

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-PC-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 (G3-1801-511-6)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: VT4S-LD5-12-PC-L840-CD2-U  
Description: VT4S VAPORTIGHT FIXTURE WITH 4000K LED AND CLEAR POLYCARBONATE LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

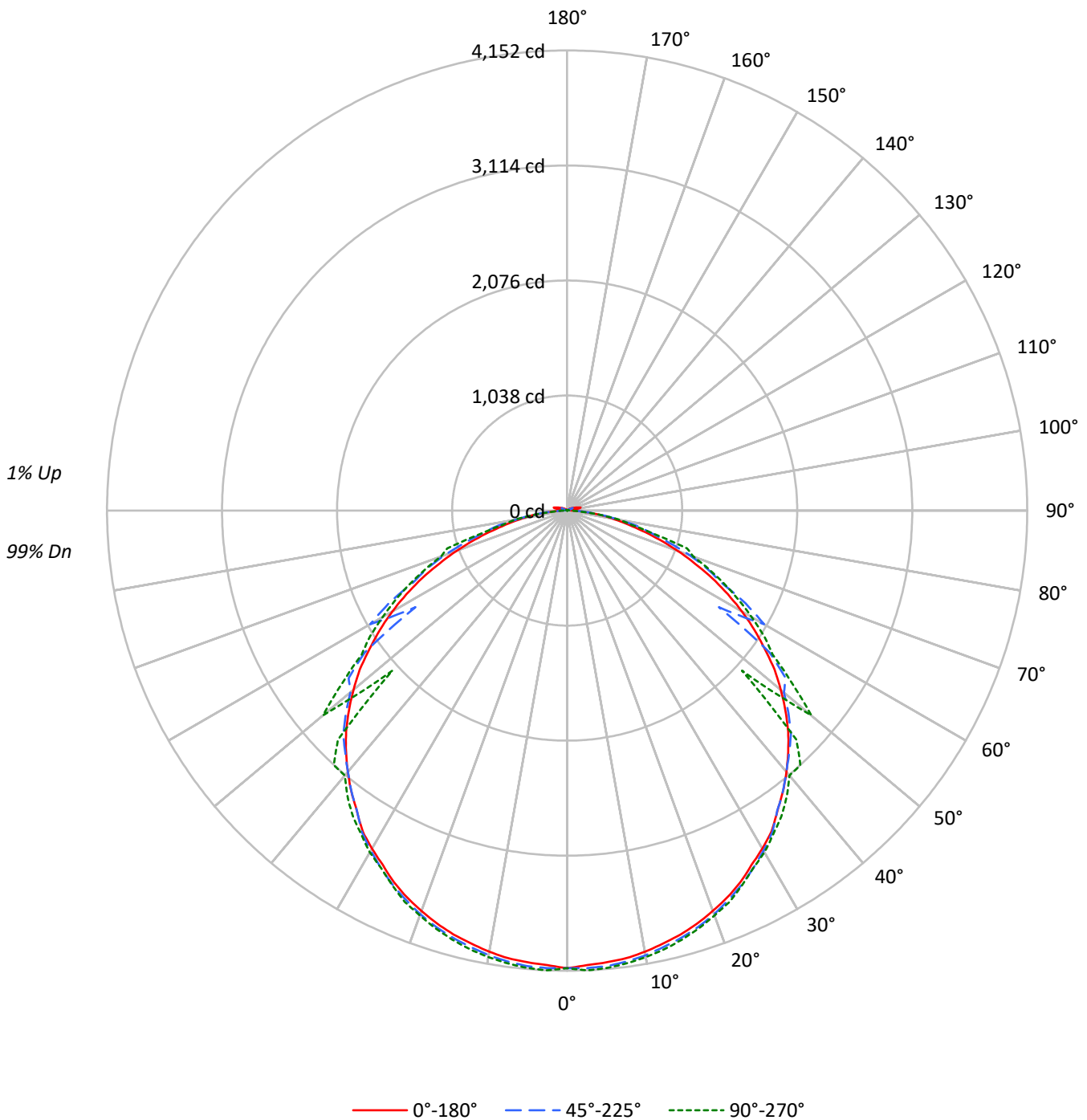
Lumens per Lamp: N/A  
Luminaire Lumens: 12149.0 lumens  
Efficiency: N/A  
Efficacy: 144.8 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.28 / 1.4  
Luminous Opening: Rectangular w/ Sides (W: 1.08' x L: 2.08' x H: 0.25')  
CIE Type: Direct

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	85	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	52	46	57	50	45	55	49	45	42
6	70	56	47	41	68	55	47	40	53	46	40	51	45	40	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	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	33	28	40	33	28	38	32	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	25	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	19699	19699	19699
5°	19392	19343	19451
10°	19177	18912	19043
15°	18948	18477	18641
20°	18698	18046	18208
25°	18447	17578	17736
30°	18146	17078	17310
35°	17770	16408	16899
40°	17421	15863	16284
45°	16995	15440	16034
50°	16341	14630	16743
55°	15465	13695	14162
60°	14395	13692	13106
65°	12985	11278	11808
70°	11151	9745	10326
75°	8871	7499	7919
80°	6782	5337	5639
85°	4319	2729	2389



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	391.9	3.2
10°-20°	1125.9	9.3
20°-30°	1714.7	14.1
30°-40°	2086.3	17.2
40°-50°	2173.0	17.9
50°-60°	1986.1	16.3
60°-70°	1512.4	12.4
70°-80°	820.9	6.8
80°-90°	226.1	1.9
90°-100°	29.0	0.2
100°-110°	39.4	0.3
110°-120°	26.3	0.2
120°-130°	10.1	0.1
130°-140°	4.1	0.0
140°-150°	1.3	0.0
150°-160°	0.7	0.0
160°-170°	0.6	0.0
170°-180°	0.2	0.0
0°-30°	3232.5	26.6
0°-40°	5318.8	43.8
0°-60°	9477.8	78.0
0°-90°	12037.3	99.1
90°-120°	94.6	0.8
90°-150°	110.1	0.9
90°-180°	112.0	0.9
0°-180°	12149.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4128	4128	4128	4128	4128	
5°	4091	4108	4126	4142	4143	389
15°	3959	3978	3989	4005	4007	1118
25°	3700	3719	3725	3732	3732	1704
35°	3307	3330	3306	3347	3370	2074
45°	2821	2827	2856	2991	2925	2171
55°	2178	2184	2230	2380	2264	1947
65°	1446	1490	1530	1562	1564	1427
75°	697	774	783	800	800	751
85°	187	203	191	159	159	202
90°	37	54	50	46	45	26
95°	30	24	26	15	14	43
105°	108	139	14	15	13	110
115°	56	35	55	7	7	56
125°	25	19	7	2	2	23
135°	10	8	3	2	2	9
145°	3	2	2	2	1	2
155°	2	2	2	2	2	1
165°	2	2	2	2	2	1
175°	2	2	2	2	2	0
180°	2	2	2	2	2	



TEST NUMBER: P#

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4128.5	4128.5	4128.5	4128.5	4128.5
2.5°	4105.0	4118.0	4131.8	4146.3	4152.0
5°	4091.2	4108.3	4126.1	4141.5	4143.1
7.5°	4074.2	4091.2	4103.4	4116.4	4120.4
10°	4041.8	4066.1	4074.2	4083.1	4090.4
12.5°	4002.1	4024.8	4032.1	4049.9	4054.0
15°	3959.2	3977.8	3989.2	4004.6	4007.0
17.5°	3906.5	3925.2	3938.1	3947.0	3952.7
20°	3843.3	3858.7	3874.9	3881.4	3887.1
22.5°	3777.7	3787.4	3802.8	3813.4	3823.1
25°	3699.9	3718.6	3725.1	3731.5	3731.5
27.5°	3604.3	3631.9	3636.8	3627.0	3635.1
30°	3521.7	3540.3	3543.6	3532.2	3560.6
32.5°	3434.2	3435.0	3444.7	3442.3	3460.9
35°	3307.0	3330.5	3306.2	3346.7	3370.2
37.5°	3198.5	3217.9	3197.7	3259.2	3255.2
40°	3078.6	3097.2	3076.9	3129.6	3120.7
42.5°	2953.0	2969.2	2964.3	2988.6	3115.8
45°	2820.9	2827.4	2855.8	2991.1	2924.6
47.5°	2671.9	2677.5	2707.5	2658.9	2138.8
50°	2516.3	2522.0	2553.6	2009.2	2876.0
52.5°	2359.1	2351.0	2483.9	2701.8	2557.6
55°	2177.7	2184.2	2229.5	2380.2	2263.6
57.5°	2003.5	2018.1	1623.5	2094.2	2105.6
60°	1822.0	1848.8	2051.3	1916.8	1922.5
62.5°	1634.1	1679.4	1813.9	1740.2	1745.9
65°	1446.1	1489.9	1530.4	1562.0	1563.6
67.5°	1246.0	1313.2	1365.1	1352.9	1386.2
70°	1062.9	1032.1	1174.7	1170.7	1209.6
72.5°	873.3	948.7	964.9	837.7	1135.0
75°	696.7	774.5	783.4	799.6	799.6
77.5°	539.6	584.9	652.2	620.6	597.9
80°	414.8	427.8	467.5	482.0	473.9
82.5°	308.7	290.8	322.4	336.2	304.6
85°	187.1	203.3	191.2	158.8	158.8
87.5°	77.0	97.2	85.9	78.6	69.7
90°	37.3	53.5	50.2	46.2	44.6
92.5°	38.9	37.3	26.7	18.6	14.6
95°	30.0	24.3	25.9	14.6	13.8
97.5°	56.7	17.8	17.8	13.0	10.5
100°	105.3	15.4	16.2	13.0	8.9
102.5°	125.6	22.7	16.2	13.0	13.0
105°	107.7	139.3	13.8	14.6	13.0
107.5°	91.5	63.2	10.5	13.0	14.6
110°	77.0	44.6	8.9	12.2	13.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	64.8	33.2	8.9	8.9	12.2
115°	55.9	34.8	55.1	7.3	7.3
117.5°	47.0	55.1	24.3	5.7	7.3
120°	38.1	31.6	14.6	7.3	4.9
122.5°	30.0	23.5	9.7	2.4	4.9
125°	25.1	18.6	7.3	1.6	2.4
127.5°	20.3	15.4	4.9	1.6	1.6
130°	16.2	14.6	3.2	1.6	1.6
132.5°	13.8	10.5	8.9	1.6	1.6
135°	10.5	8.1	3.2	1.6	1.6
137.5°	8.1	6.5	2.4	1.6	1.6
140°	6.5	4.9	1.6	1.6	0.8
142.5°	4.9	3.2	1.6	1.6	0.8
145°	3.2	1.6	1.6	1.6	0.8
147.5°	2.4	1.6	1.6	1.6	1.6
150°	1.6	1.6	1.6	1.6	1.6
152.5°	1.6	1.6	1.6	1.6	1.6
155°	1.6	1.6	1.6	1.6	1.6
157.5°	1.6	1.6	1.6	1.6	1.6
160°	1.6	1.6	1.6	1.6	1.6
162.5°	2.4	2.4	2.4	2.4	1.6
165°	2.4	2.4	2.4	2.4	2.4
167.5°	2.4	2.4	2.4	2.4	2.4
170°	2.4	2.4	2.4	2.4	2.4
172.5°	2.4	2.4	2.4	2.4	2.4
175°	2.4	2.4	2.4	2.4	2.4
177.5°	2.4	2.4	2.4	2.4	2.4
180°	2.4	2.4	2.4	2.4	2.4

(END OF REPORT)