

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-PCF-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 (G3-1801-511-7)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VT4S-LD5-12-PCF-L850-CD2-U
Description: VT4S VAPORTIGHT FIXTURE WITH 5000K LED AND FROSTED POLYCARBONATE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

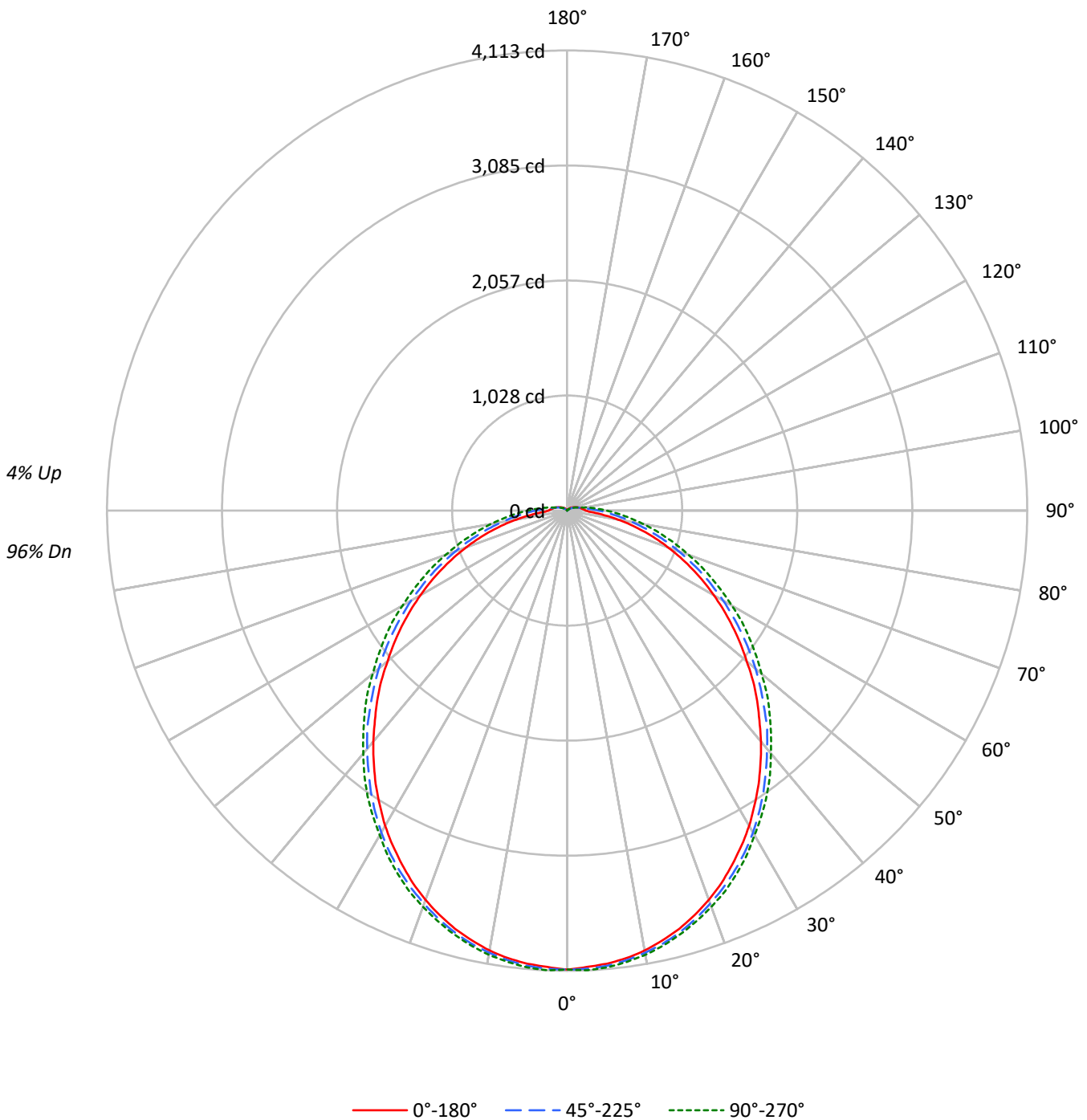
Lumens per Lamp: N/A
Luminaire Lumens: 11705.0 lumens
Efficiency: N/A
Efficacy: 139.5 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.32
Luminous Opening: Rectangular w/ Sides (W: 1.08' x L: 2.08' x H: 0.25')
CIE Type: Direct

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	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99	96
1	107	102	97	93	104	99	95	91	94	91	88	90	87	85	86	83	81	79
2	97	89	82	76	94	87	80	75	82	77	72	79	74	70	75	71	68	66
3	89	78	70	63	86	76	68	62	73	66	61	69	64	59	66	62	58	55
4	81	69	60	53	79	67	59	53	65	57	52	62	56	51	59	54	50	47
5	75	62	53	46	72	60	52	46	58	50	45	56	49	44	53	48	43	41
6	69	56	47	40	67	55	46	40	52	45	39	50	44	39	48	43	38	36
7	64	51	42	36	62	50	41	35	48	40	35	46	39	34	44	38	34	32
8	60	46	38	32	58	45	37	32	44	36	31	42	36	31	41	35	30	28
9	56	42	34	29	54	42	34	28	40	33	28	39	32	28	38	32	27	26
10	52	39	31	26	51	38	31	26	37	30	26	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19574	19574	19574
5°	19271	19149	19243
10°	18947	18634	18769
15°	18519	18065	18233
20°	18017	17413	17653
25°	17404	16743	17035
30°	16766	16013	16285
35°	16029	15189	15600
40°	15249	14337	14788
45°	14472	13458	14024
50°	13598	12599	13198
55°	12822	11684	12445
60°	11966	10755	11584
65°	11066	9801	10721
70°	10051	8793	9829
75°	8915	7754	9013
80°	7504	6771	8208
85°	5911	5905	7574



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	387.5	3.3
10°-20°	1098.5	9.4
20°-30°	1631.5	13.9
30°-40°	1909.5	16.3
40°-50°	1918.9	16.4
50°-60°	1701.2	14.5
60°-70°	1319.9	11.3
70°-80°	861.0	7.4
80°-90°	449.7	3.8
90°-100°	215.1	1.8
100°-110°	112.0	1.0
110°-120°	60.9	0.5
120°-130°	28.7	0.2
130°-140°	8.8	0.1
140°-150°	1.2	0.0
150°-160°	0.3	0.0
160°-170°	0.2	0.0
170°-180°	0.1	0.0
0°-30°	3117.5	26.6
0°-40°	5027.0	42.9
0°-60°	8647.1	73.9
0°-90°	11277.6	96.3
90°-120°	388.0	3.3
90°-150°	426.8	3.6
90°-180°	427.0	3.6
0°-180°	11705.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4102	4102	4102	4102	4102	
5°	4066	4071	4085	4094	4099	386
15°	3870	3879	3900	3913	3919	1090
25°	3491	3512	3548	3576	3584	1608
35°	2983	3014	3060	3098	3111	1865
45°	2402	2434	2489	2537	2558	1851
55°	1806	1839	1902	1967	1989	1615
65°	1232	1266	1330	1401	1420	1222
75°	700	733	810	885	910	743
85°	256	328	414	486	503	254
90°	166	213	283	337	350	93
95°	144	153	191	230	240	113
105°	105	100	103	104	110	112
115°	71	59	60	57	61	72
125°	44	36	25	26	32	40
135°	23	17	4	5	10	18
145°	6	4	0	0	0	4
155°	2	2	0	0	0	1
165°	2	2	1	0	0	0
175°	3	2	1	0	0	0
180°	1	1	1	1	1	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4102.2	4102.2	4102.2	4102.2	4102.2
2.5°	4083.0	4088.2	4099.5	4110.9	4112.6
5°	4065.6	4070.8	4084.7	4094.3	4098.7
7.5°	4036.0	4041.2	4054.3	4067.3	4069.1
10°	3993.3	4000.3	4014.2	4029.0	4031.6
12.5°	3934.9	3946.3	3963.7	3976.7	3980.2
15°	3869.6	3879.2	3900.1	3913.2	3919.3
17.5°	3791.2	3803.4	3825.2	3840.9	3847.8
20°	3703.3	3715.5	3739.0	3766.0	3768.6
22.5°	3604.0	3623.1	3648.4	3674.5	3685.0
25°	3490.8	3512.5	3548.2	3576.1	3583.9
27.5°	3375.8	3396.7	3440.2	3469.0	3475.1
30°	3253.9	3276.5	3322.7	3345.3	3349.7
32.5°	3118.0	3144.1	3193.8	3225.1	3233.0
35°	2983.0	3013.5	3060.5	3098.0	3111.0
37.5°	2840.2	2874.1	2919.4	2967.3	2977.8
40°	2694.7	2730.4	2780.9	2825.4	2834.1
42.5°	2543.2	2582.4	2645.1	2680.8	2697.3
45°	2402.1	2434.3	2489.2	2537.1	2558.0
47.5°	2253.1	2285.4	2342.8	2399.5	2423.0
50°	2093.8	2137.3	2199.1	2254.0	2267.1
52.5°	1952.7	1994.5	2048.5	2109.4	2129.5
55°	1805.5	1838.6	1902.1	1966.6	1989.2
57.5°	1659.2	1694.9	1753.2	1818.5	1852.5
60°	1514.6	1548.5	1611.3	1679.2	1699.2
62.5°	1374.4	1409.2	1465.8	1539.8	1559.9
65°	1232.4	1266.4	1329.9	1401.4	1419.6
67.5°	1094.8	1127.0	1192.3	1268.1	1290.7
70°	958.0	999.8	1059.9	1130.5	1151.4
72.5°	829.1	865.7	934.5	1005.9	1030.3
75°	700.2	733.3	810.0	884.9	910.1
77.5°	579.2	621.9	696.8	778.6	798.7
80°	459.0	504.3	593.1	671.5	689.8
82.5°	350.1	408.5	499.1	576.6	587.9
85°	256.1	327.5	413.7	486.0	503.4
87.5°	192.5	262.2	346.6	406.7	422.4
90°	165.5	213.4	283.1	337.1	350.1
92.5°	154.2	177.7	232.5	280.4	289.2
95°	143.7	153.3	190.7	229.9	239.5
97.5°	133.3	136.7	160.3	188.1	196.0
100°	123.7	124.5	135.0	155.0	160.3
102.5°	114.1	111.5	115.8	126.3	130.6
105°	105.4	100.2	102.8	104.5	109.7
107.5°	96.7	88.8	90.6	88.8	91.4
110°	88.0	77.5	79.3	76.6	79.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	79.3	67.9	69.7	66.2	69.7
115°	71.4	59.2	60.1	56.6	61.0
117.5°	64.5	53.1	50.5	47.9	53.1
120°	56.6	46.2	41.8	40.1	46.2
122.5°	50.5	40.9	33.1	33.1	39.2
125°	43.5	35.7	25.3	26.1	32.2
127.5°	38.3	30.5	18.3	20.9	26.1
130°	33.1	26.1	11.3	15.7	20.9
132.5°	27.0	20.9	7.0	10.5	14.8
135°	22.6	17.4	4.4	5.2	9.6
137.5°	18.3	13.1	1.7	0.9	4.4
140°	13.9	9.6	0.9	0.0	0.0
142.5°	9.6	6.1	0.0	0.0	0.0
145°	6.1	3.5	0.0	0.0	0.0
147.5°	3.5	1.7	0.0	0.0	0.0
150°	1.7	0.9	0.0	0.0	0.0
152.5°	1.7	0.9	0.0	0.0	0.0
155°	1.7	1.7	0.0	0.0	0.0
157.5°	1.7	1.7	0.9	0.0	0.0
160°	1.7	1.7	0.9	0.0	0.0
162.5°	1.7	1.7	0.9	0.0	0.0
165°	1.7	1.7	0.9	0.0	0.0
167.5°	1.7	1.7	0.9	0.0	0.0
170°	1.7	1.7	0.9	0.0	0.0
172.5°	1.7	1.7	0.9	0.0	0.0
175°	2.6	1.7	0.9	0.0	0.0
177.5°	2.6	1.7	0.9	0.0	0.0
180°	0.9	0.9	0.9	0.9	0.9

(END OF REPORT)