

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1060361

Luminaire Tested: S124RDR-S1195D935-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060361
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-76)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S1195D935-X4F0-XX-UDD-WVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

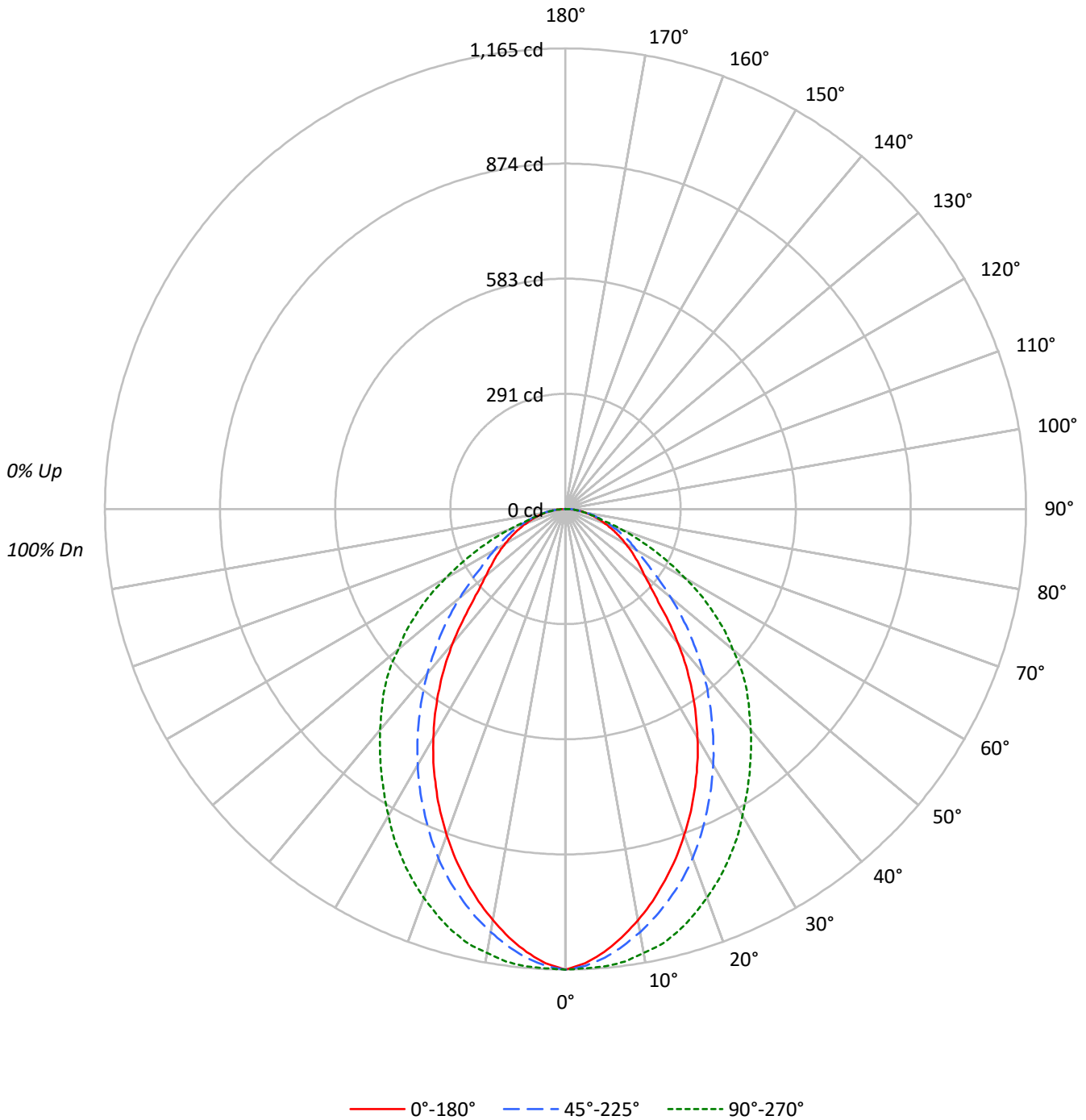
Lumens per Lamp: N/A
Luminaire Lumens: 2121.5 lumens
Efficiency: N/A
Efficacy: 50.8 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.1
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
Input Voltage (V): 120
Input Current (Ain): 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





TEST NUMBER: P1060361

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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 | 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 | 108 | 104 | 100 | 97 | 100 | 97 | 94 | 96 | 93 | 91 | 92 | 90 | 89 | 87 | | | | |
| 2 | 102 | 94 | 88 | 83 | 99 | 92 | 87 | 82 | 89 | 84 | 80 | 86 | 82 | 79 | 83 | 80 | 77 | 75 | | | | |
| 3 | 94 | 84 | 77 | 71 | 91 | 83 | 76 | 71 | 80 | 74 | 69 | 77 | 72 | 68 | 75 | 71 | 67 | 65 | | | | |
| 4 | 87 | 76 | 68 | 62 | 84 | 74 | 67 | 61 | 72 | 66 | 61 | 70 | 64 | 60 | 68 | 63 | 59 | 57 | | | | |
| 5 | 80 | 69 | 60 | 54 | 78 | 68 | 60 | 54 | 65 | 59 | 54 | 64 | 58 | 53 | 62 | 57 | 52 | 50 | | | | |
| 6 | 75 | 62 | 54 | 48 | 73 | 62 | 54 | 48 | 60 | 53 | 48 | 58 | 52 | 47 | 57 | 51 | 47 | 45 | | | | |
| 7 | 70 | 57 | 49 | 43 | 68 | 56 | 49 | 43 | 55 | 48 | 43 | 54 | 47 | 43 | 52 | 47 | 42 | 41 | | | | |
| 8 | 65 | 53 | 45 | 39 | 64 | 52 | 44 | 39 | 51 | 44 | 39 | 50 | 43 | 39 | 48 | 43 | 39 | 37 | | | | |
| 9 | 61 | 49 | 41 | 36 | 60 | 48 | 41 | 36 | 47 | 40 | 36 | 46 | 40 | 35 | 45 | 39 | 35 | 34 | | | | |
| 10 | 58 | 45 | 38 | 33 | 56 | 45 | 38 | 33 | 44 | 37 | 33 | 43 | 37 | 33 | 42 | 36 | 32 | 31 | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 10035 | 10035 | 10035 |
| 5° | 9725 | 9851 | 10041 |
| 10° | 9239 | 9506 | 9976 |
| 15° | 8668 | 9092 | 9855 |
| 20° | 8049 | 8619 | 9593 |
| 25° | 7369 | 8031 | 9285 |
| 30° | 6644 | 7434 | 8903 |
| 35° | 5855 | 6779 | 8539 |
| 40° | 4984 | 6111 | 8197 |
| 45° | 4046 | 5400 | 7899 |
| 50° | 3502 | 4647 | 7396 |
| 55° | 3246 | 3942 | 6858 |
| 60° | 3029 | 3555 | 6016 |
| 65° | 2836 | 3335 | 5002 |
| 70° | 2644 | 3074 | 3782 |
| 75° | 2519 | 2845 | 2722 |
| 80° | 2360 | 2603 | 2301 |
| 85° | 2174 | 2411 | 1808 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7899 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 107.6 | 5.1 |
| 10°-20° | 289.2 | 13.6 |
| 20°-30° | 394.9 | 18.6 |
| 30°-40° | 413.7 | 19.5 |
| 40°-50° | 358.1 | 16.9 |
| 50°-60° | 269.1 | 12.7 |
| 60°-70° | 173.5 | 8.2 |
| 70°-80° | 89.0 | 4.2 |
| 80°-90° | 26.6 | 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° | 791.6 | 37.3 |
| 0°-40° | 1205.3 | 56.8 |
| 0°-60° | 1832.5 | 86.4 |
| 0°-90° | 2121.5 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2121.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1165 | 1165 | 1165 | 1165 | 1165 | |
| 5° | 1125 | 1142 | 1140 | 1148 | 1162 | 105 |
| 15° | 972 | 997 | 1020 | 1066 | 1105 | 273 |
| 25° | 776 | 805 | 845 | 911 | 977 | 356 |
| 35° | 557 | 589 | 645 | 730 | 812 | 347 |
| 45° | 332 | 366 | 443 | 552 | 649 | 262 |
| 55° | 216 | 224 | 263 | 375 | 457 | 194 |
| 65° | 139 | 142 | 164 | 198 | 246 | 138 |
| 75° | 76 | 84 | 86 | 84 | 82 | 80 |
| 85° | 22 | 26 | 24 | 23 | 18 | 25 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P1060361

CATALOG NUMBER: S124RDR-S1195D935-X4F0-XX-UDD-WVL-S

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1165.3 | 1165.3 | 1165.3 | 1165.3 | 1165.3 |
| 2.5° | 1150.6 | 1165.3 | 1156.7 | 1159.2 | 1162.9 |
| 5° | 1125.0 | 1142.1 | 1139.6 | 1148.2 | 1161.6 |
| 7.5° | 1093.2 | 1111.6 | 1115.2 | 1134.8 | 1154.3 |
| 10° | 1056.6 | 1077.4 | 1087.1 | 1116.4 | 1140.9 |
| 12.5° | 1016.3 | 1038.3 | 1055.4 | 1092.0 | 1127.4 |
| 15° | 972.3 | 996.7 | 1019.9 | 1066.4 | 1105.4 |
| 17.5° | 927.1 | 951.5 | 982.1 | 1033.4 | 1077.4 |
| 20° | 878.3 | 905.1 | 940.5 | 994.3 | 1046.8 |
| 22.5° | 828.2 | 856.3 | 894.1 | 952.8 | 1013.8 |
| 25° | 775.6 | 805.0 | 845.3 | 911.2 | 977.2 |
| 27.5° | 723.1 | 752.4 | 797.6 | 867.3 | 939.3 |
| 30° | 668.2 | 698.7 | 747.6 | 823.3 | 895.4 |
| 32.5° | 613.2 | 646.2 | 696.2 | 776.9 | 853.8 |
| 35° | 557.0 | 588.8 | 644.9 | 730.5 | 812.3 |
| 37.5° | 500.8 | 533.8 | 593.6 | 685.3 | 770.8 |
| 40° | 443.4 | 477.6 | 543.6 | 640.1 | 729.2 |
| 42.5° | 386.0 | 422.6 | 492.3 | 593.6 | 687.7 |
| 45° | 332.2 | 366.4 | 443.4 | 552.1 | 648.6 |
| 47.5° | 291.9 | 315.1 | 394.5 | 511.8 | 604.6 |
| 50° | 261.4 | 273.6 | 346.9 | 467.8 | 552.1 |
| 52.5° | 238.2 | 246.7 | 302.9 | 420.2 | 509.4 |
| 55° | 216.2 | 223.5 | 262.6 | 375.0 | 456.8 |
| 57.5° | 196.7 | 200.3 | 232.1 | 331.0 | 406.8 |
| 60° | 175.9 | 179.6 | 206.4 | 283.4 | 349.3 |
| 62.5° | 157.6 | 160.0 | 185.7 | 238.2 | 296.8 |
| 65° | 139.2 | 141.7 | 163.7 | 197.9 | 245.5 |
| 67.5° | 122.1 | 125.8 | 142.9 | 161.2 | 195.4 |
| 70° | 105.0 | 112.4 | 122.1 | 130.7 | 150.2 |
| 72.5° | 90.4 | 97.7 | 102.6 | 105.0 | 106.3 |
| 75° | 75.7 | 84.3 | 85.5 | 84.3 | 81.8 |
| 77.5° | 61.1 | 68.4 | 68.4 | 66.0 | 63.5 |
| 80° | 47.6 | 53.7 | 52.5 | 50.1 | 46.4 |
| 82.5° | 35.4 | 39.1 | 37.9 | 35.4 | 31.8 |
| 85° | 22.0 | 25.7 | 24.4 | 23.2 | 18.3 |
| 87.5° | 11.0 | 14.7 | 13.4 | 12.2 | 7.3 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)