

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-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-LD5-18-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**

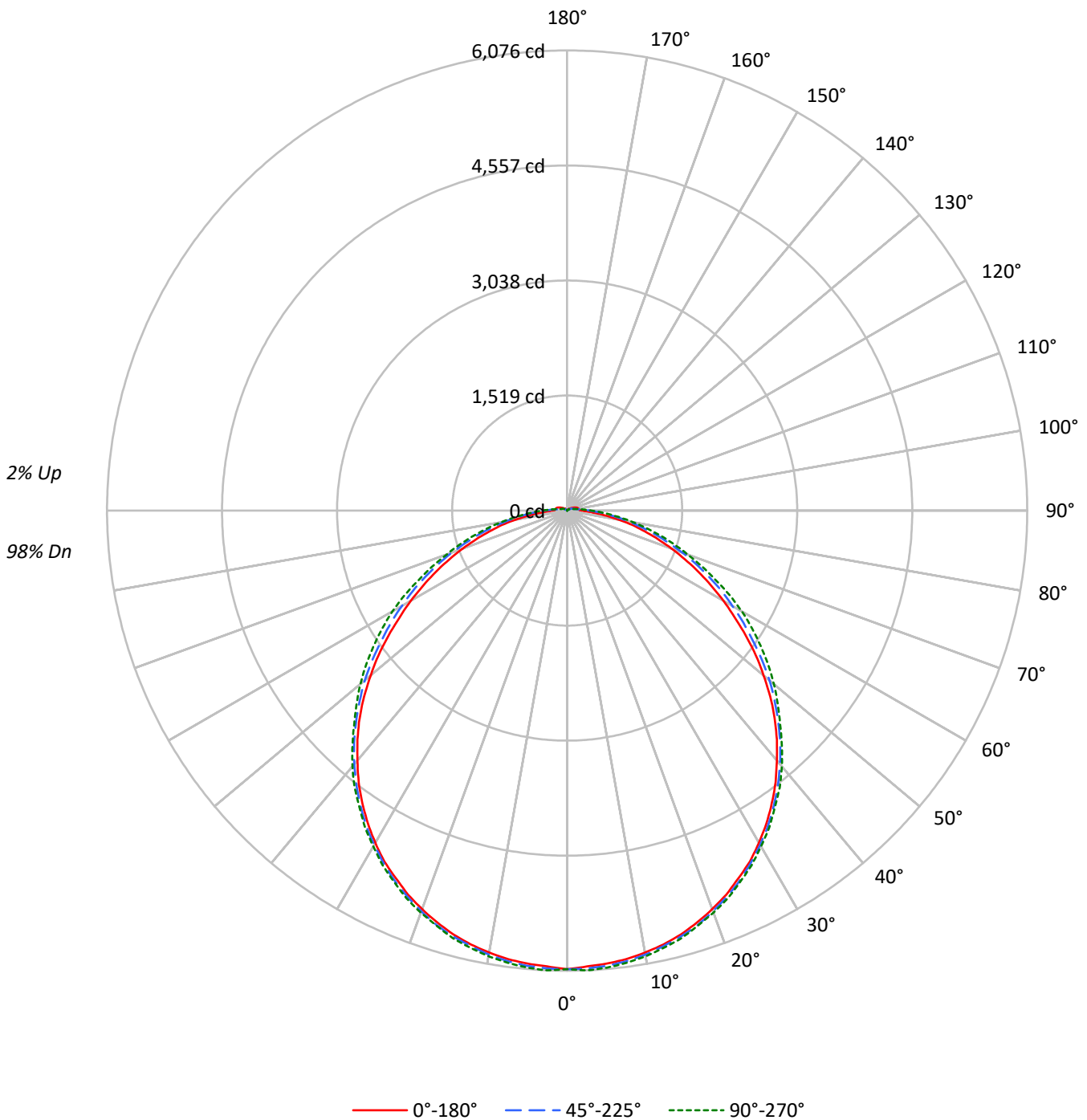
Lumens per Lamp: N/A  
Luminaire Lumens: 17656.0 lumens  
Efficiency: N/A  
Efficacy: 128.4 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.26 / 1.36  
Luminous Opening: Rectangular w/ Sides (W: 1.08' x L: 2.08' x H: 0.25')  
CIE Type: Direct

Input Watts (W): 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	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°	28892	28892	28892
5°	28463	28291	28439
10°	28113	27632	27824
15°	27736	26954	27187
20°	27251	26224	26466
25°	26696	25442	25706
30°	26105	24560	24897
35°	25328	23612	23977
40°	24375	22545	23018
45°	23354	21312	21800
50°	21994	19990	20749
55°	20455	18388	19519
60°	18833	16833	18167
65°	17167	15222	16292
70°	15397	13401	14451
75°	13514	11414	12599
80°	11257	9370	10589
85°	8358	7278	8334



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	573.3	3.2
10°-20°	1641.2	9.3
20°-30°	2481.9	14.1
30°-40°	2972.8	16.8
40°-50°	3036.4	17.2
50°-60°	2688.3	15.2
60°-70°	2037.7	11.5
70°-80°	1256.1	7.1
80°-90°	555.7	3.1
90°-100°	199.7	1.1
100°-110°	107.0	0.6
110°-120°	63.8	0.4
120°-130°	29.5	0.2
130°-140°	9.1	0.1
140°-150°	1.7	0.0
150°-160°	0.8	0.0
160°-170°	0.7	0.0
170°-180°	0.3	0.0
0°-30°	4696.5	26.6
0°-40°	7669.3	43.4
0°-60°	13394.0	75.9
0°-90°	17243.4	97.7
90°-120°	370.5	2.1
90°-150°	410.8	2.3
90°-180°	413.0	2.3
0°-180°	17656.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6055	6055	6055	6055	6055	
5°	6005	6017	6035	6052	6058	571
15°	5795	5800	5819	5832	5844	1635
25°	5355	5370	5392	5408	5408	2469
35°	4714	4729	4758	4791	4782	2947
45°	3876	3898	3942	3987	3976	2983
55°	2880	2938	2994	3088	3120	2577
65°	1912	1962	2066	2145	2157	1895
75°	1061	1111	1192	1256	1272	1130
85°	362	434	510	554	554	369
90°	191	239	295	322	320	109
95°	156	156	172	188	187	127
105°	139	119	88	81	82	146
115°	92	74	58	50	52	92
125°	49	39	26	24	29	45
135°	21	18	6	6	10	18
145°	7	5	1	0	0	5
155°	2	2	2	1	0	1
165°	4	4	2	1	1	1
175°	4	4	4	2	1	0
180°	4	4	4	4	4	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	6055.1	6055.1	6055.1	6055.1	6055.1
2.5°	6025.3	6032.4	6051.5	6070.6	6076.5
5°	6005.0	6017.0	6034.8	6051.5	6057.5
7.5°	5975.3	5984.8	6000.3	6017.0	6021.7
10°	5925.2	5935.9	5952.6	5968.1	5976.5
12.5°	5869.2	5874.0	5889.5	5907.4	5912.1
15°	5795.4	5800.1	5819.2	5832.3	5844.2
17.5°	5703.7	5708.4	5737.0	5743.0	5744.2
20°	5601.2	5608.4	5631.0	5641.7	5650.1
22.5°	5489.2	5498.8	5516.6	5529.7	5541.6
25°	5354.6	5370.1	5391.6	5408.2	5408.2
27.5°	5224.8	5227.2	5247.4	5265.3	5277.2
30°	5066.3	5068.7	5096.1	5116.4	5121.1
32.5°	4898.4	4907.9	4936.5	4957.9	4963.9
35°	4713.7	4729.2	4757.8	4791.2	4781.6
37.5°	4521.9	4530.3	4570.8	4598.2	4608.9
40°	4307.5	4331.3	4373.0	4402.8	4411.2
42.5°	4097.9	4119.3	4164.6	4193.2	4196.7
45°	3876.3	3897.7	3941.8	3987.1	3976.4
47.5°	3636.9	3670.2	3714.3	3761.9	3770.3
50°	3386.7	3435.5	3489.1	3528.5	3564.2
52.5°	3141.3	3180.6	3242.6	3312.8	3346.2
55°	2880.4	2937.6	2993.6	3087.7	3119.9
57.5°	2621.9	2691.0	2760.1	2863.7	2892.3
60°	2383.7	2438.5	2521.9	2623.1	2664.8
62.5°	2140.7	2203.8	2296.7	2389.6	2418.2
65°	1911.9	1962.0	2065.6	2145.4	2157.3
67.5°	1682.0	1741.6	1839.3	1922.7	1927.4
70°	1467.6	1521.2	1615.3	1685.6	1692.8
72.5°	1260.3	1315.1	1394.9	1466.4	1480.7
75°	1061.4	1111.4	1192.4	1255.6	1272.2
77.5°	885.1	922.0	993.5	1065.0	1070.9
80°	688.5	731.4	820.8	880.3	889.9
82.5°	524.1	575.4	655.2	708.8	711.2
85°	362.1	433.6	509.9	553.9	553.9
87.5°	250.2	325.2	393.1	422.9	426.5
90°	190.6	239.4	295.4	321.6	320.4
92.5°	165.6	188.2	224.0	245.4	241.8
95°	156.1	156.1	171.5	188.2	187.0
97.5°	151.3	141.8	135.8	146.5	145.3
100°	150.1	133.4	112.0	116.7	117.9
102.5°	146.5	126.3	97.7	96.5	97.7
105°	139.4	119.1	88.2	81.0	82.2
107.5°	129.8	109.6	81.0	71.5	72.7
110°	117.9	97.7	73.9	64.3	64.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	106.0	85.8	66.7	57.2	58.4
115°	91.7	73.9	58.4	50.0	52.4
117.5°	79.8	64.3	51.2	42.9	46.5
120°	67.9	56.0	41.7	35.7	40.5
122.5°	57.2	47.6	33.4	29.8	34.5
125°	48.8	39.3	26.2	23.8	28.6
127.5°	40.5	33.4	19.1	19.1	22.6
130°	33.4	27.4	11.9	14.3	17.9
132.5°	27.4	22.6	8.3	9.5	13.1
135°	21.4	17.9	6.0	6.0	9.5
137.5°	17.9	13.1	3.6	2.4	4.8
140°	13.1	9.5	2.4	0.0	1.2
142.5°	10.7	7.1	1.2	0.0	0.0
145°	7.1	4.8	1.2	0.0	0.0
147.5°	4.8	2.4	1.2	1.2	0.0
150°	2.4	2.4	1.2	1.2	0.0
152.5°	2.4	2.4	1.2	1.2	0.0
155°	2.4	2.4	2.4	1.2	0.0
157.5°	2.4	2.4	2.4	1.2	0.0
160°	2.4	2.4	2.4	1.2	1.2
162.5°	3.6	3.6	2.4	1.2	1.2
165°	3.6	3.6	2.4	1.2	1.2
167.5°	3.6	3.6	2.4	2.4	1.2
170°	3.6	3.6	2.4	1.2	1.2
172.5°	3.6	3.6	2.4	2.4	1.2
175°	3.6	3.6	3.6	2.4	1.2
177.5°	3.6	3.6	3.6	2.4	1.2
180°	3.6	3.6	3.6	3.6	3.6

(END OF REPORT)