

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: P1061449

Luminaire Tested: S125RDR-S1090D835-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061449
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-46)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-S1090D835-X4F0-XX-UDD-WVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

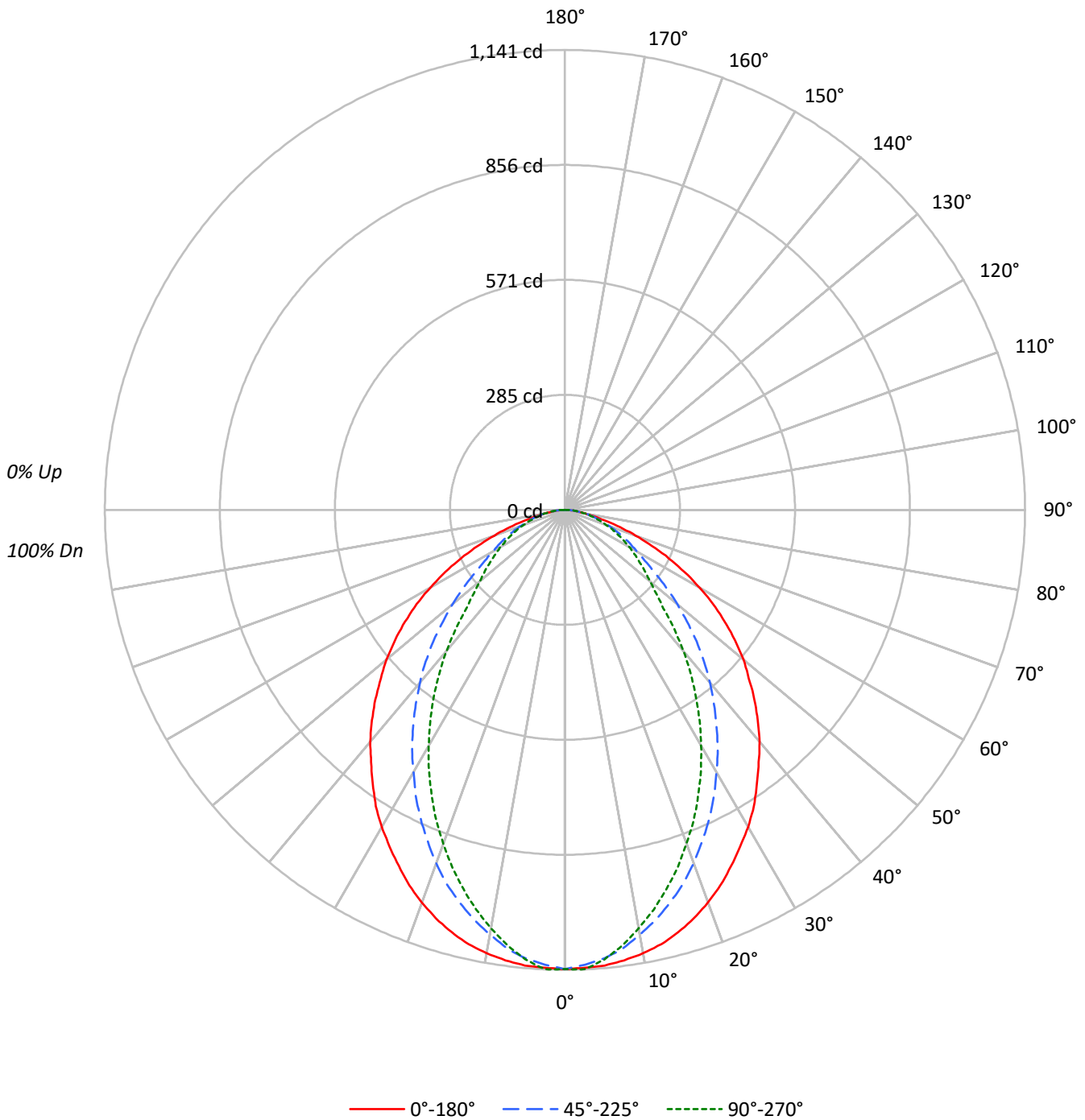
Lumens per Lamp: N/A
Luminaire Lumens: 2158.8 lumens
Efficiency: N/A
Efficacy: 61.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|--|----|--|--|--|--|--|--|--|--|----|---|
| RF | 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 | 0 | | | | | | | | | | | | | | |
| RCR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | | | | | | | | | | | | | | |
| 1 | 110 | 106 | 102 | 99 | 108 | 104 | 100 | 97 | 100 | 97 | 94 | 96 | 93 | 91 | 92 | 90 | 89 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | | | | | | | | | | | | | | |
| 2 | 101 | 94 | 88 | 83 | 99 | 92 | 87 | 82 | 89 | 84 | 80 | 86 | 82 | 78 | 83 | 80 | 77 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | | | | | | | | | | | | | | |
| 3 | 93 | 84 | 77 | 71 | 91 | 82 | 76 | 70 | 80 | 74 | 69 | 77 | 72 | 68 | 74 | 70 | 67 | 65 | 65 | 65 | 65 | 65 | 65 | 65 | | | | | | | | | | | | | | |
| 4 | 86 | 76 | 68 | 61 | 84 | 74 | 67 | 61 | 72 | 65 | 60 | 70 | 64 | 59 | 67 | 63 | 59 | 57 | 57 | 57 | 57 | 57 | 57 | 57 | | | | | | | | | | | | | | |
| 5 | 80 | 68 | 60 | 54 | 78 | 67 | 59 | 54 | 65 | 58 | 53 | 63 | 57 | 53 | 61 | 56 | 52 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | | | | | | | | | | | | | | |
| 6 | 74 | 62 | 54 | 48 | 73 | 61 | 53 | 48 | 59 | 53 | 47 | 58 | 52 | 47 | 56 | 51 | 47 | 45 | 45 | 45 | 45 | 45 | 45 | 45 | | | | | | | | | | | | | | |
| 7 | 69 | 57 | 49 | 43 | 68 | 56 | 48 | 43 | 55 | 48 | 43 | 53 | 47 | 42 | 52 | 46 | 42 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | | | | | | | | | | | | | | |
| 8 | 65 | 52 | 44 | 39 | 63 | 52 | 44 | 39 | 50 | 43 | 39 | 49 | 43 | 38 | 48 | 42 | 38 | 36 | 36 | 36 | 36 | 36 | 36 | 36 | | | | | | | | | | | | | | |
| 9 | 61 | 48 | 41 | 35 | 60 | 48 | 40 | 35 | 47 | 40 | 35 | 46 | 39 | 35 | 45 | 39 | 35 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | | | | | | | | | | | | | | |
| 10 | 57 | 45 | 37 | 32 | 56 | 44 | 37 | 32 | 43 | 37 | 32 | 42 | 36 | 32 | 42 | 36 | 32 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 7846 | 7846 | 7846 |
| 5° | 7843 | 7722 | 7740 |
| 10° | 7812 | 7483 | 7370 |
| 15° | 7735 | 7188 | 6941 |
| 20° | 7597 | 6836 | 6455 |
| 25° | 7407 | 6430 | 5941 |
| 30° | 7221 | 5972 | 5371 |
| 35° | 6979 | 5512 | 4763 |
| 40° | 6751 | 5027 | 4104 |
| 45° | 6470 | 4494 | 3361 |
| 50° | 6189 | 3897 | 2942 |
| 55° | 5808 | 3253 | 2718 |
| 60° | 5299 | 2845 | 2539 |
| 65° | 4637 | 2600 | 2359 |
| 70° | 3760 | 2341 | 2192 |
| 75° | 2700 | 2139 | 2040 |
| 80° | 1864 | 1915 | 1915 |
| 85° | 1367 | 1659 | 1762 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6470 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 105.9 | 4.9 |
| 10°-20° | 286.6 | 13.3 |
| 20°-30° | 396.1 | 18.3 |
| 30°-40° | 421.9 | 19.5 |
| 40°-50° | 370.6 | 17.2 |
| 50°-60° | 281.0 | 13.0 |
| 60°-70° | 182.5 | 8.5 |
| 70°-80° | 90.4 | 4.2 |
| 80°-90° | 23.7 | 1.1 |
| 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° | 788.7 | 36.5 |
| 0°-40° | 1210.6 | 56.1 |
| 0°-60° | 1862.3 | 86.3 |
| 0°-90° | 2158.8 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2158.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1140 | 1140 | 1140 | 1140 | 1140 | |
| 5° | 1135 | 1132 | 1117 | 1121 | 1120 | 108 |
| 15° | 1085 | 1060 | 1008 | 985 | 974 | 306 |
| 25° | 975 | 922 | 846 | 803 | 782 | 449 |
| 35° | 830 | 754 | 656 | 596 | 567 | 520 |
| 45° | 664 | 572 | 462 | 379 | 345 | 512 |
| 55° | 484 | 388 | 271 | 234 | 226 | 432 |
| 65° | 285 | 212 | 160 | 147 | 145 | 281 |
| 75° | 102 | 89 | 80 | 78 | 77 | 113 |
| 85° | 17 | 20 | 21 | 21 | 22 | 21 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1139.6 | 1139.6 | 1139.6 | 1139.6 | 1139.6 |
| 2.5° | 1137.1 | 1139.6 | 1129.7 | 1138.4 | 1140.8 |
| 5° | 1134.7 | 1132.2 | 1117.3 | 1121.0 | 1119.8 |
| 7.5° | 1127.2 | 1122.3 | 1097.5 | 1095.1 | 1090.1 |
| 10° | 1117.3 | 1105.0 | 1070.3 | 1061.7 | 1054.2 |
| 12.5° | 1103.7 | 1083.9 | 1041.9 | 1024.5 | 1015.9 |
| 15° | 1085.2 | 1060.4 | 1008.4 | 984.9 | 973.8 |
| 17.5° | 1062.9 | 1028.2 | 973.8 | 941.6 | 929.3 |
| 20° | 1036.9 | 996.1 | 933.0 | 895.8 | 881.0 |
| 22.5° | 1008.4 | 960.2 | 889.7 | 850.1 | 834.0 |
| 25° | 975.0 | 921.8 | 846.4 | 803.0 | 782.0 |
| 27.5° | 941.6 | 882.2 | 800.6 | 752.3 | 730.0 |
| 30° | 908.2 | 840.2 | 751.1 | 699.1 | 675.6 |
| 32.5° | 872.3 | 796.9 | 705.3 | 648.4 | 621.2 |
| 35° | 830.3 | 753.6 | 655.8 | 596.4 | 566.7 |
| 37.5° | 789.4 | 707.8 | 607.5 | 540.7 | 512.3 |
| 40° | 751.1 | 664.5 | 559.3 | 486.3 | 456.6 |
| 42.5° | 707.8 | 618.7 | 511.0 | 434.3 | 400.9 |
| 45° | 664.5 | 571.7 | 461.5 | 378.6 | 345.2 |
| 47.5° | 618.7 | 527.1 | 409.6 | 327.9 | 305.6 |
| 50° | 577.8 | 481.3 | 363.8 | 289.5 | 274.7 |
| 52.5° | 530.8 | 436.8 | 316.8 | 259.8 | 249.9 |
| 55° | 483.8 | 388.5 | 271.0 | 233.9 | 226.4 |
| 57.5° | 435.6 | 345.2 | 235.1 | 211.6 | 204.2 |
| 60° | 384.8 | 300.7 | 206.6 | 188.1 | 184.4 |
| 62.5° | 334.1 | 254.9 | 181.9 | 168.3 | 163.3 |
| 65° | 284.6 | 211.6 | 159.6 | 147.2 | 144.8 |
| 67.5° | 233.9 | 172.0 | 137.3 | 128.7 | 127.4 |
| 70° | 186.8 | 139.8 | 116.3 | 111.4 | 108.9 |
| 72.5° | 143.5 | 111.4 | 97.8 | 94.0 | 92.8 |
| 75° | 101.5 | 89.1 | 80.4 | 78.0 | 76.7 |
| 77.5° | 68.1 | 68.1 | 64.3 | 61.9 | 63.1 |
| 80° | 47.0 | 49.5 | 48.3 | 48.3 | 48.3 |
| 82.5° | 30.9 | 33.4 | 34.6 | 34.6 | 34.6 |
| 85° | 17.3 | 19.8 | 21.0 | 21.0 | 22.3 |
| 87.5° | 6.2 | 7.4 | 8.7 | 9.9 | 9.9 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)