

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: P1027149

Luminaire Tested: S125RDIP-B1270D850UB2750-4F0-XX-W2A-F\_2700K

Issue Date: 5/6/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1027149  
REPORT IS A COMBINATION OF REPORTS P1005290 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/6/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDIP-B1270D850UB2750-4F0-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**

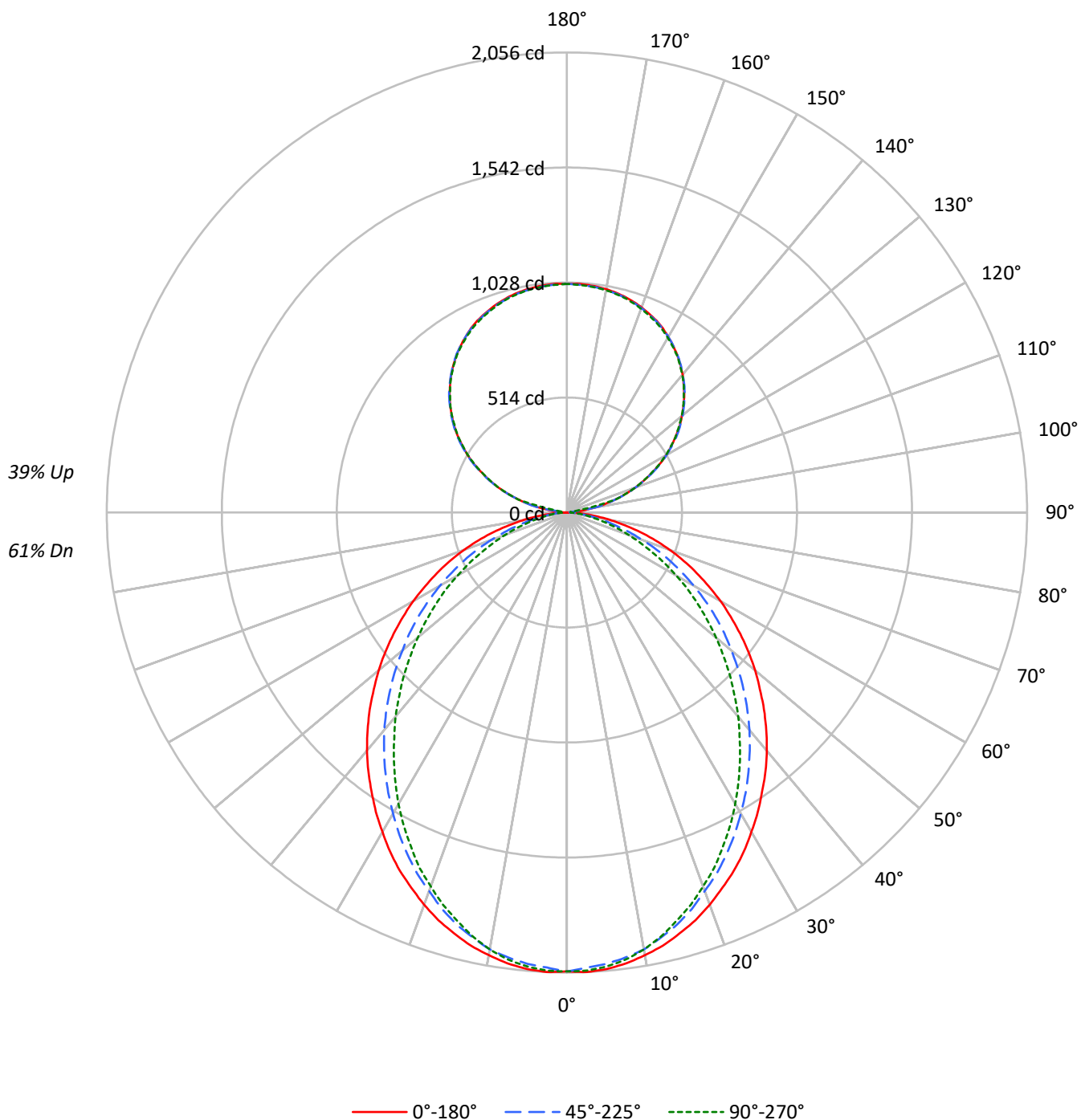
Lumens per Lamp: N/A  
Luminaire Lumens: 7985.0 lumens  
Efficiency: N/A  
Efficacy: 96.9 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')  
CIE Type: Semi-Direct

Input Watts (W): 82.4  
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 |    |    |    | 0  |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 |
| RCR |     |     |     |     |     |     |     |     |    |    |    |    |    |    |    |    |    |
| 0   | 110 | 110 | 110 | 110 | 103 | 103 | 103 | 103 | 89 | 89 | 89 | 77 | 77 | 77 | 66 | 66 | 66 |
| 1   | 100 | 96  | 92  | 89  | 94  | 90  | 87  | 84  | 79 | 76 | 74 | 68 | 67 | 65 | 59 | 57 | 56 |
| 2   | 92  | 84  | 78  | 73  | 86  | 79  | 74  | 69  | 69 | 65 | 62 | 60 | 57 | 55 | 52 | 50 | 48 |
| 3   | 84  | 74  | 67  | 61  | 78  | 70  | 63  | 58  | 61 | 56 | 52 | 54 | 50 | 46 | 46 | 43 | 41 |
| 4   | 77  | 66  | 58  | 52  | 72  | 62  | 55  | 50  | 55 | 49 | 45 | 48 | 44 | 40 | 42 | 38 | 35 |
| 5   | 71  | 59  | 51  | 45  | 66  | 56  | 48  | 43  | 49 | 43 | 39 | 43 | 39 | 35 | 38 | 34 | 31 |
| 6   | 65  | 53  | 45  | 39  | 61  | 50  | 43  | 37  | 44 | 38 | 34 | 39 | 34 | 31 | 34 | 30 | 27 |
| 7   | 60  | 48  | 40  | 34  | 56  | 45  | 38  | 33  | 40 | 34 | 30 | 36 | 31 | 27 | 31 | 27 | 25 |
| 8   | 56  | 44  | 36  | 31  | 52  | 41  | 34  | 29  | 37 | 31 | 27 | 33 | 28 | 24 | 29 | 25 | 22 |
| 9   | 52  | 40  | 32  | 27  | 49  | 38  | 31  | 26  | 34 | 28 | 24 | 30 | 25 | 22 | 27 | 23 | 20 |
| 10  | 49  | 37  | 30  | 25  | 46  | 35  | 28  | 24  | 31 | 26 | 22 | 28 | 23 | 20 | 25 | 21 | 18 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 13142 | 13142 | 13142 |
| 5°  | 13143 | 12814 | 12834 |
| 10° | 13015 | 12491 | 12381 |
| 15° | 12831 | 12039 | 11785 |
| 20° | 12603 | 11495 | 11159 |
| 25° | 12341 | 10964 | 10488 |
| 30° | 12021 | 10380 | 9784  |
| 35° | 11694 | 9788  | 9036  |
| 40° | 11384 | 9179  | 8305  |
| 45° | 11010 | 8521  | 7540  |
| 50° | 10632 | 7823  | 6760  |
| 55° | 10192 | 7137  | 5954  |
| 60° | 9742  | 6351  | 5116  |
| 65° | 9206  | 5473  | 4213  |
| 70° | 8580  | 4455  | 3316  |
| 75° | 7717  | 3350  | 2417  |
| 80° | 6508  | 2169  | 1630  |
| 85° | 4871  | 1166  | 919   |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11010 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 193.0  | 2.4       |
| 10°-20°   | 539.5  | 6.8       |
| 20°-30°   | 782.2  | 9.8       |
| 30°-40°   | 891.2  | 11.2      |
| 40°-50°   | 868.6  | 10.9      |
| 50°-60°   | 731.0  | 9.2       |
| 60°-70°   | 512.3  | 6.4       |
| 70°-80°   | 262.6  | 3.3       |
| 80°-90°   | 67.0   | 0.8       |
| 90°-100°  | 34.7   | 0.4       |
| 100°-110° | 230.5  | 2.9       |
| 110°-120° | 415.1  | 5.2       |
| 120°-130° | 532.8  | 6.7       |
| 130°-140° | 573.1  | 7.2       |
| 140°-150° | 537.9  | 6.7       |
| 150°-160° | 435.1  | 5.4       |
| 160°-170° | 281.4  | 3.5       |
| 170°-180° | 97.0   | 1.2       |
| 0°-30°    | 1514.8 | 19.0      |
| 0°-40°    | 2405.9 | 30.1      |
| 0°-60°    | 4005.6 | 50.2      |
| 0°-90°    | 4847.5 | 60.7      |
| 90°-120°  | 680.3  | 8.5       |
| 90°-150°  | 2324.0 | 29.1      |
| 90°-180°  | 3137.0 | 39.3      |
| 0°-180°   | 7985.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 2051 | 2051  | 2051 | 2051  | 2051 |      |
| 5°   | 2048 | 2042  | 2025 | 2040  | 2037 | 194  |
| 15°  | 1947 | 1938  | 1906 | 1904  | 1890 | 549  |
| 25°  | 1766 | 1743  | 1686 | 1665  | 1648 | 813  |
| 35°  | 1521 | 1484  | 1414 | 1370  | 1348 | 953  |
| 45°  | 1246 | 1201  | 1115 | 1053  | 1030 | 961  |
| 55°  | 945  | 895   | 809  | 739   | 714  | 845  |
| 65°  | 640  | 587   | 505  | 443   | 420  | 634  |
| 75°  | 341  | 294   | 229  | 195   | 184  | 360  |
| 85°  | 85   | 57    | 50   | 48    | 46   | 93   |
| 90°  | 1    | 7     | 12   | 16    | 18   | 7    |
| 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°     | 2051.1 | 2051.1 | 2051.1 | 2051.1 | 2051.1 |
| 2.5°   | 2055.7 | 2051.1 | 2035.6 | 2051.1 | 2049.5 |
| 5°     | 2048.0 | 2041.8 | 2024.8 | 2040.2 | 2037.1 |
| 7.5°   | 2032.5 | 2026.3 | 2006.2 | 2018.6 | 2015.5 |
| 10°    | 2009.3 | 2004.6 | 1982.9 | 1987.6 | 1982.9 |
| 12.5°  | 1982.9 | 1976.7 | 1945.7 | 1948.8 | 1941.1 |
| 15°    | 1947.3 | 1938.0 | 1905.5 | 1903.9 | 1890.0 |
| 17.5°  | 1910.1 | 1896.2 | 1857.4 | 1849.7 | 1838.9 |
| 20°    | 1865.2 | 1849.7 | 1800.1 | 1792.4 | 1778.4 |
| 22.5°  | 1815.6 | 1800.1 | 1747.5 | 1730.4 | 1719.6 |
| 25°    | 1766.0 | 1742.8 | 1685.5 | 1665.4 | 1648.3 |
| 27.5°  | 1710.3 | 1682.4 | 1622.0 | 1595.6 | 1578.6 |
| 30°    | 1648.3 | 1618.9 | 1553.8 | 1518.2 | 1504.2 |
| 32.5°  | 1587.9 | 1552.3 | 1485.6 | 1445.4 | 1426.8 |
| 35°    | 1521.3 | 1484.1 | 1414.4 | 1369.5 | 1347.8 |
| 37.5°  | 1457.8 | 1412.8 | 1341.6 | 1288.9 | 1267.2 |
| 40°    | 1389.6 | 1343.1 | 1268.8 | 1209.9 | 1191.3 |
| 42.5°  | 1318.3 | 1270.3 | 1192.9 | 1137.1 | 1107.7 |
| 45°    | 1245.5 | 1200.6 | 1115.4 | 1053.4 | 1030.2 |
| 47.5°  | 1169.6 | 1123.1 | 1037.9 | 974.4  | 948.1  |
| 50°    | 1098.4 | 1047.2 | 958.9  | 893.9  | 870.6  |
| 52.5°  | 1020.9 | 968.2  | 886.1  | 814.9  | 791.6  |
| 55°    | 945.0  | 895.4  | 808.7  | 739.0  | 714.2  |
| 57.5°  | 867.5  | 814.9  | 731.2  | 663.0  | 641.4  |
| 60°    | 793.2  | 739.0  | 655.3  | 587.1  | 563.9  |
| 62.5°  | 714.2  | 663.0  | 577.8  | 515.9  | 492.6  |
| 65°    | 639.8  | 587.1  | 505.0  | 443.1  | 419.8  |
| 67.5°  | 565.4  | 512.8  | 433.8  | 374.9  | 356.3  |
| 70°    | 489.5  | 436.9  | 359.4  | 311.4  | 292.8  |
| 72.5°  | 415.2  | 364.1  | 292.8  | 249.4  | 238.6  |
| 75°    | 340.8  | 294.3  | 229.3  | 195.2  | 184.4  |
| 77.5°  | 264.9  | 227.7  | 173.5  | 147.2  | 137.9  |
| 80°    | 201.4  | 164.2  | 120.8  | 106.9  | 103.8  |
| 82.5°  | 139.4  | 106.9  | 80.6   | 75.9   | 74.4   |
| 85°    | 85.2   | 57.3   | 49.6   | 48.0   | 46.5   |
| 87.5°  | 35.6   | 24.8   | 23.2   | 23.2   | 21.7   |
| 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)