

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: P1008411

Luminaire Tested: S122RDIP-B485D330UB2750-4F0-XX-W2A-F\_3500K

Issue Date: 5/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1008411  
REPORT IS A COMBINATION OF REPORTS P988271 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDIP-B485D330UB2750-4F0-XX-W2A-F\_3500K  
Description: Define 2 Regressed Direct/Indirect Pendant with 3500K BioUP LEDs {m-DER=0.721}  
{m-EER=0.792}  
Light Source: -  
Ballast/Driver: -

**Summary**

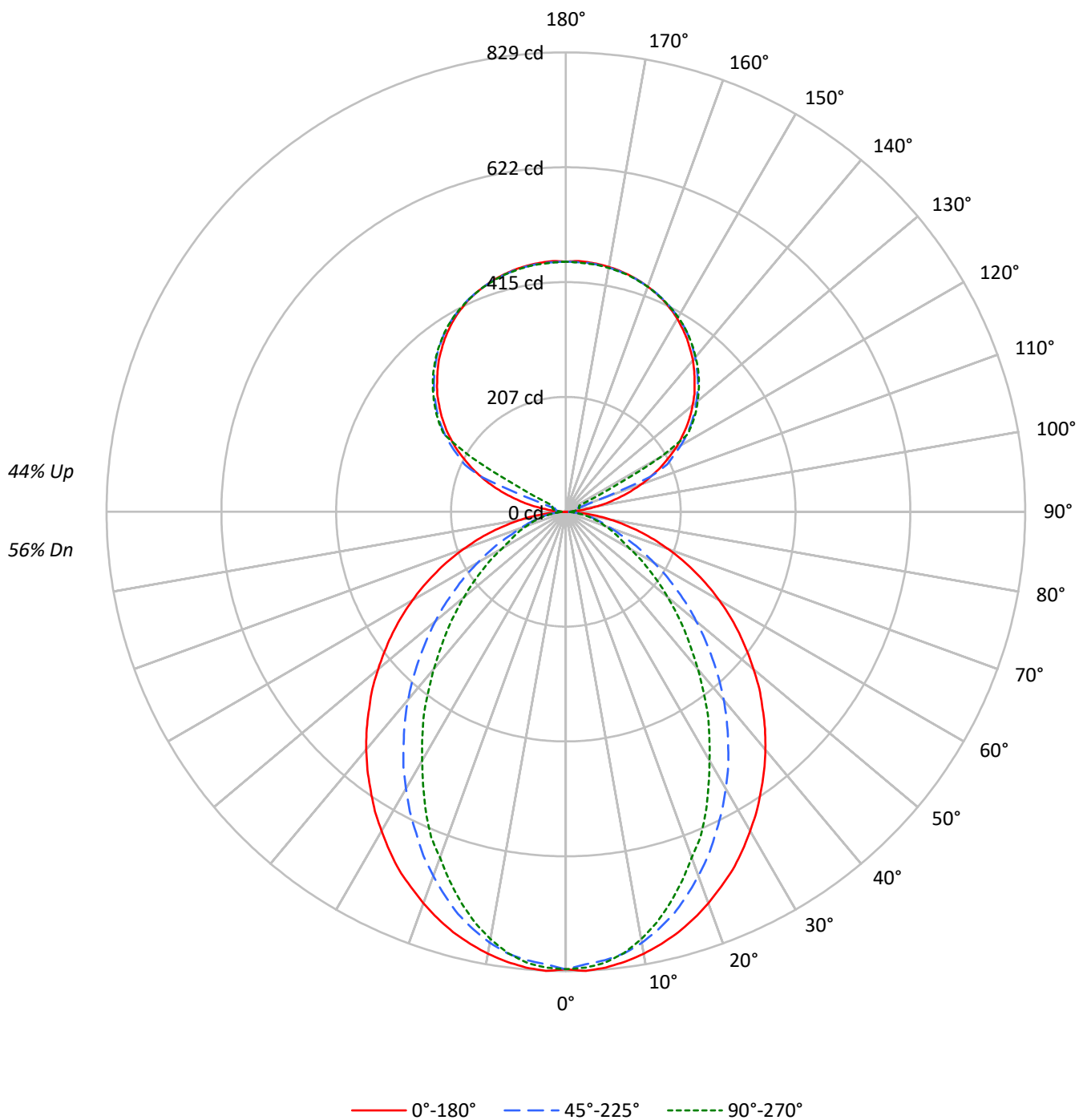
Lumens per Lamp: N/A  
Luminaire Lumens: 3022.0 lumens  
Efficiency: N/A  
Efficacy: 90.8 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16  
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

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

TEST NUMBER: P1008411

CATALOG NUMBER: S122RDIP-B485D330UB2750-4F0-XX-W2A-F\_3500K

### Luminous Intensity Polar Plot



TEST NUMBER: P1008411

CATALOG NUMBER: S122RDIP-B485D330UB2750-4F0-XX-W2A-F\_3500K

**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   | 109 | 109 | 109 | 109 | 101 | 101 | 101 | 101 | 87 | 87 | 87 | 74 | 74 | 74 | 62 | 62 | 62 |
| 1   | 100 | 96  | 92  | 88  | 93  | 89  | 86  | 83  | 77 | 75 | 72 | 66 | 64 | 63 | 55 | 54 | 53 |
| 2   | 91  | 84  | 78  | 73  | 85  | 79  | 73  | 69  | 68 | 64 | 61 | 58 | 56 | 53 | 50 | 48 | 46 |
| 3   | 84  | 74  | 67  | 62  | 78  | 70  | 63  | 58  | 61 | 56 | 52 | 52 | 49 | 46 | 44 | 42 | 40 |
| 4   | 77  | 66  | 59  | 53  | 71  | 62  | 55  | 50  | 54 | 49 | 45 | 47 | 43 | 40 | 40 | 37 | 35 |
| 5   | 71  | 59  | 51  | 46  | 66  | 56  | 49  | 43  | 49 | 43 | 39 | 42 | 38 | 35 | 36 | 33 | 30 |
| 6   | 65  | 53  | 46  | 40  | 61  | 50  | 43  | 38  | 44 | 39 | 34 | 38 | 34 | 31 | 33 | 30 | 27 |
| 7   | 61  | 49  | 41  | 35  | 56  | 46  | 39  | 34  | 40 | 35 | 30 | 35 | 31 | 27 | 30 | 27 | 24 |
| 8   | 56  | 44  | 37  | 31  | 52  | 42  | 35  | 30  | 37 | 31 | 27 | 32 | 28 | 25 | 28 | 25 | 22 |
| 9   | 53  | 41  | 33  | 28  | 49  | 38  | 32  | 27  | 34 | 28 | 25 | 30 | 25 | 22 | 26 | 23 | 20 |
| 10  | 49  | 37  | 30  | 25  | 46  | 35  | 29  | 24  | 31 | 26 | 22 | 28 | 23 | 20 | 24 | 21 | 18 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 13069 | 13069 | 13069 |
| 5°  | 13090 | 12434 | 12342 |
| 10° | 12961 | 11793 | 11403 |
| 15° | 12784 | 11036 | 10334 |
| 20° | 12548 | 10176 | 9216  |
| 25° | 12306 | 9292  | 8192  |
| 30° | 11982 | 8432  | 7075  |
| 35° | 11665 | 7564  | 6115  |
| 40° | 11342 | 6713  | 5127  |
| 45° | 10966 | 5834  | 4265  |
| 50° | 10577 | 4986  | 3472  |
| 55° | 10174 | 4138  | 2757  |
| 60° | 9704  | 3310  | 2086  |
| 65° | 9165  | 2523  | 1696  |
| 70° | 8510  | 1831  | 1348  |
| 75° | 7692  | 1397  | 1030  |
| 80° | 6499  | 946   | 692   |
| 85° | 4534  | 433   | 334   |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10966 cd/sqm

TEST NUMBER: P1008411

CATALOG NUMBER: S122RDIP-B485D330UB2750-4F0-XX-W2A-F\_3500K

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 77.4   | 2.6       |
| 10°-20°   | 212.4  | 7.0       |
| 20°-30°   | 298.2  | 9.9       |
| 30°-40°   | 325.1  | 10.8      |
| 40°-50°   | 298.8  | 9.9       |
| 50°-60°   | 234.7  | 7.8       |
| 60°-70°   | 152.7  | 5.1       |
| 70°-80°   | 78.6   | 2.6       |
| 80°-90°   | 20.9   | 0.7       |
| 90°-100°  | 14.9   | 0.5       |
| 100°-110° | 55.5   | 1.8       |
| 110°-120° | 147.1  | 4.9       |
| 120°-130° | 244.0  | 8.1       |
| 130°-140° | 259.2  | 8.6       |
| 140°-150° | 240.9  | 8.0       |
| 150°-160° | 193.7  | 6.4       |
| 160°-170° | 124.8  | 4.1       |
| 170°-180° | 43.0   | 1.4       |
| <hr/>     |        |           |
| 0°-30°    | 588.0  | 19.5      |
| 0°-40°    | 913.1  | 30.2      |
| 0°-60°    | 1446.5 | 47.9      |
| 0°-90°    | 1698.8 | 56.2      |
| 90°-120°  | 217.5  | 7.2       |
| 90°-150°  | 961.7  | 31.8      |
| 90°-180°  | 1323.0 | 43.8      |
| 0°-180°   | 3022.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0°   | 826 | 826   | 826 | 826   | 826 |      |
| 5°   | 826 | 822   | 812 | 819   | 817 | 78   |
| 15°  | 785 | 777   | 752 | 738   | 730 | 221  |
| 25°  | 713 | 689   | 640 | 609   | 598 | 328  |
| 35°  | 614 | 576   | 510 | 463   | 447 | 384  |
| 45°  | 502 | 452   | 374 | 320   | 303 | 388  |
| 55°  | 382 | 324   | 243 | 198   | 184 | 341  |
| 65°  | 258 | 197   | 130 | 105   | 102 | 256  |
| 75°  | 138 | 85    | 60  | 54    | 54  | 145  |
| 85°  | 32  | 16    | 14  | 14    | 14  | 37   |
| 90°  | 0   | 4     | 6   | 8     | 9   | 3    |
| 95°  | 21  | 10    | 13  | 14    | 14  | 25   |
| 105° | 99  | 109   | 20  | 24    | 25  | 106  |
| 115° | 188 | 193   | 202 | 50    | 27  | 185  |
| 125° | 266 | 270   | 276 | 278   | 279 | 237  |
| 135° | 329 | 334   | 337 | 340   | 339 | 254  |
| 145° | 381 | 381   | 386 | 389   | 387 | 238  |
| 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 |      |

TEST NUMBER: P1008411

CATALOG NUMBER: S122RDIP-B485D330UB2750-4F0-XX-W2A-F\_3500K

**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 0°     | 825.6 | 825.6 | 825.6 | 825.6 | 825.6 |
| 2.5°   | 829.4 | 825.6 | 817.4 | 824.9 | 823.4 |
| 5°     | 825.6 | 821.9 | 812.2 | 818.9 | 816.7 |
| 7.5°   | 818.9 | 814.4 | 804.0 | 806.9 | 803.2 |
| 10°    | 809.9 | 804.7 | 789.8 | 787.5 | 783.0 |
| 12.5°  | 798.7 | 792.0 | 771.8 | 767.3 | 759.1 |
| 15°    | 785.3 | 777.1 | 751.7 | 737.5 | 730.0 |
| 17.5°  | 769.6 | 757.6 | 726.2 | 709.8 | 697.9 |
| 20°    | 751.7 | 736.7 | 699.4 | 680.7 | 664.2 |
| 22.5°  | 732.2 | 715.0 | 671.7 | 646.3 | 635.1 |
| 25°    | 712.8 | 688.9 | 639.6 | 608.9 | 597.7 |
| 27.5°  | 689.6 | 664.2 | 609.7 | 574.6 | 557.4 |
| 30°    | 665.0 | 636.6 | 576.8 | 538.7 | 518.5 |
| 32.5°  | 641.1 | 606.7 | 545.4 | 500.6 | 481.9 |
| 35°    | 614.2 | 576.1 | 510.3 | 463.2 | 446.8 |
| 37.5°  | 588.0 | 546.9 | 477.4 | 425.9 | 407.2 |
| 40°    | 560.4 | 515.5 | 443.1 | 390.0 | 370.6 |
| 42.5°  | 532.0 | 484.2 | 408.7 | 353.4 | 334.7 |
| 45°    | 502.1 | 452.0 | 373.6 | 320.5 | 302.6 |
| 47.5°  | 473.7 | 420.7 | 340.0 | 286.9 | 270.5 |
| 50°    | 442.3 | 389.3 | 307.1 | 255.5 | 239.8 |
| 52.5°  | 411.7 | 355.7 | 275.7 | 226.4 | 212.2 |
| 55°    | 381.8 | 323.5 | 242.8 | 198.0 | 183.8 |
| 57.5°  | 351.2 | 291.4 | 213.7 | 171.8 | 159.9 |
| 60°    | 319.8 | 260.0 | 183.1 | 145.0 | 133.0 |
| 62.5°  | 289.2 | 229.4 | 156.9 | 121.0 | 115.1 |
| 65°    | 257.8 | 197.3 | 130.0 | 104.6 | 102.4 |
| 67.5°  | 227.9 | 167.4 | 104.6 | 91.9  | 89.7  |
| 70°    | 196.5 | 138.2 | 86.7  | 79.2  | 76.2  |
| 72.5°  | 166.6 | 111.3 | 72.5  | 66.5  | 65.0  |
| 75°    | 137.5 | 85.2  | 59.8  | 54.5  | 53.8  |
| 77.5°  | 108.3 | 60.5  | 47.1  | 44.1  | 42.6  |
| 80°    | 81.4  | 43.3  | 35.9  | 32.9  | 32.9  |
| 82.5°  | 56.8  | 29.1  | 24.7  | 23.2  | 23.2  |
| 85°    | 32.1  | 16.4  | 14.2  | 14.2  | 14.2  |
| 87.5°  | 12.0  | 6.0   | 6.0   | 5.2   | 5.2   |
| 90°    | 0.3   | 3.9   | 6.5   | 8.2   | 8.8   |
| 92.5°  | 8.2   | 6.9   | 7.8   | 8.5   | 8.8   |
| 95°    | 21.2  | 10.5  | 12.7  | 14.4  | 14.0  |
| 97.5°  | 38.2  | 11.4  | 16.7  | 17.6  | 18.0  |
| 100°   | 57.8  | 13.1  | 18.6  | 21.2  | 21.9  |
| 102.5° | 79.4  | 78.7  | 19.3  | 22.9  | 23.8  |
| 105°   | 99.3  | 109.1 | 19.9  | 23.5  | 24.8  |
| 107.5° | 122.5 | 130.6 | 20.6  | 24.2  | 25.5  |
| 110°   | 144.7 | 151.5 | 57.2  | 24.5  | 25.8  |



TEST NUMBER: P1008411

CATALOG NUMBER: S122RDIP-B485D330UB2750-4F0-XX-W2A-F\_3500K

**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 165.6 | 171.5 | 165.9 | 25.1  | 26.1  |
| 115°   | 187.8 | 193.3 | 201.5 | 50.3  | 26.8  |
| 117.5° | 207.1 | 213.6 | 219.1 | 172.4 | 86.9  |
| 120°   | 228.6 | 233.5 | 239.4 | 243.3 | 199.2 |
| 122.5° | 246.9 | 252.1 | 258.7 | 260.6 | 260.9 |
| 125°   | 265.5 | 269.8 | 276.0 | 278.3 | 279.2 |
| 127.5° | 282.5 | 287.1 | 292.0 | 295.2 | 295.6 |
| 130°   | 298.5 | 303.7 | 307.3 | 310.9 | 310.6 |
| 132.5° | 314.8 | 319.1 | 322.7 | 325.6 | 325.3 |
| 135°   | 328.6 | 333.8 | 336.7 | 340.0 | 339.3 |
| 137.5° | 342.9 | 346.8 | 350.1 | 353.4 | 352.4 |
| 140°   | 357.0 | 359.6 | 363.2 | 366.1 | 364.5 |
| 142.5° | 368.7 | 371.0 | 375.3 | 377.9 | 376.2 |
| 145°   | 381.1 | 380.8 | 386.4 | 388.6 | 387.0 |
| 147.5° | 391.9 | 390.9 | 396.5 | 398.1 | 396.8 |
| 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)