

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: P1061448

Luminaire Tested: S125RDR-S1090D835-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061448
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-83)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-S1090D835-X4F0-XX-UDD-SVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

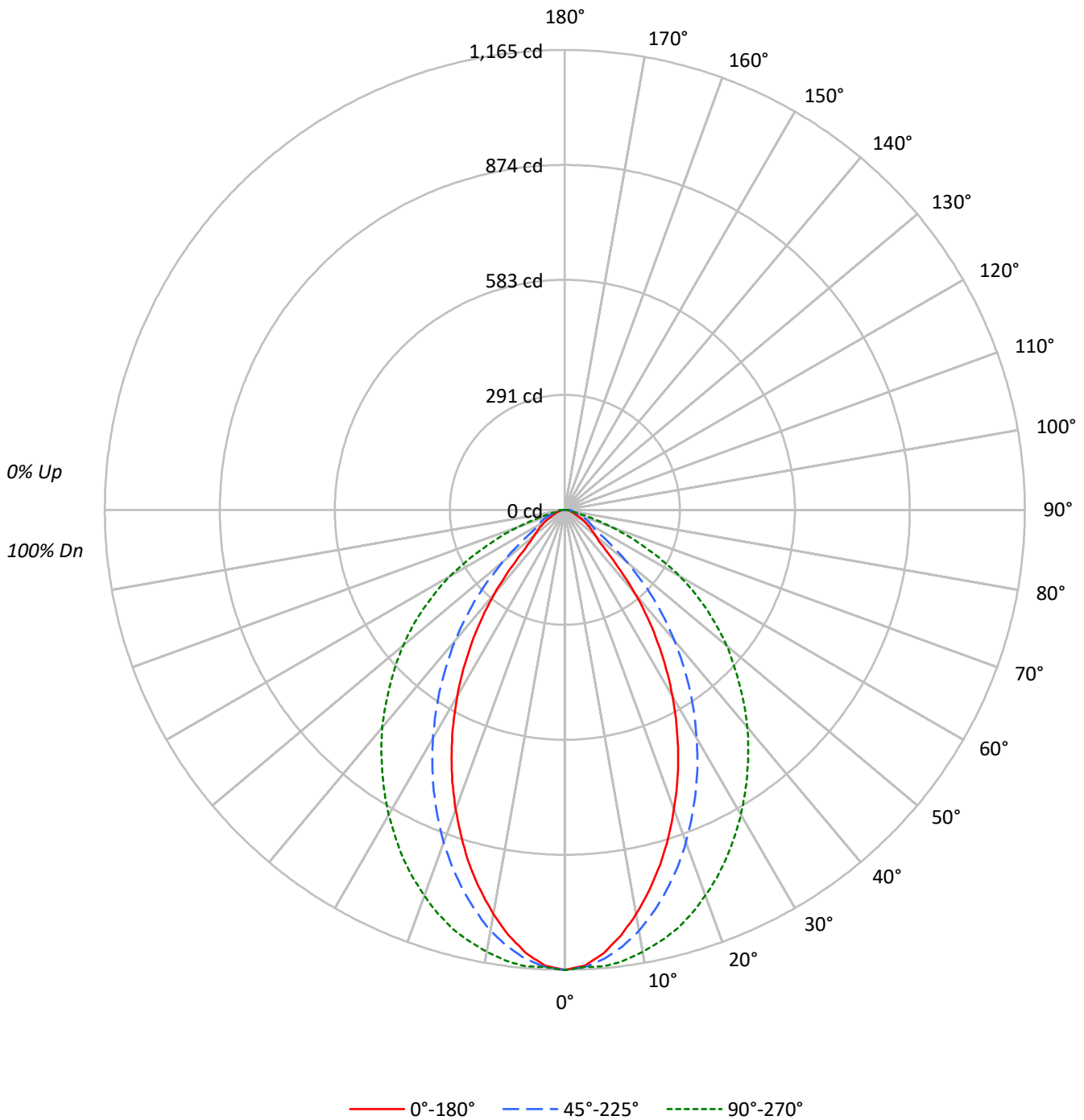
Lumens per Lamp: N/A
Luminaire Lumens: 1688.0 lumens
Efficiency: N/A
Efficacy: 48.2 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1061448

CATALOG NUMBER: S125RDR-S1090D835-X4F0-XX-UDD-SVL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1061448

CATALOG NUMBER: S125RDR-S1090D835-X4F0-XX-UDD-SVL-W

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 | 0 | |
| RCR | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | | | | 100 |
| 1 | 111 | 108 | 104 | 101 | 109 | 105 | 103 | 100 | 101 | 99 | 97 | 98 | 96 | 94 | 94 | 92 | 91 | 89 | | | | 89 |
| 2 | 104 | 97 | 92 | 87 | 101 | 95 | 90 | 86 | 92 | 88 | 84 | 89 | 85 | 82 | 86 | 83 | 81 | 79 | | | | 79 |
| 3 | 96 | 88 | 81 | 76 | 94 | 86 | 80 | 76 | 84 | 79 | 74 | 81 | 77 | 73 | 79 | 75 | 72 | 70 | | | | 70 |
| 4 | 90 | 80 | 73 | 67 | 88 | 79 | 72 | 67 | 76 | 71 | 66 | 74 | 69 | 65 | 72 | 68 | 64 | 62 | | | | 62 |
| 5 | 84 | 73 | 66 | 60 | 82 | 72 | 65 | 60 | 70 | 64 | 59 | 68 | 63 | 59 | 66 | 62 | 58 | 56 | | | | 56 |
| 6 | 78 | 67 | 59 | 54 | 77 | 66 | 59 | 54 | 64 | 58 | 53 | 63 | 57 | 53 | 61 | 56 | 53 | 51 | | | | 51 |
| 7 | 73 | 62 | 54 | 49 | 72 | 61 | 54 | 49 | 60 | 53 | 49 | 58 | 53 | 48 | 57 | 52 | 48 | 46 | | | | 46 |
| 8 | 69 | 57 | 50 | 45 | 68 | 57 | 50 | 45 | 55 | 49 | 44 | 54 | 48 | 44 | 53 | 48 | 44 | 42 | | | | 42 |
| 9 | 65 | 53 | 46 | 41 | 64 | 53 | 46 | 41 | 52 | 45 | 41 | 51 | 45 | 41 | 50 | 44 | 40 | 39 | | | | 39 |
| 10 | 61 | 50 | 43 | 38 | 60 | 49 | 42 | 38 | 48 | 42 | 38 | 47 | 42 | 38 | 46 | 41 | 37 | 36 | | | | 36 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 8024 | 8024 | 8024 |
| 5° | 7789 | 7892 | 8020 |
| 10° | 7273 | 7568 | 7949 |
| 15° | 6638 | 7106 | 7830 |
| 20° | 5917 | 6569 | 7622 |
| 25° | 5156 | 5965 | 7376 |
| 30° | 4332 | 5307 | 7089 |
| 35° | 3445 | 4611 | 6776 |
| 40° | 2482 | 3874 | 6467 |
| 45° | 1471 | 3075 | 6090 |
| 50° | 1088 | 2188 | 5731 |
| 55° | 922 | 1353 | 5248 |
| 60° | 750 | 1092 | 4621 |
| 65° | 585 | 1008 | 3653 |
| 70° | 499 | 872 | 2444 |
| 75° | 460 | 758 | 990 |
| 80° | 492 | 785 | 686 |
| 85° | 585 | 1177 | 782 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6090 cd/sqm



TEST NUMBER: P1061448

CATALOG NUMBER: S125RDR-S1090D835-X4F0-XX-UDD-SVL-W

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 107.4 | 6.4 |
| 10°-20° | 282.1 | 16.7 |
| 20°-30° | 368.7 | 21.8 |
| 30°-40° | 359.2 | 21.3 |
| 40°-50° | 269.4 | 16.0 |
| 50°-60° | 168.9 | 10.0 |
| 60°-70° | 87.9 | 5.2 |
| 70°-80° | 31.8 | 1.9 |
| 80°-90° | 12.6 | 0.7 |
| 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° | 758.2 | 44.9 |
| 0°-40° | 1117.4 | 66.2 |
| 0°-60° | 1555.7 | 92.2 |
| 0°-90° | 1688.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1688.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1165 | 1165 | 1165 | 1165 | 1165 | |
| 5° | 1127 | 1142 | 1142 | 1150 | 1160 | 105 |
| 15° | 931 | 959 | 997 | 1059 | 1098 | 260 |
| 25° | 679 | 716 | 785 | 892 | 971 | 310 |
| 35° | 410 | 453 | 549 | 695 | 806 | 255 |
| 45° | 151 | 196 | 316 | 488 | 625 | 127 |
| 55° | 77 | 80 | 113 | 295 | 437 | 68 |
| 65° | 36 | 38 | 62 | 119 | 224 | 37 |
| 75° | 17 | 24 | 28 | 30 | 37 | 19 |
| 85° | 7 | 12 | 15 | 14 | 10 | 8 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P1061448

CATALOG NUMBER: S125RDR-S1090D835-X4F0-XX-UDD-SVL-W

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1165.4 | 1165.4 | 1165.4 | 1165.4 | 1165.4 |
| 2.5° | 1155.5 | 1166.6 | 1159.2 | 1159.2 | 1159.2 |
| 5° | 1127.0 | 1141.8 | 1141.8 | 1150.5 | 1160.4 |
| 7.5° | 1087.4 | 1104.7 | 1115.8 | 1136.9 | 1151.8 |
| 10° | 1040.3 | 1061.3 | 1082.4 | 1117.1 | 1136.9 |
| 12.5° | 987.0 | 1011.8 | 1041.5 | 1089.8 | 1119.6 |
| 15° | 931.3 | 958.6 | 996.9 | 1058.9 | 1098.5 |
| 17.5° | 870.6 | 902.8 | 948.6 | 1023.0 | 1071.3 |
| 20° | 807.5 | 839.7 | 896.6 | 980.8 | 1040.3 |
| 22.5° | 744.3 | 779.0 | 840.9 | 936.3 | 1006.9 |
| 25° | 678.7 | 715.8 | 785.2 | 891.7 | 970.9 |
| 27.5° | 611.8 | 650.2 | 727.0 | 845.9 | 931.3 |
| 30° | 544.9 | 584.5 | 667.5 | 796.3 | 891.7 |
| 32.5° | 478.0 | 520.1 | 608.1 | 745.5 | 849.6 |
| 35° | 409.9 | 453.3 | 548.6 | 694.8 | 806.2 |
| 37.5° | 344.3 | 387.6 | 489.2 | 642.8 | 762.9 |
| 40° | 276.2 | 323.2 | 431.0 | 590.7 | 719.5 |
| 42.5° | 209.3 | 257.6 | 372.8 | 538.7 | 672.5 |
| 45° | 151.1 | 195.7 | 315.8 | 487.9 | 625.4 |
| 47.5° | 116.4 | 141.2 | 257.6 | 435.9 | 579.6 |
| 50° | 101.6 | 109.0 | 204.3 | 387.6 | 535.0 |
| 52.5° | 87.9 | 92.9 | 153.6 | 343.0 | 486.7 |
| 55° | 76.8 | 80.5 | 112.7 | 294.7 | 437.2 |
| 57.5° | 64.4 | 69.4 | 89.2 | 247.7 | 386.4 |
| 60° | 54.5 | 57.0 | 79.3 | 204.3 | 335.6 |
| 62.5° | 44.6 | 47.1 | 70.6 | 161.0 | 278.6 |
| 65° | 35.9 | 38.4 | 61.9 | 118.9 | 224.2 |
| 67.5° | 29.7 | 31.0 | 52.0 | 84.2 | 172.1 |
| 70° | 24.8 | 26.0 | 43.3 | 58.2 | 121.4 |
| 72.5° | 21.1 | 24.8 | 34.7 | 42.1 | 76.8 |
| 75° | 17.3 | 23.5 | 28.5 | 29.7 | 37.2 |
| 77.5° | 14.9 | 22.3 | 23.5 | 23.5 | 21.1 |
| 80° | 12.4 | 18.6 | 19.8 | 18.6 | 17.3 |
| 82.5° | 9.9 | 14.9 | 16.1 | 16.1 | 13.6 |
| 85° | 7.4 | 12.4 | 14.9 | 13.6 | 9.9 |
| 87.5° | 5.0 | 11.1 | 12.4 | 11.1 | 7.4 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)