

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



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: P1061923

Luminaire Tested: S125RDR-H1270D830-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061923  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-47)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-H1270D830-X4F0-XX-UDD-SVL-B  
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

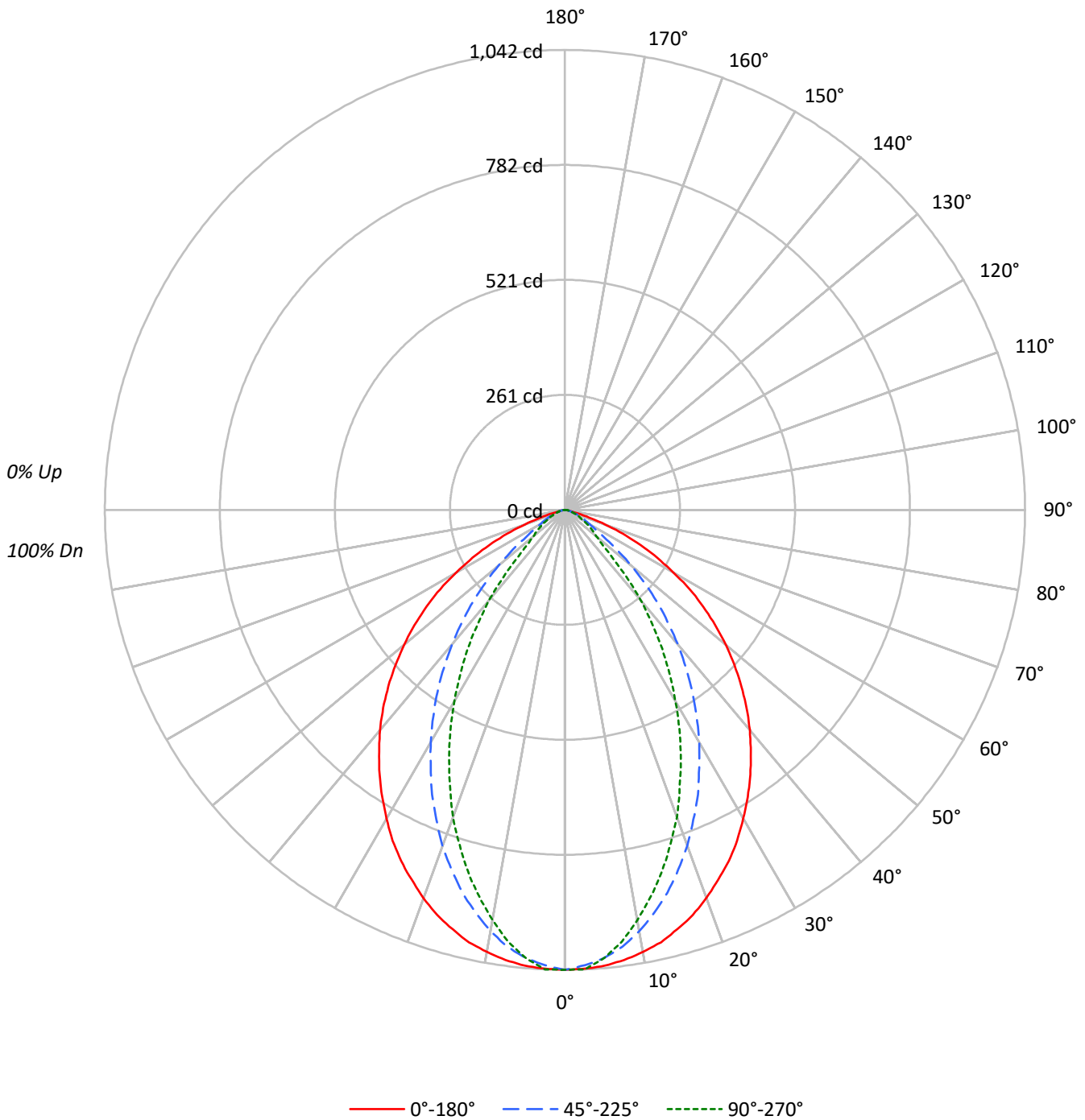
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1507.0 lumens  
Efficiency: N/A  
Efficacy: 41.3 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 36.5  
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  |     |     |    |    | 10 | 0 |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 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 | 97  | 98  | 96  | 95  | 95  | 93  | 92  | 90  |    |    |    |   |
| 2   | 104 | 98  | 93  | 88  | 102 | 96  | 91  | 87  | 93  | 89  | 85  | 90  | 86  | 83  | 87  | 84  | 82  | 80  |    |    |    |   |
| 3   | 97  | 89  | 82  | 77  | 95  | 87  | 81  | 77  | 84  | 79  | 75  | 82  | 78  | 74  | 79  | 76  | 73  | 71  |    |    |    |   |
| 4   | 90  | 81  | 74  | 68  | 88  | 79  | 73  | 68  | 77  | 71  | 67  | 75  | 70  | 66  | 73  | 69  | 65  | 63  |    |    |    |   |
| 5   | 84  | 74  | 66  | 61  | 82  | 73  | 66  | 61  | 71  | 65  | 60  | 69  | 64  | 59  | 67  | 63  | 59  | 57  |    |    |    |   |
| 6   | 79  | 68  | 60  | 55  | 77  | 67  | 60  | 55  | 65  | 59  | 54  | 64  | 58  | 54  | 62  | 57  | 53  | 52  |    |    |    |   |
| 7   | 74  | 62  | 55  | 50  | 72  | 62  | 55  | 50  | 60  | 54  | 49  | 59  | 53  | 49  | 58  | 53  | 49  | 47  |    |    |    |   |
| 8   | 69  | 58  | 50  | 45  | 68  | 57  | 50  | 45  | 56  | 50  | 45  | 55  | 49  | 45  | 54  | 48  | 45  | 43  |    |    |    |   |
| 9   | 65  | 54  | 47  | 42  | 64  | 53  | 46  | 42  | 52  | 46  | 41  | 51  | 45  | 41  | 50  | 45  | 41  | 39  |    |    |    |   |
| 10  | 62  | 50  | 43  | 38  | 61  | 50  | 43  | 38  | 49  | 43  | 38  | 48  | 42  | 38  | 47  | 42  | 38  | 36  |    |    |    |   |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 7174 | 7174 | 7174 |
| 5°  | 7165 | 7046 | 7046 |
| 10° | 7110 | 6776 | 6600 |
| 15° | 7013 | 6399 | 6050 |
| 20° | 6859 | 5937 | 5433 |
| 25° | 6669 | 5411 | 4718 |
| 30° | 6422 | 4831 | 3979 |
| 35° | 6154 | 4229 | 3228 |
| 40° | 5855 | 3570 | 2392 |
| 45° | 5505 | 2862 | 1444 |
| 50° | 5091 | 2099 | 993  |
| 55° | 4594 | 1287 | 827  |
| 60° | 3901 | 876  | 657  |
| 65° | 3084 | 668  | 518  |
| 70° | 1947 | 479  | 427  |
| 75° | 633  | 351  | 351  |
| 80° | 210  | 262  | 313  |
| 85° | 103  | 205  | 205  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5505 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 96.4   | 6.4       |
| 10°-20°   | 254.5  | 16.9      |
| 20°-30°   | 334.8  | 22.2      |
| 30°-40°   | 329.0  | 21.8      |
| 40°-50°   | 248.9  | 16.5      |
| 50°-60°   | 150.9  | 10.0      |
| 60°-70°   | 71.2   | 4.7       |
| 70°-80°   | 18.6   | 1.2       |
| 80°-90°   | 2.8    | 0.2       |
| 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°    | 685.7  | 45.5      |
| 0°-40°    | 1014.6 | 67.3      |
| 0°-60°    | 1414.4 | 93.9      |
| 0°-90°    | 1507.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1507.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1042 | 1042  | 1042 | 1042  | 1042 |      |
| 5°  | 1037 | 1034  | 1020 | 1021  | 1020 | 98   |
| 15° | 984  | 957   | 898  | 863   | 849  | 277  |
| 25° | 878  | 812   | 712  | 646   | 621  | 403  |
| 35° | 732  | 634   | 503  | 414   | 384  | 457  |
| 45° | 565  | 445   | 294  | 187   | 148  | 435  |
| 55° | 383  | 262   | 107  | 73    | 69   | 341  |
| 65° | 189  | 97    | 41   | 34    | 32   | 187  |
| 75° | 24   | 16    | 13   | 13    | 13   | 37   |
| 85° | 1    | 1     | 3    | 3     | 3    | 2    |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1042.0 | 1042.0 | 1042.0 | 1042.0 | 1042.0 |
| 2.5°  | 1040.7 | 1040.7 | 1032.8 | 1042.0 | 1042.0 |
| 5°    | 1036.7 | 1034.1 | 1019.5 | 1020.8 | 1019.5 |
| 7.5°  | 1028.8 | 1023.5 | 998.3  | 991.7  | 986.4  |
| 10°   | 1016.9 | 1006.3 | 969.2  | 953.3  | 944.0  |
| 12.5° | 1003.6 | 985.1  | 934.8  | 912.3  | 897.7  |
| 15°   | 983.8  | 957.3  | 897.7  | 863.3  | 848.7  |
| 17.5° | 962.6  | 924.2  | 854.0  | 813.0  | 794.4  |
| 20°   | 936.1  | 891.1  | 810.3  | 760.0  | 741.5  |
| 22.5° | 907.0  | 854.0  | 760.0  | 704.4  | 679.2  |
| 25°   | 877.8  | 811.6  | 712.3  | 646.1  | 621.0  |
| 27.5° | 844.7  | 769.3  | 658.1  | 589.2  | 561.4  |
| 30°   | 807.7  | 726.9  | 607.7  | 536.2  | 500.5  |
| 32.5° | 770.6  | 683.2  | 554.8  | 476.7  | 440.9  |
| 35°   | 732.2  | 634.2  | 503.1  | 414.4  | 384.0  |
| 37.5° | 691.2  | 587.9  | 450.2  | 357.5  | 321.7  |
| 40°   | 651.4  | 541.5  | 397.2  | 299.2  | 266.1  |
| 42.5° | 609.1  | 495.2  | 344.3  | 242.3  | 205.2  |
| 45°   | 565.4  | 444.9  | 293.9  | 186.7  | 148.3  |
| 47.5° | 520.4  | 399.9  | 243.6  | 137.7  | 111.2  |
| 50°   | 475.3  | 352.2  | 196.0  | 102.0  | 92.7   |
| 52.5° | 429.0  | 305.9  | 148.3  | 84.7   | 80.8   |
| 55°   | 382.7  | 262.2  | 107.2  | 72.8   | 68.9   |
| 57.5° | 335.0  | 214.5  | 80.8   | 62.2   | 58.3   |
| 60°   | 283.3  | 172.1  | 63.6   | 51.6   | 47.7   |
| 62.5° | 235.7  | 135.1  | 51.6   | 42.4   | 39.7   |
| 65°   | 189.3  | 96.7   | 41.0   | 34.4   | 31.8   |
| 67.5° | 141.7  | 64.9   | 31.8   | 26.5   | 26.5   |
| 70°   | 96.7   | 42.4   | 23.8   | 21.2   | 21.2   |
| 72.5° | 58.3   | 25.2   | 17.2   | 17.2   | 17.2   |
| 75°   | 23.8   | 15.9   | 13.2   | 13.2   | 13.2   |
| 77.5° | 7.9    | 9.3    | 9.3    | 10.6   | 10.6   |
| 80°   | 5.3    | 5.3    | 6.6    | 7.9    | 7.9    |
| 82.5° | 2.6    | 4.0    | 4.0    | 5.3    | 5.3    |
| 85°   | 1.3    | 1.3    | 2.6    | 2.6    | 2.6    |
| 87.5° | 0.0    | 0.0    | 0.0    | 1.3    | 1.3    |
| 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 | 16.18            | 17.51 | 16.54 | 17.82 | 18.13 | 6.83           | 8.16 | 7.19 | 8.47  | 8.79  |
|                 | 3H   | 16.88            | 18.06 | 17.26 | 18.39 | 18.75 | 7.61           | 8.79 | 7.99 | 9.12  | 9.48  |
|                 | 4H   | 16.90            | 17.99 | 17.30 | 18.35 | 18.73 | 7.86           | 8.96 | 8.26 | 9.31  | 9.69  |
|                 | 6H   | 16.83            | 17.83 | 17.24 | 18.20 | 18.60 | 8.04           | 9.04 | 8.45 | 9.41  | 9.81  |
|                 | 8H   | 16.79            | 17.74 | 17.22 | 18.13 | 18.54 | 8.08           | 9.03 | 8.51 | 9.42  | 9.83  |
|                 | 12H  | 16.75            | 17.66 | 17.18 | 18.04 | 18.47 | 8.09           | 9.00 | 8.52 | 9.38  | 9.81  |
| 4H              | 2H   | 16.01            | 17.10 | 16.41 | 17.45 | 17.84 | 7.32           | 8.41 | 7.72 | 8.76  | 9.14  |
|                 | 3H   | 16.75            | 17.64 | 17.17 | 18.05 | 18.45 | 8.22           | 9.12 | 8.64 | 9.52  | 9.92  |
|                 | 4H   | 16.77            | 17.57 | 17.21 | 17.99 | 18.43 | 8.54           | 9.33 | 8.97 | 9.75  | 10.19 |
|                 | 6H   | 16.71            | 17.39 | 17.17 | 17.84 | 18.31 | 8.80           | 9.48 | 9.26 | 9.93  | 10.39 |
|                 | 8H   | 16.66            | 17.30 | 17.13 | 17.74 | 18.21 | 8.86           | 9.50 | 9.33 | 9.95  | 10.42 |
|                 | 12H  | 16.61            | 17.18 | 17.10 | 17.66 | 18.13 | 8.88           | 9.45 | 9.37 | 9.93  | 10.40 |
| 8H              | 4H   | 16.65            | 17.29 | 17.12 | 17.74 | 18.21 | 8.65           | 9.29 | 9.12 | 9.73  | 10.20 |
|                 | 6H   | 16.58            | 17.10 | 17.08 | 17.59 | 18.08 | 8.97           | 9.48 | 9.47 | 9.98  | 10.46 |
|                 | 8H   | 16.52            | 16.99 | 17.05 | 17.51 | 18.00 | 9.07           | 9.54 | 9.59 | 10.05 | 10.54 |
|                 | 12H  | 16.48            | 16.90 | 17.00 | 17.39 | 17.96 | 9.13           | 9.54 | 9.65 | 10.04 | 10.61 |
| 12H             | 4H   | 16.61            | 17.17 | 17.10 | 17.66 | 18.13 | 8.62           | 9.18 | 9.11 | 9.67  | 10.14 |
|                 | 6H   | 16.52            | 16.99 | 17.04 | 17.50 | 17.99 | 8.94           | 9.40 | 9.46 | 9.92  | 10.41 |
|                 | 8H   | 16.49            | 16.90 | 17.00 | 17.39 | 17.96 | 9.08           | 9.49 | 9.59 | 9.98  | 10.55 |