

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: P236590

Luminaire Tested: **VRVT4LED-LD5-9-DRF-UNV-L840-CD1-WL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P236590
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-LD5-9-DRF-UNV-L840-CD1-WL-U
Description: METALUX VRVT4 LED LUMINAIRE
4 BOARDS WITH FROSTED ACYLIC LENS
Light Source: (224) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8774.0 lumens
Efficiency: N/A
Efficacy: 136.7 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

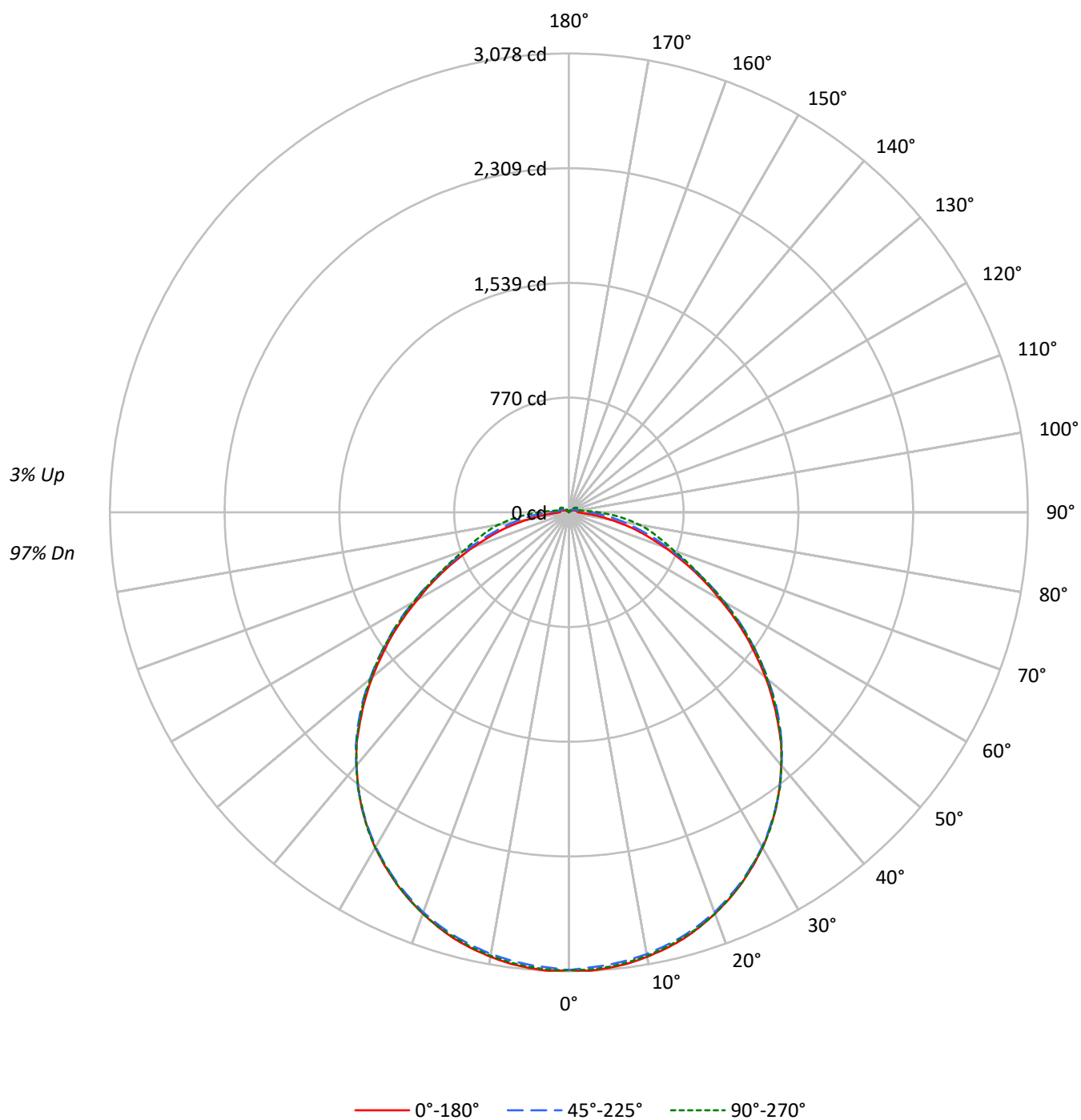
Input Watts (W): 64.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					10
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°	7694	7694	7694
5°	7675	7523	7537
10°	7619	7376	7371
15°	7562	7226	7198
20°	7472	7064	7023
25°	7377	6879	6819
30°	7260	6675	6600
35°	7109	6437	6329
40°	6894	6157	6033
45°	6609	5834	5679
50°	6262	5423	5260
55°	5836	4948	4791
60°	5314	4424	4247
65°	4811	3852	3715
70°	4278	3317	3299
75°	3746	2838	3105
80°	3049	2415	2930
85°	2284	1993	2550



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	290.7	3.3
10°-20°	833.8	9.5
20°-30°	1263.2	14.4
30°-40°	1513.9	17.3
40°-50°	1535.0	17.5
50°-60°	1315.0	15.0
60°-70°	937.4	10.7
70°-80°	569.3	6.5
80°-90°	264.8	3.0
90°-100°	97.0	1.1
100°-110°	60.5	0.7
110°-120°	45.9	0.5
120°-130°	29.0	0.3
130°-140°	13.5	0.2
140°-150°	3.6	0.0
150°-160°	0.5	0.0
160°-170°	0.4	0.0
170°-180°	0.2	0.0
0°-30°	2387.8	27.2
0°-40°	3901.7	44.5
0°-60°	6751.7	77.0
0°-90°	8523.2	97.1
90°-120°	203.5	2.3
90°-150°	249.6	2.8
90°-180°	251.0	2.9
0°-180°	8774.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3071	3071	3071	3071	3071	
5°	3068	3061	3047	3062	3060	292
15°	2963	2956	2945	2960	2954	836
25°	2744	2741	2735	2748	2743	1264
35°	2423	2425	2418	2426	2417	1513
45°	1979	1994	1997	1995	1988	1526
55°	1452	1469	1477	1482	1473	1295
65°	917	935	946	950	949	911
75°	475	488	526	584	608	503
85°	134	156	238	315	332	142
90°	63	73	138	189	199	37
95°	58	56	84	106	111	47
105°	50	44	59	65	65	53
115°	31	29	48	60	63	31
125°	16	13	32	49	54	15
135°	8	6	13	28	34	6
145°	3	3	1	9	13	2
155°	2	2	1	0	0	1
165°	3	2	2	1	1	1
175°	3	3	2	1	1	0
180°	2	2	2	2	2	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3071.4	3071.4	3071.4	3071.4	3071.4
2.5°	3078.4	3071.4	3056.3	3071.4	3070.4
5°	3068.4	3061.4	3047.3	3062.4	3060.4
7.5°	3052.3	3045.3	3030.2	3046.3	3044.3
10°	3027.2	3024.2	3008.2	3023.2	3020.2
12.5°	2998.1	2993.1	2979.1	2994.1	2991.1
15°	2963.0	2956.0	2945.0	2960.0	2954.0
17.5°	2916.9	2913.9	2902.8	2917.9	2913.9
20°	2864.7	2860.7	2854.7	2866.7	2864.7
22.5°	2807.5	2804.5	2796.5	2812.5	2805.5
25°	2744.3	2741.3	2735.3	2748.3	2743.3
27.5°	2673.0	2673.0	2665.0	2677.1	2668.0
30°	2597.8	2595.8	2590.8	2599.8	2597.8
32.5°	2510.5	2518.5	2506.5	2514.5	2514.5
35°	2423.2	2425.2	2418.2	2426.2	2417.2
37.5°	2320.8	2326.9	2323.9	2328.9	2323.9
40°	2215.5	2223.5	2218.5	2220.5	2216.5
42.5°	2107.1	2115.2	2114.2	2113.1	2109.1
45°	1978.7	1993.7	1996.8	1994.7	1987.7
47.5°	1852.3	1872.3	1874.3	1877.3	1867.3
50°	1722.8	1735.9	1743.9	1744.9	1735.9
52.5°	1582.4	1603.4	1611.5	1615.5	1609.4
55°	1451.9	1469.0	1477.0	1482.0	1473.0
57.5°	1313.4	1325.5	1345.6	1346.6	1336.5
60°	1172.0	1194.0	1208.1	1207.1	1200.1
62.5°	1045.5	1058.6	1075.6	1074.6	1067.6
65°	917.1	935.2	946.2	950.2	949.2
67.5°	794.7	811.7	826.8	839.8	844.9
70°	681.3	694.3	717.4	740.5	747.5
72.5°	571.9	588.0	619.1	657.2	674.3
75°	474.6	487.6	525.8	584.0	608.1
77.5°	379.3	390.3	443.5	519.8	545.8
80°	284.0	304.0	369.2	454.5	479.6
82.5°	204.7	222.8	302.0	384.3	408.4
85°	134.5	156.5	237.8	315.1	332.1
87.5°	85.3	104.4	182.6	248.8	261.9
90°	63.2	73.2	137.5	188.6	198.7
92.5°	59.2	61.2	103.3	142.5	148.5
95°	58.2	56.2	84.3	106.4	111.4
97.5°	57.2	52.2	73.2	86.3	88.3
100°	56.2	49.2	67.2	75.3	75.3
102.5°	54.2	46.2	62.2	69.2	69.2
105°	50.2	44.1	59.2	65.2	65.2
107.5°	46.2	41.1	56.2	64.2	64.2
110°	41.1	38.1	54.2	63.2	64.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	36.1	34.1	51.2	62.2	64.2
115°	31.1	29.1	48.2	60.2	63.2
117.5°	27.1	25.1	45.2	58.2	62.2
120°	23.1	20.1	41.1	56.2	61.2
122.5°	19.1	16.1	37.1	52.2	58.2
125°	16.1	13.0	32.1	49.2	54.2
127.5°	14.0	10.0	27.1	44.1	50.2
130°	11.0	9.0	22.1	39.1	45.2
132.5°	9.0	7.0	18.1	34.1	40.1
135°	8.0	6.0	13.0	28.1	34.1
137.5°	6.0	5.0	9.0	23.1	29.1
140°	5.0	4.0	5.0	18.1	23.1
142.5°	4.0	3.0	3.0	13.0	18.1
145°	3.0	3.0	1.0	9.0	13.0
147.5°	3.0	2.0	1.0	5.0	8.0
150°	2.0	2.0	1.0	2.0	4.0
152.5°	2.0	2.0	1.0	0.0	1.0
155°	2.0	2.0	1.0	0.0	0.0
157.5°	2.0	2.0	1.0	0.0	0.0
160°	2.0	2.0	1.0	0.0	0.0
162.5°	3.0	2.0	1.0	1.0	0.0
165°	3.0	2.0	2.0	1.0	1.0
167.5°	3.0	3.0	2.0	1.0	1.0
170°	3.0	2.0	2.0	1.0	1.0
172.5°	3.0	2.0	2.0	1.0	1.0
175°	3.0	3.0	2.0	1.0	1.0
177.5°	3.0	3.0	2.0	1.0	1.0
180°	2.0	2.0	2.0	2.0	2.0

(END OF REPORT)