

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: P1035727

Luminaire Tested: S125RDIW-B1090D1560UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

**Test Information**

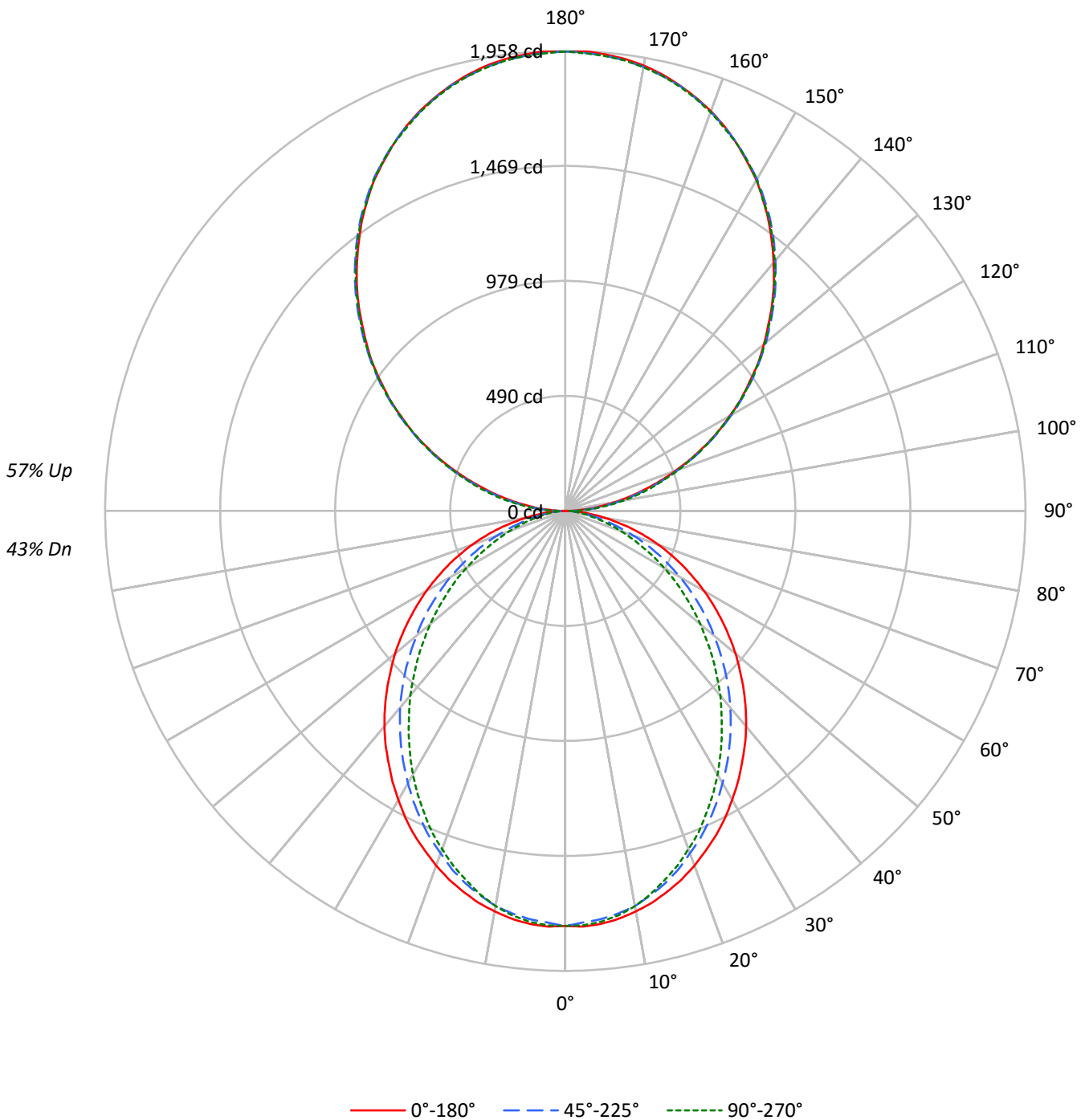
Test Method: LM-79-2019  
Report Number: P1035727  
REPORT IS A COMBINATION OF REPORTS P1006043 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/6/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDIW-B1090D1560UB40-4F0-XX-W2A-F1  
Description: Define 5 Regressed Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865}  
{m-EER=0.951}  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9634.0 lumens  
Efficiency: N/A  
Efficacy: 97.3 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): 99  
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

TEST NUMBER: P1035727  
CATALOG NUMBER: S125RDIW-B1090D1560UB40-4F0-XX-W2A-F1

### Luminous Intensity Polar Plot





TEST NUMBER: P1035727

CATALOG NUMBER: S125RDIW-B1090D1560UB40-4F0-XX-W2A-F1

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| RF  | 20  |     |     |     | 20 |    |    |    | 20 |    |    |    | 20 |    |    |    | 20 |    |    |    |    |
| RC  | 80  |     |     |     | 70 |    |    |    | 50 |    |    |    | 30 |    |    |    | 10 |    |    | 0  |    |
| RW  | 70  | 50  | 30  | 10  | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0  |
| RCR |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 0   | 106 | 106 | 106 | 106 | 97 | 97 | 97 | 97 | 80 | 80 | 80 | 64 | 64 | 64 | 50 | 50 | 50 | 43 |    |    | 43 |
| 1   | 97  | 92  | 89  | 85  | 88 | 85 | 81 | 78 | 70 | 68 | 66 | 57 | 55 | 54 | 45 | 44 | 43 | 37 |    |    | 37 |
| 2   | 88  | 81  | 75  | 70  | 80 | 74 | 69 | 65 | 62 | 58 | 55 | 50 | 47 | 45 | 39 | 38 | 36 | 31 |    |    | 31 |
| 3   | 80  | 71  | 64  | 58  | 73 | 65 | 59 | 54 | 54 | 50 | 46 | 44 | 41 | 38 | 35 | 33 | 31 | 27 |    |    | 27 |
| 4   | 74  | 63  | 55  | 49  | 67 | 58 | 51 | 46 | 48 | 43 | 39 | 40 | 36 | 33 | 31 | 29 | 27 | 23 |    |    | 23 |
| 5   | 68  | 56  | 48  | 42  | 62 | 52 | 45 | 40 | 43 | 38 | 34 | 36 | 32 | 29 | 28 | 26 | 23 | 20 |    |    | 20 |
| 6   | 62  | 50  | 42  | 37  | 57 | 47 | 39 | 34 | 39 | 34 | 30 | 32 | 28 | 25 | 26 | 23 | 21 | 18 |    |    | 18 |
| 7   | 58  | 45  | 38  | 32  | 53 | 42 | 35 | 30 | 35 | 30 | 26 | 29 | 25 | 22 | 24 | 21 | 18 | 16 |    |    | 16 |
| 8   | 53  | 41  | 34  | 28  | 49 | 38 | 31 | 27 | 32 | 27 | 23 | 27 | 23 | 20 | 22 | 19 | 17 | 14 |    |    | 14 |
| 9   | 50  | 38  | 30  | 25  | 45 | 35 | 28 | 24 | 30 | 24 | 21 | 25 | 21 | 18 | 20 | 17 | 15 | 13 |    |    | 13 |
| 10  | 46  | 35  | 27  | 23  | 42 | 32 | 26 | 21 | 27 | 22 | 19 | 23 | 19 | 16 | 19 | 16 | 14 | 12 |    |    | 12 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 11319 | 11319 | 11319 |
| 5°  | 11321 | 11037 | 11055 |
| 10° | 11210 | 10759 | 10664 |
| 15° | 11052 | 10369 | 10150 |
| 20° | 10855 | 9901  | 9611  |
| 25° | 10629 | 9444  | 9034  |
| 30° | 10354 | 8941  | 8427  |
| 35° | 10072 | 8431  | 7783  |
| 40° | 9805  | 7906  | 7153  |
| 45° | 9484  | 7339  | 6494  |
| 50° | 9157  | 6739  | 5823  |
| 55° | 8778  | 6147  | 5127  |
| 60° | 8391  | 5470  | 4407  |
| 65° | 7930  | 4714  | 3629  |
| 70° | 7392  | 3838  | 2856  |
| 75° | 6648  | 2886  | 2082  |
| 80° | 5607  | 1869  | 1403  |
| 85° | 4197  | 1004  | 790   |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 9484 cd/sqm



TEST NUMBER: P1035727

CATALOG NUMBER: S125RDIW-B1090D1560UB40-4F0-XX-W2A-F1

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 166.3  | 1.7       |
| 10°-20°   | 464.7  | 4.8       |
| 20°-30°   | 673.8  | 7.0       |
| 30°-40°   | 767.6  | 8.0       |
| 40°-50°   | 748.2  | 7.8       |
| 50°-60°   | 629.6  | 6.5       |
| 60°-70°   | 441.2  | 4.6       |
| 70°-80°   | 226.2  | 2.3       |
| 80°-90°   | 59.5   | 0.6       |
| 90°-100°  | 130.0  | 1.3       |
| 100°-110° | 386.3  | 4.0       |
| 110°-120° | 655.1  | 6.8       |
| 120°-130° | 862.4  | 9.0       |
| 130°-140° | 966.4  | 10.0      |
| 140°-150° | 947.2  | 9.8       |
| 150°-160° | 795.6  | 8.3       |
| 160°-170° | 528.9  | 5.5       |
| 170°-180° | 185.1  | 1.9       |
| 0°-30°    | 1304.7 | 13.5      |
| 0°-40°    | 2072.3 | 21.5      |
| 0°-60°    | 3450.1 | 35.8      |
| 0°-90°    | 4177.0 | 43.4      |
| 90°-120°  | 1171.4 | 12.2      |
| 90°-150°  | 3947.4 | 41.0      |
| 90°-180°  | 5457.0 | 56.6      |
| 0°-180°   | 9634.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1767 | 1767  | 1767 | 1767  | 1767 |      |
| 5°   | 1764 | 1759  | 1744 | 1757  | 1755 | 167  |
| 15°  | 1677 | 1669  | 1641 | 1640  | 1628 | 473  |
| 25°  | 1521 | 1501  | 1452 | 1434  | 1420 | 700  |
| 35°  | 1310 | 1278  | 1218 | 1180  | 1161 | 821  |
| 45°  | 1073 | 1034  | 961  | 907   | 887  | 827  |
| 55°  | 814  | 771   | 696  | 636   | 615  | 728  |
| 65°  | 551  | 506   | 435  | 382   | 362  | 546  |
| 75°  | 294  | 254   | 198  | 168   | 159  | 310  |
| 85°  | 73   | 49    | 43   | 41    | 40   | 80   |
| 90°  | 2    | 14    | 24   | 32    | 36   | 11   |
| 95°  | 99   | 102   | 117  | 128   | 131  | 103  |
| 105° | 347  | 354   | 364  | 373   | 377  | 370  |
| 115° | 656  | 662   | 665  | 663   | 662  | 649  |
| 125° | 957  | 966   | 968  | 965   | 963  | 858  |
| 135° | 1245 | 1254  | 1255 | 1255  | 1249 | 959  |
| 145° | 1508 | 1514  | 1519 | 1519  | 1514 | 943  |
| 155° | 1726 | 1726  | 1727 | 1733  | 1726 | 795  |
| 165° | 1876 | 1873  | 1875 | 1881  | 1872 | 529  |
| 175° | 1951 | 1945  | 1945 | 1954  | 1943 | 185  |
| 180° | 1955 | 1955  | 1955 | 1955  | 1955 |      |



TEST NUMBER: P1035727

CATALOG NUMBER: S125RDIW-B1090D1560UB40-4F0-XX-W2A-F1

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1766.7 | 1766.7 | 1766.7 | 1766.7 | 1766.7 |
| 2.5°   | 1770.7 | 1766.7 | 1753.3 | 1766.7 | 1765.3 |
| 5°     | 1764.0 | 1758.7 | 1744.0 | 1757.3 | 1754.7 |
| 7.5°   | 1750.7 | 1745.3 | 1728.0 | 1738.6 | 1736.0 |
| 10°    | 1730.6 | 1726.6 | 1708.0 | 1712.0 | 1708.0 |
| 12.5°  | 1708.0 | 1702.6 | 1675.9 | 1678.6 | 1671.9 |
| 15°    | 1677.3 | 1669.3 | 1641.2 | 1639.9 | 1627.9 |
| 17.5°  | 1645.2 | 1633.2 | 1599.9 | 1593.2 | 1583.9 |
| 20°    | 1606.5 | 1593.2 | 1550.5 | 1543.8 | 1531.8 |
| 22.5°  | 1563.8 | 1550.5 | 1505.1 | 1490.5 | 1481.1 |
| 25°    | 1521.1 | 1501.1 | 1451.8 | 1434.4 | 1419.7 |
| 27.5°  | 1473.1 | 1449.1 | 1397.1 | 1374.4 | 1359.7 |
| 30°    | 1419.7 | 1394.4 | 1338.3 | 1307.7 | 1295.6 |
| 32.5°  | 1367.7 | 1337.0 | 1279.6 | 1244.9 | 1228.9 |
| 35°    | 1310.3 | 1278.3 | 1218.3 | 1179.6 | 1160.9 |
| 37.5°  | 1255.6 | 1216.9 | 1155.5 | 1110.2 | 1091.5 |
| 40°    | 1196.9 | 1156.9 | 1092.8 | 1042.1 | 1026.1 |
| 42.5°  | 1135.5 | 1094.2 | 1027.4 | 979.4  | 954.1  |
| 45°    | 1072.8 | 1034.1 | 960.7  | 907.4  | 887.3  |
| 47.5°  | 1007.4 | 967.4  | 894.0  | 839.3  | 816.6  |
| 50°    | 946.0  | 902.0  | 826.0  | 769.9  | 749.9  |
| 52.5°  | 879.3  | 834.0  | 763.2  | 701.9  | 681.8  |
| 55°    | 813.9  | 771.2  | 696.5  | 636.5  | 615.1  |
| 57.5°  | 747.2  | 701.9  | 629.8  | 571.1  | 552.4  |
| 60°    | 683.2  | 636.5  | 564.4  | 505.7  | 485.7  |
| 62.5°  | 615.1  | 571.1  | 497.7  | 444.3  | 424.3  |
| 65°    | 551.1  | 505.7  | 435.0  | 381.6  | 361.6  |
| 67.5°  | 487.0  | 441.7  | 373.6  | 322.9  | 306.9  |
| 70°    | 421.7  | 376.3  | 309.6  | 268.2  | 252.2  |
| 72.5°  | 357.6  | 313.6  | 252.2  | 214.8  | 205.5  |
| 75°    | 293.6  | 253.5  | 197.5  | 168.1  | 158.8  |
| 77.5°  | 228.2  | 196.1  | 149.4  | 126.8  | 118.8  |
| 80°    | 173.5  | 141.4  | 104.1  | 92.1   | 89.4   |
| 82.5°  | 120.1  | 92.1   | 69.4   | 65.4   | 64.0   |
| 85°    | 73.4   | 49.4   | 42.7   | 41.4   | 40.0   |
| 87.5°  | 30.7   | 21.3   | 20.0   | 20.0   | 18.7   |
| 90°    | 1.5    | 13.7   | 24.3   | 32.0   | 36.5   |
| 92.5°  | 45.6   | 53.3   | 67.0   | 77.6   | 80.6   |
| 95°    | 98.9   | 101.9  | 117.2  | 127.8  | 130.9  |
| 97.5°  | 152.2  | 153.7  | 175.0  | 184.1  | 185.6  |
| 100°   | 213.0  | 213.0  | 232.8  | 246.5  | 249.5  |
| 102.5° | 278.5  | 286.1  | 293.7  | 308.9  | 313.4  |
| 105°   | 346.9  | 354.5  | 363.7  | 372.8  | 377.4  |
| 107.5° | 421.5  | 429.1  | 436.7  | 441.3  | 441.3  |
| 110°   | 499.1  | 506.7  | 511.3  | 515.8  | 514.3  |



TEST NUMBER: P1035727

CATALOG NUMBER: S125RDIW-B1090D1560UB40-4F0-XX-W2A-F1

**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 578.2  | 581.3  | 587.3  | 588.9  | 585.8  |
| 115°   | 655.8  | 661.9  | 664.9  | 663.4  | 661.9  |
| 117.5° | 734.9  | 736.5  | 739.5  | 741.0  | 734.9  |
| 120°   | 808.0  | 815.6  | 817.1  | 817.1  | 811.0  |
| 122.5° | 887.1  | 888.6  | 893.2  | 891.7  | 887.1  |
| 125°   | 957.1  | 966.2  | 967.7  | 964.7  | 963.2  |
| 127.5° | 1034.7 | 1039.3 | 1040.8 | 1039.3 | 1036.2 |
| 130°   | 1103.2 | 1110.8 | 1113.8 | 1112.3 | 1109.2 |
| 132.5° | 1171.6 | 1185.3 | 1183.8 | 1182.3 | 1177.7 |
| 135°   | 1244.7 | 1253.8 | 1255.3 | 1255.3 | 1249.2 |
| 137.5° | 1313.1 | 1322.3 | 1325.3 | 1326.8 | 1319.2 |
| 140°   | 1378.6 | 1386.2 | 1390.7 | 1393.8 | 1386.2 |
| 142.5° | 1444.0 | 1450.1 | 1456.2 | 1457.7 | 1450.1 |
| 145°   | 1507.9 | 1514.0 | 1518.6 | 1518.6 | 1514.0 |
| 147.5° | 1567.2 | 1571.8 | 1574.9 | 1579.4 | 1567.2 |
| 150°   | 1626.6 | 1625.1 | 1631.2 | 1631.2 | 1628.1 |
| 152.5° | 1675.3 | 1678.3 | 1679.8 | 1684.4 | 1678.3 |
| 155°   | 1725.5 | 1725.5 | 1727.0 | 1733.1 | 1725.5 |
| 157.5° | 1771.1 | 1768.1 | 1769.6 | 1775.7 | 1765.1 |
| 160°   | 1810.7 | 1806.1 | 1807.7 | 1813.7 | 1806.1 |
| 162.5° | 1845.7 | 1842.7 | 1842.7 | 1850.3 | 1841.1 |
| 165°   | 1876.1 | 1873.1 | 1874.6 | 1880.7 | 1871.6 |
| 167.5° | 1903.5 | 1897.4 | 1897.4 | 1906.6 | 1897.4 |
| 170°   | 1924.8 | 1918.7 | 1918.7 | 1927.9 | 1917.2 |
| 172.5° | 1940.0 | 1934.0 | 1934.0 | 1943.1 | 1934.0 |
| 175°   | 1950.7 | 1944.6 | 1944.6 | 1953.7 | 1943.1 |
| 177.5° | 1958.3 | 1952.2 | 1950.7 | 1959.8 | 1949.2 |
| 180°   | 1955.3 | 1955.3 | 1955.3 | 1955.3 | 1955.3 |

(END OF REPORT)