

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: P1061614

Luminaire Tested: S125RDR-S375D840-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061614  
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-S375D840-X4F0-XX-UDD-BVL-B  
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

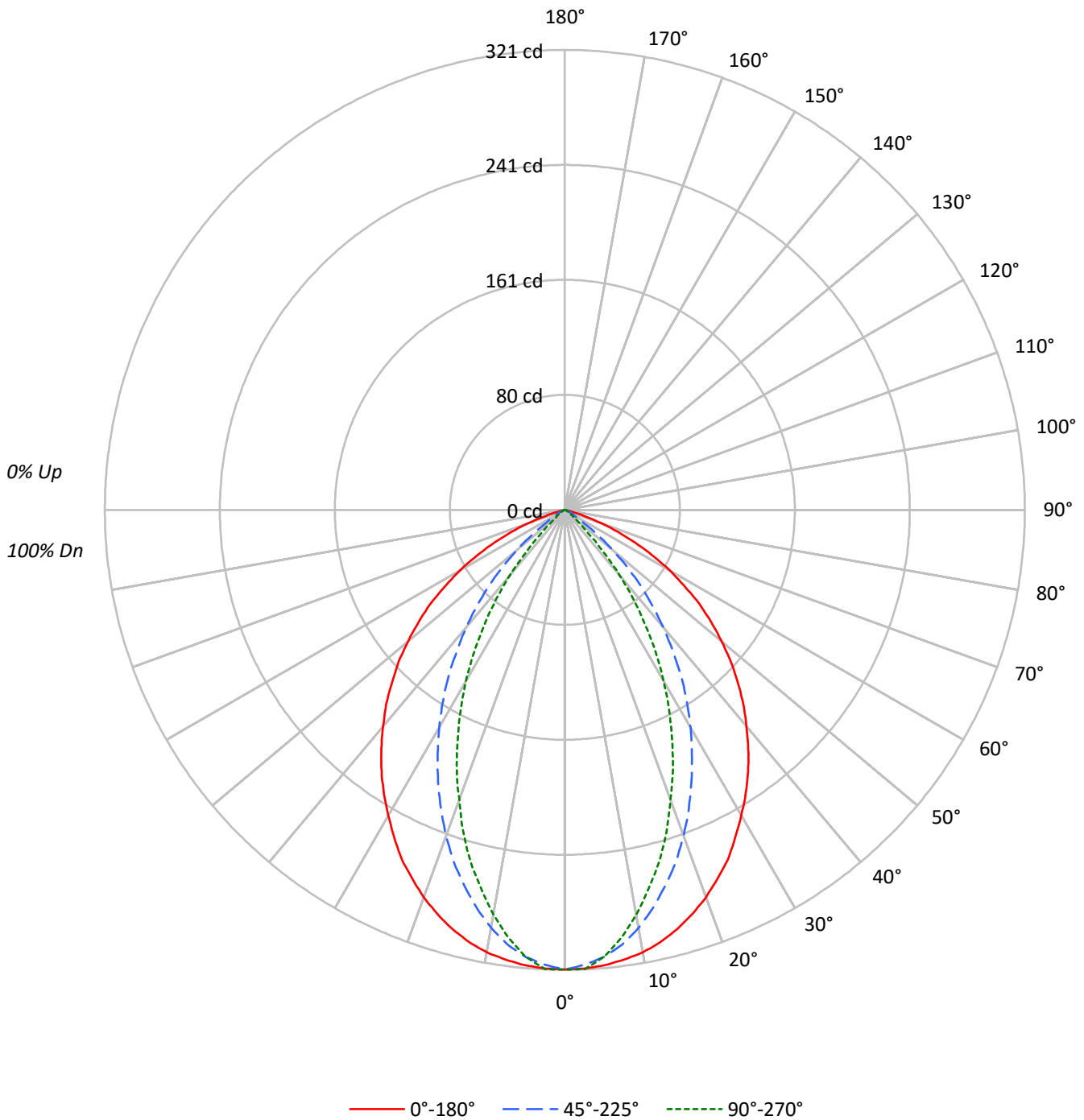
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 414.4 lumens  
Efficiency: N/A  
Efficacy: 33.2 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): 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 |    |    |    |   |
| 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°  | 2209 | 2209 | 2209 |
| 5°  | 2205 | 2165 | 2165 |
| 10° | 2193 | 2072 | 2006 |
| 15° | 2160 | 1934 | 1813 |
| 20° | 2109 | 1774 | 1578 |
| 25° | 2045 | 1589 | 1344 |
| 30° | 1958 | 1393 | 1097 |
| 35° | 1874 | 1189 | 822  |
| 40° | 1772 | 959  | 533  |
| 45° | 1661 | 725  | 231  |
| 50° | 1527 | 463  | 86   |
| 55° | 1377 | 203  | 61   |
| 60° | 1165 | 87   | 41   |
| 65° | 883  | 55   | 21   |
| 70° | 538  | 26   | 8    |
| 75° | 112  | 11   | 11   |
| 80° | 0    | 0    | 0    |
| 85° | 0    | 0    | 0    |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1661 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 29.6   | 7.1       |
| 10°-20°   | 77.1   | 18.6      |
| 20°-30°   | 99.0   | 23.9      |
| 30°-40°   | 93.2   | 22.5      |
| 40°-50°   | 65.1   | 15.7      |
| 50°-60°   | 34.8   | 8.4       |
| 60°-70°   | 13.9   | 3.3       |
| 70°-80°   | 1.8    | 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°    | 205.6  | 49.6      |
| 0°-40°    | 298.8  | 72.1      |
| 0°-60°    | 398.8  | 96.2      |
| 0°-90°    | 414.4  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 414.4  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 321 | 321   | 321 | 321   | 321 |      |
| 5°  | 319 | 318   | 313 | 314   | 313 | 30   |
| 15° | 303 | 293   | 271 | 259   | 254 | 85   |
| 25° | 269 | 246   | 209 | 186   | 177 | 124  |
| 35° | 223 | 188   | 141 | 109   | 98  | 139  |
| 45° | 171 | 128   | 74  | 36    | 24  | 132  |
| 55° | 115 | 70    | 17  | 6     | 5   | 102  |
| 65° | 54  | 22    | 3   | 2     | 1   | 54   |
| 75° | 4   | 1     | 0   | 0     | 0   | 8    |
| 85° | 0   | 0     | 0   | 0     | 0   | 0    |
| 90° | 0   | 0     | 0   | 0     | 0   |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 320.8 | 320.8 | 320.8 | 320.8 | 320.8 |
| 2.5°  | 320.4 | 320.8 | 317.8 | 320.4 | 320.8 |
| 5°    | 319.1 | 318.3 | 313.2 | 314.0 | 313.2 |
| 7.5°  | 316.6 | 314.5 | 306.0 | 303.0 | 301.3 |
| 10°   | 313.6 | 309.0 | 296.3 | 289.9 | 286.9 |
| 12.5° | 309.0 | 302.2 | 284.4 | 274.7 | 270.4 |
| 15°   | 303.0 | 293.3 | 271.3 | 258.6 | 254.4 |
| 17.5° | 295.8 | 283.1 | 257.7 | 242.1 | 235.7 |
| 20°   | 287.8 | 270.9 | 242.1 | 223.5 | 215.4 |
| 22.5° | 278.5 | 259.0 | 226.0 | 205.3 | 197.2 |
| 25°   | 269.2 | 245.5 | 209.1 | 186.2 | 176.9 |
| 27.5° | 257.7 | 231.5 | 192.1 | 167.6 | 157.4 |
| 30°   | 246.3 | 217.5 | 175.2 | 148.6 | 138.0 |
| 32.5° | 234.9 | 202.7 | 158.3 | 128.7 | 118.1 |
| 35°   | 223.0 | 187.5 | 141.4 | 109.2 | 97.8  |
| 37.5° | 210.3 | 172.3 | 123.2 | 90.6  | 78.7  |
| 40°   | 197.2 | 157.4 | 106.7 | 72.4  | 59.3  |
| 42.5° | 184.5 | 142.6 | 90.1  | 54.6  | 40.2  |
| 45°   | 170.6 | 127.8 | 74.5  | 36.0  | 23.7  |
| 47.5° | 157.4 | 113.4 | 58.4  | 20.7  | 12.3  |
| 50°   | 142.6 | 98.6  | 43.2  | 11.0  | 8.0   |
| 52.5° | 128.7 | 84.2  | 28.8  | 7.2   | 6.3   |
| 55°   | 114.7 | 70.3  | 16.9  | 5.9   | 5.1   |
| 57.5° | 98.6  | 56.7  | 9.3   | 4.7   | 3.8   |
| 60°   | 84.6  | 44.4  | 6.3   | 3.4   | 3.0   |
| 62.5° | 68.6  | 32.6  | 4.7   | 2.5   | 2.1   |
| 65°   | 54.2  | 21.6  | 3.4   | 1.7   | 1.3   |
| 67.5° | 40.2  | 12.7  | 2.1   | 0.8   | 0.8   |
| 70°   | 26.7  | 6.8   | 1.3   | 0.4   | 0.4   |
| 72.5° | 14.0  | 3.0   | 0.8   | 0.4   | 0.4   |
| 75°   | 4.2   | 1.3   | 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   |

(END OF REPORT)