

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: P1028341

Luminaire Tested: S125DIP-B850D610UB30-4F0-XX-W2A-D4

Issue Date: 5/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1028341  
REPORT IS A COMBINATION OF REPORTS P1002628 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125DIP-B850D610UB30-4F0-XX-W2A-D4  
Description: Define 5 Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}  
Light Source: -  
Ballast/Driver: -

**Summary**

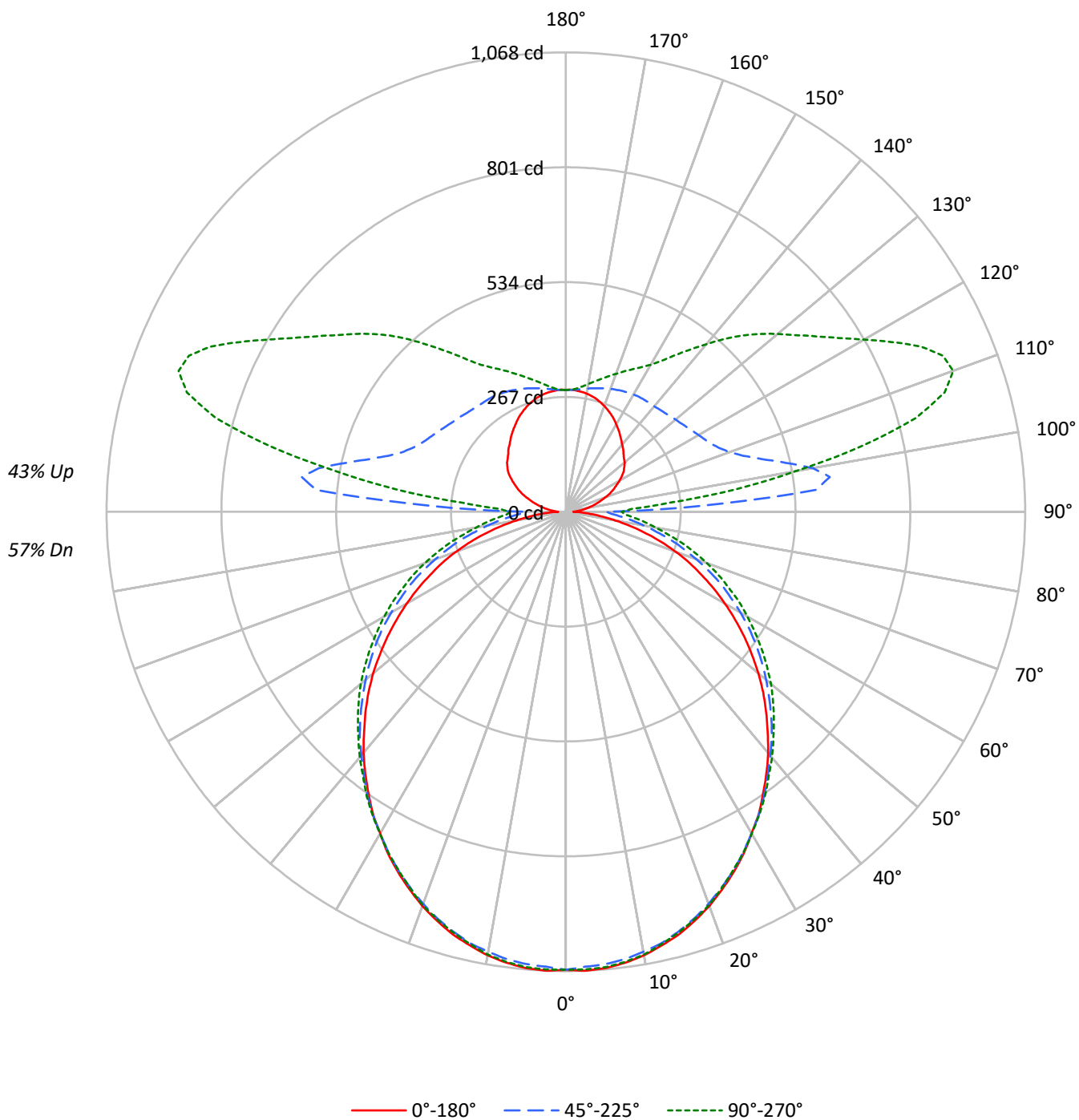
Lumens per Lamp: N/A  
Luminaire Lumens: 5434.3 lumens  
Efficiency: N/A  
Efficacy: 105.9 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

Input Watts (W): 51.3  
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   | 109 | 109 | 109 | 109 | 101 | 101 | 101 | 101 | 87 | 87 | 87 | 74 | 74 | 74 | 63 | 63 | 63 |
| 1   | 99  | 94  | 90  | 86  | 91  | 87  | 84  | 80  | 75 | 73 | 70 | 64 | 62 | 60 | 54 | 53 | 51 |
| 2   | 89  | 81  | 75  | 69  | 83  | 76  | 70  | 65  | 65 | 61 | 57 | 56 | 53 | 50 | 47 | 45 | 42 |
| 3   | 81  | 71  | 64  | 57  | 75  | 67  | 60  | 54  | 57 | 52 | 48 | 49 | 45 | 42 | 41 | 38 | 36 |
| 4   | 74  | 63  | 55  | 48  | 69  | 59  | 51  | 46  | 51 | 45 | 41 | 44 | 39 | 35 | 37 | 33 | 31 |
| 5   | 68  | 56  | 48  | 41  | 63  | 52  | 45  | 39  | 46 | 39 | 35 | 39 | 34 | 31 | 33 | 29 | 27 |
| 6   | 63  | 50  | 42  | 36  | 58  | 47  | 39  | 34  | 41 | 35 | 30 | 35 | 30 | 27 | 30 | 26 | 23 |
| 7   | 58  | 45  | 37  | 31  | 54  | 42  | 35  | 30  | 37 | 31 | 27 | 32 | 27 | 24 | 27 | 24 | 21 |
| 8   | 54  | 41  | 33  | 28  | 50  | 39  | 31  | 26  | 34 | 28 | 24 | 29 | 25 | 21 | 25 | 21 | 18 |
| 9   | 50  | 38  | 30  | 25  | 47  | 35  | 28  | 23  | 31 | 25 | 21 | 27 | 22 | 19 | 23 | 19 | 17 |
| 10  | 47  | 34  | 27  | 22  | 44  | 32  | 26  | 21  | 29 | 23 | 19 | 25 | 20 | 17 | 21 | 18 | 15 |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 6823 | 6823 | 6823 |
| 5°  | 6834 | 6680 | 6697 |
| 10° | 6783 | 6544 | 6525 |
| 15° | 6700 | 6385 | 6315 |
| 20° | 6589 | 6194 | 6106 |
| 25° | 6457 | 5991 | 5853 |
| 30° | 6297 | 5768 | 5623 |
| 35° | 6147 | 5563 | 5411 |
| 40° | 5996 | 5348 | 5197 |
| 45° | 5824 | 5161 | 5005 |
| 50° | 5659 | 4957 | 4832 |
| 55° | 5462 | 4764 | 4630 |
| 60° | 5245 | 4543 | 4424 |
| 65° | 5017 | 4311 | 4191 |
| 70° | 4759 | 3999 | 3949 |
| 75° | 4350 | 3692 | 3654 |
| 80° | 3813 | 3318 | 3327 |
| 85° | 3282 | 3019 | 3155 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5824 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 100.8  | 1.9       |
| 10°-20°   | 286.1  | 5.3       |
| 20°-30°   | 425.4  | 7.8       |
| 30°-40°   | 503.8  | 9.3       |
| 40°-50°   | 520.9  | 9.6       |
| 50°-60°   | 479.8  | 8.8       |
| 60°-70°   | 387.9  | 7.1       |
| 70°-80°   | 259.5  | 4.8       |
| 80°-90°   | 135.3  | 2.5       |
| 90°-100°  | 289.1  | 5.3       |
| 100°-110° | 499.2  | 9.2       |
| 110°-120° | 451.6  | 8.3       |
| 120°-130° | 356.3  | 6.6       |
| 130°-140° | 278.6  | 5.1       |
| 140°-150° | 205.1  | 3.8       |
| 150°-160° | 143.1  | 2.6       |
| 160°-170° | 84.4   | 1.6       |
| 170°-180° | 27.4   | 0.5       |
| 0°-30°    | 812.3  | 14.9      |
| 0°-40°    | 1316.1 | 24.2      |
| 0°-60°    | 2316.7 | 42.6      |
| 0°-90°    | 3099.4 | 57.0      |
| 90°-120°  | 1239.9 | 22.8      |
| 90°-150°  | 2080.0 | 38.3      |
| 90°-180°  | 2335.0 | 43.0      |
| 0°-180°   | 5434.3 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1065 | 1065  | 1065 | 1065  | 1065 |      |
| 5°   | 1065 | 1063  | 1056 | 1064  | 1063 | 101  |
| 15°  | 1017 | 1018  | 1011 | 1017  | 1013 | 287  |
| 25°  | 924  | 927   | 921  | 925   | 920  | 425  |
| 35°  | 800  | 807   | 804  | 807   | 807  | 501  |
| 45°  | 659  | 670   | 676  | 683   | 684  | 508  |
| 55°  | 506  | 523   | 540  | 551   | 555  | 453  |
| 65°  | 349  | 373   | 398  | 413   | 418  | 346  |
| 75°  | 192  | 219   | 253  | 274   | 279  | 204  |
| 85°  | 57   | 92    | 128  | 151   | 160  | 60   |
| 90°  | 17   | 55    | 95   | 122   | 130  | 13   |
| 95°  | 32   | 96    | 583  | 329   | 241  | 30   |
| 105° | 74   | 116   | 472  | 894   | 843  | 78   |
| 115° | 122  | 153   | 373  | 777   | 910  | 120  |
| 125° | 164  | 191   | 343  | 611   | 711  | 146  |
| 135° | 190  | 227   | 325  | 500   | 579  | 147  |
| 145° | 219  | 250   | 318  | 401   | 445  | 137  |
| 155° | 249  | 268   | 310  | 350   | 365  | 115  |
| 165° | 272  | 280   | 297  | 315   | 320  | 77   |
| 175° | 283  | 283   | 285  | 289   | 288  | 27   |
| 180° | 284  | 284   | 284  | 284   | 284  |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1064.9 | 1064.9 | 1064.9 | 1064.9 | 1064.9 |
| 2.5°   | 1068.1 | 1066.0 | 1058.7 | 1066.0 | 1064.9 |
| 5°     | 1064.9 | 1062.9 | 1055.5 | 1063.9 | 1062.9 |
| 7.5°   | 1057.6 | 1056.6 | 1049.3 | 1056.6 | 1055.5 |
| 10°    | 1047.2 | 1047.2 | 1038.8 | 1046.1 | 1045.1 |
| 12.5°  | 1032.6 | 1033.6 | 1027.4 | 1032.6 | 1029.4 |
| 15°    | 1016.9 | 1018.0 | 1010.6 | 1016.9 | 1012.7 |
| 17.5°  | 997.1  | 999.2  | 991.9  | 997.1  | 993.9  |
| 20°    | 975.2  | 977.2  | 969.9  | 973.1  | 973.1  |
| 22.5°  | 950.1  | 954.3  | 945.9  | 950.1  | 947.0  |
| 25°    | 924.0  | 927.1  | 920.9  | 925.0  | 919.8  |
| 27.5°  | 895.8  | 900.0  | 892.7  | 895.8  | 893.7  |
| 30°    | 863.4  | 869.7  | 863.4  | 865.5  | 864.5  |
| 32.5°  | 834.2  | 839.4  | 835.2  | 837.3  | 836.3  |
| 35°    | 799.7  | 807.1  | 803.9  | 807.1  | 807.1  |
| 37.5°  | 766.3  | 772.6  | 771.6  | 775.7  | 774.7  |
| 40°    | 731.9  | 740.2  | 739.2  | 743.4  | 745.5  |
| 42.5°  | 694.3  | 705.8  | 708.9  | 714.1  | 714.1  |
| 45°    | 658.8  | 670.3  | 675.5  | 682.8  | 683.9  |
| 47.5°  | 622.3  | 632.7  | 641.1  | 651.5  | 653.6  |
| 50°    | 584.7  | 596.2  | 607.6  | 619.1  | 622.3  |
| 52.5°  | 545.0  | 559.6  | 574.2  | 586.8  | 588.8  |
| 55°    | 506.4  | 523.1  | 539.8  | 551.3  | 555.4  |
| 57.5°  | 466.7  | 486.5  | 505.3  | 517.9  | 521.0  |
| 60°    | 427.0  | 447.9  | 468.8  | 484.4  | 487.6  |
| 62.5°  | 388.4  | 409.3  | 432.2  | 450.0  | 454.2  |
| 65°    | 348.7  | 372.7  | 397.8  | 413.4  | 417.6  |
| 67.5°  | 312.2  | 335.1  | 360.2  | 379.0  | 384.2  |
| 70°    | 271.5  | 295.5  | 322.6  | 342.5  | 348.7  |
| 72.5°  | 231.8  | 256.8  | 287.1  | 309.0  | 313.2  |
| 75°    | 192.1  | 219.3  | 252.7  | 273.5  | 278.8  |
| 77.5°  | 153.5  | 184.8  | 216.1  | 239.1  | 243.3  |
| 80°    | 118.0  | 149.3  | 184.8  | 207.8  | 211.9  |
| 82.5°  | 85.6   | 119.0  | 155.6  | 177.5  | 185.8  |
| 85°    | 57.4   | 91.9   | 128.4  | 151.4  | 159.7  |
| 87.5°  | 36.5   | 70.0   | 105.5  | 129.5  | 136.8  |
| 90°    | 17.3   | 55.2   | 94.7   | 121.6  | 130.0  |
| 92.5°  | 23.2   | 91.8   | 309.5  | 165.3  | 154.0  |
| 95°    | 32.5   | 96.4   | 582.7  | 329.0  | 240.9  |
| 97.5°  | 41.7   | 97.9   | 619.1  | 509.1  | 395.7  |
| 100°   | 51.5   | 102.6  | 583.1  | 675.2  | 540.9  |
| 102.5° | 62.4   | 109.5  | 524.5  | 815.3  | 705.0  |
| 105°   | 74.0   | 116.4  | 471.9  | 894.4  | 843.1  |
| 107.5° | 85.0   | 125.0  | 432.2  | 914.0  | 923.7  |
| 110°   | 97.1   | 134.2  | 404.7  | 886.2  | 958.3  |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 110.2 | 143.4 | 386.8 | 833.8 | 948.6 |
| 115°   | 121.8 | 152.8 | 373.4 | 776.8 | 909.6 |
| 117.5° | 132.1 | 162.5 | 364.1 | 723.4 | 854.6 |
| 120°   | 143.6 | 172.8 | 356.6 | 679.0 | 800.2 |
| 122.5° | 154.6 | 181.5 | 349.5 | 641.4 | 751.5 |
| 125°   | 164.3 | 190.6 | 343.0 | 611.2 | 710.8 |
| 127.5° | 171.2 | 200.5 | 337.7 | 583.8 | 674.1 |
| 130°   | 178.6 | 210.7 | 333.4 | 557.0 | 643.1 |
| 132.5° | 183.3 | 220.0 | 329.2 | 528.5 | 612.2 |
| 135°   | 189.6 | 226.6 | 325.1 | 500.1 | 579.4 |
| 137.5° | 197.6 | 233.7 | 322.5 | 471.6 | 544.4 |
| 140°   | 203.4 | 239.7 | 320.0 | 445.2 | 508.8 |
| 142.5° | 211.4 | 244.4 | 318.4 | 421.9 | 475.5 |
| 145°   | 219.4 | 250.1 | 317.9 | 401.1 | 445.0 |
| 147.5° | 227.0 | 255.3 | 316.7 | 383.7 | 416.4 |
| 150°   | 234.4 | 259.8 | 315.0 | 369.9 | 394.3 |
| 152.5° | 242.4 | 264.4 | 312.7 | 359.9 | 378.5 |
| 155°   | 249.3 | 268.1 | 309.9 | 350.2 | 365.3 |
| 157.5° | 255.6 | 271.8 | 307.0 | 341.0 | 353.3 |
| 160°   | 261.8 | 274.7 | 304.1 | 331.9 | 341.3 |
| 162.5° | 267.0 | 277.6 | 300.7 | 323.6 | 330.4 |
| 165°   | 272.1 | 279.6 | 297.3 | 315.3 | 320.2 |
| 167.5° | 275.6 | 280.8 | 293.9 | 307.5 | 310.4 |
| 170°   | 279.0 | 282.2 | 291.0 | 300.2 | 301.9 |
| 172.5° | 281.3 | 282.7 | 287.6 | 294.2 | 293.9 |
| 175°   | 283.0 | 283.0 | 285.3 | 288.7 | 287.6 |
| 177.5° | 284.1 | 283.0 | 283.6 | 285.3 | 283.6 |
| 180°   | 283.6 | 283.6 | 283.6 | 283.6 | 283.6 |

(END OF REPORT)