

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-LD5-15-DRF-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 (G3-1801-511-5)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: VT4S-LD5-15-DRF-L850-CD2-U  
Description: VT4S VAPORTIGHT FIXTURE WITH 5000K LED AND FROSTED ACRYLIC LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

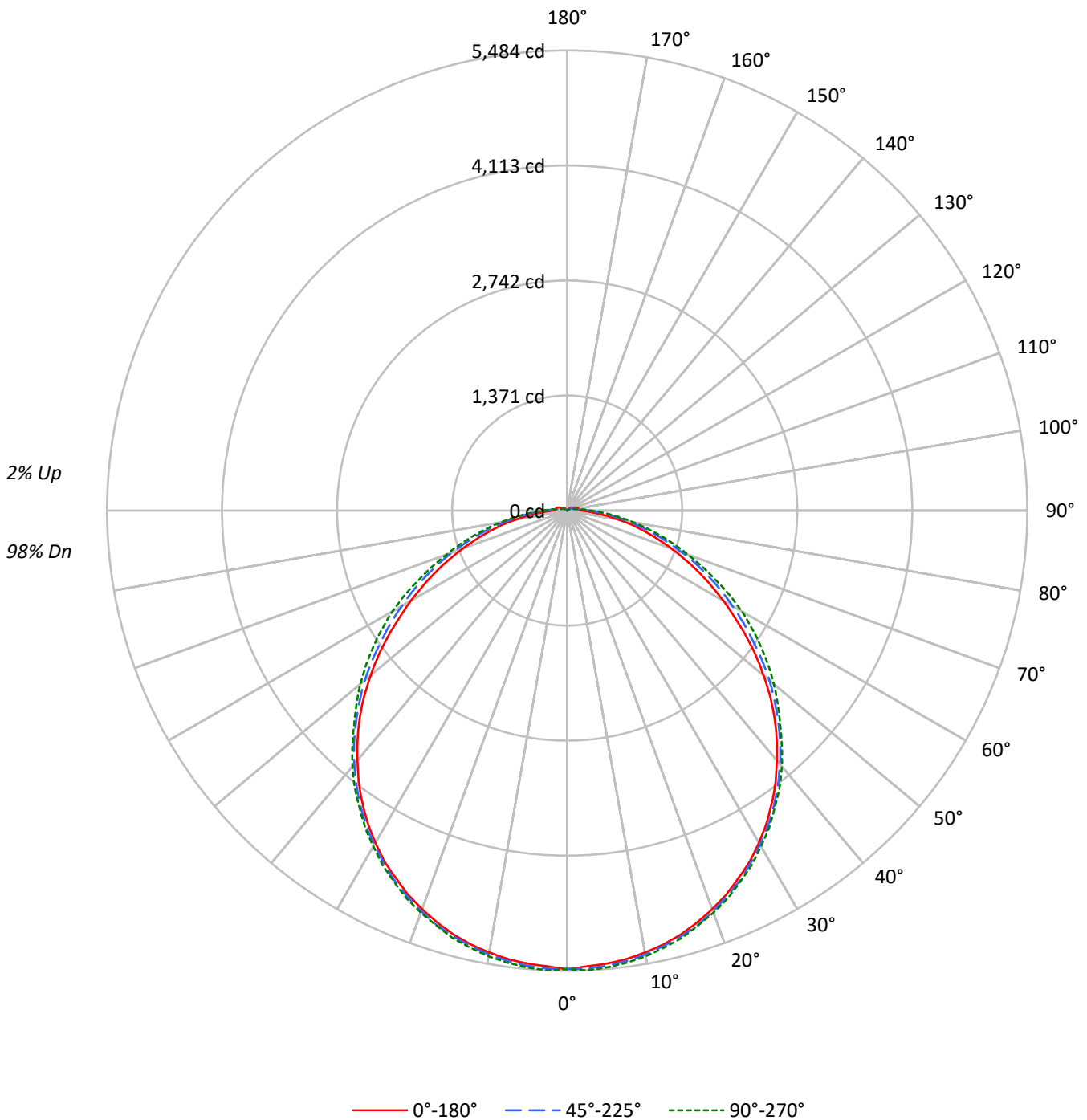
Lumens per Lamp: N/A  
Luminaire Lumens: 15932.9 lumens  
Efficiency: N/A  
Efficacy: 147.1 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.26 / 1.36  
Luminous Opening: Rectangular w/ Sides (W: 1.08' x L: 2.08' x H: 0.25')  
CIE Type: Direct

Input Watts (W): 108.3  
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	118	118	118	118	115	115	115	115	110	110	110	105	105	105	100	100	100	98
1	108	103	98	94	105	100	96	92	95	92	89	91	88	86	87	85	83	81
2	98	89	82	77	95	87	81	75	83	78	73	80	75	71	76	73	69	67
3	89	78	70	64	86	77	69	63	73	67	61	70	65	60	67	63	59	56
4	82	69	61	54	79	68	60	53	65	58	52	63	56	51	60	55	50	48
5	75	62	53	46	73	61	52	46	58	51	45	56	50	45	54	48	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	49	43	39	36
7	64	51	42	36	62	50	41	36	48	41	35	46	40	35	45	39	34	32
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	41	35	31	29
9	56	42	34	29	54	42	34	29	40	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	37	30	26	36	30	25	35	29	25	23

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

	0°	45°	90°
0°	26072	26072	26072
5°	25686	25530	25664
10°	25370	24935	25108
15°	25029	24323	24534
20°	24591	23665	23883
25°	24091	22959	23198
30°	23557	22163	22468
35°	22857	21308	21637
40°	21997	20345	20771
45°	21075	19232	19672
50°	19848	18039	18724
55°	18459	16594	17614
60°	16995	15190	16394
65°	15493	13737	14702
70°	13895	12093	13041
75°	12195	10301	11370
80°	10158	8456	9555
85°	7543	6567	7522



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	517.4	3.2
10°-20°	1481.1	9.3
20°-30°	2239.7	14.1
30°-40°	2682.7	16.8
40°-50°	2740.1	17.2
50°-60°	2425.9	15.2
60°-70°	1838.9	11.5
70°-80°	1133.5	7.1
80°-90°	501.4	3.1
90°-100°	180.1	1.1
100°-110°	96.6	0.6
110°-120°	57.6	0.4
120°-130°	26.6	0.2
130°-140°	8.2	0.1
140°-150°	1.6	0.0
150°-160°	0.7	0.0
160°-170°	0.6	0.0
170°-180°	0.2	0.0
0°-30°	4238.2	26.6
0°-40°	6920.9	43.4
0°-60°	12086.9	75.9
0°-90°	15560.7	97.7
90°-120°	334.3	2.1
90°-150°	370.7	2.3
90°-180°	372.0	2.3
0°-180°	15932.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5464	5464	5464	5464	5464	
5°	5419	5430	5446	5461	5466	515
15°	5230	5234	5251	5263	5274	1475
25°	4832	4846	4865	4880	4880	2228
35°	4254	4268	4294	4324	4315	2659
45°	3498	3517	3557	3598	3588	2692
55°	2599	2651	2702	2786	2815	2326
65°	1725	1770	1864	1936	1947	1710
75°	958	1003	1076	1133	1148	1020
85°	327	391	460	500	500	333
90°	172	216	267	290	289	99
95°	141	141	155	170	169	114
105°	126	108	80	73	74	131
115°	83	67	53	45	47	83
125°	44	36	24	22	26	40
135°	19	16	5	5	9	16
145°	6	4	1	0	0	4
155°	2	2	2	1	0	1
165°	3	3	2	1	1	1
175°	3	3	3	2	1	0
180°	3	3	3	3	3	



TEST NUMBER: P#

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5464.2	5464.2	5464.2	5464.2	5464.2
2.5°	5437.3	5443.8	5461.0	5478.1	5483.5
5°	5419.0	5429.8	5445.9	5461.0	5466.3
7.5°	5392.2	5400.8	5414.7	5429.8	5434.1
10°	5347.0	5356.7	5371.7	5385.7	5393.2
12.5°	5296.5	5300.8	5314.8	5330.9	5335.2
15°	5229.8	5234.1	5251.3	5263.2	5273.9
17.5°	5147.1	5151.4	5177.2	5182.5	5183.6
20°	5054.6	5061.1	5081.5	5091.2	5098.7
22.5°	4953.6	4962.2	4978.3	4990.1	5000.9
25°	4832.1	4846.1	4865.4	4880.5	4880.5
27.5°	4714.9	4717.1	4735.3	4751.5	4762.2
30°	4571.9	4574.1	4598.8	4617.1	4621.4
32.5°	4420.4	4429.0	4454.8	4474.1	4479.5
35°	4253.7	4267.7	4293.5	4323.6	4315.0
37.5°	4080.7	4088.2	4124.7	4149.5	4159.1
40°	3887.2	3908.7	3946.3	3973.2	3980.7
42.5°	3698.0	3717.3	3758.2	3784.0	3787.2
45°	3498.0	3517.4	3557.1	3598.0	3588.3
47.5°	3281.9	3312.0	3351.8	3394.8	3402.3
50°	3056.2	3100.3	3148.6	3184.1	3216.4
52.5°	2834.7	2870.2	2926.1	2989.5	3019.6
55°	2599.3	2650.9	2701.5	2786.4	2815.4
57.5°	2366.1	2428.4	2490.8	2584.3	2610.1
60°	2151.1	2200.5	2275.8	2367.1	2404.8
62.5°	1931.8	1988.7	2072.6	2156.4	2182.2
65°	1725.4	1770.5	1864.0	1936.1	1946.8
67.5°	1517.9	1571.6	1659.8	1735.0	1739.3
70°	1324.4	1372.8	1457.7	1521.1	1527.6
72.5°	1137.3	1186.8	1258.8	1323.3	1336.2
75°	957.8	1003.0	1076.1	1133.0	1148.1
77.5°	798.7	832.0	896.5	961.0	966.4
80°	621.3	660.0	740.7	794.4	803.0
82.5°	473.0	519.2	591.2	639.6	641.8
85°	326.8	391.3	460.1	499.9	499.9
87.5°	225.7	293.5	354.7	381.6	384.8
90°	172.0	216.1	266.6	290.2	289.2
92.5°	149.4	169.8	202.1	221.4	218.2
95°	140.8	140.8	154.8	169.8	168.8
97.5°	136.5	127.9	122.5	132.2	131.1
100°	135.4	120.4	101.0	105.3	106.4
102.5°	132.2	113.9	88.1	87.1	88.1
105°	125.8	107.5	79.5	73.1	74.2
107.5°	117.2	98.9	73.1	64.5	65.6
110°	106.4	88.1	66.6	58.0	58.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	95.7	77.4	60.2	51.6	52.7
115°	82.8	66.6	52.7	45.1	47.3
117.5°	72.0	58.0	46.2	38.7	41.9
120°	61.3	50.5	37.6	32.2	36.5
122.5°	51.6	43.0	30.1	26.9	31.2
125°	44.1	35.5	23.6	21.5	25.8
127.5°	36.5	30.1	17.2	17.2	20.4
130°	30.1	24.7	10.7	12.9	16.1
132.5°	24.7	20.4	7.5	8.6	11.8
135°	19.3	16.1	5.4	5.4	8.6
137.5°	16.1	11.8	3.2	2.1	4.3
140°	11.8	8.6	2.1	0.0	1.1
142.5°	9.7	6.4	1.1	0.0	0.0
145°	6.4	4.3	1.1	0.0	0.0
147.5°	4.3	2.1	1.1	1.1	0.0
150°	2.1	2.1	1.1	1.1	0.0
152.5°	2.1	2.1	1.1	1.1	0.0
155°	2.1	2.1	2.1	1.1	0.0
157.5°	2.1	2.1	2.1	1.1	0.0
160°	2.1	2.1	2.1	1.1	1.1
162.5°	3.2	3.2	2.1	1.1	1.1
165°	3.2	3.2	2.1	1.1	1.1
167.5°	3.2	3.2	2.1	2.1	1.1
170°	3.2	3.2	2.1	1.1	1.1
172.5°	3.2	3.2	2.1	2.1	1.1
175°	3.2	3.2	3.2	2.1	1.1
177.5°	3.2	3.2	3.2	2.1	1.1
180°	3.2	3.2	3.2	3.2	3.2

(END OF REPORT)