

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: P1061610

Luminaire Tested: S125RDR-S375D835-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

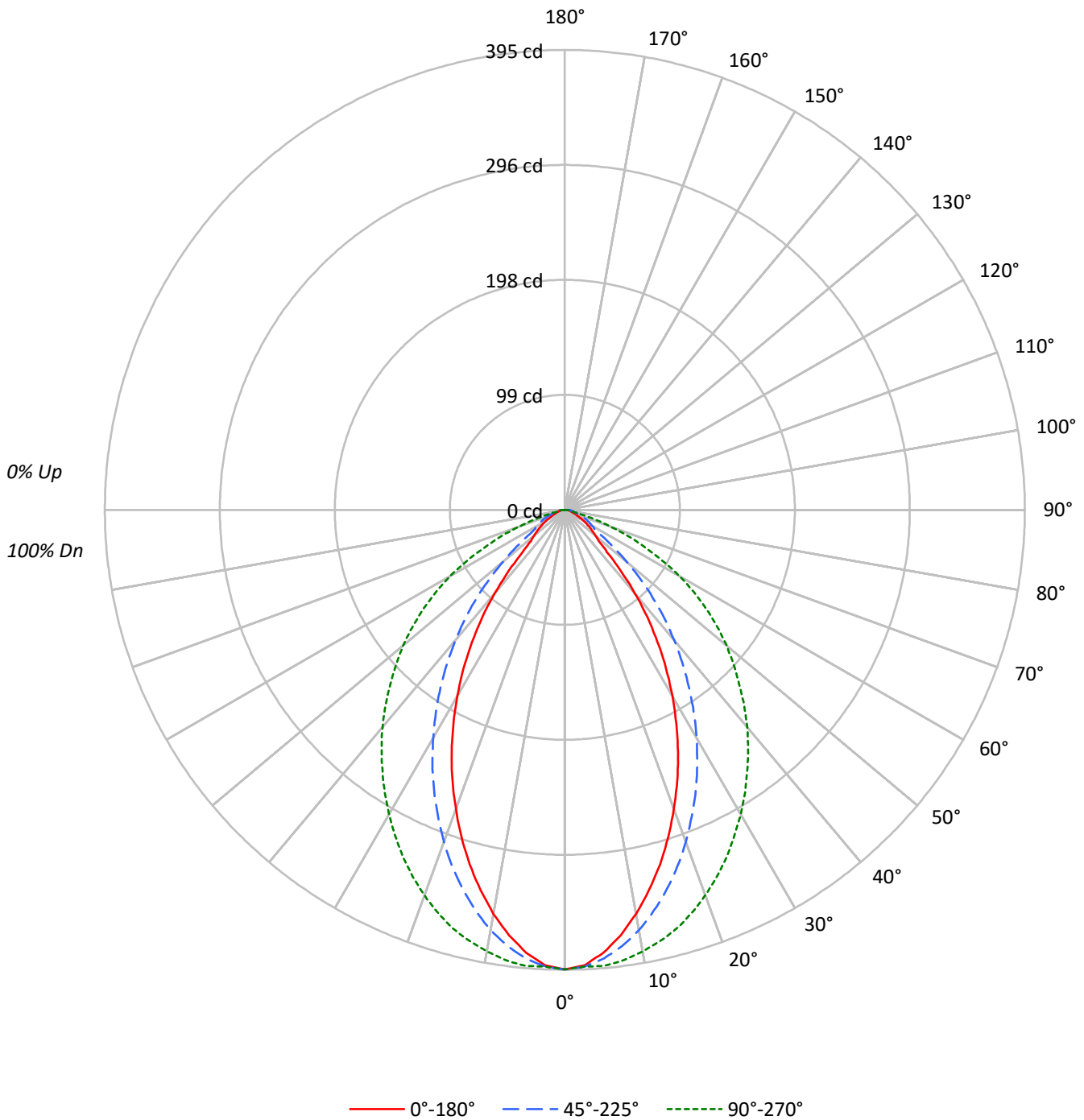
Test Method: LM-79-2019  
Report Number: P1061610  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-83)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-S375D835-X4F0-XX-UDD-SVL-W  
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 571.8 lumens  
Efficiency: N/A  
Efficacy: 45.7 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02  
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

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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   | 111 | 108 | 104 | 101 | 109 | 105 | 103 | 100 | 101 | 99  | 97  | 98  | 96  | 94  | 94  | 92  | 91  | 89  |    |    |    | 89  |
| 2   | 104 | 97  | 92  | 87  | 101 | 95  | 90  | 86  | 92  | 88  | 84  | 89  | 85  | 82  | 86  | 83  | 81  | 79  |    |    |    | 79  |
| 3   | 96  | 88  | 81  | 76  | 94  | 86  | 80  | 76  | 84  | 79  | 74  | 81  | 77  | 73  | 79  | 75  | 72  | 70  |    |    |    | 70  |
| 4   | 90  | 80  | 73  | 67  | 88  | 79  | 72  | 67  | 76  | 71  | 66  | 74  | 69  | 65  | 72  | 68  | 64  | 62  |    |    |    | 62  |
| 5   | 84  | 73  | 66  | 60  | 82  | 72  | 65  | 60  | 70  | 64  | 59  | 68  | 63  | 59  | 66  | 62  | 58  | 56  |    |    |    | 56  |
| 6   | 78  | 67  | 59  | 54  | 77  | 66  | 59  | 54  | 64  | 58  | 53  | 63  | 57  | 53  | 61  | 56  | 53  | 51  |    |    |    | 51  |
| 7   | 73  | 62  | 54  | 49  | 72  | 61  | 54  | 49  | 60  | 53  | 49  | 58  | 53  | 48  | 57  | 52  | 48  | 46  |    |    |    | 46  |
| 8   | 69  | 57  | 50  | 45  | 68  | 57  | 50  | 45  | 55  | 49  | 44  | 54  | 48  | 44  | 53  | 48  | 44  | 42  |    |    |    | 42  |
| 9   | 65  | 53  | 46  | 41  | 64  | 53  | 46  | 41  | 52  | 45  | 41  | 51  | 45  | 41  | 50  | 44  | 40  | 39  |    |    |    | 39  |
| 10  | 61  | 50  | 43  | 38  | 60  | 49  | 42  | 38  | 48  | 42  | 38  | 47  | 42  | 38  | 46  | 41  | 37  | 36  |    |    |    | 36  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 2718 | 2718 | 2718 |
| 5°  | 2638 | 2673 | 2716 |
| 10° | 2464 | 2563 | 2692 |
| 15° | 2248 | 2407 | 2652 |
| 20° | 2004 | 2225 | 2582 |
| 25° | 1747 | 2020 | 2499 |
| 30° | 1468 | 1798 | 2401 |
| 35° | 1167 | 1562 | 2295 |
| 40° | 840  | 1312 | 2190 |
| 45° | 499  | 1042 | 2062 |
| 50° | 368  | 741  | 1941 |
| 55° | 312  | 459  | 1778 |
| 60° | 255  | 369  | 1566 |
| 65° | 199  | 342  | 1237 |
| 70° | 169  | 296  | 827  |
| 75° | 157  | 255  | 335  |
| 80° | 167  | 266  | 234  |
| 85° | 197  | 395  | 269  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2062 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 36.4   | 6.4       |
| 10°-20°   | 95.5   | 16.7      |
| 20°-30°   | 124.9  | 21.8      |
| 30°-40°   | 121.7  | 21.3      |
| 40°-50°   | 91.3   | 16.0      |
| 50°-60°   | 57.2   | 10.0      |
| 60°-70°   | 29.8   | 5.2       |
| 70°-80°   | 10.8   | 1.9       |
| 80°-90°   | 4.3    | 0.7       |
| 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°    | 256.8  | 44.9      |
| 0°-40°    | 378.5  | 66.2      |
| 0°-60°    | 526.9  | 92.2      |
| 0°-90°    | 571.8  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 571.8  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 395 | 395   | 395 | 395   | 395 |      |
| 5°  | 382 | 387   | 387 | 390   | 393 | 35   |
| 15° | 315 | 325   | 338 | 359   | 372 | 88   |
| 25° | 230 | 242   | 266 | 302   | 329 | 105  |
| 35° | 139 | 154   | 186 | 235   | 273 | 86   |
| 45° | 51  | 66    | 107 | 165   | 212 | 43   |
| 55° | 26  | 27    | 38  | 100   | 148 | 23   |
| 65° | 12  | 13    | 21  | 40    | 76  | 13   |
| 75° | 6   | 8     | 10  | 10    | 13  | 6    |
| 85° | 2   | 4     | 5   | 5     | 3   | 3    |
| 90° | 0   | 0     | 0   | 0     | 0   |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 394.7 | 394.7 | 394.7 | 394.7 | 394.7 |
| 2.5°  | 391.4 | 395.1 | 392.6 | 392.6 | 392.6 |
| 5°    | 381.7 | 386.7 | 386.7 | 389.7 | 393.0 |
| 7.5°  | 368.3 | 374.2 | 377.9 | 385.1 | 390.1 |
| 10°   | 352.4 | 359.5 | 366.6 | 378.4 | 385.1 |
| 12.5° | 334.3 | 342.7 | 352.8 | 369.1 | 379.2 |
| 15°   | 315.4 | 324.7 | 337.7 | 358.6 | 372.1 |
| 17.5° | 294.9 | 305.8 | 321.3 | 346.5 | 362.8 |
| 20°   | 273.5 | 284.4 | 303.7 | 332.2 | 352.4 |
| 22.5° | 252.1 | 263.8 | 284.8 | 317.1 | 341.0 |
| 25°   | 229.9 | 242.5 | 265.9 | 302.0 | 328.9 |
| 27.5° | 207.2 | 220.2 | 246.2 | 286.5 | 315.4 |
| 30°   | 184.6 | 198.0 | 226.1 | 269.7 | 302.0 |
| 32.5° | 161.9 | 176.2 | 206.0 | 252.5 | 287.8 |
| 35°   | 138.8 | 153.5 | 185.8 | 235.3 | 273.1 |
| 37.5° | 116.6 | 131.3 | 165.7 | 217.7 | 258.4 |
| 40°   | 93.5  | 109.5 | 146.0 | 200.1 | 243.7 |
| 42.5° | 70.9  | 87.2  | 126.3 | 182.5 | 227.8 |
| 45°   | 51.2  | 66.3  | 107.0 | 165.3 | 211.8 |
| 47.5° | 39.4  | 47.8  | 87.2  | 147.7 | 196.3 |
| 50°   | 34.4  | 36.9  | 69.2  | 131.3 | 181.2 |
| 52.5° | 29.8  | 31.5  | 52.0  | 116.2 | 164.9 |
| 55°   | 26.0  | 27.3  | 38.2  | 99.8  | 148.1 |
| 57.5° | 21.8  | 23.5  | 30.2  | 83.9  | 130.9 |
| 60°   | 18.5  | 19.3  | 26.8  | 69.2  | 113.7 |
| 62.5° | 15.1  | 15.9  | 23.9  | 54.5  | 94.4  |
| 65°   | 12.2  | 13.0  | 21.0  | 40.3  | 75.9  |
| 67.5° | 10.1  | 10.5  | 17.6  | 28.5  | 58.3  |
| 70°   | 8.4   | 8.8   | 14.7  | 19.7  | 41.1  |
| 72.5° | 7.1   | 8.4   | 11.7  | 14.3  | 26.0  |
| 75°   | 5.9   | 8.0   | 9.6   | 10.1  | 12.6  |
| 77.5° | 5.0   | 7.6   | 8.0   | 8.0   | 7.1   |
| 80°   | 4.2   | 6.3   | 6.7   | 6.3   | 5.9   |
| 82.5° | 3.4   | 5.0   | 5.5   | 5.5   | 4.6   |
| 85°   | 2.5   | 4.2   | 5.0   | 4.6   | 3.4   |
| 87.5° | 1.7   | 3.8   | 4.2   | 3.8   | 2.5   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)