

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: P1027053

Luminaire Tested: S125DIP-B850D850UB2750-4F0-XX-W2A-F\_5000K

Issue Date: 5/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1027053  
REPORT IS A COMBINATION OF REPORTS P1002682 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125DIP-B850D850UB2750-4F0-XX-W2A-F\_5000K  
Description: Define 5 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}  
Light Source: -  
Ballast/Driver: -

**Summary**

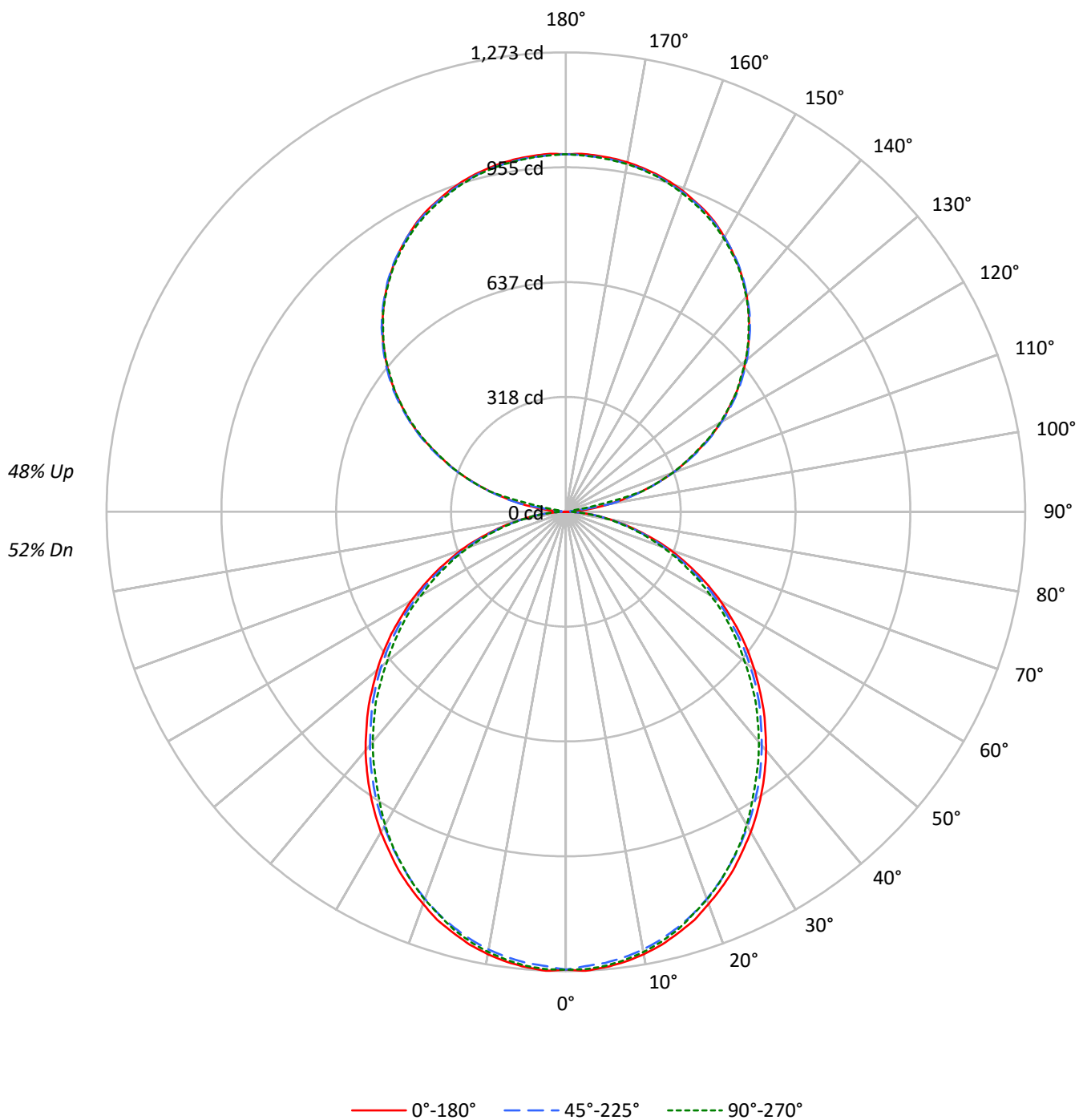
Lumens per Lamp: N/A  
Luminaire Lumens: 6348.0 lumens  
Efficiency: N/A  
Efficacy: 111.4 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

Input Watts (W): 57  
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 | 84 | 84 | 84 | 71 | 71 | 71 | 58 | 58 | 58 |
| 1   | 98  | 94  | 90  | 86  | 91  | 87  | 84  | 80  | 74 | 72 | 69 | 62 | 60 | 59 | 51 | 50 | 49 |
| 2   | 89  | 82  | 76  | 70  | 82  | 76  | 71  | 66  | 65 | 61 | 57 | 55 | 52 | 49 | 45 | 43 | 41 |
| 3   | 82  | 72  | 65  | 59  | 75  | 67  | 60  | 55  | 57 | 52 | 48 | 48 | 45 | 41 | 40 | 37 | 35 |
| 4   | 75  | 64  | 56  | 50  | 69  | 59  | 52  | 47  | 51 | 45 | 41 | 43 | 39 | 35 | 36 | 33 | 30 |
| 5   | 68  | 57  | 49  | 43  | 63  | 53  | 46  | 40  | 45 | 40 | 35 | 39 | 34 | 31 | 32 | 29 | 26 |
| 6   | 63  | 51  | 43  | 37  | 58  | 47  | 40  | 35  | 41 | 35 | 31 | 35 | 30 | 27 | 29 | 26 | 23 |
| 7   | 58  | 46  | 38  | 32  | 54  | 43  | 36  | 31  | 37 | 31 | 27 | 32 | 27 | 24 | 27 | 23 | 21 |
| 8   | 54  | 42  | 34  | 29  | 50  | 39  | 32  | 27  | 34 | 28 | 24 | 29 | 25 | 21 | 24 | 21 | 18 |
| 9   | 50  | 38  | 31  | 25  | 47  | 36  | 29  | 24  | 31 | 25 | 22 | 27 | 22 | 19 | 23 | 19 | 17 |
| 10  | 47  | 35  | 28  | 23  | 44  | 33  | 26  | 22  | 29 | 23 | 19 | 25 | 20 | 17 | 21 | 18 | 15 |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 8131 | 8131 | 8131 |
| 5°  | 8131 | 7942 | 7957 |
| 10° | 8064 | 7760 | 7735 |
| 15° | 7958 | 7542 | 7475 |
| 20° | 7815 | 7289 | 7175 |
| 25° | 7662 | 7014 | 6855 |
| 30° | 7476 | 6727 | 6517 |
| 35° | 7278 | 6427 | 6138 |
| 40° | 7073 | 6109 | 5802 |
| 45° | 6852 | 5799 | 5445 |
| 50° | 6608 | 5448 | 5028 |
| 55° | 6367 | 5060 | 4645 |
| 60° | 6080 | 4651 | 4199 |
| 65° | 5735 | 4178 | 3738 |
| 70° | 5385 | 3635 | 3206 |
| 75° | 4796 | 2992 | 2593 |
| 80° | 4088 | 2235 | 1907 |
| 85° | 3156 | 1321 | 1051 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6852 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 119.7  | 1.9       |
| 10°-20°   | 338.2  | 5.3       |
| 20°-30°   | 499.4  | 7.9       |
| 30°-40°   | 582.6  | 9.2       |
| 40°-50°   | 585.2  | 9.2       |
| 50°-60°   | 513.6  | 8.1       |
| 60°-70°   | 382.6  | 6.0       |
| 70°-80°   | 218.5  | 3.4       |
| 80°-90°   | 64.5   | 1.0       |
| 90°-100°  | 33.6   | 0.5       |
| 100°-110° | 223.6  | 3.5       |
| 110°-120° | 402.7  | 6.3       |
| 120°-130° | 516.9  | 8.1       |
| 130°-140° | 555.9  | 8.8       |
| 140°-150° | 521.7  | 8.2       |
| 150°-160° | 422.0  | 6.6       |
| 160°-170° | 272.9  | 4.3       |
| 170°-180° | 94.1   | 1.5       |
| 0°-30°    | 957.4  | 15.1      |
| 0°-40°    | 1540.0 | 24.3      |
| 0°-60°    | 2638.8 | 41.6      |
| 0°-90°    | 3304.4 | 52.1      |
| 90°-120°  | 659.9  | 10.4      |
| 90°-150°  | 2254.4 | 35.5      |
| 90°-180°  | 3044.0 | 48.0      |
| 0°-180°   | 6348.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1269 | 1269  | 1269 | 1269  | 1269 |      |
| 5°   | 1267 | 1265  | 1255 | 1264  | 1263 | 120  |
| 15°  | 1208 | 1205  | 1194 | 1199  | 1199 | 341  |
| 25°  | 1096 | 1091  | 1078 | 1080  | 1077 | 504  |
| 35°  | 947  | 943   | 929  | 924   | 916  | 592  |
| 45°  | 775  | 771   | 759  | 747   | 744  | 597  |
| 55°  | 590  | 587   | 573  | 564   | 557  | 527  |
| 65°  | 399  | 397   | 386  | 376   | 372  | 395  |
| 75°  | 212  | 210   | 205  | 202   | 198  | 226  |
| 85°  | 55   | 56    | 56   | 55    | 53   | 60   |
| 90°  | 1    | 7     | 12   | 15    | 18   | 6    |
| 95°  | 42   | 40    | 12   | 15    | 15   | 51   |
| 105° | 216  | 219   | 219  | 219   | 218  | 229  |
| 115° | 405  | 409   | 410  | 407   | 402  | 402  |
| 125° | 577  | 582   | 582  | 579   | 577  | 515  |
| 135° | 719  | 724   | 722  | 720   | 716  | 554  |
| 145° | 834  | 835   | 835  | 836   | 831  | 521  |
| 155° | 918  | 914   | 915  | 917   | 912  | 423  |
| 165° | 969  | 964   | 965  | 970   | 964  | 274  |
| 175° | 991  | 986   | 987  | 993   | 986  | 94   |
| 180° | 991  | 991   | 991  | 991   | 991  |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1269.0 | 1269.0 | 1269.0 | 1269.0 | 1269.0 |
| 2.5°   | 1273.1 | 1270.0 | 1260.0 | 1270.0 | 1269.0 |
| 5°     | 1267.0 | 1265.0 | 1255.0 | 1264.0 | 1263.0 |
| 7.5°   | 1258.0 | 1256.0 | 1244.9 | 1254.0 | 1253.0 |
| 10°    | 1244.9 | 1242.9 | 1231.9 | 1239.9 | 1238.9 |
| 12.5°  | 1228.9 | 1224.9 | 1214.8 | 1220.8 | 1220.8 |
| 15°    | 1207.8 | 1204.8 | 1193.7 | 1198.8 | 1198.8 |
| 17.5°  | 1185.7 | 1180.7 | 1169.6 | 1175.7 | 1170.6 |
| 20°    | 1156.6 | 1154.6 | 1141.5 | 1148.6 | 1143.5 |
| 22.5°  | 1127.5 | 1123.5 | 1111.4 | 1115.4 | 1112.4 |
| 25°    | 1096.4 | 1091.3 | 1078.3 | 1080.3 | 1077.3 |
| 27.5°  | 1060.2 | 1057.2 | 1044.1 | 1045.2 | 1042.1 |
| 30°    | 1025.1 | 1022.1 | 1007.0 | 1005.0 | 1002.0 |
| 32.5°  | 986.9  | 981.9  | 968.8  | 964.8  | 958.8  |
| 35°    | 946.8  | 942.7  | 928.7  | 923.7  | 915.6  |
| 37.5°  | 905.6  | 900.6  | 887.5  | 880.5  | 875.5  |
| 40°    | 863.4  | 858.4  | 844.4  | 835.3  | 832.3  |
| 42.5°  | 818.2  | 814.2  | 800.2  | 792.1  | 787.1  |
| 45°    | 775.1  | 771.1  | 759.0  | 747.0  | 744.0  |
| 47.5°  | 727.9  | 728.9  | 713.8  | 701.8  | 694.8  |
| 50°    | 682.7  | 679.7  | 667.7  | 654.6  | 647.6  |
| 52.5°  | 636.5  | 634.5  | 621.5  | 610.4  | 602.4  |
| 55°    | 590.3  | 587.3  | 573.3  | 564.2  | 557.2  |
| 57.5°  | 541.1  | 540.1  | 528.1  | 516.0  | 513.0  |
| 60°    | 495.0  | 490.9  | 479.9  | 469.9  | 462.8  |
| 62.5°  | 446.8  | 443.8  | 434.7  | 423.7  | 418.7  |
| 65°    | 398.6  | 396.6  | 385.5  | 376.5  | 372.5  |
| 67.5°  | 351.4  | 347.4  | 339.3  | 331.3  | 329.3  |
| 70°    | 307.2  | 302.2  | 293.2  | 287.1  | 283.1  |
| 72.5°  | 259.0  | 256.0  | 251.0  | 244.0  | 240.0  |
| 75°    | 211.8  | 209.8  | 204.8  | 201.8  | 197.8  |
| 77.5°  | 167.7  | 166.7  | 163.6  | 161.6  | 158.6  |
| 80°    | 126.5  | 126.5  | 124.5  | 123.5  | 121.5  |
| 82.5°  | 90.4   | 88.4   | 88.4   | 86.3   | 86.3   |
| 85°    | 55.2   | 56.2   | 56.2   | 55.2   | 53.2   |
| 87.5°  | 27.1   | 27.1   | 26.1   | 26.1   | 24.1   |
| 90°    | 0.7    | 6.6    | 11.8   | 15.4   | 17.6   |
| 92.5°  | 14.0   | 7.3    | 11.8   | 15.4   | 16.2   |
| 95°    | 41.9   | 39.7   | 11.8   | 15.4   | 15.4   |
| 97.5°  | 78.6   | 83.0   | 13.2   | 14.7   | 15.4   |
| 100°   | 122.7  | 124.9  | 127.8  | 18.4   | 15.4   |
| 102.5° | 167.5  | 170.4  | 171.9  | 173.3  | 111.6  |
| 105°   | 215.9  | 218.9  | 218.9  | 218.9  | 218.1  |
| 107.5° | 265.9  | 265.9  | 267.3  | 268.1  | 265.1  |
| 110°   | 314.4  | 314.4  | 315.8  | 313.6  | 314.4  |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 359.9 | 362.1 | 362.8 | 359.9 | 358.4 |
| 115°   | 405.4 | 409.1 | 409.8 | 406.9 | 402.5 |
| 117.5° | 453.2 | 453.2 | 456.1 | 451.7 | 450.2 |
| 120°   | 497.2 | 496.5 | 498.7 | 497.2 | 493.6 |
| 122.5° | 536.2 | 539.8 | 540.6 | 539.1 | 534.7 |
| 125°   | 576.6 | 581.7 | 581.7 | 578.8 | 576.6 |
| 127.5° | 615.5 | 619.2 | 618.4 | 617.0 | 611.1 |
| 130°   | 650.7 | 654.4 | 655.1 | 652.9 | 649.3 |
| 132.5° | 686.0 | 690.4 | 688.2 | 688.2 | 684.5 |
| 135°   | 719.0 | 723.5 | 722.0 | 720.5 | 716.1 |
| 137.5° | 749.9 | 754.3 | 752.8 | 752.8 | 749.2 |
| 140°   | 780.0 | 781.5 | 780.7 | 782.2 | 777.8 |
| 142.5° | 807.2 | 807.9 | 809.4 | 809.4 | 805.0 |
| 145°   | 833.6 | 835.1 | 835.1 | 835.8 | 831.4 |
| 147.5° | 857.1 | 857.1 | 857.9 | 858.6 | 853.5 |
| 150°   | 879.2 | 877.7 | 879.2 | 880.6 | 874.8 |
| 152.5° | 900.5 | 896.8 | 898.3 | 899.7 | 894.6 |
| 155°   | 918.1 | 913.7 | 915.2 | 917.4 | 911.5 |
| 157.5° | 932.0 | 929.8 | 929.8 | 932.0 | 926.2 |
| 160°   | 946.7 | 942.3 | 943.1 | 946.0 | 940.1 |
| 162.5° | 958.5 | 954.1 | 954.8 | 959.2 | 952.6 |
| 165°   | 968.8 | 964.4 | 965.1 | 969.5 | 963.6 |
| 167.5° | 976.8 | 972.4 | 973.2 | 978.3 | 971.7 |
| 170°   | 983.5 | 978.3 | 979.0 | 984.9 | 978.3 |
| 172.5° | 987.9 | 982.7 | 984.2 | 989.3 | 982.7 |
| 175°   | 990.8 | 986.4 | 987.1 | 993.0 | 986.4 |
| 177.5° | 993.0 | 988.6 | 989.3 | 994.5 | 988.6 |
| 180°   | 990.8 | 990.8 | 990.8 | 990.8 | 990.8 |

(END OF REPORT)