

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P730310

Luminaire Tested: **HBLED-LD5-12SE-N-CLI-UNV-L735**

Issue Date: 11/13/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P730310  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P23769)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/13/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-12SE-N-CLI-UNV-L735  
Description: 12000 LUMEN, SE HBLED WITH NARROW DISTRIBUTION AND CLEAR ACRYLIC LENS INSERT  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11066.0 lumens  
Efficiency: N/A  
Efficacy: 147.5 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 0.64 / 0.78  
Luminous Opening: Rectangular (W 1.67' x L: 4' x H: 0')  
CIE Type: Direct

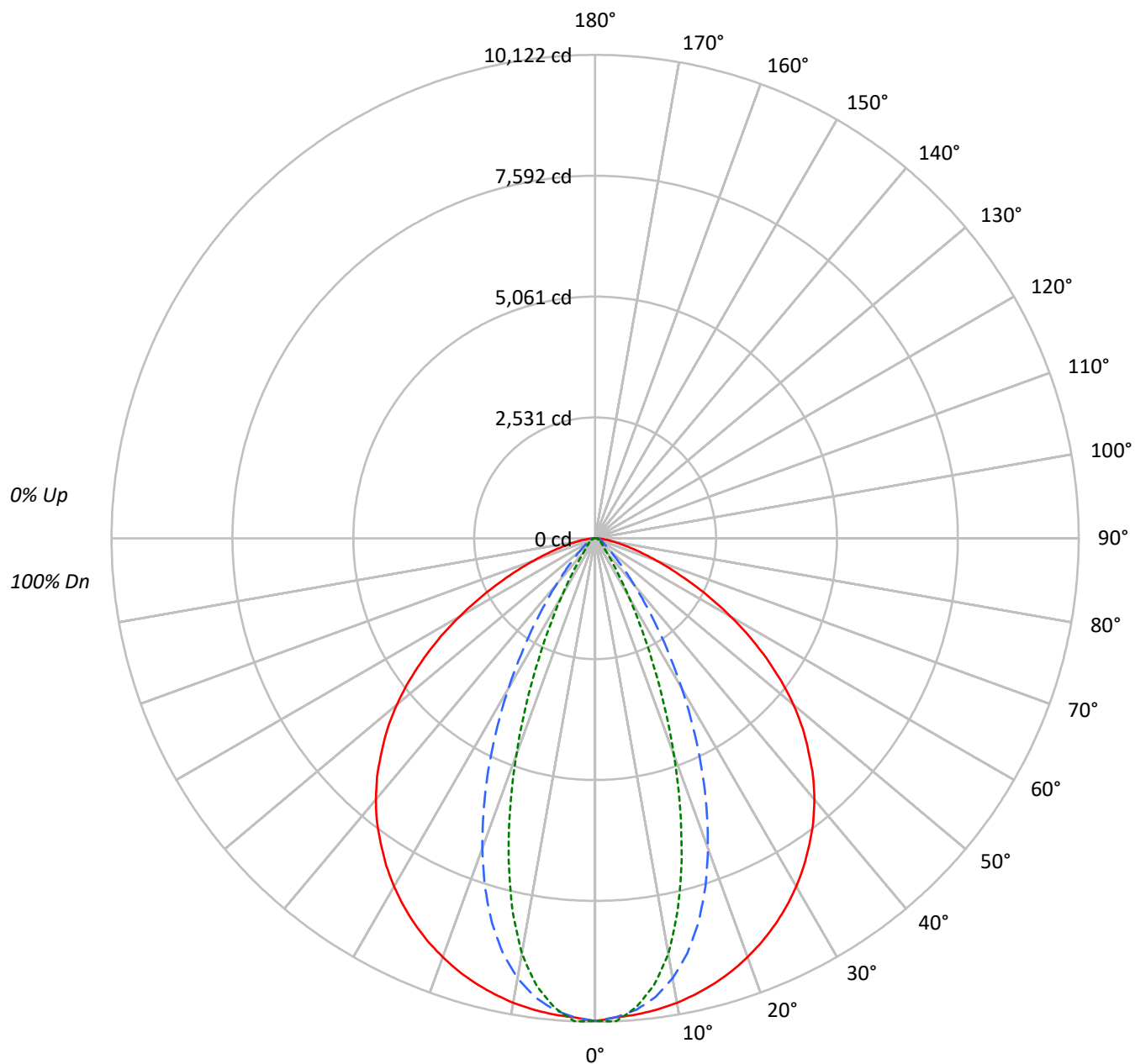
Input Watts (W): 75  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P730310

CATALOG NUMBER: HBLED-LD5-12SE-N-CLI-UNV-L735

### Luminous Intensity Polar Plot





TEST NUMBER: P730310

CATALOG NUMBER: HBLED-LD5-12SE-N-CLI-UNV-L735

**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  | 50  | 30 | 10 |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |    |    |
| 1   | 112 | 108 | 105 | 102 | 109 | 106 | 103 | 101 | 102 | 100 | 98  | 98  | 96  | 95  | 95  | 93  | 92  | 90  |    |    |
| 2   | 105 | 98  | 93  | 89  | 102 | 97  | 92  | 88  | 93  | 89  | 86  | 90  | 87  | 84  | 87  | 85  | 82  | 81  |    |    |
| 3   | 98  | 90  | 84  | 79  | 96  | 88  | 83  | 78  | 86  | 81  | 77  | 83  | 79  | 75  | 81  | 77  | 74  | 72  |    |    |
| 4   | 92  | 82  | 75  | 70  | 90  | 81  | 75  | 70  | 79  | 73  | 69  | 77  | 72  | 68  | 75  | 71  | 67  | 65  |    |    |
| 5   | 86  | 76  | 69  | 63  | 84  | 75  | 68  | 63  | 73  | 67  | 62  | 71  | 66  | 62  | 69  | 65  | 61  | 60  |    |    |
| 6   | 81  | 70  | 63  | 58  | 79  | 69  | 62  | 57  | 68  | 62  | 57  | 66  | 61  | 57  | 65  | 60  | 56  | 55  |    |    |
| 7   | 76  | 65  | 58  | 53  | 75  | 64  | 58  | 53  | 63  | 57  | 52  | 62  | 56  | 52  | 60  | 56  | 52  | 50  |    |    |
| 8   | 72  | 61  | 54  | 49  | 70  | 60  | 53  | 49  | 59  | 53  | 48  | 58  | 52  | 48  | 57  | 52  | 48  | 46  |    |    |
| 9   | 68  | 57  | 50  | 45  | 67  | 56  | 50  | 45  | 55  | 49  | 45  | 54  | 49  | 45  | 53  | 48  | 45  | 43  |    |    |
| 10  | 64  | 53  | 47  | 42  | 63  | 53  | 46  | 42  | 52  | 46  | 42  | 51  | 46  | 42  | 50  | 45  | 42  | 40  |    |    |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 16320 | 16320 | 16320 |
| 5°  | 16222 | 16061 | 15976 |
| 10° | 16195 | 15333 | 14469 |
| 15° | 16130 | 13938 | 11685 |
| 20° | 16033 | 11860 | 8282  |
| 25° | 15890 | 9352  | 5004  |
| 30° | 15696 | 6749  | 2572  |
| 35° | 15413 | 4413  | 1284  |
| 40° | 15048 | 2650  | 749   |
| 45° | 14422 | 1583  | 561   |
| 50° | 13603 | 1035  | 471   |
| 55° | 12311 | 785   | 411   |
| 60° | 10580 | 669   | 375   |
| 65° | 8510  | 610   | 354   |
| 70° | 6411  | 653   | 352   |
| 75° | 4716  | 621   | 362   |
| 80° | 3451  | 618   | 396   |
| 85° | 2584  | 750   | 513   |



TEST NUMBER: P730310

CATALOG NUMBER: HBLED-LD5-12SE-N-CLI-UNV-L735

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 930.9   | 8.4       |
| 10°-20°   | 2315.9  | 20.9      |
| 20°-30°   | 2565.2  | 23.2      |
| 30°-40°   | 2055.1  | 18.6      |
| 40°-50°   | 1467.1  | 13.3      |
| 50°-60°   | 942.3   | 8.5       |
| 60°-70°   | 510.7   | 4.6       |
| 70°-80°   | 218.3   | 2.0       |
| 80°-90°   | 60.5    | 0.5       |
| 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°    | 5811.9  | 52.5      |
| 0°-40°    | 7867.0  | 71.1      |
| 0°-60°    | 10276.5 | 92.9      |
| 0°-90°    | 11066.0 | 100.0     |
| 90°-120°  | 0.0     | 0.0       |
| 90°-150°  | 0.0     | 0.0       |
| 90°-180°  | 0.0     | 0.0       |
| 0°-180°   | 11066.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°    | 22.5° | 45°   | 67.5° | 90°   | Flux |
|-----|-------|-------|-------|-------|-------|------|
| 0°  | 10108 | 10108 | 10108 | 10108 | 10108 |      |
| 5°  | 10009 | 10046 | 9909  | 9878  | 9857  | 951  |
| 15° | 9650  | 9348  | 8338  | 7369  | 6991  | 2723 |
| 25° | 8919  | 7864  | 5249  | 3420  | 2809  | 4109 |
| 35° | 7820  | 5656  | 2239  | 903   | 652   | 4889 |
| 45° | 6316  | 3265  | 693   | 295   | 246   | 4869 |
| 55° | 4374  | 1460  | 279   | 171   | 146   | 3898 |
| 65° | 2228  | 599   | 160   | 110   | 93    | 2231 |
| 75° | 756   | 219   | 100   | 69    | 58    | 840  |
| 85° | 140   | 58    | 40    | 34    | 28    | 170  |
| 90° | 0     | 0     | 0     | 0     | 0     |      |



TEST NUMBER: P730310

CATALOG NUMBER: HBLED-LD5-12SE-N-CLI-UNV-L735

**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 22.5°   | 45°     | 67.5°   | 90°     |
|-------|---------|---------|---------|---------|---------|
| 0°    | 10108.0 | 10108.0 | 10108.0 | 10108.0 | 10108.0 |
| 2.5°  | 10041.4 | 10104.3 | 10036.6 | 10078.7 | 10121.8 |
| 5°    | 10009.0 | 10046.3 | 9909.4  | 9878.0  | 9857.2  |
| 7.5°  | 9952.5  | 9941.9  | 9684.8  | 9518.1  | 9437.7  |
| 10°   | 9878.0  | 9791.7  | 9352.5  | 8986.2  | 8825.5  |
| 12.5° | 9771.5  | 9593.7  | 8902.6  | 8259.5  | 7986.9  |
| 15°   | 9649.6  | 9347.7  | 8338.3  | 7368.9  | 6990.8  |
| 17.5° | 9503.7  | 9060.2  | 7663.8  | 6413.7  | 5914.9  |
| 20°   | 9331.2  | 8713.1  | 6902.5  | 5399.0  | 4820.3  |
| 22.5° | 9138.5  | 8312.8  | 6087.4  | 4387.4  | 3766.7  |
| 25°   | 8919.2  | 7864.5  | 5249.4  | 3420.1  | 2808.9  |
| 27.5° | 8682.3  | 7366.7  | 4416.2  | 2555.5  | 1998.0  |
| 30°   | 8419.2  | 6827.9  | 3620.2  | 1842.6  | 1379.4  |
| 32.5° | 8132.3  | 6255.1  | 2880.8  | 1295.8  | 943.4   |
| 35°   | 7819.8  | 5656.1  | 2238.7  | 902.9   | 651.6   |
| 37.5° | 7499.8  | 5044.9  | 1690.9  | 638.3   | 467.4   |
| 40°   | 7139.4  | 4435.9  | 1257.5  | 467.4   | 355.6   |
| 42.5° | 6752.3  | 3838.5  | 930.6   | 359.9   | 288.0   |
| 45°   | 6316.3  | 3265.1  | 693.2   | 295.0   | 245.5   |
| 47.5° | 5893.6  | 2730.7  | 526.5   | 251.3   | 213.5   |
| 50°   | 5415.5  | 2248.3  | 412.1   | 219.4   | 187.4   |
| 52.5° | 4908.1  | 1824.0  | 334.3   | 193.3   | 165.0   |
| 55°   | 4373.6  | 1459.8  | 278.9   | 171.4   | 145.9   |
| 57.5° | 3832.2  | 1156.3  | 238.5   | 152.8   | 129.9   |
| 60°   | 3276.3  | 924.8   | 207.1   | 136.8   | 116.0   |
| 62.5° | 2733.8  | 739.5   | 181.0   | 123.0   | 103.8   |
| 65°   | 2227.5  | 599.4   | 159.7   | 110.2   | 92.6    |
| 67.5° | 1759.5  | 473.8   | 149.1   | 99.0    | 83.6    |
| 70°   | 1358.1  | 368.9   | 138.4   | 88.4    | 74.5    |
| 72.5° | 1029.1  | 283.3   | 122.5   | 78.8    | 66.0    |
| 75°   | 756.0   | 219.4   | 99.6    | 69.2    | 58.0    |
| 77.5° | 540.9   | 168.8   | 80.9    | 60.1    | 50.1    |
| 80°   | 371.1   | 125.7   | 66.5    | 51.6    | 42.6    |
| 82.5° | 241.2   | 88.9    | 53.8    | 42.6    | 35.1    |
| 85°   | 139.5   | 58.0    | 40.5    | 33.5    | 27.7    |
| 87.5° | 60.1    | 31.9    | 27.7    | 25.0    | 21.3    |
| 90°   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |



Report Generated By 670246072 / DESKTOP-MV3F9LC





— 0°-180°    - - 45°-225°    - - - 90°-270°







(END OF REPORT)