

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: P232081

Luminaire Tested: **FVS4M-3-LD4-35-2STD-PA187-UNV-EDC1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P232081
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1706-121-30)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FVS4M-3-LD4-35-2STD-PA187-UNV-EDC1
Description: FAILSAFE FVS LED FIXTURE
3FT LENGTH, 2-MODULE LED WITH PA187 LENS
Light Source: (168) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

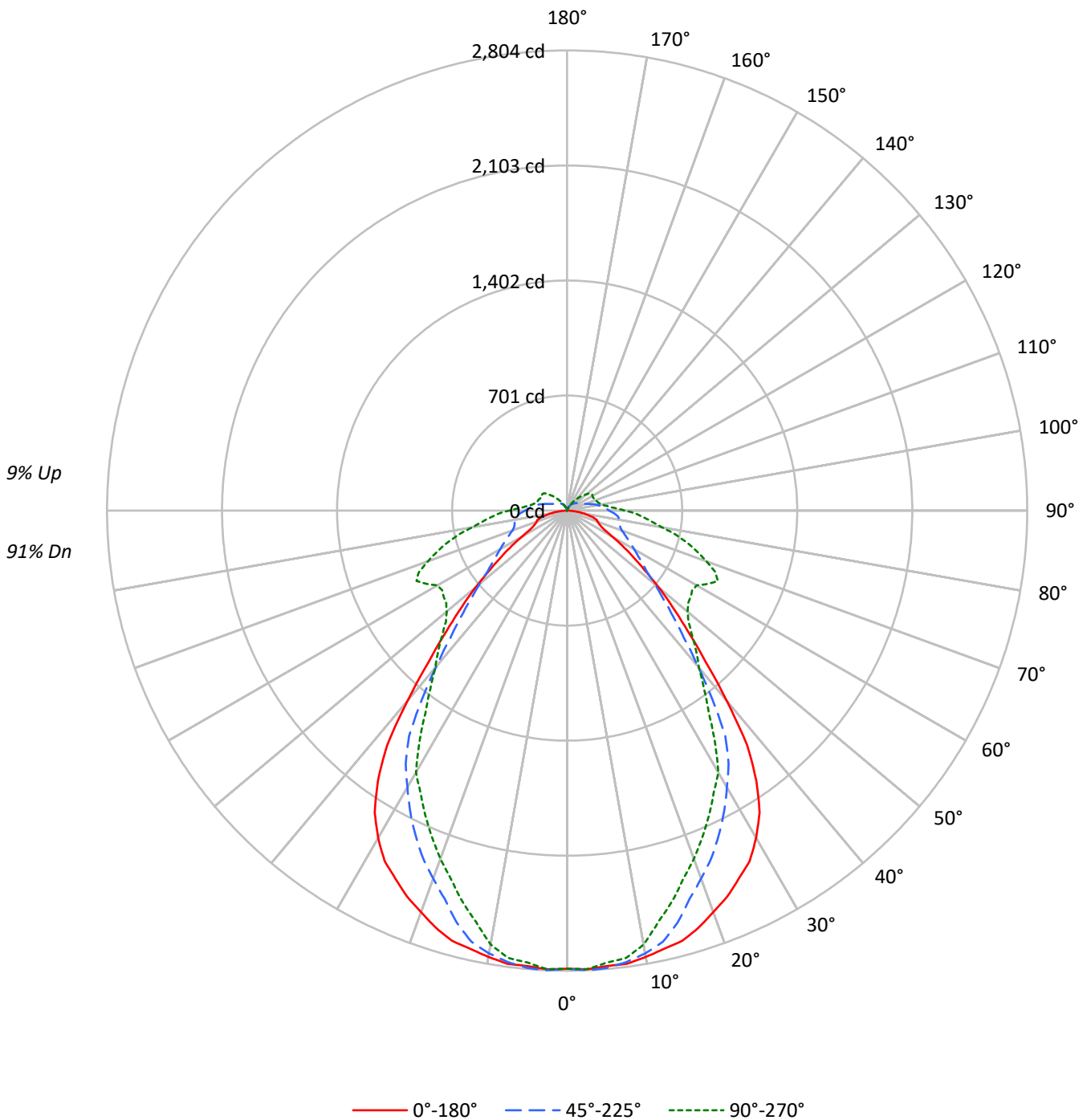
Lumens per Lamp: N/A
Luminaire Lumens: 6294.0 lumens
Efficiency: N/A
Efficacy: 98.3 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.01 / 1.1
Luminous Opening: Rectangular w/ Sides (W: 0.31' x L: 2.92' x H: 0.19')
CIE Type: Direct

Input Watts (W): 64
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: P232081

CATALOG NUMBER: FVS4M-3-LD4-35-2STD-PA187-UNV-EDC1

Luminous Intensity Polar Plot





TEST NUMBER: P232081

CATALOG NUMBER: FVS4M-3-LD4-35-2STD-PA187-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	106	106	106	99	99	99	93	93	93	91
1	106	101	96	92	102	98	94	90	92	88	85	86	84	81	81	79	77	74
2	97	89	82	76	93	86	80	75	81	76	71	76	72	68	72	69	65	63
3	89	79	71	65	86	76	69	63	72	66	61	68	63	59	64	60	57	54
4	82	71	62	56	79	69	61	55	65	58	53	62	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	35	60	48	40	35	46	39	34	44	38	33	42	37	33	31
9	58	45	37	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°	32964	32964	32964
5°	32841	31845	31146
10°	32745	30344	29119
15°	32619	28241	25990
20°	31969	25614	23282
25°	31308	23358	20848
30°	30281	20885	18653
35°	27727	18214	15281
40°	22097	13703	12808
45°	16312	10371	11245
50°	12399	8209	10259
55°	9208	6870	10180
60°	6784	6137	10550
65°	5587	5659	12385
70°	5778	5341	11758
75°	6090	5499	10641
80°	5019	5958	9043
85°	3585	6408	8032



TEST NUMBER: P232081

CATALOG NUMBER: FVS4M-3-LD4-35-2STD-PA187-UNV-EDC1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	264.5	4.2
10°-20°	728.4	11.6
20°-30°	1018.5	16.2
30°-40°	1049.3	16.7
40°-50°	768.8	12.2
50°-60°	572.9	9.1
60°-70°	537.9	8.5
70°-80°	455.3	7.2
80°-90°	303.7	4.8
90°-100°	190.2	3.0
100°-110°	134.0	2.1
110°-120°	103.1	1.6
120°-130°	80.3	1.3
130°-140°	49.0	0.8
140°-150°	25.7	0.4
150°-160°	10.2	0.2
160°-170°	2.1	0.0
170°-180°	0.0	0.0
0°-30°	2011.4	32.0
0°-40°	3060.7	48.6
0°-60°	4402.4	69.9
0°-90°	5699.3	90.6
90°-120°	427.4	6.8
90°-150°	582.4	9.3
90°-180°	595.0	9.5
0°-180°	6294.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2791	2791	2791	2791	2791	
5°	2786	2801	2797	2782	2765	266
15°	2714	2691	2601	2493	2468	763
25°	2475	2333	2185	2085	2048	1140
35°	2010	1813	1679	1541	1505	1231
45°	1040	973	913	974	1077	820
55°	488	504	558	748	918	445
65°	228	314	406	844	1014	236
75°	166	177	332	747	755	168
85°	46	99	301	456	466	49
90°	1	56	255	358	352	3
95°	0	53	223	281	260	0
105°	0	51	153	202	193	0
115°	0	48	96	178	178	0
125°	0	40	77	153	181	0
135°	1	32	62	93	126	1
145°	1	24	47	56	66	1
155°	1	14	26	30	28	1
165°	2	6	12	8	12	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P232081

CATALOG NUMBER: FVS4M-3-LD4-35-2STD-PA187-UNV-EDC1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2791.3	2791.3	2791.3	2791.3	2791.3
2.5°	2797.6	2798.5	2803.9	2803.0	2796.7
5°	2785.9	2801.2	2796.7	2782.3	2765.2
7.5°	2785.0	2776.9	2774.2	2761.6	2749.0
10°	2761.6	2760.7	2740.0	2713.0	2685.2
12.5°	2734.6	2739.1	2691.5	2604.2	2567.4
15°	2713.9	2690.6	2600.6	2492.7	2467.5
17.5°	2664.5	2626.7	2481.0	2401.0	2353.3
20°	2603.3	2542.2	2386.6	2303.0	2257.1
22.5°	2547.6	2436.1	2294.0	2203.2	2152.8
25°	2474.7	2332.7	2185.2	2085.4	2047.6
27.5°	2408.2	2212.2	2070.1	1976.6	1936.1
30°	2303.0	2089.0	1946.9	1877.6	1841.7
32.5°	2182.5	1959.5	1830.9	1749.9	1677.1
35°	2009.8	1812.9	1678.9	1541.3	1505.3
37.5°	1801.2	1639.3	1455.9	1384.8	1370.5
40°	1510.7	1399.2	1239.2	1223.0	1249.1
42.5°	1248.2	1158.2	1056.6	1089.9	1164.5
45°	1039.5	973.0	912.7	973.9	1077.3
47.5°	872.3	827.3	791.3	876.8	1001.8
50°	726.6	688.8	696.9	813.8	957.7
52.5°	591.7	585.4	612.4	768.9	928.9
55°	488.3	503.6	557.5	748.2	918.1
57.5°	397.5	442.4	511.7	753.6	903.7
60°	319.2	393.0	471.2	777.0	910.9
62.5°	259.0	348.9	437.0	810.2	966.7
65°	227.5	313.8	406.5	844.4	1013.5
67.5°	209.5	275.2	378.6	877.7	977.5
70°	196.9	239.2	354.3	912.7	901.9
72.5°	190.6	205.0	339.0	846.2	830.0
75°	165.5	177.2	331.8	747.3	755.4
77.5°	132.2	161.0	327.3	662.7	676.2
80°	100.7	142.1	321.0	585.4	585.4
82.5°	74.6	122.3	315.6	520.7	522.5
85°	45.9	98.9	301.2	455.9	465.8
87.5°	19.8	74.6	277.9	397.5	417.3
90°	0.9	55.8	255.4	357.9	351.6
92.5°	0.0	54.0	240.1	320.1	300.4
95°	0.0	53.1	223.0	280.6	259.9
97.5°	0.0	53.1	205.9	250.9	232.9
100°	0.0	52.2	190.6	226.6	214.9
102.5°	0.0	51.3	173.6	212.2	202.3
105°	0.0	51.3	152.9	202.3	193.3
107.5°	0.0	50.4	134.0	193.3	189.7
110°	0.0	50.4	117.8	184.3	187.0



TEST NUMBER: P232081

CATALOG NUMBER: FVS4M-3-LD4-35-2STD-PA187-UNV-EDC1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	48.6	104.3	179.0	184.3
115°	0.0	47.7	96.2	178.1	178.1
117.5°	0.0	45.9	89.9	179.9	176.3
120°	0.0	44.1	84.5	179.9	178.1
122.5°	0.0	42.3	80.9	170.9	181.6
125°	0.0	39.6	77.3	152.9	180.7
127.5°	0.0	37.8	73.7	135.8	172.7
130°	0.0	35.1	70.1	120.5	155.6
132.5°	0.9	33.3	65.6	106.1	140.3
135°	0.9	31.5	62.0	92.6	125.9
137.5°	0.9	29.7	58.5	82.7	109.7
140°	0.9	28.8	55.8	73.7	94.4
142.5°	0.9	27.0	52.2	64.7	79.1
145°	0.9	24.3	46.8	55.8	66.5
147.5°	0.9	22.5	42.3	48.6	54.0
150°	0.9	19.8	36.9	42.3	43.2
152.5°	0.9	17.1	31.5	36.0	34.2
155°	0.9	14.4	26.1	29.7	27.9
157.5°	1.8	12.6	21.6	23.4	22.5
160°	1.8	10.8	18.0	18.0	18.9
162.5°	1.8	9.0	14.4	12.6	16.2
165°	1.8	6.3	11.7	8.1	11.7
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)