

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: P1062008

Luminaire Tested: S125RDR-H375D830-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1062008  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-85)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-H375D830-X4F0-XX-UDD-WVL-S  
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

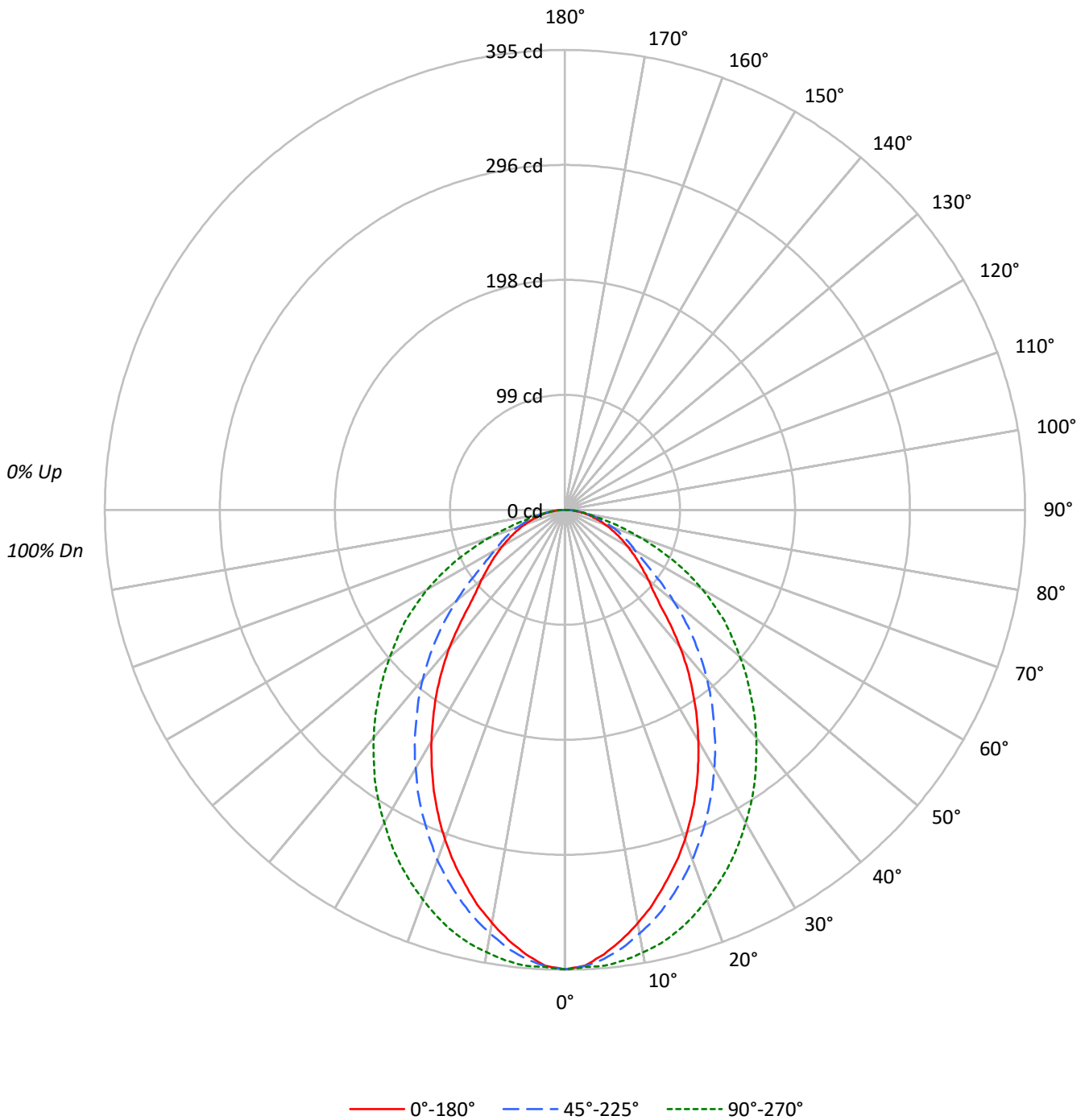
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 739.8 lumens  
Efficiency: N/A  
Efficacy: 63.2 lumens/watt  
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 11.7  
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 |    |    | 100 |   |
| 1   | 110 | 106 | 102 | 99  | 107 | 104 | 100 | 97  | 99  | 97  | 94  | 96  | 93  | 91  | 92  | 90  | 88  | 86  |    |    | 86  |   |
| 2   | 101 | 94  | 88  | 83  | 99  | 92  | 86  | 82  | 89  | 84  | 80  | 85  | 81  | 78  | 82  | 79  | 76  | 74  |    |    | 74  |   |
| 3   | 93  | 84  | 76  | 71  | 91  | 82  | 75  | 70  | 79  | 74  | 69  | 77  | 72  | 68  | 74  | 70  | 66  | 64  |    |    | 64  |   |
| 4   | 86  | 75  | 67  | 61  | 84  | 74  | 67  | 61  | 72  | 65  | 60  | 69  | 64  | 59  | 67  | 62  | 58  | 56  |    |    | 56  |   |
| 5   | 80  | 68  | 60  | 54  | 78  | 67  | 59  | 53  | 65  | 58  | 53  | 63  | 57  | 52  | 61  | 56  | 52  | 50  |    |    | 50  |   |
| 6   | 74  | 62  | 54  | 48  | 72  | 61  | 53  | 48  | 59  | 52  | 47  | 58  | 52  | 47  | 56  | 51  | 46  | 44  |    |    | 44  |   |
| 7   | 69  | 57  | 49  | 43  | 68  | 56  | 48  | 43  | 54  | 47  | 42  | 53  | 47  | 42  | 52  | 46  | 42  | 40  |    |    | 40  |   |
| 8   | 65  | 52  | 44  | 39  | 63  | 52  | 44  | 39  | 50  | 43  | 38  | 49  | 43  | 38  | 48  | 42  | 38  | 36  |    |    | 36  |   |
| 9   | 61  | 48  | 41  | 35  | 59  | 48  | 40  | 35  | 47  | 40  | 35  | 46  | 39  | 35  | 45  | 39  | 35  | 33  |    |    | 33  |   |
| 10  | 57  | 45  | 37  | 32  | 56  | 44  | 37  | 32  | 43  | 37  | 32  | 42  | 36  | 32  | 42  | 36  | 32  | 30  |    |    | 30  |   |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 2717 | 2717 | 2717 |
| 5°  | 2649 | 2675 | 2717 |
| 10° | 2519 | 2583 | 2699 |
| 15° | 2369 | 2473 | 2669 |
| 20° | 2207 | 2345 | 2611 |
| 25° | 2022 | 2196 | 2546 |
| 30° | 1821 | 2038 | 2467 |
| 35° | 1610 | 1872 | 2389 |
| 40° | 1382 | 1704 | 2296 |
| 45° | 1129 | 1516 | 2200 |
| 50° | 1000 | 1300 | 2098 |
| 55° | 918  | 1079 | 2012 |
| 60° | 847  | 956  | 1873 |
| 65° | 790  | 919  | 1670 |
| 70° | 739  | 874  | 1365 |
| 75° | 681  | 819  | 1006 |
| 80° | 642  | 765  | 734  |
| 85° | 592  | 750  | 624  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2200 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 36.5   | 4.9       |
| 10°-20°   | 98.4   | 13.3      |
| 20°-30°   | 135.2  | 18.3      |
| 30°-40°   | 143.3  | 19.4      |
| 40°-50°   | 125.1  | 16.9      |
| 50°-60°   | 95.0   | 12.8      |
| 60°-70°   | 63.7   | 8.6       |
| 70°-80°   | 32.8   | 4.4       |
| 80°-90°   | 9.8    | 1.3       |
| 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°    | 270.1  | 36.5      |
| 0°-40°    | 413.4  | 55.9      |
| 0°-60°    | 633.5  | 85.6      |
| 0°-90°    | 739.8  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 739.8  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 395 | 395   | 395 | 395   | 395 |      |
| 5°  | 383 | 387   | 387 | 390   | 393 | 36   |
| 15° | 332 | 339   | 347 | 362   | 374 | 93   |
| 25° | 266 | 274   | 289 | 313   | 335 | 122  |
| 35° | 192 | 203   | 223 | 254   | 284 | 119  |
| 45° | 116 | 127   | 156 | 193   | 226 | 92   |
| 55° | 76  | 79    | 90  | 132   | 168 | 69   |
| 65° | 48  | 50    | 56  | 75    | 102 | 48   |
| 75° | 26  | 27    | 31  | 33    | 38  | 27   |
| 85° | 8   | 10    | 10  | 9     | 8   | 8    |
| 90° | 0   | 0     | 0   | 0     | 0   |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 394.6 | 394.6 | 394.6 | 394.6 | 394.6 |
| 2.5°  | 391.9 | 394.6 | 392.3 | 392.3 | 393.1 |
| 5°    | 383.2 | 387.1 | 387.1 | 389.9 | 393.1 |
| 7.5°  | 372.6 | 376.9 | 379.3 | 385.6 | 390.3 |
| 10°   | 360.3 | 365.1 | 369.4 | 378.9 | 386.0 |
| 12.5° | 347.3 | 352.4 | 359.2 | 371.4 | 381.2 |
| 15°   | 332.3 | 338.7 | 346.9 | 362.3 | 374.5 |
| 17.5° | 317.4 | 323.7 | 333.9 | 352.1 | 365.9 |
| 20°   | 301.2 | 307.9 | 320.1 | 339.8 | 356.4 |
| 22.5° | 283.9 | 291.3 | 304.4 | 326.8 | 346.1 |
| 25°   | 266.1 | 274.4 | 289.0 | 313.0 | 335.1 |
| 27.5° | 247.6 | 257.4 | 273.2 | 298.8 | 323.3 |
| 30°   | 229.1 | 238.9 | 256.3 | 284.2 | 310.3 |
| 32.5° | 210.5 | 221.2 | 240.1 | 269.7 | 297.7 |
| 35°   | 191.6 | 202.6 | 222.7 | 254.3 | 284.2 |
| 37.5° | 173.1 | 184.1 | 206.6 | 239.3 | 269.7 |
| 40°   | 153.8 | 165.2 | 189.6 | 223.9 | 255.5 |
| 42.5° | 134.0 | 146.3 | 172.7 | 208.2 | 240.9 |
| 45°   | 115.9 | 127.3 | 155.7 | 192.8 | 225.9 |
| 47.5° | 102.5 | 110.0 | 138.8 | 177.0 | 211.3 |
| 50°   | 93.4  | 97.4  | 121.4 | 161.6 | 195.9 |
| 52.5° | 84.4  | 87.5  | 105.3 | 145.9 | 181.4 |
| 55°   | 76.5  | 78.8  | 89.9  | 132.1 | 167.6 |
| 57.5° | 68.6  | 71.0  | 78.1  | 118.3 | 151.4 |
| 60°   | 61.5  | 63.5  | 69.4  | 103.7 | 136.0 |
| 62.5° | 54.8  | 56.4  | 62.7  | 89.9  | 119.5 |
| 65°   | 48.5  | 49.7  | 56.4  | 75.3  | 102.5 |
| 67.5° | 42.2  | 43.4  | 50.1  | 61.5  | 84.4  |
| 70°   | 36.7  | 37.1  | 43.4  | 50.1  | 67.8  |
| 72.5° | 31.1  | 31.5  | 36.7  | 40.6  | 52.0  |
| 75°   | 25.6  | 27.2  | 30.8  | 32.7  | 37.8  |
| 77.5° | 20.9  | 22.9  | 24.8  | 25.6  | 25.6  |
| 80°   | 16.2  | 18.5  | 19.3  | 19.3  | 18.5  |
| 82.5° | 11.8  | 13.8  | 14.2  | 13.4  | 12.6  |
| 85°   | 7.5   | 9.5   | 9.5   | 8.7   | 7.9   |
| 87.5° | 3.5   | 5.1   | 5.1   | 4.7   | 3.5   |
| 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 | 10.08            | 11.58 | 10.45 | 11.89 | 12.21 | 14.01          | 15.51 | 14.37 | 15.82 | 16.13 |
|                 | 3H   | 11.66            | 13.00 | 12.03 | 13.33 | 13.69 | 15.43          | 16.77 | 15.81 | 17.10 | 17.46 |
|                 | 4H   | 12.27            | 13.53 | 12.67 | 13.87 | 14.25 | 15.84          | 17.10 | 16.24 | 17.45 | 17.83 |
|                 | 6H   | 12.76            | 13.92 | 13.17 | 14.29 | 14.68 | 16.06          | 17.22 | 16.47 | 17.59 | 17.98 |
|                 | 8H   | 12.94            | 14.04 | 13.36 | 14.43 | 14.83 | 16.12          | 17.23 | 16.55 | 17.62 | 18.02 |
|                 | 12H  | 13.06            | 14.12 | 13.49 | 14.50 | 14.93 | 16.15          | 17.21 | 16.58 | 17.59 | 18.02 |
| 4H              | 2H   | 10.82            | 12.08 | 11.22 | 12.43 | 12.81 | 14.13          | 15.39 | 14.53 | 15.74 | 16.12 |
|                 | 3H   | 12.60            | 13.64 | 13.01 | 14.04 | 14.45 | 15.74          | 16.79 | 16.16 | 17.19 | 17.59 |
|                 | 4H   | 13.33            | 14.27 | 13.77 | 14.69 | 15.13 | 16.27          | 17.21 | 16.70 | 17.63 | 18.07 |
|                 | 6H   | 13.97            | 14.79 | 14.43 | 15.23 | 15.69 | 16.61          | 17.43 | 17.07 | 17.87 | 18.33 |
|                 | 8H   | 14.20            | 14.96 | 14.66 | 15.41 | 15.87 | 16.71          | 17.48 | 17.18 | 17.92 | 18.39 |
|                 | 12H  | 14.37            | 15.05 | 14.85 | 15.53 | 16.00 | 16.78          | 17.47 | 17.27 | 17.95 | 18.42 |
| 8H              | 4H   | 13.73            | 14.50 | 14.20 | 14.94 | 15.41 | 16.38          | 17.14 | 16.84 | 17.59 | 18.05 |
|                 | 6H   | 14.52            | 15.15 | 15.02 | 15.64 | 16.12 | 16.82          | 17.45 | 17.31 | 17.94 | 18.42 |
|                 | 8H   | 14.84            | 15.41 | 15.36 | 15.92 | 16.41 | 16.97          | 17.54 | 17.49 | 18.05 | 18.54 |
|                 | 12H  | 15.12            | 15.62 | 15.63 | 16.11 | 16.68 | 17.11          | 17.61 | 17.62 | 18.10 | 18.67 |
| 12H             | 4H   | 13.78            | 14.46 | 14.26 | 14.94 | 15.41 | 16.38          | 17.06 | 16.86 | 17.54 | 18.01 |
|                 | 6H   | 14.60            | 15.17 | 15.12 | 15.68 | 16.17 | 16.83          | 17.40 | 17.35 | 17.91 | 18.40 |
|                 | 8H   | 15.00            | 15.50 | 15.51 | 15.99 | 16.56 | 17.04          | 17.54 | 17.55 | 18.03 | 18.60 |