

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: P#

Luminaire Tested: **VRVT4S-LD5-12-PC-L850-CD2-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P#
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1801-511-6)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VRVT4S-LD5-12-PC-L850-CD2-U
Description: VRVT4S VAPORTIGHT FIXTURE WITH 5000K LED AND CLEAR POLYCARBONATE LENS
Light Source: -
Ballast/Driver: -

Summary

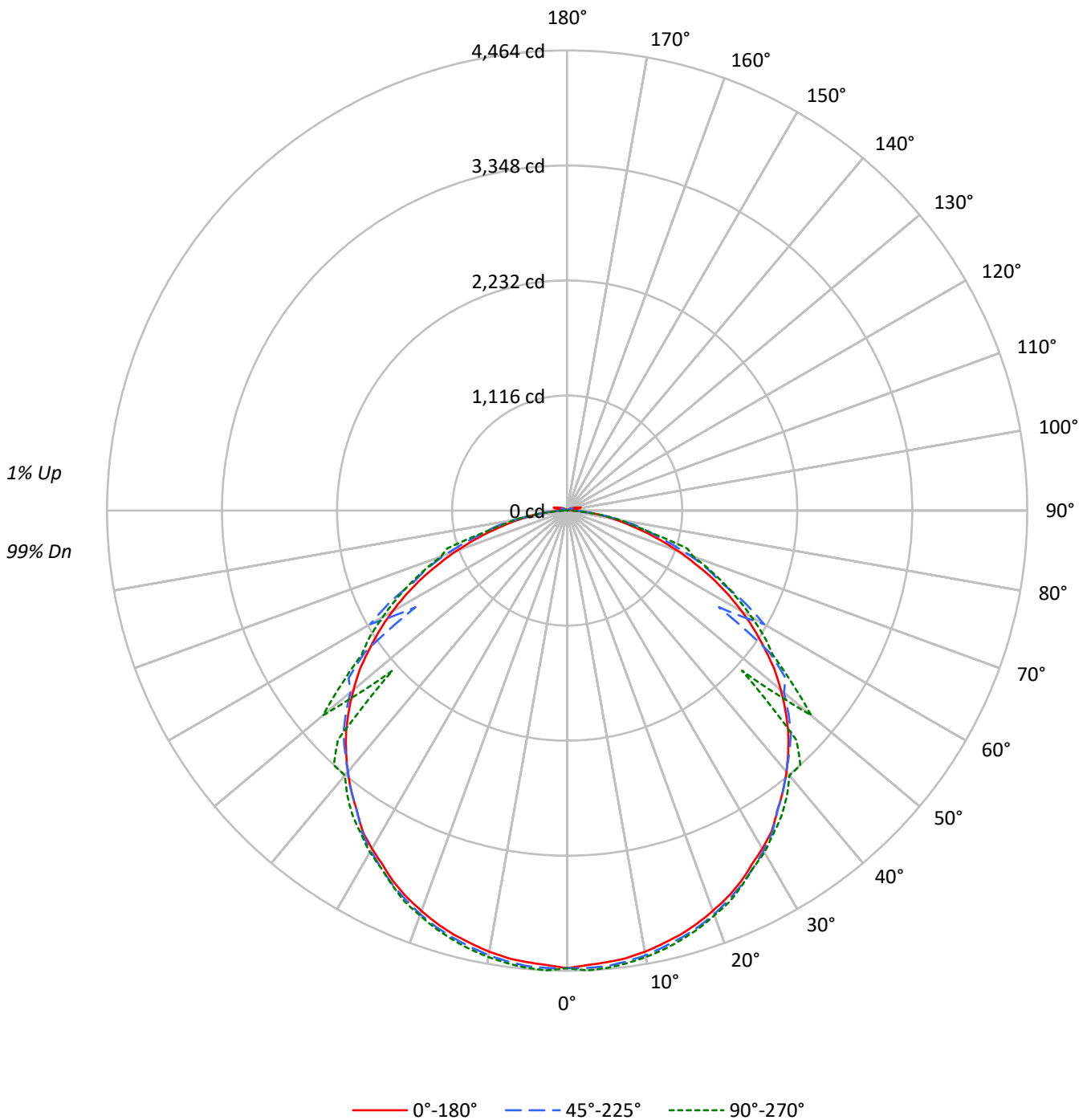
Lumens per Lamp: N/A
Luminaire Lumens: 13060.9 lumens
Efficiency: N/A
Efficacy: 155.7 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.28 / 1.4
Luminous Opening: Rectangular w/ Sides (W: 1.08' x L: 2.08' x H: 0.25')
CIE Type: Direct

Input Watts (W): 83.9
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: P#
CATALOG NUMBER: VRVT4S-LD5-12-PC-L850-CD2-U

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: VRVT4S-LD5-12-PC-L850-CD2-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 | 0 |
| RCR | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 101 | 101 | 101 | 99 |
| 1 | 108 | 104 | 99 | 95 | 106 | 101 | 97 | 94 | 97 | 94 | 91 | 93 | 90 | 88 | 89 | 87 | 85 | 83 |
| 2 | 99 | 90 | 83 | 78 | 96 | 88 | 82 | 77 | 85 | 79 | 75 | 81 | 77 | 73 | 78 | 74 | 71 | 69 |
| 3 | 90 | 79 | 71 | 64 | 87 | 77 | 70 | 64 | 74 | 68 | 62 | 71 | 66 | 61 | 69 | 64 | 60 | 58 |
| 4 | 82 | 70 | 61 | 54 | 80 | 69 | 60 | 54 | 66 | 59 | 53 | 63 | 57 | 52 | 61 | 56 | 51 | 49 |
| 5 | 75 | 62 | 53 | 47 | 73 | 61 | 53 | 46 | 59 | 52 | 46 | 57 | 50 | 45 | 55 | 49 | 45 | 42 |
| 6 | 70 | 56 | 47 | 41 | 68 | 55 | 47 | 40 | 53 | 46 | 40 | 51 | 45 | 40 | 50 | 44 | 39 | 37 |
| 7 | 64 | 51 | 42 | 36 | 63 | 50 | 42 | 36 | 48 | 41 | 35 | 47 | 40 | 35 | 45 | 39 | 35 | 33 |
| 8 | 60 | 46 | 38 | 32 | 58 | 46 | 37 | 32 | 44 | 37 | 32 | 43 | 36 | 31 | 42 | 36 | 31 | 29 |
| 9 | 56 | 43 | 34 | 29 | 55 | 42 | 34 | 29 | 41 | 33 | 28 | 40 | 33 | 28 | 38 | 32 | 28 | 26 |
| 10 | 53 | 39 | 31 | 26 | 51 | 39 | 31 | 26 | 38 | 31 | 26 | 37 | 30 | 26 | 36 | 30 | 25 | 24 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 21178 | 21178 | 21178 |
| 5° | 20848 | 20795 | 20911 |
| 10° | 20617 | 20332 | 20473 |
| 15° | 20371 | 19864 | 20040 |
| 20° | 20102 | 19401 | 19575 |
| 25° | 19832 | 18897 | 19068 |
| 30° | 19508 | 18360 | 18610 |
| 35° | 19104 | 17640 | 18168 |
| 40° | 18729 | 17054 | 17506 |
| 45° | 18271 | 16599 | 17238 |
| 50° | 17568 | 15728 | 18000 |
| 55° | 16625 | 14723 | 15225 |
| 60° | 15476 | 14720 | 14090 |
| 65° | 13960 | 12124 | 12695 |
| 70° | 11988 | 10477 | 11100 |
| 75° | 9537 | 8062 | 8513 |
| 80° | 7290 | 5736 | 6063 |
| 85° | 4644 | 2933 | 2568 |



TEST NUMBER: P#

CATALOG NUMBER: VRVT4S-LD5-12-PC-L850-CD2-U

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 421.3 | 3.2 |
| 10°-20° | 1210.4 | 9.3 |
| 20°-30° | 1843.4 | 14.1 |
| 30°-40° | 2242.9 | 17.2 |
| 40°-50° | 2336.1 | 17.9 |
| 50°-60° | 2135.2 | 16.3 |
| 60°-70° | 1625.9 | 12.4 |
| 70°-80° | 882.6 | 6.8 |
| 80°-90° | 243.0 | 1.9 |
| 90°-100° | 31.1 | 0.2 |
| 100°-110° | 42.3 | 0.3 |
| 110°-120° | 28.3 | 0.2 |
| 120°-130° | 10.9 | 0.1 |
| 130°-140° | 4.4 | 0.0 |
| 140°-150° | 1.4 | 0.0 |
| 150°-160° | 0.8 | 0.0 |
| 160°-170° | 0.7 | 0.0 |
| 170°-180° | 0.2 | 0.0 |
| 0°-30° | 3475.1 | 26.6 |
| 0°-40° | 5718.1 | 43.8 |
| 0°-60° | 10189.3 | 78.0 |
| 0°-90° | 12940.9 | 99.1 |
| 90°-120° | 101.7 | 0.8 |
| 90°-150° | 118.3 | 0.9 |
| 90°-180° | 120.0 | 0.9 |
| 0°-180° | 13060.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 4438 | 4438 | 4438 | 4438 | 4438 | |
| 5° | 4398 | 4417 | 4436 | 4452 | 4454 | 418 |
| 15° | 4256 | 4276 | 4289 | 4305 | 4308 | 1202 |
| 25° | 3978 | 3998 | 4005 | 4012 | 4012 | 1832 |
| 35° | 3555 | 3580 | 3554 | 3598 | 3623 | 2229 |
| 45° | 3033 | 3040 | 3070 | 3216 | 3144 | 2334 |
| 55° | 2341 | 2348 | 2397 | 2559 | 2434 | 2094 |
| 65° | 1555 | 1602 | 1645 | 1679 | 1681 | 1534 |
| 75° | 749 | 833 | 842 | 860 | 860 | 807 |
| 85° | 201 | 219 | 206 | 171 | 171 | 217 |
| 90° | 40 | 58 | 54 | 50 | 48 | 28 |
| 95° | 32 | 26 | 28 | 16 | 15 | 46 |
| 105° | 116 | 150 | 15 | 16 | 14 | 118 |
| 115° | 60 | 38 | 59 | 8 | 8 | 60 |
| 125° | 27 | 20 | 8 | 2 | 3 | 25 |
| 135° | 11 | 9 | 4 | 2 | 2 | 9 |
| 145° | 4 | 2 | 2 | 2 | 1 | 3 |
| 155° | 2 | 2 | 2 | 2 | 2 | 1 |
| 165° | 3 | 3 | 3 | 3 | 3 | 1 |
| 175° | 3 | 3 | 3 | 3 | 3 | 0 |
| 180° | 3 | 3 | 3 | 3 | 3 | |



TEST NUMBER: P#

CATALOG NUMBER: VRVT4S-LD5-12-PC-L850-CD2-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 4438.4 | 4438.4 | 4438.4 | 4438.4 | 4438.4 |
| 2.5° | 4413.2 | 4427.1 | 4441.9 | 4457.6 | 4463.7 |
| 5° | 4398.4 | 4416.7 | 4435.8 | 4452.4 | 4454.1 |
| 7.5° | 4380.1 | 4398.4 | 4411.4 | 4425.4 | 4429.7 |
| 10° | 4345.2 | 4371.4 | 4380.1 | 4389.7 | 4397.5 |
| 12.5° | 4302.6 | 4326.9 | 4334.8 | 4353.9 | 4358.3 |
| 15° | 4256.4 | 4276.4 | 4288.6 | 4305.2 | 4307.8 |
| 17.5° | 4199.8 | 4219.8 | 4233.8 | 4243.3 | 4249.4 |
| 20° | 4131.9 | 4148.4 | 4165.8 | 4172.8 | 4178.9 |
| 22.5° | 4061.3 | 4071.8 | 4088.3 | 4099.6 | 4110.1 |
| 25° | 3977.7 | 3997.7 | 4004.7 | 4011.7 | 4011.7 |
| 27.5° | 3874.9 | 3904.5 | 3909.8 | 3899.3 | 3908.0 |
| 30° | 3786.1 | 3806.1 | 3809.6 | 3797.4 | 3827.9 |
| 32.5° | 3692.0 | 3692.9 | 3703.3 | 3700.7 | 3720.8 |
| 35° | 3555.3 | 3580.5 | 3554.4 | 3597.9 | 3623.2 |
| 37.5° | 3438.6 | 3459.5 | 3437.7 | 3503.9 | 3499.5 |
| 40° | 3309.7 | 3329.7 | 3307.9 | 3364.5 | 3355.0 |
| 42.5° | 3174.7 | 3192.1 | 3186.9 | 3213.0 | 3349.7 |
| 45° | 3032.7 | 3039.7 | 3070.1 | 3215.6 | 3144.2 |
| 47.5° | 2872.4 | 2878.5 | 2910.8 | 2858.5 | 2299.3 |
| 50° | 2705.2 | 2711.3 | 2745.3 | 2160.0 | 3091.9 |
| 52.5° | 2536.2 | 2527.5 | 2670.4 | 2904.7 | 2749.6 |
| 55° | 2341.1 | 2348.1 | 2396.9 | 2558.9 | 2433.5 |
| 57.5° | 2153.9 | 2169.6 | 1745.4 | 2251.4 | 2263.6 |
| 60° | 1958.8 | 1987.5 | 2205.3 | 2060.7 | 2066.8 |
| 62.5° | 1756.7 | 1805.5 | 1950.1 | 1870.8 | 1876.9 |
| 65° | 1554.7 | 1601.7 | 1645.2 | 1679.2 | 1681.0 |
| 67.5° | 1339.5 | 1411.8 | 1467.6 | 1454.5 | 1490.2 |
| 70° | 1142.7 | 1109.6 | 1262.9 | 1258.5 | 1300.3 |
| 72.5° | 938.9 | 1019.9 | 1037.3 | 900.6 | 1220.2 |
| 75° | 749.0 | 832.6 | 842.2 | 859.6 | 859.6 |
| 77.5° | 580.1 | 628.8 | 701.1 | 667.2 | 642.8 |
| 80° | 445.9 | 459.9 | 502.5 | 518.2 | 509.5 |
| 82.5° | 331.8 | 312.7 | 346.6 | 361.4 | 327.5 |
| 85° | 201.2 | 218.6 | 205.5 | 170.7 | 170.7 |
| 87.5° | 82.7 | 104.5 | 92.3 | 84.5 | 74.9 |
| 90° | 40.1 | 57.5 | 54.0 | 49.6 | 47.9 |
| 92.5° | 41.8 | 40.1 | 28.7 | 20.0 | 15.7 |
| 95° | 32.2 | 26.1 | 27.9 | 15.7 | 14.8 |
| 97.5° | 61.0 | 19.2 | 19.2 | 13.9 | 11.3 |
| 100° | 113.2 | 16.5 | 17.4 | 13.9 | 9.6 |
| 102.5° | 135.0 | 24.4 | 17.4 | 13.9 | 13.9 |
| 105° | 115.8 | 149.8 | 14.8 | 15.7 | 13.9 |
| 107.5° | 98.4 | 67.9 | 11.3 | 13.9 | 15.7 |
| 110° | 82.7 | 47.9 | 9.6 | 13.1 | 14.8 |



TEST NUMBER: P#

CATALOG NUMBER: VRVT4S-LD5-12-PC-L850-CD2-U

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|------|-------|------|-------|------|
| 112.5° | 69.7 | 35.7 | 9.6 | 9.6 | 13.1 |
| 115° | 60.1 | 37.5 | 59.2 | 7.8 | 7.8 |
| 117.5° | 50.5 | 59.2 | 26.1 | 6.1 | 7.8 |
| 120° | 40.9 | 34.0 | 15.7 | 7.8 | 5.2 |
| 122.5° | 32.2 | 25.3 | 10.5 | 2.6 | 5.2 |
| 125° | 27.0 | 20.0 | 7.8 | 1.7 | 2.6 |
| 127.5° | 21.8 | 16.5 | 5.2 | 1.7 | 1.7 |
| 130° | 17.4 | 15.7 | 3.5 | 1.7 | 1.7 |
| 132.5° | 14.8 | 11.3 | 9.6 | 1.7 | 1.7 |
| 135° | 11.3 | 8.7 | 3.5 | 1.7 | 1.7 |
| 137.5° | 8.7 | 7.0 | 2.6 | 1.7 | 1.7 |
| 140° | 7.0 | 5.2 | 1.7 | 1.7 | 0.9 |
| 142.5° | 5.2 | 3.5 | 1.7 | 1.7 | 0.9 |
| 145° | 3.5 | 1.7 | 1.7 | 1.7 | 0.9 |
| 147.5° | 2.6 | 1.7 | 1.7 | 1.7 | 1.7 |
| 150° | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 |
| 152.5° | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 |
| 155° | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 |
| 157.5° | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 |
| 160° | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 |
| 162.5° | 2.6 | 2.6 | 2.6 | 2.6 | 1.7 |
| 165° | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 |
| 167.5° | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 |
| 170° | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 |
| 172.5° | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 |
| 175° | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 |
| 177.5° | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 |
| 180° | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 |

(END OF REPORT)