

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: P1034707

Luminaire Tested: S125RDIW-B1090D1340UB2750-4F0-XX-W2A-F\_3500K

Issue Date: 5/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1034707  
REPORT IS A COMBINATION OF REPORTS P1005980 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDIW-B1090D1340UB2750-4F0-XX-W2A-F\_3500K  
Description: Define 5 Regressed Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721}  
{m-EER=0.792}  
Light Source: -  
Ballast/Driver: -

**Summary**

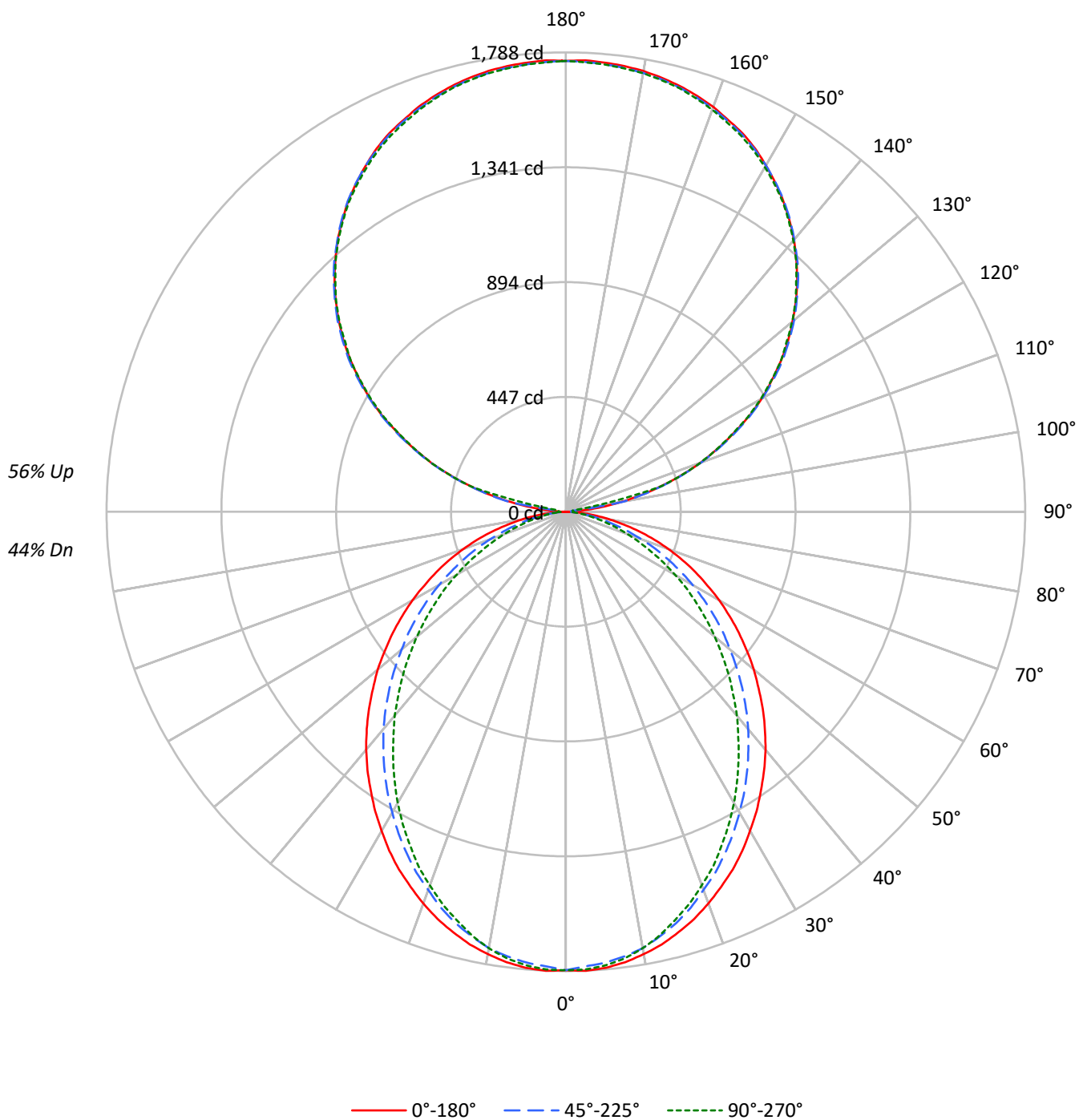
Lumens per Lamp: N/A  
Luminaire Lumens: 9609.0 lumens  
Efficiency: N/A  
Efficacy: 108.1 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

Input Watts (W): 88.9  
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   | 106 | 106 | 106 | 106 | 97 | 97 | 97 | 97 | 80 | 80 | 80 | 65 | 65 | 65 | 51 | 51 | 51 |    |    | 44 |
| 1   | 97  | 92  | 89  | 85  | 88 | 85 | 82 | 79 | 70 | 68 | 66 | 57 | 56 | 54 | 45 | 44 | 43 |    |    | 37 |
| 2   | 88  | 81  | 75  | 70  | 80 | 74 | 69 | 65 | 62 | 58 | 55 | 50 | 48 | 46 | 40 | 38 | 37 |    |    | 32 |
| 3   | 80  | 71  | 64  | 58  | 73 | 65 | 59 | 54 | 55 | 50 | 46 | 45 | 41 | 39 | 35 | 33 | 31 |    |    | 27 |
| 4   | 74  | 63  | 55  | 49  | 67 | 58 | 51 | 46 | 49 | 44 | 40 | 40 | 36 | 33 | 32 | 29 | 27 |    |    | 23 |
| 5   | 68  | 56  | 48  | 42  | 62 | 52 | 45 | 40 | 44 | 38 | 34 | 36 | 32 | 29 | 29 | 26 | 24 |    |    | 20 |
| 6   | 62  | 50  | 43  | 37  | 57 | 47 | 40 | 34 | 39 | 34 | 30 | 32 | 28 | 25 | 26 | 23 | 21 |    |    | 18 |
| 7   | 58  | 46  | 38  | 32  | 53 | 42 | 35 | 30 | 36 | 30 | 26 | 30 | 25 | 22 | 24 | 21 | 19 |    |    | 16 |
| 8   | 53  | 41  | 34  | 29  | 49 | 38 | 32 | 27 | 32 | 27 | 23 | 27 | 23 | 20 | 22 | 19 | 17 |    |    | 14 |
| 9   | 50  | 38  | 30  | 25  | 46 | 35 | 28 | 24 | 30 | 25 | 21 | 25 | 21 | 18 | 20 | 17 | 15 |    |    | 13 |
| 10  | 46  | 35  | 28  | 23  | 43 | 32 | 26 | 21 | 27 | 22 | 19 | 23 | 19 | 16 | 19 | 16 | 14 |    |    | 12 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 11433 | 11433 | 11433 |
| 5°  | 11434 | 11148 | 11166 |
| 10° | 11323 | 10867 | 10771 |
| 15° | 11162 | 10474 | 10253 |
| 20° | 10964 | 10001 | 9708  |
| 25° | 10737 | 9539  | 9125  |
| 30° | 10458 | 9031  | 8512  |
| 35° | 10174 | 8515  | 7861  |
| 40° | 9903  | 7985  | 7225  |
| 45° | 9579  | 7414  | 6560  |
| 50° | 9250  | 6807  | 5881  |
| 55° | 8867  | 6209  | 5179  |
| 60° | 8476  | 5525  | 4451  |
| 65° | 8009  | 4762  | 3665  |
| 70° | 7466  | 3876  | 2884  |
| 75° | 6714  | 2915  | 2102  |
| 80° | 5662  | 1887  | 1418  |
| 85° | 4237  | 1013  | 798   |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9579 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 167.9  | 1.7       |
| 10°-20°   | 469.3  | 4.9       |
| 20°-30°   | 680.5  | 7.1       |
| 30°-40°   | 775.3  | 8.1       |
| 40°-50°   | 755.7  | 7.9       |
| 50°-60°   | 636.0  | 6.6       |
| 60°-70°   | 445.7  | 4.6       |
| 70°-80°   | 228.5  | 2.4       |
| 80°-90°   | 59.6   | 0.6       |
| 90°-100°  | 59.5   | 0.6       |
| 100°-110° | 396.0  | 4.1       |
| 110°-120° | 713.2  | 7.4       |
| 120°-130° | 915.4  | 9.5       |
| 130°-140° | 984.6  | 10.2      |
| 140°-150° | 924.1  | 9.6       |
| 150°-160° | 747.5  | 7.8       |
| 160°-170° | 483.4  | 5.0       |
| 170°-180° | 166.7  | 1.7       |
| 0°-30°    | 1317.8 | 13.7      |
| 0°-40°    | 2093.2 | 21.8      |
| 0°-60°    | 3484.9 | 36.3      |
| 0°-90°    | 4218.6 | 43.9      |
| 90°-120°  | 1168.8 | 12.2      |
| 90°-150°  | 3992.8 | 41.6      |
| 90°-180°  | 5390.0 | 56.1      |
| 0°-180°   | 9609.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1784 | 1784  | 1784 | 1784  | 1784 |      |
| 5°   | 1782 | 1776  | 1762 | 1775  | 1772 | 169  |
| 15°  | 1694 | 1686  | 1658 | 1656  | 1644 | 478  |
| 25°  | 1536 | 1516  | 1466 | 1449  | 1434 | 707  |
| 35°  | 1324 | 1291  | 1230 | 1191  | 1173 | 829  |
| 45°  | 1084 | 1044  | 970  | 916   | 896  | 836  |
| 55°  | 822  | 779   | 704  | 643   | 621  | 735  |
| 65°  | 557  | 511   | 439  | 386   | 365  | 551  |
| 75°  | 296  | 256   | 200  | 170   | 160  | 313  |
| 85°  | 74   | 50    | 43   | 42    | 40   | 81   |
| 90°  | 1    | 12    | 21   | 27    | 31   | 8    |
| 95°  | 74   | 70    | 21   | 27    | 27   | 91   |
| 105° | 382  | 388   | 388  | 388   | 386  | 405  |
| 115° | 718  | 725   | 726  | 721   | 713  | 712  |
| 125° | 1021 | 1030  | 1030 | 1025  | 1021 | 912  |
| 135° | 1274 | 1281  | 1279 | 1276  | 1268 | 982  |
| 145° | 1476 | 1479  | 1479 | 1480  | 1472 | 923  |
| 155° | 1626 | 1618  | 1621 | 1625  | 1614 | 749  |
| 165° | 1716 | 1708  | 1709 | 1717  | 1707 | 485  |
| 175° | 1755 | 1747  | 1748 | 1759  | 1747 | 167  |
| 180° | 1755 | 1755  | 1755 | 1755  | 1755 |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1784.4 | 1784.4 | 1784.4 | 1784.4 | 1784.4 |
| 2.5°   | 1788.5 | 1784.4 | 1771.0 | 1784.4 | 1783.1 |
| 5°     | 1781.7 | 1776.4 | 1761.5 | 1775.0 | 1772.3 |
| 7.5°   | 1768.3 | 1762.9 | 1745.4 | 1756.1 | 1753.4 |
| 10°    | 1748.1 | 1744.0 | 1725.1 | 1729.2 | 1725.1 |
| 12.5°  | 1725.1 | 1719.7 | 1692.8 | 1695.5 | 1688.8 |
| 15°    | 1694.1 | 1686.1 | 1657.8 | 1656.4 | 1644.3 |
| 17.5°  | 1661.8 | 1649.7 | 1616.0 | 1609.2 | 1599.8 |
| 20°    | 1622.7 | 1609.2 | 1566.1 | 1559.4 | 1547.2 |
| 22.5°  | 1579.6 | 1566.1 | 1520.3 | 1505.5 | 1496.0 |
| 25°    | 1536.5 | 1516.2 | 1466.4 | 1448.8 | 1434.0 |
| 27.5°  | 1487.9 | 1463.7 | 1411.1 | 1388.2 | 1373.4 |
| 30°    | 1434.0 | 1408.4 | 1351.8 | 1320.8 | 1308.7 |
| 32.5°  | 1381.5 | 1350.5 | 1292.5 | 1257.5 | 1241.3 |
| 35°    | 1323.5 | 1291.2 | 1230.5 | 1191.4 | 1172.6 |
| 37.5°  | 1268.2 | 1229.2 | 1167.2 | 1121.3 | 1102.5 |
| 40°    | 1208.9 | 1168.5 | 1103.8 | 1052.6 | 1036.4 |
| 42.5°  | 1146.9 | 1105.2 | 1037.8 | 989.3  | 963.7  |
| 45°    | 1083.6 | 1044.5 | 970.4  | 916.5  | 896.3  |
| 47.5°  | 1017.6 | 977.1  | 903.0  | 847.7  | 824.8  |
| 50°    | 955.6  | 911.1  | 834.3  | 777.7  | 757.4  |
| 52.5°  | 888.2  | 842.4  | 770.9  | 708.9  | 688.7  |
| 55°    | 822.1  | 779.0  | 703.5  | 642.9  | 621.3  |
| 57.5°  | 754.7  | 708.9  | 636.1  | 576.8  | 558.0  |
| 60°    | 690.1  | 642.9  | 570.1  | 510.8  | 490.6  |
| 62.5°  | 621.3  | 576.8  | 502.7  | 448.8  | 428.6  |
| 65°    | 556.6  | 510.8  | 439.4  | 385.5  | 365.2  |
| 67.5°  | 491.9  | 446.1  | 377.4  | 326.2  | 310.0  |
| 70°    | 425.9  | 380.1  | 312.7  | 270.9  | 254.7  |
| 72.5°  | 361.2  | 316.7  | 254.7  | 217.0  | 207.6  |
| 75°    | 296.5  | 256.1  | 199.5  | 169.8  | 160.4  |
| 77.5°  | 230.5  | 198.1  | 150.9  | 128.0  | 120.0  |
| 80°    | 175.2  | 142.9  | 105.1  | 93.0   | 90.3   |
| 82.5°  | 121.3  | 93.0   | 70.1   | 66.0   | 64.7   |
| 85°    | 74.1   | 49.9   | 43.1   | 41.8   | 40.4   |
| 87.5°  | 31.0   | 21.6   | 20.2   | 20.2   | 18.9   |
| 90°    | 1.3    | 11.7   | 20.8   | 27.3   | 31.2   |
| 92.5°  | 24.7   | 13.0   | 20.8   | 27.3   | 28.6   |
| 95°    | 74.1   | 70.2   | 20.8   | 27.3   | 27.3   |
| 97.5°  | 139.2  | 147.0  | 23.4   | 26.0   | 27.3   |
| 100°   | 217.2  | 221.1  | 226.3  | 32.5   | 27.3   |
| 102.5° | 296.6  | 301.8  | 304.4  | 307.0  | 197.7  |
| 105°   | 382.4  | 387.6  | 387.6  | 387.6  | 386.3  |
| 107.5° | 470.9  | 470.9  | 473.5  | 474.8  | 469.6  |
| 110°   | 556.8  | 556.8  | 559.4  | 555.5  | 556.8  |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 637.4  | 641.3  | 642.6  | 637.4  | 634.8  |
| 115°   | 718.1  | 724.6  | 725.9  | 720.7  | 712.8  |
| 117.5° | 802.6  | 802.6  | 807.8  | 800.0  | 797.4  |
| 120°   | 880.7  | 879.4  | 883.3  | 880.7  | 874.2  |
| 122.5° | 949.6  | 956.1  | 957.4  | 954.8  | 947.0  |
| 125°   | 1021.1 | 1030.3 | 1030.3 | 1025.0 | 1021.1 |
| 127.5° | 1090.1 | 1096.6 | 1095.3 | 1092.7 | 1082.3 |
| 130°   | 1152.5 | 1159.0 | 1160.3 | 1156.4 | 1149.9 |
| 132.5° | 1215.0 | 1222.8 | 1218.9 | 1218.9 | 1212.4 |
| 135°   | 1273.5 | 1281.3 | 1278.7 | 1276.1 | 1268.3 |
| 137.5° | 1328.1 | 1335.9 | 1333.3 | 1333.3 | 1326.8 |
| 140°   | 1381.5 | 1384.1 | 1382.8 | 1385.4 | 1377.6 |
| 142.5° | 1429.6 | 1430.9 | 1433.5 | 1433.5 | 1425.7 |
| 145°   | 1476.4 | 1479.0 | 1479.0 | 1480.3 | 1472.5 |
| 147.5° | 1518.1 | 1518.1 | 1519.4 | 1520.7 | 1511.6 |
| 150°   | 1557.1 | 1554.5 | 1557.1 | 1559.7 | 1549.3 |
| 152.5° | 1594.8 | 1588.3 | 1590.9 | 1593.5 | 1584.4 |
| 155°   | 1626.0 | 1618.2 | 1620.8 | 1624.7 | 1614.3 |
| 157.5° | 1650.7 | 1646.8 | 1646.8 | 1650.7 | 1640.3 |
| 160°   | 1676.8 | 1669.0 | 1670.3 | 1675.5 | 1665.1 |
| 162.5° | 1697.6 | 1689.8 | 1691.1 | 1698.9 | 1687.2 |
| 165°   | 1715.8 | 1708.0 | 1709.3 | 1717.1 | 1706.7 |
| 167.5° | 1730.1 | 1722.3 | 1723.6 | 1732.7 | 1721.0 |
| 170°   | 1741.8 | 1732.7 | 1734.0 | 1744.4 | 1732.7 |
| 172.5° | 1749.6 | 1740.5 | 1743.1 | 1752.2 | 1740.5 |
| 175°   | 1754.8 | 1747.0 | 1748.3 | 1758.7 | 1747.0 |
| 177.5° | 1758.7 | 1750.9 | 1752.2 | 1761.3 | 1750.9 |
| 180°   | 1754.8 | 1754.8 | 1754.8 | 1754.8 | 1754.8 |

(END OF REPORT)