

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



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: P1062073

Luminaire Tested: S125RDR-H375D950-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1062073  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-48)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-H375D950-X4F0-XX-UDD-BVL-B  
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

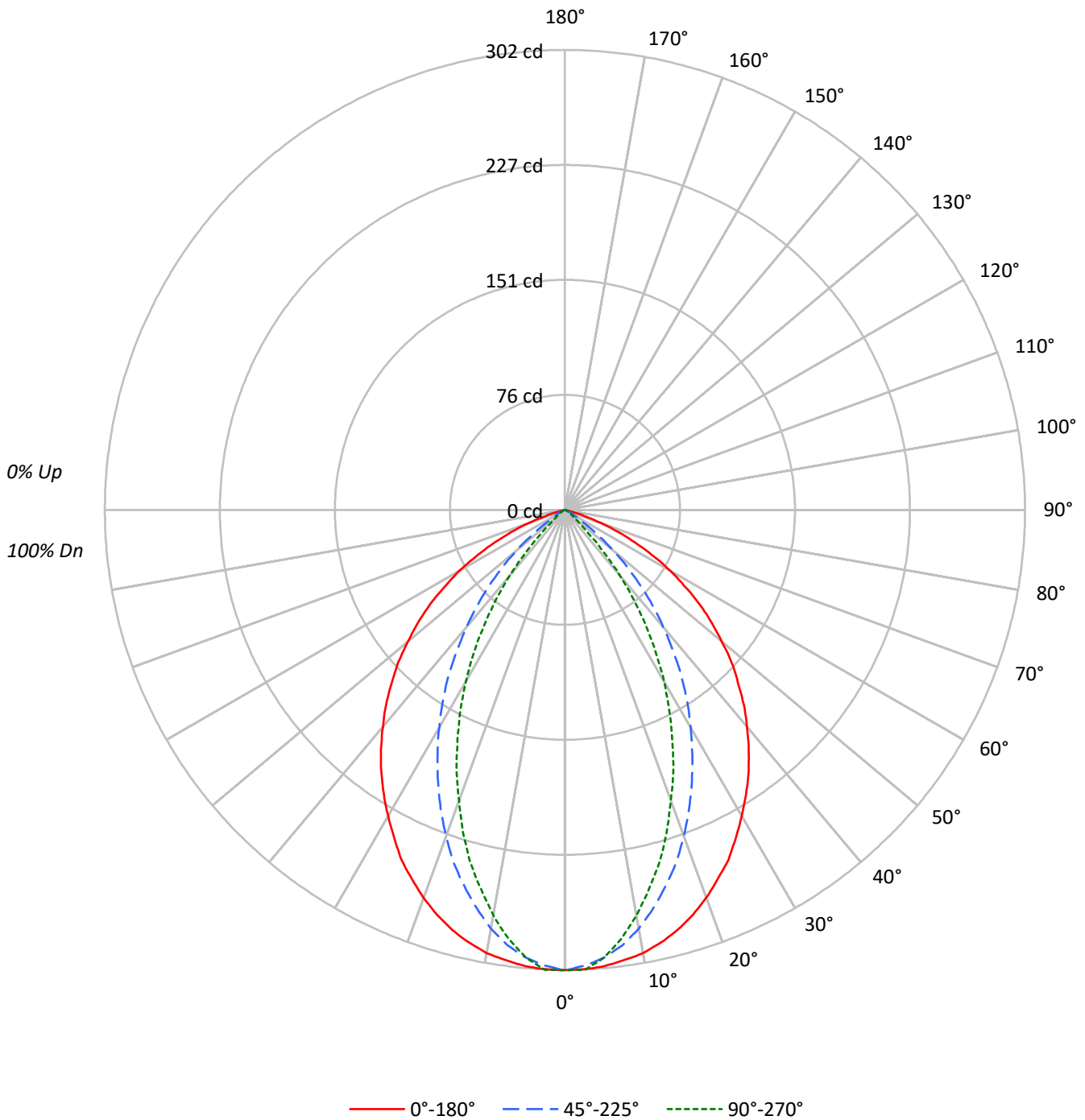
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 390.6 lumens  
Efficiency: N/A  
Efficacy: 33.4 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 0.81 / 0.97  
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 (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: P1062073

CATALOG NUMBER: S125RDR-H375D950-X4F0-XX-UDD-BVL-B

### Luminous Intensity Polar Plot





TEST NUMBER: P1062073

CATALOG NUMBER: S125RDR-H375D950-X4F0-XX-UDD-BVL-B

**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 | 109 | 106 | 103 | 110 | 107 | 104 | 102 | 103 | 101 | 99  | 99  | 97  | 96  | 95  | 94  | 93  | 91  |
| 2   | 105 | 99  | 94  | 90  | 103 | 97  | 93  | 89  | 94  | 90  | 87  | 91  | 88  | 85  | 88  | 86  | 83  | 82  |
| 3   | 98  | 90  | 84  | 80  | 96  | 89  | 83  | 79  | 86  | 82  | 78  | 84  | 80  | 76  | 81  | 78  | 75  | 73  |
| 4   | 92  | 83  | 76  | 71  | 90  | 82  | 75  | 70  | 79  | 74  | 70  | 77  | 72  | 69  | 75  | 71  | 68  | 66  |
| 5   | 86  | 76  | 69  | 64  | 84  | 75  | 68  | 63  | 73  | 67  | 63  | 71  | 66  | 62  | 70  | 65  | 62  | 60  |
| 6   | 81  | 70  | 63  | 58  | 79  | 69  | 62  | 57  | 67  | 61  | 57  | 66  | 61  | 57  | 65  | 60  | 56  | 54  |
| 7   | 76  | 65  | 58  | 53  | 74  | 64  | 57  | 52  | 63  | 56  | 52  | 61  | 56  | 52  | 60  | 55  | 51  | 50  |
| 8   | 71  | 60  | 53  | 48  | 70  | 59  | 53  | 48  | 58  | 52  | 48  | 57  | 52  | 48  | 56  | 51  | 47  | 46  |
| 9   | 67  | 56  | 49  | 44  | 66  | 55  | 49  | 44  | 54  | 48  | 44  | 53  | 48  | 44  | 52  | 47  | 44  | 42  |
| 10  | 64  | 52  | 46  | 41  | 62  | 52  | 45  | 41  | 51  | 45  | 41  | 50  | 45  | 41  | 49  | 44  | 41  | 39  |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 2081 | 2081 | 2081 |
| 5°  | 2078 | 2040 | 2040 |
| 10° | 2066 | 1952 | 1890 |
| 15° | 2036 | 1822 | 1709 |
| 20° | 1987 | 1671 | 1487 |
| 25° | 1927 | 1497 | 1266 |
| 30° | 1845 | 1313 | 1034 |
| 35° | 1767 | 1120 | 774  |
| 40° | 1671 | 903  | 502  |
| 45° | 1565 | 684  | 217  |
| 50° | 1440 | 436  | 81   |
| 55° | 1298 | 192  | 58   |
| 60° | 1099 | 83   | 39   |
| 65° | 831  | 52   | 20   |
| 70° | 505  | 24   | 8    |
| 75° | 106  | 11   | 11   |
| 80° | 0    | 0    | 0    |
| 85° | 0    | 0    | 0    |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1565 cd/sqm



TEST NUMBER: P1062073

CATALOG NUMBER: S125RDR-H375D950-X4F0-XX-UDD-BVL-B

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 27.9   | 7.1       |
| 10°-20°   | 72.6   | 18.6      |
| 20°-30°   | 93.3   | 23.9      |
| 30°-40°   | 87.8   | 22.5      |
| 40°-50°   | 61.4   | 15.7      |
| 50°-60°   | 32.8   | 8.4       |
| 60°-70°   | 13.1   | 3.3       |
| 70°-80°   | 1.7    | 0.4       |
| 80°-90°   | 0.0    | 0.0       |
| 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°    | 193.8  | 49.6      |
| 0°-40°    | 281.6  | 72.1      |
| 0°-60°    | 375.8  | 96.2      |
| 0°-90°    | 390.6  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 390.6  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 302 | 302   | 302 | 302   | 302 |      |
| 5°  | 301 | 300   | 295 | 296   | 295 | 29   |
| 15° | 286 | 276   | 256 | 244   | 240 | 80   |
| 25° | 254 | 231   | 197 | 176   | 167 | 116  |
| 35° | 210 | 177   | 133 | 103   | 92  | 131  |
| 45° | 161 | 120   | 70  | 34    | 22  | 124  |
| 55° | 108 | 66    | 16  | 6     | 5   | 96   |
| 65° | 51  | 20    | 3   | 2     | 1   | 51   |
| 75° | 4   | 1     | 0   | 0     | 0   | 8    |
| 85° | 0   | 0     | 0   | 0     | 0   | 0    |
| 90° | 0   | 0     | 0   | 0     | 0   |      |



TEST NUMBER: P1062073

CATALOG NUMBER: S125RDR-H375D950-X4F0-XX-UDD-BVL-B

**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 302.3 | 302.3 | 302.3 | 302.3 | 302.3 |
| 2.5°  | 301.9 | 302.3 | 299.5 | 301.9 | 302.3 |
| 5°    | 300.7 | 299.9 | 295.1 | 295.9 | 295.1 |
| 7.5°  | 298.3 | 296.3 | 288.4 | 285.6 | 284.0 |
| 10°   | 295.5 | 291.1 | 279.2 | 273.2 | 270.4 |
| 12.5° | 291.1 | 284.8 | 268.0 | 258.8 | 254.9 |
| 15°   | 285.6 | 276.4 | 255.6 | 243.7 | 239.7 |
| 17.5° | 278.8 | 266.8 | 242.9 | 228.1 | 222.1 |
| 20°   | 271.2 | 255.2 | 228.1 | 210.6 | 203.0 |
| 22.5° | 262.4 | 244.1 | 213.0 | 193.4 | 185.9 |
| 25°   | 253.7 | 231.3 | 197.0 | 175.5 | 166.7 |
| 27.5° | 242.9 | 218.2 | 181.1 | 157.9 | 148.4 |
| 30°   | 232.1 | 205.0 | 165.1 | 140.0 | 130.0 |
| 32.5° | 221.3 | 191.0 | 149.2 | 121.2 | 111.3 |
| 35°   | 210.2 | 176.7 | 133.2 | 102.9 | 92.1  |
| 37.5° | 198.2 | 162.3 | 116.1 | 85.3  | 74.2  |
| 40°   | 185.9 | 148.4 | 100.5 | 68.2  | 55.8  |
| 42.5° | 173.9 | 134.4 | 85.0  | 51.4  | 37.9  |
| 45°   | 160.7 | 120.4 | 70.2  | 33.9  | 22.3  |
| 47.5° | 148.4 | 106.9 | 55.0  | 19.5  | 11.6  |
| 50°   | 134.4 | 92.9  | 40.7  | 10.4  | 7.6   |
| 52.5° | 121.2 | 79.4  | 27.1  | 6.8   | 6.0   |
| 55°   | 108.1 | 66.2  | 16.0  | 5.6   | 4.8   |
| 57.5° | 92.9  | 53.4  | 8.8   | 4.4   | 3.6   |
| 60°   | 79.8  | 41.9  | 6.0   | 3.2   | 2.8   |
| 62.5° | 64.6  | 30.7  | 4.4   | 2.4   | 2.0   |
| 65°   | 51.0  | 20.3  | 3.2   | 1.6   | 1.2   |
| 67.5° | 37.9  | 12.0  | 2.0   | 0.8   | 0.8   |
| 70°   | 25.1  | 6.4   | 1.2   | 0.4   | 0.4   |
| 72.5° | 13.2  | 2.8   | 0.8   | 0.4   | 0.4   |
| 75°   | 4.0   | 1.2   | 0.4   | 0.4   | 0.4   |
| 77.5° | 0.0   | 0.4   | 0.0   | 0.0   | 0.4   |
| 80°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 82.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 85°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 87.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |



TEST NUMBER: P1062073  
 CATALOG NUMBER: S125RDR-H375D950-X4F0-XX-UDD-BVL-B

**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 | 11.49            | 12.75 | 11.85 | 13.06 | 13.38 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 3H   | 12.07            | 13.18 | 12.45 | 13.52 | 13.88 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 4H   | 12.04            | 13.07 | 12.44 | 13.42 | 13.80 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 6H   | 11.95            | 12.90 | 12.37 | 13.27 | 13.66 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 8H   | 11.90            | 12.80 | 12.34 | 13.19 | 13.60 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 12H  | 11.86            | 12.71 | 12.29 | 13.09 | 13.53 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
| 4H              | 2H   | 11.26            | 12.29 | 11.66 | 12.64 | 13.03 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 3H   | 11.85            | 12.69 | 12.27 | 13.09 | 13.50 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 4H   | 11.80            | 12.55 | 12.24 | 12.97 | 13.41 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 6H   | 11.72            | 12.35 | 12.18 | 12.80 | 13.27 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 8H   | 11.66            | 12.25 | 12.13 | 12.70 | 13.17 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 12H  | 11.61            | 12.13 | 12.09 | 12.61 | 13.09 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
| 8H              | 4H   | 11.66            | 12.25 | 12.13 | 12.70 | 13.17 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 6H   | 11.55            | 12.03 | 12.05 | 12.53 | 13.01 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 8H   | 11.48            | 11.91 | 12.01 | 12.43 | 12.93 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 12H  | 11.43            | 11.81 | 11.95 | 12.31 | 12.88 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
| 12H             | 4H   | 11.61            | 12.13 | 12.09 | 12.61 | 13.09 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 6H   | 11.48            | 11.91 | 12.01 | 12.43 | 12.93 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 8H   | 11.43            | 11.81 | 11.95 | 12.31 | 12.88 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |