

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: P1055250

Luminaire Tested: S122R3DR-S675D950-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055250
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-S675D950-X4F0-XX-UDD-FLL-W
Description: DEFINE 2, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

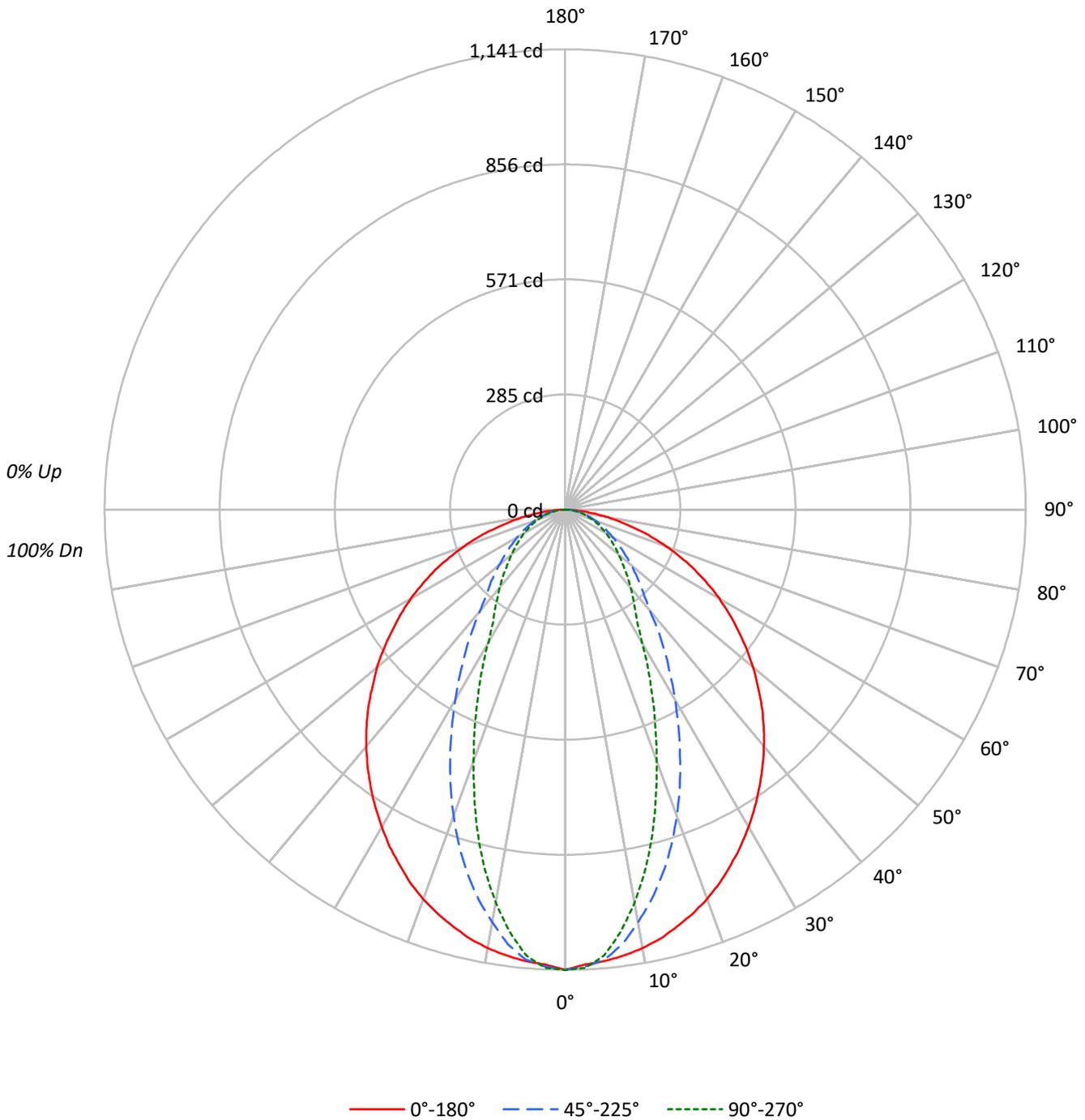
Lumens per Lamp: N/A
Luminaire Lumens: 1725.8 lumens
Efficiency: N/A
Efficacy: 65.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.71 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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 | 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° | 21617 | 21617 | 21617 |
| 5° | 21373 | 21300 | 21101 |
| 10° | 21235 | 19986 | 19032 |
| 15° | 20995 | 18320 | 16374 |
| 20° | 20716 | 16291 | 13367 |
| 25° | 20302 | 14079 | 10670 |
| 30° | 19868 | 11897 | 8326 |
| 35° | 19416 | 9952 | 6994 |
| 40° | 18947 | 8070 | 6230 |
| 45° | 18455 | 7055 | 5573 |
| 50° | 17912 | 6243 | 5090 |
| 55° | 17298 | 5642 | 4727 |
| 60° | 16699 | 5134 | 4411 |
| 65° | 15910 | 4703 | 4147 |
| 70° | 14746 | 4387 | 3911 |
| 75° | 13059 | 3982 | 3704 |
| 80° | 11140 | 3742 | 3437 |
| 85° | 7673 | 3326 | 3109 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 18455 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 104.6 | 6.1 |
| 10°-20° | 264.0 | 15.3 |
| 20°-30° | 325.3 | 18.8 |
| 30°-40° | 312.1 | 18.1 |
| 40°-50° | 269.2 | 15.6 |
| 50°-60° | 208.8 | 12.1 |
| 60°-70° | 143.0 | 8.3 |
| 70°-80° | 77.6 | 4.5 |
| 80°-90° | 21.3 | 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° | 693.8 | 40.2 |
| 0°-40° | 1005.9 | 58.3 |
| 0°-60° | 1483.9 | 86.0 |
| 0°-90° | 1725.8 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1725.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1141 | 1141 | 1141 | 1141 | 1141 | |
| 5° | 1124 | 1140 | 1120 | 1106 | 1110 | 107 |
| 15° | 1070 | 1038 | 934 | 858 | 835 | 302 |
| 25° | 971 | 867 | 674 | 550 | 510 | 448 |
| 35° | 840 | 666 | 430 | 320 | 302 | 525 |
| 45° | 689 | 464 | 263 | 218 | 208 | 531 |
| 55° | 524 | 279 | 171 | 148 | 143 | 469 |
| 65° | 355 | 152 | 105 | 95 | 92 | 350 |
| 75° | 178 | 70 | 54 | 52 | 51 | 191 |
| 85° | 35 | 17 | 15 | 15 | 14 | 45 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P1055250

CATALOG NUMBER: S122R3DR-S675D950-X4F0-XX-UDD-FLL-W

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1141.0 | 1141.0 | 1141.0 | 1141.0 | 1141.0 |
| 2.5° | 1128.6 | 1147.7 | 1134.3 | 1134.3 | 1137.2 |
| 5° | 1123.8 | 1140.0 | 1120.0 | 1105.7 | 1109.5 |
| 7.5° | 1115.2 | 1126.7 | 1086.6 | 1056.1 | 1055.1 |
| 10° | 1103.8 | 1104.7 | 1038.9 | 998.8 | 989.3 |
| 12.5° | 1089.5 | 1074.2 | 990.3 | 930.2 | 915.8 |
| 15° | 1070.4 | 1038.0 | 934.0 | 857.6 | 834.8 |
| 17.5° | 1050.4 | 1000.7 | 873.9 | 778.5 | 747.0 |
| 20° | 1027.5 | 955.9 | 808.0 | 699.3 | 663.0 |
| 22.5° | 1001.7 | 913.0 | 742.2 | 623.0 | 584.8 |
| 25° | 971.2 | 867.2 | 673.5 | 549.5 | 510.4 |
| 27.5° | 941.6 | 820.4 | 607.7 | 484.6 | 444.6 |
| 30° | 908.2 | 769.9 | 543.8 | 422.6 | 380.6 |
| 32.5° | 874.8 | 718.4 | 484.6 | 363.5 | 332.0 |
| 35° | 839.5 | 665.9 | 430.3 | 320.5 | 302.4 |
| 37.5° | 803.3 | 614.4 | 378.7 | 291.9 | 275.7 |
| 40° | 766.1 | 562.9 | 326.3 | 264.3 | 251.9 |
| 42.5° | 727.9 | 512.3 | 290.0 | 241.4 | 229.9 |
| 45° | 688.8 | 463.6 | 263.3 | 217.5 | 208.0 |
| 47.5° | 646.8 | 415.0 | 237.5 | 197.5 | 188.9 |
| 50° | 607.7 | 368.2 | 211.8 | 179.4 | 172.7 |
| 52.5° | 565.7 | 322.5 | 190.8 | 163.1 | 157.4 |
| 55° | 523.7 | 278.6 | 170.8 | 147.9 | 143.1 |
| 57.5° | 482.7 | 236.6 | 151.7 | 133.6 | 129.7 |
| 60° | 440.7 | 203.2 | 135.5 | 120.2 | 116.4 |
| 62.5° | 397.8 | 176.5 | 120.2 | 107.8 | 104.0 |
| 65° | 354.9 | 151.7 | 104.9 | 95.4 | 92.5 |
| 67.5° | 310.1 | 127.8 | 91.6 | 84.0 | 82.0 |
| 70° | 266.2 | 106.8 | 79.2 | 72.5 | 70.6 |
| 72.5° | 223.2 | 86.8 | 66.8 | 62.0 | 60.1 |
| 75° | 178.4 | 69.6 | 54.4 | 51.5 | 50.6 |
| 77.5° | 139.3 | 54.4 | 43.9 | 42.0 | 41.0 |
| 80° | 102.1 | 40.1 | 34.3 | 32.4 | 31.5 |
| 82.5° | 67.7 | 27.7 | 24.8 | 23.9 | 22.9 |
| 85° | 35.3 | 17.2 | 15.3 | 15.3 | 14.3 |
| 87.5° | 11.4 | 7.6 | 7.6 | 7.6 | 6.7 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)