

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: P#

Luminaire Tested: **VT4S-LD5-18-DR-L850-CD2-U**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

**Test Information**

Test Method: LM-79-08  
Report Number: P#  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1801-511-1)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: VT4S-LD5-18-DR-L850-CD2-U  
Description: VT4S VAPORTIGHT FIXTURE WITH 5000K LED AND CLEAR ACRYLIC LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

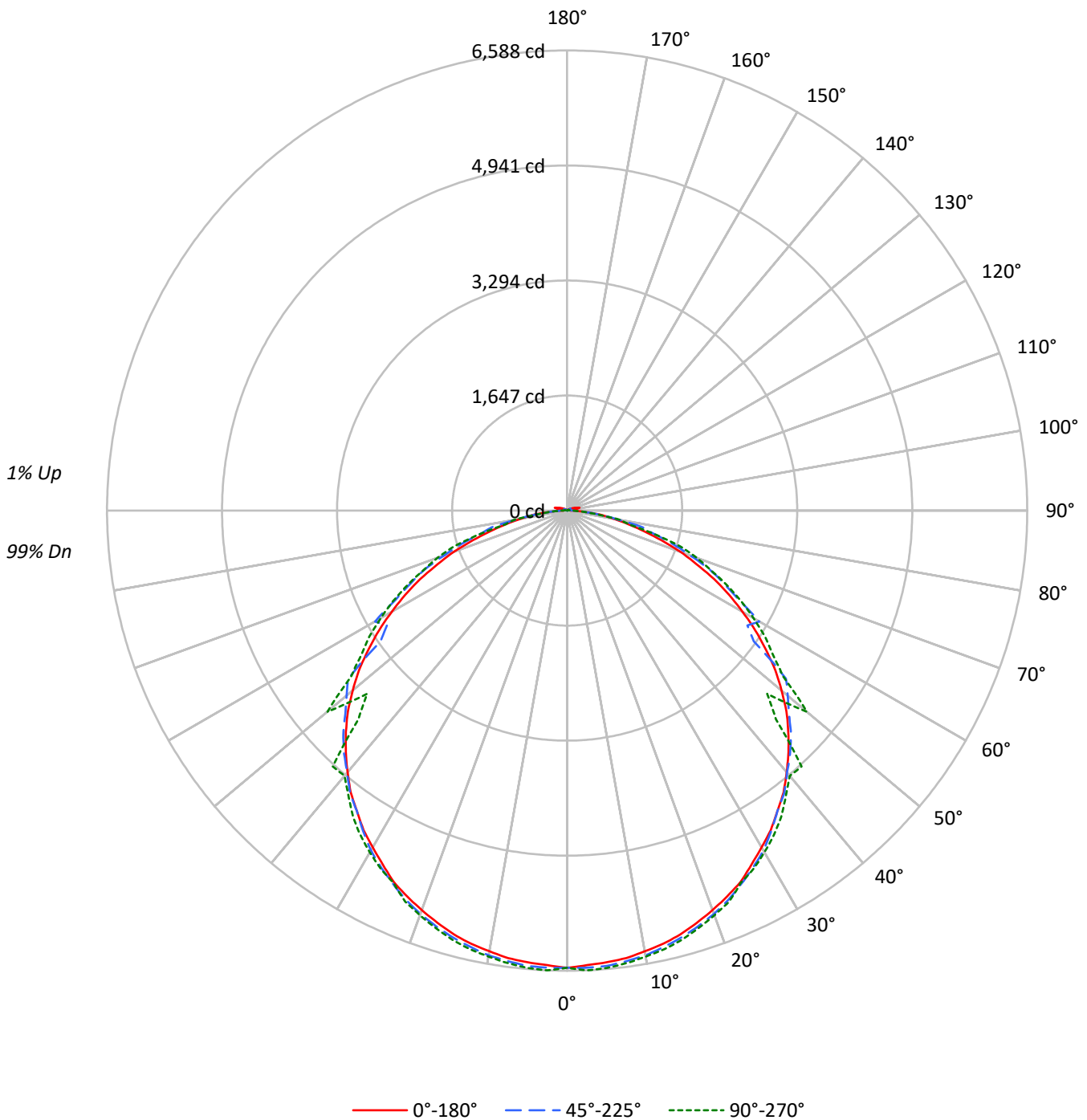
Lumens per Lamp: N/A  
Luminaire Lumens: 19335.0 lumens  
Efficiency: N/A  
Efficacy: 140.6 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.28 / 1.4  
Luminous Opening: Rectangular w/ Sides (W: 1.08' x L: 2.08' x H: 0.25')  
CIE Type: Direct

Input Watts (W): 137.5  
Input Voltage (V): NR  
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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	101	101	101	99
1	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	99	90	83	78	96	88	82	77	84	79	75	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	64	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	47	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	70	56	47	41	68	55	47	40	53	46	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	46	37	32	44	37	31	43	36	31	42	35	31	29
9	56	42	34	29	54	42	34	29	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	31230	31230	31230
5°	30770	30674	30855
10°	30401	30011	30184
15°	30054	29306	29587
20°	29610	28613	28875
25°	29267	27836	27960
30°	28688	27080	27468
35°	28213	26058	26813
40°	27674	25255	25872
45°	26984	24504	23166
50°	26025	23620	26074
55°	24659	20038	22483
60°	22896	21198	21005
65°	20810	18262	19009
70°	18095	15504	16833
75°	14388	12255	12577
80°	11072	8388	9135
85°	6985	3995	4057



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	621.7	3.2
10°-20°	1785.4	9.2
20°-30°	2717.6	14.1
30°-40°	3310.6	17.1
40°-50°	3457.6	17.9
50°-60°	3163.2	16.4
60°-70°	2415.8	12.5
70°-80°	1317.1	6.8
80°-90°	355.8	1.8
90°-100°	54.4	0.3
100°-110°	66.2	0.3
110°-120°	39.8	0.2
120°-130°	19.0	0.1
130°-140°	6.5	0.0
140°-150°	2.0	0.0
150°-160°	1.0	0.0
160°-170°	1.0	0.0
170°-180°	0.4	0.0
0°-30°	5124.6	26.5
0°-40°	8435.2	43.6
0°-60°	15056.0	77.9
0°-90°	19144.8	99.0
90°-120°	160.4	0.8
90°-150°	187.9	1.0
90°-180°	190.0	1.0
0°-180°	19335.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6545	6545	6545	6545	6545	
5°	6492	6518	6543	6566	6572	617
15°	6280	6304	6327	6350	6360	1772
25°	5870	5889	5899	5915	5882	2700
35°	5251	5279	5251	5318	5347	3288
45°	4479	4499	4532	4765	4226	3452
55°	3472	3493	3262	3618	3594	3103
65°	2318	2388	2478	2486	2517	2287
75°	1130	1216	1280	1278	1270	1223
85°	303	305	280	272	270	330
90°	52	86	82	80	78	39
95°	49	45	47	39	39	58
105°	158	210	27	29	29	158
115°	78	39	52	18	21	80
125°	35	29	14	8	10	33
135°	16	12	6	4	4	13
145°	6	4	2	2	2	4
155°	2	2	2	2	2	1
165°	4	4	4	4	2	1
175°	4	4	4	4	4	0
180°	4	4	4	4	4	



TEST NUMBER: P#

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	6545.2	6545.2	6545.2	6545.2	6545.2
2.5°	6514.4	6530.8	6551.4	6580.2	6588.5
5°	6491.7	6518.5	6543.2	6565.8	6572.0
7.5°	6462.9	6495.8	6506.1	6534.9	6534.9
10°	6407.3	6444.4	6465.0	6483.5	6483.5
12.5°	6353.8	6380.6	6399.1	6421.7	6432.0
15°	6279.7	6304.4	6327.1	6349.7	6360.0
17.5°	6185.0	6224.2	6238.6	6257.1	6265.3
20°	6086.2	6123.3	6143.9	6160.3	6164.5
22.5°	5981.3	6010.1	6030.7	6036.9	6059.5
25°	5870.1	5888.7	5898.9	5915.4	5882.5
27.5°	5713.7	5748.7	5763.1	5748.7	5781.6
30°	5567.6	5602.6	5619.0	5623.1	5649.9
32.5°	5423.5	5448.2	5440.0	5470.8	5509.9
35°	5250.6	5279.4	5250.6	5318.5	5347.3
37.5°	5088.0	5102.4	5104.5	5172.4	5143.6
40°	4890.4	4908.9	4898.6	4941.9	4958.3
42.5°	4690.8	4707.2	4725.7	4758.7	4968.6
45°	4478.8	4499.3	4532.3	4764.9	4225.6
47.5°	4258.5	4262.6	4305.9	3949.8	3881.9
50°	4007.4	4005.4	4122.7	3750.1	4478.8
52.5°	3756.3	3754.3	3949.8	4126.8	3896.3
55°	3472.3	3492.9	3262.3	3618.4	3593.7
57.5°	3196.5	3215.0	3058.6	3305.6	3359.1
60°	2898.0	2970.1	3175.9	3079.1	3081.2
62.5°	2614.0	2677.8	2768.3	2799.2	2811.6
65°	2317.6	2387.6	2478.1	2486.4	2517.2
67.5°	2002.7	2103.5	2212.6	2198.2	2227.0
70°	1724.8	1601.3	1868.9	1881.2	1971.8
72.5°	1412.0	1560.2	1580.7	1317.3	1696.0
75°	1130.0	1216.4	1280.2	1278.2	1269.9
77.5°	895.3	953.0	1107.3	996.2	901.5
80°	677.2	693.6	734.8	730.7	767.7
82.5°	510.4	485.7	500.2	494.0	436.3
85°	302.6	304.6	279.9	271.7	269.6
87.5°	125.6	140.0	135.8	129.7	140.0
90°	51.5	86.4	82.3	80.3	78.2
92.5°	57.6	61.7	57.6	49.4	43.2
95°	49.4	45.3	47.3	39.1	39.1
97.5°	67.9	37.0	37.0	32.9	30.9
100°	135.8	32.9	35.0	28.8	28.8
102.5°	181.1	35.0	30.9	28.8	30.9
105°	158.5	209.9	26.8	28.8	28.8
107.5°	133.8	123.5	24.7	26.8	28.8
110°	113.2	76.2	20.6	24.7	26.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	92.6	53.5	18.5	20.6	24.7
115°	78.2	39.1	51.5	18.5	20.6
117.5°	65.9	41.2	55.6	16.5	18.5
120°	53.5	84.4	28.8	14.4	14.4
122.5°	43.2	39.1	20.6	10.3	12.3
125°	35.0	28.8	14.4	8.2	10.3
127.5°	28.8	22.6	10.3	6.2	8.2
130°	24.7	20.6	6.2	6.2	6.2
132.5°	20.6	16.5	6.2	4.1	6.2
135°	16.5	12.3	6.2	4.1	4.1
137.5°	12.3	10.3	4.1	4.1	4.1
140°	10.3	6.2	2.1	2.1	2.1
142.5°	8.2	6.2	2.1	2.1	2.1
145°	6.2	4.1	2.1	2.1	2.1
147.5°	4.1	2.1	2.1	2.1	2.1
150°	2.1	2.1	2.1	2.1	2.1
152.5°	2.1	2.1	2.1	2.1	2.1
155°	2.1	2.1	2.1	2.1	2.1
157.5°	2.1	2.1	2.1	2.1	2.1
160°	2.1	2.1	2.1	2.1	2.1
162.5°	4.1	4.1	4.1	4.1	2.1
165°	4.1	4.1	4.1	4.1	2.1
167.5°	4.1	4.1	4.1	4.1	2.1
170°	4.1	4.1	4.1	4.1	2.1
172.5°	4.1	4.1	4.1	4.1	4.1
175°	4.1	4.1	4.1	4.1	4.1
177.5°	4.1	4.1	4.1	4.1	4.1
180°	4.1	4.1	4.1	4.1	4.1

(END OF REPORT)