

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: P1061612

Luminaire Tested: S125RDRP-S375D835-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061612
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-85)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-S375D835-X4F0-XX-UDD-WVL-S
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

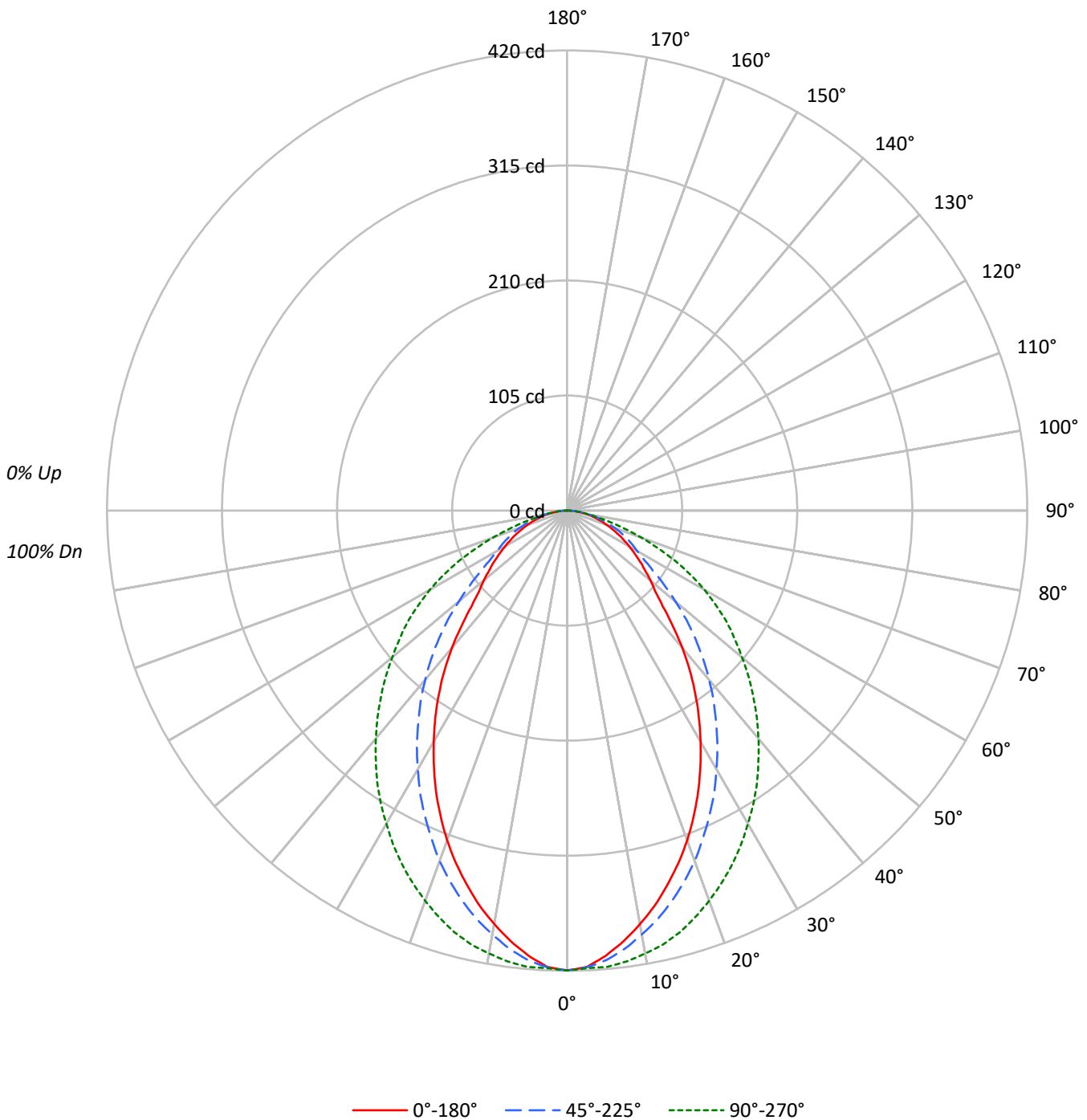
Lumens per Lamp: N/A
Luminaire Lumens: 786.8 lumens
Efficiency: N/A
Efficacy: 62.9 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
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: P1061612

CATALOG NUMBER: S125RDRP-S375D835-X4F0-XX-UDD-WVL-S

Luminous Intensity Polar Plot





TEST NUMBER: P1061612

CATALOG NUMBER: S125RDRP-S375D835-X4F0-XX-UDD-WVL-S

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 | 107 | 104 | 100 | 97 | 99 | 97 | 94 | 96 | 93 | 91 | 92 | 90 | 88 | 86 |
| 2 | 101 | 94 | 88 | 83 | 99 | 92 | 86 | 82 | 89 | 84 | 80 | 85 | 81 | 78 | 82 | 79 | 76 | 74 |
| 3 | 93 | 84 | 76 | 71 | 91 | 82 | 75 | 70 | 79 | 74 | 69 | 77 | 72 | 68 | 74 | 70 | 66 | 64 |
| 4 | 86 | 75 | 67 | 61 | 84 | 74 | 67 | 61 | 72 | 65 | 60 | 69 | 64 | 59 | 67 | 62 | 58 | 56 |
| 5 | 80 | 68 | 60 | 54 | 78 | 67 | 59 | 53 | 65 | 58 | 53 | 63 | 57 | 52 | 61 | 56 | 52 | 50 |
| 6 | 74 | 62 | 54 | 48 | 72 | 61 | 53 | 48 | 59 | 52 | 47 | 58 | 52 | 47 | 56 | 51 | 46 | 44 |
| 7 | 69 | 57 | 49 | 43 | 68 | 56 | 48 | 43 | 54 | 47 | 42 | 53 | 47 | 42 | 52 | 46 | 42 | 40 |
| 8 | 65 | 52 | 44 | 39 | 63 | 52 | 44 | 39 | 50 | 43 | 38 | 49 | 43 | 38 | 48 | 42 | 38 | 36 |
| 9 | 61 | 48 | 41 | 35 | 59 | 48 | 40 | 35 | 47 | 40 | 35 | 46 | 39 | 35 | 45 | 39 | 35 | 33 |
| 10 | 57 | 45 | 37 | 32 | 56 | 44 | 37 | 32 | 43 | 37 | 32 | 42 | 36 | 32 | 42 | 36 | 32 | 30 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 2890 | 2890 | 2890 |
| 5° | 2817 | 2846 | 2889 |
| 10° | 2679 | 2747 | 2870 |
| 15° | 2520 | 2630 | 2839 |
| 20° | 2347 | 2495 | 2777 |
| 25° | 2150 | 2335 | 2708 |
| 30° | 1937 | 2166 | 2624 |
| 35° | 1713 | 1991 | 2541 |
| 40° | 1470 | 1813 | 2442 |
| 45° | 1201 | 1612 | 2340 |
| 50° | 1065 | 1383 | 2232 |
| 55° | 976 | 1148 | 2139 |
| 60° | 901 | 1016 | 1993 |
| 65° | 841 | 978 | 1776 |
| 70° | 785 | 928 | 1451 |
| 75° | 726 | 870 | 1072 |
| 80° | 682 | 813 | 781 |
| 85° | 632 | 798 | 664 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2340 cd/sqm



TEST NUMBER: P1061612

CATALOG NUMBER: S125RDRP-S375D835-X4F0-XX-UDD-WVL-S

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 38.8 | 4.9 |
| 10°-20° | 104.6 | 13.3 |
| 20°-30° | 143.8 | 18.3 |
| 30°-40° | 152.4 | 19.4 |
| 40°-50° | 133.0 | 16.9 |
| 50°-60° | 101.1 | 12.8 |
| 60°-70° | 67.7 | 8.6 |
| 70°-80° | 34.9 | 4.4 |
| 80°-90° | 10.5 | 1.3 |
| 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° | 287.3 | 36.5 |
| 0°-40° | 439.6 | 55.9 |
| 0°-60° | 673.7 | 85.6 |
| 0°-90° | 786.8 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 786.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 420 | 420 | 420 | 420 | 420 | |
| 5° | 408 | 412 | 412 | 415 | 418 | 38 |
| 15° | 354 | 360 | 369 | 385 | 398 | 99 |
| 25° | 283 | 292 | 307 | 333 | 356 | 130 |
| 35° | 204 | 216 | 237 | 270 | 302 | 127 |
| 45° | 123 | 135 | 166 | 205 | 240 | 97 |
| 55° | 81 | 84 | 96 | 140 | 178 | 73 |
| 65° | 52 | 53 | 60 | 80 | 109 | 51 |
| 75° | 27 | 29 | 33 | 35 | 40 | 29 |
| 85° | 8 | 10 | 10 | 9 | 8 | 9 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P1061612

CATALOG NUMBER: S125RDRP-S375D835-X4F0-XX-UDD-WVL-S

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 419.7 | 419.7 | 419.7 | 419.7 | 419.7 |
| 2.5° | 416.8 | 419.7 | 417.2 | 417.2 | 418.0 |
| 5° | 407.6 | 411.8 | 411.8 | 414.7 | 418.0 |
| 7.5° | 396.2 | 400.9 | 403.4 | 410.1 | 415.1 |
| 10° | 383.2 | 388.3 | 392.9 | 402.9 | 410.5 |
| 12.5° | 369.4 | 374.9 | 382.0 | 395.0 | 405.5 |
| 15° | 353.5 | 360.2 | 369.0 | 385.3 | 398.3 |
| 17.5° | 337.5 | 344.2 | 355.1 | 374.4 | 389.1 |
| 20° | 320.3 | 327.5 | 340.5 | 361.4 | 379.0 |
| 22.5° | 301.9 | 309.9 | 323.7 | 347.6 | 368.1 |
| 25° | 283.0 | 291.8 | 307.3 | 332.9 | 356.4 |
| 27.5° | 263.3 | 273.8 | 290.6 | 317.8 | 343.8 |
| 30° | 243.6 | 254.1 | 272.5 | 302.3 | 330.0 |
| 32.5° | 223.9 | 235.2 | 255.4 | 286.8 | 316.6 |
| 35° | 203.8 | 215.5 | 236.9 | 270.4 | 302.3 |
| 37.5° | 184.1 | 195.8 | 219.7 | 254.5 | 286.8 |
| 40° | 163.5 | 175.7 | 201.7 | 238.2 | 271.7 |
| 42.5° | 142.6 | 155.6 | 183.7 | 221.4 | 256.2 |
| 45° | 123.3 | 135.4 | 165.6 | 205.0 | 240.3 |
| 47.5° | 109.0 | 117.0 | 147.6 | 188.3 | 224.7 |
| 50° | 99.4 | 103.6 | 129.1 | 171.9 | 208.4 |
| 52.5° | 89.7 | 93.1 | 112.0 | 155.1 | 192.9 |
| 55° | 81.3 | 83.9 | 95.6 | 140.5 | 178.2 |
| 57.5° | 73.0 | 75.5 | 83.0 | 125.8 | 161.0 |
| 60° | 65.4 | 67.5 | 73.8 | 110.3 | 144.7 |
| 62.5° | 58.3 | 60.0 | 66.7 | 95.6 | 127.0 |
| 65° | 51.6 | 52.8 | 60.0 | 80.1 | 109.0 |
| 67.5° | 44.9 | 46.1 | 53.3 | 65.4 | 89.7 |
| 70° | 39.0 | 39.4 | 46.1 | 53.3 | 72.1 |
| 72.5° | 33.1 | 33.5 | 39.0 | 43.2 | 55.3 |
| 75° | 27.3 | 28.9 | 32.7 | 34.8 | 40.3 |
| 77.5° | 22.2 | 24.3 | 26.4 | 27.3 | 27.3 |
| 80° | 17.2 | 19.7 | 20.5 | 20.5 | 19.7 |
| 82.5° | 12.6 | 14.7 | 15.1 | 14.3 | 13.4 |
| 85° | 8.0 | 10.1 | 10.1 | 9.2 | 8.4 |
| 87.5° | 3.8 | 5.5 | 5.5 | 5.0 | 3.8 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



TEST NUMBER: P1061612
 CATALOG NUMBER: S125RDRP-S375D835-X4F0-XX-UDD-WVL-S

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 | 10.30 | 11.79 | 10.66 | 12.11 | 12.42 | 14.22 | 15.72 | 14.59 | 16.03 | 16.35 |
| | 3H | 11.87 | 13.21 | 12.24 | 13.54 | 13.90 | 15.64 | 16.99 | 16.02 | 17.31 | 17.68 |
| | 4H | 12.48 | 13.74 | 12.88 | 14.09 | 14.47 | 16.06 | 17.32 | 16.46 | 17.67 | 18.05 |
| | 6H | 12.97 | 14.14 | 13.39 | 14.50 | 14.90 | 16.28 | 17.44 | 16.69 | 17.81 | 18.20 |
| | 8H | 13.15 | 14.26 | 13.58 | 14.65 | 15.05 | 16.33 | 17.44 | 16.76 | 17.83 | 18.23 |
| | 12H | 13.27 | 14.33 | 13.70 | 14.71 | 15.14 | 16.37 | 17.43 | 16.80 | 17.81 | 18.24 |
| 4H | 2H | 11.03 | 12.29 | 11.43 | 12.64 | 13.02 | 14.35 | 15.61 | 14.75 | 15.96 | 16.34 |
| | 3H | 12.81 | 13.86 | 13.22 | 14.26 | 14.66 | 15.96 | 17.00 | 16.37 | 17.40 | 17.80 |
| | 4H | 13.55 | 14.49 | 13.98 | 14.90 | 15.34 | 16.48 | 17.43 | 16.92 | 17.84 | 18.28 |
| | 6H | 14.18 | 15.00 | 14.64 | 15.44 | 15.90 | 16.83 | 17.65 | 17.29 | 18.09 | 18.55 |
| | 8H | 14.41 | 15.17 | 14.87 | 15.62 | 16.09 | 16.93 | 17.69 | 17.39 | 18.14 | 18.60 |
| | 12H | 14.58 | 15.27 | 15.07 | 15.75 | 16.22 | 17.00 | 17.68 | 17.48 | 18.16 | 18.63 |
| 8H | 4H | 13.95 | 14.71 | 14.41 | 15.15 | 15.62 | 16.59 | 17.36 | 17.06 | 17.80 | 18.27 |
| | 6H | 14.73 | 15.36 | 15.23 | 15.85 | 16.33 | 17.03 | 17.66 | 17.53 | 18.15 | 18.63 |
| | 8H | 15.06 | 15.62 | 15.57 | 16.13 | 16.62 | 17.19 | 17.76 | 17.70 | 18.27 | 18.75 |
| | 12H | 15.33 | 15.83 | 15.84 | 16.33 | 16.89 | 17.32 | 17.83 | 17.83 | 18.32 | 18.88 |
| 12H | 4H | 13.99 | 14.67 | 14.47 | 15.15 | 15.62 | 16.59 | 17.27 | 17.07 | 17.75 | 18.22 |
| | 6H | 14.81 | 15.38 | 15.33 | 15.89 | 16.38 | 17.05 | 17.61 | 17.56 | 18.12 | 18.61 |
| | 8H | 15.21 | 15.71 | 15.72 | 16.20 | 16.77 | 17.26 | 17.76 | 17.77 | 18.25 | 18.81 |