

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: P1057803

Luminaire Tested: S122RDRP-S1005D835-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057803
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-56)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S1005D835-X4F0-XX-UDD-SVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

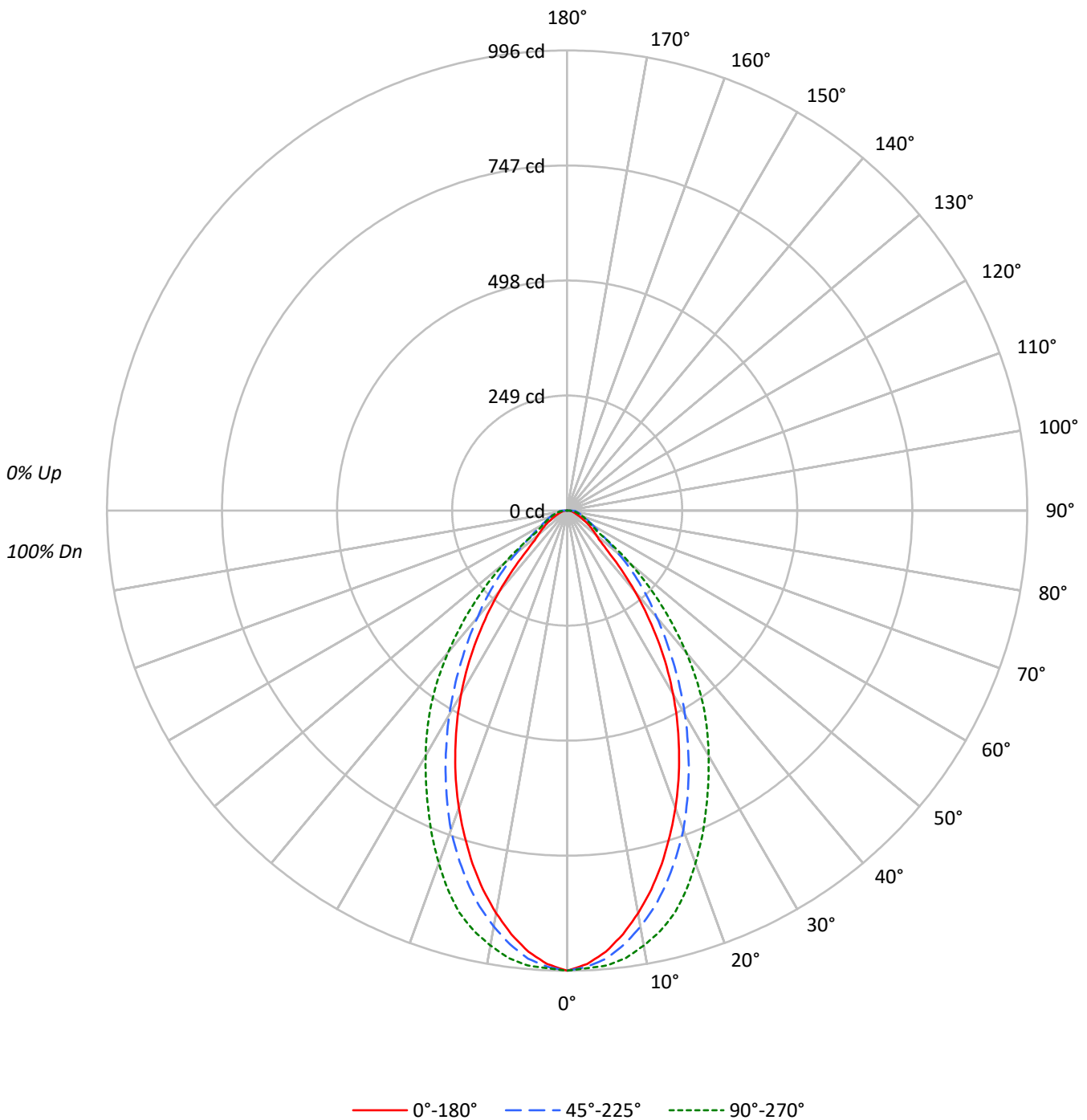
Lumens per Lamp: N/A
Luminaire Lumens: 1207.7 lumens
Efficiency: N/A
Efficacy: 28.9 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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 | 111 | 108 | 105 | 102 | 109 | 106 | 103 | 100 | 102 | 99 | 97 | 98 | 96 | 94 | 94 | 93 | 91 | 89 | | | | | 89 | | | |
| 2 | 104 | 98 | 93 | 88 | 102 | 96 | 91 | 87 | 93 | 89 | 85 | 90 | 86 | 84 | 87 | 84 | 82 | 80 | | | | | 80 | | | |
| 3 | 97 | 89 | 83 | 78 | 95 | 88 | 82 | 77 | 85 | 80 | 76 | 83 | 78 | 75 | 80 | 77 | 74 | 72 | | | | | 72 | | | |
| 4 | 91 | 82 | 75 | 70 | 89 | 81 | 74 | 69 | 78 | 73 | 68 | 76 | 71 | 68 | 74 | 70 | 67 | 65 | | | | | 65 | | | |
| 5 | 86 | 75 | 68 | 63 | 84 | 74 | 68 | 63 | 72 | 67 | 62 | 71 | 65 | 61 | 69 | 64 | 61 | 59 | | | | | 59 | | | |
| 6 | 80 | 70 | 62 | 57 | 79 | 69 | 62 | 57 | 67 | 61 | 57 | 66 | 60 | 56 | 64 | 59 | 56 | 54 | | | | | 54 | | | |
| 7 | 76 | 65 | 57 | 52 | 74 | 64 | 57 | 52 | 62 | 56 | 52 | 61 | 56 | 52 | 60 | 55 | 51 | 50 | | | | | 50 | | | |
| 8 | 71 | 60 | 53 | 48 | 70 | 59 | 53 | 48 | 58 | 52 | 48 | 57 | 52 | 48 | 56 | 51 | 47 | 46 | | | | | 46 | | | |
| 9 | 67 | 56 | 49 | 45 | 66 | 56 | 49 | 45 | 55 | 49 | 44 | 54 | 48 | 44 | 53 | 48 | 44 | 42 | | | | | 42 | | | |
| 10 | 64 | 53 | 46 | 41 | 63 | 52 | 46 | 41 | 51 | 45 | 41 | 50 | 45 | 41 | 50 | 45 | 41 | 39 | | | | | 39 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 18373 | 18373 | 18373 |
| 5° | 17758 | 18032 | 18306 |
| 10° | 16577 | 17131 | 17909 |
| 15° | 15120 | 15913 | 17212 |
| 20° | 13451 | 14439 | 15949 |
| 25° | 11658 | 12682 | 14488 |
| 30° | 9771 | 10875 | 13051 |
| 35° | 7699 | 8999 | 11565 |
| 40° | 5487 | 7270 | 9657 |
| 45° | 3244 | 5751 | 7489 |
| 50° | 2337 | 4163 | 5095 |
| 55° | 1953 | 2998 | 2570 |
| 60° | 1583 | 2403 | 2185 |
| 65° | 1292 | 2131 | 2004 |
| 70° | 1117 | 2077 | 1915 |
| 75° | 1055 | 2110 | 1896 |
| 80° | 1105 | 2518 | 2040 |
| 85° | 1567 | 4065 | 2498 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7489 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 91.3 | 7.6 |
| 10°-20° | 234.6 | 19.4 |
| 20°-30° | 289.4 | 24.0 |
| 30°-40° | 257.4 | 21.3 |
| 40°-50° | 164.3 | 13.6 |
| 50°-60° | 78.9 | 6.5 |
| 60°-70° | 46.3 | 3.8 |
| 70°-80° | 29.6 | 2.4 |
| 80°-90° | 15.8 | 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° | 615.4 | 51.0 |
| 0°-40° | 872.8 | 72.3 |
| 0°-60° | 1116.1 | 92.4 |
| 0°-90° | 1207.7 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1207.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 996 | 996 | 996 | 996 | 996 | |
| 5° | 959 | 976 | 974 | 979 | 988 | 89 |
| 15° | 792 | 811 | 833 | 871 | 901 | 221 |
| 25° | 573 | 595 | 623 | 667 | 712 | 262 |
| 35° | 342 | 368 | 400 | 460 | 513 | 212 |
| 45° | 124 | 161 | 220 | 256 | 287 | 104 |
| 55° | 61 | 78 | 93 | 90 | 80 | 55 |
| 65° | 30 | 53 | 49 | 44 | 46 | 30 |
| 75° | 15 | 32 | 30 | 28 | 27 | 16 |
| 85° | 7 | 18 | 19 | 16 | 12 | 7 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P1057803

CATALOG NUMBER: S122RDRP-S1005D835-X4F0-XX-UDD-SVL-W

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 995.7 | 995.7 | 995.7 | 995.7 | 995.7 |
| 2.5° | 982.4 | 998.7 | 988.3 | 988.3 | 991.3 |
| 5° | 958.7 | 976.5 | 973.5 | 979.4 | 988.3 |
| 7.5° | 924.7 | 943.9 | 946.9 | 963.1 | 976.5 |
| 10° | 884.7 | 905.4 | 914.3 | 938.0 | 955.8 |
| 12.5° | 840.4 | 861.1 | 877.3 | 906.9 | 932.1 |
| 15° | 791.5 | 810.8 | 833.0 | 871.4 | 901.0 |
| 17.5° | 738.3 | 763.4 | 785.6 | 825.6 | 859.6 |
| 20° | 685.0 | 708.7 | 735.3 | 773.8 | 812.2 |
| 22.5° | 630.3 | 652.5 | 679.1 | 719.0 | 763.4 |
| 25° | 572.6 | 594.8 | 622.9 | 667.2 | 711.6 |
| 27.5° | 516.3 | 538.5 | 565.2 | 614.0 | 661.3 |
| 30° | 458.6 | 480.8 | 510.4 | 560.7 | 612.5 |
| 32.5° | 400.9 | 424.6 | 454.2 | 508.9 | 563.7 |
| 35° | 341.8 | 368.4 | 399.5 | 460.1 | 513.4 |
| 37.5° | 284.1 | 310.7 | 349.2 | 408.3 | 458.6 |
| 40° | 227.8 | 258.9 | 301.8 | 355.1 | 400.9 |
| 42.5° | 173.1 | 207.1 | 260.4 | 303.3 | 343.2 |
| 45° | 124.3 | 161.3 | 220.4 | 256.0 | 287.0 |
| 47.5° | 94.7 | 121.3 | 182.0 | 210.1 | 232.3 |
| 50° | 81.4 | 97.6 | 145.0 | 165.7 | 177.5 |
| 52.5° | 71.0 | 85.8 | 115.4 | 125.8 | 125.8 |
| 55° | 60.7 | 78.4 | 93.2 | 90.2 | 79.9 |
| 57.5° | 51.8 | 71.0 | 76.9 | 65.1 | 68.1 |
| 60° | 42.9 | 65.1 | 65.1 | 57.7 | 59.2 |
| 62.5° | 35.5 | 60.7 | 56.2 | 50.3 | 51.8 |
| 65° | 29.6 | 53.3 | 48.8 | 44.4 | 45.9 |
| 67.5° | 23.7 | 47.3 | 42.9 | 39.9 | 39.9 |
| 70° | 20.7 | 42.9 | 38.5 | 35.5 | 35.5 |
| 72.5° | 17.8 | 37.0 | 34.0 | 31.1 | 31.1 |
| 75° | 14.8 | 32.5 | 29.6 | 28.1 | 26.6 |
| 77.5° | 13.3 | 28.1 | 26.6 | 23.7 | 22.2 |
| 80° | 10.4 | 23.7 | 23.7 | 22.2 | 19.2 |
| 82.5° | 8.9 | 20.7 | 20.7 | 19.2 | 16.3 |
| 85° | 7.4 | 17.8 | 19.2 | 16.3 | 11.8 |
| 87.5° | 5.9 | 16.3 | 16.3 | 13.3 | 8.9 |
| 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 | 11.78 | 13.06 | 12.15 | 13.37 | 13.69 | 11.58 | 12.85 | 11.94 | 13.17 | 13.48 |
| | 3H | 13.02 | 14.15 | 13.40 | 14.48 | 14.85 | 13.17 | 14.30 | 13.55 | 14.63 | 15.00 |
| | 4H | 13.47 | 14.53 | 13.87 | 14.88 | 15.26 | 13.88 | 14.94 | 14.29 | 15.29 | 15.68 |
| | 6H | 13.85 | 14.82 | 14.26 | 15.19 | 15.59 | 14.53 | 15.51 | 14.95 | 15.88 | 16.27 |
| | 8H | 14.00 | 14.93 | 14.43 | 15.32 | 15.72 | 14.86 | 15.79 | 15.29 | 16.18 | 16.58 |
| | 12H | 14.16 | 15.04 | 14.60 | 15.43 | 15.86 | 15.16 | 16.04 | 15.59 | 16.43 | 16.86 |
| 4H | 2H | 12.33 | 13.39 | 12.74 | 13.74 | 14.13 | 12.17 | 13.23 | 12.57 | 13.58 | 13.96 |
| | 3H | 14.03 | 14.90 | 14.44 | 15.30 | 15.71 | 14.00 | 14.87 | 14.42 | 15.28 | 15.68 |
| | 4H | 14.82 | 15.60 | 15.26 | 16.02 | 16.47 | 14.88 | 15.66 | 15.31 | 16.08 | 16.52 |
| | 6H | 15.47 | 16.14 | 15.93 | 16.59 | 17.06 | 15.72 | 16.40 | 16.19 | 16.85 | 17.31 |
| | 8H | 15.72 | 16.35 | 16.19 | 16.80 | 17.27 | 16.15 | 16.78 | 16.62 | 17.23 | 17.70 |
| | 12H | 15.96 | 16.52 | 16.45 | 17.01 | 17.48 | 16.55 | 17.11 | 17.03 | 17.59 | 18.07 |
| 8H | 4H | 15.24 | 15.87 | 15.71 | 16.32 | 16.79 | 15.29 | 15.93 | 15.76 | 16.38 | 16.85 |
| | 6H | 16.22 | 16.74 | 16.72 | 17.24 | 17.72 | 16.38 | 16.90 | 16.88 | 17.40 | 17.88 |
| | 8H | 16.71 | 17.18 | 17.23 | 17.69 | 18.19 | 16.97 | 17.44 | 17.49 | 17.96 | 18.45 |
| | 12H | 17.22 | 17.63 | 17.73 | 18.12 | 18.69 | 17.57 | 17.99 | 18.09 | 18.48 | 19.05 |
| 12H | 4H | 15.31 | 15.87 | 15.79 | 16.35 | 16.82 | 15.37 | 15.93 | 15.86 | 16.41 | 16.89 |
| | 6H | 16.39 | 16.85 | 16.91 | 17.37 | 17.86 | 16.55 | 17.01 | 17.07 | 17.53 | 18.02 |
| | 8H | 17.02 | 17.44 | 17.54 | 17.93 | 18.50 | 17.26 | 17.67 | 17.77 | 18.16 | 18.74 |