

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: P236587

Luminaire Tested: **VRVT4LED-LD5-12-DR-UNV-L840-CD1-WL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P236587
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-367-1)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VRVT4LED-LD5-12-DR-UNV-L840-CD1-WL-U
Description: METALUX VRVT4 LED LUMINAIRE
4 BOARDS WITH CLEAR ACRYLIC LENS
Light Source: (224) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11900.0 lumens
Efficiency: N/A
Efficacy: 128.6 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

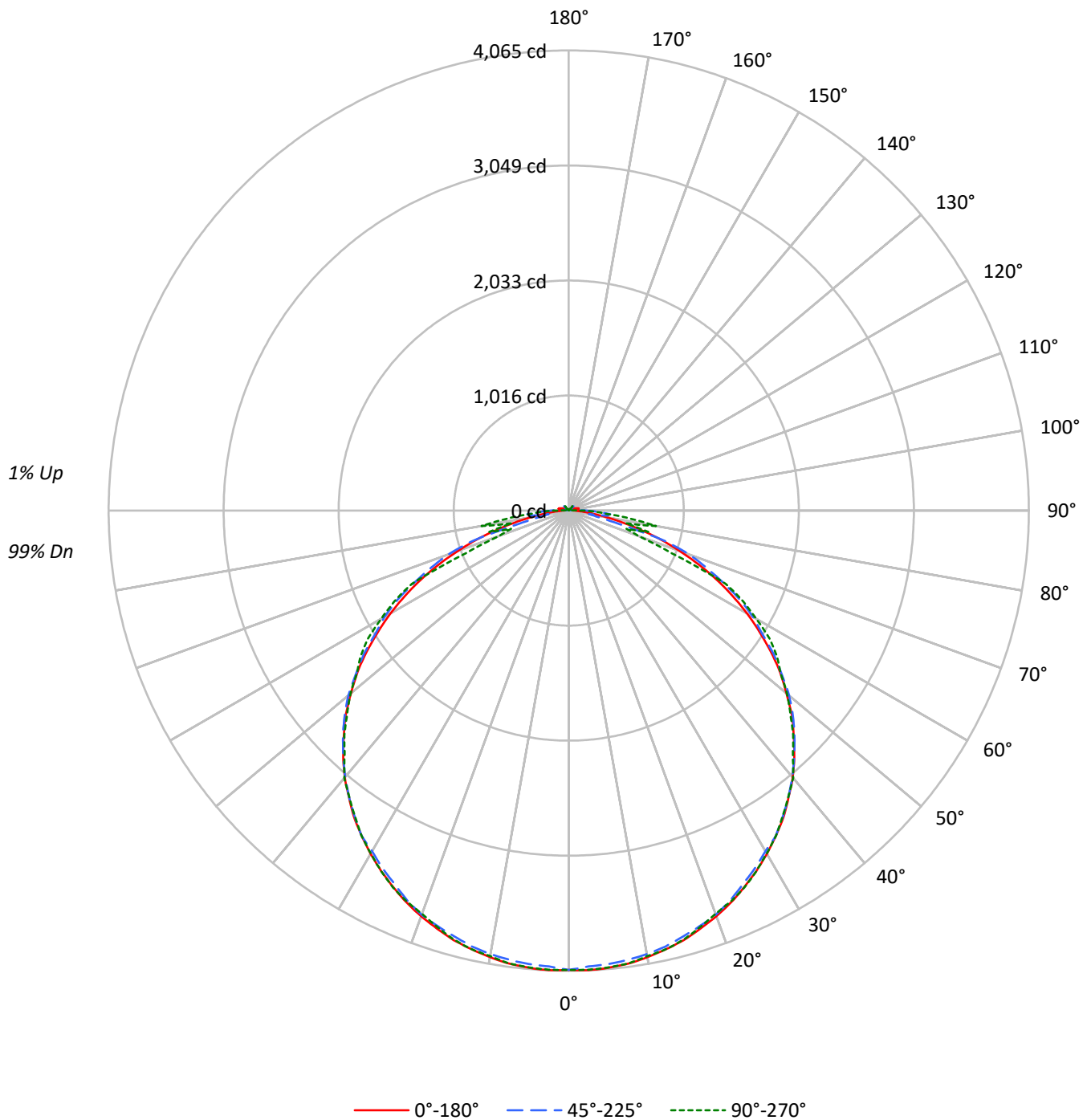
Input Watts (W): 92.53
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				10
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	106	106	106	101	101	101
1	108	104	99	96	106	101	97	94	97	94	91	93	90	88	89	87	85
2	99	90	84	78	96	88	82	77	85	79	75	81	77	73	78	74	71
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	64	60
4	82	70	62	55	80	69	61	54	66	59	54	64	58	53	61	56	52
5	76	63	54	47	73	62	53	47	59	52	46	57	51	46	55	50	45
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	39
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35
8	60	47	38	32	59	46	38	32	44	37	32	43	36	32	42	36	31
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10166	10166	10166
5°	10141	9930	9975
10°	10084	9755	9752
15°	10025	9558	9560
20°	9947	9400	9291
25°	9864	9155	9131
30°	9783	8954	8886
35°	9702	8779	8628
40°	9580	8529	8394
45°	9387	8241	8010
50°	9124	7900	7631
55°	8772	7400	7300
60°	8253	6883	6769
65°	7544	6108	5985
70°	6515	5226	2876
75°	5186	2476	3718
80°	3661	1185	4781
85°	2289	3080	2578



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	384.5	3.2
10°-20°	1106.1	9.3
20°-30°	1689.3	14.2
30°-40°	2066.2	17.4
40°-50°	2168.5	18.2
50°-60°	1976.8	16.6
60°-70°	1445.7	12.1
70°-80°	635.5	5.3
80°-90°	292.2	2.5
90°-100°	52.5	0.4
100°-110°	27.8	0.2
110°-120°	20.0	0.2
120°-130°	12.2	0.1
130°-140°	15.2	0.1
140°-150°	4.9	0.0
150°-160°	1.5	0.0
160°-170°	1.0	0.0
170°-180°	0.3	0.0
0°-30°	3179.8	26.7
0°-40°	5246.1	44.1
0°-60°	9391.4	78.9
0°-90°	11764.7	98.9
90°-120°	100.3	0.8
90°-150°	132.5	1.1
90°-180°	135.0	1.1
0°-180°	11900.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4058	4058	4058	4058	4058	
5°	4054	4049	4022	4050	4050	386
15°	3928	3923	3896	3935	3923	1108
25°	3670	3666	3640	3675	3673	1692
35°	3307	3309	3298	3301	3295	2067
45°	2810	2812	2821	2813	2804	2168
55°	2182	2210	2209	2244	2244	1947
65°	1438	1457	1500	1560	1529	1418
75°	657	686	459	320	728	709
85°	135	95	368	398	336	155
90°	40	104	155	138	116	27
95°	63	34	26	22	21	59
105°	79	25	18	16	14	82
115°	37	28	14	12	12	38
125°	17	14	13	9	9	16
135°	8	5	13	26	13	6
145°	4	4	3	14	11	3
155°	3	4	4	3	1	1
165°	4	4	4	3	3	1
175°	4	4	4	4	3	0
180°	4	4	4	4	4	



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CATALOG NUMBER: VRVT4LED-LD5-12-DR-UNV-L840-CD1-WL-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4058.1	4058.1	4058.1	4058.1	4058.1
2.5°	4064.7	4059.4	4030.3	4058.1	4059.4
5°	4054.1	4048.8	4022.4	4050.2	4050.2
7.5°	4036.9	4029.0	4002.6	4035.6	4035.6
10°	4006.5	4003.9	3978.8	4001.2	3996.0
12.5°	3969.5	3964.2	3944.4	3966.9	3969.5
15°	3928.5	3923.3	3895.5	3935.2	3923.3
17.5°	3871.7	3875.7	3849.2	3875.7	3858.5
20°	3813.5	3817.5	3799.0	3791.1	3789.8
22.5°	3747.5	3744.8	3728.9	3725.0	3738.2
25°	3669.5	3665.5	3640.4	3674.8	3673.4
27.5°	3588.8	3587.5	3562.4	3604.7	3590.2
30°	3500.3	3500.3	3475.2	3510.8	3497.6
32.5°	3406.4	3411.7	3405.1	3411.7	3406.4
35°	3307.3	3308.6	3298.0	3300.7	3295.4
37.5°	3191.0	3198.9	3188.3	3192.3	3185.7
40°	3078.6	3074.6	3073.3	3079.9	3083.9
42.5°	2949.1	2923.9	2947.7	2953.0	2930.5
45°	2810.3	2811.6	2820.8	2812.9	2803.7
47.5°	2674.1	2668.8	2687.3	2670.1	2654.3
50°	2510.2	2548.5	2540.6	2511.5	2518.1
52.5°	2356.9	2385.9	2370.1	2376.7	2358.2
55°	2182.4	2210.1	2208.8	2244.5	2244.5
57.5°	2001.3	2030.4	2023.8	2071.3	2103.1
60°	1820.2	1849.3	1879.7	1910.1	1912.7
62.5°	1628.5	1657.6	1705.2	1731.6	1736.9
65°	1438.2	1456.7	1500.3	1559.8	1529.4
67.5°	1239.9	1253.1	1313.9	1323.2	983.5
70°	1037.7	1054.8	1130.2	697.9	651.7
72.5°	853.9	860.5	888.3	582.9	534.0
75°	657.0	686.0	458.7	319.9	728.3
77.5°	489.1	511.6	264.4	528.7	515.5
80°	341.0	367.5	181.1	471.9	782.5
82.5°	222.1	171.8	342.4	532.7	553.9
85°	134.8	95.2	367.5	397.9	335.8
87.5°	83.3	72.7	247.2	252.5	234.0
90°	39.7	104.4	154.7	137.5	116.3
92.5°	37.0	74.0	68.7	55.5	51.6
95°	63.4	34.4	26.4	22.5	21.1
97.5°	88.6	22.5	18.5	15.9	15.9
100°	89.9	21.1	18.5	15.9	14.5
102.5°	89.9	22.5	18.5	15.9	14.5
105°	79.3	25.1	18.5	15.9	14.5
107.5°	67.4	27.8	17.2	15.9	14.5
110°	56.8	31.7	17.2	14.5	14.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	44.9	30.4	15.9	13.2	13.2
115°	37.0	27.8	14.5	11.9	11.9
117.5°	30.4	25.1	14.5	11.9	10.6
120°	25.1	22.5	14.5	10.6	10.6
122.5°	21.1	19.8	14.5	9.3	9.3
125°	17.2	14.5	13.2	9.3	9.3
127.5°	14.5	10.6	15.9	9.3	7.9
130°	11.9	9.3	27.8	9.3	9.3
132.5°	9.3	6.6	56.8	11.9	9.3
135°	7.9	5.3	13.2	26.4	13.2
137.5°	6.6	5.3	9.3	82.0	37.0
140°	5.3	4.0	9.3	13.2	51.6
142.5°	4.0	4.0	6.6	9.3	9.3
145°	4.0	4.0	2.6	14.5	10.6
147.5°	4.0	2.6	2.6	15.9	17.2
150°	2.6	2.6	2.6	5.3	9.3
152.5°	2.6	2.6	2.6	2.6	2.6
155°	2.6	4.0	4.0	2.6	1.3
157.5°	2.6	4.0	4.0	2.6	1.3
160°	4.0	4.0	4.0	2.6	1.3
162.5°	4.0	4.0	4.0	2.6	2.6
165°	4.0	4.0	4.0	2.6	2.6
167.5°	4.0	4.0	4.0	2.6	2.6
170°	4.0	4.0	4.0	2.6	2.6
172.5°	4.0	4.0	4.0	2.6	2.6
175°	4.0	4.0	4.0	4.0	2.6
177.5°	4.0	4.0	4.0	4.0	2.6
180°	4.0	4.0	4.0	4.0	4.0

(END OF REPORT)