

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: P1035541

Luminaire Tested: S125DIW-B850D1050UB35-4F0-XX-W2A-D

Issue Date: 5/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1035541  
REPORT IS A COMBINATION OF REPORTS P1004081 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125DIW-B850D1050UB35-4F0-XX-W2A-D  
Description: Define 5 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}  
Light Source: -  
Ballast/Driver: -

**Summary**

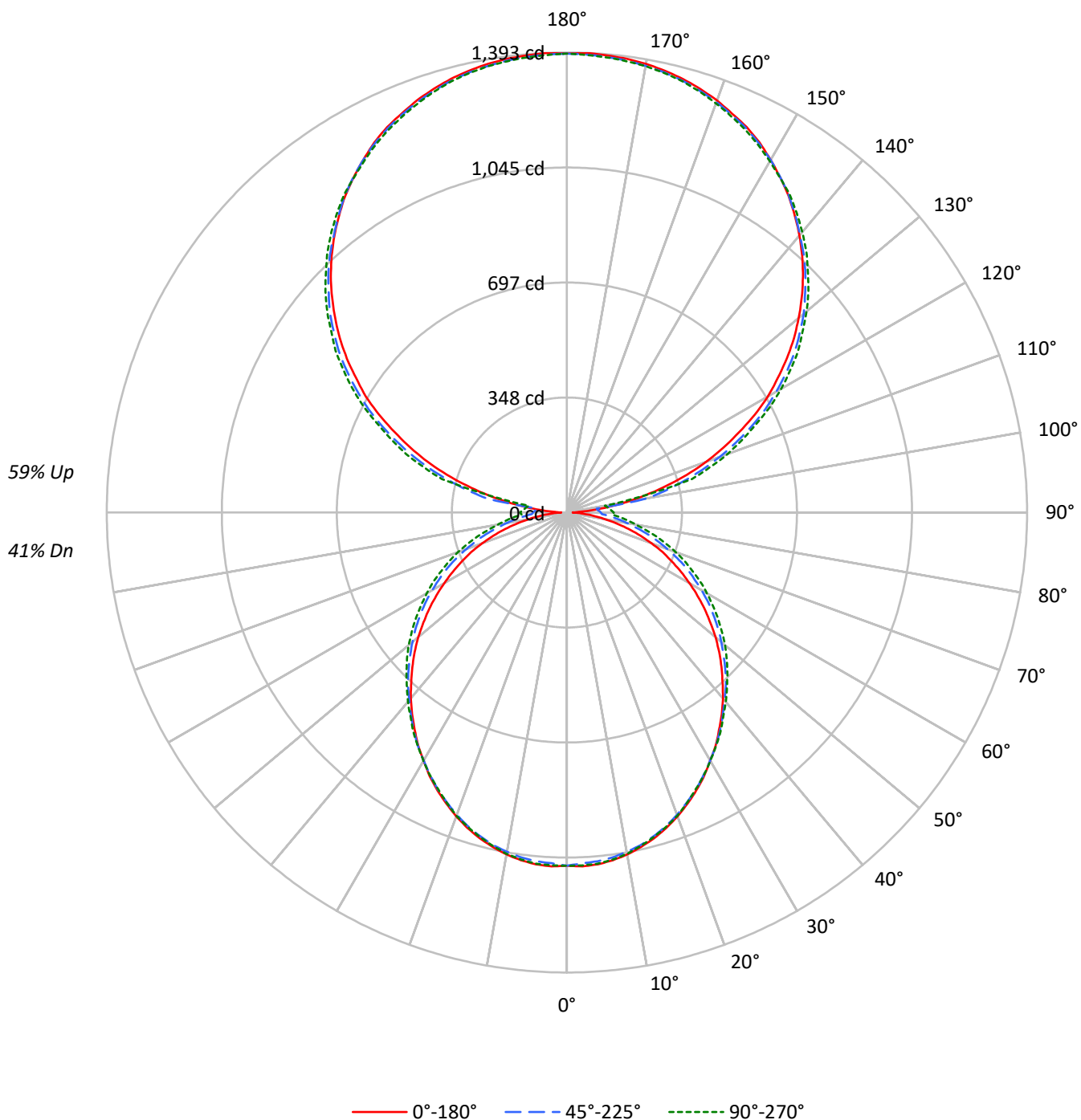
Lumens per Lamp: N/A  
Luminaire Lumens: 7583.9 lumens  
Efficiency: N/A  
Efficacy: 112.5 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

Input Watts (W): 67.4  
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   | 105 | 105 | 105 | 105 | 96 | 96 | 96 | 96 | 78 | 78 | 78 | 62 | 62 | 62 | 48 | 48 | 48 |
| 1   | 95  | 91  | 87  | 83  | 87 | 83 | 79 | 76 | 68 | 65 | 63 | 54 | 52 | 51 | 41 | 40 | 39 |
| 2   | 86  | 79  | 72  | 67  | 78 | 72 | 66 | 62 | 59 | 55 | 52 | 47 | 44 | 42 | 36 | 34 | 33 |
| 3   | 79  | 69  | 62  | 56  | 71 | 63 | 57 | 51 | 52 | 47 | 43 | 41 | 38 | 35 | 32 | 29 | 27 |
| 4   | 72  | 61  | 53  | 47  | 65 | 56 | 49 | 43 | 46 | 41 | 37 | 37 | 33 | 30 | 28 | 26 | 23 |
| 5   | 66  | 54  | 46  | 40  | 60 | 50 | 42 | 37 | 41 | 35 | 31 | 33 | 29 | 26 | 25 | 23 | 20 |
| 6   | 61  | 48  | 40  | 34  | 55 | 44 | 37 | 32 | 37 | 31 | 27 | 30 | 26 | 22 | 23 | 20 | 18 |
| 7   | 56  | 44  | 36  | 30  | 51 | 40 | 33 | 28 | 33 | 28 | 24 | 27 | 23 | 20 | 21 | 18 | 16 |
| 8   | 52  | 39  | 32  | 26  | 47 | 36 | 29 | 25 | 30 | 25 | 21 | 25 | 21 | 18 | 19 | 16 | 14 |
| 9   | 48  | 36  | 29  | 23  | 44 | 33 | 26 | 22 | 28 | 22 | 19 | 23 | 19 | 16 | 18 | 15 | 13 |
| 10  | 45  | 33  | 26  | 21  | 41 | 30 | 24 | 20 | 25 | 20 | 17 | 21 | 17 | 14 | 16 | 14 | 11 |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 6852 | 6852 | 6852 |
| 5°  | 6864 | 6708 | 6725 |
| 10° | 6812 | 6571 | 6553 |
| 15° | 6729 | 6412 | 6341 |
| 20° | 6617 | 6220 | 6131 |
| 25° | 6484 | 6016 | 5877 |
| 30° | 6324 | 5793 | 5646 |
| 35° | 6173 | 5587 | 5434 |
| 40° | 6021 | 5370 | 5219 |
| 45° | 5849 | 5183 | 5026 |
| 50° | 5684 | 4978 | 4852 |
| 55° | 5484 | 4784 | 4650 |
| 60° | 5267 | 4563 | 4442 |
| 65° | 5039 | 4329 | 4209 |
| 70° | 4778 | 4017 | 3966 |
| 75° | 4368 | 3707 | 3669 |
| 80° | 3829 | 3332 | 3341 |
| 85° | 3299 | 3033 | 3169 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5849 cd/sqm

TEST NUMBER: P1035541

CATALOG NUMBER: S125DIW-B850D1050UB35-4F0-XX-W2A-D

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 101.2  | 1.3       |
| 10°-20°   | 287.3  | 3.8       |
| 20°-30°   | 427.2  | 5.6       |
| 30°-40°   | 505.9  | 6.7       |
| 40°-50°   | 523.1  | 6.9       |
| 50°-60°   | 481.9  | 6.4       |
| 60°-70°   | 389.5  | 5.1       |
| 70°-80°   | 260.6  | 3.4       |
| 80°-90°   | 136.8  | 1.8       |
| 90°-100°  | 123.0  | 1.6       |
| 100°-110° | 369.6  | 4.9       |
| 110°-120° | 602.2  | 7.9       |
| 120°-130° | 746.2  | 9.8       |
| 130°-140° | 789.0  | 10.4      |
| 140°-150° | 733.6  | 9.7       |
| 150°-160° | 592.0  | 7.8       |
| 160°-170° | 382.8  | 5.0       |
| 170°-180° | 132.0  | 1.7       |
| 0°-30°    | 815.7  | 10.8      |
| 0°-40°    | 1321.6 | 17.4      |
| 0°-60°    | 2326.6 | 30.7      |
| 0°-90°    | 3113.5 | 41.1      |
| 90°-120°  | 1094.9 | 14.4      |
| 90°-150°  | 3363.7 | 44.4      |
| 90°-180°  | 4470.0 | 58.9      |
| 0°-180°   | 7583.9 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1070 | 1070  | 1070 | 1070  | 1070 |      |
| 5°   | 1070 | 1067  | 1060 | 1068  | 1067 | 101  |
| 15°  | 1021 | 1022  | 1015 | 1021  | 1017 | 288  |
| 25°  | 928  | 931   | 925  | 929   | 924  | 427  |
| 35°  | 803  | 810   | 807  | 810   | 810  | 503  |
| 45°  | 662  | 673   | 678  | 686   | 687  | 511  |
| 55°  | 508  | 525   | 542  | 554   | 558  | 455  |
| 65°  | 350  | 374   | 400  | 415   | 419  | 348  |
| 75°  | 193  | 220   | 254  | 275   | 280  | 204  |
| 85°  | 58   | 92    | 129  | 152   | 160  | 60   |
| 90°  | 18   | 60    | 102  | 132   | 142  | 15   |
| 95°  | 72   | 96    | 93   | 121   | 128  | 83   |
| 105° | 312  | 333   | 365  | 386   | 392  | 331  |
| 115° | 575  | 587   | 616  | 630   | 631  | 570  |
| 125° | 813  | 819   | 840  | 853   | 855  | 726  |
| 135° | 1011 | 1016  | 1021 | 1033  | 1032 | 779  |
| 145° | 1170 | 1171  | 1171 | 1178  | 1176 | 732  |
| 155° | 1288 | 1282  | 1284 | 1287  | 1278 | 593  |
| 165° | 1359 | 1353  | 1354 | 1360  | 1352 | 384  |
| 175° | 1390 | 1384  | 1385 | 1393  | 1384 | 132  |
| 180° | 1390 | 1390  | 1390 | 1390  | 1390 |      |

TEST NUMBER: P1035541

CATALOG NUMBER: S125DIW-B850D1050UB35-4F0-XX-W2A-D

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1069.5 | 1069.5 | 1069.5 | 1069.5 | 1069.5 |
| 2.5°   | 1072.6 | 1070.5 | 1063.2 | 1070.5 | 1069.5 |
| 5°     | 1069.5 | 1067.4 | 1060.0 | 1068.4 | 1067.4 |
| 7.5°   | 1062.1 | 1061.1 | 1053.7 | 1061.1 | 1060.0 |
| 10°    | 1051.6 | 1051.6 | 1043.2 | 1050.6 | 1049.5 |
| 12.5°  | 1037.0 | 1038.0 | 1031.7 | 1037.0 | 1033.8 |
| 15°    | 1021.2 | 1022.3 | 1014.9 | 1021.2 | 1017.0 |
| 17.5°  | 1001.3 | 1003.4 | 996.1  | 1001.3 | 998.2  |
| 20°    | 979.3  | 981.4  | 974.0  | 977.2  | 977.2  |
| 22.5°  | 954.1  | 958.3  | 949.9  | 954.1  | 951.0  |
| 25°    | 927.9  | 931.1  | 924.8  | 929.0  | 923.7  |
| 27.5°  | 899.6  | 903.8  | 896.5  | 899.6  | 897.5  |
| 30°    | 867.1  | 873.4  | 867.1  | 869.2  | 868.1  |
| 32.5°  | 837.7  | 843.0  | 838.8  | 840.9  | 839.8  |
| 35°    | 803.1  | 810.5  | 807.3  | 810.5  | 810.5  |
| 37.5°  | 769.6  | 775.9  | 774.8  | 779.0  | 778.0  |
| 40°    | 735.0  | 743.4  | 742.3  | 746.5  | 748.6  |
| 42.5°  | 697.2  | 708.8  | 711.9  | 717.2  | 717.2  |
| 45°    | 661.6  | 673.1  | 678.4  | 685.7  | 686.8  |
| 47.5°  | 624.9  | 635.4  | 643.8  | 654.3  | 656.4  |
| 50°    | 587.2  | 598.7  | 610.2  | 621.8  | 624.9  |
| 52.5°  | 547.3  | 562.0  | 576.7  | 589.3  | 591.3  |
| 55°    | 508.5  | 525.3  | 542.1  | 553.6  | 557.8  |
| 57.5°  | 468.7  | 488.6  | 507.5  | 520.1  | 523.2  |
| 60°    | 428.8  | 449.8  | 470.8  | 486.5  | 489.6  |
| 62.5°  | 390.0  | 411.0  | 434.1  | 451.9  | 456.1  |
| 65°    | 350.2  | 374.3  | 399.5  | 415.2  | 419.4  |
| 67.5°  | 313.5  | 336.6  | 361.7  | 380.6  | 385.8  |
| 70°    | 272.6  | 296.7  | 324.0  | 343.9  | 350.2  |
| 72.5°  | 232.8  | 257.9  | 288.3  | 310.4  | 314.5  |
| 75°    | 192.9  | 220.2  | 253.7  | 274.7  | 279.9  |
| 77.5°  | 154.1  | 185.6  | 217.0  | 240.1  | 244.3  |
| 80°    | 118.5  | 149.9  | 185.6  | 208.6  | 212.8  |
| 82.5°  | 86.0   | 119.5  | 156.2  | 178.2  | 186.6  |
| 85°    | 57.7   | 92.3   | 129.0  | 152.0  | 160.4  |
| 87.5°  | 36.7   | 70.2   | 105.9  | 130.0  | 137.4  |
| 90°    | 17.8   | 59.6   | 102.5  | 131.7  | 142.1  |
| 92.5°  | 34.3   | 55.4   | 98.3   | 126.4  | 134.9  |
| 95°    | 72.3   | 96.5   | 93.0   | 121.2  | 128.5  |
| 97.5°  | 122.8  | 154.1  | 90.8   | 115.0  | 123.3  |
| 100°   | 183.5  | 208.7  | 246.4  | 114.9  | 117.0  |
| 102.5° | 245.4  | 269.4  | 304.0  | 327.0  | 246.8  |
| 105°   | 312.3  | 333.2  | 364.7  | 385.6  | 392.0  |
| 107.5° | 381.3  | 396.0  | 428.5  | 450.4  | 452.6  |
| 110°   | 448.2  | 460.8  | 492.3  | 509.1  | 517.4  |

TEST NUMBER: P1035541

CATALOG NUMBER: S125DIW-B850D1050UB35-4F0-XX-W2A-D

**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 512.1  | 524.7  | 554.0  | 568.8  | 574.0  |
| 115°   | 575.0  | 587.4  | 615.7  | 630.5  | 630.6  |
| 117.5° | 640.8  | 646.1  | 676.4  | 688.1  | 693.4  |
| 120°   | 702.6  | 704.8  | 732.0  | 747.7  | 748.9  |
| 122.5° | 756.2  | 762.4  | 786.5  | 801.3  | 801.4  |
| 125°   | 812.9  | 819.0  | 840.0  | 852.7  | 854.8  |
| 127.5° | 866.4  | 870.5  | 887.3  | 901.0  | 899.0  |
| 130°   | 915.8  | 920.0  | 935.7  | 947.3  | 947.4  |
| 132.5° | 964.3  | 970.5  | 977.9  | 992.6  | 991.6  |
| 135°   | 1010.7 | 1015.7 | 1021.1 | 1032.6 | 1031.7 |
| 137.5° | 1053.9 | 1059.0 | 1061.1 | 1073.7 | 1072.8 |
| 140°   | 1095.1 | 1097.1 | 1097.2 | 1110.8 | 1108.8 |
| 142.5° | 1133.2 | 1133.2 | 1135.3 | 1144.7 | 1142.7 |
| 145°   | 1170.3 | 1171.3 | 1171.3 | 1177.6 | 1175.6 |
| 147.5° | 1202.2 | 1202.2 | 1203.3 | 1206.4 | 1201.3 |
| 150°   | 1233.1 | 1231.1 | 1233.1 | 1235.2 | 1228.0 |
| 152.5° | 1263.0 | 1257.9 | 1259.9 | 1262.0 | 1254.8 |
| 155°   | 1287.7 | 1281.6 | 1283.6 | 1286.7 | 1278.5 |
| 157.5° | 1307.3 | 1304.2 | 1304.2 | 1307.3 | 1299.1 |
| 160°   | 1327.9 | 1321.7 | 1322.8 | 1326.9 | 1318.6 |
| 162.5° | 1344.4 | 1338.2 | 1339.2 | 1345.4 | 1336.2 |
| 165°   | 1358.8 | 1352.6 | 1353.7 | 1359.8 | 1351.6 |
| 167.5° | 1370.2 | 1364.0 | 1365.0 | 1372.2 | 1362.9 |
| 170°   | 1379.4 | 1372.2 | 1373.2 | 1381.5 | 1372.2 |
| 172.5° | 1385.6 | 1378.4 | 1380.5 | 1387.7 | 1378.4 |
| 175°   | 1389.7 | 1383.5 | 1384.6 | 1392.8 | 1383.5 |
| 177.5° | 1392.8 | 1386.6 | 1387.7 | 1394.9 | 1386.6 |
| 180°   | 1389.7 | 1389.7 | 1389.7 | 1389.7 | 1389.7 |

(END OF REPORT)