

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: P1011168

Luminaire Tested: S123DIP-B1000D585UB30-4F0-XX-W2A-F4

Issue Date: 5/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1011168  
REPORT IS A COMBINATION OF REPORTS P989231 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123DIP-B1000D585UB30-4F0-XX-W2A-F4  
Description: Define 3 Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}  
Light Source: -  
Ballast/Driver: -

**Summary**

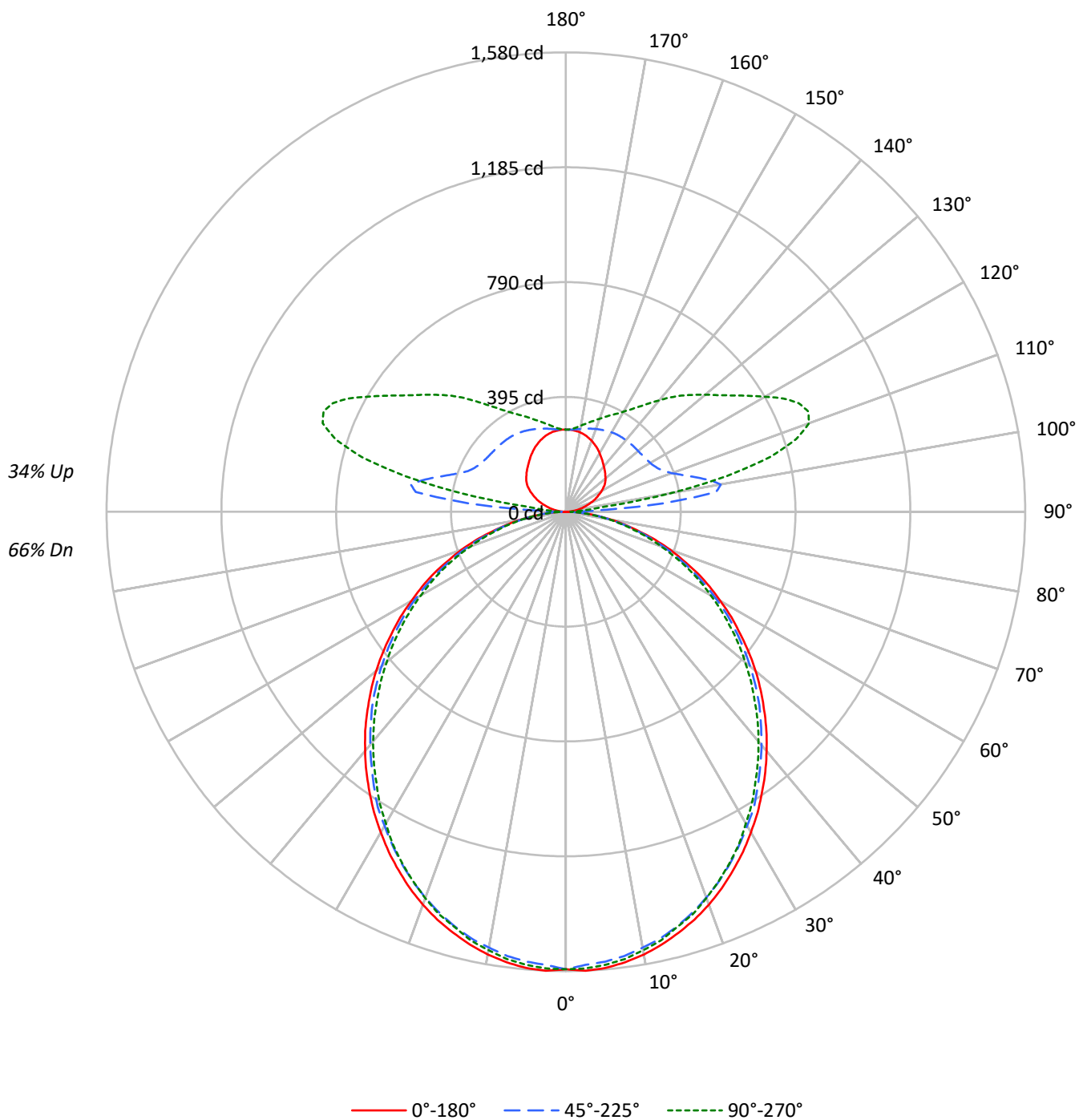
Lumens per Lamp: N/A  
Luminaire Lumens: 6224.9 lumens  
Efficiency: N/A  
Efficacy: 100.1 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3  
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')  
CIE Type: Semi-Direct

Input Watts (W): 62.2  
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   | 111 | 111 | 111 | 111 | 104 | 104 | 104 | 104 | 92 | 92 | 92 | 81 | 81 | 81 | 71 | 71 | 71 |
| 1   | 101 | 97  | 93  | 89  | 95  | 91  | 88  | 85  | 81 | 78 | 76 | 71 | 69 | 67 | 62 | 61 | 60 |
| 2   | 92  | 85  | 78  | 73  | 86  | 80  | 74  | 69  | 71 | 66 | 63 | 62 | 59 | 56 | 55 | 52 | 50 |
| 3   | 84  | 74  | 67  | 61  | 79  | 70  | 63  | 58  | 62 | 57 | 53 | 55 | 51 | 48 | 49 | 45 | 43 |
| 4   | 77  | 66  | 58  | 51  | 72  | 62  | 55  | 49  | 55 | 50 | 45 | 49 | 45 | 41 | 43 | 40 | 37 |
| 5   | 71  | 59  | 50  | 44  | 66  | 56  | 48  | 42  | 50 | 44 | 39 | 44 | 39 | 35 | 39 | 35 | 32 |
| 6   | 65  | 53  | 44  | 38  | 61  | 50  | 42  | 37  | 45 | 39 | 34 | 40 | 35 | 31 | 35 | 31 | 28 |
| 7   | 60  | 48  | 40  | 34  | 57  | 45  | 38  | 32  | 41 | 35 | 30 | 36 | 31 | 27 | 32 | 28 | 25 |
| 8   | 56  | 43  | 35  | 30  | 53  | 41  | 34  | 29  | 37 | 31 | 27 | 33 | 28 | 25 | 30 | 26 | 22 |
| 9   | 52  | 40  | 32  | 27  | 49  | 38  | 31  | 26  | 34 | 28 | 24 | 31 | 26 | 22 | 28 | 23 | 20 |
| 10  | 49  | 37  | 29  | 24  | 46  | 35  | 28  | 23  | 32 | 26 | 22 | 28 | 24 | 20 | 26 | 21 | 18 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 16937 | 16937 | 16937 |
| 5°  | 16979 | 16352 | 16328 |
| 10° | 16828 | 15798 | 15636 |
| 15° | 16593 | 15222 | 14883 |
| 20° | 16326 | 14585 | 14137 |
| 25° | 15978 | 13910 | 13339 |
| 30° | 15598 | 13212 | 12499 |
| 35° | 15200 | 12498 | 11666 |
| 40° | 14784 | 11751 | 10845 |
| 45° | 14325 | 11021 | 9988  |
| 50° | 13859 | 10209 | 9129  |
| 55° | 13262 | 9362  | 8257  |
| 60° | 12647 | 8428  | 7329  |
| 65° | 12067 | 7417  | 6363  |
| 70° | 11235 | 6297  | 5234  |
| 75° | 10035 | 4987  | 4062  |
| 80° | 8665  | 3505  | 2873  |
| 85° | 6762  | 1882  | 1438  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14325 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 148.3  | 2.4       |
| 10°-20°   | 418.8  | 6.7       |
| 20°-30°   | 618.6  | 9.9       |
| 30°-40°   | 722.5  | 11.6      |
| 40°-50°   | 726.3  | 11.7      |
| 50°-60°   | 638.0  | 10.2      |
| 60°-70°   | 475.2  | 7.6       |
| 70°-80°   | 270.4  | 4.3       |
| 80°-90°   | 78.4   | 1.3       |
| 90°-100°  | 160.4  | 2.6       |
| 100°-110° | 448.4  | 7.2       |
| 110°-120° | 437.2  | 7.0       |
| 120°-130° | 348.1  | 5.6       |
| 130°-140° | 274.8  | 4.4       |
| 140°-150° | 205.0  | 3.3       |
| 150°-160° | 143.0  | 2.3       |
| 160°-170° | 84.0   | 1.3       |
| 170°-180° | 27.3   | 0.4       |
| 0°-30°    | 1185.8 | 19.0      |
| 0°-40°    | 1908.2 | 30.7      |
| 0°-60°    | 3272.5 | 52.6      |
| 0°-90°    | 4096.5 | 65.8      |
| 90°-120°  | 1046.0 | 16.8      |
| 90°-150°  | 1874.0 | 30.1      |
| 90°-180°  | 2128.0 | 34.2      |
| 0°-180°   | 6224.9 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1574 | 1574  | 1574 | 1574  | 1574 |      |
| 5°   | 1575 | 1568  | 1553 | 1567  | 1564 | 149  |
| 15°  | 1499 | 1494  | 1476 | 1487  | 1479 | 423  |
| 25°  | 1361 | 1353  | 1335 | 1337  | 1333 | 627  |
| 35°  | 1177 | 1169  | 1151 | 1143  | 1136 | 736  |
| 45°  | 965  | 959   | 942  | 925   | 919  | 745  |
| 55°  | 732  | 731   | 713  | 698   | 691  | 656  |
| 65°  | 499  | 492   | 479  | 468   | 464  | 493  |
| 75°  | 264  | 258   | 254  | 248   | 244  | 282  |
| 85°  | 70   | 68    | 68   | 65    | 65   | 75   |
| 90°  | 1    | 7     | 14   | 16    | 17   | 6    |
| 95°  | 19   | 63    | 339  | 99    | 66   | 21   |
| 105° | 66   | 98    | 459  | 803   | 727  | 70   |
| 115° | 117  | 146   | 351  | 771   | 884  | 116  |
| 125° | 163  | 192   | 328  | 594   | 697  | 145  |
| 135° | 191  | 228   | 323  | 489   | 565  | 147  |
| 145° | 218  | 249   | 319  | 401   | 442  | 136  |
| 155° | 247  | 267   | 309  | 351   | 366  | 114  |
| 165° | 270  | 278   | 296  | 314   | 319  | 76   |
| 175° | 282  | 282   | 284  | 288   | 287  | 27   |
| 180° | 282  | 282   | 282  | 282   | 282  |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1573.5 | 1573.5 | 1573.5 | 1573.5 | 1573.5 |
| 2.5°   | 1580.2 | 1574.8 | 1559.9 | 1573.5 | 1572.1 |
| 5°     | 1574.8 | 1568.0 | 1553.2 | 1566.7 | 1564.0 |
| 7.5°   | 1562.6 | 1555.9 | 1541.0 | 1553.2 | 1551.8 |
| 10°    | 1546.4 | 1539.6 | 1522.0 | 1534.2 | 1531.5 |
| 12.5°  | 1524.7 | 1519.3 | 1503.1 | 1511.2 | 1509.9 |
| 15°    | 1499.0 | 1493.6 | 1476.0 | 1486.9 | 1478.7 |
| 17.5°  | 1470.6 | 1463.9 | 1446.3 | 1454.4 | 1451.7 |
| 20°    | 1438.2 | 1430.0 | 1412.5 | 1417.9 | 1413.8 |
| 22.5°  | 1401.6 | 1393.5 | 1375.9 | 1380.0 | 1374.6 |
| 25°    | 1361.0 | 1352.9 | 1335.3 | 1336.7 | 1332.6 |
| 27.5°  | 1319.1 | 1311.0 | 1292.0 | 1293.4 | 1289.3 |
| 30°    | 1273.1 | 1266.3 | 1247.4 | 1247.4 | 1237.9 |
| 32.5°  | 1227.1 | 1217.6 | 1204.1 | 1194.6 | 1190.6 |
| 35°    | 1177.0 | 1168.9 | 1151.3 | 1143.2 | 1136.5 |
| 37.5°  | 1127.0 | 1116.2 | 1098.6 | 1089.1 | 1085.0 |
| 40°    | 1074.2 | 1066.1 | 1047.2 | 1036.3 | 1030.9 |
| 42.5°  | 1021.5 | 1012.0 | 993.0  | 982.2  | 976.8  |
| 45°    | 964.6  | 959.2  | 941.6  | 925.4  | 918.6  |
| 47.5°  | 909.2  | 901.0  | 884.8  | 868.6  | 863.2  |
| 50°    | 852.3  | 845.6  | 828.0  | 813.1  | 805.0  |
| 52.5°  | 792.8  | 788.8  | 769.8  | 757.6  | 749.5  |
| 55°    | 731.9  | 730.6  | 713.0  | 698.1  | 691.3  |
| 57.5°  | 675.1  | 669.7  | 656.2  | 642.6  | 634.5  |
| 60°    | 612.9  | 611.5  | 595.3  | 583.1  | 576.3  |
| 62.5°  | 557.4  | 553.3  | 537.1  | 524.9  | 520.9  |
| 65°    | 499.2  | 492.5  | 478.9  | 468.1  | 464.1  |
| 67.5°  | 437.0  | 431.6  | 420.8  | 411.3  | 405.9  |
| 70°    | 381.5  | 373.4  | 365.3  | 355.8  | 349.1  |
| 72.5°  | 323.3  | 317.9  | 308.5  | 300.3  | 297.6  |
| 75°    | 263.8  | 258.4  | 254.4  | 247.6  | 243.5  |
| 77.5°  | 211.1  | 208.4  | 202.9  | 197.5  | 197.5  |
| 80°    | 159.6  | 155.6  | 152.9  | 151.5  | 151.5  |
| 82.5°  | 109.6  | 109.6  | 109.6  | 106.9  | 105.5  |
| 85°    | 70.4   | 67.6   | 67.6   | 64.9   | 64.9   |
| 87.5°  | 35.2   | 31.1   | 29.8   | 28.4   | 28.4   |
| 90°    | 1.1    | 6.8    | 14.3   | 16.0   | 16.6   |
| 92.5°  | 8.6    | 34.2   | 106.3  | 36.3   | 30.3   |
| 95°    | 19.4   | 63.2   | 338.9  | 98.8   | 66.3   |
| 97.5°  | 30.9   | 72.3   | 521.2  | 248.6  | 136.0  |
| 100°   | 42.3   | 79.8   | 541.2  | 520.0  | 358.3  |
| 102.5° | 54.3   | 88.3   | 504.0  | 696.3  | 567.4  |
| 105°   | 66.3   | 98.0   | 459.4  | 803.4  | 726.9  |
| 107.5° | 78.9   | 109.4  | 420.0  | 850.6  | 830.9  |
| 110°   | 92.6   | 121.1  | 387.4  | 852.0  | 890.3  |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 105.1 | 133.4 | 365.7 | 819.8 | 902.3 |
| 115°   | 117.1 | 146.0 | 351.4 | 770.6 | 884.0 |
| 117.5° | 129.1 | 158.0 | 341.7 | 718.0 | 844.0 |
| 120°   | 141.7 | 170.0 | 335.4 | 668.3 | 791.4 |
| 122.5° | 152.6 | 181.4 | 331.4 | 629.2 | 742.3 |
| 125°   | 162.9 | 192.3 | 328.0 | 594.3 | 697.2 |
| 127.5° | 170.9 | 202.6 | 326.3 | 565.8 | 658.3 |
| 130°   | 178.3 | 211.7 | 324.6 | 539.4 | 626.3 |
| 132.5° | 184.0 | 220.0 | 324.0 | 514.9 | 594.9 |
| 135°   | 190.9 | 227.7 | 323.4 | 489.4 | 565.2 |
| 137.5° | 197.1 | 234.0 | 322.3 | 465.4 | 533.7 |
| 140°   | 203.4 | 239.8 | 321.7 | 442.0 | 500.6 |
| 142.5° | 210.3 | 244.8 | 320.6 | 420.6 | 469.7 |
| 145°   | 217.7 | 249.4 | 319.4 | 401.4 | 441.7 |
| 147.5° | 225.1 | 254.3 | 317.7 | 386.6 | 417.7 |
| 150°   | 232.6 | 258.2 | 315.4 | 373.4 | 397.2 |
| 152.5° | 240.0 | 262.5 | 312.6 | 362.0 | 380.0 |
| 155°   | 247.4 | 266.9 | 309.2 | 351.4 | 366.3 |
| 157.5° | 253.1 | 270.5 | 306.3 | 341.2 | 353.2 |
| 160°   | 260.0 | 273.8 | 302.9 | 331.7 | 340.6 |
| 162.5° | 265.1 | 276.0 | 299.4 | 322.9 | 329.2 |
| 165°   | 270.3 | 278.0 | 296.0 | 314.0 | 319.4 |
| 167.5° | 274.3 | 279.8 | 292.6 | 306.3 | 309.7 |
| 170°   | 277.7 | 280.6 | 289.2 | 299.4 | 301.2 |
| 172.5° | 280.0 | 281.4 | 286.3 | 293.4 | 293.2 |
| 175°   | 281.7 | 282.0 | 284.0 | 288.0 | 287.4 |
| 177.5° | 282.9 | 282.3 | 282.3 | 284.6 | 283.4 |
| 180°   | 282.3 | 282.3 | 282.3 | 282.3 | 282.3 |

(END OF REPORT)