

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-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-LD5-18-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

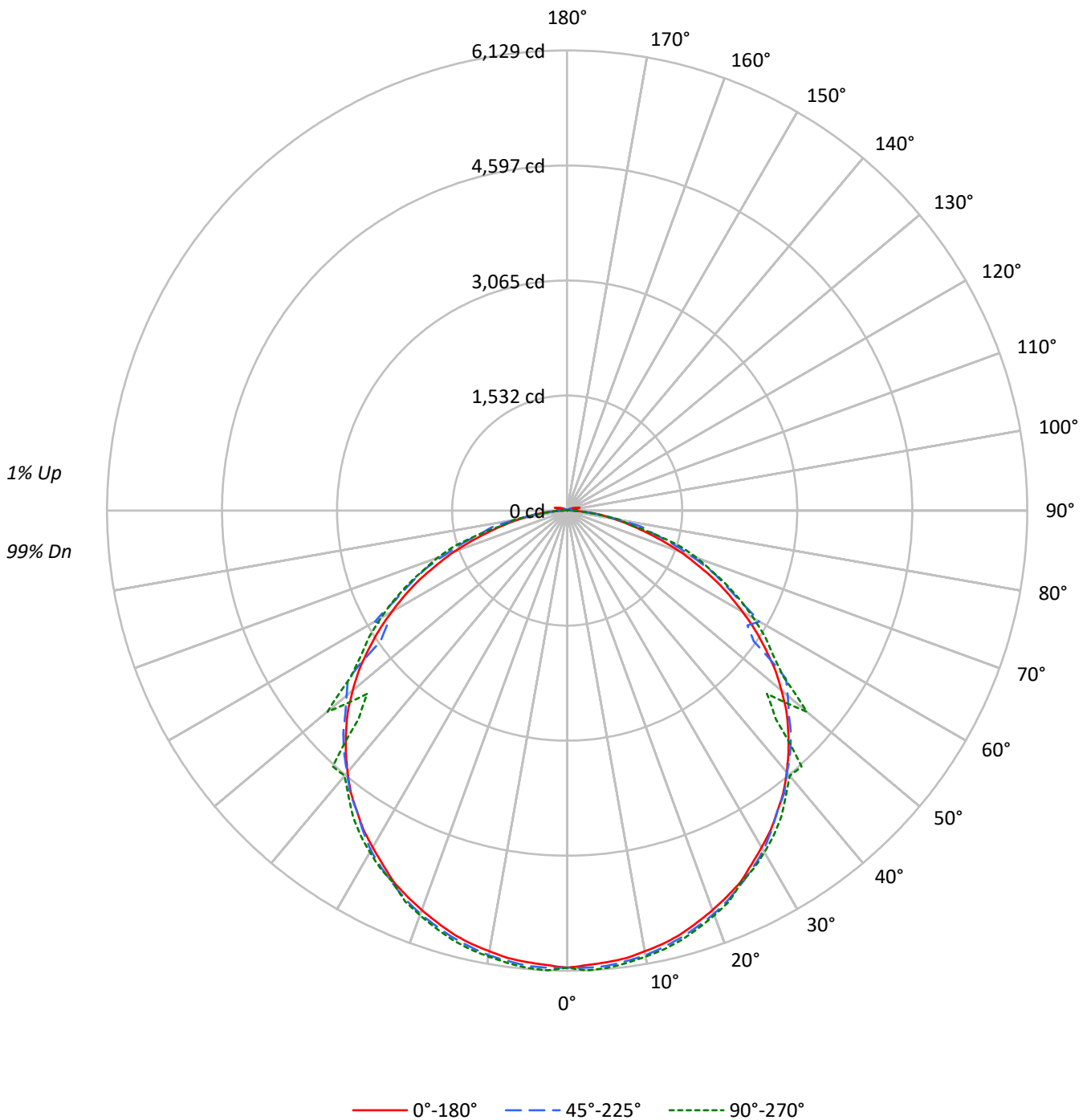
Lumens per Lamp: N/A
Luminaire Lumens: 17985.9 lumens
Efficiency: N/A
Efficacy: 130.8 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.28 / 1.4
Luminous Opening: Rectangular w/ Sides (W: 1.08' x L: 2.08' x H: 0.25')
CIE Type: Direct

Input Watts (W): 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	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°	29052	29052	29052
5°	28623	28534	28702
10°	28280	27917	28078
15°	27957	27261	27523
20°	27545	26617	26861
25°	27225	25894	26009
30°	26686	25191	25552
35°	26245	24240	24943
40°	25743	23493	24068
45°	25101	22795	21550
50°	24209	21971	24254
55°	22938	18640	20915
60°	21298	19719	19540
65°	19358	16988	17683
70°	16833	14423	15658
75°	13383	11400	11699
80°	10298	7803	8499
85°	6498	3717	3774



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	578.3	3.2
10°-20°	1660.8	9.2
20°-30°	2528.0	14.1
30°-40°	3079.6	17.1
40°-50°	3216.4	17.9
50°-60°	2942.5	16.4
60°-70°	2247.2	12.5
70°-80°	1225.2	6.8
80°-90°	331.0	1.8
90°-100°	50.7	0.3
100°-110°	61.5	0.3
110°-120°	37.0	0.2
120°-130°	17.6	0.1
130°-140°	6.0	0.0
140°-150°	1.8	0.0
150°-160°	0.9	0.0
160°-170°	0.9	0.0
170°-180°	0.4	0.0
0°-30°	4767.1	26.5
0°-40°	7846.7	43.6
0°-60°	14005.5	77.9
0°-90°	17809.0	99.0
90°-120°	149.3	0.8
90°-150°	174.7	1.0
90°-180°	177.0	1.0
0°-180°	17985.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6089	6089	6089	6089	6089	
5°	6039	6064	6087	6108	6114	574
15°	5842	5865	5886	5907	5916	1648
25°	5461	5478	5487	5503	5472	2511
35°	4884	4911	4884	4947	4974	3059
45°	4166	4185	4216	4432	3931	3211
55°	3230	3249	3035	3366	3343	2887
65°	2156	2221	2305	2313	2342	2127
75°	1051	1132	1191	1189	1181	1137
85°	282	283	260	253	251	307
90°	48	80	77	75	73	36
95°	46	42	44	36	36	54
105°	147	195	25	27	27	147
115°	73	36	48	17	19	74
125°	32	27	13	8	10	31
135°	15	12	6	4	4	12
145°	6	4	2	2	2	4
155°	2	2	2	2	2	1
165°	4	4	4	4	2	1
175°	4	4	4	4	4	0
180°	4	4	4	4	4	



TEST NUMBER: P#

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6088.6	6088.6	6088.6	6088.6	6088.6
2.5°	6059.9	6075.2	6094.3	6121.1	6128.8
5°	6038.8	6063.7	6086.7	6107.7	6113.5
7.5°	6012.0	6042.6	6052.2	6079.0	6079.0
10°	5960.3	5994.8	6013.9	6031.1	6031.1
12.5°	5910.5	5935.4	5952.6	5973.7	5983.3
15°	5841.6	5864.6	5885.6	5906.7	5916.3
17.5°	5753.5	5789.9	5803.3	5820.5	5828.2
20°	5661.6	5696.1	5715.2	5730.5	5734.4
22.5°	5564.0	5590.8	5609.9	5615.7	5636.7
25°	5460.6	5477.8	5487.4	5502.7	5472.1
27.5°	5315.1	5347.6	5361.0	5347.6	5378.2
30°	5179.1	5211.7	5227.0	5230.8	5255.7
32.5°	5045.1	5068.1	5060.4	5089.1	5125.5
35°	4884.3	4911.1	4884.3	4947.4	4974.3
37.5°	4733.0	4746.4	4748.3	4811.5	4784.7
40°	4549.2	4566.4	4556.9	4597.1	4612.4
42.5°	4363.5	4378.8	4396.0	4426.7	4622.0
45°	4166.3	4185.4	4216.1	4432.4	3930.8
47.5°	3961.4	3965.2	4005.4	3674.2	3611.0
50°	3727.8	3725.9	3835.0	3488.5	4166.3
52.5°	3494.2	3492.3	3674.2	3838.9	3624.4
55°	3230.0	3249.2	3034.7	3366.0	3343.0
57.5°	2973.4	2990.7	2845.2	3074.9	3124.7
60°	2695.8	2762.8	2954.3	2864.3	2866.2
62.5°	2431.6	2491.0	2575.2	2603.9	2615.4
65°	2155.9	2221.0	2305.2	2312.9	2341.6
67.5°	1863.0	1956.8	2058.2	2044.8	2071.6
70°	1604.5	1489.6	1738.5	1750.0	1834.2
72.5°	1313.4	1451.3	1470.4	1225.4	1577.7
75°	1051.1	1131.6	1190.9	1189.0	1181.3
77.5°	832.9	886.5	1030.1	926.7	838.6
80°	629.9	645.2	683.5	679.7	714.2
82.5°	474.8	451.9	465.3	459.5	405.9
85°	281.5	283.4	260.4	252.7	250.8
87.5°	116.8	130.2	126.4	120.6	130.2
90°	47.9	80.4	76.6	74.7	72.8
92.5°	53.6	57.4	53.6	46.0	40.2
95°	46.0	42.1	44.0	36.4	36.4
97.5°	63.2	34.5	34.5	30.6	28.7
100°	126.4	30.6	32.5	26.8	26.8
102.5°	168.5	32.5	28.7	26.8	28.7
105°	147.4	195.3	24.9	26.8	26.8
107.5°	124.5	114.9	23.0	24.9	26.8
110°	105.3	70.8	19.1	23.0	24.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	86.2	49.8	17.2	19.1	23.0
115°	72.8	36.4	47.9	17.2	19.1
117.5°	61.3	38.3	51.7	15.3	17.2
120°	49.8	78.5	26.8	13.4	13.4
122.5°	40.2	36.4	19.1	9.6	11.5
125°	32.5	26.8	13.4	7.7	9.6
127.5°	26.8	21.1	9.6	5.7	7.7
130°	23.0	19.1	5.7	5.7	5.7
132.5°	19.1	15.3	5.7	3.8	5.7
135°	15.3	11.5	5.7	3.8	3.8
137.5°	11.5	9.6	3.8	3.8	3.8
140°	9.6	5.7	1.9	1.9	1.9
142.5°	7.7	5.7	1.9	1.9	1.9
145°	5.7	3.8	1.9	1.9	1.9
147.5°	3.8	1.9	1.9	1.9	1.9
150°	1.9	1.9	1.9	1.9	1.9
152.5°	1.9	1.9	1.9	1.9	1.9
155°	1.9	1.9	1.9	1.9	1.9
157.5°	1.9	1.9	1.9	1.9	1.9
160°	1.9	1.9	1.9	1.9	1.9
162.5°	3.8	3.8	3.8	3.8	1.9
165°	3.8	3.8	3.8	3.8	1.9
167.5°	3.8	3.8	3.8	3.8	1.9
170°	3.8	3.8	3.8	3.8	1.9
172.5°	3.8	3.8	3.8	3.8	3.8
175°	3.8	3.8	3.8	3.8	3.8
177.5°	3.8	3.8	3.8	3.8	3.8
180°	3.8	3.8	3.8	3.8	3.8

(END OF REPORT)