

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: P1007154

Luminaire Tested: S125RDR-B1270DB35-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1007154
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-B1270DB35-4F0-XX-W2A-F
Description: Define 5 Regressed Direct Recessed with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

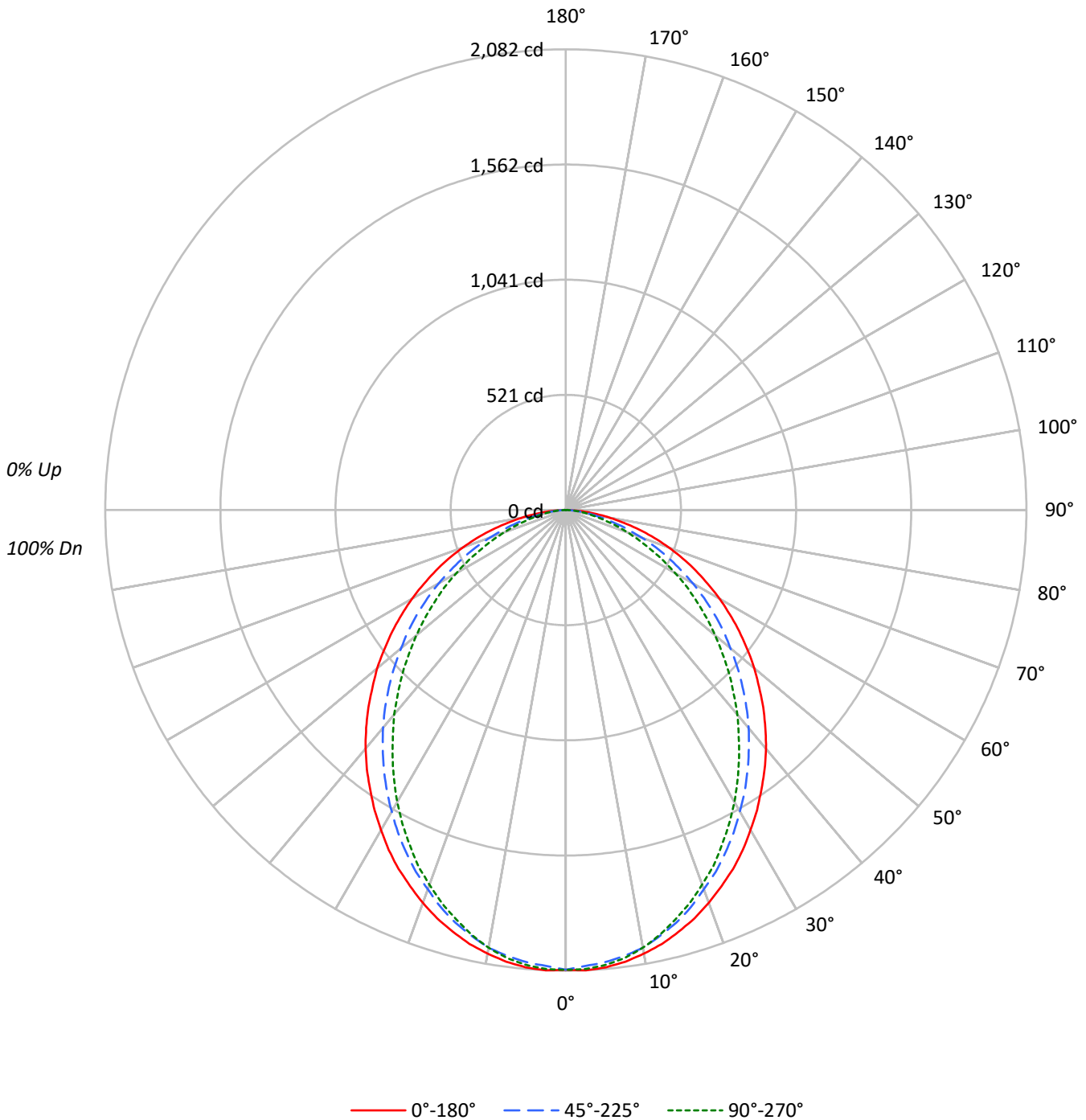
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4909.0 lumens
Efficiency: N/A
Efficacy: 80.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 61.3
Input Voltage (V):
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 | 0 |
| RCR | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 102 | 102 | 102 | 100 |
| 1 | 109 | 105 | 101 | 97 | 107 | 103 | 99 | 96 | 99 | 96 | 93 | 95 | 92 | 90 | 91 | 89 | 87 | 87 | 87 | 87 | 85 |
| 2 | 100 | 92 | 86 | 80 | 98 | 90 | 84 | 79 | 87 | 82 | 78 | 84 | 79 | 76 | 81 | 77 | 74 | 74 | 74 | 74 | 72 |
| 3 | 92 | 82 | 74 | 68 | 89 | 80 | 73 | 67 | 77 | 71 | 66 | 74 | 69 | 65 | 72 | 67 | 64 | 64 | 64 | 64 | 61 |
| 4 | 84 | 73 | 64 | 58 | 82 | 71 | 64 | 57 | 69 | 62 | 57 | 67 | 61 | 56 | 64 | 59 | 55 | 55 | 55 | 55 | 53 |
| 5 | 78 | 65 | 57 | 50 | 76 | 64 | 56 | 50 | 62 | 55 | 49 | 60 | 54 | 49 | 58 | 53 | 48 | 48 | 48 | 48 | 46 |
| 6 | 72 | 59 | 50 | 44 | 70 | 58 | 50 | 44 | 56 | 49 | 44 | 55 | 48 | 43 | 53 | 47 | 43 | 43 | 43 | 43 | 41 |
| 7 | 67 | 54 | 45 | 39 | 65 | 53 | 45 | 39 | 51 | 44 | 39 | 50 | 43 | 39 | 49 | 43 | 38 | 38 | 38 | 38 | 36 |
| 8 | 62 | 49 | 41 | 35 | 61 | 48 | 41 | 35 | 47 | 40 | 35 | 46 | 39 | 35 | 45 | 39 | 34 | 34 | 34 | 34 | 33 |
| 9 | 58 | 45 | 37 | 32 | 57 | 45 | 37 | 32 | 44 | 37 | 32 | 42 | 36 | 31 | 41 | 36 | 31 | 31 | 31 | 31 | 29 |
| 10 | 55 | 42 | 34 | 29 | 54 | 41 | 34 | 29 | 40 | 34 | 29 | 39 | 33 | 29 | 39 | 33 | 29 | 29 | 29 | 29 | 27 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 13313 | 13313 | 13313 |
| 5° | 13343 | 13192 | 13272 |
| 10° | 13242 | 13068 | 13068 |
| 15° | 13084 | 12803 | 12699 |
| 20° | 12882 | 12433 | 12284 |
| 25° | 12647 | 12070 | 11804 |
| 30° | 12353 | 11645 | 11273 |
| 35° | 12054 | 11207 | 10679 |
| 40° | 11774 | 10750 | 10094 |
| 45° | 11432 | 10238 | 9456 |
| 50° | 11090 | 9683 | 8790 |
| 55° | 10693 | 9151 | 8081 |
| 60° | 10296 | 8506 | 7319 |
| 65° | 9826 | 7756 | 6448 |
| 70° | 9290 | 6821 | 5556 |
| 75° | 8545 | 5751 | 4622 |
| 80° | 7527 | 4516 | 3878 |
| 85° | 6344 | 3690 | 3462 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11432 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 195.6 | 4.0 |
| 10°-20° | 546.5 | 11.1 |
| 20°-30° | 792.4 | 16.1 |
| 30°-40° | 902.8 | 18.4 |
| 40°-50° | 879.9 | 17.9 |
| 50°-60° | 740.5 | 15.1 |
| 60°-70° | 518.9 | 10.6 |
| 70°-80° | 266.0 | 5.4 |
| 80°-90° | 66.3 | 1.4 |
| 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° | 1534.4 | 31.3 |
| 0°-40° | 2437.2 | 49.6 |
| 0°-60° | 4057.7 | 82.7 |
| 0°-90° | 4909.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4909.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 2078 | 2078 | 2078 | 2078 | 2078 | |
| 5° | 2075 | 2068 | 2051 | 2067 | 2064 | 197 |
| 15° | 1973 | 1963 | 1930 | 1929 | 1914 | 556 |
| 25° | 1789 | 1766 | 1707 | 1687 | 1670 | 823 |
| 35° | 1541 | 1503 | 1433 | 1387 | 1365 | 965 |
| 45° | 1262 | 1216 | 1130 | 1067 | 1044 | 973 |
| 55° | 957 | 907 | 819 | 749 | 723 | 856 |
| 65° | 648 | 595 | 512 | 449 | 425 | 642 |
| 75° | 345 | 298 | 232 | 198 | 187 | 365 |
| 85° | 86 | 58 | 50 | 49 | 47 | 99 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P1007154

CATALOG NUMBER: S125RDR-B1270DB35-4F0-XX-W2A-F

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 2077.8 | 2077.8 | 2077.8 | 2077.8 | 2077.8 |
| 2.5° | 2082.5 | 2077.8 | 2062.1 | 2077.8 | 2076.2 |
| 5° | 2074.6 | 2068.3 | 2051.1 | 2066.8 | 2063.6 |
| 7.5° | 2058.9 | 2052.6 | 2032.2 | 2044.8 | 2041.7 |
| 10° | 2035.4 | 2030.7 | 2008.7 | 2013.4 | 2008.7 |
| 12.5° | 2008.7 | 2002.4 | 1971.0 | 1974.2 | 1966.3 |
| 15° | 1972.6 | 1963.2 | 1930.2 | 1928.7 | 1914.5 |
| 17.5° | 1935.0 | 1920.8 | 1881.6 | 1873.7 | 1862.8 |
| 20° | 1889.4 | 1873.7 | 1823.5 | 1815.7 | 1801.6 |
| 22.5° | 1839.2 | 1823.5 | 1770.2 | 1752.9 | 1741.9 |
| 25° | 1789.0 | 1765.5 | 1707.4 | 1687.0 | 1669.7 |
| 27.5° | 1732.5 | 1704.3 | 1643.1 | 1616.4 | 1599.1 |
| 30° | 1669.7 | 1639.9 | 1574.0 | 1537.9 | 1523.8 |
| 32.5° | 1608.5 | 1572.4 | 1505.0 | 1464.2 | 1445.3 |
| 35° | 1541.1 | 1503.4 | 1432.8 | 1387.3 | 1365.3 |
| 37.5° | 1476.7 | 1431.2 | 1359.0 | 1305.7 | 1283.7 |
| 40° | 1407.7 | 1360.6 | 1285.3 | 1225.6 | 1206.8 |
| 42.5° | 1335.5 | 1286.8 | 1208.4 | 1151.9 | 1122.1 |
| 45° | 1261.7 | 1216.2 | 1129.9 | 1067.1 | 1043.6 |
| 47.5° | 1184.8 | 1137.7 | 1051.4 | 987.1 | 960.4 |
| 50° | 1112.6 | 1060.8 | 971.4 | 905.5 | 881.9 |
| 52.5° | 1034.2 | 980.8 | 897.6 | 825.5 | 801.9 |
| 55° | 957.3 | 907.1 | 819.2 | 748.6 | 723.4 |
| 57.5° | 878.8 | 825.5 | 740.7 | 671.7 | 649.7 |
| 60° | 803.5 | 748.6 | 663.8 | 594.8 | 571.2 |
| 62.5° | 723.4 | 671.7 | 585.3 | 522.6 | 499.0 |
| 65° | 648.1 | 594.8 | 511.6 | 448.8 | 425.3 |
| 67.5° | 572.8 | 519.4 | 439.4 | 379.8 | 360.9 |
| 70° | 495.9 | 442.5 | 364.1 | 315.4 | 296.6 |
| 72.5° | 420.6 | 368.8 | 296.6 | 252.7 | 241.7 |
| 75° | 345.2 | 298.2 | 232.3 | 197.7 | 186.7 |
| 77.5° | 268.4 | 230.7 | 175.8 | 149.1 | 139.7 |
| 80° | 204.0 | 166.3 | 122.4 | 108.3 | 105.1 |
| 82.5° | 141.2 | 108.3 | 81.6 | 76.9 | 75.3 |
| 85° | 86.3 | 58.1 | 50.2 | 48.6 | 47.1 |
| 87.5° | 36.1 | 25.1 | 23.5 | 23.5 | 22.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)