

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: P1027249

Luminaire Tested: S125RDIP-B610D850UB2750-4F0-XX-W2A-F\_2700K

Issue Date: 5/6/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1027249  
REPORT IS A COMBINATION OF REPORTS P1005690 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/6/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDIP-B610D850UB2750-4F0-XX-W2A-F\_2700K  
Description: Define 5 Regressed Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473}  
{m-EER=0.52}  
Light Source: -  
Ballast/Driver: -

**Summary**

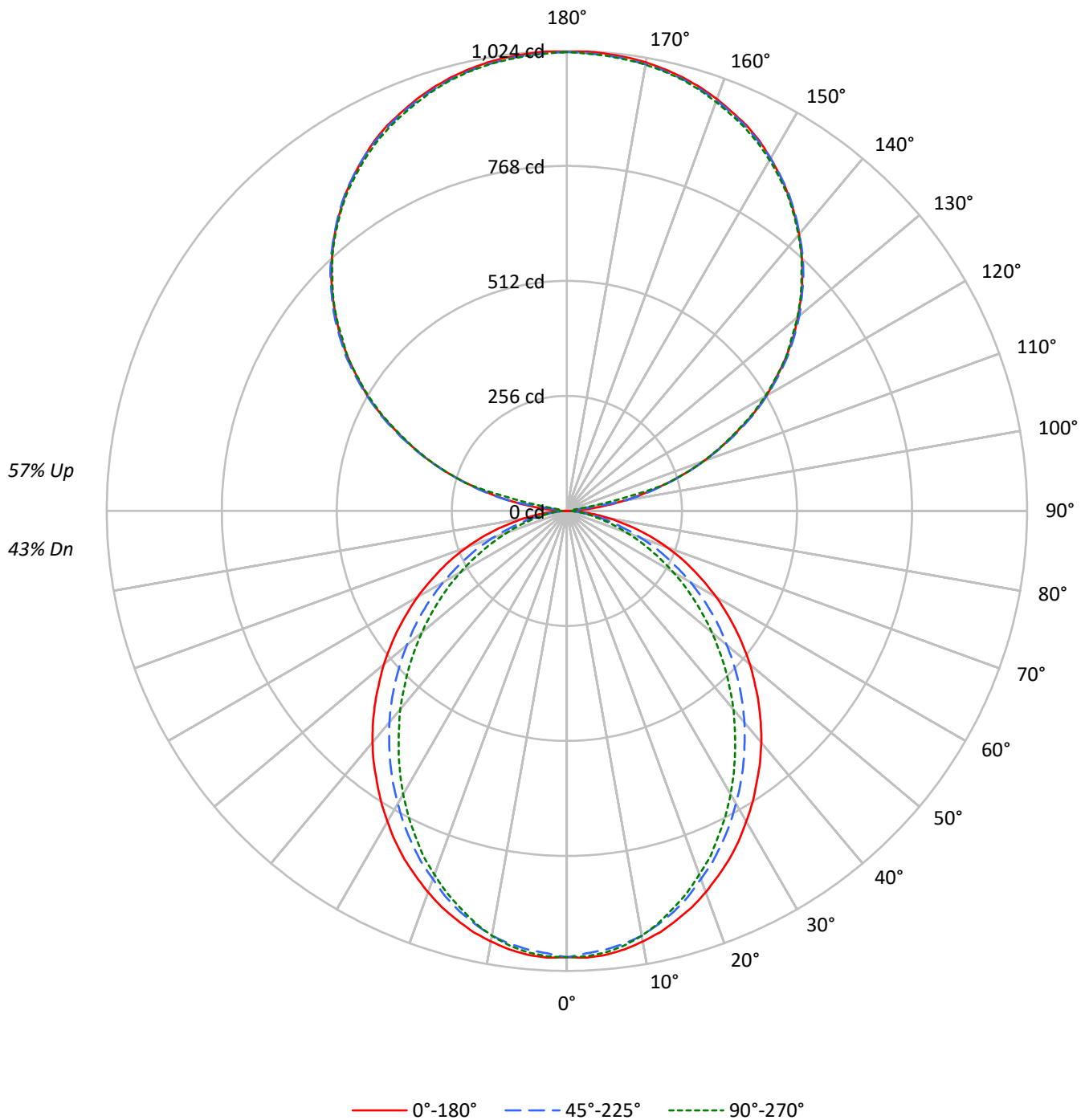
Lumens per Lamp: N/A  
Luminaire Lumens: 5486.0 lumens  
Efficiency: N/A  
Efficacy: 121.6 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

Input Watts (W): 45.1  
Input Voltage (V): 120  
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 | 79 | 79 | 79 | 64 | 64 | 64 | 50 | 50 | 50 |
| 1   | 96  | 92  | 88  | 85  | 88 | 84 | 81 | 78 | 70 | 68 | 65 | 56 | 55 | 53 | 44 | 43 | 42 |
| 2   | 88  | 81  | 75  | 70  | 80 | 74 | 69 | 65 | 61 | 58 | 54 | 50 | 47 | 45 | 39 | 37 | 36 |
| 3   | 80  | 71  | 64  | 58  | 73 | 65 | 59 | 54 | 54 | 50 | 46 | 44 | 41 | 38 | 35 | 33 | 31 |
| 4   | 73  | 63  | 55  | 49  | 67 | 58 | 51 | 46 | 48 | 43 | 39 | 39 | 36 | 33 | 31 | 29 | 27 |
| 5   | 67  | 56  | 48  | 42  | 61 | 52 | 45 | 39 | 43 | 38 | 34 | 35 | 32 | 28 | 28 | 25 | 23 |
| 6   | 62  | 50  | 42  | 37  | 57 | 46 | 39 | 34 | 39 | 34 | 30 | 32 | 28 | 25 | 26 | 23 | 20 |
| 7   | 57  | 45  | 38  | 32  | 52 | 42 | 35 | 30 | 35 | 30 | 26 | 29 | 25 | 22 | 23 | 20 | 18 |
| 8   | 53  | 41  | 34  | 28  | 49 | 38 | 31 | 27 | 32 | 27 | 23 | 27 | 23 | 20 | 21 | 19 | 16 |
| 9   | 50  | 38  | 30  | 25  | 45 | 35 | 28 | 24 | 30 | 24 | 21 | 25 | 21 | 18 | 20 | 17 | 15 |
| 10  | 46  | 34  | 27  | 23  | 42 | 32 | 26 | 21 | 27 | 22 | 19 | 23 | 19 | 16 | 18 | 16 | 13 |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 6365 | 6365 | 6365 |
| 5°  | 6366 | 6206 | 6216 |
| 10° | 6303 | 6050 | 5997 |
| 15° | 6214 | 5831 | 5707 |
| 20° | 6103 | 5567 | 5404 |
| 25° | 5977 | 5310 | 5080 |
| 30° | 5822 | 5027 | 4738 |
| 35° | 5664 | 4740 | 4376 |
| 40° | 5513 | 4446 | 4022 |
| 45° | 5332 | 4127 | 3651 |
| 50° | 5149 | 3789 | 3274 |
| 55° | 4936 | 3456 | 2883 |
| 60° | 4718 | 3076 | 2478 |
| 65° | 4459 | 2651 | 2040 |
| 70° | 4156 | 2158 | 1606 |
| 75° | 3738 | 1622 | 1171 |
| 80° | 3151 | 1050 | 790  |
| 85° | 2361 | 564  | 444  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5332 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 93.5   | 1.7       |
| 10°-20°   | 261.3  | 4.8       |
| 20°-30°   | 378.8  | 6.9       |
| 30°-40°   | 431.6  | 7.9       |
| 40°-50°   | 420.7  | 7.7       |
| 50°-60°   | 354.1  | 6.5       |
| 60°-70°   | 248.1  | 4.5       |
| 70°-80°   | 127.2  | 2.3       |
| 80°-90°   | 33.3   | 0.6       |
| 90°-100°  | 34.7   | 0.6       |
| 100°-110° | 230.5  | 4.2       |
| 110°-120° | 415.1  | 7.6       |
| 120°-130° | 532.8  | 9.7       |
| 130°-140° | 573.1  | 10.4      |
| 140°-150° | 537.9  | 9.8       |
| 150°-160° | 435.1  | 7.9       |
| 160°-170° | 281.4  | 5.1       |
| 170°-180° | 97.0   | 1.8       |
| <hr/>     |        |           |
| 0°-30°    | 733.6  | 13.4      |
| 0°-40°    | 1165.2 | 21.2      |
| 0°-60°    | 1940.0 | 35.4      |
| 0°-90°    | 2348.5 | 42.8      |
| 90°-120°  | 680.3  | 12.4      |
| 90°-150°  | 2324.0 | 42.4      |
| 90°-180°  | 3137.0 | 57.2      |
| 0°-180°   | 5486.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 993  | 993   | 993  | 993   | 993  |      |
| 5°   | 992  | 989   | 981  | 988   | 987  | 94   |
| 15°  | 943  | 939   | 923  | 922   | 915  | 266  |
| 25°  | 855  | 844   | 816  | 807   | 798  | 394  |
| 35°  | 737  | 719   | 685  | 663   | 653  | 461  |
| 45°  | 603  | 582   | 540  | 510   | 499  | 465  |
| 55°  | 458  | 434   | 392  | 358   | 346  | 409  |
| 65°  | 310  | 284   | 245  | 215   | 203  | 307  |
| 75°  | 165  | 143   | 111  | 94    | 89   | 174  |
| 85°  | 41   | 28    | 24   | 23    | 22   | 45   |
| 90°  | 1    | 7     | 12   | 16    | 18   | 5    |
| 95°  | 43   | 41    | 12   | 16    | 16   | 53   |
| 105° | 223  | 226   | 226  | 226   | 225  | 236  |
| 115° | 418  | 422   | 422  | 420   | 415  | 414  |
| 125° | 594  | 600   | 600  | 597   | 594  | 531  |
| 135° | 741  | 746   | 744  | 743   | 738  | 571  |
| 145° | 859  | 861   | 861  | 862   | 857  | 537  |
| 155° | 946  | 942   | 943  | 946   | 940  | 436  |
| 165° | 999  | 994   | 995  | 999   | 993  | 282  |
| 175° | 1021 | 1017  | 1018 | 1024  | 1017 | 97   |
| 180° | 1021 | 1021  | 1021 | 1021  | 1021 |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 0°     | 993.4 | 993.4 | 993.4 | 993.4 | 993.4 |
| 2.5°   | 995.6 | 993.4 | 985.9 | 993.4 | 992.6 |
| 5°     | 991.9 | 988.9 | 980.6 | 988.1 | 986.6 |
| 7.5°   | 984.4 | 981.4 | 971.6 | 977.6 | 976.1 |
| 10°    | 973.1 | 970.9 | 960.4 | 962.6 | 960.4 |
| 12.5°  | 960.4 | 957.4 | 942.4 | 943.9 | 940.1 |
| 15°    | 943.1 | 938.6 | 922.9 | 922.1 | 915.3 |
| 17.5°  | 925.1 | 918.3 | 899.6 | 895.8 | 890.6 |
| 20°    | 903.3 | 895.8 | 871.8 | 868.1 | 861.3 |
| 22.5°  | 879.3 | 871.8 | 846.3 | 838.1 | 832.8 |
| 25°    | 855.3 | 844.1 | 816.3 | 806.6 | 798.3 |
| 27.5°  | 828.3 | 814.8 | 785.5 | 772.8 | 764.5 |
| 30°    | 798.3 | 784.0 | 752.5 | 735.3 | 728.5 |
| 32.5°  | 769.0 | 751.8 | 719.5 | 700.0 | 691.0 |
| 35°    | 736.8 | 718.8 | 685.0 | 663.3 | 652.7 |
| 37.5°  | 706.0 | 684.3 | 649.7 | 624.2 | 613.7 |
| 40°    | 673.0 | 650.5 | 614.5 | 586.0 | 577.0 |
| 42.5°  | 638.5 | 615.2 | 577.7 | 550.7 | 536.5 |
| 45°    | 603.2 | 581.5 | 540.2 | 510.2 | 498.9 |
| 47.5°  | 566.5 | 544.0 | 502.7 | 471.9 | 459.2 |
| 50°    | 532.0 | 507.2 | 464.4 | 432.9 | 421.7 |
| 52.5°  | 494.4 | 468.9 | 429.2 | 394.7 | 383.4 |
| 55°    | 457.7 | 433.7 | 391.6 | 357.9 | 345.9 |
| 57.5°  | 420.2 | 394.7 | 354.1 | 321.1 | 310.6 |
| 60°    | 384.1 | 357.9 | 317.4 | 284.4 | 273.1 |
| 62.5°  | 345.9 | 321.1 | 279.9 | 249.8 | 238.6 |
| 65°    | 309.9 | 284.4 | 244.6 | 214.6 | 203.3 |
| 67.5°  | 273.9 | 248.3 | 210.1 | 181.6 | 172.6 |
| 70°    | 237.1 | 211.6 | 174.1 | 150.8 | 141.8 |
| 72.5°  | 201.1 | 176.3 | 141.8 | 120.8 | 115.5 |
| 75°    | 165.1 | 142.6 | 111.0 | 94.5  | 89.3  |
| 77.5°  | 128.3 | 110.3 | 84.0  | 71.3  | 66.8  |
| 80°    | 97.5  | 79.5  | 58.5  | 51.8  | 50.3  |
| 82.5°  | 67.5  | 51.8  | 39.0  | 36.8  | 36.0  |
| 85°    | 41.3  | 27.8  | 24.0  | 23.3  | 22.5  |
| 87.5°  | 17.3  | 12.0  | 11.3  | 11.3  | 10.5  |
| 90°    | 0.8   | 6.8   | 12.1  | 15.9  | 18.2  |
| 92.5°  | 14.4  | 7.6   | 12.1  | 15.9  | 16.7  |
| 95°    | 43.2  | 40.9  | 12.1  | 15.9  | 15.9  |
| 97.5°  | 81.0  | 85.6  | 13.6  | 15.1  | 15.9  |
| 100°   | 126.4 | 128.7 | 131.7 | 18.9  | 15.9  |
| 102.5° | 172.6 | 175.7 | 177.2 | 178.7 | 115.1 |
| 105°   | 222.6 | 225.6 | 225.6 | 225.6 | 224.9 |
| 107.5° | 274.1 | 274.1 | 275.6 | 276.4 | 273.3 |
| 110°   | 324.1 | 324.1 | 325.6 | 323.3 | 324.1 |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 371.0  | 373.3  | 374.0  | 371.0  | 369.5  |
| 115°   | 417.9  | 421.7  | 422.5  | 419.5  | 414.9  |
| 117.5° | 467.2  | 467.2  | 470.2  | 465.6  | 464.1  |
| 120°   | 512.6  | 511.8  | 514.1  | 512.6  | 508.8  |
| 122.5° | 552.7  | 556.5  | 557.3  | 555.7  | 551.2  |
| 125°   | 594.4  | 599.7  | 599.7  | 596.6  | 594.4  |
| 127.5° | 634.5  | 638.3  | 637.5  | 636.0  | 629.9  |
| 130°   | 670.8  | 674.6  | 675.4  | 673.1  | 669.3  |
| 132.5° | 707.2  | 711.7  | 709.4  | 709.4  | 705.7  |
| 135°   | 741.2  | 745.8  | 744.3  | 742.8  | 738.2  |
| 137.5° | 773.0  | 777.6  | 776.1  | 776.1  | 772.3  |
| 140°   | 804.1  | 805.6  | 804.8  | 806.4  | 801.8  |
| 142.5° | 832.1  | 832.9  | 834.4  | 834.4  | 829.8  |
| 145°   | 859.4  | 860.9  | 860.9  | 861.6  | 857.1  |
| 147.5° | 883.6  | 883.6  | 884.3  | 885.1  | 879.8  |
| 150°   | 906.3  | 904.8  | 906.3  | 907.8  | 901.8  |
| 152.5° | 928.3  | 924.5  | 926.0  | 927.5  | 922.2  |
| 155°   | 946.4  | 941.9  | 943.4  | 945.7  | 939.6  |
| 157.5° | 960.8  | 958.5  | 958.5  | 960.8  | 954.8  |
| 160°   | 976.0  | 971.4  | 972.2  | 975.2  | 969.1  |
| 162.5° | 988.1  | 983.5  | 984.3  | 988.8  | 982.0  |
| 165°   | 998.7  | 994.1  | 994.9  | 999.4  | 993.4  |
| 167.5° | 1007.0 | 1002.5 | 1003.2 | 1008.5 | 1001.7 |
| 170°   | 1013.8 | 1008.5 | 1009.3 | 1015.3 | 1008.5 |
| 172.5° | 1018.4 | 1013.1 | 1014.6 | 1019.9 | 1013.1 |
| 175°   | 1021.4 | 1016.8 | 1017.6 | 1023.7 | 1016.8 |
| 177.5° | 1023.7 | 1019.1 | 1019.9 | 1025.2 | 1019.1 |
| 180°   | 1021.4 | 1021.4 | 1021.4 | 1021.4 | 1021.4 |

(END OF REPORT)