

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: P1057996

Luminaire Tested: S122RDRP-S485D930-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1057996  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-21)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDRP-S485D930-X4F0-XX-UDD-BVL-B  
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

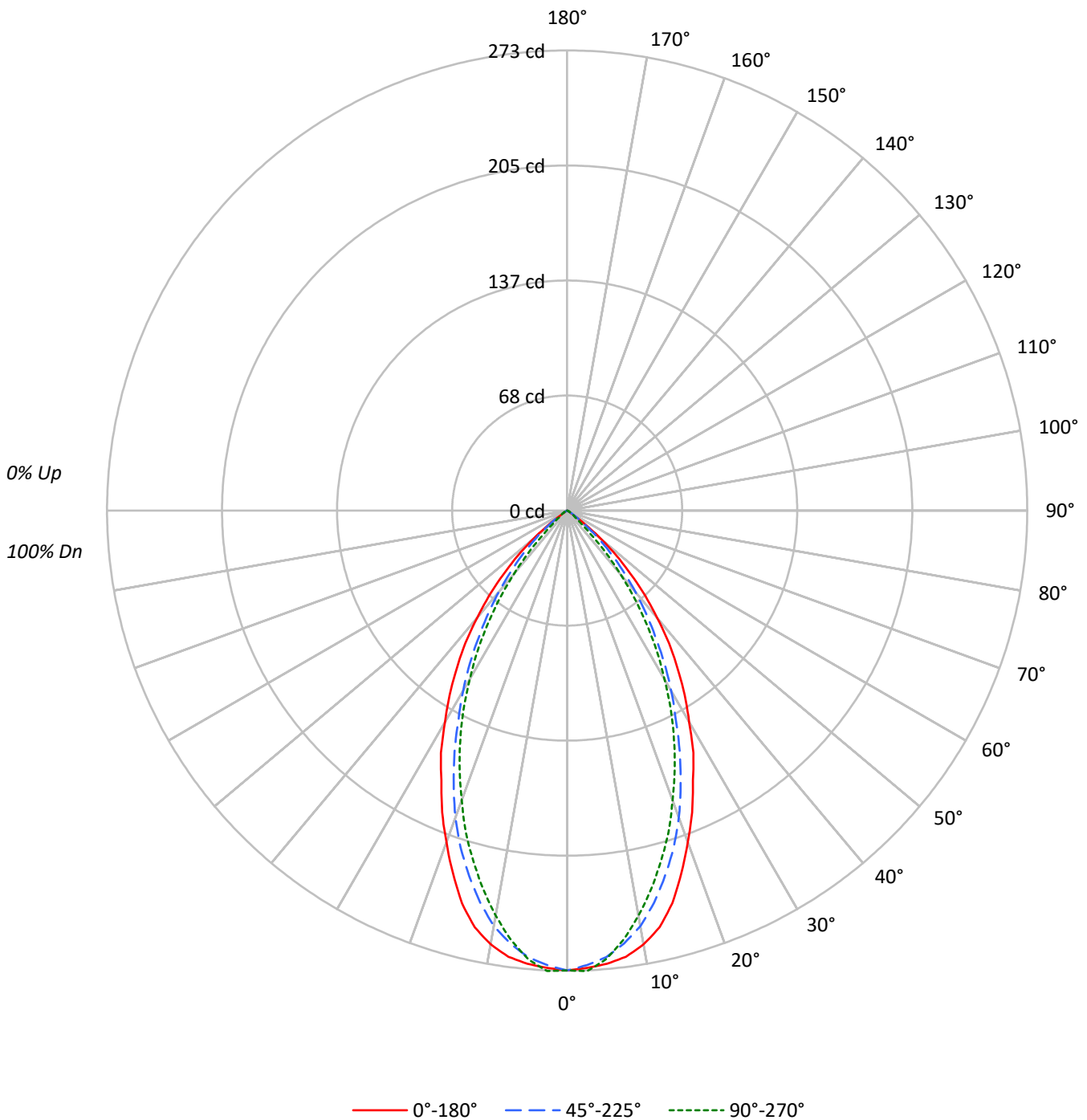
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 256.6 lumens  
Efficiency: N/A  
Efficacy: 13.1 lumens/watt  
Spacing Criteria (0/90/45): 0.91 / 0.8 / 0.88  
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 19.6  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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: P1057996

CATALOG NUMBER: S122RDRP-S485D930-X4F0-XX-UDD-BVL-B

### Luminous Intensity Polar Plot





TEST NUMBER: P1057996

CATALOG NUMBER: S122RDRP-S485D930-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   | 113 | 110 | 108 | 105 | 111 | 108 | 106 | 104 | 104 | 102 | 101 | 100 | 99  | 98  | 97  | 96  | 95  | 93  |
| 2   | 107 | 102 | 98  | 94  | 105 | 100 | 97  | 93  | 97  | 94  | 91  | 94  | 92  | 89  | 91  | 89  | 87  | 86  |
| 3   | 101 | 95  | 89  | 85  | 99  | 93  | 89  | 85  | 91  | 87  | 83  | 88  | 85  | 82  | 86  | 83  | 81  | 79  |
| 4   | 96  | 88  | 82  | 78  | 94  | 87  | 81  | 77  | 85  | 80  | 76  | 83  | 79  | 75  | 81  | 77  | 75  | 73  |
| 5   | 91  | 82  | 76  | 71  | 89  | 81  | 75  | 71  | 79  | 74  | 70  | 77  | 73  | 70  | 76  | 72  | 69  | 67  |
| 6   | 86  | 76  | 70  | 66  | 84  | 76  | 70  | 65  | 74  | 69  | 65  | 73  | 68  | 64  | 71  | 67  | 64  | 62  |
| 7   | 81  | 71  | 65  | 61  | 80  | 71  | 65  | 61  | 69  | 64  | 60  | 68  | 63  | 60  | 67  | 63  | 60  | 58  |
| 8   | 77  | 67  | 61  | 56  | 76  | 66  | 60  | 56  | 65  | 60  | 56  | 64  | 59  | 56  | 63  | 59  | 56  | 54  |
| 9   | 73  | 63  | 57  | 53  | 72  | 62  | 57  | 52  | 61  | 56  | 52  | 61  | 56  | 52  | 60  | 55  | 52  | 51  |
| 10  | 69  | 59  | 53  | 49  | 68  | 59  | 53  | 49  | 58  | 53  | 49  | 57  | 52  | 49  | 56  | 52  | 49  | 47  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 5034 | 5034 | 5034 |
| 5°  | 4999 | 4925 | 4946 |
| 10° | 4896 | 4690 | 4572 |
| 15° | 4606 | 4287 | 4109 |
| 20° | 4112 | 3806 | 3590 |
| 25° | 3594 | 3217 | 3054 |
| 30° | 3085 | 2629 | 2457 |
| 35° | 2573 | 2052 | 1845 |
| 40° | 2002 | 1515 | 1180 |
| 45° | 1399 | 1007 | 511  |
| 50° | 761  | 531  | 181  |
| 55° | 113  | 187  | 129  |
| 60° | 22   | 44   | 85   |
| 65° | 0    | 26   | 52   |
| 70° | 0    | 0    | 32   |
| 75° | 0    | 0    | 0    |
| 80° | 0    | 0    | 0    |
| 85° | 0    | 0    | 0    |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1399 cd/sqm



TEST NUMBER: P1057996

CATALOG NUMBER: S122RDRP-S485D930-X4F0-XX-UDD-BVL-B

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 25.1   | 9.8       |
| 10°-20°   | 63.2   | 24.6      |
| 20°-30°   | 73.6   | 28.7      |
| 30°-40°   | 59.0   | 23.0      |
| 40°-50°   | 29.3   | 11.4      |
| 50°-60°   | 5.8    | 2.3       |
| 60°-70°   | 0.5    | 0.2       |
| 70°-80°   | 0.0    | 0.0       |
| 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°    | 161.9  | 63.1      |
| 0°-40°    | 220.9  | 86.1      |
| 0°-60°    | 256.0  | 99.8      |
| 0°-90°    | 256.6  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 256.6  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 273 | 273   | 273 | 273   | 273 |      |
| 5°  | 270 | 270   | 266 | 266   | 267 | 26   |
| 15° | 241 | 236   | 224 | 219   | 215 | 67   |
| 25° | 176 | 168   | 158 | 155   | 150 | 81   |
| 35° | 114 | 103   | 91  | 87    | 82  | 71   |
| 45° | 54  | 47    | 39  | 26    | 20  | 41   |
| 55° | 4   | 7     | 6   | 4     | 4   | 7    |
| 65° | 0   | 0     | 1   | 1     | 1   | 0    |
| 75° | 0   | 0     | 0   | 0     | 0   | 0    |
| 85° | 0   | 0     | 0   | 0     | 0   | 0    |
| 90° | 0   | 0     | 0   | 0     | 0   |      |

TEST NUMBER: P1057996

CATALOG NUMBER: S122RDRP-S485D930-X4F0-XX-UDD-BVL-B

**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 272.8 | 272.8 | 272.8 | 272.8 | 272.8 |
| 2.5°  | 271.6 | 272.8 | 269.9 | 272.8 | 273.4 |
| 5°    | 269.9 | 269.9 | 265.9 | 266.5 | 267.0 |
| 7.5°  | 267.0 | 265.9 | 259.0 | 257.8 | 256.7 |
| 10°   | 261.3 | 259.0 | 250.3 | 245.7 | 244.0 |
| 12.5° | 253.2 | 249.7 | 238.2 | 233.0 | 230.1 |
| 15°   | 241.1 | 236.5 | 224.4 | 218.6 | 215.1 |
| 17.5° | 225.5 | 221.5 | 209.9 | 203.6 | 200.1 |
| 20°   | 209.4 | 203.6 | 193.8 | 187.4 | 182.8 |
| 22.5° | 193.8 | 186.3 | 175.9 | 171.3 | 166.7 |
| 25°   | 176.5 | 167.8 | 158.0 | 154.6 | 150.0 |
| 27.5° | 162.1 | 151.1 | 139.6 | 137.3 | 133.2 |
| 30°   | 144.8 | 134.4 | 123.4 | 120.0 | 115.3 |
| 32.5° | 129.8 | 118.2 | 107.3 | 103.2 | 99.2  |
| 35°   | 114.2 | 102.7 | 91.1  | 87.1  | 81.9  |
| 37.5° | 99.2  | 88.2  | 76.7  | 70.4  | 65.7  |
| 40°   | 83.1  | 73.8  | 62.9  | 54.8  | 49.0  |
| 42.5° | 68.6  | 60.6  | 50.2  | 39.8  | 34.0  |
| 45°   | 53.6  | 47.3  | 38.6  | 26.0  | 19.6  |
| 47.5° | 39.8  | 35.2  | 28.3  | 15.0  | 10.4  |
| 50°   | 26.5  | 24.8  | 18.5  | 7.5   | 6.3   |
| 52.5° | 14.4  | 15.6  | 11.0  | 4.6   | 5.2   |
| 55°   | 3.5   | 6.9   | 5.8   | 3.5   | 4.0   |
| 57.5° | 0.6   | 1.2   | 2.9   | 2.9   | 2.9   |
| 60°   | 0.6   | 0.6   | 1.2   | 1.7   | 2.3   |
| 62.5° | 0.6   | 0.0   | 0.6   | 1.2   | 1.7   |
| 65°   | 0.0   | 0.0   | 0.6   | 0.6   | 1.2   |
| 67.5° | 0.0   | 0.0   | 0.0   | 0.6   | 0.6   |
| 70°   | 0.0   | 0.0   | 0.0   | 0.6   | 0.6   |
| 72.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.6   |
| 75°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 77.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 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: P1057996  
 CATALOG NUMBER: S122RDRP-S485D930-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 | 0.00             | 0.00 | 0.00 | 0.00 | 0.00 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 3H   | 0.00             | 0.00 | 0.00 | 0.00 | 0.00 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 4H   | 0.00             | 0.00 | 0.00 | 0.00 | 0.00 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 6H   | 0.00             | 0.00 | 0.00 | 0.00 | 0.00 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 8H   | 0.00             | 0.00 | 0.00 | 0.00 | 0.00 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 12H  | 0.00             | 0.00 | 0.00 | 0.00 | 0.00 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
| 4H              | 2H   | 0.00             | 0.00 | 0.00 | 0.00 | 0.00 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 3H   | 0.00             | 0.00 | 0.00 | 0.00 | 0.00 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 4H   | 0.00             | 0.00 | 0.00 | 0.00 | 0.00 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 6H   | 0.00             | 0.00 | 0.00 | 0.00 | 0.00 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 8H   | 0.00             | 0.00 | 0.00 | 0.00 | 0.00 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 12H  | 0.00             | 0.00 | 0.00 | 0.00 | 0.00 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
| 8H              | 4H   | 0.00             | 0.00 | 0.00 | 0.00 | 0.00 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 6H   | 0.00             | 0.00 | 0.00 | 0.00 | 0.00 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 8H   | 0.00             | 0.00 | 0.00 | 0.00 | 0.00 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 12H  | 0.00             | 0.00 | 0.00 | 0.00 | 0.00 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
| 12H             | 4H   | 0.00             | 0.00 | 0.00 | 0.00 | 0.00 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 6H   | 0.00             | 0.00 | 0.00 | 0.00 | 0.00 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |
|                 | 8H   | 0.00             | 0.00 | 0.00 | 0.00 | 0.00 | 0.00           | 0.00 | 0.00 | 0.00 | 0.00 |