

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: P1217447

Luminaire Tested: S125DRP-H290D840-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217447
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-H290D840-X4F0-XX-UDD-G-W
Description: DEFINE 5, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

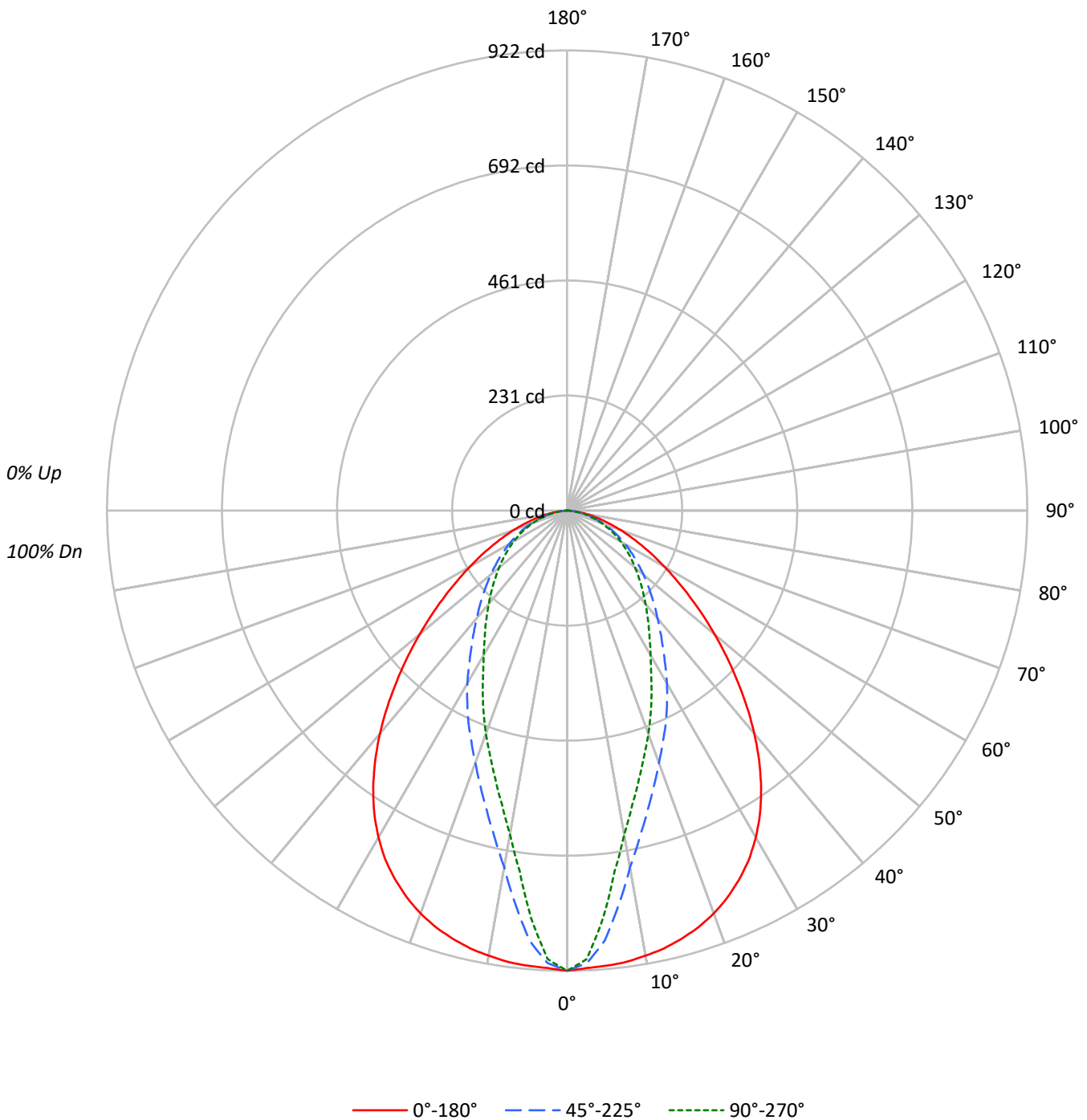
Lumens per Lamp: N/A
Luminaire Lumens: 1313.4 lumens
Efficiency: N/A
Efficacy: 112.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 0.6 / 0.87
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
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° | 6519 | 6519 | 6519 |
| 5° | 6495 | 6136 | 5828 |
| 10° | 6501 | 5210 | 4728 |
| 15° | 6498 | 4554 | 4073 |
| 20° | 6464 | 4044 | 3579 |
| 25° | 6363 | 3649 | 3119 |
| 30° | 6173 | 3264 | 2726 |
| 35° | 5848 | 2882 | 2463 |
| 40° | 5385 | 2599 | 2256 |
| 45° | 4825 | 2376 | 2089 |
| 50° | 4240 | 2196 | 1954 |
| 55° | 3684 | 2040 | 1848 |
| 60° | 3181 | 1899 | 1749 |
| 65° | 2740 | 1766 | 1646 |
| 70° | 2348 | 1614 | 1519 |
| 75° | 1961 | 1407 | 1349 |
| 80° | 1547 | 1152 | 1115 |
| 85° | 990 | 787 | 787 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4825 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 79.1 | 6.0 |
| 10°-20° | 186.9 | 14.2 |
| 20°-30° | 237.5 | 18.1 |
| 30°-40° | 241.9 | 18.4 |
| 40°-50° | 213.9 | 16.3 |
| 50°-60° | 167.7 | 12.8 |
| 60°-70° | 114.3 | 8.7 |
| 70°-80° | 58.9 | 4.5 |
| 80°-90° | 13.2 | 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° | 503.5 | 38.3 |
| 0°-40° | 745.4 | 56.8 |
| 0°-60° | 1127.0 | 85.8 |
| 0°-90° | 1313.4 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1313.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 922 | 922 | 922 | 922 | 922 | |
| 5° | 915 | 911 | 865 | 831 | 821 | 87 |
| 15° | 888 | 751 | 622 | 567 | 556 | 250 |
| 25° | 816 | 579 | 468 | 412 | 400 | 375 |
| 35° | 678 | 438 | 334 | 292 | 285 | 422 |
| 45° | 483 | 310 | 238 | 212 | 209 | 372 |
| 55° | 299 | 207 | 166 | 150 | 150 | 269 |
| 65° | 164 | 126 | 106 | 98 | 98 | 164 |
| 75° | 72 | 60 | 52 | 48 | 49 | 77 |
| 85° | 12 | 11 | 10 | 9 | 10 | 16 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P1217447

CATALOG NUMBER: S125DRP-H290D840-X4F0-XX-UDD-G-W

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 922.1 | 922.1 | 922.1 | 922.1 | 922.1 |
| 2.5° | 917.4 | 924.6 | 907.3 | 902.7 | 899.3 |
| 5° | 915.3 | 910.7 | 864.7 | 830.9 | 821.2 |
| 7.5° | 912.0 | 886.2 | 795.4 | 738.0 | 729.1 |
| 10° | 905.6 | 847.8 | 725.8 | 669.6 | 658.6 |
| 12.5° | 898.4 | 801.8 | 670.9 | 613.9 | 603.3 |
| 15° | 887.9 | 751.1 | 622.3 | 567.0 | 556.5 |
| 17.5° | 875.2 | 703.0 | 578.4 | 524.0 | 513.8 |
| 20° | 859.2 | 659.1 | 537.5 | 486.0 | 475.8 |
| 22.5° | 839.3 | 617.7 | 501.2 | 448.4 | 437.4 |
| 25° | 815.7 | 579.3 | 467.8 | 412.1 | 399.8 |
| 27.5° | 788.7 | 542.5 | 433.6 | 375.8 | 363.9 |
| 30° | 756.2 | 506.6 | 399.8 | 343.7 | 334.0 |
| 32.5° | 719.4 | 472.0 | 365.2 | 315.8 | 307.8 |
| 35° | 677.6 | 438.2 | 334.0 | 291.7 | 285.4 |
| 37.5° | 632.0 | 404.9 | 306.9 | 269.4 | 263.9 |
| 40° | 583.5 | 372.4 | 281.6 | 248.7 | 244.5 |
| 42.5° | 533.2 | 341.1 | 259.7 | 230.1 | 226.3 |
| 45° | 482.6 | 310.3 | 237.7 | 211.9 | 209.0 |
| 47.5° | 433.2 | 282.0 | 218.3 | 195.5 | 192.9 |
| 50° | 385.5 | 255.4 | 199.7 | 179.4 | 177.7 |
| 52.5° | 340.7 | 230.5 | 181.5 | 164.7 | 163.8 |
| 55° | 298.9 | 207.3 | 165.5 | 150.3 | 149.9 |
| 57.5° | 260.5 | 185.3 | 149.5 | 136.4 | 136.4 |
| 60° | 225.0 | 164.7 | 134.3 | 122.9 | 123.7 |
| 62.5° | 193.4 | 144.8 | 119.9 | 110.2 | 111.0 |
| 65° | 163.8 | 126.2 | 105.6 | 97.5 | 98.4 |
| 67.5° | 137.2 | 108.5 | 91.6 | 84.9 | 85.7 |
| 70° | 113.6 | 91.6 | 78.1 | 72.2 | 73.5 |
| 72.5° | 91.6 | 76.0 | 64.6 | 60.0 | 61.2 |
| 75° | 71.8 | 60.4 | 51.5 | 48.1 | 49.4 |
| 77.5° | 54.0 | 46.0 | 39.7 | 36.7 | 38.0 |
| 80° | 38.0 | 32.9 | 28.3 | 26.2 | 27.4 |
| 82.5° | 23.6 | 21.1 | 18.6 | 16.9 | 17.7 |
| 85° | 12.2 | 11.4 | 9.7 | 8.9 | 9.7 |
| 87.5° | 4.2 | 4.2 | 3.8 | 3.4 | 3.8 |
| 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 | 15.39 | 16.87 | 15.75 | 17.19 | 17.50 | 12.78 | 14.26 | 13.14 | 14.58 | 14.89 |
| | 3H | 16.98 | 18.31 | 17.35 | 18.64 | 19.00 | 14.42 | 15.75 | 14.80 | 16.08 | 16.44 |
| | 4H | 17.51 | 18.76 | 17.91 | 19.11 | 19.49 | 14.99 | 16.24 | 15.39 | 16.59 | 16.97 |
| | 6H | 17.85 | 19.00 | 18.26 | 19.37 | 19.76 | 15.37 | 16.52 | 15.78 | 16.89 | 17.28 |
| | 8H | 17.93 | 19.02 | 18.35 | 19.41 | 19.81 | 15.46 | 16.56 | 15.89 | 16.95 | 17.35 |
| | 12H | 17.96 | 19.01 | 18.39 | 19.39 | 19.82 | 15.51 | 16.56 | 15.94 | 16.94 | 17.37 |
| 4H | 2H | 15.63 | 16.88 | 16.03 | 17.23 | 17.61 | 13.46 | 14.71 | 13.86 | 15.06 | 15.44 |
| | 3H | 17.41 | 18.45 | 17.82 | 18.85 | 19.25 | 15.28 | 16.32 | 15.69 | 16.72 | 17.12 |
| | 4H | 18.06 | 18.99 | 18.49 | 19.41 | 19.85 | 15.95 | 16.88 | 16.38 | 17.29 | 17.73 |
| | 6H | 18.51 | 19.32 | 18.97 | 19.77 | 20.23 | 16.41 | 17.22 | 16.87 | 17.66 | 18.13 |
| | 8H | 18.63 | 19.38 | 19.09 | 19.83 | 20.30 | 16.53 | 17.29 | 17.00 | 17.74 | 18.20 |
| | 12H | 18.69 | 19.36 | 19.17 | 19.84 | 20.31 | 16.60 | 17.28 | 17.09 | 17.76 | 18.23 |
| 8H | 4H | 18.17 | 18.92 | 18.63 | 19.37 | 19.84 | 16.24 | 17.00 | 16.71 | 17.44 | 17.91 |
| | 6H | 18.70 | 19.32 | 19.19 | 19.81 | 20.29 | 16.79 | 17.42 | 17.29 | 17.91 | 18.39 |
| | 8H | 18.86 | 19.41 | 19.37 | 19.93 | 20.41 | 16.96 | 17.52 | 17.48 | 18.03 | 18.52 |
| | 12H | 18.96 | 19.45 | 19.47 | 19.95 | 20.51 | 17.07 | 17.57 | 17.59 | 18.06 | 18.63 |
| 12H | 4H | 18.16 | 18.83 | 18.64 | 19.31 | 19.78 | 16.27 | 16.94 | 16.75 | 17.42 | 17.89 |
| | 6H | 18.69 | 19.25 | 19.21 | 19.76 | 20.25 | 16.83 | 17.39 | 17.35 | 17.90 | 18.39 |
| | 8H | 18.89 | 19.38 | 19.40 | 19.87 | 20.44 | 17.05 | 17.54 | 17.56 | 18.03 | 18.60 |