

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: P1009051

Luminaire Tested: S122DIP-B485D330UB35-4F0-XX-W2A-D

Issue Date: 5/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1009051  
REPORT IS A COMBINATION OF REPORTS P984214 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122DIP-B485D330UB35-4F0-XX-W2A-D  
Description: Define 2 Direct/Indirect Pendant with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}  
Light Source: -  
Ballast/Driver: -

**Summary**

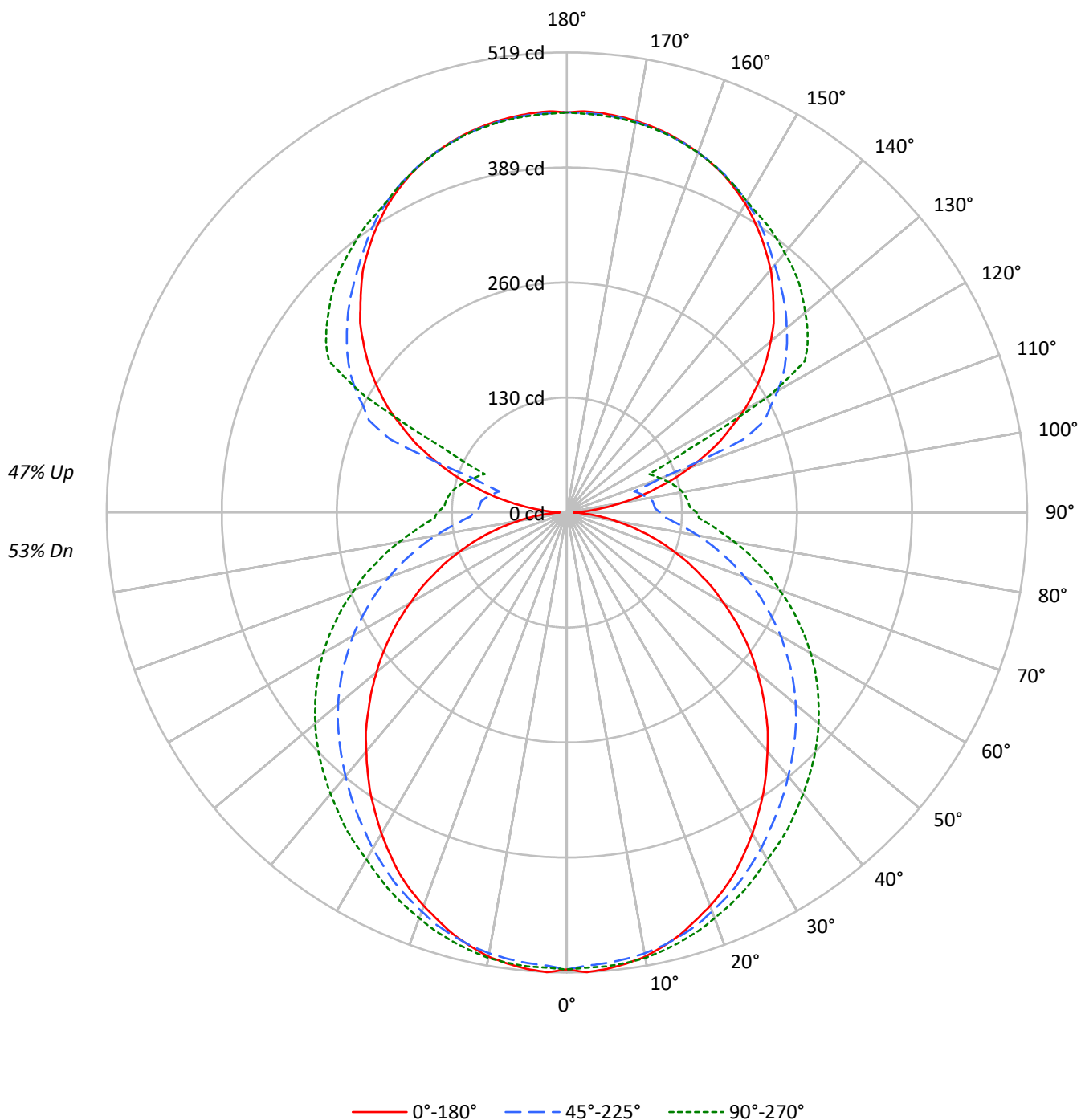
Lumens per Lamp: N/A  
Luminaire Lumens: 3291.0 lumens  
Efficiency: N/A  
Efficacy: 98.8 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42  
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

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°  | 8160 | 8160 | 8160 |
| 5°  | 8197 | 7812 | 7768 |
| 10° | 8142 | 7541 | 7431 |
| 15° | 8027 | 7262 | 7087 |
| 20° | 7883 | 6968 | 6758 |
| 25° | 7740 | 6686 | 6461 |
| 30° | 7539 | 6400 | 6167 |
| 35° | 7336 | 6125 | 5951 |
| 40° | 7122 | 5886 | 5736 |
| 45° | 6919 | 5670 | 5549 |
| 50° | 6701 | 5470 | 5365 |
| 55° | 6470 | 5260 | 5177 |
| 60° | 6190 | 5039 | 4979 |
| 65° | 5898 | 4784 | 4752 |
| 70° | 5565 | 4513 | 4508 |
| 75° | 5141 | 4240 | 4276 |
| 80° | 4471 | 3958 | 4036 |
| 85° | 3800 | 3690 | 3831 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6919 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 48.9   | 1.5       |
| 10°-20°   | 140.2  | 4.3       |
| 20°-30°   | 212.4  | 6.5       |
| 30°-40°   | 258.6  | 7.9       |
| 40°-50°   | 278.2  | 8.5       |
| 50°-60°   | 270.2  | 8.2       |
| 60°-70°   | 236.0  | 7.2       |
| 70°-80°   | 181.6  | 5.5       |
| 80°-90°   | 122.4  | 3.7       |
| 90°-100°  | 98.8   | 3.0       |
| 100°-110° | 116.8  | 3.5       |
| 110°-120° | 187.6  | 5.7       |
| 120°-130° | 266.6  | 8.1       |
| 130°-140° | 268.7  | 8.2       |
| 140°-150° | 242.5  | 7.4       |
| 150°-160° | 193.7  | 5.9       |
| 160°-170° | 124.8  | 3.8       |
| 170°-180° | 43.0   | 1.3       |
| <hr/>     |        |           |
| 0°-30°    | 401.4  | 12.2      |
| 0°-40°    | 660.0  | 20.1      |
| 0°-60°    | 1208.5 | 36.7      |
| 0°-90°    | 1748.5 | 53.1      |
| 90°-120°  | 403.2  | 12.3      |
| 90°-150°  | 1181.0 | 35.9      |
| 90°-180°  | 1542.0 | 46.9      |
| 0°-180°   | 3291.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0°   | 516 | 516   | 516 | 516   | 516 |      |
| 5°   | 517 | 515   | 510 | 515   | 514 | 49   |
| 15°  | 493 | 495   | 495 | 501   | 501 | 139  |
| 25°  | 448 | 454   | 460 | 469   | 471 | 206  |
| 35°  | 386 | 399   | 413 | 430   | 435 | 241  |
| 45°  | 317 | 337   | 363 | 386   | 394 | 245  |
| 55°  | 243 | 270   | 309 | 336   | 345 | 217  |
| 65°  | 166 | 202   | 246 | 277   | 287 | 165  |
| 75°  | 92  | 134   | 182 | 214   | 223 | 97   |
| 85°  | 27  | 73    | 121 | 152   | 163 | 28   |
| 90°  | 8   | 55    | 105 | 137   | 146 | 6    |
| 95°  | 27  | 52    | 99  | 129   | 137 | 30   |
| 105° | 103 | 134   | 84  | 114   | 123 | 110  |
| 115° | 191 | 204   | 246 | 118   | 102 | 188  |
| 125° | 267 | 271   | 301 | 324   | 332 | 238  |
| 135° | 329 | 334   | 345 | 364   | 369 | 255  |
| 145° | 381 | 381   | 386 | 393   | 395 | 239  |
| 155° | 420 | 417   | 421 | 423   | 420 | 193  |
| 165° | 442 | 440   | 441 | 444   | 441 | 125  |
| 175° | 452 | 450   | 451 | 453   | 450 | 43   |
| 180° | 451 | 451   | 451 | 451   | 451 |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 0°     | 515.5 | 515.5 | 515.5 | 515.5 | 515.5 |
| 2.5°   | 519.2 | 517.0 | 511.8 | 515.5 | 514.0 |
| 5°     | 517.0 | 514.8 | 510.3 | 514.8 | 514.0 |
| 7.5°   | 513.3 | 511.8 | 508.0 | 513.3 | 512.5 |
| 10°    | 508.8 | 507.3 | 505.0 | 511.0 | 510.3 |
| 12.5°  | 501.3 | 502.1 | 500.6 | 506.5 | 505.8 |
| 15°    | 493.1 | 494.6 | 494.6 | 501.3 | 500.6 |
| 17.5°  | 482.6 | 485.6 | 487.9 | 494.6 | 494.6 |
| 20°    | 472.2 | 475.9 | 478.9 | 487.1 | 487.1 |
| 22.5°  | 461.0 | 465.5 | 469.9 | 478.2 | 479.6 |
| 25°    | 448.3 | 453.5 | 460.2 | 469.2 | 471.4 |
| 27.5°  | 433.3 | 441.5 | 449.0 | 460.2 | 461.7 |
| 30°    | 418.4 | 428.1 | 437.8 | 449.8 | 452.0 |
| 32.5°  | 401.9 | 413.2 | 425.1 | 439.3 | 443.8 |
| 35°    | 386.3 | 399.0 | 413.2 | 429.6 | 434.8 |
| 37.5°  | 369.1 | 383.3 | 401.2 | 419.1 | 424.4 |
| 40°    | 351.9 | 368.3 | 388.5 | 407.9 | 414.6 |
| 42.5°  | 335.5 | 351.9 | 375.8 | 397.5 | 404.2 |
| 45°    | 316.8 | 336.9 | 363.1 | 386.3 | 393.7 |
| 47.5°  | 298.8 | 320.5 | 350.4 | 374.3 | 382.5 |
| 50°    | 280.2 | 303.3 | 336.9 | 362.4 | 370.6 |
| 52.5°  | 262.2 | 286.9 | 322.8 | 348.9 | 357.9 |
| 55°    | 242.8 | 269.7 | 308.6 | 335.5 | 345.2 |
| 57.5°  | 224.1 | 254.0 | 292.9 | 322.0 | 331.7 |
| 60°    | 204.0 | 236.1 | 278.7 | 307.1 | 317.5 |
| 62.5°  | 186.0 | 219.7 | 262.2 | 292.9 | 302.6 |
| 65°    | 165.9 | 202.5 | 246.5 | 277.2 | 286.9 |
| 67.5°  | 147.9 | 186.0 | 230.9 | 261.5 | 271.9 |
| 70°    | 128.5 | 167.4 | 213.7 | 245.8 | 254.8 |
| 72.5°  | 110.6 | 150.9 | 198.0 | 229.4 | 240.6 |
| 75°    | 91.9  | 133.7 | 181.5 | 213.7 | 223.4 |
| 77.5°  | 74.0  | 117.3 | 165.9 | 198.0 | 208.4 |
| 80°    | 56.0  | 101.6 | 150.2 | 181.5 | 192.0 |
| 82.5°  | 41.1  | 85.9  | 135.2 | 166.6 | 176.3 |
| 85°    | 26.9  | 73.2  | 121.0 | 152.4 | 162.9 |
| 87.5°  | 16.4  | 61.3  | 109.1 | 139.7 | 149.4 |
| 90°    | 7.8   | 54.7  | 105.1 | 136.7 | 146.3 |
| 92.5°  | 14.9  | 53.2  | 99.7  | 129.5 | 138.8 |
| 95°    | 27.2  | 51.6  | 98.6  | 128.7 | 137.3 |
| 97.5°  | 43.4  | 48.8  | 97.4  | 125.9 | 135.3 |
| 100°   | 63.0  | 46.0  | 93.3  | 123.6 | 132.5 |
| 102.5° | 83.9  | 107.8 | 88.8  | 119.3 | 128.4 |
| 105°   | 103.0 | 134.5 | 84.2  | 113.9 | 123.4 |
| 107.5° | 126.2 | 152.3 | 79.6  | 108.6 | 118.1 |
| 110°   | 147.7 | 169.4 | 111.7 | 102.9 | 112.5 |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 168.6 | 186.4 | 215.2 | 98.3  | 107.5 |
| 115°   | 190.8 | 204.5 | 246.3 | 117.5 | 102.3 |
| 117.5° | 209.3 | 221.8 | 258.7 | 234.4 | 156.4 |
| 120°   | 230.8 | 238.7 | 274.5 | 299.3 | 263.5 |
| 122.5° | 249.1 | 255.1 | 289.3 | 311.4 | 318.4 |
| 125°   | 267.0 | 271.3 | 301.4 | 323.9 | 331.5 |
| 127.5° | 284.0 | 287.8 | 312.9 | 334.8 | 341.9 |
| 130°   | 300.0 | 304.4 | 323.7 | 345.3 | 350.9 |
| 132.5° | 316.3 | 319.8 | 334.7 | 354.7 | 360.4 |
| 135°   | 329.3 | 334.5 | 344.9 | 363.9 | 369.2 |
| 137.5° | 343.6 | 347.5 | 354.6 | 372.1 | 376.3 |
| 140°   | 357.7 | 359.6 | 364.7 | 379.5 | 382.4 |
| 142.5° | 369.4 | 371.0 | 375.3 | 386.9 | 388.9 |
| 145°   | 381.1 | 380.8 | 386.4 | 393.1 | 395.2 |
| 147.5° | 391.9 | 390.9 | 396.5 | 398.8 | 399.8 |
| 150°   | 402.4 | 400.1 | 405.3 | 407.3 | 405.6 |
| 152.5° | 411.2 | 408.6 | 413.5 | 415.4 | 413.1 |
| 155°   | 419.7 | 416.7 | 420.7 | 422.6 | 420.0 |
| 157.5° | 426.5 | 423.9 | 426.9 | 429.1 | 426.5 |
| 160°   | 432.4 | 430.5 | 432.4 | 434.4 | 432.1 |
| 162.5° | 437.6 | 435.7 | 437.3 | 439.6 | 436.7 |
| 165°   | 442.2 | 440.2 | 441.2 | 443.5 | 441.2 |
| 167.5° | 445.8 | 443.8 | 444.8 | 447.1 | 444.2 |
| 170°   | 448.7 | 446.8 | 447.4 | 449.7 | 446.8 |
| 172.5° | 450.7 | 448.7 | 449.4 | 451.7 | 448.7 |
| 175°   | 452.3 | 450.0 | 450.7 | 453.0 | 449.7 |
| 177.5° | 453.0 | 450.7 | 451.0 | 453.3 | 450.4 |
| 180°   | 451.4 | 451.4 | 451.4 | 451.4 | 451.4 |

(END OF REPORT)