

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: P1034966

Luminaire Tested: S125DIW-B1090D1050UB50-4F0-XX-W2A-D1

Issue Date: 5/6/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1034966  
REPORT IS A COMBINATION OF REPORTS P1002780 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/6/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125DIW-B1090D1050UB50-4F0-XX-W2A-D1  
Description: Define 5 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}  
Light Source: -  
Ballast/Driver: -

**Summary**

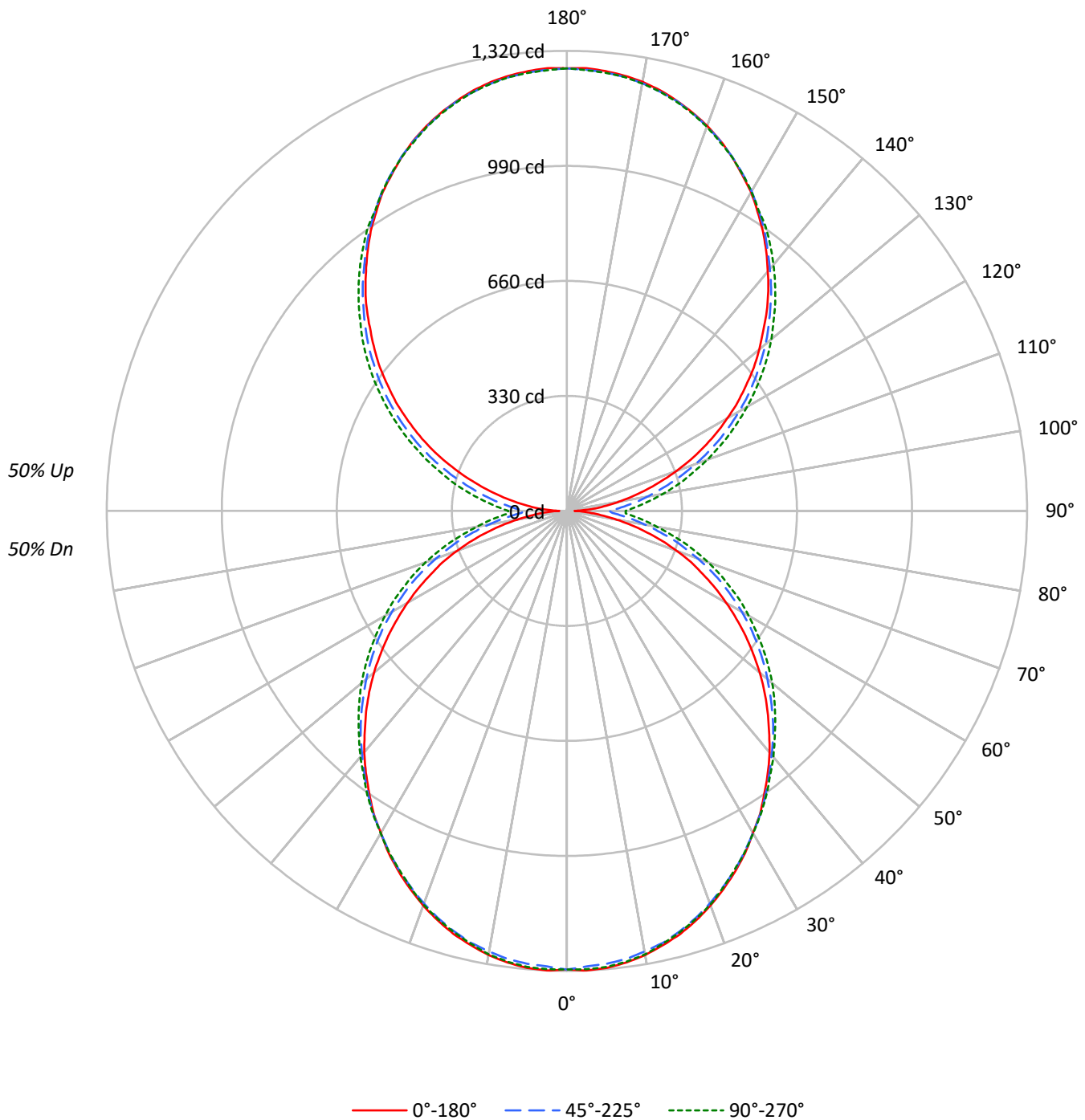
Lumens per Lamp: N/A  
Luminaire Lumens: 7623.0 lumens  
Efficiency: N/A  
Efficacy: 97.4 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

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   | 107 | 107 | 107 | 107 | 99 | 99 | 99 | 99 | 83 | 83 | 83 | 69 | 69 | 69 | 56 | 56 | 56 |
| 1   | 97  | 92  | 88  | 84  | 89 | 85 | 82 | 78 | 72 | 69 | 67 | 60 | 58 | 56 | 49 | 47 | 46 |
| 2   | 88  | 80  | 74  | 68  | 81 | 74 | 69 | 64 | 63 | 59 | 55 | 52 | 49 | 46 | 42 | 40 | 38 |
| 3   | 80  | 70  | 63  | 57  | 74 | 65 | 58 | 53 | 55 | 50 | 46 | 46 | 42 | 39 | 37 | 35 | 32 |
| 4   | 73  | 62  | 54  | 48  | 67 | 57 | 50 | 45 | 49 | 43 | 39 | 41 | 37 | 33 | 33 | 30 | 28 |
| 5   | 67  | 55  | 47  | 41  | 62 | 51 | 44 | 38 | 44 | 38 | 33 | 36 | 32 | 29 | 30 | 27 | 24 |
| 6   | 62  | 49  | 41  | 35  | 57 | 46 | 38 | 33 | 39 | 33 | 29 | 33 | 28 | 25 | 27 | 24 | 21 |
| 7   | 57  | 45  | 36  | 31  | 52 | 41 | 34 | 29 | 35 | 30 | 25 | 30 | 25 | 22 | 25 | 21 | 19 |
| 8   | 53  | 40  | 33  | 27  | 49 | 38 | 31 | 26 | 32 | 27 | 23 | 27 | 23 | 20 | 23 | 19 | 17 |
| 9   | 49  | 37  | 29  | 24  | 45 | 34 | 28 | 23 | 30 | 24 | 20 | 25 | 21 | 18 | 21 | 17 | 15 |
| 10  | 46  | 34  | 26  | 22  | 42 | 32 | 25 | 20 | 27 | 22 | 18 | 23 | 19 | 16 | 19 | 16 | 14 |

**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  | 1.6       |
| 10°-20°   | 353.5  | 4.6       |
| 20°-30°   | 525.7  | 6.9       |
| 30°-40°   | 622.6  | 8.2       |
| 40°-50°   | 643.7  | 8.4       |
| 50°-60°   | 593.0  | 7.8       |
| 60°-70°   | 479.3  | 6.3       |
| 70°-80°   | 320.7  | 4.2       |
| 80°-90°   | 167.8  | 2.2       |
| 90°-100°  | 177.8  | 2.3       |
| 100°-110° | 319.7  | 4.2       |
| 110°-120° | 471.5  | 6.2       |
| 120°-130° | 586.2  | 7.7       |
| 130°-140° | 639.0  | 8.4       |
| 140°-150° | 617.4  | 8.1       |
| 150°-160° | 516.7  | 6.8       |
| 160°-170° | 343.5  | 4.5       |
| 170°-180° | 120.2  | 1.6       |
| 0°-30°    | 1003.8 | 13.2      |
| 0°-40°    | 1626.4 | 21.3      |
| 0°-60°    | 2863.1 | 37.6      |
| 0°-90°    | 3830.9 | 50.3      |
| 90°-120°  | 969.1  | 12.7      |
| 90°-150°  | 2811.7 | 36.9      |
| 90°-180°  | 3792.0 | 49.7      |
| 0°-180°   | 7623.0 | 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   | 71    | 122  | 156   | 168  | 19   |
| 95°  | 81   | 116   | 170  | 206   | 217  | 80   |
| 105° | 237  | 263   | 307  | 339   | 351  | 253  |
| 115° | 434  | 447   | 482  | 504   | 511  | 429  |
| 125° | 627  | 631   | 658  | 677   | 682  | 561  |
| 135° | 811  | 816   | 826  | 842   | 845  | 625  |
| 145° | 981  | 983   | 986  | 993   | 995  | 613  |
| 155° | 1121 | 1121  | 1122 | 1126  | 1121 | 516  |
| 165° | 1218 | 1216  | 1218 | 1221  | 1216 | 344  |
| 175° | 1267 | 1263  | 1263 | 1269  | 1262 | 120  |
| 180° | 1270 | 1270  | 1270 | 1270  | 1270 |      |

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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°    | 21.6   | 70.8   | 121.6  | 156.3  | 168.2  |
| 92.5°  | 47.7   | 90.1   | 144.1  | 179.4  | 190.5  |
| 95°    | 81.0   | 116.5  | 170.3  | 205.6  | 216.6  |
| 97.5°  | 114.3  | 146.3  | 202.6  | 235.7  | 245.8  |
| 100°   | 152.5  | 179.6  | 233.8  | 269.8  | 279.5  |
| 102.5° | 193.7  | 223.2  | 268.1  | 303.8  | 314.6  |
| 105°   | 236.9  | 262.6  | 307.2  | 338.9  | 350.9  |
| 107.5° | 284.0  | 307.1  | 349.4  | 378.2  | 386.0  |
| 110°   | 333.1  | 353.6  | 392.6  | 420.2  | 428.2  |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 384.5  | 398.1  | 436.9  | 461.1  | 468.2  |
| 115°   | 433.6  | 446.7  | 482.1  | 504.4  | 511.2  |
| 117.5° | 483.8  | 491.2  | 525.5  | 548.4  | 553.4  |
| 120°   | 531.2  | 540.0  | 570.7  | 592.6  | 596.4  |
| 122.5° | 581.3  | 583.6  | 614.9  | 634.6  | 639.3  |
| 125°   | 626.8  | 631.4  | 658.2  | 676.8  | 682.3  |
| 127.5° | 675.9  | 677.5  | 700.4  | 718.8  | 724.6  |
| 130°   | 720.3  | 724.0  | 744.0  | 761.1  | 765.6  |
| 132.5° | 763.5  | 772.4  | 784.3  | 801.3  | 803.6  |
| 135°   | 811.0  | 815.6  | 825.6  | 842.4  | 844.8  |
| 137.5° | 855.4  | 860.0  | 867.2  | 883.6  | 883.9  |
| 140°   | 896.6  | 901.6  | 905.8  | 922.0  | 922.2  |
| 142.5° | 939.1  | 941.8  | 945.7  | 958.3  | 958.6  |
| 145°   | 980.6  | 983.3  | 986.2  | 992.7  | 994.9  |
| 147.5° | 1017.8 | 1020.8 | 1022.8 | 1028.4 | 1023.0 |
| 150°   | 1056.4 | 1055.4 | 1059.4 | 1059.4 | 1058.7 |
| 152.5° | 1088.0 | 1090.0 | 1091.0 | 1093.9 | 1090.0 |
| 155°   | 1120.6 | 1120.6 | 1121.6 | 1125.6 | 1120.6 |
| 157.5° | 1150.3 | 1148.3 | 1149.3 | 1153.2 | 1146.3 |
| 160°   | 1176.0 | 1173.0 | 1174.0 | 1177.9 | 1173.0 |
| 162.5° | 1198.7 | 1196.7 | 1196.7 | 1201.7 | 1195.7 |
| 165°   | 1218.5 | 1216.5 | 1217.5 | 1221.4 | 1215.5 |
| 167.5° | 1236.2 | 1232.3 | 1232.3 | 1238.2 | 1232.3 |
| 170°   | 1250.1 | 1246.1 | 1246.1 | 1252.1 | 1245.1 |
| 172.5° | 1260.0 | 1256.0 | 1256.0 | 1261.9 | 1256.0 |
| 175°   | 1266.9 | 1262.9 | 1262.9 | 1268.9 | 1261.9 |
| 177.5° | 1271.8 | 1267.9 | 1266.9 | 1272.8 | 1265.9 |
| 180°   | 1269.8 | 1269.8 | 1269.8 | 1269.8 | 1269.8 |

(END OF REPORT)