

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: P1061665

Luminaire Tested: S125RDR-S375D940-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061665  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-46)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-S375D940-X4F0-XX-UDD-WVL-B  
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

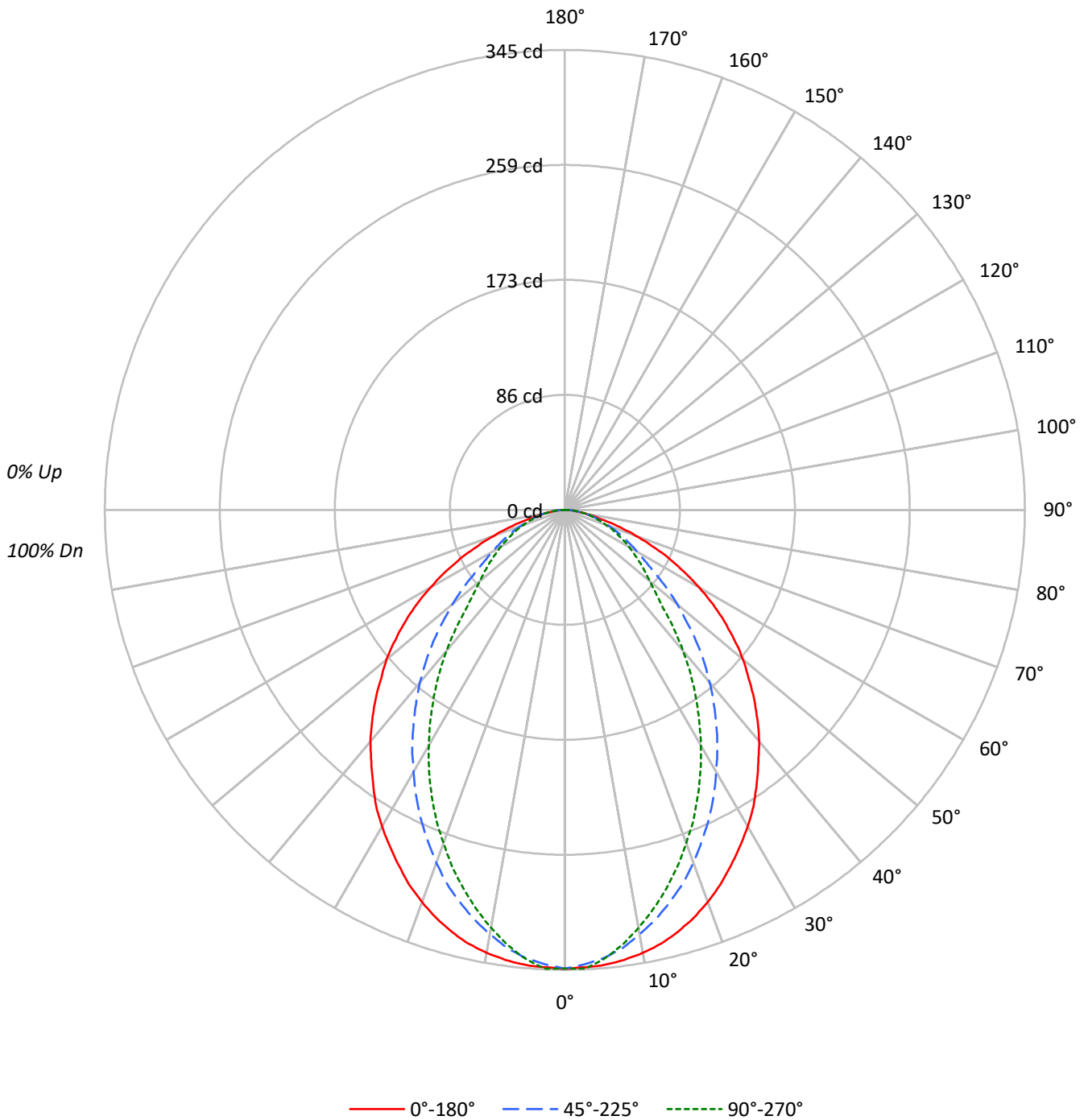
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 652.0 lumens  
Efficiency: N/A  
Efficacy: 52.2 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11  
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   | 110 | 106 | 102 | 99  | 108 | 104 | 100 | 97  | 100 | 97  | 94  | 96  | 93  | 91  | 92  | 90  | 89  | 87  |    |    | 87  |   |
| 2   | 101 | 94  | 88  | 83  | 99  | 92  | 87  | 82  | 89  | 84  | 80  | 86  | 82  | 78  | 83  | 80  | 77  | 75  |    |    | 75  |   |
| 3   | 93  | 84  | 77  | 71  | 91  | 82  | 76  | 70  | 80  | 74  | 69  | 77  | 72  | 68  | 74  | 70  | 67  | 65  |    |    | 65  |   |
| 4   | 86  | 76  | 68  | 61  | 84  | 74  | 67  | 61  | 72  | 65  | 60  | 70  | 64  | 59  | 67  | 63  | 59  | 57  |    |    | 57  |   |
| 5   | 80  | 68  | 60  | 54  | 78  | 67  | 59  | 54  | 65  | 58  | 53  | 63  | 57  | 53  | 61  | 56  | 52  | 50  |    |    | 50  |   |
| 6   | 74  | 62  | 54  | 48  | 73  | 61  | 53  | 48  | 59  | 53  | 47  | 58  | 52  | 47  | 56  | 51  | 47  | 45  |    |    | 45  |   |
| 7   | 69  | 57  | 49  | 43  | 68  | 56  | 48  | 43  | 55  | 48  | 43  | 53  | 47  | 42  | 52  | 46  | 42  | 40  |    |    | 40  |   |
| 8   | 65  | 52  | 44  | 39  | 63  | 52  | 44  | 39  | 50  | 43  | 39  | 49  | 43  | 38  | 48  | 42  | 38  | 36  |    |    | 36  |   |
| 9   | 61  | 48  | 41  | 35  | 60  | 48  | 40  | 35  | 47  | 40  | 35  | 46  | 39  | 35  | 45  | 39  | 35  | 33  |    |    | 33  |   |
| 10  | 57  | 45  | 37  | 32  | 56  | 44  | 37  | 32  | 43  | 37  | 32  | 42  | 36  | 32  | 42  | 36  | 32  | 30  |    |    | 30  |   |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 2370 | 2370 | 2370 |
| 5°  | 2369 | 2333 | 2337 |
| 10° | 2360 | 2260 | 2226 |
| 15° | 2336 | 2171 | 2096 |
| 20° | 2295 | 2065 | 1950 |
| 25° | 2237 | 1942 | 1794 |
| 30° | 2181 | 1803 | 1622 |
| 35° | 2108 | 1665 | 1439 |
| 40° | 2038 | 1518 | 1239 |
| 45° | 1954 | 1357 | 1016 |
| 50° | 1869 | 1177 | 889  |
| 55° | 1754 | 982  | 821  |
| 60° | 1600 | 859  | 767  |
| 65° | 1401 | 785  | 712  |
| 70° | 1135 | 707  | 662  |
| 75° | 814  | 646  | 617  |
| 80° | 563  | 579  | 579  |
| 85° | 411  | 506  | 529  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1954 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 32.0   | 4.9       |
| 10°-20°   | 86.6   | 13.3      |
| 20°-30°   | 119.6  | 18.3      |
| 30°-40°   | 127.4  | 19.5      |
| 40°-50°   | 112.0  | 17.2      |
| 50°-60°   | 84.9   | 13.0      |
| 60°-70°   | 55.1   | 8.5       |
| 70°-80°   | 27.3   | 4.2       |
| 80°-90°   | 7.2    | 1.1       |
| 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°    | 238.2  | 36.5      |
| 0°-40°    | 365.6  | 56.1      |
| 0°-60°    | 562.5  | 86.3      |
| 0°-90°    | 652.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 652.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 344 | 344   | 344 | 344   | 344 |      |
| 5°  | 343 | 342   | 338 | 339   | 338 | 33   |
| 15° | 328 | 320   | 305 | 298   | 294 | 92   |
| 25° | 294 | 278   | 256 | 242   | 236 | 136  |
| 35° | 251 | 228   | 198 | 180   | 171 | 157  |
| 45° | 201 | 173   | 139 | 114   | 104 | 155  |
| 55° | 146 | 117   | 82  | 71    | 68  | 130  |
| 65° | 86  | 64    | 48  | 44    | 44  | 85   |
| 75° | 31  | 27    | 24  | 24    | 23  | 34   |
| 85° | 5   | 6     | 6   | 6     | 7   | 6    |
| 90° | 0   | 0     | 0   | 0     | 0   |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 344.2 | 344.2 | 344.2 | 344.2 | 344.2 |
| 2.5°  | 343.4 | 344.2 | 341.2 | 343.8 | 344.6 |
| 5°    | 342.7 | 342.0 | 337.5 | 338.6 | 338.2 |
| 7.5°  | 340.5 | 339.0 | 331.5 | 330.7 | 329.2 |
| 10°   | 337.5 | 333.7 | 323.3 | 320.6 | 318.4 |
| 12.5° | 333.4 | 327.4 | 314.7 | 309.4 | 306.8 |
| 15°   | 327.7 | 320.3 | 304.6 | 297.5 | 294.1 |
| 17.5° | 321.0 | 310.6 | 294.1 | 284.4 | 280.7 |
| 20°   | 313.2 | 300.8 | 281.8 | 270.6 | 266.1 |
| 22.5° | 304.6 | 290.0 | 268.7 | 256.7 | 251.9 |
| 25°   | 294.5 | 278.4 | 255.6 | 242.5 | 236.2 |
| 27.5° | 284.4 | 266.5 | 241.8 | 227.2 | 220.5 |
| 30°   | 274.3 | 253.8 | 226.8 | 211.1 | 204.0 |
| 32.5° | 263.5 | 240.7 | 213.0 | 195.8 | 187.6 |
| 35°   | 250.8 | 227.6 | 198.1 | 180.1 | 171.2 |
| 37.5° | 238.4 | 213.8 | 183.5 | 163.3 | 154.7 |
| 40°   | 226.8 | 200.7 | 168.9 | 146.9 | 137.9 |
| 42.5° | 213.8 | 186.9 | 154.3 | 131.2 | 121.1 |
| 45°   | 200.7 | 172.7 | 139.4 | 114.4 | 104.3 |
| 47.5° | 186.9 | 159.2 | 123.7 | 99.0  | 92.3  |
| 50°   | 174.5 | 145.4 | 109.9 | 87.4  | 83.0  |
| 52.5° | 160.3 | 131.9 | 95.7  | 78.5  | 75.5  |
| 55°   | 146.1 | 117.3 | 81.8  | 70.6  | 68.4  |
| 57.5° | 131.5 | 104.3 | 71.0  | 63.9  | 61.7  |
| 60°   | 116.2 | 90.8  | 62.4  | 56.8  | 55.7  |
| 62.5° | 100.9 | 77.0  | 54.9  | 50.8  | 49.3  |
| 65°   | 86.0  | 63.9  | 48.2  | 44.5  | 43.7  |
| 67.5° | 70.6  | 51.9  | 41.5  | 38.9  | 38.5  |
| 70°   | 56.4  | 42.2  | 35.1  | 33.6  | 32.9  |
| 72.5° | 43.4  | 33.6  | 29.5  | 28.4  | 28.0  |
| 75°   | 30.6  | 26.9  | 24.3  | 23.5  | 23.2  |
| 77.5° | 20.6  | 20.6  | 19.4  | 18.7  | 19.1  |
| 80°   | 14.2  | 14.9  | 14.6  | 14.6  | 14.6  |
| 82.5° | 9.3   | 10.1  | 10.5  | 10.5  | 10.5  |
| 85°   | 5.2   | 6.0   | 6.4   | 6.4   | 6.7   |
| 87.5° | 1.9   | 2.2   | 2.6   | 3.0   | 3.0   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)