

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: P730369

Luminaire Tested: **HBLED-LD5-12SE-W-WG-UNV-L850**

Issue Date: 11/13/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P730369  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33336)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/13/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-12SE-W-WG-UNV-L850  
Description: 12000 LUMEN, SE HBLED WITH WIDE DISTRIBUTION AND WIREGUARD  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11794.0 lumens  
Efficiency: N/A  
Efficacy: 157.3 lumens/watt  
Spacing Criteria (0/90/45): 1.29 / 1.31 / 1.41  
Luminous Opening: Rectangular (W 1.67' x L: 4' x H: 0')  
CIE Type: Direct

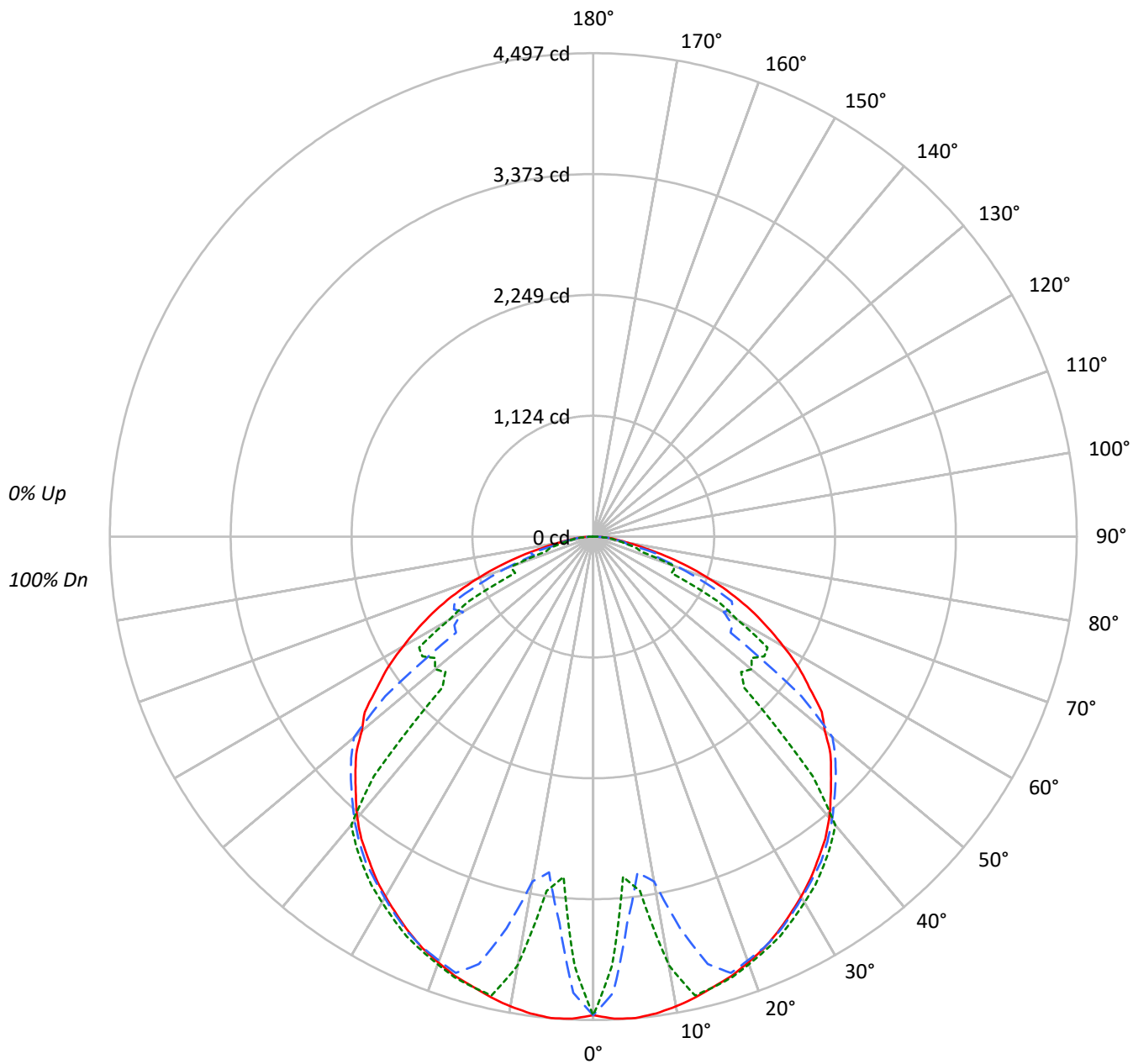
Input Watts (W): 75  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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 | 92  | 85  | 80  | 97  | 90  | 84  | 79  | 87  | 82  | 77  | 83  | 79  | 75  | 80  | 77  | 74  | 72  |    |    |
| 3   | 91  | 81  | 73  | 67  | 89  | 79  | 72  | 66  | 76  | 70  | 65  | 74  | 68  | 64  | 71  | 67  | 63  | 61  |    |    |
| 4   | 84  | 72  | 63  | 57  | 81  | 71  | 63  | 56  | 68  | 61  | 56  | 66  | 60  | 55  | 64  | 58  | 54  | 52  |    |    |
| 5   | 77  | 64  | 55  | 49  | 75  | 63  | 55  | 49  | 61  | 54  | 48  | 59  | 53  | 48  | 57  | 52  | 47  | 45  |    |    |
| 6   | 71  | 58  | 49  | 43  | 69  | 57  | 49  | 42  | 55  | 48  | 42  | 53  | 47  | 42  | 52  | 46  | 41  | 39  |    |    |
| 7   | 66  | 52  | 44  | 38  | 64  | 52  | 43  | 38  | 50  | 43  | 37  | 49  | 42  | 37  | 47  | 41  | 37  | 35  |    |    |
| 8   | 61  | 48  | 39  | 34  | 60  | 47  | 39  | 33  | 46  | 38  | 33  | 44  | 38  | 33  | 43  | 37  | 33  | 31  |    |    |
| 9   | 57  | 44  | 36  | 30  | 56  | 43  | 35  | 30  | 42  | 35  | 30  | 41  | 34  | 30  | 40  | 34  | 30  | 28  |    |    |
| 10  | 53  | 40  | 32  | 27  | 52  | 40  | 32  | 27  | 39  | 32  | 27  | 38  | 31  | 27  | 37  | 31  | 27  | 25  |    |    |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 7188 | 7188 | 7188 |
| 5°  | 7288 | 5855 | 5149 |
| 10° | 7275 | 5340 | 6641 |
| 15° | 7243 | 6882 | 7249 |
| 20° | 7243 | 7210 | 7274 |
| 25° | 7230 | 7246 | 7313 |
| 30° | 7209 | 7233 | 7326 |
| 35° | 7198 | 7278 | 7363 |
| 40° | 7199 | 7277 | 7382 |
| 45° | 7142 | 7282 | 4525 |
| 50° | 7061 | 7297 | 4823 |
| 55° | 6912 | 4387 | 5466 |
| 60° | 6594 | 4522 | 5006 |
| 65° | 6178 | 5430 | 3063 |
| 70° | 5456 | 4114 | 3754 |
| 75° | 4347 | 3739 | 2604 |
| 80° | 2995 | 2702 | 2237 |
| 85° | 2870 | 2495 | 2368 |



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**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 356.0   | 3.0       |
| 10°-20°   | 1115.3  | 9.5       |
| 20°-30°   | 1834.9  | 15.6      |
| 30°-40°   | 2307.1  | 19.6      |
| 40°-50°   | 2262.7  | 19.2      |
| 50°-60°   | 1874.7  | 15.9      |
| 60°-70°   | 1322.3  | 11.2      |
| 70°-80°   | 576.9   | 4.9       |
| 80°-90°   | 144.1   | 1.2       |
| 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°    | 3306.1  | 28.0      |
| 0°-40°    | 5613.2  | 47.6      |
| 0°-60°    | 9750.7  | 82.7      |
| 0°-90°    | 11794.0 | 100.0     |
| 90°-120°  | 0.0     | 0.0       |
| 90°-150°  | 0.0     | 0.0       |
| 90°-180°  | 0.0     | 0.0       |
| 0°-180°   | 11794.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 4452 | 4452  | 4452 | 4452  | 4452 |      |
| 5°  | 4497 | 4185  | 3612 | 3275  | 3177 | 427  |
| 15° | 4333 | 3009  | 4117 | 4350  | 4337 | 1225 |
| 25° | 4058 | 3714  | 4068 | 4095  | 4105 | 1871 |
| 35° | 3652 | 3650  | 3692 | 3717  | 3735 | 2288 |
| 45° | 3128 | 3138  | 3189 | 2825  | 1982 | 2414 |
| 55° | 2456 | 2536  | 1559 | 1772  | 1942 | 2197 |
| 65° | 1617 | 1712  | 1421 | 1093  | 802  | 1590 |
| 75° | 697  | 683   | 599  | 392   | 417  | 747  |
| 85° | 155  | 138   | 135  | 129   | 128  | 161  |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 4451.9 | 4451.9 | 4451.9 | 4451.9 | 4451.9 |
| 2.5°  | 4488.6 | 4395.4 | 4247.4 | 4061.1 | 3995.1 |
| 5°    | 4496.6 | 4185.1 | 3612.4 | 3275.4 | 3176.9 |
| 7.5°  | 4473.7 | 3803.5 | 3149.3 | 3220.0 | 3324.4 |
| 10°   | 4437.5 | 3468.1 | 3256.8 | 3831.7 | 4050.5 |
| 12.5° | 4391.2 | 3170.0 | 3731.1 | 4328.4 | 4372.0 |
| 15°   | 4333.1 | 3009.3 | 4117.0 | 4350.2 | 4336.9 |
| 17.5° | 4284.2 | 3103.5 | 4255.4 | 4306.5 | 4296.9 |
| 20°   | 4215.5 | 3291.4 | 4196.3 | 4237.3 | 4233.6 |
| 22.5° | 4146.3 | 3513.9 | 4140.4 | 4169.7 | 4169.7 |
| 25°   | 4058.5 | 3713.5 | 4067.5 | 4094.7 | 4104.8 |
| 27.5° | 3962.1 | 3828.5 | 3976.5 | 3998.8 | 4016.9 |
| 30°   | 3866.8 | 3845.0 | 3879.6 | 3908.4 | 3929.6 |
| 32.5° | 3766.2 | 3757.7 | 3784.8 | 3815.2 | 3842.3 |
| 35°   | 3651.7 | 3649.6 | 3692.2 | 3716.7 | 3735.4 |
| 37.5° | 3544.2 | 3536.8 | 3576.2 | 3610.2 | 3624.6 |
| 40°   | 3415.4 | 3415.4 | 3452.7 | 3487.3 | 3502.2 |
| 42.5° | 3268.5 | 3289.3 | 3318.0 | 3353.6 | 3020.4 |
| 45°   | 3127.9 | 3137.5 | 3189.2 | 2824.6 | 1981.8 |
| 47.5° | 2992.7 | 3005.0 | 3054.0 | 1815.8 | 1865.3 |
| 50°   | 2811.2 | 2866.6 | 2904.9 | 1810.5 | 1920.1 |
| 52.5° | 2678.7 | 2702.6 | 2438.6 | 1792.4 | 1854.1 |
| 55°   | 2455.6 | 2536.0 | 1558.6 | 1772.1 | 1941.9 |
| 57.5° | 2265.1 | 2323.6 | 1532.6 | 1815.8 | 1921.2 |
| 60°   | 2042.0 | 2131.4 | 1400.5 | 1751.9 | 1550.1 |
| 62.5° | 1828.0 | 1913.2 | 1462.3 | 1378.7 | 1312.7 |
| 65°   | 1617.2 | 1712.5 | 1421.3 | 1093.4 | 801.7  |
| 67.5° | 1386.2 | 1297.3 | 1133.9 | 770.3  | 810.7  |
| 70°   | 1155.7 | 906.0  | 871.4  | 861.3  | 795.3  |
| 72.5° | 918.8  | 661.2  | 578.6  | 646.3  | 462.6  |
| 75°   | 696.8  | 683.0  | 599.4  | 391.8  | 417.4  |
| 77.5° | 483.3  | 492.9  | 321.0  | 382.2  | 317.2  |
| 80°   | 322.1  | 279.0  | 290.6  | 243.8  | 240.6  |
| 82.5° | 223.0  | 227.8  | 191.1  | 185.2  | 187.9  |
| 85°   | 154.9  | 137.9  | 134.7  | 128.8  | 127.8  |
| 87.5° | 51.6   | 60.2   | 55.9   | 50.6   | 53.8   |
| 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)