

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



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: P978894

Luminaire Tested: UHBS2-2436-M-L83065-HIGH-5000K

Issue Date: 3/27/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P978894  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2405-087-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/27/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: UHBS2-2436-M-L83065-HIGH-5000K  
Description: UHBS2 LED High Bay at 5000K and HIGH lumen setting  
Light Source: -  
Ballast/Driver: -

**Summary**

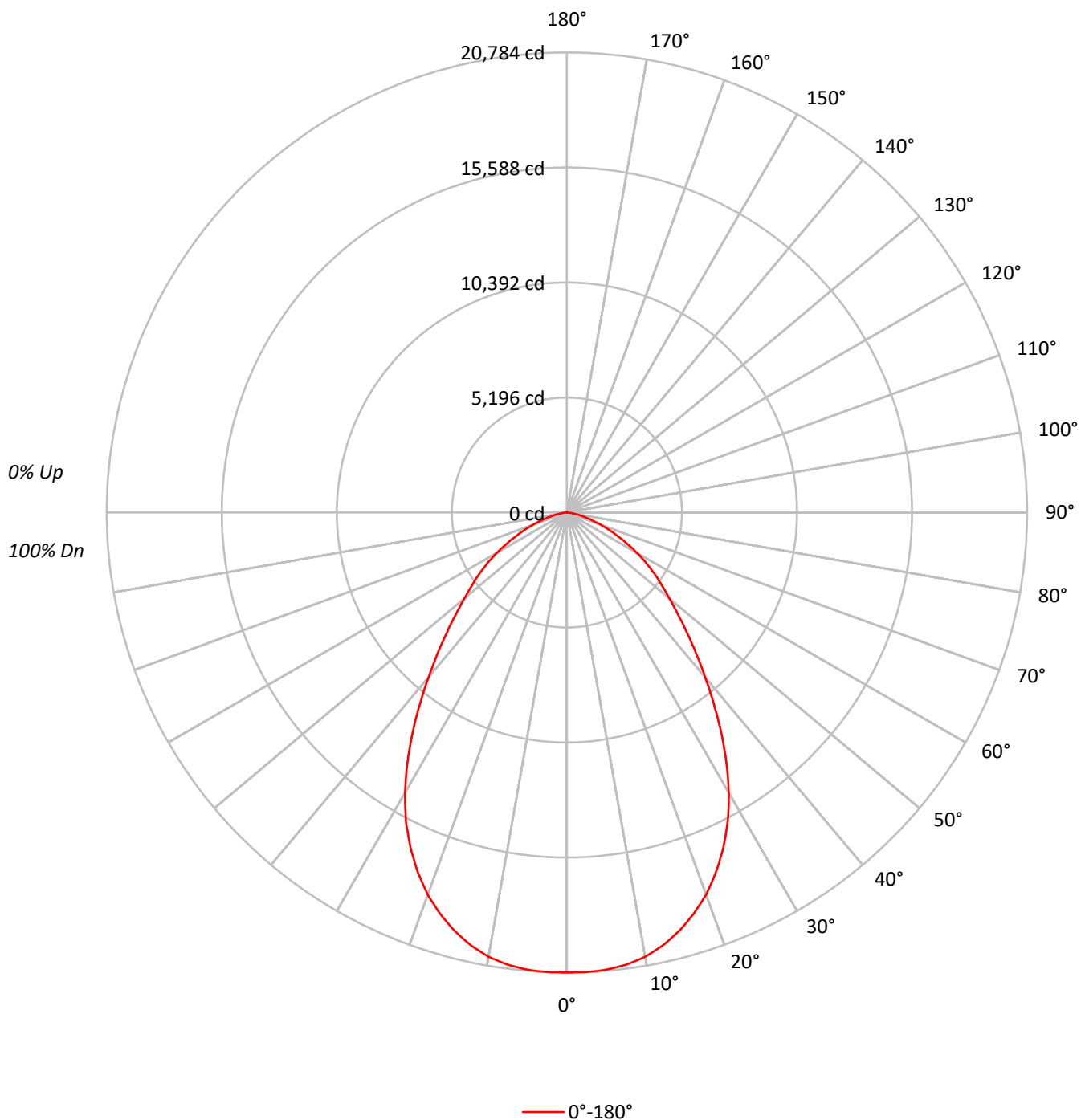
Lumens per Lamp: N/A  
Luminaire Lumens: 36708.0 lumens  
Efficiency: N/A  
Efficacy: 157.2 lumens/watt  
Spacing Criteria (0/90/45): 1.08 / 1.08 / 1.11  
Luminous Opening: Vertical Cylinder (Dia: 1.18' x H: 0.1')  
CIE Type: Direct

Input Watts (W): 233.5  
Input Voltage (V):  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: 0.999  
Total Harmonic Distortion (THDi): 5.15  
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  |     |     |  | 10  |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  |  | 50  | 30  | 10  |  | 50  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |  |     |     |     |  |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 |  | 106 | 106 | 106 |  | 102 |
| 1   | 111 | 107 | 104 | 101 | 108 | 105 | 102 | 99  | 101 | 98  | 96  |  | 97  | 95  | 93  |  | 93  |
| 2   | 103 | 96  | 90  | 86  | 100 | 94  | 89  | 85  | 91  | 86  | 83  |  | 88  | 84  | 81  |  | 85  |
| 3   | 95  | 86  | 79  | 74  | 93  | 85  | 78  | 73  | 82  | 77  | 72  |  | 79  | 75  | 71  |  | 77  |
| 4   | 88  | 78  | 70  | 65  | 86  | 77  | 70  | 64  | 74  | 68  | 63  |  | 72  | 67  | 63  |  | 70  |
| 5   | 82  | 71  | 63  | 57  | 80  | 70  | 62  | 57  | 68  | 61  | 56  |  | 66  | 60  | 56  |  | 64  |
| 6   | 76  | 65  | 57  | 51  | 75  | 64  | 56  | 51  | 62  | 56  | 51  |  | 61  | 55  | 50  |  | 59  |
| 7   | 71  | 59  | 52  | 46  | 70  | 59  | 51  | 46  | 57  | 51  | 46  |  | 56  | 50  | 45  |  | 55  |
| 8   | 67  | 55  | 47  | 42  | 66  | 54  | 47  | 42  | 53  | 46  | 42  |  | 52  | 46  | 41  |  | 51  |
| 9   | 63  | 51  | 43  | 38  | 62  | 50  | 43  | 38  | 49  | 43  | 38  |  | 48  | 42  | 38  |  | 47  |
| 10  | 59  | 47  | 40  | 35  | 58  | 47  | 40  | 35  | 46  | 39  | 35  |  | 45  | 39  | 35  |  | 44  |

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

|     |        |
|-----|--------|
|     | 0°     |
| 0°  | 206311 |
| 5°  | 204644 |
| 10° | 201593 |
| 15° | 195500 |
| 20° | 186729 |
| 25° | 174213 |
| 30° | 157720 |
| 35° | 136890 |
| 40° | 115326 |
| 45° | 96990  |
| 50° | 82561  |
| 55° | 72239  |
| 60° | 61149  |
| 65° | 48505  |
| 70° | 36831  |
| 75° | 24603  |
| 80° | 13713  |
| 85° | 5546   |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 96990 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 1967.8  | 5.4       |
| 10°-20°   | 5498.7  | 15.0      |
| 20°-30°   | 7648.8  | 20.8      |
| 30°-40°   | 7576.7  | 20.6      |
| 40°-50°   | 5956.4  | 16.2      |
| 50°-60°   | 4311.5  | 11.7      |
| 60°-70°   | 2560.8  | 7.0       |
| 70°-80°   | 995.5   | 2.7       |
| 80°-90°   | 156.8   | 0.4       |
| 90°-100°  | 4.7     | 0.0       |
| 100°-110° | 3.1     | 0.0       |
| 110°-120° | 2.9     | 0.0       |
| 120°-130° | 2.9     | 0.0       |
| 130°-140° | 4.4     | 0.0       |
| 140°-150° | 5.2     | 0.0       |
| 150°-160° | 5.6     | 0.0       |
| 160°-170° | 4.5     | 0.0       |
| 170°-180° | 1.8     | 0.0       |
| 0°-30°    | 15115.3 | 41.2      |
| 0°-40°    | 22692.0 | 61.8      |
| 0°-60°    | 32959.9 | 89.8      |
| 0°-90°    | 36673.0 | 99.9      |
| 90°-120°  | 10.7    | 0.0       |
| 90°-150°  | 23.1    | 0.1       |
| 90°-180°  | 35.0    | 0.1       |
| 0°-180°   | 36708.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°    | Flux |
|------|-------|------|
| 0°   | 20784 |      |
| 5°   | 20732 | ###  |
| 15°  | 19576 | 5499 |
| 25°  | 16709 | 7649 |
| 35°  | 12153 | 7577 |
| 45°  | 7658  | 5956 |
| 55°  | 4820  | 4312 |
| 65°  | 2545  | 2561 |
| 75°  | 901   | 996  |
| 85°  | 109   | 149  |
| 90°  | 14    | 11   |
| 95°  | 3     | 2    |
| 105° | 3     | 3    |
| 115° | 3     | 3    |
| 125° | 3     | 3    |
| 135° | 6     | 4    |
| 145° | 9     | 5    |
| 155° | 12    | 6    |
| 165° | 17    | 5    |
| 175° | 20    | 2    |
| 180° | 20    |      |

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**CANDELA DISTRIBUTION (FULL):**

| 0°     |         |
|--------|---------|
| 0°     | 20783.5 |
| 2.5°   | 20783.5 |
| 5°     | 20731.8 |
| 7.5°   | 20602.7 |
| 10°    | 20381.8 |
| 12.5°  | 20026.0 |
| 15°    | 19575.6 |
| 17.5°  | 19021.9 |
| 20°    | 18373.5 |
| 22.5°  | 17593.1 |
| 25°    | 16709.4 |
| 27.5°  | 15736.8 |
| 30°    | 14620.7 |
| 32.5°  | 13412.9 |
| 35°    | 12153.3 |
| 37.5°  | 10899.6 |
| 40°    | 9708.9  |
| 42.5°  | 8641.6  |
| 45°    | 7657.5  |
| 47.5°  | 6793.9  |
| 50°    | 6036.5  |
| 52.5°  | 5405.3  |
| 55°    | 4820.0  |
| 57.5°  | 4240.5  |
| 60°    | 3658.1  |
| 62.5°  | 3081.4  |
| 65°    | 2544.9  |
| 67.5°  | 2091.5  |
| 70°    | 1646.8  |
| 72.5°  | 1248.0  |
| 75°    | 900.9   |
| 77.5°  | 616.8   |
| 80°    | 387.3   |
| 82.5°  | 220.9   |
| 85°    | 109.0   |
| 87.5°  | 45.9    |
| 90°    | 14.3    |
| 92.5°  | 2.9     |
| 95°    | 2.9     |
| 97.5°  | 2.9     |
| 100°   | 2.9     |
| 102.5° | 2.9     |
| 105°   | 2.9     |
| 107.5° | 2.9     |
| 110°   | 2.9     |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°   |
|--------|------|
| 112.5° | 2.9  |
| 115°   | 2.9  |
| 117.5° | 2.9  |
| 120°   | 2.9  |
| 122.5° | 2.9  |
| 125°   | 2.9  |
| 127.5° | 2.9  |
| 130°   | 5.7  |
| 132.5° | 5.7  |
| 135°   | 5.7  |
| 137.5° | 5.7  |
| 140°   | 5.7  |
| 142.5° | 8.6  |
| 145°   | 8.6  |
| 147.5° | 8.6  |
| 150°   | 8.6  |
| 152.5° | 11.5 |
| 155°   | 11.5 |
| 157.5° | 14.3 |
| 160°   | 14.3 |
| 162.5° | 14.3 |
| 165°   | 17.2 |
| 167.5° | 17.2 |
| 170°   | 17.2 |
| 172.5° | 17.2 |
| 175°   | 20.1 |
| 177.5° | 20.1 |
| 180°   | 20.1 |

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**CIE UGR TABLE:**

| Reflectances:   |      |                  |       |       |       |       |                |       |       |       |       |
|-----------------|------|------------------|-------|-------|-------|-------|----------------|-------|-------|-------|-------|
| Ceiling         |      | 0.7              | 0.7   | 0.5   | 0.5   | 0.3   | 0.7            | 0.7   | 0.5   | 0.5   | 0.3   |
| Wall            |      | 0.5              | 0.3   | 0.5   | 0.3   | 0.3   | 0.5            | 0.3   | 0.5   | 0.3   | 0.3   |
| Reference plane |      | 0.2              | 0.2   | 0.2   | 0.2   | 0.2   | 0.2            | 0.2   | 0.2   | 0.2   | 0.2   |
| Room dimensions |      | Viewed crosswise |       |       |       |       | Viewed endwise |       |       |       |       |
| X=2H            | Y=2H | 25.66            | 27.07 | 26.02 | 27.38 | 27.70 | 25.66          | 27.07 | 26.02 | 27.38 | 27.70 |
|                 | 3H   | 26.59            | 27.84 | 26.97 | 28.17 | 28.54 | 26.59          | 27.84 | 26.97 | 28.17 | 28.54 |
|                 | 4H   | 26.79            | 27.96 | 27.19 | 28.31 | 28.69 | 26.79          | 27.96 | 27.19 | 28.31 | 28.69 |
|                 | 6H   | 26.84            | 27.92 | 27.25 | 28.29 | 28.68 | 26.84          | 27.92 | 27.25 | 28.29 | 28.68 |
|                 | 8H   | 26.82            | 27.85 | 27.25 | 28.24 | 28.64 | 26.82          | 27.85 | 27.25 | 28.24 | 28.64 |
|                 | 12H  | 26.79            | 27.77 | 27.23 | 28.16 | 28.59 | 26.79          | 27.77 | 27.23 | 28.16 | 28.59 |
| 4H              | 2H   | 25.97            | 27.15 | 26.38 | 27.50 | 27.88 | 25.97          | 27.15 | 26.38 | 27.50 | 27.88 |
|                 | 3H   | 27.05            | 28.01 | 27.46 | 28.41 | 28.82 | 27.05          | 28.01 | 27.46 | 28.41 | 28.82 |
|                 | 4H   | 27.30            | 28.16 | 27.73 | 28.58 | 29.02 | 27.30          | 28.16 | 27.73 | 28.58 | 29.02 |
|                 | 6H   | 27.39            | 28.14 | 27.85 | 28.58 | 29.05 | 27.39          | 28.14 | 27.85 | 28.58 | 29.05 |
|                 | 8H   | 27.38            | 28.07 | 27.85 | 28.52 | 28.99 | 27.38          | 28.07 | 27.85 | 28.52 | 28.99 |
|                 | 12H  | 27.35            | 27.97 | 27.84 | 28.45 | 28.93 | 27.35          | 27.97 | 27.84 | 28.45 | 28.93 |
| 8H              | 4H   | 27.33            | 28.02 | 27.80 | 28.47 | 28.94 | 27.33          | 28.02 | 27.80 | 28.47 | 28.94 |
|                 | 6H   | 27.44            | 28.01 | 27.94 | 28.50 | 28.99 | 27.44          | 28.01 | 27.94 | 28.50 | 28.99 |
|                 | 8H   | 27.43            | 27.94 | 27.95 | 28.46 | 28.95 | 27.43          | 27.94 | 27.95 | 28.46 | 28.95 |
|                 | 12H  | 27.42            | 27.87 | 27.93 | 28.36 | 28.94 | 27.42          | 27.87 | 27.93 | 28.36 | 28.94 |
| 12H             | 4H   | 27.30            | 27.92 | 27.79 | 28.40 | 28.87 | 27.30          | 27.92 | 27.79 | 28.40 | 28.87 |
|                 | 6H   | 27.40            | 27.91 | 27.92 | 28.43 | 28.92 | 27.40          | 27.91 | 27.92 | 28.43 | 28.92 |
|                 | 8H   | 27.42            | 27.87 | 27.93 | 28.36 | 28.93 | 27.42          | 27.87 | 27.93 | 28.36 | 28.93 |