

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: P236627

Luminaire Tested: **VRVT4LED-LD5-24-PC-UNV-L850-CD2-WL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P236627
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-367-13)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VRVT4LED-LD5-24-PC-UNV-L850-CD2-WL-U
Description: METALUX VRVT4 LED LUMINAIRE
10 BOARDS WITH CLEAR POLY CARBONATE LENS
Light Source: (560) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24267.0 lumens
Efficiency: N/A
Efficacy: 135.7 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.17 / 1.27
Luminous Opening: Rectangular w/ Sides (W: 1.04' x L: 4.12' x H: 0.25')
CIE Type: Direct

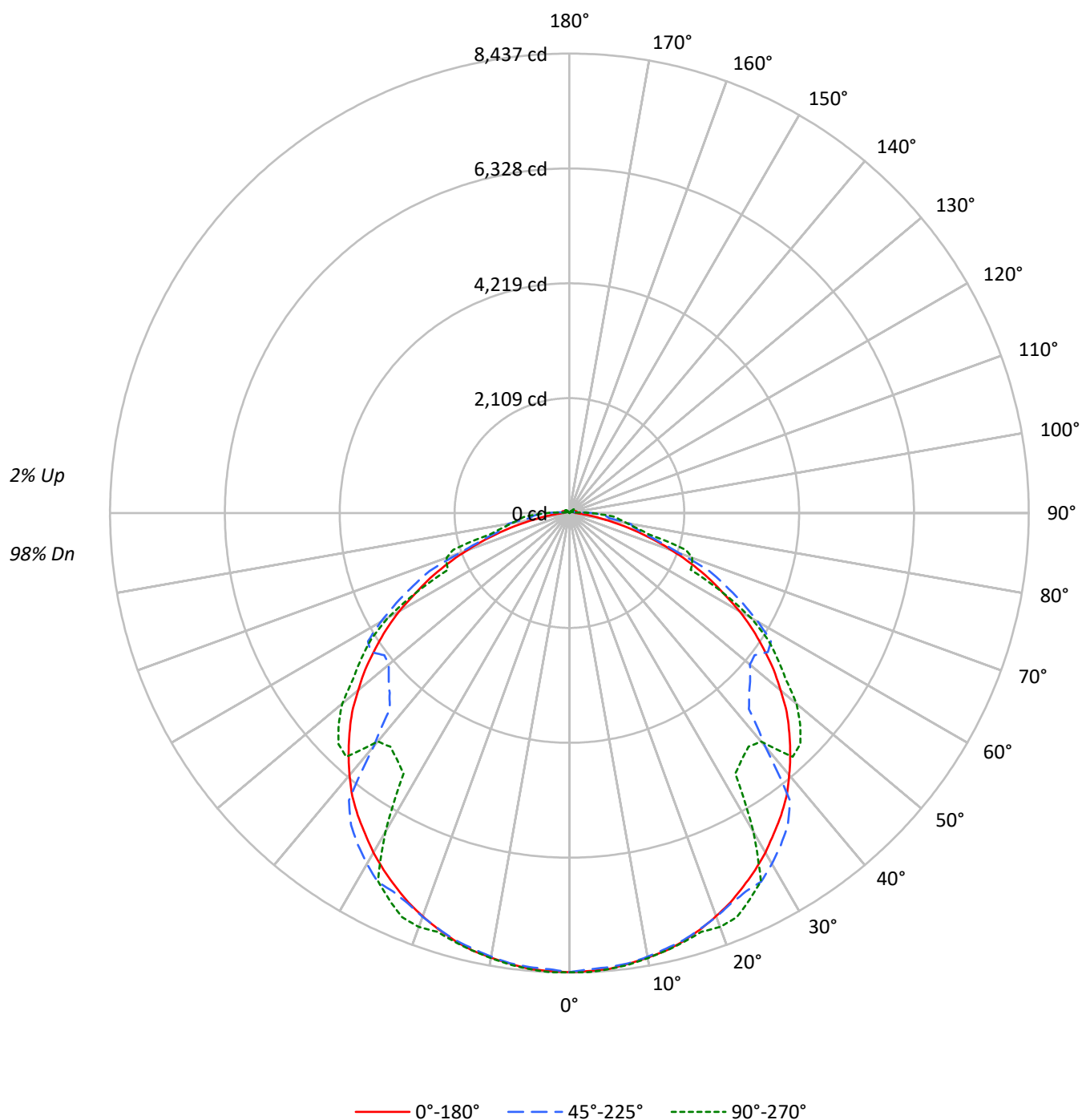
Input Watts (W): 178.82
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P236627

CATALOG NUMBER: VRVT4LED-LD5-24-PC-UNV-L850-CD2-WL-U

Luminous Intensity Polar Plot





TEST NUMBER: P236627

CATALOG NUMBER: VRVT4LED-LD5-24-PC-UNV-L850-CD2-WL-U

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					0
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	119	119	119	119	116	116	116	116		110	110	110		105	105	105		101	101	101
1	108	103	99	95	105	101	97	93		96	93	90		92	89	87		88	86	84
2	98	90	83	77	96	88	82	76		84	79	74		81	76	72		77	74	70
3	90	79	71	64	87	77	70	64		74	68	62		71	66	61		68	64	60
4	82	70	61	54	80	69	60	54		66	59	53		63	57	52		61	56	51
5	75	63	54	47	73	61	53	47		59	52	46		57	50	45		55	49	45
6	70	56	47	41	68	55	47	41		53	46	40		51	45	40		50	44	39
7	65	51	42	36	63	50	42	36		48	41	36		47	40	35		45	39	35
8	60	47	38	32	58	46	38	32		44	37	32		43	36	31		42	36	31
9	56	43	35	29	55	42	34	29		41	34	29		40	33	28		38	33	28
10	53	39	32	26	51	39	31	26		38	31	26		37	30	26		36	30	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	21118	21118	21118
5°	21014	20660	20701
10°	20861	20281	20248
15°	20749	19914	19857
20°	20548	19518	19829
25°	20332	19280	19469
30°	20119	19160	17182
35°	19879	18614	14450
40°	19544	15524	14901
45°	19081	13643	17141
50°	18404	13456	16508
55°	17503	14906	15188
60°	16358	14647	13618
65°	14779	12893	9621
70°	12537	9853	10590
75°	9859	7426	7715
80°	6509	7455	6525
85°	4398	5735	6532



TEST NUMBER: P236627

CATALOG NUMBER: VRVT4LED-LD5-24-PC-UNV-L850-CD2-WL-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	797.6	3.3
10°-20°	2296.4	9.5
20°-30°	3542.6	14.6
30°-40°	4028.1	16.6
40°-50°	4228.6	17.4
50°-60°	3976.9	16.4
60°-70°	2762.1	11.4
70°-80°	1552.4	6.4
80°-90°	679.7	2.8
90°-100°	175.9	0.7
100°-110°	81.3	0.3
110°-120°	57.4	0.2
120°-130°	51.2	0.2
130°-140°	25.9	0.1
140°-150°	6.3	0.0
150°-160°	2.3	0.0
160°-170°	1.6	0.0
170°-180°	0.6	0.0
0°-30°	6636.6	27.3
0°-40°	10664.7	43.9
0°-60°	18870.1	77.8
0°-90°	23864.4	98.3
90°-120°	314.6	1.3
90°-150°	398.1	1.6
90°-180°	403.0	1.7
0°-180°	24267.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8430	8430	8430	8430	8430	
5°	8401	8380	8369	8401	8405	798
15°	8130	8134	8116	8139	8149	2294
25°	7564	7592	7667	7824	7832	3488
35°	6776	6828	6993	5493	5519	4237
45°	5713	5885	4670	5689	6000	4402
55°	4354	4465	4449	4685	4670	3894
65°	2817	2370	3167	2727	2458	2772
75°	1249	1222	1376	1663	1511	1333
85°	259	428	684	879	851	287
90°	111	283	407	414	409	67
95°	113	141	132	121	111	99
105°	120	93	69	59	57	124
115°	61	62	60	38	40	63
125°	30	25	73	68	74	28
135°	14	10	30	41	31	11
145°	7	6	5	8	10	5
155°	6	6	6	4	1	3
165°	7	7	7	5	3	2
175°	7	7	7	6	4	1
180°	7	7	7	7	7	



TEST NUMBER: P236627

CATALOG NUMBER: VRVT4LED-LD5-24-PC-UNV-L850-CD2-WL-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8430.0	8430.0	8430.0	8430.0	8430.0
2.5°	8418.5	8409.2	8383.2	8411.3	8437.3
5°	8400.9	8380.1	8368.6	8400.9	8405.0
7.5°	8345.8	8351.0	8337.4	8346.8	8363.4
10°	8288.6	8301.0	8271.9	8293.8	8296.9
12.5°	8226.2	8226.2	8192.9	8216.8	8228.2
15°	8130.5	8133.6	8115.9	8138.8	8149.2
17.5°	8010.9	8013.0	8001.5	8033.8	8062.9
20°	7877.8	7883.0	7888.2	7977.6	8087.8
22.5°	7735.3	7738.4	7757.1	8006.7	8032.7
25°	7563.7	7591.8	7666.7	7823.7	7832.0
27.5°	7386.9	7417.1	7629.2	7654.2	7617.8
30°	7198.7	7221.5	7436.8	7406.7	6762.9
32.5°	6981.3	7034.4	7225.7	6256.5	5671.0
35°	6776.4	6828.4	6992.8	5493.1	5519.1
37.5°	6552.8	6639.2	6652.7	5339.2	5405.8
40°	6280.4	6466.5	5594.0	5206.1	5474.4
42.5°	6003.7	6195.1	4879.5	5234.2	6069.3
45°	5712.6	5885.2	4669.5	5688.6	5999.6
47.5°	5415.1	5576.3	4503.1	5703.2	5747.9
50°	5063.6	5235.2	4327.3	5419.3	5447.4
52.5°	4729.8	4877.5	4285.7	5087.5	5005.4
55°	4354.4	4464.6	4449.0	4685.1	4669.5
57.5°	3995.6	3607.7	4387.6	4331.5	4319.0
60°	3607.7	2937.9	3999.7	3936.3	3847.9
62.5°	3185.4	2640.5	3585.8	3490.1	3200.0
65°	2817.3	2370.1	3166.7	2726.8	2458.5
67.5°	2407.5	2056.0	2781.9	2214.1	2438.7
70°	1996.7	1713.9	2130.9	2164.2	2399.2
72.5°	1615.1	1440.4	1707.6	2141.3	2237.0
75°	1249.0	1222.0	1375.9	1662.9	1511.1
77.5°	894.4	1111.7	1206.4	1278.1	1251.1
80°	606.3	780.0	1139.8	1081.6	1068.0
82.5°	408.7	582.4	739.4	926.6	937.0
85°	259.0	428.5	684.3	878.8	850.7
87.5°	170.6	333.8	576.1	615.7	599.0
90°	111.3	282.9	406.6	413.9	408.7
92.5°	93.6	204.9	252.7	229.8	210.1
95°	113.4	141.4	132.1	120.6	111.3
97.5°	134.2	94.6	88.4	88.4	91.5
100°	138.3	90.5	71.8	64.5	61.4
102.5°	132.1	95.7	67.6	63.4	60.3
105°	119.6	92.6	68.6	59.3	57.2
107.5°	104.0	85.3	69.7	59.3	53.0
110°	88.4	78.0	61.4	66.6	65.5



TEST NUMBER: P236627

CATALOG NUMBER: VRVT4LED-LD5-24-PC-UNV-L850-CD2-WL-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	73.8	70.7	54.1	49.9	55.1
115°	61.4	62.4	60.3	38.5	39.5
117.5°	52.0	54.1	79.0	38.5	34.3
120°	43.7	42.6	68.6	78.0	44.7
122.5°	36.4	33.3	82.2	85.3	92.6
125°	30.2	25.0	72.8	67.6	73.8
127.5°	25.0	19.8	41.6	105.0	68.6
130°	20.8	15.6	38.5	79.0	106.1
132.5°	16.6	13.5	55.1	41.6	65.5
135°	13.5	10.4	30.2	40.6	31.2
137.5°	11.4	9.4	14.6	73.8	56.2
140°	9.4	7.3	8.3	41.6	63.4
142.5°	8.3	6.2	6.2	15.6	33.3
145°	7.3	6.2	5.2	8.3	10.4
147.5°	6.2	5.2	5.2	6.2	5.2
150°	6.2	5.2	5.2	4.2	3.1
152.5°	6.2	6.2	5.2	3.1	2.1
155°	6.2	6.2	6.2	4.2	1.0
157.5°	6.2	6.2	6.2	4.2	2.1
160°	6.2	6.2	6.2	4.2	2.1
162.5°	6.2	6.2	6.2	4.2	2.1
165°	7.3	7.3	7.3	5.2	3.1
167.5°	7.3	7.3	7.3	5.2	3.1
170°	7.3	7.3	7.3	5.2	3.1
172.5°	7.3	7.3	7.3	6.2	4.2
175°	7.3	7.3	7.3	6.2	4.2
177.5°	7.3	7.3	7.3	6.2	4.2
180°	7.3	7.3	7.3	7.3	7.3

(END OF REPORT)