

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: P1011089

Luminaire Tested: S123DIP-B1000D1195UB35-4F0-XX-W2A-F1

Issue Date: 5/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1011089  
REPORT IS A COMBINATION OF REPORTS P989119 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123DIP-B1000D1195UB35-4F0-XX-W2A-F1  
Description: Define 3 Direct/Indirect Pendant with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}  
Light Source: -  
Ballast/Driver: -

**Summary**

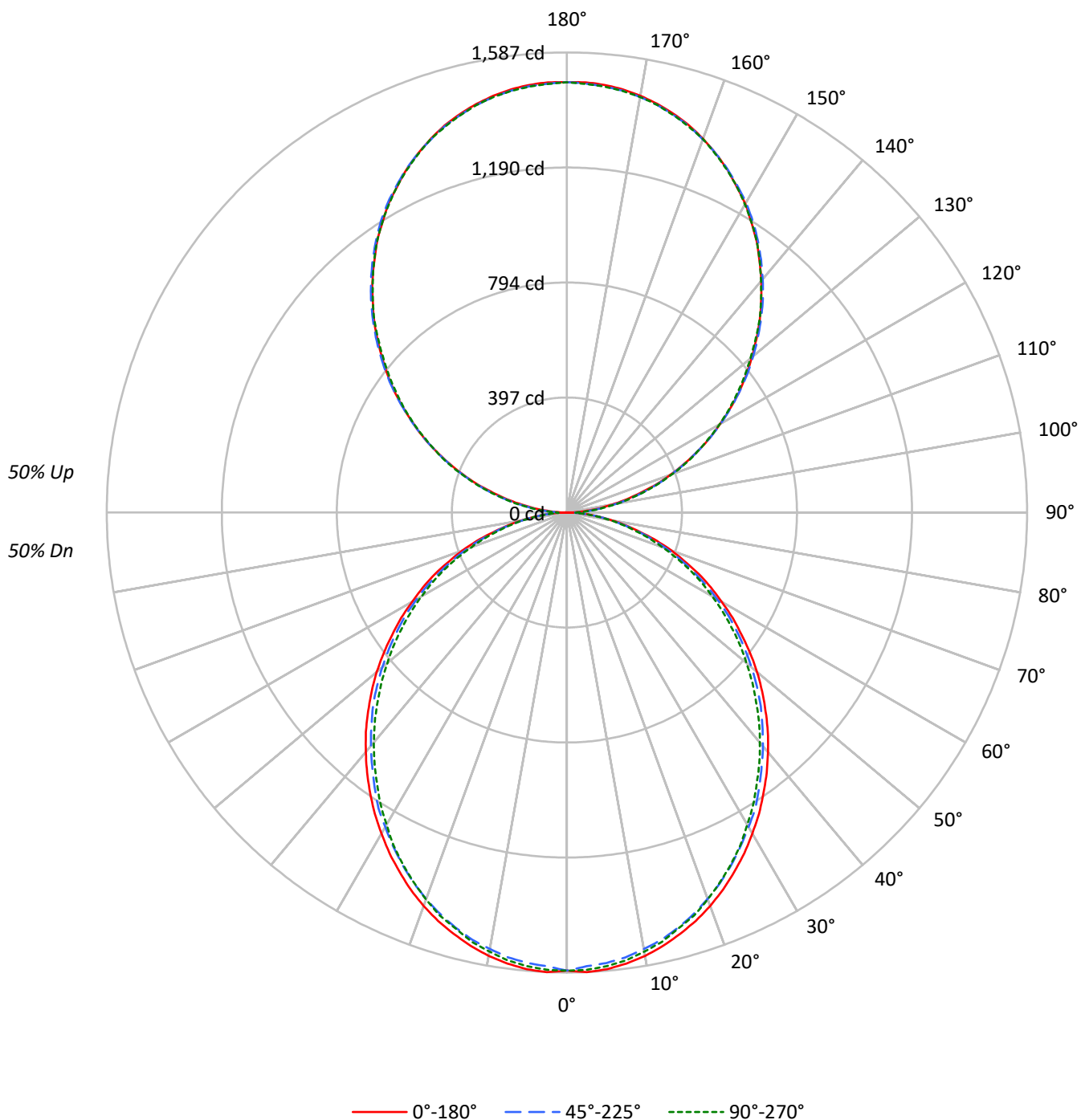
Lumens per Lamp: N/A  
Luminaire Lumens: 8229.0 lumens  
Efficiency: N/A  
Efficacy: 100.6 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3  
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

Input Watts (W): 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   | 107 | 107 | 107 | 107 | 99 | 99 | 99 | 99 | 83 | 83 | 83 | 69 | 69 | 69 | 56 | 56 | 56 |
| 1   | 98  | 93  | 89  | 86  | 90 | 86 | 83 | 80 | 73 | 71 | 68 | 61 | 59 | 57 | 50 | 48 | 47 |
| 2   | 89  | 81  | 75  | 70  | 82 | 75 | 70 | 65 | 64 | 60 | 57 | 53 | 50 | 48 | 44 | 42 | 40 |
| 3   | 81  | 72  | 64  | 58  | 75 | 66 | 60 | 55 | 56 | 51 | 47 | 47 | 44 | 41 | 39 | 36 | 34 |
| 4   | 74  | 63  | 55  | 49  | 68 | 59 | 52 | 46 | 50 | 45 | 40 | 42 | 38 | 35 | 34 | 32 | 29 |
| 5   | 68  | 56  | 48  | 42  | 63 | 52 | 45 | 40 | 45 | 39 | 35 | 38 | 33 | 30 | 31 | 28 | 25 |
| 6   | 63  | 51  | 42  | 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 | 18 | 16 |
| 10  | 47  | 35  | 27  | 23  | 43 | 32 | 26 | 21 | 28 | 23 | 19 | 24 | 20 | 17 | 20 | 17 | 15 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 17011 | 17011 | 17011 |
| 5°  | 17053 | 16424 | 16400 |
| 10° | 16902 | 15868 | 15705 |
| 15° | 16666 | 15289 | 14948 |
| 20° | 16397 | 14649 | 14199 |
| 25° | 16048 | 13971 | 13398 |
| 30° | 15667 | 13270 | 12555 |
| 35° | 15267 | 12554 | 11718 |
| 40° | 14848 | 11803 | 10894 |
| 45° | 14389 | 11071 | 10033 |
| 50° | 13921 | 10253 | 9168  |
| 55° | 13321 | 9403  | 8294  |
| 60° | 12702 | 8465  | 7362  |
| 65° | 12121 | 7450  | 6390  |
| 70° | 11285 | 6325  | 5257  |
| 75° | 10080 | 5009  | 4081  |
| 80° | 8703  | 3521  | 2886  |
| 85° | 6791  | 1891  | 1445  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14389 cd/sqm

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CATALOG NUMBER: S123DIP-B1000D1195UB35-4F0-XX-W2A-F1

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 149.0  | 1.8       |
| 10°-20°   | 420.7  | 5.1       |
| 20°-30°   | 621.3  | 7.6       |
| 30°-40°   | 725.6  | 8.8       |
| 40°-50°   | 729.5  | 8.9       |
| 50°-60°   | 640.8  | 7.8       |
| 60°-70°   | 477.3  | 5.8       |
| 70°-80°   | 271.6  | 3.3       |
| 80°-90°   | 80.4   | 1.0       |
| 90°-100°  | 95.6   | 1.2       |
| 100°-110° | 289.2  | 3.5       |
| 110°-120° | 492.4  | 6.0       |
| 120°-130° | 647.7  | 7.9       |
| 130°-140° | 728.0  | 8.8       |
| 140°-150° | 715.8  | 8.7       |
| 150°-160° | 602.6  | 7.3       |
| 160°-170° | 401.2  | 4.9       |
| 170°-180° | 140.5  | 1.7       |
| 0°-30°    | 1191.0 | 14.5      |
| 0°-40°    | 1916.6 | 23.3      |
| 0°-60°    | 3286.9 | 39.9      |
| 0°-90°    | 4116.2 | 50.0      |
| 90°-120°  | 877.1  | 10.7      |
| 90°-150°  | 2968.6 | 36.1      |
| 90°-180°  | 4113.0 | 50.0      |
| 0°-180°   | 8229.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1580 | 1580  | 1580 | 1580  | 1580 |      |
| 5°   | 1582 | 1575  | 1560 | 1574  | 1571 | 150  |
| 15°  | 1506 | 1500  | 1482 | 1493  | 1485 | 425  |
| 25°  | 1367 | 1359  | 1341 | 1343  | 1338 | 630  |
| 35°  | 1182 | 1174  | 1156 | 1148  | 1142 | 740  |
| 45°  | 969  | 963   | 946  | 930   | 923  | 748  |
| 55°  | 735  | 734   | 716  | 701   | 694  | 659  |
| 65°  | 501  | 495   | 481  | 470   | 466  | 495  |
| 75°  | 265  | 260   | 256  | 249   | 245  | 283  |
| 85°  | 71   | 68    | 68   | 65    | 65   | 76   |
| 90°  | 1    | 13    | 28   | 33    | 35   | 10   |
| 95°  | 69   | 77    | 86   | 91    | 91   | 76   |
| 105° | 262  | 265   | 275  | 275   | 278  | 281  |
| 115° | 496  | 499   | 497  | 498   | 497  | 490  |
| 125° | 725  | 729   | 726  | 722   | 717  | 647  |
| 135° | 941  | 948   | 947  | 942   | 940  | 725  |
| 145° | 1142 | 1144  | 1147 | 1146  | 1142 | 713  |
| 155° | 1307 | 1307  | 1308 | 1313  | 1305 | 602  |
| 165° | 1424 | 1420  | 1420 | 1427  | 1419 | 402  |
| 175° | 1481 | 1476  | 1476 | 1483  | 1475 | 141  |
| 180° | 1484 | 1484  | 1484 | 1484  | 1484 |      |

TEST NUMBER: P1011089

CATALOG NUMBER: S123DIP-B1000D1195UB35-4F0-XX-W2A-F1

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1580.4 | 1580.4 | 1580.4 | 1580.4 | 1580.4 |
| 2.5°   | 1587.2 | 1581.7 | 1566.8 | 1580.4 | 1579.0 |
| 5°     | 1581.7 | 1574.9 | 1560.0 | 1573.6 | 1570.9 |
| 7.5°   | 1569.5 | 1562.7 | 1547.8 | 1560.0 | 1558.6 |
| 10°    | 1553.2 | 1546.4 | 1528.7 | 1541.0 | 1538.2 |
| 12.5°  | 1531.4 | 1526.0 | 1509.7 | 1517.9 | 1516.5 |
| 15°    | 1505.6 | 1500.2 | 1482.5 | 1493.4 | 1485.2 |
| 17.5°  | 1477.1 | 1470.3 | 1452.6 | 1460.8 | 1458.1 |
| 20°    | 1444.5 | 1436.3 | 1418.7 | 1424.1 | 1420.0 |
| 22.5°  | 1407.8 | 1399.6 | 1382.0 | 1386.1 | 1380.6 |
| 25°    | 1367.0 | 1358.9 | 1341.2 | 1342.6 | 1338.5 |
| 27.5°  | 1324.9 | 1316.7 | 1297.7 | 1299.1 | 1295.0 |
| 30°    | 1278.7 | 1271.9 | 1252.9 | 1252.9 | 1243.4 |
| 32.5°  | 1232.5 | 1223.0 | 1209.4 | 1199.9 | 1195.8 |
| 35°    | 1182.2 | 1174.1 | 1156.4 | 1148.2 | 1141.5 |
| 37.5°  | 1131.9 | 1121.1 | 1103.4 | 1093.9 | 1089.8 |
| 40°    | 1078.9 | 1070.8 | 1051.8 | 1040.9 | 1035.5 |
| 42.5°  | 1025.9 | 1016.4 | 997.4  | 986.5  | 981.1  |
| 45°    | 968.9  | 963.4  | 945.8  | 929.5  | 922.7  |
| 47.5°  | 913.2  | 905.0  | 888.7  | 872.4  | 867.0  |
| 50°    | 856.1  | 849.3  | 831.6  | 816.7  | 808.5  |
| 52.5°  | 796.3  | 792.2  | 773.2  | 761.0  | 752.8  |
| 55°    | 735.2  | 733.8  | 716.1  | 701.2  | 694.4  |
| 57.5°  | 678.1  | 672.6  | 659.1  | 645.5  | 637.3  |
| 60°    | 615.6  | 614.2  | 597.9  | 585.7  | 578.9  |
| 62.5°  | 559.9  | 555.8  | 539.5  | 527.2  | 523.2  |
| 65°    | 501.4  | 494.6  | 481.0  | 470.2  | 466.1  |
| 67.5°  | 438.9  | 433.5  | 422.6  | 413.1  | 407.7  |
| 70°    | 383.2  | 375.0  | 366.9  | 357.4  | 350.6  |
| 72.5°  | 324.8  | 319.3  | 309.8  | 301.7  | 299.0  |
| 75°    | 265.0  | 259.5  | 255.5  | 248.7  | 244.6  |
| 77.5°  | 212.0  | 209.3  | 203.8  | 198.4  | 198.4  |
| 80°    | 160.3  | 156.3  | 153.6  | 152.2  | 152.2  |
| 82.5°  | 110.1  | 110.1  | 110.1  | 107.4  | 106.0  |
| 85°    | 70.7   | 67.9   | 67.9   | 65.2   | 65.2   |
| 87.5°  | 35.3   | 31.3   | 29.9   | 28.5   | 28.5   |
| 90°    | 1.2    | 12.8   | 28.0   | 32.6   | 35.0   |
| 92.5°  | 35.0   | 42.0   | 49.0   | 52.5   | 50.1   |
| 95°    | 68.8   | 77.0   | 86.3   | 90.9   | 90.9   |
| 97.5°  | 113.1  | 118.9  | 125.9  | 131.8  | 130.6  |
| 100°   | 158.6  | 165.6  | 171.4  | 174.9  | 177.2  |
| 102.5° | 211.1  | 214.5  | 222.7  | 226.2  | 225.0  |
| 105°   | 262.4  | 264.7  | 275.2  | 275.2  | 277.5  |
| 107.5° | 323.0  | 324.2  | 328.8  | 332.3  | 331.2  |
| 110°   | 379.0  | 381.3  | 383.6  | 388.3  | 386.0  |

TEST NUMBER: P1011089

CATALOG NUMBER: S123DIP-B1000D1195UB35-4F0-XX-W2A-F1

**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 437.3  | 438.4  | 438.4  | 444.3  | 444.3  |
| 115°   | 495.6  | 499.1  | 496.7  | 497.9  | 496.7  |
| 117.5° | 555.0  | 556.2  | 553.9  | 553.9  | 550.4  |
| 120°   | 609.8  | 616.8  | 611.0  | 609.8  | 607.5  |
| 122.5° | 667.0  | 671.6  | 669.3  | 665.8  | 662.3  |
| 125°   | 725.3  | 728.8  | 726.4  | 721.8  | 717.1  |
| 127.5° | 778.9  | 785.9  | 783.6  | 776.6  | 771.9  |
| 130°   | 832.5  | 841.9  | 838.4  | 833.7  | 825.5  |
| 132.5° | 886.2  | 895.5  | 893.2  | 887.3  | 881.5  |
| 135°   | 941.0  | 948.0  | 946.8  | 942.1  | 939.8  |
| 137.5° | 991.1  | 997.0  | 1000.4 | 994.6  | 991.1  |
| 140°   | 1043.6 | 1049.4 | 1050.6 | 1049.4 | 1041.3 |
| 142.5° | 1091.4 | 1097.2 | 1099.6 | 1098.4 | 1092.6 |
| 145°   | 1141.5 | 1143.9 | 1147.4 | 1146.2 | 1141.5 |
| 147.5° | 1184.7 | 1189.3 | 1192.8 | 1192.8 | 1185.8 |
| 150°   | 1230.2 | 1232.5 | 1234.8 | 1234.8 | 1227.8 |
| 152.5° | 1267.5 | 1271.0 | 1272.1 | 1274.5 | 1268.6 |
| 155°   | 1307.1 | 1307.1 | 1308.3 | 1312.9 | 1304.8 |
| 157.5° | 1340.9 | 1339.8 | 1340.9 | 1345.6 | 1338.6 |
| 160°   | 1372.4 | 1370.1 | 1370.1 | 1375.9 | 1371.2 |
| 162.5° | 1400.4 | 1396.9 | 1398.1 | 1403.9 | 1395.7 |
| 165°   | 1423.7 | 1420.2 | 1420.2 | 1427.2 | 1419.1 |
| 167.5° | 1443.5 | 1438.9 | 1440.0 | 1447.0 | 1440.0 |
| 170°   | 1459.9 | 1455.2 | 1455.2 | 1463.4 | 1455.2 |
| 172.5° | 1472.7 | 1468.0 | 1468.0 | 1475.0 | 1466.9 |
| 175°   | 1480.9 | 1476.2 | 1476.2 | 1483.2 | 1475.0 |
| 177.5° | 1485.5 | 1480.9 | 1480.9 | 1487.8 | 1479.7 |
| 180°   | 1484.3 | 1484.3 | 1484.3 | 1484.3 | 1484.3 |

(END OF REPORT)