

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: P996811

Luminaire Tested: S125DRP-B1090DB40-4F0-XX-W2A-D

Issue Date: 5/2/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P996811  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-17)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/2/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125DRP-B1090DB40-4F0-XX-W2A-D  
Description: Define 5 Direct Perimeter with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}  
Light Source: -  
Ballast/Driver: -

**Summary**

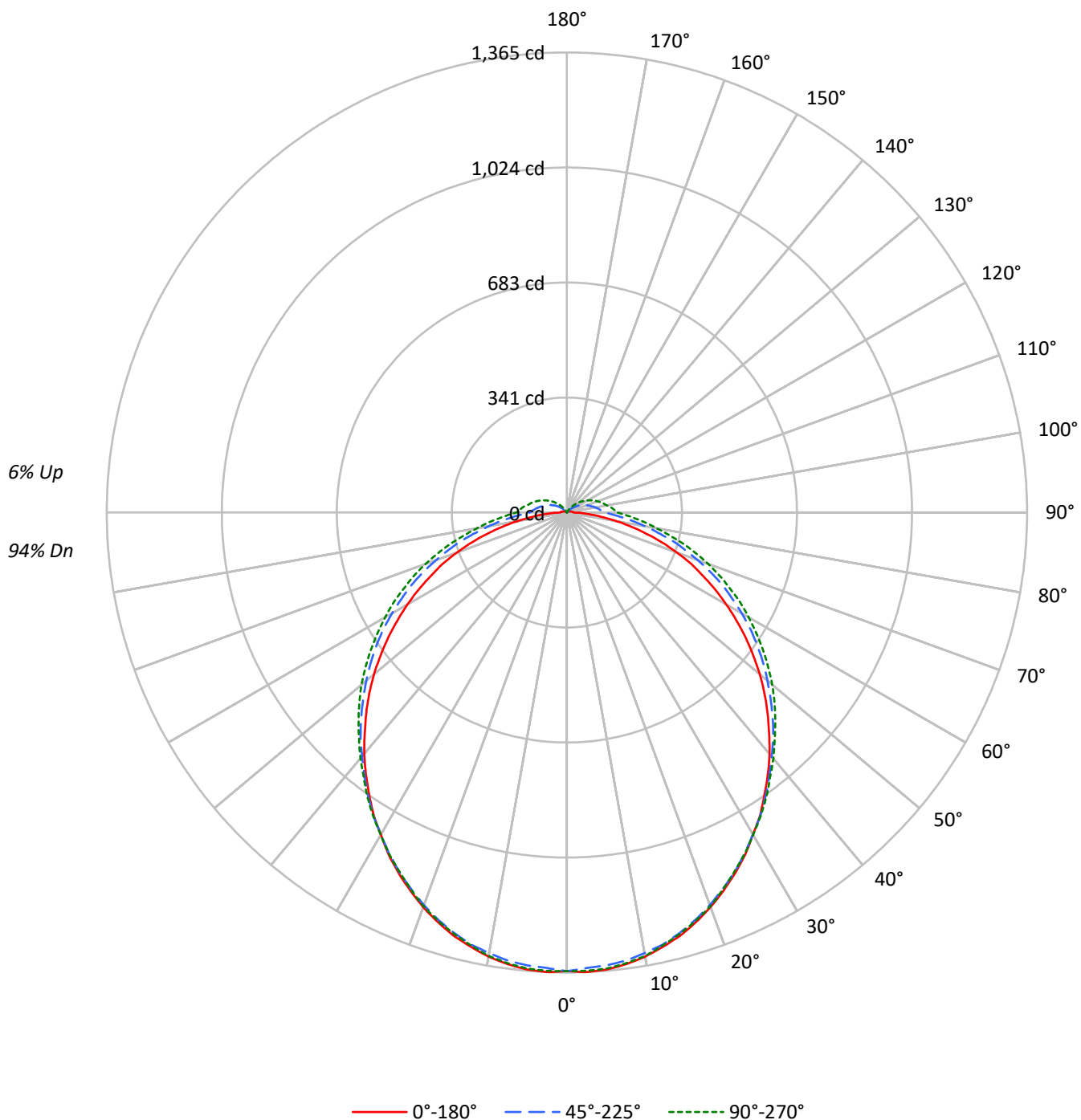
Lumens per Lamp: N/A  
Luminaire Lumens: 4216.0 lumens  
Efficiency: N/A  
Efficacy: 90.1 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34  
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 46.8  
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 |
| RC  | 80  |     |     |     | 70  |     |     |     | 50  |     |     |     | 30  |     |    |    | 10 |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50 | 30 | 10 |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |    |
| 0   | 118 | 118 | 118 | 118 | 114 | 114 | 114 | 114 | 108 | 108 | 108 | 102 | 102 | 102 | 96 | 96 | 96 |
| 1   | 106 | 101 | 96  | 92  | 103 | 98  | 94  | 90  | 93  | 89  | 86  | 88  | 85  | 82  | 83 | 81 | 79 |
| 2   | 96  | 88  | 80  | 74  | 93  | 85  | 78  | 73  | 81  | 75  | 70  | 76  | 72  | 68  | 72 | 69 | 65 |
| 3   | 88  | 77  | 68  | 61  | 84  | 75  | 67  | 60  | 71  | 64  | 59  | 67  | 61  | 57  | 64 | 59 | 55 |
| 4   | 80  | 68  | 59  | 52  | 77  | 66  | 58  | 51  | 63  | 55  | 50  | 60  | 53  | 48  | 57 | 51 | 47 |
| 5   | 74  | 60  | 51  | 44  | 71  | 59  | 50  | 44  | 56  | 49  | 43  | 53  | 47  | 42  | 51 | 45 | 41 |
| 6   | 68  | 54  | 45  | 39  | 66  | 53  | 45  | 38  | 51  | 43  | 38  | 48  | 42  | 37  | 46 | 40 | 36 |
| 7   | 63  | 49  | 40  | 34  | 61  | 48  | 40  | 34  | 46  | 39  | 33  | 44  | 37  | 33  | 42 | 36 | 32 |
| 8   | 59  | 45  | 36  | 30  | 57  | 44  | 36  | 30  | 42  | 35  | 30  | 40  | 34  | 29  | 39 | 33 | 29 |
| 9   | 55  | 41  | 33  | 27  | 53  | 40  | 33  | 27  | 39  | 32  | 27  | 37  | 31  | 26  | 36 | 30 | 26 |
| 10  | 51  | 38  | 30  | 25  | 50  | 37  | 30  | 25  | 36  | 29  | 24  | 35  | 28  | 24  | 33 | 28 | 23 |

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

|     | 0°   | 45°   | 90°   |
|-----|------|-------|-------|
| 0°  | 8720 | 8720  | 8720  |
| 5°  | 8753 | 8676  | 8736  |
| 10° | 8707 | 8637  | 8689  |
| 15° | 8620 | 8567  | 8585  |
| 20° | 8497 | 8451  | 8479  |
| 25° | 8348 | 8319  | 8310  |
| 30° | 8163 | 8163  | 8174  |
| 35° | 7994 | 8036  | 8067  |
| 40° | 7823 | 7901  | 7968  |
| 45° | 7628 | 7822  | 7918  |
| 50° | 7448 | 7740  | 7926  |
| 55° | 7228 | 7705  | 7929  |
| 60° | 6993 | 7677  | 7985  |
| 65° | 6756 | 7708  | 8091  |
| 70° | 6499 | 7724  | 8347  |
| 75° | 6077 | 7993  | 8818  |
| 80° | 5564 | 8715  | 9995  |
| 85° | 5396 | 12064 | 15004 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 87.5°

Luminance: 25676 cd/sqm

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CATALOG NUMBER: S125DRP-B1090DB40-4F0-XX-W2A-D

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 128.8  | 3.1       |
| 10°-20°   | 365.6  | 8.7       |
| 20°-30°   | 543.6  | 12.9      |
| 30°-40°   | 643.8  | 15.3      |
| 40°-50°   | 665.6  | 15.8      |
| 50°-60°   | 613.2  | 14.5      |
| 60°-70°   | 495.7  | 11.8      |
| 70°-80°   | 331.7  | 7.9       |
| 80°-90°   | 171.4  | 4.1       |
| 90°-100°  | 96.6   | 2.3       |
| 100°-110° | 71.2   | 1.7       |
| 110°-120° | 47.7   | 1.1       |
| 120°-130° | 27.0   | 0.6       |
| 130°-140° | 11.8   | 0.3       |
| 140°-150° | 2.3    | 0.1       |
| 150°-160° | 0.0    | 0.0       |
| 160°-170° | 0.0    | 0.0       |
| 170°-180° | 0.0    | 0.0       |
| 0°-30°    | 1038.0 | 24.6      |
| 0°-40°    | 1681.9 | 39.9      |
| 0°-60°    | 2960.7 | 70.2      |
| 0°-90°    | 3959.4 | 93.9      |
| 90°-120°  | 215.4  | 5.1       |
| 90°-150°  | 256.5  | 6.1       |
| 90°-180°  | 257.0  | 6.1       |
| 0°-180°   | 4216.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1361 | 1361  | 1361 | 1361  | 1361 |      |
| 5°   | 1361 | 1358  | 1349 | 1360  | 1358 | 129  |
| 15°  | 1300 | 1301  | 1292 | 1300  | 1294 | 366  |
| 25°  | 1181 | 1185  | 1177 | 1182  | 1176 | 544  |
| 35°  | 1022 | 1031  | 1027 | 1031  | 1031 | 640  |
| 45°  | 842  | 857   | 863  | 873   | 874  | 650  |
| 55°  | 647  | 668   | 690  | 704   | 710  | 578  |
| 65°  | 446  | 476   | 508  | 528   | 534  | 442  |
| 75°  | 246  | 280   | 323  | 350   | 356  | 260  |
| 85°  | 73   | 117   | 164  | 194   | 204  | 77   |
| 90°  | 21   | 64    | 109  | 140   | 149  | 15   |
| 95°  | 17   | 52    | 97   | 127   | 136  | 14   |
| 105° | 12   | 33    | 73   | 100   | 109  | 13   |
| 115° | 8    | 17    | 52   | 76    | 84   | 8    |
| 125° | 5    | 4     | 31   | 52    | 59   | 4    |
| 135° | 3    | 1     | 11   | 28    | 35   | 2    |
| 145° | 1    | 0     | 0    | 7     | 12   | 1    |
| 155° | 0    | 0     | 0    | 0     | 0    | 0    |
| 165° | 0    | 0     | 0    | 0     | 0    | 0    |
| 175° | 0    | 0     | 0    | 0     | 0    | 0    |
| 180° | 0    | 0     | 0    | 0     | 0    | 0    |

TEST NUMBER: P996811

CATALOG NUMBER: S125DRP-B1090DB40-4F0-XX-W2A-D

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1361.0 | 1361.0 | 1361.0 | 1361.0 | 1361.0 |
| 2.5°   | 1365.0 | 1362.3 | 1352.9 | 1362.3 | 1361.0 |
| 5°     | 1361.0 | 1358.3 | 1348.9 | 1359.6 | 1358.3 |
| 7.5°   | 1351.6 | 1350.3 | 1340.9 | 1350.3 | 1348.9 |
| 10°    | 1338.3 | 1338.3 | 1327.6 | 1336.9 | 1335.6 |
| 12.5°  | 1319.6 | 1320.9 | 1312.9 | 1319.6 | 1315.6 |
| 15°    | 1299.6 | 1300.9 | 1291.6 | 1299.6 | 1294.2 |
| 17.5°  | 1274.2 | 1276.9 | 1267.6 | 1274.2 | 1270.2 |
| 20°    | 1246.2 | 1248.9 | 1239.5 | 1243.5 | 1243.5 |
| 22.5°  | 1214.2 | 1219.5 | 1208.8 | 1214.2 | 1210.2 |
| 25°    | 1180.8 | 1184.8 | 1176.8 | 1182.2 | 1175.5 |
| 27.5°  | 1144.8 | 1150.1 | 1140.8 | 1144.8 | 1142.1 |
| 30°    | 1103.4 | 1111.4 | 1103.4 | 1106.1 | 1104.8 |
| 32.5°  | 1066.1 | 1072.8 | 1067.4 | 1070.1 | 1068.7 |
| 35°    | 1022.1 | 1031.4 | 1027.4 | 1031.4 | 1031.4 |
| 37.5°  | 979.4  | 987.4  | 986.0  | 991.4  | 990.0  |
| 40°    | 935.3  | 946.0  | 944.7  | 950.0  | 952.7  |
| 42.5°  | 887.3  | 902.0  | 906.0  | 912.6  | 912.6  |
| 45°    | 841.9  | 856.6  | 863.3  | 872.6  | 873.9  |
| 47.5°  | 795.2  | 808.6  | 819.2  | 832.6  | 835.3  |
| 50°    | 747.2  | 761.9  | 776.5  | 791.2  | 795.2  |
| 52.5°  | 696.5  | 715.2  | 733.8  | 749.9  | 752.5  |
| 55°    | 647.1  | 668.5  | 689.8  | 704.5  | 709.8  |
| 57.5°  | 596.4  | 621.8  | 645.8  | 661.8  | 665.8  |
| 60°    | 545.7  | 572.4  | 599.1  | 619.1  | 623.1  |
| 62.5°  | 496.3  | 523.0  | 552.4  | 575.1  | 580.4  |
| 65°    | 445.6  | 476.3  | 508.4  | 528.4  | 533.7  |
| 67.5°  | 398.9  | 428.3  | 460.3  | 484.3  | 491.0  |
| 70°    | 346.9  | 377.6  | 412.3  | 437.6  | 445.6  |
| 72.5°  | 296.2  | 328.2  | 366.9  | 394.9  | 400.3  |
| 75°    | 245.5  | 280.2  | 322.9  | 349.6  | 356.2  |
| 77.5°  | 196.1  | 236.2  | 276.2  | 305.5  | 310.9  |
| 80°    | 150.8  | 190.8  | 236.2  | 265.5  | 270.9  |
| 82.5°  | 109.4  | 152.1  | 198.8  | 226.8  | 237.5  |
| 85°    | 73.4   | 117.4  | 164.1  | 193.5  | 204.1  |
| 87.5°  | 46.7   | 89.4   | 134.8  | 165.4  | 174.8  |
| 90°    | 21.3   | 64.0   | 109.4  | 140.1  | 149.4  |
| 92.5°  | 18.7   | 57.4   | 104.1  | 133.4  | 142.8  |
| 95°    | 17.3   | 52.0   | 97.4   | 126.8  | 136.1  |
| 97.5°  | 16.0   | 48.0   | 92.1   | 120.1  | 129.4  |
| 100°   | 14.7   | 42.7   | 85.4   | 113.4  | 121.4  |
| 102.5° | 13.3   | 38.7   | 80.1   | 106.7  | 114.7  |
| 105°   | 12.0   | 33.4   | 73.4   | 100.1  | 109.4  |
| 107.5° | 10.7   | 29.4   | 68.0   | 94.7   | 102.7  |
| 110°   | 9.3    | 25.4   | 62.7   | 88.1   | 97.4   |



TEST NUMBER: P996811

CATALOG NUMBER: S125DRP-B1090DB40-4F0-XX-W2A-D

**CANDELA DISTRIBUTION (continued):**

|        | 0°  | 22.5° | 45°  | 67.5° | 90°  |
|--------|-----|-------|------|-------|------|
| 112.5° | 9.3 | 21.3  | 57.4 | 81.4  | 90.7 |
| 115°   | 8.0 | 17.3  | 52.0 | 76.1  | 84.1 |
| 117.5° | 6.7 | 13.3  | 46.7 | 69.4  | 78.7 |
| 120°   | 6.7 | 10.7  | 41.4 | 64.0  | 72.1 |
| 122.5° | 5.3 | 6.7   | 36.0 | 57.4  | 65.4 |
| 125°   | 5.3 | 4.0   | 30.7 | 52.0  | 58.7 |
| 127.5° | 4.0 | 2.7   | 25.4 | 45.4  | 53.4 |
| 130°   | 4.0 | 2.7   | 21.3 | 40.0  | 46.7 |
| 132.5° | 2.7 | 2.7   | 16.0 | 34.7  | 40.0 |
| 135°   | 2.7 | 1.3   | 10.7 | 28.0  | 34.7 |
| 137.5° | 2.7 | 1.3   | 6.7  | 22.7  | 28.0 |
| 140°   | 1.3 | 1.3   | 2.7  | 17.3  | 22.7 |
| 142.5° | 1.3 | 0.0   | 0.0  | 12.0  | 17.3 |
| 145°   | 1.3 | 0.0   | 0.0  | 6.7   | 12.0 |
| 147.5° | 0.0 | 0.0   | 0.0  | 2.7   | 5.3  |
| 150°   | 0.0 | 0.0   | 0.0  | 0.0   | 1.3  |
| 152.5° | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 155°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 157.5° | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 160°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 162.5° | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 165°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 167.5° | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 170°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 172.5° | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 175°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 177.5° | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 180°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |

(END OF REPORT)