

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-PC-L850-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-LD5-15-PC-L850-CD2-U  
Description: VT4S VAPORTIGHT FIXTURE WITH 5000K LED AND CLEAR POLYCARBONATE LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

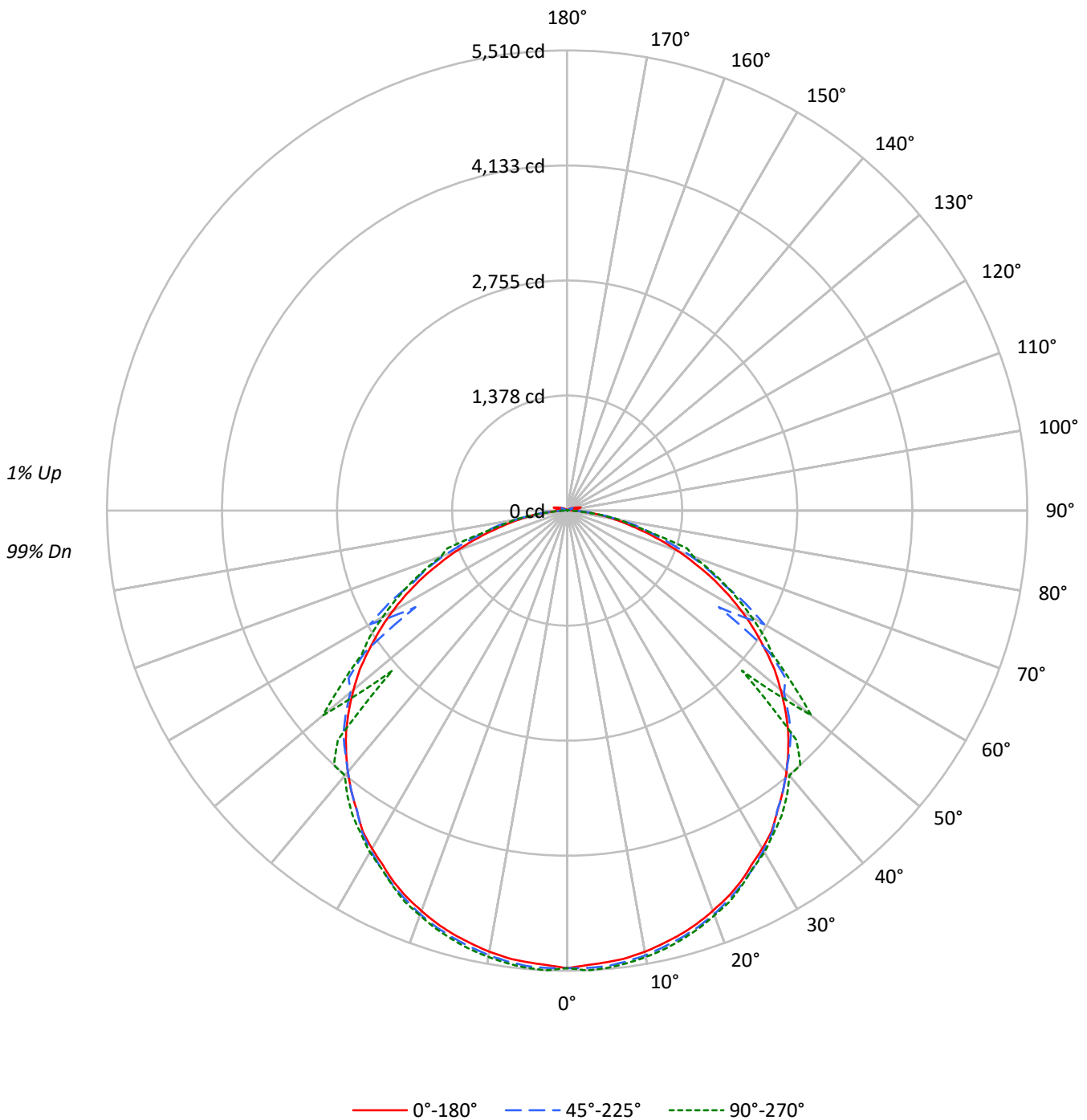
Lumens per Lamp: N/A  
Luminaire Lumens: 16121.1 lumens  
Efficiency: N/A  
Efficacy: 148.9 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.28 / 1.4  
Luminous Opening: Rectangular w/ Sides (W: 1.08' x L: 2.08' x H: 0.25')  
CIE Type: Direct

Input Watts (W): 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



TEST NUMBER: P#  
CATALOG NUMBER: VT4S-LD5-15-PC-L850-CD2-U

### Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: VT4S-LD5-15-PC-L850-CD2-U

**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°	26140	26140	26140
5°	25732	25667	25811
10°	25447	25096	25270
15°	25143	24518	24735
20°	24812	23946	24160
25°	24478	23325	23535
30°	24079	22661	22970
35°	23579	21772	22425
40°	23117	21049	21608
45°	22552	20488	21276
50°	21684	19413	22217
55°	20521	18172	18791
60°	19101	18168	17391
65°	17230	14965	15669
70°	14797	12932	13701
75°	11771	9951	10508
80°	8999	7081	7484
85°	5731	3621	3170



TEST NUMBER: P#

CATALOG NUMBER: VT4S-LD5-15-PC-L850-CD2-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	520.0	3.2
10°-20°	1494.0	9.3
20°-30°	2275.3	14.1
30°-40°	2768.4	17.2
40°-50°	2883.4	17.9
50°-60°	2635.4	16.3
60°-70°	2006.9	12.4
70°-80°	1089.3	6.8
80°-90°	300.0	1.9
90°-100°	38.5	0.2
100°-110°	52.2	0.3
110°-120°	34.9	0.2
120°-130°	13.4	0.1
130°-140°	5.4	0.0
140°-150°	1.7	0.0
150°-160°	1.0	0.0
160°-170°	0.9	0.0
170°-180°	0.3	0.0
0°-30°	4289.3	26.6
0°-40°	7057.7	43.8
0°-60°	12576.5	78.0
0°-90°	15972.8	99.1
90°-120°	125.6	0.8
90°-150°	146.2	0.9
90°-180°	148.0	0.9
0°-180°	16121.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5478	5478	5478	5478	5478	
5°	5429	5451	5475	5496	5498	516
15°	5254	5278	5293	5314	5317	1483
25°	4910	4934	4943	4952	4952	2261
35°	4388	4419	4387	4441	4472	2752
45°	3743	3752	3789	3969	3881	2881
55°	2890	2898	2958	3158	3004	2584
65°	1919	1977	2031	2073	2075	1893
75°	924	1028	1040	1061	1061	996
85°	248	270	254	211	211	268
90°	50	71	67	61	59	35
95°	40	32	34	19	18	57
105°	143	185	18	19	17	146
115°	74	46	73	10	10	74
125°	33	25	10	2	3	31
135°	14	11	4	2	2	11
145°	4	2	2	2	1	3
155°	2	2	2	2	2	1
165°	3	3	3	3	3	1
175°	3	3	3	3	3	0
180°	3	3	3	3	3	



TEST NUMBER: P#

CATALOG NUMBER: VT4S-LD5-15-PC-L850-CD2-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5478.3	5478.3	5478.3	5478.3	5478.3
2.5°	5447.1	5464.3	5482.6	5501.9	5509.5
5°	5428.8	5451.4	5475.1	5495.5	5497.6
7.5°	5406.3	5428.8	5445.0	5462.2	5467.5
10°	5363.3	5395.5	5406.3	5418.1	5427.8
12.5°	5310.6	5340.7	5350.4	5374.0	5379.4
15°	5253.6	5278.3	5293.4	5313.8	5317.0
17.5°	5183.7	5208.5	5225.7	5237.5	5245.0
20°	5099.9	5120.3	5141.8	5150.4	5157.9
22.5°	5012.8	5025.7	5046.1	5060.1	5073.0
25°	4909.6	4934.3	4942.9	4951.5	4951.5
27.5°	4782.8	4819.3	4825.8	4812.9	4823.6
30°	4673.1	4697.8	4702.1	4687.1	4724.7
32.5°	4557.0	4558.1	4571.0	4567.7	4592.5
35°	4388.2	4419.4	4387.1	4440.9	4472.1
37.5°	4244.2	4270.0	4243.1	4324.8	4319.4
40°	4085.1	4109.8	4082.9	4152.8	4141.0
42.5°	3918.4	3939.9	3933.5	3965.7	4134.5
45°	3743.2	3751.8	3789.4	3969.0	3880.8
47.5°	3545.4	3552.9	3592.7	3528.2	2838.0
50°	3339.0	3346.5	3388.5	2666.0	3816.3
52.5°	3130.5	3119.7	3296.0	3585.2	3393.8
55°	2889.6	2898.2	2958.4	3158.4	3003.6
57.5°	2658.5	2677.9	2154.3	2778.9	2794.0
60°	2417.7	2453.2	2721.9	2543.5	2551.0
62.5°	2168.3	2228.5	2407.0	2309.1	2316.7
65°	1918.9	1977.0	2030.7	2072.6	2074.8
67.5°	1653.4	1742.6	1811.4	1795.3	1839.4
70°	1410.4	1369.6	1558.8	1553.4	1605.0
72.5°	1158.9	1258.8	1280.3	1111.6	1506.1
75°	924.5	1027.7	1039.5	1061.0	1061.0
77.5°	716.0	776.2	865.4	823.5	793.4
80°	550.4	567.6	620.3	639.6	628.9
82.5°	409.6	385.9	427.9	446.1	404.2
85°	248.3	269.8	253.7	210.7	210.7
87.5°	102.1	129.0	114.0	104.3	92.5
90°	49.5	71.0	66.7	61.3	59.1
92.5°	51.6	49.5	35.5	24.7	19.4
95°	39.8	32.3	34.4	19.4	18.3
97.5°	75.3	23.7	23.7	17.2	14.0
100°	139.8	20.4	21.5	17.2	11.8
102.5°	166.6	30.1	21.5	17.2	17.2
105°	143.0	184.9	18.3	19.4	17.2
107.5°	121.5	83.9	14.0	17.2	19.4
110°	102.1	59.1	11.8	16.1	18.3



TEST NUMBER: P#

CATALOG NUMBER: VT4S-LD5-15-PC-L850-CD2-U

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	86.0	44.1	11.8	11.8	16.1
115°	74.2	46.2	73.1	9.7	9.7
117.5°	62.4	73.1	32.3	7.5	9.7
120°	50.5	41.9	19.4	9.7	6.5
122.5°	39.8	31.2	12.9	3.2	6.5
125°	33.3	24.7	9.7	2.2	3.2
127.5°	26.9	20.4	6.5	2.2	2.2
130°	21.5	19.4	4.3	2.2	2.2
132.5°	18.3	14.0	11.8	2.2	2.2
135°	14.0	10.8	4.3	2.2	2.2
137.5°	10.8	8.6	3.2	2.2	2.2
140°	8.6	6.5	2.2	2.2	1.1
142.5°	6.5	4.3	2.2	2.2	1.1
145°	4.3	2.2	2.2	2.2	1.1
147.5°	3.2	2.2	2.2	2.2	2.2
150°	2.2	2.2	2.2	2.2	2.2
152.5°	2.2	2.2	2.2	2.2	2.2
155°	2.2	2.2	2.2	2.2	2.2
157.5°	2.2	2.2	2.2	2.2	2.2
160°	2.2	2.2	2.2	2.2	2.2
162.5°	3.2	3.2	3.2	3.2	2.2
165°	3.2	3.2	3.2	3.2	3.2
167.5°	3.2	3.2	3.2	3.2	3.2
170°	3.2	3.2	3.2	3.2	3.2
172.5°	3.2	3.2	3.2	3.2	3.2
175°	3.2	3.2	3.2	3.2	3.2
177.5°	3.2	3.2	3.2	3.2	3.2
180°	3.2	3.2	3.2	3.2	3.2

(END OF REPORT)