

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: P1175367

Luminaire Tested: S125RDR-S375D840-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

Test Information

Test Method: LM-79-2019
Report Number: P1175367
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-82)
Test Lab: INNOVATION CENTER
Issue Date: 8/18/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-S375D840-X4F0-XX-UDD-WVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

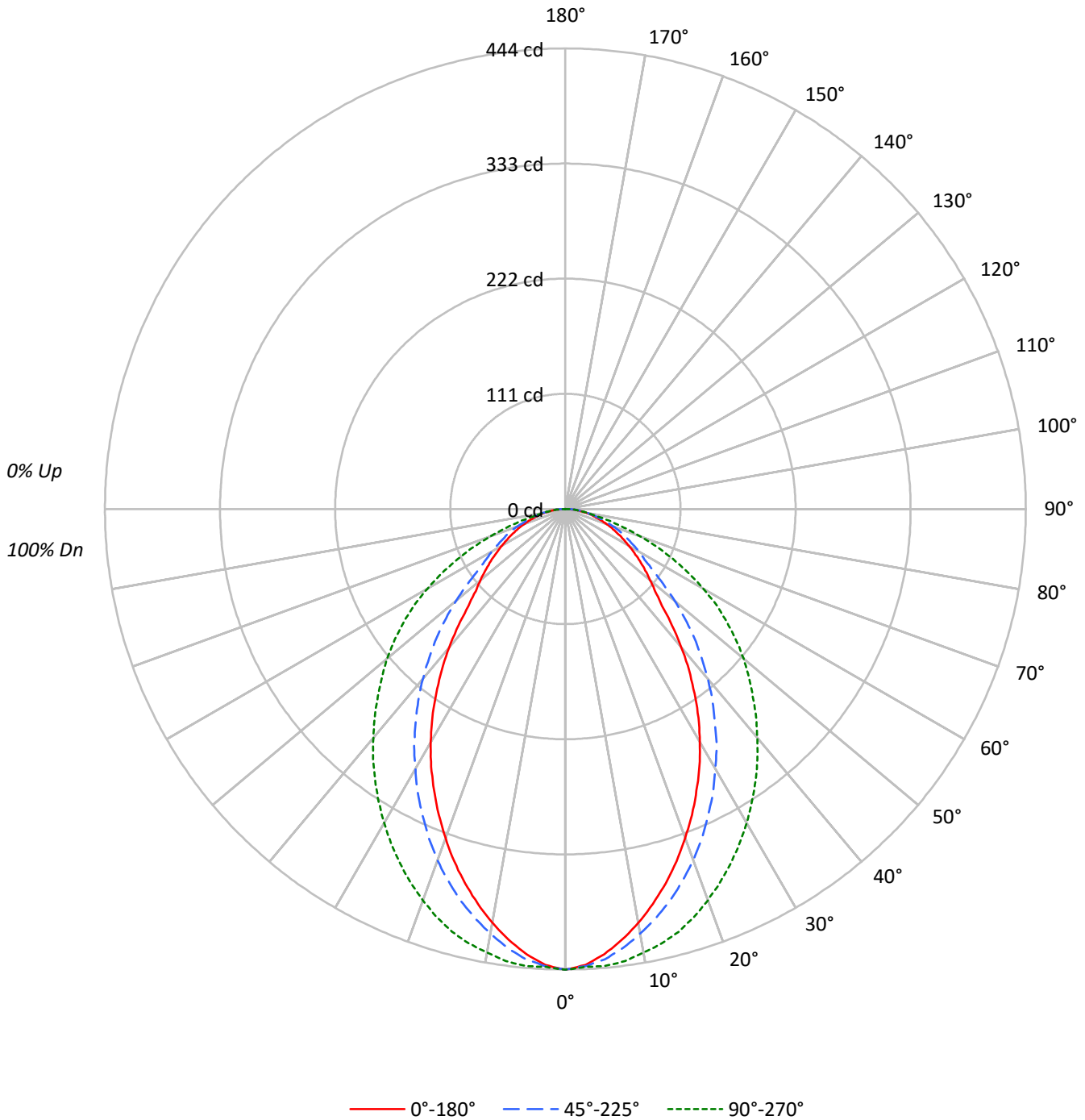
Lumens per Lamp: N/A
Luminaire Lumens: 836.7 lumens
Efficiency: N/A
Efficacy: 66.9 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
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

TEST NUMBER: P1175367

CATALOG NUMBER: S125RDR-S375D840-X4F0-XX-UDD-WVL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1175367

CATALOG NUMBER: S125RDR-S375D840-X4F0-XX-UDD-WVL-W

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|---|--|--|--|--|--|--|----|--|--|--|--|--|--|--|--|---|
| RF | 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 | 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 | 81 | 78 | 82 | 79 | 76 | 74 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 93 | 84 | 76 | 71 | 91 | 82 | 75 | 70 | 79 | 73 | 69 | 77 | 72 | 68 | 74 | 70 | 66 | 64 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 86 | 75 | 67 | 61 | 84 | 74 | 66 | 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° | 3058 | 3058 | 3058 |
| 5° | 2978 | 3012 | 3056 |
| 10° | 2834 | 2907 | 3036 |
| 15° | 2663 | 2784 | 3007 |
| 20° | 2475 | 2641 | 2942 |
| 25° | 2275 | 2474 | 2864 |
| 30° | 2062 | 2299 | 2779 |
| 35° | 1826 | 2114 | 2687 |
| 40° | 1566 | 1922 | 2589 |
| 45° | 1285 | 1711 | 2489 |
| 50° | 1143 | 1470 | 2403 |
| 55° | 1054 | 1230 | 2281 |
| 60° | 971 | 1121 | 2112 |
| 65° | 903 | 1056 | 1867 |
| 70° | 841 | 986 | 1526 |
| 75° | 793 | 912 | 1144 |
| 80° | 749 | 837 | 821 |
| 85° | 687 | 837 | 687 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2489 cd/sqm



TEST NUMBER: P1175367

CATALOG NUMBER: S125RDR-S375D840-X4F0-XX-UDD-WVL-W

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 41.1 | 4.9 |
| 10°-20° | 110.8 | 13.2 |
| 20°-30° | 152.5 | 18.2 |
| 30°-40° | 161.7 | 19.3 |
| 40°-50° | 141.5 | 16.9 |
| 50°-60° | 108.6 | 13.0 |
| 60°-70° | 72.3 | 8.6 |
| 70°-80° | 37.1 | 4.4 |
| 80°-90° | 11.0 | 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° | 304.4 | 36.4 |
| 0°-40° | 466.1 | 55.7 |
| 0°-60° | 716.3 | 85.6 |
| 0°-90° | 836.7 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 836.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 444 | 444 | 444 | 444 | 444 | |
| 5° | 431 | 437 | 436 | 439 | 442 | 40 |
| 15° | 374 | 382 | 391 | 409 | 422 | 105 |
| 25° | 299 | 310 | 326 | 353 | 377 | 137 |
| 35° | 217 | 227 | 252 | 288 | 320 | 135 |
| 45° | 132 | 143 | 176 | 219 | 256 | 104 |
| 55° | 88 | 90 | 102 | 152 | 190 | 79 |
| 65° | 55 | 56 | 65 | 85 | 115 | 55 |
| 75° | 30 | 32 | 34 | 36 | 43 | 32 |
| 85° | 9 | 10 | 11 | 10 | 9 | 10 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P1175367

CATALOG NUMBER: S125RDR-S375D840-X4F0-XX-UDD-WVL-W

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 444.1 | 444.1 | 444.1 | 444.1 | 444.1 |
| 2.5° | 440.0 | 444.5 | 441.1 | 441.5 | 441.9 |
| 5° | 430.9 | 436.6 | 435.8 | 438.8 | 442.2 |
| 7.5° | 418.9 | 424.9 | 426.8 | 434.3 | 439.6 |
| 10° | 405.3 | 412.1 | 415.8 | 427.2 | 434.3 |
| 12.5° | 389.8 | 397.8 | 403.8 | 418.5 | 429.0 |
| 15° | 373.6 | 382.3 | 390.6 | 409.1 | 421.9 |
| 17.5° | 356.3 | 365.0 | 375.9 | 397.0 | 412.5 |
| 20° | 337.8 | 347.2 | 360.4 | 383.0 | 401.5 |
| 22.5° | 319.0 | 328.8 | 343.8 | 368.7 | 389.8 |
| 25° | 299.4 | 309.5 | 325.7 | 353.3 | 377.0 |
| 27.5° | 280.1 | 289.5 | 308.4 | 337.8 | 363.8 |
| 30° | 259.4 | 269.2 | 289.2 | 321.6 | 349.5 |
| 32.5° | 238.7 | 248.5 | 271.5 | 305.4 | 334.8 |
| 35° | 217.2 | 227.3 | 251.5 | 288.4 | 319.7 |
| 37.5° | 195.7 | 206.2 | 233.0 | 271.1 | 304.3 |
| 40° | 174.2 | 185.5 | 213.8 | 253.7 | 288.0 |
| 42.5° | 152.3 | 164.4 | 194.2 | 236.8 | 272.2 |
| 45° | 132.0 | 142.9 | 175.7 | 219.4 | 255.6 |
| 47.5° | 117.3 | 123.7 | 156.1 | 201.7 | 239.8 |
| 50° | 106.7 | 109.7 | 137.2 | 184.7 | 224.3 |
| 52.5° | 97.3 | 99.2 | 118.8 | 168.9 | 207.4 |
| 55° | 87.8 | 89.7 | 102.5 | 152.3 | 190.0 |
| 57.5° | 78.8 | 79.9 | 90.5 | 135.7 | 172.7 |
| 60° | 70.5 | 71.3 | 81.4 | 119.1 | 153.4 |
| 62.5° | 63.0 | 63.3 | 72.8 | 102.2 | 134.2 |
| 65° | 55.4 | 55.8 | 64.8 | 85.2 | 114.6 |
| 67.5° | 48.6 | 48.6 | 57.3 | 69.7 | 95.8 |
| 70° | 41.8 | 41.8 | 49.0 | 56.6 | 75.8 |
| 72.5° | 35.8 | 36.6 | 41.5 | 45.6 | 59.2 |
| 75° | 29.8 | 31.7 | 34.3 | 36.2 | 43.0 |
| 77.5° | 24.1 | 26.4 | 27.5 | 28.3 | 28.7 |
| 80° | 18.9 | 20.4 | 21.1 | 21.5 | 20.7 |
| 82.5° | 13.9 | 15.1 | 15.5 | 15.5 | 14.3 |
| 85° | 8.7 | 9.8 | 10.6 | 10.2 | 8.7 |
| 87.5° | 4.1 | 5.7 | 6.0 | 5.3 | 4.1 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)