

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: P1036155

Luminaire Tested: S125RDIW-B850D770UB35-4F0-XX-W2A-F1

Issue Date: 5/6/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1036155  
REPORT IS A COMBINATION OF REPORTS P1007005 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/6/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDIW-B850D770UB35-4F0-XX-W2A-F1  
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**

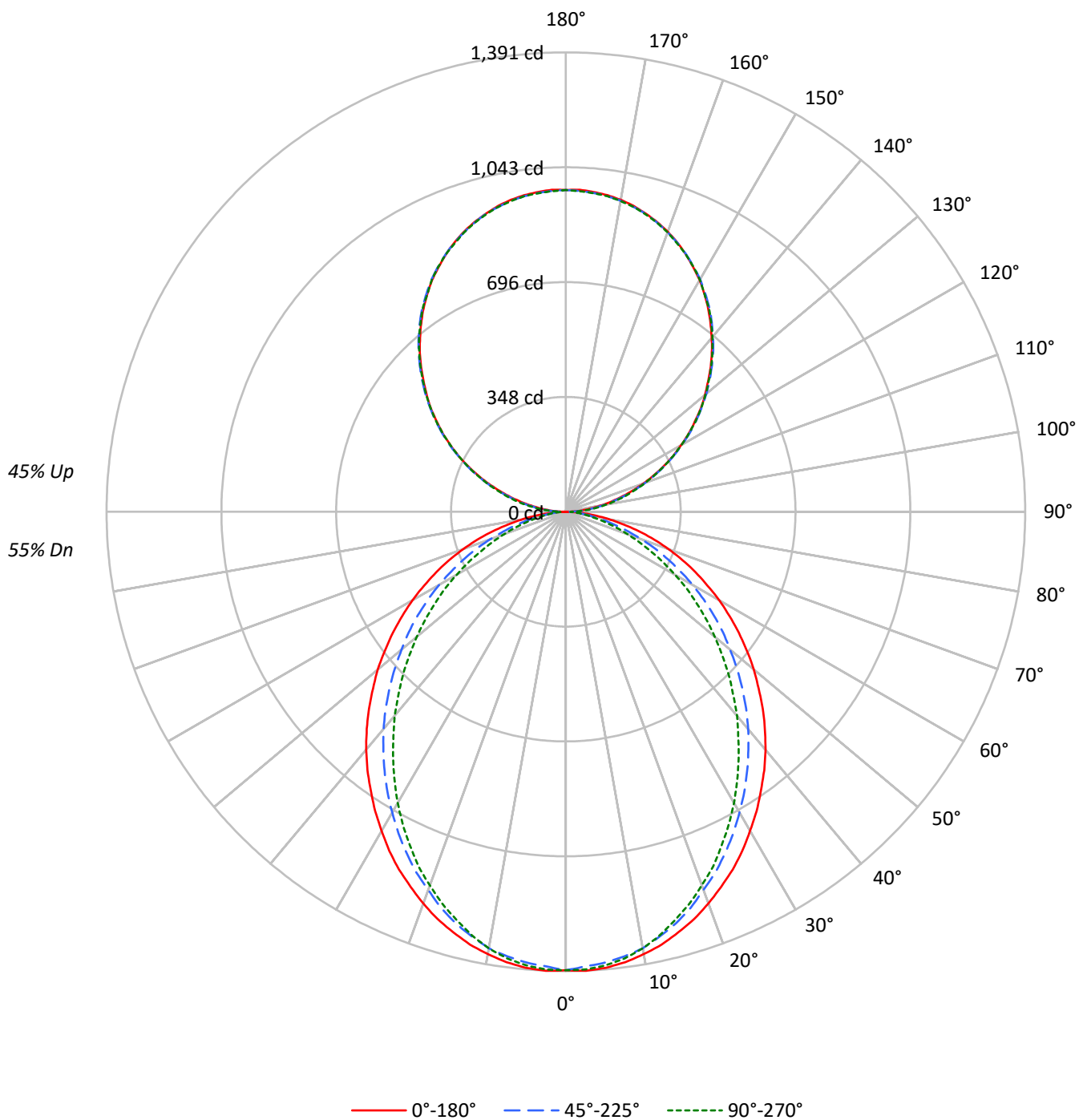
Lumens per Lamp: N/A  
Luminaire Lumens: 6001.0 lumens  
Efficiency: N/A  
Efficacy: 101.5 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

Input Watts (W): 59.1  
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   | 108 | 108 | 108 | 108 | 100 | 100 | 100 | 100 | 86 | 86 | 86 | 73 | 73 | 73 | 60 | 60 | 60 |
| 1   | 99  | 95  | 91  | 88  | 92  | 88  | 85  | 82  | 76 | 73 | 71 | 64 | 63 | 61 | 54 | 53 | 52 |
| 2   | 90  | 83  | 77  | 72  | 84  | 77  | 72  | 68  | 67 | 63 | 59 | 57 | 54 | 51 | 48 | 46 | 44 |
| 3   | 83  | 73  | 66  | 60  | 76  | 68  | 62  | 57  | 59 | 54 | 50 | 50 | 47 | 44 | 42 | 40 | 37 |
| 4   | 76  | 65  | 57  | 51  | 70  | 61  | 54  | 48  | 53 | 47 | 43 | 45 | 41 | 38 | 38 | 35 | 32 |
| 5   | 70  | 58  | 50  | 44  | 64  | 54  | 47  | 42  | 47 | 41 | 37 | 41 | 36 | 33 | 34 | 31 | 28 |
| 6   | 64  | 52  | 44  | 38  | 59  | 49  | 42  | 36  | 43 | 37 | 33 | 37 | 32 | 29 | 31 | 28 | 25 |
| 7   | 59  | 47  | 39  | 34  | 55  | 44  | 37  | 32  | 39 | 33 | 29 | 33 | 29 | 26 | 29 | 25 | 22 |
| 8   | 55  | 43  | 35  | 30  | 51  | 40  | 33  | 28  | 35 | 30 | 26 | 31 | 26 | 23 | 26 | 23 | 20 |
| 9   | 51  | 39  | 32  | 27  | 48  | 37  | 30  | 25  | 32 | 27 | 23 | 28 | 24 | 21 | 24 | 21 | 18 |
| 10  | 48  | 36  | 29  | 24  | 45  | 34  | 27  | 23  | 30 | 25 | 21 | 26 | 22 | 19 | 23 | 19 | 17 |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 8895 | 8895 | 8895 |
| 5°  | 8896 | 8673 | 8687 |
| 10° | 8809 | 8454 | 8380 |
| 15° | 8684 | 8149 | 7976 |
| 20° | 8530 | 7781 | 7553 |
| 25° | 8353 | 7421 | 7099 |
| 30° | 8137 | 7026 | 6622 |
| 35° | 7915 | 6625 | 6115 |
| 40° | 7705 | 6213 | 5621 |
| 45° | 7452 | 5768 | 5103 |
| 50° | 7196 | 5296 | 4576 |
| 55° | 6898 | 4830 | 4030 |
| 60° | 6594 | 4298 | 3463 |
| 65° | 6230 | 3704 | 2852 |
| 70° | 5807 | 3016 | 2245 |
| 75° | 5224 | 2268 | 1636 |
| 80° | 4405 | 1469 | 1104 |
| 85° | 3299 | 790  | 622  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 7452 cd/sqm

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CATALOG NUMBER: S125RDIW-B850D770UB35-4F0-XX-W2A-F1

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 130.7  | 2.2       |
| 10°-20°   | 365.1  | 6.1       |
| 20°-30°   | 529.4  | 8.8       |
| 30°-40°   | 603.2  | 10.1      |
| 40°-50°   | 587.9  | 9.8       |
| 50°-60°   | 494.8  | 8.2       |
| 60°-70°   | 346.7  | 5.8       |
| 70°-80°   | 177.7  | 3.0       |
| 80°-90°   | 45.8   | 0.8       |
| 90°-100°  | 64.8   | 1.1       |
| 100°-110° | 192.5  | 3.2       |
| 110°-120° | 326.5  | 5.4       |
| 120°-130° | 429.8  | 7.2       |
| 130°-140° | 481.6  | 8.0       |
| 140°-150° | 472.0  | 7.9       |
| 150°-160° | 396.5  | 6.6       |
| 160°-170° | 263.6  | 4.4       |
| 170°-180° | 92.2   | 1.5       |
| 0°-30°    | 1025.3 | 17.1      |
| 0°-40°    | 1628.5 | 27.1      |
| 0°-60°    | 2711.2 | 45.2      |
| 0°-90°    | 3281.5 | 54.7      |
| 90°-120°  | 583.8  | 9.7       |
| 90°-150°  | 1967.2 | 32.8      |
| 90°-180°  | 2720.0 | 45.3      |
| 0°-180°   | 6001.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1388 | 1388  | 1388 | 1388  | 1388 |      |
| 5°   | 1386 | 1382  | 1370 | 1381  | 1379 | 131  |
| 15°  | 1318 | 1312  | 1290 | 1289  | 1279 | 372  |
| 25°  | 1195 | 1180  | 1141 | 1127  | 1116 | 550  |
| 35°  | 1030 | 1004  | 957  | 927   | 912  | 645  |
| 45°  | 843  | 813   | 755  | 713   | 697  | 650  |
| 55°  | 640  | 606   | 547  | 500   | 483  | 572  |
| 65°  | 433  | 397   | 342  | 300   | 284  | 429  |
| 75°  | 231  | 199   | 155  | 132   | 125  | 244  |
| 85°  | 58   | 39    | 34   | 32    | 32   | 63   |
| 90°  | 1    | 7     | 12   | 16    | 18   | 7    |
| 95°  | 49   | 51    | 58   | 64    | 65   | 52   |
| 105° | 173  | 177   | 181  | 186   | 188  | 184  |
| 115° | 327  | 330   | 331  | 331   | 330  | 323  |
| 125° | 477  | 482   | 482  | 481   | 480  | 427  |
| 135° | 620  | 625   | 626  | 626   | 623  | 478  |
| 145° | 752  | 754   | 757  | 757   | 754  | 470  |
| 155° | 860  | 860   | 861  | 864   | 860  | 396  |
| 165° | 935  | 934   | 934  | 937   | 933  | 264  |
| 175° | 972  | 969   | 969  | 974   | 968  | 92   |
| 180° | 974  | 974   | 974  | 974   | 974  |      |

TEST NUMBER: P1036155

CATALOG NUMBER: S125RDIW-B850D770UB35-4F0-XX-W2A-F1

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1388.3 | 1388.3 | 1388.3 | 1388.3 | 1388.3 |
| 2.5°   | 1391.4 | 1388.3 | 1377.8 | 1388.3 | 1387.2 |
| 5°     | 1386.2 | 1382.0 | 1370.4 | 1380.9 | 1378.8 |
| 7.5°   | 1375.7 | 1371.5 | 1357.9 | 1366.3 | 1364.2 |
| 10°    | 1360.0 | 1356.8 | 1342.1 | 1345.3 | 1342.1 |
| 12.5°  | 1342.1 | 1337.9 | 1317.0 | 1319.1 | 1313.8 |
| 15°    | 1318.0 | 1311.7 | 1289.7 | 1288.7 | 1279.2 |
| 17.5°  | 1292.9 | 1283.4 | 1257.2 | 1252.0 | 1244.6 |
| 20°    | 1262.4 | 1252.0 | 1218.4 | 1213.2 | 1203.7 |
| 22.5°  | 1228.9 | 1218.4 | 1182.8 | 1171.2 | 1163.9 |
| 25°    | 1195.3 | 1179.6 | 1140.8 | 1127.2 | 1115.7 |
| 27.5°  | 1157.6 | 1138.7 | 1097.8 | 1080.0 | 1068.5 |
| 30°    | 1115.7 | 1095.7 | 1051.7 | 1027.6 | 1018.1 |
| 32.5°  | 1074.8 | 1050.6 | 1005.6 | 978.3  | 965.7  |
| 35°    | 1029.7 | 1004.5 | 957.3  | 926.9  | 912.2  |
| 37.5°  | 986.7  | 956.3  | 908.0  | 872.4  | 857.7  |
| 40°    | 940.5  | 909.1  | 858.8  | 818.9  | 806.3  |
| 42.5°  | 892.3  | 859.8  | 807.4  | 769.6  | 749.7  |
| 45°    | 843.0  | 812.6  | 755.0  | 713.0  | 697.3  |
| 47.5°  | 791.7  | 760.2  | 702.5  | 659.5  | 641.7  |
| 50°    | 743.4  | 708.8  | 649.1  | 605.0  | 589.3  |
| 52.5°  | 691.0  | 655.3  | 599.8  | 551.5  | 535.8  |
| 55°    | 639.6  | 606.1  | 547.3  | 500.2  | 483.4  |
| 57.5°  | 587.2  | 551.5  | 494.9  | 448.8  | 434.1  |
| 60°    | 536.9  | 500.2  | 443.5  | 397.4  | 381.7  |
| 62.5°  | 483.4  | 448.8  | 391.1  | 349.2  | 333.4  |
| 65°    | 433.0  | 397.4  | 341.8  | 299.9  | 284.2  |
| 67.5°  | 382.7  | 347.1  | 293.6  | 253.7  | 241.2  |
| 70°    | 331.3  | 295.7  | 243.3  | 210.8  | 198.2  |
| 72.5°  | 281.0  | 246.4  | 198.2  | 168.8  | 161.5  |
| 75°    | 230.7  | 199.2  | 155.2  | 132.1  | 124.8  |
| 77.5°  | 179.3  | 154.1  | 117.4  | 99.6   | 93.3   |
| 80°    | 136.3  | 111.1  | 81.8   | 72.3   | 70.3   |
| 82.5°  | 94.4   | 72.3   | 54.5   | 51.4   | 50.3   |
| 85°    | 57.7   | 38.8   | 33.6   | 32.5   | 31.5   |
| 87.5°  | 24.1   | 16.8   | 15.7   | 15.7   | 14.7   |
| 90°    | 0.8    | 6.8    | 12.1   | 15.9   | 18.2   |
| 92.5°  | 22.7   | 26.5   | 33.4   | 38.7   | 40.2   |
| 95°    | 49.3   | 50.8   | 58.4   | 63.7   | 65.2   |
| 97.5°  | 75.8   | 76.6   | 87.2   | 91.8   | 92.5   |
| 100°   | 106.2  | 106.2  | 116.0  | 122.8  | 124.4  |
| 102.5° | 138.8  | 142.6  | 146.4  | 153.9  | 156.2  |
| 105°   | 172.9  | 176.7  | 181.2  | 185.8  | 188.1  |
| 107.5° | 210.0  | 213.8  | 217.6  | 219.9  | 219.9  |
| 110°   | 248.7  | 252.5  | 254.8  | 257.1  | 256.3  |

TEST NUMBER: P1036155

CATALOG NUMBER: S125RDIW-B850D770UB35-4F0-XX-W2A-F1

**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 288.2 | 289.7 | 292.7 | 293.5 | 291.9 |
| 115°   | 326.8 | 329.9 | 331.4 | 330.6 | 329.9 |
| 117.5° | 366.3 | 367.0 | 368.5 | 369.3 | 366.3 |
| 120°   | 402.7 | 406.4 | 407.2 | 407.2 | 404.2 |
| 122.5° | 442.1 | 442.8 | 445.1 | 444.4 | 442.1 |
| 125°   | 477.0 | 481.5 | 482.3 | 480.8 | 480.0 |
| 127.5° | 515.6 | 517.9 | 518.7 | 517.9 | 516.4 |
| 130°   | 549.8 | 553.6 | 555.1 | 554.3 | 552.8 |
| 132.5° | 583.9 | 590.7 | 590.0 | 589.2 | 586.9 |
| 135°   | 620.3 | 624.8 | 625.6 | 625.6 | 622.6 |
| 137.5° | 654.4 | 659.0 | 660.5 | 661.2 | 657.4 |
| 140°   | 687.0 | 690.8 | 693.1 | 694.6 | 690.8 |
| 142.5° | 719.6 | 722.7 | 725.7 | 726.4 | 722.7 |
| 145°   | 751.5 | 754.5 | 756.8 | 756.8 | 754.5 |
| 147.5° | 781.0 | 783.3 | 784.8 | 787.1 | 781.0 |
| 150°   | 810.6 | 809.9 | 812.9 | 812.9 | 811.4 |
| 152.5° | 834.9 | 836.4 | 837.2 | 839.4 | 836.4 |
| 155°   | 859.9 | 859.9 | 860.7 | 863.7 | 859.9 |
| 157.5° | 882.7 | 881.1 | 881.9 | 884.9 | 879.6 |
| 160°   | 902.4 | 900.1 | 900.8 | 903.9 | 900.1 |
| 162.5° | 919.8 | 918.3 | 918.3 | 922.1 | 917.5 |
| 165°   | 935.0 | 933.5 | 934.2 | 937.2 | 932.7 |
| 167.5° | 948.6 | 945.6 | 945.6 | 950.1 | 945.6 |
| 170°   | 959.2 | 956.2 | 956.2 | 960.8 | 955.4 |
| 172.5° | 966.8 | 963.8 | 963.8 | 968.3 | 963.8 |
| 175°   | 972.1 | 969.1 | 969.1 | 973.6 | 968.3 |
| 177.5° | 975.9 | 972.9 | 972.1 | 976.7 | 971.4 |
| 180°   | 974.4 | 974.4 | 974.4 | 974.4 | 974.4 |

(END OF REPORT)