

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-DR-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 (G3-1801-511-1)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: VT4S-LD5-12-DR-L835-CD2-U  
Description: VT4S VAPORTIGHT FIXTURE WITH 3500K LED AND CLEAR ACRYLIC LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

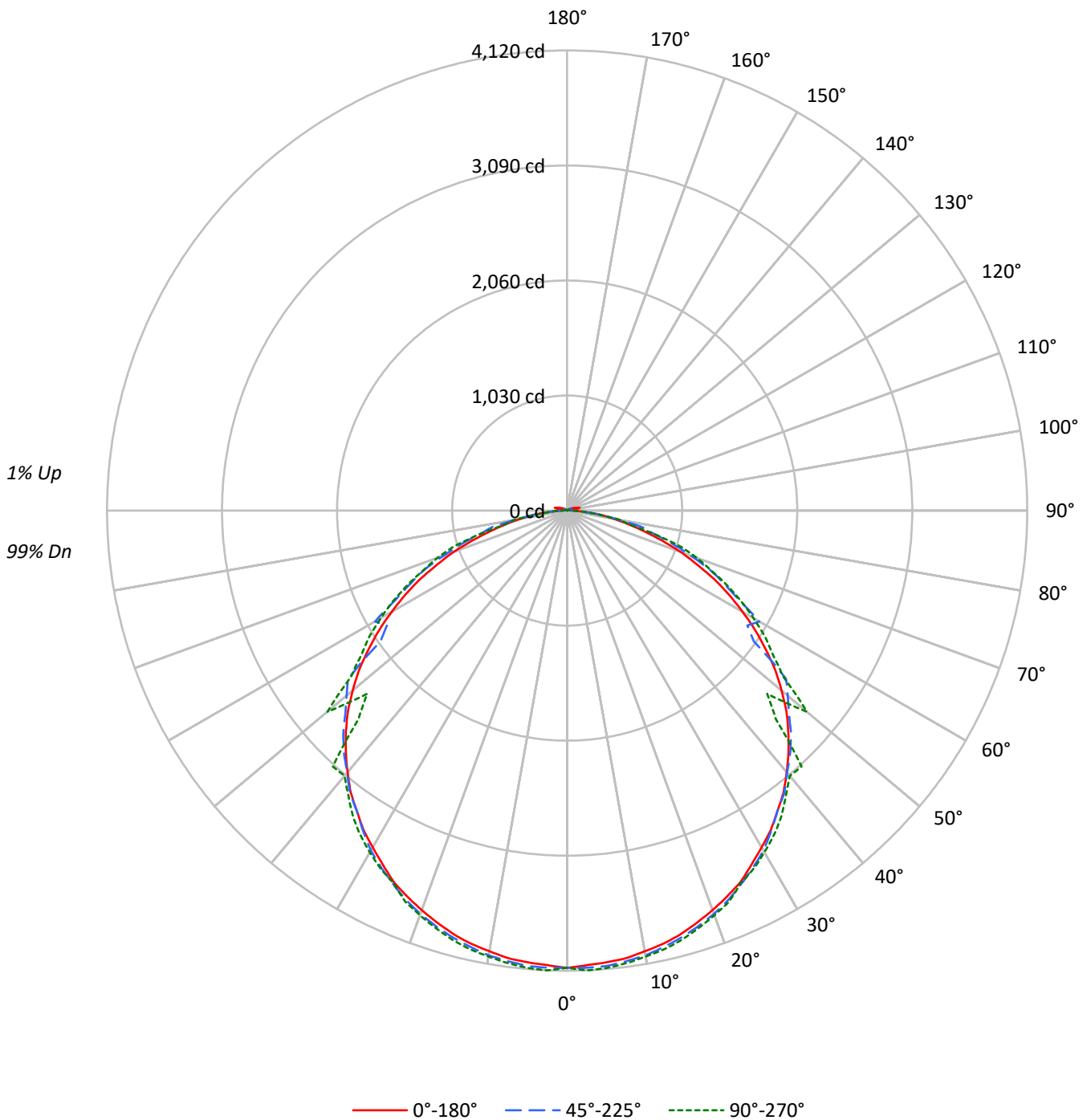
Lumens per Lamp: N/A  
Luminaire Lumens: 12092.0 lumens  
Efficiency: N/A  
Efficacy: 144.1 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.28 / 1.4  
Luminous Opening: Rectangular w/ Sides (W: 1.08' x L: 2.08' x H: 0.25')  
CIE Type: Direct

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	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	84	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	51	46	57	50	45	55	49	45	42
6	70	56	47	41	68	55	47	40	53	46	40	51	45	39	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	31	43	36	31	42	35	31	29
9	56	42	34	29	54	42	34	29	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24

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

	0°	45°	90°
0°	19532	19532	19532
5°	19244	19184	19296
10°	19012	18769	18877
15°	18796	18328	18504
20°	18518	17894	18058
25°	18303	17409	17486
30°	17941	16936	17178
35°	17644	16296	16769
40°	17307	15794	16180
45°	16875	15325	14488
50°	16276	14772	16306
55°	15421	12532	14061
60°	14319	13257	13137
65°	13014	11421	11889
70°	11317	9696	10527
75°	8998	7665	7865
80°	6924	5246	5713
85°	4367	2499	2537



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	388.8	3.2
10°-20°	1116.6	9.2
20°-30°	1699.6	14.1
30°-40°	2070.4	17.1
40°-50°	2162.4	17.9
50°-60°	1978.3	16.4
60°-70°	1510.8	12.5
70°-80°	823.7	6.8
80°-90°	222.5	1.8
90°-100°	34.1	0.3
100°-110°	41.4	0.3
110°-120°	24.9	0.2
120°-130°	11.9	0.1
130°-140°	4.1	0.0
140°-150°	1.2	0.0
150°-160°	0.6	0.0
160°-170°	0.6	0.0
170°-180°	0.2	0.0
0°-30°	3204.9	26.5
0°-40°	5275.3	43.6
0°-60°	9415.9	77.9
0°-90°	11973.0	99.0
90°-120°	100.3	0.8
90°-150°	117.5	1.0
90°-180°	119.0	1.0
0°-180°	12092.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4093	4093	4093	4093	4093	
5°	4060	4077	4092	4106	4110	386
15°	3927	3943	3957	3971	3978	1108
25°	3671	3683	3689	3700	3679	1688
35°	3284	3302	3284	3326	3344	2057
45°	2801	2814	2834	2980	2643	2159
55°	2172	2184	2040	2263	2248	1941
65°	1449	1493	1550	1555	1574	1430
75°	707	761	801	799	794	765
85°	189	190	175	170	169	206
90°	32	54	52	50	49	25
95°	31	28	30	24	24	36
105°	99	131	17	18	18	99
115°	49	24	32	12	13	50
125°	22	18	9	5	6	21
135°	10	8	4	3	3	8
145°	4	3	1	1	1	2
155°	1	1	1	1	1	1
165°	3	3	3	3	1	1
175°	3	3	3	3	3	0
180°	3	3	3	3	3	



TEST NUMBER: P#

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4093.4	4093.4	4093.4	4093.4	4093.4
2.5°	4074.0	4084.3	4097.2	4115.2	4120.4
5°	4059.9	4076.6	4092.1	4106.2	4110.1
7.5°	4041.9	4062.5	4068.9	4086.9	4086.9
10°	4007.1	4030.3	4043.2	4054.7	4054.7
12.5°	3973.6	3990.4	4002.0	4016.1	4022.6
15°	3927.3	3942.8	3956.9	3971.1	3977.5
17.5°	3868.1	3892.5	3901.6	3913.1	3918.3
20°	3806.3	3829.5	3842.3	3852.6	3855.2
22.5°	3740.7	3758.7	3771.6	3775.4	3789.6
25°	3671.1	3682.7	3689.2	3699.5	3678.9
27.5°	3573.3	3595.2	3604.2	3595.2	3615.8
30°	3481.9	3503.8	3514.1	3516.7	3533.4
32.5°	3391.8	3407.3	3402.1	3421.4	3445.9
35°	3283.7	3301.7	3283.7	3326.2	3344.2
37.5°	3182.0	3191.0	3192.3	3234.8	3216.8
40°	3058.4	3070.0	3063.6	3090.6	3100.9
42.5°	2933.6	2943.9	2955.5	2976.0	3107.3
45°	2801.0	2813.9	2834.5	2979.9	2642.7
47.5°	2663.3	2665.8	2692.9	2470.2	2427.7
50°	2506.2	2504.9	2578.3	2345.3	2801.0
52.5°	2349.2	2347.9	2470.2	2580.9	2436.7
55°	2171.5	2184.4	2040.2	2262.9	2247.5
57.5°	1999.1	2010.6	1912.8	2067.3	2100.7
60°	1812.4	1857.5	1986.2	1925.7	1927.0
62.5°	1634.8	1674.7	1731.3	1750.6	1758.3
65°	1449.4	1493.2	1549.8	1555.0	1574.3
67.5°	1252.5	1315.5	1383.8	1374.7	1392.8
70°	1078.7	1001.5	1168.8	1176.5	1233.2
72.5°	883.0	975.7	988.6	823.8	1060.7
75°	706.7	760.7	800.7	799.4	794.2
77.5°	559.9	596.0	692.5	623.0	563.8
80°	423.5	433.8	459.5	457.0	480.1
82.5°	319.2	303.8	312.8	308.9	272.9
85°	189.2	190.5	175.1	169.9	168.6
87.5°	78.5	87.5	85.0	81.1	87.5
90°	32.2	54.1	51.5	50.2	48.9
92.5°	36.0	38.6	36.0	30.9	27.0
95°	30.9	28.3	29.6	24.5	24.5
97.5°	42.5	23.2	23.2	20.6	19.3
100°	85.0	20.6	21.9	18.0	18.0
102.5°	113.3	21.9	19.3	18.0	19.3
105°	99.1	131.3	16.7	18.0	18.0
107.5°	83.7	77.2	15.4	16.7	18.0
110°	70.8	47.6	12.9	15.4	16.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	57.9	33.5	11.6	12.9	15.4
115°	48.9	24.5	32.2	11.6	12.9
117.5°	41.2	25.7	34.8	10.3	11.6
120°	33.5	52.8	18.0	9.0	9.0
122.5°	27.0	24.5	12.9	6.4	7.7
125°	21.9	18.0	9.0	5.1	6.4
127.5°	18.0	14.2	6.4	3.9	5.1
130°	15.4	12.9	3.9	3.9	3.9
132.5°	12.9	10.3	3.9	2.6	3.9
135°	10.3	7.7	3.9	2.6	2.6
137.5°	7.7	6.4	2.6	2.6	2.6
140°	6.4	3.9	1.3	1.3	1.3
142.5°	5.1	3.9	1.3	1.3	1.3
145°	3.9	2.6	1.3	1.3	1.3
147.5°	2.6	1.3	1.3	1.3	1.3
150°	1.3	1.3	1.3	1.3	1.3
152.5°	1.3	1.3	1.3	1.3	1.3
155°	1.3	1.3	1.3	1.3	1.3
157.5°	1.3	1.3	1.3	1.3	1.3
160°	1.3	1.3	1.3	1.3	1.3
162.5°	2.6	2.6	2.6	2.6	1.3
165°	2.6	2.6	2.6	2.6	1.3
167.5°	2.6	2.6	2.6	2.6	1.3
170°	2.6	2.6	2.6	2.6	1.3
172.5°	2.6	2.6	2.6	2.6	2.6
175°	2.6	2.6	2.6	2.6	2.6
177.5°	2.6	2.6	2.6	2.6	2.6
180°	2.6	2.6	2.6	2.6	2.6

(END OF REPORT)