

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: P1061601

Luminaire Tested: S125RDRP-S375D830-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061601  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-83)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-S375D830-X4F0-XX-UDD-SVL-W  
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

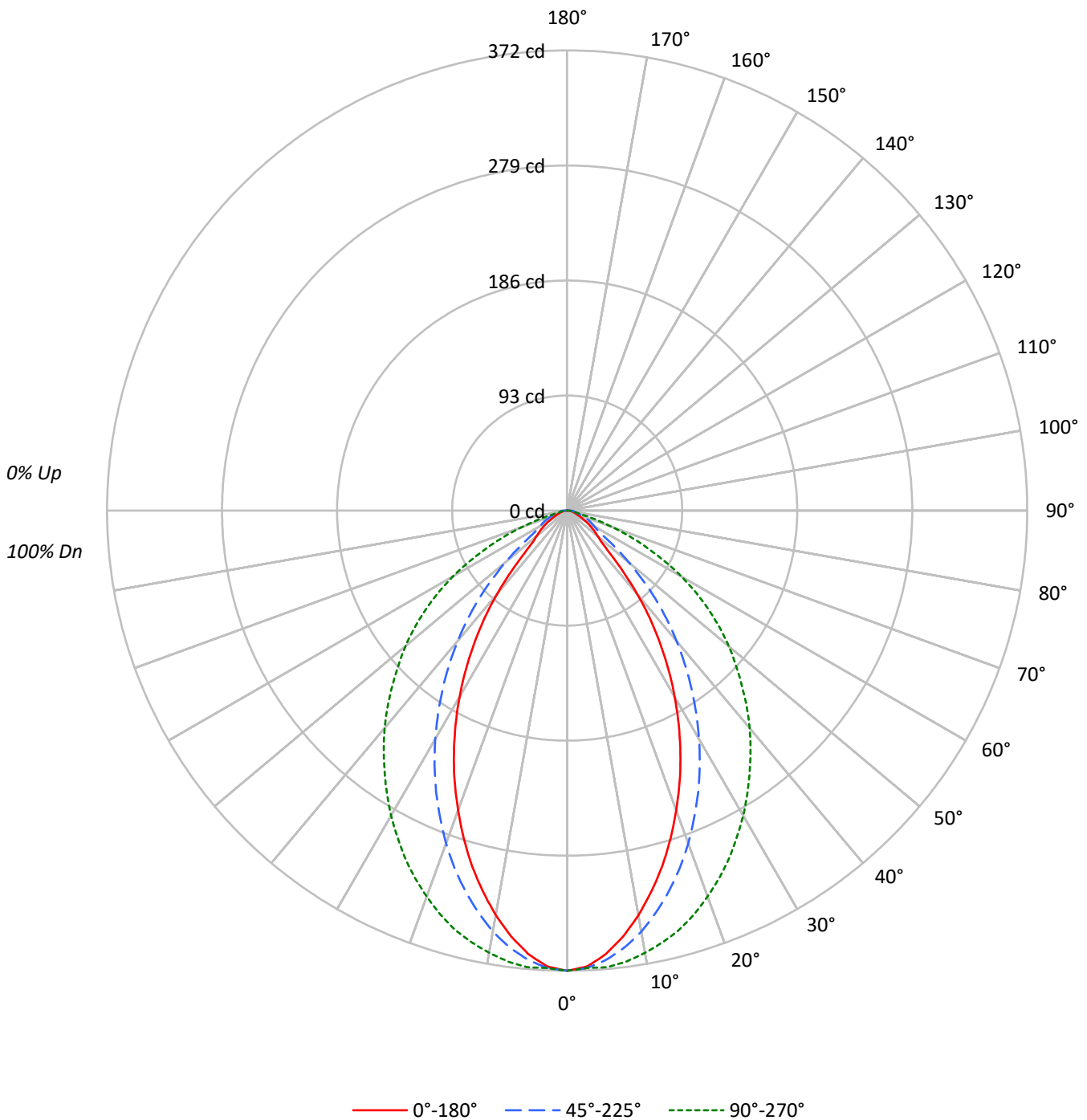
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 538.9 lumens  
Efficiency: N/A  
Efficacy: 43.1 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 12.5  
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   | 111 | 108 | 104 | 101 | 109 | 105 | 103 | 100 | 101 | 99  | 97  | 98  | 96  | 94  | 94  | 92  | 91  | 89  |
| 2   | 104 | 97  | 92  | 87  | 101 | 95  | 90  | 86  | 92  | 88  | 84  | 89  | 85  | 82  | 86  | 83  | 81  | 79  |
| 3   | 96  | 88  | 81  | 76  | 94  | 86  | 80  | 76  | 84  | 79  | 74  | 81  | 77  | 73  | 79  | 75  | 72  | 70  |
| 4   | 90  | 80  | 73  | 67  | 88  | 79  | 72  | 67  | 76  | 71  | 66  | 74  | 69  | 65  | 72  | 68  | 64  | 62  |
| 5   | 84  | 73  | 66  | 60  | 82  | 72  | 65  | 60  | 70  | 64  | 59  | 68  | 63  | 59  | 66  | 62  | 58  | 56  |
| 6   | 78  | 67  | 59  | 54  | 77  | 66  | 59  | 54  | 64  | 58  | 53  | 63  | 57  | 53  | 61  | 56  | 53  | 51  |
| 7   | 73  | 62  | 54  | 49  | 72  | 61  | 54  | 49  | 60  | 53  | 49  | 58  | 53  | 48  | 57  | 52  | 48  | 46  |
| 8   | 69  | 57  | 50  | 45  | 68  | 57  | 50  | 45  | 55  | 49  | 44  | 54  | 48  | 44  | 53  | 48  | 44  | 42  |
| 9   | 65  | 53  | 46  | 41  | 64  | 53  | 46  | 41  | 52  | 45  | 41  | 51  | 45  | 41  | 50  | 44  | 40  | 39  |
| 10  | 61  | 50  | 43  | 38  | 60  | 49  | 42  | 38  | 48  | 42  | 38  | 47  | 42  | 38  | 46  | 41  | 37  | 36  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 2561 | 2561 | 2561 |
| 5°  | 2487 | 2519 | 2561 |
| 10° | 2322 | 2416 | 2537 |
| 15° | 2119 | 2269 | 2500 |
| 20° | 1889 | 2097 | 2433 |
| 25° | 1646 | 1905 | 2355 |
| 30° | 1383 | 1694 | 2263 |
| 35° | 1100 | 1472 | 2164 |
| 40° | 793  | 1237 | 2065 |
| 45° | 469  | 982  | 1945 |
| 50° | 347  | 698  | 1830 |
| 55° | 294  | 432  | 1676 |
| 60° | 240  | 348  | 1475 |
| 65° | 187  | 323  | 1166 |
| 70° | 159  | 278  | 779  |
| 75° | 146  | 242  | 317  |
| 80° | 159  | 250  | 218  |
| 85° | 190  | 371  | 253  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 1945 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 34.3   | 6.4       |
| 10°-20°   | 90.1   | 16.7      |
| 20°-30°   | 117.7  | 21.8      |
| 30°-40°   | 114.7  | 21.3      |
| 40°-50°   | 86.0   | 16.0      |
| 50°-60°   | 53.9   | 10.0      |
| 60°-70°   | 28.1   | 5.2       |
| 70°-80°   | 10.1   | 1.9       |
| 80°-90°   | 4.0    | 0.7       |
| 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°    | 242.1  | 44.9      |
| 0°-40°    | 356.7  | 66.2      |
| 0°-60°    | 496.6  | 92.2      |
| 0°-90°    | 538.9  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 538.9  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 372 | 372   | 372 | 372   | 372 |      |
| 5°  | 360 | 364   | 364 | 367   | 370 | 33   |
| 15° | 297 | 306   | 318 | 338   | 351 | 83   |
| 25° | 217 | 228   | 251 | 285   | 310 | 99   |
| 35° | 131 | 145   | 175 | 222   | 257 | 81   |
| 45° | 48  | 62    | 101 | 156   | 200 | 41   |
| 55° | 24  | 26    | 36  | 94    | 140 | 22   |
| 65° | 12  | 12    | 20  | 38    | 72  | 12   |
| 75° | 6   | 8     | 9   | 10    | 12  | 6    |
| 85° | 2   | 4     | 5   | 4     | 3   | 3    |
| 90° | 0   | 0     | 0   | 0     | 0   |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 372.0 | 372.0 | 372.0 | 372.0 | 372.0 |
| 2.5°  | 368.9 | 372.4 | 370.1 | 370.1 | 370.1 |
| 5°    | 359.8 | 364.5 | 364.5 | 367.3 | 370.5 |
| 7.5°  | 347.1 | 352.7 | 356.2 | 362.9 | 367.7 |
| 10°   | 332.1 | 338.8 | 345.6 | 356.6 | 362.9 |
| 12.5° | 315.1 | 323.0 | 332.5 | 347.9 | 357.4 |
| 15°   | 297.3 | 306.0 | 318.3 | 338.0 | 350.7 |
| 17.5° | 277.9 | 288.2 | 302.9 | 326.6 | 342.0 |
| 20°   | 257.8 | 268.1 | 286.2 | 313.1 | 332.1 |
| 22.5° | 237.6 | 248.7 | 268.5 | 298.9 | 321.4 |
| 25°   | 216.7 | 228.5 | 250.7 | 284.7 | 310.0 |
| 27.5° | 195.3 | 207.6 | 232.1 | 270.0 | 297.3 |
| 30°   | 174.0 | 186.6 | 213.1 | 254.2 | 284.7 |
| 32.5° | 152.6 | 166.1 | 194.1 | 238.0 | 271.2 |
| 35°   | 130.9 | 144.7 | 175.1 | 221.8 | 257.4 |
| 37.5° | 109.9 | 123.7 | 156.2 | 205.2 | 243.5 |
| 40°   | 88.2  | 103.2 | 137.6 | 188.6 | 229.7 |
| 42.5° | 66.8  | 82.2  | 119.0 | 172.0 | 214.7 |
| 45°   | 48.2  | 62.5  | 100.8 | 155.8 | 199.7 |
| 47.5° | 37.2  | 45.1  | 82.2  | 139.2 | 185.0 |
| 50°   | 32.4  | 34.8  | 65.2  | 123.7 | 170.8 |
| 52.5° | 28.1  | 29.7  | 49.0  | 109.5 | 155.4 |
| 55°   | 24.5  | 25.7  | 36.0  | 94.1  | 139.6 |
| 57.5° | 20.6  | 22.1  | 28.5  | 79.1  | 123.4 |
| 60°   | 17.4  | 18.2  | 25.3  | 65.2  | 107.1 |
| 62.5° | 14.2  | 15.0  | 22.5  | 51.4  | 89.0  |
| 65°   | 11.5  | 12.3  | 19.8  | 38.0  | 71.6  |
| 67.5° | 9.5   | 9.9   | 16.6  | 26.9  | 55.0  |
| 70°   | 7.9   | 8.3   | 13.8  | 18.6  | 38.7  |
| 72.5° | 6.7   | 7.9   | 11.1  | 13.4  | 24.5  |
| 75°   | 5.5   | 7.5   | 9.1   | 9.5   | 11.9  |
| 77.5° | 4.7   | 7.1   | 7.5   | 7.5   | 6.7   |
| 80°   | 4.0   | 5.9   | 6.3   | 5.9   | 5.5   |
| 82.5° | 3.2   | 4.7   | 5.1   | 5.1   | 4.3   |
| 85°   | 2.4   | 4.0   | 4.7   | 4.3   | 3.2   |
| 87.5° | 1.6   | 3.6   | 4.0   | 3.6   | 2.4   |
| 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 | 3.18             | 4.53 | 3.54 | 4.84 | 5.16 | 12.80          | 14.15 | 13.17 | 14.47 | 14.78 |
|                 | 3H   | 4.04             | 5.24 | 4.42 | 5.57 | 5.93 | 13.64          | 14.84 | 14.02 | 15.17 | 15.54 |
|                 | 4H   | 4.46             | 5.58 | 4.86 | 5.93 | 6.31 | 13.72          | 14.84 | 14.12 | 15.19 | 15.57 |
|                 | 6H   | 4.89             | 5.92 | 5.30 | 6.29 | 6.68 | 13.70          | 14.73 | 14.11 | 15.10 | 15.49 |
|                 | 8H   | 5.07             | 6.04 | 5.50 | 6.44 | 6.84 | 13.69          | 14.66 | 14.11 | 15.05 | 15.46 |
|                 | 12H  | 5.24             | 6.17 | 5.67 | 6.55 | 6.98 | 13.67          | 14.61 | 14.11 | 14.99 | 15.42 |
| 4H              | 2H   | 4.15             | 5.27 | 4.55 | 5.62 | 6.00 | 12.66          | 13.78 | 13.07 | 14.13 | 14.52 |
|                 | 3H   | 5.20             | 6.12 | 5.61 | 6.52 | 6.92 | 13.57          | 14.49 | 13.99 | 14.89 | 15.30 |
|                 | 4H   | 5.76             | 6.58 | 6.19 | 7.00 | 7.44 | 13.68          | 14.50 | 14.11 | 14.91 | 15.36 |
|                 | 6H   | 6.36             | 7.06 | 6.82 | 7.51 | 7.98 | 13.70          | 14.41 | 14.16 | 14.86 | 15.32 |
|                 | 8H   | 6.60             | 7.26 | 7.07 | 7.70 | 8.18 | 13.70          | 14.36 | 14.17 | 14.81 | 15.28 |
|                 | 12H  | 6.83             | 7.41 | 7.31 | 7.90 | 8.37 | 13.72          | 14.30 | 14.20 | 14.78 | 15.26 |
| 8H              | 4H   | 6.23             | 6.89 | 6.70 | 7.34 | 7.81 | 13.60          | 14.26 | 14.07 | 14.71 | 15.18 |
|                 | 6H   | 7.04             | 7.58 | 7.54 | 8.08 | 8.56 | 13.65          | 14.20 | 14.16 | 14.69 | 15.17 |
|                 | 8H   | 7.42             | 7.90 | 7.94 | 8.42 | 8.91 | 13.69          | 14.17 | 14.21 | 14.69 | 15.18 |
|                 | 12H  | 7.82             | 8.25 | 8.33 | 8.74 | 9.31 | 13.75          | 14.18 | 14.26 | 14.67 | 15.24 |
| 12H             | 4H   | 6.28             | 6.87 | 6.77 | 7.35 | 7.82 | 13.57          | 14.15 | 14.05 | 14.63 | 15.11 |
|                 | 6H   | 7.16             | 7.65 | 7.68 | 8.16 | 8.65 | 13.62          | 14.11 | 14.14 | 14.62 | 15.11 |
|                 | 8H   | 7.65             | 8.08 | 8.16 | 8.57 | 9.14 | 13.69          | 14.12 | 14.20 | 14.61 | 15.18 |