

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-L835-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-L835-CD2-U  
Description: VT4S VAPORTIGHT FIXTURE WITH 3500K LED AND CLEAR POLYCARBONATE LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

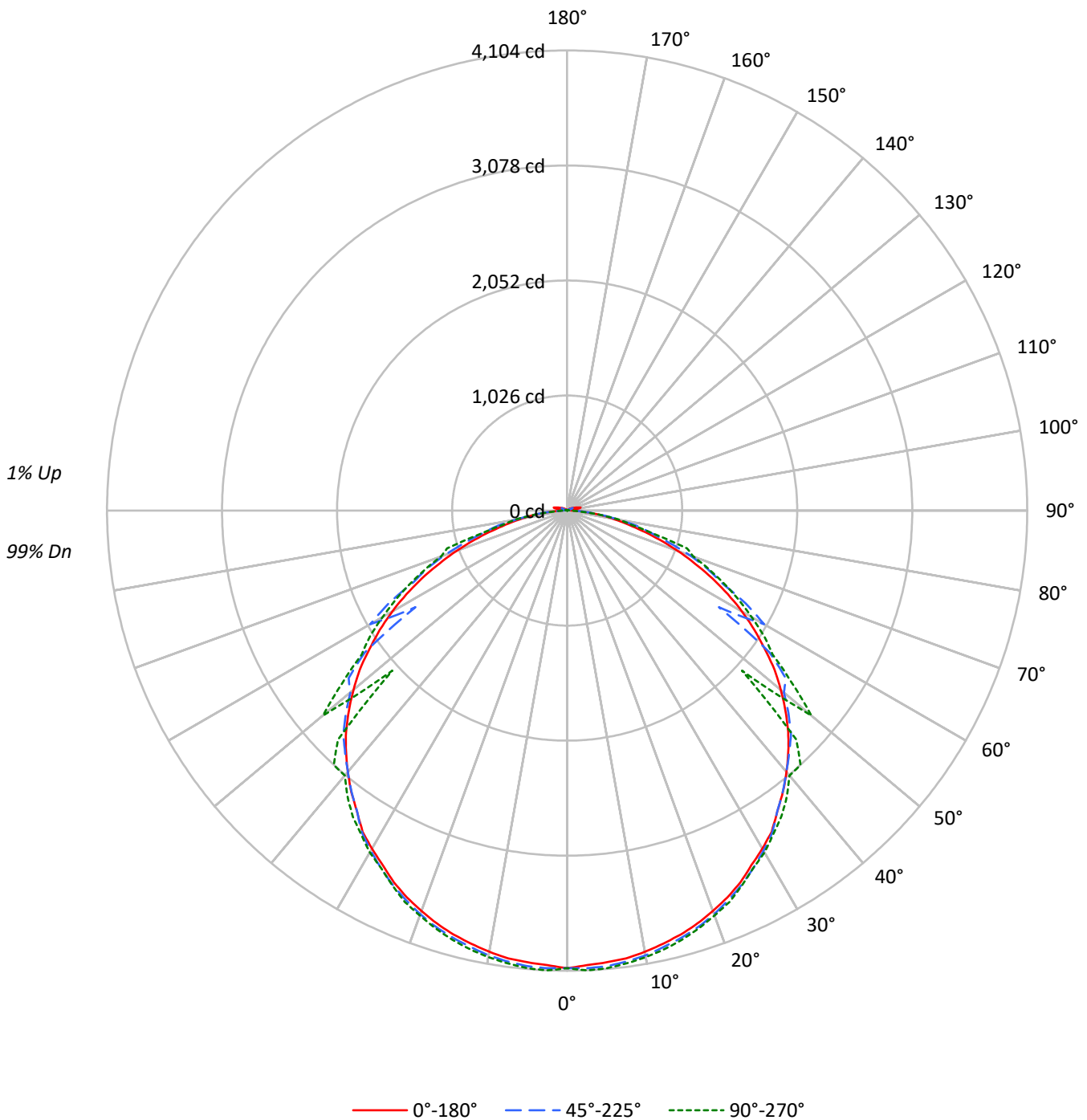
Lumens per Lamp: N/A  
Luminaire Lumens: 12009.9 lumens  
Efficiency: N/A  
Efficacy: 143.1 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.28 / 1.4  
Luminous Opening: Rectangular w/ Sides (W: 1.08' x L: 2.08' x H: 0.25')  
CIE Type: Direct

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	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°	19474	19474	19474
5°	19170	19122	19229
10°	18958	18696	18825
15°	18731	18266	18427
20°	18485	17840	17999
25°	18236	17377	17533
30°	17938	16882	17113
35°	17566	16220	16706
40°	17222	15681	16098
45°	16801	15263	15851
50°	16154	14463	16551
55°	15288	13538	14000
60°	14231	13535	12956
65°	12837	11149	11673
70°	11024	9634	10207
75°	8770	7413	7829
80°	6703	5275	5575
85°	4270	2698	2362



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	387.4	3.2
10°-20°	1113.0	9.3
20°-30°	1695.0	14.1
30°-40°	2062.4	17.2
40°-50°	2148.1	17.9
50°-60°	1963.4	16.3
60°-70°	1495.1	12.4
70°-80°	811.5	6.8
80°-90°	223.5	1.9
90°-100°	28.6	0.2
100°-110°	38.9	0.3
110°-120°	26.0	0.2
120°-130°	10.0	0.1
130°-140°	4.0	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°	3195.5	26.6
0°-40°	5257.9	43.8
0°-60°	9369.4	78.0
0°-90°	11899.6	99.1
90°-120°	93.5	0.8
90°-150°	108.8	0.9
90°-180°	110.0	0.9
0°-180°	12009.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4081	4081	4081	4081	4081	
5°	4044	4061	4079	4094	4096	385
15°	3914	3932	3944	3959	3961	1105
25°	3658	3676	3682	3689	3689	1685
35°	3269	3292	3268	3308	3332	2050
45°	2789	2795	2823	2957	2891	2146
55°	2153	2159	2204	2353	2238	1925
65°	1430	1473	1513	1544	1546	1410
75°	689	766	774	790	790	742
85°	185	201	189	157	157	199
90°	37	53	50	46	44	26
95°	30	24	26	14	14	43
105°	106	138	14	14	13	109
115°	55	34	54	7	7	56
125°	25	18	7	2	2	23
135°	10	8	3	2	2	8
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	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4081.3	4081.3	4081.3	4081.3	4081.3
2.5°	4058.1	4070.9	4084.5	4098.9	4104.5
5°	4044.4	4061.3	4078.9	4094.1	4095.7
7.5°	4027.6	4044.4	4056.4	4069.3	4073.3
10°	3995.6	4019.6	4027.6	4036.4	4043.6
12.5°	3956.3	3978.8	3986.0	4003.6	4007.6
15°	3913.9	3932.3	3943.5	3958.7	3961.1
17.5°	3861.8	3880.3	3893.1	3901.9	3907.5
20°	3799.4	3814.6	3830.6	3837.0	3842.6
22.5°	3734.5	3744.1	3759.3	3769.7	3779.3
25°	3657.6	3676.0	3682.4	3688.8	3688.8
27.5°	3563.1	3590.3	3595.1	3585.5	3593.5
30°	3481.4	3499.8	3503.0	3491.8	3519.9
32.5°	3394.9	3395.7	3405.3	3402.9	3421.4
35°	3269.2	3292.4	3268.4	3308.4	3331.7
37.5°	3161.9	3181.1	3161.1	3221.9	3217.9
40°	3043.3	3061.8	3041.7	3093.8	3085.0
42.5°	2919.2	2935.2	2930.4	2954.4	3080.2
45°	2788.7	2795.1	2823.1	2956.8	2891.2
47.5°	2641.3	2646.9	2676.5	2628.5	2114.3
50°	2487.5	2493.1	2524.4	1986.2	2843.1
52.5°	2332.2	2324.1	2455.5	2670.9	2528.4
55°	2152.8	2159.2	2204.0	2353.0	2237.7
57.5°	1980.6	1995.0	1605.0	2070.3	2081.5
60°	1801.2	1827.6	2027.8	1894.9	1900.5
62.5°	1615.4	1660.2	1793.2	1720.3	1725.9
65°	1429.6	1472.8	1512.9	1544.1	1545.7
67.5°	1231.8	1298.2	1349.5	1337.5	1370.3
70°	1050.8	1020.3	1161.3	1157.3	1195.7
72.5°	863.3	937.8	953.8	828.1	1122.0
75°	688.8	765.6	774.4	790.5	790.5
77.5°	533.4	578.2	644.7	613.5	591.0
80°	410.0	422.9	462.1	476.5	468.5
82.5°	305.1	287.5	318.7	332.4	301.1
85°	185.0	201.0	189.0	157.0	157.0
87.5°	76.1	96.1	84.9	77.7	68.9
90°	36.8	52.9	49.7	45.7	44.0
92.5°	38.4	36.8	26.4	18.4	14.4
95°	29.6	24.0	25.6	14.4	13.6
97.5°	56.1	17.6	17.6	12.8	10.4
100°	104.1	15.2	16.0	12.8	8.8
102.5°	124.1	22.4	16.0	12.8	12.8
105°	106.5	137.8	13.6	14.4	12.8
107.5°	90.5	62.5	10.4	12.8	14.4
110°	76.1	44.0	8.8	12.0	13.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	64.1	32.8	8.8	8.8	12.0
115°	55.3	34.4	54.5	7.2	7.2
117.5°	46.5	54.5	24.0	5.6	7.2
120°	37.6	31.2	14.4	7.2	4.8
122.5°	29.6	23.2	9.6	2.4	4.8
125°	24.8	18.4	7.2	1.6	2.4
127.5°	20.0	15.2	4.8	1.6	1.6
130°	16.0	14.4	3.2	1.6	1.6
132.5°	13.6	10.4	8.8	1.6	1.6
135°	10.4	8.0	3.2	1.6	1.6
137.5°	8.0	6.4	2.4	1.6	1.6
140°	6.4	4.8	1.6	1.6	0.8
142.5°	4.8	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)