

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-LD5-9-PC-L840-CD1-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-LD5-9-PC-L840-CD1-U
Description: VT4S VAPORTIGHT FIXTURE WITH 4000K LED AND CLEAR POLYCARBONATE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

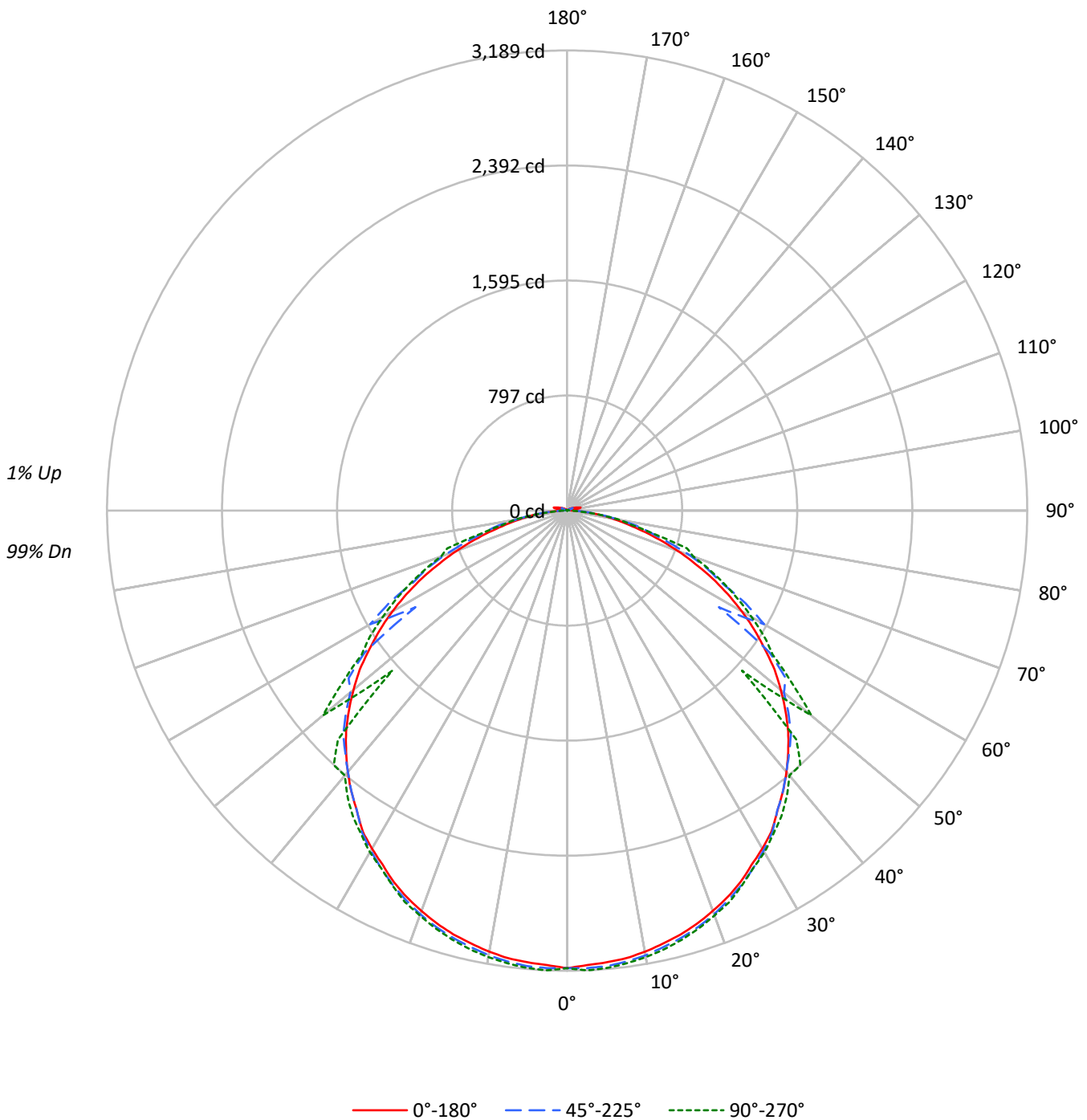
Lumens per Lamp: N/A
Luminaire Lumens: 9330.9 lumens
Efficiency: N/A
Efficacy: 151.7 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.28 / 1.4
Luminous Opening: Rectangular w/ Sides (W: 1.08' x L: 2.08' x H: 0.25')
CIE Type: Direct

Input Watts (W): 61.5
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	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°	15130	15130	15130
5°	14894	14856	14940
10°	14729	14526	14626
15°	14553	14192	14317
20°	14361	13860	13984
25°	14168	13501	13622
30°	13937	13116	13295
35°	13648	12602	12980
40°	13380	12183	12507
45°	13053	11859	12315
50°	12551	11237	12859
55°	11878	10518	10877
60°	11056	10516	10066
65°	9973	8662	9069
70°	8565	7485	7931
75°	6813	5760	6082
80°	5209	4098	4331
85°	3317	2095	1836



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	301.0	3.2
10°-20°	864.8	9.3
20°-30°	1317.0	14.1
30°-40°	1602.4	17.2
40°-50°	1669.0	17.9
50°-60°	1525.4	16.3
60°-70°	1161.6	12.4
70°-80°	630.5	6.8
80°-90°	173.6	1.9
90°-100°	22.3	0.2
100°-110°	30.2	0.3
110°-120°	20.2	0.2
120°-130°	7.8	0.1
130°-140°	3.1	0.0
140°-150°	1.0	0.0
150°-160°	0.6	0.0
160°-170°	0.5	0.0
170°-180°	0.2	0.0
0°-30°	2482.7	26.6
0°-40°	4085.1	43.8
0°-60°	7279.4	78.0
0°-90°	9245.2	99.1
90°-120°	72.7	0.8
90°-150°	84.5	0.9
90°-180°	86.0	0.9
0°-180°	9330.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3171	3171	3171	3171	3171	
5°	3142	3155	3169	3181	3182	299
15°	3041	3055	3064	3076	3078	858
25°	2842	2856	2861	2866	2866	1309
35°	2540	2558	2539	2570	2588	1593
45°	2167	2172	2193	2297	2246	1667
55°	1673	1678	1712	1828	1738	1496
65°	1111	1144	1175	1200	1201	1096
75°	535	595	602	614	614	577
85°	144	156	147	122	122	155
90°	29	41	39	36	34	20
95°	23	19	20	11	11	33
105°	83	107	11	11	10	85
115°	43	27	42	6	6	43
125°	19	14	6	1	2	18
135°	8	6	2	1	1	7
145°	2	1	1	1	1	2
155°	1	1	1	1	1	1
165°	2	2	2	2	2	1
175°	2	2	2	2	2	0
180°	2	2	2	2	2	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3170.9	3170.9	3170.9	3170.9	3170.9
2.5°	3152.8	3162.8	3173.4	3184.6	3188.9
5°	3142.3	3155.3	3169.0	3180.8	3182.1
7.5°	3129.2	3142.3	3151.6	3161.6	3164.7
10°	3104.3	3123.0	3129.2	3136.0	3141.6
12.5°	3073.8	3091.2	3096.8	3110.5	3113.6
15°	3040.8	3055.2	3063.9	3075.7	3077.6
17.5°	3000.4	3014.7	3024.7	3031.5	3035.9
20°	2951.9	2963.7	2976.1	2981.1	2985.5
22.5°	2901.5	2908.9	2920.8	2928.8	2936.3
25°	2841.7	2856.0	2861.0	2866.0	2866.0
27.5°	2768.3	2789.5	2793.2	2785.7	2792.0
30°	2704.8	2719.1	2721.6	2712.9	2734.7
32.5°	2637.6	2638.3	2645.7	2643.9	2658.2
35°	2539.9	2558.0	2539.3	2570.4	2588.5
37.5°	2456.6	2471.5	2455.9	2503.2	2500.1
40°	2364.5	2378.8	2363.2	2403.7	2396.8
42.5°	2268.0	2280.5	2276.7	2295.4	2393.1
45°	2166.6	2171.6	2193.4	2297.3	2246.3
47.5°	2052.1	2056.5	2079.5	2042.2	1642.7
50°	1932.6	1937.0	1961.3	1543.1	2208.9
52.5°	1811.9	1805.7	1907.8	2075.1	1964.4
55°	1672.6	1677.5	1712.4	1828.1	1738.5
57.5°	1538.8	1550.0	1247.0	1608.5	1617.2
60°	1399.4	1419.9	1575.5	1472.2	1476.6
62.5°	1255.0	1289.9	1393.2	1336.6	1340.9
65°	1110.7	1144.3	1175.4	1199.7	1200.9
67.5°	957.0	1008.6	1048.5	1039.1	1064.6
70°	816.4	792.7	902.2	899.1	929.0
72.5°	670.8	728.6	741.1	643.4	871.7
75°	535.1	594.9	601.7	614.1	614.1
77.5°	414.4	449.3	500.9	476.6	459.2
80°	318.6	328.5	359.0	370.2	364.0
82.5°	237.1	223.4	247.6	258.2	234.0
85°	143.7	156.2	146.8	122.0	122.0
87.5°	59.1	74.7	66.0	60.4	53.5
90°	28.6	41.1	38.6	35.5	34.2
92.5°	29.9	28.6	20.5	14.3	11.2
95°	23.0	18.7	19.9	11.2	10.6
97.5°	43.6	13.7	13.7	10.0	8.1
100°	80.9	11.8	12.4	10.0	6.8
102.5°	96.4	17.4	12.4	10.0	10.0
105°	82.8	107.0	10.6	11.2	10.0
107.5°	70.3	48.5	8.1	10.0	11.2
110°	59.1	34.2	6.8	9.3	10.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	49.8	25.5	6.8	6.8	9.3
115°	42.9	26.8	42.3	5.6	5.6
117.5°	36.1	42.3	18.7	4.4	5.6
120°	29.2	24.3	11.2	5.6	3.7
122.5°	23.0	18.0	7.5	1.9	3.7
125°	19.3	14.3	5.6	1.2	1.9
127.5°	15.6	11.8	3.7	1.2	1.2
130°	12.4	11.2	2.5	1.2	1.2
132.5°	10.6	8.1	6.8	1.2	1.2
135°	8.1	6.2	2.5	1.2	1.2
137.5°	6.2	5.0	1.9	1.2	1.2
140°	5.0	3.7	1.2	1.2	0.6
142.5°	3.7	2.5	1.2	1.2	0.6
145°	2.5	1.2	1.2	1.2	0.6
147.5°	1.9	1.2	1.2	1.2	1.2
150°	1.2	1.2	1.2	1.2	1.2
152.5°	1.2	1.2	1.2	1.2	1.2
155°	1.2	1.2	1.2	1.2	1.2
157.5°	1.2	1.2	1.2	1.2	1.2
160°	1.2	1.2	1.2	1.2	1.2
162.5°	1.9	1.9	1.9	1.9	1.2
165°	1.9	1.9	1.9	1.9	1.9
167.5°	1.9	1.9	1.9	1.9	1.9
170°	1.9	1.9	1.9	1.9	1.9
172.5°	1.9	1.9	1.9	1.9	1.9
175°	1.9	1.9	1.9	1.9	1.9
177.5°	1.9	1.9	1.9	1.9	1.9
180°	1.9	1.9	1.9	1.9	1.9

(END OF REPORT)