

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: P730331

Luminaire Tested: **HBLED-LD5-12SE-W-AI-UNV-L835**

Issue Date: 11/13/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P730331  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P23765)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/13/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-12SE-W-AI-UNV-L835  
Description: 12000 LUMEN, SE HBLED WITH WIDE DISTRIBUTION AND PRISMATIC ACRYLIC LENS INSERT  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10471.0 lumens  
Efficiency: N/A  
Efficacy: 139.6 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1.67' x L: 4' x H: 0')  
CIE Type: Direct

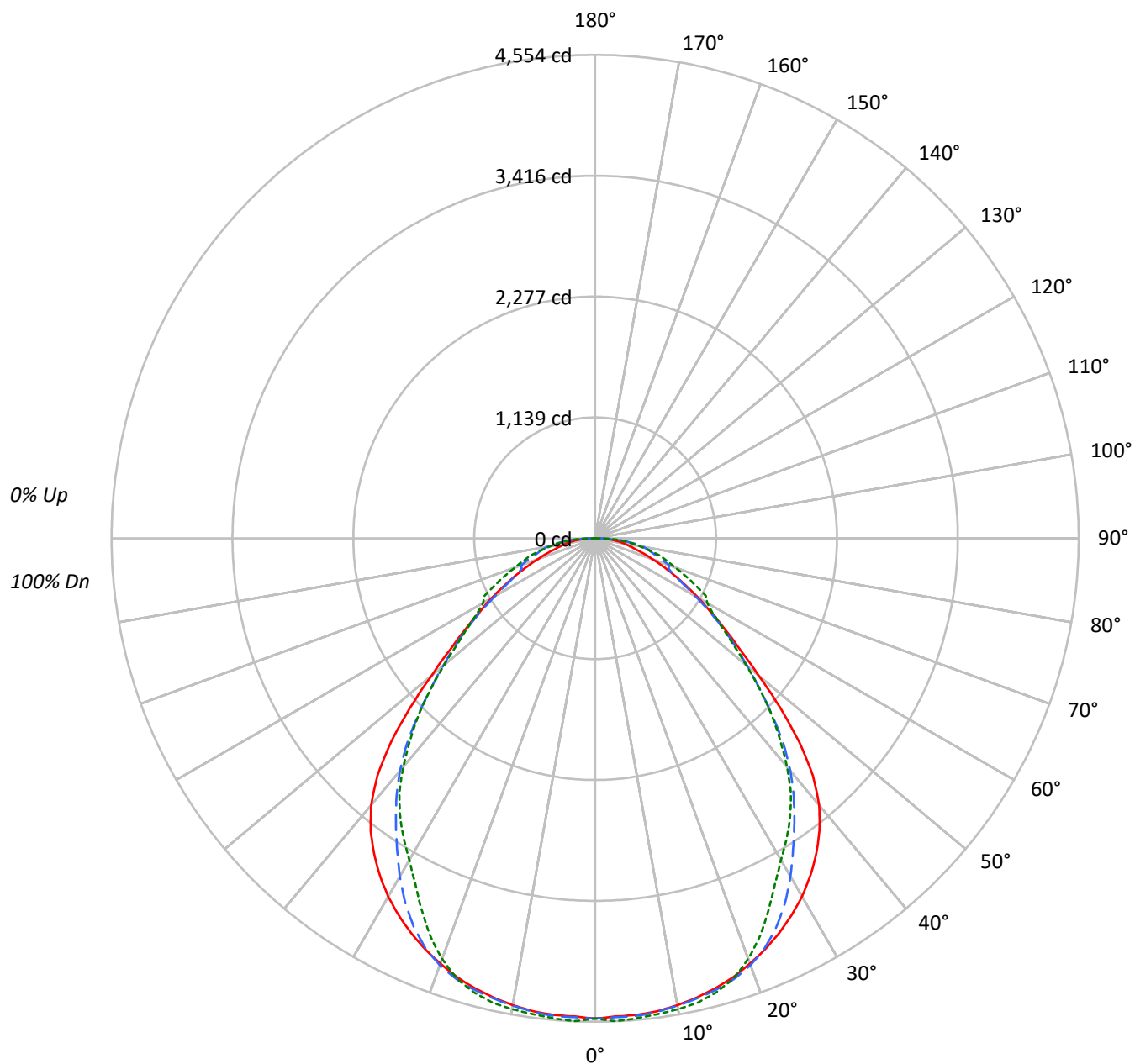
Input Watts (W): 75  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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  | 50  | 30 | 10 |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |    |    |
| 1   | 109 | 105 | 101 | 97  | 107 | 103 | 99  | 96  | 98  | 95  | 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  | 75  | 73  |    |    |
| 3   | 92  | 82  | 75  | 69  | 90  | 81  | 74  | 68  | 78  | 72  | 67  | 75  | 70  | 66  | 73  | 68  | 65  | 63  |    |    |
| 4   | 85  | 74  | 66  | 59  | 83  | 73  | 65  | 59  | 70  | 64  | 58  | 68  | 62  | 57  | 66  | 61  | 57  | 55  |    |    |
| 5   | 79  | 67  | 58  | 52  | 77  | 66  | 58  | 52  | 64  | 57  | 51  | 62  | 55  | 51  | 60  | 54  | 50  | 48  |    |    |
| 6   | 73  | 61  | 52  | 46  | 71  | 60  | 52  | 46  | 58  | 51  | 45  | 56  | 50  | 45  | 55  | 49  | 45  | 43  |    |    |
| 7   | 68  | 55  | 47  | 41  | 66  | 54  | 47  | 41  | 53  | 46  | 41  | 52  | 45  | 40  | 50  | 44  | 40  | 38  |    |    |
| 8   | 64  | 51  | 43  | 37  | 62  | 50  | 42  | 37  | 49  | 42  | 37  | 48  | 41  | 36  | 46  | 41  | 36  | 34  |    |    |
| 9   | 60  | 47  | 39  | 34  | 58  | 46  | 39  | 33  | 45  | 38  | 33  | 44  | 38  | 33  | 43  | 37  | 33  | 31  |    |    |
| 10  | 56  | 43  | 36  | 31  | 55  | 43  | 35  | 31  | 42  | 35  | 30  | 41  | 35  | 30  | 40  | 34  | 30  | 29  |    |    |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 7304 | 7304 | 7304 |
| 5°  | 7304 | 7319 | 7355 |
| 10° | 7322 | 7331 | 7385 |
| 15° | 7333 | 7360 | 7396 |
| 20° | 7326 | 7353 | 7244 |
| 25° | 7307 | 7198 | 6885 |
| 30° | 7264 | 6858 | 6524 |
| 35° | 7155 | 6446 | 6311 |
| 40° | 6916 | 6027 | 5927 |
| 45° | 6216 | 5382 | 5362 |
| 50° | 5041 | 4688 | 4655 |
| 55° | 4186 | 4108 | 4107 |
| 60° | 3624 | 3519 | 3933 |
| 65° | 3141 | 3122 | 3965 |
| 70° | 2708 | 3501 | 3779 |
| 75° | 2429 | 3589 | 3940 |
| 80° | 2524 | 4225 | 3954 |
| 85° | 2866 | 4868 | 4516 |



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**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 430.7   | 4.1       |
| 10°-20°   | 1244.0  | 11.9      |
| 20°-30°   | 1847.6  | 17.6      |
| 30°-40°   | 2097.5  | 20.0      |
| 40°-50°   | 1875.1  | 17.9      |
| 50°-60°   | 1296.4  | 12.4      |
| 60°-70°   | 855.5   | 8.2       |
| 70°-80°   | 577.1   | 5.5       |
| 80°-90°   | 247.2   | 2.4       |
| 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°    | 3522.2  | 33.6      |
| 0°-40°    | 5619.7  | 53.7      |
| 0°-60°    | 8791.2  | 84.0      |
| 0°-90°    | 10471.0 | 100.0     |
| 90°-120°  | 0.0     | 0.0       |
| 90°-150°  | 0.0     | 0.0       |
| 90°-180°  | 0.0     | 0.0       |
| 0°-180°   | 10471.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 4524 | 4524  | 4524 | 4524  | 4524 |      |
| 5°  | 4506 | 4534  | 4516 | 4534  | 4538 | 429  |
| 15° | 4387 | 4408  | 4403 | 4428  | 4425 | 1238 |
| 25° | 4102 | 4141  | 4040 | 3920  | 3864 | 1890 |
| 35° | 3630 | 3554  | 3270 | 3223  | 3202 | 2264 |
| 45° | 2722 | 2492  | 2357 | 2375  | 2348 | 2070 |
| 55° | 1487 | 1358  | 1460 | 1439  | 1459 | 1351 |
| 65° | 822  | 730   | 817  | 955   | 1038 | 820  |
| 75° | 389  | 490   | 575  | 615   | 632  | 425  |
| 85° | 155  | 215   | 263  | 264   | 244  | 161  |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 4523.8 | 4523.8 | 4523.8 | 4523.8 | 4523.8 |
| 2.5°  | 4508.4 | 4536.6 | 4515.6 | 4535.1 | 4554.0 |
| 5°    | 4506.4 | 4534.0 | 4516.1 | 4534.5 | 4538.1 |
| 7.5°  | 4493.6 | 4519.2 | 4498.2 | 4516.1 | 4520.2 |
| 10°   | 4465.9 | 4496.1 | 4471.5 | 4499.2 | 4504.3 |
| 12.5° | 4430.1 | 4460.8 | 4439.3 | 4477.2 | 4479.2 |
| 15°   | 4387.0 | 4408.0 | 4403.4 | 4428.0 | 4424.9 |
| 17.5° | 4332.7 | 4356.8 | 4353.2 | 4359.3 | 4345.0 |
| 20°   | 4263.6 | 4290.7 | 4279.4 | 4251.3 | 4215.9 |
| 22.5° | 4189.3 | 4222.1 | 4177.5 | 4106.3 | 4056.6 |
| 25°   | 4101.7 | 4140.6 | 4040.2 | 3919.9 | 3864.5 |
| 27.5° | 4004.9 | 4039.7 | 3872.7 | 3725.2 | 3667.8 |
| 30°   | 3896.3 | 3911.1 | 3678.5 | 3538.2 | 3499.2 |
| 32.5° | 3770.8 | 3749.3 | 3471.1 | 3378.4 | 3355.8 |
| 35°   | 3629.9 | 3553.6 | 3270.3 | 3222.6 | 3202.1 |
| 37.5° | 3471.1 | 3331.3 | 3072.1 | 3050.0 | 3028.5 |
| 40°   | 3281.1 | 3074.6 | 2859.5 | 2845.1 | 2812.3 |
| 42.5° | 3035.7 | 2795.4 | 2623.3 | 2606.4 | 2577.2 |
| 45°   | 2722.2 | 2491.6 | 2356.9 | 2374.9 | 2348.2 |
| 47.5° | 2361.5 | 2186.9 | 2101.3 | 2150.5 | 2101.3 |
| 50°   | 2007.0 | 1889.8 | 1866.2 | 1910.8 | 1853.4 |
| 52.5° | 1716.6 | 1611.1 | 1659.8 | 1667.4 | 1633.1 |
| 55°   | 1487.1 | 1357.5 | 1459.5 | 1438.9 | 1458.9 |
| 57.5° | 1287.3 | 1142.3 | 1267.9 | 1244.3 | 1312.9 |
| 60°   | 1122.4 | 959.5  | 1089.6 | 1084.5 | 1218.1 |
| 62.5° | 960.5  | 830.4  | 934.9  | 1010.2 | 1174.6 |
| 65°   | 822.2  | 730.0  | 817.1  | 955.4  | 1037.9 |
| 67.5° | 689.5  | 654.7  | 747.4  | 824.2  | 914.4  |
| 70°   | 573.7  | 591.6  | 741.7  | 727.4  | 800.6  |
| 72.5° | 476.4  | 537.4  | 654.7  | 657.2  | 709.0  |
| 75°   | 389.3  | 489.7  | 575.3  | 614.7  | 631.6  |
| 77.5° | 323.7  | 444.1  | 519.4  | 533.3  | 516.9  |
| 80°   | 271.5  | 391.4  | 454.4  | 448.2  | 425.2  |
| 82.5° | 219.2  | 296.6  | 358.1  | 363.7  | 336.5  |
| 85°   | 154.7  | 215.2  | 262.8  | 264.3  | 243.8  |
| 87.5° | 83.0   | 132.7  | 159.3  | 163.9  | 151.6  |
| 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)