

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: P231944

Luminaire Tested: **FVS4M-4-LD4-30-1LO-P125-UNV-EDC1**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P231944  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1706-121-13)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: FVS4M-4-LD4-30-1LO-P125-UNV-EDC1  
Description: FAILSAFE FVS LED FIXTURE  
4FT LENGTH, 1-MODULE LED WITH P125 LENS  
Light Source: (84) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

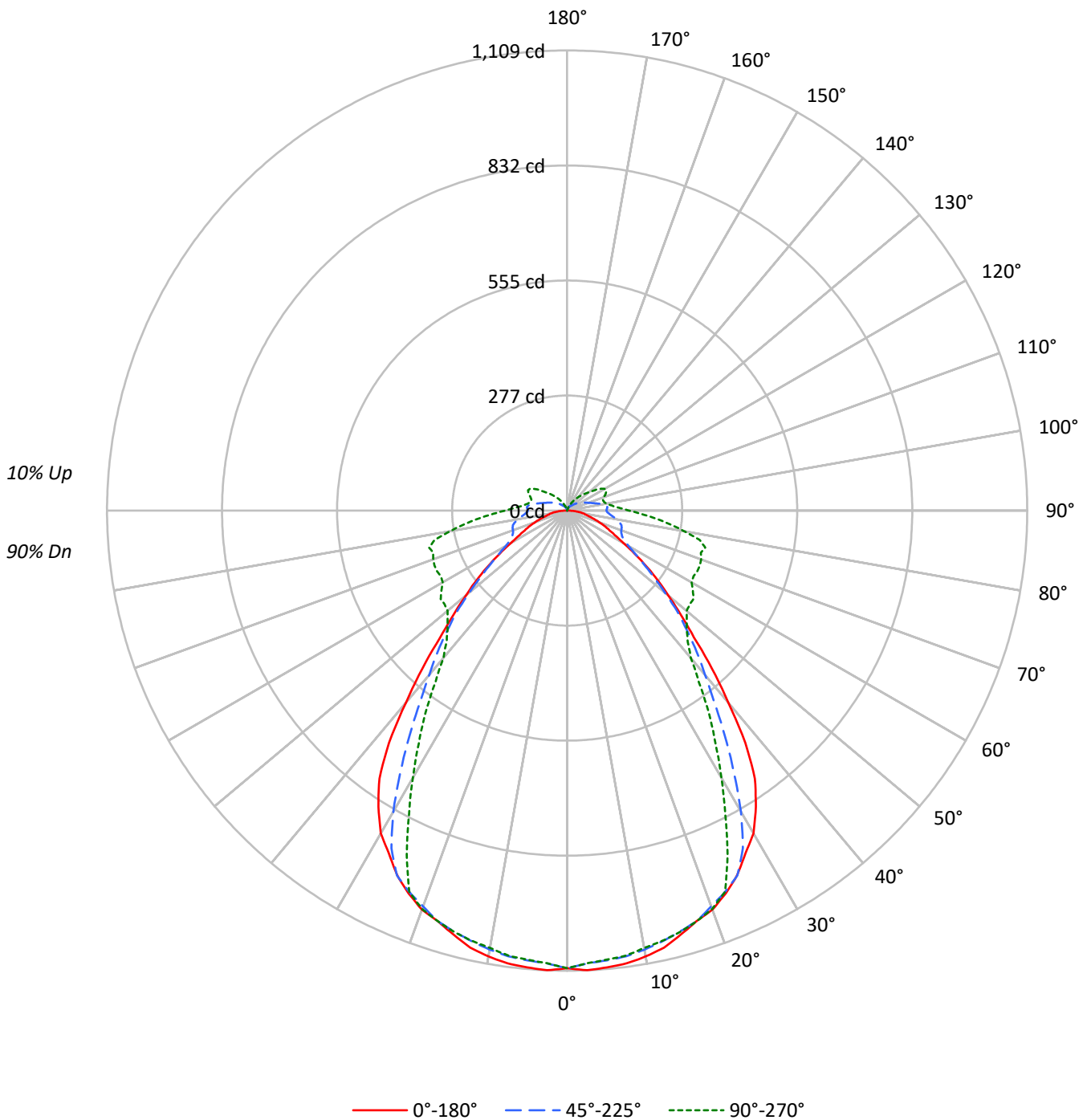
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2594.1 lumens  
Efficiency: N/A  
Efficacy: 109.9 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.07 / 1.11  
Luminous Opening: Rectangular w/ Sides (W: 0.31' x L: 3.79' x H: 0.19')  
CIE Type: Semi-Direct  
  
Input Watts (W): 23.6  
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

TEST NUMBER: P231944

CATALOG NUMBER: FVS4M-4-LD4-30-1LO-P125-UNV-EDC1

### Luminous Intensity Polar Plot





TEST NUMBER: P231944

CATALOG NUMBER: FVS4M-4-LD4-30-1LO-P125-UNV-EDC1

**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	105	105	105	99	99	99	93	93	93	90
1	106	101	96	92	102	97	93	90	91	88	85	86	83	81	80	78	76	74
2	97	89	82	76	93	86	80	74	81	76	71	76	72	68	71	68	65	62
3	89	79	71	65	86	76	69	63	72	66	61	68	63	59	64	60	56	54
4	82	71	62	56	79	69	61	55	65	58	53	61	56	51	58	54	50	47
5	76	64	55	49	73	62	54	48	59	52	47	56	50	46	53	48	44	42
6	71	58	50	44	68	57	49	43	54	47	42	51	45	41	49	44	40	38
7	66	53	45	39	64	52	44	39	50	43	38	47	41	37	45	40	36	34
8	62	49	41	36	60	48	40	35	46	39	34	44	38	34	42	37	33	31
9	58	45	38	32	56	44	37	32	42	36	31	41	35	31	39	34	30	28
10	55	42	35	30	53	41	34	29	40	33	29	38	32	28	37	31	28	26

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

	0°	45°	90°
0°	10019	10019	10019
5°	10035	9541	9414
10°	9979	9167	8927
15°	9819	8795	8519
20°	9720	8410	8107
25°	9502	8011	7166
30°	9158	6946	5795
35°	8455	5556	4646
40°	6888	4423	3661
45°	5296	3593	3272
50°	4247	2810	3098
55°	3411	2161	3172
60°	2619	1725	3084
65°	2190	1581	3254
70°	1939	1632	3449
75°	1644	1752	3733
80°	1622	1755	3392
85°	1438	1723	2819



TEST NUMBER: P231944

CATALOG NUMBER: FVS4M-4-LD4-30-1LO-P125-UNV-EDC1

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.9	4.0
10°-20°	297.8	11.5
20°-30°	434.8	16.8
30°-40°	424.2	16.4
40°-50°	324.6	12.5
50°-60°	235.3	9.1
60°-70°	189.7	7.3
70°-80°	184.5	7.1
80°-90°	133.0	5.1
90°-100°	81.1	3.1
100°-110°	61.4	2.4
110°-120°	52.5	2.0
120°-130°	36.4	1.4
130°-140°	20.3	0.8
140°-150°	10.2	0.4
150°-160°	3.8	0.1
160°-170°	0.5	0.0
170°-180°	0.0	0.0
0°-30°	836.5	32.2
0°-40°	1260.7	48.6
0°-60°	1820.6	70.2
0°-90°	2327.9	89.7
90°-120°	195.0	7.5
90°-150°	261.9	10.1
90°-180°	266.0	10.3
0°-180°	2594.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1103	1103	1103	1103	1103	
5°	1105	1097	1088	1091	1086	105
15°	1058	1061	1050	1054	1052	299
25°	970	972	970	949	915	445
35°	789	767	662	607	595	482
45°	433	424	408	419	408	342
55°	231	211	226	301	372	208
65°	113	113	146	266	346	114
75°	56	89	136	288	344	61
85°	22	43	103	221	212	21
90°	1	24	95	155	149	2
95°	1	22	98	118	114	0
105°	1	20	68	95	90	1
115°	1	18	45	99	103	1
125°	1	16	31	69	89	1
135°	1	13	20	43	55	0
145°	1	9	13	25	32	0
155°	1	5	8	11	15	1
165°	1	2	2	1	1	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P231944

CATALOG NUMBER: FVS4M-4-LD4-30-1LO-P125-UNV-EDC1

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1102.9	1102.9	1102.9	1102.9	1102.9
2.5°	1108.7	1102.3	1092.4	1095.3	1091.8
5°	1105.2	1097.0	1088.3	1090.6	1086.5
7.5°	1100.6	1090.6	1083.6	1085.4	1081.9
10°	1091.2	1083.6	1074.3	1076.0	1070.2
12.5°	1079.0	1070.2	1063.2	1066.1	1062.0
15°	1057.9	1061.4	1050.3	1054.4	1051.5
17.5°	1037.5	1045.1	1037.5	1041.6	1037.5
20°	1023.5	1021.1	1015.3	1028.2	1021.7
22.5°	998.4	997.8	994.9	1003.1	994.3
25°	969.8	971.5	970.4	949.3	914.9
27.5°	930.7	938.2	917.2	853.0	825.6
30°	898.0	900.9	837.8	771.3	743.8
32.5°	846.6	849.5	747.9	684.3	665.6
35°	788.8	767.2	662.1	607.2	594.9
37.5°	705.3	669.1	582.1	546.5	521.4
40°	604.9	571.0	516.7	492.8	464.2
42.5°	516.7	491.6	462.4	453.6	430.3
45°	432.6	424.5	408.1	419.2	407.5
47.5°	370.7	360.8	359.7	384.2	390.6
50°	318.2	302.4	307.7	350.9	376.0
52.5°	274.4	253.4	262.7	323.5	371.9
55°	230.6	211.4	225.9	300.7	371.9
57.5°	192.1	174.0	195.0	290.2	359.1
60°	156.5	146.0	170.5	277.3	346.2
62.5°	131.4	126.1	154.7	268.0	343.3
65°	112.7	112.7	146.0	265.7	346.2
67.5°	97.5	103.3	141.3	269.2	346.2
70°	82.9	98.1	139.0	275.6	343.9
72.5°	68.3	94.0	137.8	282.0	338.0
75°	55.5	88.7	135.5	287.8	344.5
77.5°	46.1	78.2	128.4	288.4	327.0
80°	39.7	66.0	120.9	287.3	285.5
82.5°	30.9	54.3	110.9	261.6	249.3
85°	21.6	42.6	103.3	221.3	212.5
87.5°	9.9	32.7	96.9	185.1	177.5
90°	0.6	24.5	94.6	155.3	148.9
92.5°	0.6	22.8	95.8	134.9	128.4
95°	0.6	22.2	97.5	117.9	113.9
97.5°	0.6	21.6	94.0	106.3	103.9
100°	0.6	21.0	86.4	98.7	96.3
102.5°	0.6	20.4	77.1	94.6	92.2
105°	0.6	19.9	68.3	94.6	89.9
107.5°	0.6	19.3	60.7	97.5	90.5
110°	0.6	18.7	54.9	101.0	94.0



TEST NUMBER: P231944

CATALOG NUMBER: FVS4M-4-LD4-30-1LO-P125-UNV-EDC1

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.6	18.1	49.6	102.2	99.3
115°	0.6	17.5	45.0	99.3	103.3
117.5°	0.6	17.5	41.5	92.2	106.3
120°	0.6	16.9	38.0	85.2	104.5
122.5°	0.6	16.9	34.4	77.7	98.1
125°	0.6	16.3	30.9	68.9	89.3
127.5°	0.6	15.8	28.0	61.9	78.2
130°	0.6	15.2	25.1	54.9	69.5
132.5°	0.6	14.0	22.8	48.5	61.3
135°	0.6	12.8	19.9	42.6	54.9
137.5°	0.6	11.7	18.1	37.4	48.5
140°	0.6	11.1	16.3	32.7	42.6
142.5°	0.6	9.9	14.6	29.2	37.4
145°	0.6	8.8	13.4	25.1	32.1
147.5°	0.6	8.2	12.8	21.6	26.9
150°	0.6	7.0	11.7	17.5	22.2
152.5°	1.2	5.8	9.9	14.0	18.1
155°	1.2	4.7	8.2	11.1	14.6
157.5°	1.2	3.5	7.0	7.6	10.5
160°	1.2	2.9	5.3	4.7	7.0
162.5°	1.2	1.8	3.5	2.3	4.1
165°	1.2	1.8	1.8	1.2	1.2
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)