

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: P1062089

Luminaire Tested: S125RDRP-H610D830-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1062089
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-H610D830-X4F0-XX-UDD-WVL-S
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

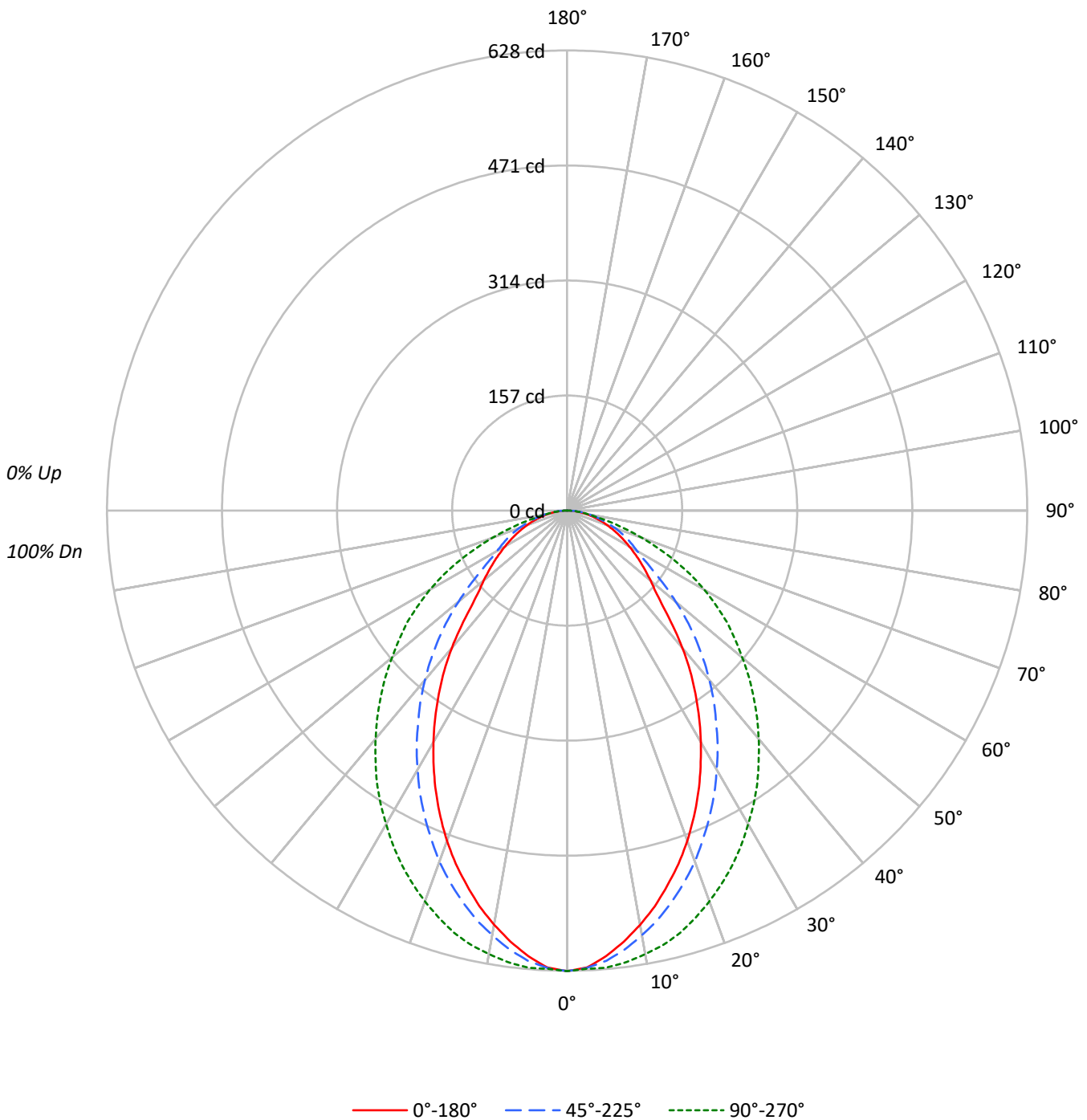
Lumens per Lamp: N/A
Luminaire Lumens: 1178.1 lumens
Efficiency: N/A
Efficacy: 67.7 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 17.4
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

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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 | 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° | 4327 | 4327 | 4327 |
| 5° | 4217 | 4261 | 4326 |
| 10° | 4012 | 4113 | 4297 |
| 15° | 3773 | 3938 | 4251 |
| 20° | 3515 | 3735 | 4159 |
| 25° | 3220 | 3496 | 4055 |
| 30° | 2900 | 3245 | 3928 |
| 35° | 2564 | 2981 | 3805 |
| 40° | 2201 | 2714 | 3656 |
| 45° | 1797 | 2415 | 3502 |
| 50° | 1594 | 2072 | 3342 |
| 55° | 1462 | 1718 | 3203 |
| 60° | 1348 | 1522 | 2983 |
| 65° | 1258 | 1463 | 2659 |
| 70° | 1176 | 1391 | 2174 |
| 75° | 1085 | 1304 | 1604 |
| 80° | 1019 | 1221 | 1170 |
| 85° | 940 | 1193 | 995 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3502 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 58.2 | 4.9 |
| 10°-20° | 156.7 | 13.3 |
| 20°-30° | 215.3 | 18.3 |
| 30°-40° | 228.2 | 19.4 |
| 40°-50° | 199.2 | 16.9 |
| 50°-60° | 151.3 | 12.8 |
| 60°-70° | 101.4 | 8.6 |
| 70°-80° | 52.3 | 4.4 |
| 80°-90° | 15.7 | 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° | 430.1 | 36.5 |
| 0°-40° | 658.3 | 55.9 |
| 0°-60° | 1008.8 | 85.6 |
| 0°-90° | 1178.1 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1178.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 628 | 628 | 628 | 628 | 628 | |
| 5° | 610 | 616 | 616 | 621 | 626 | 57 |
| 15° | 529 | 539 | 552 | 577 | 596 | 148 |
| 25° | 424 | 437 | 460 | 498 | 534 | 194 |
| 35° | 305 | 323 | 355 | 405 | 453 | 190 |
| 45° | 185 | 203 | 248 | 307 | 360 | 146 |
| 55° | 122 | 126 | 143 | 210 | 267 | 109 |
| 65° | 77 | 79 | 90 | 120 | 163 | 77 |
| 75° | 41 | 43 | 49 | 52 | 60 | 44 |
| 85° | 12 | 15 | 15 | 14 | 13 | 13 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P1062089

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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 628.5 | 628.5 | 628.5 | 628.5 | 628.5 |
| 2.5° | 624.1 | 628.5 | 624.7 | 624.7 | 625.9 |
| 5° | 610.2 | 616.5 | 616.5 | 620.9 | 625.9 |
| 7.5° | 593.3 | 600.2 | 604.0 | 614.0 | 621.5 |
| 10° | 573.8 | 581.4 | 588.3 | 603.3 | 614.6 |
| 12.5° | 553.1 | 561.3 | 571.9 | 591.4 | 607.1 |
| 15° | 529.3 | 539.3 | 552.5 | 577.0 | 596.4 |
| 17.5° | 505.4 | 515.4 | 531.8 | 560.6 | 582.6 |
| 20° | 479.7 | 490.3 | 509.8 | 541.2 | 567.6 |
| 22.5° | 452.0 | 464.0 | 484.7 | 520.5 | 551.2 |
| 25° | 423.8 | 437.0 | 460.2 | 498.5 | 533.7 |
| 27.5° | 394.3 | 410.0 | 435.1 | 475.9 | 514.8 |
| 30° | 364.8 | 380.5 | 408.1 | 452.7 | 494.1 |
| 32.5° | 335.3 | 352.2 | 382.3 | 429.4 | 474.0 |
| 35° | 305.1 | 322.7 | 354.7 | 404.9 | 452.7 |
| 37.5° | 275.6 | 293.2 | 329.0 | 381.1 | 429.4 |
| 40° | 244.9 | 263.1 | 302.0 | 356.6 | 406.8 |
| 42.5° | 213.5 | 232.9 | 275.0 | 331.5 | 383.6 |
| 45° | 184.6 | 202.8 | 248.0 | 307.0 | 359.7 |
| 47.5° | 163.2 | 175.2 | 221.0 | 281.9 | 336.5 |
| 50° | 148.8 | 155.1 | 193.4 | 257.4 | 312.0 |
| 52.5° | 134.4 | 139.4 | 167.6 | 232.3 | 288.8 |
| 55° | 121.8 | 125.6 | 143.1 | 210.3 | 266.8 |
| 57.5° | 109.2 | 113.0 | 124.3 | 188.3 | 241.1 |
| 60° | 97.9 | 101.1 | 110.5 | 165.1 | 216.6 |
| 62.5° | 87.3 | 89.8 | 99.8 | 143.1 | 190.2 |
| 65° | 77.2 | 79.1 | 89.8 | 119.9 | 163.2 |
| 67.5° | 67.2 | 69.1 | 79.7 | 97.9 | 134.4 |
| 70° | 58.4 | 59.0 | 69.1 | 79.7 | 108.0 |
| 72.5° | 49.6 | 50.2 | 58.4 | 64.7 | 82.9 |
| 75° | 40.8 | 43.3 | 49.0 | 52.1 | 60.3 |
| 77.5° | 33.3 | 36.4 | 39.6 | 40.8 | 40.8 |
| 80° | 25.7 | 29.5 | 30.8 | 30.8 | 29.5 |
| 82.5° | 18.8 | 22.0 | 22.6 | 21.3 | 20.1 |
| 85° | 11.9 | 15.1 | 15.1 | 13.8 | 12.6 |
| 87.5° | 5.7 | 8.2 | 8.2 | 7.5 | 5.7 |
| 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 | 11.70 | 13.19 | 12.06 | 13.51 | 13.82 | 15.62 | 17.12 | 15.99 | 17.43 | 17.75 |
| | 3H | 13.27 | 14.61 | 13.65 | 14.94 | 15.30 | 17.05 | 18.39 | 17.42 | 18.72 | 19.08 |
| | 4H | 13.88 | 15.14 | 14.28 | 15.49 | 15.87 | 17.46 | 18.72 | 17.86 | 19.07 | 19.45 |
| | 6H | 14.38 | 15.54 | 14.79 | 15.91 | 16.30 | 17.68 | 18.84 | 18.09 | 19.21 | 19.60 |
| | 8H | 14.55 | 15.66 | 14.98 | 16.05 | 16.45 | 17.74 | 18.84 | 18.16 | 19.23 | 19.63 |
| | 12H | 14.67 | 15.73 | 15.10 | 16.11 | 16.54 | 17.77 | 18.83 | 18.20 | 19.21 | 19.64 |
| 4H | 2H | 12.43 | 13.69 | 12.83 | 14.04 | 14.42 | 15.75 | 17.01 | 16.15 | 17.36 | 17.74 |
| | 3H | 14.21 | 15.26 | 14.62 | 15.66 | 16.06 | 17.36 | 18.40 | 17.77 | 18.80 | 19.21 |
| | 4H | 14.95 | 15.89 | 15.38 | 16.30 | 16.74 | 17.89 | 18.83 | 18.32 | 19.24 | 19.68 |
| | 6H | 15.58 | 16.40 | 16.04 | 16.84 | 17.30 | 18.23 | 19.05 | 18.69 | 19.49 | 19.95 |
| | 8H | 15.81 | 16.58 | 16.28 | 17.02 | 17.49 | 18.33 | 19.09 | 18.79 | 19.54 | 20.00 |
| | 12H | 15.98 | 16.67 | 16.47 | 17.15 | 17.62 | 18.40 | 19.08 | 18.88 | 19.56 | 20.03 |
| 8H | 4H | 15.35 | 16.11 | 15.81 | 16.56 | 17.03 | 17.99 | 18.76 | 18.46 | 19.20 | 19.67 |
| | 6H | 16.14 | 16.77 | 16.63 | 17.26 | 17.74 | 18.43 | 19.06 | 18.93 | 19.56 | 20.03 |
| | 8H | 16.46 | 17.03 | 16.97 | 17.54 | 18.02 | 18.59 | 19.16 | 19.10 | 19.67 | 20.16 |
| | 12H | 16.73 | 17.23 | 17.24 | 17.73 | 18.29 | 18.73 | 19.23 | 19.24 | 19.72 | 20.28 |
| 12H | 4H | 15.39 | 16.08 | 15.88 | 16.55 | 17.03 | 17.99 | 18.68 | 18.48 | 19.16 | 19.63 |
| | 6H | 16.22 | 16.79 | 16.73 | 17.30 | 17.78 | 18.45 | 19.02 | 18.96 | 19.53 | 20.01 |
| | 8H | 16.61 | 17.11 | 17.12 | 17.61 | 18.17 | 18.66 | 19.16 | 19.17 | 19.65 | 20.22 |