

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: P236614

Luminaire Tested: **VRVT4LED-LD5-18-DRF-UNV-L840-CD2-WL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P236614
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-367-9)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VRVT4LED-LD5-18-DRF-UNV-L840-CD2-WL-U
Description: METALUX VRVT4 LED LUMINAIRE
8 BOARDS WITH FROSTED ACYLIC LENS
Light Source: (448) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17913.0 lumens
Efficiency: N/A
Efficacy: 134.4 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.19 / 1.32
Luminous Opening: Rectangular w/ Sides (W: 1.04' x L: 4.12' x H: 0.25')
CIE Type: Direct

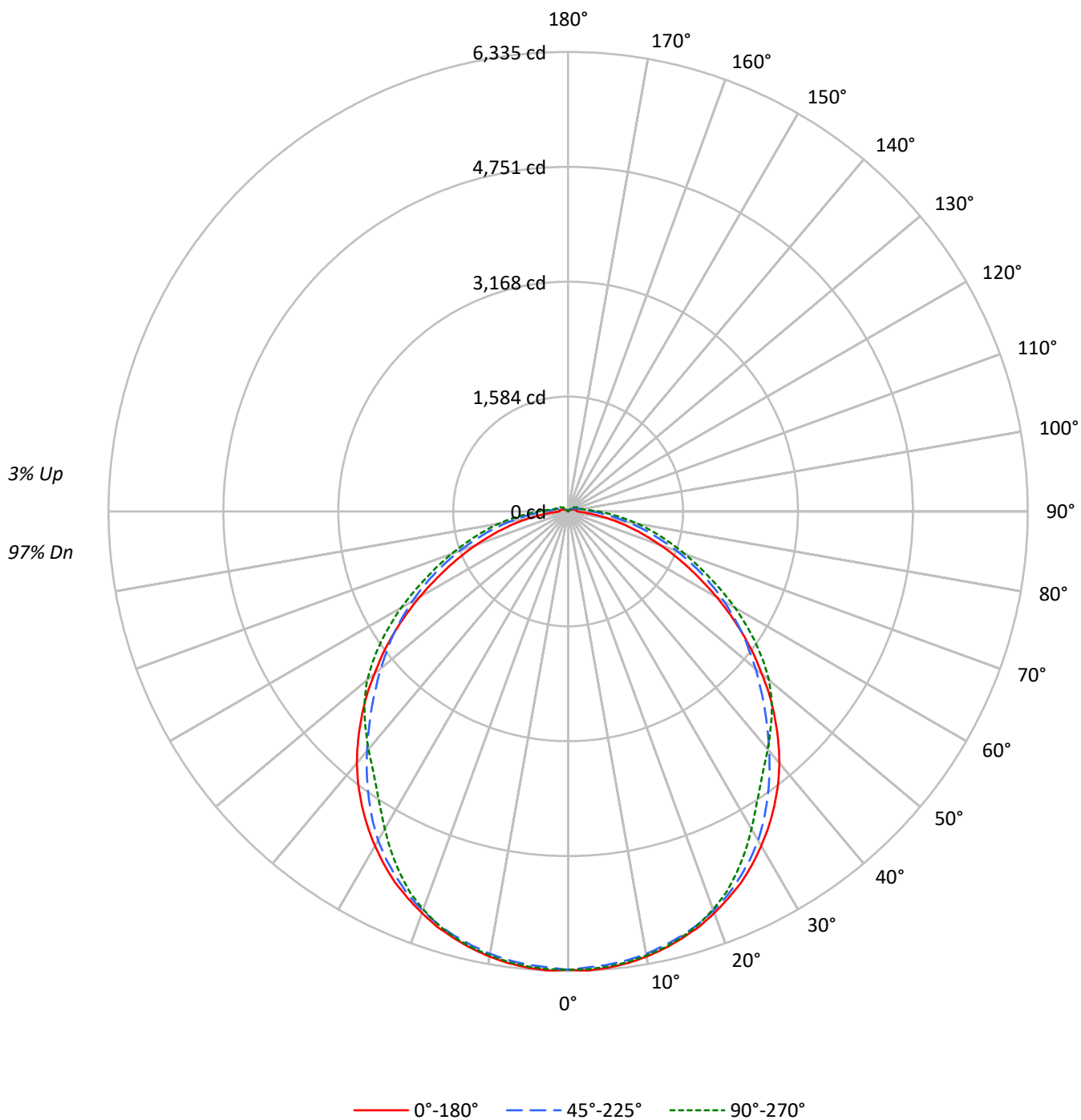
Input Watts (W): 133.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10
RCR																				
0	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99	99	99	97
1	108	103	98	94	105	100	96	92	95	92	89	91	88	86	87	85	83	87	85	80
2	98	90	83	77	95	87	81	76	83	78	73	80	75	71	76	72	69	76	72	67
3	89	79	70	64	87	77	69	63	73	67	62	70	65	60	67	63	59	67	63	56
4	82	70	61	54	79	68	60	54	65	58	53	63	57	52	60	55	51	60	55	48
5	75	62	53	47	73	61	53	46	59	51	46	56	50	45	54	49	44	54	49	42
6	70	56	47	41	67	55	47	41	53	46	40	51	44	39	49	43	39	49	43	37
7	65	51	42	36	63	50	42	36	48	41	35	47	40	35	45	39	35	45	39	32
8	60	47	38	32	58	46	38	32	44	37	32	43	36	31	41	35	31	41	35	29
9	56	43	35	29	55	42	34	29	41	34	29	39	33	28	38	32	28	38	32	26
10	53	40	32	26	51	39	31	26	38	31	26	37	30	26	35	30	25	35	30	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15830	15830	15830
5°	15796	15486	15509
10°	15682	15184	15165
15°	15537	14857	14798
20°	15366	14490	14318
25°	15172	14035	13662
30°	14883	13490	12835
35°	14536	12767	12080
40°	14100	11961	11648
45°	13462	11184	11337
50°	12663	10488	10952
55°	11789	9827	10259
60°	10728	9085	9403
65°	9584	8273	8414
70°	8458	7371	7534
75°	7294	6417	6709
80°	5991	5377	5890
85°	4534	4433	4991



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	598.1	3.3
10°-20°	1712.4	9.6
20°-30°	2566.2	14.3
30°-40°	2998.9	16.7
40°-50°	3031.8	16.9
50°-60°	2675.9	14.9
60°-70°	1987.7	11.1
70°-80°	1219.1	6.8
80°-90°	561.3	3.1
90°-100°	235.2	1.3
100°-110°	143.6	0.8
110°-120°	94.8	0.5
120°-130°	53.9	0.3
130°-140°	24.1	0.1
140°-150°	6.8	0.0
150°-160°	1.7	0.0
160°-170°	1.1	0.0
170°-180°	0.4	0.0
0°-30°	4876.7	27.2
0°-40°	7875.6	44.0
0°-60°	13583.4	75.8
0°-90°	17351.4	96.9
90°-120°	473.6	2.6
90°-150°	558.4	3.1
90°-180°	562.0	3.1
0°-180°	17913.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6319	6319	6319	6319	6319	
5°	6315	6300	6273	6292	6297	600
15°	6088	6075	6055	6074	6073	1719
25°	5644	5624	5581	5541	5496	2598
35°	4955	4939	4796	4646	4614	3097
45°	4030	3993	3828	3907	3968	3105
55°	2933	2887	2933	3126	3154	2620
65°	1827	1834	2032	2149	2150	1817
75°	924	996	1189	1285	1314	985
85°	267	359	529	635	650	278
90°	130	207	331	402	411	76
95°	117	161	222	252	255	94
105°	93	108	143	159	162	98
115°	56	61	102	124	131	57
125°	29	24	61	88	98	27
135°	14	11	25	50	58	11
145°	7	5	4	17	22	5
155°	5	5	4	2	1	2
165°	6	5	4	2	1	2
175°	6	6	5	3	3	1
180°	5	5	5	5	5	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6319.1	6319.1	6319.1	6319.1	6319.1
2.5°	6335.1	6319.1	6292.1	6310.1	6315.1
5°	6315.1	6300.1	6273.1	6292.1	6297.1
7.5°	6281.1	6266.1	6240.1	6259.1	6266.1
10°	6231.1	6216.1	6193.1	6208.1	6214.1
12.5°	6168.1	6155.1	6129.1	6151.1	6154.1
15°	6088.1	6075.1	6055.1	6074.1	6073.1
17.5°	6003.1	5984.1	5965.1	5975.1	5971.1
20°	5891.1	5874.1	5856.1	5850.1	5840.1
22.5°	5772.1	5758.1	5733.1	5709.1	5688.1
25°	5644.1	5624.1	5581.1	5541.1	5496.1
27.5°	5490.1	5478.1	5419.1	5335.1	5283.1
30°	5325.1	5313.1	5236.1	5110.1	5052.1
32.5°	5147.1	5132.1	5024.1	4883.1	4821.1
35°	4955.1	4939.1	4796.1	4646.1	4614.1
37.5°	4751.1	4724.1	4559.1	4432.1	4434.1
40°	4531.1	4495.1	4310.1	4241.1	4279.1
42.5°	4285.1	4255.1	4066.1	4071.1	4123.1
45°	4030.1	3993.1	3828.1	3907.1	3968.1
47.5°	3770.1	3723.1	3593.1	3723.1	3800.1
50°	3484.0	3445.0	3373.0	3546.1	3614.1
52.5°	3215.0	3179.0	3143.0	3339.0	3390.0
55°	2933.0	2887.0	2933.0	3126.0	3154.0
57.5°	2651.0	2610.0	2701.0	2889.0	2906.0
60°	2366.0	2337.0	2481.0	2642.0	2657.0
62.5°	2085.0	2083.0	2255.0	2392.0	2399.0
65°	1827.0	1834.0	2032.0	2149.0	2150.0
67.5°	1581.0	1607.0	1806.0	1908.0	1922.0
70°	1347.0	1392.0	1594.0	1690.0	1707.0
72.5°	1126.0	1186.0	1378.0	1479.0	1503.0
75°	924.0	996.0	1189.0	1285.0	1314.0
77.5°	732.0	813.0	1001.0	1104.0	1141.0
80°	558.0	640.0	822.0	935.0	964.0
82.5°	392.0	489.0	667.0	782.0	805.0
85°	267.0	359.0	529.0	635.0	650.0
87.5°	169.0	267.0	420.0	507.0	520.0
90°	130.0	207.0	331.0	402.0	411.0
92.5°	122.0	178.0	267.0	313.0	322.0
95°	117.0	161.0	222.0	252.0	255.0
97.5°	113.0	146.0	195.0	214.0	214.0
100°	108.0	133.0	174.0	188.0	188.0
102.5°	102.0	120.0	157.0	171.0	174.0
105°	93.0	108.0	143.0	159.0	162.0
107.5°	84.0	96.0	132.0	149.0	153.0
110°	75.0	84.0	122.0	140.0	146.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	65.0	73.0	112.0	132.0	139.0
115°	56.0	61.0	102.0	124.0	131.0
117.5°	48.0	50.0	92.0	115.0	124.0
120°	41.0	40.0	82.0	107.0	116.0
122.5°	34.0	32.0	72.0	98.0	107.0
125°	29.0	24.0	61.0	88.0	98.0
127.5°	24.0	19.0	52.0	78.0	89.0
130°	20.0	16.0	42.0	69.0	79.0
132.5°	17.0	13.0	33.0	59.0	68.0
135°	14.0	11.0	25.0	50.0	58.0
137.5°	12.0	9.0	18.0	40.0	49.0
140°	10.0	8.0	11.0	31.0	39.0
142.5°	8.0	6.0	6.0	24.0	30.0
145°	7.0	5.0	4.0	17.0	22.0
147.5°	6.0	5.0	3.0	10.0	14.0
150°	5.0	4.0	3.0	4.0	8.0
152.5°	5.0	5.0	3.0	2.0	2.0
155°	5.0	5.0	4.0	2.0	1.0
157.5°	5.0	5.0	4.0	2.0	1.0
160°	5.0	5.0	4.0	2.0	1.0
162.5°	6.0	5.0	4.0	2.0	1.0
165°	6.0	5.0	4.0	2.0	1.0
167.5°	6.0	6.0	5.0	3.0	2.0
170°	6.0	6.0	5.0	3.0	2.0
172.5°	6.0	6.0	5.0	3.0	2.0
175°	6.0	6.0	5.0	3.0	3.0
177.5°	6.0	6.0	5.0	3.0	3.0
180°	5.0	5.0	5.0	5.0	5.0

(END OF REPORT)