587.9 |
| 137.5° | 585.6 | 592.2 | 597.3 | 610.2 | 612.2 |
| 140°   | 614.3 | 620.2 | 625.2 | 636.7 | 638.1 |
| 142.5° | 643.6 | 649.5 | 651.7 | 661.1 | 661.7 |
| 145°   | 670.8 | 675.9 | 680.4 | 685.4 | 686.0 |
| 147.5° | 695.8 | 702.4 | 705.3 | 707.5 | 706.7 |
| 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)