

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: P236636

Luminaire Tested: **VRVT4LED-LD5-30-PC-UNV-L850-CD3-WL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P236636
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-367-16)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VRVT4LED-LD5-30-PC-UNV-L850-CD3-WL-U
Description: METALUX VRVT4 LED LUMINAIRE
12 BOARDS WITH CLEAR POLY CARBONATE LENS
Light Source: (672) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31147.0 lumens
Efficiency: N/A
Efficacy: 134.0 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.17 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 1.04' x L: 4.12' x H: 0.25')
CIE Type: Direct

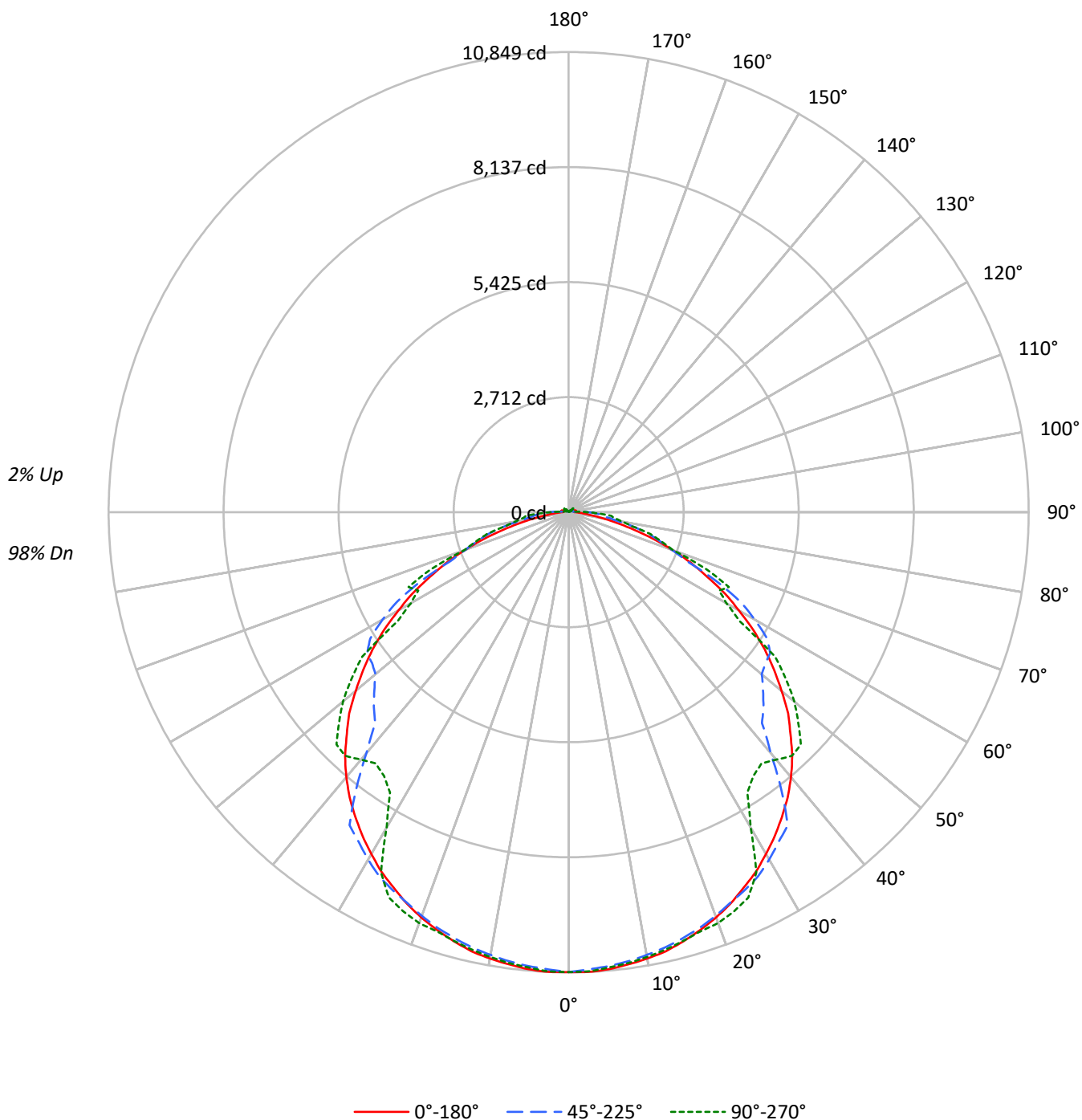
Input Watts (W): 232.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P236636

CATALOG NUMBER: VRVT4LED-LD5-30-PC-UNV-L850-CD3-WL-U

Luminous Intensity Polar Plot





TEST NUMBER: P236636

CATALOG NUMBER: VRVT4LED-LD5-30-PC-UNV-L850-CD3-WL-U

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			98
1	108	103	99	95	105	101	97	94	96	93	90	92	90	87	88	86	84			82
2	99	90	83	78	96	88	82	77	84	79	75	81	77	73	78	74	71			69
3	90	79	71	65	87	78	70	64	74	68	63	71	66	61	69	64	60			58
4	82	70	61	55	80	69	61	54	66	59	53	64	57	52	61	56	52			49
5	76	63	54	47	73	62	53	47	59	52	46	57	51	45	55	49	45			43
6	70	56	48	41	68	55	47	41	53	46	40	52	45	40	50	44	39			37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35			33
8	60	47	38	32	59	46	38	32	44	37	32	43	36	32	42	36	31			29
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28			26
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°	27165	27165	27165
5°	27060	26524	26541
10°	26897	25988	25987
15°	26723	25515	25491
20°	26518	25064	25270
25°	26256	24717	24914
30°	26005	24364	21811
35°	25719	23985	19877
40°	25382	20581	20727
45°	24706	18972	22121
50°	23810	18491	21046
55°	22686	19436	19322
60°	20998	18566	15212
65°	18898	15642	16316
70°	16305	11935	11568
75°	12568	10474	10189
80°	8430	7408	7841
85°	5844	6529	7730



TEST NUMBER: P236636

CATALOG NUMBER: VRVT4LED-LD5-30-PC-UNV-L850-CD3-WL-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1024.5	3.3
10°-20°	2948.2	9.5
20°-30°	4528.8	14.5
30°-40°	5259.8	16.9
40°-50°	5556.6	17.8
50°-60°	5080.9	16.3
60°-70°	3567.0	11.5
70°-80°	1908.0	6.1
80°-90°	782.3	2.5
90°-100°	199.2	0.6
100°-110°	99.5	0.3
110°-120°	70.4	0.2
120°-130°	69.6	0.2
130°-140°	35.7	0.1
140°-150°	10.0	0.0
150°-160°	3.3	0.0
160°-170°	2.2	0.0
170°-180°	0.8	0.0
0°-30°	8501.6	27.3
0°-40°	13761.4	44.2
0°-60°	24398.9	78.3
0°-90°	30656.2	98.4
90°-120°	369.0	1.2
90°-150°	484.4	1.6
90°-180°	491.0	1.6
0°-180°	31147.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10844	10844	10844	10844	10844	
5°	10818	10800	10744	10765	10776	1028
15°	10472	10432	10399	10448	10461	2956
25°	9768	9754	9829	9960	10022	4507
35°	8767	8776	9010	7558	7592	5487
45°	7396	7496	6494	7385	7743	5708
55°	5644	5584	5801	6043	5940	5030
65°	3602	3222	3842	3592	4169	3583
75°	1592	1618	1941	1855	1996	1719
85°	344	482	779	976	1007	371
90°	150	312	470	447	414	89
95°	140	162	148	123	113	126
105°	157	115	80	68	63	163
115°	82	83	72	45	44	85
125°	42	35	108	98	128	38
135°	20	16	28	83	49	16
145°	10	8	8	30	24	7
155°	8	8	8	5	3	4
165°	9	9	9	7	4	3
175°	9	9	10	8	6	1
180°	9	9	9	9	9	



TEST NUMBER: P236636

CATALOG NUMBER: VRVT4LED-LD5-30-PC-UNV-L850-CD3-WL-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	10844.0	10844.0	10844.0	10844.0	10844.0
2.5°	10849.2	10837.7	10790.9	10815.9	10837.7
5°	10818.0	10800.3	10744.1	10764.9	10776.4
7.5°	10755.6	10745.2	10682.8	10707.7	10723.3
10°	10686.9	10658.8	10599.6	10640.1	10648.4
12.5°	10601.6	10551.7	10510.1	10549.6	10562.1
15°	10471.6	10432.1	10398.8	10447.7	10461.2
17.5°	10327.1	10281.3	10274.0	10314.6	10357.2
20°	10166.9	10123.2	10129.5	10230.4	10307.3
22.5°	9983.9	9946.4	9965.2	10135.7	10187.7
25°	9767.6	9754.0	9828.9	9960.0	10022.4
27.5°	9561.6	9533.6	9678.1	9824.8	9580.4
30°	9304.8	9299.6	9456.6	9148.8	8585.1
32.5°	9051.0	9064.5	9216.4	8282.5	7837.3
35°	8767.1	8776.5	9010.5	7557.6	7591.9
37.5°	8480.1	8534.1	8235.7	7331.9	7467.1
40°	8156.6	8283.5	7416.2	7214.4	7614.8
42.5°	7803.0	7897.7	6747.4	7226.9	7791.6
45°	7396.4	7496.2	6493.7	7385.0	7742.7
47.5°	7016.8	7090.6	6215.0	7369.4	7344.4
50°	6550.9	6704.8	5946.6	6911.8	6945.0
52.5°	6103.7	6258.6	5841.6	6501.0	6458.3
55°	5644.0	5583.7	5801.1	6043.4	5940.4
57.5°	5158.3	4782.9	5548.3	5425.6	4777.7
60°	4631.1	4064.3	5069.9	4300.3	4298.3
62.5°	4153.7	3625.4	4560.3	3918.7	3998.8
65°	3602.5	3221.9	3841.7	3592.1	4169.3
67.5°	3122.0	2786.1	3012.8	3672.2	3523.5
70°	2596.8	2360.8	2581.2	2875.6	2620.8
72.5°	2091.4	1961.4	2240.1	2256.8	2285.9
75°	1592.2	1618.2	1940.6	1855.3	1995.7
77.5°	1152.3	1235.5	1549.6	1592.2	1531.9
80°	785.2	964.1	1132.5	1183.5	1283.3
82.5°	512.7	652.1	910.0	1030.6	1089.9
85°	344.2	481.5	779.0	976.5	1006.7
87.5°	230.9	413.9	652.1	739.4	688.5
90°	149.8	312.0	470.1	447.2	413.9
92.5°	121.7	236.1	272.5	244.4	216.3
95°	140.4	162.2	147.7	122.7	113.4
97.5°	170.6	112.3	105.0	109.2	111.3
100°	178.9	111.3	89.4	88.4	89.4
102.5°	172.6	117.5	82.2	79.0	75.9
105°	157.0	115.4	80.1	67.6	63.4
107.5°	137.3	108.2	78.0	66.6	60.3
110°	117.5	99.8	71.8	65.5	64.5



TEST NUMBER: P236636

CATALOG NUMBER: VRVT4LED-LD5-30-PC-UNV-L850-CD3-WL-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	98.8	93.6	65.5	54.1	55.1
115°	82.2	83.2	71.8	44.7	43.7
117.5°	69.7	72.8	103.0	42.6	36.4
120°	59.3	59.3	99.8	78.0	46.8
122.5°	48.9	46.8	96.7	127.9	104.0
125°	41.6	35.4	108.2	97.8	127.9
127.5°	34.3	28.1	60.3	115.4	90.5
130°	29.1	22.9	69.7	131.0	141.4
132.5°	23.9	18.7	58.2	56.2	99.8
135°	19.8	15.6	28.1	83.2	48.9
137.5°	15.6	13.5	19.8	83.2	94.6
140°	13.5	11.4	20.8	27.0	60.3
142.5°	11.4	9.4	13.5	21.8	20.8
145°	10.4	8.3	8.3	30.2	23.9
147.5°	8.3	8.3	7.3	23.9	32.2
150°	8.3	7.3	7.3	9.4	18.7
152.5°	7.3	7.3	7.3	5.2	5.2
155°	8.3	8.3	8.3	5.2	3.1
157.5°	8.3	8.3	8.3	5.2	3.1
160°	8.3	8.3	8.3	6.2	4.2
162.5°	8.3	8.3	9.4	6.2	4.2
165°	9.4	9.4	9.4	7.3	4.2
167.5°	9.4	9.4	9.4	7.3	5.2
170°	9.4	9.4	9.4	7.3	5.2
172.5°	9.4	9.4	10.4	7.3	6.2
175°	9.4	9.4	10.4	8.3	6.2
177.5°	9.4	9.4	10.4	8.3	7.3
180°	9.4	9.4	9.4	9.4	9.4

(END OF REPORT)