

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: P1035689

Luminaire Tested: S125RDIW-B1090D1050UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1035689  
REPORT IS A COMBINATION OF REPORTS P1005955 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/6/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDIW-B1090D1050UB40-4F0-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**

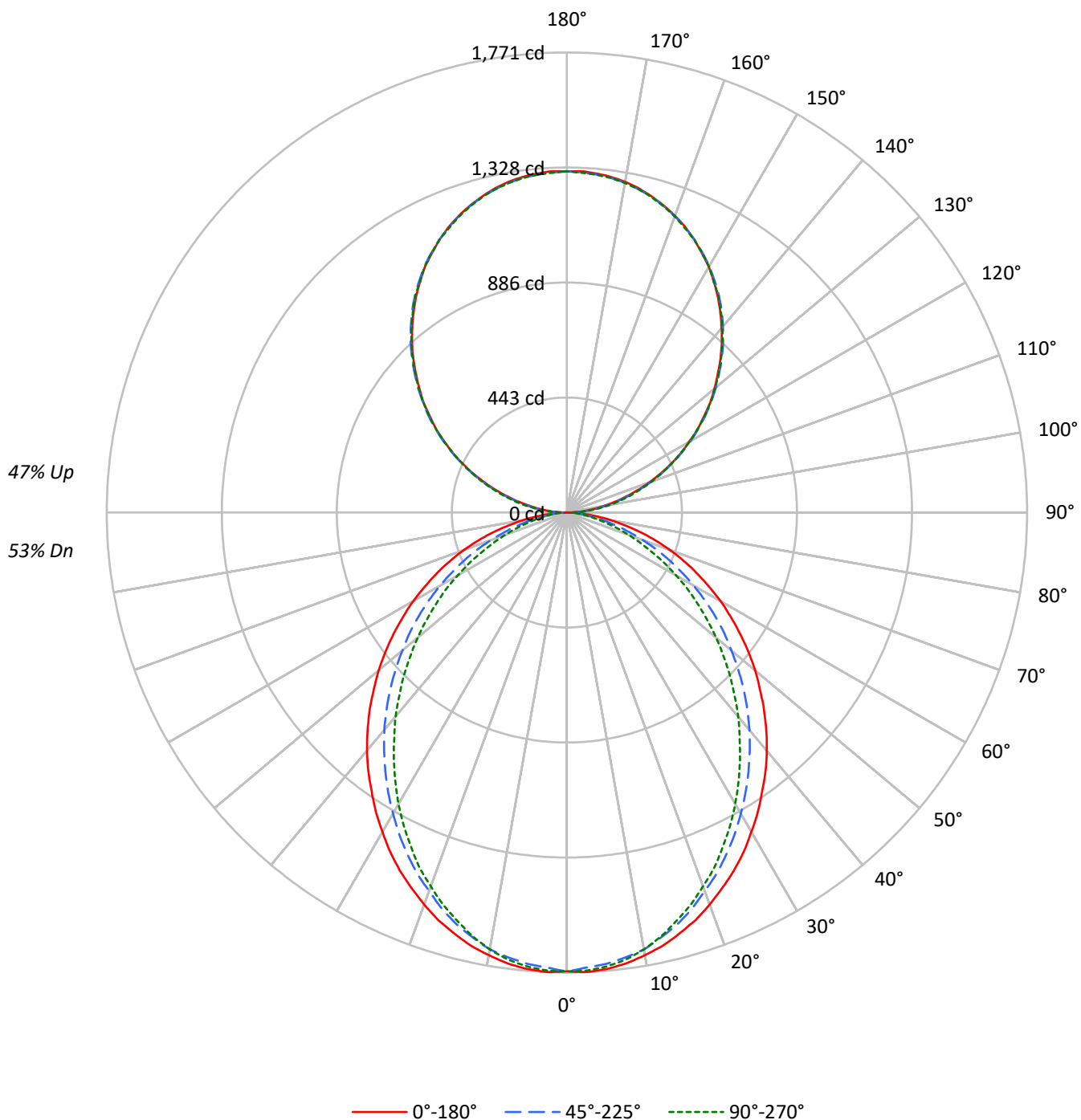
Lumens per Lamp: N/A  
Luminaire Lumens: 7841.0 lumens  
Efficiency: N/A  
Efficacy: 100.1 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

Input Watts (W): 78.3  
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 | 85 | 85 | 85 | 72 | 72 | 72 | 59 | 59 | 59 |
| 1   | 99  | 95  | 91  | 87  | 91  | 88  | 84  | 81  | 75 | 73 | 70 | 63 | 62 | 60 | 53 | 51 | 50 |
| 2   | 90  | 83  | 77  | 72  | 83  | 77  | 72  | 67  | 66 | 62 | 59 | 56 | 53 | 51 | 47 | 45 | 43 |
| 3   | 82  | 73  | 66  | 60  | 76  | 68  | 62  | 56  | 58 | 54 | 50 | 50 | 46 | 43 | 41 | 39 | 37 |
| 4   | 75  | 65  | 57  | 51  | 70  | 60  | 53  | 48  | 52 | 47 | 42 | 44 | 40 | 37 | 37 | 34 | 32 |
| 5   | 69  | 58  | 50  | 44  | 64  | 54  | 47  | 41  | 47 | 41 | 37 | 40 | 36 | 32 | 34 | 30 | 28 |
| 6   | 64  | 52  | 44  | 38  | 59  | 49  | 41  | 36  | 42 | 36 | 32 | 36 | 32 | 28 | 31 | 27 | 25 |
| 7   | 59  | 47  | 39  | 33  | 55  | 44  | 37  | 32  | 38 | 33 | 28 | 33 | 28 | 25 | 28 | 25 | 22 |
| 8   | 55  | 43  | 35  | 30  | 51  | 40  | 33  | 28  | 35 | 29 | 25 | 30 | 26 | 22 | 26 | 22 | 20 |
| 9   | 51  | 39  | 32  | 27  | 47  | 37  | 30  | 25  | 32 | 27 | 23 | 28 | 23 | 20 | 24 | 20 | 18 |
| 10  | 48  | 36  | 29  | 24  | 44  | 34  | 27  | 23  | 30 | 24 | 21 | 26 | 21 | 18 | 22 | 19 | 16 |

**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

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 166.3  | 2.1       |
| 10°-20°   | 464.7  | 5.9       |
| 20°-30°   | 673.8  | 8.6       |
| 30°-40°   | 767.6  | 9.8       |
| 40°-50°   | 748.2  | 9.5       |
| 50°-60°   | 629.6  | 8.0       |
| 60°-70°   | 441.2  | 5.6       |
| 70°-80°   | 226.2  | 2.9       |
| 80°-90°   | 58.5   | 0.7       |
| 90°-100°  | 87.3   | 1.1       |
| 100°-110° | 259.4  | 3.3       |
| 110°-120° | 440.0  | 5.6       |
| 120°-130° | 579.2  | 7.4       |
| 130°-140° | 649.0  | 8.3       |
| 140°-150° | 636.2  | 8.1       |
| 150°-160° | 534.4  | 6.8       |
| 160°-170° | 355.2  | 4.5       |
| 170°-180° | 124.3  | 1.6       |
| 0°-30°    | 1304.7 | 16.6      |
| 0°-40°    | 2072.3 | 26.4      |
| 0°-60°    | 3450.1 | 44.0      |
| 0°-90°    | 4176.0 | 53.3      |
| 90°-120°  | 786.7  | 10.0      |
| 90°-150°  | 2651.1 | 33.8      |
| 90°-180°  | 3665.0 | 46.7      |
| 0°-180°   | 7841.0 | 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°  | 1    | 9     | 16   | 22    | 24   | 9    |
| 95°  | 66   | 68    | 79   | 86    | 88   | 69   |
| 105° | 233  | 238   | 244  | 250   | 253  | 248  |
| 115° | 440  | 444   | 447  | 446   | 444  | 436  |
| 125° | 643  | 649   | 650  | 648   | 647  | 576  |
| 135° | 836  | 842   | 843  | 843   | 839  | 644  |
| 145° | 1013 | 1017  | 1020 | 1020  | 1017 | 633  |
| 155° | 1159 | 1159  | 1160 | 1164  | 1159 | 534  |
| 165° | 1260 | 1258  | 1259 | 1263  | 1257 | 356  |
| 175° | 1310 | 1306  | 1306 | 1312  | 1305 | 125  |
| 180° | 1313 | 1313  | 1313 | 1313  | 1313 |      |

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**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°    | 1.0    | 9.2    | 16.4   | 21.5   | 24.5   |
| 92.5°  | 30.7   | 35.8   | 45.0   | 52.1   | 54.2   |
| 95°    | 66.4   | 68.5   | 78.7   | 85.8   | 87.9   |
| 97.5°  | 102.2  | 103.2  | 117.5  | 123.7  | 124.7  |
| 100°   | 143.1  | 143.1  | 156.4  | 165.6  | 167.6  |
| 102.5° | 187.0  | 192.1  | 197.2  | 207.5  | 210.5  |
| 105°   | 233.0  | 238.1  | 244.2  | 250.4  | 253.4  |
| 107.5° | 283.1  | 288.2  | 293.3  | 296.4  | 296.4  |
| 110°   | 335.2  | 340.3  | 343.4  | 346.4  | 345.4  |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 388.3  | 390.4  | 394.5  | 395.5  | 393.4  |
| 115°   | 440.4  | 444.5  | 446.6  | 445.6  | 444.5  |
| 117.5° | 493.6  | 494.6  | 496.7  | 497.7  | 493.6  |
| 120°   | 542.6  | 547.8  | 548.8  | 548.8  | 544.7  |
| 122.5° | 595.8  | 596.8  | 599.9  | 598.8  | 595.8  |
| 125°   | 642.8  | 648.9  | 649.9  | 647.9  | 646.9  |
| 127.5° | 694.9  | 698.0  | 699.0  | 698.0  | 695.9  |
| 130°   | 740.9  | 746.0  | 748.0  | 747.0  | 745.0  |
| 132.5° | 786.9  | 796.1  | 795.1  | 794.0  | 791.0  |
| 135°   | 835.9  | 842.1  | 843.1  | 843.1  | 839.0  |
| 137.5° | 881.9  | 888.1  | 890.1  | 891.1  | 886.0  |
| 140°   | 925.9  | 931.0  | 934.0  | 936.1  | 931.0  |
| 142.5° | 969.8  | 973.9  | 978.0  | 979.0  | 973.9  |
| 145°   | 1012.7 | 1016.8 | 1019.9 | 1019.9 | 1016.8 |
| 147.5° | 1052.6 | 1055.6 | 1057.7 | 1060.8 | 1052.6 |
| 150°   | 1092.4 | 1091.4 | 1095.5 | 1095.5 | 1093.5 |
| 152.5° | 1125.1 | 1127.2 | 1128.2 | 1131.3 | 1127.2 |
| 155°   | 1158.9 | 1158.9 | 1159.9 | 1164.0 | 1158.9 |
| 157.5° | 1189.5 | 1187.5 | 1188.5 | 1192.6 | 1185.4 |
| 160°   | 1216.1 | 1213.0 | 1214.0 | 1218.1 | 1213.0 |
| 162.5° | 1239.6 | 1237.5 | 1237.5 | 1242.7 | 1236.5 |
| 165°   | 1260.0 | 1258.0 | 1259.0 | 1263.1 | 1257.0 |
| 167.5° | 1278.4 | 1274.3 | 1274.3 | 1280.5 | 1274.3 |
| 170°   | 1292.7 | 1288.6 | 1288.6 | 1294.8 | 1287.6 |
| 172.5° | 1303.0 | 1298.9 | 1298.9 | 1305.0 | 1298.9 |
| 175°   | 1310.1 | 1306.0 | 1306.0 | 1312.1 | 1305.0 |
| 177.5° | 1315.2 | 1311.1 | 1310.1 | 1316.2 | 1309.1 |
| 180°   | 1313.2 | 1313.2 | 1313.2 | 1313.2 | 1313.2 |

(END OF REPORT)