

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: P1055244

Luminaire Tested: S122R3DR-S675D935-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1055244  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/25/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122R3DR-S675D935-X4F0-XX-UDD-FLL-W  
Description: DEFINE 2, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

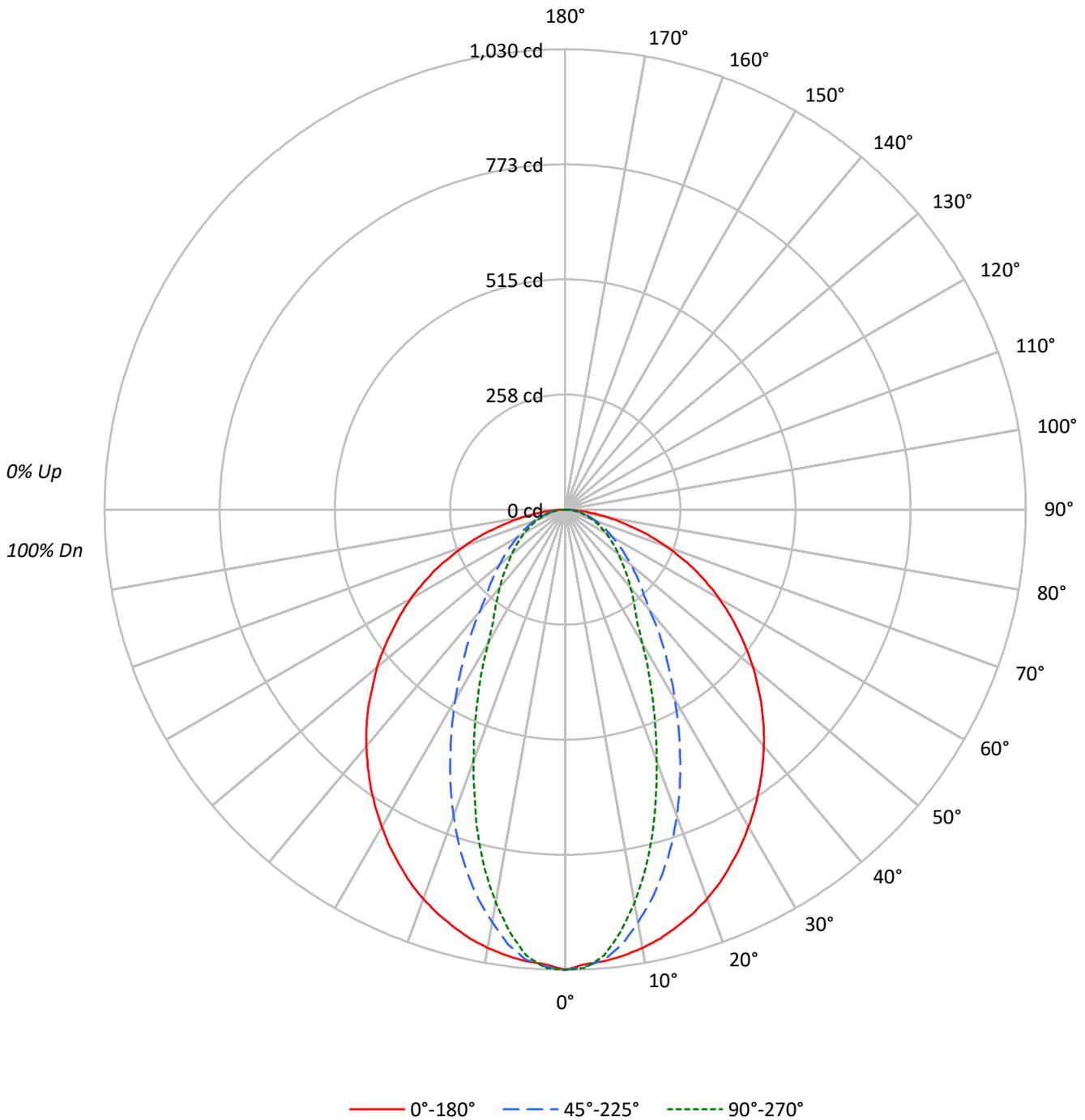
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1557.6 lumens  
Efficiency: N/A  
Efficacy: 59.0 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.71 / 0.9  
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 26.4  
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   | 110 | 106 | 102 | 99  | 108 | 104 | 101 | 97  | 100 | 97  | 94  | 96  | 94  | 92  | 92  | 91  | 89  | 87  |    |    |    |   |
| 2   | 102 | 95  | 89  | 84  | 99  | 93  | 87  | 83  | 89  | 85  | 81  | 86  | 82  | 79  | 83  | 80  | 77  | 75  |    |    |    |   |
| 3   | 94  | 85  | 78  | 72  | 92  | 83  | 77  | 71  | 80  | 75  | 70  | 78  | 73  | 69  | 75  | 71  | 68  | 66  |    |    |    |   |
| 4   | 87  | 76  | 69  | 63  | 85  | 75  | 68  | 62  | 73  | 66  | 61  | 71  | 65  | 61  | 68  | 64  | 60  | 58  |    |    |    |   |
| 5   | 81  | 69  | 61  | 55  | 79  | 68  | 61  | 55  | 66  | 60  | 55  | 64  | 59  | 54  | 63  | 58  | 54  | 52  |    |    |    |   |
| 6   | 75  | 63  | 55  | 50  | 74  | 63  | 55  | 49  | 61  | 54  | 49  | 59  | 53  | 49  | 58  | 52  | 48  | 46  |    |    |    |   |
| 7   | 71  | 58  | 50  | 45  | 69  | 58  | 50  | 45  | 56  | 49  | 44  | 55  | 49  | 44  | 53  | 48  | 44  | 42  |    |    |    |   |
| 8   | 66  | 54  | 46  | 41  | 65  | 53  | 46  | 41  | 52  | 45  | 40  | 51  | 45  | 40  | 50  | 44  | 40  | 38  |    |    |    |   |
| 9   | 62  | 50  | 43  | 37  | 61  | 49  | 42  | 37  | 48  | 42  | 37  | 47  | 41  | 37  | 46  | 41  | 37  | 35  |    |    |    |   |
| 10  | 59  | 47  | 39  | 35  | 58  | 46  | 39  | 34  | 45  | 39  | 34  | 44  | 38  | 34  | 43  | 38  | 34  | 32  |    |    |    |   |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 19510 | 19510 | 19510 |
| 5°  | 19290 | 19224 | 19043 |
| 10° | 19165 | 18038 | 17178 |
| 15° | 18947 | 16533 | 14777 |
| 20° | 18696 | 14704 | 12065 |
| 25° | 18323 | 12708 | 9629  |
| 30° | 17932 | 10737 | 7515  |
| 35° | 17525 | 8981  | 6312  |
| 40° | 17100 | 7284  | 5622  |
| 45° | 16655 | 6366  | 5029  |
| 50° | 16167 | 5633  | 4592  |
| 55° | 15614 | 5090  | 4264  |
| 60° | 15073 | 4634  | 3979  |
| 65° | 14359 | 4245  | 3743  |
| 70° | 13306 | 3961  | 3529  |
| 75° | 11785 | 3594  | 3338  |
| 80° | 10049 | 3382  | 3099  |
| 85° | 6934  | 3000  | 2804  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 16655 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 94.4   | 6.1       |
| 10°-20°   | 238.2  | 15.3      |
| 20°-30°   | 293.6  | 18.8      |
| 30°-40°   | 281.7  | 18.1      |
| 40°-50°   | 242.9  | 15.6      |
| 50°-60°   | 188.5  | 12.1      |
| 60°-70°   | 129.1  | 8.3       |
| 70°-80°   | 70.1   | 4.5       |
| 80°-90°   | 19.2   | 1.2       |
| 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°    | 626.2  | 40.2      |
| 0°-40°    | 907.8  | 58.3      |
| 0°-60°    | 1339.2 | 86.0      |
| 0°-90°    | 1557.6 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1557.6 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1030 | 1030  | 1030 | 1030  | 1030 |      |
| 5°  | 1014 | 1029  | 1011 | 998   | 1001 | 96   |
| 15° | 966  | 937   | 843  | 774   | 753  | 272  |
| 25° | 876  | 783   | 608  | 496   | 461  | 404  |
| 35° | 758  | 601   | 388  | 289   | 273  | 474  |
| 45° | 622  | 418   | 238  | 196   | 188  | 479  |
| 55° | 473  | 251   | 154  | 134   | 129  | 423  |
| 65° | 320  | 137   | 95   | 86    | 84   | 316  |
| 75° | 161  | 63    | 49   | 46    | 46   | 172  |
| 85° | 32   | 16    | 14   | 14    | 13   | 41   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1029.8 | 1029.8 | 1029.8 | 1029.8 | 1029.8 |
| 2.5°  | 1018.6 | 1035.8 | 1023.7 | 1023.7 | 1026.3 |
| 5°    | 1014.3 | 1028.9 | 1010.8 | 997.9  | 1001.3 |
| 7.5°  | 1006.5 | 1016.8 | 980.7  | 953.1  | 952.3  |
| 10°   | 996.2  | 997.0  | 937.6  | 901.5  | 892.9  |
| 12.5° | 983.3  | 969.5  | 893.7  | 839.5  | 826.6  |
| 15°   | 966.0  | 936.8  | 842.9  | 774.0  | 753.4  |
| 17.5° | 948.0  | 903.2  | 788.7  | 702.6  | 674.2  |
| 20°   | 927.3  | 862.7  | 729.3  | 631.1  | 598.4  |
| 22.5° | 904.0  | 824.0  | 669.9  | 562.2  | 527.8  |
| 25°   | 876.5  | 782.6  | 607.9  | 495.9  | 460.6  |
| 27.5° | 849.8  | 740.5  | 548.5  | 437.4  | 401.2  |
| 30°   | 819.7  | 694.8  | 490.8  | 381.4  | 343.5  |
| 32.5° | 789.5  | 648.3  | 437.4  | 328.0  | 299.6  |
| 35°   | 757.7  | 601.0  | 388.3  | 289.3  | 272.9  |
| 37.5° | 725.0  | 554.5  | 341.8  | 263.5  | 248.8  |
| 40°   | 691.4  | 508.0  | 294.5  | 238.5  | 227.3  |
| 42.5° | 656.9  | 462.4  | 261.7  | 217.8  | 207.5  |
| 45°   | 621.6  | 418.4  | 237.6  | 196.3  | 187.7  |
| 47.5° | 583.8  | 374.5  | 214.4  | 178.2  | 170.5  |
| 50°   | 548.5  | 332.3  | 191.1  | 161.9  | 155.8  |
| 52.5° | 510.6  | 291.0  | 172.2  | 147.2  | 142.1  |
| 55°   | 472.7  | 251.4  | 154.1  | 133.5  | 129.1  |
| 57.5° | 435.7  | 213.5  | 136.9  | 120.5  | 117.1  |
| 60°   | 397.8  | 183.4  | 122.3  | 108.5  | 105.0  |
| 62.5° | 359.0  | 159.3  | 108.5  | 97.3   | 93.8   |
| 65°   | 320.3  | 136.9  | 94.7   | 86.1   | 83.5   |
| 67.5° | 279.8  | 115.4  | 82.7   | 75.8   | 74.0   |
| 70°   | 240.2  | 96.4   | 71.5   | 65.4   | 63.7   |
| 72.5° | 201.5  | 78.4   | 60.3   | 56.0   | 54.2   |
| 75°   | 161.0  | 62.9   | 49.1   | 46.5   | 45.6   |
| 77.5° | 125.7  | 49.1   | 39.6   | 37.9   | 37.0   |
| 80°   | 92.1   | 36.2   | 31.0   | 29.3   | 28.4   |
| 82.5° | 61.1   | 25.0   | 22.4   | 21.5   | 20.7   |
| 85°   | 31.9   | 15.5   | 13.8   | 13.8   | 12.9   |
| 87.5° | 10.3   | 6.9    | 6.9    | 6.9    | 6.0    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)