

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: P241367

Luminaire Tested: **FVS8M-3-LD4-40-2HI-P125-UNV-EDC1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P241367
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1711-410-23)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FVS8M-3-LD4-40-2HI-P125-UNV-EDC1
Description: FAILSAFE FVS8M LED FIXTURE
3FT LENGTH, 2-MODULE LED WITH P125 LENS
Light Source: (168) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

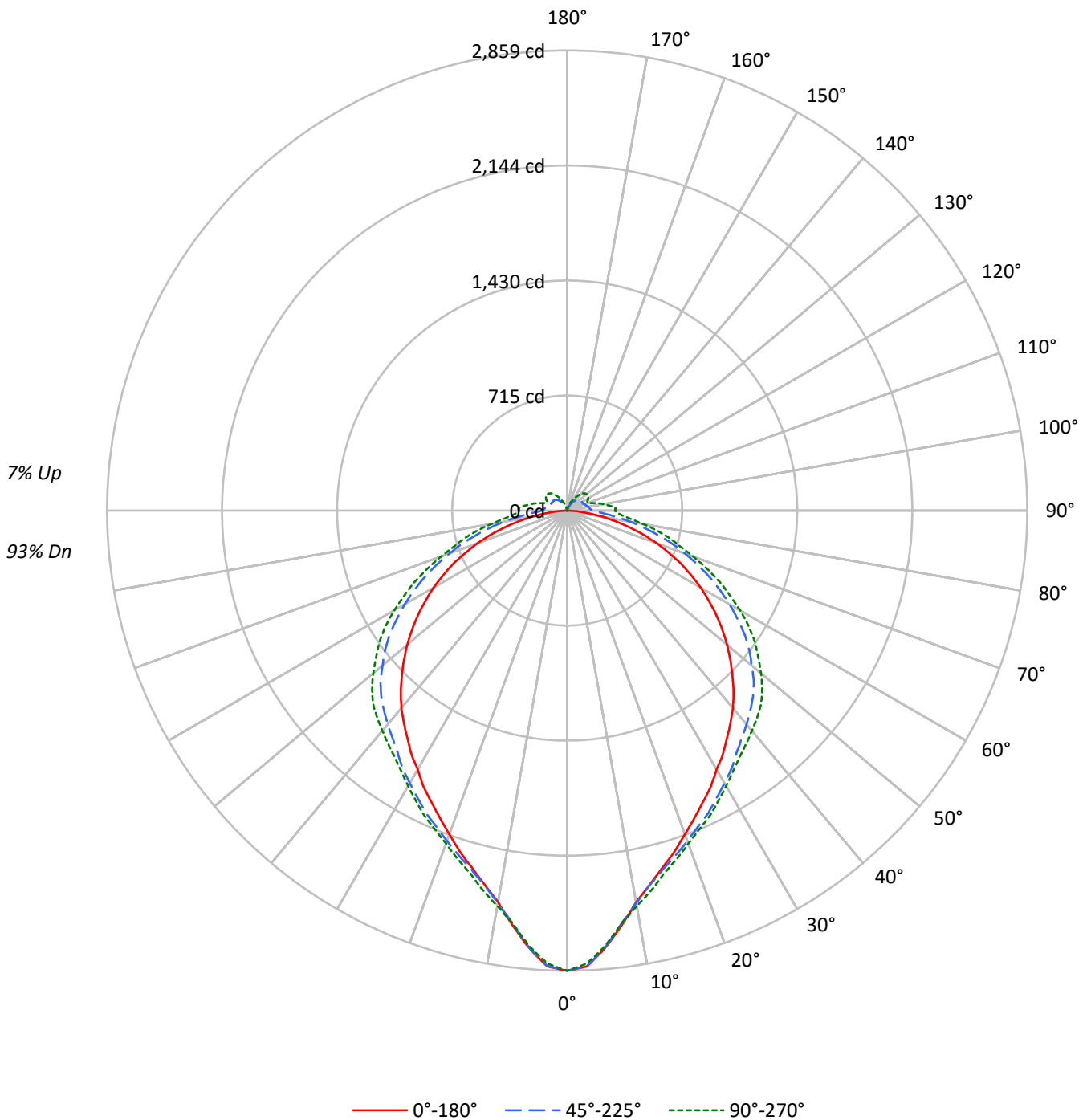
Lumens per Lamp: N/A
Luminaire Lumens: 7743.9 lumens
Efficiency: N/A
Efficacy: 111.7 lumens/watt
Spacing Criteria (0/90/45): 0.98 / 1.03 / 1.26
Luminous Opening: Rectangular w/ Sides (W: 0.65' x L: 2.85' x H: 0.15')
CIE Type: Direct

Input Watts (W): 69.3
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	114	114	114	114	107	107	107	101	101	101	95	95	95	93
1	106	101	97	92	103	98	94	90	93	89	86	87	85	82	83	80	78	76
2	96	88	80	74	93	85	79	73	80	75	70	76	71	68	72	68	65	62
3	87	77	68	61	84	74	67	60	70	64	58	67	61	57	63	59	55	52
4	80	68	59	52	77	66	57	51	62	55	50	59	53	48	56	51	47	44
5	73	60	51	44	71	59	50	44	56	48	43	53	47	42	50	45	40	38
6	68	54	45	39	65	53	44	38	50	43	37	48	41	36	46	40	35	33
7	63	49	40	34	61	48	40	34	46	38	33	44	37	32	42	36	31	29
8	58	45	36	30	56	44	36	30	42	35	29	40	34	29	38	33	28	26
9	55	41	33	27	53	40	32	27	38	31	26	37	31	26	35	30	25	24
10	51	38	30	25	49	37	30	24	36	29	24	34	28	24	33	27	23	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16695	16695	16695
5°	15908	15698	15601
10°	14515	14186	14222
15°	13681	13246	13288
20°	13056	12669	12639
25°	12567	12245	12212
30°	12163	11843	11787
35°	11900	11510	11504
40°	11710	11353	11446
45°	11416	11284	11480
50°	11106	11027	11260
55°	10741	10717	10962
60°	10289	10160	10427
65°	9701	9488	9719
70°	8833	8626	8766
75°	7579	7574	8069
80°	5840	6326	7019
85°	3215	4945	6399



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	251.7	3.3
10°-20°	652.8	8.4
20°-30°	951.1	12.3
30°-40°	1144.5	14.8
40°-50°	1238.4	16.0
50°-60°	1170.5	15.1
60°-70°	929.2	12.0
70°-80°	589.5	7.6
80°-90°	256.7	3.3
90°-100°	147.6	1.9
100°-110°	115.2	1.5
110°-120°	89.9	1.2
120°-130°	82.6	1.1
130°-140°	65.5	0.8
140°-150°	38.9	0.5
150°-160°	16.0	0.2
160°-170°	3.9	0.0
170°-180°	0.1	0.0
0°-30°	1855.5	24.0
0°-40°	3000.0	38.7
0°-60°	5408.8	69.8
0°-90°	7184.2	92.8
90°-120°	352.7	4.6
90°-150°	539.7	7.0
90°-180°	560.0	7.2
0°-180°	7743.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2859	2859	2859	2859	2859	
5°	2726	2730	2724	2713	2714	252
15°	2294	2291	2306	2324	2331	647
25°	1997	2038	2074	2094	2095	921
35°	1729	1788	1836	1872	1869	1084
45°	1453	1520	1634	1693	1704	1121
55°	1132	1225	1347	1405	1424	1010
65°	779	861	975	1013	1044	768
75°	400	478	581	637	659	424
85°	76	136	239	299	342	92
90°	2	64	156	215	296	4
95°	1	62	141	201	285	1
105°	1	56	123	167	176	1
115°	1	51	107	129	139	1
125°	1	46	105	141	158	1
135°	2	38	95	133	152	1
145°	2	24	69	98	112	1
155°	2	11	35	56	62	1
165°	3	3	12	20	24	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°	2859	2859	2859	2859	2859	2859	2859	2859	2859	2859	2859
2.5°	2835	2831	2832	2827	2829	2832	2832	2835	2836	2834	2831
5°	2726	2732	2728	2725	2726	2730	2729	2732	2729	2730	2724
7.5°	2598	2600	2593	2588	2590	2591	2594	2596	2601	2591	2588
10°	2470	2479	2468	2466	2468	2467	2472	2466	2471	2471	2475
12.5°	2378	2379	2383	2370	2370	2371	2370	2369	2371	2377	2380
15°	2294	2297	2297	2290	2290	2291	2293	2295	2296	2308	2306
17.5°	2220	2217	2220	2218	2222	2228	2227	2231	2237	2237	2244
20°	2140	2145	2151	2145	2156	2161	2164	2168	2172	2183	2184
22.5°	2066	2076	2078	2076	2091	2096	2101	2105	2120	2119	2125
25°	1997	2006	2007	2014	2030	2038	2041	2050	2058	2063	2074
27.5°	1933	1938	1939	1953	1963	1971	1981	1995	1999	2010	2012
30°	1857	1868	1874	1886	1906	1910	1920	1929	1944	1949	1955
32.5°	1799	1804	1806	1822	1839	1850	1857	1863	1881	1892	1901
35°	1729	1738	1742	1759	1773	1788	1793	1810	1818	1833	1836
37.5°	1666	1673	1678	1691	1710	1725	1726	1745	1759	1770	1782
40°	1602	1604	1612	1623	1646	1651	1663	1683	1705	1719	1734
42.5°	1530	1531	1541	1555	1580	1587	1604	1625	1648	1673	1684
45°	1453	1457	1471	1489	1510	1520	1536	1563	1589	1616	1634
47.5°	1375	1384	1396	1414	1438	1451	1466	1499	1523	1548	1573
50°	1297	1305	1317	1338	1364	1378	1391	1426	1459	1481	1497
52.5°	1214	1222	1236	1261	1291	1299	1318	1351	1382	1405	1427
55°	1132	1137	1156	1177	1208	1225	1237	1270	1297	1328	1347
57.5°	1043	1050	1070	1089	1124	1137	1151	1184	1217	1239	1256
60°	959	964	981	1002	1031	1048	1062	1094	1120	1145	1165
62.5°	866	873	889	912	943	955	975	998	1031	1048	1070
65°	779	786	799	820	844	861	877	901	928	951	975
67.5°	683	691	707	729	756	768	780	805	834	857	876
70°	590	595	612	630	653	667	679	708	733	758	777
72.5°	495	499	515	535	559	576	587	609	634	659	683
75°	400	408	420	438	463	478	487	514	536	562	581
77.5°	306	313	329	347	370	384	393	419	440	463	487
80°	224	224	243	256	280	292	302	323	347	370	397
82.5°	140	145	158	176	197	208	217	238	263	287	310
85°	76	77	90	106	128	136	148	170	192	214	239
87.5°	23	29	42	60	77	88	96	119	139	161	186
90°	2	7	20	36	55	64	75	95	115	138	156
92.5°	1	6	18	34	53	62	73	92	113	131	147
95°	1	5	17	34	52	62	71	91	110	126	141
97.5°	1	5	17	33	51	60	70	89	106	122	139
100°	1	5	16	32	50	60	69	86	102	119	133
102.5°	1	5	16	32	49	58	66	83	99	113	128
105°	1	4	15	31	47	56	64	80	95	110	123
107.5°	1	4	15	29	46	54	63	78	92	106	119
110°	1	4	14	29	44	53	61	76	90	103	114



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CATALOG NUMBER: FVS8M-3-LD4-40-2HI-P125-UNV-EDC1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	1	4	14	28	43	51	59	75	88	100	111
115°	1	3	13	27	43	51	58	73	87	98	107
117.5°	1	3	13	26	41	49	57	72	85	97	106
120°	1	3	12	26	41	48	56	71	84	96	106
122.5°	1	3	12	25	39	47	55	70	83	95	106
125°	1	2	11	24	38	46	54	69	82	95	105
127.5°	1	2	10	23	37	44	52	67	80	93	104
130°	1	2	10	21	35	42	50	65	78	90	102
132.5°	1	2	9	20	33	40	47	62	75	87	98
135°	2	2	8	18	31	38	45	59	72	84	95
137.5°	2	2	7	17	28	35	41	55	67	79	90
140°	2	2	6	15	25	31	37	49	62	73	84
142.5°	2	2	5	13	22	28	33	44	55	67	77
145°	2	2	4	11	19	24	28	38	48	59	69
147.5°	2	2	4	9	16	20	24	33	42	51	60
150°	2	2	3	7	13	16	20	28	35	43	52
152.5°	2	2	2	6	11	14	16	23	29	36	43
155°	2	2	2	5	9	11	13	18	24	30	35
157.5°	2	2	2	4	7	8	10	15	19	24	28
160°	3	2	2	3	5	6	8	11	15	18	22
162.5°	3	2	2	2	4	5	6	8	11	14	16
165°	3	3	2	2	3	3	4	6	7	10	12
167.5°	3	3	2	2	2	2	3	4	5	6	7
170°	3	3	2	2	2	2	2	2	3	3	4
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-3-LD4-40-2HI-P125-UNV-EDC1

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	2859	2859	2859	2859	2859	2859	2859	2859	2859	2859
2.5°	2828	2830	2825	2826	2824	2825	2822	2821	2823	2817
5°	2725	2720	2714	2714	2713	2711	2710	2712	2711	2714
7.5°	2591	2582	2584	2579	2585	2583	2585	2587	2587	2587
10°	2468	2477	2481	2485	2490	2487	2494	2496	2498	2494
12.5°	2387	2387	2394	2396	2396	2398	2406	2400	2409	2417
15°	2311	2317	2323	2324	2324	2334	2336	2333	2334	2331
17.5°	2250	2253	2255	2261	2267	2266	2268	2273	2271	2268
20°	2188	2197	2204	2203	2204	2207	2208	2209	2204	2201
22.5°	2132	2132	2144	2148	2152	2151	2149	2151	2151	2144
25°	2074	2084	2090	2088	2094	2099	2094	2093	2097	2095
27.5°	2026	2026	2033	2044	2043	2045	2041	2037	2034	2033
30°	1962	1972	1982	1980	1983	1987	1987	1983	1976	1976
32.5°	1906	1913	1917	1929	1933	1932	1923	1916	1919	1919
35°	1848	1856	1872	1870	1872	1874	1871	1868	1868	1869
37.5°	1786	1811	1810	1830	1834	1833	1830	1821	1823	1827
40°	1750	1760	1780	1784	1786	1788	1797	1791	1788	1786
42.5°	1704	1721	1731	1743	1752	1754	1749	1746	1748	1747
45°	1647	1670	1683	1694	1693	1695	1701	1708	1709	1704
47.5°	1593	1599	1626	1623	1635	1644	1642	1638	1645	1644
50°	1518	1539	1546	1565	1567	1561	1568	1572	1573	1573
52.5°	1444	1457	1477	1478	1485	1488	1492	1494	1498	1496
55°	1368	1376	1390	1402	1405	1404	1409	1417	1421	1424
57.5°	1277	1295	1299	1311	1309	1316	1325	1329	1335	1338
60°	1178	1192	1206	1210	1214	1220	1229	1228	1237	1242
62.5°	1088	1094	1106	1114	1115	1115	1124	1128	1137	1139
65°	986	1000	1005	1008	1013	1013	1021	1025	1032	1044
67.5°	891	904	914	916	920	922	920	925	930	936
70°	792	804	817	825	823	822	823	827	834	832
72.5°	697	716	722	734	735	737	732	730	736	733
75°	601	621	630	643	637	640	640	649	657	659
77.5°	510	530	542	548	558	568	570	575	570	570
80°	418	436	458	465	468	471	474	475	476	476
82.5°	337	360	372	374	376	380	385	391	399	400
85°	262	276	287	296	299	305	316	326	337	342
87.5°	203	214	226	236	244	249	263	279	299	309
90°	170	182	194	207	215	223	239	257	282	296
92.5°	160	174	188	200	206	212	228	252	284	303
95°	157	170	181	193	201	209	228	252	275	285
97.5°	152	163	175	190	197	205	222	238	248	252
100°	145	157	170	183	190	196	208	219	226	230
102.5°	140	151	163	175	180	185	195	203	206	207
105°	135	145	156	164	167	171	176	176	176	176
107.5°	129	138	146	150	152	153	154	153	153	152
110°	124	131	136	138	138	139	139	139	139	139



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	119	125	128	130	130	131	132	134	135	135
115°	115	121	124	127	129	130	133	137	139	139
117.5°	113	120	124	129	132	134	139	143	145	146
120°	114	121	127	133	136	138	144	148	151	152
122.5°	115	122	130	136	139	142	147	152	155	156
125°	114	123	131	138	141	144	149	154	157	158
127.5°	113	122	131	138	141	145	150	154	157	158
130°	111	120	129	137	140	143	148	153	156	158
132.5°	108	117	126	133	137	140	146	151	155	156
135°	104	113	122	130	133	137	142	147	150	152
137.5°	99	108	116	124	127	130	136	141	144	145
140°	93	101	109	116	119	122	127	131	135	137
142.5°	85	93	100	106	109	112	117	120	123	125
145°	77	84	90	95	98	101	105	108	111	112
147.5°	68	74	80	85	87	89	93	96	98	98
150°	59	65	70	75	76	78	81	83	85	84
152.5°	50	55	61	65	66	68	70	72	73	73
155°	41	46	51	55	56	58	59	61	62	62
157.5°	33	38	42	46	47	48	50	51	51	52
160°	26	29	33	36	38	39	41	41	42	42
162.5°	19	22	25	28	29	30	32	33	33	33
165°	13	16	17	19	20	22	24	24	25	24
167.5°	9	10	11	13	13	14	15	16	17	17
170°	5	6	6	7	7	7	8	9	9	9
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)