

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: P236622

Luminaire Tested: **VRVT4LED-LD5-24-DRF-UNV-L835-CD2-WL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P236622
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-367-12)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VRVT4LED-LD5-24-DRF-UNV-L835-CD2-WL-U
Description: METALUX VRVT4 LED LUMINAIRE
10 BOARDS WITH FROSTED ACYLIC LENS
Light Source: (560) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22986.0 lumens
Efficiency: N/A
Efficacy: 128.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.2 / 1.32
Luminous Opening: Rectangular w/ Sides (W: 1.04' x L: 4.12' x H: 0.25')
CIE Type: Direct

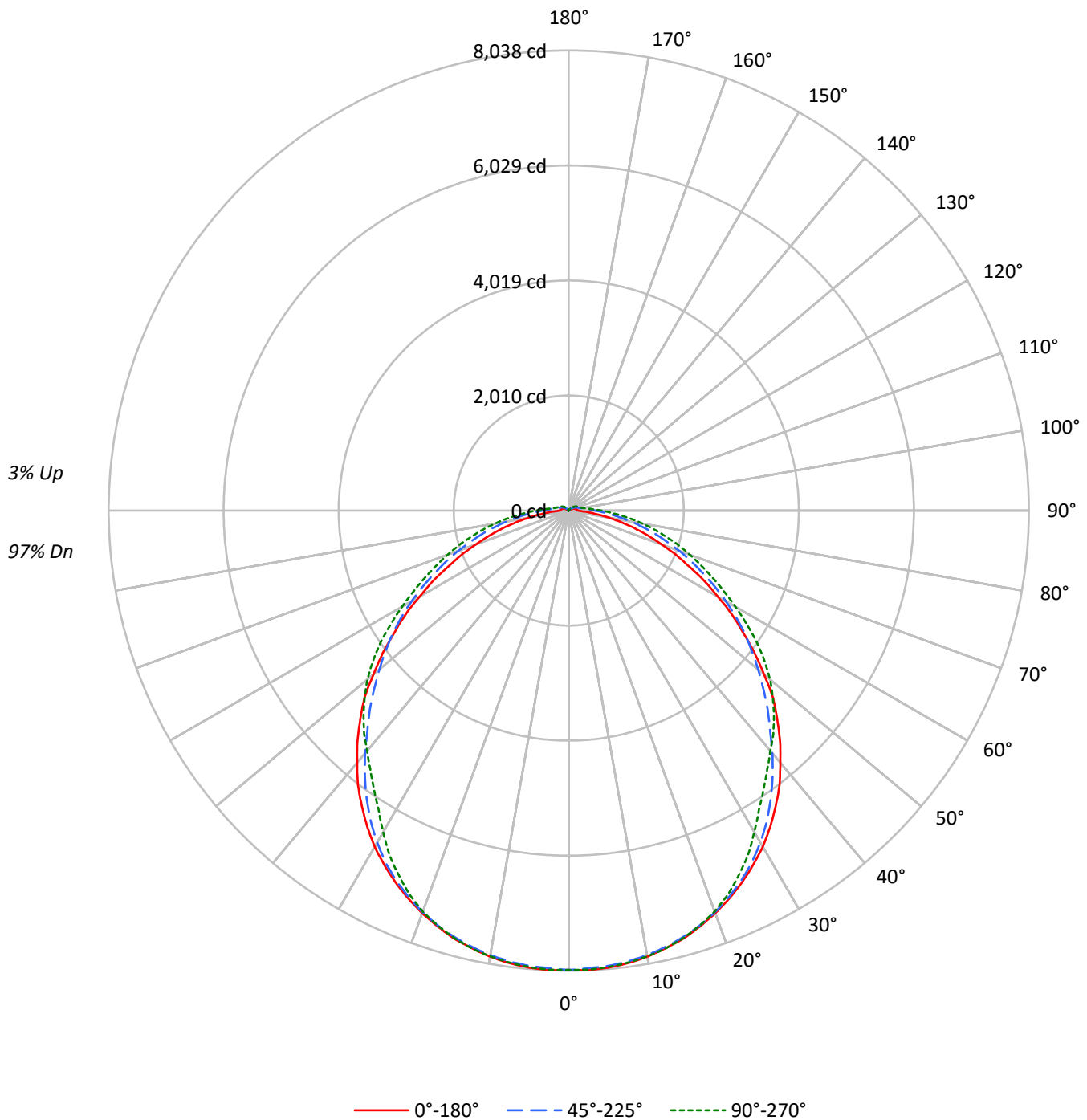
Input Watts (W): 179.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					10
RW	70	50	30	10	70	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
1	108	103	98	94	104	100	96	92		95	92	89		91	88	85		87	84	82
2	98	89	82	77	95	87	81	75		83	78	73		79	75	71		76	72	69
3	89	79	70	64	86	77	69	63		73	67	61		70	65	60		67	62	58
4	82	70	61	54	79	68	60	54		65	58	52		62	56	51		60	55	50
5	75	62	53	47	73	61	53	46		58	51	45		56	50	45		54	48	44
6	69	56	47	41	67	55	47	40		53	45	40		51	44	39		49	43	39
7	64	51	42	36	62	50	42	36		48	41	35		46	40	35		45	39	34
8	60	46	38	32	58	46	38	32		44	37	32		43	36	31		41	35	31
9	56	43	35	29	54	42	34	29		41	33	28		39	33	28		38	32	28
10	53	39	32	26	51	39	31	26		38	31	26		36	30	26		35	30	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20104	20104	20104
5°	20043	19704	19710
10°	19912	19333	19296
15°	19753	18927	18835
20°	19527	18473	18273
25°	19257	17927	17472
30°	18948	17245	16473
35°	18489	16380	15541
40°	17893	15355	14914
45°	17196	14365	14484
50°	16193	13433	13914
55°	14945	12589	13050
60°	13642	11602	11896
65°	12210	10514	10838
70°	10805	9489	9945
75°	9360	8421	8981
80°	7597	7218	7946
85°	5692	6086	6825



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	760.2	3.3
10°-20°	2179.6	9.5
20°-30°	3274.7	14.2
30°-40°	3839.3	16.7
40°-50°	3880.2	16.9
50°-60°	3416.3	14.9
60°-70°	2548.5	11.1
70°-80°	1601.6	7.0
80°-90°	755.5	3.3
90°-100°	318.2	1.4
100°-110°	185.0	0.8
110°-120°	118.6	0.5
120°-130°	66.6	0.3
130°-140°	29.9	0.1
140°-150°	8.4	0.0
150°-160°	1.7	0.0
160°-170°	1.2	0.0
170°-180°	0.5	0.0
0°-30°	6214.6	27.0
0°-40°	10053.8	43.7
0°-60°	17350.3	75.5
0°-90°	22256.0	96.8
90°-120°	621.8	2.7
90°-150°	726.7	3.2
90°-180°	730.0	3.2
0°-180°	22986.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8025	8025	8025	8025	8025	
5°	8013	8002	7981	7996	8003	762
15°	7740	7728	7714	7724	7730	2183
25°	7164	7157	7129	7079	7029	3301
35°	6302	6296	6154	5980	5936	3940
45°	5148	5118	4917	4992	5070	3966
55°	3718	3704	3757	3960	4012	3336
65°	2328	2368	2582	2741	2770	2326
75°	1186	1284	1560	1722	1759	1263
85°	335	470	726	869	889	354
90°	157	276	459	554	570	93
95°	142	207	306	355	360	115
105°	116	137	186	206	210	122
115°	71	77	128	154	163	71
125°	35	30	77	108	120	33
135°	18	14	32	61	71	14
145°	8	7	4	20	26	5
155°	6	6	4	1	0	3
165°	7	6	5	2	1	2
175°	7	7	5	3	2	1
180°	5	5	5	5	5	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8025.4	8025.4	8025.4	8025.4	8025.4
2.5°	8038.2	8026.4	8000.9	8014.7	8027.4
5°	8012.7	8001.9	7981.3	7996.0	8002.9
7.5°	7973.5	7960.7	7944.1	7954.9	7964.7
10°	7911.7	7904.9	7885.3	7898.0	7906.8
12.5°	7828.4	7825.5	7807.9	7826.5	7832.4
15°	7740.2	7727.5	7713.8	7723.6	7729.5
17.5°	7616.8	7614.8	7602.1	7612.8	7603.0
20°	7486.4	7484.5	7465.8	7470.7	7453.1
22.5°	7330.6	7335.5	7307.1	7280.6	7261.0
25°	7164.0	7157.1	7128.7	7078.7	7028.7
27.5°	6978.8	6974.8	6929.8	6839.6	6783.7
30°	6779.8	6764.1	6693.6	6558.3	6483.9
32.5°	6549.5	6543.6	6436.8	6272.2	6186.9
35°	6302.5	6295.7	6153.6	5980.1	5936.0
37.5°	6047.7	6025.2	5849.8	5713.6	5696.9
40°	5749.8	5735.1	5533.2	5450.9	5479.3
42.5°	5463.6	5443.1	5204.9	5211.8	5288.2
45°	5148.1	5117.7	4916.8	4992.3	5069.7
47.5°	4840.3	4763.9	4609.1	4769.8	4836.4
50°	4455.2	4429.7	4320.0	4511.1	4591.4
52.5°	4095.5	4078.9	4032.8	4255.3	4308.2
55°	3718.2	3703.5	3757.4	3960.3	4012.2
57.5°	3382.1	3360.5	3467.3	3656.5	3681.0
60°	3008.7	3004.8	3168.4	3355.6	3361.5
62.5°	2681.4	2651.9	2874.4	3040.0	3055.7
65°	2327.6	2367.7	2582.4	2741.1	2769.6
67.5°	2032.6	2082.6	2313.8	2483.4	2499.1
70°	1720.9	1783.6	2052.2	2218.8	2253.1
72.5°	1451.4	1528.8	1781.7	1967.9	2007.1
75°	1185.8	1283.8	1560.2	1721.9	1759.1
77.5°	939.8	1056.5	1310.3	1502.4	1534.7
80°	707.6	830.1	1103.5	1274.0	1300.5
82.5°	503.7	633.1	893.8	1065.3	1098.6
85°	335.2	470.4	726.2	869.3	888.9
87.5°	216.6	351.8	576.3	695.8	712.5
90°	156.8	276.4	458.7	553.7	570.4
92.5°	148.0	233.2	369.5	440.0	441.0
95°	142.1	206.8	305.8	354.8	359.7
97.5°	138.2	188.2	260.7	293.0	295.0
100°	133.3	169.5	230.3	251.9	254.8
102.5°	125.4	151.9	203.8	227.4	228.3
105°	115.6	137.2	186.2	205.8	209.7
107.5°	104.9	121.5	168.6	190.1	195.0
110°	93.1	106.8	154.8	177.4	184.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	82.3	91.1	141.1	165.6	172.5
115°	70.6	77.4	128.4	153.9	162.7
117.5°	59.8	63.7	114.7	142.1	152.9
120°	51.0	51.0	101.9	131.3	141.1
122.5°	42.1	40.2	90.2	119.6	130.3
125°	35.3	30.4	77.4	107.8	119.6
127.5°	29.4	23.5	65.7	96.0	106.8
130°	25.5	19.6	52.9	84.3	95.1
132.5°	20.6	16.7	42.1	72.5	82.3
135°	17.6	13.7	32.3	60.8	70.6
137.5°	14.7	11.8	22.5	50.0	58.8
140°	11.8	9.8	14.7	40.2	47.0
142.5°	9.8	7.8	7.8	29.4	37.2
145°	7.8	6.9	3.9	19.6	26.5
147.5°	6.9	5.9	3.9	12.7	17.6
150°	5.9	4.9	3.9	4.9	9.8
152.5°	5.9	4.9	3.9	1.0	2.0
155°	5.9	5.9	3.9	1.0	0.0
157.5°	5.9	5.9	3.9	1.0	0.0
160°	5.9	5.9	3.9	2.0	0.0
162.5°	5.9	5.9	4.9	2.0	0.0
165°	6.9	5.9	4.9	2.0	1.0
167.5°	6.9	6.9	4.9	2.0	1.0
170°	6.9	6.9	4.9	2.9	1.0
172.5°	6.9	6.9	4.9	2.9	1.0
175°	6.9	6.9	4.9	2.9	2.0
177.5°	6.9	6.9	4.9	2.9	2.0
180°	4.9	4.9	4.9	4.9	4.9

(END OF REPORT)