

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: P1034353

Luminaire Tested: S125DIW-B1090D1560UB2750-4F0-XX-W2A-D\_5000K

Issue Date: 5/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1034353  
REPORT IS A COMBINATION OF REPORTS P1002873 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125DIW-B1090D1560UB2750-4F0-XX-W2A-D\_5000K  
Description: Define 5 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}  
Light Source: -  
Ballast/Driver: -

**Summary**

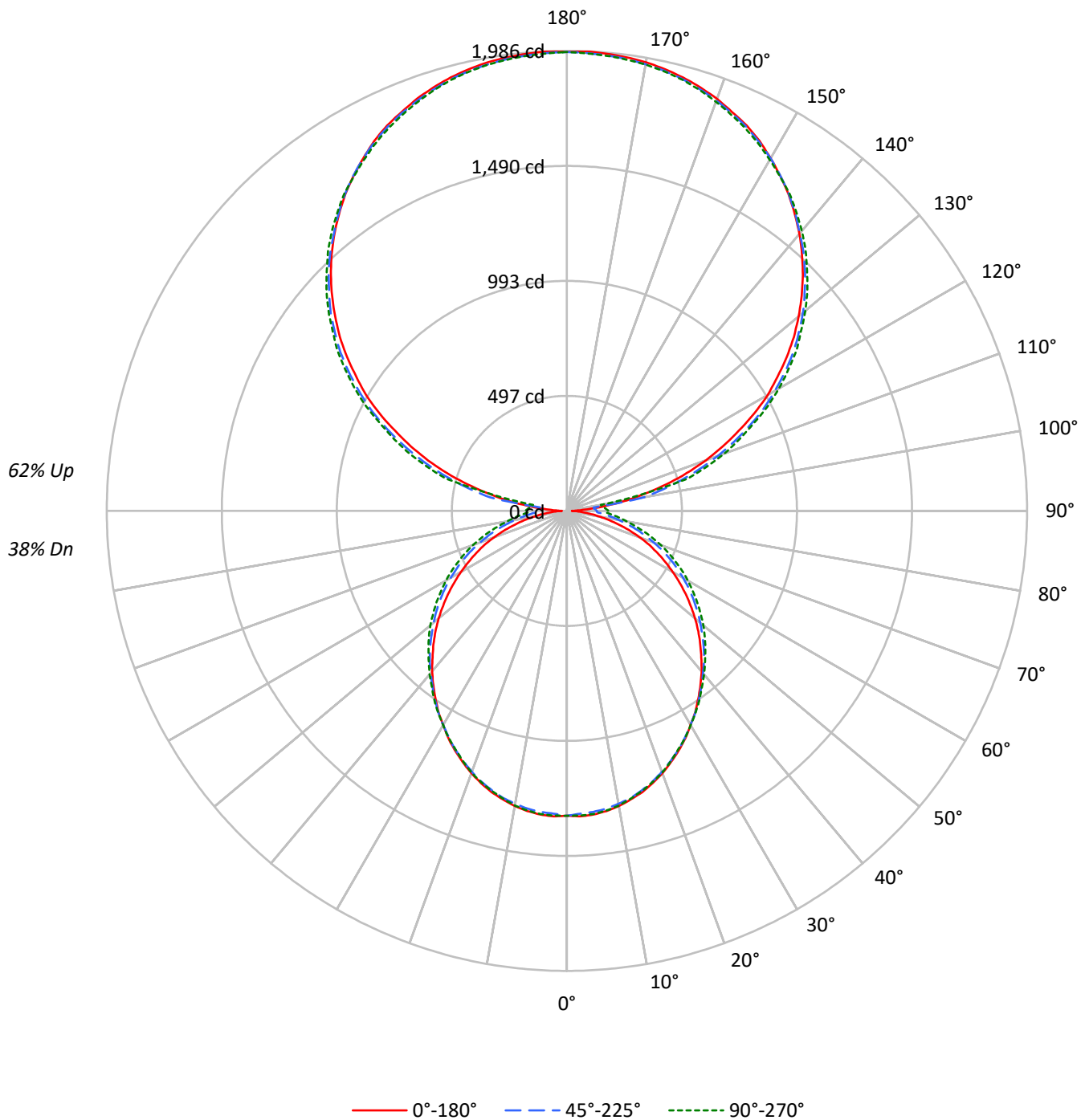
Lumens per Lamp: N/A  
Luminaire Lumens: 10166.0 lumens  
Efficiency: N/A  
Efficacy: 102.7 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')  
CIE Type: Semi-Indirect

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

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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   | 104 | 104 | 104 | 104 | 95 | 95 | 95 | 95 | 76 | 76 | 76 | 60 | 60 | 60 | 45 | 45 | 45 |    |    | 38 |
| 1   | 94  | 90  | 86  | 82  | 85 | 82 | 78 | 75 | 66 | 64 | 62 | 52 | 50 | 49 | 39 | 38 | 37 |    |    | 31 |
| 2   | 86  | 78  | 72  | 67  | 77 | 71 | 66 | 61 | 58 | 54 | 50 | 45 | 43 | 40 | 34 | 32 | 30 |    |    | 25 |
| 3   | 78  | 69  | 61  | 55  | 70 | 62 | 56 | 51 | 51 | 46 | 42 | 40 | 36 | 34 | 30 | 28 | 26 |    |    | 21 |
| 4   | 71  | 60  | 53  | 46  | 64 | 55 | 48 | 43 | 45 | 40 | 36 | 35 | 32 | 29 | 26 | 24 | 22 |    |    | 18 |
| 5   | 65  | 54  | 46  | 40  | 59 | 49 | 42 | 37 | 40 | 35 | 31 | 32 | 28 | 25 | 24 | 21 | 19 |    |    | 15 |
| 6   | 60  | 48  | 40  | 34  | 54 | 44 | 37 | 32 | 36 | 31 | 27 | 28 | 25 | 22 | 21 | 19 | 17 |    |    | 14 |
| 7   | 55  | 43  | 35  | 30  | 50 | 40 | 33 | 28 | 32 | 27 | 23 | 26 | 22 | 19 | 20 | 17 | 15 |    |    | 12 |
| 8   | 51  | 39  | 31  | 26  | 46 | 36 | 29 | 24 | 29 | 24 | 21 | 24 | 20 | 17 | 18 | 15 | 13 |    |    | 11 |
| 9   | 48  | 36  | 28  | 23  | 43 | 33 | 26 | 22 | 27 | 22 | 18 | 22 | 18 | 15 | 17 | 14 | 12 |    |    | 10 |
| 10  | 45  | 33  | 25  | 21  | 40 | 30 | 24 | 19 | 25 | 20 | 16 | 20 | 16 | 14 | 15 | 13 | 11 |    |    | 9  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 8432 | 8432 | 8432 |
| 5°  | 8446 | 8256 | 8275 |
| 10° | 8382 | 8087 | 8064 |
| 15° | 8280 | 7891 | 7804 |
| 20° | 8143 | 7655 | 7545 |
| 25° | 7980 | 7403 | 7233 |
| 30° | 7782 | 7129 | 6949 |
| 35° | 7598 | 6875 | 6687 |
| 40° | 7410 | 6609 | 6423 |
| 45° | 7198 | 6378 | 6185 |
| 50° | 6994 | 6126 | 5971 |
| 55° | 6749 | 5888 | 5722 |
| 60° | 6481 | 5614 | 5467 |
| 65° | 6202 | 5327 | 5180 |
| 70° | 5881 | 4943 | 4881 |
| 75° | 5375 | 4562 | 4516 |
| 80° | 4712 | 4101 | 4112 |
| 85° | 4059 | 3732 | 3899 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 7198 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 124.5   | 1.2       |
| 10°-20°   | 353.5   | 3.5       |
| 20°-30°   | 525.7   | 5.2       |
| 30°-40°   | 622.6   | 6.1       |
| 40°-50°   | 643.7   | 6.3       |
| 50°-60°   | 593.0   | 5.8       |
| 60°-70°   | 479.3   | 4.7       |
| 70°-80°   | 320.7   | 3.2       |
| 80°-90°   | 168.7   | 1.7       |
| 90°-100°  | 160.6   | 1.6       |
| 100°-110° | 516.0   | 5.1       |
| 110°-120° | 851.3   | 8.4       |
| 120°-130° | 1059.7  | 10.4      |
| 130°-140° | 1123.1  | 11.0      |
| 140°-150° | 1045.6  | 10.3      |
| 150°-160° | 843.9   | 8.3       |
| 160°-170° | 545.8   | 5.4       |
| 170°-180° | 188.2   | 1.9       |
| 0°-30°    | 1003.8  | 9.9       |
| 0°-40°    | 1626.4  | 16.0      |
| 0°-60°    | 2863.1  | 28.2      |
| 0°-90°    | 3831.9  | 37.7      |
| 90°-120°  | 1527.9  | 15.0      |
| 90°-150°  | 4756.2  | 46.8      |
| 90°-180°  | 6334.0  | 62.3      |
| 0°-180°   | 10166.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1316 | 1316  | 1316 | 1316  | 1316 |      |
| 5°   | 1316 | 1314  | 1304 | 1315  | 1314 | 125  |
| 15°  | 1257 | 1258  | 1249 | 1257  | 1252 | 354  |
| 25°  | 1142 | 1146  | 1138 | 1143  | 1137 | 526  |
| 35°  | 988  | 997   | 994  | 997   | 997  | 619  |
| 45°  | 814  | 828   | 835  | 844   | 845  | 628  |
| 55°  | 626  | 646   | 667  | 681   | 686  | 559  |
| 65°  | 431  | 461   | 492  | 511   | 516  | 428  |
| 75°  | 237  | 271   | 312  | 338   | 344  | 252  |
| 85°  | 71   | 114   | 159  | 187   | 197  | 74   |
| 90°  | 22   | 75    | 129  | 166   | 180  | 19   |
| 95°  | 100  | 130   | 118  | 153   | 162  | 116  |
| 105° | 443  | 470   | 509  | 534   | 542  | 470  |
| 115° | 818  | 835   | 870  | 887   | 886  | 811  |
| 125° | 1158 | 1167  | 1193 | 1208  | 1210 | 1034 |
| 135° | 1440 | 1448  | 1454 | 1468  | 1466 | 1111 |
| 145° | 1668 | 1670  | 1670 | 1678  | 1674 | 1043 |
| 155° | 1836 | 1827  | 1830 | 1834  | 1823 | 846  |
| 165° | 1937 | 1928  | 1930 | 1939  | 1927 | 547  |
| 175° | 1981 | 1972  | 1974 | 1986  | 1972 | 189  |
| 180° | 1981 | 1981  | 1981 | 1981  | 1981 |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1316.1 | 1316.1 | 1316.1 | 1316.1 | 1316.1 |
| 2.5°   | 1320.0 | 1317.4 | 1308.3 | 1317.4 | 1316.1 |
| 5°     | 1316.1 | 1313.5 | 1304.5 | 1314.8 | 1313.5 |
| 7.5°   | 1307.1 | 1305.8 | 1296.7 | 1305.8 | 1304.5 |
| 10°    | 1294.1 | 1294.1 | 1283.8 | 1292.9 | 1291.6 |
| 12.5°  | 1276.1 | 1277.4 | 1269.6 | 1276.1 | 1272.2 |
| 15°    | 1256.7 | 1258.0 | 1249.0 | 1256.7 | 1251.6 |
| 17.5°  | 1232.2 | 1234.8 | 1225.8 | 1232.2 | 1228.3 |
| 20°    | 1205.1 | 1207.7 | 1198.7 | 1202.5 | 1202.5 |
| 22.5°  | 1174.2 | 1179.3 | 1169.0 | 1174.2 | 1170.3 |
| 25°    | 1141.9 | 1145.8 | 1138.0 | 1143.2 | 1136.7 |
| 27.5°  | 1107.1 | 1112.2 | 1103.2 | 1107.1 | 1104.5 |
| 30°    | 1067.1 | 1074.8 | 1067.1 | 1069.6 | 1068.4 |
| 32.5°  | 1030.9 | 1037.4 | 1032.2 | 1034.8 | 1033.5 |
| 35°    | 988.4  | 997.4  | 993.5  | 997.4  | 997.4  |
| 37.5°  | 947.1  | 954.8  | 953.5  | 958.7  | 957.4  |
| 40°    | 904.5  | 914.8  | 913.5  | 918.7  | 921.3  |
| 42.5°  | 858.0  | 872.2  | 876.1  | 882.6  | 882.6  |
| 45°    | 814.2  | 828.4  | 834.8  | 843.8  | 845.1  |
| 47.5°  | 769.0  | 781.9  | 792.2  | 805.1  | 807.7  |
| 50°    | 722.6  | 736.7  | 750.9  | 765.1  | 769.0  |
| 52.5°  | 673.5  | 691.6  | 709.7  | 725.1  | 727.7  |
| 55°    | 625.8  | 646.4  | 667.1  | 681.3  | 686.4  |
| 57.5°  | 576.8  | 601.3  | 624.5  | 640.0  | 643.8  |
| 60°    | 527.7  | 553.5  | 579.3  | 598.7  | 602.6  |
| 62.5°  | 480.0  | 505.8  | 534.2  | 556.1  | 561.3  |
| 65°    | 431.0  | 460.6  | 491.6  | 511.0  | 516.1  |
| 67.5°  | 385.8  | 414.2  | 445.1  | 468.4  | 474.8  |
| 70°    | 335.5  | 365.1  | 398.7  | 423.2  | 431.0  |
| 72.5°  | 286.4  | 317.4  | 354.8  | 381.9  | 387.1  |
| 75°    | 237.4  | 271.0  | 312.2  | 338.1  | 344.5  |
| 77.5°  | 189.7  | 228.4  | 267.1  | 295.5  | 300.6  |
| 80°    | 145.8  | 184.5  | 228.4  | 256.8  | 261.9  |
| 82.5°  | 105.8  | 147.1  | 192.3  | 219.3  | 229.7  |
| 85°    | 71.0   | 113.5  | 158.7  | 187.1  | 197.4  |
| 87.5°  | 45.2   | 86.4   | 130.3  | 160.0  | 169.0  |
| 90°    | 22.1   | 75.1   | 129.3  | 166.3  | 179.7  |
| 92.5°  | 46.0   | 70.2   | 124.1  | 159.8  | 170.4  |
| 95°    | 100.5  | 129.6  | 117.7  | 153.4  | 162.4  |
| 97.5°  | 172.7  | 212.5  | 115.4  | 145.5  | 156.0  |
| 100°   | 259.5  | 291.0  | 338.2  | 146.4  | 148.2  |
| 102.5° | 347.8  | 378.1  | 421.1  | 449.8  | 334.2  |
| 105°   | 443.4  | 470.0  | 508.7  | 534.5  | 542.0  |
| 107.5° | 542.0  | 560.1  | 600.4  | 627.7  | 629.6  |
| 110°   | 637.6  | 653.1  | 692.1  | 712.3  | 722.8  |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 728.7  | 744.7  | 781.0  | 798.4  | 804.4  |
| 115°   | 818.4  | 834.9  | 869.8  | 887.2  | 886.1  |
| 117.5° | 912.7  | 919.1  | 957.3  | 970.4  | 976.4  |
| 120°   | 1000.8 | 1003.1 | 1037.2 | 1056.2 | 1056.7 |
| 122.5° | 1077.4 | 1086.0 | 1115.8 | 1133.5 | 1132.4 |
| 125°   | 1158.1 | 1167.1 | 1192.9 | 1207.6 | 1209.7 |
| 127.5° | 1234.7 | 1240.7 | 1261.1 | 1277.6 | 1273.6 |
| 130°   | 1305.2 | 1311.2 | 1330.7 | 1344.4 | 1343.5 |
| 132.5° | 1374.4 | 1383.2 | 1391.7 | 1409.7 | 1407.5 |
| 135°   | 1440.5 | 1448.0 | 1454.0 | 1467.9 | 1465.5 |
| 137.5° | 1502.1 | 1509.7 | 1511.9 | 1527.3 | 1525.2 |
| 140°   | 1561.1 | 1564.0 | 1563.8 | 1581.0 | 1577.3 |
| 142.5° | 1615.4 | 1615.6 | 1618.5 | 1630.1 | 1626.5 |
| 145°   | 1668.3 | 1669.9 | 1669.9 | 1677.9 | 1674.2 |
| 147.5° | 1714.0 | 1714.0 | 1715.4 | 1719.5 | 1711.8 |
| 150°   | 1758.0 | 1755.1 | 1758.0 | 1761.0 | 1750.5 |
| 152.5° | 1800.6 | 1793.3 | 1796.2 | 1799.2 | 1788.9 |
| 155°   | 1835.9 | 1827.1 | 1830.0 | 1834.4 | 1822.7 |
| 157.5° | 1863.8 | 1859.4 | 1859.4 | 1863.8 | 1852.0 |
| 160°   | 1893.2 | 1884.3 | 1885.8 | 1891.7 | 1879.9 |
| 162.5° | 1916.7 | 1907.8 | 1909.3 | 1918.1 | 1904.9 |
| 165°   | 1937.2 | 1928.4 | 1929.9 | 1938.7 | 1926.9 |
| 167.5° | 1953.4 | 1944.6 | 1946.0 | 1956.3 | 1943.1 |
| 170°   | 1966.6 | 1956.3 | 1957.8 | 1969.5 | 1956.3 |
| 172.5° | 1975.4 | 1965.1 | 1968.1 | 1978.3 | 1965.1 |
| 175°   | 1981.3 | 1972.5 | 1973.9 | 1985.7 | 1972.5 |
| 177.5° | 1985.7 | 1976.9 | 1978.3 | 1988.6 | 1976.9 |
| 180°   | 1981.3 | 1981.3 | 1981.3 | 1981.3 | 1981.3 |

(END OF REPORT)