

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: P1004677

Luminaire Tested: S125DW-B1090DB2750-4F0-XX-W2A-D\_2700K

Issue Date: 5/2/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1004677  
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: S125DW-B1090DB2750-4F0-XX-W2A-D\_2700K  
Description: Define 5 Direct Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}  
Light Source: -  
Ballast/Driver: -

**Summary**

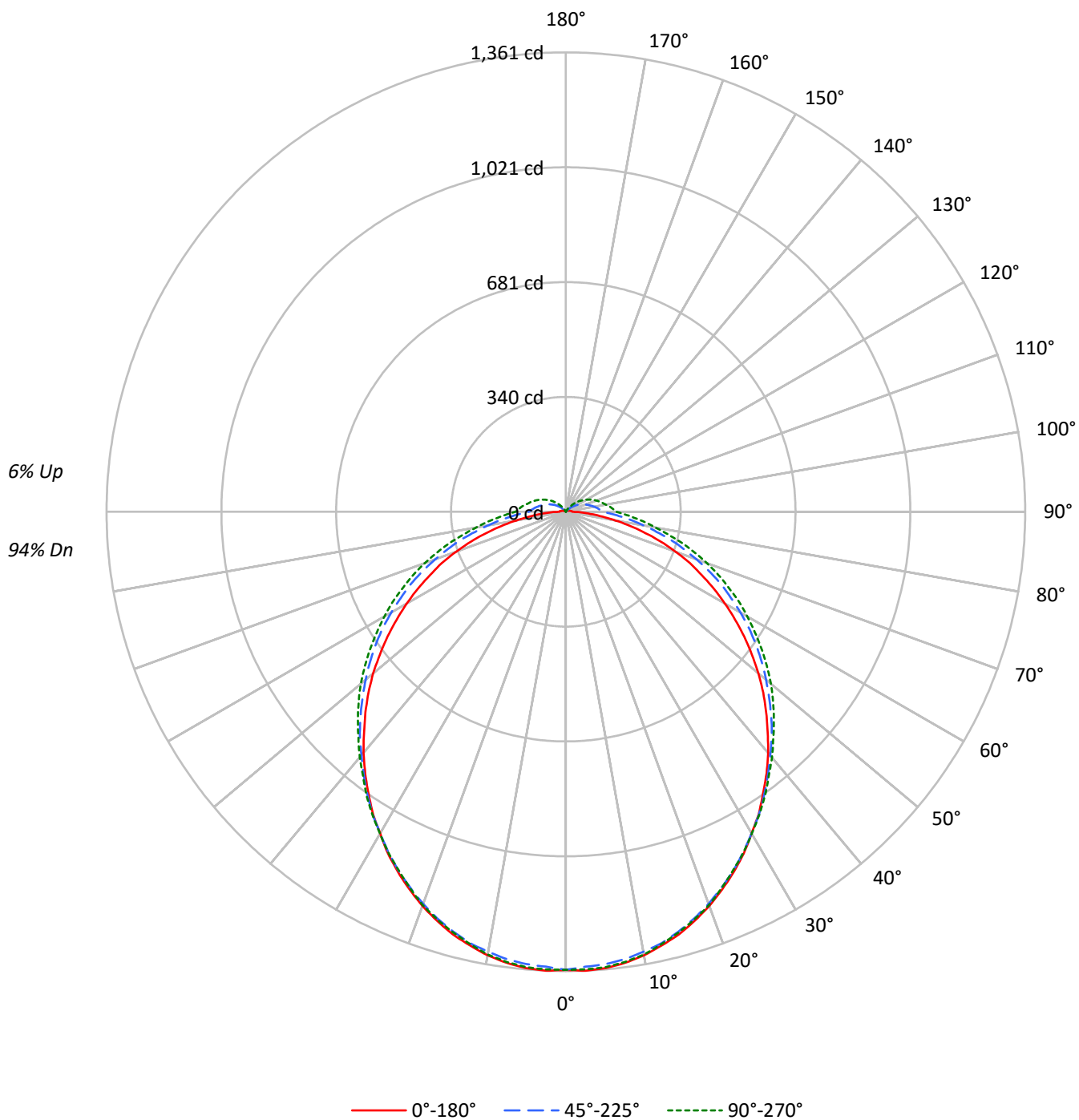
Lumens per Lamp: N/A  
Luminaire Lumens: 4204.0 lumens  
Efficiency: N/A  
Efficacy: 89.8 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34  
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 46.8  
Input Voltage (V): 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

TEST NUMBER: P1004677

CATALOG NUMBER: S125DW-B1090DB2750-4F0-XX-W2A-D\_2700K

### Luminous Intensity Polar Plot



TEST NUMBER: P1004677

CATALOG NUMBER: S125DW-B1090DB2750-4F0-XX-W2A-D\_2700K

**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 | 50 | 30 | 10 |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |    |    |    |    |
| 0   | 118 | 118 | 118 | 118 | 114 | 114 | 114 | 114 | 108 | 108 | 108 | 102 | 102 | 102 | 96 | 96 | 96 | 94 |    |    |
| 1   | 106 | 101 | 96  | 92  | 103 | 98  | 94  | 90  | 93  | 89  | 86  | 88  | 85  | 82  | 83 | 81 | 79 | 76 |    |    |
| 2   | 96  | 88  | 80  | 74  | 93  | 85  | 78  | 73  | 81  | 75  | 70  | 76  | 72  | 68  | 72 | 69 | 65 | 63 |    |    |
| 3   | 88  | 77  | 68  | 61  | 84  | 75  | 67  | 60  | 71  | 64  | 59  | 67  | 61  | 57  | 64 | 59 | 55 | 53 |    |    |
| 4   | 80  | 68  | 59  | 52  | 77  | 66  | 58  | 51  | 63  | 55  | 50  | 60  | 53  | 48  | 57 | 51 | 47 | 45 |    |    |
| 5   | 74  | 60  | 51  | 44  | 71  | 59  | 50  | 44  | 56  | 49  | 43  | 53  | 47  | 42  | 51 | 45 | 41 | 39 |    |    |
| 6   | 68  | 54  | 45  | 39  | 66  | 53  | 45  | 38  | 51  | 43  | 38  | 48  | 42  | 37  | 46 | 40 | 36 | 34 |    |    |
| 7   | 63  | 49  | 40  | 34  | 61  | 48  | 40  | 34  | 46  | 39  | 33  | 44  | 37  | 33  | 42 | 36 | 32 | 30 |    |    |
| 8   | 59  | 45  | 36  | 30  | 57  | 44  | 36  | 30  | 42  | 35  | 30  | 40  | 34  | 29  | 39 | 33 | 29 | 27 |    |    |
| 9   | 55  | 41  | 33  | 27  | 53  | 40  | 33  | 27  | 39  | 32  | 27  | 37  | 31  | 26  | 36 | 30 | 26 | 24 |    |    |
| 10  | 51  | 38  | 30  | 25  | 50  | 37  | 30  | 25  | 36  | 29  | 24  | 35  | 28  | 24  | 33 | 28 | 23 | 22 |    |    |

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

|     | 0°   | 45°   | 90°   |
|-----|------|-------|-------|
| 0°  | 8695 | 8695  | 8695  |
| 5°  | 8728 | 8651  | 8711  |
| 10° | 8682 | 8613  | 8665  |
| 15° | 8596 | 8543  | 8561  |
| 20° | 8473 | 8427  | 8455  |
| 25° | 8324 | 8296  | 8286  |
| 30° | 8140 | 8140  | 8150  |
| 35° | 7971 | 8013  | 8045  |
| 40° | 7801 | 7879  | 7946  |
| 45° | 7607 | 7800  | 7897  |
| 50° | 7427 | 7718  | 7904  |
| 55° | 7208 | 7684  | 7906  |
| 60° | 6973 | 7655  | 7961  |
| 65° | 6737 | 7685  | 8068  |
| 70° | 6480 | 7701  | 8325  |
| 75° | 6060 | 7971  | 8793  |
| 80° | 5546 | 8689  | 9966  |
| 85° | 5381 | 12027 | 14967 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 87.5°

Luminance: 25602 cd/sqm

TEST NUMBER: P1004677

CATALOG NUMBER: S125DW-B1090DB2750-4F0-XX-W2A-D\_2700K

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 128.4  | 3.1       |
| 10°-20°   | 364.6  | 8.7       |
| 20°-30°   | 542.1  | 12.9      |
| 30°-40°   | 642.0  | 15.3      |
| 40°-50°   | 663.7  | 15.8      |
| 50°-60°   | 611.4  | 14.5      |
| 60°-70°   | 494.3  | 11.8      |
| 70°-80°   | 330.7  | 7.9       |
| 80°-90°   | 170.9  | 4.1       |
| 90°-100°  | 96.3   | 2.3       |
| 100°-110° | 71.0   | 1.7       |
| 110°-120° | 47.5   | 1.1       |
| 120°-130° | 26.9   | 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°    | 1035.1 | 24.6      |
| 0°-40°    | 1677.1 | 39.9      |
| 0°-60°    | 2952.3 | 70.2      |
| 0°-90°    | 3948.2 | 93.9      |
| 90°-120°  | 214.8  | 5.1       |
| 90°-150°  | 255.8  | 6.1       |
| 90°-180°  | 256.0  | 6.1       |
| 0°-180°   | 4204.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1357 | 1357  | 1357 | 1357  | 1357 |      |
| 5°   | 1357 | 1354  | 1345 | 1356  | 1354 | 129  |
| 15°  | 1296 | 1297  | 1288 | 1296  | 1291 | 365  |
| 25°  | 1178 | 1182  | 1174 | 1179  | 1172 | 542  |
| 35°  | 1019 | 1028  | 1024 | 1028  | 1028 | 638  |
| 45°  | 840  | 854   | 861  | 870   | 872  | 648  |
| 55°  | 645  | 667   | 688  | 702   | 708  | 577  |
| 65°  | 444  | 475   | 507  | 527   | 532  | 441  |
| 75°  | 245  | 279   | 322  | 349   | 355  | 259  |
| 85°  | 73   | 117   | 164  | 193   | 204  | 76   |
| 90°  | 21   | 64    | 109  | 140   | 149  | 15   |
| 95°  | 17   | 52    | 97   | 126   | 136  | 14   |
| 105° | 12   | 33    | 73   | 100   | 109  | 13   |
| 115° | 8    | 17    | 52   | 76    | 84   | 8    |
| 125° | 5    | 4     | 31   | 52    | 58   | 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: P1004677

CATALOG NUMBER: S125DW-B1090DB2750-4F0-XX-W2A-D\_2700K

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1357.1 | 1357.1 | 1357.1 | 1357.1 | 1357.1 |
| 2.5°   | 1361.1 | 1358.4 | 1349.1 | 1358.4 | 1357.1 |
| 5°     | 1357.1 | 1354.4 | 1345.1 | 1355.8 | 1354.4 |
| 7.5°   | 1347.8 | 1346.4 | 1337.1 | 1346.4 | 1345.1 |
| 10°    | 1334.5 | 1334.5 | 1323.8 | 1333.1 | 1331.8 |
| 12.5°  | 1315.8 | 1317.2 | 1309.2 | 1315.8 | 1311.8 |
| 15°    | 1295.9 | 1297.2 | 1287.9 | 1295.9 | 1290.6 |
| 17.5°  | 1270.6 | 1273.3 | 1263.9 | 1270.6 | 1266.6 |
| 20°    | 1242.7 | 1245.3 | 1236.0 | 1240.0 | 1240.0 |
| 22.5°  | 1210.7 | 1216.1 | 1205.4 | 1210.7 | 1206.7 |
| 25°    | 1177.5 | 1181.5 | 1173.5 | 1178.8 | 1172.1 |
| 27.5°  | 1141.5 | 1146.9 | 1137.6 | 1141.5 | 1138.9 |
| 30°    | 1100.3 | 1108.3 | 1100.3 | 1103.0 | 1101.6 |
| 32.5°  | 1063.0 | 1069.7 | 1064.4 | 1067.0 | 1065.7 |
| 35°    | 1019.1 | 1028.5 | 1024.5 | 1028.5 | 1028.5 |
| 37.5°  | 976.6  | 984.5  | 983.2  | 988.5  | 987.2  |
| 40°    | 932.7  | 943.3  | 942.0  | 947.3  | 950.0  |
| 42.5°  | 884.8  | 899.4  | 903.4  | 910.0  | 910.0  |
| 45°    | 839.5  | 854.2  | 860.8  | 870.1  | 871.5  |
| 47.5°  | 793.0  | 806.3  | 816.9  | 830.2  | 832.9  |
| 50°    | 745.1  | 759.7  | 774.3  | 789.0  | 793.0  |
| 52.5°  | 694.5  | 713.1  | 731.8  | 747.7  | 750.4  |
| 55°    | 645.3  | 666.6  | 687.9  | 702.5  | 707.8  |
| 57.5°  | 594.7  | 620.0  | 643.9  | 659.9  | 663.9  |
| 60°    | 544.2  | 570.8  | 597.4  | 617.3  | 621.3  |
| 62.5°  | 494.9  | 521.5  | 550.8  | 573.4  | 578.8  |
| 65°    | 444.4  | 475.0  | 506.9  | 526.9  | 532.2  |
| 67.5°  | 397.8  | 427.1  | 459.0  | 483.0  | 489.6  |
| 70°    | 345.9  | 376.5  | 411.1  | 436.4  | 444.4  |
| 72.5°  | 295.4  | 327.3  | 365.9  | 393.8  | 399.1  |
| 75°    | 244.8  | 279.4  | 322.0  | 348.6  | 355.2  |
| 77.5°  | 195.6  | 235.5  | 275.4  | 304.7  | 310.0  |
| 80°    | 150.3  | 190.3  | 235.5  | 264.8  | 270.1  |
| 82.5°  | 109.1  | 151.7  | 198.2  | 226.2  | 236.8  |
| 85°    | 73.2   | 117.1  | 163.6  | 192.9  | 203.6  |
| 87.5°  | 46.6   | 89.1   | 134.4  | 165.0  | 174.3  |
| 90°    | 21.3   | 63.9   | 109.1  | 139.7  | 149.0  |
| 92.5°  | 18.6   | 57.2   | 103.8  | 133.0  | 142.4  |
| 95°    | 17.3   | 51.9   | 97.1   | 126.4  | 135.7  |
| 97.5°  | 16.0   | 47.9   | 91.8   | 119.7  | 129.1  |
| 100°   | 14.6   | 42.6   | 85.2   | 113.1  | 121.1  |
| 102.5° | 13.3   | 38.6   | 79.8   | 106.4  | 114.4  |
| 105°   | 12.0   | 33.3   | 73.2   | 99.8   | 109.1  |
| 107.5° | 10.6   | 29.3   | 67.9   | 94.5   | 102.4  |
| 110°   | 9.3    | 25.3   | 62.5   | 87.8   | 97.1   |

TEST NUMBER: P1004677

CATALOG NUMBER: S125DW-B1090DB2750-4F0-XX-W2A-D\_2700K

**CANDELA DISTRIBUTION (continued):**

|        | 0°  | 22.5° | 45°  | 67.5° | 90°  |
|--------|-----|-------|------|-------|------|
| 112.5° | 9.3 | 21.3  | 57.2 | 81.2  | 90.5 |
| 115°   | 8.0 | 17.3  | 51.9 | 75.8  | 83.8 |
| 117.5° | 6.7 | 13.3  | 46.6 | 69.2  | 78.5 |
| 120°   | 6.7 | 10.6  | 41.2 | 63.9  | 71.8 |
| 122.5° | 5.3 | 6.7   | 35.9 | 57.2  | 65.2 |
| 125°   | 5.3 | 4.0   | 30.6 | 51.9  | 58.5 |
| 127.5° | 4.0 | 2.7   | 25.3 | 45.2  | 53.2 |
| 130°   | 4.0 | 2.7   | 21.3 | 39.9  | 46.6 |
| 132.5° | 2.7 | 2.7   | 16.0 | 34.6  | 39.9 |
| 135°   | 2.7 | 1.3   | 10.6 | 27.9  | 34.6 |
| 137.5° | 2.7 | 1.3   | 6.7  | 22.6  | 27.9 |
| 140°   | 1.3 | 1.3   | 2.7  | 17.3  | 22.6 |
| 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)