

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: P1025332

Luminaire Tested: S124DIP-B350D1205UB40-4F0-XX-W2A-F

Issue Date: 5/6/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1025332  
REPORT IS A COMBINATION OF REPORTS P995827 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/6/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124DIP-B350D1205UB40-4F0-XX-W2A-F  
Description: Define 4 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}  
Light Source: -  
Ballast/Driver: -

**Summary**

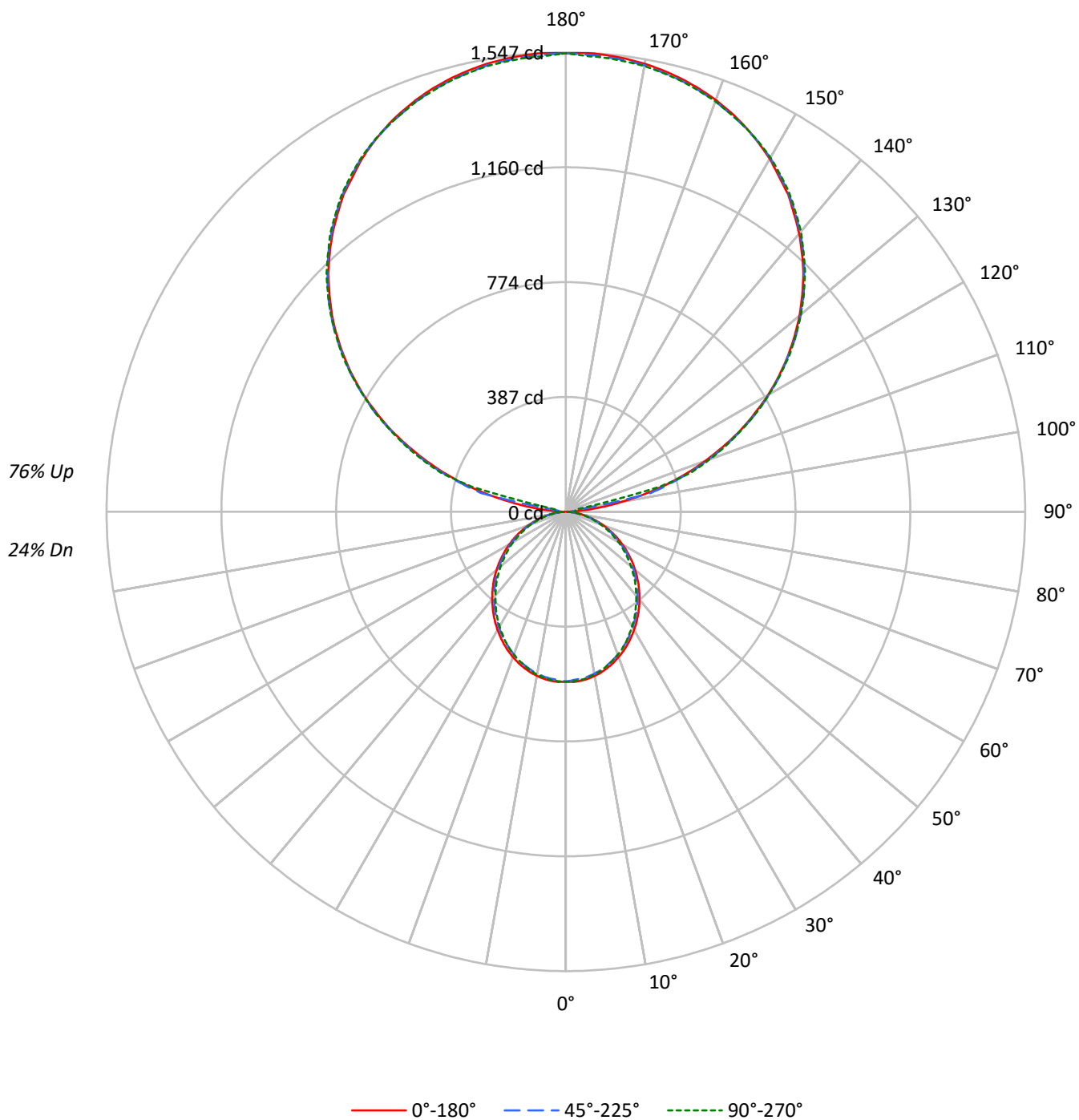
Lumens per Lamp: N/A  
Luminaire Lumens: 6248.0 lumens  
Efficiency: N/A  
Efficacy: 130.2 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')  
CIE Type: Semi-Indirect

Input Watts (W): 48  
Input Voltage (V):  
Input Current (A<sub>in</sub>): 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: P1025332

CATALOG NUMBER: S124DIP-B350D1205UB40-4F0-XX-W2A-F

### Luminous Intensity Polar Plot



TEST NUMBER: P1025332

CATALOG NUMBER: S124DIP-B350D1205UB40-4F0-XX-W2A-F

**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°  | 4664 | 4664 | 4664 |
| 5°  | 4668 | 4530 | 4535 |
| 10° | 4628 | 4404 | 4373 |
| 15° | 4562 | 4255 | 4191 |
| 20° | 4477 | 4092 | 4001 |
| 25° | 4382 | 3922 | 3797 |
| 30° | 4267 | 3737 | 3573 |
| 35° | 4147 | 3548 | 3357 |
| 40° | 4023 | 3344 | 3127 |
| 45° | 3893 | 3141 | 2912 |
| 50° | 3749 | 2943 | 2674 |
| 55° | 3592 | 2711 | 2437 |
| 60° | 3431 | 2458 | 2191 |
| 65° | 3249 | 2197 | 1913 |
| 70° | 3036 | 1881 | 1616 |
| 75° | 2720 | 1517 | 1294 |
| 80° | 2320 | 1097 | 910  |
| 85° | 1797 | 610  | 490  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3893 cd/sqm

TEST NUMBER: P1025332

CATALOG NUMBER: S124DIP-B350D1205UB40-4F0-XX-W2A-F

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 53.9   | 0.9       |
| 10°-20°   | 151.9  | 2.4       |
| 20°-30°   | 223.5  | 3.6       |
| 30°-40°   | 259.8  | 4.2       |
| 40°-50°   | 259.8  | 4.2       |
| 50°-60°   | 227.2  | 3.6       |
| 60°-70°   | 168.7  | 2.7       |
| 70°-80°   | 95.7   | 1.5       |
| 80°-90°   | 30.6   | 0.5       |
| 90°-100°  | 51.2   | 0.8       |
| 100°-110° | 337.5  | 5.4       |
| 110°-120° | 644.4  | 10.3      |
| 120°-130° | 818.1  | 13.1      |
| 130°-140° | 875.1  | 14.0      |
| 140°-150° | 818.3  | 13.1      |
| 150°-160° | 659.9  | 10.6      |
| 160°-170° | 425.6  | 6.8       |
| 170°-180° | 146.7  | 2.3       |
| 0°-30°    | 429.3  | 6.9       |
| 0°-40°    | 689.1  | 11.0      |
| 0°-60°    | 1176.2 | 18.8      |
| 0°-90°    | 1471.2 | 23.5      |
| 90°-120°  | 1033.1 | 16.5      |
| 90°-150°  | 3544.6 | 56.7      |
| 90°-180°  | 4777.0 | 76.5      |
| 0°-180°   | 6248.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 572  | 572   | 572  | 572   | 572  |      |
| 5°   | 572  | 570   | 565  | 570   | 569  | 54   |
| 15°  | 544  | 542   | 535  | 538   | 537  | 153  |
| 25°  | 493  | 490   | 483  | 484   | 482  | 227  |
| 35°  | 424  | 421   | 414  | 411   | 409  | 265  |
| 45°  | 346  | 343   | 336  | 330   | 329  | 267  |
| 55°  | 262  | 260   | 254  | 248   | 246  | 234  |
| 65°  | 177  | 175   | 170  | 166   | 164  | 176  |
| 75°  | 94   | 92    | 90   | 88    | 88   | 100  |
| 85°  | 25   | 25    | 24   | 24    | 23   | 27   |
| 90°  | 4    | 16    | 25   | 32    | 35   | 5    |
| 95°  | 64   | 24    | 25   | 32    | 34   | 78   |
| 105° | 348  | 354   | 360  | 371   | 329  | 364  |
| 115° | 649  | 652   | 651  | 654   | 654  | 639  |
| 125° | 912  | 917   | 914  | 918   | 919  | 815  |
| 135° | 1132 | 1130  | 1135 | 1137  | 1140 | 872  |
| 145° | 1305 | 1308  | 1308 | 1309  | 1312 | 815  |
| 155° | 1431 | 1432  | 1428 | 1433  | 1429 | 660  |
| 165° | 1509 | 1503  | 1503 | 1512  | 1502 | 426  |
| 175° | 1544 | 1537  | 1538 | 1548  | 1534 | 147  |
| 180° | 1544 | 1544  | 1544 | 1544  | 1544 |      |

TEST NUMBER: P1025332

CATALOG NUMBER: S124DIP-B350D1205UB40-4F0-XX-W2A-F

**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 0°     | 571.9 | 571.9 | 571.9 | 571.9 | 571.9 |
| 2.5°   | 573.8 | 572.4 | 567.4 | 571.9 | 571.5 |
| 5°     | 571.5 | 569.7 | 564.6 | 569.7 | 568.7 |
| 7.5°   | 567.4 | 565.5 | 560.0 | 564.2 | 563.7 |
| 10°    | 561.4 | 559.6 | 553.6 | 557.3 | 556.4 |
| 12.5°  | 553.6 | 551.8 | 545.4 | 549.5 | 548.1 |
| 15°    | 544.0 | 542.2 | 535.3 | 538.0 | 536.7 |
| 17.5°  | 533.0 | 530.7 | 524.3 | 526.1 | 525.2 |
| 20°    | 520.6 | 518.3 | 511.4 | 512.8 | 511.9 |
| 22.5°  | 507.3 | 504.1 | 497.2 | 500.0 | 498.2 |
| 25°    | 492.7 | 489.5 | 483.0 | 483.5 | 481.7 |
| 27.5°  | 476.2 | 473.0 | 467.0 | 466.1 | 463.8 |
| 30°    | 459.7 | 456.0 | 450.0 | 448.2 | 445.9 |
| 32.5°  | 442.2 | 439.0 | 432.6 | 430.3 | 428.0 |
| 35°    | 423.9 | 420.7 | 414.3 | 411.1 | 408.8 |
| 37.5°  | 404.7 | 401.9 | 395.0 | 391.8 | 388.6 |
| 40°    | 385.9 | 382.2 | 375.3 | 370.8 | 368.5 |
| 42.5°  | 365.7 | 363.9 | 356.1 | 350.6 | 349.2 |
| 45°    | 346.0 | 342.8 | 335.5 | 330.4 | 329.0 |
| 47.5°  | 325.4 | 323.1 | 316.2 | 310.7 | 307.1 |
| 50°    | 304.3 | 302.5 | 296.1 | 289.6 | 286.9 |
| 52.5°  | 283.7 | 281.4 | 274.5 | 269.0 | 265.3 |
| 55°    | 261.7 | 260.3 | 253.9 | 248.4 | 245.6 |
| 57.5°  | 241.1 | 239.7 | 233.3 | 227.8 | 225.0 |
| 60°    | 219.5 | 217.2 | 211.3 | 207.1 | 204.9 |
| 62.5°  | 198.4 | 196.6 | 190.2 | 186.5 | 184.2 |
| 65°    | 177.4 | 175.1 | 170.5 | 165.9 | 163.6 |
| 67.5°  | 155.8 | 154.0 | 149.4 | 144.8 | 144.4 |
| 70°    | 136.1 | 132.9 | 129.2 | 125.6 | 124.2 |
| 72.5°  | 115.0 | 111.8 | 109.1 | 106.3 | 104.9 |
| 75°    | 94.4  | 92.1  | 89.8  | 88.0  | 87.5  |
| 77.5°  | 74.2  | 73.3  | 71.0  | 70.6  | 69.2  |
| 80°    | 56.4  | 55.0  | 54.1  | 53.2  | 52.7  |
| 82.5°  | 39.0  | 38.5  | 38.5  | 38.0  | 37.6  |
| 85°    | 24.7  | 24.7  | 23.8  | 23.8  | 23.4  |
| 87.5°  | 11.9  | 11.5  | 11.0  | 11.0  | 11.0  |
| 90°    | 3.5   | 16.2  | 25.4  | 32.3  | 34.6  |
| 92.5°  | 17.3  | 15.0  | 24.2  | 31.2  | 31.2  |
| 95°    | 63.5  | 24.2  | 25.4  | 32.3  | 33.5  |
| 97.5°  | 121.2 | 146.6 | 25.4  | 31.2  | 32.3  |
| 100°   | 189.4 | 210.1 | 50.8  | 31.2  | 32.3  |
| 102.5° | 265.6 | 279.4 | 293.3 | 33.5  | 33.5  |
| 105°   | 347.5 | 354.5 | 360.2 | 370.6 | 329.1 |
| 107.5° | 422.6 | 426.1 | 434.1 | 439.9 | 444.5 |
| 110°   | 498.8 | 502.3 | 509.2 | 511.5 | 515.0 |

TEST NUMBER: P1025332

CATALOG NUMBER: S124DIP-B350D1205UB40-4F0-XX-W2A-F

**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 572.7  | 579.6  | 581.9  | 580.8  | 585.4  |
| 115°   | 648.9  | 652.4  | 651.2  | 653.5  | 653.5  |
| 117.5° | 717.0  | 721.6  | 725.1  | 723.9  | 723.9  |
| 120°   | 786.3  | 790.9  | 789.8  | 792.1  | 789.8  |
| 122.5° | 851.0  | 853.3  | 855.6  | 856.7  | 854.4  |
| 125°   | 912.1  | 916.8  | 914.5  | 917.9  | 919.1  |
| 127.5° | 971.0  | 972.2  | 978.0  | 976.8  | 975.6  |
| 130°   | 1027.6 | 1028.8 | 1032.2 | 1033.4 | 1033.4 |
| 132.5° | 1079.6 | 1081.9 | 1086.5 | 1087.6 | 1086.5 |
| 135°   | 1131.5 | 1130.4 | 1135.0 | 1137.3 | 1139.6 |
| 137.5° | 1177.7 | 1177.7 | 1183.5 | 1185.8 | 1184.6 |
| 140°   | 1222.7 | 1225.0 | 1227.4 | 1230.8 | 1232.0 |
| 142.5° | 1263.1 | 1267.8 | 1268.9 | 1271.2 | 1271.2 |
| 145°   | 1304.7 | 1308.2 | 1308.2 | 1309.3 | 1311.6 |
| 147.5° | 1337.0 | 1344.0 | 1342.8 | 1344.0 | 1345.1 |
| 150°   | 1372.8 | 1377.5 | 1376.3 | 1376.3 | 1377.5 |
| 152.5° | 1402.9 | 1406.3 | 1404.0 | 1406.3 | 1405.2 |
| 155°   | 1430.6 | 1431.7 | 1428.3 | 1432.9 | 1429.4 |
| 157.5° | 1454.8 | 1454.8 | 1450.2 | 1456.0 | 1450.2 |
| 160°   | 1475.6 | 1472.1 | 1471.0 | 1477.9 | 1471.0 |
| 162.5° | 1494.1 | 1489.5 | 1488.3 | 1495.2 | 1487.1 |
| 165°   | 1509.1 | 1503.3 | 1503.3 | 1512.5 | 1502.2 |
| 167.5° | 1521.8 | 1516.0 | 1514.9 | 1525.2 | 1513.7 |
| 170°   | 1532.2 | 1525.2 | 1526.4 | 1535.6 | 1524.1 |
| 172.5° | 1539.1 | 1532.2 | 1533.3 | 1542.6 | 1529.9 |
| 175°   | 1543.7 | 1536.8 | 1537.9 | 1548.3 | 1534.5 |
| 177.5° | 1547.2 | 1539.1 | 1541.4 | 1550.6 | 1536.8 |
| 180°   | 1543.7 | 1543.7 | 1543.7 | 1543.7 | 1543.7 |

(END OF REPORT)