

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P1056567

Luminaire Tested: S125R3DR-H375D935-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056567
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-10)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125R3DR-H375D935-X4F0-XX-UDD-FLL-W
Description: DEFINE 5, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

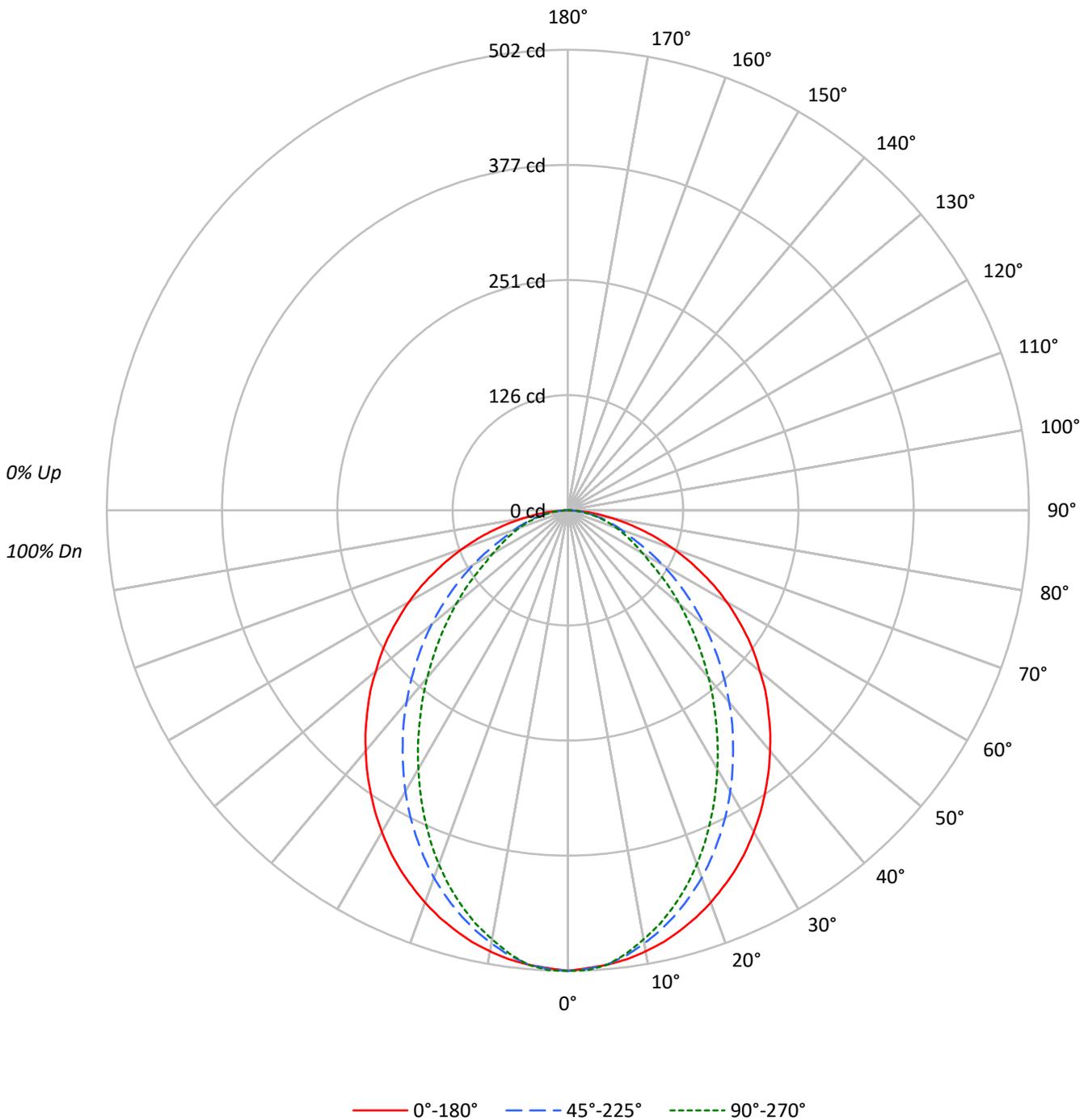
Lumens per Lamp: N/A
Luminaire Lumens: 1064.1 lumens
Efficiency: N/A
Efficacy: 91.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.01 / 1.17
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1056567

CATALOG NUMBER: S125R3DR-H375D935-X4F0-XX-UDD-FLL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1056567

CATALOG NUMBER: S125R3DR-H375D935-X4F0-XX-UDD-FLL-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 | 0 |
| RCR | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1 | 110 | 105 | 101 | 98 | 107 | 103 | 100 | 96 | 99 | 96 | 93 | 95 | 93 | 90 | 91 | 90 | 88 | 86 |
| 2 | 101 | 93 | 87 | 81 | 98 | 91 | 85 | 80 | 88 | 83 | 79 | 84 | 80 | 77 | 81 | 78 | 75 | 73 |
| 3 | 92 | 83 | 75 | 69 | 90 | 81 | 74 | 68 | 78 | 72 | 67 | 75 | 70 | 66 | 73 | 69 | 65 | 63 |
| 4 | 85 | 74 | 66 | 59 | 83 | 73 | 65 | 59 | 70 | 63 | 58 | 68 | 62 | 57 | 66 | 61 | 57 | 55 |
| 5 | 79 | 67 | 58 | 52 | 77 | 66 | 58 | 52 | 63 | 56 | 51 | 62 | 55 | 51 | 60 | 54 | 50 | 48 |
| 6 | 73 | 60 | 52 | 46 | 71 | 59 | 51 | 46 | 58 | 51 | 45 | 56 | 50 | 45 | 55 | 49 | 45 | 43 |
| 7 | 68 | 55 | 47 | 41 | 66 | 54 | 46 | 41 | 53 | 46 | 41 | 51 | 45 | 40 | 50 | 44 | 40 | 38 |
| 8 | 63 | 51 | 42 | 37 | 62 | 50 | 42 | 37 | 49 | 42 | 37 | 47 | 41 | 36 | 46 | 40 | 36 | 34 |
| 9 | 59 | 47 | 39 | 33 | 58 | 46 | 39 | 33 | 45 | 38 | 33 | 44 | 38 | 33 | 43 | 37 | 33 | 31 |
| 10 | 56 | 43 | 36 | 31 | 55 | 43 | 35 | 31 | 42 | 35 | 30 | 41 | 35 | 30 | 40 | 34 | 30 | 28 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 3550 | 3550 | 3550 |
| 5° | 3528 | 3525 | 3528 |
| 10° | 3504 | 3441 | 3408 |
| 15° | 3469 | 3335 | 3267 |
| 20° | 3423 | 3206 | 3090 |
| 25° | 3371 | 3053 | 2881 |
| 30° | 3305 | 2887 | 2658 |
| 35° | 3233 | 2707 | 2426 |
| 40° | 3160 | 2522 | 2197 |
| 45° | 3083 | 2328 | 1970 |
| 50° | 3001 | 2129 | 1743 |
| 55° | 2926 | 1912 | 1516 |
| 60° | 2822 | 1681 | 1332 |
| 65° | 2683 | 1425 | 1238 |
| 70° | 2520 | 1275 | 1160 |
| 75° | 2278 | 1174 | 1093 |
| 80° | 1979 | 1067 | 1018 |
| 85° | 1549 | 941 | 941 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3083 cd/sqm



TEST NUMBER: P1056567

CATALOG NUMBER: S125R3DR-H375D935-X4F0-XX-UDD-FLL-W

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 47.0 | 4.4 |
| 10°-20° | 129.0 | 12.1 |
| 20°-30° | 182.2 | 17.1 |
| 30°-40° | 200.6 | 18.8 |
| 40°-50° | 187.1 | 17.6 |
| 50°-60° | 149.4 | 14.0 |
| 60°-70° | 100.5 | 9.4 |
| 70°-80° | 53.5 | 5.0 |
| 80°-90° | 14.9 | 1.4 |
| 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° | 358.2 | 33.7 |
| 0°-40° | 558.7 | 52.5 |
| 0°-60° | 895.2 | 84.1 |
| 0°-90° | 1064.1 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1064.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 502 | 502 | 502 | 502 | 502 | |
| 5° | 497 | 501 | 497 | 495 | 497 | 47 |
| 15° | 474 | 471 | 456 | 448 | 446 | 134 |
| 25° | 432 | 419 | 391 | 374 | 369 | 199 |
| 35° | 375 | 352 | 314 | 289 | 281 | 234 |
| 45° | 308 | 279 | 233 | 204 | 197 | 238 |
| 55° | 237 | 202 | 155 | 130 | 123 | 212 |
| 65° | 160 | 125 | 85 | 76 | 74 | 159 |
| 75° | 83 | 55 | 43 | 40 | 40 | 89 |
| 85° | 19 | 13 | 12 | 12 | 12 | 23 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P1056567

CATALOG NUMBER: S125R3DR-H375D935-X4F0-XX-UDD-FLL-W

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 502.1 | 502.1 | 502.1 | 502.1 | 502.1 |
| 2.5° | 499.4 | 503.6 | 500.2 | 500.9 | 501.7 |
| 5° | 497.2 | 501.3 | 496.8 | 495.3 | 497.2 |
| 7.5° | 493.5 | 496.8 | 489.4 | 486.0 | 487.5 |
| 10° | 488.2 | 490.5 | 479.3 | 474.8 | 474.8 |
| 12.5° | 481.9 | 481.9 | 468.4 | 462.1 | 462.1 |
| 15° | 474.0 | 471.4 | 455.7 | 447.9 | 446.4 |
| 17.5° | 465.1 | 460.2 | 441.5 | 431.4 | 429.5 |
| 20° | 455.0 | 447.1 | 426.2 | 413.1 | 410.8 |
| 22.5° | 443.7 | 433.7 | 409.4 | 393.3 | 390.7 |
| 25° | 432.2 | 419.1 | 391.4 | 374.2 | 369.4 |
| 27.5° | 419.1 | 403.4 | 373.1 | 353.7 | 347.7 |
| 30° | 404.9 | 386.9 | 353.7 | 332.0 | 325.6 |
| 32.5° | 390.3 | 370.1 | 333.8 | 310.7 | 303.6 |
| 35° | 374.6 | 352.5 | 313.7 | 289.0 | 281.1 |
| 37.5° | 358.9 | 335.0 | 293.8 | 268.0 | 259.8 |
| 40° | 342.4 | 316.3 | 273.3 | 246.7 | 238.1 |
| 42.5° | 326.0 | 297.9 | 253.1 | 226.2 | 217.2 |
| 45° | 308.4 | 279.3 | 232.9 | 204.5 | 197.0 |
| 47.5° | 291.6 | 260.2 | 213.1 | 185.4 | 177.2 |
| 50° | 272.9 | 240.4 | 193.6 | 166.0 | 158.5 |
| 52.5° | 255.7 | 220.9 | 174.2 | 148.4 | 140.6 |
| 55° | 237.4 | 201.5 | 155.1 | 130.5 | 123.0 |
| 57.5° | 218.3 | 182.1 | 136.8 | 113.6 | 106.5 |
| 60° | 199.6 | 162.6 | 118.9 | 97.6 | 94.2 |
| 62.5° | 180.6 | 144.3 | 102.1 | 85.6 | 83.4 |
| 65° | 160.4 | 125.2 | 85.2 | 75.5 | 74.0 |
| 67.5° | 141.3 | 106.9 | 71.8 | 66.2 | 64.7 |
| 70° | 121.9 | 88.6 | 61.7 | 56.8 | 56.1 |
| 72.5° | 102.8 | 71.0 | 52.0 | 48.6 | 47.9 |
| 75° | 83.4 | 55.3 | 43.0 | 40.4 | 40.0 |
| 77.5° | 65.4 | 41.5 | 34.0 | 32.9 | 32.2 |
| 80° | 48.6 | 31.0 | 26.2 | 25.4 | 25.0 |
| 82.5° | 33.3 | 21.3 | 18.7 | 18.7 | 17.9 |
| 85° | 19.1 | 13.1 | 11.6 | 12.0 | 11.6 |
| 87.5° | 7.1 | 5.6 | 5.2 | 5.6 | 5.6 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



TEST NUMBER: P1056567

CATALOG NUMBER: S125R3DR-H375D935-X4F0-XX-UDD-FLL-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 | 15.69 | 17.23 | 16.06 | 17.54 | 17.86 | 12.07 | 13.61 | 12.43 | 13.92 | 14.24 |
| | 3H | 17.48 | 18.86 | 17.85 | 19.19 | 19.55 | 13.55 | 14.93 | 13.92 | 15.26 | 15.62 |
| | 4H | 18.13 | 19.43 | 18.53 | 19.78 | 20.15 | 14.14 | 15.44 | 14.54 | 15.78 | 16.16 |
| | 6H | 18.60 | 19.81 | 19.02 | 20.17 | 20.56 | 14.60 | 15.80 | 15.01 | 16.17 | 16.56 |
| | 8H | 18.76 | 19.90 | 19.18 | 20.29 | 20.69 | 14.76 | 15.90 | 15.19 | 16.29 | 16.69 |
| | 12H | 18.85 | 19.95 | 19.28 | 20.33 | 20.76 | 14.87 | 15.97 | 15.30 | 16.35 | 16.78 |
| 4H | 2H | 15.82 | 17.12 | 16.22 | 17.47 | 17.85 | 12.75 | 14.04 | 13.15 | 14.39 | 14.77 |
| | 3H | 17.79 | 18.88 | 18.20 | 19.27 | 19.68 | 14.42 | 15.51 | 14.83 | 15.90 | 16.31 |
| | 4H | 18.54 | 19.51 | 18.97 | 19.93 | 20.37 | 15.13 | 16.10 | 15.56 | 16.52 | 16.96 |
| | 6H | 19.13 | 19.98 | 19.59 | 20.42 | 20.88 | 15.71 | 16.56 | 16.17 | 17.00 | 17.46 |
| | 8H | 19.34 | 20.13 | 19.80 | 20.58 | 21.04 | 15.92 | 16.71 | 16.38 | 17.16 | 17.63 |
| | 12H | 19.49 | 20.20 | 19.97 | 20.67 | 21.15 | 16.08 | 16.79 | 16.56 | 17.27 | 17.74 |
| 8H | 4H | 18.60 | 19.40 | 19.07 | 19.84 | 20.31 | 15.49 | 16.29 | 15.96 | 16.73 | 17.20 |
| | 6H | 19.26 | 19.92 | 19.76 | 20.41 | 20.89 | 16.19 | 16.85 | 16.69 | 17.34 | 17.82 |
| | 8H | 19.52 | 20.10 | 20.03 | 20.61 | 21.10 | 16.48 | 17.07 | 16.99 | 17.58 | 18.06 |
| | 12H | 19.72 | 20.25 | 20.23 | 20.74 | 21.30 | 16.72 | 17.24 | 17.23 | 17.73 | 18.30 |
| 12H | 4H | 18.60 | 19.31 | 19.08 | 19.78 | 20.25 | 15.54 | 16.25 | 16.02 | 16.73 | 17.20 |
| | 6H | 19.26 | 19.85 | 19.77 | 20.36 | 20.84 | 16.27 | 16.86 | 16.78 | 17.37 | 17.85 |
| | 8H | 19.55 | 20.07 | 20.06 | 20.56 | 21.13 | 16.61 | 17.13 | 17.12 | 17.62 | 18.19 |