

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: P978849

Luminaire Tested: UHBS2-1218-M-L83065-HIGH-5000K

Issue Date: 3/27/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P978849  
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: UHBS2-1218-M-L83065-HIGH-5000K  
Description: UHBS2 LED High Bay at 5000K and HIGH lumen setting  
Light Source: -  
Ballast/Driver: -

**Summary**

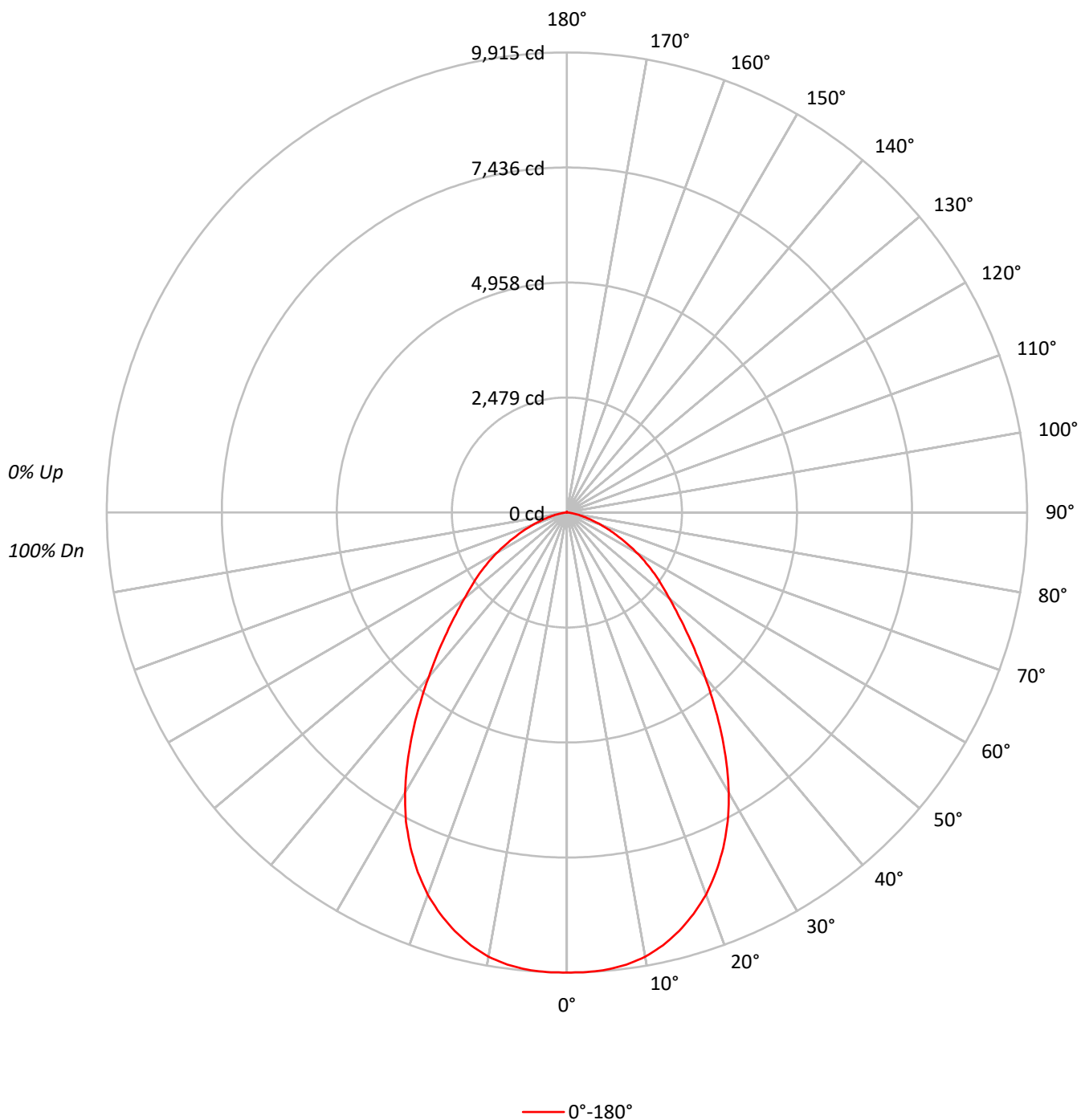
Lumens per Lamp: N/A  
Luminaire Lumens: 17512.1 lumens  
Efficiency: N/A  
Efficacy: 146.9 lumens/watt  
Spacing Criteria (0/90/45): 1.08 / 1.08 / 1.11  
Luminous Opening: Vertical Cylinder (Dia: 1' x H: 0.1')  
CIE Type: Direct

Input Watts (W): 119.2  
Input Voltage (V):  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: 0.998  
Total Harmonic Distortion (THDi): 6.9  
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°  | 135885 |
| 5°  | 134567 |
| 10° | 132344 |
| 15° | 128132 |
| 20° | 122176 |
| 25° | 113786 |
| 30° | 102822 |
| 35° | 89063  |
| 40° | 74867  |
| 45° | 62807  |
| 50° | 53312  |
| 55° | 46491  |
| 60° | 39191  |
| 65° | 30927  |
| 70° | 23321  |
| 75° | 15428  |
| 80° | 8469   |
| 85° | 3330   |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 62807 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 938.8   | 5.4       |
| 10°-20°   | 2623.2  | 15.0      |
| 20°-30°   | 3648.9  | 20.8      |
| 30°-40°   | 3614.6  | 20.6      |
| 40°-50°   | 2841.6  | 16.2      |
| 50°-60°   | 2056.9  | 11.7      |
| 60°-70°   | 1221.6  | 7.0       |
| 70°-80°   | 475.0   | 2.7       |
| 80°-90°   | 74.8    | 0.4       |
| 90°-100°  | 2.3     | 0.0       |
| 100°-110° | 1.5     | 0.0       |
| 110°-120° | 1.4     | 0.0       |
| 120°-130° | 1.4     | 0.0       |
| 130°-140° | 2.1     | 0.0       |
| 140°-150° | 2.5     | 0.0       |
| 150°-160° | 2.7     | 0.0       |
| 160°-170° | 2.1     | 0.0       |
| 170°-180° | 0.8     | 0.0       |
| 0°-30°    | 7210.9  | 41.2      |
| 0°-40°    | 10825.5 | 61.8      |
| 0°-60°    | 15724.0 | 89.8      |
| 0°-90°    | 17495.4 | 99.9      |
| 90°-120°  | 5.1     | 0.0       |
| 90°-150°  | 11.1    | 0.1       |
| 90°-180°  | 17.0    | 0.1       |
| 0°-180°   | 17512.1 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | Flux |
|------|------|------|
| 0°   | 9915 |      |
| 5°   | 9890 | 939  |
| 15°  | 9339 | 2623 |
| 25°  | 7971 | 3649 |
| 35°  | 5798 | 3615 |
| 45°  | 3653 | 2842 |
| 55°  | 2300 | 2057 |
| 65°  | 1214 | 1222 |
| 75°  | 430  | 475  |
| 85°  | 52   | 71   |
| 90°  | 7    | 5    |
| 95°  | 1    | 1    |
| 105° | 1    | 1    |
| 115° | 1    | 1    |
| 125° | 1    | 1    |
| 135° | 3    | 2    |
| 145° | 4    | 2    |
| 155° | 6    | 3    |
| 165° | 8    | 2    |
| 175° | 10   | 1    |
| 180° | 10   |      |

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**CANDELA DISTRIBUTION (FULL):**

| 0°     |        |
|--------|--------|
| 0°     | 9915.0 |
| 2.5°   | 9915.0 |
| 5°     | 9890.4 |
| 7.5°   | 9828.8 |
| 10°    | 9723.4 |
| 12.5°  | 9553.7 |
| 15°    | 9338.8 |
| 17.5°  | 9074.6 |
| 20°    | 8765.3 |
| 22.5°  | 8393.0 |
| 25°    | 7971.4 |
| 27.5°  | 7507.4 |
| 30°    | 6975.0 |
| 32.5°  | 6398.8 |
| 35°    | 5797.9 |
| 37.5°  | 5199.8 |
| 40°    | 4631.8 |
| 42.5°  | 4122.6 |
| 45°    | 3653.1 |
| 47.5°  | 3241.1 |
| 50°    | 2879.8 |
| 52.5°  | 2578.7 |
| 55°    | 2299.5 |
| 57.5°  | 2023.0 |
| 60°    | 1745.1 |
| 62.5°  | 1470.0 |
| 65°    | 1214.1 |
| 67.5°  | 997.8  |
| 70°    | 785.6  |
| 72.5°  | 595.4  |
| 75°    | 429.8  |
| 77.5°  | 294.3  |
| 80°    | 184.8  |
| 82.5°  | 105.4  |
| 85°    | 52.0   |
| 87.5°  | 21.9   |
| 90°    | 6.8    |
| 92.5°  | 1.4    |
| 95°    | 1.4    |
| 97.5°  | 1.4    |
| 100°   | 1.4    |
| 102.5° | 1.4    |
| 105°   | 1.4    |
| 107.5° | 1.4    |
| 110°   | 1.4    |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°  |
|--------|-----|
| 112.5° | 1.4 |
| 115°   | 1.4 |
| 117.5° | 1.4 |
| 120°   | 1.4 |
| 122.5° | 1.4 |
| 125°   | 1.4 |
| 127.5° | 1.4 |
| 130°   | 2.7 |
| 132.5° | 2.7 |
| 135°   | 2.7 |
| 137.5° | 2.7 |
| 140°   | 2.7 |
| 142.5° | 4.1 |
| 145°   | 4.1 |
| 147.5° | 4.1 |
| 150°   | 4.1 |
| 152.5° | 5.5 |
| 155°   | 5.5 |
| 157.5° | 6.8 |
| 160°   | 6.8 |
| 162.5° | 6.8 |
| 165°   | 8.2 |
| 167.5° | 8.2 |
| 170°   | 8.2 |
| 172.5° | 8.2 |
| 175°   | 9.6 |
| 177.5° | 9.6 |
| 180°   | 9.6 |

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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 | 24.10            | 25.51 | 24.46 | 25.82 | 26.14 | 24.10          | 25.51 | 24.46 | 25.82 | 26.14 |
|                 | 3H   | 25.02            | 26.27 | 25.40 | 26.61 | 26.97 | 25.02          | 26.27 | 25.40 | 26.61 | 26.97 |
|                 | 4H   | 25.21            | 26.39 | 25.62 | 26.74 | 27.12 | 25.21          | 26.39 | 25.62 | 26.74 | 27.12 |
|                 | 6H   | 25.26            | 26.34 | 25.68 | 26.71 | 27.11 | 25.26          | 26.34 | 25.68 | 26.71 | 27.11 |
|                 | 8H   | 25.25            | 26.27 | 25.68 | 26.66 | 27.07 | 25.25          | 26.27 | 25.68 | 26.66 | 27.07 |
|                 | 12H  | 25.22            | 26.20 | 25.65 | 26.58 | 27.01 | 25.22          | 26.20 | 25.65 | 26.58 | 27.01 |
| 4H              | 2H   | 24.41            | 25.58 | 24.81 | 25.94 | 26.32 | 24.41          | 25.58 | 24.81 | 25.94 | 26.32 |
|                 | 3H   | 25.47            | 26.43 | 25.88 | 26.84 | 27.24 | 25.47          | 26.43 | 25.88 | 26.84 | 27.24 |
|                 | 4H   | 25.71            | 26.58 | 26.15 | 27.00 | 27.44 | 25.71          | 26.58 | 26.15 | 27.00 | 27.44 |
|                 | 6H   | 25.81            | 26.55 | 26.27 | 27.00 | 27.46 | 25.81          | 26.55 | 26.27 | 27.00 | 27.46 |
|                 | 8H   | 25.79            | 26.49 | 26.26 | 26.93 | 27.40 | 25.79          | 26.49 | 26.26 | 26.93 | 27.40 |
|                 | 12H  | 25.77            | 26.38 | 26.25 | 26.87 | 27.34 | 25.77          | 26.38 | 26.25 | 26.87 | 27.34 |
| 8H              | 4H   | 25.74            | 26.44 | 26.21 | 26.89 | 27.36 | 25.74          | 26.44 | 26.21 | 26.89 | 27.36 |
|                 | 6H   | 25.85            | 26.42 | 26.35 | 26.91 | 27.40 | 25.85          | 26.42 | 26.35 | 26.91 | 27.40 |
|                 | 8H   | 25.84            | 26.35 | 26.36 | 26.87 | 27.36 | 25.84          | 26.35 | 26.36 | 26.87 | 27.36 |
|                 | 12H  | 25.83            | 26.28 | 26.34 | 26.77 | 27.34 | 25.83          | 26.28 | 26.34 | 26.77 | 27.34 |
| 12H             | 4H   | 25.71            | 26.33 | 26.20 | 26.81 | 27.29 | 25.71          | 26.33 | 26.20 | 26.81 | 27.29 |
|                 | 6H   | 25.81            | 26.32 | 26.33 | 26.84 | 27.33 | 25.81          | 26.32 | 26.33 | 26.84 | 27.33 |
|                 | 8H   | 25.83            | 26.27 | 26.34 | 26.77 | 27.34 | 25.83          | 26.27 | 26.34 | 26.77 | 27.34 |