

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-L840-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-L840-CD1-U
Description: VT4S VAPORTIGHT FIXTURE WITH 4000K LED AND FROSTED ACRYLIC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

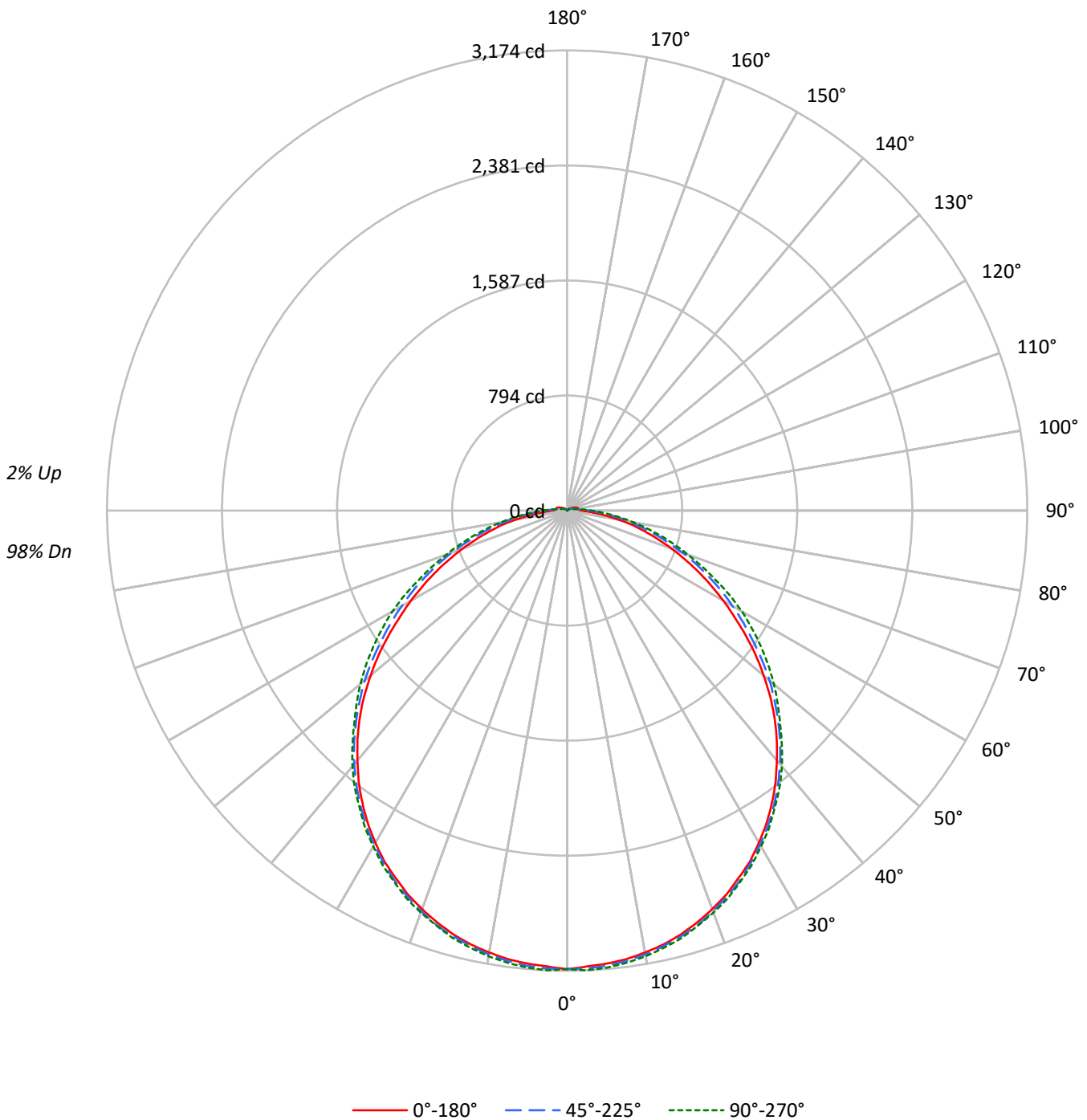
Lumens per Lamp: N/A
Luminaire Lumens: 9222.0 lumens
Efficiency: N/A
Efficacy: 150.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.26 / 1.36
Luminous Opening: Rectangular w/ Sides (W: 1.08' x L: 2.08' x H: 0.25')
CIE Type: Direct

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	50	30	10	0		
RCR																										
0	118	118	118	118	115	115	115	115	110	110	110	105	105	105	100	100	100	98					98			
1	108	103	98	94	105	100	96	92	95	92	89	91	88	86	87	85	83	81					81			
2	98	89	82	77	95	87	81	75	83	78	73	80	75	71	76	73	69	67					67			
3	89	78	70	64	86	77	69	63	73	67	61	70	65	60	67	63	59	56					56			
4	82	69	61	54	79	68	60	53	65	58	52	63	56	51	60	55	50	48					48			
5	75	62	53	46	73	61	52	46	58	51	45	56	50	45	54	48	44	42					42			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	49	43	39	36					36			
7	64	51	42	36	62	50	41	36	48	41	35	46	40	35	45	39	34	32					32			
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	41	35	31	29					29			
9	56	42	34	29	54	42	34	29	40	33	28	39	33	28	38	32	28	26					26			
10	52	39	31	26	51	39	31	26	37	30	26	36	30	25	35	29	25	23					23			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15091	15091	15091
5°	14867	14777	14854
10°	14684	14432	14533
15°	14487	14079	14200
20°	14234	13698	13823
25°	13944	13289	13427
30°	13635	12828	13005
35°	13230	12333	12523
40°	12732	11776	12022
45°	12198	11132	11386
50°	11488	10441	10837
55°	10684	9604	10195
60°	9836	8792	9489
65°	8967	7951	8509
70°	8043	6999	7548
75°	7059	5962	6581
80°	5879	4894	5531
85°	4365	3801	4353



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	299.5	3.2
10°-20°	857.2	9.3
20°-30°	1296.4	14.1
30°-40°	1552.8	16.8
40°-50°	1585.9	17.2
50°-60°	1404.1	15.2
60°-70°	1064.3	11.5
70°-80°	656.1	7.1
80°-90°	290.2	3.1
90°-100°	104.3	1.1
100°-110°	55.9	0.6
110°-120°	33.3	0.4
120°-130°	15.4	0.2
130°-140°	4.8	0.1
140°-150°	0.9	0.0
150°-160°	0.4	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-30°	2453.0	26.6
0°-40°	4005.8	43.4
0°-60°	6995.9	75.9
0°-90°	9006.5	97.7
90°-120°	193.5	2.1
90°-150°	214.6	2.3
90°-180°	215.0	2.3
0°-180°	9222.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3163	3163	3163	3163	3163	
5°	3136	3143	3152	3161	3164	298
15°	3027	3030	3040	3046	3052	854
25°	2797	2805	2816	2825	2825	1290
35°	2462	2470	2485	2502	2498	1539
45°	2025	2036	2059	2082	2077	1558
55°	1504	1534	1564	1613	1630	1346
65°	999	1025	1079	1121	1127	990
75°	554	580	623	656	664	590
85°	189	226	266	289	289	193
90°	100	125	154	168	167	57
95°	82	82	90	98	98	66
105°	73	62	46	42	43	76
115°	48	39	30	26	27	48
125°	26	20	14	12	15	23
135°	11	9	3	3	5	9
145°	4	2	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°	3162.7	3162.7	3162.7	3162.7	3162.7
2.5°	3147.1	3150.8	3160.8	3170.7	3173.9
5°	3136.5	3142.7	3152.1	3160.8	3163.9
7.5°	3121.0	3125.9	3134.0	3142.7	3145.2
10°	3094.8	3100.4	3109.1	3117.2	3121.6
12.5°	3065.6	3068.1	3076.2	3085.5	3088.0
15°	3027.0	3029.5	3039.5	3046.3	3052.5
17.5°	2979.1	2981.6	2996.5	2999.6	3000.3
20°	2925.6	2929.3	2941.2	2946.8	2951.1
22.5°	2867.1	2872.1	2881.4	2888.3	2894.5
25°	2796.8	2804.9	2816.1	2824.8	2824.8
27.5°	2729.0	2730.2	2740.8	2750.1	2756.4
30°	2646.2	2647.5	2661.8	2672.4	2674.9
32.5°	2558.5	2563.5	2578.4	2589.6	2592.7
35°	2462.1	2470.1	2485.1	2502.5	2497.5
37.5°	2361.9	2366.2	2387.4	2401.7	2407.3
40°	2249.9	2262.3	2284.1	2299.7	2304.0
42.5°	2140.4	2151.6	2175.2	2190.2	2192.0
45°	2024.6	2035.8	2058.9	2082.5	2076.9
47.5°	1899.6	1917.0	1940.0	1964.9	1969.3
50°	1768.9	1794.4	1822.4	1843.0	1861.6
52.5°	1640.7	1661.3	1693.6	1730.3	1747.8
55°	1504.5	1534.4	1563.6	1612.8	1629.5
57.5°	1369.5	1405.6	1441.6	1495.8	1510.7
60°	1245.0	1273.6	1317.2	1370.1	1391.9
62.5°	1118.1	1151.1	1199.6	1248.1	1263.1
65°	998.6	1024.8	1078.9	1120.6	1126.8
67.5°	878.6	909.7	960.7	1004.2	1006.7
70°	766.6	794.6	843.7	880.4	884.2
72.5°	658.3	686.9	728.6	765.9	773.4
75°	554.4	580.5	622.8	655.8	664.5
77.5°	462.3	481.6	518.9	556.2	559.4
80°	359.6	382.0	428.7	459.8	464.8
82.5°	273.8	300.5	342.2	370.2	371.5
85°	189.1	226.5	266.3	289.3	289.3
87.5°	130.7	169.9	205.3	220.9	222.7
90°	99.6	125.1	154.3	168.0	167.4
92.5°	86.5	98.3	117.0	128.2	126.3
95°	81.5	81.5	89.6	98.3	97.7
97.5°	79.0	74.0	70.9	76.5	75.9
100°	78.4	69.7	58.5	61.0	61.6
102.5°	76.5	66.0	51.0	50.4	51.0
105°	72.8	62.2	46.0	42.3	42.9
107.5°	67.8	57.2	42.3	37.3	38.0
110°	61.6	51.0	38.6	33.6	33.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	55.4	44.8	34.8	29.9	30.5
115°	47.9	38.6	30.5	26.1	27.4
117.5°	41.7	33.6	26.8	22.4	24.3
120°	35.5	29.2	21.8	18.7	21.2
122.5°	29.9	24.9	17.4	15.6	18.0
125°	25.5	20.5	13.7	12.4	14.9
127.5°	21.2	17.4	10.0	10.0	11.8
130°	17.4	14.3	6.2	7.5	9.3
132.5°	14.3	11.8	4.4	5.0	6.8
135°	11.2	9.3	3.1	3.1	5.0
137.5°	9.3	6.8	1.9	1.2	2.5
140°	6.8	5.0	1.2	0.0	0.6
142.5°	5.6	3.7	0.6	0.0	0.0
145°	3.7	2.5	0.6	0.0	0.0
147.5°	2.5	1.2	0.6	0.6	0.0
150°	1.2	1.2	0.6	0.6	0.0
152.5°	1.2	1.2	0.6	0.6	0.0
155°	1.2	1.2	1.2	0.6	0.0
157.5°	1.2	1.2	1.2	0.6	0.0
160°	1.2	1.2	1.2	0.6	0.6
162.5°	1.9	1.9	1.2	0.6	0.6
165°	1.9	1.9	1.2	0.6	0.6
167.5°	1.9	1.9	1.2	1.2	0.6
170°	1.9	1.9	1.2	0.6	0.6
172.5°	1.9	1.9	1.2	1.2	0.6
175°	1.9	1.9	1.9	1.2	0.6
177.5°	1.9	1.9	1.9	1.2	0.6
180°	1.9	1.9	1.9	1.9	1.9

(END OF REPORT)