

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: P1058270

Luminaire Tested: S122RDR-H1005D950-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058270  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-59)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-H1005D950-X4F0-XX-UDD-SVL-S  
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

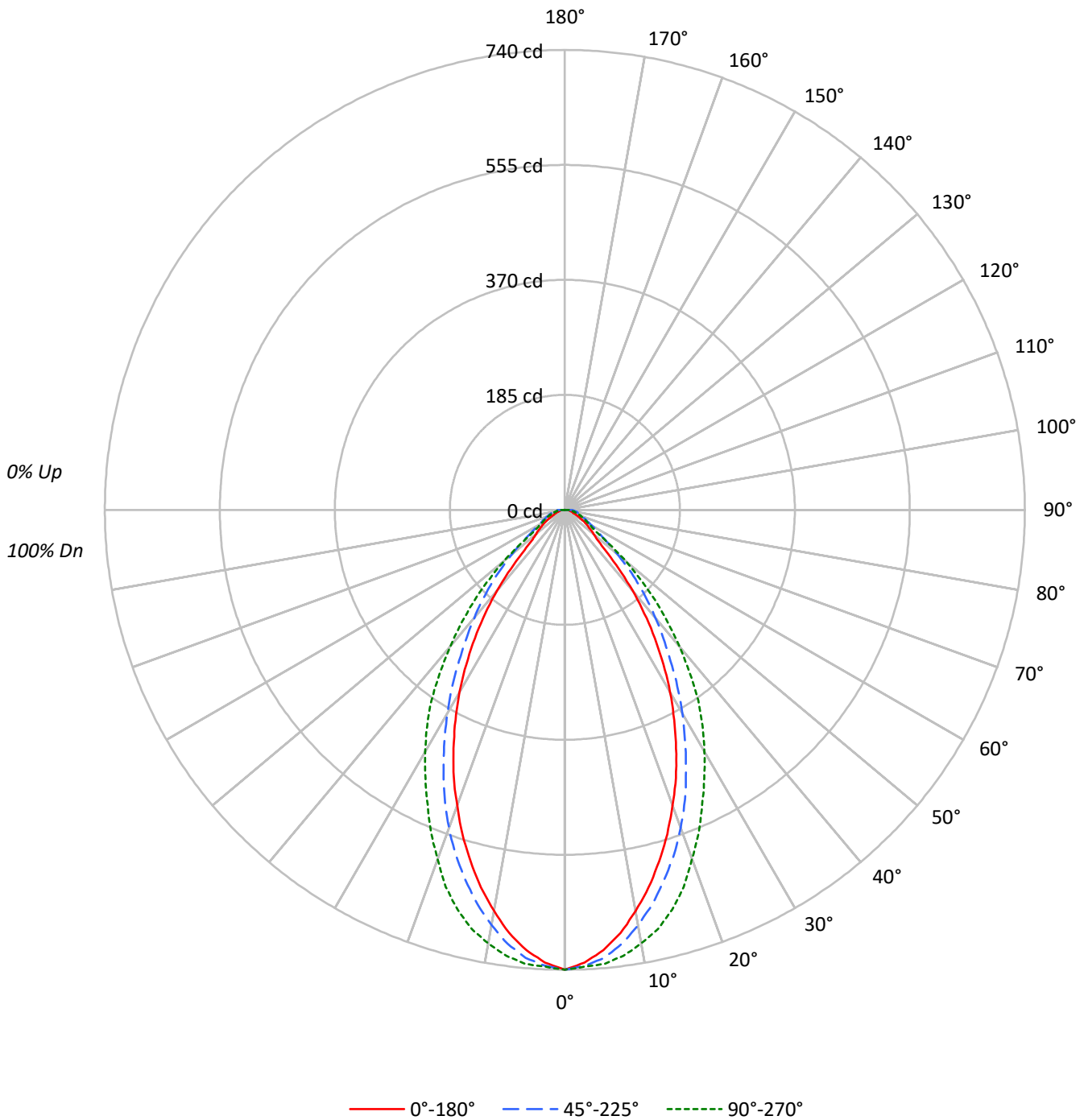
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 892.6 lumens  
Efficiency: N/A  
Efficacy: 24.5 lumens/watt  
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94  
Luminous Opening: Rectangular (W 0.15' 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   | 111 | 108 | 105 | 102 | 109 | 106 | 103 | 100 | 101 | 99  | 97  | 98  | 96  | 94  | 94  | 93  | 91  | 89  |    |    |    |   |
| 2   | 104 | 98  | 93  | 88  | 102 | 96  | 91  | 87  | 93  | 89  | 85  | 90  | 86  | 83  | 87  | 84  | 82  | 80  |    |    |    |   |
| 3   | 97  | 89  | 83  | 78  | 95  | 88  | 82  | 77  | 85  | 80  | 76  | 82  | 78  | 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   | 86  | 75  | 68  | 63  | 84  | 74  | 68  | 63  | 72  | 66  | 62  | 71  | 65  | 61  | 69  | 64  | 61  | 59  |    |    |    |   |
| 6   | 80  | 70  | 62  | 57  | 79  | 69  | 62  | 57  | 67  | 61  | 57  | 66  | 60  | 56  | 64  | 59  | 56  | 54  |    |    |    |   |
| 7   | 76  | 65  | 57  | 52  | 74  | 64  | 57  | 52  | 62  | 56  | 52  | 61  | 56  | 52  | 60  | 55  | 51  | 50  |    |    |    |   |
| 8   | 71  | 60  | 53  | 48  | 70  | 59  | 53  | 48  | 58  | 52  | 48  | 57  | 52  | 48  | 56  | 51  | 47  | 46  |    |    |    |   |
| 9   | 67  | 56  | 49  | 45  | 66  | 56  | 49  | 44  | 55  | 49  | 44  | 54  | 48  | 44  | 53  | 48  | 44  | 42  |    |    |    |   |
| 10  | 64  | 53  | 46  | 41  | 63  | 52  | 46  | 41  | 51  | 45  | 41  | 50  | 45  | 41  | 50  | 45  | 41  | 39  |    |    |    |   |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 13653 | 13653 | 13653 |
| 5°  | 13174 | 13401 | 13579 |
| 10° | 12278 | 12713 | 13275 |
| 15° | 11187 | 11787 | 12727 |
| 20° | 9946  | 10696 | 11741 |
| 25° | 8616  | 9394  | 10644 |
| 30° | 7215  | 8056  | 9569  |
| 35° | 5688  | 6672  | 8425  |
| 40° | 4078  | 5458  | 6906  |
| 45° | 2388  | 4311  | 5344  |
| 50° | 1725  | 3135  | 3606  |
| 55° | 1448  | 2239  | 1888  |
| 60° | 1159  | 1812  | 1613  |
| 65° | 952   | 1611  | 1489  |
| 70° | 809   | 1548  | 1397  |
| 75° | 777   | 1654  | 1362  |
| 80° | 871   | 2030  | 1456  |
| 85° | 1440  | 3176  | 2032  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5344 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 67.8   | 7.6       |
| 10°-20°   | 173.7  | 19.5      |
| 20°-30°   | 213.5  | 23.9      |
| 30°-40°   | 188.7  | 21.1      |
| 40°-50°   | 120.5  | 13.5      |
| 50°-60°   | 58.8   | 6.6       |
| 60°-70°   | 35.0   | 3.9       |
| 70°-80°   | 22.3   | 2.5       |
| 80°-90°   | 12.3   | 1.4       |
| 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°    | 455.0  | 51.0      |
| 0°-40°    | 643.7  | 72.1      |
| 0°-60°    | 822.9  | 92.2      |
| 0°-90°    | 892.6  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 892.6  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 740 | 740   | 740 | 740   | 740 |      |
| 5°  | 711 | 726   | 724 | 726   | 733 | 66   |
| 15° | 586 | 602   | 617 | 644   | 666 | 163  |
| 25° | 423 | 438   | 461 | 490   | 523 | 194  |
| 35° | 252 | 266   | 296 | 337   | 374 | 157  |
| 45° | 92  | 117   | 165 | 186   | 205 | 77   |
| 55° | 45  | 60    | 70  | 66    | 59  | 40   |
| 65° | 22  | 41    | 37  | 34    | 34  | 22   |
| 75° | 11  | 25    | 23  | 20    | 19  | 12   |
| 85° | 7   | 14    | 15  | 14    | 10  | 6    |
| 90° | 0   | 0     | 0   | 0     | 0   |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 739.9 | 739.9 | 739.9 | 739.9 | 739.9 |
| 2.5°  | 729.0 | 742.6 | 734.4 | 734.4 | 735.8 |
| 5°    | 711.2 | 726.2 | 723.5 | 726.2 | 733.1 |
| 7.5°  | 686.7 | 701.7 | 704.4 | 715.3 | 723.5 |
| 10°   | 655.3 | 670.3 | 678.5 | 696.2 | 708.5 |
| 12.5° | 622.5 | 637.5 | 649.8 | 673.0 | 690.8 |
| 15°   | 585.6 | 602.0 | 617.0 | 644.3 | 666.2 |
| 17.5° | 547.4 | 563.8 | 582.9 | 610.2 | 636.1 |
| 20°   | 506.5 | 521.5 | 544.7 | 570.6 | 597.9 |
| 22.5° | 466.9 | 480.5 | 505.1 | 529.7 | 562.4 |
| 25°   | 423.2 | 438.2 | 461.4 | 490.1 | 522.8 |
| 27.5° | 380.9 | 395.9 | 419.1 | 451.9 | 486.0 |
| 30°   | 338.6 | 352.2 | 378.1 | 412.3 | 449.1 |
| 32.5° | 294.9 | 308.5 | 337.2 | 374.0 | 412.3 |
| 35°   | 252.5 | 266.2 | 296.2 | 337.2 | 374.0 |
| 37.5° | 210.2 | 225.2 | 259.4 | 297.6 | 329.0 |
| 40°   | 169.3 | 187.0 | 226.6 | 259.4 | 286.7 |
| 42.5° | 128.3 | 152.9 | 195.2 | 222.5 | 244.4 |
| 45°   | 91.5  | 117.4 | 165.2 | 185.7 | 204.8 |
| 47.5° | 69.6  | 90.1  | 136.5 | 151.5 | 163.8 |
| 50°   | 60.1  | 73.7  | 109.2 | 120.1 | 125.6 |
| 52.5° | 51.9  | 65.5  | 87.4  | 91.5  | 88.7  |
| 55°   | 45.0  | 60.1  | 69.6  | 65.5  | 58.7  |
| 57.5° | 38.2  | 56.0  | 57.3  | 49.1  | 50.5  |
| 60°   | 31.4  | 50.5  | 49.1  | 42.3  | 43.7  |
| 62.5° | 25.9  | 46.4  | 42.3  | 38.2  | 38.2  |
| 65°   | 21.8  | 41.0  | 36.9  | 34.1  | 34.1  |
| 67.5° | 17.7  | 36.9  | 32.8  | 30.0  | 30.0  |
| 70°   | 15.0  | 32.8  | 28.7  | 25.9  | 25.9  |
| 72.5° | 13.7  | 28.7  | 25.9  | 23.2  | 23.2  |
| 75°   | 10.9  | 24.6  | 23.2  | 20.5  | 19.1  |
| 77.5° | 9.6   | 20.5  | 20.5  | 19.1  | 16.4  |
| 80°   | 8.2   | 17.7  | 19.1  | 16.4  | 13.7  |
| 82.5° | 8.2   | 16.4  | 16.4  | 15.0  | 10.9  |
| 85°   | 6.8   | 13.7  | 15.0  | 13.7  | 9.6   |
| 87.5° | 4.1   | 12.3  | 12.3  | 10.9  | 6.8   |
| 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 | 11.11            | 12.39 | 11.48 | 12.70 | 13.02 | 10.63          | 11.91 | 11.00 | 12.22 | 12.54 |
|                 | 3H   | 12.29            | 13.43 | 12.67 | 13.76 | 14.12 | 12.19          | 13.33 | 12.57 | 13.66 | 14.02 |
|                 | 4H   | 12.72            | 13.78 | 13.12 | 14.13 | 14.51 | 12.88          | 13.94 | 13.28 | 14.29 | 14.67 |
|                 | 6H   | 13.06            | 14.04 | 13.48 | 14.41 | 14.81 | 13.53          | 14.50 | 13.94 | 14.87 | 15.27 |
|                 | 8H   | 13.26            | 14.19 | 13.69 | 14.58 | 14.98 | 13.81          | 14.74 | 14.25 | 15.13 | 15.54 |
|                 | 12H  | 13.48            | 14.36 | 13.91 | 14.75 | 15.18 | 14.13          | 15.02 | 14.57 | 15.40 | 15.83 |
| 4H              | 2H   | 11.62            | 12.68 | 12.02 | 13.03 | 13.41 | 11.23          | 12.29 | 11.64 | 12.64 | 13.03 |
|                 | 3H   | 13.26            | 14.14 | 13.67 | 14.54 | 14.94 | 13.03          | 13.91 | 13.44 | 14.31 | 14.71 |
|                 | 4H   | 14.03            | 14.81 | 14.46 | 15.23 | 15.67 | 13.87          | 14.66 | 14.31 | 15.08 | 15.52 |
|                 | 6H   | 14.63            | 15.31 | 15.09 | 15.75 | 16.22 | 14.73          | 15.41 | 15.19 | 15.86 | 16.33 |
|                 | 8H   | 14.93            | 15.56 | 15.40 | 16.01 | 16.48 | 15.12          | 15.76 | 15.59 | 16.20 | 16.68 |
|                 | 12H  | 15.24            | 15.80 | 15.73 | 16.29 | 16.76 | 15.56          | 16.12 | 16.05 | 16.61 | 17.08 |
| 8H              | 4H   | 14.44            | 15.08 | 14.91 | 15.53 | 16.00 | 14.33          | 14.97 | 14.80 | 15.42 | 15.89 |
|                 | 6H   | 15.39            | 15.91 | 15.89 | 16.41 | 16.89 | 15.44          | 15.96 | 15.95 | 16.46 | 16.94 |
|                 | 8H   | 15.94            | 16.41 | 16.46 | 16.92 | 17.41 | 16.02          | 16.49 | 16.54 | 17.01 | 17.50 |
|                 | 12H  | 16.50            | 16.92 | 17.02 | 17.41 | 17.98 | 16.69          | 17.11 | 17.21 | 17.60 | 18.17 |
| 12H             | 4H   | 14.51            | 15.08 | 15.00 | 15.56 | 16.03 | 14.41          | 14.98 | 14.90 | 15.46 | 15.94 |
|                 | 6H   | 15.57            | 16.04 | 16.09 | 16.56 | 17.05 | 15.63          | 16.10 | 16.15 | 16.61 | 17.10 |
|                 | 8H   | 16.27            | 16.68 | 16.78 | 17.18 | 17.75 | 16.34          | 16.75 | 16.85 | 17.25 | 17.82 |