

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: P1034943

Luminaire Tested: S125DIW-B1090D1050UB27-4F0-XX-W2A-F

Issue Date: 5/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1034943  
REPORT IS A COMBINATION OF REPORTS P1002725 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125DIW-B1090D1050UB27-4F0-XX-W2A-F  
Description: Define 5 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}  
Light Source: -  
Ballast/Driver: -

**Summary**

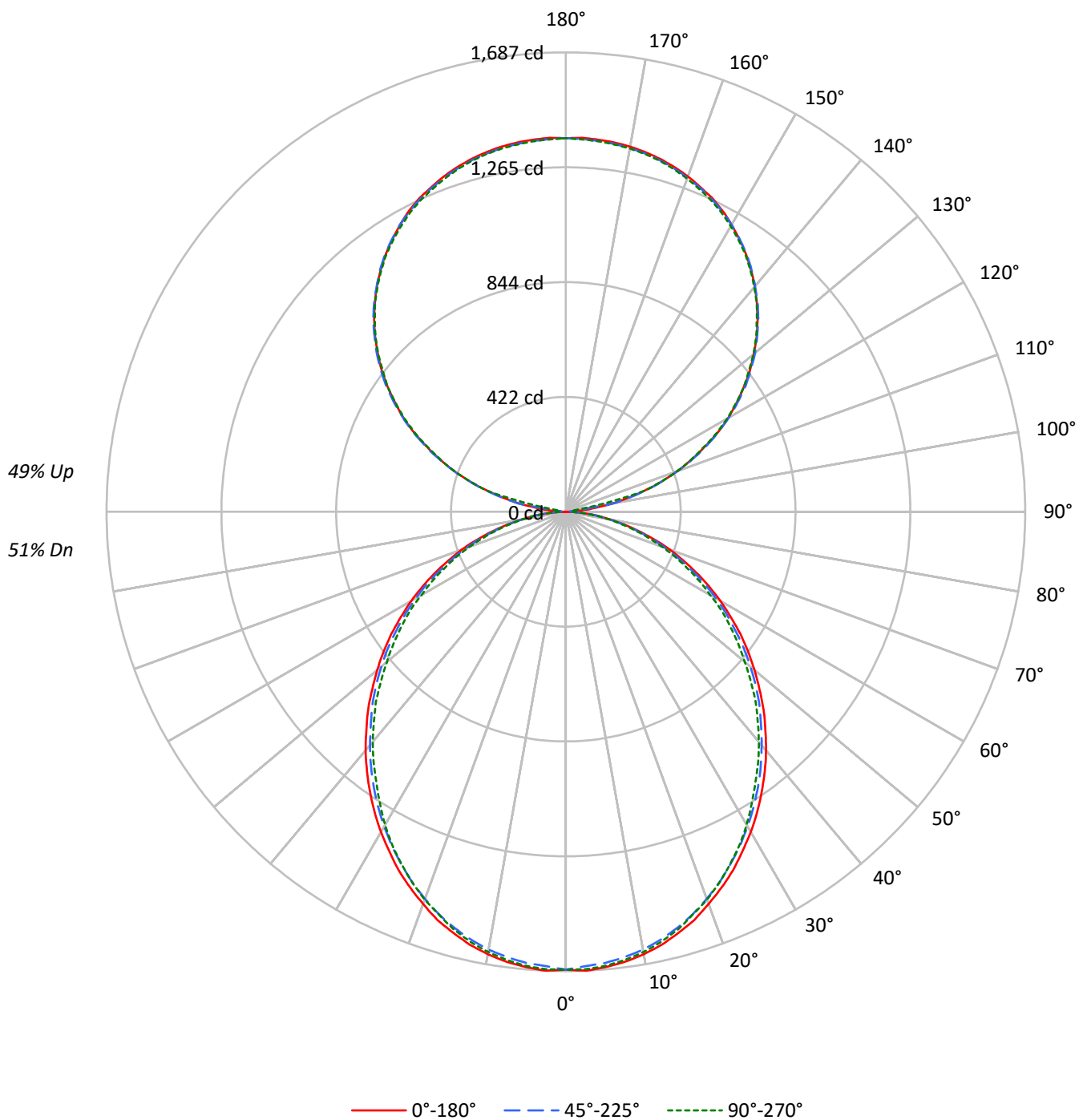
Lumens per Lamp: N/A  
Luminaire Lumens: 8593.0 lumens  
Efficiency: N/A  
Efficacy: 109.7 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

Input Watts (W): 78.3  
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 | 84 | 84 | 84 | 70 | 70 | 70 | 57 | 57 | 57 |
| 1   | 98  | 94  | 90  | 86  | 90 | 87 | 83 | 80 | 73 | 71 | 69 | 61 | 60 | 58 | 50 | 49 | 48 |
| 2   | 89  | 82  | 75  | 70  | 82 | 76 | 70 | 66 | 64 | 60 | 57 | 54 | 51 | 48 | 44 | 42 | 40 |
| 3   | 81  | 72  | 64  | 59  | 75 | 67 | 60 | 55 | 57 | 52 | 48 | 48 | 44 | 41 | 39 | 37 | 34 |
| 4   | 74  | 64  | 56  | 49  | 68 | 59 | 52 | 47 | 50 | 45 | 41 | 42 | 38 | 35 | 35 | 32 | 30 |
| 5   | 68  | 57  | 48  | 42  | 63 | 53 | 45 | 40 | 45 | 39 | 35 | 38 | 34 | 30 | 32 | 28 | 26 |
| 6   | 63  | 51  | 43  | 37  | 58 | 47 | 40 | 35 | 41 | 35 | 31 | 34 | 30 | 27 | 29 | 25 | 23 |
| 7   | 58  | 46  | 38  | 32  | 54 | 43 | 36 | 30 | 37 | 31 | 27 | 31 | 27 | 24 | 26 | 23 | 20 |
| 8   | 54  | 42  | 34  | 28  | 50 | 39 | 32 | 27 | 34 | 28 | 24 | 29 | 24 | 21 | 24 | 21 | 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 | 33 | 26 | 22 | 28 | 23 | 19 | 24 | 20 | 17 | 21 | 17 | 15 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 10775 | 10775 | 10775 |
| 5°  | 10775 | 10525 | 10545 |
| 10° | 10686 | 10284 | 10251 |
| 15° | 10546 | 9995  | 9905  |
| 20° | 10356 | 9660  | 9508  |
| 25° | 10152 | 9295  | 9084  |
| 30° | 9907  | 8915  | 8636  |
| 35° | 9644  | 8517  | 8135  |
| 40° | 9373  | 8095  | 7688  |
| 45° | 9080  | 7684  | 7215  |
| 50° | 8757  | 7218  | 6663  |
| 55° | 8437  | 6705  | 6155  |
| 60° | 8056  | 6164  | 5564  |
| 65° | 7600  | 5537  | 4954  |
| 70° | 7136  | 4816  | 4249  |
| 75° | 6356  | 3965  | 3436  |
| 80° | 5416  | 2962  | 2528  |
| 85° | 4185  | 1752  | 1393  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9080 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 158.7  | 1.8       |
| 10°-20°   | 448.2  | 5.2       |
| 20°-30°   | 661.7  | 7.7       |
| 30°-40°   | 772.1  | 9.0       |
| 40°-50°   | 775.4  | 9.0       |
| 50°-60°   | 680.7  | 7.9       |
| 60°-70°   | 507.0  | 5.9       |
| 70°-80°   | 289.6  | 3.4       |
| 80°-90°   | 85.6   | 1.0       |
| 90°-100°  | 46.6   | 0.5       |
| 100°-110° | 309.6  | 3.6       |
| 110°-120° | 557.5  | 6.5       |
| 120°-130° | 715.6  | 8.3       |
| 130°-140° | 769.7  | 9.0       |
| 140°-150° | 722.4  | 8.4       |
| 150°-160° | 584.3  | 6.8       |
| 160°-170° | 377.9  | 4.4       |
| 170°-180° | 130.3  | 1.5       |
| 0°-30°    | 1268.7 | 14.8      |
| 0°-40°    | 2040.7 | 23.7      |
| 0°-60°    | 3496.8 | 40.7      |
| 0°-90°    | 4379.0 | 51.0      |
| 90°-120°  | 913.7  | 10.6      |
| 90°-150°  | 3121.4 | 36.3      |
| 90°-180°  | 4214.0 | 49.0      |
| 0°-180°   | 8593.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1682 | 1682  | 1682 | 1682  | 1682 |      |
| 5°   | 1679 | 1676  | 1663 | 1675  | 1674 | 159  |
| 15°  | 1600 | 1596  | 1582 | 1588  | 1588 | 451  |
| 25°  | 1453 | 1446  | 1429 | 1432  | 1428 | 668  |
| 35°  | 1255 | 1249  | 1231 | 1224  | 1213 | 785  |
| 45°  | 1027 | 1022  | 1006 | 990   | 986  | 791  |
| 55°  | 782  | 778   | 760  | 748   | 738  | 698  |
| 65°  | 528  | 526   | 511  | 499   | 494  | 524  |
| 75°  | 281  | 278   | 271  | 267   | 262  | 299  |
| 85°  | 73   | 74    | 74   | 73    | 70   | 80   |
| 90°  | 1    | 9     | 16   | 21    | 24   | 8    |
| 95°  | 58   | 55    | 16   | 21    | 21   | 71   |
| 105° | 299  | 303   | 303  | 303   | 302  | 317  |
| 115° | 561  | 566   | 567  | 563   | 557  | 556  |
| 125° | 798  | 805   | 805  | 801   | 798  | 713  |
| 135° | 996  | 1002  | 1000 | 998   | 992  | 768  |
| 145° | 1154 | 1156  | 1156 | 1157  | 1151 | 722  |
| 155° | 1271 | 1265  | 1267 | 1270  | 1262 | 586  |
| 165° | 1341 | 1335  | 1336 | 1342  | 1334 | 379  |
| 175° | 1372 | 1366  | 1367 | 1375  | 1366 | 131  |
| 180° | 1372 | 1372  | 1372 | 1372  | 1372 |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1681.7 | 1681.7 | 1681.7 | 1681.7 | 1681.7 |
| 2.5°   | 1687.0 | 1683.0 | 1669.7 | 1683.0 | 1681.7 |
| 5°     | 1679.0 | 1676.4 | 1663.1 | 1675.0 | 1673.7 |
| 7.5°   | 1667.0 | 1664.4 | 1649.7 | 1661.7 | 1660.4 |
| 10°    | 1649.7 | 1647.1 | 1632.5 | 1643.1 | 1641.8 |
| 12.5°  | 1628.5 | 1623.1 | 1609.8 | 1617.8 | 1617.8 |
| 15°    | 1600.5 | 1596.5 | 1581.9 | 1588.5 | 1588.5 |
| 17.5°  | 1571.3 | 1564.6 | 1550.0 | 1557.9 | 1551.3 |
| 20°    | 1532.7 | 1530.0 | 1512.7 | 1522.0 | 1515.4 |
| 22.5°  | 1494.1 | 1488.8 | 1472.8 | 1478.1 | 1474.1 |
| 25°    | 1452.8 | 1446.2 | 1428.9 | 1431.6 | 1427.6 |
| 27.5°  | 1404.9 | 1401.0 | 1383.7 | 1385.0 | 1381.0 |
| 30°    | 1358.4 | 1354.4 | 1334.4 | 1331.8 | 1327.8 |
| 32.5°  | 1307.8 | 1301.2 | 1283.9 | 1278.6 | 1270.6 |
| 35°    | 1254.6 | 1249.3 | 1230.7 | 1224.0 | 1213.4 |
| 37.5°  | 1200.1 | 1193.4 | 1176.1 | 1166.8 | 1160.1 |
| 40°    | 1144.2 | 1137.5 | 1118.9 | 1106.9 | 1102.9 |
| 42.5°  | 1084.3 | 1079.0 | 1060.4 | 1049.7 | 1043.1 |
| 45°    | 1027.1 | 1021.8 | 1005.8 | 989.8  | 985.9  |
| 47.5°  | 964.6  | 965.9  | 945.9  | 930.0  | 920.7  |
| 50°    | 904.7  | 900.7  | 884.7  | 867.4  | 858.1  |
| 52.5°  | 843.5  | 840.8  | 823.5  | 808.9  | 798.3  |
| 55°    | 782.3  | 778.3  | 759.7  | 747.7  | 738.4  |
| 57.5°  | 717.1  | 715.8  | 699.8  | 683.8  | 679.9  |
| 60°    | 655.9  | 650.6  | 636.0  | 622.6  | 613.3  |
| 62.5°  | 592.0  | 588.1  | 576.1  | 561.4  | 554.8  |
| 65°    | 528.2  | 525.5  | 510.9  | 498.9  | 493.6  |
| 67.5°  | 465.7  | 460.3  | 449.7  | 439.0  | 436.4  |
| 70°    | 407.1  | 400.5  | 388.5  | 380.5  | 375.2  |
| 72.5°  | 343.3  | 339.3  | 332.6  | 323.3  | 318.0  |
| 75°    | 280.7  | 278.1  | 271.4  | 267.4  | 262.1  |
| 77.5°  | 222.2  | 220.9  | 216.9  | 214.2  | 210.2  |
| 80°    | 167.6  | 167.6  | 165.0  | 163.6  | 161.0  |
| 82.5°  | 119.7  | 117.1  | 117.1  | 114.4  | 114.4  |
| 85°    | 73.2   | 74.5   | 74.5   | 73.2   | 70.5   |
| 87.5°  | 35.9   | 35.9   | 34.6   | 34.6   | 31.9   |
| 90°    | 1.0    | 9.2    | 16.3   | 21.4   | 24.4   |
| 92.5°  | 19.3   | 10.2   | 16.3   | 21.4   | 22.4   |
| 95°    | 58.0   | 54.9   | 16.3   | 21.4   | 21.4   |
| 97.5°  | 108.8  | 114.9  | 18.3   | 20.3   | 21.4   |
| 100°   | 169.8  | 172.9  | 176.9  | 25.4   | 21.4   |
| 102.5° | 231.9  | 235.9  | 238.0  | 240.0  | 154.6  |
| 105°   | 299.0  | 303.0  | 303.0  | 303.0  | 302.0  |
| 107.5° | 368.1  | 368.1  | 370.2  | 371.2  | 367.1  |
| 110°   | 435.2  | 435.2  | 437.3  | 434.2  | 435.2  |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 498.3  | 501.3  | 502.4  | 498.3  | 496.3  |
| 115°   | 561.3  | 566.4  | 567.4  | 563.4  | 557.3  |
| 117.5° | 627.4  | 627.4  | 631.5  | 625.4  | 623.4  |
| 120°   | 688.5  | 687.4  | 690.5  | 688.5  | 683.4  |
| 122.5° | 742.4  | 747.4  | 748.5  | 746.4  | 740.3  |
| 125°   | 798.3  | 805.4  | 805.4  | 801.3  | 798.3  |
| 127.5° | 852.2  | 857.3  | 856.2  | 854.2  | 846.1  |
| 130°   | 901.0  | 906.1  | 907.1  | 904.0  | 899.0  |
| 132.5° | 949.8  | 955.9  | 952.9  | 952.9  | 947.8  |
| 135°   | 995.6  | 1001.7 | 999.6  | 997.6  | 991.5  |
| 137.5° | 1038.3 | 1044.4 | 1042.3 | 1042.3 | 1037.3 |
| 140°   | 1080.0 | 1082.0 | 1081.0 | 1083.0 | 1076.9 |
| 142.5° | 1117.6 | 1118.6 | 1120.6 | 1120.6 | 1114.5 |
| 145°   | 1154.2 | 1156.2 | 1156.2 | 1157.3 | 1151.2 |
| 147.5° | 1186.7 | 1186.7 | 1187.8 | 1188.8 | 1181.7 |
| 150°   | 1217.3 | 1215.2 | 1217.3 | 1219.3 | 1211.2 |
| 152.5° | 1246.7 | 1241.7 | 1243.7 | 1245.7 | 1238.6 |
| 155°   | 1271.2 | 1265.1 | 1267.1 | 1270.1 | 1262.0 |
| 157.5° | 1290.5 | 1287.4 | 1287.4 | 1290.5 | 1282.3 |
| 160°   | 1310.8 | 1304.7 | 1305.7 | 1309.8 | 1301.7 |
| 162.5° | 1327.1 | 1321.0 | 1322.0 | 1328.1 | 1318.9 |
| 165°   | 1341.3 | 1335.2 | 1336.2 | 1342.3 | 1334.2 |
| 167.5° | 1352.5 | 1346.4 | 1347.4 | 1354.5 | 1345.4 |
| 170°   | 1361.7 | 1354.5 | 1355.6 | 1363.7 | 1354.5 |
| 172.5° | 1367.8 | 1360.6 | 1362.7 | 1369.8 | 1360.6 |
| 175°   | 1371.8 | 1365.7 | 1366.7 | 1374.9 | 1365.7 |
| 177.5° | 1374.9 | 1368.8 | 1369.8 | 1376.9 | 1368.8 |
| 180°   | 1371.8 | 1371.8 | 1371.8 | 1371.8 | 1371.8 |

(END OF REPORT)