

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: P236598

Luminaire Tested: **VRVT4LED-LD5-12-PC-UNV-L835-CD1-WL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P236598
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-LD5-12-PC-UNV-L835-CD1-WL-U
Description: METALUX VRVT4 LED LUMINAIRE
4 BOARDS WITH CLEAR POLY CARBONATE LENS
Light Source: (224) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11376.0 lumens
Efficiency: N/A
Efficacy: 122.9 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

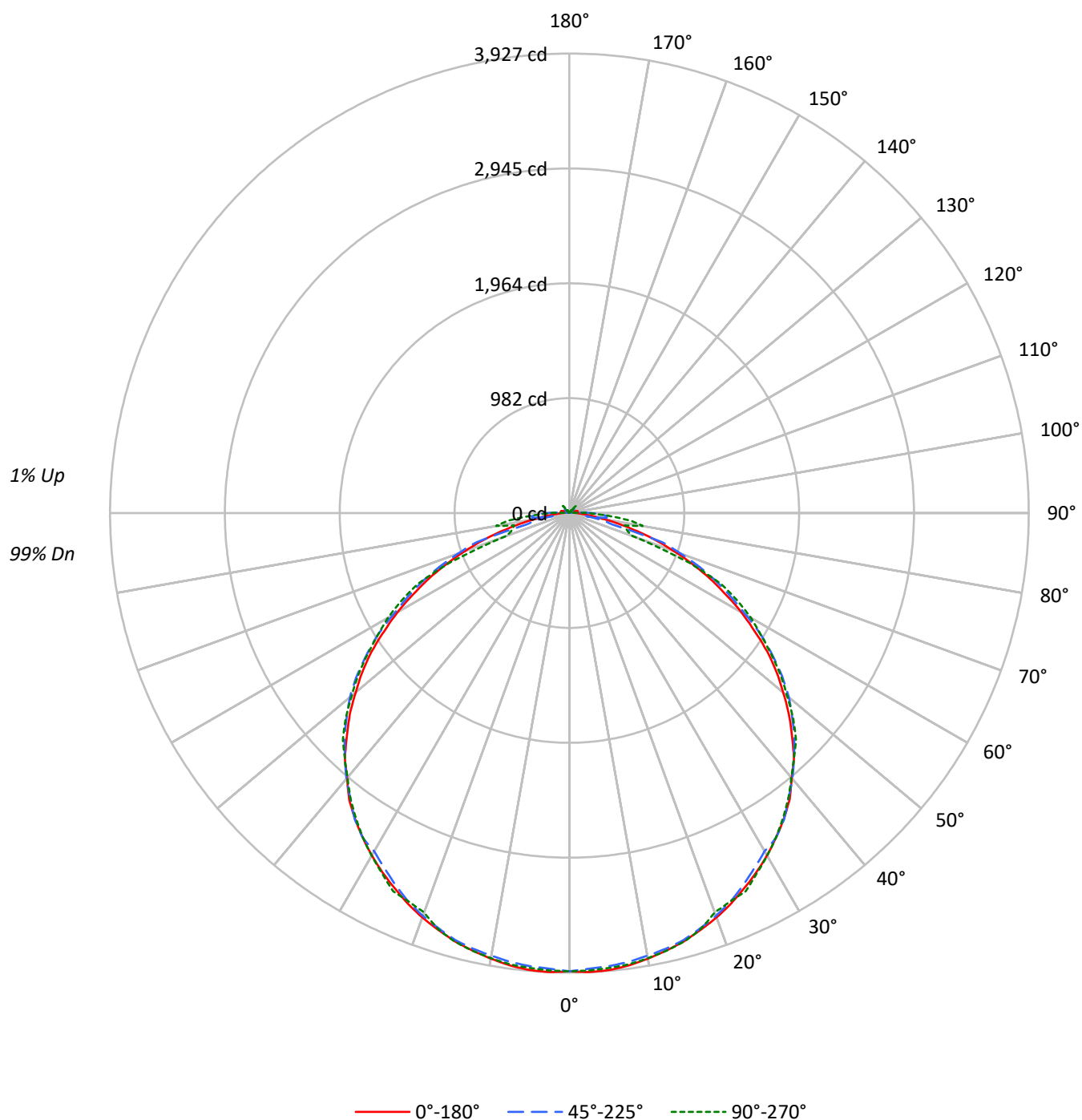
Input Watts (W): 92.53
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	9810	9810	9810
5°	9806	9598	9610
10°	9732	9418	9424
15°	9670	9266	9237
20°	9593	9065	8906
25°	9510	8832	8862
30°	9443	8598	8590
35°	9368	8514	8330
40°	9200	8229	8029
45°	8983	7945	7824
50°	8673	7617	7361
55°	8300	7101	6855
60°	7707	6376	6336
65°	6952	5649	5582
70°	5954	4666	2527
75°	4714	2070	2547
80°	3296	958	3879
85°	2199	2704	2965



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	371.0	3.3
10°-20°	1067.4	9.4
20°-30°	1628.7	14.3
30°-40°	1994.4	17.5
40°-50°	2089.0	18.4
50°-60°	1878.1	16.5
60°-70°	1341.9	11.8
70°-80°	569.2	5.0
80°-90°	289.6	2.5
90°-100°	60.7	0.5
100°-110°	26.2	0.2
110°-120°	18.6	0.2
120°-130°	12.7	0.1
130°-140°	19.6	0.2
140°-150°	6.6	0.1
150°-160°	1.2	0.0
160°-170°	0.9	0.0
170°-180°	0.3	0.0
0°-30°	3067.0	27.0
0°-40°	5061.4	44.5
0°-60°	9028.5	79.4
0°-90°	11229.2	98.7
90°-120°	105.6	0.9
90°-150°	144.5	1.3
90°-180°	147.0	1.3
0°-180°	11376.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3916	3916	3916	3916	3916	
5°	3920	3903	3888	3906	3902	372
15°	3789	3780	3776	3793	3791	1069
25°	3538	3546	3512	3544	3565	1632
35°	3193	3196	3198	3192	3182	1996
45°	2689	2697	2719	2718	2739	2075
55°	2065	2088	2119	2117	2108	1837
65°	1325	1349	1388	1433	1426	1309
75°	597	609	384	249	499	643
85°	130	93	323	412	386	144
90°	53	80	186	157	163	32
95°	52	50	39	26	22	48
105°	67	30	17	14	13	70
115°	38	28	14	9	8	38
125°	18	16	14	6	6	17
135°	9	6	22	76	31	7
145°	4	4	3	23	17	3
155°	3	3	3	1	1	1
165°	4	4	4	3	1	1
175°	4	4	4	3	3	0
180°	3	3	3	3	3	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3916.2	3916.2	3916.2	3916.2	3916.2
2.5°	3926.6	3914.9	3896.8	3913.6	3912.3
5°	3920.1	3903.3	3887.7	3905.9	3902.0
7.5°	3899.4	3881.3	3868.3	3887.7	3890.3
10°	3867.0	3856.6	3841.1	3864.4	3861.8
12.5°	3829.4	3825.5	3812.6	3830.7	3830.7
15°	3789.3	3780.2	3776.3	3793.2	3790.6
17.5°	3733.6	3733.6	3720.6	3743.9	3729.7
20°	3677.9	3672.7	3663.6	3650.7	3632.5
22.5°	3611.8	3613.1	3596.2	3569.0	3592.4
25°	3538.0	3545.7	3512.0	3544.4	3565.2
27.5°	3461.5	3466.7	3421.4	3483.5	3470.6
30°	3378.6	3377.3	3337.2	3382.5	3381.2
32.5°	3287.9	3295.7	3289.2	3289.2	3286.6
35°	3193.4	3195.9	3198.5	3192.1	3181.7
37.5°	3091.0	3081.9	3075.5	3081.9	3075.5
40°	2956.3	2967.9	2965.3	2969.2	2949.8
42.5°	2841.0	2813.8	2838.4	2842.3	2842.3
45°	2689.4	2697.2	2719.2	2717.9	2738.6
47.5°	2545.6	2544.3	2581.9	2600.0	2593.5
50°	2386.3	2429.0	2449.7	2444.6	2429.0
52.5°	2232.1	2268.4	2291.7	2287.8	2274.9
55°	2065.0	2088.3	2119.4	2116.8	2107.7
57.5°	1875.9	1923.8	1944.5	1952.3	1941.9
60°	1699.7	1724.3	1741.1	1772.2	1790.4
62.5°	1507.9	1540.3	1562.3	1611.6	1615.5
65°	1325.3	1348.6	1387.5	1432.8	1426.3
67.5°	1136.1	1160.7	1203.5	1252.7	1106.3
70°	948.3	967.7	1009.2	597.2	572.6
72.5°	777.3	773.4	834.3	506.5	523.4
75°	597.2	608.9	383.5	248.7	498.8
77.5°	437.9	459.9	298.0	493.6	484.5
80°	307.0	332.9	146.4	458.6	634.8
82.5°	203.4	167.1	320.0	545.4	544.1
85°	129.5	93.3	322.6	412.0	386.1
87.5°	86.8	71.3	278.5	272.1	247.4
90°	53.1	80.3	186.5	156.8	163.2
92.5°	41.5	84.2	98.5	76.4	68.7
95°	51.8	50.5	38.9	25.9	22.0
97.5°	68.7	27.2	20.7	16.8	14.3
100°	73.8	24.6	18.1	14.3	13.0
102.5°	73.8	27.2	18.1	14.3	13.0
105°	67.4	29.8	16.8	14.3	13.0
107.5°	59.6	31.1	16.8	13.0	11.7
110°	51.8	32.4	15.5	11.7	11.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	44.0	31.1	14.3	10.4	9.1
115°	37.6	28.5	14.3	9.1	7.8
117.5°	31.1	25.9	13.0	7.8	7.8
120°	25.9	23.3	13.0	7.8	6.5
122.5°	22.0	20.7	13.0	6.5	6.5
125°	18.1	15.5	14.3	6.5	6.5
127.5°	15.5	11.7	23.3	7.8	6.5
130°	13.0	9.1	51.8	10.4	7.8
132.5°	10.4	7.8	45.3	20.7	11.7
135°	9.1	6.5	22.0	76.4	31.1
137.5°	6.5	5.2	13.0	54.4	82.9
140°	5.2	3.9	14.3	31.1	49.2
142.5°	5.2	3.9	7.8	14.3	20.7
145°	3.9	3.9	2.6	23.3	16.8
147.5°	3.9	2.6	2.6	16.8	28.5
150°	2.6	2.6	2.6	5.2	13.0
152.5°	2.6	2.6	2.6	1.3	2.6
155°	2.6	2.6	2.6	1.3	1.3
157.5°	2.6	2.6	3.9	1.3	1.3
160°	2.6	3.9	3.9	1.3	1.3
162.5°	2.6	3.9	3.9	1.3	1.3
165°	3.9	3.9	3.9	2.6	1.3
167.5°	3.9	3.9	3.9	2.6	1.3
170°	3.9	3.9	3.9	2.6	1.3
172.5°	3.9	3.9	3.9	2.6	2.6
175°	3.9	3.9	3.9	2.6	2.6
177.5°	3.9	3.9	3.9	2.6	2.6
180°	2.6	2.6	2.6	2.6	2.6

(END OF REPORT)