

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: P236625

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P236625
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-367-13)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VRVT4LED-LD5-24-PC-UNV-L835-CD2-WL-U
Description: METALUX VRVT4 LED LUMINAIRE
10 BOARDS WITH CLEAR POLY CARBONATE LENS
Light Source: (560) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22867.1 lumens
Efficiency: N/A
Efficacy: 127.9 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.17 / 1.27
Luminous Opening: Rectangular w/ Sides (W: 1.04' x L: 4.12' x H: 0.25')
CIE Type: Direct

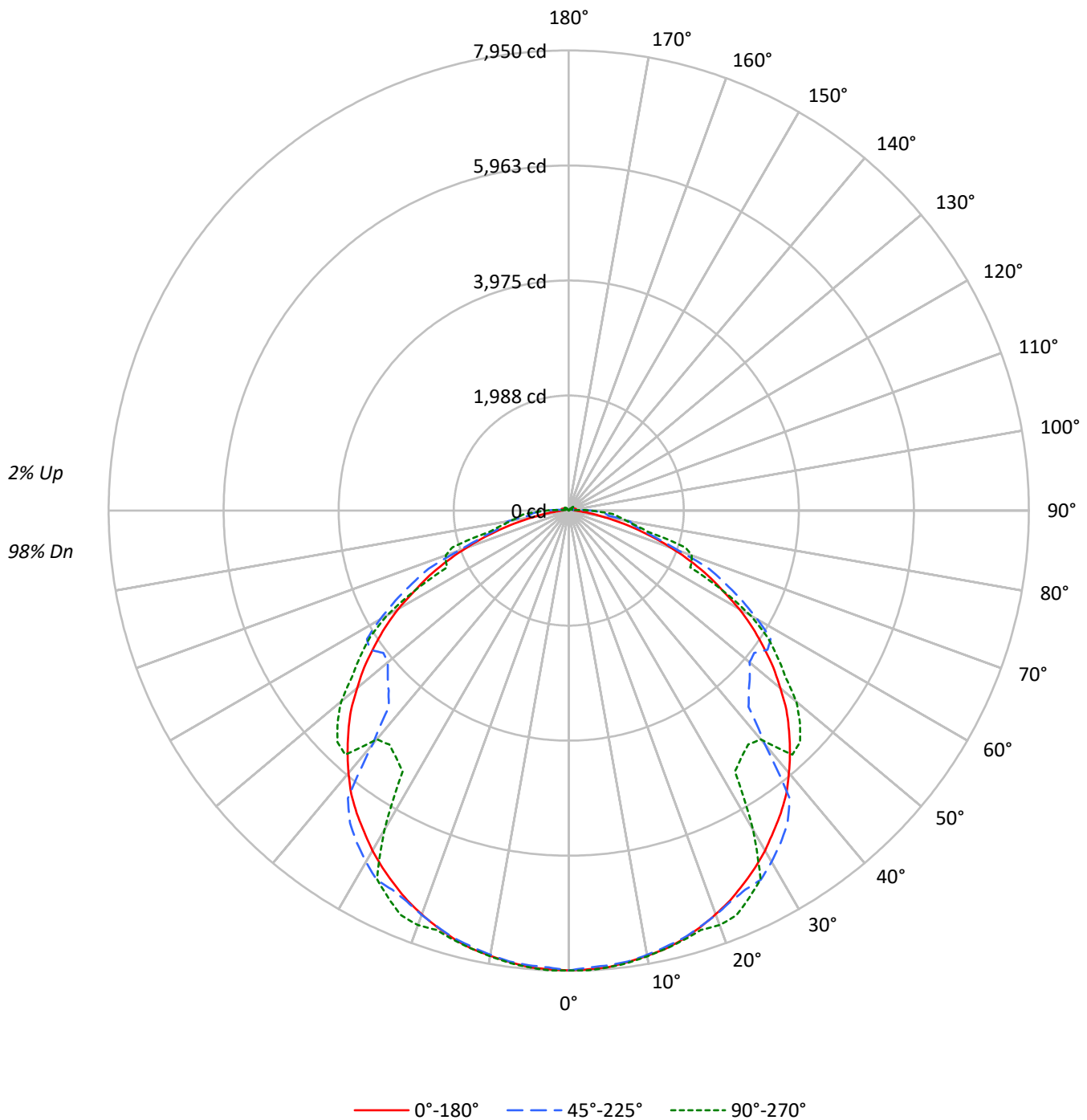
Input Watts (W): 178.82
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	103	99	95	105	101	97	93		96	93	90		92	89	87		88	86	84
2	98	90	83	77	96	88	82	76		84	79	74		81	76	72		77	74	70
3	90	79	71	64	87	77	70	64		74	68	62		71	66	61		68	64	60
4	82	70	61	54	80	69	60	54		66	59	53		63	57	52		61	56	51
5	75	63	54	47	73	61	53	47		59	52	46		57	50	45		55	49	45
6	70	56	47	41	68	55	47	41		53	46	40		51	45	40		50	44	39
7	65	51	42	36	63	50	42	36		48	41	36		47	40	35		45	39	35
8	60	47	38	32	58	46	38	32		44	37	32		43	36	31		42	36	31
9	56	43	35	29	55	42	34	29		41	34	29		40	33	28		38	33	28
10	53	39	32	26	51	39	31	26		38	31	26		37	30	26		36	30	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19899	19899	19899
5°	19801	19468	19506
10°	19657	19111	19080
15°	19552	18765	18712
20°	19362	18392	18685
25°	19159	18168	18346
30°	18958	18055	16190
35°	18733	17540	13616
40°	18416	14629	14041
45°	17981	12856	16152
50°	17343	12680	15555
55°	16493	14046	14312
60°	15414	13802	12832
65°	13926	12149	9066
70°	11814	9285	9979
75°	9290	6998	7270
80°	6133	7025	6149
85°	4143	5404	6155



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	751.5	3.3
10°-20°	2164.0	9.5
20°-30°	3338.2	14.6
30°-40°	3795.7	16.6
40°-50°	3984.6	17.4
50°-60°	3747.4	16.4
60°-70°	2602.7	11.4
70°-80°	1462.9	6.4
80°-90°	640.5	2.8
90°-100°	165.8	0.7
100°-110°	76.7	0.3
110°-120°	54.1	0.2
120°-130°	48.3	0.2
130°-140°	24.4	0.1
140°-150°	6.0	0.0
150°-160°	2.2	0.0
160°-170°	1.5	0.0
170°-180°	0.6	0.0
0°-30°	6253.7	27.3
0°-40°	10049.5	43.9
0°-60°	17781.5	77.8
0°-90°	22487.6	98.3
90°-120°	296.5	1.3
90°-150°	375.1	1.6
90°-180°	379.0	1.7
0°-180°	22867.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7944	7944	7944	7944	7944	
5°	7916	7897	7886	7916	7920	752
15°	7661	7664	7648	7669	7679	2161
25°	7127	7154	7224	7372	7380	3287
35°	6386	6434	6589	5176	5201	3993
45°	5383	5546	4400	5360	5654	4148
55°	4103	4207	4192	4415	4400	3669
65°	2655	2233	2984	2570	2317	2612
75°	1177	1152	1296	1567	1424	1256
85°	244	404	645	828	802	271
90°	105	267	383	390	385	63
95°	107	133	124	114	105	93
105°	113	87	65	56	54	117
115°	58	59	57	36	37	59
125°	28	24	69	64	70	26
135°	13	10	28	38	29	10
145°	7	6	5	8	10	4
155°	6	6	6	4	1	3
165°	7	7	7	5	3	2
175°	7	7	7	6	4	1
180°	7	7	7	7	7	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7943.7	7943.7	7943.7	7943.7	7943.7
2.5°	7932.9	7924.1	7899.6	7926.0	7950.5
5°	7916.2	7896.6	7885.8	7916.2	7920.1
7.5°	7864.3	7869.2	7856.4	7865.3	7880.9
10°	7810.4	7822.1	7794.7	7815.3	7818.2
12.5°	7751.6	7751.6	7720.2	7742.8	7753.5
15°	7661.4	7664.4	7647.7	7669.3	7679.1
17.5°	7548.7	7550.7	7539.9	7570.3	7597.7
20°	7423.3	7428.2	7433.1	7517.4	7621.2
22.5°	7289.0	7292.0	7309.6	7544.8	7569.3
25°	7127.3	7153.8	7224.4	7372.3	7380.2
27.5°	6960.7	6989.2	7189.1	7212.6	7178.3
30°	6783.4	6804.9	7007.8	6979.4	6372.8
32.5°	6578.6	6628.5	6808.8	5895.5	5343.8
35°	6385.5	6434.5	6589.3	5176.2	5200.7
37.5°	6174.8	6256.1	6268.9	5031.2	5093.9
40°	5918.0	6093.5	5271.3	4905.7	5158.6
42.5°	5657.4	5837.7	4598.0	4932.2	5719.1
45°	5383.0	5545.7	4400.1	5360.4	5653.5
47.5°	5102.7	5254.6	4243.3	5374.2	5416.3
50°	4771.5	4933.2	4077.7	5106.6	5133.1
52.5°	4456.9	4596.1	4038.5	4794.0	4716.6
55°	4103.1	4207.0	4192.3	4414.8	4400.1
57.5°	3765.1	3399.5	4134.5	4081.6	4069.8
60°	3399.5	2768.4	3769.0	3709.2	3625.9
62.5°	3001.7	2488.1	3378.9	3288.8	3015.4
65°	2654.7	2233.4	2984.0	2569.5	2316.7
67.5°	2268.6	1937.4	2621.4	2086.4	2298.0
70°	1881.5	1615.0	2008.0	2039.3	2260.8
72.5°	1521.9	1357.3	1609.1	2017.8	2107.9
75°	1176.9	1151.5	1296.5	1567.0	1423.9
77.5°	842.8	1047.6	1136.8	1204.4	1178.9
80°	571.3	735.0	1074.0	1019.2	1006.4
82.5°	385.1	548.8	696.8	873.2	883.0
85°	244.0	403.7	644.8	828.1	801.6
87.5°	160.7	314.6	542.9	580.1	564.5
90°	104.9	266.6	383.2	390.0	385.1
92.5°	88.2	193.1	238.1	216.6	198.0
95°	106.8	133.3	124.5	113.7	104.9
97.5°	126.4	89.2	83.3	83.3	86.2
100°	130.3	85.3	67.6	60.8	57.8
102.5°	124.5	90.2	63.7	59.8	56.8
105°	112.7	87.2	64.7	55.9	53.9
107.5°	98.0	80.4	65.7	55.9	50.0
110°	83.3	73.5	57.8	62.7	61.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	69.6	66.6	51.0	47.0	51.9
115°	57.8	58.8	56.8	36.3	37.2
117.5°	49.0	51.0	74.5	36.3	32.3
120°	41.2	40.2	64.7	73.5	42.1
122.5°	34.3	31.4	77.4	80.4	87.2
125°	28.4	23.5	68.6	63.7	69.6
127.5°	23.5	18.6	39.2	99.0	64.7
130°	19.6	14.7	36.3	74.5	100.0
132.5°	15.7	12.7	51.9	39.2	61.7
135°	12.7	9.8	28.4	38.2	29.4
137.5°	10.8	8.8	13.7	69.6	52.9
140°	8.8	6.9	7.8	39.2	59.8
142.5°	7.8	5.9	5.9	14.7	31.4
145°	6.9	5.9	4.9	7.8	9.8
147.5°	5.9	4.9	4.9	5.9	4.9
150°	5.9	4.9	4.9	3.9	2.9
152.5°	5.9	5.9	4.9	2.9	2.0
155°	5.9	5.9	5.9	3.9	1.0
157.5°	5.9	5.9	5.9	3.9	2.0
160°	5.9	5.9	5.9	3.9	2.0
162.5°	5.9	5.9	5.9	3.9	2.0
165°	6.9	6.9	6.9	4.9	2.9
167.5°	6.9	6.9	6.9	4.9	2.9
170°	6.9	6.9	6.9	4.9	2.9
172.5°	6.9	6.9	6.9	5.9	3.9
175°	6.9	6.9	6.9	5.9	3.9
177.5°	6.9	6.9	6.9	5.9	3.9
180°	6.9	6.9	6.9	6.9	6.9

(END OF REPORT)