

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-DRF-L850-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 (G3-1801-511-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VT4S-LD5-9-DRF-L850-CD1-U
Description: VT4S VAPORTIGHT FIXTURE WITH 5000K LED AND FROSTED ACRYLIC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

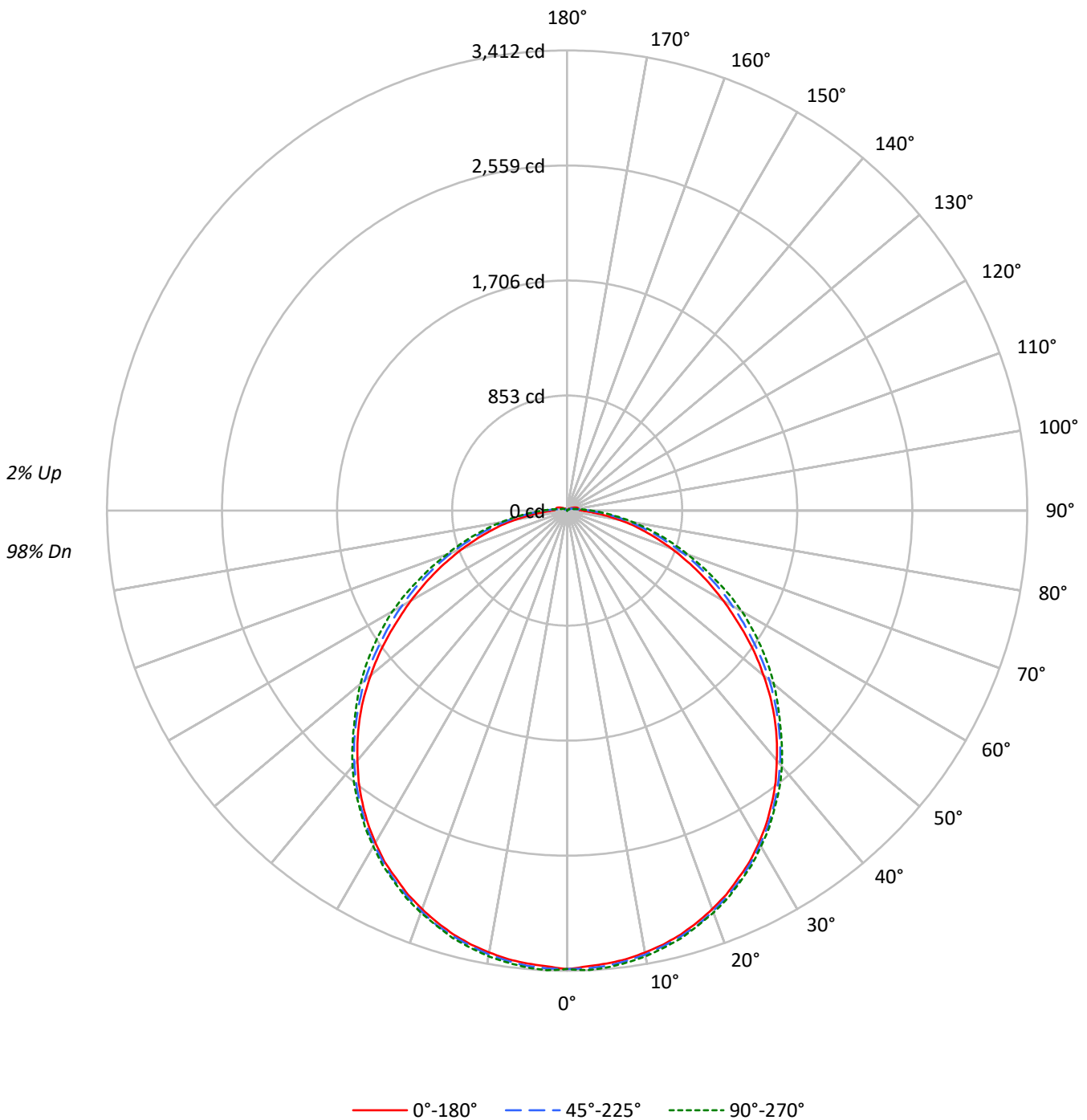
Lumens per Lamp: N/A
Luminaire Lumens: 9913.0 lumens
Efficiency: N/A
Efficacy: 161.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.26 / 1.36
Luminous Opening: Rectangular w/ Sides (W: 1.08' x L: 2.08' x H: 0.25')
CIE Type: Direct

Input Watts (W): 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	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°	16221	16221	16221
5°	15981	15884	15967
10°	15784	15514	15622
15°	15572	15133	15265
20°	15300	14724	14859
25°	14989	14284	14433
30°	14657	13789	13979
35°	14221	13257	13462
40°	13686	12658	12923
45°	13112	11965	12239
50°	12349	11223	11650
55°	11485	10324	10959
60°	10573	9451	10200
65°	9639	8546	9147
70°	8645	7524	8113
75°	7587	6409	7074
80°	6321	5260	5945
85°	4693	4086	4679



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	321.9	3.2
10°-20°	921.5	9.3
20°-30°	1393.5	14.1
30°-40°	1669.1	16.8
40°-50°	1704.8	17.2
50°-60°	1509.4	15.2
60°-70°	1144.1	11.5
70°-80°	705.2	7.1
80°-90°	312.0	3.1
90°-100°	112.1	1.1
100°-110°	60.1	0.6
110°-120°	35.8	0.4
120°-130°	16.5	0.2
130°-140°	5.1	0.1
140°-150°	1.0	0.0
150°-160°	0.4	0.0
160°-170°	0.4	0.0
170°-180°	0.1	0.0
0°-30°	2636.9	26.6
0°-40°	4306.0	43.4
0°-60°	7520.1	75.9
0°-90°	9681.4	97.7
90°-120°	208.0	2.1
90°-150°	230.7	2.3
90°-180°	232.0	2.3
0°-180°	9913.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3400	3400	3400	3400	3400	
5°	3372	3378	3388	3398	3401	321
15°	3254	3256	3267	3275	3281	918
25°	3006	3015	3027	3036	3036	1386
35°	2646	2655	2671	2690	2685	1654
45°	2176	2188	2213	2239	2232	1675
55°	1617	1649	1681	1734	1752	1447
65°	1074	1102	1160	1205	1211	1064
75°	596	624	670	705	714	635
85°	203	244	286	311	311	207
90°	107	134	166	181	180	61
95°	88	88	96	106	105	71
105°	78	67	50	46	46	82
115°	52	42	33	28	29	52
125°	27	22	15	13	16	25
135°	12	10	3	3	5	10
145°	4	3	1	0	0	3
155°	1	1	1	1	0	1
165°	2	2	1	1	1	1
175°	2	2	2	1	1	0
180°	2	2	2	2	2	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3399.6	3399.6	3399.6	3399.6	3399.6
2.5°	3382.9	3386.9	3397.6	3408.3	3411.7
5°	3371.5	3378.2	3388.3	3397.6	3401.0
7.5°	3354.8	3360.2	3368.9	3378.2	3380.9
10°	3326.7	3332.8	3342.1	3350.8	3355.5
12.5°	3295.3	3298.0	3306.7	3316.7	3319.4
15°	3253.8	3256.5	3267.2	3274.6	3281.3
17.5°	3202.3	3205.0	3221.1	3224.4	3225.1
20°	3144.8	3148.8	3161.5	3167.6	3172.2
22.5°	3081.9	3087.3	3097.3	3104.7	3111.4
25°	3006.4	3015.1	3027.1	3036.5	3036.5
27.5°	2933.5	2934.8	2946.2	2956.2	2962.9
30°	2844.5	2845.8	2861.2	2872.6	2875.3
32.5°	2750.2	2755.6	2771.6	2783.6	2787.0
35°	2646.5	2655.2	2671.3	2690.0	2684.7
37.5°	2538.9	2543.5	2566.3	2581.7	2587.7
40°	2418.5	2431.8	2455.3	2472.0	2476.7
42.5°	2300.8	2312.8	2338.2	2354.3	2356.3
45°	2176.4	2188.4	2213.1	2238.6	2232.5
47.5°	2041.9	2060.6	2085.4	2112.1	2116.8
50°	1901.5	1928.9	1959.0	1981.1	2001.1
52.5°	1763.7	1785.8	1820.5	1860.0	1878.7
55°	1617.2	1649.3	1680.8	1733.6	1751.7
57.5°	1472.1	1510.9	1549.7	1607.9	1623.9
60°	1338.3	1369.1	1415.9	1472.8	1496.2
62.5°	1201.9	1237.3	1289.5	1341.7	1357.7
65°	1073.5	1101.6	1159.7	1204.6	1211.2
67.5°	944.4	977.8	1032.7	1079.5	1082.2
70°	824.0	854.1	906.9	946.4	950.4
72.5°	707.6	738.4	783.2	823.3	831.3
75°	595.9	624.0	669.5	704.9	714.3
77.5°	496.9	517.7	557.8	597.9	601.3
80°	386.6	410.7	460.8	494.3	499.6
82.5°	294.3	323.0	367.9	398.0	399.3
85°	203.3	243.5	286.3	311.0	311.0
87.5°	140.5	182.6	220.7	237.4	239.4
90°	107.0	134.4	165.9	180.6	179.9
92.5°	93.0	105.7	125.7	137.8	135.8
95°	87.6	87.6	96.3	105.7	105.0
97.5°	84.9	79.6	76.2	82.3	81.6
100°	84.3	74.9	62.9	65.5	66.2
102.5°	82.3	70.9	54.8	54.2	54.8
105°	78.3	66.9	49.5	45.5	46.1
107.5°	72.9	61.5	45.5	40.1	40.8
110°	66.2	54.8	41.5	36.1	36.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	59.5	48.2	37.5	32.1	32.8
115°	51.5	41.5	32.8	28.1	29.4
117.5°	44.8	36.1	28.8	24.1	26.1
120°	38.1	31.4	23.4	20.1	22.7
122.5°	32.1	26.8	18.7	16.7	19.4
125°	27.4	22.1	14.7	13.4	16.1
127.5°	22.7	18.7	10.7	10.7	12.7
130°	18.7	15.4	6.7	8.0	10.0
132.5°	15.4	12.7	4.7	5.4	7.4
135°	12.0	10.0	3.3	3.3	5.4
137.5°	10.0	7.4	2.0	1.3	2.7
140°	7.4	5.4	1.3	0.0	0.7
142.5°	6.0	4.0	0.7	0.0	0.0
145°	4.0	2.7	0.7	0.0	0.0
147.5°	2.7	1.3	0.7	0.7	0.0
150°	1.3	1.3	0.7	0.7	0.0
152.5°	1.3	1.3	0.7	0.7	0.0
155°	1.3	1.3	1.3	0.7	0.0
157.5°	1.3	1.3	1.3	0.7	0.0
160°	1.3	1.3	1.3	0.7	0.7
162.5°	2.0	2.0	1.3	0.7	0.7
165°	2.0	2.0	1.3	0.7	0.7
167.5°	2.0	2.0	1.3	1.3	0.7
170°	2.0	2.0	1.3	0.7	0.7
172.5°	2.0	2.0	1.3	1.3	0.7
175°	2.0	2.0	2.0	1.3	0.7
177.5°	2.0	2.0	2.0	1.3	0.7
180°	2.0	2.0	2.0	2.0	2.0

(END OF REPORT)