

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-DR-L835-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-LD5-15-DR-L835-CD2-U  
Description: VT4S VAPORTIGHT FIXTURE WITH 3500K LED AND CLEAR ACRYLIC LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

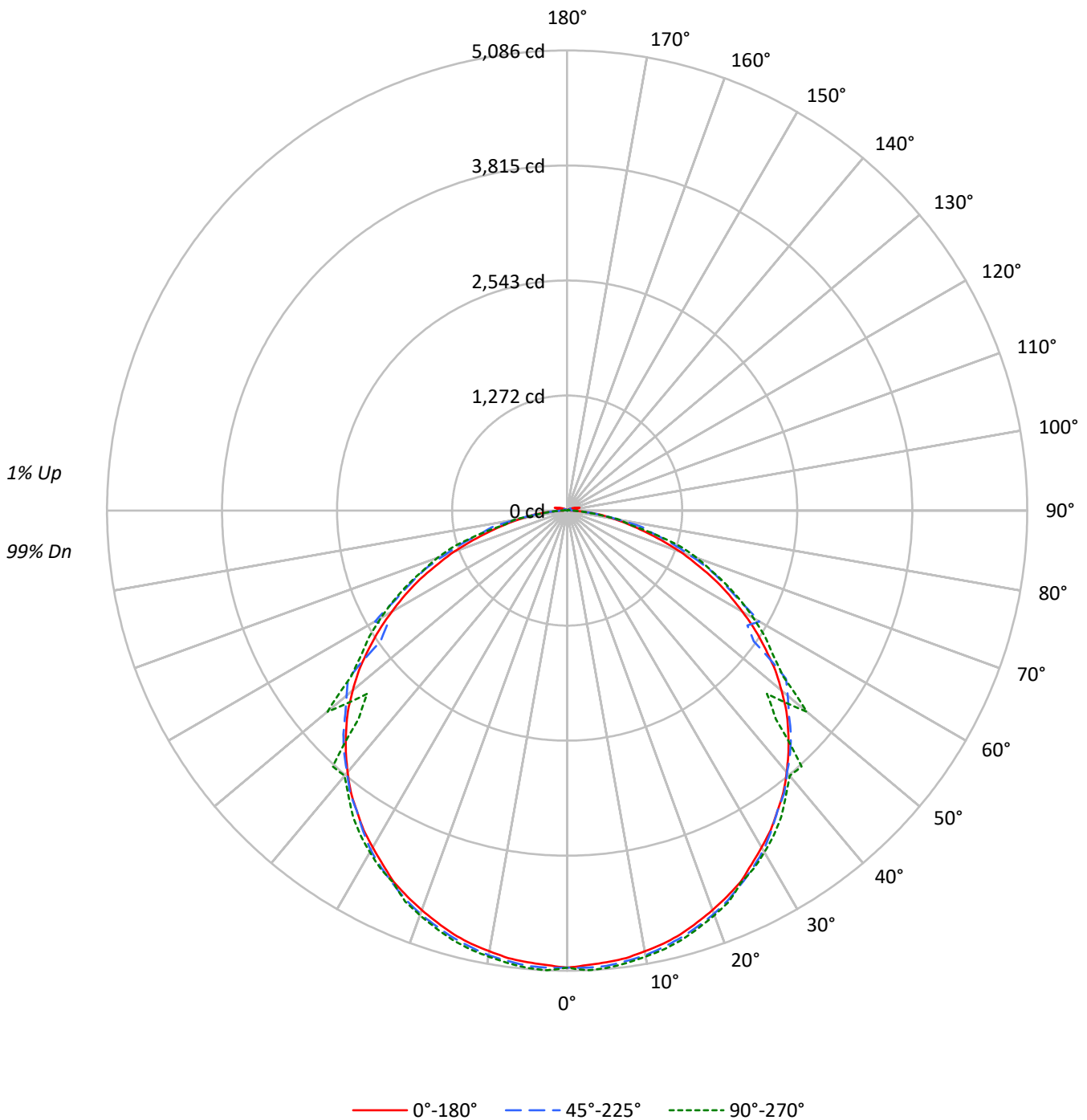
Lumens per Lamp: N/A  
Luminaire Lumens: 14925.0 lumens  
Efficiency: N/A  
Efficacy: 137.8 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.28 / 1.4  
Luminous Opening: Rectangular w/ Sides (W: 1.08' x L: 2.08' x H: 0.25')  
CIE Type: Direct

Input Watts (W): 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	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°	24107	24107	24107
5°	23752	23678	23817
10°	23467	23165	23300
15°	23199	22622	22839
20°	22857	22087	22289
25°	22592	21487	21583
30°	22144	20903	21203
35°	21778	20114	20698
40°	21362	19494	19971
45°	20829	18915	17882
50°	20089	18232	20126
55°	19034	15468	17355
60°	17674	16363	16214
65°	16064	14097	14674
70°	13968	11968	12994
75°	11105	9459	9708
80°	8546	6475	7052
85°	5392	3084	3131



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	479.9	3.2
10°-20°	1378.2	9.2
20°-30°	2097.7	14.1
30°-40°	2555.5	17.1
40°-50°	2669.0	17.9
50°-60°	2441.7	16.4
60°-70°	1864.8	12.5
70°-80°	1016.7	6.8
80°-90°	274.7	1.8
90°-100°	42.0	0.3
100°-110°	51.1	0.3
110°-120°	30.7	0.2
120°-130°	14.6	0.1
130°-140°	5.0	0.0
140°-150°	1.5	0.0
150°-160°	0.7	0.0
160°-170°	0.8	0.0
170°-180°	0.3	0.0
0°-30°	3955.8	26.5
0°-40°	6511.2	43.6
0°-60°	11622.0	77.9
0°-90°	14778.1	99.0
90°-120°	123.9	0.8
90°-150°	145.0	1.0
90°-180°	147.0	1.0
0°-180°	14925.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5052	5052	5052	5052	5052	
5°	5011	5032	5051	5068	5073	477
15°	4847	4866	4884	4901	4909	1368
25°	4531	4546	4554	4566	4541	2084
35°	4053	4075	4053	4106	4128	2538
45°	3457	3473	3498	3678	3262	2665
55°	2680	2696	2518	2793	2774	2395
65°	1789	1843	1913	1919	1943	1765
75°	872	939	988	987	980	944
85°	234	235	216	210	208	255
90°	40	67	64	62	60	30
95°	38	35	36	30	30	45
105°	122	162	21	22	22	122
115°	60	30	40	14	16	62
125°	27	22	11	6	8	25
135°	13	10	5	3	3	10
145°	5	3	2	2	2	3
155°	2	2	2	2	2	1
165°	3	3	3	3	2	1
175°	3	3	3	3	3	0
180°	3	3	3	3	3	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5052.4	5052.4	5052.4	5052.4	5052.4
2.5°	5028.5	5041.3	5057.1	5079.4	5085.7
5°	5011.1	5031.7	5050.8	5068.3	5073.0
7.5°	4988.8	5014.2	5022.2	5044.4	5044.4
10°	4945.9	4974.5	4990.4	5004.7	5004.7
12.5°	4904.6	4925.3	4939.6	4957.0	4965.0
15°	4847.4	4866.5	4884.0	4901.4	4909.4
17.5°	4774.3	4804.5	4815.6	4829.9	4836.3
20°	4698.1	4726.7	4742.6	4755.3	4758.4
22.5°	4617.0	4639.3	4655.2	4659.9	4677.4
25°	4531.3	4545.6	4553.5	4566.2	4540.8
27.5°	4410.5	4437.5	4448.6	4437.5	4462.9
30°	4297.7	4324.7	4337.4	4340.6	4361.2
32.5°	4186.5	4205.5	4199.2	4223.0	4253.2
35°	4053.0	4075.3	4053.0	4105.5	4127.7
37.5°	3927.5	3938.6	3940.2	3992.6	3970.4
40°	3775.0	3789.3	3781.3	3814.7	3827.4
42.5°	3620.9	3633.6	3647.9	3673.3	3835.4
45°	3457.2	3473.1	3498.5	3678.1	3261.8
47.5°	3287.2	3290.4	3323.8	3048.9	2996.5
50°	3093.4	3091.8	3182.4	2894.8	3457.2
52.5°	2899.6	2898.0	3048.9	3185.5	3007.6
55°	2680.3	2696.2	2518.2	2793.1	2774.0
57.5°	2467.4	2481.7	2361.0	2551.6	2592.9
60°	2237.0	2292.6	2451.5	2376.8	2378.4
62.5°	2017.8	2067.0	2136.9	2160.8	2170.3
65°	1789.0	1843.0	1912.9	1919.3	1943.1
67.5°	1545.9	1623.8	1708.0	1696.8	1719.1
70°	1331.4	1236.1	1442.6	1452.2	1522.1
72.5°	1089.9	1204.3	1220.2	1016.8	1309.2
75°	872.2	939.0	988.2	986.6	980.3
77.5°	691.1	735.6	854.8	769.0	695.9
80°	522.7	535.4	567.2	564.0	592.6
82.5°	394.0	375.0	386.1	381.3	336.8
85°	233.6	235.1	216.1	209.7	208.1
87.5°	96.9	108.0	104.9	100.1	108.0
90°	39.7	66.7	63.6	62.0	60.4
92.5°	44.5	47.7	44.5	38.1	33.4
95°	38.1	35.0	36.5	30.2	30.2
97.5°	52.4	28.6	28.6	25.4	23.8
100°	104.9	25.4	27.0	22.2	22.2
102.5°	139.8	27.0	23.8	22.2	23.8
105°	122.3	162.1	20.7	22.2	22.2
107.5°	103.3	95.3	19.1	20.7	22.2
110°	87.4	58.8	15.9	19.1	20.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	71.5	41.3	14.3	15.9	19.1
115°	60.4	30.2	39.7	14.3	15.9
117.5°	50.8	31.8	42.9	12.7	14.3
120°	41.3	65.1	22.2	11.1	11.1
122.5°	33.4	30.2	15.9	7.9	9.5
125°	27.0	22.2	11.1	6.4	7.9
127.5°	22.2	17.5	7.9	4.8	6.4
130°	19.1	15.9	4.8	4.8	4.8
132.5°	15.9	12.7	4.8	3.2	4.8
135°	12.7	9.5	4.8	3.2	3.2
137.5°	9.5	7.9	3.2	3.2	3.2
140°	7.9	4.8	1.6	1.6	1.6
142.5°	6.4	4.8	1.6	1.6	1.6
145°	4.8	3.2	1.6	1.6	1.6
147.5°	3.2	1.6	1.6	1.6	1.6
150°	1.6	1.6	1.6	1.6	1.6
152.5°	1.6	1.6	1.6	1.6	1.6
155°	1.6	1.6	1.6	1.6	1.6
157.5°	1.6	1.6	1.6	1.6	1.6
160°	1.6	1.6	1.6	1.6	1.6
162.5°	3.2	3.2	3.2	3.2	1.6
165°	3.2	3.2	3.2	3.2	1.6
167.5°	3.2	3.2	3.2	3.2	1.6
170°	3.2	3.2	3.2	3.2	1.6
172.5°	3.2	3.2	3.2	3.2	3.2
175°	3.2	3.2	3.2	3.2	3.2
177.5°	3.2	3.2	3.2	3.2	3.2
180°	3.2	3.2	3.2	3.2	3.2

(END OF REPORT)