

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: P236596

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P236596
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-367-3)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VRVT4LED-LD5-9-PC-UNV-L840-CD1-WL-U
Description: METALUX VRVT4 LED LUMINAIRE
4 BOARDS WITH CLEAR POLY CARBONATE LENS
Light Source: (224) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8781.0 lumens
Efficiency: N/A
Efficacy: 136.8 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.28 / 1.4
Luminous Opening: Rectangular w/ Sides (W: 1.04' x L: 4.12' x H: 0.25')
CIE Type: Direct

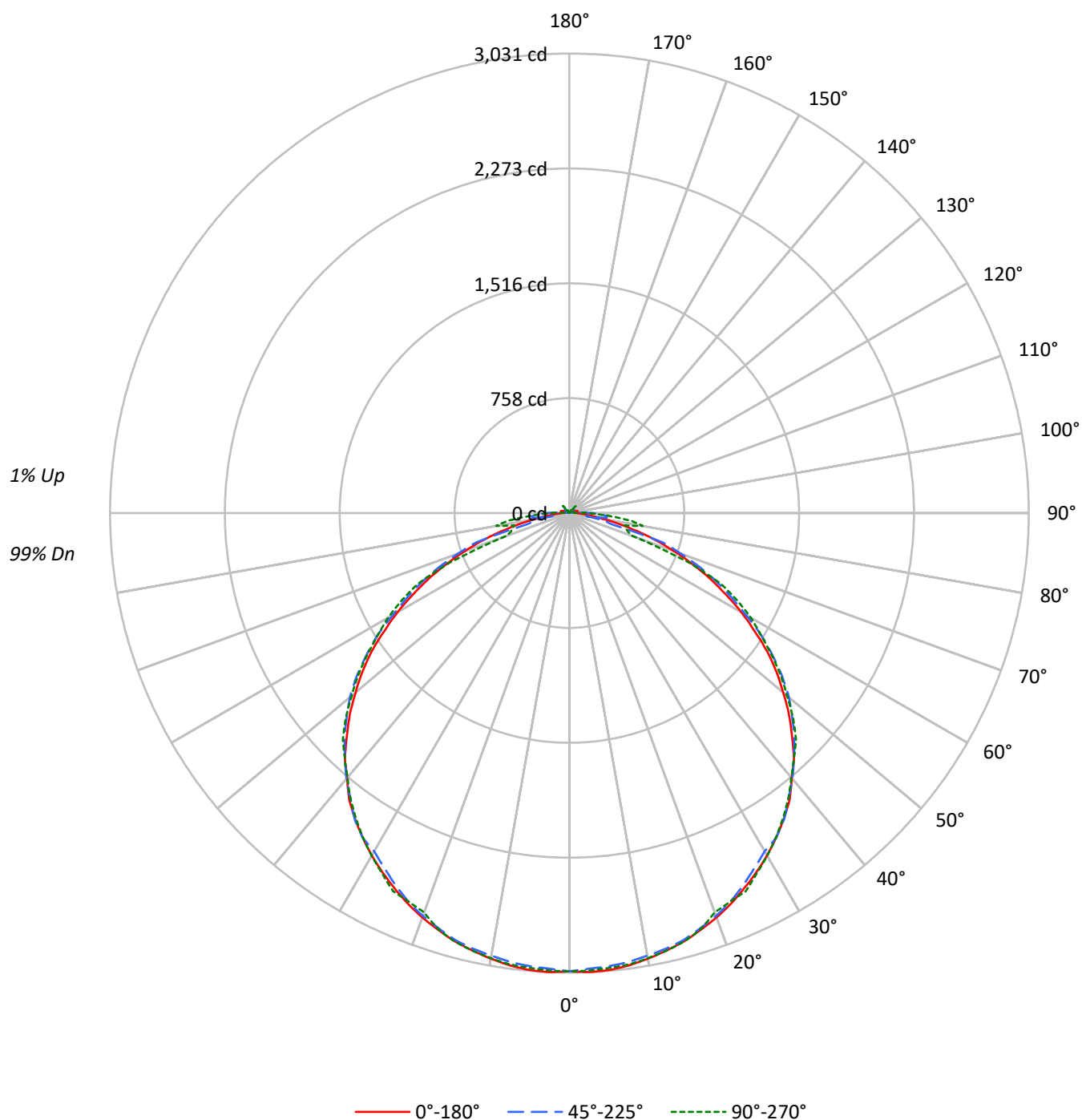
Input Watts (W): 64.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					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	104	99	96	106	101	97	94		97	94	91		93	90	88		89	87	85
2	99	91	84	78	96	89	82	77		85	80	75		81	77	73		78	75	71
3	90	80	72	65	88	78	70	64		75	68	63		72	66	62		69	65	61
4	83	71	62	55	80	69	61	55		66	59	54		64	58	53		62	56	52
5	76	63	54	47	74	62	53	47		60	52	46		57	51	46		55	50	45
6	70	57	48	41	68	56	47	41		54	46	41		52	45	40		50	44	40
7	65	51	43	36	63	50	42	36		49	41	36		47	41	36		46	40	35
8	60	47	38	32	59	46	38	32		45	37	32		43	37	32		42	36	31
9	56	43	35	29	55	42	34	29		41	34	29		40	33	29		39	33	28
10	53	40	32	26	51	39	31	26		38	31	26		37	30	26		36	30	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7573	7573	7573
5°	7569	7408	7418
10°	7512	7269	7275
15°	7464	7152	7130
20°	7405	6997	6874
25°	7341	6817	6841
30°	7289	6637	6631
35°	7231	6572	6430
40°	7101	6352	6198
45°	6934	6132	6039
50°	6695	5880	5682
55°	6407	5481	5292
60°	5949	4922	4891
65°	5366	4361	4309
70°	4596	3602	1951
75°	3639	1598	1966
80°	2544	739	2994
85°	1698	2087	2288



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	286.4	3.3
10°-20°	823.9	9.4
20°-30°	1257.2	14.3
30°-40°	1539.4	17.5
40°-50°	1612.5	18.4
50°-60°	1449.6	16.5
60°-70°	1035.9	11.8
70°-80°	439.3	5.0
80°-90°	223.5	2.5
90°-100°	46.9	0.5
100°-110°	20.2	0.2
110°-120°	14.3	0.2
120°-130°	9.8	0.1
130°-140°	15.1	0.2
140°-150°	5.1	0.1
150°-160°	0.9	0.0
160°-170°	0.7	0.0
170°-180°	0.2	0.0
0°-30°	2367.4	27.0
0°-40°	3906.8	44.5
0°-60°	6968.9	79.4
0°-90°	8667.7	98.7
90°-120°	81.5	0.9
90°-150°	111.5	1.3
90°-180°	113.0	1.3
0°-180°	8781.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3023	3023	3023	3023	3023	
5°	3026	3013	3001	3015	3012	287
15°	2925	2918	2915	2928	2926	825
25°	2731	2737	2711	2736	2752	1260
35°	2465	2467	2469	2464	2456	1540
45°	2076	2082	2099	2098	2114	1601
55°	1594	1612	1636	1634	1627	1418
65°	1023	1041	1071	1106	1101	1010
75°	461	470	296	192	385	496
85°	100	72	249	318	298	111
90°	41	62	144	121	126	25
95°	40	39	30	20	17	37
105°	52	23	13	11	10	54
115°	29	22	11	7	6	29
125°	14	12	11	5	5	13
135°	7	5	17	59	24	5
145°	3	3	2	18	13	2
155°	2	2	2	1	1	1
165°	3	3	3	2	1	1
175°	3	3	3	2	2	0
180°	2	2	2	2	2	



TEST NUMBER: P236596

CATALOG NUMBER: VRVT4LED-LD5-9-PC-UNV-L840-CD1-WL-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3022.9	3022.9	3022.9	3022.9	3022.9
2.5°	3030.9	3021.9	3007.9	3020.9	3019.9
5°	3025.9	3012.9	3000.9	3014.9	3011.9
7.5°	3009.9	2995.9	2985.9	3000.9	3002.9
10°	2984.9	2976.9	2964.9	2982.9	2980.9
12.5°	2955.9	2952.9	2942.9	2956.9	2956.9
15°	2924.9	2917.9	2914.9	2927.9	2925.9
17.5°	2881.9	2881.9	2871.9	2889.9	2878.9
20°	2838.9	2834.9	2827.9	2817.9	2803.9
22.5°	2787.9	2788.9	2775.9	2754.9	2772.9
25°	2730.9	2736.9	2710.9	2735.9	2751.9
27.5°	2671.9	2675.9	2640.9	2688.9	2678.9
30°	2607.9	2606.9	2575.9	2610.9	2609.9
32.5°	2537.9	2543.9	2538.9	2538.9	2536.9
35°	2464.9	2466.9	2468.9	2463.9	2455.9
37.5°	2385.9	2378.9	2373.9	2378.9	2373.9
40°	2281.9	2290.9	2288.9	2291.9	2276.9
42.5°	2192.9	2171.9	2190.9	2193.9	2193.9
45°	2075.9	2081.9	2098.9	2097.9	2113.9
47.5°	1964.9	1963.9	1992.9	2006.9	2001.9
50°	1841.9	1874.9	1890.9	1886.9	1874.9
52.5°	1722.9	1750.9	1768.9	1765.9	1755.9
55°	1593.9	1611.9	1635.9	1633.9	1626.9
57.5°	1447.9	1484.9	1500.9	1506.9	1498.9
60°	1312.0	1331.0	1344.0	1368.0	1382.0
62.5°	1164.0	1189.0	1206.0	1244.0	1247.0
65°	1023.0	1041.0	1071.0	1106.0	1101.0
67.5°	877.0	896.0	929.0	967.0	854.0
70°	732.0	747.0	779.0	461.0	442.0
72.5°	600.0	597.0	644.0	391.0	404.0
75°	461.0	470.0	296.0	192.0	385.0
77.5°	338.0	355.0	230.0	381.0	374.0
80°	237.0	257.0	113.0	354.0	490.0
82.5°	157.0	129.0	247.0	421.0	420.0
85°	100.0	72.0	249.0	318.0	298.0
87.5°	67.0	55.0	215.0	210.0	191.0
90°	41.0	62.0	144.0	121.0	126.0
92.5°	32.0	65.0	76.0	59.0	53.0
95°	40.0	39.0	30.0	20.0	17.0
97.5°	53.0	21.0	16.0	13.0	11.0
100°	57.0	19.0	14.0	11.0	10.0
102.5°	57.0	21.0	14.0	11.0	10.0
105°	52.0	23.0	13.0	11.0	10.0
107.5°	46.0	24.0	13.0	10.0	9.0
110°	40.0	25.0	12.0	9.0	9.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	34.0	24.0	11.0	8.0	7.0
115°	29.0	22.0	11.0	7.0	6.0
117.5°	24.0	20.0	10.0	6.0	6.0
120°	20.0	18.0	10.0	6.0	5.0
122.5°	17.0	16.0	10.0	5.0	5.0
125°	14.0	12.0	11.0	5.0	5.0
127.5°	12.0	9.0	18.0	6.0	5.0
130°	10.0	7.0	40.0	8.0	6.0
132.5°	8.0	6.0	35.0	16.0	9.0
135°	7.0	5.0	17.0	59.0	24.0
137.5°	5.0	4.0	10.0	42.0	64.0
140°	4.0	3.0	11.0	24.0	38.0
142.5°	4.0	3.0	6.0	11.0	16.0
145°	3.0	3.0	2.0	18.0	13.0
147.5°	3.0	2.0	2.0	13.0	22.0
150°	2.0	2.0	2.0	4.0	10.0
152.5°	2.0	2.0	2.0	1.0	2.0
155°	2.0	2.0	2.0	1.0	1.0
157.5°	2.0	2.0	3.0	1.0	1.0
160°	2.0	3.0	3.0	1.0	1.0
162.5°	2.0	3.0	3.0	1.0	1.0
165°	3.0	3.0	3.0	2.0	1.0
167.5°	3.0	3.0	3.0	2.0	1.0
170°	3.0	3.0	3.0	2.0	1.0
172.5°	3.0	3.0	3.0	2.0	2.0
175°	3.0	3.0	3.0	2.0	2.0
177.5°	3.0	3.0	3.0	2.0	2.0
180°	2.0	2.0	2.0	2.0	2.0

(END OF REPORT)