

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: P563287

Luminaire Tested: **VHB-30-N-UNV-L740-CD**

Issue Date: 6/3/2022



**Test Information**

Test Method: LM-79-08  
Report Number: P563287  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P364424)  
Test Lab: INNOVATION CENTER  
Issue Date: 6/3/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: VHB-30-N-UNV-L740-CD  
Description: 30000 LUMEN, VHB LED LUMINAIRE WITH, NARROW LENS AND 70CRI, 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

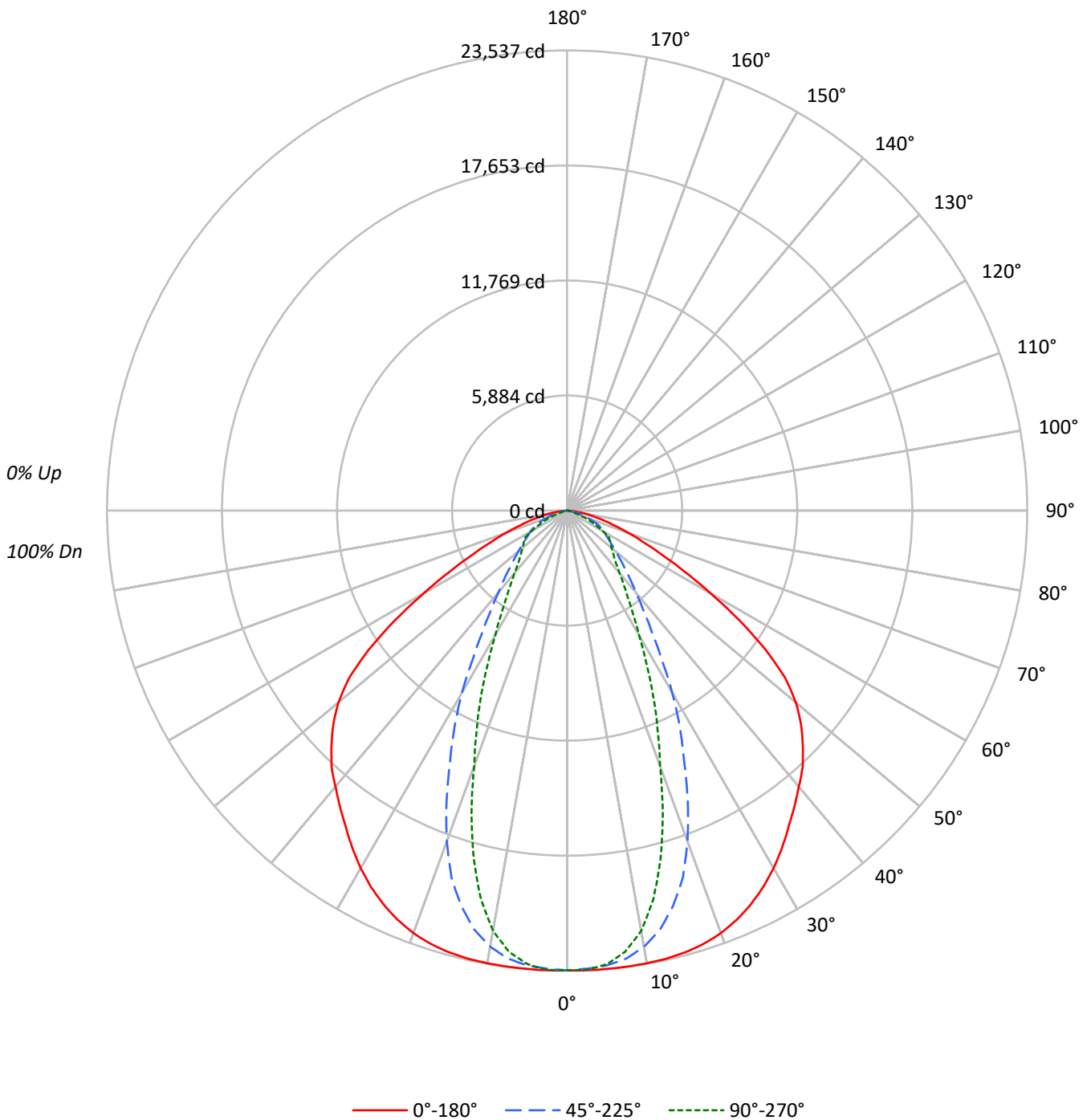
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 33162.0 lumens  
Efficiency: N/A  
Efficacy: 162.6 lumens/watt  
Spacing Criteria (0/90/45): 1.32 / 0.72 / 0.86  
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: P563287

CATALOG NUMBER: VHB-30-N-UNV-L740-CD

### Luminous Intensity Polar Plot





TEST NUMBER: P563287

CATALOG NUMBER: VHB-30-N-UNV-L740-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  | 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 |    |    |    |    | 100 |   |  |   |
| 1   | 111 | 108 | 104 | 101 | 109 | 105 | 102 | 100 | 101 | 99  | 96  | 97  | 95  | 94  | 94  | 92  | 91  | 89  |    |    |    |    | 89  |   |  |   |
| 2   | 103 | 97  | 91  | 87  | 101 | 95  | 90  | 86  | 91  | 87  | 84  | 88  | 85  | 82  | 85  | 83  | 80  | 78  |    |    |    |    | 78  |   |  |   |
| 3   | 96  | 87  | 81  | 75  | 94  | 86  | 80  | 75  | 83  | 78  | 73  | 80  | 76  | 72  | 78  | 74  | 71  | 69  |    |    |    |    | 69  |   |  |   |
| 4   | 89  | 79  | 72  | 66  | 87  | 78  | 71  | 66  | 76  | 70  | 65  | 74  | 68  | 64  | 71  | 67  | 64  | 62  |    |    |    |    | 62  |   |  |   |
| 5   | 83  | 72  | 65  | 59  | 81  | 71  | 64  | 59  | 69  | 63  | 58  | 68  | 62  | 58  | 66  | 61  | 57  | 55  |    |    |    |    | 55  |   |  |   |
| 6   | 78  | 66  | 59  | 53  | 76  | 66  | 58  | 53  | 64  | 57  | 53  | 62  | 57  | 52  | 61  | 56  | 52  | 50  |    |    |    |    | 50  |   |  |   |
| 7   | 73  | 61  | 54  | 48  | 71  | 61  | 53  | 48  | 59  | 53  | 48  | 58  | 52  | 48  | 57  | 51  | 47  | 46  |    |    |    |    | 46  |   |  |   |
| 8   | 69  | 57  | 49  | 44  | 67  | 56  | 49  | 44  | 55  | 49  | 44  | 54  | 48  | 44  | 53  | 47  | 44  | 42  |    |    |    |    | 42  |   |  |   |
| 9   | 65  | 53  | 46  | 41  | 63  | 52  | 45  | 41  | 51  | 45  | 41  | 50  | 44  | 40  | 49  | 44  | 40  | 39  |    |    |    |    | 39  |   |  |   |
| 10  | 61  | 49  | 42  | 38  | 60  | 49  | 42  | 38  | 48  | 42  | 38  | 47  | 41  | 37  | 46  | 41  | 37  | 36  |    |    |    |    | 36  |   |  |   |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 91349 | 91349 | 91349 |
| 5°  | 91778 | 91081 | 90817 |
| 10° | 92741 | 89335 | 86072 |
| 15° | 94064 | 84170 | 74214 |
| 20° | 95078 | 74360 | 57459 |
| 25° | 95268 | 60720 | 44522 |
| 30° | 94734 | 48225 | 32953 |
| 35° | 93652 | 35735 | 25624 |
| 40° | 93506 | 27751 | 21148 |
| 45° | 93703 | 22837 | 18786 |
| 50° | 92373 | 19752 | 17918 |
| 55° | 83857 | 17607 | 18105 |
| 60° | 65928 | 16827 | 16496 |
| 65° | 48968 | 16309 | 12415 |
| 70° | 37557 | 13055 | 7578  |
| 75° | 28588 | 9311  | 4180  |
| 80° | 20991 | 4333  | 3376  |
| 85° | 13131 | 3722  | 3004  |



TEST NUMBER: P563287

CATALOG NUMBER: VHB-30-N-UNV-L740-CD

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 2209.3  | 6.7       |
| 10°-20°   | 5815.6  | 17.5      |
| 20°-30°   | 7023.0  | 21.2      |
| 30°-40°   | 6279.4  | 18.9      |
| 40°-50°   | 4917.3  | 14.8      |
| 50°-60°   | 3715.3  | 11.2      |
| 60°-70°   | 2206.7  | 6.7       |
| 70°-80°   | 848.0   | 2.6       |
| 80°-90°   | 147.3   | 0.4       |
| 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°    | 15047.9 | 45.4      |
| 0°-40°    | 21327.4 | 64.3      |
| 0°-60°    | 29959.9 | 90.3      |
| 0°-90°    | 33162.0 | 100.0     |
| 90°-120°  | 0.0     | 0.0       |
| 90°-150°  | 0.0     | 0.0       |
| 90°-180°  | 0.0     | 0.0       |
| 0°-180°   | 33162.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°    | 22.5° | 45°   | 67.5° | 90°   | Flux  |
|-----|-------|-------|-------|-------|-------|-------|
| 0°  | 23514 | 23514 | 23514 | 23514 | 23514 |       |
| 5°  | 23535 | 23432 | 23356 | 23326 | 23289 | ###   |
| 15° | 23388 | 22617 | 20928 | 19179 | 18453 | 6608  |
| 25° | 22226 | 19611 | 14166 | 11168 | 10387 | 10233 |
| 35° | 19748 | 14053 | 7535  | 5875  | 5403  | 12384 |
| 45° | 17056 | 7267  | 4157  | 3512  | 3419  | 13129 |
| 55° | 12381 | 3943  | 2600  | 2589  | 2673  | 10873 |
| 65° | 5327  | 2214  | 1774  | 1480  | 1351  | 5489  |
| 75° | 1905  | 1064  | 620   | 307   | 278   | 2085  |
| 85° | 295   | 103   | 84    | 73    | 67    | 393   |
| 90° | 0     | 0     | 0     | 0     | 0     |       |



TEST NUMBER: P563287

CATALOG NUMBER: VHB-30-N-UNV-L740-CD

**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 22.5°   | 45°     | 67.5°   | 90°     |
|-------|---------|---------|---------|---------|---------|
| 0°    | 23514.4 | 23514.4 | 23514.4 | 23514.4 | 23514.4 |
| 2.5°  | 23536.6 | 23458.9 | 23452.8 | 23502.7 | 23510.2 |
| 5°    | 23534.9 | 23432.3 | 23356.3 | 23325.5 | 23288.6 |
| 7.5°  | 23527.7 | 23372.4 | 23115.7 | 22869.4 | 22755.1 |
| 10°   | 23510.2 | 23234.5 | 22646.6 | 22086.4 | 21819.5 |
| 12.5° | 23472.0 | 22988.1 | 21949.9 | 20920.6 | 20360.5 |
| 15°   | 23388.4 | 22617.2 | 20928.1 | 19178.6 | 18452.8 |
| 17.5° | 23237.2 | 22105.3 | 19675.8 | 17206.6 | 16272.5 |
| 20°   | 22998.4 | 21454.4 | 17986.8 | 14957.4 | 13898.7 |
| 22.5° | 22655.2 | 20604.1 | 16126.0 | 12932.4 | 12086.5 |
| 25°   | 22225.7 | 19611.4 | 14165.6 | 11168.5 | 10386.9 |
| 27.5° | 21715.5 | 18452.8 | 12476.3 | 9526.3  | 8756.4  |
| 30°   | 21118.7 | 17099.5 | 10750.7 | 7974.9  | 7346.0  |
| 32.5° | 20451.5 | 15674.3 | 8948.7  | 6791.6  | 6274.2  |
| 35°   | 19747.6 | 14052.7 | 7535.2  | 5875.3  | 5403.1  |
| 37.5° | 19084.8 | 12316.5 | 6381.3  | 5064.6  | 4733.1  |
| 40°   | 18438.4 | 10492.6 | 5472.2  | 4423.7  | 4170.1  |
| 42.5° | 17828.3 | 8747.8  | 4777.2  | 3887.2  | 3721.3  |
| 45°   | 17055.7 | 7266.9  | 4156.8  | 3511.8  | 3419.4  |
| 47.5° | 16235.9 | 6133.3  | 3664.1  | 3206.6  | 3174.4  |
| 50°   | 15284.2 | 5224.4  | 3268.2  | 2941.4  | 2964.7  |
| 52.5° | 14049.7 | 4505.8  | 2892.8  | 2753.6  | 2822.6  |
| 55°   | 12381.2 | 3942.9  | 2599.6  | 2589.3  | 2673.1  |
| 57.5° | 10426.6 | 3404.7  | 2367.9  | 2432.6  | 2526.3  |
| 60°   | 8485.4  | 2972.2  | 2165.7  | 2259.4  | 2123.2  |
| 62.5° | 6778.6  | 2574.9  | 1973.7  | 1801.9  | 1684.9  |
| 65°   | 5327.1  | 2213.9  | 1774.2  | 1479.6  | 1350.6  |
| 67.5° | 4247.8  | 1878.2  | 1492.6  | 1177.4  | 1070.3  |
| 70°   | 3306.5  | 1579.2  | 1149.4  | 884.2   | 667.2   |
| 72.5° | 2533.8  | 1319.8  | 897.2   | 503.0   | 379.8   |
| 75°   | 1904.6  | 1064.5  | 620.3   | 306.6   | 278.5   |
| 77.5° | 1357.8  | 790.4   | 331.3   | 221.4   | 205.3   |
| 80°   | 938.3   | 507.4   | 193.7   | 159.8   | 150.9   |
| 82.5° | 582.1   | 245.0   | 132.1   | 114.3   | 107.1   |
| 85°   | 294.6   | 102.7   | 83.5    | 73.2    | 67.4    |
| 87.5° | 98.2    | 49.9    | 38.0    | 35.2    | 32.2    |
| 90°   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |

(END OF REPORT)