

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: P1055672

Luminaire Tested: S123R3DR-S775D930-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055672
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-6)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123R3DR-S775D930-X4F0-XX-UDD-FLL-S
Description: DEFINE 3, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

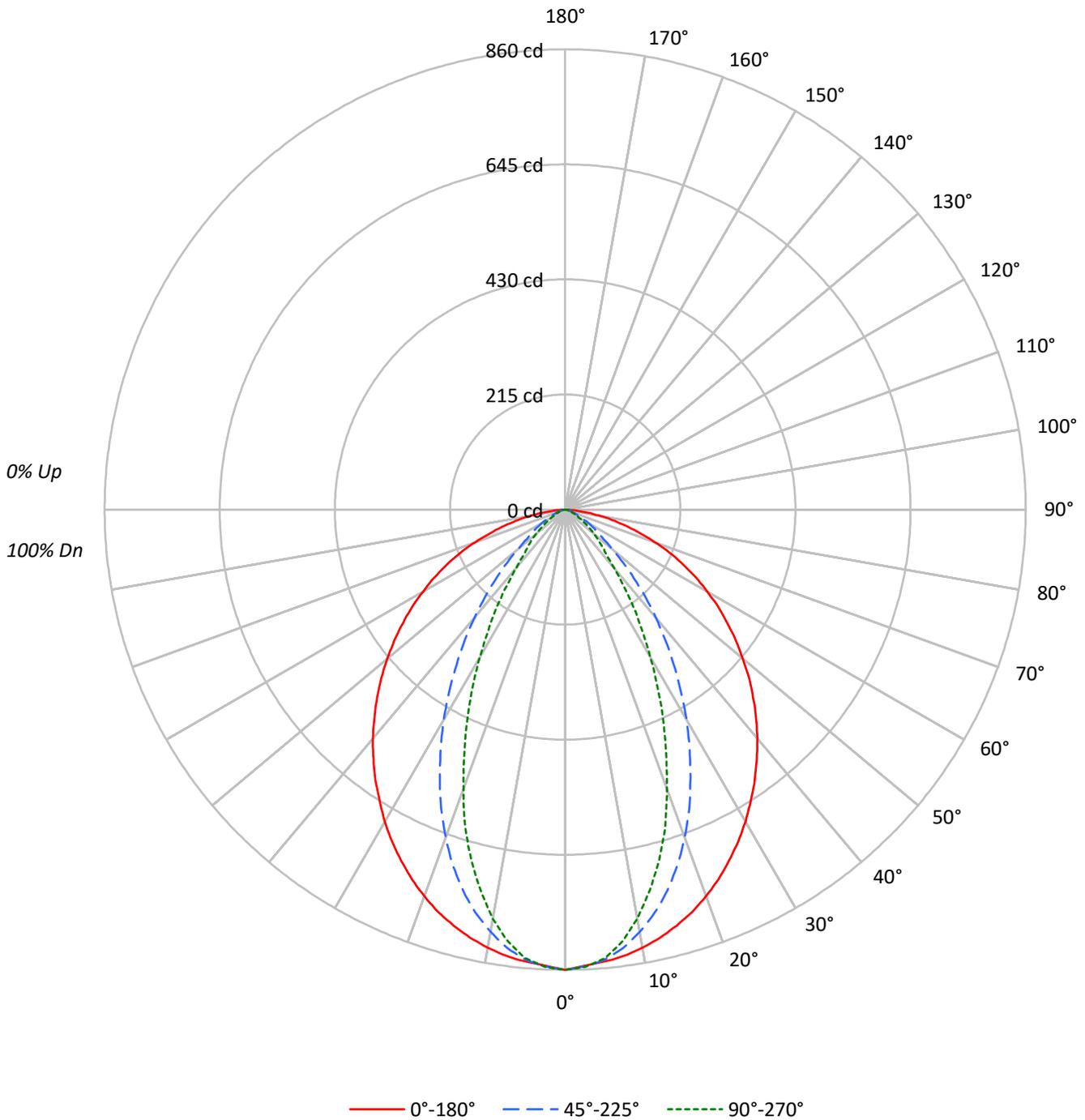
Lumens per Lamp: N/A
Luminaire Lumens: 1196.2 lumens
Efficiency: N/A
Efficacy: 45.3 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 0.77 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 26.4
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: P1055672

CATALOG NUMBER: S123R3DR-S775D930-X4F0-XX-UDD-FLL-S

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|---|--|--|--|--|--|--|----|--|--|--|--|--|--|--|--|----|
| RF | 20 | | | | | | | | | 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 | 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 | 111 | 108 | 104 | 102 | 109 | 106 | 103 | 100 | 101 | 99 | 97 | 98 | 96 | 94 | 94 | 93 | 91 | 89 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 104 | 97 | 92 | 87 | 101 | 95 | 90 | 86 | 92 | 88 | 84 | 89 | 85 | 82 | 86 | 83 | 81 | 79 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 96 | 88 | 81 | 76 | 94 | 86 | 80 | 76 | 84 | 78 | 74 | 81 | 77 | 73 | 79 | 75 | 72 | 70 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 90 | 80 | 73 | 67 | 88 | 79 | 72 | 67 | 76 | 71 | 66 | 74 | 69 | 65 | 72 | 68 | 64 | 62 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | 84 | 73 | 66 | 60 | 82 | 72 | 65 | 60 | 70 | 64 | 59 | 68 | 63 | 59 | 67 | 62 | 58 | 56 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | 78 | 67 | 60 | 54 | 77 | 66 | 59 | 54 | 65 | 58 | 53 | 63 | 57 | 53 | 62 | 57 | 53 | 51 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | 73 | 62 | 54 | 49 | 72 | 61 | 54 | 49 | 60 | 53 | 49 | 58 | 53 | 48 | 57 | 52 | 48 | 46 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | 69 | 57 | 50 | 45 | 68 | 57 | 50 | 45 | 56 | 49 | 45 | 54 | 49 | 44 | 53 | 48 | 44 | 42 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | 65 | 53 | 46 | 41 | 64 | 53 | 46 | 41 | 52 | 45 | 41 | 51 | 45 | 41 | 50 | 45 | 41 | 39 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | 62 | 50 | 43 | 38 | 60 | 49 | 43 | 38 | 48 | 42 | 38 | 48 | 42 | 38 | 47 | 42 | 38 | 36 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 10370 | 10370 | 10370 |
| 5° | 10262 | 10222 | 10193 |
| 10° | 10181 | 9811 | 9503 |
| 15° | 10044 | 9199 | 8456 |
| 20° | 9864 | 8368 | 7123 |
| 25° | 9631 | 7364 | 5748 |
| 30° | 9375 | 6311 | 4427 |
| 35° | 9084 | 5207 | 3276 |
| 40° | 8790 | 4144 | 2233 |
| 45° | 8465 | 3100 | 1683 |
| 50° | 8120 | 2157 | 1315 |
| 55° | 7763 | 1576 | 961 |
| 60° | 7393 | 1179 | 687 |
| 65° | 6955 | 790 | 536 |
| 70° | 6292 | 575 | 430 |
| 75° | 5432 | 419 | 340 |
| 80° | 4360 | 340 | 285 |
| 85° | 2255 | 332 | 221 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8465 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 79.5 | 6.6 |
| 10°-20° | 207.0 | 17.3 |
| 20°-30° | 260.0 | 21.7 |
| 30°-40° | 242.2 | 20.2 |
| 40°-50° | 185.4 | 15.5 |
| 50°-60° | 123.2 | 10.3 |
| 60°-70° | 66.4 | 5.6 |
| 70°-80° | 27.2 | 2.3 |
| 80°-90° | 5.2 | 0.4 |
| 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° | 546.5 | 45.7 |
| 0°-40° | 788.7 | 65.9 |
| 0°-60° | 1097.3 | 91.7 |
| 0°-90° | 1196.2 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1196.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 860 | 860 | 860 | 860 | 860 | |
| 5° | 848 | 857 | 845 | 841 | 842 | 80 |
| 15° | 805 | 792 | 737 | 694 | 678 | 227 |
| 25° | 724 | 675 | 554 | 462 | 432 | 333 |
| 35° | 617 | 526 | 354 | 250 | 223 | 386 |
| 45° | 496 | 367 | 182 | 107 | 99 | 383 |
| 55° | 369 | 214 | 75 | 52 | 46 | 331 |
| 65° | 244 | 82 | 28 | 20 | 19 | 241 |
| 75° | 117 | 20 | 9 | 8 | 7 | 125 |
| 85° | 16 | 2 | 2 | 2 | 2 | 24 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P1055672

CATALOG NUMBER: S123R3DR-S775D930-X4F0-XX-UDD-FLL-S

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 860.1 | 860.1 | 860.1 | 860.1 | 860.1 |
| 2.5° | 852.8 | 863.4 | 854.4 | 855.2 | 855.2 |
| 5° | 847.9 | 856.9 | 844.6 | 841.4 | 842.2 |
| 7.5° | 841.4 | 847.1 | 826.7 | 816.1 | 814.5 |
| 10° | 831.6 | 833.2 | 801.4 | 782.7 | 776.2 |
| 12.5° | 819.4 | 813.7 | 772.1 | 741.1 | 728.9 |
| 15° | 804.7 | 791.7 | 737.0 | 693.8 | 677.5 |
| 17.5° | 788.4 | 766.4 | 697.1 | 640.8 | 621.3 |
| 20° | 768.8 | 737.8 | 652.2 | 582.1 | 555.2 |
| 22.5° | 747.6 | 707.7 | 605.0 | 521.8 | 491.6 |
| 25° | 724.0 | 675.1 | 553.6 | 461.5 | 432.1 |
| 27.5° | 699.5 | 640.0 | 503.0 | 404.4 | 374.2 |
| 30° | 673.4 | 604.1 | 453.3 | 348.9 | 318.0 |
| 32.5° | 644.9 | 565.0 | 401.9 | 297.6 | 266.6 |
| 35° | 617.2 | 525.9 | 353.8 | 250.3 | 222.6 |
| 37.5° | 587.8 | 486.7 | 307.4 | 208.7 | 177.7 |
| 40° | 558.5 | 446.8 | 263.3 | 168.0 | 141.9 |
| 42.5° | 527.5 | 406.8 | 221.8 | 133.7 | 113.3 |
| 45° | 496.5 | 366.9 | 181.8 | 106.8 | 98.7 |
| 47.5° | 465.5 | 326.9 | 146.8 | 92.1 | 84.0 |
| 50° | 432.9 | 288.6 | 115.0 | 78.3 | 70.1 |
| 52.5° | 401.9 | 250.3 | 89.7 | 64.4 | 57.1 |
| 55° | 369.3 | 213.6 | 75.0 | 52.2 | 45.7 |
| 57.5° | 339.2 | 176.1 | 62.0 | 40.8 | 35.9 |
| 60° | 306.6 | 142.7 | 48.9 | 31.8 | 28.5 |
| 62.5° | 275.6 | 111.7 | 37.5 | 25.3 | 22.8 |
| 65° | 243.8 | 82.3 | 27.7 | 20.4 | 18.8 |
| 67.5° | 212.0 | 59.5 | 21.2 | 16.3 | 15.5 |
| 70° | 178.5 | 44.8 | 16.3 | 13.0 | 12.2 |
| 72.5° | 146.8 | 31.8 | 12.2 | 10.6 | 9.8 |
| 75° | 116.6 | 19.6 | 9.0 | 8.2 | 7.3 |
| 77.5° | 89.7 | 11.4 | 6.5 | 6.5 | 5.7 |
| 80° | 62.8 | 6.5 | 4.9 | 4.9 | 4.1 |
| 82.5° | 38.3 | 4.1 | 3.3 | 3.3 | 3.3 |
| 85° | 16.3 | 2.4 | 2.4 | 2.4 | 1.6 |
| 87.5° | 2.4 | 0.8 | 0.8 | 0.8 | 0.8 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)