

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: P231947

Luminaire Tested: **FVS4M-4-LD4-50-1LO-P125-UNV-EDC1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P231947
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-LD4-50-1LO-P125-UNV-EDC1
Description: FAILSAFE FVS LED FIXTURE
4FT LENGTH, 1-MODULE LED WITH P125 LENS
Light Source: (84) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

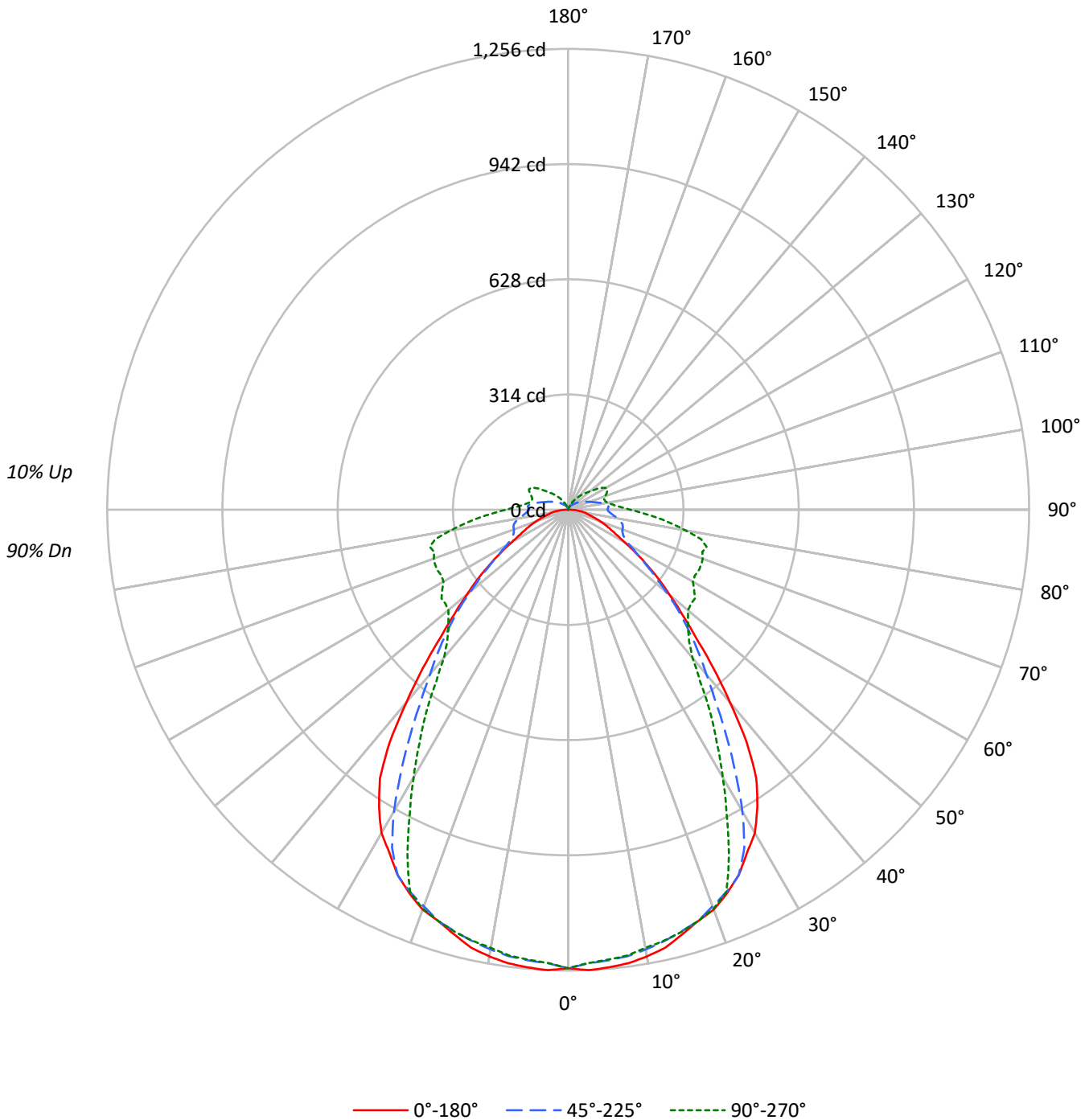
Lumens per Lamp: N/A
Luminaire Lumens: 2939.1 lumens
Efficiency: N/A
Efficacy: 124.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.07 / 1.11
Luminous Opening: Rectangular w/ Sides (W: 0.31' x L: 3.79' x H: 0.19')
CIE Type: Semi-Direct

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: P231947

CATALOG NUMBER: FVS4M-4-LD4-50-1LO-P125-UNV-EDC1

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	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°	11352	11352	11352
5°	11370	10809	10666
10°	11306	10387	10115
15°	11125	9965	9653
20°	11012	9528	9185
25°	10764	9076	8119
30°	10376	7871	6565
35°	9579	6294	5264
40°	7803	5011	4148
45°	6001	4071	3707
50°	4811	3184	3510
55°	3865	2449	3594
60°	2967	1955	3495
65°	2482	1791	3688
70°	2196	1848	3907
75°	1861	1985	4229
80°	1839	1987	3844
85°	1631	1953	3194



TEST NUMBER: P231947

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.7	4.0
10°-20°	337.4	11.5
20°-30°	492.6	16.8
30°-40°	480.6	16.4
40°-50°	367.8	12.5
50°-60°	266.6	9.1
60°-70°	215.0	7.3
70°-80°	209.1	7.1
80°-90°	150.8	5.1
90°-100°	91.9	3.1
100°-110°	69.5	2.4
110°-120°	59.5	2.0
120°-130°	41.2	1.4
130°-140°	23.0	0.8
140°-150°	11.6	0.4
150°-160°	4.3	0.1
160°-170°	0.6	0.0
170°-180°	0.0	0.0
0°-30°	947.8	32.2
0°-40°	1428.4	48.6
0°-60°	2062.7	70.2
0°-90°	2637.5	89.7
90°-120°	220.9	7.5
90°-150°	296.7	10.1
90°-180°	302.0	10.3
0°-180°	2939.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1250	1250	1250	1250	1250	
5°	1252	1243	1233	1236	1231	119
15°	1199	1203	1190	1195	1191	339
25°	1099	1101	1099	1076	1037	504
35°	894	869	750	688	674	546
45°	490	481	462	475	462	387
55°	261	240	256	341	421	236
65°	128	128	165	301	392	129
75°	63	100	154	326	390	69
85°	24	48	117	251	241	24
90°	1	28	107	176	169	2
95°	1	25	110	134	129	1
105°	1	22	77	107	102	1
115°	1	20	51	112	117	1
125°	1	18	35	78	101	1
135°	1	15	22	48	62	1
145°	1	10	15	28	36	0
155°	1	5	9	13	16	1
165°	1	2	2	1	1	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P231947

CATALOG NUMBER: FVS4M-4-LD4-50-1LO-P125-UNV-EDC1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1249.6	1249.6	1249.6	1249.6	1249.6
2.5°	1256.2	1248.9	1237.7	1241.0	1237.0
5°	1252.2	1243.0	1233.0	1235.7	1231.0
7.5°	1246.9	1235.7	1227.7	1229.7	1225.8
10°	1236.3	1227.7	1217.2	1219.1	1212.5
12.5°	1222.4	1212.5	1204.6	1207.9	1203.3
15°	1198.6	1202.6	1190.0	1194.7	1191.4
17.5°	1175.5	1184.1	1175.5	1180.1	1175.5
20°	1159.6	1157.0	1150.3	1164.9	1157.6
22.5°	1131.2	1130.5	1127.2	1136.5	1126.5
25°	1098.7	1100.7	1099.4	1075.6	1036.6
27.5°	1054.4	1063.0	1039.2	966.4	935.4
30°	1017.4	1020.7	949.3	873.8	842.7
32.5°	959.2	962.5	847.4	775.3	754.1
35°	893.7	869.2	750.1	688.0	674.1
37.5°	799.1	758.1	659.5	619.2	590.7
40°	685.3	646.9	585.4	558.3	525.9
42.5°	585.4	557.0	523.9	514.0	487.5
45°	490.2	480.9	462.4	475.0	461.7
47.5°	420.1	408.8	407.5	435.3	442.5
50°	360.5	342.7	348.6	397.6	426.0
52.5°	310.9	287.1	297.7	366.5	421.4
55°	261.3	239.5	256.0	340.7	421.4
57.5°	217.6	197.1	220.9	328.8	406.8
60°	177.3	165.4	193.2	314.2	392.3
62.5°	148.8	142.9	175.3	303.6	389.0
65°	127.7	127.7	165.4	301.0	392.3
67.5°	110.5	117.1	160.1	305.0	392.3
70°	93.9	111.1	157.4	312.2	389.6
72.5°	77.4	106.5	156.1	319.5	383.0
75°	62.8	100.5	153.5	326.1	390.3
77.5°	52.3	88.6	145.5	326.8	370.4
80°	45.0	74.7	136.9	325.5	323.5
82.5°	35.1	61.5	125.7	296.4	282.5
85°	24.5	48.3	117.1	250.7	240.8
87.5°	11.2	37.0	109.8	209.7	201.1
90°	0.7	27.8	107.2	176.0	168.7
92.5°	0.7	25.8	108.5	152.8	145.5
95°	0.7	25.1	110.5	133.6	129.0
97.5°	0.7	24.5	106.5	120.4	117.7
100°	0.7	23.8	97.9	111.8	109.1
102.5°	0.7	23.2	87.3	107.2	104.5
105°	0.7	22.5	77.4	107.2	101.9
107.5°	0.7	21.8	68.8	110.5	102.5
110°	0.7	21.2	62.2	114.4	106.5



TEST NUMBER: P231947

CATALOG NUMBER: FVS4M-4-LD4-50-1LO-P125-UNV-EDC1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.7	20.5	56.2	115.8	112.5
115°	0.7	19.8	50.9	112.5	117.1
117.5°	0.7	19.8	47.0	104.5	120.4
120°	0.7	19.2	43.0	96.6	118.4
122.5°	0.7	19.2	39.0	88.0	111.1
125°	0.7	18.5	35.1	78.1	101.2
127.5°	0.7	17.9	31.8	70.1	88.6
130°	0.7	17.2	28.4	62.2	78.7
132.5°	0.7	15.9	25.8	54.9	69.5
135°	0.7	14.6	22.5	48.3	62.2
137.5°	0.7	13.2	20.5	42.3	54.9
140°	0.7	12.6	18.5	37.0	48.3
142.5°	0.7	11.2	16.5	33.1	42.3
145°	0.7	9.9	15.2	28.4	36.4
147.5°	0.7	9.3	14.6	24.5	30.4
150°	0.7	7.9	13.2	19.8	25.1
152.5°	1.3	6.6	11.2	15.9	20.5
155°	1.3	5.3	9.3	12.6	16.5
157.5°	1.3	4.0	7.9	8.6	11.9
160°	1.3	3.3	6.0	5.3	7.9
162.5°	1.3	2.0	4.0	2.6	4.6
165°	1.3	2.0	2.0	1.3	1.3
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)