

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: P1028278

Luminaire Tested: S125DIP-B850D1270UB50-4F0-XX-W2A-D4

Issue Date: 5/6/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1028278  
REPORT IS A COMBINATION OF REPORTS P1002535 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/6/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125DIP-B850D1270UB50-4F0-XX-W2A-D4  
Description: Define 5 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}  
Light Source: -  
Ballast/Driver: -

**Summary**

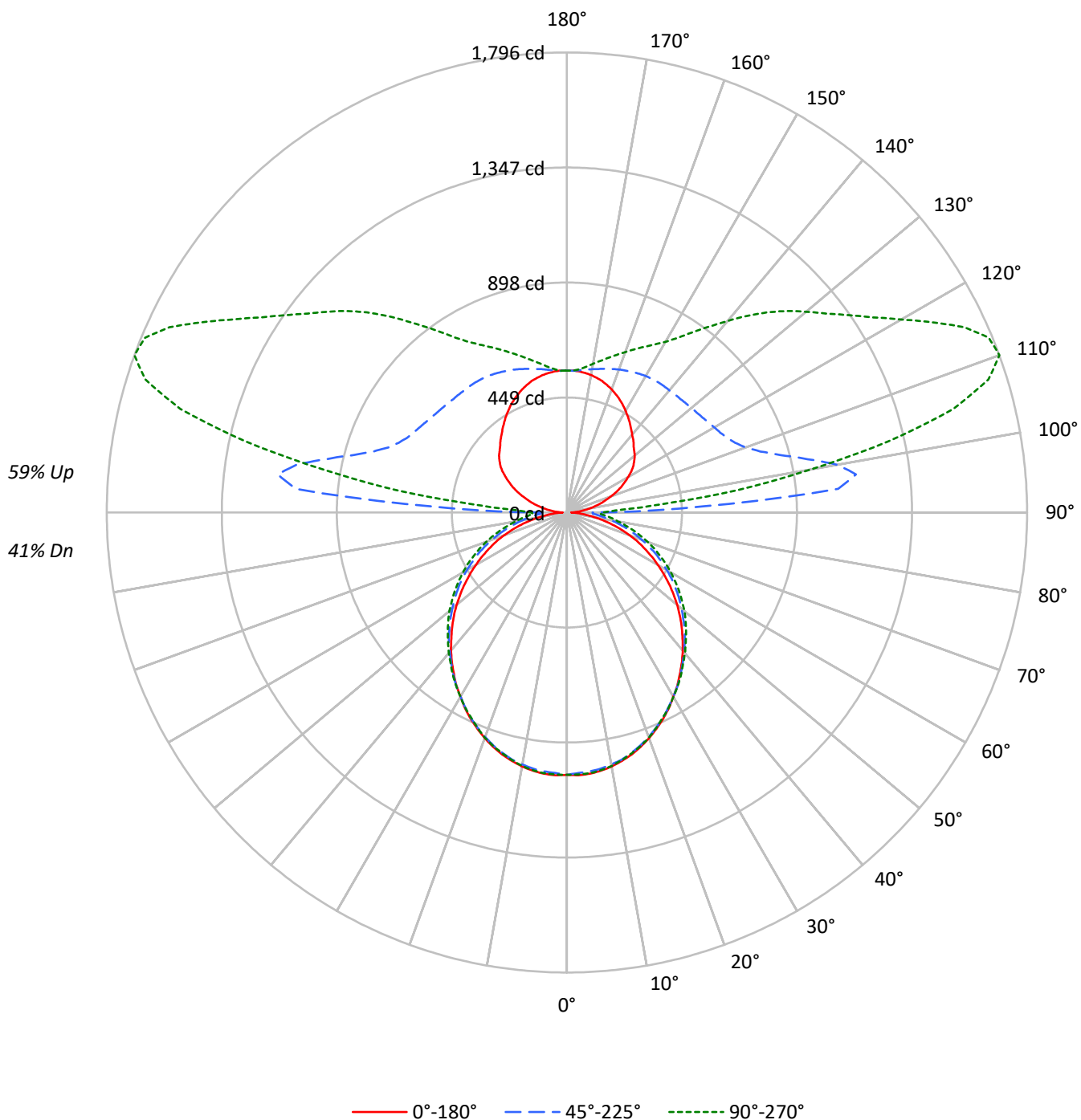
Lumens per Lamp: N/A  
Luminaire Lumens: 7342.5 lumens  
Efficiency: N/A  
Efficacy: 103.6 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

Input Watts (W): 70.9  
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 | 47 | 47 | 47 |
| 1   | 95  | 91  | 86  | 83  | 86 | 83 | 79 | 76 | 68 | 65 | 63 | 54 | 52 | 50 | 41 | 40 | 39 |
| 2   | 86  | 79  | 72  | 67  | 78 | 72 | 66 | 62 | 59 | 55 | 51 | 47 | 44 | 42 | 36 | 34 | 32 |
| 3   | 79  | 69  | 62  | 56  | 71 | 63 | 57 | 51 | 52 | 47 | 43 | 41 | 38 | 35 | 31 | 29 | 27 |
| 4   | 72  | 61  | 53  | 47  | 65 | 56 | 49 | 43 | 46 | 41 | 36 | 37 | 33 | 30 | 28 | 25 | 23 |
| 5   | 66  | 54  | 46  | 40  | 60 | 49 | 42 | 37 | 41 | 35 | 31 | 33 | 29 | 26 | 25 | 22 | 20 |
| 6   | 60  | 48  | 40  | 34  | 55 | 44 | 37 | 32 | 37 | 31 | 27 | 29 | 25 | 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 | 24 | 20 | 17 | 19 | 16 | 14 |
| 9   | 48  | 36  | 28  | 23  | 44 | 33 | 26 | 22 | 28 | 22 | 19 | 22 | 18 | 16 | 18 | 15 | 13 |
| 10  | 45  | 33  | 26  | 21  | 41 | 30 | 24 | 20 | 25 | 20 | 17 | 21 | 17 | 14 | 16 | 13 | 11 |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 6560 | 6560 | 6560 |
| 5°  | 6571 | 6423 | 6438 |
| 10° | 6522 | 6292 | 6274 |
| 15° | 6443 | 6139 | 6072 |
| 20° | 6335 | 5955 | 5870 |
| 25° | 6208 | 5760 | 5627 |
| 30° | 6055 | 5546 | 5406 |
| 35° | 5911 | 5349 | 5202 |
| 40° | 5765 | 5142 | 4997 |
| 45° | 5599 | 4962 | 4812 |
| 50° | 5442 | 4767 | 4645 |
| 55° | 5251 | 4580 | 4452 |
| 60° | 5043 | 4368 | 4253 |
| 65° | 4825 | 4145 | 4029 |
| 70° | 4575 | 3845 | 3797 |
| 75° | 4182 | 3549 | 3513 |
| 80° | 3665 | 3190 | 3199 |
| 85° | 3156 | 2904 | 3034 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
Vertical Angle: 45°  
Luminance: 5599 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 96.9   | 1.3       |
| 10°-20°   | 275.1  | 3.7       |
| 20°-30°   | 409.0  | 5.6       |
| 30°-40°   | 484.4  | 6.6       |
| 40°-50°   | 500.8  | 6.8       |
| 50°-60°   | 461.3  | 6.3       |
| 60°-70°   | 372.9  | 5.1       |
| 70°-80°   | 249.5  | 3.4       |
| 80°-90°   | 131.2  | 1.8       |
| 90°-100°  | 489.7  | 6.7       |
| 100°-110° | 919.9  | 12.5      |
| 110°-120° | 845.0  | 11.5      |
| 120°-130° | 675.0  | 9.2       |
| 130°-140° | 534.9  | 7.3       |
| 140°-150° | 398.8  | 5.4       |
| 150°-160° | 279.6  | 3.8       |
| 160°-170° | 164.8  | 2.2       |
| 170°-180° | 53.6   | 0.7       |
| 0°-30°    | 781.0  | 10.6      |
| 0°-40°    | 1265.4 | 17.2      |
| 0°-60°    | 2227.5 | 30.3      |
| 0°-90°    | 2981.2 | 40.6      |
| 90°-120°  | 2254.6 | 30.7      |
| 90°-150°  | 3863.4 | 52.6      |
| 90°-180°  | 4361.0 | 59.4      |
| 0°-180°   | 7342.5 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1024 | 1024  | 1024 | 1024  | 1024 |      |
| 5°   | 1024 | 1022  | 1015 | 1023  | 1022 | 97   |
| 15°  | 978  | 979   | 972  | 978   | 974  | 275  |
| 25°  | 888  | 891   | 885  | 889   | 884  | 409  |
| 35°  | 769  | 776   | 773  | 776   | 776  | 481  |
| 45°  | 633  | 644   | 650  | 656   | 658  | 489  |
| 55°  | 487  | 503   | 519  | 530   | 534  | 435  |
| 65°  | 335  | 358   | 382  | 398   | 402  | 333  |
| 75°  | 185  | 211   | 243  | 263   | 268  | 196  |
| 85°  | 55   | 88    | 124  | 146   | 154  | 58   |
| 90°  | 17   | 58    | 100  | 129   | 138  | 14   |
| 95°  | 50   | 148   | 1063 | 544   | 365  | 49   |
| 105° | 135  | 202   | 865  | 1669  | 1562 | 142  |
| 115° | 232  | 285   | 689  | 1458  | 1711 | 228  |
| 125° | 317  | 369   | 646  | 1154  | 1343 | 281  |
| 135° | 368  | 442   | 627  | 955   | 1105 | 286  |
| 145° | 428  | 488   | 621  | 778   | 860  | 268  |
| 155° | 487  | 524   | 605  | 684   | 714  | 224  |
| 165° | 532  | 546   | 581  | 616   | 625  | 150  |
| 175° | 553  | 553   | 557  | 564   | 562  | 53   |
| 180° | 554  | 554   | 554  | 554   | 554  |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1023.9 | 1023.9 | 1023.9 | 1023.9 | 1023.9 |
| 2.5°   | 1027.0 | 1024.9 | 1017.9 | 1024.9 | 1023.9 |
| 5°     | 1023.9 | 1021.9 | 1014.9 | 1022.9 | 1021.9 |
| 7.5°   | 1016.9 | 1015.9 | 1008.9 | 1015.9 | 1014.9 |
| 10°    | 1006.9 | 1006.9 | 998.8  | 1005.9 | 1004.9 |
| 12.5°  | 992.8  | 993.8  | 987.8  | 992.8  | 989.8  |
| 15°    | 977.8  | 978.8  | 971.7  | 977.8  | 973.8  |
| 17.5°  | 958.7  | 960.7  | 953.7  | 958.7  | 955.7  |
| 20°    | 937.6  | 939.6  | 932.6  | 935.6  | 935.6  |
| 22.5°  | 913.5  | 917.5  | 909.5  | 913.5  | 910.5  |
| 25°    | 888.4  | 891.4  | 885.4  | 889.4  | 884.4  |
| 27.5°  | 861.3  | 865.3  | 858.3  | 861.3  | 859.3  |
| 30°    | 830.2  | 836.2  | 830.2  | 832.2  | 831.2  |
| 32.5°  | 802.1  | 807.1  | 803.1  | 805.1  | 804.1  |
| 35°    | 769.0  | 776.0  | 773.0  | 776.0  | 776.0  |
| 37.5°  | 736.8  | 742.9  | 741.9  | 745.9  | 744.9  |
| 40°    | 703.7  | 711.7  | 710.7  | 714.8  | 716.8  |
| 42.5°  | 667.6  | 678.6  | 681.6  | 686.6  | 686.6  |
| 45°    | 633.4  | 644.5  | 649.5  | 656.5  | 657.5  |
| 47.5°  | 598.3  | 608.3  | 616.4  | 626.4  | 628.4  |
| 50°    | 562.2  | 573.2  | 584.3  | 595.3  | 598.3  |
| 52.5°  | 524.0  | 538.1  | 552.1  | 564.2  | 566.2  |
| 55°    | 486.9  | 502.9  | 519.0  | 530.0  | 534.1  |
| 57.5°  | 448.7  | 467.8  | 485.9  | 497.9  | 500.9  |
| 60°    | 410.6  | 430.7  | 450.7  | 465.8  | 468.8  |
| 62.5°  | 373.4  | 393.5  | 415.6  | 432.7  | 436.7  |
| 65°    | 335.3  | 358.4  | 382.5  | 397.5  | 401.5  |
| 67.5°  | 300.2  | 322.2  | 346.3  | 364.4  | 369.4  |
| 70°    | 261.0  | 284.1  | 310.2  | 329.3  | 335.3  |
| 72.5°  | 222.9  | 247.0  | 276.1  | 297.1  | 301.2  |
| 75°    | 184.7  | 210.8  | 242.9  | 263.0  | 268.0  |
| 77.5°  | 147.6  | 177.7  | 207.8  | 229.9  | 233.9  |
| 80°    | 113.4  | 143.6  | 177.7  | 199.8  | 203.8  |
| 82.5°  | 82.3   | 114.4  | 149.6  | 170.7  | 178.7  |
| 85°    | 55.2   | 88.3   | 123.5  | 145.6  | 153.6  |
| 87.5°  | 35.1   | 67.3   | 101.4  | 124.5  | 131.5  |
| 90°    | 17.2   | 58.2   | 100.2  | 128.9  | 138.1  |
| 92.5°  | 30.8   | 134.8  | 523.8  | 219.3  | 190.0  |
| 95°    | 49.9   | 148.0  | 1062.6 | 544.3  | 364.8  |
| 97.5°  | 68.9   | 153.9  | 1137.9 | 900.9  | 672.4  |
| 100°   | 89.2   | 167.2  | 1072.5 | 1231.0 | 962.3  |
| 102.5° | 111.6  | 183.8  | 962.4  | 1509.6 | 1287.8 |
| 105°   | 135.2  | 201.5  | 864.7  | 1669.2 | 1561.8 |
| 107.5° | 157.6  | 221.4  | 791.5  | 1711.6 | 1724.3 |
| 110°   | 182.3  | 242.4  | 741.7  | 1662.4 | 1796.2 |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5°  | 90°    |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 208.0 | 263.5 | 710.9 | 1565.2 | 1782.3 |
| 115°   | 231.6 | 285.0 | 689.1 | 1458.0 | 1711.3 |
| 117.5° | 252.9 | 307.0 | 674.9 | 1359.2 | 1607.9 |
| 120°   | 275.2 | 329.0 | 664.2 | 1276.4 | 1506.9 |
| 122.5° | 297.7 | 349.4 | 654.6 | 1208.4 | 1417.0 |
| 125°   | 316.6 | 369.2 | 646.2 | 1153.6 | 1342.8 |
| 127.5° | 331.3 | 389.4 | 639.9 | 1104.9 | 1275.1 |
| 130°   | 345.8 | 409.6 | 634.7 | 1056.8 | 1219.8 |
| 132.5° | 356.0 | 427.4 | 630.6 | 1005.4 | 1164.6 |
| 135°   | 368.2 | 441.5 | 626.6 | 955.2  | 1104.7 |
| 137.5° | 383.9 | 455.4 | 624.7 | 903.7  | 1041.7 |
| 140°   | 396.3 | 467.2 | 622.8 | 856.2  | 976.3  |
| 142.5° | 411.9 | 477.4 | 621.9 | 814.7  | 915.3  |
| 145°   | 427.5 | 488.5 | 620.8 | 778.2  | 859.8  |
| 147.5° | 443.3 | 498.6 | 618.6 | 747.3  | 809.1  |
| 150°   | 457.8 | 507.5 | 615.2 | 722.4  | 769.2  |
| 152.5° | 473.4 | 516.4 | 610.8 | 702.9  | 739.2  |
| 155°   | 486.8 | 523.7 | 605.2 | 684.0  | 713.5  |
| 157.5° | 499.1 | 531.0 | 599.6 | 666.0  | 690.1  |
| 160°   | 511.4 | 536.5 | 594.0 | 648.2  | 666.6  |
| 162.5° | 521.4 | 542.1 | 587.3 | 632.0  | 645.4  |
| 165°   | 531.5 | 546.0 | 580.6 | 615.8  | 625.3  |
| 167.5° | 538.2 | 548.2 | 573.9 | 600.8  | 606.3  |
| 170°   | 544.9 | 551.0 | 568.3 | 586.2  | 589.6  |
| 172.5° | 549.4 | 552.2 | 561.6 | 574.4  | 573.9  |
| 175°   | 552.7 | 552.7 | 557.2 | 563.9  | 561.6  |
| 177.5° | 554.9 | 552.7 | 553.8 | 557.2  | 553.8  |
| 180°   | 553.8 | 553.8 | 553.8 | 553.8  | 553.8  |

(END OF REPORT)