

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: P1035457

Luminaire Tested: S125DIW-B610D1560UB40-4F0-XX-W2A-D

Issue Date: 5/6/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1035457  
REPORT IS A COMBINATION OF REPORTS P1003892 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/6/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125DIW-B610D1560UB40-4F0-XX-W2A-D  
Description: Define 5 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}  
Light Source: -  
Ballast/Driver: -

**Summary**

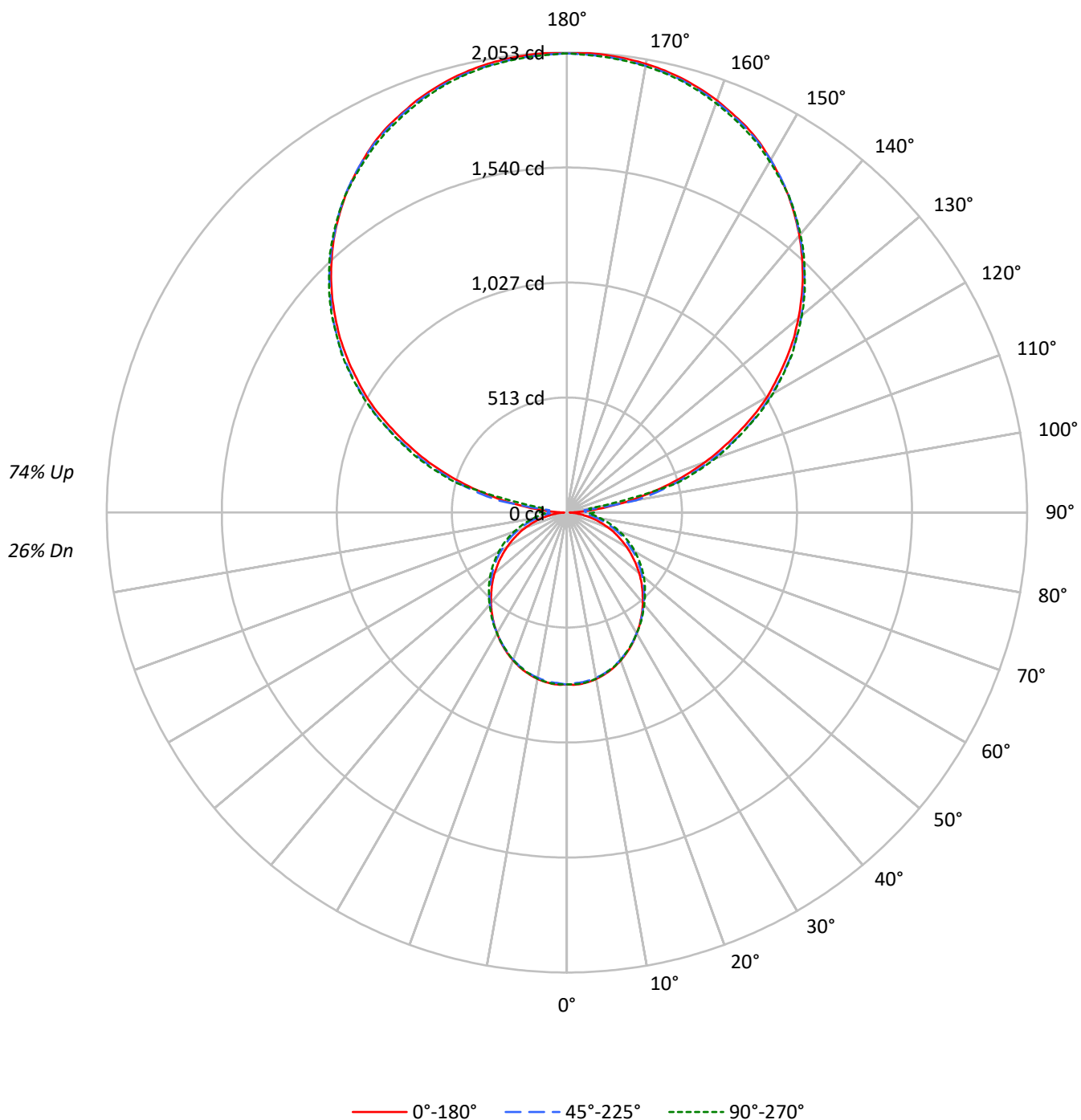
Lumens per Lamp: N/A  
Luminaire Lumens: 8673.0 lumens  
Efficiency: N/A  
Efficacy: 113.8 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')  
CIE Type: Semi-Indirect

Input Watts (W): 76.2  
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   | 101 | 101 | 101 | 101 | 90 | 90 | 90 | 90 | 70 | 70 | 70 | 51 | 51 | 51 | 34 | 34 | 34 |
| 1   | 92  | 88  | 84  | 80  | 82 | 78 | 75 | 72 | 61 | 58 | 56 | 44 | 43 | 42 | 29 | 28 | 28 |
| 2   | 84  | 76  | 70  | 65  | 74 | 68 | 63 | 59 | 53 | 49 | 46 | 39 | 36 | 34 | 26 | 24 | 23 |
| 3   | 76  | 67  | 60  | 54  | 67 | 60 | 54 | 49 | 46 | 42 | 39 | 34 | 31 | 29 | 22 | 21 | 19 |
| 4   | 69  | 59  | 51  | 45  | 62 | 53 | 46 | 41 | 41 | 36 | 33 | 30 | 27 | 25 | 20 | 18 | 17 |
| 5   | 64  | 52  | 44  | 39  | 56 | 47 | 40 | 35 | 37 | 32 | 28 | 27 | 24 | 21 | 18 | 16 | 14 |
| 6   | 58  | 47  | 39  | 33  | 52 | 42 | 35 | 30 | 33 | 28 | 24 | 24 | 21 | 18 | 16 | 14 | 13 |
| 7   | 54  | 42  | 34  | 29  | 48 | 38 | 31 | 26 | 30 | 25 | 21 | 22 | 19 | 16 | 15 | 13 | 11 |
| 8   | 50  | 38  | 30  | 25  | 44 | 34 | 28 | 23 | 27 | 22 | 19 | 20 | 17 | 14 | 14 | 11 | 10 |
| 9   | 46  | 34  | 27  | 22  | 41 | 31 | 25 | 20 | 24 | 20 | 16 | 18 | 15 | 13 | 12 | 10 | 9  |
| 10  | 43  | 31  | 24  | 20  | 38 | 28 | 22 | 18 | 22 | 18 | 15 | 17 | 14 | 11 | 12 | 9  | 8  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 4916 | 4916 | 4916 |
| 5°  | 4924 | 4813 | 4825 |
| 10° | 4887 | 4715 | 4702 |
| 15° | 4828 | 4601 | 4550 |
| 20° | 4747 | 4463 | 4399 |
| 25° | 4653 | 4316 | 4217 |
| 30° | 4537 | 4156 | 4051 |
| 35° | 4429 | 4008 | 3898 |
| 40° | 4320 | 3853 | 3744 |
| 45° | 4196 | 3718 | 3606 |
| 50° | 4078 | 3572 | 3482 |
| 55° | 3934 | 3432 | 3336 |
| 60° | 3779 | 3274 | 3187 |
| 65° | 3616 | 3106 | 3020 |
| 70° | 3429 | 2882 | 2846 |
| 75° | 3134 | 2659 | 2633 |
| 80° | 2747 | 2391 | 2397 |
| 85° | 2367 | 2175 | 2274 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
Vertical Angle: 45°  
Luminance: 4196 cd/sqm

TEST NUMBER: P1035457

CATALOG NUMBER: S125DIW-B610D1560UB40-4F0-XX-W2A-D

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 72.6   | 0.8       |
| 10°-20°   | 206.1  | 2.4       |
| 20°-30°   | 306.5  | 3.5       |
| 30°-40°   | 363.0  | 4.2       |
| 40°-50°   | 375.3  | 4.3       |
| 50°-60°   | 345.7  | 4.0       |
| 60°-70°   | 279.5  | 3.2       |
| 70°-80°   | 187.0  | 2.2       |
| 80°-90°   | 99.7   | 1.1       |
| 90°-100°  | 124.0  | 1.4       |
| 100°-110° | 502.5  | 5.8       |
| 110°-120° | 859.5  | 9.9       |
| 120°-130° | 1083.9 | 12.5      |
| 130°-140° | 1156.1 | 13.3      |
| 140°-150° | 1080.1 | 12.5      |
| 150°-160° | 872.6  | 10.1      |
| 160°-170° | 564.3  | 6.5       |
| 170°-180° | 194.6  | 2.2       |
| 0°-30°    | 585.2  | 6.7       |
| 0°-40°    | 948.2  | 10.9      |
| 0°-60°    | 1669.2 | 19.2      |
| 0°-90°    | 2235.4 | 25.8      |
| 90°-120°  | 1485.9 | 17.1      |
| 90°-150°  | 4806.0 | 55.4      |
| 90°-180°  | 6438.0 | 74.2      |
| 0°-180°   | 8673.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 767  | 767   | 767  | 767   | 767  |      |
| 5°   | 767  | 766   | 760  | 767   | 766  | 73   |
| 15°  | 733  | 734   | 728  | 733   | 730  | 206  |
| 25°  | 666  | 668   | 664  | 666   | 663  | 307  |
| 35°  | 576  | 582   | 579  | 582   | 582  | 361  |
| 45°  | 475  | 483   | 487  | 492   | 493  | 366  |
| 55°  | 365  | 377   | 389  | 397   | 400  | 326  |
| 65°  | 251  | 269   | 287  | 298   | 301  | 249  |
| 75°  | 138  | 158   | 182  | 197   | 201  | 147  |
| 85°  | 41   | 66    | 92   | 109   | 115  | 43   |
| 90°  | 14   | 50    | 86   | 111   | 121  | 13   |
| 95°  | 96   | 111   | 79   | 103   | 109  | 114  |
| 105° | 453  | 471   | 494  | 509   | 513  | 480  |
| 115° | 843  | 856   | 877  | 884   | 880  | 836  |
| 125° | 1195 | 1205  | 1220 | 1226  | 1225 | 1067 |
| 135° | 1488 | 1497  | 1499 | 1506  | 1500 | 1147 |
| 145° | 1724 | 1727  | 1727 | 1732  | 1726 | 1078 |
| 155° | 1898 | 1889  | 1892 | 1897  | 1885 | 875  |
| 165° | 2003 | 1994  | 1996 | 2005  | 1992 | 566  |
| 175° | 2049 | 2040  | 2041 | 2053  | 2040 | 195  |
| 180° | 2049 | 2049  | 2049 | 2049  | 2049 |      |

TEST NUMBER: P1035457

CATALOG NUMBER: S125DIW-B610D1560UB40-4F0-XX-W2A-D

**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 0°     | 767.3 | 767.3 | 767.3 | 767.3 | 767.3 |
| 2.5°   | 769.6 | 768.1 | 762.8 | 768.1 | 767.3 |
| 5°     | 767.3 | 765.8 | 760.5 | 766.6 | 765.8 |
| 7.5°   | 762.0 | 761.3 | 756.0 | 761.3 | 760.5 |
| 10°    | 754.5 | 754.5 | 748.5 | 753.8 | 753.0 |
| 12.5°  | 744.0 | 744.7 | 740.2 | 744.0 | 741.7 |
| 15°    | 732.7 | 733.5 | 728.2 | 732.7 | 729.7 |
| 17.5°  | 718.4 | 719.9 | 714.7 | 718.4 | 716.2 |
| 20°    | 702.6 | 704.1 | 698.9 | 701.1 | 701.1 |
| 22.5°  | 684.6 | 687.6 | 681.6 | 684.6 | 682.3 |
| 25°    | 665.8 | 668.0 | 663.5 | 666.5 | 662.7 |
| 27.5°  | 645.4 | 648.5 | 643.2 | 645.4 | 643.9 |
| 30°    | 622.1 | 626.6 | 622.1 | 623.6 | 622.9 |
| 32.5°  | 601.1 | 604.8 | 601.8 | 603.3 | 602.6 |
| 35°    | 576.2 | 581.5 | 579.2 | 581.5 | 581.5 |
| 37.5°  | 552.2 | 556.7 | 555.9 | 558.9 | 558.2 |
| 40°    | 527.3 | 533.4 | 532.6 | 535.6 | 537.1 |
| 42.5°  | 500.3 | 508.5 | 510.8 | 514.6 | 514.6 |
| 45°    | 474.7 | 483.0 | 486.7 | 492.0 | 492.7 |
| 47.5°  | 448.4 | 455.9 | 461.9 | 469.4 | 470.9 |
| 50°    | 421.3 | 429.5 | 437.8 | 446.1 | 448.4 |
| 52.5°  | 392.7 | 403.2 | 413.7 | 422.8 | 424.3 |
| 55°    | 364.8 | 376.9 | 388.9 | 397.2 | 400.2 |
| 57.5°  | 336.3 | 350.6 | 364.1 | 373.1 | 375.4 |
| 60°    | 307.7 | 322.7 | 337.8 | 349.1 | 351.3 |
| 62.5°  | 279.8 | 294.9 | 311.4 | 324.2 | 327.2 |
| 65°    | 251.3 | 268.6 | 286.6 | 297.9 | 300.9 |
| 67.5°  | 224.9 | 241.5 | 259.5 | 273.1 | 276.8 |
| 70°    | 195.6 | 212.9 | 232.5 | 246.7 | 251.3 |
| 72.5°  | 167.0 | 185.1 | 206.9 | 222.7 | 225.7 |
| 75°    | 138.4 | 158.0 | 182.0 | 197.1 | 200.9 |
| 77.5°  | 110.6 | 133.2 | 155.7 | 172.3 | 175.3 |
| 80°    | 85.0  | 107.6 | 133.2 | 149.7 | 152.7 |
| 82.5°  | 61.7  | 85.8  | 112.1 | 127.9 | 133.9 |
| 85°    | 41.4  | 66.2  | 92.5  | 109.1 | 115.1 |
| 87.5°  | 26.3  | 50.4  | 76.0  | 93.3  | 98.5  |
| 90°    | 13.5  | 49.8  | 86.0  | 110.9 | 120.7 |
| 92.5°  | 39.4  | 47.5  | 83.0  | 107.1 | 113.9 |
| 95°    | 96.4  | 111.3 | 79.2  | 103.4 | 108.6 |
| 97.5°  | 171.5 | 198.7 | 79.2  | 98.1  | 104.9 |
| 100°   | 261.9 | 282.3 | 312.3 | 101.9 | 100.4 |
| 102.5° | 353.7 | 374.1 | 400.5 | 418.6 | 295.5 |
| 105°   | 453.3 | 471.4 | 494.0 | 509.0 | 512.7 |
| 107.5° | 555.7 | 566.2 | 591.2 | 607.7 | 606.1 |
| 110°   | 655.3 | 664.3 | 688.4 | 698.1 | 704.9 |

TEST NUMBER: P1035457

CATALOG NUMBER: S125DIW-B610D1560UB40-4F0-XX-W2A-D

**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 749.4  | 760.7  | 782.5  | 790.0  | 792.3  |
| 115°   | 842.8  | 855.7  | 876.7  | 884.2  | 879.6  |
| 117.5° | 940.8  | 944.5  | 969.4  | 973.1  | 975.3  |
| 120°   | 1031.9 | 1032.6 | 1054.4 | 1064.2 | 1061.1 |
| 122.5° | 1111.6 | 1120.0 | 1138.0 | 1147.0 | 1142.5 |
| 125°   | 1195.1 | 1205.1 | 1220.1 | 1226.0 | 1225.2 |
| 127.5° | 1274.9 | 1281.7 | 1293.0 | 1301.2 | 1293.6 |
| 130°   | 1347.8 | 1354.6 | 1366.6 | 1372.7 | 1368.8 |
| 132.5° | 1419.9 | 1429.0 | 1432.0 | 1442.6 | 1438.0 |
| 135°   | 1488.2 | 1496.6 | 1498.8 | 1505.6 | 1500.3 |
| 137.5° | 1552.0 | 1560.4 | 1560.4 | 1569.4 | 1564.8 |
| 140°   | 1613.6 | 1616.6 | 1615.8 | 1627.1 | 1621.0 |
| 142.5° | 1669.8 | 1670.5 | 1673.5 | 1680.3 | 1674.2 |
| 145°   | 1724.4 | 1726.7 | 1726.7 | 1732.0 | 1725.9 |
| 147.5° | 1772.2 | 1772.2 | 1773.8 | 1776.8 | 1767.6 |
| 150°   | 1817.8 | 1814.8 | 1817.8 | 1820.8 | 1809.5 |
| 152.5° | 1861.8 | 1854.2 | 1857.3 | 1860.3 | 1849.7 |
| 155°   | 1898.3 | 1889.2 | 1892.2 | 1896.8 | 1884.6 |
| 157.5° | 1927.1 | 1922.6 | 1922.6 | 1927.1 | 1915.0 |
| 160°   | 1957.5 | 1948.4 | 1949.9 | 1956.0 | 1943.8 |
| 162.5° | 1981.8 | 1972.7 | 1974.2 | 1983.3 | 1969.7 |
| 165°   | 2003.1 | 1994.0 | 1995.5 | 2004.6 | 1992.4 |
| 167.5° | 2019.8 | 2010.7 | 2012.2 | 2022.8 | 2009.1 |
| 170°   | 2033.4 | 2022.8 | 2024.3 | 2036.5 | 2022.8 |
| 172.5° | 2042.6 | 2031.9 | 2035.0 | 2045.6 | 2031.9 |
| 175°   | 2048.6 | 2039.5 | 2041.0 | 2053.2 | 2039.5 |
| 177.5° | 2053.2 | 2044.1 | 2045.6 | 2056.2 | 2044.1 |
| 180°   | 2048.6 | 2048.6 | 2048.6 | 2048.6 | 2048.6 |

(END OF REPORT)