

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: P997135

Luminaire Tested: S125RDRP-B850DB50-4F0-XX-W2A-F

Issue Date: 5/2/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P997135  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-27)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/2/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-B850DB50-4F0-XX-W2A-F  
Description: Define 5 Regressed Direct Perimeter with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}  
Light Source: -  
Ballast/Driver: -

**Summary**

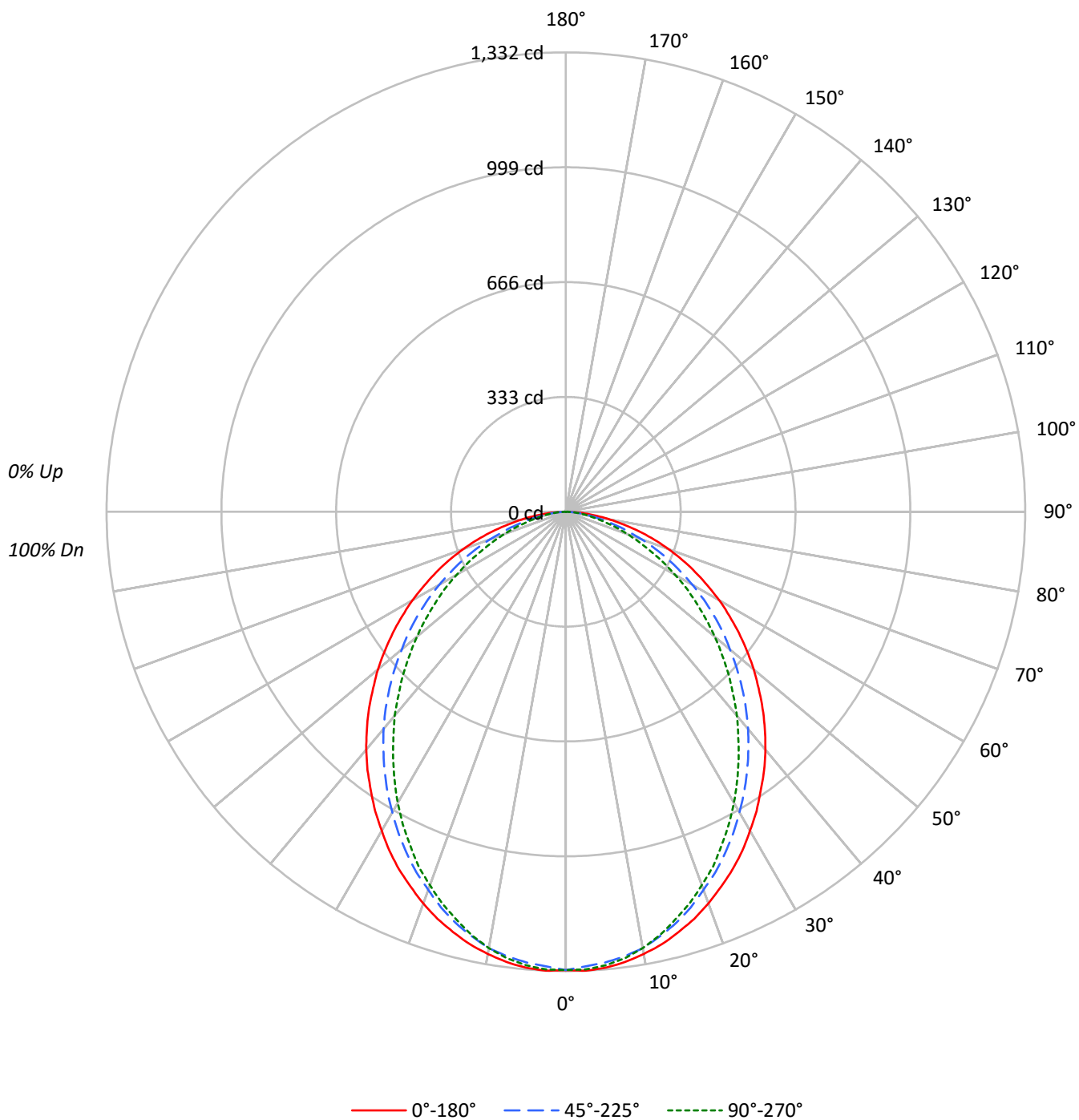
Lumens per Lamp: N/A  
Luminaire Lumens: 3140.0 lumens  
Efficiency: N/A  
Efficacy: 87.5 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25  
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 35.9  
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: P997135

CATALOG NUMBER: S125RDRP-B850DB50-4F0-XX-W2A-F

### Luminous Intensity Polar Plot



TEST NUMBER: P997135

CATALOG NUMBER: S125RDRP-B850DB50-4F0-XX-W2A-F

**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  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |  |     |     |     |  |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 |  | 106 | 106 | 106 |  | 102 |
| 1   | 109 | 105 | 101 | 97  | 107 | 103 | 99  | 96  | 99  | 96  | 93  |  | 95  | 92  | 90  |  | 91  |
| 2   | 100 | 92  | 86  | 80  | 98  | 90  | 84  | 79  | 87  | 82  | 78  |  | 84  | 79  | 76  |  | 81  |
| 3   | 92  | 82  | 74  | 68  | 89  | 80  | 73  | 67  | 77  | 71  | 66  |  | 74  | 69  | 65  |  | 72  |
| 4   | 84  | 73  | 64  | 58  | 82  | 71  | 64  | 57  | 69  | 62  | 57  |  | 67  | 61  | 56  |  | 64  |
| 5   | 78  | 65  | 57  | 50  | 76  | 64  | 56  | 50  | 62  | 55  | 49  |  | 60  | 54  | 49  |  | 58  |
| 6   | 72  | 59  | 50  | 44  | 70  | 58  | 50  | 44  | 56  | 49  | 44  |  | 55  | 48  | 43  |  | 53  |
| 7   | 67  | 54  | 45  | 39  | 65  | 53  | 45  | 39  | 51  | 44  | 39  |  | 50  | 43  | 39  |  | 49  |
| 8   | 62  | 49  | 41  | 35  | 61  | 48  | 41  | 35  | 47  | 40  | 35  |  | 46  | 39  | 35  |  | 45  |
| 9   | 58  | 45  | 37  | 32  | 57  | 45  | 37  | 32  | 44  | 37  | 32  |  | 42  | 36  | 31  |  | 41  |
| 10  | 55  | 42  | 34  | 29  | 54  | 41  | 34  | 29  | 40  | 34  | 29  |  | 39  | 33  | 29  |  | 39  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 8515 | 8515 | 8515 |
| 5°  | 8535 | 8438 | 8490 |
| 10° | 8470 | 8359 | 8359 |
| 15° | 8370 | 8190 | 8123 |
| 20° | 8241 | 7953 | 7857 |
| 25° | 8090 | 7721 | 7550 |
| 30° | 7901 | 7449 | 7211 |
| 35° | 7710 | 7169 | 6831 |
| 40° | 7531 | 6876 | 6456 |
| 45° | 7312 | 6548 | 6048 |
| 50° | 7094 | 6193 | 5623 |
| 55° | 6840 | 5853 | 5169 |
| 60° | 6585 | 5441 | 4682 |
| 65° | 6286 | 4961 | 4124 |
| 70° | 5942 | 4363 | 3554 |
| 75° | 5466 | 3679 | 2958 |
| 80° | 4815 | 2889 | 2483 |
| 85° | 4058 | 2360 | 2213 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 7312 cd/sqm

TEST NUMBER: P997135

CATALOG NUMBER: S125RDRP-B850DB50-4F0-XX-W2A-F

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 125.1  | 4.0       |
| 10°-20°   | 349.6  | 11.1      |
| 20°-30°   | 506.9  | 16.1      |
| 30°-40°   | 577.5  | 18.4      |
| 40°-50°   | 562.8  | 17.9      |
| 50°-60°   | 473.7  | 15.1      |
| 60°-70°   | 331.9  | 10.6      |
| 70°-80°   | 170.2  | 5.4       |
| 80°-90°   | 42.5   | 1.4       |
| 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°    | 981.5  | 31.3      |
| 0°-40°    | 1559.0 | 49.6      |
| 0°-60°    | 2595.5 | 82.7      |
| 0°-90°    | 3140.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 3140.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1329 | 1329  | 1329 | 1329  | 1329 |      |
| 5°  | 1327 | 1323  | 1312 | 1322  | 1320 | 126  |
| 15° | 1262 | 1256  | 1235 | 1234  | 1225 | 356  |
| 25° | 1144 | 1129  | 1092 | 1079  | 1068 | 527  |
| 35° | 986  | 962   | 916  | 887   | 873  | 617  |
| 45° | 807  | 778   | 723  | 683   | 668  | 622  |
| 55° | 612  | 580   | 524  | 479   | 463  | 548  |
| 65° | 415  | 380   | 327  | 287   | 272  | 411  |
| 75° | 221  | 191   | 149  | 126   | 120  | 233  |
| 85° | 55   | 37    | 32   | 31    | 30   | 64   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

TEST NUMBER: P997135

CATALOG NUMBER: S125RDRP-B850DB50-4F0-XX-W2A-F

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1329.0 | 1329.0 | 1329.0 | 1329.0 | 1329.0 |
| 2.5°  | 1332.0 | 1329.0 | 1319.0 | 1329.0 | 1328.0 |
| 5°    | 1327.0 | 1323.0 | 1312.0 | 1322.0 | 1320.0 |
| 7.5°  | 1317.0 | 1313.0 | 1299.9 | 1307.9 | 1305.9 |
| 10°   | 1301.9 | 1298.9 | 1284.9 | 1287.9 | 1284.9 |
| 12.5° | 1284.9 | 1280.8 | 1260.8 | 1262.8 | 1257.8 |
| 15°   | 1261.8 | 1255.7 | 1234.7 | 1233.7 | 1224.6 |
| 17.5° | 1237.7 | 1228.6 | 1203.5 | 1198.5 | 1191.5 |
| 20°   | 1208.6 | 1198.5 | 1166.4 | 1161.4 | 1152.4 |
| 22.5° | 1176.4 | 1166.4 | 1132.3 | 1121.2 | 1114.2 |
| 25°   | 1144.3 | 1129.3 | 1092.1 | 1079.1 | 1068.0 |
| 27.5° | 1108.2 | 1090.1 | 1051.0 | 1033.9 | 1022.9 |
| 30°   | 1068.0 | 1049.0 | 1006.8 | 983.7  | 974.7  |
| 32.5° | 1028.9 | 1005.8 | 962.6  | 936.5  | 924.5  |
| 35°   | 985.7  | 961.6  | 916.5  | 887.4  | 873.3  |
| 37.5° | 944.6  | 915.5  | 869.3  | 835.2  | 821.1  |
| 40°   | 900.4  | 870.3  | 822.1  | 784.0  | 771.9  |
| 42.5° | 854.2  | 823.1  | 772.9  | 736.8  | 717.7  |
| 45°   | 807.0  | 777.9  | 722.7  | 682.6  | 667.5  |
| 47.5° | 757.9  | 727.7  | 672.5  | 631.4  | 614.3  |
| 50°   | 711.7  | 678.6  | 621.3  | 579.2  | 564.1  |
| 52.5° | 661.5  | 627.4  | 574.2  | 528.0  | 512.9  |
| 55°   | 612.3  | 580.2  | 524.0  | 478.8  | 462.7  |
| 57.5° | 562.1  | 528.0  | 473.8  | 429.6  | 415.6  |
| 60°   | 513.9  | 478.8  | 424.6  | 380.4  | 365.4  |
| 62.5° | 462.7  | 429.6  | 374.4  | 334.3  | 319.2  |
| 65°   | 414.6  | 380.4  | 327.2  | 287.1  | 272.0  |
| 67.5° | 366.4  | 332.3  | 281.1  | 242.9  | 230.9  |
| 70°   | 317.2  | 283.1  | 232.9  | 201.8  | 189.7  |
| 72.5° | 269.0  | 235.9  | 189.7  | 161.6  | 154.6  |
| 75°   | 220.8  | 190.7  | 148.6  | 126.5  | 119.5  |
| 77.5° | 171.6  | 147.6  | 112.4  | 95.4   | 89.3   |
| 80°   | 130.5  | 106.4  | 78.3   | 69.3   | 67.3   |
| 82.5° | 90.3   | 69.3   | 52.2   | 49.2   | 48.2   |
| 85°   | 55.2   | 37.1   | 32.1   | 31.1   | 30.1   |
| 87.5° | 23.1   | 16.1   | 15.1   | 15.1   | 14.1   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)