

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: FAIL-SAFE

Report Number: P241547

Luminaire Tested: **FVS8M-2-LD4-40-2HI-O-UNV-EDC1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P241547
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1711-410-9)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FVS8M-2-LD4-40-2HI-O-UNV-EDC1
Description: FAILSAFE FVS8M LED FIXTURE
2FT LENGTH, 2-MODULE LED WITH OPAL LENS
Light Source: (84) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

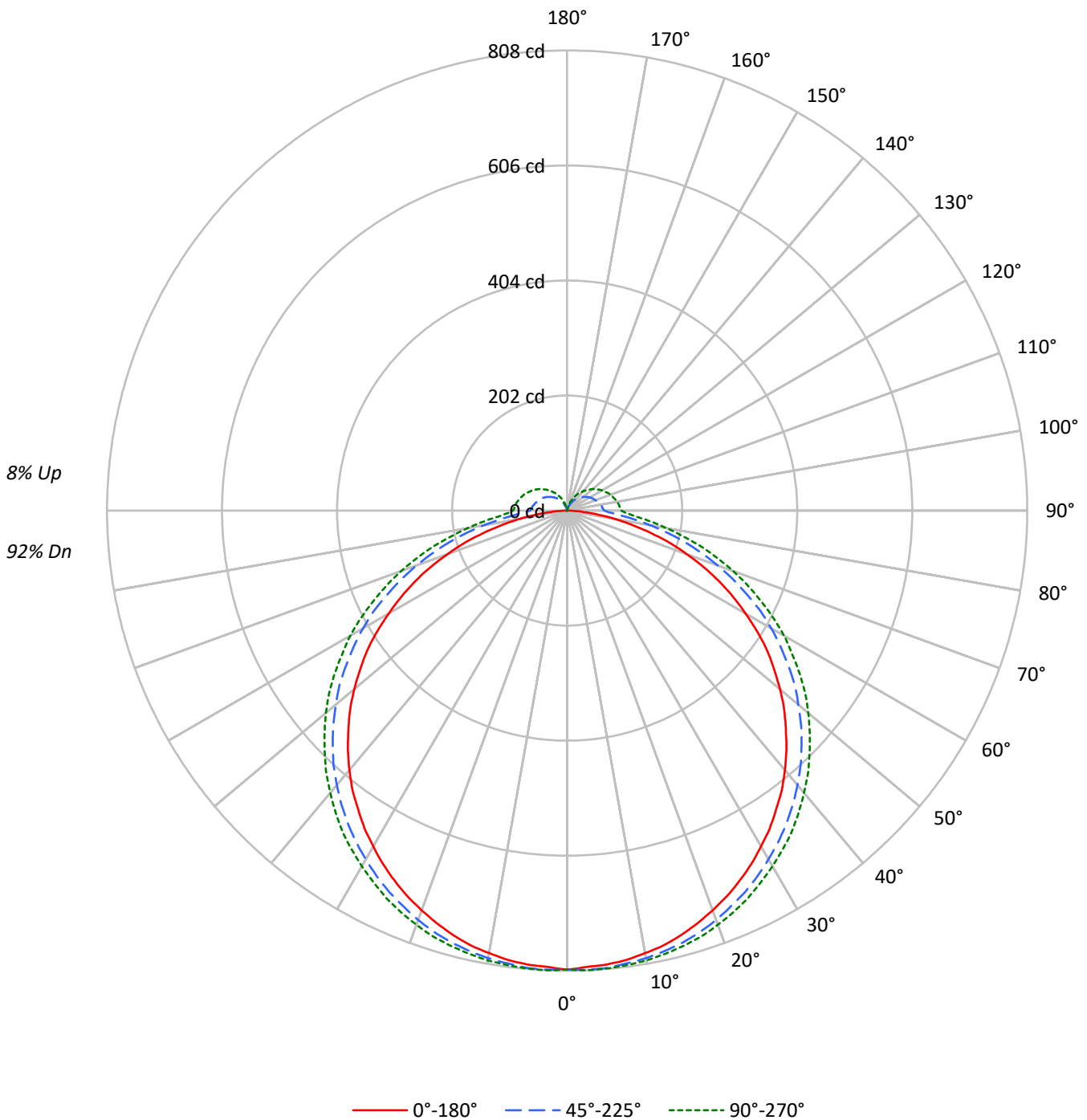
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2811.8 lumens
Efficiency: N/A
Efficacy: 63.6 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.33 / 1.43
Luminous Opening: Rectangular w/ Sides (W: 0.65' x L: 1.85' x H: 0.15')
CIE Type: Direct

Input Watts (W): 44.2
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	117	117	117	117	113	113	113	113	106	106	106	100	100	100	94	94	94	92
1	106	101	96	92	102	98	93	89	92	88	85	86	84	81	81	79	77	74
2	96	87	80	74	92	84	78	72	79	74	69	75	70	66	71	67	64	61
3	87	76	67	61	84	74	66	60	70	63	57	66	60	55	62	57	53	51
4	79	67	58	51	76	65	57	50	61	54	49	58	52	47	55	50	46	43
5	73	60	50	44	70	58	49	43	55	47	42	52	46	41	49	44	39	37
6	67	54	44	38	65	52	44	37	49	42	36	47	40	35	45	39	34	32
7	62	48	39	33	60	47	39	33	45	37	32	43	36	31	41	35	30	28
8	58	44	35	29	56	43	35	29	41	34	28	39	33	28	37	31	27	25
9	54	40	32	26	52	39	31	26	38	31	26	36	30	25	34	29	24	22
10	50	37	29	24	49	36	29	24	35	28	23	33	27	23	32	26	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7245	7245	7245
5°	7169	7138	7141
10°	7103	7017	7040
15°	7036	6907	6941
20°	6947	6786	6842
25°	6860	6661	6739
30°	6761	6527	6620
35°	6656	6399	6519
40°	6550	6251	6383
45°	6399	6088	6243
50°	6239	5898	6093
55°	6044	5681	5901
60°	5728	5421	5686
65°	5369	5064	5374
70°	4819	4640	5028
75°	4081	4121	4580
80°	3079	3450	4017
85°	1575	2772	3514



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.5	2.7
10°-20°	221.1	7.9
20°-30°	339.6	12.1
30°-40°	417.8	14.9
40°-50°	446.0	15.9
50°-60°	419.4	14.9
60°-70°	339.1	12.1
70°-80°	218.8	7.8
80°-90°	98.7	3.5
90°-100°	60.1	2.1
100°-110°	53.4	1.9
110°-120°	44.2	1.6
120°-130°	33.7	1.2
130°-140°	22.9	0.8
140°-150°	13.2	0.5
150°-160°	5.7	0.2
160°-170°	1.3	0.0
170°-180°	0.0	0.0
0°-30°	637.3	22.7
0°-40°	1055.1	37.5
0°-60°	1920.6	68.3
0°-90°	2577.2	91.7
90°-120°	157.7	5.6
90°-150°	227.6	8.1
90°-180°	235.0	8.4
0°-180°	2811.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	806	806	806	806	806	
5°	800	801	806	807	807	76
15°	772	776	785	790	791	218
25°	717	725	739	747	751	331
35°	640	653	671	683	688	401
45°	543	559	582	597	602	419
55°	429	448	474	492	498	382
65°	295	319	348	370	375	291
75°	152	181	214	235	243	162
85°	29	59	93	114	122	36
90°	0	31	65	87	95	2
95°	0	28	62	84	92	0
105°	0	25	56	78	85	0
115°	0	21	50	69	76	0
125°	0	17	42	59	65	0
135°	0	13	33	47	52	0
145°	0	8	23	34	38	0
155°	1	3	13	21	23	0
165°	1	1	4	8	9	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	806	806	806	806	806	806	806	806	806	806	806
2.5°	802	802	802	802	803	803	804	805	805	806	807
5°	800	799	800	800	801	801	802	803	804	805	806
7.5°	796	795	796	797	797	798	798	799	800	801	802
10°	789	789	790	791	792	792	793	794	795	797	798
12.5°	782	781	782	783	784	785	785	787	789	790	792
15°	772	772	773	774	775	776	777	780	781	783	785
17.5°	760	761	761	763	765	766	767	769	772	773	776
20°	747	748	748	750	752	754	755	758	761	763	765
22.5°	733	733	734	737	739	740	742	745	747	750	752
25°	717	717	719	721	724	725	727	730	733	736	739
27.5°	700	700	702	705	708	709	711	715	718	721	724
30°	681	682	684	687	690	692	694	697	700	704	707
32.5°	662	662	664	667	671	673	676	679	683	687	690
35°	640	641	643	648	650	653	655	659	664	667	671
37.5°	619	620	621	625	629	632	634	638	642	646	651
40°	595	595	598	603	606	609	611	616	620	625	629
42.5°	570	570	574	577	582	585	587	592	597	602	607
45°	543	545	548	552	558	559	562	567	573	578	582
47.5°	517	518	521	526	531	535	537	541	547	553	557
50°	488	490	493	498	503	507	510	515	521	526	530
52.5°	458	460	464	470	476	478	481	487	494	498	504
55°	429	430	434	439	446	448	451	457	463	469	474
57.5°	396	397	402	408	413	417	420	427	433	439	444
60°	362	365	370	377	382	386	389	395	401	407	414
62.5°	329	331	337	342	349	352	356	363	369	375	383
65°	295	297	301	308	316	319	323	329	336	343	348
67.5°	260	263	268	273	280	284	287	296	302	309	315
70°	223	226	232	239	246	251	254	261	269	275	281
72.5°	190	190	196	204	212	216	220	228	234	239	247
75°	152	155	162	169	178	181	185	192	201	207	214
77.5°	117	123	127	134	143	147	151	158	167	174	180
80°	86	89	94	101	111	113	118	126	133	140	148
82.5°	55	58	64	71	80	84	88	96	103	111	118
85°	29	32	38	46	55	59	63	70	78	86	93
87.5°	11	14	20	28	36	40	44	52	60	67	74
90°	0	4	11	18	27	31	35	43	51	58	65
92.5°	0	3	9	16	25	29	33	41	49	56	63
95°	0	3	8	16	24	28	32	40	48	55	62
97.5°	0	3	8	15	23	27	31	39	47	54	61
100°	0	2	8	15	22	26	30	38	46	53	59
102.5°	0	2	7	14	22	26	29	37	44	51	58
105°	0	2	7	14	21	25	29	36	43	50	56
107.5°	0	2	7	13	20	24	28	35	42	49	55
110°	0	2	6	12	19	23	27	34	41	47	53



TEST NUMBER: P241547

CATALOG NUMBER: FVS8M-2-LD4-40-2HI-O-UNV-EDC1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0	2	6	12	19	22	26	33	39	46	51
115°	0	1	5	11	18	21	24	31	38	44	50
117.5°	0	1	5	11	17	20	23	30	36	42	48
120°	0	1	5	10	16	19	22	29	35	40	46
122.5°	0	1	4	9	15	18	21	27	33	39	44
125°	0	1	4	9	14	17	20	26	31	37	42
127.5°	0	1	4	8	13	16	19	24	30	35	39
130°	0	1	3	7	12	15	17	23	28	33	37
132.5°	0	1	3	7	11	14	16	21	26	31	35
135°	0	1	2	6	10	13	15	20	24	29	33
137.5°	0	0	2	5	9	11	14	18	22	27	30
140°	0	0	2	5	8	10	12	16	20	24	28
142.5°	0	0	1	4	7	9	11	15	19	22	26
145°	0	0	1	3	6	8	10	13	17	20	23
147.5°	0	0	1	3	5	7	8	12	15	18	21
150°	0	0	1	2	4	5	7	10	13	16	18
152.5°	1	0	1	1	3	4	5	8	11	13	16
155°	1	0	1	1	2	3	4	6	8	11	13
157.5°	1	1	0	1	2	2	3	5	7	8	10
160°	1	1	1	1	1	2	2	3	5	6	8
162.5°	1	1	1	1	1	1	1	2	3	4	6
165°	1	1	1	0	1	1	1	1	2	3	4
167.5°	1	1	1	1	0	1	1	1	1	2	2
170°	1	1	1	1	0	0	0	0	1	1	1
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



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CATALOG NUMBER: FVS8M-2-LD4-40-2HI-O-UNV-EDC1

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	806	806	806	806	806	806	806	806	806	806
2.5°	807	807	807	808	808	808	808	807	807	808
5°	806	806	807	807	807	807	807	807	807	807
7.5°	803	804	804	805	805	805	805	805	805	805
10°	799	800	801	801	801	802	802	802	802	802
12.5°	793	795	796	796	797	796	797	797	797	797
15°	786	788	789	789	790	790	790	791	791	791
17.5°	777	779	780	781	782	782	783	783	783	784
20°	767	769	770	772	772	772	773	773	774	774
22.5°	755	757	759	761	761	761	762	763	763	763
25°	742	743	745	747	747	748	750	750	750	751
27.5°	727	729	732	732	734	734	735	736	736	736
30°	711	713	716	717	719	719	720	721	721	721
32.5°	693	696	698	701	701	702	704	704	705	705
35°	675	678	680	682	683	684	685	686	687	688
37.5°	653	657	660	663	664	664	666	667	668	668
40°	632	636	638	641	643	643	645	646	647	647
42.5°	610	614	618	620	621	621	623	625	625	626
45°	586	591	595	597	597	598	600	602	602	602
47.5°	562	565	568	572	573	575	576	576	577	578
50°	536	539	543	546	548	549	551	551	553	553
52.5°	507	512	516	519	520	522	523	525	526	527
55°	479	483	487	490	492	493	496	497	498	498
57.5°	449	454	458	461	462	464	466	468	469	468
60°	419	424	427	430	433	434	435	438	439	440
62.5°	387	391	395	399	400	403	405	406	406	408
65°	354	359	364	367	370	371	373	374	376	375
67.5°	321	326	331	334	336	338	340	342	343	343
70°	287	293	296	301	303	304	306	308	308	310
72.5°	253	258	263	268	268	272	273	276	275	276
75°	220	224	229	232	235	236	240	241	241	243
77.5°	185	192	195	200	204	203	206	208	210	208
80°	152	159	164	167	169	171	174	174	177	177
82.5°	124	130	134	138	140	142	144	146	147	148
85°	99	103	108	113	114	116	119	120	122	122
87.5°	80	85	90	94	97	98	101	102	103	104
90°	71	76	81	86	87	89	92	93	95	95
92.5°	69	74	79	83	85	87	89	91	92	93
95°	68	73	78	82	84	86	88	90	91	92
97.5°	67	72	77	81	83	85	87	89	90	91
100°	65	71	75	80	81	83	86	88	89	89
102.5°	64	69	74	78	80	81	84	86	87	87
105°	62	67	72	76	78	80	82	84	85	85
107.5°	61	66	70	74	76	78	80	82	83	83
110°	59	64	68	72	74	75	78	80	81	81



TEST NUMBER: P241547

CATALOG NUMBER: FVS8M-2-LD4-40-2HI-O-UNV-EDC1

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	57	62	66	70	72	73	76	77	78	79
115°	55	60	64	68	69	71	73	75	76	76
117.5°	53	57	62	65	67	68	70	72	73	73
120°	51	55	59	63	64	66	68	69	70	71
122.5°	49	53	57	60	62	63	65	67	68	68
125°	46	50	54	57	59	60	62	64	64	65
127.5°	44	48	52	55	56	57	59	61	62	62
130°	42	45	49	52	53	54	56	57	58	59
132.5°	39	43	46	49	50	51	53	54	55	55
135°	37	40	43	46	47	48	50	51	52	52
137.5°	34	37	40	43	44	45	46	48	48	48
140°	31	34	37	39	41	41	43	44	45	45
142.5°	29	31	34	36	37	38	39	41	41	41
145°	26	29	31	33	34	35	36	37	38	38
147.5°	23	26	28	30	31	31	33	33	34	34
150°	21	23	25	27	27	28	29	30	30	30
152.5°	18	20	22	23	24	24	26	26	27	27
155°	15	17	19	20	21	21	22	22	23	23
157.5°	12	14	16	17	17	18	18	19	19	19
160°	9	11	12	13	14	14	15	15	16	16
162.5°	7	8	9	10	11	11	12	12	12	12
165°	5	5	6	7	8	8	8	8	9	9
167.5°	3	3	4	4	5	5	5	5	5	5
170°	1	1	2	2	2	2	3	3	3	3
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)