

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: P1058511

Luminaire Tested: S122RDRP-H675D950-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058511
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-57)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-H675D950-X4F0-XX-UDD-BVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

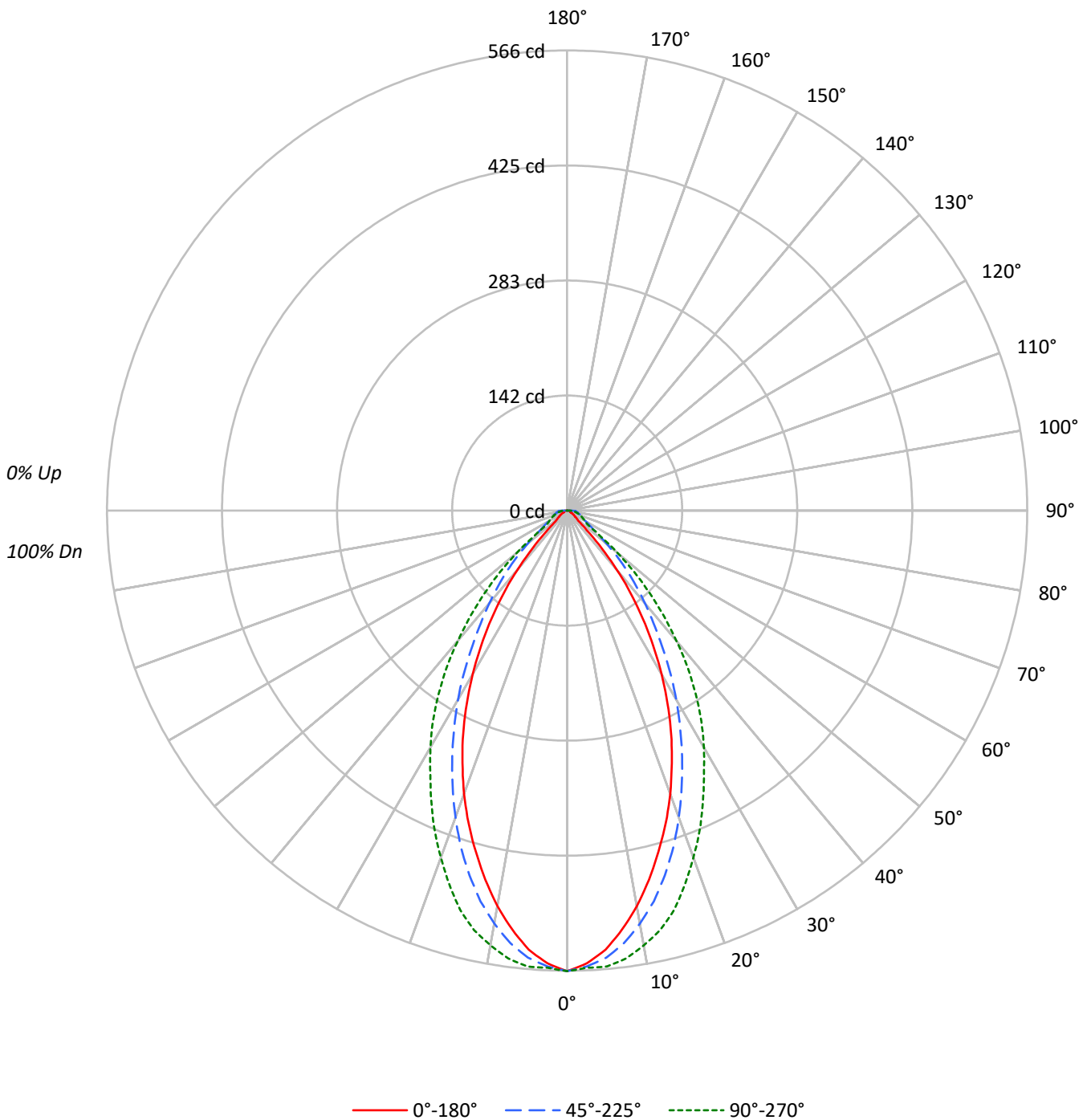
Lumens per Lamp: N/A
Luminaire Lumens: 616.6 lumens
Efficiency: N/A
Efficacy: 26.2 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.5
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 | 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 | 112 | 108 | 105 | 102 | 109 | 106 | 103 | 101 | 102 | 100 | 97 | 98 | 96 | 95 | 95 | 93 | 92 | 90 | | | | | 90 | | | |
| 2 | 105 | 99 | 94 | 90 | 102 | 97 | 92 | 89 | 94 | 90 | 87 | 91 | 87 | 85 | 88 | 85 | 83 | 81 | | | | | 81 | | | |
| 3 | 98 | 91 | 85 | 80 | 96 | 89 | 84 | 79 | 86 | 82 | 78 | 84 | 80 | 76 | 81 | 78 | 75 | 74 | | | | | 74 | | | |
| 4 | 92 | 83 | 77 | 72 | 90 | 82 | 76 | 71 | 80 | 75 | 70 | 78 | 73 | 70 | 76 | 72 | 69 | 67 | | | | | 67 | | | |
| 5 | 87 | 77 | 70 | 65 | 85 | 76 | 70 | 65 | 74 | 69 | 64 | 72 | 67 | 64 | 71 | 66 | 63 | 61 | | | | | 61 | | | |
| 6 | 82 | 72 | 65 | 60 | 80 | 71 | 64 | 59 | 69 | 63 | 59 | 68 | 62 | 58 | 66 | 62 | 58 | 56 | | | | | 56 | | | |
| 7 | 77 | 67 | 60 | 55 | 76 | 66 | 59 | 55 | 64 | 59 | 54 | 63 | 58 | 54 | 62 | 57 | 54 | 52 | | | | | 52 | | | |
| 8 | 73 | 62 | 55 | 51 | 72 | 62 | 55 | 51 | 60 | 54 | 50 | 59 | 54 | 50 | 58 | 53 | 50 | 48 | | | | | 48 | | | |
| 9 | 69 | 58 | 52 | 47 | 68 | 58 | 51 | 47 | 57 | 51 | 47 | 56 | 50 | 47 | 55 | 50 | 46 | 45 | | | | | 45 | | | |
| 10 | 66 | 55 | 48 | 44 | 64 | 54 | 48 | 44 | 53 | 48 | 44 | 53 | 47 | 43 | 52 | 47 | 43 | 42 | | | | | 42 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 10453 | 10453 | 10453 |
| 5° | 10041 | 10225 | 10427 |
| 10° | 9256 | 9665 | 10174 |
| 15° | 8295 | 8866 | 9714 |
| 20° | 7279 | 7886 | 8917 |
| 25° | 6165 | 6810 | 8046 |
| 30° | 4945 | 5717 | 7166 |
| 35° | 3656 | 4573 | 6208 |
| 40° | 2293 | 3582 | 5044 |
| 45° | 898 | 2696 | 3737 |
| 50° | 442 | 1823 | 2291 |
| 55° | 351 | 1197 | 1020 |
| 60° | 269 | 971 | 937 |
| 65° | 196 | 908 | 908 |
| 70° | 243 | 928 | 928 |
| 75° | 257 | 1034 | 970 |
| 80° | 383 | 1350 | 1063 |
| 85° | 762 | 2308 | 1546 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 87.5°
 Luminance: 4230 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 51.7 | 8.4 |
| 10°-20° | 130.8 | 21.2 |
| 20°-30° | 156.5 | 25.4 |
| 30°-40° | 131.7 | 21.4 |
| 40°-50° | 75.0 | 12.2 |
| 50°-60° | 29.6 | 4.8 |
| 60°-70° | 18.6 | 3.0 |
| 70°-80° | 13.8 | 2.2 |
| 80°-90° | 8.8 | 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° | 339.1 | 55.0 |
| 0°-40° | 470.8 | 76.3 |
| 0°-60° | 575.4 | 93.3 |
| 0°-90° | 616.6 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 616.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 566 | 566 | 566 | 566 | 566 | |
| 5° | 542 | 554 | 552 | 558 | 563 | 50 |
| 15° | 434 | 450 | 464 | 491 | 508 | 121 |
| 25° | 303 | 316 | 334 | 369 | 395 | 138 |
| 35° | 162 | 177 | 203 | 247 | 276 | 101 |
| 45° | 34 | 61 | 103 | 130 | 143 | 32 |
| 55° | 11 | 24 | 37 | 38 | 32 | 10 |
| 65° | 4 | 21 | 21 | 20 | 21 | 5 |
| 75° | 4 | 14 | 14 | 14 | 14 | 4 |
| 85° | 4 | 10 | 11 | 10 | 7 | 3 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 566.5 | 566.5 | 566.5 | 566.5 | 566.5 |
| 2.5° | 557.5 | 567.4 | 561.1 | 562.0 | 562.9 |
| 5° | 542.1 | 553.9 | 552.0 | 558.4 | 562.9 |
| 7.5° | 519.4 | 532.1 | 536.6 | 547.5 | 555.7 |
| 10° | 494.0 | 508.5 | 515.8 | 533.0 | 543.0 |
| 12.5° | 465.0 | 481.3 | 492.2 | 514.0 | 528.5 |
| 15° | 434.2 | 449.6 | 464.1 | 491.3 | 508.5 |
| 17.5° | 403.4 | 418.8 | 434.2 | 464.1 | 482.2 |
| 20° | 370.7 | 385.2 | 401.6 | 433.3 | 454.1 |
| 22.5° | 336.3 | 351.7 | 368.0 | 400.7 | 426.0 |
| 25° | 302.8 | 316.4 | 334.5 | 368.9 | 395.2 |
| 27.5° | 267.4 | 281.0 | 300.9 | 336.3 | 364.4 |
| 30° | 232.1 | 245.7 | 268.3 | 304.6 | 336.3 |
| 32.5° | 196.7 | 211.2 | 235.7 | 275.6 | 307.3 |
| 35° | 162.3 | 176.8 | 203.0 | 246.6 | 275.6 |
| 37.5° | 128.7 | 145.0 | 174.0 | 216.6 | 243.8 |
| 40° | 95.2 | 114.2 | 148.7 | 186.7 | 209.4 |
| 42.5° | 63.5 | 87.0 | 125.1 | 156.8 | 175.9 |
| 45° | 34.4 | 60.7 | 103.3 | 129.6 | 143.2 |
| 47.5° | 19.0 | 39.0 | 82.5 | 103.3 | 111.5 |
| 50° | 15.4 | 27.2 | 63.5 | 78.9 | 79.8 |
| 52.5° | 12.7 | 24.5 | 47.1 | 56.2 | 51.7 |
| 55° | 10.9 | 23.6 | 37.2 | 38.1 | 31.7 |
| 57.5° | 9.1 | 22.7 | 30.8 | 27.2 | 27.2 |
| 60° | 7.3 | 22.7 | 26.3 | 24.5 | 25.4 |
| 62.5° | 5.4 | 22.7 | 23.6 | 21.8 | 22.7 |
| 65° | 4.5 | 20.8 | 20.8 | 19.9 | 20.8 |
| 67.5° | 4.5 | 19.0 | 19.0 | 18.1 | 19.0 |
| 70° | 4.5 | 18.1 | 17.2 | 17.2 | 17.2 |
| 72.5° | 3.6 | 16.3 | 16.3 | 15.4 | 15.4 |
| 75° | 3.6 | 14.5 | 14.5 | 13.6 | 13.6 |
| 77.5° | 3.6 | 13.6 | 13.6 | 12.7 | 11.8 |
| 80° | 3.6 | 11.8 | 12.7 | 11.8 | 10.0 |
| 82.5° | 3.6 | 10.9 | 11.8 | 10.9 | 8.2 |
| 85° | 3.6 | 10.0 | 10.9 | 10.0 | 7.3 |
| 87.5° | 2.7 | 10.0 | 10.0 | 8.2 | 5.4 |
| 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 | 5.86 | 7.08 | 6.22 | 7.39 | 7.71 | 7.87 | 9.09 | 8.24 | 9.41 | 9.72 |
| | 3H | 7.39 | 8.48 | 7.77 | 8.81 | 9.17 | 9.84 | 10.92 | 10.22 | 11.26 | 11.62 |
| | 4H | 7.94 | 8.95 | 8.35 | 9.31 | 9.69 | 10.75 | 11.77 | 11.16 | 12.12 | 12.50 |
| | 6H | 8.50 | 9.43 | 8.91 | 9.80 | 10.19 | 11.64 | 12.57 | 12.06 | 12.94 | 13.34 |
| | 8H | 8.79 | 9.67 | 9.22 | 10.06 | 10.47 | 12.05 | 12.93 | 12.48 | 13.32 | 13.73 |
| | 12H | 9.15 | 9.99 | 9.58 | 10.37 | 10.80 | 12.50 | 13.34 | 12.93 | 13.72 | 14.15 |
| 4H | 2H | 7.04 | 8.05 | 7.44 | 8.40 | 8.78 | 8.49 | 9.50 | 8.89 | 9.85 | 10.24 |
| | 3H | 9.23 | 10.06 | 9.64 | 10.47 | 10.87 | 10.73 | 11.56 | 11.14 | 11.97 | 12.37 |
| | 4H | 10.28 | 11.03 | 10.72 | 11.45 | 11.89 | 11.80 | 12.55 | 12.24 | 12.97 | 13.42 |
| | 6H | 11.18 | 11.82 | 11.64 | 12.27 | 12.74 | 12.92 | 13.56 | 13.38 | 14.01 | 14.48 |
| | 8H | 11.56 | 12.17 | 12.03 | 12.61 | 13.09 | 13.44 | 14.05 | 13.91 | 14.50 | 14.97 |
| | 12H | 11.98 | 12.51 | 12.47 | 13.00 | 13.47 | 14.03 | 14.56 | 14.51 | 15.04 | 15.52 |
| 8H | 4H | 11.08 | 11.69 | 11.55 | 12.14 | 12.61 | 12.29 | 12.90 | 12.77 | 13.35 | 13.82 |
| | 6H | 12.47 | 12.96 | 12.97 | 13.46 | 13.94 | 13.70 | 14.19 | 14.20 | 14.69 | 15.17 |
| | 8H | 13.19 | 13.63 | 13.71 | 14.15 | 14.64 | 14.44 | 14.89 | 14.96 | 15.40 | 15.90 |
| | 12H | 13.94 | 14.33 | 14.46 | 14.83 | 15.40 | 15.28 | 15.67 | 15.79 | 16.17 | 16.74 |
| 12H | 4H | 11.25 | 11.78 | 11.73 | 12.27 | 12.74 | 12.40 | 12.93 | 12.88 | 13.41 | 13.89 |
| | 6H | 12.80 | 13.25 | 13.32 | 13.76 | 14.25 | 13.91 | 14.36 | 14.44 | 14.88 | 15.37 |
| | 8H | 13.72 | 14.11 | 14.23 | 14.61 | 15.18 | 14.80 | 15.20 | 15.32 | 15.69 | 16.27 |