

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: P978884

Luminaire Tested: UHBS2-1218-W-L83065-LOW-5000K

Issue Date: 3/27/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P978884  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2405-087-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/27/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: UHBS2-1218-W-L83065-LOW-5000K  
Description: UHBS2 LED High Bay at 5000K and LOW lumen setting  
Light Source: -  
Ballast/Driver: -

**Summary**

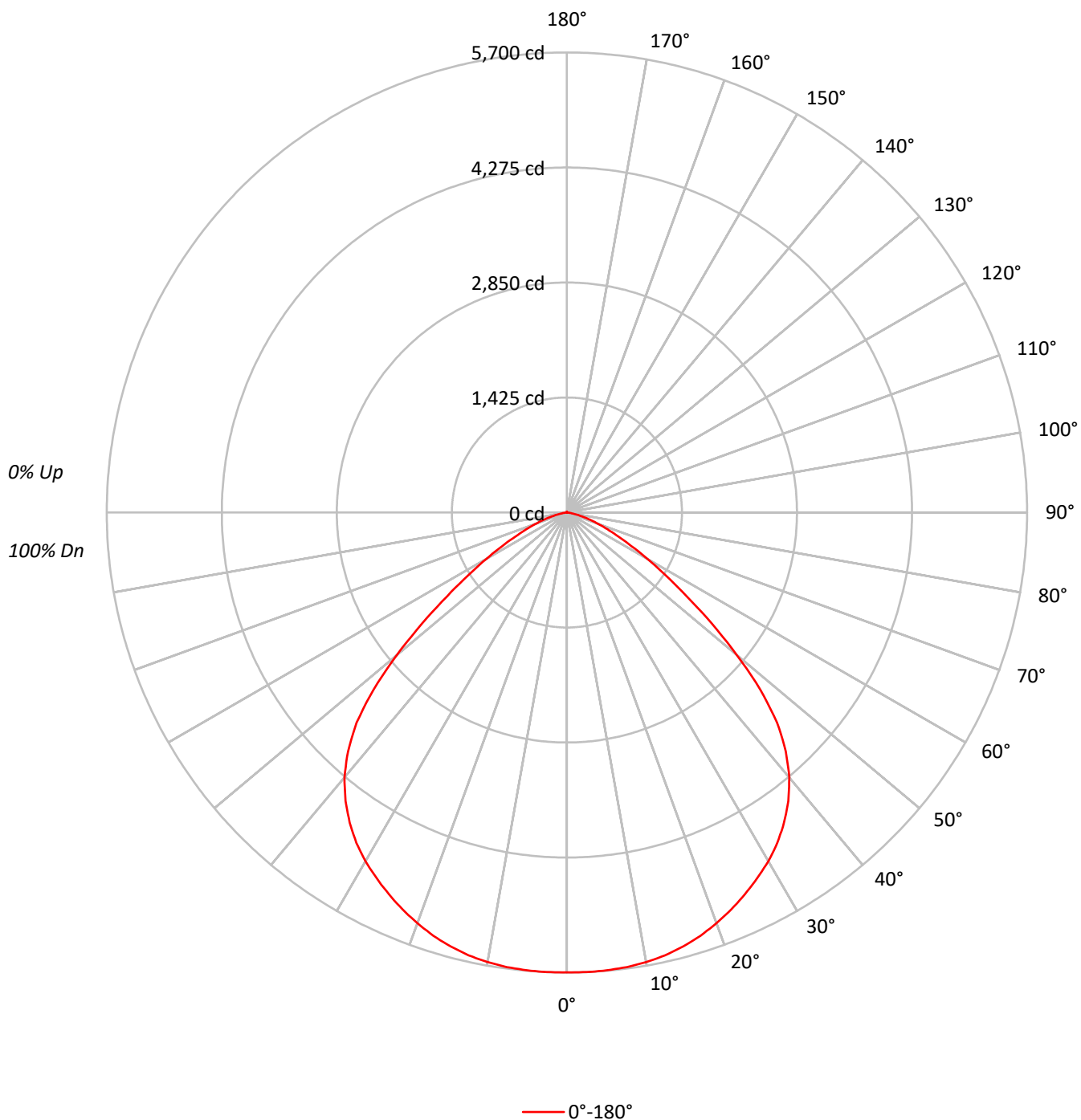
Lumens per Lamp: N/A  
Luminaire Lumens: 12880.1 lumens  
Efficiency: N/A  
Efficacy: 163.0 lumens/watt  
Spacing Criteria (0/90/45): 1.3 / 1.3 / 1.36  
Luminous Opening: Vertical Cylinder (Dia: 1' x H: 0.1')  
CIE Type: Direct

Input Watts (W): 79  
Input Voltage (V):  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: 0.997  
Total Harmonic Distortion (THDi): 7.2  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

TEST NUMBER: P978884

CATALOG NUMBER: UHBS2-1218-W-L83065-LOW-5000K

### Luminous Intensity Polar Plot



TEST NUMBER: P978884

CATALOG NUMBER: UHBS2-1218-W-L83065-LOW-5000K

**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  |  | 94  |
| 2   | 103 | 96  | 90  | 86  | 100 | 94  | 89  | 85  | 91  | 86  | 83  |  | 88  | 84  | 81  |  | 85  |
| 3   | 95  | 86  | 79  | 73  | 93  | 84  | 78  | 73  | 82  | 76  | 72  |  | 79  | 74  | 70  |  | 76  |
| 4   | 88  | 77  | 70  | 64  | 86  | 76  | 69  | 63  | 74  | 67  | 63  |  | 71  | 66  | 62  |  | 69  |
| 5   | 81  | 70  | 62  | 56  | 79  | 69  | 61  | 56  | 67  | 60  | 55  |  | 65  | 59  | 54  |  | 63  |
| 6   | 75  | 63  | 55  | 49  | 74  | 62  | 55  | 49  | 61  | 54  | 49  |  | 59  | 53  | 48  |  | 58  |
| 7   | 70  | 58  | 50  | 44  | 68  | 57  | 49  | 44  | 56  | 49  | 44  |  | 54  | 48  | 43  |  | 53  |
| 8   | 65  | 53  | 45  | 40  | 64  | 52  | 45  | 40  | 51  | 44  | 39  |  | 50  | 44  | 39  |  | 49  |
| 9   | 61  | 49  | 41  | 36  | 60  | 48  | 41  | 36  | 47  | 40  | 36  |  | 46  | 40  | 35  |  | 45  |
| 10  | 57  | 45  | 38  | 33  | 56  | 45  | 37  | 33  | 44  | 37  | 32  |  | 43  | 37  | 32  |  | 42  |

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

|     |       |
|-----|-------|
|     | 0°    |
| 0°  | 78091 |
| 5°  | 77472 |
| 10° | 77002 |
| 15° | 76379 |
| 20° | 75485 |
| 25° | 74488 |
| 30° | 73557 |
| 35° | 72044 |
| 40° | 69273 |
| 45° | 63318 |
| 50° | 50935 |
| 55° | 36596 |
| 60° | 25882 |
| 65° | 17921 |
| 70° | 12124 |
| 75° | 7366  |
| 80° | 3236  |
| 85° | 1070  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 63318 cd/sqm

TEST NUMBER: P978884

CATALOG NUMBER: UHBS2-1218-W-L83065-LOW-5000K

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 542.4   | 4.2       |
| 10°-20°   | 1571.4  | 12.2      |
| 20°-30°   | 2407.1  | 18.7      |
| 30°-40°   | 2925.9  | 22.7      |
| 40°-50°   | 2784.6  | 21.6      |
| 50°-60°   | 1662.3  | 12.9      |
| 60°-70°   | 721.5   | 5.6       |
| 70°-80°   | 229.4   | 1.8       |
| 80°-90°   | 25.6    | 0.2       |
| 90°-100°  | 0.9     | 0.0       |
| 100°-110° | 0.7     | 0.0       |
| 110°-120° | 0.8     | 0.0       |
| 120°-130° | 1.2     | 0.0       |
| 130°-140° | 1.3     | 0.0       |
| 140°-150° | 1.6     | 0.0       |
| 150°-160° | 1.6     | 0.0       |
| 160°-170° | 1.2     | 0.0       |
| 170°-180° | 0.5     | 0.0       |
| 0°-30°    | 4520.9  | 35.1      |
| 0°-40°    | 7446.8  | 57.8      |
| 0°-60°    | 11893.6 | 92.3      |
| 0°-90°    | 12870.2 | 99.9      |
| 90°-120°  | 2.4     | 0.0       |
| 90°-150°  | 6.6     | 0.1       |
| 90°-180°  | 10.0    | 0.1       |
| 0°-180°   | 12880.1 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | Flux |
|------|------|------|
| 0°   | 5698 |      |
| 5°   | 5694 | 542  |
| 15°  | 5567 | 1571 |
| 25°  | 5218 | 2407 |
| 35°  | 4690 | 2926 |
| 45°  | 3683 | 2785 |
| 55°  | 1810 | 1662 |
| 65°  | 704  | 722  |
| 75°  | 205  | 229  |
| 85°  | 17   | 24   |
| 90°  | 2    | 2    |
| 95°  | 1    | 1    |
| 105° | 1    | 1    |
| 115° | 1    | 1    |
| 125° | 1    | 1    |
| 135° | 2    | 1    |
| 145° | 3    | 2    |
| 155° | 3    | 2    |
| 165° | 5    | 1    |
| 175° | 5    | 0    |
| 180° | 6    |      |

TEST NUMBER: P978884

CATALOG NUMBER: UHBS2-1218-W-L83065-LOW-5000K

**CANDELA DISTRIBUTION (FULL):**

| 0°     |        |
|--------|--------|
| 0°     | 5698.0 |
| 2.5°   | 5700.0 |
| 5°     | 5694.0 |
| 7.5°   | 5681.4 |
| 10°    | 5657.4 |
| 12.5°  | 5620.1 |
| 15°    | 5566.8 |
| 17.5°  | 5499.5 |
| 20°    | 5415.5 |
| 22.5°  | 5322.9 |
| 25°    | 5218.3 |
| 27.5°  | 5107.8 |
| 30°    | 4989.8 |
| 32.5°  | 4852.6 |
| 35°    | 4690.0 |
| 37.5°  | 4504.8 |
| 40°    | 4285.7 |
| 42.5°  | 4013.9 |
| 45°    | 3682.8 |
| 47.5°  | 3250.4 |
| 50°    | 2751.4 |
| 52.5°  | 2259.8 |
| 55°    | 1810.1 |
| 57.5°  | 1451.0 |
| 60°    | 1152.5 |
| 62.5°  | 900.7  |
| 65°    | 703.5  |
| 67.5°  | 541.6  |
| 70°    | 408.4  |
| 72.5°  | 297.8  |
| 75°    | 205.2  |
| 77.5°  | 129.9  |
| 80°    | 70.6   |
| 82.5°  | 34.0   |
| 85°    | 16.7   |
| 87.5°  | 7.3    |
| 90°    | 2.0    |
| 92.5°  | 0.7    |
| 95°    | 0.7    |
| 97.5°  | 0.7    |
| 100°   | 0.7    |
| 102.5° | 0.7    |
| 105°   | 0.7    |
| 107.5° | 0.7    |
| 110°   | 0.7    |



TEST NUMBER: P978884

CATALOG NUMBER: UHBS2-1218-W-L83065-LOW-5000K

**CANDELA DISTRIBUTION (continued):**

|        | 0°  |
|--------|-----|
| 112.5° | 0.7 |
| 115°   | 0.7 |
| 117.5° | 0.7 |
| 120°   | 1.3 |
| 122.5° | 1.3 |
| 125°   | 1.3 |
| 127.5° | 1.3 |
| 130°   | 1.3 |
| 132.5° | 1.3 |
| 135°   | 2.0 |
| 137.5° | 2.0 |
| 140°   | 2.0 |
| 142.5° | 2.7 |
| 145°   | 2.7 |
| 147.5° | 2.7 |
| 150°   | 2.7 |
| 152.5° | 3.3 |
| 155°   | 3.3 |
| 157.5° | 4.0 |
| 160°   | 4.0 |
| 162.5° | 4.0 |
| 165°   | 4.7 |
| 167.5° | 4.7 |
| 170°   | 4.7 |
| 172.5° | 4.7 |
| 175°   | 5.3 |
| 177.5° | 5.3 |
| 180°   | 6.0 |

TEST NUMBER: P978884

CATALOG NUMBER: UHBS2-1218-W-L83065-LOW-5000K

**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 | 22.77            | 24.22 | 23.14 | 24.54 | 24.85 | 22.77          | 24.22 | 23.14 | 24.54 | 24.85 |
|                 | 3H   | 23.28            | 24.56 | 23.66 | 24.89 | 25.26 | 23.28          | 24.56 | 23.66 | 24.89 | 25.26 |
|                 | 4H   | 23.36            | 24.55 | 23.76 | 24.90 | 25.29 | 23.36          | 24.55 | 23.76 | 24.90 | 25.29 |
|                 | 6H   | 23.34            | 24.44 | 23.75 | 24.81 | 25.20 | 23.34          | 24.44 | 23.75 | 24.81 | 25.20 |
|                 | 8H   | 23.31            | 24.35 | 23.74 | 24.74 | 25.15 | 23.31          | 24.35 | 23.74 | 24.74 | 25.15 |
|                 | 12H  | 23.27            | 24.27 | 23.71 | 24.65 | 25.08 | 23.27          | 24.27 | 23.71 | 24.65 | 25.08 |
| 4H              | 2H   | 22.94            | 24.14 | 23.34 | 24.49 | 24.87 | 22.94          | 24.14 | 23.34 | 24.49 | 24.87 |
|                 | 3H   | 23.56            | 24.53 | 23.97 | 24.93 | 25.34 | 23.56          | 24.53 | 23.97 | 24.93 | 25.34 |
|                 | 4H   | 23.66            | 24.53 | 24.10 | 24.95 | 25.39 | 23.66          | 24.53 | 24.10 | 24.95 | 25.39 |
|                 | 6H   | 23.66            | 24.41 | 24.13 | 24.86 | 25.32 | 23.66          | 24.41 | 24.13 | 24.86 | 25.32 |
|                 | 8H   | 23.62            | 24.32 | 24.09 | 24.77 | 25.24 | 23.62          | 24.32 | 24.09 | 24.77 | 25.24 |
|                 | 12H  | 23.59            | 24.21 | 24.07 | 24.69 | 25.17 | 23.59          | 24.21 | 24.07 | 24.69 | 25.17 |
| 8H              | 4H   | 23.63            | 24.33 | 24.09 | 24.77 | 25.24 | 23.63          | 24.33 | 24.09 | 24.77 | 25.24 |
|                 | 6H   | 23.62            | 24.19 | 24.12 | 24.69 | 25.17 | 23.62          | 24.19 | 24.12 | 24.69 | 25.17 |
|                 | 8H   | 23.57            | 24.09 | 24.09 | 24.61 | 25.10 | 23.57          | 24.09 | 24.09 | 24.61 | 25.10 |
|                 | 12H  | 23.54            | 24.00 | 24.05 | 24.49 | 25.06 | 23.54          | 24.00 | 24.05 | 24.49 | 25.06 |
| 12H             | 4H   | 23.59            | 24.21 | 24.08 | 24.69 | 25.17 | 23.59          | 24.21 | 24.08 | 24.69 | 25.17 |
|                 | 6H   | 23.57            | 24.08 | 24.09 | 24.60 | 25.09 | 23.57          | 24.08 | 24.09 | 24.60 | 25.09 |
|                 | 8H   | 23.54            | 24.00 | 24.05 | 24.50 | 25.07 | 23.54          | 24.00 | 24.05 | 24.50 | 25.07 |