

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: P996777

Luminaire Tested: S124RDRP-B795DB2750-4F0-XX-W2A-F\_5000K

Issue Date: 5/2/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P996777  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-26)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/2/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDRP-B795DB2750-4F0-XX-W2A-F\_5000K  
Description: Define 4 Regressed Direct Perimeter with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}  
Light Source: -  
Ballast/Driver: -

**Summary**

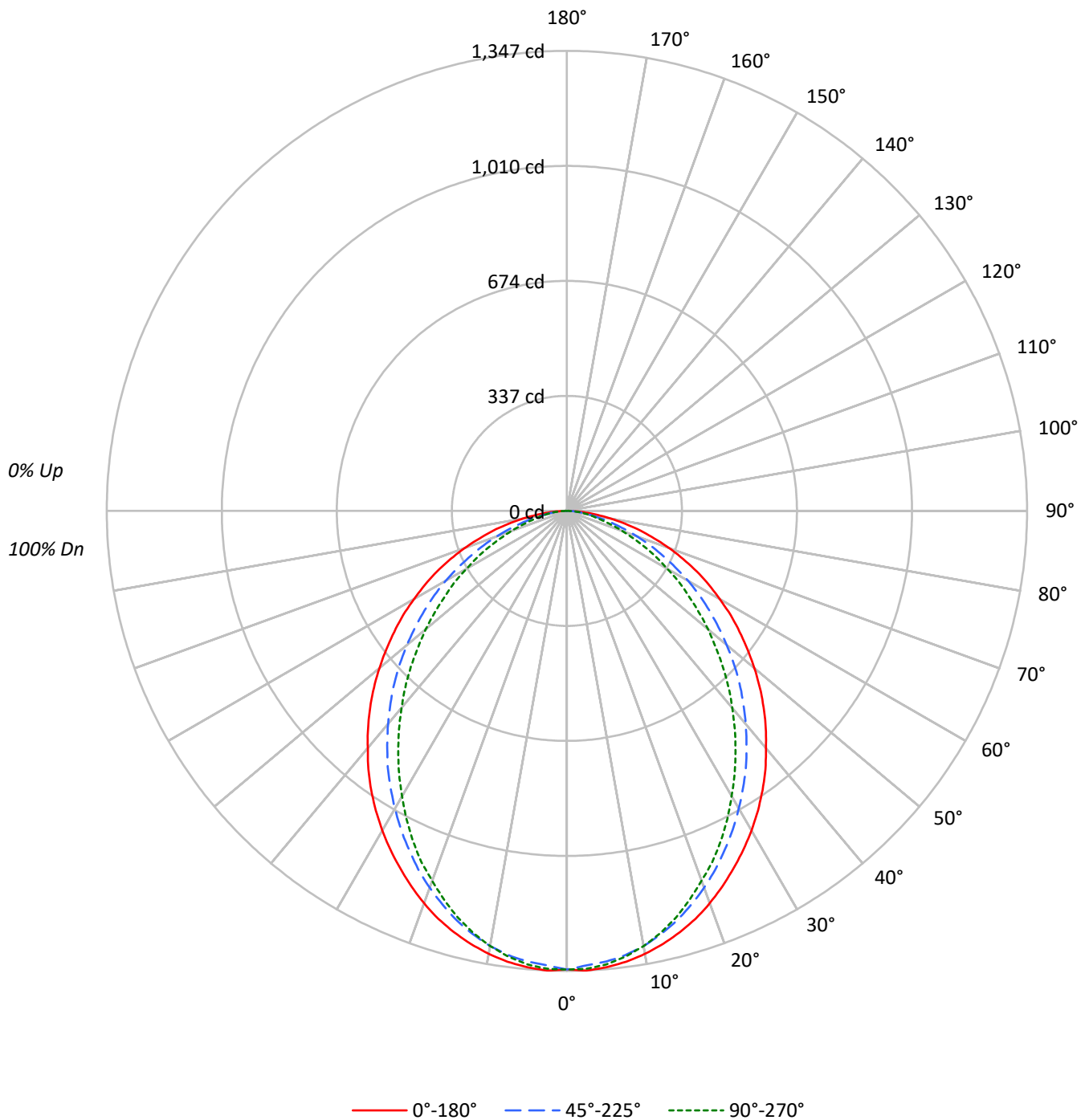
Lumens per Lamp: N/A  
Luminaire Lumens: 3103.0 lumens  
Efficiency: N/A  
Efficacy: 86.4 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24  
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')  
CIE Type: Direct

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

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### Luminous Intensity Polar Plot



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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |     |     |     |     |     |     |     |  |     |     |     |  |     |     |     |  |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|-----|-----|-----|--|-----|-----|-----|--|-----|
| RF  | 20  |     |     |     | 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 | 105 | 101 | 98  | 107 | 103 | 99  | 96  | 99  | 96  | 93  |  | 95  | 92  | 90  |  | 91  | 89  | 87  |  | 85  |
| 2   | 100 | 93  | 86  | 81  | 98  | 91  | 85  | 80  | 87  | 82  | 78  |  | 84  | 80  | 76  |  | 81  | 78  | 74  |  | 72  |
| 3   | 92  | 82  | 74  | 68  | 89  | 80  | 73  | 67  | 77  | 71  | 66  |  | 75  | 69  | 65  |  | 72  | 68  | 64  |  | 62  |
| 4   | 84  | 73  | 65  | 58  | 82  | 72  | 64  | 58  | 69  | 62  | 57  |  | 67  | 61  | 56  |  | 65  | 60  | 56  |  | 54  |
| 5   | 78  | 66  | 57  | 51  | 76  | 65  | 56  | 50  | 62  | 55  | 50  |  | 61  | 54  | 49  |  | 59  | 53  | 49  |  | 47  |
| 6   | 72  | 59  | 51  | 45  | 70  | 58  | 50  | 44  | 57  | 49  | 44  |  | 55  | 49  | 44  |  | 53  | 48  | 43  |  | 41  |
| 7   | 67  | 54  | 46  | 40  | 65  | 53  | 45  | 40  | 52  | 45  | 39  |  | 50  | 44  | 39  |  | 49  | 43  | 39  |  | 37  |
| 8   | 63  | 50  | 41  | 36  | 61  | 49  | 41  | 36  | 48  | 40  | 35  |  | 46  | 40  | 35  |  | 45  | 39  | 35  |  | 33  |
| 9   | 59  | 46  | 38  | 32  | 57  | 45  | 37  | 32  | 44  | 37  | 32  |  | 43  | 36  | 32  |  | 42  | 36  | 32  |  | 30  |
| 10  | 55  | 42  | 35  | 29  | 54  | 42  | 34  | 29  | 41  | 34  | 29  |  | 40  | 33  | 29  |  | 39  | 33  | 29  |  | 27  |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 10951 | 10951 | 10951 |
| 5°  | 10976 | 10841 | 10909 |
| 10° | 10907 | 10711 | 10711 |
| 15° | 10781 | 10487 | 10408 |
| 20° | 10609 | 10190 | 10003 |
| 25° | 10390 | 9844  | 9594  |
| 30° | 10176 | 9479  | 9082  |
| 35° | 9940  | 9100  | 8568  |
| 40° | 9654  | 8669  | 8012  |
| 45° | 9392  | 8242  | 7447  |
| 50° | 9092  | 7749  | 6848  |
| 55° | 8772  | 7236  | 6199  |
| 60° | 8419  | 6675  | 5534  |
| 65° | 8094  | 5972  | 4882  |
| 70° | 7625  | 5198  | 4144  |
| 75° | 7029  | 4310  | 3368  |
| 80° | 6133  | 3282  | 3090  |
| 85° | 5193  | 2985  | 2788  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9392 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 126.3  | 4.1       |
| 10°-20°   | 352.1  | 11.3      |
| 20°-30°   | 508.3  | 16.4      |
| 30°-40°   | 576.1  | 18.6      |
| 40°-50°   | 556.3  | 17.9      |
| 50°-60°   | 462.5  | 14.9      |
| 60°-70°   | 319.2  | 10.3      |
| 70°-80°   | 161.3  | 5.2       |
| 80°-90°   | 41.0   | 1.3       |
| 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°    | 986.7  | 31.8      |
| 0°-40°    | 1562.8 | 50.4      |
| 0°-60°    | 2581.6 | 83.2      |
| 0°-90°    | 3103.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 3103.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1343 | 1343  | 1343 | 1343  | 1343 |      |
| 5°  | 1341 | 1337  | 1324 | 1335  | 1333 | 127  |
| 15° | 1277 | 1268  | 1242 | 1240  | 1233 | 360  |
| 25° | 1155 | 1136  | 1094 | 1077  | 1066 | 532  |
| 35° | 998  | 966   | 914  | 879   | 861  | 624  |
| 45° | 814  | 776   | 715  | 664   | 646  | 628  |
| 55° | 617  | 576   | 509  | 456   | 436  | 552  |
| 65° | 420  | 375   | 310  | 265   | 253  | 414  |
| 75° | 223  | 185   | 137  | 113   | 107  | 235  |
| 85° | 56   | 35    | 32   | 30    | 30   | 64   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1342.9 | 1342.9 | 1342.9 | 1342.9 | 1342.9 |
| 2.5°  | 1347.1 | 1342.9 | 1331.6 | 1342.9 | 1341.9 |
| 5°    | 1340.9 | 1336.8 | 1324.4 | 1334.7 | 1332.7 |
| 7.5°  | 1331.6 | 1327.5 | 1312.1 | 1319.3 | 1316.2 |
| 10°   | 1317.2 | 1312.1 | 1293.6 | 1297.7 | 1293.6 |
| 12.5° | 1298.7 | 1292.6 | 1269.9 | 1272.0 | 1265.8 |
| 15°   | 1277.1 | 1267.9 | 1242.2 | 1240.1 | 1232.9 |
| 17.5° | 1252.4 | 1239.1 | 1209.3 | 1204.1 | 1193.8 |
| 20°   | 1222.6 | 1209.3 | 1174.3 | 1166.1 | 1152.7 |
| 22.5° | 1189.7 | 1174.3 | 1136.3 | 1122.9 | 1112.6 |
| 25°   | 1154.8 | 1136.3 | 1094.1 | 1076.6 | 1066.3 |
| 27.5° | 1118.8 | 1096.1 | 1051.9 | 1031.4 | 1017.0 |
| 30°   | 1080.7 | 1055.0 | 1006.7 | 981.0  | 964.5  |
| 32.5° | 1040.6 | 1010.8 | 960.4  | 929.6  | 914.1  |
| 35°   | 998.5  | 965.6  | 914.1  | 879.2  | 860.7  |
| 37.5° | 954.2  | 920.3  | 863.8  | 825.7  | 807.2  |
| 40°   | 906.9  | 873.0  | 814.4  | 771.2  | 752.7  |
| 42.5° | 861.7  | 825.7  | 764.0  | 719.8  | 700.3  |
| 45°   | 814.4  | 776.4  | 714.7  | 664.3  | 645.8  |
| 47.5° | 766.1  | 727.0  | 663.2  | 610.8  | 590.2  |
| 50°   | 716.7  | 676.6  | 610.8  | 559.4  | 539.8  |
| 52.5° | 666.3  | 627.3  | 559.4  | 506.9  | 486.4  |
| 55°   | 617.0  | 575.8  | 509.0  | 455.5  | 436.0  |
| 57.5° | 568.6  | 525.5  | 459.6  | 405.1  | 390.7  |
| 60°   | 516.2  | 475.1  | 409.3  | 355.8  | 339.3  |
| 62.5° | 468.9  | 425.7  | 357.8  | 309.5  | 297.2  |
| 65°   | 419.5  | 375.3  | 309.5  | 265.3  | 253.0  |
| 67.5° | 368.1  | 326.0  | 264.3  | 225.2  | 210.8  |
| 70°   | 319.8  | 276.6  | 218.0  | 184.1  | 173.8  |
| 72.5° | 268.4  | 230.3  | 175.8  | 148.1  | 138.8  |
| 75°   | 223.1  | 185.1  | 136.8  | 113.1  | 106.9  |
| 77.5° | 175.8  | 142.9  | 101.8  | 85.3   | 83.3   |
| 80°   | 130.6  | 100.8  | 69.9   | 66.8   | 65.8   |
| 82.5° | 91.5   | 64.8   | 50.4   | 48.3   | 47.3   |
| 85°   | 55.5   | 35.0   | 31.9   | 29.8   | 29.8   |
| 87.5° | 23.7   | 15.4   | 14.4   | 13.4   | 14.4   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)