

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: P730235

Luminaire Tested: **HBLED-LD5-12HE-N-CL-WG-UNV-L835**

Issue Date: 11/13/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P730235  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33344)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/13/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-12HE-N-CL-WG-UNV-L835  
Description: 12000 LUMEN, HE HBLED WITH NARROW DISTRIBUTION AND CLEAR ACRYLIC LENS, WIREGUARD & DOOR FRAME  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10753.0 lumens  
Efficiency: N/A  
Efficacy: 147.9 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 0.81 / 0.91  
Luminous Opening: Rectangular (W 1.67' x L: 4' x H: 0')  
CIE Type: Direct

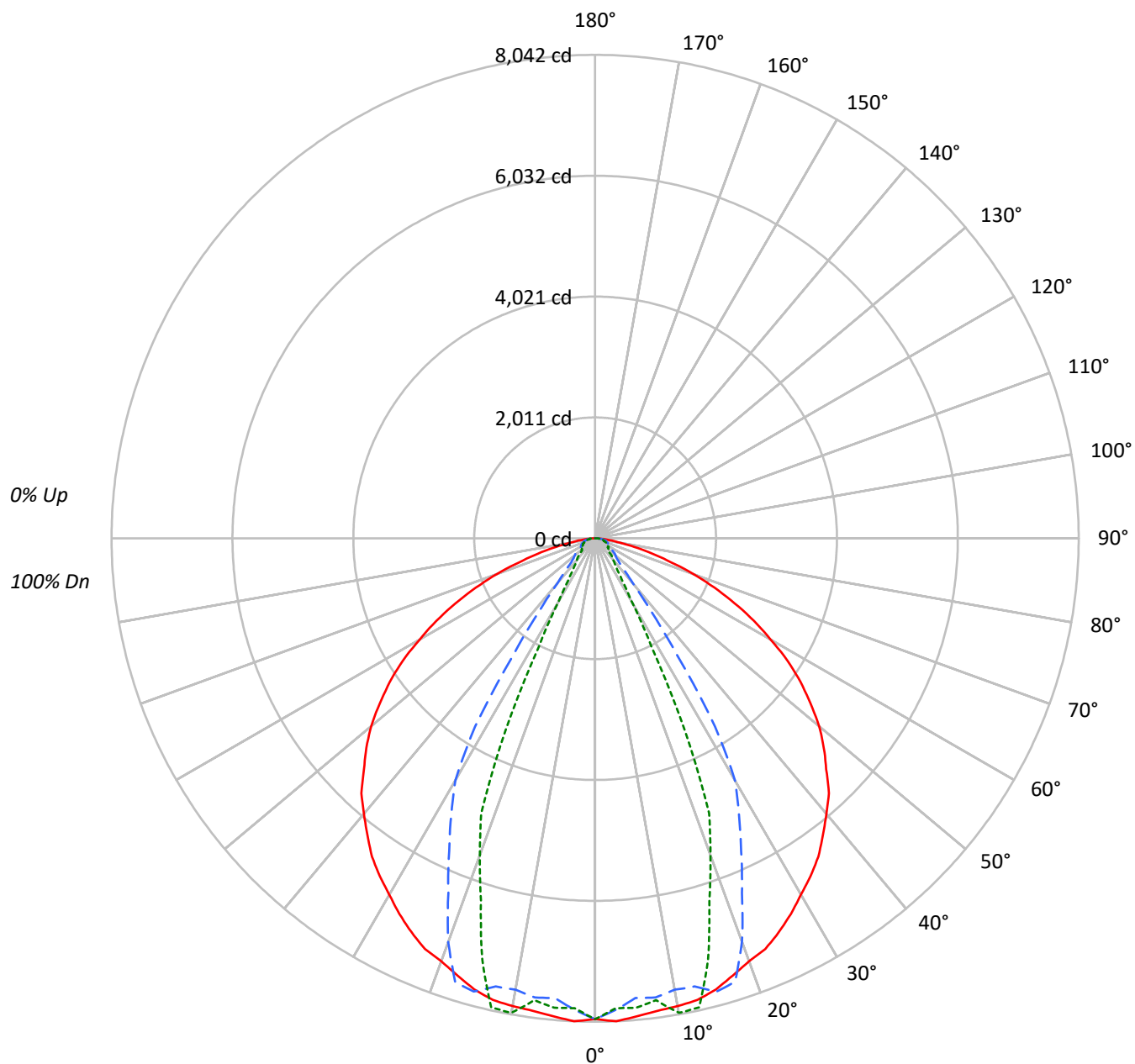
Input Watts (W): 72.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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   | 111 | 108 | 104 | 101 | 109 | 105 | 103 | 100 | 101 | 99  | 97  | 98  | 96  | 94  | 94  | 92  | 91  | 89  |    |    |
| 2   | 104 | 97  | 92  | 88  | 101 | 96  | 91  | 87  | 92  | 88  | 85  | 89  | 86  | 83  | 86  | 84  | 81  | 79  |    |    |
| 3   | 97  | 89  | 82  | 77  | 95  | 87  | 81  | 76  | 84  | 79  | 75  | 82  | 77  | 74  | 79  | 76  | 73  | 71  |    |    |
| 4   | 90  | 81  | 74  | 68  | 88  | 80  | 73  | 68  | 77  | 72  | 67  | 75  | 70  | 66  | 73  | 69  | 65  | 64  |    |    |
| 5   | 85  | 74  | 67  | 62  | 83  | 73  | 66  | 61  | 71  | 65  | 61  | 69  | 64  | 60  | 68  | 63  | 59  | 58  |    |    |
| 6   | 79  | 68  | 61  | 56  | 78  | 68  | 61  | 56  | 66  | 60  | 55  | 64  | 59  | 55  | 63  | 58  | 54  | 53  |    |    |
| 7   | 75  | 63  | 56  | 51  | 73  | 63  | 56  | 51  | 61  | 55  | 50  | 60  | 54  | 50  | 59  | 54  | 50  | 48  |    |    |
| 8   | 70  | 59  | 52  | 47  | 69  | 58  | 51  | 47  | 57  | 51  | 46  | 56  | 50  | 46  | 55  | 50  | 46  | 44  |    |    |
| 9   | 66  | 55  | 48  | 43  | 65  | 54  | 48  | 43  | 53  | 47  | 43  | 52  | 47  | 43  | 52  | 46  | 43  | 41  |    |    |
| 10  | 63  | 52  | 45  | 40  | 62  | 51  | 45  | 40  | 50  | 44  | 40  | 49  | 44  | 40  | 48  | 43  | 40  | 38  |    |    |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 12914 | 12914 | 12914 |
| 5°  | 12936 | 12443 | 12705 |
| 10° | 12955 | 12503 | 13145 |
| 15° | 12984 | 13051 | 12130 |
| 20° | 12861 | 12275 | 9628  |
| 25° | 12879 | 10233 | 6289  |
| 30° | 12764 | 8669  | 2259  |
| 35° | 12750 | 4696  | 1271  |
| 40° | 12606 | 2047  | 995   |
| 45° | 12411 | 1265  | 780   |
| 50° | 12218 | 1102  | 737   |
| 55° | 11737 | 956   | 721   |
| 60° | 10890 | 856   | 775   |
| 65° | 9789  | 968   | 846   |
| 70° | 8209  | 1041  | 873   |
| 75° | 6137  | 1187  | 945   |
| 80° | 3855  | 1379  | 1078  |
| 85° | 2568  | 1727  | 1578  |



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**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 741.4   | 6.9       |
| 10°-20°   | 2093.4  | 19.5      |
| 20°-30°   | 2563.5  | 23.8      |
| 30°-40°   | 2013.1  | 18.7      |
| 40°-50°   | 1492.9  | 13.9      |
| 50°-60°   | 908.8   | 8.5       |
| 60°-70°   | 544.4   | 5.1       |
| 70°-80°   | 298.7   | 2.8       |
| 80°-90°   | 96.9    | 0.9       |
| 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°    | 5398.3  | 50.2      |
| 0°-40°    | 7411.4  | 68.9      |
| 0°-60°    | 9813.1  | 91.3      |
| 0°-90°    | 10753.0 | 100.0     |
| 90°-120°  | 0.0     | 0.0       |
| 90°-150°  | 0.0     | 0.0       |
| 90°-180°  | 0.0     | 0.0       |
| 0°-180°   | 10753.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 7999 | 7999  | 7999 | 7999  | 7999 |      |
| 5°  | 7981 | 7764  | 7677 | 7762  | 7839 | 759  |
| 15° | 7767 | 7554  | 7808 | 7492  | 7257 | 2187 |
| 25° | 7229 | 7252  | 5744 | 4506  | 3530 | 3328 |
| 35° | 6469 | 5884  | 2383 | 797   | 645  | 4036 |
| 45° | 5435 | 3903  | 554  | 420   | 342  | 4203 |
| 55° | 4170 | 1076  | 340  | 287   | 256  | 3711 |
| 65° | 2562 | 317   | 253  | 238   | 222  | 2531 |
| 75° | 984  | 200   | 190  | 166   | 152  | 1065 |
| 85° | 139  | 109   | 93   | 86    | 85   | 169  |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 7998.6 | 7998.6 | 7998.6 | 7998.6 | 7998.6 |
| 2.5°  | 8042.3 | 7933.9 | 7850.9 | 7804.6 | 7823.4 |
| 5°    | 7981.4 | 7764.1 | 7677.3 | 7762.0 | 7839.1 |
| 7.5°  | 7928.5 | 7605.6 | 7703.7 | 7711.3 | 7751.7 |
| 10°   | 7901.6 | 7590.5 | 7626.1 | 7793.8 | 8017.5 |
| 12.5° | 7866.0 | 7625.6 | 7638.0 | 7866.5 | 7992.7 |
| 15°   | 7767.4 | 7554.4 | 7807.8 | 7492.4 | 7256.9 |
| 17.5° | 7623.4 | 7388.4 | 7736.6 | 6637.5 | 6317.3 |
| 20°   | 7484.9 | 7207.8 | 7144.2 | 5912.4 | 5603.6 |
| 22.5° | 7395.4 | 7180.3 | 6382.0 | 5268.3 | 4949.1 |
| 25°   | 7229.4 | 7252.0 | 5744.3 | 4505.5 | 3530.3 |
| 27.5° | 7046.6 | 7083.3 | 5180.4 | 3004.8 | 2022.6 |
| 30°   | 6846.1 | 6888.2 | 4649.9 | 1775.6 | 1211.8 |
| 32.5° | 6664.5 | 6427.2 | 3713.6 | 1107.8 | 842.5  |
| 35°   | 6468.8 | 5884.4 | 2382.7 | 797.3  | 644.7  |
| 37.5° | 6222.4 | 5314.1 | 1508.3 | 630.7  | 541.2  |
| 40°   | 5980.9 | 4802.0 | 971.4  | 538.5  | 472.2  |
| 42.5° | 5755.0 | 4379.9 | 706.7  | 470.6  | 426.4  |
| 45°   | 5435.4 | 3902.8 | 554.2  | 419.9  | 341.8  |
| 47.5° | 5158.8 | 3343.3 | 484.6  | 355.3  | 294.9  |
| 50°   | 4864.0 | 2556.3 | 438.8  | 315.9  | 293.3  |
| 52.5° | 4514.1 | 1672.1 | 405.4  | 302.4  | 273.8  |
| 55°   | 4169.7 | 1075.5 | 339.6  | 287.3  | 256.0  |
| 57.5° | 3797.7 | 681.9  | 299.7  | 278.7  | 267.4  |
| 60°   | 3372.4 | 459.8  | 265.2  | 264.1  | 239.9  |
| 62.5° | 2978.8 | 377.9  | 256.0  | 253.4  | 227.0  |
| 65°   | 2562.2 | 317.0  | 253.4  | 238.3  | 221.5  |
| 67.5° | 2146.0 | 271.7  | 229.1  | 217.8  | 203.2  |
| 70°   | 1739.0 | 248.5  | 220.5  | 215.6  | 184.9  |
| 72.5° | 1320.7 | 204.8  | 195.7  | 182.8  | 153.7  |
| 75°   | 983.8  | 200.0  | 190.3  | 165.5  | 151.5  |
| 77.5° | 665.7  | 184.4  | 173.1  | 148.3  | 136.9  |
| 80°   | 414.6  | 169.3  | 148.3  | 129.9  | 115.9  |
| 82.5° | 246.3  | 141.2  | 121.8  | 107.3  | 98.1   |
| 85°   | 138.6  | 108.9  | 93.2   | 85.7   | 85.2   |
| 87.5° | 29.7   | 39.3   | 31.3   | 29.7   | 21.0   |
| 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)