

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: METALUX

Report Number: P601336

Luminaire Tested: 14CGSB-60-L840

Issue Date: 1/24/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P601336  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2311-233-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/24/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 14CGSB-60-L840  
Description: 1x4 CGSB AT 6000lm 4000K 80CRI  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

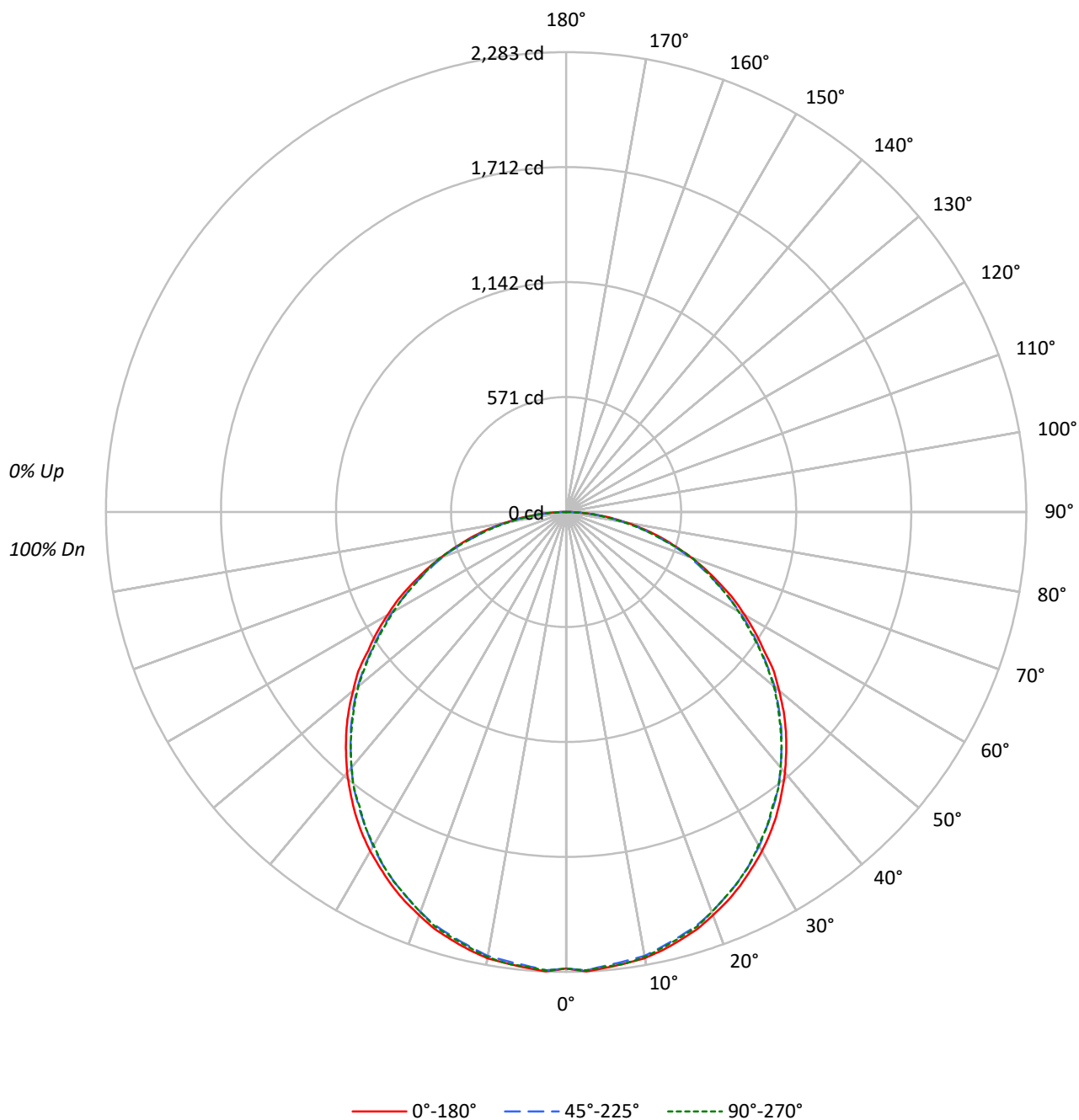
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6578.0 lumens  
Efficiency: N/A  
Efficacy: 96.3 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 68.3  
Input Voltage (V): 120  
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: 24 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  |     |  |     |     | 0   |
| RW  | 70  | 50  | 30  | 10  | 70  | 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 |
| 1   | 108 | 103 | 99  | 95  | 106 | 101 | 97  | 94  |  | 97  | 94  | 91  |  | 93  | 90  | 88  |  | 89  | 87  | 85  |
| 2   | 98  | 90  | 83  | 77  | 96  | 88  | 82  | 76  |  | 84  | 79  | 74  |  | 81  | 77  | 73  |  | 78  | 74  | 71  |
| 3   | 90  | 79  | 71  | 64  | 87  | 77  | 70  | 63  |  | 74  | 68  | 62  |  | 71  | 66  | 61  |  | 69  | 64  | 60  |
| 4   | 82  | 70  | 61  | 54  | 80  | 68  | 60  | 54  |  | 66  | 59  | 53  |  | 64  | 57  | 52  |  | 61  | 56  | 51  |
| 5   | 75  | 62  | 53  | 46  | 73  | 61  | 53  | 46  |  | 59  | 51  | 46  |  | 57  | 50  | 45  |  | 55  | 49  | 45  |
| 6   | 70  | 56  | 47  | 41  | 68  | 55  | 47  | 40  |  | 53  | 46  | 40  |  | 52  | 45  | 40  |  | 50  | 44  | 39  |
| 7   | 64  | 51  | 42  | 36  | 63  | 50  | 42  | 36  |  | 48  | 41  | 35  |  | 47  | 40  | 35  |  | 46  | 39  | 35  |
| 8   | 60  | 46  | 38  | 32  | 58  | 46  | 37  | 32  |  | 44  | 37  | 32  |  | 43  | 36  | 31  |  | 42  | 36  | 31  |
| 9   | 56  | 43  | 34  | 29  | 55  | 42  | 34  | 29  |  | 41  | 33  | 28  |  | 40  | 33  | 28  |  | 39  | 33  | 28  |
| 10  | 53  | 39  | 31  | 26  | 51  | 39  | 31  | 26  |  | 38  | 31  | 26  |  | 37  | 30  | 26  |  | 36  | 30  | 26  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 6097 | 6097 | 6097 |
| 5°  | 6136 | 6105 | 6121 |
| 10° | 6145 | 6114 | 6130 |
| 15° | 6123 | 6076 | 6092 |
| 20° | 6100 | 6052 | 6052 |
| 25° | 6073 | 6006 | 6006 |
| 30° | 6040 | 5952 | 5934 |
| 35° | 5995 | 5884 | 5866 |
| 40° | 5935 | 5815 | 5815 |
| 45° | 5870 | 5741 | 5720 |
| 50° | 5772 | 5653 | 5630 |
| 55° | 5620 | 5487 | 5461 |
| 60° | 5504 | 5352 | 5322 |
| 65° | 5361 | 5217 | 5181 |
| 70° | 5201 | 5113 | 5246 |
| 75° | 5052 | 4817 | 4817 |
| 80° | 4728 | 4641 | 4466 |
| 85° | 4363 | 4187 | 4187 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5870 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 215.5  | 3.3       |
| 10°-20°   | 617.6  | 9.4       |
| 20°-30°   | 934.4  | 14.2      |
| 30°-40°   | 1126.0 | 17.1      |
| 40°-50°   | 1169.2 | 17.8      |
| 50°-60°   | 1052.9 | 16.0      |
| 60°-70°   | 813.6  | 12.4      |
| 70°-80°   | 495.7  | 7.5       |
| 80°-90°   | 153.3  | 2.3       |
| 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°    | 1767.4 | 26.9      |
| 0°-40°    | 2893.4 | 44.0      |
| 0°-60°    | 5115.5 | 77.8      |
| 0°-90°    | 6578.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 6578.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 2266 | 2266  | 2266 | 2266  | 2266 |      |
| 5°  | 2271 | 2266  | 2260 | 2260  | 2266 | 216  |
| 15° | 2198 | 2192  | 2181 | 2181  | 2187 | 621  |
| 25° | 2045 | 2040  | 2023 | 2017  | 2023 | 943  |
| 35° | 1825 | 1814  | 1791 | 1786  | 1786 | 1141 |
| 45° | 1542 | 1531  | 1509 | 1503  | 1503 | 1189 |
| 55° | 1198 | 1187  | 1170 | 1164  | 1164 | 1076 |
| 65° | 842  | 825   | 819  | 808   | 814  | 835  |
| 75° | 486  | 469   | 463  | 458   | 463  | 510  |
| 85° | 141  | 141   | 136  | 130   | 136  | 160  |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 2265.8 | 2265.8 | 2265.8 | 2265.8 | 2265.8 |
| 2.5°  | 2282.7 | 2282.7 | 2277.1 | 2277.1 | 2277.1 |
| 5°    | 2271.4 | 2265.8 | 2260.1 | 2260.1 | 2265.8 |
| 7.5°  | 2260.1 | 2260.1 | 2248.8 | 2248.8 | 2260.1 |
| 10°   | 2248.8 | 2243.2 | 2237.5 | 2237.5 | 2243.2 |
| 12.5° | 2226.2 | 2220.6 | 2209.3 | 2209.3 | 2214.9 |
| 15°   | 2198.0 | 2192.3 | 2181.0 | 2181.0 | 2186.7 |
| 17.5° | 2169.7 | 2164.0 | 2152.7 | 2152.7 | 2158.4 |
| 20°   | 2130.1 | 2124.5 | 2113.2 | 2107.5 | 2113.2 |
| 22.5° | 2090.6 | 2084.9 | 2068.0 | 2062.3 | 2068.0 |
| 25°   | 2045.4 | 2039.7 | 2022.8 | 2017.1 | 2022.8 |
| 27.5° | 1994.5 | 1988.9 | 1971.9 | 1966.3 | 1971.9 |
| 30°   | 1943.7 | 1932.4 | 1915.4 | 1904.1 | 1909.8 |
| 32.5° | 1887.2 | 1875.9 | 1853.3 | 1847.6 | 1853.3 |
| 35°   | 1825.0 | 1813.7 | 1791.1 | 1785.5 | 1785.5 |
| 37.5° | 1757.2 | 1751.6 | 1729.0 | 1723.3 | 1729.0 |
| 40°   | 1689.4 | 1678.1 | 1655.5 | 1649.9 | 1655.5 |
| 42.5° | 1616.0 | 1604.7 | 1582.1 | 1582.1 | 1582.1 |
| 45°   | 1542.5 | 1531.2 | 1508.6 | 1503.0 | 1503.0 |
| 47.5° | 1463.4 | 1452.1 | 1429.5 | 1423.9 | 1423.9 |
| 50°   | 1378.7 | 1367.4 | 1350.4 | 1344.8 | 1344.8 |
| 52.5° | 1299.6 | 1282.6 | 1260.0 | 1254.4 | 1254.4 |
| 55°   | 1197.9 | 1186.6 | 1169.6 | 1164.0 | 1164.0 |
| 57.5° | 1113.1 | 1096.2 | 1084.9 | 1073.5 | 1073.5 |
| 60°   | 1022.7 | 1005.7 | 994.4  | 988.8  | 988.8  |
| 62.5° | 937.9  | 915.3  | 904.0  | 898.4  | 904.0  |
| 65°   | 841.9  | 824.9  | 819.3  | 808.0  | 813.6  |
| 67.5° | 751.5  | 734.5  | 728.9  | 728.9  | 740.2  |
| 70°   | 661.1  | 644.1  | 649.8  | 632.8  | 666.7  |
| 72.5° | 570.7  | 559.4  | 559.4  | 542.4  | 559.4  |
| 75°   | 485.9  | 469.0  | 463.3  | 457.7  | 463.3  |
| 77.5° | 395.5  | 389.9  | 384.2  | 372.9  | 378.6  |
| 80°   | 305.1  | 316.4  | 299.5  | 282.5  | 288.2  |
| 82.5° | 226.0  | 220.4  | 209.1  | 203.4  | 209.1  |
| 85°   | 141.3  | 141.3  | 135.6  | 130.0  | 135.6  |
| 87.5° | 67.8   | 67.8   | 62.2   | 62.2   | 67.8   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)