

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: P1010273

Luminaire Tested: S122RDIP-B865D1080UB50-4F0-XX-W2A-F4

Issue Date: 5/6/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1010273  
REPORT IS A COMBINATION OF REPORTS P988657 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/6/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDIP-B865D1080UB50-4F0-XX-W2A-F4  
Description: Define 2 Regressed Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015}  
{m-EER=1.115}  
Light Source: -  
Ballast/Driver: -

**Summary**

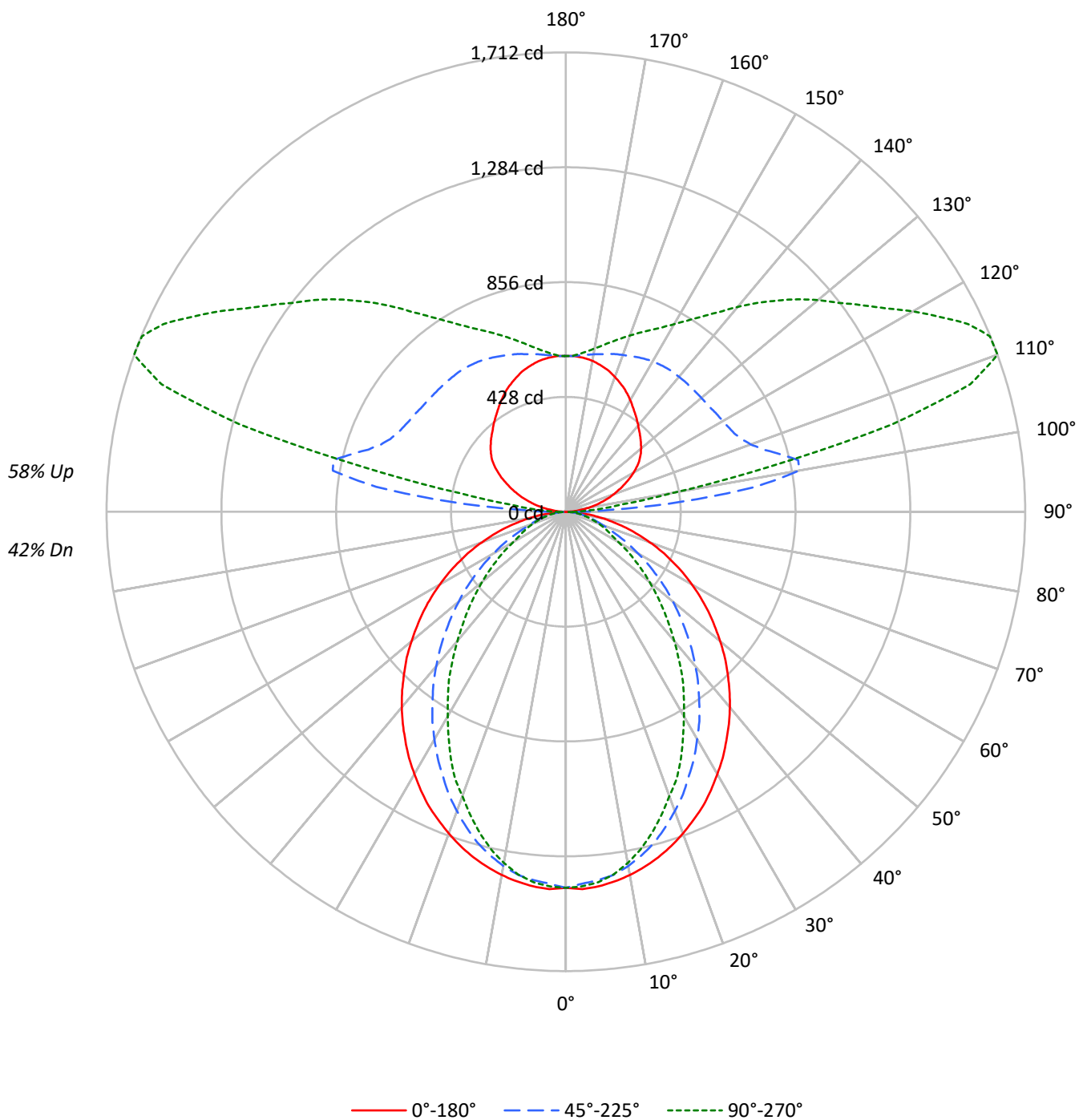
Lumens per Lamp: N/A  
Luminaire Lumens: 6932.6 lumens  
Efficiency: N/A  
Efficacy: 84.8 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16  
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

Input Watts (W): 81.8  
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   | 105 | 105 | 105 | 105 | 96 | 96 | 96 | 96 | 79 | 79 | 79 | 63 | 63 | 63 | 48 | 48 | 48 |
| 1   | 96  | 92  | 88  | 85  | 88 | 84 | 81 | 78 | 69 | 67 | 65 | 56 | 54 | 53 | 43 | 42 | 42 |
| 2   | 88  | 81  | 75  | 70  | 80 | 74 | 69 | 65 | 61 | 58 | 55 | 50 | 47 | 45 | 39 | 37 | 36 |
| 3   | 81  | 71  | 64  | 59  | 73 | 66 | 60 | 55 | 54 | 50 | 46 | 44 | 41 | 38 | 35 | 33 | 31 |
| 4   | 74  | 63  | 56  | 50  | 67 | 58 | 52 | 47 | 49 | 44 | 40 | 40 | 36 | 33 | 31 | 29 | 27 |
| 5   | 68  | 57  | 49  | 43  | 62 | 52 | 45 | 40 | 44 | 39 | 35 | 36 | 32 | 29 | 28 | 26 | 24 |
| 6   | 63  | 51  | 43  | 38  | 57 | 47 | 40 | 35 | 39 | 34 | 30 | 32 | 29 | 26 | 26 | 23 | 21 |
| 7   | 58  | 46  | 38  | 33  | 53 | 43 | 36 | 31 | 36 | 31 | 27 | 30 | 26 | 23 | 24 | 21 | 19 |
| 8   | 54  | 42  | 34  | 29  | 49 | 39 | 32 | 27 | 33 | 28 | 24 | 27 | 23 | 20 | 22 | 19 | 17 |
| 9   | 50  | 38  | 31  | 26  | 46 | 35 | 29 | 25 | 30 | 25 | 21 | 25 | 21 | 18 | 20 | 17 | 15 |
| 10  | 47  | 35  | 28  | 23  | 43 | 33 | 26 | 22 | 28 | 23 | 19 | 23 | 19 | 17 | 19 | 16 | 14 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 22182 | 22182 | 22182 |
| 5°  | 22218 | 21103 | 20947 |
| 10° | 21999 | 20016 | 19354 |
| 15° | 21696 | 18731 | 17540 |
| 20° | 21297 | 17270 | 15642 |
| 25° | 20886 | 15770 | 13905 |
| 30° | 20337 | 14311 | 12008 |
| 35° | 19797 | 12840 | 10380 |
| 40° | 19249 | 11394 | 8702  |
| 45° | 18612 | 9901  | 7239  |
| 50° | 17954 | 8462  | 5894  |
| 55° | 17267 | 7025  | 4679  |
| 60° | 16471 | 5617  | 3539  |
| 65° | 15553 | 4283  | 2877  |
| 70° | 14443 | 3107  | 2289  |
| 75° | 13051 | 2371  | 1748  |
| 80° | 11034 | 1605  | 1173  |
| 85° | 7698  | 735   | 567   |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 18612 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 131.3  | 1.9       |
| 10°-20°   | 360.5  | 5.2       |
| 20°-30°   | 506.2  | 7.3       |
| 30°-40°   | 551.8  | 8.0       |
| 40°-50°   | 507.1  | 7.3       |
| 50°-60°   | 398.3  | 5.7       |
| 60°-70°   | 259.2  | 3.7       |
| 70°-80°   | 133.5  | 1.9       |
| 80°-90°   | 37.8   | 0.5       |
| 90°-100°  | 235.3  | 3.4       |
| 100°-110° | 795.5  | 11.5      |
| 110°-120° | 836.1  | 12.1      |
| 120°-130° | 687.6  | 9.9       |
| 130°-140° | 552.5  | 8.0       |
| 140°-150° | 417.4  | 6.0       |
| 150°-160° | 293.4  | 4.2       |
| 160°-170° | 172.8  | 2.5       |
| 170°-180° | 56.2   | 0.8       |
| 0°-30°    | 998.1  | 14.4      |
| 0°-40°    | 1549.8 | 22.4      |
| 0°-60°    | 2455.2 | 35.4      |
| 0°-90°    | 2885.7 | 41.6      |
| 90°-120°  | 1866.9 | 26.9      |
| 90°-150°  | 3524.5 | 50.8      |
| 90°-180°  | 4047.0 | 58.4      |
| 0°-180°   | 6932.6 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1401 | 1401  | 1401 | 1401  | 1401 |      |
| 5°   | 1401 | 1395  | 1378 | 1390  | 1386 | 133  |
| 15°  | 1333 | 1319  | 1276 | 1252  | 1239 | 376  |
| 25°  | 1210 | 1169  | 1086 | 1034  | 1014 | 556  |
| 35°  | 1042 | 978   | 866  | 786   | 758  | 652  |
| 45°  | 852  | 767   | 634  | 544   | 514  | 658  |
| 55°  | 648  | 549   | 412  | 336   | 312  | 579  |
| 65°  | 438  | 335   | 221  | 178   | 174  | 434  |
| 75°  | 233  | 145   | 102  | 93    | 91   | 247  |
| 85°  | 54   | 28    | 24   | 24    | 24   | 63   |
| 90°  | 1    | 15    | 38   | 36    | 37   | 5    |
| 95°  | 39   | 96    | 438  | 165   | 127  | 40   |
| 105° | 136  | 205   | 827  | 1478  | 1258 | 145  |
| 115° | 240  | 303   | 692  | 1428  | 1655 | 238  |
| 125° | 335  | 396   | 665  | 1157  | 1343 | 298  |
| 135° | 393  | 469   | 658  | 972   | 1113 | 304  |
| 145° | 449  | 516   | 654  | 812   | 888  | 282  |
| 155° | 510  | 551   | 635  | 718   | 747  | 235  |
| 165° | 556  | 573   | 608  | 645   | 655  | 157  |
| 175° | 579  | 580   | 585  | 592   | 590  | 55   |
| 180° | 580  | 580   | 580  | 580   | 580  |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1401.3 | 1401.3 | 1401.3 | 1401.3 | 1401.3 |
| 2.5°   | 1407.7 | 1401.3 | 1387.4 | 1400.1 | 1397.5 |
| 5°     | 1401.3 | 1395.0 | 1378.5 | 1389.9 | 1386.1 |
| 7.5°   | 1389.9 | 1382.3 | 1364.5 | 1369.6 | 1363.3 |
| 10°    | 1374.7 | 1365.8 | 1340.5 | 1336.6 | 1329.0 |
| 12.5°  | 1355.7 | 1344.3 | 1310.0 | 1302.4 | 1288.5 |
| 15°    | 1332.8 | 1318.9 | 1275.8 | 1251.7 | 1239.0 |
| 17.5°  | 1306.2 | 1285.9 | 1232.7 | 1204.8 | 1184.5 |
| 20°    | 1275.8 | 1250.4 | 1187.0 | 1155.3 | 1127.4 |
| 22.5°  | 1242.8 | 1213.6 | 1140.1 | 1097.0 | 1077.9 |
| 25°    | 1209.8 | 1169.2 | 1085.5 | 1033.6 | 1014.5 |
| 27.5°  | 1170.5 | 1127.4 | 1034.8 | 975.2  | 946.1  |
| 30°    | 1128.7 | 1080.5 | 979.0  | 914.3  | 880.1  |
| 32.5°  | 1088.1 | 1029.8 | 925.8  | 849.7  | 818.0  |
| 35°    | 1042.4 | 977.8  | 866.2  | 786.3  | 758.4  |
| 37.5°  | 998.0  | 928.3  | 810.4  | 722.9  | 691.2  |
| 40°    | 951.1  | 875.0  | 752.0  | 662.0  | 629.0  |
| 42.5°  | 902.9  | 821.8  | 693.7  | 599.8  | 568.1  |
| 45°    | 852.2  | 767.2  | 634.1  | 544.0  | 513.6  |
| 47.5°  | 804.0  | 714.0  | 577.0  | 487.0  | 459.1  |
| 50°    | 750.8  | 660.7  | 521.2  | 433.7  | 407.1  |
| 52.5°  | 698.8  | 603.6  | 468.0  | 384.3  | 360.2  |
| 55°    | 648.0  | 549.1  | 412.2  | 336.1  | 312.0  |
| 57.5°  | 596.0  | 494.6  | 362.7  | 291.7  | 271.4  |
| 60°    | 542.8  | 441.3  | 310.7  | 246.0  | 225.7  |
| 62.5°  | 490.8  | 389.3  | 266.3  | 205.4  | 195.3  |
| 65°    | 437.5  | 334.8  | 220.7  | 177.5  | 173.7  |
| 67.5°  | 386.8  | 284.1  | 177.5  | 156.0  | 152.2  |
| 70°    | 333.5  | 234.6  | 147.1  | 134.4  | 129.4  |
| 72.5°  | 282.8  | 189.0  | 123.0  | 112.9  | 110.3  |
| 75°    | 233.3  | 144.6  | 101.5  | 92.6   | 91.3   |
| 77.5°  | 183.9  | 102.7  | 79.9   | 74.8   | 72.3   |
| 80°    | 138.2  | 73.6   | 60.9   | 55.8   | 55.8   |
| 82.5°  | 96.4   | 49.5   | 41.8   | 39.3   | 39.3   |
| 85°    | 54.5   | 27.9   | 24.1   | 24.1   | 24.1   |
| 87.5°  | 20.3   | 10.1   | 10.1   | 8.9    | 8.9    |
| 90°    | 1.1    | 15.0   | 38.0   | 36.2   | 36.8   |
| 92.5°  | 16.7   | 53.0   | 171.9  | 79.2   | 68.1   |
| 95°    | 39.1   | 96.0   | 437.6  | 165.2  | 127.3  |
| 97.5°  | 58.0   | 126.7  | 713.3  | 331.5  | 213.2  |
| 100°   | 86.0   | 155.2  | 881.8  | 660.2  | 399.6  |
| 102.5° | 111.6  | 180.8  | 887.4  | 1116.2 | 779.1  |
| 105°   | 136.2  | 205.4  | 827.1  | 1478.5 | 1258.0 |
| 107.5° | 163.0  | 230.0  | 771.3  | 1609.6 | 1580.6 |
| 110°   | 189.8  | 255.0  | 733.4  | 1588.4 | 1712.3 |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5°  | 90°    |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 214.3 | 279.0 | 708.8 | 1516.4 | 1710.1 |
| 115°   | 240.0 | 303.0 | 692.1 | 1428.2 | 1655.4 |
| 117.5° | 266.8 | 327.0 | 683.1 | 1344.0 | 1572.8 |
| 120°   | 291.3 | 350.5 | 675.3 | 1268.6 | 1493.5 |
| 122.5° | 314.8 | 374.5 | 670.9 | 1210.1 | 1410.9 |
| 125°   | 334.9 | 396.2 | 665.3 | 1157.0 | 1342.8 |
| 127.5° | 351.6 | 416.9 | 661.9 | 1111.8 | 1279.2 |
| 130°   | 366.1 | 435.4 | 659.7 | 1066.1 | 1226.8 |
| 132.5° | 379.5 | 453.2 | 658.6 | 1018.6 | 1172.1 |
| 135°   | 392.9 | 468.8 | 657.5 | 972.2  | 1112.9 |
| 137.5° | 405.2 | 482.2 | 657.5 | 925.4  | 1056.0 |
| 140°   | 419.7 | 494.5 | 656.4 | 884.0  | 996.8  |
| 142.5° | 434.2 | 504.6 | 656.4 | 844.4  | 937.7  |
| 145°   | 448.7 | 515.7 | 654.1 | 812.1  | 888.5  |
| 147.5° | 464.4 | 524.6 | 650.8 | 783.6  | 845.0  |
| 150°   | 480.0 | 533.6 | 647.4 | 759.0  | 807.0  |
| 152.5° | 495.6 | 542.5 | 641.8 | 738.4  | 774.7  |
| 155°   | 510.1 | 550.8 | 635.1 | 718.3  | 746.8  |
| 157.5° | 522.4 | 557.6 | 628.4 | 699.3  | 722.2  |
| 160°   | 534.7 | 564.2 | 621.8 | 680.3  | 698.8  |
| 162.5° | 547.0 | 569.3 | 616.2 | 662.5  | 676.4  |
| 165°   | 555.9 | 572.6 | 608.4 | 645.2  | 655.2  |
| 167.5° | 563.7 | 576.0 | 601.7 | 629.6  | 635.1  |
| 170°   | 571.5 | 577.6 | 596.1 | 615.0  | 617.3  |
| 172.5° | 576.0 | 579.4 | 589.4 | 602.2  | 602.8  |
| 175°   | 579.3 | 579.9 | 584.9 | 592.2  | 590.5  |
| 177.5° | 581.6 | 580.5 | 580.5 | 584.9  | 581.6  |
| 180°   | 580.5 | 580.5 | 580.5 | 580.5  | 580.5  |

(END OF REPORT)