

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-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 (G3-1801-511-5)  
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-L840-CD2-U  
Description: VT4S VAPORTIGHT FIXTURE WITH 4000K LED AND FROSTED ACRYLIC LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

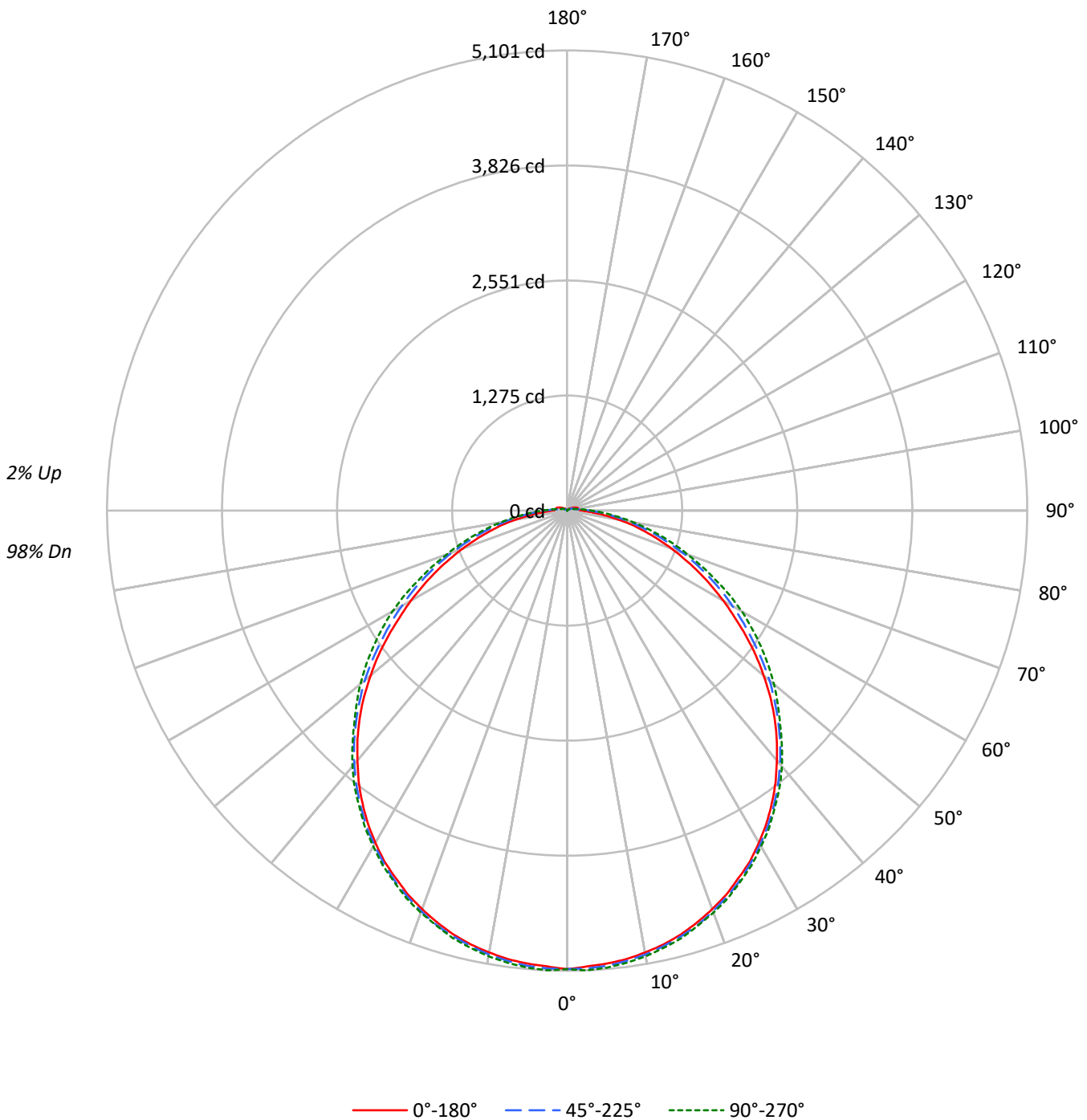
Lumens per Lamp: N/A  
Luminaire Lumens: 14821.0 lumens  
Efficiency: N/A  
Efficacy: 136.9 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.26 / 1.36  
Luminous Opening: Rectangular w/ Sides (W: 1.08' x L: 2.08' x H: 0.25')  
CIE Type: Direct

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°	24252	24252	24252
5°	23893	23748	23873
10°	23599	23195	23356
15°	23282	22626	22822
20°	22875	22013	22216
25°	22410	21356	21578
30°	21913	20616	20899
35°	21262	19821	20127
40°	20462	18925	19322
45°	19604	17890	18299
50°	18462	16780	17418
55°	17171	15435	16385
60°	15808	14130	15249
65°	14411	12778	13676
70°	12925	11249	12130
75°	11345	9582	10577
80°	9450	7865	8889
85°	7017	6109	6997



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	481.3	3.2
10°-20°	1377.7	9.3
20°-30°	2083.4	14.1
30°-40°	2495.5	16.8
40°-50°	2548.9	17.2
50°-60°	2256.6	15.2
60°-70°	1710.5	11.5
70°-80°	1054.4	7.1
80°-90°	466.5	3.1
90°-100°	167.6	1.1
100°-110°	89.9	0.6
110°-120°	53.6	0.4
120°-130°	24.7	0.2
130°-140°	7.7	0.1
140°-150°	1.4	0.0
150°-160°	0.7	0.0
160°-170°	0.6	0.0
170°-180°	0.2	0.0
0°-30°	3942.3	26.6
0°-40°	6437.9	43.4
0°-60°	11243.3	75.9
0°-90°	14474.7	97.7
90°-120°	311.0	2.1
90°-150°	344.9	2.3
90°-180°	346.0	2.3
0°-180°	14821.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5083	5083	5083	5083	5083	
5°	5041	5051	5066	5080	5085	479
15°	4865	4869	4885	4896	4906	1372
25°	4495	4508	4526	4540	4540	2073
35°	3957	3970	3994	4022	4014	2473
45°	3254	3272	3309	3347	3338	2504
55°	2418	2466	2513	2592	2619	2163
65°	1605	1647	1734	1801	1811	1591
75°	891	933	1001	1054	1068	949
85°	304	364	428	465	465	310
90°	160	201	248	270	269	92
95°	131	131	144	158	157	106
105°	117	100	74	68	69	122
115°	77	62	49	42	44	77
125°	41	33	22	20	24	37
135°	18	15	5	5	8	15
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	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5082.8	5082.8	5082.8	5082.8	5082.8
2.5°	5057.8	5063.8	5079.8	5095.8	5100.8
5°	5040.8	5050.8	5065.8	5079.8	5084.8
7.5°	5015.8	5023.8	5036.8	5050.8	5054.8
10°	4973.8	4982.8	4996.8	5009.8	5016.8
12.5°	4926.8	4930.8	4943.8	4958.8	4962.8
15°	4864.8	4868.8	4884.8	4895.8	4905.8
17.5°	4787.8	4791.8	4815.8	4820.8	4821.8
20°	4701.8	4707.8	4726.8	4735.8	4742.8
22.5°	4607.8	4615.8	4630.8	4641.8	4651.8
25°	4494.8	4507.8	4525.8	4539.8	4539.8
27.5°	4385.8	4387.8	4404.8	4419.8	4429.8
30°	4252.8	4254.8	4277.8	4294.8	4298.8
32.5°	4111.9	4119.9	4143.9	4161.9	4166.9
35°	3956.9	3969.9	3993.9	4021.9	4013.9
37.5°	3795.9	3802.9	3836.9	3859.9	3868.9
40°	3615.9	3635.9	3670.9	3695.9	3702.9
42.5°	3439.9	3457.9	3495.9	3519.9	3522.9
45°	3253.9	3271.9	3308.9	3346.9	3337.9
47.5°	3052.9	3080.9	3117.9	3157.9	3164.9
50°	2842.9	2883.9	2928.9	2961.9	2991.9
52.5°	2636.9	2669.9	2721.9	2780.9	2808.9
55°	2417.9	2465.9	2512.9	2591.9	2618.9
57.5°	2200.9	2258.9	2316.9	2403.9	2427.9
60°	2000.9	2046.9	2116.9	2201.9	2236.9
62.5°	1796.9	1849.9	1927.9	2005.9	2029.9
65°	1604.9	1646.9	1733.9	1800.9	1810.9
67.5°	1411.9	1461.9	1543.9	1613.9	1617.9
70°	1232.0	1277.0	1356.0	1414.9	1420.9
72.5°	1058.0	1104.0	1171.0	1231.0	1243.0
75°	891.0	933.0	1001.0	1054.0	1068.0
77.5°	743.0	774.0	834.0	894.0	899.0
80°	578.0	614.0	689.0	739.0	747.0
82.5°	440.0	483.0	550.0	595.0	597.0
85°	304.0	364.0	428.0	465.0	465.0
87.5°	210.0	273.0	330.0	355.0	358.0
90°	160.0	201.0	248.0	270.0	269.0
92.5°	139.0	158.0	188.0	206.0	203.0
95°	131.0	131.0	144.0	158.0	157.0
97.5°	127.0	119.0	114.0	123.0	122.0
100°	126.0	112.0	94.0	98.0	99.0
102.5°	123.0	106.0	82.0	81.0	82.0
105°	117.0	100.0	74.0	68.0	69.0
107.5°	109.0	92.0	68.0	60.0	61.0
110°	99.0	82.0	62.0	54.0	54.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	89.0	72.0	56.0	48.0	49.0
115°	77.0	62.0	49.0	42.0	44.0
117.5°	67.0	54.0	43.0	36.0	39.0
120°	57.0	47.0	35.0	30.0	34.0
122.5°	48.0	40.0	28.0	25.0	29.0
125°	41.0	33.0	22.0	20.0	24.0
127.5°	34.0	28.0	16.0	16.0	19.0
130°	28.0	23.0	10.0	12.0	15.0
132.5°	23.0	19.0	7.0	8.0	11.0
135°	18.0	15.0	5.0	5.0	8.0
137.5°	15.0	11.0	3.0	2.0	4.0
140°	11.0	8.0	2.0	0.0	1.0
142.5°	9.0	6.0	1.0	0.0	0.0
145°	6.0	4.0	1.0	0.0	0.0
147.5°	4.0	2.0	1.0	1.0	0.0
150°	2.0	2.0	1.0	1.0	0.0
152.5°	2.0	2.0	1.0	1.0	0.0
155°	2.0	2.0	2.0	1.0	0.0
157.5°	2.0	2.0	2.0	1.0	0.0
160°	2.0	2.0	2.0	1.0	1.0
162.5°	3.0	3.0	2.0	1.0	1.0
165°	3.0	3.0	2.0	1.0	1.0
167.5°	3.0	3.0	2.0	2.0	1.0
170°	3.0	3.0	2.0	1.0	1.0
172.5°	3.0	3.0	2.0	2.0	1.0
175°	3.0	3.0	3.0	2.0	1.0
177.5°	3.0	3.0	3.0	2.0	1.0
180°	3.0	3.0	3.0	3.0	3.0

(END OF REPORT)