

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: P1061538

Luminaire Tested: S125RDR-S1270D840-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061538
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-S1270D840-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: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

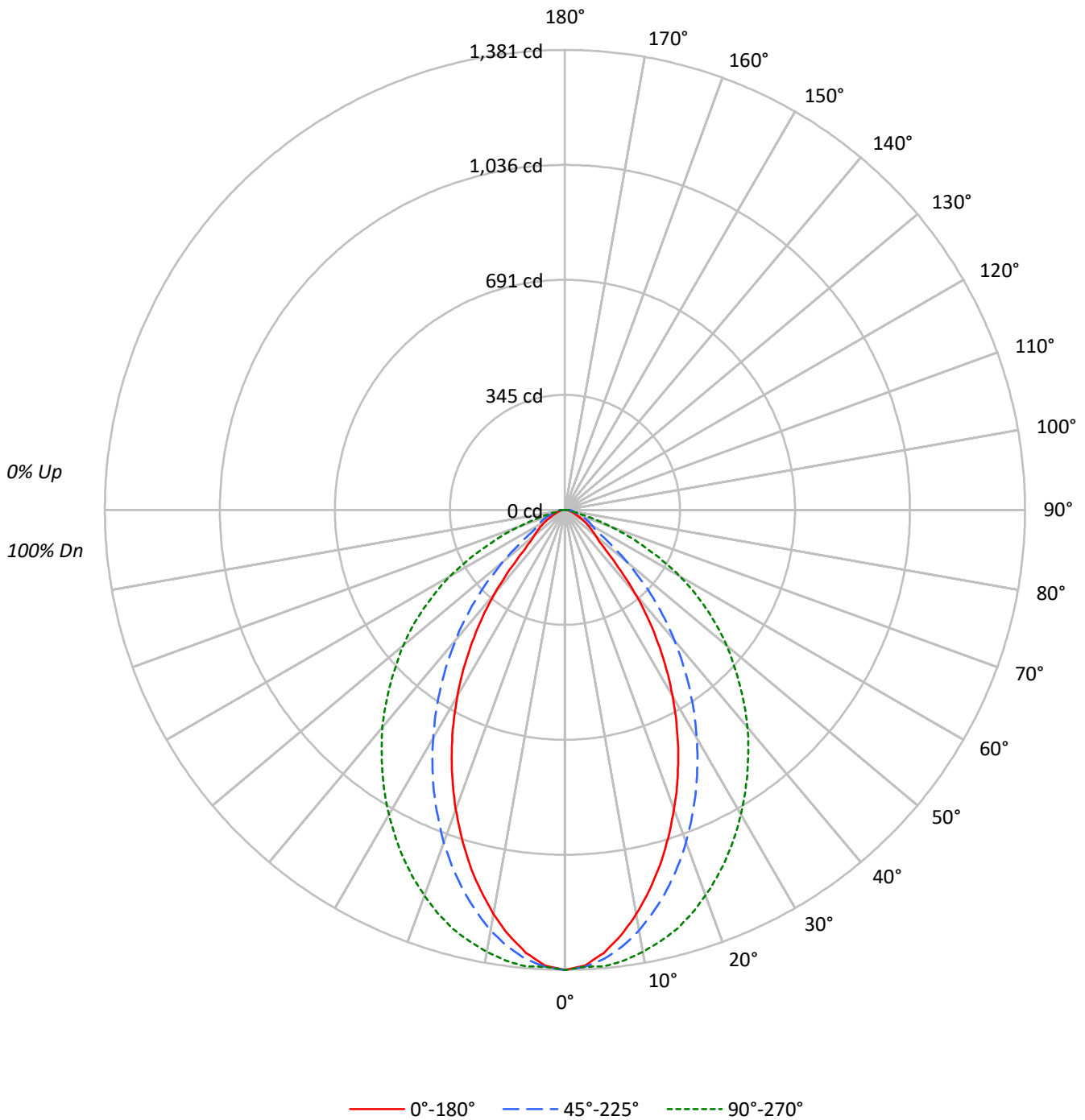
Lumens per Lamp: N/A
Luminaire Lumens: 2000.6 lumens
Efficiency: N/A
Efficacy: 47.9 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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 | | | | | 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° | 9510 | 9510 | 9510 |
| 5° | 9232 | 9353 | 9505 |
| 10° | 8620 | 8969 | 9420 |
| 15° | 7868 | 8423 | 9280 |
| 20° | 7012 | 7787 | 9034 |
| 25° | 6110 | 7070 | 8742 |
| 30° | 5134 | 6290 | 8402 |
| 35° | 4083 | 5465 | 8031 |
| 40° | 2942 | 4591 | 7665 |
| 45° | 1744 | 3645 | 7217 |
| 50° | 1290 | 2594 | 6792 |
| 55° | 1092 | 1604 | 6219 |
| 60° | 890 | 1293 | 5478 |
| 65° | 694 | 1196 | 4329 |
| 70° | 592 | 1035 | 2895 |
| 75° | 545 | 899 | 1171 |
| 80° | 583 | 932 | 813 |
| 85° | 695 | 1390 | 924 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7217 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 127.3 | 6.4 |
| 10°-20° | 334.3 | 16.7 |
| 20°-30° | 437.0 | 21.8 |
| 30°-40° | 425.7 | 21.3 |
| 40°-50° | 319.3 | 16.0 |
| 50°-60° | 200.2 | 10.0 |
| 60°-70° | 104.2 | 5.2 |
| 70°-80° | 37.7 | 1.9 |
| 80°-90° | 14.9 | 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° | 898.6 | 44.9 |
| 0°-40° | 1324.3 | 66.2 |
| 0°-60° | 1843.8 | 92.2 |
| 0°-90° | 2000.6 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2000.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1381 | 1381 | 1381 | 1381 | 1381 | |
| 5° | 1336 | 1353 | 1353 | 1364 | 1375 | 124 |
| 15° | 1104 | 1136 | 1182 | 1255 | 1302 | 308 |
| 25° | 804 | 848 | 931 | 1057 | 1151 | 368 |
| 35° | 486 | 537 | 650 | 823 | 956 | 302 |
| 45° | 179 | 232 | 374 | 578 | 741 | 151 |
| 55° | 91 | 95 | 134 | 349 | 518 | 81 |
| 65° | 43 | 46 | 73 | 141 | 266 | 44 |
| 75° | 20 | 28 | 34 | 35 | 44 | 22 |
| 85° | 9 | 15 | 18 | 16 | 12 | 9 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1381.2 | 1381.2 | 1381.2 | 1381.2 | 1381.2 |
| 2.5° | 1369.4 | 1382.6 | 1373.8 | 1373.8 | 1373.8 |
| 5° | 1335.7 | 1353.3 | 1353.3 | 1363.6 | 1375.3 |
| 7.5° | 1288.7 | 1309.3 | 1322.5 | 1347.4 | 1365.0 |
| 10° | 1232.9 | 1257.9 | 1282.8 | 1323.9 | 1347.4 |
| 12.5° | 1169.8 | 1199.2 | 1234.4 | 1291.6 | 1326.9 |
| 15° | 1103.8 | 1136.1 | 1181.6 | 1255.0 | 1301.9 |
| 17.5° | 1031.8 | 1070.0 | 1124.3 | 1212.4 | 1269.6 |
| 20° | 957.0 | 995.2 | 1062.7 | 1162.5 | 1232.9 |
| 22.5° | 882.1 | 923.2 | 996.6 | 1109.6 | 1193.3 |
| 25° | 804.3 | 848.4 | 930.6 | 1056.8 | 1150.7 |
| 27.5° | 725.1 | 770.6 | 861.6 | 1002.5 | 1103.8 |
| 30° | 645.8 | 692.8 | 791.1 | 943.8 | 1056.8 |
| 32.5° | 566.6 | 616.5 | 720.7 | 883.6 | 1006.9 |
| 35° | 485.8 | 537.2 | 650.2 | 823.4 | 955.5 |
| 37.5° | 408.0 | 459.4 | 579.8 | 761.8 | 904.2 |
| 40° | 327.3 | 383.1 | 510.8 | 700.1 | 852.8 |
| 42.5° | 248.1 | 305.3 | 441.8 | 638.5 | 797.0 |
| 45° | 179.1 | 231.9 | 374.3 | 578.3 | 741.2 |
| 47.5° | 138.0 | 167.3 | 305.3 | 516.7 | 686.9 |
| 50° | 120.4 | 129.2 | 242.2 | 459.4 | 634.1 |
| 52.5° | 104.2 | 110.1 | 182.0 | 406.6 | 576.8 |
| 55° | 91.0 | 95.4 | 133.6 | 349.3 | 518.1 |
| 57.5° | 76.3 | 82.2 | 105.7 | 293.6 | 457.9 |
| 60° | 64.6 | 67.5 | 93.9 | 242.2 | 397.8 |
| 62.5° | 52.8 | 55.8 | 83.7 | 190.8 | 330.3 |
| 65° | 42.6 | 45.5 | 73.4 | 140.9 | 265.7 |
| 67.5° | 35.2 | 36.7 | 61.6 | 99.8 | 204.0 |
| 70° | 29.4 | 30.8 | 51.4 | 69.0 | 143.8 |
| 72.5° | 25.0 | 29.4 | 41.1 | 49.9 | 91.0 |
| 75° | 20.5 | 27.9 | 33.8 | 35.2 | 44.0 |
| 77.5° | 17.6 | 26.4 | 27.9 | 27.9 | 25.0 |
| 80° | 14.7 | 22.0 | 23.5 | 22.0 | 20.5 |
| 82.5° | 11.7 | 17.6 | 19.1 | 19.1 | 16.1 |
| 85° | 8.8 | 14.7 | 17.6 | 16.1 | 11.7 |
| 87.5° | 5.9 | 13.2 | 14.7 | 13.2 | 8.8 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)