

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: P563361

Luminaire Tested: **VHB-30-W-UNV-L835-CD**

Issue Date: 6/3/2022



**Test Information**

Test Method: LM-79-08  
Report Number: P563361  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P364417)  
Test Lab: INNOVATION CENTER  
Issue Date: 6/3/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: VHB-30-W-UNV-L835-CD  
Description: 30000 LUMEN, VHB LED LUMINAIRE WITH, WIDE LENS AND 80CRI, 3500K CCT  
LEDS  
Light Source: -  
Ballast/Driver: -

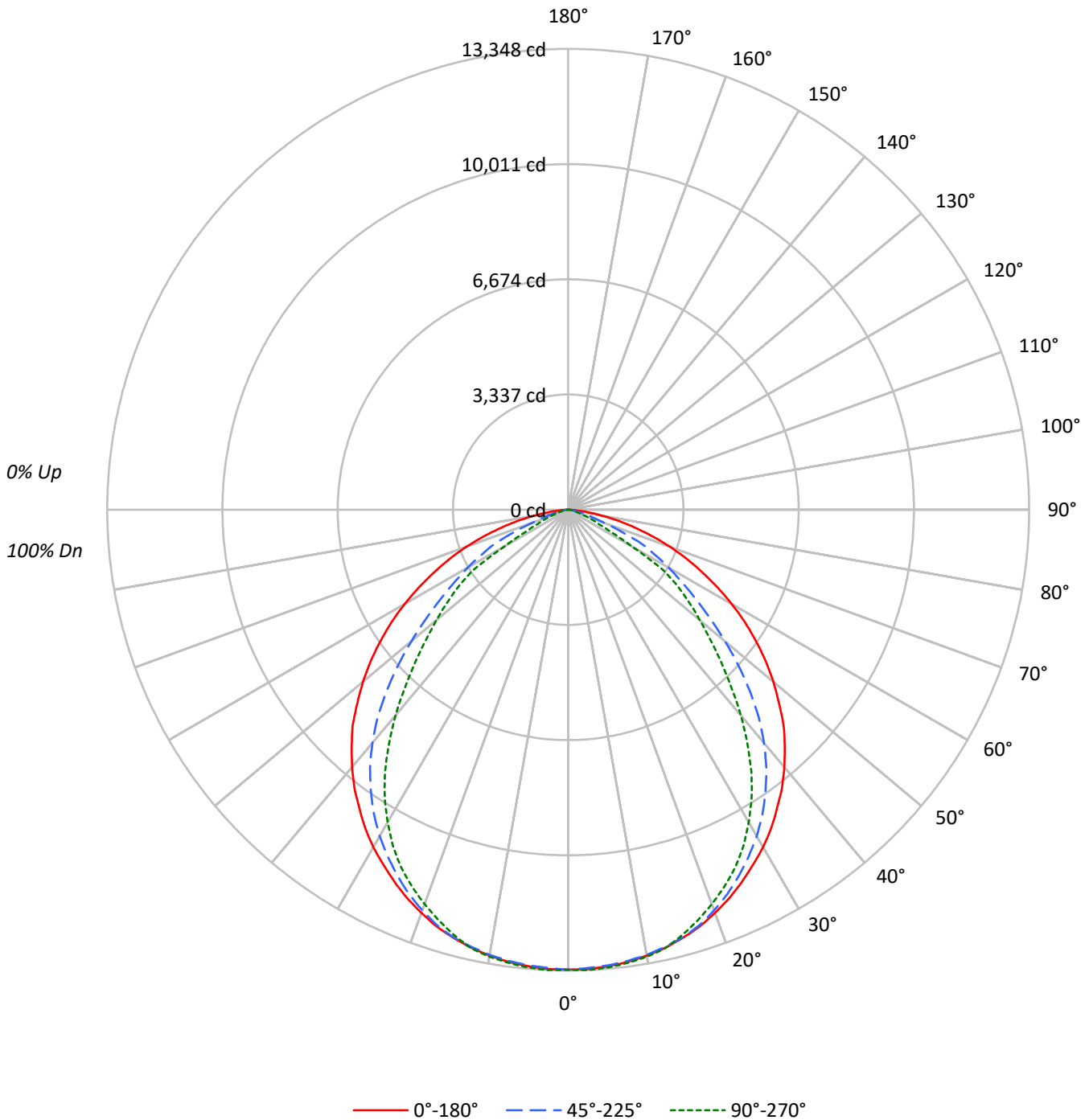
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 29968.0 lumens  
Efficiency: N/A  
Efficacy: 146.9 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.17 / 1.28  
Luminous Opening: Rectangular (W 1.75' x L: 1.58' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 204  
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

TEST NUMBER: P563361

CATALOG NUMBER: VHB-30-W-UNV-L835-CD

### Luminous Intensity Polar Plot





TEST NUMBER: P563361

CATALOG NUMBER: VHB-30-W-UNV-L835-CD

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| RF  | 20  |     |     |     | 20  |     |     |     | 20  |     |     |     | 20  |     |     |     | 20  |     |
| RC  | 80  |     |     |     | 70  |     |     |     | 50  |     |     |     | 30  |     |     |     | 10  | 0   |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 0   |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1   | 111 | 107 | 103 | 100 | 108 | 104 | 101 | 98  | 100 | 97  | 95  | 96  | 94  | 92  | 93  | 91  | 89  | 87  |
| 2   | 102 | 95  | 89  | 84  | 99  | 93  | 87  | 83  | 89  | 85  | 81  | 86  | 82  | 79  | 83  | 80  | 77  | 75  |
| 3   | 94  | 84  | 77  | 71  | 91  | 83  | 76  | 71  | 80  | 74  | 70  | 77  | 72  | 68  | 75  | 71  | 67  | 65  |
| 4   | 86  | 76  | 68  | 62  | 84  | 74  | 67  | 61  | 72  | 65  | 60  | 70  | 64  | 60  | 68  | 63  | 59  | 57  |
| 5   | 80  | 68  | 60  | 54  | 78  | 67  | 59  | 54  | 65  | 58  | 53  | 63  | 57  | 52  | 61  | 56  | 52  | 50  |
| 6   | 74  | 62  | 53  | 48  | 72  | 61  | 53  | 47  | 59  | 52  | 47  | 57  | 51  | 47  | 56  | 50  | 46  | 44  |
| 7   | 69  | 56  | 48  | 42  | 67  | 56  | 48  | 42  | 54  | 47  | 42  | 53  | 46  | 42  | 51  | 46  | 41  | 39  |
| 8   | 64  | 52  | 44  | 38  | 63  | 51  | 43  | 38  | 50  | 43  | 38  | 48  | 42  | 38  | 47  | 42  | 37  | 36  |
| 9   | 60  | 48  | 40  | 34  | 59  | 47  | 39  | 34  | 46  | 39  | 34  | 45  | 39  | 34  | 44  | 38  | 34  | 32  |
| 10  | 57  | 44  | 36  | 31  | 55  | 43  | 36  | 31  | 42  | 36  | 31  | 42  | 35  | 31  | 41  | 35  | 31  | 29  |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 51760 | 51760 | 51760 |
| 5°  | 51768 | 51662 | 51900 |
| 10° | 51749 | 51637 | 51850 |
| 15° | 51626 | 51572 | 51306 |
| 20° | 51377 | 51059 | 50261 |
| 25° | 50997 | 50129 | 49030 |
| 30° | 50626 | 48974 | 46879 |
| 35° | 50023 | 47257 | 43833 |
| 40° | 49364 | 44717 | 39440 |
| 45° | 48465 | 40896 | 34461 |
| 50° | 46865 | 35805 | 30104 |
| 55° | 44951 | 30501 | 26278 |
| 60° | 42466 | 26160 | 16776 |
| 65° | 39348 | 21821 | 8893  |
| 70° | 35515 | 12400 | 5763  |
| 75° | 29836 | 7596  | 3584  |
| 80° | 22674 | 3835  | 3139  |
| 85° | 13778 | 3486  | 2830  |



TEST NUMBER: P563361

CATALOG NUMBER: VHB-30-W-UNV-L835-CD

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 1261.4  | 4.2       |
| 10°-20°   | 3608.9  | 12.0      |
| 20°-30°   | 5379.7  | 18.0      |
| 30°-40°   | 6195.6  | 20.7      |
| 40°-50°   | 5766.0  | 19.2      |
| 50°-60°   | 4387.5  | 14.6      |
| 60°-70°   | 2355.1  | 7.9       |
| 70°-80°   | 866.4   | 2.9       |
| 80°-90°   | 147.3   | 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°    | 10250.0 | 34.2      |
| 0°-40°    | 16445.7 | 54.9      |
| 0°-60°    | 26599.1 | 88.8      |
| 0°-90°    | 29968.0 | 100.0     |
| 90°-120°  | 0.0     | 0.0       |
| 90°-150°  | 0.0     | 0.0       |
| 90°-180°  | 0.0     | 0.0       |
| 0°-180°   | 29968.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°    | 22.5° | 45°   | 67.5° | 90°   | Flux |
|-----|-------|-------|-------|-------|-------|------|
| 0°  | 13324 | 13324 | 13324 | 13324 | 13324 |      |
| 5°  | 13275 | 13237 | 13248 | 13294 | 13309 | ###  |
| 15° | 12836 | 12816 | 12823 | 12799 | 12757 | 3623 |
| 25° | 11897 | 11888 | 11695 | 11529 | 11438 | 5484 |
| 35° | 10548 | 10420 | 9965  | 9464  | 9243  | 6603 |
| 45° | 8822  | 8397  | 7444  | 6560  | 6272  | 6779 |
| 55° | 6637  | 5886  | 4503  | 4009  | 3880  | 5928 |
| 65° | 4281  | 3144  | 2374  | 1175  | 968   | 4245 |
| 75° | 1988  | 1302  | 506   | 262   | 239   | 2131 |
| 85° | 309   | 100   | 78    | 67    | 64    | 412  |
| 90° | 0     | 0     | 0     | 0     | 0     |      |



TEST NUMBER: P563361

CATALOG NUMBER: VHB-30-W-UNV-L835-CD

**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 22.5°   | 45°     | 67.5°   | 90°     |
|-------|---------|---------|---------|---------|---------|
| 0°    | 13323.7 | 13323.7 | 13323.7 | 13323.7 | 13323.7 |
| 2.5°  | 13314.2 | 13273.7 | 13287.3 | 13330.4 | 13348.0 |
| 5°    | 13275.1 | 13237.2 | 13248.0 | 13294.0 | 13308.8 |
| 7.5°  | 13210.3 | 13173.9 | 13182.0 | 13225.2 | 13240.0 |
| 10°   | 13118.5 | 13080.8 | 13090.2 | 13132.0 | 13144.2 |
| 12.5° | 12994.3 | 12959.3 | 12967.4 | 12997.1 | 13010.6 |
| 15°   | 12836.5 | 12816.2 | 12823.0 | 12798.6 | 12756.9 |
| 17.5° | 12659.8 | 12630.0 | 12621.9 | 12514.0 | 12469.4 |
| 20°   | 12427.6 | 12416.8 | 12350.7 | 12217.1 | 12157.7 |
| 22.5° | 12183.3 | 12163.0 | 12048.3 | 11887.7 | 11816.2 |
| 25°   | 11897.3 | 11887.7 | 11694.9 | 11528.8 | 11438.4 |
| 27.5° | 11589.6 | 11566.6 | 11318.2 | 11110.5 | 10987.6 |
| 30°   | 11285.9 | 11229.2 | 10917.5 | 10626.0 | 10450.6 |
| 32.5° | 10941.8 | 10835.1 | 10462.7 | 10090.3 | 9887.9  |
| 35°   | 10547.8 | 10419.5 | 9964.7  | 9464.0  | 9242.7  |
| 37.5° | 10165.8 | 9972.8  | 9424.9  | 8798.8  | 8515.4  |
| 40°   | 9734.0  | 9457.3  | 8817.7  | 8090.3  | 7777.1  |
| 42.5° | 9279.1  | 8941.8  | 8171.3  | 7325.1  | 7003.8  |
| 45°   | 8821.6  | 8396.7  | 7443.8  | 6560.0  | 6272.5  |
| 47.5° | 8277.8  | 7827.2  | 6688.2  | 5829.8  | 5582.9  |
| 50°   | 7754.3  | 7228.0  | 5924.3  | 5149.8  | 4981.0  |
| 52.5° | 7206.4  | 6568.1  | 5182.1  | 4574.8  | 4411.5  |
| 55°   | 6636.9  | 5886.5  | 4503.3  | 4009.4  | 3879.9  |
| 57.5° | 6064.6  | 5186.2  | 3901.5  | 3495.3  | 3263.2  |
| 60°   | 5465.6  | 4491.1  | 3367.0  | 2840.7  | 2159.2  |
| 62.5° | 4875.7  | 3767.7  | 2834.0  | 1781.3  | 1373.7  |
| 65°   | 4280.6  | 3144.3  | 2373.8  | 1175.4  | 967.5   |
| 67.5° | 3712.5  | 2541.2  | 1693.6  | 851.5   | 724.6   |
| 70°   | 3126.8  | 2078.2  | 1091.7  | 610.0   | 507.4   |
| 72.5° | 2539.8  | 1672.0  | 749.0   | 400.9   | 325.2   |
| 75°   | 1987.8  | 1302.3  | 506.1   | 261.8   | 238.8   |
| 77.5° | 1489.8  | 898.7   | 282.0   | 194.3   | 182.2   |
| 80°   | 1013.5  | 538.5   | 171.4   | 148.4   | 140.3   |
| 82.5° | 607.3   | 257.8   | 124.2   | 109.3   | 105.3   |
| 85°   | 309.1   | 99.8    | 78.2    | 67.4    | 63.5    |
| 87.5° | 91.8    | 49.9    | 35.0    | 27.1    | 25.7    |
| 90°   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |

(END OF REPORT)