

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1062067

Luminaire Tested: S125RDRP-H375D940-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1062067
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-47)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-H375D940-X4F0-XX-UDD-SVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

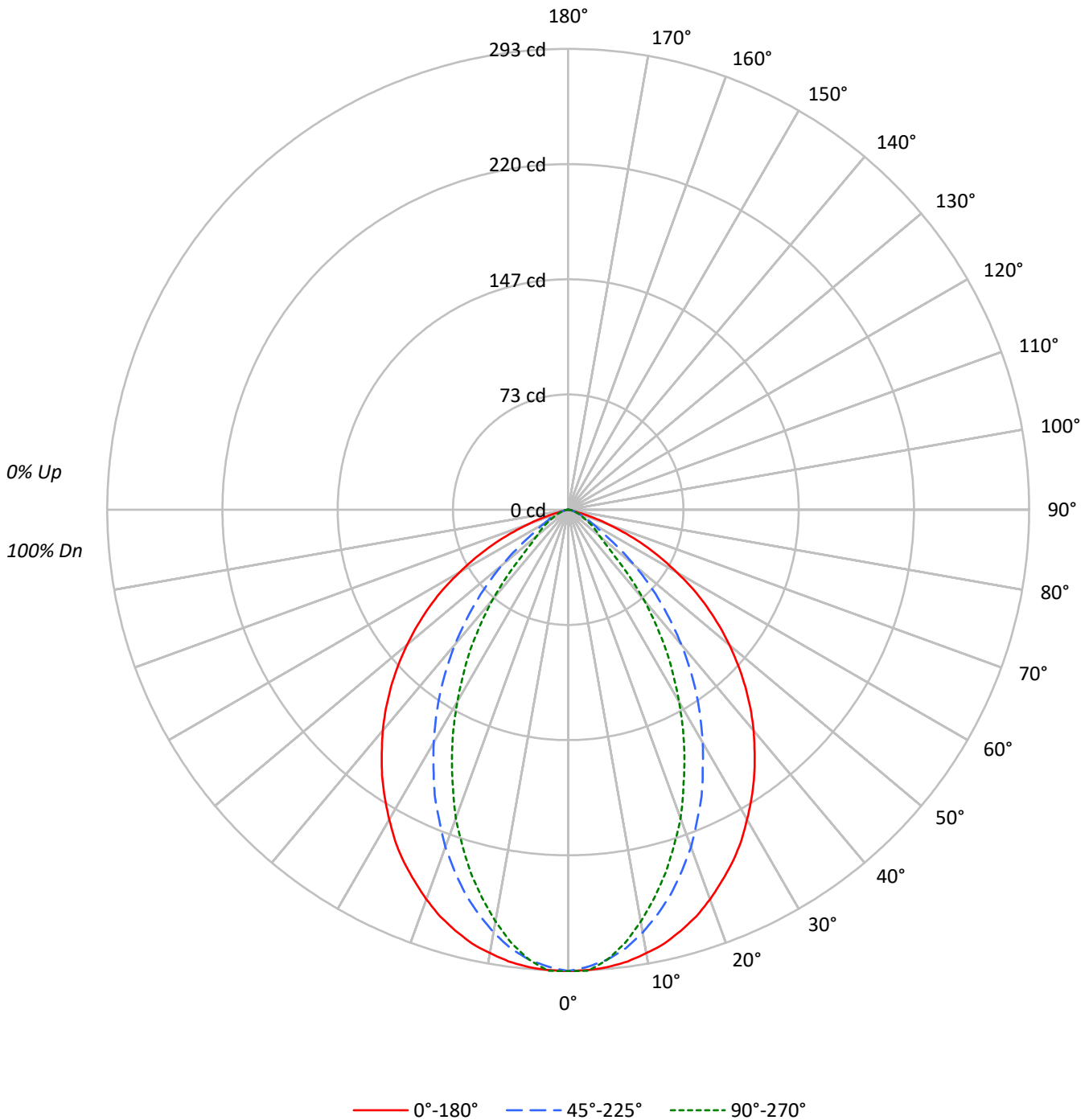
Lumens per Lamp: N/A
Luminaire Lumens: 424.3 lumens
Efficiency: N/A
Efficacy: 36.3 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
Input Voltage (V): 120
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 | 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 | 104 | 98 | 93 | 88 | 102 | 96 | 91 | 87 | 93 | 89 | 85 | 90 | 86 | 83 | 87 | 84 | 82 | 80 |
| 3 | 97 | 89 | 82 | 77 | 95 | 87 | 81 | 77 | 84 | 79 | 75 | 82 | 78 | 74 | 79 | 76 | 73 | 71 |
| 4 | 90 | 81 | 74 | 68 | 88 | 79 | 73 | 68 | 77 | 71 | 67 | 75 | 70 | 66 | 73 | 69 | 65 | 63 |
| 5 | 84 | 74 | 66 | 61 | 82 | 73 | 66 | 61 | 71 | 65 | 60 | 69 | 64 | 59 | 67 | 63 | 59 | 57 |
| 6 | 79 | 68 | 60 | 55 | 77 | 67 | 60 | 55 | 65 | 59 | 54 | 64 | 58 | 54 | 62 | 57 | 53 | 52 |
| 7 | 74 | 62 | 55 | 50 | 72 | 62 | 55 | 50 | 60 | 54 | 49 | 59 | 53 | 49 | 58 | 53 | 49 | 47 |
| 8 | 69 | 58 | 50 | 45 | 68 | 57 | 50 | 45 | 56 | 50 | 45 | 55 | 49 | 45 | 54 | 48 | 45 | 43 |
| 9 | 65 | 54 | 47 | 42 | 64 | 53 | 46 | 42 | 52 | 46 | 41 | 51 | 45 | 41 | 50 | 45 | 41 | 39 |
| 10 | 62 | 50 | 43 | 38 | 61 | 50 | 43 | 38 | 49 | 43 | 38 | 48 | 42 | 38 | 47 | 42 | 38 | 36 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 2020 | 2020 | 2020 |
| 5° | 2017 | 1984 | 1984 |
| 10° | 2002 | 1908 | 1858 |
| 15° | 1974 | 1802 | 1704 |
| 20° | 1931 | 1672 | 1530 |
| 25° | 1878 | 1524 | 1328 |
| 30° | 1808 | 1360 | 1120 |
| 35° | 1733 | 1191 | 909 |
| 40° | 1648 | 1005 | 673 |
| 45° | 1550 | 806 | 407 |
| 50° | 1433 | 591 | 280 |
| 55° | 1293 | 363 | 233 |
| 60° | 1099 | 246 | 185 |
| 65° | 868 | 189 | 145 |
| 70° | 548 | 135 | 121 |
| 75° | 178 | 98 | 98 |
| 80° | 59 | 75 | 87 |
| 85° | 32 | 55 | 55 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1550 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 27.1 | 6.4 |
| 10°-20° | 71.7 | 16.9 |
| 20°-30° | 94.3 | 22.2 |
| 30°-40° | 92.6 | 21.8 |
| 40°-50° | 70.1 | 16.5 |
| 50°-60° | 42.5 | 10.0 |
| 60°-70° | 20.1 | 4.7 |
| 70°-80° | 5.2 | 1.2 |
| 80°-90° | 0.8 | 0.2 |
| 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° | 193.1 | 45.5 |
| 0°-40° | 285.7 | 67.3 |
| 0°-60° | 398.3 | 93.9 |
| 0°-90° | 424.3 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 424.3 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 293 | 293 | 293 | 293 | 293 | |
| 5° | 292 | 291 | 287 | 287 | 287 | 28 |
| 15° | 277 | 270 | 253 | 243 | 239 | 78 |
| 25° | 247 | 228 | 201 | 182 | 175 | 114 |
| 35° | 206 | 179 | 142 | 117 | 108 | 129 |
| 45° | 159 | 125 | 83 | 53 | 42 | 123 |
| 55° | 108 | 74 | 30 | 20 | 19 | 96 |
| 65° | 53 | 27 | 12 | 10 | 9 | 53 |
| 75° | 7 | 4 | 4 | 4 | 4 | 10 |
| 85° | 0 | 0 | 1 | 1 | 1 | 1 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CATALOG NUMBER: S125RDRP-H375D940-X4F0-XX-UDD-SVL-B

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 293.4 | 293.4 | 293.4 | 293.4 | 293.4 |
| 2.5° | 293.0 | 293.0 | 290.8 | 293.4 | 293.4 |
| 5° | 291.9 | 291.2 | 287.1 | 287.4 | 287.1 |
| 7.5° | 289.7 | 288.2 | 281.1 | 279.2 | 277.7 |
| 10° | 286.3 | 283.3 | 272.9 | 268.4 | 265.8 |
| 12.5° | 282.6 | 277.4 | 263.2 | 256.9 | 252.8 |
| 15° | 277.0 | 269.5 | 252.8 | 243.1 | 239.0 |
| 17.5° | 271.0 | 260.2 | 240.5 | 228.9 | 223.7 |
| 20° | 263.6 | 250.9 | 228.2 | 214.0 | 208.8 |
| 22.5° | 255.4 | 240.5 | 214.0 | 198.3 | 191.3 |
| 25° | 247.2 | 228.5 | 200.6 | 181.9 | 174.8 |
| 27.5° | 237.9 | 216.6 | 185.3 | 165.9 | 158.1 |
| 30° | 227.4 | 204.7 | 171.1 | 151.0 | 140.9 |
| 32.5° | 217.0 | 192.4 | 156.2 | 134.2 | 124.1 |
| 35° | 206.2 | 178.6 | 141.7 | 116.7 | 108.1 |
| 37.5° | 194.6 | 165.5 | 126.8 | 100.7 | 90.6 |
| 40° | 183.4 | 152.5 | 111.8 | 84.3 | 74.9 |
| 42.5° | 171.5 | 139.4 | 96.9 | 68.2 | 57.8 |
| 45° | 159.2 | 125.3 | 82.8 | 52.6 | 41.8 |
| 47.5° | 146.5 | 112.6 | 68.6 | 38.8 | 31.3 |
| 50° | 133.8 | 99.2 | 55.2 | 28.7 | 26.1 |
| 52.5° | 120.8 | 86.1 | 41.8 | 23.9 | 22.7 |
| 55° | 107.7 | 73.8 | 30.2 | 20.5 | 19.4 |
| 57.5° | 94.3 | 60.4 | 22.7 | 17.5 | 16.4 |
| 60° | 79.8 | 48.5 | 17.9 | 14.5 | 13.4 |
| 62.5° | 66.4 | 38.0 | 14.5 | 11.9 | 11.2 |
| 65° | 53.3 | 27.2 | 11.6 | 9.7 | 8.9 |
| 67.5° | 39.9 | 18.3 | 8.9 | 7.5 | 7.5 |
| 70° | 27.2 | 11.9 | 6.7 | 6.0 | 6.0 |
| 72.5° | 16.4 | 7.1 | 4.8 | 4.8 | 4.8 |
| 75° | 6.7 | 4.5 | 3.7 | 3.7 | 3.7 |
| 77.5° | 2.2 | 2.6 | 2.6 | 3.0 | 3.0 |
| 80° | 1.5 | 1.5 | 1.9 | 2.2 | 2.2 |
| 82.5° | 0.7 | 1.1 | 1.1 | 1.5 | 1.5 |
| 85° | 0.4 | 0.4 | 0.7 | 0.7 | 0.7 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.4 | 0.4 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



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CIE UGR TABLE:

| Reflectances: | | | | | | | | | | | |
|-----------------|------|------------------|-------|-------|-------|-------|----------------|------|------|------|------|
| Ceiling | | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 |
| Wall | | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 |
| Reference plane | | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Room dimensions | | Viewed crosswise | | | | | Viewed endwise | | | | |
| X=2H | Y=2H | 11.77 | 13.10 | 12.14 | 13.42 | 13.73 | 2.42 | 3.75 | 2.79 | 4.06 | 4.38 |
| | 3H | 12.48 | 13.66 | 12.86 | 13.99 | 14.35 | 3.21 | 4.39 | 3.59 | 4.72 | 5.08 |
| | 4H | 12.50 | 13.59 | 12.90 | 13.94 | 14.32 | 3.46 | 4.55 | 3.86 | 4.90 | 5.29 |
| | 6H | 12.43 | 13.43 | 12.84 | 13.80 | 14.20 | 3.63 | 4.64 | 4.05 | 5.01 | 5.40 |
| | 8H | 12.38 | 13.34 | 12.81 | 13.73 | 14.13 | 3.68 | 4.63 | 4.11 | 5.02 | 5.43 |
| | 12H | 12.34 | 13.25 | 12.78 | 13.64 | 14.07 | 3.68 | 4.59 | 4.12 | 4.98 | 5.41 |
| 4H | 2H | 11.60 | 12.70 | 12.01 | 13.05 | 13.43 | 2.91 | 4.01 | 3.31 | 4.36 | 4.74 |
| | 3H | 12.35 | 13.24 | 12.76 | 13.65 | 14.05 | 3.83 | 4.72 | 4.24 | 5.12 | 5.53 |
| | 4H | 12.37 | 13.16 | 12.80 | 13.58 | 14.03 | 4.13 | 4.93 | 4.57 | 5.35 | 5.79 |
| | 6H | 12.31 | 12.99 | 12.77 | 13.44 | 13.90 | 4.39 | 5.08 | 4.86 | 5.52 | 5.99 |
| | 8H | 12.26 | 12.89 | 12.72 | 13.34 | 13.81 | 4.46 | 5.10 | 4.93 | 5.54 | 6.01 |
| | 12H | 12.21 | 12.77 | 12.70 | 13.26 | 13.73 | 4.48 | 5.04 | 4.97 | 5.52 | 6.00 |
| 8H | 4H | 12.25 | 12.89 | 12.72 | 13.34 | 13.81 | 4.25 | 4.88 | 4.71 | 5.33 | 5.80 |
| | 6H | 12.18 | 12.69 | 12.68 | 13.19 | 13.67 | 4.56 | 5.08 | 5.06 | 5.58 | 6.06 |
| | 8H | 12.12 | 12.59 | 12.64 | 13.10 | 13.59 | 4.67 | 5.13 | 5.19 | 5.65 | 6.14 |
| | 12H | 12.08 | 12.49 | 12.60 | 12.99 | 13.56 | 4.72 | 5.13 | 5.24 | 5.63 | 6.20 |
| 12H | 4H | 12.21 | 12.77 | 12.69 | 13.25 | 13.73 | 4.22 | 4.78 | 4.70 | 5.26 | 5.74 |
| | 6H | 12.12 | 12.58 | 12.64 | 13.10 | 13.59 | 4.53 | 5.00 | 5.05 | 5.51 | 6.01 |
| | 8H | 12.08 | 12.49 | 12.60 | 12.99 | 13.56 | 4.67 | 5.08 | 5.19 | 5.58 | 6.15 |