

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: P1056403

Luminaire Tested: S125R3DRP-S1270D935-X4F0-XX-UDD-F-B

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1056403  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/25/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125R3DRP-S1270D935-X4F0-XX-UDD-F-B  
Description: DEFINE 5, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

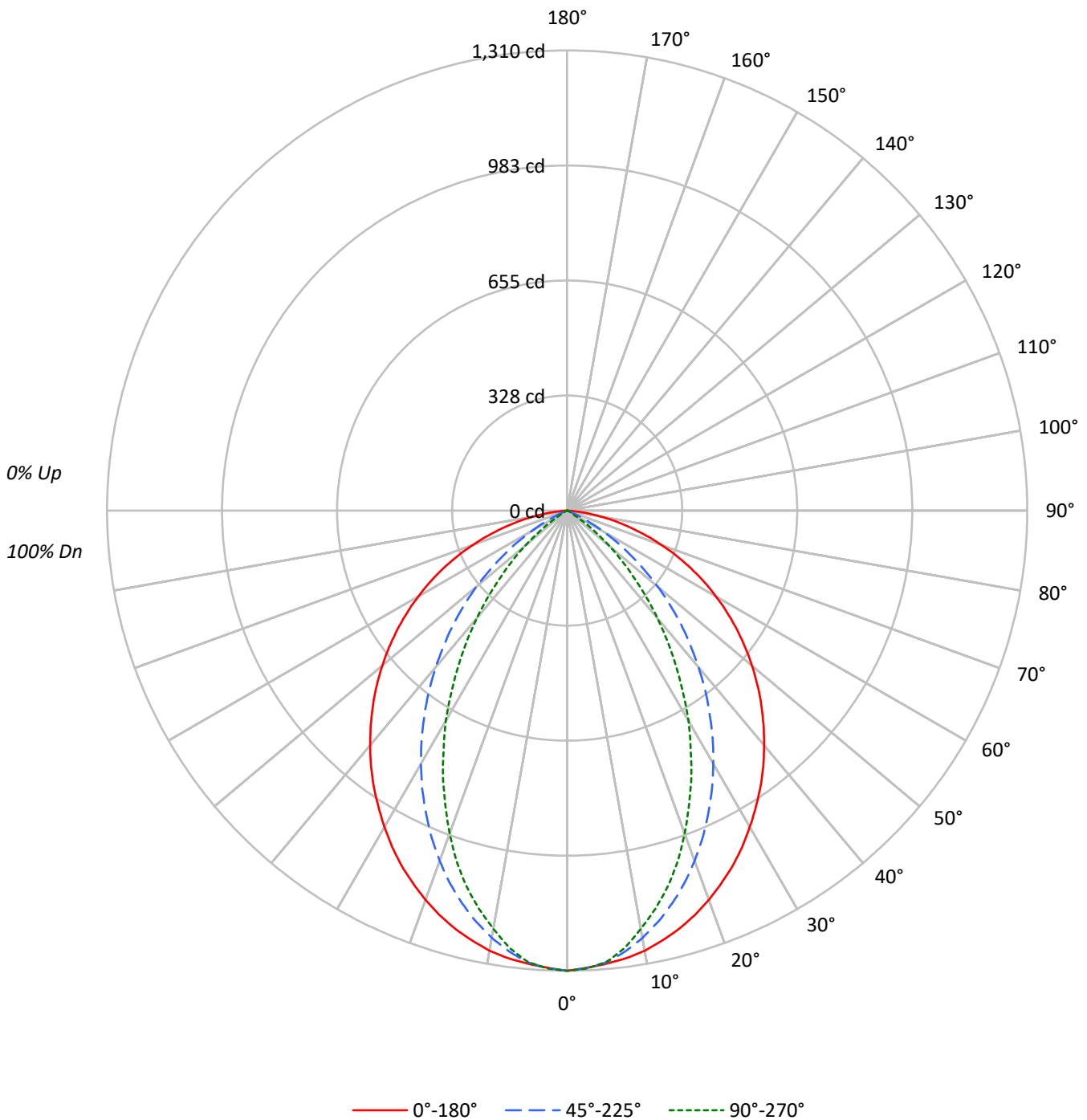
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2123.7 lumens  
Efficiency: N/A  
Efficacy: 50.7 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.89 / 1.07  
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 41.9  
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

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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  | 0   |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1   | 111 | 108 | 104 | 101 | 109 | 106 | 103 | 100 | 101 | 99  | 97  | 98  | 96  | 94  | 94  | 93  | 91  | 89  |
| 2   | 103 | 97  | 91  | 87  | 101 | 95  | 90  | 86  | 92  | 88  | 84  | 89  | 85  | 82  | 86  | 83  | 80  | 78  |
| 3   | 96  | 87  | 81  | 75  | 94  | 86  | 80  | 75  | 83  | 78  | 74  | 80  | 76  | 72  | 78  | 74  | 71  | 69  |
| 4   | 89  | 79  | 72  | 66  | 87  | 78  | 71  | 66  | 76  | 70  | 65  | 73  | 68  | 64  | 71  | 67  | 63  | 61  |
| 5   | 83  | 72  | 64  | 59  | 81  | 71  | 64  | 58  | 69  | 63  | 58  | 67  | 62  | 57  | 65  | 61  | 57  | 55  |
| 6   | 77  | 66  | 58  | 53  | 76  | 65  | 58  | 52  | 63  | 57  | 52  | 62  | 56  | 52  | 60  | 55  | 51  | 49  |
| 7   | 72  | 61  | 53  | 47  | 71  | 60  | 52  | 47  | 58  | 52  | 47  | 57  | 51  | 47  | 56  | 50  | 46  | 45  |
| 8   | 68  | 56  | 48  | 43  | 66  | 55  | 48  | 43  | 54  | 47  | 43  | 53  | 47  | 43  | 52  | 46  | 42  | 41  |
| 9   | 64  | 52  | 44  | 39  | 62  | 51  | 44  | 39  | 50  | 44  | 39  | 49  | 43  | 39  | 48  | 43  | 39  | 37  |
| 10  | 60  | 48  | 41  | 36  | 59  | 48  | 41  | 36  | 47  | 40  | 36  | 46  | 40  | 36  | 45  | 40  | 36  | 34  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 9262 | 9262 | 9262 |
| 5°  | 9187 | 9159 | 9150 |
| 10° | 9135 | 8865 | 8678 |
| 15° | 9019 | 8468 | 8106 |
| 20° | 8870 | 7981 | 7356 |
| 25° | 8700 | 7414 | 6522 |
| 30° | 8490 | 6795 | 5639 |
| 35° | 8281 | 6107 | 4662 |
| 40° | 8053 | 5368 | 3690 |
| 45° | 7815 | 4583 | 2674 |
| 50° | 7554 | 3699 | 1728 |
| 55° | 7266 | 2704 | 768  |
| 60° | 6921 | 1671 | 221  |
| 65° | 6495 | 609  | 130  |
| 70° | 5878 | 215  | 54   |
| 75° | 5108 | 71   | 36   |
| 80° | 3912 | 53   | 0    |
| 85° | 1793 | 0    | 0    |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 7815 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 121.7  | 5.7       |
| 10°-20°   | 326.8  | 15.4      |
| 20°-30°   | 442.1  | 20.8      |
| 30°-40°   | 454.1  | 21.4      |
| 40°-50°   | 376.2  | 17.7      |
| 50°-60°   | 241.5  | 11.4      |
| 60°-70°   | 116.7  | 5.5       |
| 70°-80°   | 39.5   | 1.9       |
| 80°-90°   | 5.1    | 0.2       |
| 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°    | 890.5  | 41.9      |
| 0°-40°    | 1344.7 | 63.3      |
| 0°-60°    | 1962.4 | 92.4      |
| 0°-90°    | 2123.7 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2123.7 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1310 | 1310  | 1310 | 1310  | 1310 |      |
| 5°  | 1295 | 1305  | 1291 | 1283  | 1289 | 123  |
| 15° | 1232 | 1217  | 1157 | 1117  | 1108 | 347  |
| 25° | 1115 | 1061  | 950  | 865   | 836  | 513  |
| 35° | 960  | 867   | 708  | 584   | 540  | 600  |
| 45° | 782  | 653   | 458  | 317   | 268  | 603  |
| 55° | 590  | 432   | 219  | 96    | 62   | 527  |
| 65° | 388  | 214   | 36   | 10    | 8    | 384  |
| 75° | 187  | 40    | 3    | 1     | 1    | 198  |
| 85° | 22   | 0     | 0    | 0     | 0    | 35   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1310.2 | 1310.2 | 1310.2 | 1310.2 | 1310.2 |
| 2.5°  | 1302.4 | 1312.8 | 1303.7 | 1302.4 | 1305.0 |
| 5°    | 1294.6 | 1305.0 | 1290.7 | 1282.9 | 1289.4 |
| 7.5°  | 1285.5 | 1290.7 | 1266.1 | 1253.1 | 1255.7 |
| 10°   | 1272.5 | 1271.3 | 1234.9 | 1212.8 | 1208.9 |
| 12.5° | 1253.1 | 1246.6 | 1198.5 | 1167.4 | 1160.9 |
| 15°   | 1232.3 | 1216.7 | 1157.0 | 1116.7 | 1107.6 |
| 17.5° | 1207.6 | 1183.0 | 1111.5 | 1059.6 | 1046.6 |
| 20°   | 1179.1 | 1145.3 | 1060.9 | 997.3  | 977.8  |
| 22.5° | 1147.9 | 1105.0 | 1007.7 | 932.3  | 906.4  |
| 25°   | 1115.4 | 1060.9 | 950.5  | 864.8  | 836.2  |
| 27.5° | 1079.1 | 1015.4 | 893.4  | 796.0  | 760.9  |
| 30°   | 1040.1 | 967.4  | 832.4  | 725.9  | 690.8  |
| 32.5° | 999.9  | 919.4  | 771.3  | 655.8  | 612.9  |
| 35°   | 959.6  | 867.4  | 707.7  | 584.3  | 540.2  |
| 37.5° | 916.8  | 815.5  | 645.4  | 516.8  | 468.8  |
| 40°   | 872.6  | 762.2  | 581.7  | 446.7  | 399.9  |
| 42.5° | 827.2  | 707.7  | 518.1  | 380.5  | 332.4  |
| 45°   | 781.7  | 653.2  | 458.4  | 316.8  | 267.5  |
| 47.5° | 735.0  | 597.3  | 396.0  | 254.5  | 211.7  |
| 50°   | 686.9  | 542.8  | 336.3  | 198.7  | 157.1  |
| 52.5° | 638.9  | 486.9  | 275.3  | 144.1  | 106.5  |
| 55°   | 589.5  | 432.4  | 219.4  | 96.1   | 62.3   |
| 57.5° | 540.2  | 376.6  | 167.5  | 53.2   | 23.4   |
| 60°   | 489.5  | 323.3  | 118.2  | 18.2   | 15.6   |
| 62.5° | 440.2  | 266.2  | 74.0   | 14.3   | 11.7   |
| 65°   | 388.3  | 214.3  | 36.4   | 10.4   | 7.8    |
| 67.5° | 337.6  | 164.9  | 15.6   | 6.5    | 3.9    |
| 70°   | 284.4  | 119.5  | 10.4   | 3.9    | 2.6    |
| 72.5° | 235.0  | 76.6   | 6.5    | 2.6    | 1.3    |
| 75°   | 187.0  | 40.3   | 2.6    | 1.3    | 1.3    |
| 77.5° | 140.2  | 16.9   | 1.3    | 1.3    | 1.3    |
| 80°   | 96.1   | 7.8    | 1.3    | 1.3    | 0.0    |
| 82.5° | 57.1   | 2.6    | 1.3    | 1.3    | 0.0    |
| 85°   | 22.1   | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 1.3    | 0.0    | 0.0    | 0.0    | 0.0    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

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**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 | 18.80            | 20.19 | 19.17 | 20.50 | 20.81 | 3.66           | 5.05 | 4.03 | 5.36 | 5.68 |
|                 | 3H   | 20.35            | 21.58 | 20.73 | 21.91 | 22.27 | 3.59           | 4.81 | 3.96 | 5.14 | 5.51 |
|                 | 4H   | 20.88            | 22.02 | 21.28 | 22.37 | 22.75 | 3.52           | 4.66 | 3.92 | 5.01 | 5.40 |
|                 | 6H   | 21.21            | 22.27 | 21.63 | 22.63 | 23.03 | 3.45           | 4.50 | 3.86 | 4.87 | 5.26 |
|                 | 8H   | 21.30            | 22.29 | 21.72 | 22.68 | 23.09 | 3.41           | 4.41 | 3.84 | 4.80 | 5.20 |
|                 | 12H  | 21.31            | 22.27 | 21.74 | 22.65 | 23.08 | 3.37           | 4.32 | 3.80 | 4.70 | 5.13 |
| 4H              | 2H   | 18.61            | 19.75 | 19.01 | 20.10 | 20.48 | 4.53           | 5.67 | 4.93 | 6.02 | 6.41 |
|                 | 3H   | 20.22            | 21.15 | 20.63 | 21.56 | 21.96 | 4.48           | 5.41 | 4.89 | 5.82 | 6.22 |
|                 | 4H   | 20.74            | 21.58 | 21.18 | 21.99 | 22.44 | 4.40           | 5.24 | 4.84 | 5.65 | 6.10 |
|                 | 6H   | 21.12            | 21.84 | 21.58 | 22.28 | 22.75 | 4.34           | 5.06 | 4.80 | 5.50 | 5.97 |
|                 | 8H   | 21.22            | 21.89 | 21.68 | 22.33 | 22.80 | 4.29           | 4.96 | 4.75 | 5.40 | 5.87 |
|                 | 12H  | 21.25            | 21.84 | 21.74 | 22.33 | 22.80 | 4.24           | 4.84 | 4.73 | 5.32 | 5.79 |
| 8H              | 4H   | 20.61            | 21.29 | 21.08 | 21.73 | 22.20 | 5.42           | 6.10 | 5.89 | 6.54 | 7.01 |
|                 | 6H   | 20.97            | 21.52 | 21.47 | 22.01 | 22.49 | 5.34           | 5.89 | 5.84 | 6.39 | 6.87 |
|                 | 8H   | 21.06            | 21.56 | 21.58 | 22.07 | 22.56 | 5.29           | 5.78 | 5.81 | 6.30 | 6.79 |
|                 | 12H  | 21.11            | 21.54 | 21.62 | 22.04 | 22.61 | 5.25           | 5.68 | 5.76 | 6.18 | 6.75 |
| 12H             | 4H   | 20.57            | 21.17 | 21.06 | 21.65 | 22.12 | 5.50           | 6.10 | 5.99 | 6.58 | 7.05 |
|                 | 6H   | 20.91            | 21.40 | 21.43 | 21.92 | 22.41 | 5.40           | 5.90 | 5.93 | 6.41 | 6.90 |
|                 | 8H   | 21.02            | 21.46 | 21.54 | 21.95 | 22.52 | 5.37           | 5.81 | 5.89 | 6.30 | 6.87 |