

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: P1001183

Luminaire Tested: SA4XXDIP-B350D1205UB2750-4F0-XX-W2A-F\_3000K

Issue Date: 5/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1001183  
REPORT IS A COMBINATION OF REPORTS P995799 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: SA4XXDIP-B350D1205UB2750-4F0-XX-W2A-F\_3000K  
Description: Define 4 Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}  
Light Source: -  
Ballast/Driver: -

**Summary**

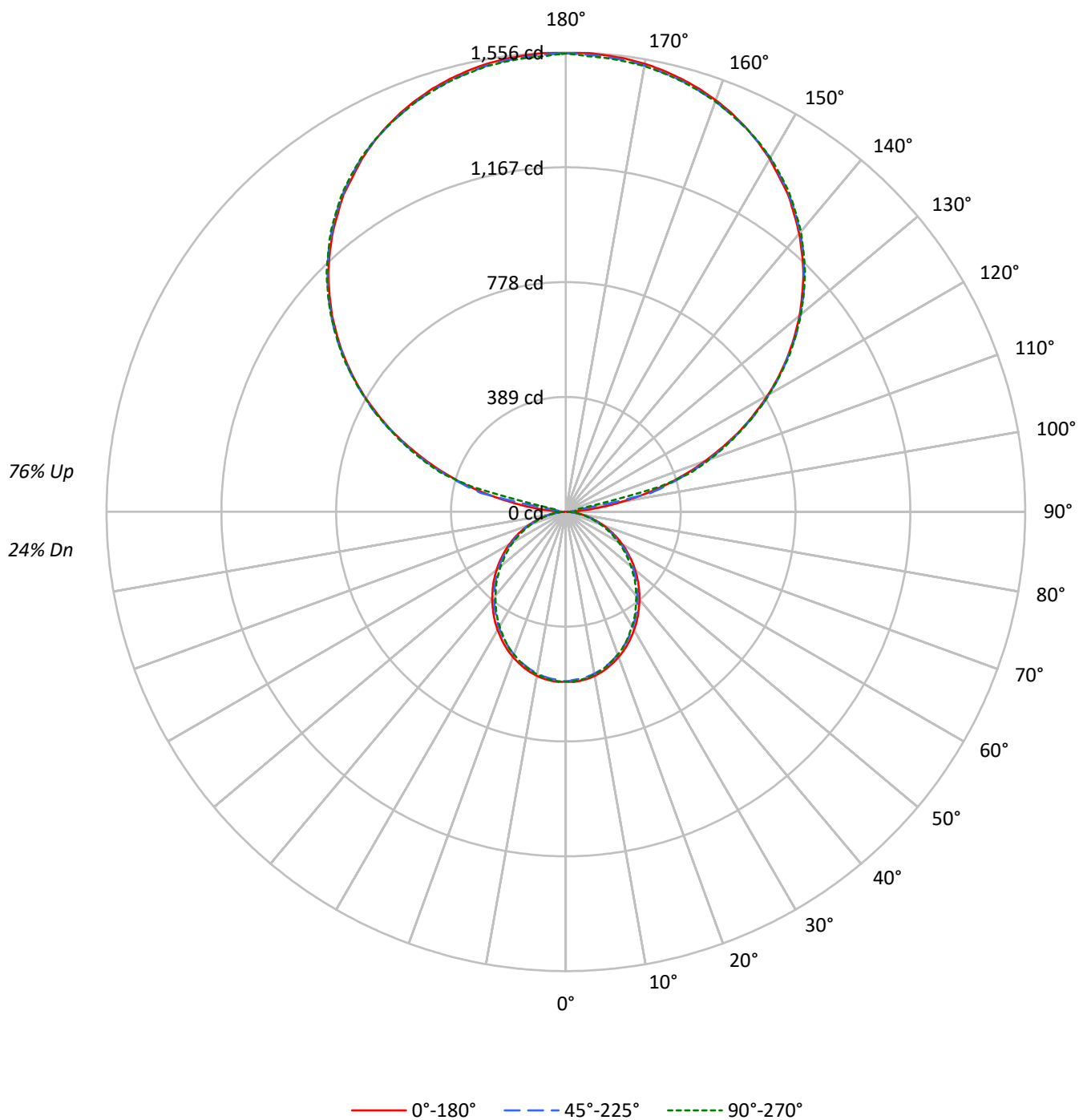
Lumens per Lamp: N/A  
Luminaire Lumens: 6283.0 lumens  
Efficiency: N/A  
Efficacy: 130.9 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')  
CIE Type: Semi-Indirect

Input Watts (W): 48  
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: P1001183

CATALOG NUMBER: SA4XXDIP-B350D1205UB2750-4F0-XX-W2A-F\_3000K

### Luminous Intensity Polar Plot



TEST NUMBER: P1001183

CATALOG NUMBER: SA4XXDIP-B350D1205UB2750-4F0-XX-W2A-F\_3000K

**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   | 101 | 101 | 101 | 101 | 90 | 90 | 90 | 90 | 69 | 69 | 69 | 49 | 49 | 49 | 32 | 32 | 32 |
| 1   | 92  | 88  | 84  | 81  | 81 | 78 | 75 | 72 | 60 | 58 | 56 | 43 | 42 | 41 | 28 | 27 | 27 |
| 2   | 84  | 76  | 71  | 66  | 74 | 68 | 63 | 59 | 52 | 49 | 46 | 38 | 36 | 34 | 25 | 24 | 22 |
| 3   | 76  | 67  | 60  | 55  | 67 | 60 | 54 | 49 | 46 | 42 | 39 | 34 | 31 | 29 | 22 | 20 | 19 |
| 4   | 70  | 59  | 52  | 46  | 62 | 53 | 47 | 42 | 41 | 36 | 33 | 30 | 27 | 25 | 19 | 18 | 16 |
| 5   | 64  | 53  | 45  | 39  | 56 | 47 | 40 | 35 | 37 | 32 | 28 | 27 | 24 | 21 | 18 | 16 | 14 |
| 6   | 59  | 47  | 39  | 34  | 52 | 42 | 35 | 31 | 33 | 28 | 24 | 24 | 21 | 18 | 16 | 14 | 13 |
| 7   | 54  | 42  | 35  | 29  | 48 | 38 | 31 | 27 | 30 | 25 | 21 | 22 | 19 | 16 | 14 | 13 | 11 |
| 8   | 50  | 38  | 31  | 26  | 44 | 34 | 28 | 23 | 27 | 22 | 19 | 20 | 17 | 14 | 13 | 11 | 10 |
| 9   | 46  | 35  | 28  | 23  | 41 | 31 | 25 | 21 | 24 | 20 | 17 | 18 | 15 | 13 | 12 | 10 | 9  |
| 10  | 43  | 32  | 25  | 20  | 38 | 29 | 22 | 18 | 22 | 18 | 15 | 17 | 14 | 11 | 11 | 9  | 8  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 4690 | 4690 | 4690 |
| 5°  | 4693 | 4555 | 4560 |
| 10° | 4654 | 4428 | 4397 |
| 15° | 4587 | 4278 | 4213 |
| 20° | 4502 | 4115 | 4023 |
| 25° | 4405 | 3944 | 3818 |
| 30° | 4290 | 3758 | 3593 |
| 35° | 4170 | 3567 | 3375 |
| 40° | 4045 | 3363 | 3144 |
| 45° | 3914 | 3157 | 2928 |
| 50° | 3770 | 2959 | 2689 |
| 55° | 3612 | 2726 | 2451 |
| 60° | 3450 | 2471 | 2203 |
| 65° | 3265 | 2209 | 1924 |
| 70° | 3054 | 1892 | 1625 |
| 75° | 2735 | 1525 | 1301 |
| 80° | 2332 | 1103 | 916  |
| 85° | 1812 | 615  | 493  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
Vertical Angle: 45°  
Luminance: 3914 cd/sqm

TEST NUMBER: P1001183

CATALOG NUMBER: SA4XXDIP-B350D1205UB2750-4F0-XX-W2A-F\_3000K

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 54.2   | 0.9       |
| 10°-20°   | 152.7  | 2.4       |
| 20°-30°   | 224.7  | 3.6       |
| 30°-40°   | 261.2  | 4.2       |
| 40°-50°   | 261.2  | 4.2       |
| 50°-60°   | 228.5  | 3.6       |
| 60°-70°   | 169.6  | 2.7       |
| 70°-80°   | 96.2   | 1.5       |
| 80°-90°   | 30.8   | 0.5       |
| 90°-100°  | 51.5   | 0.8       |
| 100°-110° | 339.4  | 5.4       |
| 110°-120° | 648.0  | 10.3      |
| 120°-130° | 822.7  | 13.1      |
| 130°-140° | 880.1  | 14.0      |
| 140°-150° | 823.0  | 13.1      |
| 150°-160° | 663.6  | 10.6      |
| 160°-170° | 428.0  | 6.8       |
| 170°-180° | 147.5  | 2.3       |
| 0°-30°    | 431.6  | 6.9       |
| 0°-40°    | 692.9  | 11.0      |
| 0°-60°    | 1182.6 | 18.8      |
| 0°-90°    | 1479.2 | 23.5      |
| 90°-120°  | 1039.0 | 16.5      |
| 90°-150°  | 3564.7 | 56.7      |
| 90°-180°  | 4804.0 | 76.5      |
| 0°-180°   | 6283.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 575  | 575   | 575  | 575   | 575  |      |
| 5°   | 575  | 573   | 568  | 573   | 572  | 55   |
| 15°  | 547  | 545   | 538  | 541   | 540  | 154  |
| 25°  | 495  | 492   | 486  | 486   | 484  | 228  |
| 35°  | 426  | 423   | 416  | 413   | 411  | 267  |
| 45°  | 348  | 345   | 337  | 332   | 331  | 268  |
| 55°  | 263  | 262   | 255  | 250   | 247  | 236  |
| 65°  | 178  | 176   | 171  | 167   | 164  | 176  |
| 75°  | 95   | 93    | 90   | 88    | 88   | 101  |
| 85°  | 25   | 25    | 24   | 24    | 24   | 27   |
| 90°  | 4    | 16    | 26   | 32    | 35   | 5    |
| 95°  | 64   | 24    | 26   | 32    | 34   | 79   |
| 105° | 350  | 356   | 362  | 373   | 331  | 366  |
| 115° | 653  | 656   | 655  | 657   | 657  | 642  |
| 125° | 917  | 922   | 920  | 923   | 924  | 819  |
| 135° | 1138 | 1137  | 1141 | 1144  | 1146 | 877  |
| 145° | 1312 | 1316  | 1316 | 1317  | 1319 | 820  |
| 155° | 1439 | 1440  | 1436 | 1441  | 1438 | 663  |
| 165° | 1518 | 1512  | 1512 | 1521  | 1511 | 429  |
| 175° | 1552 | 1546  | 1547 | 1557  | 1543 | 148  |
| 180° | 1552 | 1552  | 1552 | 1552  | 1552 |      |

TEST NUMBER: P1001183

CATALOG NUMBER: SA4XXDIP-B350D1205UB2750-4F0-XX-W2A-F\_3000K

**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 0°     | 575.1 | 575.1 | 575.1 | 575.1 | 575.1 |
| 2.5°   | 576.9 | 575.5 | 570.5 | 575.1 | 574.6 |
| 5°     | 574.6 | 572.8 | 567.7 | 572.8 | 571.8 |
| 7.5°   | 570.5 | 568.6 | 563.1 | 567.2 | 566.8 |
| 10°    | 564.5 | 562.6 | 556.6 | 560.3 | 559.4 |
| 12.5°  | 556.6 | 554.8 | 548.3 | 552.5 | 551.1 |
| 15°    | 547.0 | 545.1 | 538.2 | 541.0 | 539.6 |
| 17.5°  | 535.9 | 533.6 | 527.1 | 529.0 | 528.1 |
| 20°    | 523.5 | 521.1 | 514.2 | 515.6 | 514.7 |
| 22.5°  | 510.1 | 506.9 | 500.0 | 502.7 | 500.9 |
| 25°    | 495.3 | 492.1 | 485.7 | 486.1 | 484.3 |
| 27.5°  | 478.8 | 475.5 | 469.5 | 468.6 | 466.3 |
| 30°    | 462.2 | 458.5 | 452.5 | 450.6 | 448.3 |
| 32.5°  | 444.7 | 441.4 | 435.0 | 432.7 | 430.4 |
| 35°    | 426.2 | 423.0 | 416.5 | 413.3 | 411.0 |
| 37.5°  | 406.9 | 404.1 | 397.2 | 394.0 | 390.7 |
| 40°    | 388.0 | 384.3 | 377.4 | 372.8 | 370.5 |
| 42.5°  | 367.7 | 365.9 | 358.0 | 352.5 | 351.1 |
| 45°    | 347.9 | 344.7 | 337.3 | 332.2 | 330.8 |
| 47.5°  | 327.2 | 324.9 | 317.9 | 312.4 | 308.7 |
| 50°    | 306.0 | 304.1 | 297.7 | 291.2 | 288.5 |
| 52.5°  | 285.2 | 282.9 | 276.0 | 270.5 | 266.8 |
| 55°    | 263.1 | 261.7 | 255.3 | 249.7 | 247.0 |
| 57.5°  | 242.4 | 241.0 | 234.5 | 229.0 | 226.2 |
| 60°    | 220.7 | 218.4 | 212.4 | 208.3 | 206.0 |
| 62.5°  | 199.5 | 197.7 | 191.2 | 187.5 | 185.2 |
| 65°    | 178.3 | 176.0 | 171.4 | 166.8 | 164.5 |
| 67.5°  | 156.7 | 154.8 | 150.2 | 145.6 | 145.1 |
| 70°    | 136.9 | 133.6 | 129.9 | 126.3 | 124.9 |
| 72.5°  | 115.7 | 112.4 | 109.7 | 106.9 | 105.5 |
| 75°    | 94.9  | 92.6  | 90.3  | 88.5  | 88.0  |
| 77.5°  | 74.6  | 73.7  | 71.4  | 71.0  | 69.6  |
| 80°    | 56.7  | 55.3  | 54.4  | 53.5  | 53.0  |
| 82.5°  | 39.2  | 38.7  | 38.7  | 38.2  | 37.8  |
| 85°    | 24.9  | 24.9  | 24.0  | 24.0  | 23.5  |
| 87.5°  | 12.0  | 11.5  | 11.1  | 11.1  | 11.1  |
| 90°    | 3.5   | 16.3  | 25.5  | 32.5  | 34.8  |
| 92.5°  | 17.4  | 15.1  | 24.4  | 31.4  | 31.4  |
| 95°    | 63.9  | 24.4  | 25.5  | 32.5  | 33.7  |
| 97.5°  | 121.9 | 147.5 | 25.5  | 31.4  | 32.5  |
| 100°   | 190.4 | 211.3 | 51.1  | 31.4  | 32.5  |
| 102.5° | 267.1 | 281.0 | 294.9 | 33.7  | 33.7  |
| 105°   | 349.5 | 356.5 | 362.3 | 372.7 | 330.9 |
| 107.5° | 425.0 | 428.5 | 436.6 | 442.4 | 447.0 |
| 110°   | 501.6 | 505.1 | 512.1 | 514.4 | 517.9 |

TEST NUMBER: P1001183

CATALOG NUMBER: SA4XXDIP-B350D1205UB2750-4F0-XX-W2A-F\_3000K

**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 575.9  | 582.9  | 585.2  | 584.1  | 588.7  |
| 115°   | 652.6  | 656.0  | 654.9  | 657.2  | 657.2  |
| 117.5° | 721.1  | 725.7  | 729.2  | 728.0  | 728.0  |
| 120°   | 790.7  | 795.4  | 794.2  | 796.5  | 794.2  |
| 122.5° | 855.8  | 858.1  | 860.4  | 861.6  | 859.2  |
| 125°   | 917.3  | 921.9  | 919.6  | 923.1  | 924.3  |
| 127.5° | 976.5  | 977.7  | 983.5  | 982.3  | 981.2  |
| 130°   | 1033.4 | 1034.6 | 1038.1 | 1039.2 | 1039.2 |
| 132.5° | 1085.7 | 1088.0 | 1092.6 | 1093.8 | 1092.6 |
| 135°   | 1137.9 | 1136.8 | 1141.4 | 1143.7 | 1146.0 |
| 137.5° | 1184.4 | 1184.4 | 1190.2 | 1192.5 | 1191.3 |
| 140°   | 1229.6 | 1232.0 | 1234.3 | 1237.8 | 1238.9 |
| 142.5° | 1270.3 | 1274.9 | 1276.1 | 1278.4 | 1278.4 |
| 145°   | 1312.1 | 1315.6 | 1315.6 | 1316.7 | 1319.1 |
| 147.5° | 1344.6 | 1351.6 | 1350.4 | 1351.6 | 1352.7 |
| 150°   | 1380.6 | 1385.2 | 1384.1 | 1384.1 | 1385.2 |
| 152.5° | 1410.8 | 1414.3 | 1411.9 | 1414.3 | 1413.1 |
| 155°   | 1438.6 | 1439.8 | 1436.3 | 1441.0 | 1437.5 |
| 157.5° | 1463.0 | 1463.0 | 1458.4 | 1464.2 | 1458.4 |
| 160°   | 1483.9 | 1480.4 | 1479.3 | 1486.3 | 1479.3 |
| 162.5° | 1502.5 | 1497.9 | 1496.7 | 1503.7 | 1495.5 |
| 165°   | 1517.6 | 1511.8 | 1511.8 | 1521.1 | 1510.6 |
| 167.5° | 1530.4 | 1524.6 | 1523.4 | 1533.9 | 1522.2 |
| 170°   | 1540.8 | 1533.9 | 1535.0 | 1544.3 | 1532.7 |
| 172.5° | 1547.8 | 1540.8 | 1542.0 | 1551.3 | 1538.5 |
| 175°   | 1552.4 | 1545.5 | 1546.6 | 1557.1 | 1543.1 |
| 177.5° | 1555.9 | 1547.8 | 1550.1 | 1559.4 | 1545.5 |
| 180°   | 1552.4 | 1552.4 | 1552.4 | 1552.4 | 1552.4 |

(END OF REPORT)