

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: P1061543

Luminaire Tested: S125RDR-S1270D850-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061543  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-87)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-S1270D850-X4F0-XX-UDD-BVL-S  
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

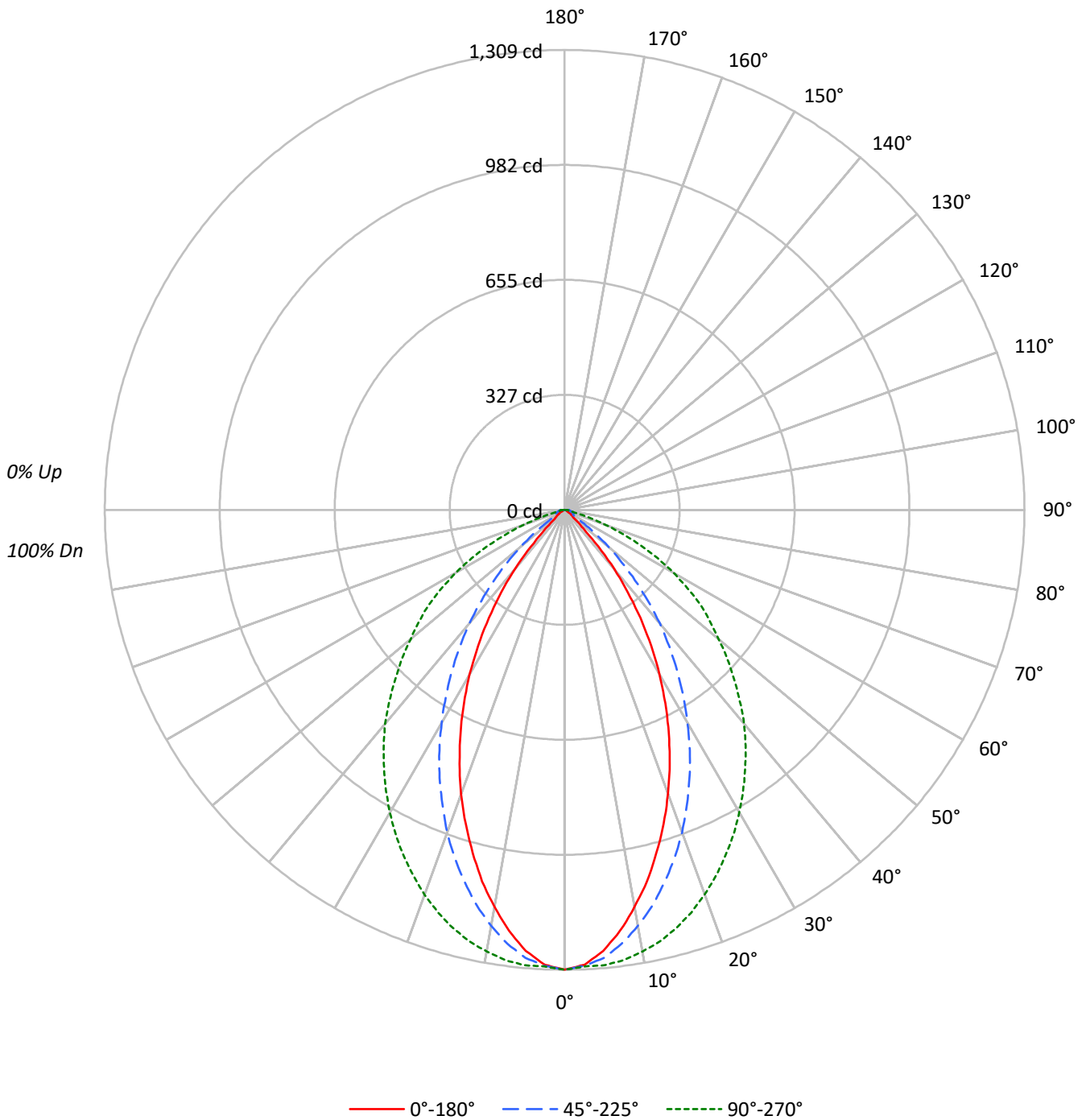
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1683.4 lumens  
Efficiency: N/A  
Efficacy: 40.3 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 41.8  
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  | 50  | 30 | 10 | 0  |     |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |    |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |    |    |    | 100 |
| 1   | 112 | 108 | 105 | 102 | 109 | 106 | 103 | 101 | 102 | 100 | 98  | 98  | 96  | 95  | 95  | 93  | 92  | 90  |    |    |    | 90  |
| 2   | 105 | 98  | 93  | 89  | 102 | 97  | 92  | 88  | 93  | 89  | 86  | 90  | 87  | 84  | 87  | 85  | 82  | 81  |    |    |    | 81  |
| 3   | 98  | 90  | 83  | 78  | 95  | 88  | 82  | 78  | 85  | 80  | 76  | 83  | 79  | 75  | 80  | 77  | 74  | 72  |    |    |    | 72  |
| 4   | 91  | 82  | 75  | 70  | 89  | 81  | 74  | 69  | 78  | 73  | 68  | 76  | 71  | 68  | 74  | 70  | 67  | 65  |    |    |    | 65  |
| 5   | 85  | 75  | 68  | 63  | 84  | 74  | 67  | 62  | 72  | 66  | 62  | 70  | 65  | 61  | 69  | 64  | 61  | 59  |    |    |    | 59  |
| 6   | 80  | 69  | 62  | 57  | 78  | 68  | 62  | 57  | 67  | 61  | 56  | 65  | 60  | 56  | 64  | 59  | 55  | 54  |    |    |    | 54  |
| 7   | 75  | 64  | 57  | 52  | 74  | 63  | 56  | 52  | 62  | 56  | 51  | 61  | 55  | 51  | 59  | 54  | 51  | 49  |    |    |    | 49  |
| 8   | 71  | 60  | 52  | 47  | 69  | 59  | 52  | 47  | 58  | 52  | 47  | 57  | 51  | 47  | 55  | 50  | 47  | 45  |    |    |    | 45  |
| 9   | 67  | 55  | 48  | 44  | 66  | 55  | 48  | 44  | 54  | 48  | 44  | 53  | 47  | 43  | 52  | 47  | 43  | 42  |    |    |    | 42  |
| 10  | 63  | 52  | 45  | 41  | 62  | 51  | 45  | 40  | 50  | 44  | 40  | 50  | 44  | 40  | 49  | 44  | 40  | 39  |    |    |    | 39  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 9011 | 9011 | 9011 |
| 5°  | 8712 | 8845 | 8991 |
| 10° | 8023 | 8407 | 8925 |
| 15° | 7204 | 7825 | 8778 |
| 20° | 6306 | 7157 | 8539 |
| 25° | 5327 | 6392 | 8241 |
| 30° | 4293 | 5561 | 7907 |
| 35° | 3157 | 4688 | 7533 |
| 40° | 1970 | 3781 | 7142 |
| 45° | 738  | 2762 | 6639 |
| 50° | 345  | 1727 | 6129 |
| 55° | 252  | 715  | 5670 |
| 60° | 178  | 377  | 4905 |
| 65° | 104  | 446  | 3887 |
| 70° | 97   | 519  | 2466 |
| 75° | 128  | 513  | 771  |
| 80° | 190  | 638  | 575  |
| 85° | 379  | 1019 | 766  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6639 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 120.0  | 7.1       |
| 10°-20°   | 310.7  | 18.5      |
| 20°-30°   | 395.8  | 23.5      |
| 30°-40°   | 368.4  | 21.9      |
| 40°-50°   | 252.4  | 15.0      |
| 50°-60°   | 139.0  | 8.3       |
| 60°-70°   | 65.8   | 3.9       |
| 70°-80°   | 20.7   | 1.2       |
| 80°-90°   | 10.6   | 0.6       |
| 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°    | 826.5  | 49.1      |
| 0°-40°    | 1194.9 | 71.0      |
| 0°-60°    | 1586.3 | 94.2      |
| 0°-90°    | 1683.4 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1683.4 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1309 | 1309  | 1309 | 1309  | 1309 |      |
| 5°  | 1260 | 1277  | 1280 | 1290  | 1301 | 117  |
| 15° | 1011 | 1043  | 1098 | 1180  | 1232 | 282  |
| 25° | 701  | 745   | 841  | 977   | 1085 | 320  |
| 35° | 376  | 429   | 558  | 742   | 896  | 233  |
| 45° | 76   | 127   | 284  | 503   | 682  | 72   |
| 55° | 21   | 24    | 60   | 280   | 472  | 19   |
| 65° | 6    | 8     | 27   | 103   | 239  | 7    |
| 75° | 5    | 8     | 19   | 21    | 29   | 5    |
| 85° | 5    | 11    | 13   | 11    | 10   | 5    |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1308.8 | 1308.8 | 1308.8 | 1308.8 | 1308.8 |
| 2.5°  | 1295.9 | 1308.8 | 1299.2 | 1299.2 | 1300.8 |
| 5°    | 1260.5 | 1276.6 | 1279.8 | 1289.5 | 1300.8 |
| 7.5°  | 1208.9 | 1229.8 | 1246.0 | 1273.4 | 1292.7 |
| 10°   | 1147.6 | 1173.4 | 1202.4 | 1247.6 | 1276.6 |
| 12.5° | 1083.2 | 1110.6 | 1154.1 | 1217.0 | 1257.3 |
| 15°   | 1010.6 | 1042.9 | 1097.7 | 1179.9 | 1231.5 |
| 17.5° | 936.5  | 972.0  | 1039.7 | 1136.4 | 1200.8 |
| 20°   | 860.7  | 897.8  | 976.8  | 1084.8 | 1165.4 |
| 22.5° | 781.8  | 822.0  | 909.1  | 1031.6 | 1126.7 |
| 25°   | 701.2  | 744.7  | 841.4  | 976.8  | 1084.8 |
| 27.5° | 620.6  | 665.7  | 772.1  | 920.4  | 1041.3 |
| 30°   | 540.0  | 586.7  | 699.5  | 862.3  | 994.5  |
| 32.5° | 457.8  | 509.3  | 628.6  | 804.3  | 946.2  |
| 35°   | 375.6  | 428.8  | 557.7  | 741.5  | 896.2  |
| 37.5° | 295.0  | 349.8  | 488.4  | 681.8  | 846.2  |
| 40°   | 219.2  | 274.0  | 420.7  | 622.2  | 794.6  |
| 42.5° | 141.8  | 199.9  | 349.8  | 560.9  | 738.2  |
| 45°   | 75.8   | 127.3  | 283.7  | 502.9  | 681.8  |
| 47.5° | 40.3   | 67.7   | 220.8  | 444.9  | 628.6  |
| 50°   | 32.2   | 37.1   | 161.2  | 386.8  | 572.2  |
| 52.5° | 25.8   | 29.0   | 103.2  | 327.2  | 522.2  |
| 55°   | 21.0   | 24.2   | 59.6   | 280.5  | 472.3  |
| 57.5° | 16.1   | 19.3   | 33.8   | 233.7  | 414.2  |
| 60°   | 12.9   | 14.5   | 27.4   | 187.0  | 356.2  |
| 62.5° | 8.1    | 11.3   | 27.4   | 145.1  | 298.2  |
| 65°   | 6.4    | 8.1    | 27.4   | 103.2  | 238.6  |
| 67.5° | 6.4    | 6.4    | 27.4   | 67.7   | 178.9  |
| 70°   | 4.8    | 4.8    | 25.8   | 43.5   | 122.5  |
| 72.5° | 4.8    | 4.8    | 22.6   | 29.0   | 70.9   |
| 75°   | 4.8    | 8.1    | 19.3   | 21.0   | 29.0   |
| 77.5° | 4.8    | 12.9   | 17.7   | 17.7   | 16.1   |
| 80°   | 4.8    | 12.9   | 16.1   | 14.5   | 14.5   |
| 82.5° | 4.8    | 12.9   | 12.9   | 12.9   | 11.3   |
| 85°   | 4.8    | 11.3   | 12.9   | 11.3   | 9.7    |
| 87.5° | 4.8    | 11.3   | 11.3   | 11.3   | 6.4    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)