

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: P1009070

Luminaire Tested: S122DIP-B485D330UB50-4F0-XX-W2A-D1

Issue Date: 5/6/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1009070  
REPORT IS A COMBINATION OF REPORTS P984233 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/6/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122DIP-B485D330UB50-4F0-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**

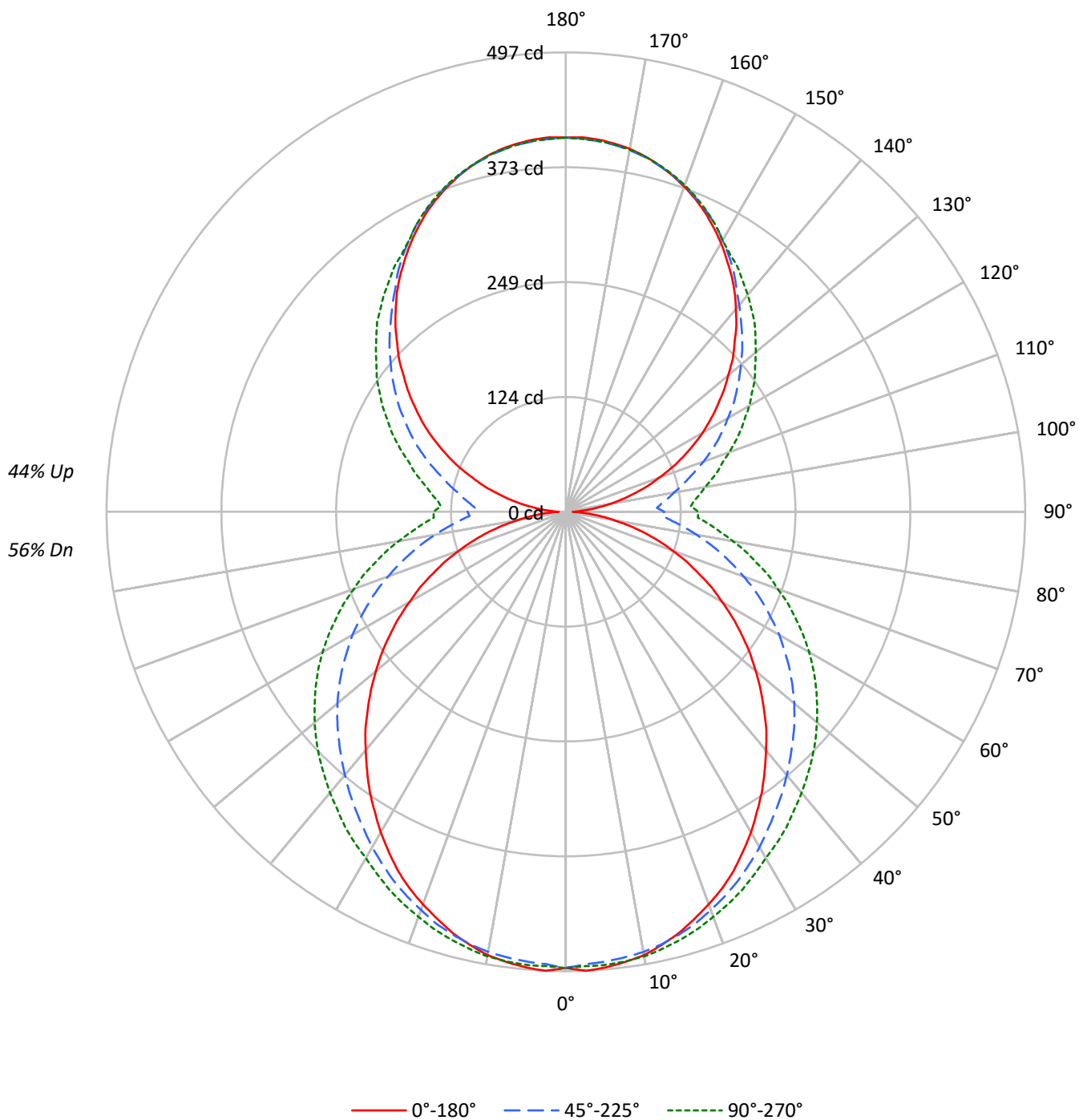
Lumens per Lamp: N/A  
Luminaire Lumens: 3016.0 lumens  
Efficiency: N/A  
Efficacy: 90.6 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42  
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

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 | 101 | 101 | 101 | 101 | 86 | 86 | 86 | 73 | 73 | 73 | 61 | 61 | 61 |
| 1   | 97  | 92  | 88  | 84  | 90  | 86  | 82  | 78  | 73 | 70 | 68 | 62 | 60 | 58 | 51 | 50 | 48 |
| 2   | 88  | 80  | 73  | 67  | 81  | 74  | 68  | 63  | 63 | 59 | 55 | 53 | 50 | 47 | 44 | 42 | 39 |
| 3   | 80  | 69  | 61  | 55  | 74  | 65  | 57  | 52  | 55 | 50 | 45 | 47 | 42 | 39 | 39 | 36 | 33 |
| 4   | 73  | 61  | 53  | 46  | 67  | 57  | 49  | 43  | 49 | 43 | 38 | 41 | 37 | 33 | 34 | 31 | 28 |
| 5   | 67  | 54  | 46  | 39  | 61  | 51  | 43  | 37  | 43 | 37 | 33 | 37 | 32 | 28 | 31 | 27 | 24 |
| 6   | 61  | 49  | 40  | 34  | 57  | 45  | 38  | 32  | 39 | 33 | 28 | 33 | 28 | 25 | 28 | 24 | 21 |
| 7   | 57  | 44  | 35  | 29  | 52  | 41  | 33  | 28  | 35 | 29 | 25 | 30 | 25 | 22 | 25 | 21 | 18 |
| 8   | 53  | 40  | 32  | 26  | 49  | 37  | 30  | 25  | 32 | 26 | 22 | 28 | 23 | 19 | 23 | 19 | 16 |
| 9   | 49  | 36  | 28  | 23  | 45  | 34  | 27  | 22  | 29 | 24 | 19 | 25 | 21 | 17 | 21 | 18 | 15 |
| 10  | 46  | 33  | 26  | 21  | 42  | 31  | 24  | 20  | 27 | 21 | 17 | 23 | 19 | 15 | 20 | 16 | 13 |

**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   | 1.6       |
| 10°-20°   | 134.2  | 4.4       |
| 20°-30°   | 203.3  | 6.7       |
| 30°-40°   | 247.6  | 8.2       |
| 40°-50°   | 266.4  | 8.8       |
| 50°-60°   | 258.7  | 8.6       |
| 60°-70°   | 225.9  | 7.5       |
| 70°-80°   | 173.9  | 5.8       |
| 80°-90°   | 117.6  | 3.9       |
| 90°-100°  | 105.4  | 3.5       |
| 100°-110° | 138.3  | 4.6       |
| 110°-120° | 175.0  | 5.8       |
| 120°-130° | 200.7  | 6.7       |
| 130°-140° | 210.2  | 7.0       |
| 140°-150° | 198.7  | 6.6       |
| 150°-160° | 165.4  | 5.5       |
| 160°-170° | 109.7  | 3.6       |
| 170°-180° | 38.3   | 1.3       |
| 0°-30°    | 384.3  | 12.7      |
| 0°-40°    | 631.8  | 20.9      |
| 0°-60°    | 1156.9 | 38.4      |
| 0°-90°    | 1674.2 | 55.5      |
| 90°-120°  | 418.6  | 13.9      |
| 90°-150°  | 1028.3 | 34.1      |
| 90°-180°  | 1342.0 | 44.5      |
| 0°-180°   | 3016.0 | 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   | 53    | 106 | 134   | 143 | 6    |
| 95°  | 24  | 60    | 104 | 131   | 139 | 24   |
| 105° | 77  | 99    | 137 | 162   | 170 | 82   |
| 115° | 140 | 149   | 181 | 202   | 209 | 138  |
| 125° | 200 | 203   | 225 | 244   | 250 | 179  |
| 135° | 258 | 262   | 270 | 284   | 289 | 200  |
| 145° | 312 | 315   | 317 | 321   | 324 | 195  |
| 155° | 357 | 358   | 359 | 361   | 360 | 164  |
| 165° | 388 | 388   | 388 | 390   | 389 | 110  |
| 175° | 404 | 403   | 402 | 405   | 403 | 38   |
| 180° | 405 | 405   | 405 | 405   | 405 |      |

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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°    | 7.5   | 53.0  | 106.4 | 134.3 | 143.2 |
| 92.5°  | 13.9  | 54.5  | 98.6  | 126.8 | 135.3 |
| 95°    | 23.5  | 60.5  | 104.1 | 131.3 | 139.2 |
| 97.5°  | 34.7  | 68.6  | 111.4 | 137.9 | 146.5 |
| 100°   | 48.4  | 77.6  | 118.6 | 145.1 | 152.7 |
| 102.5° | 62.0  | 87.7  | 127.7 | 153.8 | 161.3 |
| 105°   | 77.1  | 98.8  | 136.7 | 162.3 | 170.2 |
| 107.5° | 92.8  | 111.2 | 147.0 | 171.7 | 177.9 |
| 110°   | 107.1 | 123.4 | 158.4 | 181.3 | 188.2 |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 123.5 | 136.9 | 169.5 | 191.4 | 198.6 |
| 115°   | 139.6 | 149.4 | 180.9 | 202.1 | 208.9 |
| 117.5° | 154.8 | 163.3 | 191.6 | 212.1 | 218.2 |
| 120°   | 170.9 | 176.5 | 202.4 | 222.4 | 229.2 |
| 122.5° | 185.6 | 189.8 | 214.5 | 232.7 | 238.6 |
| 125°   | 200.2 | 203.3 | 225.2 | 243.5 | 249.6 |
| 127.5° | 215.3 | 218.3 | 236.3 | 252.8 | 258.2 |
| 130°   | 229.3 | 233.0 | 247.3 | 263.8 | 268.2 |
| 132.5° | 245.0 | 247.7 | 258.7 | 273.5 | 278.2 |
| 135°   | 258.0 | 261.7 | 269.6 | 284.3 | 288.9 |
| 137.5° | 273.0 | 276.1 | 280.3 | 293.6 | 297.2 |
| 140°   | 286.3 | 288.7 | 291.8 | 303.3 | 306.2 |
| 142.5° | 300.0 | 302.3 | 303.4 | 312.3 | 314.5 |
| 145°   | 312.3 | 314.6 | 316.7 | 321.3 | 323.6 |
| 147.5° | 323.9 | 326.9 | 328.3 | 329.7 | 330.5 |
| 150°   | 335.8 | 337.9 | 339.2 | 340.3 | 339.2 |
| 152.5° | 346.4 | 348.5 | 350.2 | 351.5 | 350.2 |
| 155°   | 357.0 | 358.0 | 359.1 | 360.8 | 359.7 |
| 157.5° | 366.2 | 366.9 | 367.6 | 370.0 | 368.3 |
| 160°   | 374.4 | 375.1 | 375.5 | 377.5 | 376.1 |
| 162.5° | 381.9 | 381.9 | 382.3 | 384.7 | 383.0 |
| 165°   | 388.4 | 388.1 | 388.1 | 390.5 | 388.8 |
| 167.5° | 394.2 | 393.2 | 393.2 | 395.6 | 393.9 |
| 170°   | 398.7 | 397.7 | 397.3 | 399.7 | 397.7 |
| 172.5° | 401.8 | 400.7 | 400.4 | 402.8 | 400.7 |
| 175°   | 404.2 | 403.1 | 402.4 | 404.8 | 402.8 |
| 177.5° | 405.5 | 404.5 | 403.8 | 405.9 | 403.8 |
| 180°   | 404.8 | 404.8 | 404.8 | 404.8 | 404.8 |

(END OF REPORT)