

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: P1011034

Luminaire Tested: S123DIP-B1000D1025UB30-4F0-XX-W2A-F

Issue Date: 5/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1011034  
REPORT IS A COMBINATION OF REPORTS P989049 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123DIP-B1000D1025UB30-4F0-XX-W2A-F  
Description: Define 3 Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}  
Light Source: -  
Ballast/Driver: -

**Summary**

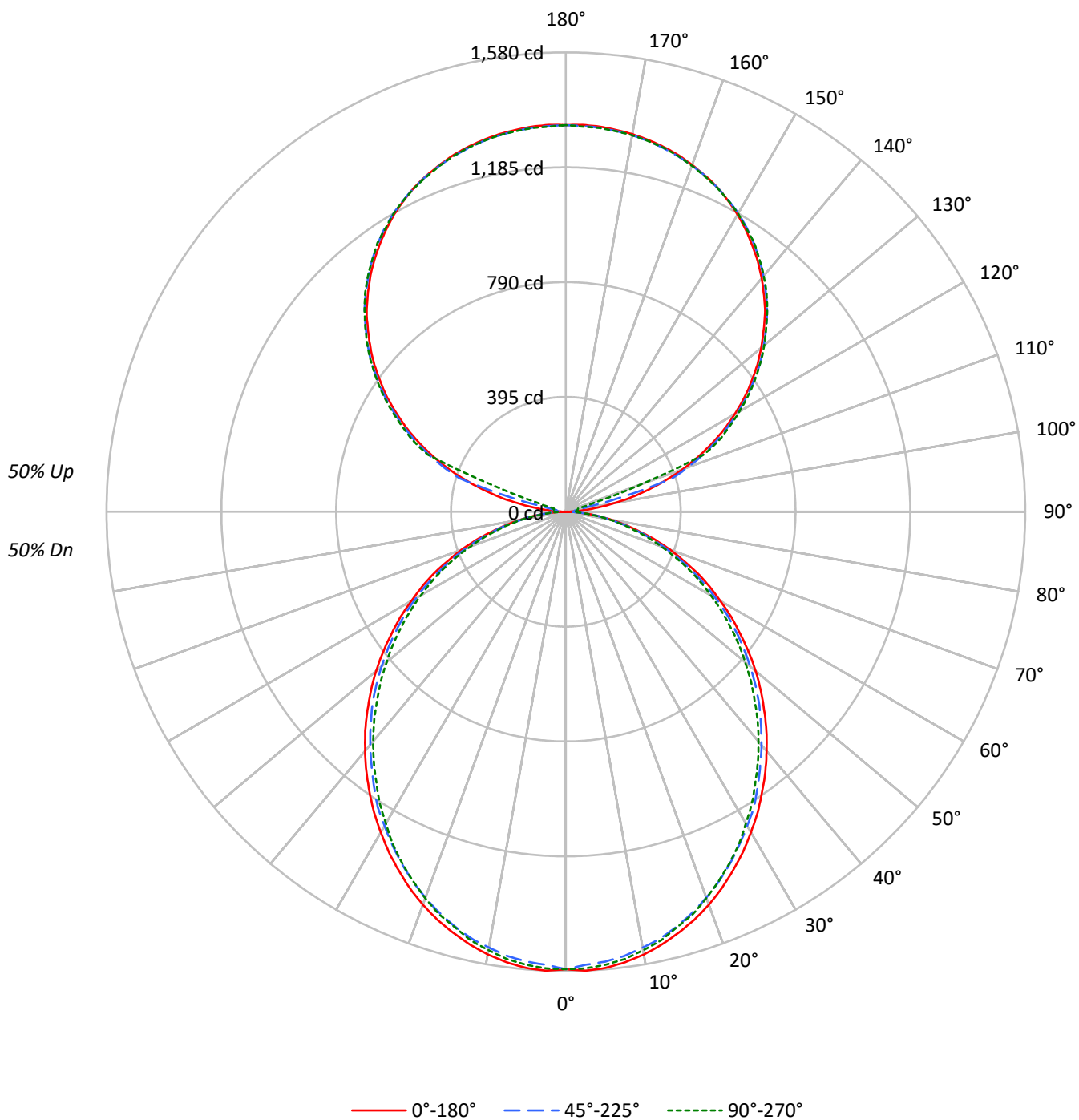
Lumens per Lamp: N/A  
Luminaire Lumens: 8152.0 lumens  
Efficiency: N/A  
Efficacy: 108.3 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3  
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

Input Watts (W): 75.3  
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   | 107 | 107 | 107 | 107 | 99 | 99 | 99 | 99 | 83 | 83 | 83 | 69 | 69 | 69 | 56 | 56 | 56 |
| 1   | 98  | 93  | 90  | 86  | 90 | 86 | 83 | 80 | 73 | 71 | 68 | 61 | 59 | 58 | 50 | 49 | 47 |
| 2   | 89  | 82  | 75  | 70  | 82 | 75 | 70 | 66 | 64 | 60 | 57 | 53 | 51 | 48 | 44 | 42 | 40 |
| 3   | 81  | 72  | 64  | 58  | 75 | 66 | 60 | 55 | 56 | 52 | 48 | 47 | 44 | 41 | 39 | 36 | 34 |
| 4   | 74  | 63  | 55  | 49  | 68 | 59 | 52 | 46 | 50 | 45 | 41 | 42 | 38 | 35 | 35 | 32 | 29 |
| 5   | 68  | 56  | 48  | 42  | 63 | 52 | 45 | 40 | 45 | 39 | 35 | 38 | 33 | 30 | 31 | 28 | 25 |
| 6   | 63  | 51  | 43  | 37  | 58 | 47 | 40 | 35 | 40 | 35 | 30 | 34 | 30 | 26 | 28 | 25 | 22 |
| 7   | 58  | 46  | 38  | 32  | 53 | 43 | 35 | 30 | 37 | 31 | 27 | 31 | 27 | 23 | 26 | 22 | 20 |
| 8   | 54  | 41  | 34  | 28  | 50 | 39 | 32 | 27 | 33 | 28 | 24 | 28 | 24 | 21 | 24 | 20 | 18 |
| 9   | 50  | 38  | 30  | 25  | 46 | 35 | 29 | 24 | 31 | 25 | 21 | 26 | 22 | 19 | 22 | 19 | 16 |
| 10  | 47  | 35  | 28  | 23  | 43 | 32 | 26 | 22 | 28 | 23 | 19 | 24 | 20 | 17 | 20 | 17 | 15 |

**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

TEST NUMBER: P1011034

CATALOG NUMBER: S123DIP-B1000D1025UB30-4F0-XX-W2A-F

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 148.3  | 1.8       |
| 10°-20°   | 418.8  | 5.1       |
| 20°-30°   | 618.6  | 7.6       |
| 30°-40°   | 722.5  | 8.9       |
| 40°-50°   | 726.3  | 8.9       |
| 50°-60°   | 638.0  | 7.8       |
| 60°-70°   | 475.2  | 5.8       |
| 70°-80°   | 270.4  | 3.3       |
| 80°-90°   | 79.5   | 1.0       |
| 90°-100°  | 46.9   | 0.6       |
| 100°-110° | 226.7  | 2.8       |
| 110°-120° | 555.6  | 6.8       |
| 120°-130° | 705.4  | 8.7       |
| 130°-140° | 753.5  | 9.2       |
| 140°-150° | 704.6  | 8.6       |
| 150°-160° | 568.4  | 7.0       |
| 160°-170° | 366.8  | 4.5       |
| 170°-180° | 126.4  | 1.6       |
| 0°-30°    | 1185.8 | 14.5      |
| 0°-40°    | 1908.2 | 23.4      |
| 0°-60°    | 3272.5 | 40.1      |
| 0°-90°    | 4097.6 | 50.3      |
| 90°-120°  | 829.3  | 10.2      |
| 90°-150°  | 2992.8 | 36.7      |
| 90°-180°  | 4054.0 | 49.7      |
| 0°-180°   | 8152.0 | 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    | 11    | 24   | 28    | 30   | 8    |
| 95°  | 60   | 20    | 31   | 38    | 38   | 72   |
| 105° | 294  | 305   | 216  | 42    | 44   | 312  |
| 115° | 552  | 558   | 567  | 577   | 581  | 545  |
| 125° | 779  | 786   | 790  | 792   | 794  | 696  |
| 135° | 969  | 975   | 979  | 982   | 979  | 746  |
| 145° | 1118 | 1125  | 1127 | 1129  | 1129 | 700  |
| 155° | 1232 | 1230  | 1231 | 1236  | 1230 | 568  |
| 165° | 1299 | 1296  | 1295 | 1303  | 1296 | 367  |
| 175° | 1330 | 1325  | 1326 | 1333  | 1325 | 127  |
| 180° | 1330 | 1330  | 1330 | 1330  | 1330 |      |

TEST NUMBER: P1011034

CATALOG NUMBER: S123DIP-B1000D1025UB30-4F0-XX-W2A-F

**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°    | 1.0    | 10.9   | 23.7   | 27.7   | 29.6   |
| 92.5°  | 22.7   | 16.8   | 25.7   | 32.6   | 33.6   |
| 95°    | 60.3   | 19.8   | 30.6   | 37.5   | 37.5   |
| 97.5°  | 109.7  | 82.0   | 31.6   | 39.5   | 40.5   |
| 100°   | 167.0  | 186.7  | 32.6   | 40.5   | 41.5   |
| 102.5° | 232.2  | 245.0  | 73.1   | 40.5   | 42.5   |
| 105°   | 294.4  | 305.3  | 216.4  | 41.5   | 43.5   |
| 107.5° | 360.6  | 369.5  | 384.3  | 232.2  | 102.8  |
| 110°   | 426.8  | 434.7  | 445.6  | 413.0  | 271.7  |

TEST NUMBER: P1011034

CATALOG NUMBER: S123DIP-B1000D1025UB30-4F0-XX-W2A-F

**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 490.1  | 497.0  | 507.9  | 516.7  | 514.8  |
| 115°   | 552.3  | 558.2  | 567.1  | 577.0  | 581.0  |
| 117.5° | 613.6  | 620.5  | 625.4  | 633.3  | 634.3  |
| 120°   | 669.9  | 678.8  | 681.8  | 689.7  | 689.7  |
| 122.5° | 727.2  | 734.1  | 738.1  | 743.0  | 744.0  |
| 125°   | 778.6  | 786.5  | 790.4  | 792.4  | 794.4  |
| 127.5° | 830.0  | 837.9  | 842.8  | 845.8  | 843.8  |
| 130°   | 877.4  | 885.3  | 889.2  | 893.2  | 891.2  |
| 132.5° | 922.8  | 930.7  | 933.7  | 937.7  | 934.7  |
| 135°   | 969.3  | 975.2  | 979.2  | 982.1  | 979.2  |
| 137.5° | 1008.8 | 1016.7 | 1018.7 | 1023.6 | 1021.6 |
| 140°   | 1048.3 | 1054.2 | 1057.2 | 1061.2 | 1059.2 |
| 142.5° | 1084.9 | 1090.8 | 1093.8 | 1096.7 | 1093.8 |
| 145°   | 1118.5 | 1125.4 | 1127.4 | 1129.3 | 1129.3 |
| 147.5° | 1151.1 | 1156.0 | 1158.0 | 1160.0 | 1155.0 |
| 150°   | 1180.7 | 1183.7 | 1185.7 | 1187.6 | 1184.7 |
| 152.5° | 1207.4 | 1208.4 | 1209.4 | 1213.3 | 1208.4 |
| 155°   | 1232.1 | 1230.1 | 1231.1 | 1236.0 | 1230.1 |
| 157.5° | 1251.9 | 1251.9 | 1250.9 | 1256.8 | 1248.9 |
| 160°   | 1269.6 | 1268.7 | 1267.7 | 1273.6 | 1266.7 |
| 162.5° | 1286.4 | 1283.5 | 1282.5 | 1289.4 | 1283.5 |
| 165°   | 1299.3 | 1296.3 | 1295.3 | 1303.2 | 1296.3 |
| 167.5° | 1310.1 | 1306.2 | 1306.2 | 1314.1 | 1306.2 |
| 170°   | 1319.0 | 1315.1 | 1315.1 | 1323.0 | 1315.1 |
| 172.5° | 1325.0 | 1320.0 | 1321.0 | 1328.9 | 1320.0 |
| 175°   | 1329.9 | 1325.0 | 1326.0 | 1332.9 | 1325.0 |
| 177.5° | 1331.9 | 1326.9 | 1327.9 | 1335.8 | 1326.0 |
| 180°   | 1329.9 | 1329.9 | 1329.9 | 1329.9 | 1329.9 |

(END OF REPORT)