

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: P1058034

Luminaire Tested: S122RDR-S675D830-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058034
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-57)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S675D830-X4F0-XX-UDD-BVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

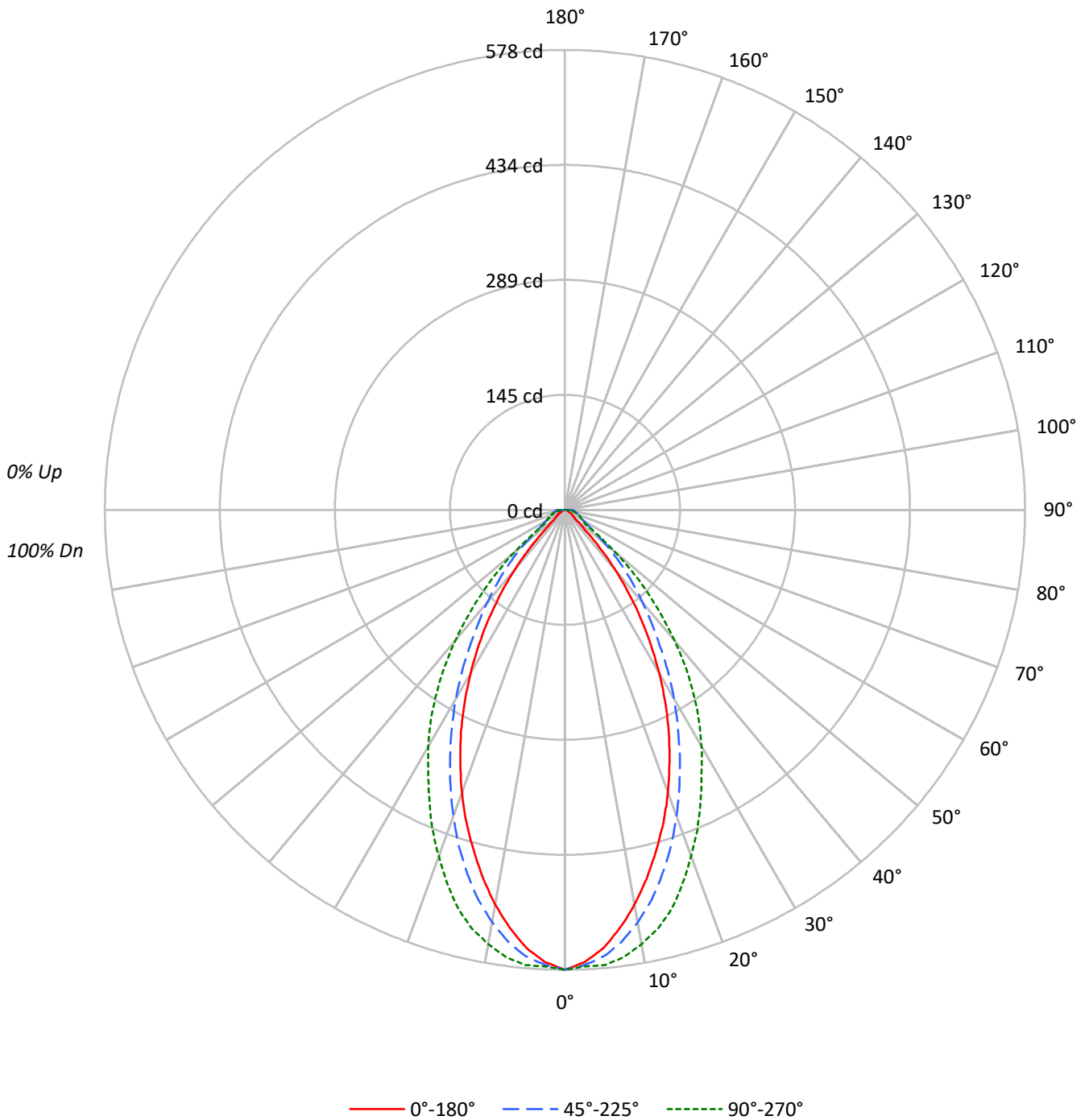
Lumens per Lamp: N/A
Luminaire Lumens: 629.1 lumens
Efficiency: N/A
Efficacy: 24.4 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
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 | 0 |
| RCR | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1 | 112 | 108 | 105 | 102 | 109 | 106 | 103 | 101 | 102 | 100 | 97 | 98 | 96 | 95 | 95 | 93 | 92 | 90 |
| 2 | 105 | 99 | 94 | 90 | 102 | 97 | 92 | 89 | 94 | 90 | 87 | 91 | 87 | 85 | 88 | 85 | 83 | 81 |
| 3 | 98 | 91 | 85 | 80 | 96 | 89 | 84 | 79 | 86 | 82 | 78 | 84 | 80 | 76 | 81 | 78 | 75 | 74 |
| 4 | 92 | 83 | 77 | 72 | 90 | 82 | 76 | 71 | 80 | 75 | 70 | 78 | 73 | 70 | 76 | 72 | 69 | 67 |
| 5 | 87 | 77 | 70 | 65 | 85 | 76 | 70 | 65 | 74 | 69 | 64 | 72 | 67 | 64 | 71 | 66 | 63 | 61 |
| 6 | 82 | 72 | 65 | 60 | 80 | 71 | 64 | 59 | 69 | 63 | 59 | 68 | 62 | 58 | 66 | 62 | 58 | 56 |
| 7 | 77 | 67 | 60 | 55 | 76 | 66 | 59 | 55 | 64 | 59 | 54 | 63 | 58 | 54 | 62 | 57 | 54 | 52 |
| 8 | 73 | 62 | 55 | 51 | 72 | 62 | 55 | 51 | 60 | 54 | 50 | 59 | 54 | 50 | 58 | 53 | 50 | 48 |
| 9 | 69 | 58 | 52 | 47 | 68 | 58 | 51 | 47 | 57 | 51 | 47 | 56 | 50 | 47 | 55 | 50 | 46 | 45 |
| 10 | 66 | 55 | 48 | 44 | 64 | 54 | 48 | 44 | 53 | 48 | 44 | 53 | 47 | 43 | 52 | 47 | 43 | 42 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 10666 | 10666 | 10666 |
| 5° | 10243 | 10432 | 10638 |
| 10° | 9444 | 9859 | 10380 |
| 15° | 8463 | 9045 | 9911 |
| 20° | 7429 | 8045 | 9098 |
| 25° | 6289 | 6949 | 8209 |
| 30° | 5046 | 5834 | 7310 |
| 35° | 3728 | 4667 | 6332 |
| 40° | 2339 | 3654 | 5145 |
| 45° | 916 | 2750 | 3813 |
| 50° | 451 | 1857 | 2337 |
| 55° | 357 | 1219 | 1042 |
| 60° | 273 | 989 | 956 |
| 65° | 201 | 930 | 930 |
| 70° | 248 | 950 | 950 |
| 75° | 264 | 1055 | 991 |
| 80° | 393 | 1371 | 1084 |
| 85° | 783 | 2350 | 1567 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 87.5°
 Luminance: 4315 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 52.8 | 8.4 |
| 10°-20° | 133.5 | 21.2 |
| 20°-30° | 159.7 | 25.4 |
| 30°-40° | 134.4 | 21.4 |
| 40°-50° | 76.5 | 12.2 |
| 50°-60° | 30.2 | 4.8 |
| 60°-70° | 19.0 | 3.0 |
| 70°-80° | 14.1 | 2.2 |
| 80°-90° | 9.0 | 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° | 345.9 | 55.0 |
| 0°-40° | 480.3 | 76.4 |
| 0°-60° | 587.0 | 93.3 |
| 0°-90° | 629.1 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 629.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 578 | 578 | 578 | 578 | 578 | |
| 5° | 553 | 565 | 563 | 570 | 574 | 51 |
| 15° | 443 | 459 | 474 | 501 | 519 | 124 |
| 25° | 309 | 323 | 341 | 376 | 403 | 141 |
| 35° | 166 | 180 | 207 | 252 | 281 | 103 |
| 45° | 35 | 62 | 105 | 132 | 146 | 33 |
| 55° | 11 | 24 | 38 | 39 | 32 | 10 |
| 65° | 5 | 21 | 21 | 20 | 21 | 5 |
| 75° | 4 | 15 | 15 | 14 | 14 | 4 |
| 85° | 4 | 10 | 11 | 10 | 7 | 3 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CATALOG NUMBER: S122RDR-S675D830-X4F0-XX-UDD-BVL-W

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 578.0 | 578.0 | 578.0 | 578.0 | 578.0 |
| 2.5° | 568.8 | 578.9 | 572.5 | 573.4 | 574.3 |
| 5° | 553.0 | 565.1 | 563.2 | 569.7 | 574.3 |
| 7.5° | 529.9 | 542.9 | 547.5 | 558.6 | 566.9 |
| 10° | 504.0 | 518.8 | 526.2 | 543.8 | 554.0 |
| 12.5° | 474.4 | 491.1 | 502.2 | 524.4 | 539.2 |
| 15° | 443.0 | 458.7 | 473.5 | 501.3 | 518.8 |
| 17.5° | 411.5 | 427.3 | 443.0 | 473.5 | 492.0 |
| 20° | 378.3 | 393.1 | 409.7 | 442.1 | 463.3 |
| 22.5° | 343.1 | 358.8 | 375.5 | 408.8 | 434.7 |
| 25° | 308.9 | 322.8 | 341.3 | 376.4 | 403.2 |
| 27.5° | 272.8 | 286.7 | 307.0 | 343.1 | 371.8 |
| 30° | 236.8 | 250.6 | 273.8 | 310.7 | 343.1 |
| 32.5° | 200.7 | 215.5 | 240.5 | 281.1 | 313.5 |
| 35° | 165.5 | 180.3 | 207.2 | 251.6 | 281.1 |
| 37.5° | 131.3 | 148.0 | 177.6 | 221.0 | 248.8 |
| 40° | 97.1 | 116.5 | 151.7 | 190.5 | 213.6 |
| 42.5° | 64.7 | 88.8 | 127.6 | 160.0 | 179.4 |
| 45° | 35.1 | 62.0 | 105.4 | 132.3 | 146.1 |
| 47.5° | 19.4 | 39.8 | 84.2 | 105.4 | 113.8 |
| 50° | 15.7 | 27.7 | 64.7 | 80.5 | 81.4 |
| 52.5° | 12.9 | 25.0 | 48.1 | 57.3 | 52.7 |
| 55° | 11.1 | 24.0 | 37.9 | 38.8 | 32.4 |
| 57.5° | 9.2 | 23.1 | 31.4 | 27.7 | 27.7 |
| 60° | 7.4 | 23.1 | 26.8 | 25.0 | 25.9 |
| 62.5° | 5.5 | 23.1 | 24.0 | 22.2 | 23.1 |
| 65° | 4.6 | 21.3 | 21.3 | 20.3 | 21.3 |
| 67.5° | 4.6 | 19.4 | 19.4 | 18.5 | 19.4 |
| 70° | 4.6 | 18.5 | 17.6 | 17.6 | 17.6 |
| 72.5° | 3.7 | 16.6 | 16.6 | 15.7 | 15.7 |
| 75° | 3.7 | 14.8 | 14.8 | 13.9 | 13.9 |
| 77.5° | 3.7 | 13.9 | 13.9 | 12.9 | 12.0 |
| 80° | 3.7 | 12.0 | 12.9 | 12.0 | 10.2 |
| 82.5° | 3.7 | 11.1 | 12.0 | 11.1 | 8.3 |
| 85° | 3.7 | 10.2 | 11.1 | 10.2 | 7.4 |
| 87.5° | 2.8 | 10.2 | 10.2 | 8.3 | 5.5 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)