

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: P1029269

Luminaire Tested: S122DIW-B1005D710UB2750-4F0-XX-W2A-F\_2700K

Issue Date: 5/6/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1029269  
REPORT IS A COMBINATION OF REPORTS P985337 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/6/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122DIW-B1005D710UB2750-4F0-XX-W2A-F\_2700K  
Description: Define 2 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}  
Light Source: -  
Ballast/Driver: -

**Summary**

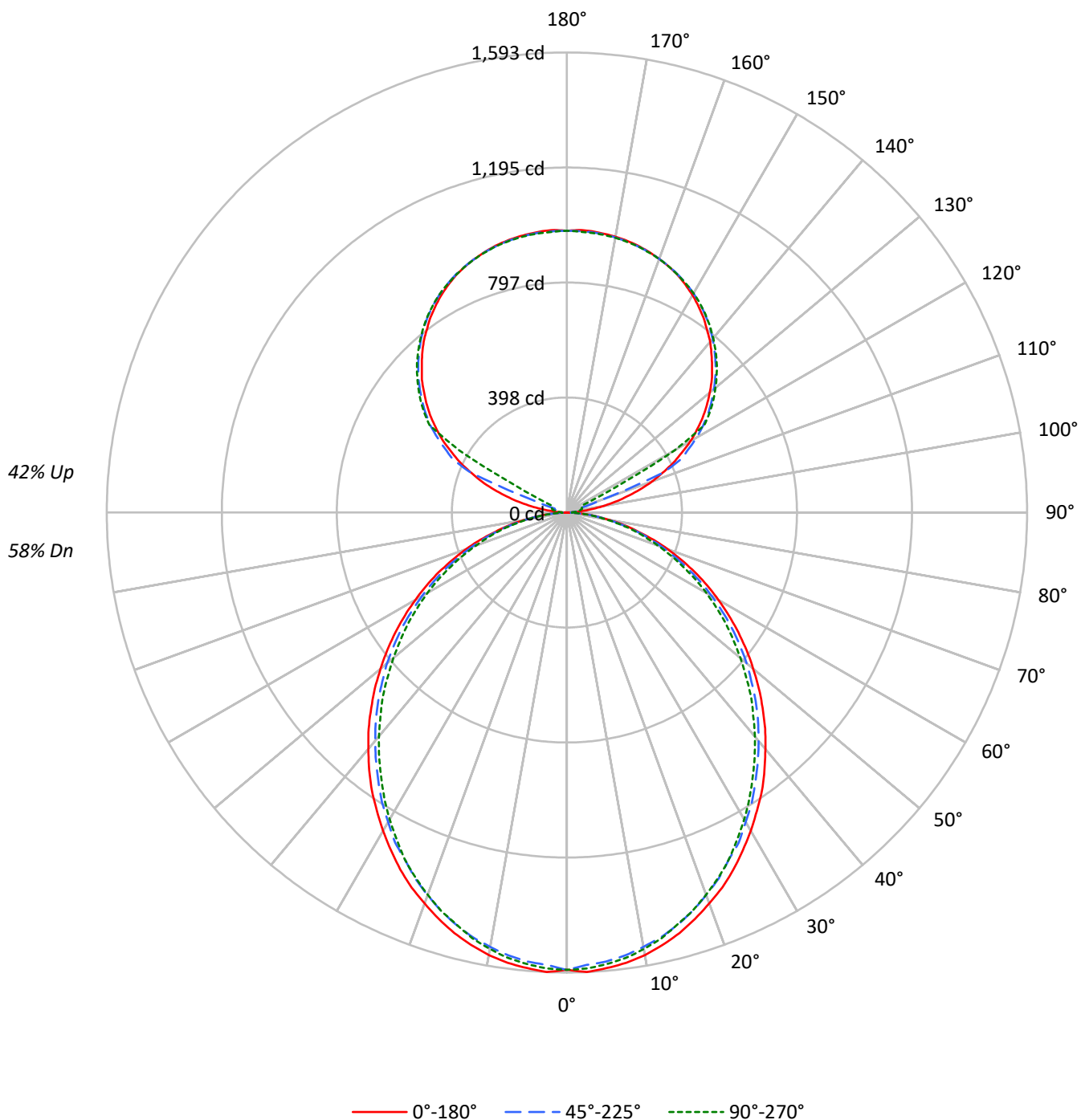
Lumens per Lamp: N/A  
Luminaire Lumens: 6891.0 lumens  
Efficiency: N/A  
Efficacy: 81.6 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29  
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

Input Watts (W): 84.5  
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   | 109 | 109 | 109 | 109 | 102 | 102 | 102 | 102 | 88 | 88 | 88 | 75 | 75 | 75 | 64 | 64 | 64 |
| 1   | 100 | 95  | 91  | 88  | 93  | 89  | 86  | 83  | 77 | 75 | 72 | 66 | 65 | 63 | 57 | 55 | 54 |
| 2   | 91  | 83  | 77  | 72  | 84  | 78  | 72  | 68  | 68 | 64 | 60 | 58 | 55 | 53 | 50 | 48 | 46 |
| 3   | 83  | 73  | 66  | 60  | 77  | 69  | 62  | 57  | 60 | 55 | 50 | 52 | 48 | 45 | 44 | 41 | 39 |
| 4   | 76  | 65  | 57  | 51  | 70  | 61  | 54  | 48  | 53 | 48 | 43 | 46 | 42 | 38 | 39 | 36 | 33 |
| 5   | 70  | 58  | 50  | 43  | 65  | 54  | 47  | 41  | 48 | 42 | 37 | 41 | 37 | 33 | 36 | 32 | 29 |
| 6   | 64  | 52  | 44  | 38  | 60  | 49  | 41  | 36  | 43 | 37 | 33 | 37 | 33 | 29 | 32 | 29 | 26 |
| 7   | 59  | 47  | 39  | 33  | 55  | 44  | 37  | 32  | 39 | 33 | 29 | 34 | 29 | 26 | 29 | 26 | 23 |
| 8   | 55  | 43  | 35  | 29  | 51  | 40  | 33  | 28  | 36 | 30 | 26 | 31 | 26 | 23 | 27 | 23 | 20 |
| 9   | 51  | 39  | 31  | 26  | 48  | 37  | 30  | 25  | 33 | 27 | 23 | 29 | 24 | 21 | 25 | 21 | 19 |
| 10  | 48  | 36  | 29  | 24  | 45  | 34  | 27  | 23  | 30 | 25 | 21 | 27 | 22 | 19 | 23 | 20 | 17 |

**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  | 2.2       |
| 10°-20°   | 419.4  | 6.1       |
| 20°-30°   | 616.3  | 8.9       |
| 30°-40°   | 715.8  | 10.4      |
| 40°-50°   | 714.9  | 10.4      |
| 50°-60°   | 623.3  | 9.0       |
| 60°-70°   | 460.8  | 6.7       |
| 70°-80°   | 260.7  | 3.8       |
| 80°-90°   | 70.5   | 1.0       |
| 90°-100°  | 32.2   | 0.5       |
| 100°-110° | 119.9  | 1.7       |
| 110°-120° | 318.1  | 4.6       |
| 120°-130° | 527.5  | 7.7       |
| 130°-140° | 560.4  | 8.1       |
| 140°-150° | 520.8  | 7.6       |
| 150°-160° | 418.7  | 6.1       |
| 160°-170° | 269.8  | 3.9       |
| 170°-180° | 92.9   | 1.3       |
| 0°-30°    | 1184.7 | 17.2      |
| 0°-40°    | 1900.5 | 27.6      |
| 0°-60°    | 3238.7 | 47.0      |
| 0°-90°    | 4030.7 | 58.5      |
| 90°-120°  | 470.2  | 6.8       |
| 90°-150°  | 2078.9 | 30.2      |
| 90°-180°  | 2860.0 | 41.5      |
| 0°-180°   | 6891.0 | 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    | 8     | 14   | 18    | 19   | 6    |
| 95°  | 46   | 23    | 28   | 31    | 30   | 54   |
| 105° | 215  | 236   | 43   | 51    | 54   | 229  |
| 115° | 406  | 418   | 436  | 109   | 58   | 400  |
| 125° | 574  | 583   | 596  | 602   | 604  | 512  |
| 135° | 710  | 722   | 728  | 735   | 734  | 549  |
| 145° | 824  | 823   | 835  | 840   | 837  | 515  |
| 155° | 907  | 901   | 909  | 914   | 908  | 418  |
| 165° | 956  | 952   | 954  | 959   | 954  | 270  |
| 175° | 978  | 973   | 974  | 979   | 972  | 93   |
| 180° | 976  | 976   | 976  | 976   | 976  |      |

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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°    | 0.7    | 8.5    | 14.1   | 17.6   | 19.1   |
| 92.5°  | 17.6   | 14.8   | 16.9   | 18.4   | 19.1   |
| 95°    | 45.9   | 22.6   | 27.5   | 31.1   | 30.4   |
| 97.5°  | 82.6   | 24.7   | 36.0   | 38.1   | 38.8   |
| 100°   | 125.0  | 28.2   | 40.2   | 45.9   | 47.3   |
| 102.5° | 171.6  | 170.1  | 41.7   | 49.4   | 51.5   |
| 105°   | 214.6  | 235.8  | 43.1   | 50.8   | 53.7   |
| 107.5° | 264.7  | 282.4  | 44.5   | 52.2   | 55.1   |
| 110°   | 312.7  | 327.6  | 123.5  | 52.9   | 55.8   |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 357.9 | 370.6 | 358.6 | 54.4  | 56.5  |
| 115°   | 405.9 | 417.9 | 435.6 | 108.7 | 57.9  |
| 117.5° | 447.6 | 461.7 | 473.7 | 372.8 | 187.8 |
| 120°   | 494.2 | 504.8 | 517.5 | 526.0 | 430.6 |
| 122.5° | 533.7 | 545.0 | 559.1 | 563.4 | 564.1 |
| 125°   | 574.0 | 583.1 | 596.5 | 601.5 | 603.6 |
| 127.5° | 610.7 | 620.6 | 631.1 | 638.2 | 638.9 |
| 130°   | 645.3 | 656.6 | 664.3 | 672.1 | 671.4 |
| 132.5° | 680.6 | 689.7 | 697.5 | 703.9 | 703.2 |
| 135°   | 710.2 | 721.5 | 727.9 | 734.9 | 733.5 |
| 137.5° | 741.3 | 749.7 | 756.8 | 763.9 | 761.7 |
| 140°   | 771.6 | 777.3 | 785.0 | 791.4 | 787.9 |
| 142.5° | 797.0 | 802.0 | 811.2 | 816.8 | 813.3 |
| 145°   | 823.9 | 823.2 | 835.2 | 840.1 | 836.6 |
| 147.5° | 847.2 | 845.1 | 857.1 | 860.6 | 857.8 |
| 150°   | 869.8 | 864.8 | 876.1 | 880.4 | 876.8 |
| 152.5° | 888.8 | 883.2 | 893.8 | 898.0 | 893.1 |
| 155°   | 907.2 | 900.8 | 909.3 | 913.5 | 907.9 |
| 157.5° | 922.0 | 916.4 | 922.7 | 927.7 | 922.0 |
| 160°   | 934.7 | 930.5 | 934.7 | 938.9 | 934.0 |
| 162.5° | 946.0 | 941.8 | 945.3 | 950.2 | 943.9 |
| 165°   | 955.9 | 951.7 | 953.8 | 958.7 | 953.8 |
| 167.5° | 963.7 | 959.4 | 961.5 | 966.5 | 960.1 |
| 170°   | 970.0 | 965.8 | 967.2 | 972.1 | 965.8 |
| 172.5° | 974.2 | 970.0 | 971.4 | 976.4 | 970.0 |
| 175°   | 977.8 | 972.8 | 974.2 | 979.2 | 972.1 |
| 177.5° | 979.2 | 974.2 | 975.0 | 979.9 | 973.5 |
| 180°   | 975.7 | 975.7 | 975.7 | 975.7 | 975.7 |

(END OF REPORT)