

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: P1217475

Luminaire Tested: S125DRP-H865D850-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217475
TEST IS SCALED FROM IESNA LM-79-24 TEST DATA (G2-2511-596-4)
Test Lab: INNOVATION CENTER
Issue Date: 4/9/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DRP-H865D850-X4F0-XX-UDD-G-W
Description: DEFINE 5, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

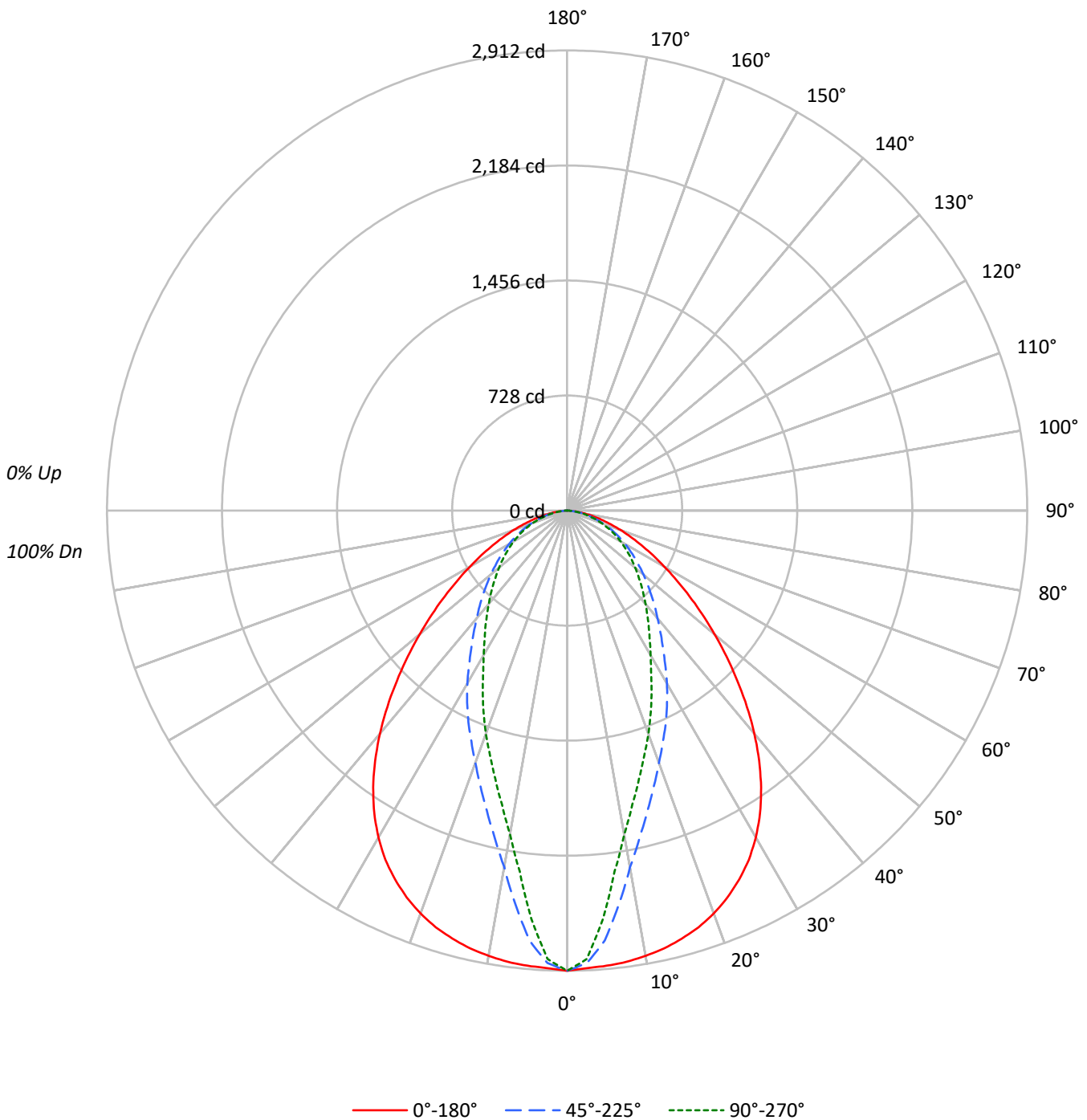
Lumens per Lamp: N/A
Luminaire Lumens: 4148.4 lumens
Efficiency: N/A
Efficacy: 134.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 0.6 / 0.87
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

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





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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 | 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 | 94 | 92 | 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 | 85 | 75 | 67 | 62 | 72 | 66 | 61 | 70 | 64 | 60 | 68 | 63 | 59 | 57 |
| 5 | 80 | 69 | 61 | 55 | 78 | 68 | 60 | 54 | 66 | 59 | 54 | 64 | 58 | 53 | 62 | 57 | 53 | 51 |
| 6 | 75 | 63 | 55 | 49 | 73 | 62 | 54 | 49 | 60 | 53 | 48 | 59 | 52 | 48 | 57 | 52 | 47 | 46 |
| 7 | 70 | 58 | 50 | 44 | 68 | 57 | 49 | 44 | 55 | 49 | 44 | 54 | 48 | 43 | 53 | 47 | 43 | 41 |
| 8 | 66 | 53 | 45 | 40 | 64 | 52 | 45 | 40 | 51 | 44 | 40 | 50 | 44 | 39 | 49 | 43 | 39 | 37 |
| 9 | 62 | 49 | 42 | 37 | 60 | 49 | 41 | 36 | 48 | 41 | 36 | 47 | 40 | 36 | 46 | 40 | 36 | 34 |
| 10 | 58 | 46 | 39 | 34 | 57 | 45 | 38 | 34 | 44 | 38 | 33 | 44 | 38 | 33 | 43 | 37 | 33 | 32 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 20589 | 20589 | 20589 |
| 5° | 20517 | 19381 | 18406 |
| 10° | 20534 | 16456 | 14934 |
| 15° | 20525 | 14386 | 12863 |
| 20° | 20416 | 12771 | 11306 |
| 25° | 20097 | 11526 | 9851 |
| 30° | 19496 | 10309 | 8611 |
| 35° | 18472 | 9104 | 7780 |
| 40° | 17008 | 8209 | 7125 |
| 45° | 15239 | 7506 | 6599 |
| 50° | 13390 | 6937 | 6174 |
| 55° | 11637 | 6444 | 5835 |
| 60° | 10050 | 5996 | 5524 |
| 65° | 8655 | 5577 | 5197 |
| 70° | 7414 | 5099 | 4795 |
| 75° | 6192 | 4444 | 4261 |
| 80° | 4885 | 3635 | 3530 |
| 85° | 3139 | 2490 | 2490 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 15239 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 250.0 | 6.0 |
| 10°-20° | 590.4 | 14.2 |
| 20°-30° | 750.0 | 18.1 |
| 30°-40° | 763.9 | 18.4 |
| 40°-50° | 675.7 | 16.3 |
| 50°-60° | 529.6 | 12.8 |
| 60°-70° | 361.2 | 8.7 |
| 70°-80° | 186.0 | 4.5 |
| 80°-90° | 41.6 | 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° | 1590.4 | 38.3 |
| 0°-40° | 2354.3 | 56.8 |
| 0°-60° | 3559.6 | 85.8 |
| 0°-90° | 4148.4 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4148.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 2912 | 2912 | 2912 | 2912 | 2912 | |
| 5° | 2891 | 2876 | 2731 | 2624 | 2594 | 275 |
| 15° | 2804 | 2372 | 1966 | 1791 | 1758 | 791 |
| 25° | 2576 | 1830 | 1478 | 1302 | 1263 | 1184 |
| 35° | 2140 | 1384 | 1055 | 922 | 902 | 1332 |
| 45° | 1524 | 980 | 751 | 670 | 660 | 1176 |
| 55° | 944 | 655 | 523 | 475 | 473 | 850 |
| 65° | 517 | 399 | 333 | 308 | 311 | 518 |
| 75° | 227 | 191 | 163 | 152 | 156 | 244 |
| 85° | 39 | 36 | 31 | 28 | 31 | 51 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P1217475

CATALOG NUMBER: S125DRP-H865D850-X4F0-XX-UDD-G-W

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 2912.5 | 2912.5 | 2912.5 | 2912.5 | 2912.5 |
| 2.5° | 2897.8 | 2920.5 | 2865.8 | 2851.2 | 2840.5 |
| 5° | 2891.2 | 2876.5 | 2731.1 | 2624.5 | 2593.8 |
| 7.5° | 2880.5 | 2799.2 | 2512.4 | 2331.1 | 2303.1 |
| 10° | 2860.5 | 2677.8 | 2292.4 | 2115.0 | 2080.4 |
| 12.5° | 2837.8 | 2532.4 | 2119.0 | 1939.0 | 1905.7 |
| 15° | 2804.5 | 2372.4 | 1965.7 | 1791.0 | 1757.6 |
| 17.5° | 2764.5 | 2220.4 | 1827.0 | 1655.0 | 1623.0 |
| 20° | 2713.8 | 2081.7 | 1697.6 | 1534.9 | 1502.9 |
| 22.5° | 2651.1 | 1951.0 | 1582.9 | 1416.2 | 1381.6 |
| 25° | 2576.5 | 1829.7 | 1477.6 | 1301.6 | 1262.9 |
| 27.5° | 2491.1 | 1713.6 | 1369.6 | 1186.9 | 1149.5 |
| 30° | 2388.4 | 1600.3 | 1262.9 | 1085.5 | 1054.9 |
| 32.5° | 2272.4 | 1490.9 | 1153.5 | 997.5 | 972.2 |
| 35° | 2140.4 | 1384.2 | 1054.9 | 921.5 | 901.5 |
| 37.5° | 1996.4 | 1278.9 | 969.5 | 850.8 | 833.5 |
| 40° | 1843.0 | 1176.2 | 889.5 | 785.5 | 772.1 |
| 42.5° | 1684.3 | 1077.5 | 820.1 | 726.8 | 714.8 |
| 45° | 1524.3 | 980.2 | 750.8 | 669.5 | 660.1 |
| 47.5° | 1368.2 | 890.8 | 689.5 | 617.4 | 609.4 |
| 50° | 1217.5 | 806.8 | 630.8 | 566.8 | 561.4 |
| 52.5° | 1076.2 | 728.1 | 573.4 | 520.1 | 517.4 |
| 55° | 944.2 | 654.8 | 522.8 | 474.7 | 473.4 |
| 57.5° | 822.8 | 585.4 | 472.1 | 430.7 | 430.7 |
| 60° | 710.8 | 520.1 | 424.1 | 388.1 | 390.7 |
| 62.5° | 610.8 | 457.4 | 378.7 | 348.1 | 350.7 |
| 65° | 517.4 | 398.7 | 333.4 | 308.1 | 310.7 |
| 67.5° | 433.4 | 342.7 | 289.4 | 268.0 | 270.7 |
| 70° | 358.7 | 289.4 | 246.7 | 228.0 | 232.0 |
| 72.5° | 289.4 | 240.0 | 204.0 | 189.4 | 193.4 |
| 75° | 226.7 | 190.7 | 162.7 | 152.0 | 156.0 |
| 77.5° | 170.7 | 145.4 | 125.4 | 116.0 | 120.0 |
| 80° | 120.0 | 104.0 | 89.3 | 82.7 | 86.7 |
| 82.5° | 74.7 | 66.7 | 58.7 | 53.3 | 56.0 |
| 85° | 38.7 | 36.0 | 30.7 | 28.0 | 30.7 |
| 87.5° | 13.3 | 13.3 | 12.0 | 10.7 | 12.0 |
| 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 | 19.39 | 20.87 | 19.75 | 21.18 | 21.50 | 16.77 | 18.26 | 17.14 | 18.57 | 18.89 |
| | 3H | 20.97 | 22.30 | 21.35 | 22.63 | 22.99 | 18.41 | 19.75 | 18.79 | 20.07 | 20.44 |
| | 4H | 21.51 | 22.75 | 21.91 | 23.10 | 23.48 | 18.99 | 20.24 | 19.39 | 20.59 | 20.97 |
| | 6H | 21.84 | 23.00 | 22.26 | 23.36 | 23.76 | 19.36 | 20.52 | 19.78 | 20.88 | 21.28 |
| | 8H | 21.92 | 23.02 | 22.35 | 23.41 | 23.81 | 19.46 | 20.56 | 19.89 | 20.95 | 21.35 |
| | 12H | 21.95 | 23.00 | 22.38 | 23.39 | 23.82 | 19.51 | 20.56 | 19.94 | 20.94 | 21.37 |
| 4H | 2H | 19.63 | 20.88 | 20.03 | 21.22 | 21.60 | 17.46 | 18.71 | 17.86 | 19.06 | 19.43 |
| | 3H | 21.41 | 22.45 | 21.82 | 22.85 | 23.25 | 19.28 | 20.31 | 19.69 | 20.71 | 21.11 |
| | 4H | 22.06 | 22.99 | 22.49 | 23.40 | 23.84 | 19.94 | 20.87 | 20.37 | 21.29 | 21.73 |
| | 6H | 22.51 | 23.32 | 22.97 | 23.76 | 24.22 | 20.41 | 21.22 | 20.86 | 21.66 | 22.12 |
| | 8H | 22.62 | 23.38 | 23.09 | 23.82 | 24.29 | 20.53 | 21.29 | 20.99 | 21.73 | 22.20 |
| | 12H | 22.69 | 23.36 | 23.17 | 23.84 | 24.31 | 20.60 | 21.27 | 21.08 | 21.75 | 22.22 |
| 8H | 4H | 22.16 | 22.92 | 22.63 | 23.36 | 23.83 | 20.24 | 20.99 | 20.70 | 21.44 | 21.91 |
| | 6H | 22.69 | 23.32 | 23.19 | 23.81 | 24.29 | 20.79 | 21.41 | 21.29 | 21.90 | 22.38 |
| | 8H | 22.85 | 23.41 | 23.37 | 23.92 | 24.41 | 20.96 | 21.52 | 21.47 | 22.03 | 22.51 |
| | 12H | 22.96 | 23.45 | 23.47 | 23.94 | 24.51 | 21.07 | 21.56 | 21.58 | 22.05 | 22.62 |
| 12H | 4H | 22.16 | 22.83 | 22.64 | 23.31 | 23.78 | 20.26 | 20.94 | 20.75 | 21.42 | 21.89 |
| | 6H | 22.69 | 23.25 | 23.20 | 23.76 | 24.25 | 20.83 | 21.39 | 21.34 | 21.90 | 22.39 |
| | 8H | 22.89 | 23.38 | 23.40 | 23.87 | 24.44 | 21.04 | 21.53 | 21.55 | 22.03 | 22.59 |