

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: P1038068

Luminaire Tested: S125DS-B850DB30-4F0-XX-W2A-D

Issue Date: 5/2/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1038068  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-17)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/2/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125DS-B850DB30-4F0-XX-W2A-D  
Description: Define 5 Direct Surface with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}  
Light Source: -  
Ballast/Driver: -

**Summary**

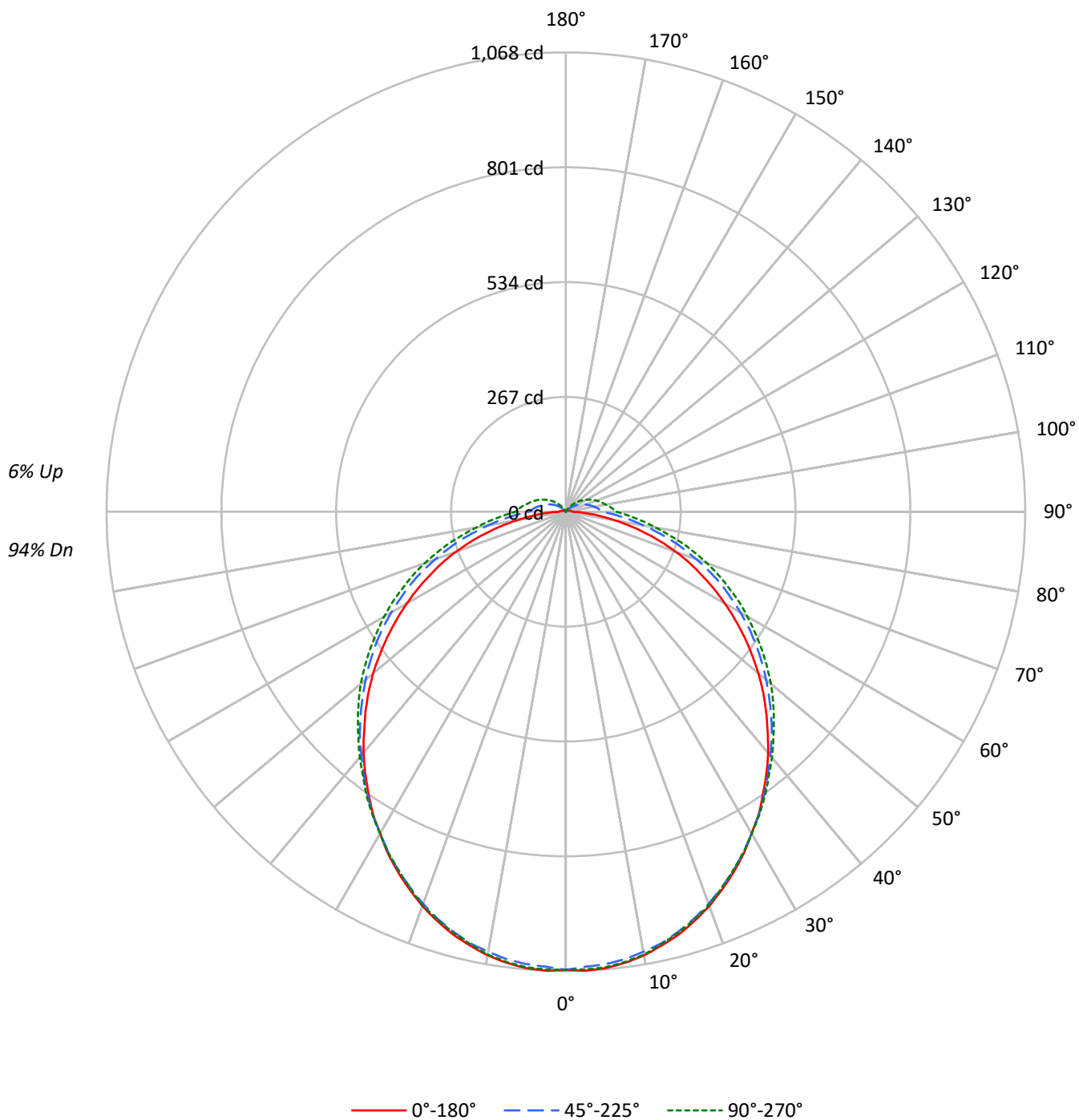
Lumens per Lamp: N/A  
Luminaire Lumens: 3299.0 lumens  
Efficiency: N/A  
Efficacy: 91.9 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34  
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 35.9  
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   | 118 | 118 | 118 | 118 | 114 | 114 | 114 | 114 | 108 | 108 | 108 | 102 | 102 | 102 | 96 | 96 | 96 |
| 1   | 106 | 101 | 96  | 92  | 103 | 98  | 94  | 90  | 93  | 89  | 86  | 88  | 85  | 82  | 83 | 81 | 79 |
| 2   | 96  | 88  | 80  | 74  | 93  | 85  | 78  | 73  | 81  | 75  | 70  | 76  | 72  | 68  | 72 | 69 | 65 |
| 3   | 88  | 77  | 68  | 61  | 84  | 75  | 67  | 60  | 71  | 64  | 59  | 67  | 61  | 57  | 64 | 59 | 55 |
| 4   | 80  | 68  | 59  | 52  | 77  | 66  | 58  | 51  | 63  | 55  | 50  | 60  | 53  | 48  | 57 | 51 | 47 |
| 5   | 74  | 60  | 51  | 44  | 71  | 59  | 50  | 44  | 56  | 49  | 43  | 53  | 47  | 42  | 51 | 45 | 41 |
| 6   | 68  | 54  | 45  | 39  | 66  | 53  | 45  | 38  | 51  | 43  | 38  | 48  | 42  | 37  | 46 | 40 | 36 |
| 7   | 63  | 49  | 40  | 34  | 61  | 48  | 40  | 34  | 46  | 39  | 33  | 44  | 37  | 33  | 42 | 36 | 32 |
| 8   | 59  | 45  | 36  | 30  | 57  | 44  | 36  | 30  | 42  | 35  | 30  | 40  | 34  | 29  | 39 | 33 | 29 |
| 9   | 55  | 41  | 33  | 27  | 53  | 40  | 33  | 27  | 39  | 32  | 27  | 37  | 31  | 26  | 36 | 30 | 26 |
| 10  | 51  | 38  | 30  | 25  | 50  | 37  | 30  | 25  | 36  | 29  | 24  | 35  | 28  | 24  | 33 | 28 | 23 |

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

|     | 0°   | 45°  | 90°   |
|-----|------|------|-------|
| 0°  | 6823 | 6823 | 6823  |
| 5°  | 6849 | 6789 | 6836  |
| 10° | 6813 | 6758 | 6799  |
| 15° | 6745 | 6703 | 6717  |
| 20° | 6649 | 6613 | 6635  |
| 25° | 6532 | 6510 | 6502  |
| 30° | 6388 | 6388 | 6396  |
| 35° | 6255 | 6288 | 6313  |
| 40° | 6122 | 6183 | 6235  |
| 45° | 5969 | 6121 | 6197  |
| 50° | 5828 | 6056 | 6203  |
| 55° | 5657 | 6030 | 6204  |
| 60° | 5472 | 6007 | 6248  |
| 65° | 5286 | 6031 | 6331  |
| 70° | 5086 | 6043 | 6532  |
| 75° | 4755 | 6256 | 6902  |
| 80° | 4354 | 6819 | 7818  |
| 85° | 4220 | 9439 | 11740 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 87.5°

Luminance: 20094 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 100.8  | 3.1       |
| 10°-20°   | 286.1  | 8.7       |
| 20°-30°   | 425.4  | 12.9      |
| 30°-40°   | 503.8  | 15.3      |
| 40°-50°   | 520.9  | 15.8      |
| 50°-60°   | 479.8  | 14.5      |
| 60°-70°   | 387.9  | 11.8      |
| 70°-80°   | 259.5  | 7.9       |
| 80°-90°   | 134.2  | 4.1       |
| 90°-100°  | 75.6   | 2.3       |
| 100°-110° | 55.7   | 1.7       |
| 110°-120° | 37.3   | 1.1       |
| 120°-130° | 21.1   | 0.6       |
| 130°-140° | 9.2    | 0.3       |
| 140°-150° | 1.8    | 0.1       |
| 150°-160° | 0.0    | 0.0       |
| 160°-170° | 0.0    | 0.0       |
| 170°-180° | 0.0    | 0.0       |
| 0°-30°    | 812.3  | 24.6      |
| 0°-40°    | 1316.1 | 39.9      |
| 0°-60°    | 2316.7 | 70.2      |
| 0°-90°    | 3098.3 | 93.9      |
| 90°-120°  | 168.5  | 5.1       |
| 90°-150°  | 200.7  | 6.1       |
| 90°-180°  | 201.0  | 6.1       |
| 0°-180°   | 3299.0 | 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   | 50    | 86   | 110   | 117  | 12   |
| 95°  | 14   | 41    | 76   | 99    | 106  | 11   |
| 105° | 9    | 26    | 57   | 78    | 86   | 10   |
| 115° | 6    | 14    | 41   | 60    | 66   | 6    |
| 125° | 4    | 3     | 24   | 41    | 46   | 4    |
| 135° | 2    | 1     | 8    | 22    | 27   | 2    |
| 145° | 1    | 0     | 0    | 5     | 9    | 0    |
| 155° | 0    | 0     | 0    | 0     | 0    | 0    |
| 165° | 0    | 0     | 0    | 0     | 0    | 0    |
| 175° | 0    | 0     | 0    | 0     | 0    | 0    |
| 180° | 0    | 0     | 0    | 0     | 0    | 0    |

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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°    | 16.7   | 50.1   | 85.6   | 109.6  | 116.9  |
| 92.5°  | 14.6   | 44.9   | 81.4   | 104.4  | 111.7  |
| 95°    | 13.6   | 40.7   | 76.2   | 99.2   | 106.5  |
| 97.5°  | 12.5   | 37.6   | 72.0   | 94.0   | 101.3  |
| 100°   | 11.5   | 33.4   | 66.8   | 88.7   | 95.0   |
| 102.5° | 10.4   | 30.3   | 62.6   | 83.5   | 89.8   |
| 105°   | 9.4    | 26.1   | 57.4   | 78.3   | 85.6   |
| 107.5° | 8.4    | 23.0   | 53.2   | 74.1   | 80.4   |
| 110°   | 7.3    | 19.8   | 49.1   | 68.9   | 76.2   |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°  | 22.5° | 45°  | 67.5° | 90°  |
|--------|-----|-------|------|-------|------|
| 112.5° | 7.3 | 16.7  | 44.9 | 63.7  | 71.0 |
| 115°   | 6.3 | 13.6  | 40.7 | 59.5  | 65.8 |
| 117.5° | 5.2 | 10.4  | 36.5 | 54.3  | 61.6 |
| 120°   | 5.2 | 8.4   | 32.4 | 50.1  | 56.4 |
| 122.5° | 4.2 | 5.2   | 28.2 | 44.9  | 51.2 |
| 125°   | 4.2 | 3.1   | 24.0 | 40.7  | 45.9 |
| 127.5° | 3.1 | 2.1   | 19.8 | 35.5  | 41.8 |
| 130°   | 3.1 | 2.1   | 16.7 | 31.3  | 36.5 |
| 132.5° | 2.1 | 2.1   | 12.5 | 27.1  | 31.3 |
| 135°   | 2.1 | 1.0   | 8.4  | 21.9  | 27.1 |
| 137.5° | 2.1 | 1.0   | 5.2  | 17.7  | 21.9 |
| 140°   | 1.0 | 1.0   | 2.1  | 13.6  | 17.7 |
| 142.5° | 1.0 | 0.0   | 0.0  | 9.4   | 13.6 |
| 145°   | 1.0 | 0.0   | 0.0  | 5.2   | 9.4  |
| 147.5° | 0.0 | 0.0   | 0.0  | 2.1   | 4.2  |
| 150°   | 0.0 | 0.0   | 0.0  | 0.0   | 1.0  |
| 152.5° | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 155°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 157.5° | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 160°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 162.5° | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 165°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 167.5° | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 170°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 172.5° | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 175°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 177.5° | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 180°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |

(END OF REPORT)