

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: P1060353

Luminaire Tested: S124RDR-S1195D930-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060353
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-73)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S1195D930-X4F0-XX-UDD-WVL-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

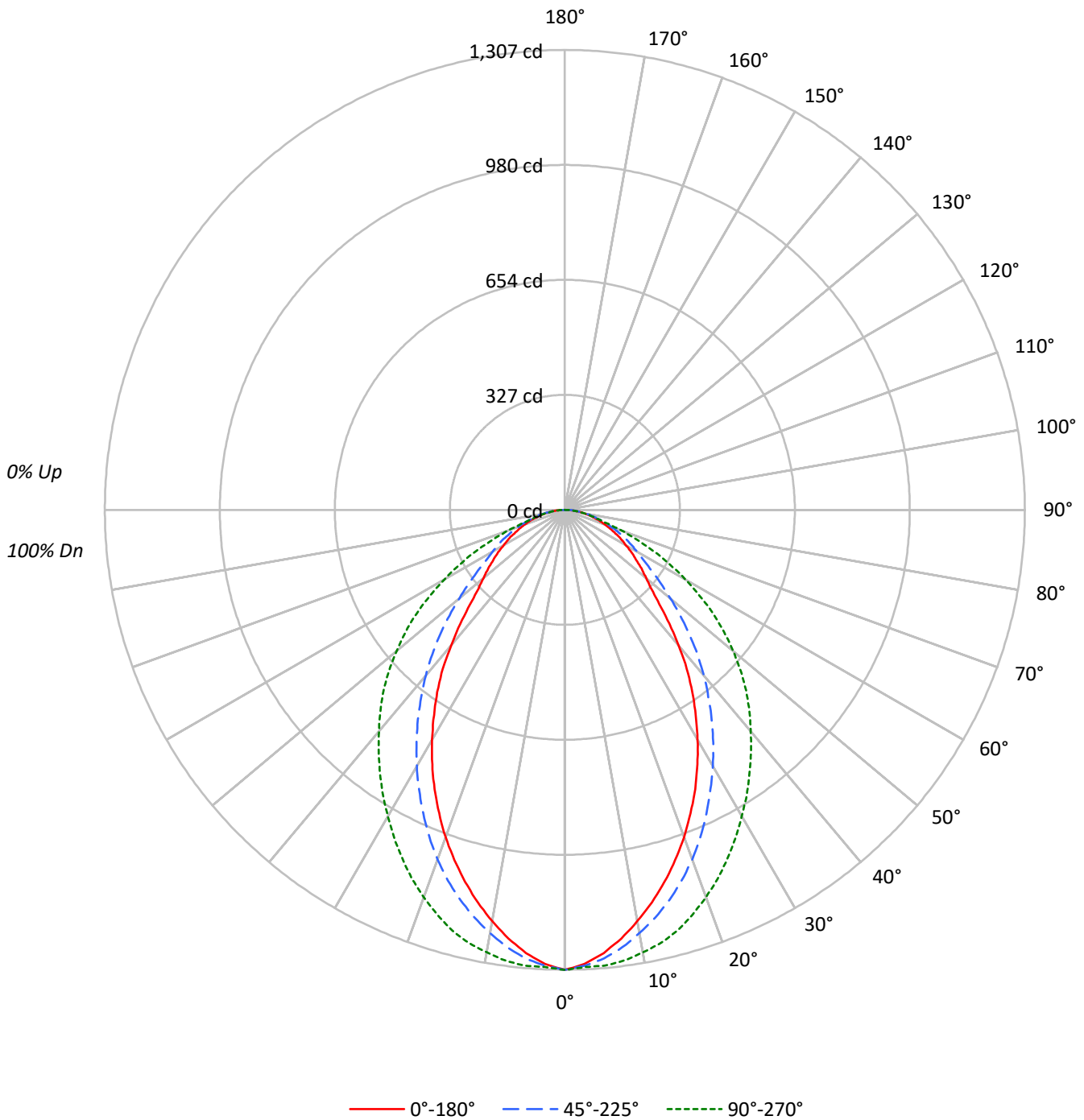
Lumens per Lamp: N/A
Luminaire Lumens: 2398.6 lumens
Efficiency: N/A
Efficacy: 57.4 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.11
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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 | 110 | 106 | 102 | 99 | 108 | 104 | 100 | 97 | 100 | 97 | 94 | 96 | 93 | 91 | 92 | 90 | 89 | 87 | | | 87 | |
| 2 | 101 | 94 | 88 | 83 | 99 | 92 | 87 | 82 | 89 | 84 | 80 | 86 | 82 | 78 | 83 | 80 | 77 | 75 | | | 75 | |
| 3 | 94 | 84 | 77 | 71 | 91 | 83 | 76 | 70 | 80 | 74 | 69 | 77 | 72 | 68 | 75 | 70 | 67 | 65 | | | 65 | |
| 4 | 86 | 76 | 68 | 62 | 84 | 74 | 67 | 61 | 72 | 66 | 60 | 70 | 64 | 60 | 68 | 63 | 59 | 57 | | | 57 | |
| 5 | 80 | 68 | 60 | 54 | 78 | 67 | 60 | 54 | 65 | 59 | 53 | 63 | 58 | 53 | 62 | 56 | 52 | 50 | | | 50 | |
| 6 | 75 | 62 | 54 | 48 | 73 | 61 | 54 | 48 | 60 | 53 | 48 | 58 | 52 | 47 | 57 | 51 | 47 | 45 | | | 45 | |
| 7 | 70 | 57 | 49 | 43 | 68 | 56 | 49 | 43 | 55 | 48 | 43 | 53 | 47 | 43 | 52 | 47 | 42 | 40 | | | 40 | |
| 8 | 65 | 53 | 45 | 39 | 64 | 52 | 44 | 39 | 51 | 44 | 39 | 49 | 43 | 39 | 48 | 43 | 38 | 37 | | | 37 | |
| 9 | 61 | 49 | 41 | 36 | 60 | 48 | 41 | 36 | 47 | 40 | 35 | 46 | 40 | 35 | 45 | 39 | 35 | 33 | | | 33 | |
| 10 | 58 | 45 | 38 | 33 | 56 | 45 | 38 | 33 | 44 | 37 | 33 | 43 | 37 | 32 | 42 | 36 | 32 | 31 | | | 31 | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 11256 | 11256 | 11256 |
| 5° | 10930 | 11059 | 11239 |
| 10° | 10378 | 10682 | 11167 |
| 15° | 9756 | 10230 | 11035 |
| 20° | 9074 | 9689 | 10738 |
| 25° | 8320 | 9045 | 10387 |
| 30° | 7499 | 8362 | 9996 |
| 35° | 6640 | 7649 | 9619 |
| 40° | 5644 | 6905 | 9232 |
| 45° | 4620 | 6100 | 8875 |
| 50° | 4044 | 5238 | 8353 |
| 55° | 3717 | 4516 | 7729 |
| 60° | 3446 | 4064 | 6813 |
| 65° | 3230 | 3818 | 5703 |
| 70° | 3029 | 3495 | 4280 |
| 75° | 2848 | 3194 | 3117 |
| 80° | 2638 | 2926 | 2638 |
| 85° | 2401 | 2855 | 2282 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8875 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 120.8 | 5.0 |
| 10°-20° | 325.0 | 13.6 |
| 20°-30° | 444.3 | 18.5 |
| 30°-40° | 466.9 | 19.5 |
| 40°-50° | 405.2 | 16.9 |
| 50°-60° | 305.7 | 12.7 |
| 60°-70° | 198.1 | 8.3 |
| 70°-80° | 101.7 | 4.2 |
| 80°-90° | 30.8 | 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° | 890.1 | 37.1 |
| 0°-40° | 1357.1 | 56.6 |
| 0°-60° | 2068.0 | 86.2 |
| 0°-90° | 2398.6 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2398.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1307 | 1307 | 1307 | 1307 | 1307 | |
| 5° | 1264 | 1282 | 1279 | 1290 | 1300 | 118 |
| 15° | 1094 | 1121 | 1148 | 1200 | 1238 | 307 |
| 25° | 876 | 907 | 952 | 1025 | 1093 | 401 |
| 35° | 632 | 666 | 728 | 825 | 915 | 393 |
| 45° | 379 | 415 | 501 | 626 | 729 | 299 |
| 55° | 248 | 254 | 301 | 427 | 515 | 223 |
| 65° | 158 | 162 | 187 | 227 | 280 | 158 |
| 75° | 86 | 96 | 96 | 97 | 94 | 91 |
| 85° | 24 | 30 | 29 | 28 | 23 | 28 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P1060353

CATALOG NUMBER: S124RDR-S1195D930-X4F0-XX-UDD-WVL-W

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1307.2 | 1307.2 | 1307.2 | 1307.2 | 1307.2 |
| 2.5° | 1292.1 | 1308.3 | 1296.8 | 1299.1 | 1300.2 |
| 5° | 1264.4 | 1281.7 | 1279.4 | 1289.8 | 1300.2 |
| 7.5° | 1228.5 | 1249.3 | 1254.0 | 1274.8 | 1292.1 |
| 10° | 1186.9 | 1210.0 | 1221.6 | 1255.1 | 1277.1 |
| 12.5° | 1142.9 | 1166.1 | 1186.9 | 1229.7 | 1260.9 |
| 15° | 1094.3 | 1120.9 | 1147.5 | 1199.6 | 1237.8 |
| 17.5° | 1043.4 | 1071.2 | 1104.7 | 1161.4 | 1206.5 |
| 20° | 990.2 | 1018.0 | 1057.3 | 1118.6 | 1171.8 |
| 22.5° | 933.5 | 964.8 | 1006.4 | 1072.4 | 1134.8 |
| 25° | 875.7 | 906.9 | 952.0 | 1024.9 | 1093.2 |
| 27.5° | 815.5 | 847.9 | 896.5 | 977.5 | 1050.4 |
| 30° | 754.2 | 788.9 | 841.0 | 926.6 | 1005.3 |
| 32.5° | 691.8 | 728.8 | 784.3 | 875.7 | 961.3 |
| 35° | 631.6 | 666.3 | 727.6 | 824.8 | 915.0 |
| 37.5° | 569.1 | 603.8 | 669.8 | 775.1 | 868.8 |
| 40° | 502.1 | 540.2 | 614.3 | 723.0 | 821.3 |
| 42.5° | 439.6 | 477.8 | 557.6 | 673.3 | 776.2 |
| 45° | 379.4 | 415.3 | 500.9 | 625.8 | 728.8 |
| 47.5° | 333.2 | 358.6 | 444.2 | 579.6 | 677.9 |
| 50° | 301.9 | 313.5 | 391.0 | 528.7 | 623.5 |
| 52.5° | 274.2 | 283.4 | 342.4 | 477.8 | 570.3 |
| 55° | 247.6 | 254.5 | 300.8 | 426.9 | 514.8 |
| 57.5° | 224.4 | 227.9 | 263.8 | 376.0 | 454.6 |
| 60° | 200.1 | 204.8 | 236.0 | 323.9 | 395.6 |
| 62.5° | 180.5 | 182.8 | 211.7 | 274.2 | 336.6 |
| 65° | 158.5 | 162.0 | 187.4 | 226.7 | 279.9 |
| 67.5° | 138.8 | 144.6 | 162.0 | 185.1 | 220.9 |
| 70° | 120.3 | 128.4 | 138.8 | 150.4 | 170.0 |
| 72.5° | 103.0 | 112.2 | 118.0 | 122.6 | 119.2 |
| 75° | 85.6 | 96.0 | 96.0 | 97.2 | 93.7 |
| 77.5° | 69.4 | 78.7 | 77.5 | 76.3 | 71.7 |
| 80° | 53.2 | 61.3 | 59.0 | 57.8 | 53.2 |
| 82.5° | 39.3 | 45.1 | 42.8 | 41.6 | 35.9 |
| 85° | 24.3 | 30.1 | 28.9 | 27.8 | 23.1 |
| 87.5° | 11.6 | 17.4 | 16.2 | 15.0 | 10.4 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)