

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: P241403

Luminaire Tested: **FVS8M-4-LD4-40-2HI-P125-UNV-EDC1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P241403
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1711-410-38)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FVS8M-4-LD4-40-2HI-P125-UNV-EDC1
Description: FAILSAFE FVS8M LED FIXTURE
4FT LENGTH, 2-MODULE LED WITH P125 LENS
Light Source: (168) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

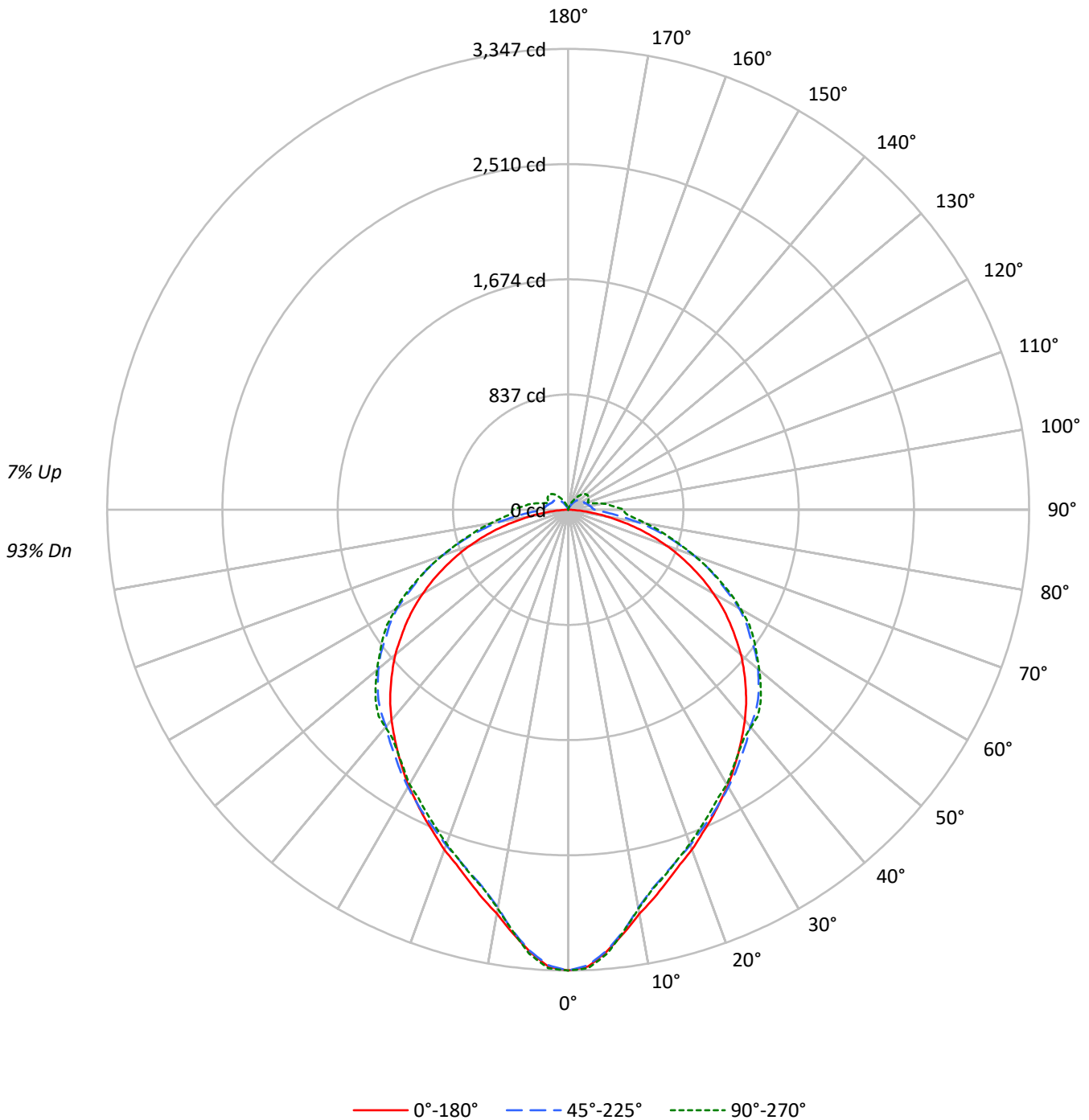
Lumens per Lamp: N/A
Luminaire Lumens: 9295.0 lumens
Efficiency: N/A
Efficacy: 108.8 lumens/watt
Spacing Criteria (0/90/45): 1.04 / 1.02 / 1.27
Luminous Opening: Rectangular w/ Sides (W: 0.65' x L: 3.73' x H: 0.15')
CIE Type: Direct

Input Watts (W): 85.4
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	50	30	10	0	
RCR																						
0	117	117	117	117	114	114	114	114	107	107	107	101	101	101	96	96	96	93				
1	106	101	96	92	103	98	94	90	93	89	86	87	85	82	83	81	79	76				
2	96	87	80	74	93	85	78	73	80	75	70	76	71	67	72	68	65	62				
3	87	76	68	61	84	74	66	60	70	64	58	67	61	56	63	59	55	52				
4	80	67	58	51	77	66	57	51	62	55	49	59	53	48	56	51	47	44				
5	73	60	51	44	71	59	50	44	56	48	42	53	46	41	50	45	40	38				
6	68	54	45	38	65	53	44	38	50	43	37	48	41	36	46	40	35	33				
7	63	49	40	34	60	48	39	33	46	38	33	44	37	32	42	36	31	29				
8	58	45	36	30	56	44	35	30	42	34	29	40	33	29	38	32	28	26				
9	54	41	33	27	53	40	32	27	38	31	26	37	30	26	35	30	25	23				
10	51	38	30	24	49	37	29	24	35	29	24	34	28	23	33	27	23	21				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14959	14959	14959
5°	14397	14191	14245
10°	13431	12889	12836
15°	12771	12050	11963
20°	12324	11541	11348
25°	11957	11138	10846
30°	11698	10832	10514
35°	11444	10558	10152
40°	11270	10371	10119
45°	11089	10381	10189
50°	10888	10226	9927
55°	10575	9922	9704
60°	10197	9678	9304
65°	9640	9046	8628
70°	8932	8368	7847
75°	7791	7470	7056
80°	6025	6302	6444
85°	3367	4914	6186



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	298.7	3.2
10°-20°	778.0	8.4
20°-30°	1134.6	12.2
30°-40°	1367.1	14.7
40°-50°	1482.7	16.0
50°-60°	1413.0	15.2
60°-70°	1139.4	12.3
70°-80°	728.7	7.8
80°-90°	325.8	3.5
90°-100°	180.8	1.9
100°-110°	131.8	1.4
110°-120°	103.8	1.1
120°-130°	92.0	1.0
130°-140°	67.2	0.7
140°-150°	36.4	0.4
150°-160°	13.0	0.1
160°-170°	2.1	0.0
170°-180°	0.0	0.0
0°-30°	2211.3	23.8
0°-40°	3578.4	38.5
0°-60°	6474.1	69.7
0°-90°	8667.9	93.3
90°-120°	416.4	4.5
90°-150°	612.0	6.6
90°-180°	627.0	6.7
0°-180°	9295.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3347	3347	3347	3347	3347	
5°	3220	3220	3215	3238	3238	300
15°	2789	2779	2735	2745	2742	787
25°	2469	2472	2456	2451	2431	1139
35°	2155	2187	2189	2180	2155	1350
45°	1823	1879	1950	1982	1976	1406
55°	1433	1528	1614	1650	1647	1281
65°	988	1099	1199	1212	1211	979
75°	517	615	735	771	753	546
85°	95	181	301	380	432	118
90°	1	88	192	272	404	5
95°	1	78	173	249	317	1
105°	1	66	148	185	183	1
115°	1	58	126	150	161	1
125°	1	48	119	159	176	1
135°	2	32	97	140	161	1
145°	2	14	61	98	112	1
155°	2	3	25	50	57	1
165°	3	1	3	10	15	1
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°	3347	3347	3347	3347	3347	3347	3347	3347	3347	3347	3347
2.5°	3321	3321	3321	3316	3316	3322	3322	3325	3320	3315	3311
5°	3220	3217	3210	3211	3215	3220	3219	3228	3225	3219	3215
7.5°	3100	3094	3091	3091	3088	3093	3090	3097	3091	3086	3085
10°	2980	2980	2980	2972	2973	2972	2966	2962	2957	2941	2934
12.5°	2886	2884	2876	2870	2870	2866	2867	2859	2846	2827	2819
15°	2789	2792	2789	2780	2782	2779	2776	2766	2760	2741	2735
17.5°	2700	2708	2702	2692	2689	2687	2688	2684	2672	2664	2658
20°	2628	2626	2621	2613	2621	2618	2618	2614	2607	2598	2592
22.5°	2544	2546	2540	2540	2545	2548	2542	2540	2535	2524	2520
25°	2469	2471	2467	2465	2469	2472	2472	2472	2468	2461	2456
27.5°	2390	2397	2392	2392	2400	2406	2409	2404	2402	2394	2391
30°	2318	2311	2314	2325	2329	2336	2341	2342	2332	2329	2326
32.5°	2236	2239	2233	2245	2261	2269	2269	2267	2264	2263	2261
35°	2155	2157	2159	2174	2182	2187	2195	2202	2197	2192	2189
37.5°	2074	2078	2082	2093	2103	2113	2122	2132	2130	2123	2126
40°	1995	2000	1998	2005	2033	2043	2047	2056	2057	2048	2057
42.5°	1913	1913	1912	1934	1951	1961	1962	1982	1990	1998	2008
45°	1823	1825	1834	1849	1864	1879	1894	1917	1926	1938	1950
47.5°	1731	1732	1747	1757	1788	1805	1817	1829	1844	1857	1875
50°	1639	1643	1643	1675	1700	1707	1718	1737	1766	1784	1799
52.5°	1533	1543	1550	1576	1596	1612	1631	1664	1685	1701	1715
55°	1433	1428	1456	1464	1506	1528	1542	1565	1578	1596	1614
57.5°	1331	1330	1346	1368	1413	1423	1427	1455	1490	1516	1533
60°	1218	1223	1233	1274	1293	1303	1324	1368	1393	1420	1434
62.5°	1107	1108	1136	1158	1183	1208	1230	1255	1269	1293	1309
65°	988	994	1024	1039	1086	1099	1107	1132	1155	1184	1199
67.5°	875	881	905	924	965	969	983	1021	1057	1079	1094
70°	757	768	779	814	836	851	871	913	926	952	970
72.5°	638	648	660	688	716	733	756	780	795	819	850
75°	517	527	544	567	598	615	627	649	685	713	735
77.5°	396	402	426	446	483	494	511	538	572	600	620
80°	286	294	310	334	362	379	392	425	459	479	505
82.5°	182	190	209	233	258	273	290	321	350	371	396
85°	95	102	120	145	167	181	198	229	251	277	301
87.5°	30	38	56	80	105	118	132	161	183	209	231
90°	1	8	26	49	75	88	101	126	149	171	192
92.5°	1	7	24	46	70	82	94	117	140	161	179
95°	1	6	22	44	67	78	90	112	134	154	173
97.5°	1	6	21	41	63	74	86	108	129	148	167
100°	1	5	19	39	60	71	82	104	124	143	160
102.5°	1	4	18	37	58	68	79	100	119	138	154
105°	1	4	16	35	56	66	77	97	116	133	148
107.5°	1	3	15	33	54	64	75	94	112	128	142
110°	1	3	14	32	52	62	72	92	109	124	135



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	1	2	13	30	50	60	70	89	106	119	130
115°	1	2	12	29	48	58	68	86	102	116	126
117.5°	1	1	11	27	46	55	65	84	100	113	124
120°	1	1	9	25	43	53	63	81	98	112	124
122.5°	1	1	8	23	41	51	60	78	95	110	122
125°	1	1	7	21	38	48	57	75	92	107	119
127.5°	1	1	6	19	35	44	54	71	88	102	115
130°	1	1	4	16	32	41	50	67	83	97	110
132.5°	2	1	3	14	29	37	45	62	78	91	104
135°	2	1	2	11	25	32	40	55	71	85	97
137.5°	2	2	2	9	21	27	34	49	63	77	90
140°	2	2	1	7	17	23	29	42	55	68	81
142.5°	2	2	1	5	13	18	24	35	48	60	71
145°	2	2	1	3	10	14	19	29	40	50	61
147.5°	2	2	1	2	7	11	14	23	32	41	50
150°	2	2	1	2	5	7	11	18	25	33	41
152.5°	2	2	2	1	3	5	8	13	20	26	33
155°	2	2	2	1	2	3	5	9	14	20	25
157.5°	3	2	2	1	1	2	3	6	10	14	18
160°	3	2	2	1	1	1	2	3	6	9	12
162.5°	3	3	2	1	1	1	1	2	3	5	7
165°	3	3	2	2	1	1	1	1	1	2	3
167.5°	3	3	2	2	1	1	1	1	1	1	1
170°	3	3	2	2	1	1	1	1	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



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CATALOG NUMBER: FVS8M-4-LD4-40-2HI-P125-UNV-EDC1

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	3347	3347	3347	3347	3347	3347	3347	3347	3347	3347
2.5°	3311	3322	3330	3333	3334	3332	3336	3337	3336	3333
5°	3216	3227	3236	3239	3238	3242	3240	3241	3240	3238
7.5°	3074	3077	3081	3076	3082	3083	3075	3080	3082	3087
10°	2934	2936	2939	2937	2939	2939	2939	2940	2944	2941
12.5°	2818	2822	2833	2830	2835	2841	2834	2829	2836	2824
15°	2737	2740	2742	2739	2745	2742	2740	2735	2741	2742
17.5°	2661	2659	2666	2660	2661	2659	2658	2651	2649	2657
20°	2593	2588	2583	2587	2592	2588	2587	2582	2583	2582
22.5°	2518	2524	2528	2527	2522	2524	2517	2509	2508	2503
25°	2458	2460	2458	2458	2451	2448	2451	2443	2435	2431
27.5°	2393	2394	2394	2386	2384	2382	2375	2369	2363	2358
30°	2322	2328	2321	2325	2323	2316	2311	2303	2297	2303
32.5°	2260	2256	2256	2253	2251	2253	2243	2230	2224	2225
35°	2190	2190	2194	2187	2180	2178	2169	2166	2154	2155
37.5°	2126	2124	2126	2124	2120	2119	2102	2105	2102	2094
40°	2069	2076	2078	2065	2070	2074	2062	2064	2059	2063
42.5°	2021	2026	2034	2032	2028	2023	2032	2035	2030	2036
45°	1964	1973	1974	1983	1982	1978	1979	1976	1971	1976
47.5°	1887	1894	1900	1901	1908	1908	1901	1904	1910	1896
50°	1811	1814	1821	1817	1820	1824	1822	1814	1814	1812
52.5°	1727	1734	1735	1737	1736	1727	1729	1729	1722	1725
55°	1633	1649	1655	1651	1650	1653	1646	1658	1646	1647
57.5°	1545	1548	1556	1557	1554	1561	1558	1557	1554	1560
60°	1444	1447	1447	1441	1449	1441	1444	1442	1451	1448
62.5°	1323	1331	1338	1327	1328	1325	1324	1324	1332	1335
65°	1209	1208	1218	1211	1212	1214	1202	1209	1209	1211
67.5°	1106	1104	1100	1097	1096	1095	1092	1086	1090	1093
70°	982	994	988	988	986	984	988	969	972	973
72.5°	865	871	880	884	881	876	872	865	857	859
75°	749	755	767	770	771	768	770	764	760	753
77.5°	637	647	654	666	666	667	672	670	664	666
80°	521	532	547	560	565	567	569	568	570	571
82.5°	412	439	447	461	467	469	479	483	486	492
85°	323	342	361	374	380	385	395	408	424	432
87.5°	252	269	287	303	313	321	337	363	392	410
90°	210	228	247	263	272	281	305	338	381	404
92.5°	197	216	232	249	258	268	293	323	350	359
95°	191	209	223	239	249	259	279	298	312	317
97.5°	184	200	214	230	237	245	262	277	288	293
100°	176	191	203	216	221	228	243	254	259	256
102.5°	169	180	191	200	204	209	217	219	218	215
105°	160	170	177	182	185	187	189	188	186	183
107.5°	152	159	164	165	167	168	169	167	164	163
110°	144	150	153	154	154	155	156	156	154	153



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	138	143	146	148	149	150	153	155	154	154
115°	134	140	145	148	150	152	157	160	161	161
117.5°	133	141	147	152	154	157	162	166	167	167
120°	134	142	149	155	158	161	166	170	172	173
122.5°	133	142	150	157	160	163	168	173	175	175
125°	130	140	148	156	159	162	168	173	176	176
127.5°	126	136	145	153	156	160	166	171	175	175
130°	121	132	141	149	152	156	162	168	171	172
132.5°	115	126	135	143	147	150	157	163	166	168
135°	109	119	128	137	140	144	150	155	159	161
137.5°	101	111	120	128	131	135	141	146	150	151
140°	92	102	111	118	122	125	131	135	138	139
142.5°	82	92	100	107	110	113	118	122	125	126
145°	71	81	88	95	98	100	105	108	112	112
147.5°	60	69	77	83	85	88	92	95	96	97
150°	49	57	65	71	73	75	78	81	83	83
152.5°	39	46	53	60	61	63	66	68	70	70
155°	31	36	41	47	50	52	54	56	57	57
157.5°	23	27	31	36	38	41	43	44	45	46
160°	15	19	22	26	28	30	32	34	35	35
162.5°	9	12	14	17	18	19	23	24	24	24
165°	5	6	8	9	10	11	13	15	15	15
167.5°	1	2	3	3	4	4	5	7	7	7
170°	0	0	0	0	0	0	0	1	1	1
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)