

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: P236594

Luminaire Tested: **VRVT4LED-LD5-12-DRF-UNV-L850-CD1-WL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P236594
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-367-2)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VRVT4LED-LD5-12-DRF-UNV-L850-CD1-WL-U
Description: METALUX VRVT4 LED LUMINAIRE
4 BOARDS WITH FROSTED ACYLIC LENS
Light Source: (224) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12063.0 lumens
Efficiency: N/A
Efficacy: 130.4 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.26 / 1.36
Luminous Opening: Rectangular w/ Sides (W: 1.04' x L: 4.12' x H: 0.25')
CIE Type: Direct

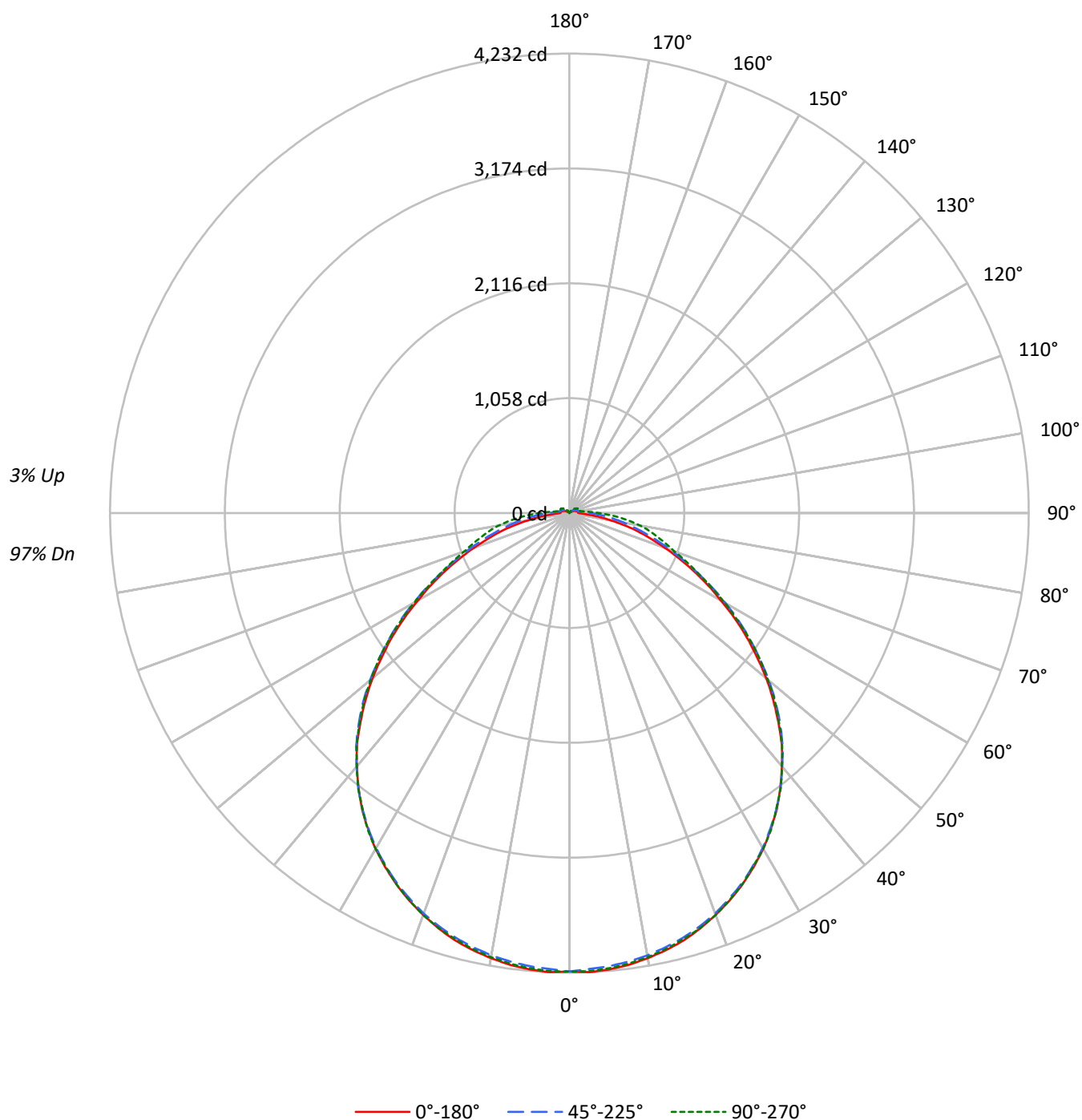
Input Watts (W): 92.53
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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	118	118	118	118	115	115	115	115		110	110	110		104	104	104		99	99	99
1	108	103	99	95	105	100	96	93		96	92	89		91	89	86		87	85	83
2	98	90	83	77	95	88	81	76		84	78	74		80	76	72		77	73	70
3	90	79	71	64	87	77	70	64		74	67	62		71	65	61		68	63	59
4	82	70	61	55	80	69	60	54		66	59	53		63	57	52		61	55	51
5	76	63	54	47	73	61	53	47		59	52	46		57	50	45		55	49	45
6	70	57	48	41	68	55	47	41		53	46	40		51	45	40		50	44	39
7	65	51	43	36	63	50	42	36		49	41	36		47	40	35		45	39	35
8	60	47	38	33	59	46	38	32		44	37	32		43	36	32		42	36	31
9	56	43	35	29	55	42	34	29		41	34	29		40	33	29		38	33	28
10	53	40	32	27	51	39	32	26		38	31	26		37	30	26		36	30	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10578	10578	10578
5°	10552	10343	10363
10°	10475	10140	10134
15°	10396	9935	9896
20°	10273	9711	9656
25°	10142	9457	9376
30°	9982	9177	9074
35°	9773	8850	8701
40°	9479	8464	8295
45°	9087	8021	7808
50°	8609	7455	7232
55°	8024	6804	6587
60°	7306	6082	5839
65°	6614	5297	5107
70°	5881	4561	4536
75°	5150	3902	4268
80°	4191	3321	4029
85°	3140	2740	3506



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	399.7	3.3
10°-20°	1146.4	9.5
20°-30°	1736.7	14.4
30°-40°	2081.4	17.3
40°-50°	2110.5	17.5
50°-60°	1807.9	15.0
60°-70°	1288.8	10.7
70°-80°	782.7	6.5
80°-90°	364.0	3.0
90°-100°	133.3	1.1
100°-110°	83.3	0.7
110°-120°	63.2	0.5
120°-130°	39.9	0.3
130°-140°	18.6	0.2
140°-150°	5.0	0.0
150°-160°	0.8	0.0
160°-170°	0.6	0.0
170°-180°	0.2	0.0
0°-30°	3282.8	27.2
0°-40°	5364.2	44.5
0°-60°	9282.6	77.0
0°-90°	11718.2	97.1
90°-120°	279.8	2.3
90°-150°	343.2	2.8
90°-180°	345.0	2.9
0°-180°	12063.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4223	4223	4223	4223	4223	
5°	4219	4209	4190	4210	4208	401
15°	4074	4064	4049	4070	4061	1149
25°	3773	3769	3761	3778	3772	1738
35°	3332	3334	3325	3336	3323	2080
45°	2720	2741	2745	2742	2733	2098
55°	1996	2020	2031	2038	2025	1781
65°	1261	1286	1301	1306	1305	1253
75°	652	670	723	803	836	692
85°	185	215	327	433	457	196
90°	87	101	189	259	273	51
95°	80	77	116	146	153	65
105°	69	61	81	90	90	73
115°	43	40	66	83	87	43
125°	22	18	44	68	74	21
135°	11	8	18	39	47	8
145°	4	4	1	12	18	3
155°	3	3	1	0	0	1
165°	4	3	3	1	1	1
175°	4	4	3	1	1	0
180°	3	3	3	3	3	



TEST NUMBER: P236594

CATALOG NUMBER: VRVT4LED-LD5-12-DRF-UNV-L850-CD1-WL-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4222.7	4222.7	4222.7	4222.7	4222.7
2.5°	4232.4	4222.7	4202.0	4222.7	4221.3
5°	4218.6	4208.9	4189.6	4210.3	4207.5
7.5°	4196.5	4186.9	4166.2	4188.2	4185.5
10°	4162.0	4157.9	4135.8	4156.5	4152.4
12.5°	4122.0	4115.1	4095.8	4116.5	4112.4
15°	4073.7	4064.1	4048.9	4069.6	4061.3
17.5°	4010.3	4006.1	3991.0	4011.7	4006.1
20°	3938.5	3933.0	3924.7	3941.3	3938.5
22.5°	3859.9	3855.8	3844.7	3866.8	3857.1
25°	3773.0	3768.9	3760.6	3778.5	3771.6
27.5°	3675.0	3675.0	3664.0	3680.6	3668.2
30°	3571.6	3568.8	3561.9	3574.3	3571.6
32.5°	3451.6	3462.6	3446.0	3457.1	3457.1
35°	3331.5	3334.3	3324.7	3335.7	3323.3
37.5°	3190.8	3199.1	3195.0	3201.9	3195.0
40°	3046.0	3057.0	3050.1	3052.9	3047.4
42.5°	2897.0	2908.0	2906.7	2905.3	2899.8
45°	2720.4	2741.1	2745.3	2742.5	2732.8
47.5°	2546.6	2574.2	2576.9	2581.1	2567.3
50°	2368.6	2386.6	2397.6	2399.0	2386.6
52.5°	2175.5	2204.5	2215.5	2221.0	2212.8
55°	1996.2	2019.6	2030.7	2037.6	2025.1
57.5°	1805.8	1822.4	1849.9	1851.3	1837.5
60°	1611.3	1641.6	1660.9	1659.6	1649.9
62.5°	1437.5	1455.4	1478.8	1477.5	1467.8
65°	1260.9	1285.7	1300.9	1306.4	1305.0
67.5°	1092.6	1116.0	1136.7	1154.7	1161.6
70°	936.7	954.6	986.4	1018.1	1027.7
72.5°	786.3	808.4	851.2	903.6	927.0
75°	652.5	670.4	722.9	802.9	836.0
77.5°	521.5	536.6	609.7	714.6	750.5
80°	390.4	418.0	507.7	624.9	659.4
82.5°	281.4	306.3	415.2	528.4	561.5
85°	184.9	215.2	326.9	433.2	456.6
87.5°	117.3	143.5	251.1	342.1	360.1
90°	86.9	100.7	189.0	259.4	273.1
92.5°	81.4	84.2	142.1	195.9	204.2
95°	80.0	77.3	115.9	146.2	153.1
97.5°	78.6	71.7	100.7	118.6	121.4
100°	77.3	67.6	92.4	103.5	103.5
102.5°	74.5	63.5	85.5	95.2	95.2
105°	69.0	60.7	81.4	89.7	89.7
107.5°	63.5	56.6	77.3	88.3	88.3
110°	56.6	52.4	74.5	86.9	88.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	49.7	46.9	70.4	85.5	88.3
115°	42.8	40.0	66.2	82.8	86.9
117.5°	37.2	34.5	62.1	80.0	85.5
120°	31.7	27.6	56.6	77.3	84.2
122.5°	26.2	22.1	51.0	71.7	80.0
125°	22.1	17.9	44.1	67.6	74.5
127.5°	19.3	13.8	37.2	60.7	69.0
130°	15.2	12.4	30.3	53.8	62.1
132.5°	12.4	9.7	24.8	46.9	55.2
135°	11.0	8.3	17.9	38.6	46.9
137.5°	8.3	6.9	12.4	31.7	40.0
140°	6.9	5.5	6.9	24.8	31.7
142.5°	5.5	4.1	4.1	17.9	24.8
145°	4.1	4.1	1.4	12.4	17.9
147.5°	4.1	2.8	1.4	6.9	11.0
150°	2.8	2.8	1.4	2.8	5.5
152.5°	2.8	2.8	1.4	0.0	1.4
155°	2.8	2.8	1.4	0.0	0.0
157.5°	2.8	2.8	1.4	0.0	0.0
160°	2.8	2.8	1.4	0.0	0.0
162.5°	4.1	2.8	1.4	1.4	0.0
165°	4.1	2.8	2.8	1.4	1.4
167.5°	4.1	4.1	2.8	1.4	1.4
170°	4.1	2.8	2.8	1.4	1.4
172.5°	4.1	2.8	2.8	1.4	1.4
175°	4.1	4.1	2.8	1.4	1.4
177.5°	4.1	4.1	2.8	1.4	1.4
180°	2.8	2.8	2.8	2.8	2.8

(END OF REPORT)