

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-PCF-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 (G3-1801-511-7)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VT4S-LD5-9-PCF-L850-CD1-U
Description: VT4S VAPORTIGHT FIXTURE WITH 5000K LED AND FROSTED POLYCARBONATE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

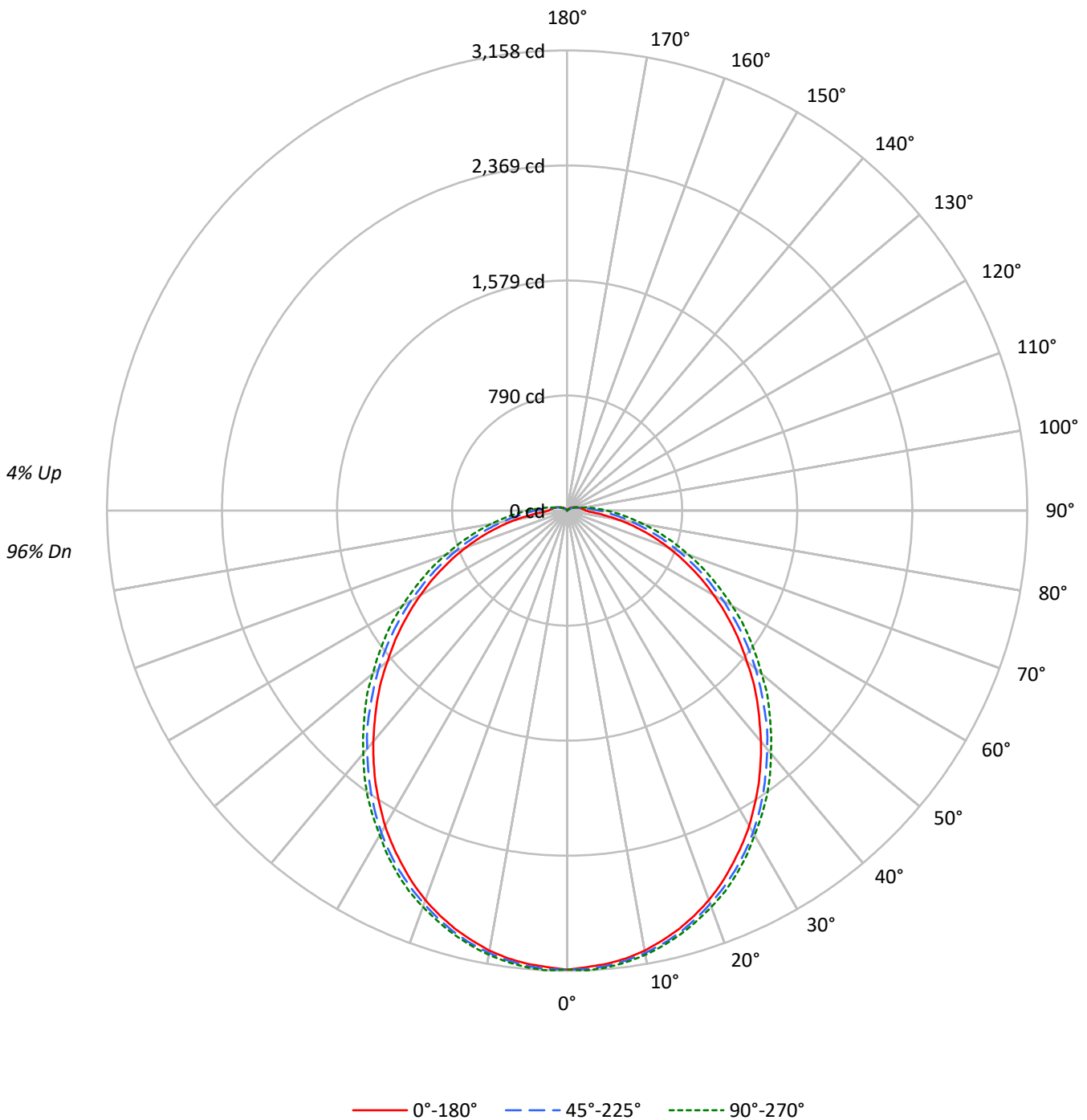
Lumens per Lamp: N/A
Luminaire Lumens: 8989.0 lumens
Efficiency: N/A
Efficacy: 146.2 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.32
Luminous Opening: Rectangular w/ Sides (W: 1.08' x L: 2.08' x H: 0.25')
CIE Type: Direct

Input Watts (W): 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	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°	15032	15032	15032
5°	14799	14706	14778
10°	14550	14310	14414
15°	14222	13873	14002
20°	13837	13373	13556
25°	13366	12858	13082
30°	12875	12297	12506
35°	12309	11664	11980
40°	11710	11011	11357
45°	11114	10335	10770
50°	10442	9676	10135
55°	9846	8973	9558
60°	9189	8259	8896
65°	8498	7526	8233
70°	7718	6753	7548
75°	6848	5954	6923
80°	5763	5200	6303
85°	4538	4534	5817



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	297.6	3.3
10°-20°	843.6	9.4
20°-30°	1252.9	13.9
30°-40°	1466.4	16.3
40°-50°	1473.6	16.4
50°-60°	1306.5	14.5
60°-70°	1013.6	11.3
70°-80°	661.2	7.4
80°-90°	345.3	3.8
90°-100°	165.2	1.8
100°-110°	86.0	1.0
110°-120°	46.8	0.5
120°-130°	22.1	0.2
130°-140°	6.8	0.1
140°-150°	1.0	0.0
150°-160°	0.2	0.0
160°-170°	0.2	0.0
170°-180°	0.1	0.0
0°-30°	2394.1	26.6
0°-40°	3860.5	42.9
0°-60°	6640.6	73.9
0°-90°	8660.8	96.3
90°-120°	298.0	3.3
90°-150°	327.8	3.6
90°-180°	328.0	3.6
0°-180°	8989.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3150	3150	3150	3150	3150	
5°	3122	3126	3137	3144	3148	296
15°	2972	2979	2995	3005	3010	837
25°	2681	2698	2725	2746	2752	1235
35°	2291	2314	2350	2379	2389	1432
45°	1845	1869	1912	1948	1964	1421
55°	1386	1412	1461	1510	1528	1240
65°	946	972	1021	1076	1090	938
75°	538	563	622	680	699	571
85°	197	252	318	373	387	195
90°	127	164	217	259	269	71
95°	110	118	146	177	184	87
105°	81	77	79	80	84	86
115°	55	46	46	44	47	55
125°	33	27	19	20	25	31
135°	17	13	3	4	7	14
145°	5	3	0	0	0	3
155°	1	1	0	0	0	1
165°	1	1	1	0	0	0
175°	2	1	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°	3150.3	3150.3	3150.3	3150.3	3150.3
2.5°	3135.6	3139.6	3148.3	3157.0	3158.3
5°	3122.2	3126.2	3136.9	3144.3	3147.6
7.5°	3099.5	3103.5	3113.5	3123.6	3124.9
10°	3066.7	3072.0	3082.8	3094.1	3096.1
12.5°	3021.9	3030.6	3044.0	3054.0	3056.7
15°	2971.7	2979.1	2995.1	3005.2	3009.8
17.5°	2911.5	2920.9	2937.6	2949.6	2955.0
20°	2844.0	2853.3	2871.4	2892.1	2894.1
22.5°	2767.7	2782.4	2801.8	2821.9	2829.9
25°	2680.8	2697.5	2724.9	2746.3	2752.3
27.5°	2592.5	2608.5	2642.0	2664.0	2668.7
30°	2498.8	2516.2	2551.7	2569.1	2572.4
32.5°	2394.5	2414.6	2452.7	2476.8	2482.8
35°	2290.8	2314.2	2350.4	2379.1	2389.1
37.5°	2181.1	2207.2	2242.0	2278.8	2286.8
40°	2069.4	2096.9	2135.7	2169.8	2176.5
42.5°	1953.1	1983.2	2031.3	2058.7	2071.4
45°	1844.7	1869.4	1911.6	1948.4	1964.4
47.5°	1730.3	1755.1	1799.2	1842.7	1860.8
50°	1607.9	1641.4	1688.9	1731.0	1741.0
52.5°	1499.6	1531.7	1573.1	1620.0	1635.3
55°	1386.5	1412.0	1460.8	1510.3	1527.7
57.5°	1274.2	1301.6	1346.4	1396.6	1422.7
60°	1163.1	1189.2	1237.4	1289.6	1304.9
62.5°	1055.5	1082.2	1125.7	1182.5	1197.9
65°	946.4	972.5	1021.3	1076.2	1090.2
67.5°	840.8	865.5	915.7	973.9	991.2
70°	735.7	767.8	814.0	868.2	884.2
72.5°	636.7	664.8	717.7	772.5	791.3
75°	537.8	563.2	622.0	679.6	699.0
77.5°	444.8	477.6	535.1	598.0	613.3
80°	352.5	387.3	455.5	515.7	529.7
82.5°	268.9	313.7	383.3	442.8	451.5
85°	196.6	251.5	317.7	373.2	386.6
87.5°	147.8	201.3	266.2	312.4	324.4
90°	127.1	163.9	217.4	258.8	268.9
92.5°	118.4	136.4	178.6	215.4	222.1
95°	110.4	117.7	146.5	176.6	183.9
97.5°	102.3	105.0	123.1	144.5	150.5
100°	95.0	95.6	103.7	119.1	123.1
102.5°	87.6	85.6	89.0	97.0	100.3
105°	80.9	76.9	78.9	80.3	84.3
107.5°	74.2	68.2	69.6	68.2	70.2
110°	67.6	59.5	60.9	58.9	60.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	60.9	52.2	53.5	50.8	53.5
115°	54.8	45.5	46.2	43.5	46.8
117.5°	49.5	40.8	38.8	36.8	40.8
120°	43.5	35.4	32.1	30.8	35.4
122.5°	38.8	31.4	25.4	25.4	30.1
125°	33.4	27.4	19.4	20.1	24.7
127.5°	29.4	23.4	14.0	16.1	20.1
130°	25.4	20.1	8.7	12.0	16.1
132.5°	20.7	16.1	5.4	8.0	11.4
135°	17.4	13.4	3.3	4.0	7.4
137.5°	14.0	10.0	1.3	0.7	3.3
140°	10.7	7.4	0.7	0.0	0.0
142.5°	7.4	4.7	0.0	0.0	0.0
145°	4.7	2.7	0.0	0.0	0.0
147.5°	2.7	1.3	0.0	0.0	0.0
150°	1.3	0.7	0.0	0.0	0.0
152.5°	1.3	0.7	0.0	0.0	0.0
155°	1.3	1.3	0.0	0.0	0.0
157.5°	1.3	1.3	0.7	0.0	0.0
160°	1.3	1.3	0.7	0.0	0.0
162.5°	1.3	1.3	0.7	0.0	0.0
165°	1.3	1.3	0.7	0.0	0.0
167.5°	1.3	1.3	0.7	0.0	0.0
170°	1.3	1.3	0.7	0.0	0.0
172.5°	1.3	1.3	0.7	0.0	0.0
175°	2.0	1.3	0.7	0.0	0.0
177.5°	2.0	1.3	0.7	0.0	0.0
180°	0.7	0.7	0.7	0.7	0.7

(END OF REPORT)