

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: P237726

Luminaire Tested: **2VT2-LD5-2-FR50-UNV-L840-CD1-WL-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P237726  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-355-8)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2VT2-LD5-2-FR50-UNV-L840-CD1-WL-U  
Description: METALUX VT2 LED LUMINAIRE  
FROSTED LENS/15% DR HIGH IMPACT ADDITIVE STANDARD DISTRIBUTION  
2FT FIXTURE  
Light Source: (56) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2183.1 lumens  
Efficiency: N/A  
Efficacy: 125.6 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.22 / 1.33  
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 2.08' x H: 0.17')  
CIE Type: Direct

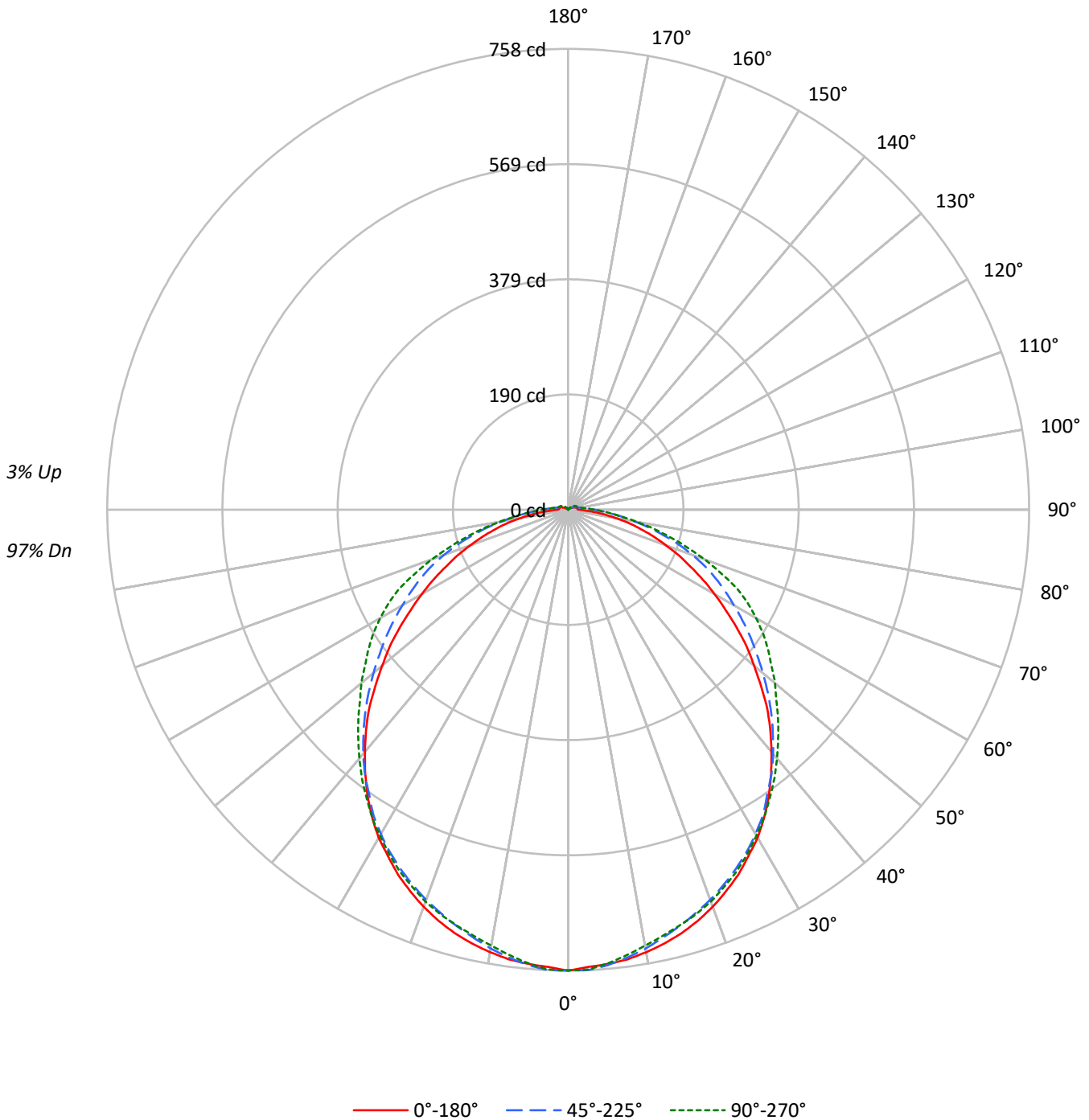
Input Watts (W): 17.38  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	110	110	110	104	104	104	99	99	99	97
1	107	102	98	94	104	100	96	92	95	92	88	91	88	85	86	84	82	80
2	97	89	82	76	95	87	80	75	83	77	73	79	74	70	76	72	69	66
3	89	78	70	63	86	76	68	62	73	66	61	70	64	59	67	62	58	56
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	45	58	50	45	56	49	44	53	48	43	41
6	69	56	46	40	67	54	46	40	52	45	39	50	44	39	48	43	38	36
7	64	50	41	35	62	49	41	35	48	40	35	46	39	34	44	38	34	32
8	60	46	37	31	58	45	37	31	44	36	31	42	35	31	41	35	30	28
9	56	42	34	28	54	41	34	28	40	33	28	39	32	28	38	32	27	25
10	52	39	31	26	51	38	31	26	37	30	25	36	30	25	35	29	25	23

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	7833	7833	7833
5°	7726	7606	7549
10°	7646	7314	7215
15°	7551	7034	6953
20°	7426	6788	6727
25°	7276	6542	6473
30°	7105	6289	6194
35°	6869	5979	5912
40°	6573	5676	5629
45°	6265	5338	5349
50°	5856	4984	5108
55°	5465	4652	4894
60°	5046	4322	4677
65°	4633	4028	4363
70°	4235	3636	3753
75°	3812	3094	3060
80°	3234	2485	2347
85°	2601	1912	1725



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.1	3.3
10°-20°	200.9	9.2
20°-30°	301.4	13.8
30°-40°	358.1	16.4
40°-50°	364.0	16.7
50°-60°	327.6	15.0
60°-70°	261.5	12.0
70°-80°	164.7	7.5
80°-90°	72.1	3.3
90°-100°	27.5	1.3
100°-110°	15.2	0.7
110°-120°	10.0	0.5
120°-130°	5.8	0.3
130°-140°	2.5	0.1
140°-150°	0.6	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	573.5	26.3
0°-40°	931.6	42.7
0°-60°	1623.2	74.4
0°-90°	2121.5	97.2
90°-120°	52.6	2.4
90°-150°	61.6	2.8
90°-180°	62.0	2.8
0°-180°	2183.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	758	758	758	758	758	
5°	750	752	752	750	749	71
15°	721	715	709	710	708	203
25°	662	650	652	657	656	305
35°	575	564	571	579	578	359
45°	463	456	472	484	488	356
55°	338	338	366	391	401	303
65°	222	229	268	300	306	221
75°	124	136	162	174	172	132
85°	42	56	70	72	70	42
90°	18	31	43	44	43	11
95°	15	18	27	29	28	12
105°	14	10	15	17	16	14
115°	8	6	10	13	14	8
125°	4	3	6	9	11	4
135°	2	1	2	5	6	1
145°	1	1	0	2	2	1
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P237726

CATALOG NUMBER: 2VT2-LD5-2-FR50-UNV-L840-CD1-WL-U

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	758	758	758	758	758	758	758	758	758	758	758
2.5°	753	753	754	754	755	756	756	756	757	757	758
5°	750	751	751	751	752	752	752	752	752	752	752
7.5°	746	746	746	746	746	746	746	745	744	744	743
10°	739	740	739	739	738	737	737	735	735	733	733
12.5°	731	731	731	729	728	727	726	724	723	721	721
15°	721	721	721	718	716	715	714	712	711	710	709
17.5°	709	709	708	705	702	701	700	698	697	696	696
20°	695	695	693	690	688	685	684	683	682	682	683
22.5°	679	679	677	673	671	668	667	667	666	667	668
25°	662	662	658	655	653	650	649	649	649	651	652
27.5°	642	641	639	635	632	631	630	630	632	633	635
30°	623	621	618	614	611	611	610	611	613	614	616
32.5°	600	598	594	591	588	588	589	589	591	592	596
35°	575	574	570	566	565	564	564	566	569	571	571
37.5°	548	548	543	541	539	539	540	542	543	547	549
40°	520	519	516	513	512	512	512	515	518	521	524
42.5°	492	489	487	485	484	485	485	489	491	495	498
45°	463	459	457	455	455	456	457	461	465	468	472
47.5°	430	429	426	425	426	427	429	432	436	442	445
50°	399	397	396	394	395	396	398	403	408	414	418
52.5°	370	367	365	365	367	368	370	375	381	387	391
55°	338	337	334	334	337	338	341	346	353	359	366
57.5°	307	305	305	305	307	309	312	317	326	333	340
60°	278	276	275	275	278	282	284	290	298	307	315
62.5°	250	249	248	249	252	254	258	265	273	282	291
65°	222	222	220	222	226	229	233	240	249	258	268
67.5°	197	196	197	199	202	204	208	216	225	233	244
70°	171	171	172	174	178	180	184	192	201	210	217
72.5°	147	147	148	150	155	158	162	169	176	185	191
75°	124	124	125	128	133	136	139	145	152	159	162
77.5°	103	101	103	106	111	114	117	122	128	133	137
80°	79	80	82	85	90	92	95	100	104	108	111
82.5°	60	60	62	66	71	72	76	80	83	87	89
85°	42	43	45	49	54	56	58	62	65	68	70
87.5°	27	29	31	36	40	42	44	47	51	52	55
90°	18	19	22	25	29	31	33	36	39	41	43
92.5°	16	16	17	19	22	23	25	28	30	32	34
95°	15	15	15	16	18	18	20	22	24	26	27
97.5°	15	15	14	14	15	15	16	18	20	21	23
100°	15	14	13	12	13	13	14	15	17	18	19
102.5°	14	14	12	11	11	12	12	13	14	16	17
105°	14	13	11	10	10	10	11	12	13	14	15
107.5°	12	12	10	9	9	9	10	10	11	12	13
110°	11	11	9	8	8	8	8	9	10	11	12



TEST NUMBER: P237726

CATALOG NUMBER: 2VT2-LD5-2-FR50-UNV-L840-CD1-WL-U

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	10	9	8	7	7	7	7	8	9	10	11
115°	8	8	7	6	6	6	6	7	8	9	10
117.5°	7	7	6	5	5	5	5	6	7	8	9
120°	6	6	5	4	4	4	5	5	6	7	8
122.5°	5	5	4	4	3	3	4	4	5	6	7
125°	4	4	4	3	3	3	3	3	4	5	6
127.5°	3	3	3	3	2	2	2	3	4	4	5
130°	3	3	3	2	2	2	2	2	3	3	4
132.5°	2	2	2	2	2	2	1	1	2	3	3
135°	2	2	2	1	1	1	1	1	1	2	2
137.5°	1	1	1	1	1	1	1	1	1	1	2
140°	1	1	1	1	1	1	1	1	1	1	1
142.5°	1	1	1	1	1	1	1	1	0	0	0
145°	1	1	1	1	1	1	1	0	0	0	0
147.5°	1	1	1	0	0	0	0	0	0	0	0
150°	0	0	0	0	0	0	0	0	0	0	0
152.5°	0	0	0	0	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0	0	0	0
157.5°	0	0	0	0	0	0	0	0	0	0	0
160°	0	0	0	0	0	0	0	0	0	0	0
162.5°	0	0	0	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0	0	0	0
167.5°	0	0	0	0	0	0	0	0	0	0	0
170°	0	0	0	0	0	0	0	0	0	0	0
172.5°	0	0	0	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0	0	0	0
177.5°	0	0	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0	0	0



TEST NUMBER: P237726

CATALOG NUMBER: 2VT2-LD5-2-FR50-UNV-L840-CD1-WL-U

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	758	758	758	758	758	758	758	758	758	758
2.5°	758	758	758	758	758	758	757	758	757	757
5°	751	751	751	751	750	750	750	749	749	749
7.5°	742	742	741	741	740	740	739	739	738	739
10°	732	731	731	730	730	730	729	729	728	728
12.5°	721	720	720	720	719	719	719	718	718	718
15°	709	710	710	710	710	710	709	709	709	708
17.5°	697	698	698	699	699	699	698	698	697	698
20°	684	685	685	686	686	686	685	686	685	686
22.5°	669	671	671	672	672	672	671	672	672	671
25°	654	655	655	657	657	657	655	656	656	656
27.5°	636	636	639	638	638	638	639	638	638	638
30°	617	618	619	620	620	620	619	620	620	619
32.5°	597	598	599	600	600	600	600	600	600	600
35°	573	575	577	578	579	578	579	579	579	578
37.5°	550	553	554	555	556	556	556	556	557	557
40°	525	529	529	532	532	533	534	533	534	534
42.5°	501	504	506	508	508	509	510	511	512	511
45°	475	479	482	483	484	485	486	487	489	488
47.5°	449	453	456	459	460	461	463	464	467	464
50°	423	428	433	435	436	437	441	442	443	444
52.5°	397	402	407	411	413	415	418	420	421	421
55°	372	377	383	389	391	392	396	398	400	401
57.5°	348	355	361	367	369	372	375	378	379	380
60°	324	331	338	345	348	350	354	356	358	357
62.5°	301	308	317	322	325	327	329	332	333	333
65°	277	286	293	298	300	300	303	304	305	306
67.5°	253	260	265	269	271	270	272	274	273	271
70°	224	230	235	238	239	238	241	238	239	238
72.5°	197	202	204	206	206	206	206	206	205	204
75°	167	170	173	173	174	174	174	174	173	172
77.5°	140	142	144	143	144	144	143	143	143	143
80°	114	115	117	117	116	116	116	115	115	114
82.5°	91	92	92	92	93	91	92	90	91	89
85°	72	73	73	72	72	71	70	71	70	70
87.5°	56	56	57	57	56	56	55	55	54	54
90°	44	45	44	45	44	44	43	43	43	43
92.5°	35	36	35	35	35	35	35	34	34	34
95°	28	28	29	28	29	28	28	28	28	28
97.5°	23	24	24	24	24	24	24	24	23	23
100°	20	20	21	21	21	21	21	20	20	20
102.5°	17	18	18	18	18	18	18	18	18	18
105°	16	16	16	17	17	17	17	17	16	16
107.5°	14	15	15	15	16	16	15	15	15	15
110°	13	14	14	15	15	15	15	15	15	15





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CATALOG NUMBER: 2VT2-LD5-2-FR50-UNV-L840-CD1-WL-U

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	12	13	13	14	14	14	14	14	14	14
115°	11	12	12	13	13	13	14	14	14	14
117.5°	10	11	12	12	12	12	13	13	13	13
120°	9	10	10	11	11	12	12	12	12	12
122.5°	8	9	10	10	10	11	11	11	12	12
125°	7	8	9	9	9	10	10	10	10	11
127.5°	6	7	7	8	8	9	9	9	9	9
130°	5	6	6	7	7	7	8	8	8	8
132.5°	4	5	5	6	6	6	7	7	7	7
135°	3	4	4	5	5	5	6	6	6	6
137.5°	2	3	4	4	4	4	5	5	5	5
140°	2	2	3	3	3	4	4	4	4	4
142.5°	1	1	2	2	2	3	3	3	3	3
145°	0	1	1	1	2	2	2	2	2	2
147.5°	0	0	0	1	1	1	1	1	1	1
150°	0	0	0	0	0	0	0	0	0	0
152.5°	0	0	0	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0	0	0
157.5°	0	0	0	0	0	0	0	0	0	0
160°	0	0	0	0	0	0	0	0	0	0
162.5°	0	0	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0	0	0
167.5°	0	0	0	0	0	0	0	0	0	0
170°	0	0	0	0	0	0	0	0	0	0
172.5°	0	0	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0	0	0
177.5°	0	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0	0

(END OF REPORT)