

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: P1059373

Luminaire Tested: S123RDRP-S775D930-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059373
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-30)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S775D930-X4F0-XX-UDD-BVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

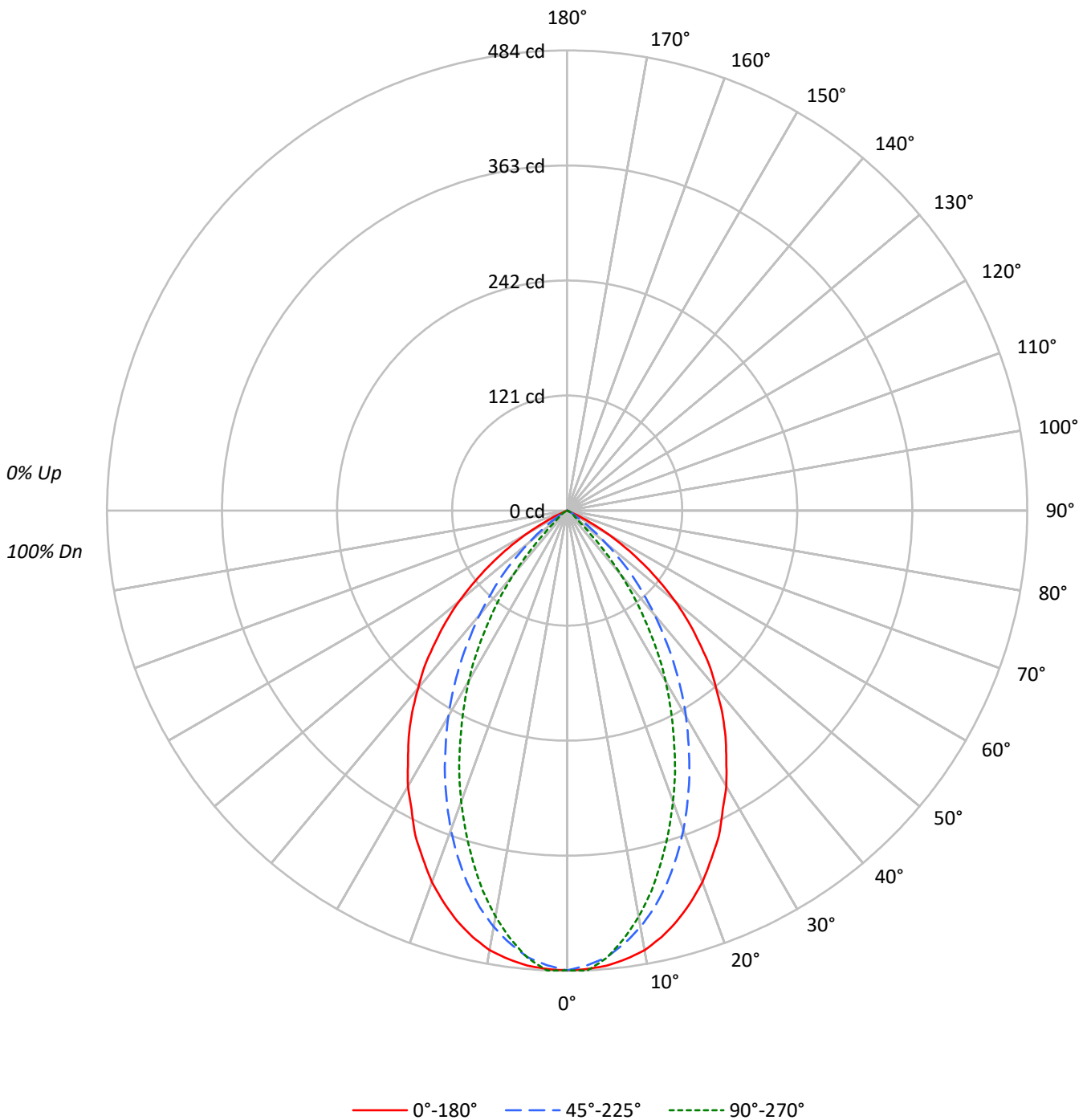
Lumens per Lamp: N/A
Luminaire Lumens: 551.8 lumens
Efficiency: N/A
Efficacy: 21.4 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 0.81 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
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: P1059373

CATALOG NUMBER: S123RDRP-S775D930-X4F0-XX-UDD-BVL-B

Luminous Intensity Polar Plot





TEST NUMBER: P1059373

CATALOG NUMBER: S123RDRP-S775D930-X4F0-XX-UDD-BVL-B

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 | 113 | 110 | 107 | 104 | 110 | 107 | 105 | 103 | 103 | 101 | 100 | 100 | 98 | 97 | 96 | 95 | 94 | 92 |
| 2 | 106 | 101 | 96 | 92 | 104 | 99 | 95 | 91 | 96 | 92 | 89 | 93 | 90 | 87 | 90 | 87 | 85 | 84 |
| 3 | 100 | 92 | 87 | 82 | 98 | 91 | 86 | 82 | 88 | 84 | 80 | 86 | 82 | 79 | 83 | 80 | 78 | 76 |
| 4 | 94 | 85 | 79 | 74 | 92 | 84 | 78 | 74 | 82 | 77 | 73 | 80 | 75 | 72 | 78 | 74 | 71 | 69 |
| 5 | 88 | 79 | 72 | 67 | 86 | 78 | 71 | 67 | 76 | 70 | 66 | 74 | 69 | 65 | 72 | 68 | 65 | 63 |
| 6 | 83 | 73 | 66 | 61 | 81 | 72 | 66 | 61 | 70 | 65 | 60 | 69 | 64 | 60 | 67 | 63 | 60 | 58 |
| 7 | 78 | 68 | 61 | 56 | 77 | 67 | 60 | 56 | 66 | 60 | 56 | 64 | 59 | 55 | 63 | 58 | 55 | 53 |
| 8 | 74 | 63 | 56 | 52 | 72 | 62 | 56 | 51 | 61 | 55 | 51 | 60 | 55 | 51 | 59 | 54 | 51 | 49 |
| 9 | 70 | 59 | 52 | 48 | 68 | 58 | 52 | 48 | 57 | 52 | 47 | 56 | 51 | 47 | 55 | 51 | 47 | 46 |
| 10 | 66 | 55 | 49 | 44 | 65 | 55 | 48 | 44 | 54 | 48 | 44 | 53 | 48 | 44 | 52 | 47 | 44 | 42 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 5677 | 5677 | 5677 |
| 5° | 5663 | 5561 | 5571 |
| 10° | 5598 | 5301 | 5171 |
| 15° | 5433 | 4932 | 4647 |
| 20° | 5196 | 4466 | 4067 |
| 25° | 4892 | 3944 | 3440 |
| 30° | 4540 | 3388 | 2808 |
| 35° | 4163 | 2801 | 2087 |
| 40° | 3736 | 2197 | 1337 |
| 45° | 3258 | 1603 | 556 |
| 50° | 2702 | 954 | 214 |
| 55° | 1992 | 399 | 160 |
| 60° | 1207 | 146 | 92 |
| 65° | 325 | 86 | 44 |
| 70° | 0 | 27 | 27 |
| 75° | 0 | 0 | 36 |
| 80° | 0 | 0 | 0 |
| 85° | 0 | 0 | 0 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3258 cd/sqm



TEST NUMBER: P1059373

CATALOG NUMBER: S123RDRP-S775D930-X4F0-XX-UDD-BVL-B

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 44.5 | 8.1 |
| 10°-20° | 114.9 | 20.8 |
| 20°-30° | 143.2 | 25.9 |
| 30°-40° | 128.0 | 23.2 |
| 40°-50° | 80.8 | 14.6 |
| 50°-60° | 33.8 | 6.1 |
| 60°-70° | 6.4 | 1.2 |
| 70°-80° | 0.2 | 0.0 |
| 80°-90° | 0.0 | 0.0 |
| 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° | 302.6 | 54.8 |
| 0°-40° | 430.6 | 78.0 |
| 0°-60° | 545.2 | 98.8 |
| 0°-90° | 551.8 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 551.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 484 | 484 | 484 | 484 | 484 | |
| 5° | 480 | 480 | 472 | 473 | 473 | 45 |
| 15° | 447 | 436 | 406 | 388 | 382 | 125 |
| 25° | 378 | 347 | 304 | 278 | 266 | 173 |
| 35° | 290 | 248 | 195 | 160 | 146 | 181 |
| 45° | 196 | 153 | 96 | 51 | 34 | 151 |
| 55° | 97 | 67 | 20 | 8 | 8 | 87 |
| 65° | 12 | 9 | 3 | 2 | 2 | 16 |
| 75° | 0 | 0 | 0 | 0 | 1 | 0 |
| 85° | 0 | 0 | 0 | 0 | 0 | 0 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P1059373

CATALOG NUMBER: S123RDRP-S775D930-X4F0-XX-UDD-BVL-B

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 483.5 | 483.5 | 483.5 | 483.5 | 483.5 |
| 2.5° | 482.7 | 483.5 | 478.8 | 483.5 | 484.3 |
| 5° | 480.4 | 479.6 | 471.8 | 473.4 | 472.6 |
| 7.5° | 475.7 | 473.4 | 459.4 | 456.3 | 454.7 |
| 10° | 469.5 | 463.3 | 444.6 | 436.8 | 433.7 |
| 12.5° | 459.4 | 450.8 | 426.7 | 414.2 | 409.6 |
| 15° | 446.9 | 436.0 | 405.7 | 388.5 | 382.3 |
| 17.5° | 432.1 | 416.6 | 382.3 | 363.6 | 354.3 |
| 20° | 415.8 | 394.0 | 357.4 | 334.8 | 325.5 |
| 22.5° | 396.3 | 372.2 | 330.9 | 306.8 | 296.7 |
| 25° | 377.6 | 347.3 | 304.4 | 278.0 | 265.5 |
| 27.5° | 354.3 | 322.3 | 276.4 | 249.2 | 235.9 |
| 30° | 334.8 | 298.2 | 249.9 | 219.6 | 207.1 |
| 32.5° | 311.4 | 273.3 | 222.7 | 189.2 | 177.5 |
| 35° | 290.4 | 248.4 | 195.4 | 160.4 | 145.6 |
| 37.5° | 267.8 | 224.2 | 168.2 | 131.6 | 117.6 |
| 40° | 243.7 | 200.1 | 143.3 | 102.8 | 87.2 |
| 42.5° | 221.9 | 176.0 | 118.3 | 76.3 | 60.7 |
| 45° | 196.2 | 152.6 | 96.5 | 51.4 | 33.5 |
| 47.5° | 172.9 | 130.8 | 73.2 | 28.8 | 17.9 |
| 50° | 147.9 | 108.2 | 52.2 | 14.8 | 11.7 |
| 52.5° | 122.2 | 86.4 | 34.3 | 10.1 | 9.3 |
| 55° | 97.3 | 67.0 | 19.5 | 7.8 | 7.8 |
| 57.5° | 73.2 | 48.3 | 10.1 | 6.2 | 5.5 |
| 60° | 51.4 | 31.9 | 6.2 | 4.7 | 3.9 |
| 62.5° | 29.6 | 18.7 | 4.7 | 3.1 | 3.1 |
| 65° | 11.7 | 8.6 | 3.1 | 1.6 | 1.6 |
| 67.5° | 0.8 | 2.3 | 1.6 | 0.8 | 0.8 |
| 70° | 0.0 | 0.0 | 0.8 | 0.8 | 0.8 |
| 72.5° | 0.0 | 0.0 | 0.8 | 0.8 | 0.8 |
| 75° | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 |
| 77.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



TEST NUMBER: P1059373
 CATALOG NUMBER: S123RDRP-S775D930-X4F0-XX-UDD-BVL-B

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 | 11.23 | 12.40 | 11.59 | 12.72 | 13.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 3H | 11.07 | 12.10 | 11.45 | 12.43 | 12.80 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 4H | 10.98 | 11.94 | 11.39 | 12.29 | 12.67 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 6H | 10.89 | 11.76 | 11.30 | 12.13 | 12.53 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 8H | 10.84 | 11.66 | 11.27 | 12.05 | 12.46 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 12H | 10.79 | 11.57 | 11.22 | 11.96 | 12.39 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4H | 2H | 10.99 | 11.94 | 11.39 | 12.29 | 12.68 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 3H | 10.82 | 11.59 | 11.23 | 12.00 | 12.40 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 4H | 10.72 | 11.40 | 11.15 | 11.82 | 12.27 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 6H | 10.62 | 11.20 | 11.09 | 11.65 | 12.12 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 8H | 10.55 | 11.10 | 11.03 | 11.55 | 12.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 12H | 10.50 | 10.97 | 10.99 | 11.46 | 11.94 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 8H | 4H | 10.55 | 11.10 | 11.03 | 11.55 | 12.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 6H | 10.44 | 10.88 | 10.94 | 11.38 | 11.86 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 8H | 10.37 | 10.76 | 10.89 | 11.28 | 11.78 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 12H | 10.31 | 10.66 | 10.83 | 11.16 | 11.73 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 12H | 4H | 10.50 | 10.97 | 10.99 | 11.46 | 11.94 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 6H | 10.37 | 10.76 | 10.89 | 11.28 | 11.78 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 8H | 10.31 | 10.66 | 10.83 | 11.16 | 11.73 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |