

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: P565443

Luminaire Tested: **VHB-15-N-UNV-L750-CD1-U**

Issue Date: 9/7/2021



Test Information

Test Method: LM-79-08
Report Number: P565443
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1909-491-2)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 9/7/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VHB-15-N-UNV-L750-CD1-U
Description: VHB LED HIGH BAY LUMINAIRE WITH NARROW DISTRIBUTION LENS AND 5000K,
70 CRI LEDS

Light Source: -
Ballast/Driver: -

Summary

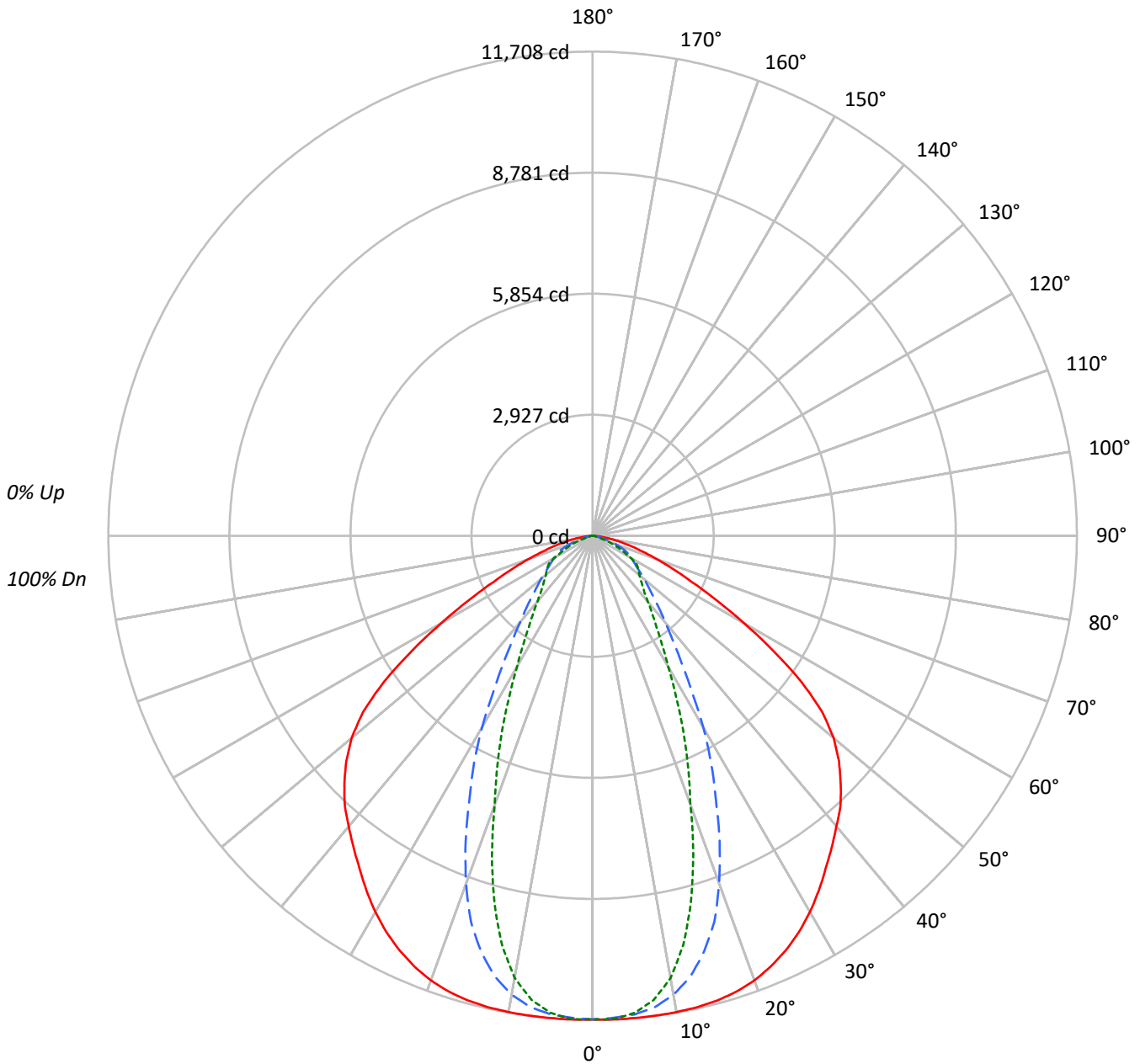
Lumens per Lamp: N/A
Luminaire Lumens: 16496.0 lumens
Efficiency: N/A
Efficacy: 147.8 lumens/watt
Spacing Criteria (0/90/45): 1.32 / 0.72 / 0.86
Luminous Opening: Rectangular (W 1.17' x L: 1.5' x H: 0')
CIE Type: Direct

Input Watts (W): 111.6
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

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CATALOG NUMBER: VHB-15-N-UNV-L750-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P565443

CATALOG NUMBER: VHB-15-N-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 | 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° | 71946 | 71946 | 71946 |
| 5° | 72284 | 71734 | 71527 |
| 10° | 73042 | 70359 | 67789 |
| 15° | 74085 | 66291 | 58451 |
| 20° | 74882 | 58564 | 45254 |
| 25° | 75032 | 47822 | 35066 |
| 30° | 74611 | 37982 | 25953 |
| 35° | 73760 | 28145 | 20181 |
| 40° | 73644 | 21856 | 16655 |
| 45° | 73799 | 17987 | 14795 |
| 50° | 72753 | 15557 | 14112 |
| 55° | 66044 | 13868 | 14259 |
| 60° | 51924 | 13252 | 12992 |
| 65° | 38565 | 12844 | 9777 |
| 70° | 29578 | 10283 | 5969 |
| 75° | 22517 | 7331 | 3294 |
| 80° | 16535 | 3411 | 2660 |
| 85° | 10346 | 2936 | 2371 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 1099.0 | 6.7 |
| 10°-20° | 2892.9 | 17.5 |
| 20°-30° | 3493.5 | 21.2 |
| 30°-40° | 3123.6 | 18.9 |
| 40°-50° | 2446.0 | 14.8 |
| 50°-60° | 1848.2 | 11.2 |
| 60°-70° | 1097.7 | 6.7 |
| 70°-80° | 421.8 | 2.6 |
| 80°-90° | 73.3 | 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° | 7485.4 | 45.4 |
| 0°-40° | 10609.0 | 64.3 |
| 0°-60° | 14903.2 | 90.3 |
| 0°-90° | 16496.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 16496.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-------|-------|-------|-------|-------|------|
| 0° | 11697 | 11697 | 11697 | 11697 | 11697 | |
| 5° | 11707 | 11656 | 11618 | 11603 | 11585 | ### |
| 15° | 11634 | 11251 | 10410 | 9540 | 9179 | 3287 |
| 25° | 11056 | 9755 | 7046 | 5556 | 5167 | 5090 |
| 35° | 9823 | 6990 | 3748 | 2923 | 2688 | 6160 |
| 45° | 8484 | 3615 | 2068 | 1747 | 1701 | 6531 |
| 55° | 6159 | 1961 | 1293 | 1288 | 1330 | 5409 |
| 65° | 2650 | 1101 | 882 | 736 | 672 | 2730 |
| 75° | 948 | 530 | 308 | 152 | 139 | 1037 |
| 85° | 147 | 51 | 42 | 36 | 34 | 195 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P565443

CATALOG NUMBER: VHB-15-N-UNV-L750-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|---------|---------|---------|---------|---------|
| 0° | 11697.0 | 11697.0 | 11697.0 | 11697.0 | 11697.0 |
| 2.5° | 11707.9 | 11669.3 | 11666.4 | 11691.2 | 11694.8 |
| 5° | 11707.2 | 11656.1 | 11618.2 | 11602.9 | 11584.7 |
| 7.5° | 11703.6 | 11626.2 | 11498.6 | 11376.1 | 11319.2 |
| 10° | 11694.8 | 11557.7 | 11265.2 | 10986.6 | 10853.8 |
| 12.5° | 11675.8 | 11435.1 | 10918.7 | 10406.7 | 10128.1 |
| 15° | 11634.3 | 11250.6 | 10410.4 | 9540.2 | 9179.2 |
| 17.5° | 11559.1 | 10996.1 | 9787.5 | 8559.2 | 8094.6 |
| 20° | 11440.2 | 10672.2 | 8947.2 | 7440.4 | 6913.7 |
| 22.5° | 11269.6 | 10249.2 | 8021.7 | 6433.1 | 6012.2 |
| 25° | 11055.9 | 9755.4 | 7046.5 | 5555.6 | 5166.9 |
| 27.5° | 10802.0 | 9179.2 | 6206.3 | 4738.7 | 4355.8 |
| 30° | 10505.2 | 8506.0 | 5347.8 | 3967.1 | 3654.2 |
| 32.5° | 10173.3 | 7797.0 | 4451.4 | 3378.5 | 3121.0 |
| 35° | 9823.2 | 6990.3 | 3748.3 | 2922.6 | 2687.7 |
| 37.5° | 9493.5 | 6126.8 | 3174.2 | 2519.3 | 2354.4 |
| 40° | 9171.9 | 5219.4 | 2722.0 | 2200.5 | 2074.3 |
| 42.5° | 8868.5 | 4351.5 | 2376.3 | 1933.6 | 1851.2 |
| 45° | 8484.1 | 3614.8 | 2067.8 | 1746.9 | 1700.9 |
| 47.5° | 8076.4 | 3051.0 | 1822.7 | 1595.1 | 1579.1 |
| 50° | 7603.0 | 2598.8 | 1625.8 | 1463.1 | 1474.8 |
| 52.5° | 6988.9 | 2241.4 | 1439.1 | 1369.8 | 1404.0 |
| 55° | 6158.8 | 1961.3 | 1293.2 | 1288.1 | 1329.7 |
| 57.5° | 5186.6 | 1693.6 | 1177.9 | 1210.0 | 1256.7 |
| 60° | 4220.9 | 1478.4 | 1077.3 | 1124.0 | 1056.1 |
| 62.5° | 3371.9 | 1280.8 | 981.7 | 896.4 | 838.1 |
| 65° | 2649.8 | 1101.4 | 882.5 | 735.9 | 671.8 |
| 67.5° | 2113.0 | 934.3 | 742.5 | 585.7 | 532.4 |
| 70° | 1644.7 | 785.5 | 571.8 | 439.8 | 331.9 |
| 72.5° | 1260.4 | 656.4 | 446.4 | 250.2 | 188.9 |
| 75° | 947.5 | 529.5 | 308.5 | 152.4 | 138.6 |
| 77.5° | 675.4 | 393.1 | 164.8 | 110.1 | 102.1 |
| 80° | 466.8 | 252.4 | 96.3 | 79.5 | 75.1 |
| 82.5° | 289.6 | 121.8 | 65.6 | 56.9 | 53.2 |
| 85° | 146.6 | 51.1 | 41.6 | 36.5 | 33.6 |
| 87.5° | 48.9 | 24.8 | 19.0 | 17.5 | 16.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







(END OF REPORT)