

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: P236615

Luminaire Tested: **VRVT4LED-LD5-18-DRF-UNV-L850-CD2-WL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P236615
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-L850-CD2-WL-U
Description: METALUX VRVT4 LED LUMINAIRE
8 BOARDS WITH FROSTED ACYLIC LENS
Light Source: (448) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18630.0 lumens
Efficiency: N/A
Efficacy: 139.8 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

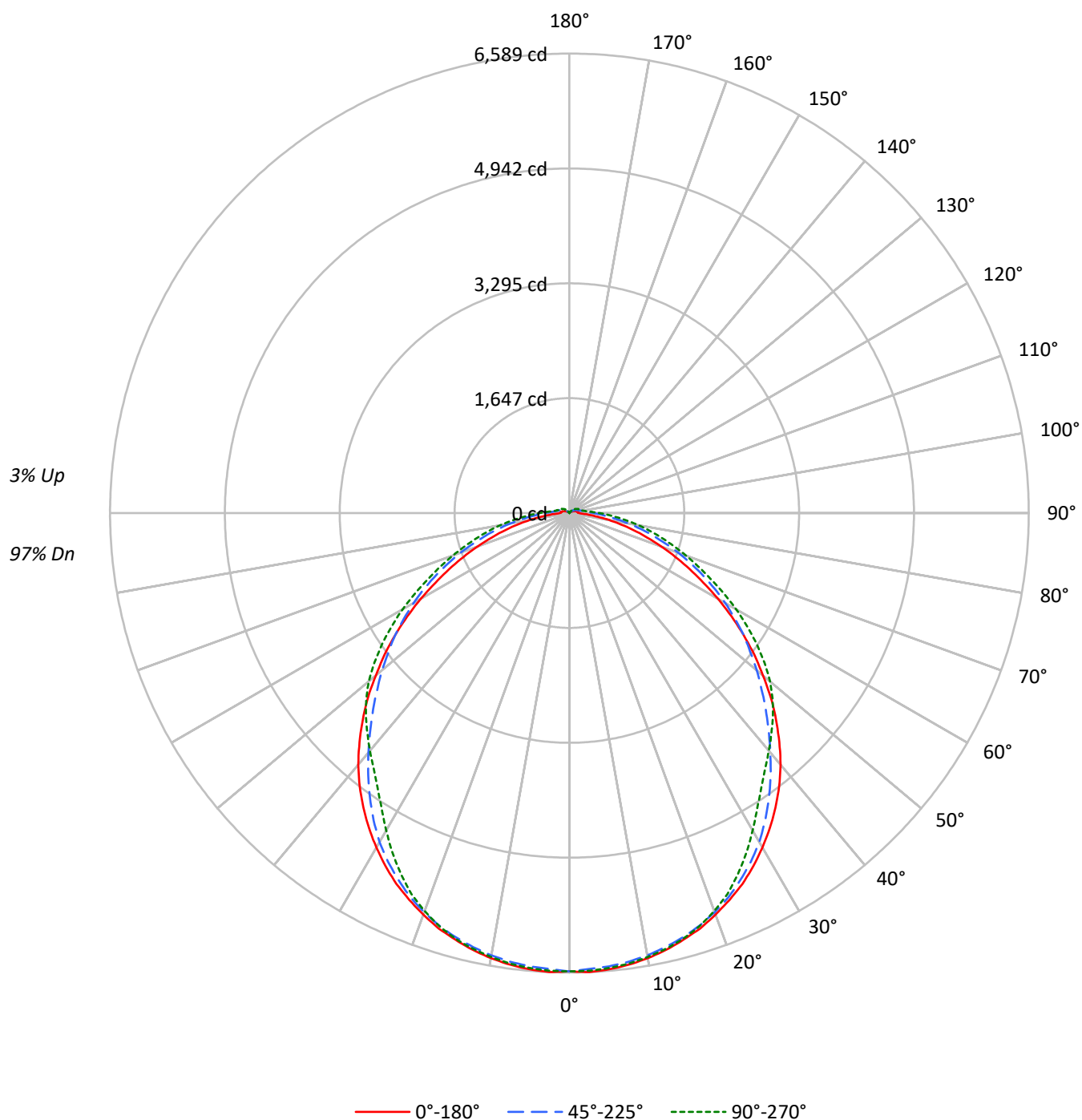
Input Watts (W): 133.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16463	16463	16463
5°	16429	16106	16130
10°	16310	15792	15772
15°	16159	15452	15391
20°	15981	15070	14891
25°	15779	14597	14209
30°	15478	14030	13349
35°	15118	13278	12564
40°	14664	12440	12114
45°	14000	11632	11791
50°	13170	10908	11390
55°	12261	10220	10669
60°	11157	9449	9780
65°	9968	8605	8751
70°	8796	7666	7836
75°	7586	6674	6977
80°	6230	5592	6126
85°	4715	4611	5191



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	622.0	3.3
10°-20°	1780.9	9.6
20°-30°	2668.9	14.3
30°-40°	3118.9	16.7
40°-50°	3153.2	16.9
50°-60°	2783.1	14.9
60°-70°	2067.2	11.1
70°-80°	1267.9	6.8
80°-90°	583.8	3.1
90°-100°	244.6	1.3
100°-110°	149.3	0.8
110°-120°	98.6	0.5
120°-130°	56.1	0.3
130°-140°	25.1	0.1
140°-150°	7.1	0.0
150°-160°	1.7	0.0
160°-170°	1.1	0.0
170°-180°	0.5	0.0
0°-30°	5071.9	27.2
0°-40°	8190.8	44.0
0°-60°	14127.0	75.8
0°-90°	18045.9	96.9
90°-120°	492.5	2.6
90°-150°	580.8	3.1
90°-180°	584.0	3.1
0°-180°	18630.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6572	6572	6572	6572	6572	
5°	6568	6552	6524	6544	6549	624
15°	6332	6318	6298	6317	6316	1787
25°	5870	5849	5804	5763	5716	2702
35°	5153	5137	4988	4832	4799	3221
45°	4191	4153	3981	4063	4127	3229
55°	3050	3003	3050	3251	3280	2725
65°	1900	1907	2113	2235	2236	1890
75°	961	1036	1237	1336	1367	1024
85°	278	373	550	660	676	289
90°	135	215	344	418	428	79
95°	122	167	231	262	265	98
105°	97	112	149	165	168	102
115°	58	63	106	129	136	59
125°	30	25	63	92	102	28
135°	15	11	26	52	60	12
145°	7	5	4	18	23	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°	6572.0	6572.0	6572.0	6572.0	6572.0
2.5°	6588.7	6572.0	6543.9	6562.7	6567.9
5°	6567.9	6552.3	6524.2	6543.9	6549.1
7.5°	6532.5	6516.9	6489.9	6509.6	6516.9
10°	6480.5	6464.9	6441.0	6456.6	6462.8
12.5°	6415.0	6401.5	6374.4	6397.3	6400.4
15°	6331.8	6318.3	6297.5	6317.2	6316.2
17.5°	6243.4	6223.6	6203.8	6214.2	6210.1
20°	6126.9	6109.2	6090.5	6084.2	6073.8
22.5°	6003.1	5988.6	5962.6	5937.6	5915.8
25°	5870.0	5849.2	5804.5	5762.9	5716.1
27.5°	5709.8	5697.3	5636.0	5548.6	5494.5
30°	5538.2	5525.7	5445.7	5314.6	5254.3
32.5°	5353.1	5337.5	5225.2	5078.5	5014.0
35°	5153.4	5136.8	4988.0	4832.0	4798.8
37.5°	4941.2	4913.2	4741.6	4609.5	4611.5
40°	4712.4	4675.0	4482.6	4410.8	4450.3
42.5°	4456.6	4425.4	4228.8	4234.0	4288.1
45°	4191.4	4152.9	3981.3	4063.4	4126.9
47.5°	3921.0	3872.1	3736.9	3872.1	3952.2
50°	3623.5	3582.9	3508.1	3688.0	3758.7
52.5°	3343.7	3306.3	3268.9	3472.7	3525.7
55°	3050.4	3002.6	3050.4	3251.2	3280.3
57.5°	2757.2	2714.5	2809.2	3004.7	3022.4
60°	2460.7	2430.6	2580.3	2747.8	2763.4
62.5°	2168.5	2166.4	2345.3	2487.8	2495.1
65°	1900.2	1907.4	2113.4	2235.0	2236.1
67.5°	1644.3	1671.3	1878.3	1984.4	1999.0
70°	1400.9	1447.7	1657.8	1757.7	1775.4
72.5°	1171.1	1233.5	1433.2	1538.2	1563.2
75°	961.0	1035.9	1236.6	1336.5	1366.6
77.5°	761.3	845.6	1041.1	1148.2	1186.7
80°	580.3	665.6	854.9	972.4	1002.6
82.5°	407.7	508.6	693.7	813.3	837.2
85°	277.7	373.4	550.2	660.4	676.0
87.5°	175.8	277.7	436.8	527.3	540.8
90°	135.2	215.3	344.3	418.1	427.5
92.5°	126.9	185.1	277.7	325.5	334.9
95°	121.7	167.4	230.9	262.1	265.2
97.5°	117.5	151.8	202.8	222.6	222.6
100°	112.3	138.3	181.0	195.5	195.5
102.5°	106.1	124.8	163.3	177.8	181.0
105°	96.7	112.3	148.7	165.4	168.5
107.5°	87.4	99.8	137.3	155.0	159.1
110°	78.0	87.4	126.9	145.6	151.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	67.6	75.9	116.5	137.3	144.6
115°	58.2	63.4	106.1	129.0	136.2
117.5°	49.9	52.0	95.7	119.6	129.0
120°	42.6	41.6	85.3	111.3	120.6
122.5°	35.4	33.3	74.9	101.9	111.3
125°	30.2	25.0	63.4	91.5	101.9
127.5°	25.0	19.8	54.1	81.1	92.6
130°	20.8	16.6	43.7	71.8	82.2
132.5°	17.7	13.5	34.3	61.4	70.7
135°	14.6	11.4	26.0	52.0	60.3
137.5°	12.5	9.4	18.7	41.6	51.0
140°	10.4	8.3	11.4	32.2	40.6
142.5°	8.3	6.2	6.2	25.0	31.2
145°	7.3	5.2	4.2	17.7	22.9
147.5°	6.2	5.2	3.1	10.4	14.6
150°	5.2	4.2	3.1	4.2	8.3
152.5°	5.2	5.2	3.1	2.1	2.1
155°	5.2	5.2	4.2	2.1	1.0
157.5°	5.2	5.2	4.2	2.1	1.0
160°	5.2	5.2	4.2	2.1	1.0
162.5°	6.2	5.2	4.2	2.1	1.0
165°	6.2	5.2	4.2	2.1	1.0
167.5°	6.2	6.2	5.2	3.1	2.1
170°	6.2	6.2	5.2	3.1	2.1
172.5°	6.2	6.2	5.2	3.1	2.1
175°	6.2	6.2	5.2	3.1	3.1
177.5°	6.2	6.2	5.2	3.1	3.1
180°	5.2	5.2	5.2	5.2	5.2

(END OF REPORT)