

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: P1037101

Luminaire Tested: S122R3DS-B675DB2750-4F0-XX-W2A-F\_5000K

Issue Date: 5/2/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1037101  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-24)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/2/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122R3DS-B675DB2750-4F0-XX-W2A-F\_5000K  
Description: Define 2 3in Regressed Direct Surface with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}  
Light Source: -  
Ballast/Driver: -

**Summary**

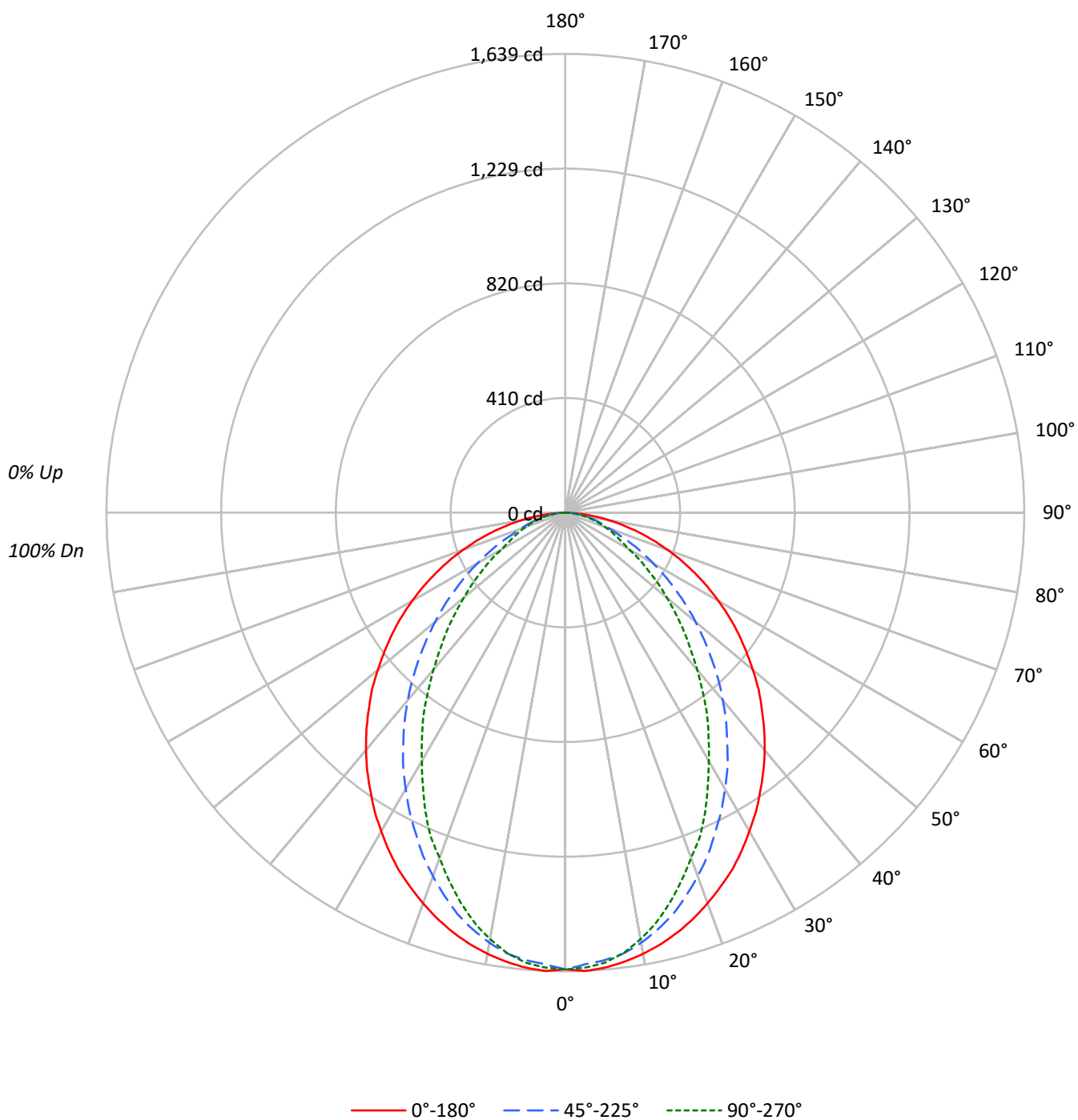
Lumens per Lamp: N/A  
Luminaire Lumens: 3356.0 lumens  
Efficiency: N/A  
Efficacy: 54.7 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 61.3  
Input Voltage (V):  
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

TEST NUMBER: P1037101

CATALOG NUMBER: S122R3DS-B675DB2750-4F0-XX-W2A-F\_5000K

### Luminous Intensity Polar Plot





TEST NUMBER: P1037101

CATALOG NUMBER: S122R3DS-B675DB2750-4F0-XX-W2A-F\_5000K

### COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| RF  | 20  |     |     |     | 20  |     |     |     | 20  |     |     |     | 20  |     |     |     | 20  |     |  |  |
| RC  | 80  |     |     |     | 70  |     |     |     | 50  |     |     |     | 30  |     |     |     | 10  |     |  |  |
| 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 | 98  | 107 | 103 | 100 | 97  | 99  | 96  | 94  | 95  | 93  | 91  | 92  | 90  | 88  | 86  |  |  |
| 2   | 101 | 94  | 87  | 82  | 98  | 92  | 86  | 81  | 88  | 83  | 79  | 85  | 81  | 78  | 82  | 79  | 76  | 74  |  |  |
| 3   | 93  | 83  | 76  | 70  | 90  | 82  | 75  | 69  | 79  | 73  | 68  | 76  | 71  | 67  | 74  | 69  | 66  | 64  |  |  |
| 4   | 86  | 75  | 66  | 60  | 83  | 73  | 66  | 60  | 71  | 64  | 59  | 69  | 63  | 58  | 66  | 62  | 57  | 55  |  |  |
| 5   | 79  | 67  | 59  | 53  | 77  | 66  | 58  | 52  | 64  | 57  | 52  | 62  | 56  | 51  | 60  | 55  | 51  | 49  |  |  |
| 6   | 74  | 61  | 53  | 47  | 72  | 60  | 52  | 46  | 58  | 51  | 46  | 57  | 50  | 46  | 55  | 50  | 45  | 43  |  |  |
| 7   | 68  | 56  | 47  | 42  | 67  | 55  | 47  | 42  | 53  | 46  | 41  | 52  | 46  | 41  | 51  | 45  | 41  | 39  |  |  |
| 8   | 64  | 51  | 43  | 38  | 62  | 51  | 43  | 37  | 49  | 42  | 37  | 48  | 42  | 37  | 47  | 41  | 37  | 35  |  |  |
| 9   | 60  | 47  | 39  | 34  | 59  | 47  | 39  | 34  | 46  | 39  | 34  | 44  | 38  | 34  | 44  | 38  | 34  | 32  |  |  |
| 10  | 56  | 44  | 36  | 31  | 55  | 43  | 36  | 31  | 42  | 36  | 31  | 41  | 35  | 31  | 41  | 35  | 31  | 29  |  |  |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 25830 | 25830 | 25830 |
| 5°  | 25929 | 25506 | 25648 |
| 10° | 25730 | 25089 | 24875 |
| 15° | 25435 | 24346 | 23644 |
| 20° | 25025 | 23283 | 22114 |
| 25° | 24606 | 22078 | 20634 |
| 30° | 24023 | 20837 | 18733 |
| 35° | 23457 | 19490 | 17065 |
| 40° | 22887 | 18095 | 15136 |
| 45° | 22216 | 16530 | 13389 |
| 50° | 21528 | 14946 | 11673 |
| 55° | 20825 | 13244 | 10026 |
| 60° | 20008 | 11454 | 8323  |
| 65° | 19083 | 9626  | 7577  |
| 70° | 17976 | 7928  | 6970  |
| 75° | 16617 | 7223  | 6501  |
| 80° | 14676 | 6463  | 5925  |
| 85° | 11533 | 5104  | 5104  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle:  $0^\circ$ 

Vertical Angle:  $45^\circ$

Luminance: 22216 cd/sqm

TEST NUMBER: P1037101

CATALOG NUMBER: S122R3DS-B675DB2750-4F0-XX-W2A-F\_5000K

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 152.9  | 4.6       |
| 10°-20°   | 419.8  | 12.5      |
| 20°-30°   | 589.4  | 17.6      |
| 30°-40°   | 642.5  | 19.1      |
| 40°-50°   | 590.5  | 17.6      |
| 50°-60°   | 463.8  | 13.8      |
| 60°-70°   | 301.9  | 9.0       |
| 70°-80°   | 155.4  | 4.6       |
| 80°-90°   | 39.7   | 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°    | 1162.2 | 34.6      |
| 0°-40°    | 1804.7 | 53.8      |
| 0°-60°    | 2859.0 | 85.2      |
| 0°-90°    | 3356.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 3356.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1632 | 1632  | 1632 | 1632  | 1632 |      |
| 5°  | 1632 | 1624  | 1605 | 1618  | 1614 | 155  |
| 15° | 1552 | 1536  | 1486 | 1458  | 1443 | 437  |
| 25° | 1409 | 1362  | 1264 | 1204  | 1181 | 648  |
| 35° | 1214 | 1139  | 1009 | 916   | 883  | 760  |
| 45° | 992  | 893   | 738  | 634   | 598  | 766  |
| 55° | 755  | 639   | 480  | 391   | 363  | 674  |
| 65° | 510  | 390   | 257  | 207   | 202  | 505  |
| 75° | 272  | 168   | 118  | 108   | 106  | 287  |
| 85° | 64   | 32    | 28   | 28    | 28   | 76   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

TEST NUMBER: P1037101

CATALOG NUMBER: S122R3DS-B675DB2750-4F0-XX-W2A-F\_5000K

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1631.8 | 1631.8 | 1631.8 | 1631.8 | 1631.8 |
| 2.5°  | 1639.2 | 1631.8 | 1615.6 | 1630.3 | 1627.4 |
| 5°    | 1631.8 | 1624.4 | 1605.2 | 1618.5 | 1614.1 |
| 7.5°  | 1618.5 | 1609.6 | 1589.0 | 1594.9 | 1587.5 |
| 10°   | 1600.8 | 1590.4 | 1560.9 | 1556.5 | 1547.6 |
| 12.5° | 1578.6 | 1565.3 | 1525.5 | 1516.6 | 1500.4 |
| 15°   | 1552.1 | 1535.8 | 1485.6 | 1457.5 | 1442.8 |
| 17.5° | 1521.0 | 1497.4 | 1435.4 | 1402.9 | 1379.3 |
| 20°   | 1485.6 | 1456.1 | 1382.2 | 1345.3 | 1312.8 |
| 22.5° | 1447.2 | 1413.2 | 1327.6 | 1277.4 | 1255.2 |
| 25°   | 1408.8 | 1361.6 | 1264.1 | 1203.5 | 1181.4 |
| 27.5° | 1363.0 | 1312.8 | 1205.0 | 1135.6 | 1101.6 |
| 30°   | 1314.3 | 1258.2 | 1140.0 | 1064.7 | 1024.9 |
| 32.5° | 1267.0 | 1199.1 | 1078.0 | 989.4  | 952.5  |
| 35°   | 1213.9 | 1138.6 | 1008.6 | 915.6  | 883.1  |
| 37.5° | 1162.2 | 1081.0 | 943.6  | 841.7  | 804.8  |
| 40°   | 1107.6 | 1019.0 | 875.7  | 770.9  | 732.5  |
| 42.5° | 1051.4 | 956.9  | 807.8  | 698.5  | 661.6  |
| 45°   | 992.4  | 893.4  | 738.4  | 633.5  | 598.1  |
| 47.5° | 936.3  | 831.4  | 671.9  | 567.1  | 534.6  |
| 50°   | 874.2  | 769.4  | 606.9  | 505.0  | 474.0  |
| 52.5° | 813.7  | 702.9  | 544.9  | 447.5  | 419.4  |
| 55°   | 754.6  | 639.4  | 479.9  | 391.3  | 363.3  |
| 57.5° | 694.1  | 575.9  | 422.3  | 339.7  | 316.0  |
| 60°   | 632.0  | 513.9  | 361.8  | 286.5  | 262.9  |
| 62.5° | 571.5  | 453.4  | 310.1  | 239.2  | 227.4  |
| 65°   | 509.5  | 389.9  | 257.0  | 206.7  | 202.3  |
| 67.5° | 450.4  | 330.8  | 206.7  | 181.6  | 177.2  |
| 70°   | 388.4  | 273.2  | 171.3  | 156.5  | 150.6  |
| 72.5° | 329.3  | 220.0  | 143.2  | 131.4  | 128.5  |
| 75°   | 271.7  | 168.3  | 118.1  | 107.8  | 106.3  |
| 77.5° | 214.1  | 119.6  | 93.0   | 87.1   | 84.2   |
| 80°   | 161.0  | 85.7   | 70.9   | 65.0   | 65.0   |
| 82.5° | 112.2  | 57.6   | 48.7   | 45.8   | 45.8   |
| 85°   | 63.5   | 32.5   | 28.1   | 28.1   | 28.1   |
| 87.5° | 23.6   | 11.8   | 11.8   | 10.3   | 10.3   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)