

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: P1217426

Luminaire Tested: S124DRP-S675D950-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217426
TEST IS SCALED FROM IESNA LM-79-24 TEST DATA (G2-2509-563-3)
Test Lab: INNOVATION CENTER
Issue Date: 4/9/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DRP-S675D950-X4F0-XX-UDD-G-W
Description: DEFINE 4, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

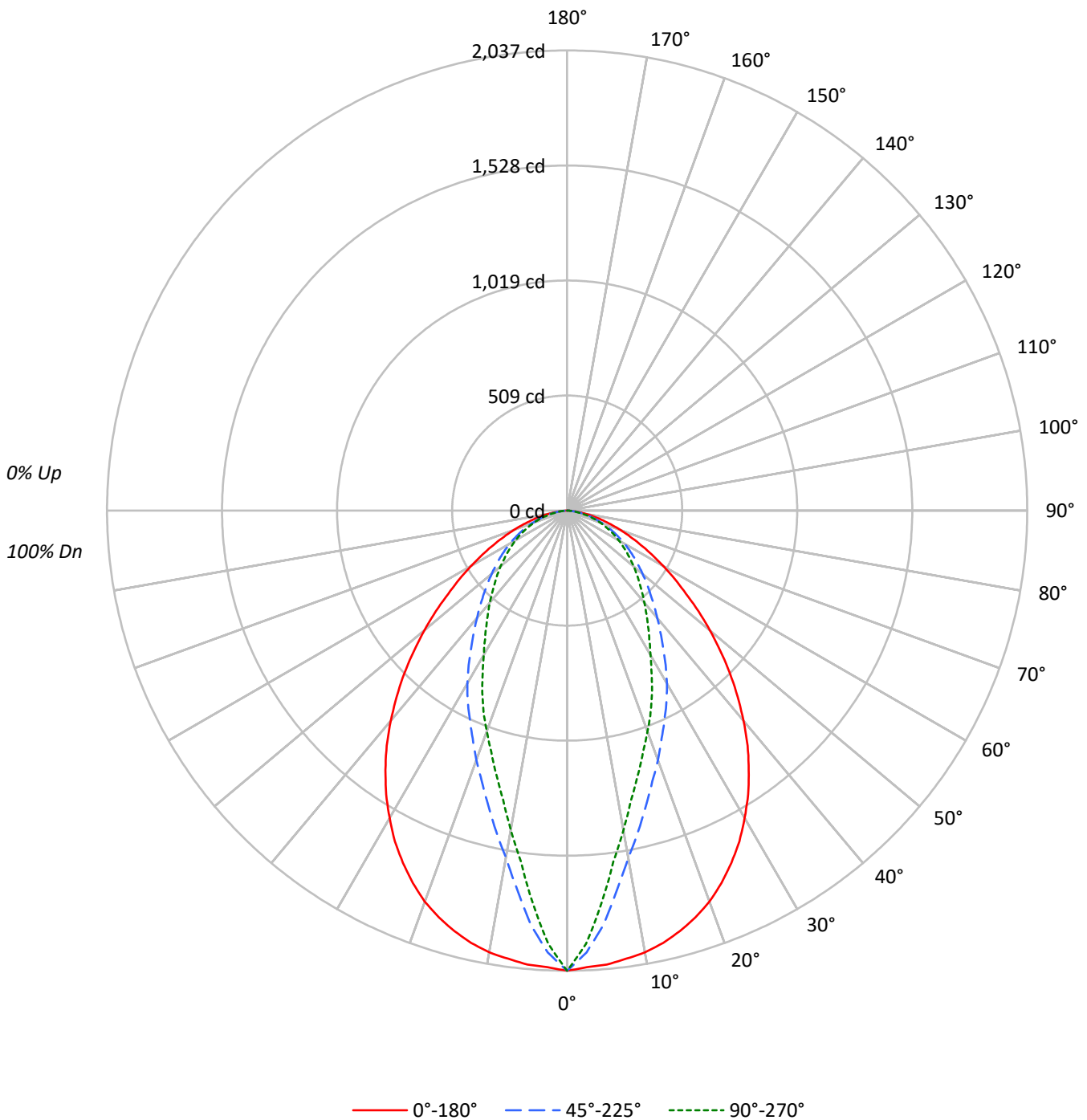
Lumens per Lamp: N/A
Luminaire Lumens: 2856.7 lumens
Efficiency: N/A
Efficacy: 108.2 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.59 / 0.87
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 26.4
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

TEST NUMBER: P1217426

CATALOG NUMBER: S124DRP-S675D950-X4F0-XX-UDD-G-W

Luminous Intensity Polar Plot





TEST NUMBER: P1217426

CATALOG NUMBER: S124DRP-S675D950-X4F0-XX-UDD-G-W

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

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 18009 | 18009 | 18009 |
| 5° | 17902 | 16335 | 15483 |
| 10° | 17828 | 14003 | 12884 |
| 15° | 17643 | 12355 | 11083 |
| 20° | 17333 | 11054 | 9789 |
| 25° | 16782 | 9949 | 8671 |
| 30° | 16043 | 9020 | 7527 |
| 35° | 15131 | 7996 | 6737 |
| 40° | 14016 | 7164 | 6139 |
| 45° | 12740 | 6516 | 5663 |
| 50° | 11350 | 5996 | 5293 |
| 55° | 9899 | 5572 | 4950 |
| 60° | 8691 | 5186 | 4663 |
| 65° | 7525 | 4785 | 4354 |
| 70° | 6514 | 4335 | 4012 |
| 75° | 5425 | 3829 | 3522 |
| 80° | 4201 | 3106 | 2877 |
| 85° | 2638 | 2090 | 1907 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12740 cd/sqm



TEST NUMBER: P1217426

CATALOG NUMBER: S124DRP-S675D950-X4F0-XX-UDD-G-W

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 170.5 | 6.0 |
| 10°-20° | 405.0 | 14.2 |
| 20°-30° | 517.6 | 18.1 |
| 30°-40° | 525.7 | 18.4 |
| 40°-50° | 466.0 | 16.3 |
| 50°-60° | 366.2 | 12.8 |
| 60°-70° | 249.4 | 8.7 |
| 70°-80° | 128.0 | 4.5 |
| 80°-90° | 28.4 | 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° | 1093.1 | 38.3 |
| 0°-40° | 1618.8 | 56.7 |
| 0°-60° | 2450.9 | 85.8 |
| 0°-90° | 2856.7 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2856.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 2037 | 2037 | 2037 | 2037 | 2037 | |
| 5° | 2017 | 1966 | 1840 | 1770 | 1744 | 191 |
| 15° | 1928 | 1609 | 1350 | 1239 | 1211 | 543 |
| 25° | 1720 | 1261 | 1020 | 922 | 889 | 791 |
| 35° | 1402 | 955 | 741 | 647 | 624 | 875 |
| 45° | 1019 | 688 | 521 | 467 | 453 | 785 |
| 55° | 642 | 458 | 362 | 329 | 321 | 580 |
| 65° | 360 | 278 | 229 | 213 | 208 | 360 |
| 75° | 159 | 131 | 112 | 107 | 103 | 171 |
| 85° | 26 | 24 | 21 | 21 | 19 | 35 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P1217426

CATALOG NUMBER: S124DRP-S675D950-X4F0-XX-UDD-G-W

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 2036.9 | 2036.9 | 2036.9 | 2036.9 | 2036.9 |
| 2.5° | 2022.5 | 2025.2 | 1957.9 | 1933.7 | 1919.4 |
| 5° | 2017.1 | 1966.0 | 1840.5 | 1769.6 | 1744.5 |
| 7.5° | 2001.0 | 1889.8 | 1691.6 | 1593.8 | 1567.8 |
| 10° | 1985.8 | 1802.8 | 1559.7 | 1462.9 | 1435.1 |
| 12.5° | 1960.6 | 1706.8 | 1453.9 | 1342.7 | 1309.5 |
| 15° | 1927.5 | 1609.1 | 1349.8 | 1238.6 | 1210.8 |
| 17.5° | 1888.0 | 1515.8 | 1255.7 | 1148.9 | 1118.4 |
| 20° | 1842.2 | 1429.7 | 1174.9 | 1065.5 | 1040.4 |
| 22.5° | 1784.8 | 1344.5 | 1092.4 | 993.8 | 966.0 |
| 25° | 1720.3 | 1261.1 | 1019.8 | 922.0 | 888.8 |
| 27.5° | 1651.2 | 1180.3 | 952.5 | 844.0 | 809.0 |
| 30° | 1571.4 | 1103.2 | 883.5 | 769.5 | 737.3 |
| 32.5° | 1490.7 | 1027.0 | 810.8 | 703.2 | 677.2 |
| 35° | 1401.9 | 955.2 | 740.8 | 646.7 | 624.2 |
| 37.5° | 1312.2 | 886.1 | 678.1 | 595.5 | 575.8 |
| 40° | 1214.4 | 818.9 | 620.7 | 548.0 | 531.9 |
| 42.5° | 1116.6 | 751.6 | 568.6 | 505.9 | 490.6 |
| 45° | 1018.9 | 687.9 | 521.1 | 467.3 | 452.9 |
| 47.5° | 920.2 | 625.1 | 477.2 | 429.6 | 418.0 |
| 50° | 825.2 | 565.9 | 435.9 | 394.6 | 384.8 |
| 52.5° | 732.8 | 510.3 | 396.4 | 361.5 | 350.7 |
| 55° | 642.2 | 458.3 | 361.5 | 329.2 | 321.1 |
| 57.5° | 565.1 | 409.9 | 326.5 | 298.7 | 292.4 |
| 60° | 491.5 | 363.2 | 293.3 | 270.0 | 263.7 |
| 62.5° | 422.4 | 320.2 | 260.1 | 241.3 | 236.8 |
| 65° | 359.7 | 278.0 | 228.7 | 212.6 | 208.1 |
| 67.5° | 302.3 | 239.5 | 196.4 | 184.8 | 181.2 |
| 70° | 252.0 | 200.9 | 167.7 | 157.9 | 155.2 |
| 72.5° | 201.8 | 164.1 | 139.0 | 131.8 | 129.2 |
| 75° | 158.8 | 130.9 | 112.1 | 106.7 | 103.1 |
| 77.5° | 119.3 | 99.6 | 86.1 | 81.6 | 78.9 |
| 80° | 82.5 | 70.9 | 61.0 | 59.2 | 56.5 |
| 82.5° | 52.0 | 44.8 | 39.5 | 38.6 | 35.9 |
| 85° | 26.0 | 24.2 | 20.6 | 20.6 | 18.8 |
| 87.5° | 9.0 | 8.1 | 8.1 | 8.1 | 7.2 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



TEST NUMBER: P1217426
 CATALOG NUMBER: S124DRP-S675D950-X4F0-XX-UDD-G-W

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 | 18.95 | 20.44 | 19.31 | 20.75 | 21.06 | 16.27 | 17.76 | 16.64 | 18.07 | 18.39 |
| | 3H | 20.54 | 21.87 | 20.92 | 22.20 | 22.56 | 17.87 | 19.21 | 18.25 | 19.53 | 19.90 |
| | 4H | 21.07 | 22.32 | 21.47 | 22.67 | 23.05 | 18.43 | 19.68 | 18.83 | 20.03 | 20.41 |
| | 6H | 21.40 | 22.56 | 21.82 | 22.92 | 23.32 | 18.79 | 19.94 | 19.20 | 20.31 | 20.70 |
| | 8H | 21.48 | 22.58 | 21.91 | 22.97 | 23.37 | 18.87 | 19.97 | 19.30 | 20.36 | 20.76 |
| | 12H | 21.51 | 22.56 | 21.94 | 22.94 | 23.37 | 18.91 | 19.96 | 19.34 | 20.34 | 20.77 |
| 4H | 2H | 19.18 | 20.43 | 19.58 | 20.78 | 21.16 | 16.95 | 18.20 | 17.35 | 18.55 | 18.93 |
| | 3H | 20.96 | 22.00 | 21.37 | 22.40 | 22.80 | 18.74 | 19.77 | 19.15 | 20.17 | 20.58 |
| | 4H | 21.60 | 22.53 | 22.03 | 22.95 | 23.39 | 19.40 | 20.33 | 19.83 | 20.75 | 21.19 |
| | 6H | 22.05 | 22.86 | 22.51 | 23.30 | 23.76 | 19.86 | 20.67 | 20.32 | 21.11 | 21.57 |
| | 8H | 22.16 | 22.92 | 22.62 | 23.36 | 23.83 | 19.97 | 20.73 | 20.44 | 21.17 | 21.64 |
| | 12H | 22.22 | 22.89 | 22.70 | 23.37 | 23.84 | 20.03 | 20.71 | 20.52 | 21.19 | 21.66 |
| 8H | 4H | 21.70 | 22.46 | 22.17 | 22.91 | 23.37 | 19.70 | 20.46 | 20.16 | 20.90 | 21.37 |
| | 6H | 22.22 | 22.85 | 22.72 | 23.34 | 23.82 | 20.25 | 20.87 | 20.75 | 21.36 | 21.84 |
| | 8H | 22.38 | 22.94 | 22.89 | 23.45 | 23.94 | 20.42 | 20.98 | 20.93 | 21.49 | 21.98 |
| | 12H | 22.48 | 22.97 | 22.99 | 23.46 | 24.03 | 20.52 | 21.02 | 21.03 | 21.51 | 22.08 |
| 12H | 4H | 21.70 | 22.37 | 22.18 | 22.85 | 23.32 | 19.72 | 20.40 | 20.21 | 20.88 | 21.35 |
| | 6H | 22.22 | 22.78 | 22.73 | 23.29 | 23.77 | 20.29 | 20.85 | 20.80 | 21.36 | 21.85 |
| | 8H | 22.41 | 22.90 | 22.92 | 23.39 | 23.96 | 20.50 | 20.99 | 21.01 | 21.49 | 22.05 |