

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: P730994

Luminaire Tested: **HBLED-LD5-36SE-N-CLI-UNV-L735**

Issue Date: 11/13/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P730994  
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-LD5-36SE-N-CLI-UNV-L735  
Description: 36000 LUMEN, SE HBLED WITH NARROW DISTRIBUTION AND CLEAR ACRYLIC LENS INSERT  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 33197.0 lumens  
Efficiency: N/A  
Efficacy: 145.9 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

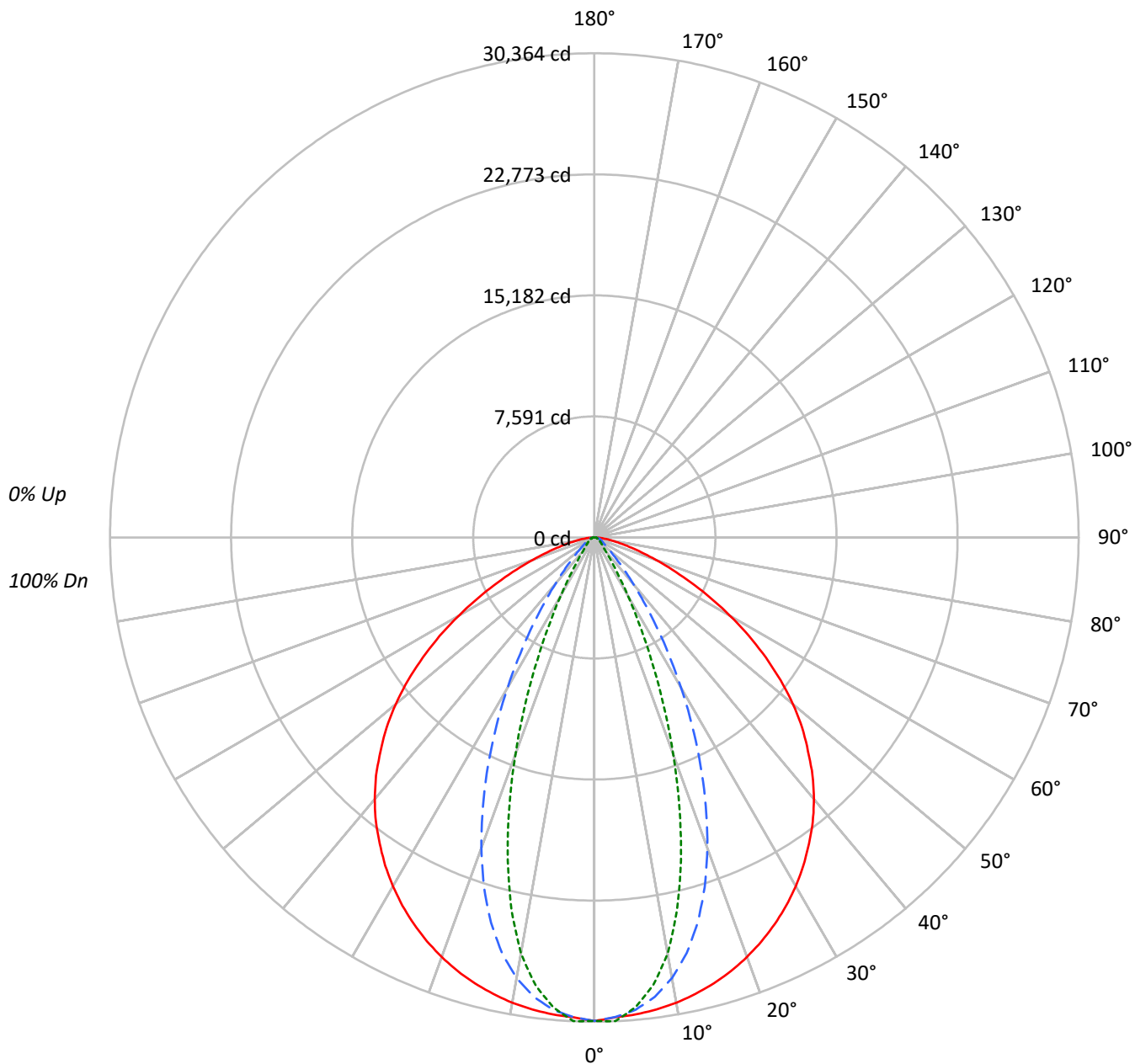
Input Watts (W): 227.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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   | 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°  | 48959 | 48959 | 48959 |
| 5°  | 48665 | 48181 | 47927 |
| 10° | 48583 | 45999 | 43407 |
| 15° | 48388 | 41812 | 35055 |
| 20° | 48097 | 35579 | 24846 |
| 25° | 47667 | 28055 | 15012 |
| 30° | 47088 | 20248 | 7715  |
| 35° | 46238 | 13237 | 3853  |
| 40° | 45141 | 7951  | 2248  |
| 45° | 43266 | 4748  | 1681  |
| 50° | 40808 | 3105  | 1412  |
| 55° | 36933 | 2356  | 1232  |
| 60° | 31739 | 2006  | 1124  |
| 65° | 25530 | 1830  | 1062  |
| 70° | 19233 | 1961  | 1056  |
| 75° | 14147 | 1863  | 1085  |
| 80° | 10351 | 1856  | 1188  |
| 85° | 7753  | 2251  | 1538  |



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**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 2792.6  | 8.4       |
| 10°-20°   | 6947.4  | 20.9      |
| 20°-30°   | 7695.2  | 23.2      |
| 30°-40°   | 6165.3  | 18.6      |
| 40°-50°   | 4401.2  | 13.3      |
| 50°-60°   | 2826.9  | 8.5       |
| 60°-70°   | 1532.0  | 4.6       |
| 70°-80°   | 654.8   | 2.0       |
| 80°-90°   | 181.6   | 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°    | 17435.2 | 52.5      |
| 0°-40°    | 23600.4 | 71.1      |
| 0°-60°    | 30828.6 | 92.9      |
| 0°-90°    | 33197.0 | 100.0     |
| 90°-120°  | 0.0     | 0.0       |
| 90°-150°  | 0.0     | 0.0       |
| 90°-180°  | 0.0     | 0.0       |
| 0°-180°   | 33197.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°    | 22.5° | 45°   | 67.5° | 90°   | Flux  |
|-----|-------|-------|-------|-------|-------|-------|
| 0°  | 30323 | 30323 | 30323 | 30323 | 30323 |       |
| 5°  | 30026 | 30138 | 29727 | 29633 | 29571 | ###   |
| 15° | 28948 | 28042 | 25014 | 22106 | 20972 | 8168  |
| 25° | 26757 | 23593 | 15748 | 10260 | 8426  | 12326 |
| 35° | 23459 | 16968 | 6716  | 2709  | 1955  | 14667 |
| 45° | 18948 | 9795  | 2080  | 885   | 736   | 14605 |
| 55° | 13120 | 4379  | 837   | 514   | 438   | 11693 |
| 65° | 6682  | 1798  | 479   | 331   | 278   | 6692  |
| 75° | 2268  | 658   | 299   | 208   | 174   | 2520  |
| 85° | 418   | 174   | 122   | 101   | 83    | 511   |
| 90° | 0     | 0     | 0     | 0     | 0     |       |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 22.5°   | 45°     | 67.5°   | 90°     |
|-------|---------|---------|---------|---------|---------|
| 0°    | 30323.0 | 30323.0 | 30323.0 | 30323.0 | 30323.0 |
| 2.5°  | 30123.4 | 30311.9 | 30109.0 | 30235.1 | 30364.5 |
| 5°    | 30026.0 | 30137.9 | 29727.3 | 29633.0 | 29570.9 |
| 7.5°  | 29856.6 | 29824.7 | 29053.4 | 28553.4 | 28312.2 |
| 10°   | 29633.0 | 29374.3 | 28056.7 | 26957.9 | 26475.6 |
| 12.5° | 29313.6 | 28780.2 | 26707.1 | 24777.8 | 23960.1 |
| 15°   | 28947.9 | 28042.4 | 25014.2 | 22105.9 | 20971.9 |
| 17.5° | 28510.3 | 27179.9 | 22990.6 | 19240.6 | 17744.1 |
| 20°   | 27992.8 | 26138.6 | 20706.8 | 16196.5 | 14460.3 |
| 22.5° | 27414.7 | 24937.6 | 18261.5 | 13161.9 | 11299.7 |
| 25°   | 26756.7 | 23592.7 | 15747.7 | 10260.0 | 8426.4  |
| 27.5° | 26046.0 | 22099.5 | 13248.2 | 7666.2  | 5993.9  |
| 30°   | 25256.9 | 20483.2 | 10860.4 | 5527.7  | 4138.2  |
| 32.5° | 24396.1 | 18764.7 | 8642.1  | 3887.4  | 2830.1  |
| 35°   | 23458.6 | 16967.9 | 6715.8  | 2708.7  | 1954.9  |
| 37.5° | 22498.7 | 15134.4 | 5072.5  | 1914.9  | 1402.3  |
| 40°   | 21417.4 | 13307.2 | 3772.5  | 1402.3  | 1066.8  |
| 42.5° | 20256.4 | 11515.3 | 2791.8  | 1079.6  | 864.0   |
| 45°   | 18948.3 | 9795.1  | 2079.5  | 884.9   | 736.3   |
| 47.5° | 17680.3 | 8191.7  | 1579.5  | 753.8   | 640.4   |
| 50°   | 16246.0 | 6744.7  | 1236.2  | 658.1   | 562.1   |
| 52.5° | 14723.9 | 5471.8  | 1003.0  | 579.8   | 495.1   |
| 55°   | 13120.4 | 4379.3  | 836.8   | 514.3   | 437.6   |
| 57.5° | 11496.1 | 3468.9  | 715.5   | 458.3   | 389.8   |
| 60°   | 9828.7  | 2774.2  | 621.3   | 410.4   | 348.1   |
| 62.5° | 8201.3  | 2218.5  | 543.0   | 368.9   | 311.5   |
| 65°   | 6682.4  | 1798.3  | 479.1   | 330.6   | 277.9   |
| 67.5° | 5278.4  | 1421.5  | 447.2   | 297.0   | 250.8   |
| 70°   | 4074.2  | 1106.8  | 415.3   | 265.1   | 223.6   |
| 72.5° | 3087.2  | 849.7   | 367.4   | 236.4   | 198.1   |
| 75°   | 2267.8  | 658.1   | 298.7   | 207.6   | 174.0   |
| 77.5° | 1622.7  | 506.4   | 242.8   | 180.4   | 150.2   |
| 80°   | 1113.2  | 377.0   | 199.6   | 154.9   | 127.8   |
| 82.5° | 723.6   | 266.8   | 161.3   | 127.8   | 105.3   |
| 85°   | 418.5   | 174.0   | 121.5   | 100.6   | 83.0    |
| 87.5° | 180.4   | 95.8    | 83.0    | 75.1    | 63.8    |
| 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)