

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: P565473

Luminaire Tested: **VHB-24-W-UNV-L750-CD1-U**

Issue Date: 9/7/2021



Test Information

Test Method: LM-79-08
Report Number: P565473
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1909-491-3)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 9/7/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VHB-24-W-UNV-L750-CD1-U
Description: VHB LED HIGH BAY LUMINAIRE WITH WIDE DISTRIBUTION LENS AND 5000K, 70 CRI LEDS

Light Source: -
Ballast/Driver: -

Summary

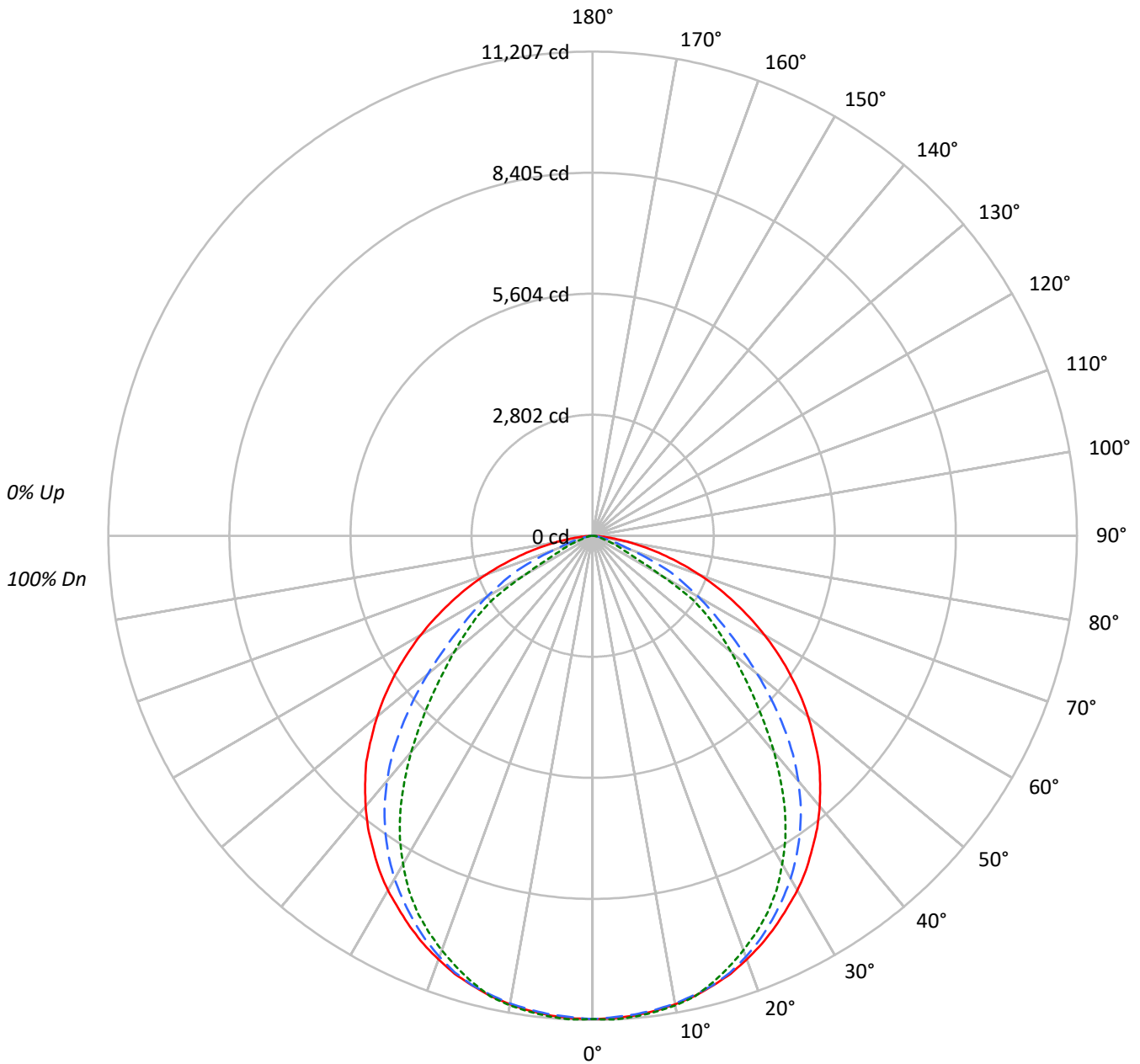
Lumens per Lamp: N/A
Luminaire Lumens: 25161.0 lumens
Efficiency: N/A
Efficacy: 144.5 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.17 / 1.28
Luminous Opening: Rectangular (W 1.17' x L: 1.5' x H: 0')
CIE Type: Direct

Input Watts (W): 174.1
Input Voltage (V): NR
Input Current (A_{in}): 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: P565473

CATALOG NUMBER: VHB-24-W-UNV-L750-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P565473

CATALOG NUMBER: VHB-24-W-UNV-L750-CD1-U

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 |
| 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° | 68806 | 68806 | 68806 |
| 5° | 68817 | 68677 | 68991 |
| 10° | 68792 | 68643 | 68926 |
| 15° | 68629 | 68556 | 68203 |
| 20° | 68297 | 67875 | 66814 |
| 25° | 67791 | 66637 | 65176 |
| 30° | 67299 | 65102 | 62317 |
| 35° | 66496 | 62820 | 58269 |
| 40° | 65620 | 59443 | 52429 |
| 45° | 64427 | 54364 | 45810 |
| 50° | 62298 | 47596 | 40017 |
| 55° | 59755 | 40545 | 34932 |
| 60° | 56449 | 34775 | 22302 |
| 65° | 52307 | 29006 | 11824 |
| 70° | 47211 | 16484 | 7661 |
| 75° | 39664 | 10098 | 4765 |
| 80° | 30140 | 5097 | 4173 |
| 85° | 18314 | 4637 | 3762 |



TEST NUMBER: P565473

CATALOG NUMBER: VHB-24-W-UNV-L750-CD1-U

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 1059.1 | 4.2 |
| 10°-20° | 3030.0 | 12.0 |
| 20°-30° | 4516.8 | 18.0 |
| 30°-40° | 5201.8 | 20.7 |
| 40°-50° | 4841.1 | 19.2 |
| 50°-60° | 3683.7 | 14.6 |
| 60°-70° | 1977.3 | 7.9 |
| 70°-80° | 727.5 | 2.9 |
| 80°-90° | 123.7 | 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° | 8605.9 | 34.2 |
| 0°-40° | 13807.7 | 54.9 |
| 0°-60° | 22332.5 | 88.8 |
| 0°-90° | 25161.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 25161.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-------|-------|-------|-------|-------|------|
| 0° | 11186 | 11186 | 11186 | 11186 | 11186 | |
| 5° | 11146 | 11114 | 11123 | 11162 | 11174 | ### |
| 15° | 10778 | 10760 | 10766 | 10746 | 10711 | 3042 |
| 25° | 9989 | 9981 | 9819 | 9680 | 9604 | 4604 |
| 35° | 8856 | 8748 | 8366 | 7946 | 7760 | 5544 |
| 45° | 7407 | 7050 | 6250 | 5508 | 5266 | 5692 |
| 55° | 5572 | 4942 | 3781 | 3366 | 3258 | 4977 |
| 65° | 3594 | 2640 | 1993 | 987 | 812 | 3564 |
| 75° | 1669 | 1093 | 425 | 220 | 200 | 1789 |
| 85° | 260 | 84 | 66 | 57 | 53 | 346 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P565473

CATALOG NUMBER: VHB-24-W-UNV-L750-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|----------------|----------------|----------------|----------------|----------------|
| 0° | 11186.5 | 11186.5 | 11186.5 | 11186.5 | <i>11186.5</i> |
| 2.5° | <i>11178.5</i> | <i>11144.6</i> | <i>11155.9</i> | <i>11192.1</i> | <i>11206.9</i> |
| 5° | 11145.7 | 11114.0 | 11123.0 | 11161.6 | <i>11174.0</i> |
| 7.5° | 11091.3 | 11060.7 | 11067.5 | 11103.8 | <i>11116.2</i> |
| 10° | 11014.3 | 10982.5 | 10990.5 | 11025.6 | <i>11035.8</i> |
| 12.5° | 10910.0 | 10880.6 | 10887.4 | 10912.3 | <i>10923.6</i> |
| 15° | 10777.5 | 10760.5 | 10766.1 | 10745.7 | <i>10710.6</i> |
| 17.5° | 10629.0 | 10604.1 | 10597.3 | 10506.7 | <i>10469.3</i> |
| 20° | 10434.1 | 10425.1 | 10369.6 | 10257.4 | <i>10207.5</i> |
| 22.5° | 10229.1 | 10212.1 | 10115.8 | 9980.9 | <i>9920.9</i> |
| 25° | 9988.9 | 9980.9 | 9818.9 | 9679.5 | <i>9603.6</i> |
| 27.5° | 9730.5 | 9711.3 | 9502.8 | 9328.3 | <i>9225.2</i> |
| 30° | 9475.6 | 9428.0 | 9166.3 | 8921.5 | <i>8774.2</i> |
| 32.5° | 9186.7 | 9097.2 | 8784.4 | 8471.7 | <i>8301.8</i> |
| 35° | 8855.8 | 8748.2 | 8366.3 | 7946.0 | <i>7760.2</i> |
| 37.5° | 8535.2 | 8373.1 | 7913.1 | 7387.4 | <i>7149.5</i> |
| 40° | 8172.6 | 7940.3 | 7403.3 | 6792.6 | <i>6529.7</i> |
| 42.5° | 7790.8 | 7507.5 | 6860.5 | 6150.1 | <i>5880.5</i> |
| 45° | 7406.7 | 7049.8 | 6249.8 | 5507.7 | <i>5266.4</i> |
| 47.5° | 6950.1 | 6571.6 | 5615.3 | 4894.7 | <i>4687.4</i> |
| 50° | 6510.4 | 6068.5 | 4974.0 | 4323.7 | <i>4182.0</i> |
| 52.5° | 6050.4 | 5514.5 | 4350.9 | 3841.0 | <i>3703.9</i> |
| 55° | 5572.3 | 4942.3 | 3780.9 | 3366.3 | <i>3257.5</i> |
| 57.5° | 5091.9 | 4354.3 | 3275.6 | 2934.6 | <i>2739.7</i> |
| 60° | 4588.8 | 3770.7 | 2826.9 | 2385.0 | <i>1812.9</i> |
| 62.5° | 4093.7 | 3163.4 | 2379.4 | 1495.6 | <i>1153.4</i> |
| 65° | 3594.0 | 2640.0 | 1993.0 | 986.9 | <i>812.4</i> |
| 67.5° | 3117.0 | 2133.5 | 1422.0 | 714.9 | <i>608.4</i> |
| 70° | 2625.2 | 1744.9 | 916.6 | 512.1 | <i>426.0</i> |
| 72.5° | 2132.4 | 1403.8 | 628.8 | 336.5 | <i>273.1</i> |
| 75° | 1669.0 | 1093.4 | 424.9 | 219.8 | <i>200.5</i> |
| 77.5° | 1250.9 | 754.6 | 236.8 | 163.2 | <i>153.0</i> |
| 80° | 850.9 | 452.1 | 143.9 | 124.6 | <i>117.8</i> |
| 82.5° | 509.9 | 216.4 | 104.2 | 91.8 | <i>88.4</i> |
| 85° | 259.5 | 83.8 | 65.7 | 56.7 | <i>53.3</i> |
| 87.5° | 77.0 | 41.9 | 29.5 | 22.7 | <i>21.5</i> |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | <i>0.0</i> |



Report Generated By 670246072 / DESKTOP-MV3F9LC





— 0°-180° - - 45°-225° - - - - 90°-270°







(END OF REPORT)