

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: P1058103

Luminaire Tested: S122RDRP-S675D940-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1058103  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-55 )  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDRP-S675D940-X4F0-XX-UDD-WVL-W  
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

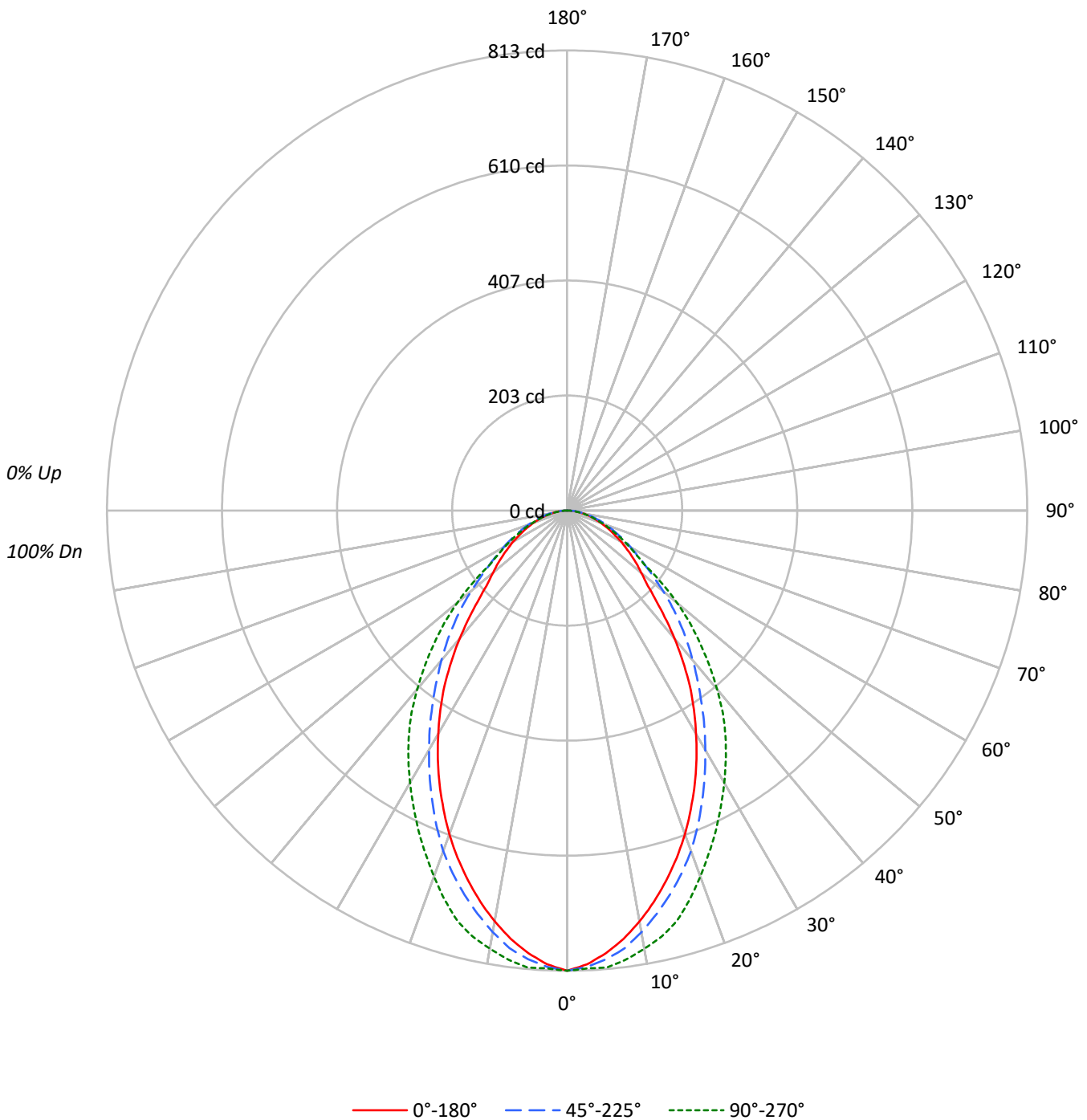
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1325.4 lumens  
Efficiency: N/A  
Efficacy: 51.4 lumens/watt  
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05  
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 25.8  
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  | 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 | 103 | 99  | 108 | 104 | 101 | 98  | 100 | 97  | 95  | 96  | 94  | 92  | 93  | 91  | 89  |     |    |    |    | 87 |     |   |  |   |
| 2   | 102 | 95  | 89  | 84  | 100 | 93  | 88  | 83  | 90  | 85  | 81  | 87  | 83  | 80  | 84  | 81  | 78  |     |    |    |    | 76 |     |   |  |   |
| 3   | 94  | 85  | 78  | 73  | 92  | 84  | 77  | 72  | 81  | 75  | 71  | 78  | 74  | 70  | 76  | 72  | 68  |     |    |    |    | 67 |     |   |  |   |
| 4   | 88  | 77  | 69  | 64  | 85  | 76  | 69  | 63  | 73  | 67  | 62  | 71  | 66  | 62  | 69  | 65  | 61  |     |    |    |    | 59 |     |   |  |   |
| 5   | 81  | 70  | 62  | 56  | 80  | 69  | 62  | 56  | 67  | 60  | 55  | 65  | 59  | 55  | 63  | 58  | 54  |     |    |    |    | 52 |     |   |  |   |
| 6   | 76  | 64  | 56  | 50  | 74  | 63  | 56  | 50  | 61  | 55  | 50  | 60  | 54  | 49  | 58  | 53  | 49  |     |    |    |    | 47 |     |   |  |   |
| 7   | 71  | 59  | 51  | 46  | 69  | 58  | 51  | 45  | 57  | 50  | 45  | 55  | 49  | 45  | 54  | 49  | 44  |     |    |    |    | 43 |     |   |  |   |
| 8   | 67  | 54  | 47  | 41  | 65  | 54  | 46  | 41  | 52  | 46  | 41  | 51  | 45  | 41  | 50  | 45  | 41  |     |    |    |    | 39 |     |   |  |   |
| 9   | 63  | 50  | 43  | 38  | 61  | 50  | 43  | 38  | 49  | 42  | 38  | 48  | 42  | 37  | 47  | 41  | 37  |     |    |    |    | 36 |     |   |  |   |
| 10  | 59  | 47  | 40  | 35  | 58  | 46  | 40  | 35  | 46  | 39  | 35  | 45  | 39  | 35  | 44  | 38  | 34  |     |    |    |    | 33 |     |   |  |   |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 15002 | 15002 | 15002 |
| 5°  | 14541 | 14735 | 15011 |
| 10° | 13809 | 14169 | 14726 |
| 15° | 12925 | 13411 | 14329 |
| 20° | 11949 | 12566 | 13510 |
| 25° | 10858 | 11497 | 12672 |
| 30° | 9705  | 10394 | 11828 |
| 35° | 8508  | 9315  | 10988 |
| 40° | 7118  | 8318  | 9919  |
| 45° | 5705  | 7369  | 8669  |
| 50° | 4895  | 6350  | 7277  |
| 55° | 4472  | 5398  | 5373  |
| 60° | 4067  | 4775  | 4680  |
| 65° | 3703  | 4275  | 4082  |
| 70° | 3394  | 3917  | 3631  |
| 75° | 3180  | 3615  | 3180  |
| 80° | 2975  | 3347  | 2784  |
| 85° | 2964  | 3515  | 2414  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 8669 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 75.0   | 5.7       |
| 10°-20°   | 198.7  | 15.0      |
| 20°-30°   | 262.1  | 19.8      |
| 30°-40°   | 263.9  | 19.9      |
| 40°-50°   | 214.8  | 16.2      |
| 50°-60°   | 146.4  | 11.0      |
| 60°-70°   | 95.1   | 7.2       |
| 70°-80°   | 52.4   | 3.9       |
| 80°-90°   | 17.1   | 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°    | 535.8  | 40.4      |
| 0°-40°    | 799.7  | 60.3      |
| 0°-60°    | 1161.0 | 87.6      |
| 0°-90°    | 1325.4 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1325.4 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 813 | 813   | 813 | 813   | 813 |      |
| 5°  | 785 | 800   | 796 | 802   | 810 | 73   |
| 15° | 677 | 694   | 702 | 731   | 750 | 190  |
| 25° | 533 | 551   | 565 | 590   | 622 | 245  |
| 35° | 378 | 397   | 414 | 449   | 488 | 235  |
| 45° | 219 | 246   | 282 | 307   | 332 | 172  |
| 55° | 139 | 153   | 168 | 169   | 167 | 124  |
| 65° | 85  | 100   | 98  | 93    | 94  | 84   |
| 75° | 45  | 55    | 51  | 46    | 45  | 47   |
| 85° | 14  | 18    | 17  | 13    | 11  | 15   |
| 90° | 0   | 0     | 0   | 0     | 0   |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 813.0 | 813.0 | 813.0 | 813.0 | 813.0 |
| 2.5°  | 802.5 | 815.6 | 806.9 | 807.8 | 809.5 |
| 5°    | 785.0 | 799.9 | 795.5 | 802.5 | 810.4 |
| 7.5°  | 763.2 | 778.1 | 779.8 | 790.3 | 799.9 |
| 10°   | 737.0 | 753.6 | 756.2 | 771.9 | 785.9 |
| 12.5° | 708.1 | 726.5 | 730.0 | 752.7 | 771.1 |
| 15°   | 676.6 | 694.1 | 702.0 | 730.8 | 750.1 |
| 17.5° | 643.4 | 660.0 | 672.3 | 698.5 | 720.4 |
| 20°   | 608.5 | 624.2 | 639.9 | 663.5 | 688.0 |
| 22.5° | 570.9 | 588.3 | 603.2 | 626.8 | 654.8 |
| 25°   | 533.3 | 550.8 | 564.7 | 590.1 | 622.4 |
| 27.5° | 494.8 | 512.3 | 526.3 | 553.4 | 588.3 |
| 30°   | 455.5 | 473.8 | 487.8 | 518.4 | 555.1 |
| 32.5° | 417.0 | 435.4 | 451.1 | 483.4 | 521.9 |
| 35°   | 377.7 | 396.9 | 413.5 | 449.3 | 487.8 |
| 37.5° | 335.7 | 357.6 | 378.5 | 414.4 | 452.0 |
| 40°   | 295.5 | 320.0 | 345.3 | 378.5 | 411.8 |
| 42.5° | 255.3 | 282.4 | 313.8 | 341.8 | 372.4 |
| 45°   | 218.6 | 245.7 | 282.4 | 306.8 | 332.2 |
| 47.5° | 189.7 | 212.4 | 251.8 | 271.9 | 294.6 |
| 50°   | 170.5 | 186.2 | 221.2 | 236.9 | 253.5 |
| 52.5° | 154.7 | 167.8 | 192.3 | 202.8 | 211.6 |
| 55°   | 139.0 | 153.0 | 167.8 | 168.7 | 167.0 |
| 57.5° | 123.3 | 139.0 | 146.9 | 140.7 | 144.2 |
| 60°   | 110.2 | 125.9 | 129.4 | 123.3 | 126.8 |
| 62.5° | 96.2  | 113.6 | 113.6 | 107.5 | 109.3 |
| 65°   | 84.8  | 100.5 | 97.9  | 92.7  | 93.5  |
| 67.5° | 73.4  | 89.2  | 84.8  | 79.6  | 79.6  |
| 70°   | 62.9  | 77.8  | 72.6  | 67.3  | 67.3  |
| 72.5° | 53.3  | 65.6  | 62.1  | 55.9  | 55.1  |
| 75°   | 44.6  | 55.1  | 50.7  | 45.5  | 44.6  |
| 77.5° | 35.8  | 44.6  | 41.1  | 36.7  | 35.0  |
| 80°   | 28.0  | 35.8  | 31.5  | 28.0  | 26.2  |
| 82.5° | 21.0  | 27.1  | 23.6  | 20.1  | 18.4  |
| 85°   | 14.0  | 18.4  | 16.6  | 13.1  | 11.4  |
| 87.5° | 7.0   | 12.2  | 10.5  | 8.7   | 7.0   |
| 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 | 16.13            | 17.57 | 16.49 | 17.88 | 18.19 | 16.37          | 17.81 | 16.74 | 18.12 | 18.44 |
|                 | 3H   | 17.66            | 18.94 | 18.03 | 19.27 | 19.63 | 17.73          | 19.02 | 18.11 | 19.35 | 19.71 |
|                 | 4H   | 18.22            | 19.42 | 18.62 | 19.77 | 20.15 | 18.21          | 19.42 | 18.62 | 19.77 | 20.15 |
|                 | 6H   | 18.64            | 19.75 | 19.06 | 20.12 | 20.51 | 18.56          | 19.67 | 18.98 | 20.04 | 20.44 |
|                 | 8H   | 18.79            | 19.85 | 19.22 | 20.24 | 20.64 | 18.67          | 19.73 | 19.10 | 20.12 | 20.52 |
|                 | 12H  | 18.91            | 19.92 | 19.34 | 20.30 | 20.73 | 18.74          | 19.75 | 19.17 | 20.13 | 20.56 |
| 4H              | 2H   | 16.70            | 17.91 | 17.10 | 18.25 | 18.64 | 16.90          | 18.10 | 17.30 | 18.45 | 18.83 |
|                 | 3H   | 18.50            | 19.50 | 18.92 | 19.90 | 20.31 | 18.47          | 19.47 | 18.89 | 19.87 | 20.28 |
|                 | 4H   | 19.25            | 20.14 | 19.68 | 20.56 | 21.00 | 19.07          | 19.97 | 19.50 | 20.38 | 20.82 |
|                 | 6H   | 19.83            | 20.61 | 20.29 | 21.06 | 21.52 | 19.54          | 20.32 | 20.00 | 20.76 | 21.22 |
|                 | 8H   | 20.04            | 20.77 | 20.51 | 21.22 | 21.69 | 19.69          | 20.42 | 20.15 | 20.86 | 21.33 |
|                 | 12H  | 20.21            | 20.86 | 20.69 | 21.34 | 21.81 | 19.80          | 20.45 | 20.28 | 20.93 | 21.40 |
| 8H              | 4H   | 19.51            | 20.24 | 19.98 | 20.69 | 21.15 | 19.36          | 20.09 | 19.82 | 20.53 | 21.00 |
|                 | 6H   | 20.27            | 20.87 | 20.77 | 21.36 | 21.84 | 19.95          | 20.55 | 20.45 | 21.04 | 21.52 |
|                 | 8H   | 20.59            | 21.13 | 21.11 | 21.64 | 22.13 | 20.17          | 20.71 | 20.69 | 21.22 | 21.71 |
|                 | 12H  | 20.87            | 21.35 | 21.39 | 21.84 | 22.41 | 20.35          | 20.83 | 20.87 | 21.32 | 21.89 |
| 12H             | 4H   | 19.53            | 20.18 | 20.01 | 20.66 | 21.13 | 19.39          | 20.04 | 19.88 | 20.52 | 20.99 |
|                 | 6H   | 20.31            | 20.85 | 20.83 | 21.36 | 21.85 | 20.02          | 20.56 | 20.53 | 21.07 | 21.56 |
|                 | 8H   | 20.71            | 21.19 | 21.22 | 21.68 | 22.25 | 20.30          | 20.78 | 20.81 | 21.27 | 21.84 |