

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: P1060540

Luminaire Tested: S124RDR-S575D950-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060540
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-37)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S575D950-X4F0-XX-UDD-WVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

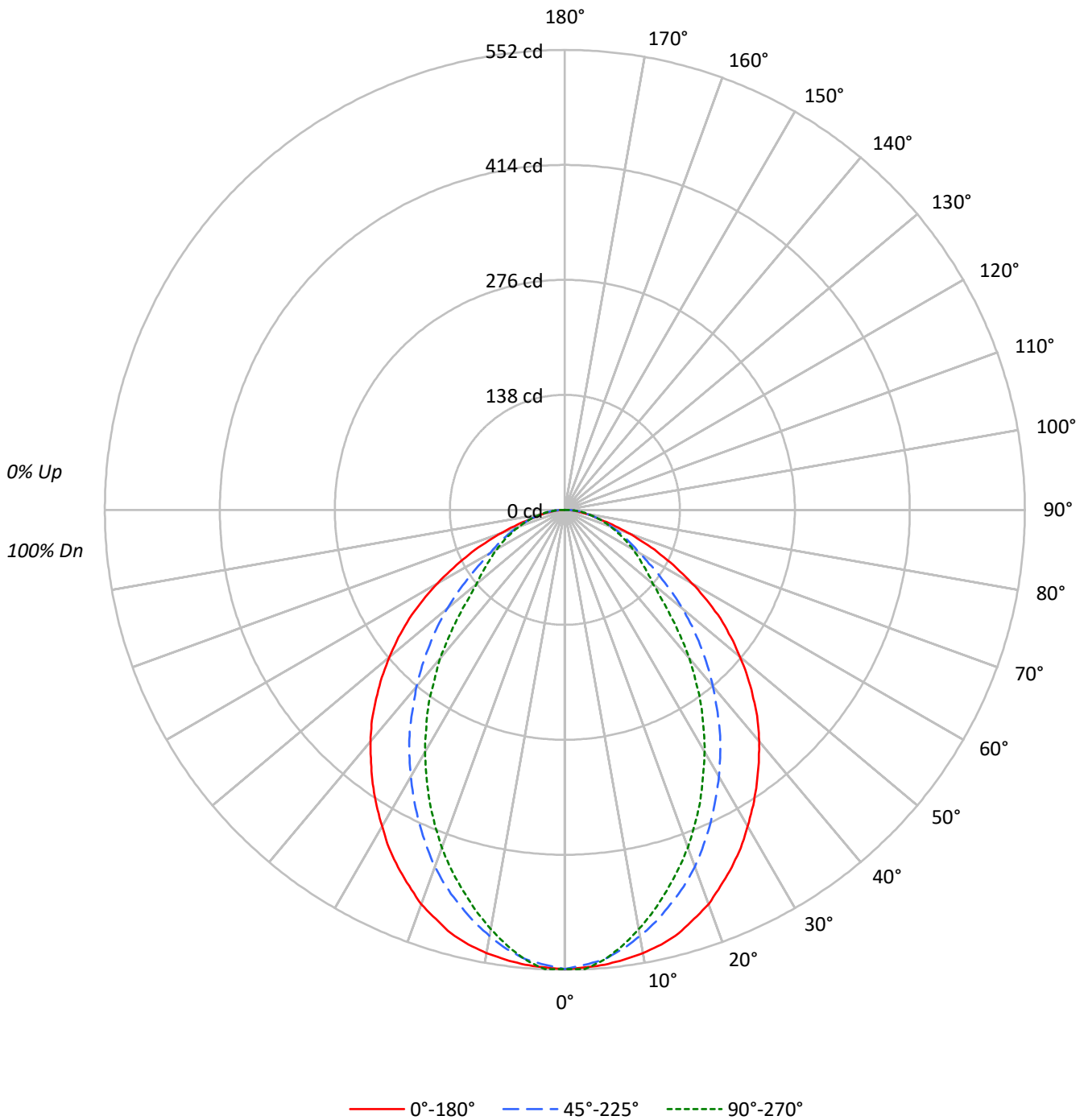
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1062.8 lumens
Efficiency: N/A
Efficacy: 54.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.96 / 1.12
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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





TEST NUMBER: P1060540

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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 | | | | |
| 1 | 110 | 106 | 102 | 99 | 107 | 104 | 100 | 97 | 99 | 97 | 94 | 96 | 93 | 91 | 92 | 90 | 88 | 86 | | | | |
| 2 | 101 | 94 | 88 | 83 | 99 | 92 | 86 | 82 | 89 | 84 | 80 | 85 | 82 | 78 | 82 | 79 | 76 | 74 | | | | |
| 3 | 93 | 84 | 76 | 71 | 91 | 82 | 75 | 70 | 79 | 74 | 69 | 77 | 72 | 68 | 74 | 70 | 66 | 64 | | | | |
| 4 | 86 | 75 | 67 | 61 | 84 | 74 | 67 | 61 | 72 | 65 | 60 | 69 | 64 | 59 | 67 | 62 | 58 | 56 | | | | |
| 5 | 80 | 68 | 60 | 54 | 78 | 67 | 59 | 53 | 65 | 58 | 53 | 63 | 57 | 52 | 61 | 56 | 52 | 50 | | | | |
| 6 | 74 | 62 | 54 | 48 | 72 | 61 | 53 | 47 | 59 | 52 | 47 | 58 | 51 | 47 | 56 | 51 | 46 | 44 | | | | |
| 7 | 69 | 57 | 48 | 43 | 68 | 56 | 48 | 43 | 54 | 47 | 42 | 53 | 47 | 42 | 52 | 46 | 42 | 40 | | | | |
| 8 | 65 | 52 | 44 | 39 | 63 | 51 | 44 | 39 | 50 | 43 | 38 | 49 | 43 | 38 | 48 | 42 | 38 | 36 | | | | |
| 9 | 61 | 48 | 40 | 35 | 59 | 48 | 40 | 35 | 46 | 40 | 35 | 45 | 39 | 35 | 44 | 39 | 35 | 33 | | | | |
| 10 | 57 | 45 | 37 | 32 | 56 | 44 | 37 | 32 | 43 | 37 | 32 | 42 | 36 | 32 | 41 | 36 | 32 | 30 | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 4746 | 4746 | 4746 |
| 5° | 4737 | 4681 | 4686 |
| 10° | 4723 | 4542 | 4468 |
| 15° | 4695 | 4371 | 4215 |
| 20° | 4618 | 4179 | 3953 |
| 25° | 4499 | 3933 | 3655 |
| 30° | 4360 | 3677 | 3336 |
| 35° | 4222 | 3411 | 2996 |
| 40° | 4077 | 3109 | 2614 |
| 45° | 3897 | 2792 | 2185 |
| 50° | 3679 | 2464 | 1849 |
| 55° | 3423 | 2091 | 1711 |
| 60° | 3035 | 1774 | 1617 |
| 65° | 2586 | 1636 | 1530 |
| 70° | 2022 | 1516 | 1450 |
| 75° | 1381 | 1401 | 1401 |
| 80° | 1190 | 1319 | 1349 |
| 85° | 1028 | 1284 | 1403 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3897 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 51.3 | 4.8 |
| 10°-20° | 139.3 | 13.1 |
| 20°-30° | 193.3 | 18.2 |
| 30°-40° | 207.3 | 19.5 |
| 40°-50° | 183.6 | 17.3 |
| 50°-60° | 138.4 | 13.0 |
| 60°-70° | 89.6 | 8.4 |
| 70°-80° | 46.0 | 4.3 |
| 80°-90° | 14.1 | 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° | 383.9 | 36.1 |
| 0°-40° | 591.1 | 55.6 |
| 0°-60° | 913.1 | 85.9 |
| 0°-90° | 1062.8 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1062.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 551 | 551 | 551 | 551 | 551 | |
| 5° | 548 | 549 | 542 | 542 | 542 | 52 |
| 15° | 527 | 515 | 490 | 478 | 473 | 148 |
| 25° | 474 | 448 | 414 | 392 | 385 | 218 |
| 35° | 402 | 365 | 324 | 295 | 285 | 251 |
| 45° | 320 | 278 | 229 | 194 | 179 | 247 |
| 55° | 228 | 190 | 139 | 117 | 114 | 203 |
| 65° | 127 | 102 | 80 | 76 | 75 | 126 |
| 75° | 42 | 43 | 42 | 42 | 42 | 49 |
| 85° | 10 | 11 | 13 | 14 | 14 | 12 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P1060540

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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 551.2 | 551.2 | 551.2 | 551.2 | 551.2 |
| 2.5° | 549.9 | 551.8 | 546.7 | 550.5 | 551.8 |
| 5° | 548.0 | 548.6 | 541.5 | 542.1 | 542.1 |
| 7.5° | 544.7 | 543.4 | 531.8 | 528.5 | 527.9 |
| 10° | 540.2 | 536.3 | 519.5 | 513.0 | 511.0 |
| 12.5° | 534.3 | 527.2 | 505.8 | 496.8 | 492.9 |
| 15° | 526.6 | 514.9 | 490.3 | 478.0 | 472.8 |
| 17.5° | 514.9 | 500.0 | 474.1 | 458.6 | 452.7 |
| 20° | 503.9 | 483.8 | 456.0 | 436.5 | 431.4 |
| 22.5° | 488.4 | 467.0 | 435.3 | 414.5 | 408.0 |
| 25° | 473.5 | 448.2 | 413.9 | 391.9 | 384.7 |
| 27.5° | 457.3 | 428.8 | 391.9 | 368.5 | 359.5 |
| 30° | 438.5 | 408.0 | 369.8 | 345.2 | 335.5 |
| 32.5° | 420.4 | 388.0 | 347.2 | 320.0 | 309.6 |
| 35° | 401.6 | 365.3 | 324.5 | 295.3 | 285.0 |
| 37.5° | 382.1 | 343.9 | 299.2 | 270.7 | 257.1 |
| 40° | 362.7 | 322.6 | 276.6 | 244.2 | 232.5 |
| 42.5° | 342.6 | 300.5 | 253.2 | 219.6 | 204.7 |
| 45° | 320.0 | 278.5 | 229.3 | 193.7 | 179.4 |
| 47.5° | 297.9 | 257.1 | 207.3 | 168.4 | 155.4 |
| 50° | 274.6 | 234.5 | 183.9 | 146.4 | 138.0 |
| 52.5° | 251.3 | 211.1 | 161.3 | 129.5 | 125.7 |
| 55° | 228.0 | 189.8 | 139.3 | 117.2 | 114.0 |
| 57.5° | 202.1 | 167.8 | 119.8 | 106.2 | 103.6 |
| 60° | 176.2 | 143.8 | 103.0 | 95.9 | 93.9 |
| 62.5° | 150.9 | 123.1 | 91.3 | 85.5 | 84.2 |
| 65° | 126.9 | 102.3 | 80.3 | 75.8 | 75.1 |
| 67.5° | 103.6 | 84.2 | 70.0 | 67.4 | 66.1 |
| 70° | 80.3 | 67.4 | 60.2 | 58.9 | 57.6 |
| 72.5° | 59.6 | 54.4 | 51.2 | 50.5 | 49.9 |
| 75° | 41.5 | 43.4 | 42.1 | 42.1 | 42.1 |
| 77.5° | 33.0 | 33.7 | 34.3 | 35.0 | 34.3 |
| 80° | 24.0 | 25.9 | 26.6 | 27.9 | 27.2 |
| 82.5° | 16.8 | 18.1 | 20.1 | 20.7 | 21.4 |
| 85° | 10.4 | 11.0 | 13.0 | 14.2 | 14.2 |
| 87.5° | 4.5 | 5.2 | 6.5 | 7.8 | 8.4 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)