

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: P1056376

Luminaire Tested: S125R3DRP-S1090D935-X4F0-XX-UDD-F-B

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1056376  
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-S1090D935-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: -

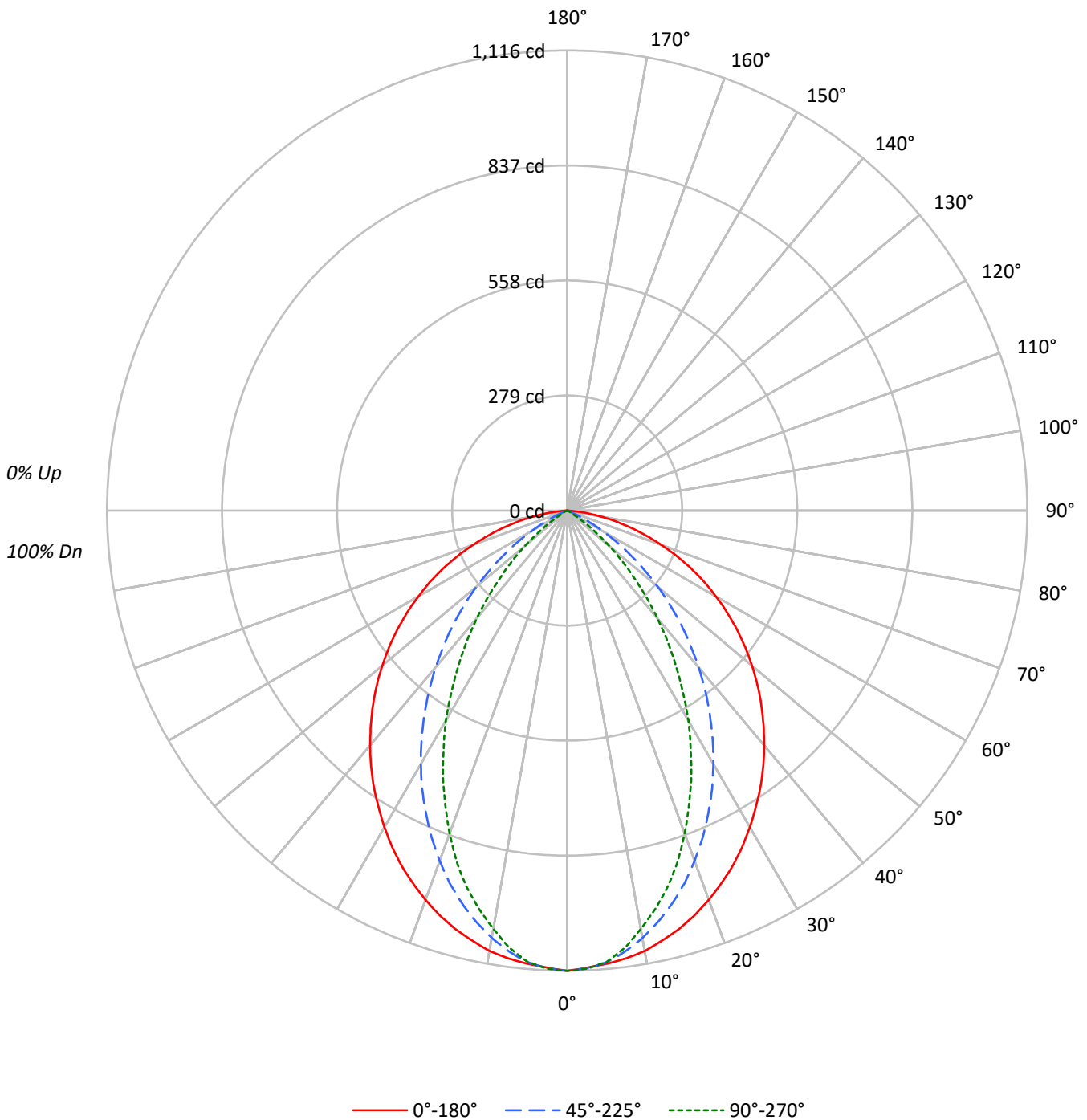
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1809.5 lumens  
Efficiency: N/A  
Efficacy: 52.1 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): 34.7  
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°  | 7892 | 7892 | 7892 |
| 5°  | 7828 | 7805 | 7797 |
| 10° | 7784 | 7553 | 7394 |
| 15° | 7685 | 7215 | 6907 |
| 20° | 7558 | 6801 | 6267 |
| 25° | 7413 | 6317 | 5558 |
| 30° | 7235 | 5789 | 4805 |
| 35° | 7057 | 5204 | 3972 |
| 40° | 6861 | 4575 | 3145 |
| 45° | 6659 | 3905 | 2278 |
| 50° | 6437 | 3152 | 1473 |
| 55° | 6191 | 2305 | 654  |
| 60° | 5897 | 1424 | 188  |
| 65° | 5533 | 519  | 110  |
| 70° | 5008 | 184  | 45   |
| 75° | 4351 | 60   | 30   |
| 80° | 3334 | 45   | 0    |
| 85° | 1525 | 0    | 0    |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6659 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 103.7  | 5.7       |
| 10°-20°   | 278.4  | 15.4      |
| 20°-30°   | 376.7  | 20.8      |
| 30°-40°   | 387.0  | 21.4      |
| 40°-50°   | 320.6  | 17.7      |
| 50°-60°   | 205.8  | 11.4      |
| 60°-70°   | 99.4   | 5.5       |
| 70°-80°   | 33.6   | 1.9       |
| 80°-90°   | 4.3    | 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°    | 758.8  | 41.9      |
| 0°-40°    | 1145.7 | 63.3      |
| 0°-60°    | 1672.1 | 92.4      |
| 0°-90°    | 1809.5 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1809.5 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1116 | 1116  | 1116 | 1116  | 1116 |      |
| 5°  | 1103 | 1112  | 1100 | 1093  | 1099 | 105  |
| 15° | 1050 | 1037  | 986  | 952   | 944  | 296  |
| 25° | 950  | 904   | 810  | 737   | 712  | 437  |
| 35° | 818  | 739   | 603  | 498   | 460  | 511  |
| 45° | 666  | 556   | 391  | 270   | 228  | 514  |
| 55° | 502  | 368   | 187  | 82    | 53   | 449  |
| 65° | 331  | 183   | 31   | 9     | 7    | 327  |
| 75° | 159  | 34    | 2    | 1     | 1    | 169  |
| 85° | 19   | 0     | 0    | 0     | 0    | 30   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1116.4 | 1116.4 | 1116.4 | 1116.4 | 1116.4 |
| 2.5°  | 1109.8 | 1118.6 | 1110.9 | 1109.8 | 1112.0 |
| 5°    | 1103.1 | 1112.0 | 1099.8 | 1093.2 | 1098.7 |
| 7.5°  | 1095.4 | 1099.8 | 1078.8 | 1067.7 | 1069.9 |
| 10°   | 1084.3 | 1083.2 | 1052.2 | 1033.4 | 1030.1 |
| 12.5° | 1067.7 | 1062.2 | 1021.2 | 994.7  | 989.2  |
| 15°   | 1050.0 | 1036.7 | 985.8  | 951.5  | 943.8  |
| 17.5° | 1029.0 | 1008.0 | 947.1  | 902.9  | 891.8  |
| 20°   | 1004.6 | 975.9  | 904.0  | 849.7  | 833.1  |
| 22.5° | 978.1  | 941.6  | 858.6  | 794.4  | 772.3  |
| 25°   | 950.4  | 904.0  | 809.9  | 736.9  | 712.5  |
| 27.5° | 919.5  | 865.2  | 761.2  | 678.2  | 648.4  |
| 30°   | 886.3  | 824.3  | 709.2  | 618.5  | 588.6  |
| 32.5° | 852.0  | 783.4  | 657.2  | 558.8  | 522.2  |
| 35°   | 817.7  | 739.1  | 603.0  | 497.9  | 460.3  |
| 37.5° | 781.1  | 694.8  | 549.9  | 440.4  | 399.4  |
| 40°   | 743.5  | 649.5  | 495.7  | 380.6  | 340.8  |
| 42.5° | 704.8  | 603.0  | 441.5  | 324.2  | 283.2  |
| 45°   | 666.1  | 556.5  | 390.6  | 270.0  | 227.9  |
| 47.5° | 626.2  | 509.0  | 337.5  | 216.9  | 180.3  |
| 50°   | 585.3  | 462.5  | 286.6  | 169.3  | 133.9  |
| 52.5° | 544.4  | 414.9  | 234.6  | 122.8  | 90.7   |
| 55°   | 502.3  | 368.4  | 187.0  | 81.9   | 53.1   |
| 57.5° | 460.3  | 320.9  | 142.7  | 45.4   | 19.9   |
| 60°   | 417.1  | 275.5  | 100.7  | 15.5   | 13.3   |
| 62.5° | 375.1  | 226.8  | 63.1   | 12.2   | 10.0   |
| 65°   | 330.8  | 182.6  | 31.0   | 8.9    | 6.6    |
| 67.5° | 287.7  | 140.5  | 13.3   | 5.5    | 3.3    |
| 70°   | 242.3  | 101.8  | 8.9    | 3.3    | 2.2    |
| 72.5° | 200.3  | 65.3   | 5.5    | 2.2    | 1.1    |
| 75°   | 159.3  | 34.3   | 2.2    | 1.1    | 1.1    |
| 77.5° | 119.5  | 14.4   | 1.1    | 1.1    | 1.1    |
| 80°   | 81.9   | 6.6    | 1.1    | 1.1    | 0.0    |
| 82.5° | 48.7   | 2.2    | 1.1    | 1.1    | 0.0    |
| 85°   | 18.8   | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 1.1    | 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 | 18.25            | 19.63 | 18.61 | 19.94 | 20.26 | 3.12           | 4.50 | 3.48 | 4.81 | 5.13 |
|                 | 3H   | 19.80            | 21.02 | 20.18 | 21.35 | 21.72 | 3.04           | 4.26 | 3.42 | 4.59 | 4.96 |
|                 | 4H   | 20.32            | 21.46 | 20.72 | 21.81 | 22.20 | 2.97           | 4.11 | 3.37 | 4.46 | 4.85 |
|                 | 6H   | 20.66            | 21.71 | 21.07 | 22.08 | 22.47 | 2.90           | 3.95 | 3.31 | 4.32 | 4.71 |
|                 | 8H   | 20.74            | 21.74 | 21.17 | 22.13 | 22.53 | 2.86           | 3.86 | 3.29 | 4.25 | 4.65 |
|                 | 12H  | 20.76            | 21.71 | 21.19 | 22.09 | 22.52 | 2.82           | 3.77 | 3.25 | 4.15 | 4.58 |
| 4H              | 2H   | 18.05            | 19.19 | 18.45 | 19.54 | 19.93 | 3.98           | 5.12 | 4.38 | 5.47 | 5.86 |
|                 | 3H   | 19.66            | 20.60 | 20.08 | 21.00 | 21.40 | 3.93           | 4.86 | 4.34 | 5.26 | 5.67 |
|                 | 4H   | 20.19            | 21.02 | 20.62 | 21.44 | 21.88 | 3.85           | 4.68 | 4.28 | 5.10 | 5.54 |
|                 | 6H   | 20.56            | 21.28 | 21.02 | 21.73 | 22.19 | 3.78           | 4.50 | 4.25 | 4.95 | 5.41 |
|                 | 8H   | 20.66            | 21.33 | 21.13 | 21.78 | 22.25 | 3.73           | 4.40 | 4.20 | 4.85 | 5.32 |
|                 | 12H  | 20.69            | 21.29 | 21.18 | 21.77 | 22.24 | 3.69           | 4.28 | 4.18 | 4.77 | 5.24 |
| 8H              | 4H   | 20.06            | 20.73 | 20.53 | 21.18 | 21.65 | 4.87           | 5.54 | 5.34 | 5.99 | 6.46 |
|                 | 6H   | 20.41            | 20.96 | 20.91 | 21.46 | 21.94 | 4.79           | 5.34 | 5.29 | 5.83 | 6.31 |
|                 | 8H   | 20.51            | 21.00 | 21.03 | 21.52 | 22.01 | 4.74           | 5.23 | 5.26 | 5.74 | 6.23 |
|                 | 12H  | 20.55            | 20.99 | 21.07 | 21.48 | 22.05 | 4.69           | 5.13 | 5.21 | 5.62 | 6.19 |
| 12H             | 4H   | 20.02            | 20.61 | 20.50 | 21.09 | 21.56 | 4.95           | 5.54 | 5.43 | 6.02 | 6.50 |
|                 | 6H   | 20.35            | 20.85 | 20.87 | 21.36 | 21.85 | 4.85           | 5.34 | 5.37 | 5.86 | 6.35 |
|                 | 8H   | 20.47            | 20.90 | 20.98 | 21.40 | 21.97 | 4.82           | 5.25 | 5.33 | 5.75 | 6.32 |