

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: P1175376

Luminaire Tested: S125RDRP-S610D840-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

Test Information

Test Method: LM-79-2024
Report Number: P1175376
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-82)
Test Lab: INNOVATION CENTER
Issue Date: 8/18/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-S610D840-X4F0-XX-UDD-WVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

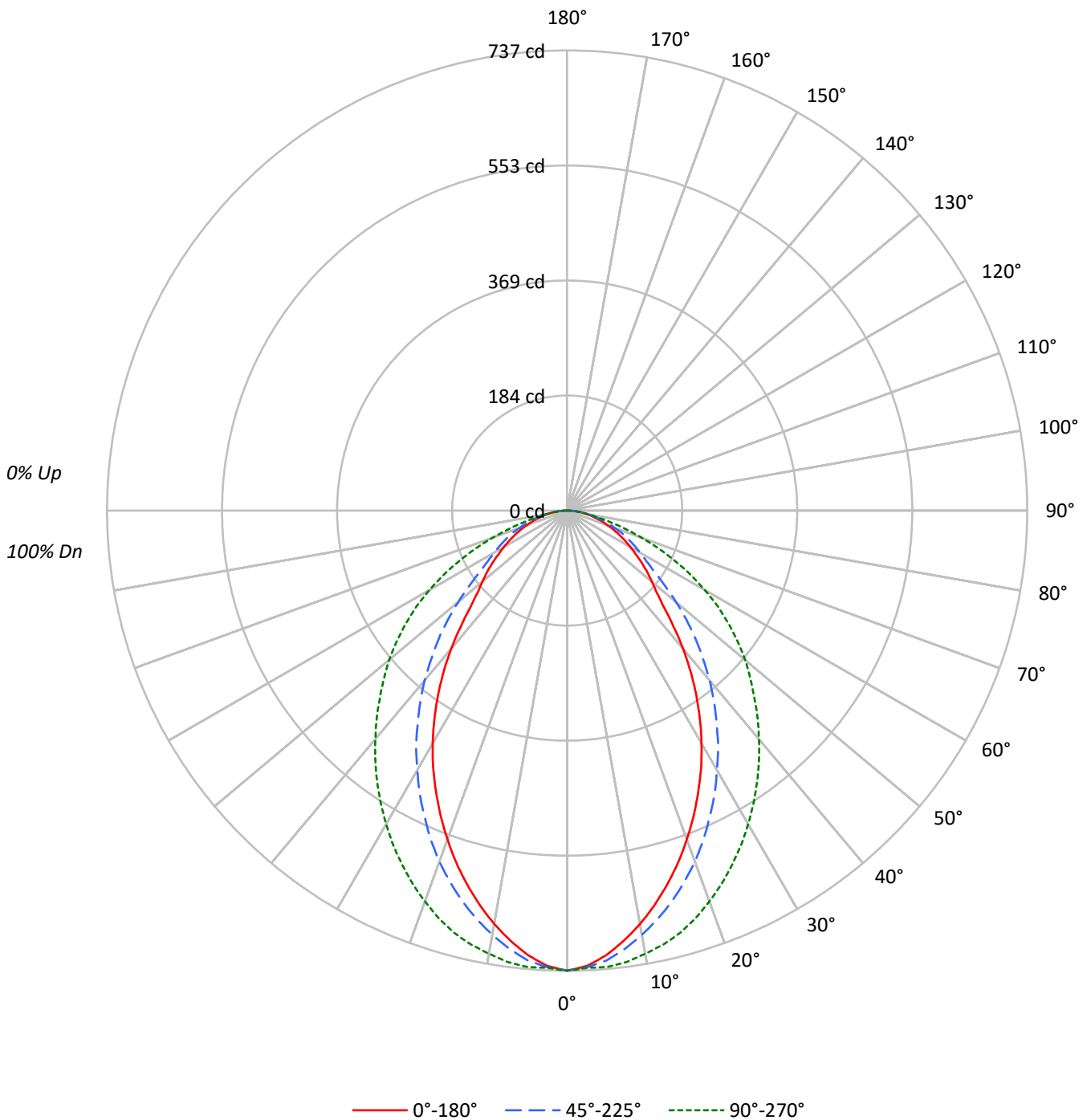
Lumens per Lamp: N/A
Luminaire Lumens: 1388.2 lumens
Efficiency: N/A
Efficacy: 70.8 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
Input Voltage (V): 120
Input Current (A_{in}): 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 | 110 | 106 | 102 | 99 | 107 | 104 | 100 | 97 | 99 | 97 | 94 | 96 | 93 | 91 | 92 | 90 | 88 | 86 |
| 2 | 101 | 94 | 88 | 83 | 99 | 92 | 86 | 82 | 89 | 84 | 80 | 85 | 81 | 78 | 82 | 79 | 76 | 74 |
| 3 | 93 | 84 | 76 | 71 | 91 | 82 | 75 | 70 | 79 | 73 | 69 | 77 | 72 | 68 | 74 | 70 | 66 | 64 |
| 4 | 86 | 75 | 67 | 61 | 84 | 74 | 66 | 61 | 72 | 65 | 60 | 69 | 64 | 59 | 67 | 62 | 58 | 56 |
| 5 | 80 | 68 | 60 | 54 | 78 | 67 | 59 | 53 | 65 | 58 | 53 | 63 | 57 | 52 | 61 | 56 | 52 | 50 |
| 6 | 74 | 62 | 54 | 48 | 72 | 61 | 53 | 47 | 59 | 52 | 47 | 58 | 51 | 47 | 56 | 51 | 46 | 44 |
| 7 | 69 | 57 | 48 | 43 | 68 | 56 | 48 | 43 | 54 | 47 | 42 | 53 | 47 | 42 | 52 | 46 | 42 | 40 |
| 8 | 65 | 52 | 44 | 39 | 63 | 51 | 44 | 39 | 50 | 43 | 38 | 49 | 43 | 38 | 48 | 42 | 38 | 36 |
| 9 | 61 | 48 | 40 | 35 | 59 | 48 | 40 | 35 | 46 | 40 | 35 | 45 | 39 | 35 | 44 | 39 | 35 | 33 |
| 10 | 57 | 45 | 37 | 32 | 56 | 44 | 37 | 32 | 43 | 37 | 32 | 42 | 36 | 32 | 41 | 36 | 32 | 30 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 5074 | 5074 | 5074 |
| 5° | 4942 | 4998 | 5071 |
| 10° | 4701 | 4823 | 5038 |
| 15° | 4419 | 4619 | 4989 |
| 20° | 4107 | 4382 | 4881 |
| 25° | 3773 | 4105 | 4752 |
| 30° | 3422 | 3815 | 4610 |
| 35° | 3028 | 3507 | 4458 |
| 40° | 2598 | 3188 | 4295 |
| 45° | 2131 | 2838 | 4130 |
| 50° | 1896 | 2439 | 3987 |
| 55° | 1749 | 2042 | 3785 |
| 60° | 1611 | 1860 | 3506 |
| 65° | 1499 | 1753 | 3099 |
| 70° | 1397 | 1637 | 2530 |
| 75° | 1314 | 1514 | 1897 |
| 80° | 1241 | 1388 | 1364 |
| 85° | 1138 | 1382 | 1138 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4130 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 68.2 | 4.9 |
| 10°-20° | 183.9 | 13.2 |
| 20°-30° | 253.0 | 18.2 |
| 30°-40° | 268.3 | 19.3 |
| 40°-50° | 234.8 | 16.9 |
| 50°-60° | 180.2 | 13.0 |
| 60°-70° | 120.0 | 8.6 |
| 70°-80° | 61.5 | 4.4 |
| 80°-90° | 18.3 | 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° | 505.0 | 36.4 |
| 0°-40° | 773.3 | 55.7 |
| 0°-60° | 1188.3 | 85.6 |
| 0°-90° | 1388.2 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1388.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 737 | 737 | 737 | 737 | 737 | |
| 5° | 715 | 724 | 723 | 728 | 734 | 67 |
| 15° | 620 | 634 | 648 | 679 | 700 | 174 |
| 25° | 497 | 514 | 540 | 586 | 626 | 228 |
| 35° | 360 | 377 | 417 | 478 | 530 | 224 |
| 45° | 219 | 237 | 292 | 364 | 424 | 173 |
| 55° | 146 | 149 | 170 | 253 | 315 | 131 |
| 65° | 92 | 93 | 108 | 141 | 190 | 92 |
| 75° | 49 | 52 | 57 | 60 | 71 | 53 |
| 85° | 14 | 16 | 18 | 17 | 14 | 16 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 736.9 | 736.9 | 736.9 | 736.9 | 736.9 |
| 2.5° | 730.0 | 737.5 | 731.8 | 732.5 | 733.1 |
| 5° | 715.0 | 724.3 | 723.1 | 728.1 | 733.7 |
| 7.5° | 694.9 | 705.0 | 708.1 | 720.6 | 729.3 |
| 10° | 672.4 | 683.7 | 689.9 | 708.7 | 720.6 |
| 12.5° | 646.8 | 659.9 | 669.9 | 694.3 | 711.8 |
| 15° | 619.9 | 634.3 | 648.0 | 678.7 | 699.9 |
| 17.5° | 591.1 | 605.5 | 623.6 | 658.7 | 684.3 |
| 20° | 560.5 | 576.1 | 598.0 | 635.5 | 666.2 |
| 22.5° | 529.2 | 545.4 | 570.5 | 611.8 | 646.8 |
| 25° | 496.7 | 513.5 | 540.4 | 586.1 | 625.5 |
| 27.5° | 464.8 | 480.4 | 511.7 | 560.5 | 603.6 |
| 30° | 430.4 | 446.6 | 479.8 | 533.6 | 579.8 |
| 32.5° | 395.9 | 412.2 | 450.4 | 506.7 | 555.5 |
| 35° | 360.3 | 377.2 | 417.2 | 478.5 | 530.4 |
| 37.5° | 324.6 | 342.2 | 386.6 | 449.7 | 504.8 |
| 40° | 289.0 | 307.8 | 354.7 | 421.0 | 477.9 |
| 42.5° | 252.7 | 272.7 | 322.1 | 392.8 | 451.6 |
| 45° | 218.9 | 237.1 | 291.5 | 364.0 | 424.1 |
| 47.5° | 194.5 | 205.2 | 259.0 | 334.6 | 397.8 |
| 50° | 177.0 | 182.0 | 227.7 | 306.5 | 372.2 |
| 52.5° | 161.4 | 164.5 | 197.0 | 280.2 | 344.0 |
| 55° | 145.7 | 148.9 | 170.1 | 252.7 | 315.3 |
| 57.5° | 130.7 | 132.6 | 150.1 | 225.2 | 286.5 |
| 60° | 117.0 | 118.2 | 135.1 | 197.7 | 254.6 |
| 62.5° | 104.5 | 105.1 | 120.7 | 169.5 | 222.7 |
| 65° | 92.0 | 92.6 | 107.6 | 141.4 | 190.2 |
| 67.5° | 80.7 | 80.7 | 95.1 | 115.7 | 158.9 |
| 70° | 69.4 | 69.4 | 81.3 | 93.8 | 125.7 |
| 72.5° | 59.4 | 60.7 | 68.8 | 75.7 | 98.2 |
| 75° | 49.4 | 52.5 | 56.9 | 60.0 | 71.3 |
| 77.5° | 40.0 | 43.8 | 45.7 | 46.9 | 47.5 |
| 80° | 31.3 | 33.8 | 35.0 | 35.7 | 34.4 |
| 82.5° | 23.1 | 25.0 | 25.6 | 25.6 | 23.8 |
| 85° | 14.4 | 16.3 | 17.5 | 16.9 | 14.4 |
| 87.5° | 6.9 | 9.4 | 10.0 | 8.8 | 6.9 |
| 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 | 12.26 | 13.76 | 12.62 | 14.07 | 14.38 | 16.28 | 17.78 | 16.65 | 18.10 | 18.41 |
| | 3H | 13.84 | 15.19 | 14.22 | 15.52 | 15.88 | 17.67 | 19.01 | 18.05 | 19.34 | 19.70 |
| | 4H | 14.49 | 15.75 | 14.89 | 16.10 | 16.48 | 18.08 | 19.34 | 18.48 | 19.69 | 20.06 |
| | 6H | 15.00 | 16.16 | 15.41 | 16.53 | 16.92 | 18.28 | 19.45 | 18.69 | 19.81 | 20.20 |
| | 8H | 15.18 | 16.29 | 15.60 | 16.67 | 17.08 | 18.34 | 19.45 | 18.77 | 19.84 | 20.24 |
| | 12H | 15.30 | 16.36 | 15.73 | 16.75 | 17.17 | 18.37 | 19.43 | 18.80 | 19.82 | 20.24 |
| 4H | 2H | 13.03 | 14.29 | 13.43 | 14.64 | 15.02 | 16.41 | 17.67 | 16.81 | 18.02 | 18.40 |
| | 3H | 14.81 | 15.86 | 15.22 | 16.26 | 16.66 | 17.98 | 19.03 | 18.39 | 19.43 | 19.83 |
| | 4H | 15.58 | 16.52 | 16.01 | 16.93 | 17.37 | 18.49 | 19.43 | 18.92 | 19.85 | 20.29 |
| | 6H | 16.22 | 17.04 | 16.67 | 17.48 | 17.94 | 18.82 | 19.64 | 19.28 | 20.08 | 20.54 |
| | 8H | 16.45 | 17.21 | 16.91 | 17.66 | 18.12 | 18.92 | 19.68 | 19.38 | 20.13 | 20.59 |
| | 12H | 16.62 | 17.30 | 17.10 | 17.78 | 18.25 | 18.99 | 19.67 | 19.47 | 20.15 | 20.62 |
| 8H | 4H | 15.96 | 16.73 | 16.42 | 17.17 | 17.64 | 18.59 | 19.36 | 19.06 | 19.80 | 20.27 |
| | 6H | 16.74 | 17.37 | 17.23 | 17.86 | 18.34 | 19.01 | 19.64 | 19.51 | 20.13 | 20.61 |
| | 8H | 17.05 | 17.62 | 17.57 | 18.13 | 18.62 | 19.17 | 19.74 | 19.68 | 20.25 | 20.74 |
| | 12H | 17.32 | 17.82 | 17.83 | 18.31 | 18.87 | 19.31 | 19.81 | 19.82 | 20.30 | 20.87 |
| 12H | 4H | 16.00 | 16.68 | 16.48 | 17.16 | 17.63 | 18.59 | 19.27 | 19.07 | 19.75 | 20.22 |
| | 6H | 16.81 | 17.38 | 17.33 | 17.89 | 18.38 | 19.02 | 19.59 | 19.54 | 20.10 | 20.59 |
| | 8H | 17.20 | 17.70 | 17.71 | 18.19 | 18.75 | 19.23 | 19.73 | 19.74 | 20.23 | 20.79 |