

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: P1010255

Luminaire Tested: S122RDIP-B865D1080UB30-4F0-XX-W2A-F

Issue Date: 5/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1010255  
REPORT IS A COMBINATION OF REPORTS P988637 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDIP-B865D1080UB30-4F0-XX-W2A-F  
Description: Define 2 Regressed Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589}  
{m-EER=0.647}  
Light Source: -  
Ballast/Driver: -

**Summary**

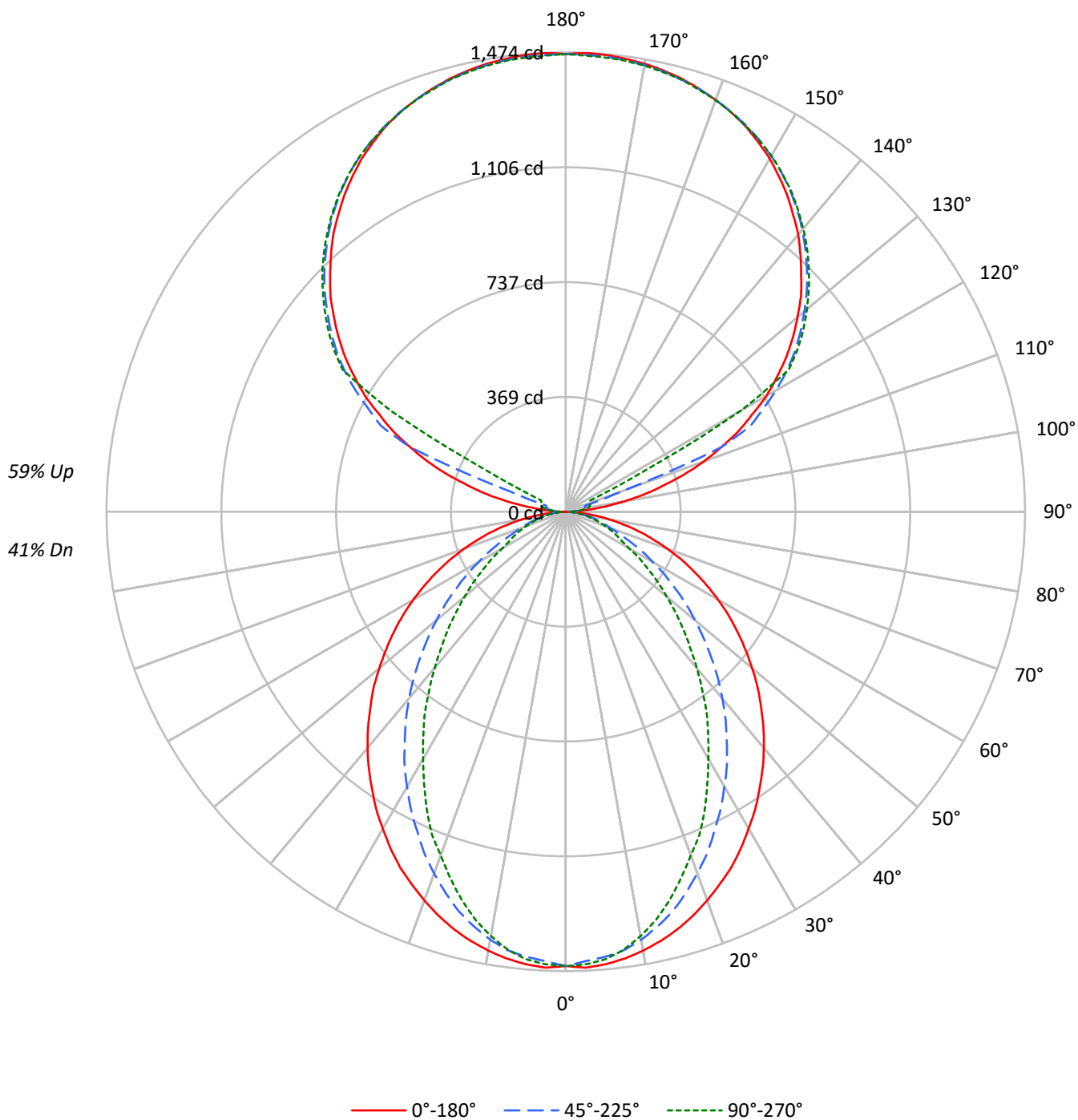
Lumens per Lamp: N/A  
Luminaire Lumens: 7305.0 lumens  
Efficiency: N/A  
Efficacy: 89.3 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16  
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

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

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 23074 | 23074 | 23074 |
| 5°  | 23112 | 21953 | 21790 |
| 10° | 22884 | 20821 | 20133 |
| 15° | 22570 | 19484 | 18246 |
| 20° | 22154 | 17965 | 16272 |
| 25° | 21727 | 16405 | 14465 |
| 30° | 21155 | 14887 | 12491 |
| 35° | 20594 | 13356 | 10797 |
| 40° | 20025 | 11853 | 9052  |
| 45° | 19361 | 10300 | 7531  |
| 50° | 18676 | 8803  | 6131  |
| 55° | 17962 | 7306  | 4867  |
| 60° | 17133 | 5843  | 3682  |
| 65° | 16179 | 4454  | 2993  |
| 70° | 15028 | 3231  | 2381  |
| 75° | 13577 | 2464  | 1818  |
| 80° | 11481 | 1668  | 1219  |
| 85° | 8009  | 765   | 590   |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 19361 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 136.6  | 1.9       |
| 10°-20°   | 375.1  | 5.1       |
| 20°-30°   | 526.6  | 7.2       |
| 30°-40°   | 574.0  | 7.9       |
| 40°-50°   | 527.5  | 7.2       |
| 50°-60°   | 414.3  | 5.7       |
| 60°-70°   | 269.7  | 3.7       |
| 70°-80°   | 138.8  | 1.9       |
| 80°-90°   | 38.0   | 0.5       |
| 90°-100°  | 48.4   | 0.7       |
| 100°-110° | 180.5  | 2.5       |
| 110°-120° | 478.7  | 6.6       |
| 120°-130° | 793.9  | 10.9      |
| 130°-140° | 843.3  | 11.5      |
| 140°-150° | 783.8  | 10.7      |
| 150°-160° | 630.1  | 8.6       |
| 160°-170° | 406.0  | 5.6       |
| 170°-180° | 139.7  | 1.9       |
| 0°-30°    | 1038.2 | 14.2      |
| 0°-40°    | 1612.2 | 22.1      |
| 0°-60°    | 2554.0 | 35.0      |
| 0°-90°    | 3000.6 | 41.1      |
| 90°-120°  | 707.6  | 9.7       |
| 90°-150°  | 3128.5 | 42.8      |
| 90°-180°  | 4304.0 | 58.9      |
| 0°-180°   | 7305.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1458 | 1458  | 1458 | 1458  | 1458 |      |
| 5°   | 1458 | 1451  | 1434 | 1446  | 1442 | 138  |
| 15°  | 1386 | 1372  | 1327 | 1302  | 1289 | 391  |
| 25°  | 1258 | 1216  | 1129 | 1075  | 1055 | 579  |
| 35°  | 1084 | 1017  | 901  | 818   | 789  | 679  |
| 45°  | 886  | 798   | 660  | 566   | 534  | 685  |
| 55°  | 674  | 571   | 429  | 350   | 324  | 602  |
| 65°  | 455  | 348   | 230  | 185   | 181  | 451  |
| 75°  | 243  | 150   | 106  | 96    | 95   | 257  |
| 85°  | 57   | 29    | 25   | 25    | 25   | 65   |
| 90°  | 1    | 13    | 21   | 27    | 29   | 7    |
| 95°  | 69   | 34    | 41   | 47    | 46   | 82   |
| 105° | 323  | 355   | 65   | 76    | 81   | 345  |
| 115° | 611  | 629   | 656  | 164   | 87   | 601  |
| 125° | 864  | 878   | 898  | 905   | 908  | 770  |
| 135° | 1069 | 1086  | 1095 | 1106  | 1104 | 826  |
| 145° | 1240 | 1239  | 1257 | 1264  | 1259 | 775  |
| 155° | 1365 | 1356  | 1368 | 1375  | 1366 | 629  |
| 165° | 1438 | 1432  | 1435 | 1443  | 1435 | 406  |
| 175° | 1471 | 1464  | 1466 | 1474  | 1463 | 140  |
| 180° | 1468 | 1468  | 1468 | 1468  | 1468 |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1457.7 | 1457.7 | 1457.7 | 1457.7 | 1457.7 |
| 2.5°   | 1464.3 | 1457.7 | 1443.2 | 1456.4 | 1453.8 |
| 5°     | 1457.7 | 1451.1 | 1434.0 | 1445.9 | 1441.9 |
| 7.5°   | 1445.9 | 1437.9 | 1419.5 | 1424.7 | 1418.1 |
| 10°    | 1430.0 | 1420.8 | 1394.4 | 1390.4 | 1382.5 |
| 12.5°  | 1410.2 | 1398.4 | 1362.7 | 1354.8 | 1340.3 |
| 15°    | 1386.5 | 1372.0 | 1327.1 | 1302.1 | 1288.9 |
| 17.5°  | 1358.8 | 1337.7 | 1282.3 | 1253.2 | 1232.1 |
| 20°    | 1327.1 | 1300.7 | 1234.8 | 1201.8 | 1172.8 |
| 22.5°  | 1292.8 | 1262.5 | 1186.0 | 1141.1 | 1121.3 |
| 25°    | 1258.5 | 1216.3 | 1129.2 | 1075.2 | 1055.4 |
| 27.5°  | 1217.6 | 1172.8 | 1076.5 | 1014.5 | 984.1  |
| 30°    | 1174.1 | 1124.0 | 1018.4 | 951.1  | 915.5  |
| 32.5°  | 1131.9 | 1071.2 | 963.0  | 883.9  | 850.9  |
| 35°    | 1084.4 | 1017.1 | 901.0  | 817.9  | 788.9  |
| 37.5°  | 1038.2 | 965.7  | 843.0  | 751.9  | 719.0  |
| 40°    | 989.4  | 910.3  | 782.3  | 688.6  | 654.3  |
| 42.5°  | 939.3  | 854.8  | 721.6  | 624.0  | 591.0  |
| 45°    | 886.5  | 798.1  | 659.6  | 565.9  | 534.3  |
| 47.5°  | 836.4  | 742.7  | 600.2  | 506.6  | 477.6  |
| 50°    | 781.0  | 687.3  | 542.2  | 451.2  | 423.5  |
| 52.5°  | 726.9  | 627.9  | 486.8  | 399.7  | 374.7  |
| 55°    | 674.1  | 571.2  | 428.7  | 349.6  | 324.5  |
| 57.5°  | 620.0  | 514.5  | 377.3  | 303.4  | 282.3  |
| 60°    | 564.6  | 459.1  | 323.2  | 255.9  | 234.8  |
| 62.5°  | 510.5  | 405.0  | 277.0  | 213.7  | 203.2  |
| 65°    | 455.1  | 348.3  | 229.5  | 184.7  | 180.7  |
| 67.5°  | 402.4  | 295.5  | 184.7  | 162.3  | 158.3  |
| 70°    | 347.0  | 244.1  | 153.0  | 139.8  | 134.6  |
| 72.5°  | 294.2  | 196.6  | 128.0  | 117.4  | 114.8  |
| 75°    | 242.7  | 150.4  | 105.5  | 96.3   | 95.0   |
| 77.5°  | 191.3  | 106.9  | 83.1   | 77.8   | 75.2   |
| 80°    | 143.8  | 76.5   | 63.3   | 58.0   | 58.0   |
| 82.5°  | 100.3  | 51.4   | 43.5   | 40.9   | 40.9   |
| 85°    | 56.7   | 29.0   | 25.1   | 25.1   | 25.1   |
| 87.5°  | 21.1   | 10.6   | 10.6   | 9.2    | 9.2    |
| 90°    | 1.1    | 12.7   | 21.2   | 26.6   | 28.7   |
| 92.5°  | 26.6   | 22.3   | 25.5   | 27.6   | 28.7   |
| 95°    | 69.1   | 34.0   | 41.4   | 46.7   | 45.7   |
| 97.5°  | 124.3  | 37.2   | 54.2   | 57.4   | 58.4   |
| 100°   | 188.0  | 42.5   | 60.6   | 69.1   | 71.2   |
| 102.5° | 258.2  | 256.0  | 62.7   | 74.4   | 77.6   |
| 105°   | 323.0  | 354.8  | 64.8   | 76.5   | 80.7   |
| 107.5° | 398.4  | 425.0  | 66.9   | 78.6   | 82.9   |
| 110°   | 470.6  | 493.0  | 185.9  | 79.7   | 83.9   |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 538.6  | 557.8  | 539.7  | 81.8   | 85.0   |
| 115°   | 610.9  | 628.9  | 655.5  | 163.6  | 87.1   |
| 117.5° | 673.6  | 694.8  | 712.9  | 561.0  | 282.6  |
| 120°   | 743.7  | 759.6  | 778.8  | 791.5  | 648.1  |
| 122.5° | 803.2  | 820.2  | 841.4  | 847.8  | 848.9  |
| 125°   | 863.7  | 877.6  | 897.7  | 905.2  | 908.4  |
| 127.5° | 919.0  | 933.9  | 949.8  | 960.4  | 961.5  |
| 130°   | 971.0  | 988.0  | 999.7  | 1011.4 | 1010.4 |
| 132.5° | 1024.2 | 1038.0 | 1049.7 | 1059.2 | 1058.2 |
| 135°   | 1068.8 | 1085.8 | 1095.3 | 1106.0 | 1103.8 |
| 137.5° | 1115.5 | 1128.3 | 1138.9 | 1149.5 | 1146.3 |
| 140°   | 1161.2 | 1169.7 | 1181.4 | 1191.0 | 1185.7 |
| 142.5° | 1199.5 | 1206.9 | 1220.7 | 1229.2 | 1223.9 |
| 145°   | 1239.8 | 1238.8 | 1256.8 | 1264.3 | 1259.0 |
| 147.5° | 1274.9 | 1271.7 | 1289.8 | 1295.1 | 1290.8 |
| 150°   | 1308.9 | 1301.5 | 1318.5 | 1324.8 | 1319.5 |
| 152.5° | 1337.6 | 1329.1 | 1345.0 | 1351.4 | 1344.0 |
| 155°   | 1365.2 | 1355.6 | 1368.4 | 1374.8 | 1366.3 |
| 157.5° | 1387.5 | 1379.0 | 1388.6 | 1396.0 | 1387.5 |
| 160°   | 1406.6 | 1400.3 | 1406.6 | 1413.0 | 1405.6 |
| 162.5° | 1423.6 | 1417.3 | 1422.6 | 1430.0 | 1420.4 |
| 165°   | 1438.5 | 1432.1 | 1435.3 | 1442.8 | 1435.3 |
| 167.5° | 1450.2 | 1443.8 | 1447.0 | 1454.4 | 1444.9 |
| 170°   | 1459.8 | 1453.4 | 1455.5 | 1462.9 | 1453.4 |
| 172.5° | 1466.1 | 1459.8 | 1461.9 | 1469.3 | 1459.8 |
| 175°   | 1471.4 | 1464.0 | 1466.1 | 1473.6 | 1462.9 |
| 177.5° | 1473.6 | 1466.1 | 1467.2 | 1474.6 | 1465.1 |
| 180°   | 1468.3 | 1468.3 | 1468.3 | 1468.3 | 1468.3 |

(END OF REPORT)