

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: P236600

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P236600
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-L850-CD1-WL-U
Description: METALUX VRVT4 LED LUMINAIRE
4 BOARDS WITH CLEAR POLY CARBONATE LENS
Light Source: (224) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12071.9 lumens
Efficiency: N/A
Efficacy: 130.5 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

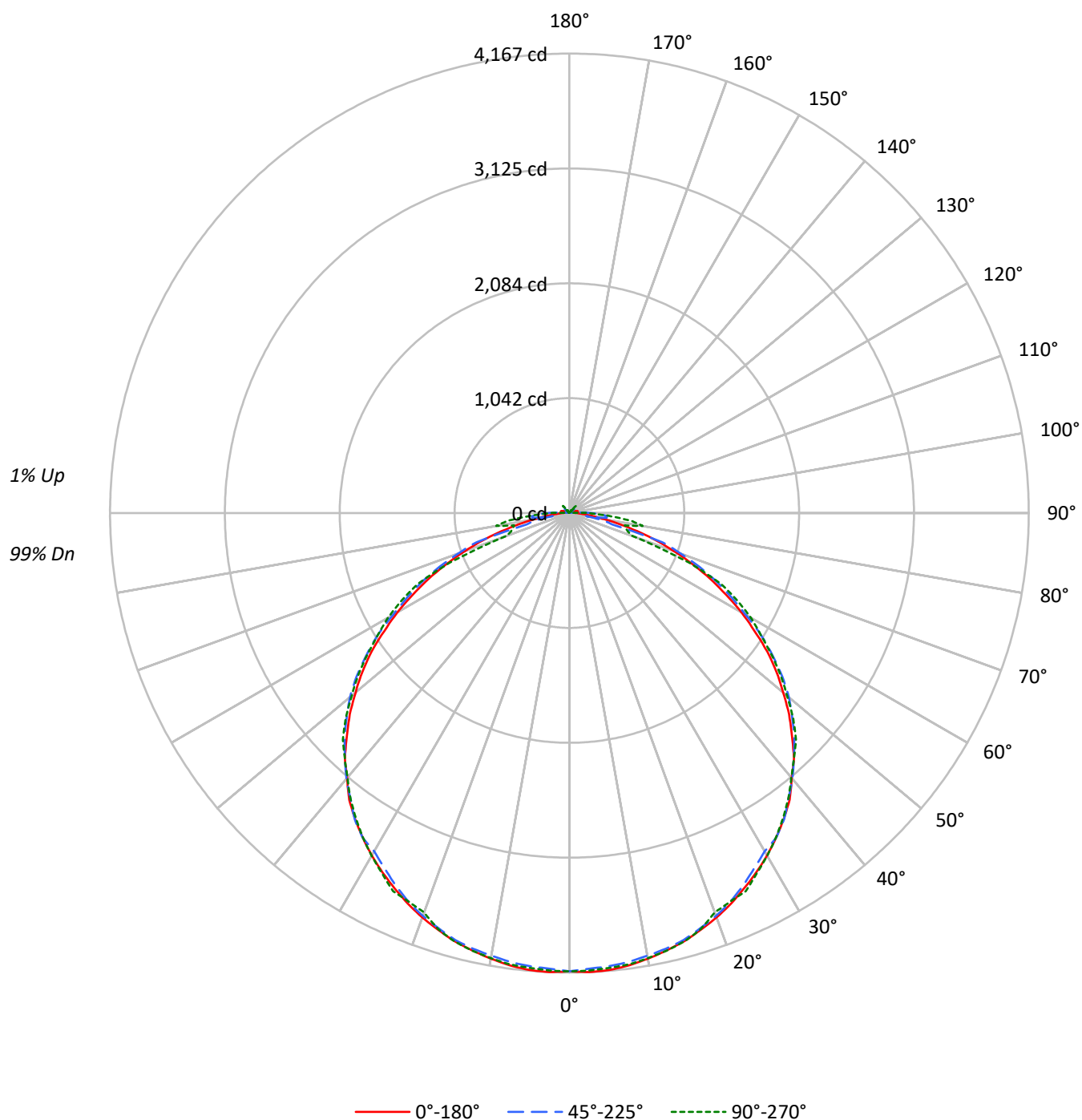
Input Watts (W): 92.53
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	110	110	110	105	105	105	101	101	101			99
1	108	104	99	96	106	101	97	94	97	94	91	93	90	88	89	87	85			83
2	99	91	84	78	96	89	82	77	85	80	75	81	77	73	78	75	71			69
3	90	80	72	65	88	78	70	64	75	68	63	72	66	62	69	65	61			58
4	83	71	62	55	80	69	61	55	66	59	54	64	58	53	62	56	52			50
5	76	63	54	47	74	62	53	47	60	52	46	57	51	46	55	50	45			43
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40	50	44	40			38
7	65	51	43	36	63	50	42	36	49	41	36	47	41	36	46	40	35			33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31			30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28			27
10	53	40	32	26	51	39	31	26	38	31	26	37	30	26	36	30	26			24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10411	10411	10411
5°	10406	10185	10198
10°	10328	9994	10001
15°	10262	9833	9802
20°	10180	9620	9451
25°	10092	9372	9405
30°	10020	9124	9116
35°	9941	9035	8840
40°	9763	8733	8521
45°	9533	8431	8303
50°	9204	8083	7811
55°	8808	7535	7275
60°	8178	6766	6724
65°	7378	5994	5923
70°	6318	4952	2682
75°	5003	2196	2702
80°	3498	1016	4116
85°	2335	2869	3146



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	393.7	3.3
10°-20°	1132.7	9.4
20°-30°	1728.3	14.3
30°-40°	2116.4	17.5
40°-50°	2216.8	18.4
50°-60°	1993.0	16.5
60°-70°	1424.0	11.8
70°-80°	604.0	5.0
80°-90°	307.3	2.5
90°-100°	64.4	0.5
100°-110°	27.8	0.2
110°-120°	19.7	0.2
120°-130°	13.5	0.1
130°-140°	20.8	0.2
140°-150°	7.0	0.1
150°-160°	1.3	0.0
160°-170°	0.9	0.0
170°-180°	0.3	0.0
0°-30°	3254.7	27.0
0°-40°	5371.1	44.5
0°-60°	9580.9	79.4
0°-90°	11916.2	98.7
90°-120°	112.0	0.9
90°-150°	153.2	1.3
90°-180°	156.0	1.3
0°-180°	12071.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4156	4156	4156	4156	4156	
5°	4160	4142	4126	4145	4141	395
15°	4021	4012	4007	4025	4022	1135
25°	3754	3763	3727	3761	3783	1732
35°	3389	3392	3394	3387	3376	2118
45°	2854	2862	2886	2884	2906	2202
55°	2191	2216	2249	2246	2237	1949
65°	1406	1431	1472	1520	1514	1389
75°	634	646	407	264	529	682
85°	138	99	342	437	410	153
90°	56	85	198	166	173	34
95°	55	54	41	28	23	51
105°	72	32	18	15	14	74
115°	40	30	15	10	8	40
125°	19	16	15	7	7	18
135°	10	7	23	81	33	7
145°	4	4	3	25	18	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°	4155.8	4155.8	4155.8	4155.8	4155.8
2.5°	4166.8	4154.5	4135.2	4153.1	4151.7
5°	4160.0	4142.1	4125.6	4144.8	4140.7
7.5°	4138.0	4118.7	4105.0	4125.6	4128.3
10°	4103.6	4092.6	4076.1	4100.8	4098.1
12.5°	4063.7	4059.6	4045.9	4065.1	4065.1
15°	4021.1	4011.5	4007.4	4025.2	4022.5
17.5°	3962.0	3962.0	3948.2	3973.0	3957.9
20°	3902.9	3897.4	3887.8	3874.0	3854.8
22.5°	3832.8	3834.1	3816.3	3787.4	3812.1
25°	3754.4	3762.7	3726.9	3761.3	3783.3
27.5°	3673.3	3678.8	3630.7	3696.7	3682.9
30°	3585.3	3583.9	3541.3	3589.4	3588.1
32.5°	3489.1	3497.3	3490.5	3490.5	3487.7
35°	3388.7	3391.5	3394.2	3387.4	3376.4
37.5°	3280.1	3270.5	3263.6	3270.5	3263.6
40°	3137.2	3149.5	3146.8	3150.9	3130.3
42.5°	3014.8	2985.9	3012.0	3016.2	3016.2
45°	2854.0	2862.2	2885.6	2884.2	2906.2
47.5°	2701.4	2700.0	2739.9	2759.1	2752.2
50°	2532.3	2577.6	2599.6	2594.1	2577.6
52.5°	2368.7	2407.2	2431.9	2427.8	2414.0
55°	2191.3	2216.1	2249.1	2246.3	2236.7
57.5°	1990.6	2041.5	2063.5	2071.7	2060.7
60°	1803.7	1829.8	1847.6	1880.6	1899.9
62.5°	1600.2	1634.6	1657.9	1710.2	1714.3
65°	1406.4	1431.1	1472.3	1520.5	1513.6
67.5°	1205.6	1231.8	1277.1	1329.4	1174.0
70°	1006.3	1026.9	1070.9	633.8	607.6
72.5°	824.8	820.7	885.3	537.5	555.4
75°	633.8	646.1	406.9	263.9	529.3
77.5°	464.7	488.0	316.2	523.8	514.2
80°	325.8	353.3	155.3	486.7	673.6
82.5°	215.8	177.3	339.6	578.8	577.4
85°	137.5	99.0	342.3	437.2	409.7
87.5°	92.1	75.6	295.6	288.7	262.6
90°	56.4	85.2	198.0	166.3	173.2
92.5°	44.0	89.4	104.5	81.1	72.9
95°	55.0	53.6	41.2	27.5	23.4
97.5°	72.9	28.9	22.0	17.9	15.1
100°	78.4	26.1	19.2	15.1	13.7
102.5°	78.4	28.9	19.2	15.1	13.7
105°	71.5	31.6	17.9	15.1	13.7
107.5°	63.2	33.0	17.9	13.7	12.4
110°	55.0	34.4	16.5	12.4	12.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	46.7	33.0	15.1	11.0	9.6
115°	39.9	30.2	15.1	9.6	8.2
117.5°	33.0	27.5	13.7	8.2	8.2
120°	27.5	24.7	13.7	8.2	6.9
122.5°	23.4	22.0	13.7	6.9	6.9
125°	19.2	16.5	15.1	6.9	6.9
127.5°	16.5	12.4	24.7	8.2	6.9
130°	13.7	9.6	55.0	11.0	8.2
132.5°	11.0	8.2	48.1	22.0	12.4
135°	9.6	6.9	23.4	81.1	33.0
137.5°	6.9	5.5	13.7	57.7	88.0
140°	5.5	4.1	15.1	33.0	52.2
142.5°	5.5	4.1	8.2	15.1	22.0
145°	4.1	4.1	2.7	24.7	17.9
147.5°	4.1	2.7	2.7	17.9	30.2
150°	2.7	2.7	2.7	5.5	13.7
152.5°	2.7	2.7	2.7	1.4	2.7
155°	2.7	2.7	2.7	1.4	1.4
157.5°	2.7	2.7	4.1	1.4	1.4
160°	2.7	4.1	4.1	1.4	1.4
162.5°	2.7	4.1	4.1	1.4	1.4
165°	4.1	4.1	4.1	2.7	1.4
167.5°	4.1	4.1	4.1	2.7	1.4
170°	4.1	4.1	4.1	2.7	1.4
172.5°	4.1	4.1	4.1	2.7	2.7
175°	4.1	4.1	4.1	2.7	2.7
177.5°	4.1	4.1	4.1	2.7	2.7
180°	2.7	2.7	2.7	2.7	2.7

(END OF REPORT)