

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: P1217300

Luminaire Tested: S122DRP-H865D950-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217300
TEST IS SCALED FROM IESNA LM-79-24 TEST DATA (G3-2511-596-2)
Test Lab: INNOVATION CENTER
Issue Date: 4/9/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122DRP-H865D950-X4F0-XX-UDD-G-W
Description: DEFINE 2, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

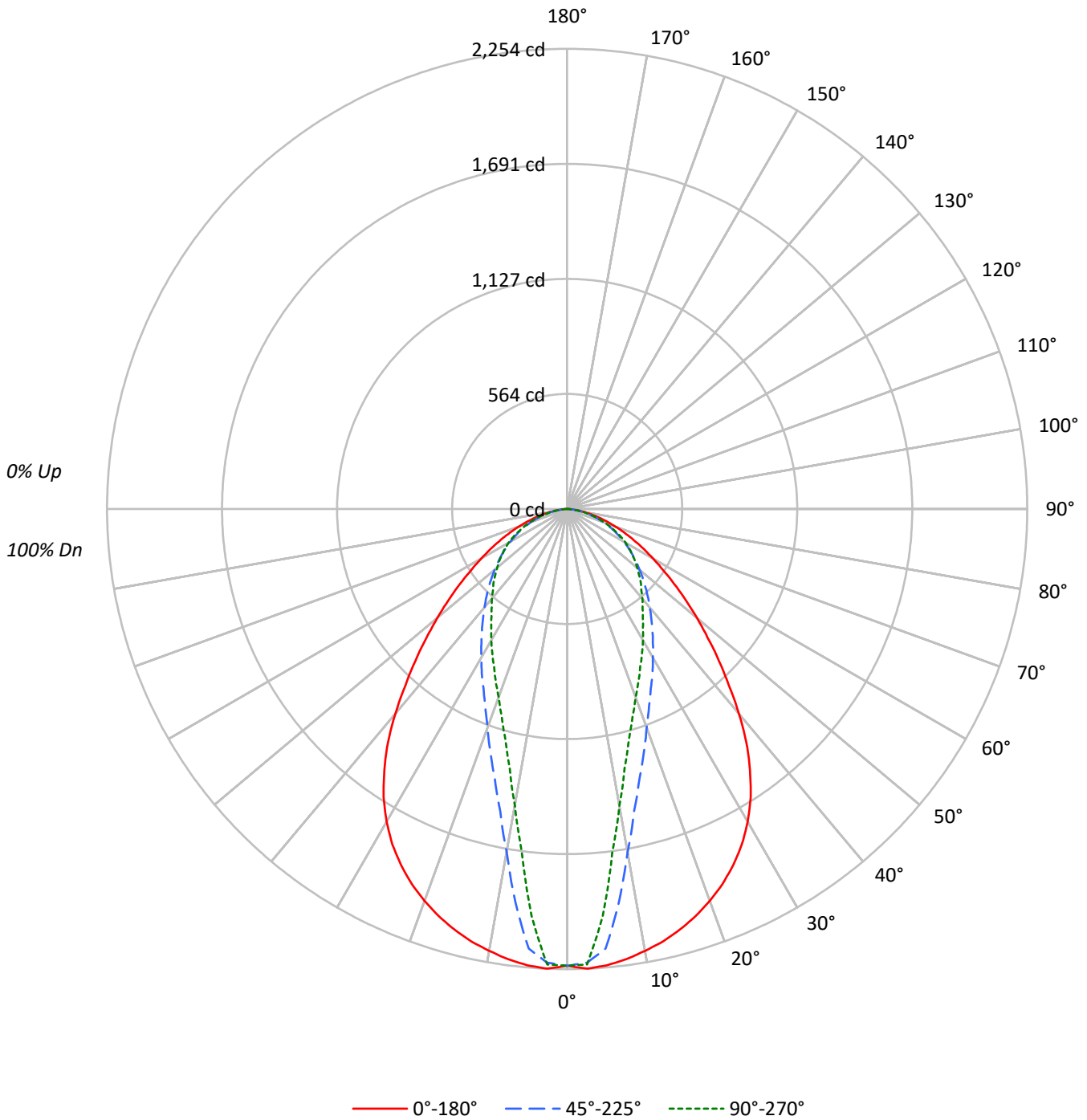
Lumens per Lamp: N/A
Luminaire Lumens: 3006.4 lumens
Efficiency: N/A
Efficacy: 97.3 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.5 / 0.8
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 30.9
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: P1217300

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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 | 102 | 99 | 108 | 104 | 100 | 97 | 100 | 97 | 94 | 96 | 93 | 91 | 92 | 90 | 89 | | | | | 87 | | | | |
| 2 | 101 | 94 | 88 | 83 | 99 | 92 | 87 | 82 | 89 | 84 | 80 | 86 | 82 | 78 | 83 | 79 | 77 | | | | | 75 | | | | |
| 3 | 93 | 84 | 77 | 71 | 91 | 82 | 76 | 70 | 80 | 74 | 69 | 77 | 72 | 68 | 74 | 70 | 67 | | | | | 65 | | | | |
| 4 | 86 | 76 | 68 | 62 | 84 | 74 | 67 | 61 | 72 | 65 | 60 | 70 | 64 | 60 | 68 | 63 | 59 | | | | | 57 | | | | |
| 5 | 80 | 69 | 60 | 54 | 78 | 67 | 60 | 54 | 65 | 59 | 53 | 63 | 58 | 53 | 62 | 57 | 52 | | | | | 50 | | | | |
| 6 | 75 | 63 | 54 | 48 | 73 | 62 | 54 | 48 | 60 | 53 | 48 | 58 | 52 | 47 | 57 | 51 | 47 | | | | | 45 | | | | |
| 7 | 70 | 57 | 49 | 44 | 68 | 57 | 49 | 44 | 55 | 48 | 43 | 54 | 48 | 43 | 52 | 47 | 43 | | | | | 41 | | | | |
| 8 | 65 | 53 | 45 | 40 | 64 | 52 | 45 | 40 | 51 | 44 | 39 | 50 | 44 | 39 | 49 | 43 | 39 | | | | | 37 | | | | |
| 9 | 62 | 49 | 41 | 36 | 60 | 49 | 41 | 36 | 47 | 41 | 36 | 46 | 40 | 36 | 45 | 40 | 36 | | | | | 34 | | | | |
| 10 | 58 | 46 | 38 | 33 | 57 | 45 | 38 | 33 | 44 | 38 | 33 | 43 | 37 | 33 | 43 | 37 | 33 | | | | | 31 | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 42388 | 42388 | 42388 |
| 5° | 42660 | 41106 | 38065 |
| 10° | 42278 | 32826 | 28380 |
| 15° | 41845 | 26828 | 22913 |
| 20° | 41178 | 22966 | 19765 |
| 25° | 40231 | 20273 | 17737 |
| 30° | 38707 | 18383 | 16263 |
| 35° | 36115 | 16842 | 14955 |
| 40° | 32384 | 15556 | 14171 |
| 45° | 28173 | 14541 | 13665 |
| 50° | 24458 | 13656 | 13175 |
| 55° | 21163 | 12915 | 12836 |
| 60° | 18351 | 12159 | 12516 |
| 65° | 16062 | 11405 | 11826 |
| 70° | 13837 | 10475 | 10863 |
| 75° | 11537 | 9223 | 9567 |
| 80° | 9045 | 7517 | 7255 |
| 85° | 5587 | 4826 | 4826 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 28173 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 192.6 | 6.4 |
| 10°-20° | 424.7 | 14.1 |
| 20°-30° | 521.1 | 17.3 |
| 30°-40° | 538.5 | 17.9 |
| 40°-50° | 486.4 | 16.2 |
| 50°-60° | 394.2 | 13.1 |
| 60°-70° | 276.3 | 9.2 |
| 70°-80° | 142.5 | 4.7 |
| 80°-90° | 30.1 | 1.0 |
| 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° | 1138.5 | 37.9 |
| 0°-40° | 1677.0 | 55.8 |
| 0°-60° | 2557.5 | 85.1 |
| 0°-90° | 3006.4 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3006.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 2237 | 2237 | 2237 | 2237 | 2237 | |
| 5° | 2243 | 2238 | 2161 | 2064 | 2002 | 213 |
| 15° | 2133 | 1798 | 1368 | 1220 | 1168 | 601 |
| 25° | 1924 | 1278 | 970 | 878 | 848 | 884 |
| 35° | 1562 | 944 | 728 | 666 | 647 | 971 |
| 45° | 1052 | 680 | 543 | 512 | 510 | 813 |
| 55° | 641 | 466 | 391 | 386 | 389 | 577 |
| 65° | 358 | 287 | 254 | 260 | 264 | 358 |
| 75° | 158 | 135 | 126 | 130 | 131 | 170 |
| 85° | 26 | 22 | 22 | 22 | 22 | 34 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P1217300

CATALOG NUMBER: S122DRP-H865D950-X4F0-XX-UDD-G-W

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 2237.3 | 2237.3 | 2237.3 | 2237.3 | 2237.3 |
| 2.5° | 2253.6 | 2245.4 | 2224.4 | 2244.3 | 2233.8 |
| 5° | 2243.1 | 2238.4 | 2161.4 | 2064.5 | 2001.5 |
| 7.5° | 2224.4 | 2208.1 | 1942.0 | 1758.8 | 1696.9 |
| 10° | 2197.6 | 2115.9 | 1706.3 | 1535.9 | 1475.2 |
| 12.5° | 2169.6 | 1977.0 | 1516.0 | 1356.1 | 1301.3 |
| 15° | 2133.4 | 1798.4 | 1367.8 | 1219.6 | 1168.2 |
| 17.5° | 2091.4 | 1643.2 | 1249.9 | 1107.5 | 1066.7 |
| 20° | 2042.4 | 1509.0 | 1139.1 | 1014.2 | 980.3 |
| 22.5° | 1988.7 | 1395.8 | 1046.9 | 945.3 | 913.8 |
| 25° | 1924.5 | 1277.9 | 969.8 | 877.6 | 848.5 |
| 27.5° | 1853.3 | 1188.1 | 905.6 | 819.3 | 794.8 |
| 30° | 1769.3 | 1100.5 | 840.3 | 763.3 | 743.4 |
| 32.5° | 1673.6 | 1018.8 | 781.9 | 714.2 | 690.9 |
| 35° | 1561.5 | 944.2 | 728.2 | 666.4 | 646.6 |
| 37.5° | 1442.5 | 870.6 | 676.9 | 623.2 | 606.9 |
| 40° | 1309.4 | 806.4 | 629.0 | 581.2 | 573.0 |
| 42.5° | 1172.9 | 742.3 | 585.9 | 545.0 | 538.0 |
| 45° | 1051.5 | 680.4 | 542.7 | 512.3 | 510.0 |
| 47.5° | 933.7 | 624.4 | 503.0 | 479.7 | 477.3 |
| 50° | 829.8 | 566.0 | 463.3 | 448.2 | 447.0 |
| 52.5° | 730.6 | 514.7 | 426.0 | 417.8 | 420.1 |
| 55° | 640.7 | 465.7 | 391.0 | 386.3 | 388.6 |
| 57.5° | 557.9 | 420.1 | 356.0 | 357.1 | 360.6 |
| 60° | 484.3 | 373.5 | 320.9 | 325.6 | 330.3 |
| 62.5° | 420.1 | 330.3 | 287.1 | 294.1 | 298.8 |
| 65° | 358.3 | 287.1 | 254.4 | 260.3 | 263.8 |
| 67.5° | 303.4 | 246.3 | 221.7 | 228.7 | 229.9 |
| 70° | 249.8 | 208.9 | 189.1 | 196.1 | 196.1 |
| 72.5° | 203.1 | 170.4 | 157.6 | 161.1 | 162.2 |
| 75° | 157.6 | 135.4 | 126.0 | 129.5 | 130.7 |
| 77.5° | 119.0 | 102.7 | 95.7 | 99.2 | 98.0 |
| 80° | 82.9 | 72.4 | 68.9 | 67.7 | 66.5 |
| 82.5° | 51.4 | 45.5 | 42.0 | 43.2 | 42.0 |
| 85° | 25.7 | 22.2 | 22.2 | 22.2 | 22.2 |
| 87.5° | 8.2 | 8.2 | 8.2 | 8.2 | 8.2 |
| 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 | 21.52 | 23.01 | 21.88 | 23.33 | 23.64 | 20.01 | 21.51 | 20.38 | 21.83 | 22.14 |
| | 3H | 23.10 | 24.45 | 23.48 | 24.78 | 25.14 | 21.73 | 23.07 | 22.10 | 23.40 | 23.76 |
| | 4H | 23.63 | 24.89 | 24.03 | 25.24 | 25.62 | 22.31 | 23.57 | 22.71 | 23.92 | 24.30 |
| | 6H | 23.95 | 25.12 | 24.37 | 25.49 | 25.88 | 22.65 | 23.82 | 23.07 | 24.19 | 24.58 |
| | 8H | 24.03 | 25.14 | 24.45 | 25.53 | 25.93 | 22.73 | 23.84 | 23.16 | 24.23 | 24.63 |
| | 12H | 24.05 | 25.12 | 24.48 | 25.50 | 25.93 | 22.76 | 23.82 | 23.19 | 24.20 | 24.63 |
| 4H | 2H | 21.82 | 23.09 | 22.22 | 23.44 | 23.81 | 20.57 | 21.84 | 20.97 | 22.18 | 22.56 |
| | 3H | 23.61 | 24.65 | 24.02 | 25.05 | 25.46 | 22.49 | 23.54 | 22.90 | 23.94 | 24.34 |
| | 4H | 24.24 | 25.18 | 24.67 | 25.59 | 26.03 | 23.18 | 24.13 | 23.62 | 24.54 | 24.98 |
| | 6H | 24.67 | 25.49 | 25.13 | 25.93 | 26.39 | 23.64 | 24.46 | 24.09 | 24.90 | 25.36 |
| | 8H | 24.78 | 25.54 | 25.24 | 25.99 | 26.45 | 23.74 | 24.51 | 24.20 | 24.95 | 25.42 |
| | 12H | 24.83 | 25.51 | 25.31 | 25.99 | 26.46 | 23.79 | 24.48 | 24.28 | 24.96 | 25.43 |
| 8H | 4H | 24.38 | 25.15 | 24.85 | 25.59 | 26.06 | 23.43 | 24.19 | 23.89 | 24.64 | 25.10 |
| | 6H | 24.89 | 25.52 | 25.39 | 26.01 | 26.49 | 23.96 | 24.59 | 24.46 | 25.09 | 25.56 |
| | 8H | 25.04 | 25.60 | 25.55 | 26.11 | 26.60 | 24.11 | 24.68 | 24.63 | 25.19 | 25.68 |
| | 12H | 25.13 | 25.63 | 25.64 | 26.12 | 26.68 | 24.21 | 24.71 | 24.72 | 25.20 | 25.77 |
| 12H | 4H | 24.38 | 25.07 | 24.87 | 25.54 | 26.02 | 23.44 | 24.12 | 23.92 | 24.60 | 25.07 |
| | 6H | 24.89 | 25.46 | 25.41 | 25.97 | 26.46 | 23.98 | 24.55 | 24.50 | 25.06 | 25.55 |
| | 8H | 25.08 | 25.58 | 25.59 | 26.07 | 26.63 | 24.18 | 24.67 | 24.69 | 25.17 | 25.73 |