

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-LD5-12-DR-L840-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-LD5-12-DR-L840-CD2-U  
Description: VT4S VAPORTIGHT FIXTURE WITH 4000K LED AND CLEAR ACRYLIC LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

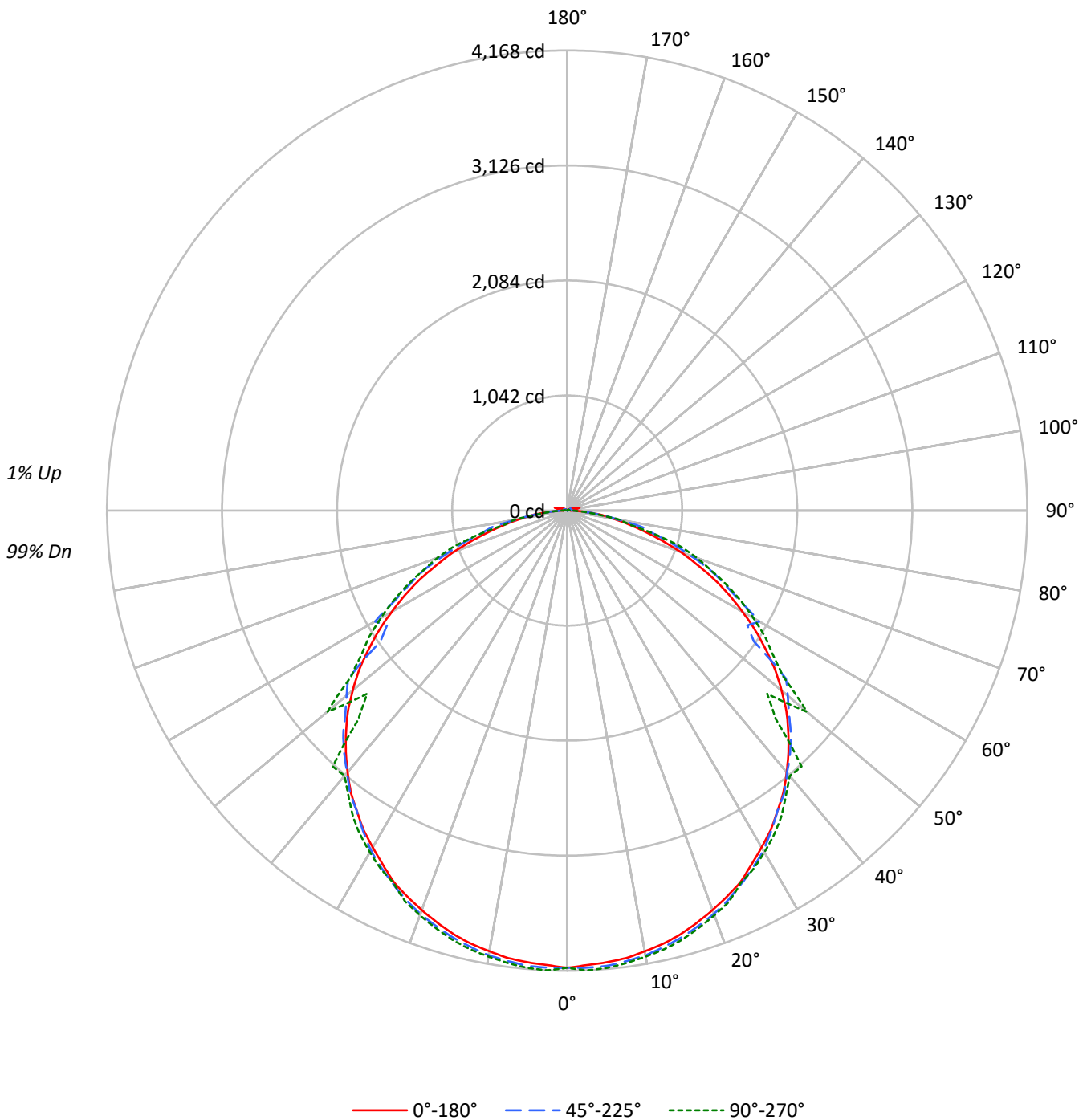
Lumens per Lamp: N/A  
Luminaire Lumens: 12232.0 lumens  
Efficiency: N/A  
Efficacy: 145.8 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.28 / 1.4  
Luminous Opening: Rectangular w/ Sides (W: 1.08' x L: 2.08' x H: 0.25')  
CIE Type: Direct

Input Watts (W): 83.9  
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°	19757	19757	19757
5°	19466	19405	19520
10°	19233	18986	19096
15°	19013	18540	18718
20°	18733	18101	18268
25°	18515	17610	17689
30°	18148	17132	17377
35°	17849	16485	16963
40°	17507	15977	16368
45°	17071	15502	14656
50°	16464	14943	16495
55°	15600	12677	14224
60°	14485	13411	13289
65°	13165	11554	12026
70°	11448	9808	10649
75°	9102	7753	7957
80°	7004	5307	5780
85°	4418	2528	2567



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	393.3	3.2
10°-20°	1129.5	9.2
20°-30°	1719.2	14.1
30°-40°	2094.4	17.1
40°-50°	2187.4	17.9
50°-60°	2001.2	16.4
60°-70°	1528.3	12.5
70°-80°	833.3	6.8
80°-90°	225.1	1.8
90°-100°	34.4	0.3
100°-110°	41.8	0.3
110°-120°	25.2	0.2
120°-130°	12.0	0.1
130°-140°	4.1	0.0
140°-150°	1.2	0.0
150°-160°	0.6	0.0
160°-170°	0.6	0.0
170°-180°	0.2	0.0
0°-30°	3242.0	26.5
0°-40°	5336.4	43.6
0°-60°	9525.0	77.9
0°-90°	12111.7	99.0
90°-120°	101.5	0.8
90°-150°	118.8	1.0
90°-180°	120.0	1.0
0°-180°	12232.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4141	4141	4141	4141	4141	
5°	4107	4124	4139	4154	4158	391
15°	3973	3988	4003	4017	4024	1121
25°	3714	3725	3732	3742	3722	1708
35°	3322	3340	3322	3365	3383	2080
45°	2833	2846	2867	3014	2673	2184
55°	2197	2210	2064	2289	2274	1963
65°	1466	1510	1568	1573	1592	1447
75°	715	770	810	809	803	774
85°	191	193	177	172	171	209
90°	33	55	52	51	50	25
95°	31	29	30	25	25	37
105°	100	133	17	18	18	100
115°	50	25	33	12	13	50
125°	22	18	9	5	6	21
135°	10	8	4	3	3	8
145°	4	3	1	1	1	3
155°	1	1	1	1	1	1
165°	3	3	3	3	1	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°	4140.7	4140.7	4140.7	4140.7	4140.7
2.5°	4121.2	4131.6	4144.7	4162.9	4168.1
5°	4106.9	4123.8	4139.4	4153.8	4157.7
7.5°	4088.7	4109.5	4116.0	4134.2	4134.2
10°	4053.5	4076.9	4090.0	4101.7	4101.7
12.5°	4019.7	4036.6	4048.3	4062.6	4069.1
15°	3972.8	3988.4	4002.7	4017.0	4023.6
17.5°	3912.9	3937.6	3946.7	3958.5	3963.7
20°	3850.4	3873.8	3886.8	3897.3	3899.9
22.5°	3784.0	3802.2	3815.2	3819.1	3833.4
25°	3713.7	3725.4	3731.9	3742.3	3721.5
27.5°	3614.7	3636.8	3645.9	3636.8	3657.7
30°	3522.2	3544.4	3554.8	3557.4	3574.3
32.5°	3431.1	3446.7	3441.5	3461.0	3485.8
35°	3321.7	3339.9	3321.7	3364.7	3382.9
37.5°	3218.8	3228.0	3229.3	3272.2	3254.0
40°	3093.8	3105.6	3099.1	3126.4	3136.8
42.5°	2967.5	2978.0	2989.7	3010.5	3143.3
45°	2833.4	2846.4	2867.3	3014.4	2673.3
47.5°	2694.1	2696.7	2724.0	2498.8	2455.8
50°	2535.2	2533.9	2608.2	2372.5	2833.4
52.5°	2376.4	2375.1	2498.8	2610.8	2464.9
55°	2196.7	2209.7	2063.9	2289.1	2273.5
57.5°	2022.2	2033.9	1935.0	2091.2	2125.1
60°	1833.4	1879.0	2009.2	1948.0	1949.3
62.5°	1653.7	1694.1	1751.4	1770.9	1778.7
65°	1466.2	1510.5	1567.8	1573.0	1592.5
67.5°	1267.0	1330.8	1399.8	1390.7	1408.9
70°	1091.2	1013.1	1182.3	1190.1	1247.4
72.5°	893.3	987.0	1000.0	833.4	1072.9
75°	714.9	769.6	809.9	808.6	803.4
77.5°	566.4	602.9	700.5	630.2	570.3
80°	428.4	438.8	464.9	462.3	485.7
82.5°	322.9	307.3	316.4	312.5	276.0
85°	191.4	192.7	177.1	171.9	170.6
87.5°	79.4	88.5	85.9	82.0	88.5
90°	32.6	54.7	52.1	50.8	49.5
92.5°	36.5	39.1	36.5	31.3	27.3
95°	31.3	28.6	29.9	24.7	24.7
97.5°	43.0	23.4	23.4	20.8	19.5
100°	85.9	20.8	22.1	18.2	18.2
102.5°	114.6	22.1	19.5	18.2	19.5
105°	100.3	132.8	16.9	18.2	18.2
107.5°	84.6	78.1	15.6	16.9	18.2
110°	71.6	48.2	13.0	15.6	16.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	58.6	33.9	11.7	13.0	15.6
115°	49.5	24.7	32.6	11.7	13.0
117.5°	41.7	26.0	35.2	10.4	11.7
120°	33.9	53.4	18.2	9.1	9.1
122.5°	27.3	24.7	13.0	6.5	7.8
125°	22.1	18.2	9.1	5.2	6.5
127.5°	18.2	14.3	6.5	3.9	5.2
130°	15.6	13.0	3.9	3.9	3.9
132.5°	13.0	10.4	3.9	2.6	3.9
135°	10.4	7.8	3.9	2.6	2.6
137.5°	7.8	6.5	2.6	2.6	2.6
140°	6.5	3.9	1.3	1.3	1.3
142.5°	5.2	3.9	1.3	1.3	1.3
145°	3.9	2.6	1.3	1.3	1.3
147.5°	2.6	1.3	1.3	1.3	1.3
150°	1.3	1.3	1.3	1.3	1.3
152.5°	1.3	1.3	1.3	1.3	1.3
155°	1.3	1.3	1.3	1.3	1.3
157.5°	1.3	1.3	1.3	1.3	1.3
160°	1.3	1.3	1.3	1.3	1.3
162.5°	2.6	2.6	2.6	2.6	1.3
165°	2.6	2.6	2.6	2.6	1.3
167.5°	2.6	2.6	2.6	2.6	1.3
170°	2.6	2.6	2.6	2.6	1.3
172.5°	2.6	2.6	2.6	2.6	2.6
175°	2.6	2.6	2.6	2.6	2.6
177.5°	2.6	2.6	2.6	2.6	2.6
180°	2.6	2.6	2.6	2.6	2.6

(END OF REPORT)