

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-PCF-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 (G3-1801-511-7)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VT4S-LD5-18-PCF-L840-CD2-U
Description: VT4S VAPORTIGHT FIXTURE WITH 4000K LED AND FROSTED POLYCARBONATE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

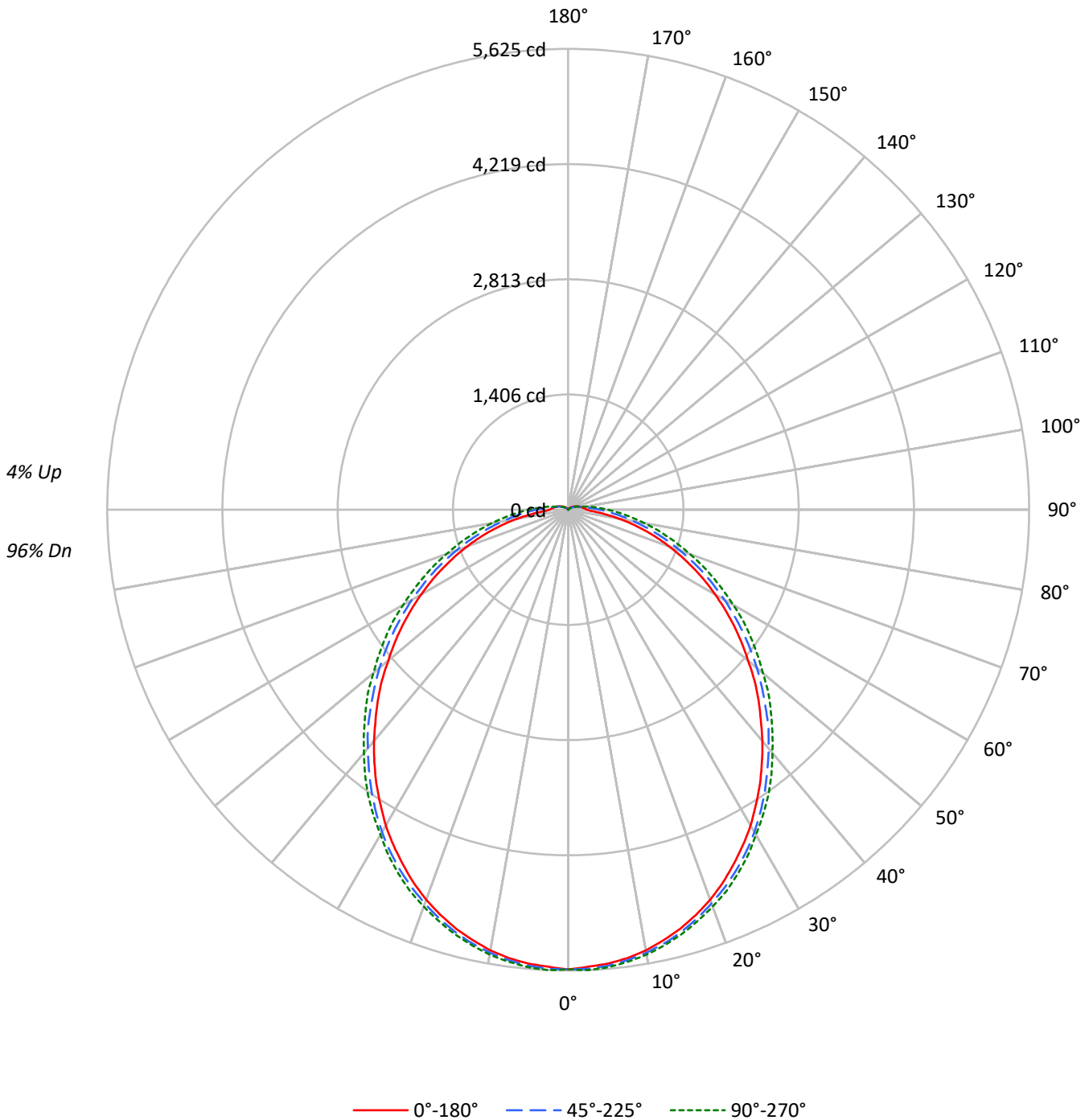
Lumens per Lamp: N/A
Luminaire Lumens: 16010.0 lumens
Efficiency: N/A
Efficacy: 116.4 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.32
Luminous Opening: Rectangular w/ Sides (W: 1.08' x L: 2.08' x H: 0.25')
CIE Type: Direct

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	50	30	10	50	30	10	0		
RCR																										
0	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99	99	99	99	99	99	99	96		
1	107	102	97	93	104	99	95	91	94	91	88	90	87	85	86	83	81	86	83	81	86	83	81	79		
2	97	89	82	76	94	87	80	75	82	77	72	79	74	70	75	71	68	75	71	68	75	71	68	66		
3	89	78	70	63	86	76	68	62	73	66	61	69	64	59	66	62	58	66	62	58	66	62	58	55		
4	81	69	60	53	79	67	59	53	65	57	52	62	56	51	59	54	50	62	56	51	59	54	50	47		
5	75	62	53	46	72	60	52	46	58	50	45	56	49	44	53	48	43	56	49	44	53	48	43	41		
6	69	56	47	40	67	55	46	40	52	45	39	50	44	39	48	43	38	50	44	39	48	43	38	36		
7	64	51	42	36	62	50	41	35	48	40	35	46	39	34	44	38	34	46	39	34	44	38	34	32		
8	60	46	38	32	58	45	37	32	44	36	31	42	36	31	41	35	30	42	36	31	41	35	30	28		
9	56	42	34	29	54	42	34	28	40	33	28	39	32	28	38	32	27	39	32	28	38	32	27	26		
10	52	39	31	26	51	38	31	26	37	30	26	36	30	25	35	29	25	36	30	25	35	29	25	23		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	26772	26772	26772
5°	26358	26192	26320
10°	25915	25487	25673
15°	25331	24709	24938
20°	24644	23817	24145
25°	23805	22901	23300
30°	22932	21902	22274
35°	21924	20775	21337
40°	20857	19610	20227
45°	19794	18408	19182
50°	18598	17233	18052
55°	17537	15981	17023
60°	16367	14710	15845
65°	15136	13406	14664
70°	13748	12028	13444
75°	12195	10605	12329
80°	10264	9262	11227
85°	8083	8077	10361



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	530.0	3.3
10°-20°	1502.5	9.4
20°-30°	2231.6	13.9
30°-40°	2611.8	16.3
40°-50°	2624.6	16.4
50°-60°	2326.9	14.5
60°-70°	1805.3	11.3
70°-80°	1177.7	7.4
80°-90°	615.0	3.8
90°-100°	294.2	1.8
100°-110°	153.2	1.0
110°-120°	83.4	0.5
120°-130°	39.3	0.2
130°-140°	12.0	0.1
140°-150°	1.7	0.0
150°-160°	0.4	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-30°	4264.1	26.6
0°-40°	6875.9	42.9
0°-60°	11827.4	73.9
0°-90°	15425.4	96.3
90°-120°	530.7	3.3
90°-150°	583.7	3.6
90°-180°	585.0	3.7
0°-180°	16010.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5611	5611	5611	5611	5611	
5°	5561	5568	5587	5600	5606	528
15°	5293	5306	5334	5352	5361	1491
25°	4775	4804	4853	4891	4902	2199
35°	4080	4122	4186	4237	4255	2550
45°	3286	3330	3405	3470	3499	2532
55°	2470	2515	2602	2690	2721	2209
65°	1686	1732	1819	1917	1942	1671
75°	958	1003	1108	1210	1245	1016
85°	350	448	566	665	689	347
90°	226	292	387	461	479	127
95°	197	210	261	314	328	155
105°	144	137	141	143	150	153
115°	98	81	82	77	83	98
125°	60	49	34	36	44	55
135°	31	24	6	7	13	24
145°	8	5	0	0	0	6
155°	2	2	0	0	0	1
165°	2	2	1	0	0	1
175°	4	2	1	0	0	0
180°	1	1	1	1	1	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5610.9	5610.9	5610.9	5610.9	5610.9
2.5°	5584.7	5591.8	5607.3	5622.8	5625.2
5°	5560.9	5568.0	5587.1	5600.2	5606.1
7.5°	5520.4	5527.5	5545.4	5563.2	5565.6
10°	5462.0	5471.5	5490.6	5510.8	5514.4
12.5°	5382.2	5397.7	5421.5	5439.4	5444.1
15°	5292.8	5305.9	5334.5	5352.4	5360.7
17.5°	5185.6	5202.3	5232.1	5253.5	5263.0
20°	5065.3	5082.0	5114.1	5151.1	5154.6
22.5°	4929.5	4955.7	4990.2	5026.0	5040.3
25°	4774.6	4804.4	4853.2	4891.4	4902.1
27.5°	4617.4	4646.0	4705.5	4744.8	4753.2
30°	4450.6	4481.6	4544.7	4575.7	4581.6
32.5°	4264.8	4300.5	4368.4	4411.3	4422.0
35°	4080.1	4121.8	4186.1	4237.4	4255.2
37.5°	3884.7	3931.2	3993.2	4058.7	4073.0
40°	3685.8	3734.6	3803.7	3864.5	3876.4
42.5°	3478.5	3532.1	3617.9	3666.7	3689.4
45°	3285.5	3329.6	3404.7	3470.2	3498.8
47.5°	3081.8	3125.9	3204.5	3282.0	3314.1
50°	2863.8	2923.4	3008.0	3083.0	3100.9
52.5°	2670.8	2728.0	2801.9	2885.3	2912.7
55°	2469.5	2514.8	2601.7	2689.9	2720.9
57.5°	2269.4	2318.2	2398.0	2487.4	2533.8
60°	2071.6	2118.1	2203.9	2296.8	2324.2
62.5°	1879.8	1927.5	2004.9	2106.2	2133.6
65°	1685.7	1732.1	1819.1	1916.8	1941.8
67.5°	1497.4	1541.5	1630.9	1734.5	1765.5
70°	1310.4	1367.6	1449.8	1546.3	1574.9
72.5°	1134.1	1184.1	1278.2	1375.9	1409.3
75°	957.8	1003.1	1107.9	1210.3	1244.9
77.5°	792.2	850.6	953.0	1065.0	1092.4
80°	627.8	689.7	811.3	918.5	943.5
82.5°	478.9	558.7	682.6	788.6	804.1
85°	350.2	447.9	565.9	664.7	688.6
87.5°	263.3	358.6	474.1	556.3	577.8
90°	226.3	291.9	387.2	461.0	478.9
92.5°	210.9	243.0	318.1	383.6	395.5
95°	196.6	209.7	260.9	314.5	327.6
97.5°	182.3	187.0	219.2	257.3	268.0
100°	169.2	170.4	184.6	212.0	219.2
102.5°	156.1	152.5	158.4	172.7	178.7
105°	144.1	137.0	140.6	143.0	150.1
107.5°	132.2	121.5	123.9	121.5	125.1
110°	120.3	106.0	108.4	104.8	108.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	108.4	92.9	95.3	90.5	95.3
115°	97.7	81.0	82.2	77.4	83.4
117.5°	88.2	72.7	69.1	65.5	72.7
120°	77.4	63.1	57.2	54.8	63.1
122.5°	69.1	56.0	45.3	45.3	53.6
125°	59.6	48.8	34.5	35.7	44.1
127.5°	52.4	41.7	25.0	28.6	35.7
130°	45.3	35.7	15.5	21.4	28.6
132.5°	36.9	28.6	9.5	14.3	20.3
135°	31.0	23.8	6.0	7.1	13.1
137.5°	25.0	17.9	2.4	1.2	6.0
140°	19.1	13.1	1.2	0.0	0.0
142.5°	13.1	8.3	0.0	0.0	0.0
145°	8.3	4.8	0.0	0.0	0.0
147.5°	4.8	2.4	0.0	0.0	0.0
150°	2.4	1.2	0.0	0.0	0.0
152.5°	2.4	1.2	0.0	0.0	0.0
155°	2.4	2.4	0.0	0.0	0.0
157.5°	2.4	2.4	1.2	0.0	0.0
160°	2.4	2.4	1.2	0.0	0.0
162.5°	2.4	2.4	1.2	0.0	0.0
165°	2.4	2.4	1.2	0.0	0.0
167.5°	2.4	2.4	1.2	0.0	0.0
170°	2.4	2.4	1.2	0.0	0.0
172.5°	2.4	2.4	1.2	0.0	0.0
175°	3.6	2.4	1.2	0.0	0.0
177.5°	3.6	2.4	1.2	0.0	0.0
180°	1.2	1.2	1.2	1.2	1.2

(END OF REPORT)