

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: P1008551

Luminaire Tested: S122DIP-B1005D1080UB27-4F0-XX-W2A-F1

Issue Date: 5/6/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1008551  
REPORT IS A COMBINATION OF REPORTS P983525 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/6/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122DIP-B1005D1080UB27-4F0-XX-W2A-F1  
Description: Define 2 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}  
Light Source: -  
Ballast/Driver: -

**Summary**

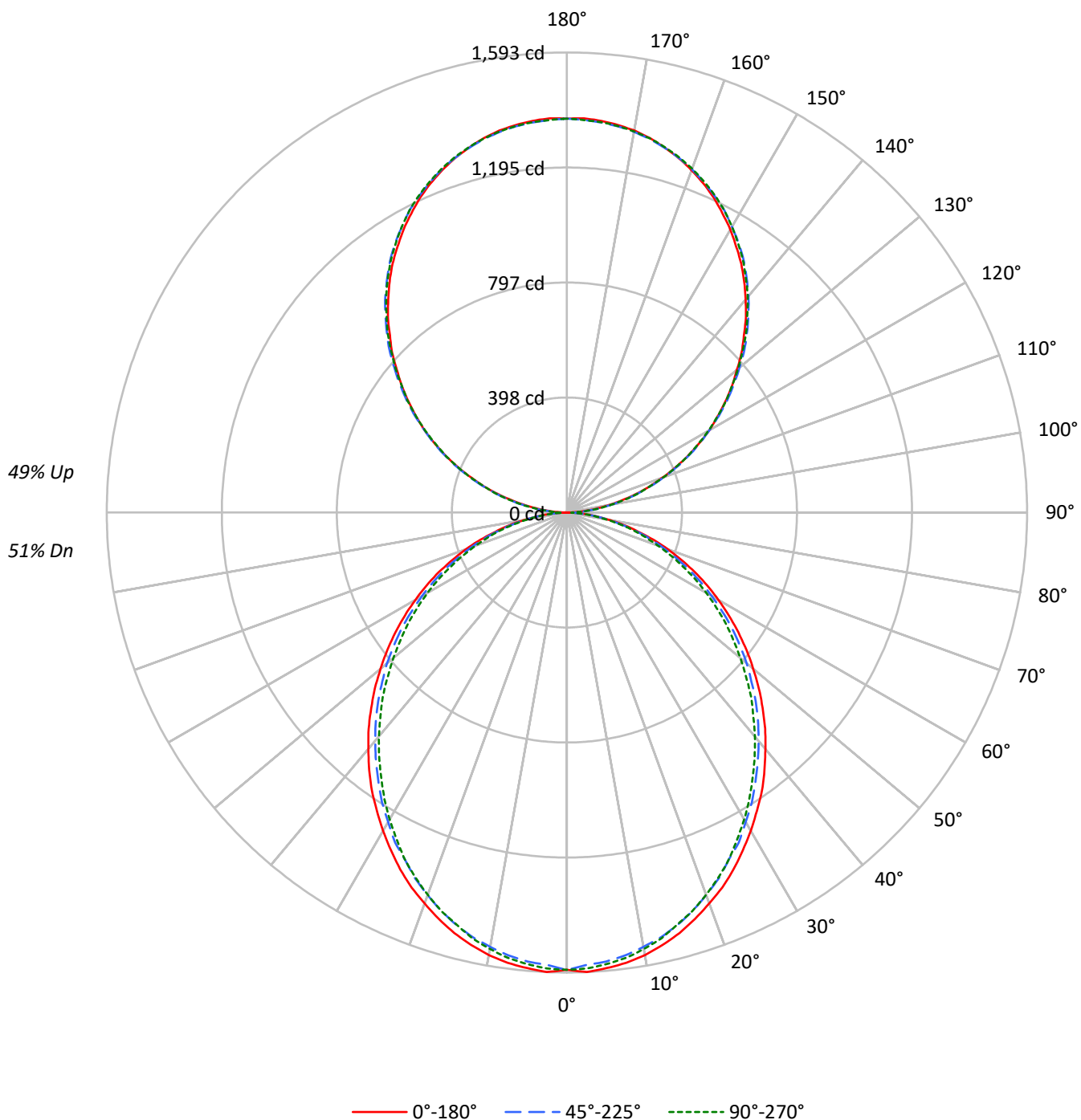
Lumens per Lamp: N/A  
Luminaire Lumens: 7846.0 lumens  
Efficiency: N/A  
Efficacy: 81.5 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29  
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

Input Watts (W): 96.3  
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 | 50 | 30 | 10 |
| RCR |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 0   | 107 | 107 | 107 | 107 | 99 | 99 | 99 | 99 | 84 | 84 | 84 | 70 | 70 | 70 | 57 | 57 | 57 | 57 | 57 | 57 |
| 1   | 98  | 94  | 90  | 86  | 91 | 87 | 83 | 80 | 74 | 71 | 69 | 62 | 60 | 58 | 51 | 50 | 48 | 48 | 48 | 43 |
| 2   | 89  | 82  | 76  | 71  | 82 | 76 | 71 | 66 | 65 | 61 | 57 | 54 | 51 | 49 | 45 | 43 | 41 | 41 | 41 | 36 |
| 3   | 81  | 72  | 65  | 59  | 75 | 67 | 60 | 55 | 57 | 52 | 48 | 48 | 44 | 41 | 40 | 37 | 35 | 35 | 35 | 31 |
| 4   | 75  | 64  | 56  | 50  | 69 | 59 | 52 | 47 | 51 | 45 | 41 | 43 | 39 | 35 | 35 | 32 | 30 | 30 | 30 | 26 |
| 5   | 68  | 57  | 49  | 43  | 63 | 53 | 46 | 40 | 45 | 40 | 35 | 38 | 34 | 31 | 32 | 29 | 26 | 26 | 26 | 23 |
| 6   | 63  | 51  | 43  | 37  | 58 | 47 | 40 | 35 | 41 | 35 | 31 | 35 | 30 | 27 | 29 | 26 | 23 | 23 | 23 | 20 |
| 7   | 58  | 46  | 38  | 32  | 54 | 43 | 36 | 31 | 37 | 31 | 27 | 32 | 27 | 24 | 26 | 23 | 20 | 20 | 20 | 18 |
| 8   | 54  | 42  | 34  | 29  | 50 | 39 | 32 | 27 | 34 | 28 | 24 | 29 | 24 | 21 | 24 | 21 | 18 | 18 | 18 | 16 |
| 9   | 50  | 38  | 31  | 26  | 47 | 36 | 29 | 24 | 31 | 26 | 22 | 27 | 22 | 19 | 22 | 19 | 17 | 17 | 17 | 14 |
| 10  | 47  | 35  | 28  | 23  | 44 | 33 | 26 | 22 | 29 | 23 | 20 | 25 | 20 | 17 | 21 | 17 | 15 | 15 | 15 | 13 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 25067 | 25067 | 25067 |
| 5°  | 25108 | 23894 | 23724 |
| 10° | 24904 | 22805 | 22353 |
| 15° | 24540 | 21709 | 20909 |
| 20° | 24047 | 20514 | 19542 |
| 25° | 23556 | 19269 | 18178 |
| 30° | 22937 | 18098 | 16746 |
| 35° | 22355 | 16861 | 15339 |
| 40° | 21634 | 15642 | 14009 |
| 45° | 20918 | 14433 | 12705 |
| 50° | 20138 | 13201 | 11353 |
| 55° | 19313 | 11886 | 10071 |
| 60° | 18389 | 10461 | 8739  |
| 65° | 17377 | 9013  | 7339  |
| 70° | 16089 | 7428  | 5926  |
| 75° | 14310 | 5728  | 4576  |
| 80° | 12159 | 3892  | 2945  |
| 85° | 8814  | 1811  | 1253  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 20918 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 149.0  | 1.9       |
| 10°-20°   | 419.4  | 5.3       |
| 20°-30°   | 616.3  | 7.9       |
| 30°-40°   | 715.8  | 9.1       |
| 40°-50°   | 714.9  | 9.1       |
| 50°-60°   | 623.3  | 7.9       |
| 60°-70°   | 460.8  | 5.9       |
| 70°-80°   | 260.7  | 3.3       |
| 80°-90°   | 72.7   | 0.9       |
| 90°-100°  | 84.4   | 1.1       |
| 100°-110° | 268.2  | 3.4       |
| 110°-120° | 458.9  | 5.8       |
| 120°-130° | 603.6  | 7.7       |
| 130°-140° | 677.5  | 8.6       |
| 140°-150° | 664.4  | 8.5       |
| 150°-160° | 557.3  | 7.1       |
| 160°-170° | 369.6  | 4.7       |
| 170°-180° | 129.2  | 1.6       |
| 0°-30°    | 1184.7 | 15.1      |
| 0°-40°    | 1900.5 | 24.2      |
| 0°-60°    | 3238.7 | 41.3      |
| 0°-90°    | 4032.9 | 51.4      |
| 90°-120°  | 811.5  | 10.3      |
| 90°-150°  | 2757.0 | 35.1      |
| 90°-180°  | 3813.0 | 48.6      |
| 0°-180°   | 7846.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1584 | 1584  | 1584 | 1584  | 1584 |      |
| 5°   | 1584 | 1578  | 1561 | 1573  | 1570 | 150  |
| 15°  | 1508 | 1498  | 1479 | 1485  | 1477 | 425  |
| 25°  | 1364 | 1352  | 1326 | 1329  | 1326 | 628  |
| 35°  | 1177 | 1162  | 1138 | 1128  | 1121 | 735  |
| 45°  | 958  | 947   | 924  | 908   | 901  | 739  |
| 55°  | 725  | 716   | 697  | 679   | 672  | 648  |
| 65°  | 489  | 480   | 464  | 451   | 443  | 483  |
| 75°  | 256  | 253   | 245  | 236   | 239  | 273  |
| 85°  | 62   | 61    | 59   | 55    | 53   | 70   |
| 90°  | 1    | 15    | 40   | 38    | 39   | 8    |
| 95°  | 60   | 71    | 74   | 74    | 71   | 67   |
| 105° | 248  | 251   | 253  | 256   | 256  | 261  |
| 115° | 460  | 467   | 465  | 464   | 460  | 455  |
| 125° | 670  | 680   | 677  | 673   | 672  | 599  |
| 135° | 867  | 879   | 882  | 880   | 877  | 670  |
| 145° | 1052 | 1060  | 1067 | 1068  | 1064 | 657  |
| 155° | 1203 | 1206  | 1210 | 1215  | 1212 | 554  |
| 165° | 1309 | 1308  | 1308 | 1316  | 1310 | 369  |
| 175° | 1362 | 1358  | 1356 | 1364  | 1357 | 129  |
| 180° | 1364 | 1364  | 1364 | 1364  | 1364 |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1583.6 | 1583.6 | 1583.6 | 1583.6 | 1583.6 |
| 2.5°   | 1592.8 | 1585.1 | 1568.4 | 1583.6 | 1580.6 |
| 5°     | 1583.6 | 1577.5 | 1560.8 | 1573.0 | 1569.9 |
| 7.5°   | 1573.0 | 1563.8 | 1547.1 | 1559.3 | 1556.2 |
| 10°    | 1556.2 | 1545.6 | 1527.3 | 1539.5 | 1534.9 |
| 12.5°  | 1533.4 | 1524.2 | 1506.0 | 1513.6 | 1510.5 |
| 15°    | 1507.5 | 1498.4 | 1478.6 | 1484.7 | 1477.0 |
| 17.5°  | 1475.5 | 1466.4 | 1446.6 | 1454.2 | 1446.6 |
| 20°    | 1440.5 | 1431.4 | 1410.0 | 1414.6 | 1408.5 |
| 22.5°  | 1405.5 | 1391.8 | 1372.0 | 1372.0 | 1368.9 |
| 25°    | 1364.4 | 1352.2 | 1326.3 | 1329.3 | 1326.3 |
| 27.5°  | 1318.7 | 1308.0 | 1288.2 | 1283.7 | 1276.0 |
| 30°    | 1273.0 | 1260.8 | 1238.0 | 1233.4 | 1227.3 |
| 32.5°  | 1224.3 | 1215.1 | 1190.8 | 1181.6 | 1175.5 |
| 35°    | 1177.1 | 1161.8 | 1137.5 | 1128.3 | 1120.7 |
| 37.5°  | 1123.8 | 1110.1 | 1085.7 | 1075.0 | 1067.4 |
| 40°    | 1068.9 | 1056.8 | 1032.4 | 1018.7 | 1012.6 |
| 42.5°  | 1015.7 | 1003.5 | 979.1  | 963.9  | 954.7  |
| 45°    | 957.8  | 947.1  | 924.3  | 907.5  | 901.4  |
| 47.5°  | 901.4  | 890.8  | 866.4  | 849.7  | 840.5  |
| 50°    | 842.1  | 834.4  | 813.1  | 791.8  | 784.2  |
| 52.5°  | 784.2  | 773.5  | 753.7  | 737.0  | 726.3  |
| 55°    | 724.8  | 715.7  | 697.4  | 679.1  | 671.5  |
| 57.5°  | 665.4  | 657.8  | 638.0  | 619.7  | 613.7  |
| 60°    | 606.0  | 600.0  | 578.6  | 561.9  | 557.3  |
| 62.5°  | 548.2  | 537.5  | 522.3  | 507.1  | 501.0  |
| 65°    | 488.8  | 479.7  | 464.4  | 450.7  | 443.1  |
| 67.5°  | 427.9  | 420.3  | 406.6  | 395.9  | 389.8  |
| 70°    | 371.5  | 365.5  | 351.7  | 341.1  | 335.0  |
| 72.5°  | 313.7  | 307.6  | 300.0  | 289.3  | 284.7  |
| 75°    | 255.8  | 252.8  | 245.2  | 236.0  | 239.1  |
| 77.5°  | 204.0  | 198.0  | 194.9  | 190.3  | 185.8  |
| 80°    | 152.3  | 150.7  | 147.7  | 143.1  | 140.1  |
| 82.5°  | 103.5  | 103.5  | 102.0  | 95.9   | 95.9   |
| 85°    | 62.4   | 60.9   | 59.4   | 54.8   | 53.3   |
| 87.5°  | 27.4   | 24.4   | 21.3   | 16.7   | 15.2   |
| 90°    | 1.2    | 15.0   | 40.3   | 38.0   | 39.1   |
| 92.5°  | 25.3   | 34.5   | 35.7   | 36.8   | 36.8   |
| 95°    | 59.8   | 71.4   | 73.7   | 73.7   | 71.4   |
| 97.5°  | 100.1  | 110.5  | 115.1  | 115.1  | 115.1  |
| 100°   | 146.2  | 155.4  | 158.8  | 158.8  | 157.7  |
| 102.5° | 194.5  | 201.4  | 206.0  | 207.2  | 206.0  |
| 105°   | 247.5  | 250.9  | 253.2  | 255.5  | 255.5  |
| 107.5° | 300.4  | 305.0  | 305.0  | 306.2  | 300.4  |
| 110°   | 351.0  | 357.9  | 357.9  | 357.9  | 354.5  |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 406.3  | 413.2  | 412.0  | 408.6  | 406.3  |
| 115°   | 460.4  | 467.3  | 465.0  | 463.8  | 460.4  |
| 117.5° | 514.5  | 523.7  | 517.9  | 514.5  | 511.0  |
| 120°   | 568.6  | 577.8  | 568.6  | 568.6  | 565.1  |
| 122.5° | 618.1  | 629.6  | 623.8  | 620.4  | 618.1  |
| 125°   | 669.8  | 680.2  | 676.8  | 673.3  | 672.2  |
| 127.5° | 720.5  | 733.2  | 728.5  | 723.9  | 720.5  |
| 130°   | 767.7  | 782.6  | 780.3  | 778.0  | 773.4  |
| 132.5° | 820.6  | 832.1  | 833.3  | 827.5  | 824.1  |
| 135°   | 866.7  | 879.3  | 881.6  | 880.5  | 877.0  |
| 137.5° | 917.3  | 927.7  | 930.0  | 928.8  | 924.2  |
| 140°   | 962.2  | 972.5  | 978.3  | 978.3  | 973.7  |
| 142.5° | 1008.2 | 1018.6 | 1022.0 | 1023.2 | 1018.6 |
| 145°   | 1052.0 | 1060.0 | 1066.9 | 1068.1 | 1063.5 |
| 147.5° | 1091.1 | 1101.5 | 1106.1 | 1108.4 | 1103.8 |
| 150°   | 1131.4 | 1138.3 | 1142.9 | 1146.3 | 1142.9 |
| 152.5° | 1167.1 | 1174.0 | 1179.7 | 1184.3 | 1179.7 |
| 155°   | 1202.7 | 1206.2 | 1209.6 | 1215.4 | 1211.9 |
| 157.5° | 1233.8 | 1236.1 | 1238.4 | 1246.5 | 1240.7 |
| 160°   | 1261.4 | 1263.7 | 1264.9 | 1271.8 | 1267.2 |
| 162.5° | 1286.8 | 1286.8 | 1287.9 | 1296.0 | 1290.2 |
| 165°   | 1308.6 | 1307.5 | 1307.5 | 1315.5 | 1309.8 |
| 167.5° | 1328.2 | 1324.7 | 1324.7 | 1332.8 | 1327.0 |
| 170°   | 1343.2 | 1339.7 | 1338.5 | 1346.6 | 1339.7 |
| 172.5° | 1353.5 | 1350.1 | 1348.9 | 1357.0 | 1350.1 |
| 175°   | 1361.6 | 1358.1 | 1355.8 | 1363.9 | 1357.0 |
| 177.5° | 1366.2 | 1362.7 | 1360.4 | 1367.3 | 1360.4 |
| 180°   | 1363.9 | 1363.9 | 1363.9 | 1363.9 | 1363.9 |

(END OF REPORT)