

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-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-LD5-12-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**

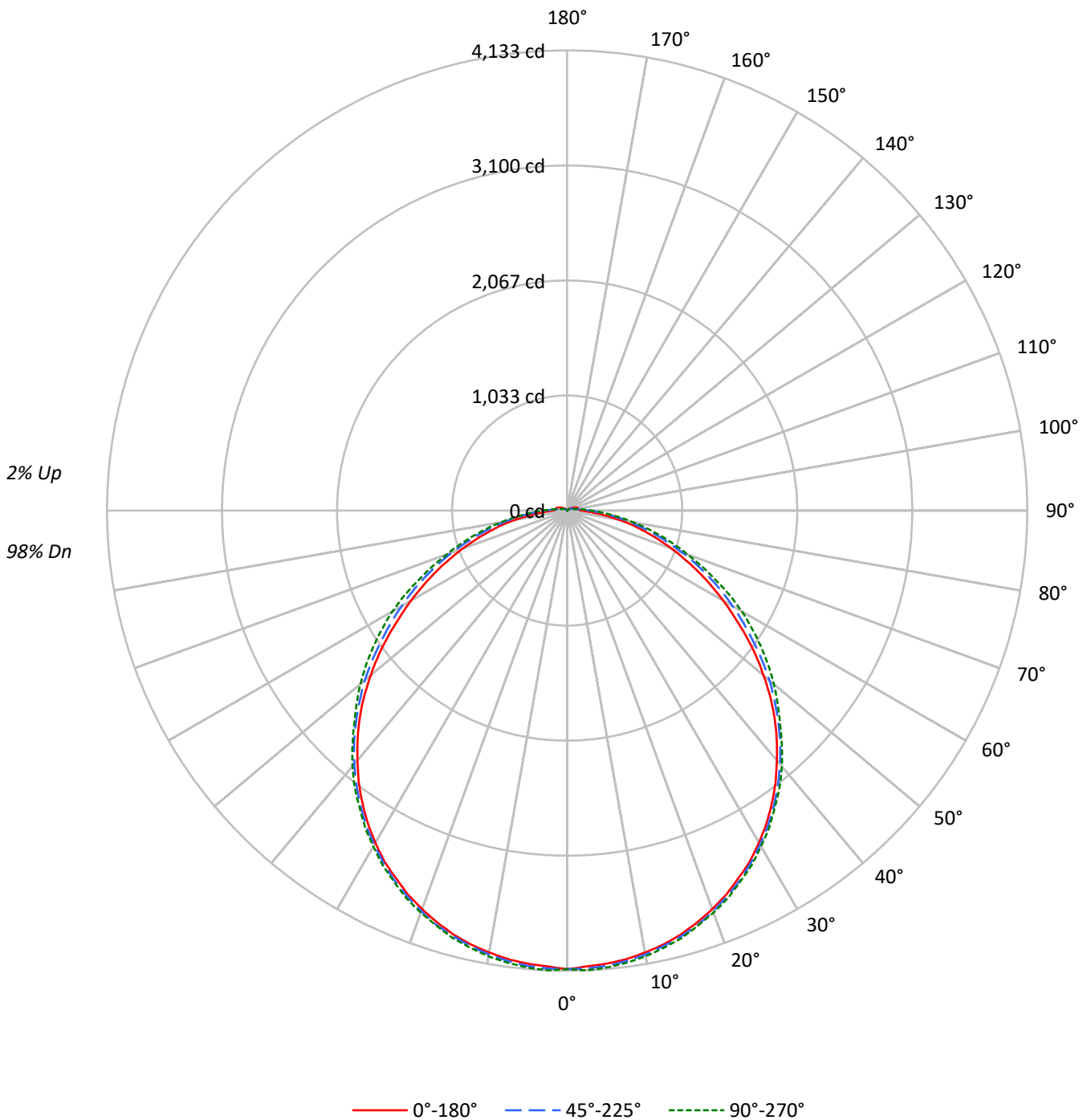
Lumens per Lamp: N/A  
Luminaire Lumens: 12008.0 lumens  
Efficiency: N/A  
Efficacy: 143.1 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.26 / 1.36  
Luminous Opening: Rectangular w/ Sides (W: 1.08' x L: 2.08' x H: 0.25')  
CIE Type: Direct

Input Watts (W): 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



TEST NUMBER: P#  
CATALOG NUMBER: VT4S-LD5-12-DRF-L840-CD2-U

### Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: VT4S-LD5-12-DRF-L840-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	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°	19649	19649	19649
5°	19358	19241	19342
10°	19120	18793	18923
15°	18864	18332	18490
20°	18533	17836	17999
25°	18156	17303	17483
30°	17754	16703	16933
35°	17226	16059	16307
40°	16578	15333	15655
45°	15883	14494	14826
50°	14958	13595	14111
55°	13912	12506	13275
60°	12808	11448	12356
65°	11676	10353	11080
70°	10471	9114	9828
75°	9192	7763	8570
80°	7656	6372	7202
85°	5685	4950	5668



TEST NUMBER: P#

CATALOG NUMBER: VT4S-LD5-12-DRF-L840-CD2-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	389.9	3.2
10°-20°	1116.2	9.3
20°-30°	1688.0	14.1
30°-40°	2021.9	16.8
40°-50°	2065.1	17.2
50°-60°	1828.3	15.2
60°-70°	1385.9	11.5
70°-80°	854.3	7.1
80°-90°	377.9	3.1
90°-100°	135.8	1.1
100°-110°	72.8	0.6
110°-120°	43.4	0.4
120°-130°	20.0	0.2
130°-140°	6.2	0.1
140°-150°	1.2	0.0
150°-160°	0.5	0.0
160°-170°	0.5	0.0
170°-180°	0.2	0.0
0°-30°	3194.1	26.6
0°-40°	5216.0	43.4
0°-60°	9109.4	75.9
0°-90°	11727.4	97.7
90°-120°	252.0	2.1
90°-150°	279.4	2.3
90°-180°	281.0	2.3
0°-180°	12008.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4118	4118	4118	4118	4118	
5°	4084	4092	4104	4116	4120	388
15°	3942	3945	3958	3967	3975	1112
25°	3642	3652	3667	3678	3678	1679
35°	3206	3216	3236	3258	3252	2004
45°	2636	2651	2681	2712	2704	2029
55°	1959	1998	2036	2100	2122	1753
65°	1300	1334	1405	1459	1467	1289
75°	722	756	811	854	865	769
85°	246	295	347	377	377	251
90°	130	163	201	219	218	74
95°	106	106	117	128	127	86
105°	95	81	60	55	56	99
115°	62	50	40	34	36	63
125°	33	27	18	16	19	30
135°	15	12	4	4	6	12
145°	5	3	1	0	0	3
155°	2	2	2	1	0	1
165°	2	2	2	1	1	1
175°	2	2	2	2	1	0
180°	2	2	2	2	2	



TEST NUMBER: P#

CATALOG NUMBER: VT4S-LD5-12-DRF-L840-CD2-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4118.1	4118.1	4118.1	4118.1	4118.1
2.5°	4097.9	4102.7	4115.7	4128.6	4132.7
5°	4084.1	4092.2	4104.3	4115.7	4119.7
7.5°	4063.8	4070.3	4080.8	4092.2	4095.4
10°	4029.8	4037.1	4048.4	4059.0	4064.6
12.5°	3991.7	3995.0	4005.5	4017.6	4020.9
15°	3941.5	3944.7	3957.7	3966.6	3974.7
17.5°	3879.1	3882.3	3901.8	3905.8	3906.7
20°	3809.4	3814.3	3829.7	3837.0	3842.6
22.5°	3733.3	3739.8	3751.9	3760.8	3768.9
25°	3641.7	3652.3	3666.8	3678.2	3678.2
27.5°	3553.4	3555.0	3568.8	3581.0	3589.1
30°	3445.7	3447.3	3465.9	3479.7	3482.9
32.5°	3331.4	3337.9	3357.4	3371.9	3376.0
35°	3205.9	3216.4	3235.8	3258.5	3252.0
37.5°	3075.4	3081.1	3108.6	3127.3	3134.6
40°	2929.6	2945.8	2974.1	2994.4	3000.1
42.5°	2787.0	2801.6	2832.4	2851.8	2854.2
45°	2636.3	2650.9	2680.9	2711.6	2704.4
47.5°	2473.5	2496.1	2526.1	2558.5	2564.2
50°	2303.3	2336.5	2373.0	2399.7	2424.0
52.5°	2136.4	2163.2	2205.3	2253.1	2275.8
55°	1959.0	1997.9	2036.0	2100.0	2121.8
57.5°	1783.2	1830.2	1877.2	1947.7	1967.1
60°	1621.2	1658.4	1715.1	1784.0	1812.4
62.5°	1455.9	1498.8	1562.0	1625.2	1644.7
65°	1300.3	1334.4	1404.8	1459.1	1467.2
67.5°	1144.0	1184.5	1250.9	1307.6	1310.9
70°	998.1	1034.6	1098.6	1146.4	1151.3
72.5°	857.2	894.4	948.7	997.3	1007.0
75°	721.9	755.9	811.0	853.9	865.3
77.5°	602.0	627.1	675.7	724.3	728.3
80°	468.3	497.4	558.2	598.7	605.2
82.5°	356.5	391.3	445.6	482.1	483.7
85°	246.3	294.9	346.8	376.7	376.7
87.5°	170.1	221.2	267.4	287.6	290.0
90°	129.6	162.8	200.9	218.7	217.9
92.5°	112.6	128.0	152.3	166.9	164.5
95°	106.1	106.1	116.7	128.0	127.2
97.5°	102.9	96.4	92.4	99.7	98.8
100°	102.1	90.7	76.2	79.4	80.2
102.5°	99.7	85.9	66.4	65.6	66.4
105°	94.8	81.0	60.0	55.1	55.9
107.5°	88.3	74.5	55.1	48.6	49.4
110°	80.2	66.4	50.2	43.7	43.7



TEST NUMBER: P#

CATALOG NUMBER: VT4S-LD5-12-DRF-L840-CD2-U

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	72.1	58.3	45.4	38.9	39.7
115°	62.4	50.2	39.7	34.0	35.6
117.5°	54.3	43.7	34.8	29.2	31.6
120°	46.2	38.1	28.4	24.3	27.5
122.5°	38.9	32.4	22.7	20.3	23.5
125°	33.2	26.7	17.8	16.2	19.4
127.5°	27.5	22.7	13.0	13.0	15.4
130°	22.7	18.6	8.1	9.7	12.2
132.5°	18.6	15.4	5.7	6.5	8.9
135°	14.6	12.2	4.1	4.1	6.5
137.5°	12.2	8.9	2.4	1.6	3.2
140°	8.9	6.5	1.6	0.0	0.8
142.5°	7.3	4.9	0.8	0.0	0.0
145°	4.9	3.2	0.8	0.0	0.0
147.5°	3.2	1.6	0.8	0.8	0.0
150°	1.6	1.6	0.8	0.8	0.0
152.5°	1.6	1.6	0.8	0.8	0.0
155°	1.6	1.6	1.6	0.8	0.0
157.5°	1.6	1.6	1.6	0.8	0.0
160°	1.6	1.6	1.6	0.8	0.8
162.5°	2.4	2.4	1.6	0.8	0.8
165°	2.4	2.4	1.6	0.8	0.8
167.5°	2.4	2.4	1.6	1.6	0.8
170°	2.4	2.4	1.6	0.8	0.8
172.5°	2.4	2.4	1.6	1.6	0.8
175°	2.4	2.4	2.4	1.6	0.8
177.5°	2.4	2.4	2.4	1.6	0.8
180°	2.4	2.4	2.4	2.4	2.4

(END OF REPORT)