

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-DRF-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 (G3-1801-511-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VT4S-LD5-12-DRF-L850-CD2-U
Description: VT4S VAPORTIGHT FIXTURE WITH 5000K LED AND FROSTED ACRYLIC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

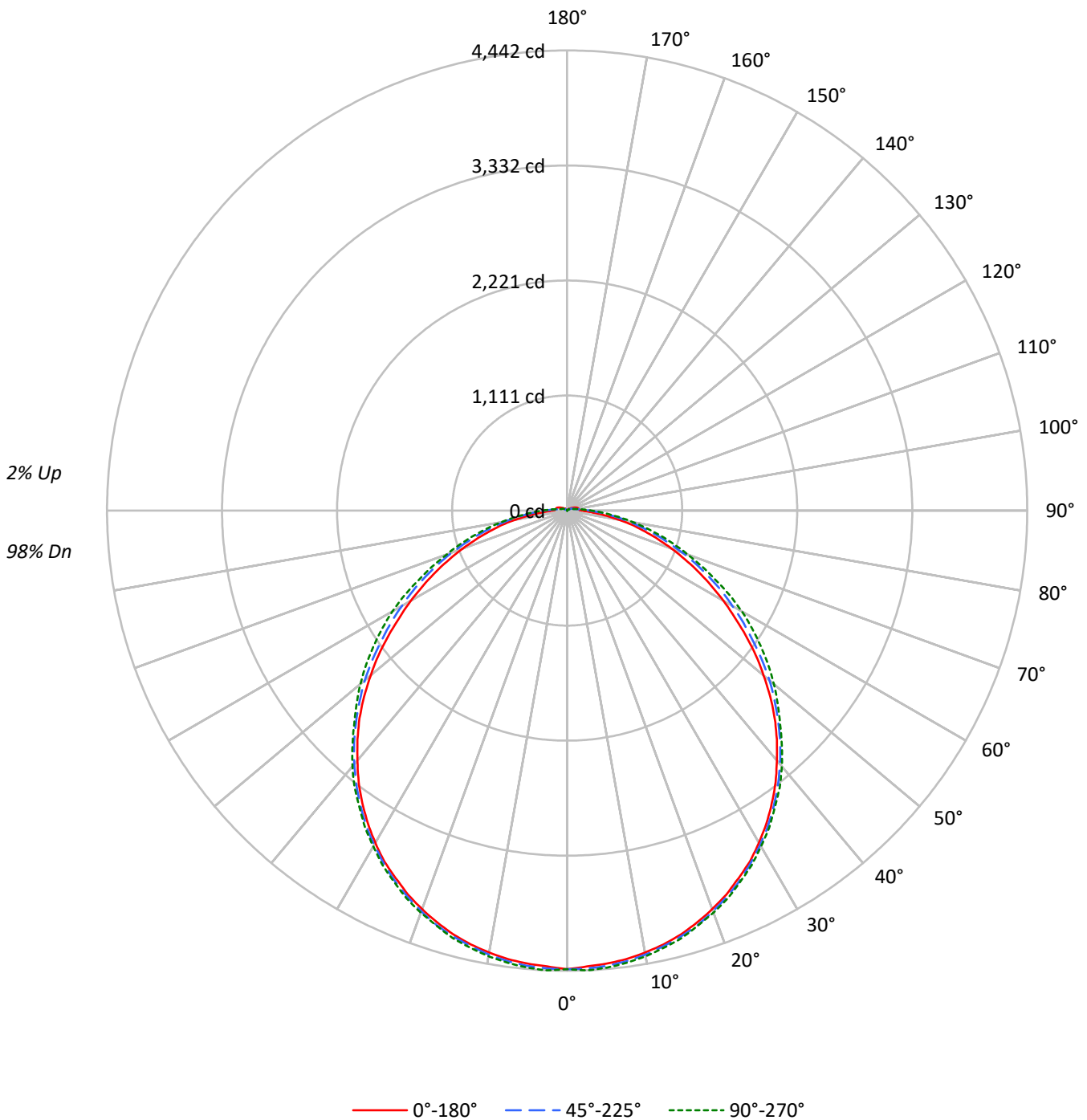
Lumens per Lamp: N/A
Luminaire Lumens: 12908.0 lumens
Efficiency: N/A
Efficacy: 153.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.26 / 1.36
Luminous Opening: Rectangular w/ Sides (W: 1.08' x L: 2.08' x H: 0.25')
CIE Type: Direct

Input Watts (W): 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	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°	21122	21122	21122
5°	20809	20683	20791
10°	20553	20202	20342
15°	20277	19705	19876
20°	19922	19172	19349
25°	19518	18600	18793
30°	19085	17955	18202
35°	18517	17263	17529
40°	17821	16483	16828
45°	17074	15581	15937
50°	16080	14615	15169
55°	14954	13443	14270
60°	13768	12306	13281
65°	12551	11129	11911
70°	11256	9797	10564
75°	9880	8345	9211
80°	8230	6849	7742
85°	6112	5319	6094



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	419.1	3.2
10°-20°	1199.9	9.3
20°-30°	1814.5	14.1
30°-40°	2173.4	16.8
40°-50°	2219.9	17.2
50°-60°	1965.4	15.2
60°-70°	1489.7	11.5
70°-80°	918.3	7.1
80°-90°	406.2	3.1
90°-100°	146.0	1.1
100°-110°	78.2	0.6
110°-120°	46.7	0.4
120°-130°	21.5	0.2
130°-140°	6.7	0.1
140°-150°	1.3	0.0
150°-160°	0.6	0.0
160°-170°	0.5	0.0
170°-180°	0.2	0.0
0°-30°	3433.5	26.6
0°-40°	5606.9	43.4
0°-60°	9792.2	75.9
0°-90°	12606.4	97.7
90°-120°	270.8	2.1
90°-150°	300.3	2.3
90°-180°	302.0	2.3
0°-180°	12908.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4427	4427	4427	4427	4427	
5°	4390	4399	4412	4424	4428	417
15°	4237	4240	4254	4264	4273	1195
25°	3915	3926	3942	3954	3954	1805
35°	3446	3458	3478	3503	3496	2154
45°	2834	2850	2882	2915	2907	2181
55°	2106	2148	2189	2257	2281	1884
65°	1398	1434	1510	1568	1577	1386
75°	776	812	872	918	930	826
85°	265	317	373	405	405	270
90°	139	175	216	235	234	80
95°	114	114	125	138	137	93
105°	102	87	64	59	60	106
115°	67	54	43	37	38	67
125°	36	29	19	17	21	33
135°	16	13	4	4	7	13
145°	5	4	1	0	0	4
155°	2	2	2	1	0	1
165°	3	3	2	1	1	1
175°	3	3	3	2	1	0
180°	3	3	3	3	3	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4426.8	4426.8	4426.8	4426.8	4426.8
2.5°	4405.0	4410.2	4424.1	4438.1	4442.4
5°	4390.2	4398.9	4412.0	4424.1	4428.5
7.5°	4368.4	4375.4	4386.7	4398.9	4402.4
10°	4331.8	4339.7	4351.9	4363.2	4369.3
12.5°	4290.9	4294.4	4305.7	4318.8	4322.3
15°	4236.9	4240.4	4254.3	4263.9	4272.6
17.5°	4169.8	4173.3	4194.2	4198.6	4199.5
20°	4094.9	4100.2	4116.7	4124.6	4130.7
22.5°	4013.1	4020.1	4033.1	4042.7	4051.4
25°	3914.7	3926.0	3941.7	3953.9	3953.9
27.5°	3819.7	3821.5	3836.3	3849.4	3858.1
30°	3703.9	3705.7	3725.7	3740.5	3744.0
32.5°	3581.1	3588.1	3609.0	3624.7	3629.0
35°	3446.1	3457.5	3478.4	3502.7	3495.8
37.5°	3305.9	3312.0	3341.6	3361.7	3369.5
40°	3149.2	3166.6	3197.1	3218.8	3224.9
42.5°	2995.9	3011.6	3044.6	3065.6	3068.2
45°	2833.9	2849.6	2881.8	2914.9	2907.0
47.5°	2658.8	2683.2	2715.5	2750.3	2756.4
50°	2476.0	2511.7	2550.9	2579.6	2605.7
52.5°	2296.6	2325.3	2370.6	2422.0	2446.3
55°	2105.8	2147.6	2188.6	2257.4	2280.9
57.5°	1916.8	1967.4	2017.9	2093.6	2114.5
60°	1742.7	1782.7	1843.7	1917.7	1948.2
62.5°	1565.0	1611.2	1679.1	1747.0	1767.9
65°	1397.8	1434.4	1510.1	1568.5	1577.2
67.5°	1229.7	1273.2	1344.7	1405.6	1409.1
70°	1072.9	1112.1	1180.9	1232.3	1237.5
72.5°	921.4	961.5	1019.8	1072.1	1082.5
75°	776.0	812.5	871.8	917.9	930.1
77.5°	647.1	674.1	726.3	778.6	782.9
80°	503.4	534.7	600.0	643.6	650.6
82.5°	383.2	420.6	479.0	518.2	519.9
85°	264.8	317.0	372.7	405.0	405.0
87.5°	182.9	237.8	287.4	309.2	311.8
90°	139.3	175.0	216.0	235.1	234.3
92.5°	121.1	137.6	163.7	179.4	176.8
95°	114.1	114.1	125.4	137.6	136.7
97.5°	110.6	103.6	99.3	107.1	106.2
100°	109.7	97.5	81.9	85.3	86.2
102.5°	107.1	92.3	71.4	70.5	71.4
105°	101.9	87.1	64.4	59.2	60.1
107.5°	94.9	80.1	59.2	52.3	53.1
110°	86.2	71.4	54.0	47.0	47.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	77.5	62.7	48.8	41.8	42.7
115°	67.1	54.0	42.7	36.6	38.3
117.5°	58.3	47.0	37.4	31.4	34.0
120°	49.6	40.9	30.5	26.1	29.6
122.5°	41.8	34.8	24.4	21.8	25.3
125°	35.7	28.7	19.2	17.4	20.9
127.5°	29.6	24.4	13.9	13.9	16.5
130°	24.4	20.0	8.7	10.5	13.1
132.5°	20.0	16.5	6.1	7.0	9.6
135°	15.7	13.1	4.4	4.4	7.0
137.5°	13.1	9.6	2.6	1.7	3.5
140°	9.6	7.0	1.7	0.0	0.9
142.5°	7.8	5.2	0.9	0.0	0.0
145°	5.2	3.5	0.9	0.0	0.0
147.5°	3.5	1.7	0.9	0.9	0.0
150°	1.7	1.7	0.9	0.9	0.0
152.5°	1.7	1.7	0.9	0.9	0.0
155°	1.7	1.7	1.7	0.9	0.0
157.5°	1.7	1.7	1.7	0.9	0.0
160°	1.7	1.7	1.7	0.9	0.9
162.5°	2.6	2.6	1.7	0.9	0.9
165°	2.6	2.6	1.7	0.9	0.9
167.5°	2.6	2.6	1.7	1.7	0.9
170°	2.6	2.6	1.7	0.9	0.9
172.5°	2.6	2.6	1.7	1.7	0.9
175°	2.6	2.6	2.6	1.7	0.9
177.5°	2.6	2.6	2.6	1.7	0.9
180°	2.6	2.6	2.6	2.6	2.6

(END OF REPORT)