

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1061516

Luminaire Tested: S125RDRP-S1270D830-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061516  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-87)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-S1270D830-X4F0-XX-UDD-BVL-S  
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

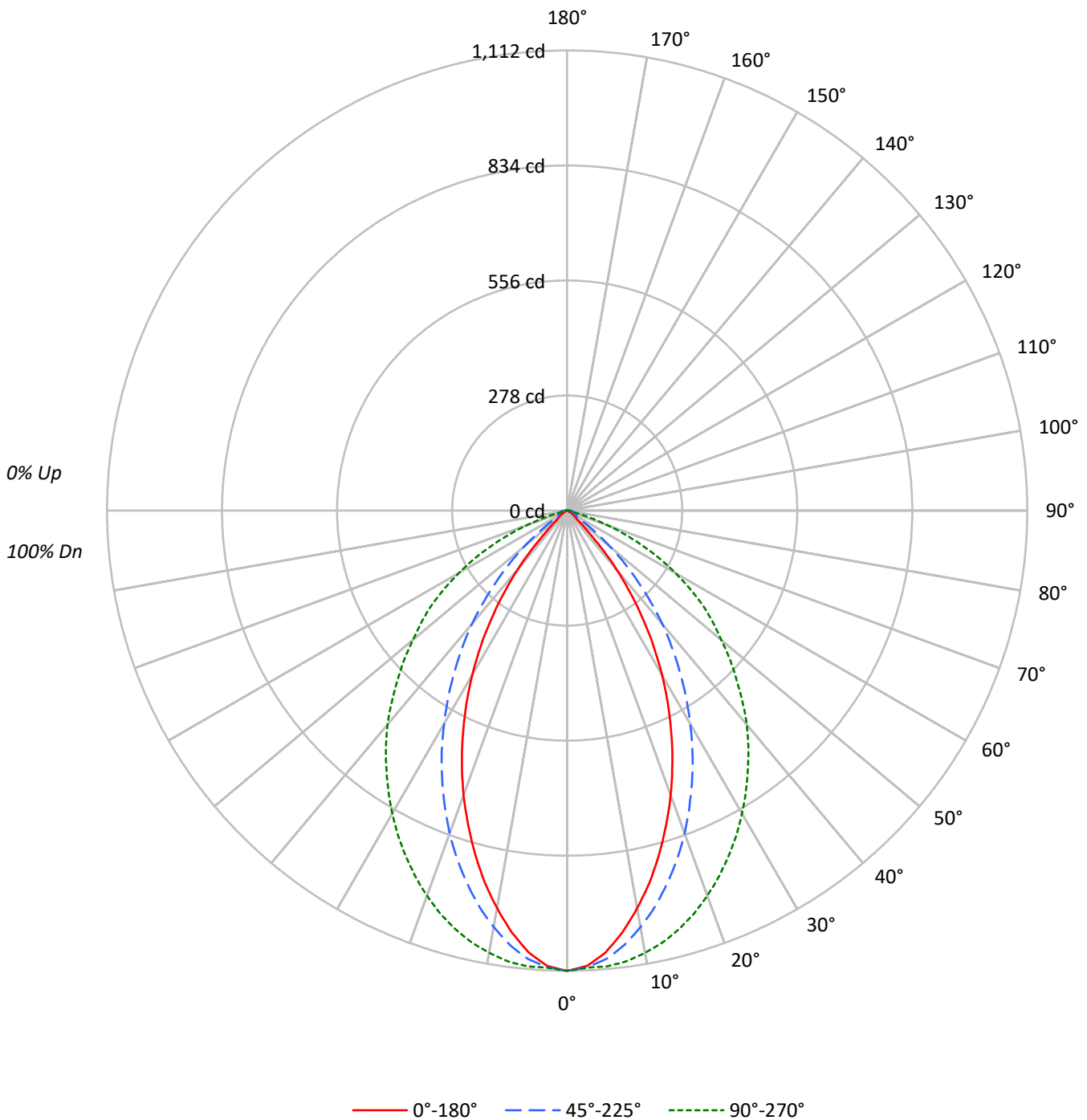
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1430.8 lumens  
Efficiency: N/A  
Efficacy: 34.2 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 41.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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  | 0   |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 0   |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1   | 112 | 108 | 105 | 102 | 109 | 106 | 103 | 101 | 102 | 100 | 98  | 98  | 96  | 95  | 95  | 93  | 92  | 90  |
| 2   | 105 | 98  | 93  | 89  | 102 | 97  | 92  | 88  | 93  | 89  | 86  | 90  | 87  | 84  | 87  | 85  | 82  | 81  |
| 3   | 98  | 90  | 83  | 78  | 95  | 88  | 82  | 78  | 85  | 80  | 76  | 83  | 79  | 75  | 80  | 77  | 74  | 72  |
| 4   | 91  | 82  | 75  | 70  | 89  | 81  | 74  | 69  | 78  | 73  | 68  | 76  | 71  | 68  | 74  | 70  | 67  | 65  |
| 5   | 85  | 75  | 68  | 63  | 84  | 74  | 67  | 62  | 72  | 66  | 62  | 70  | 65  | 61  | 69  | 64  | 61  | 59  |
| 6   | 80  | 69  | 62  | 57  | 78  | 68  | 62  | 57  | 67  | 61  | 56  | 65  | 60  | 56  | 64  | 59  | 55  | 54  |
| 7   | 75  | 64  | 57  | 52  | 74  | 63  | 56  | 52  | 62  | 56  | 51  | 61  | 55  | 51  | 59  | 54  | 51  | 49  |
| 8   | 71  | 60  | 52  | 47  | 69  | 59  | 52  | 47  | 58  | 52  | 47  | 57  | 51  | 47  | 55  | 50  | 47  | 45  |
| 9   | 67  | 55  | 48  | 44  | 66  | 55  | 48  | 44  | 54  | 48  | 44  | 53  | 47  | 43  | 52  | 47  | 43  | 42  |
| 10  | 63  | 52  | 45  | 41  | 62  | 51  | 45  | 40  | 50  | 44  | 40  | 50  | 44  | 40  | 49  | 44  | 40  | 39  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 7659 | 7659 | 7659 |
| 5°  | 7404 | 7518 | 7641 |
| 10° | 6819 | 7145 | 7586 |
| 15° | 6122 | 6650 | 7460 |
| 20° | 5360 | 6083 | 7258 |
| 25° | 4527 | 5433 | 7004 |
| 30° | 3648 | 4727 | 6720 |
| 35° | 2683 | 3984 | 6402 |
| 40° | 1674 | 3214 | 6071 |
| 45° | 627  | 2348 | 5643 |
| 50° | 293  | 1467 | 5209 |
| 55° | 214  | 609  | 4818 |
| 60° | 151  | 321  | 4170 |
| 65° | 90   | 380  | 3302 |
| 70° | 83   | 441  | 2096 |
| 75° | 109  | 436  | 657  |
| 80° | 163  | 543  | 488  |
| 85° | 324  | 869  | 648  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5643 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 102.0  | 7.1       |
| 10°-20°   | 264.1  | 18.5      |
| 20°-30°   | 336.4  | 23.5      |
| 30°-40°   | 313.1  | 21.9      |
| 40°-50°   | 214.5  | 15.0      |
| 50°-60°   | 118.1  | 8.3       |
| 60°-70°   | 55.9   | 3.9       |
| 70°-80°   | 17.6   | 1.2       |
| 80°-90°   | 9.0    | 0.6       |
| 90°-100°  | 0.0    | 0.0       |
| 100°-110° | 0.0    | 0.0       |
| 110°-120° | 0.0    | 0.0       |
| 120°-130° | 0.0    | 0.0       |
| 130°-140° | 0.0    | 0.0       |
| 140°-150° | 0.0    | 0.0       |
| 150°-160° | 0.0    | 0.0       |
| 160°-170° | 0.0    | 0.0       |
| 170°-180° | 0.0    | 0.0       |
| 0°-30°    | 702.5  | 49.1      |
| 0°-40°    | 1015.6 | 71.0      |
| 0°-60°    | 1348.2 | 94.2      |
| 0°-90°    | 1430.8 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1430.8 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1112 | 1112  | 1112 | 1112  | 1112 |      |
| 5°  | 1071 | 1085  | 1088 | 1096  | 1106 | 99   |
| 15° | 859  | 886   | 933  | 1003  | 1047 | 239  |
| 25° | 596  | 633   | 715  | 830   | 922  | 272  |
| 35° | 319  | 364   | 474  | 630   | 762  | 198  |
| 45° | 64   | 108   | 241  | 427   | 580  | 61   |
| 55° | 18   | 20    | 51   | 238   | 401  | 16   |
| 65° | 6    | 7     | 23   | 88    | 203  | 6    |
| 75° | 4    | 7     | 16   | 18    | 25   | 4    |
| 85° | 4    | 10    | 11   | 10    | 8    | 4    |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1112.4 | 1112.4 | 1112.4 | 1112.4 | 1112.4 |
| 2.5°  | 1101.4 | 1112.4 | 1104.2 | 1104.2 | 1105.5 |
| 5°    | 1071.3 | 1085.0 | 1087.7 | 1095.9 | 1105.5 |
| 7.5°  | 1027.4 | 1045.3 | 1059.0 | 1082.2 | 1098.7 |
| 10°   | 975.4  | 997.3  | 1022.0 | 1060.3 | 1085.0 |
| 12.5° | 920.6  | 943.9  | 980.9  | 1034.3 | 1068.5 |
| 15°   | 858.9  | 886.3  | 932.9  | 1002.8 | 1046.6 |
| 17.5° | 795.9  | 826.1  | 883.6  | 965.8  | 1020.6 |
| 20°   | 731.5  | 763.0  | 830.2  | 922.0  | 990.5  |
| 22.5° | 664.4  | 698.7  | 772.6  | 876.8  | 957.6  |
| 25°   | 595.9  | 632.9  | 715.1  | 830.2  | 922.0  |
| 27.5° | 527.4  | 565.8  | 656.2  | 782.2  | 885.0  |
| 30°   | 458.9  | 498.7  | 594.5  | 732.9  | 845.2  |
| 32.5° | 389.1  | 432.9  | 534.3  | 683.6  | 804.1  |
| 35°   | 319.2  | 364.4  | 474.0  | 630.2  | 761.7  |
| 37.5° | 250.7  | 297.3  | 415.1  | 579.5  | 719.2  |
| 40°   | 186.3  | 232.9  | 357.6  | 528.8  | 675.4  |
| 42.5° | 120.6  | 169.9  | 297.3  | 476.7  | 627.4  |
| 45°   | 64.4   | 108.2  | 241.1  | 427.4  | 579.5  |
| 47.5° | 34.2   | 57.5   | 187.7  | 378.1  | 534.3  |
| 50°   | 27.4   | 31.5   | 137.0  | 328.8  | 486.3  |
| 52.5° | 21.9   | 24.7   | 87.7   | 278.1  | 443.9  |
| 55°   | 17.8   | 20.5   | 50.7   | 238.4  | 401.4  |
| 57.5° | 13.7   | 16.4   | 28.8   | 198.6  | 352.1  |
| 60°   | 11.0   | 12.3   | 23.3   | 158.9  | 302.8  |
| 62.5° | 6.8    | 9.6    | 23.3   | 123.3  | 253.4  |
| 65°   | 5.5    | 6.8    | 23.3   | 87.7   | 202.7  |
| 67.5° | 5.5    | 5.5    | 23.3   | 57.5   | 152.1  |
| 70°   | 4.1    | 4.1    | 21.9   | 37.0   | 104.1  |
| 72.5° | 4.1    | 4.1    | 19.2   | 24.7   | 60.3   |
| 75°   | 4.1    | 6.8    | 16.4   | 17.8   | 24.7   |
| 77.5° | 4.1    | 11.0   | 15.1   | 15.1   | 13.7   |
| 80°   | 4.1    | 11.0   | 13.7   | 12.3   | 12.3   |
| 82.5° | 4.1    | 11.0   | 11.0   | 11.0   | 9.6    |
| 85°   | 4.1    | 9.6    | 11.0   | 9.6    | 8.2    |
| 87.5° | 4.1    | 9.6    | 9.6    | 9.6    | 5.5    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |



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**CIE UGR TABLE:**

| Reflectances:   |      |                  |      |      |      |      |                |       |       |       |       |
|-----------------|------|------------------|------|------|------|------|----------------|-------|-------|-------|-------|
| Ceiling         |      | 0.7              | 0.7  | 0.5  | 0.5  | 0.3  | 0.7            | 0.7   | 0.5   | 0.5   | 0.3   |
| Wall            |      | 0.5              | 0.3  | 0.5  | 0.3  | 0.3  | 0.5            | 0.3   | 0.5   | 0.3   | 0.3   |
| Reference plane |      | 0.2              | 0.2  | 0.2  | 0.2  | 0.2  | 0.2            | 0.2   | 0.2   | 0.2   | 0.2   |
| Room dimensions |      | Viewed crosswise |      |      |      |      | Viewed endwise |       |       |       |       |
| X=2H            | Y=2H | 0.00             | 0.00 | 0.00 | 0.00 | 0.00 | 16.12          | 17.40 | 16.48 | 17.72 | 18.03 |
|                 | 3H   | 0.00             | 0.00 | 0.00 | 0.00 | 0.00 | 16.90          | 18.04 | 17.28 | 18.37 | 18.74 |
|                 | 4H   | 0.00             | 0.00 | 0.00 | 0.00 | 0.36 | 16.93          | 17.99 | 17.33 | 18.34 | 18.72 |
|                 | 6H   | 0.00             | 0.77 | 0.22 | 1.14 | 1.54 | 16.89          | 17.86 | 17.30 | 18.23 | 18.62 |
|                 | 8H   | 0.48             | 1.40 | 0.91 | 1.79 | 2.19 | 16.86          | 17.78 | 17.30 | 18.17 | 18.58 |
|                 | 12H  | 1.23             | 2.10 | 1.66 | 2.49 | 2.92 | 16.85          | 17.72 | 17.28 | 18.11 | 18.54 |
| 4H              | 2H   | 0.00             | 0.95 | 0.30 | 1.30 | 1.69 | 15.90          | 16.96 | 16.30 | 17.31 | 17.69 |
|                 | 3H   | 0.77             | 1.63 | 1.18 | 2.04 | 2.44 | 16.73          | 17.59 | 17.14 | 18.00 | 18.40 |
|                 | 4H   | 1.36             | 2.13 | 1.80 | 2.55 | 2.99 | 16.76          | 17.53 | 17.20 | 17.95 | 18.40 |
|                 | 6H   | 2.87             | 3.53 | 3.33 | 3.98 | 4.44 | 16.75          | 17.41 | 17.21 | 17.86 | 18.33 |
|                 | 8H   | 3.61             | 4.23 | 4.08 | 4.68 | 5.15 | 16.73          | 17.35 | 17.20 | 17.80 | 18.27 |
|                 | 12H  | 4.35             | 4.90 | 4.84 | 5.38 | 5.86 | 16.74          | 17.28 | 17.22 | 17.77 | 18.24 |
| 8H              | 4H   | 3.41             | 4.03 | 3.88 | 4.47 | 4.94 | 16.65          | 17.27 | 17.12 | 17.72 | 18.19 |
|                 | 6H   | 5.16             | 5.67 | 5.66 | 6.16 | 6.64 | 16.65          | 17.16 | 17.15 | 17.65 | 18.14 |
|                 | 8H   | 6.12             | 6.57 | 6.64 | 7.09 | 7.58 | 16.66          | 17.11 | 17.18 | 17.63 | 18.12 |
|                 | 12H  | 7.05             | 7.45 | 7.56 | 7.95 | 8.52 | 16.70          | 17.10 | 17.22 | 17.60 | 18.17 |
| 12H             | 4H   | 3.71             | 4.25 | 4.20 | 4.74 | 5.21 | 16.61          | 17.15 | 17.09 | 17.64 | 18.11 |
|                 | 6H   | 5.62             | 6.07 | 6.14 | 6.59 | 7.08 | 16.61          | 17.06 | 17.13 | 17.58 | 18.07 |
|                 | 8H   | 6.75             | 7.16 | 7.27 | 7.65 | 8.22 | 16.65          | 17.05 | 17.16 | 17.54 | 18.11 |