

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: P231948

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

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P231948
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-LD4-30-1STD-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

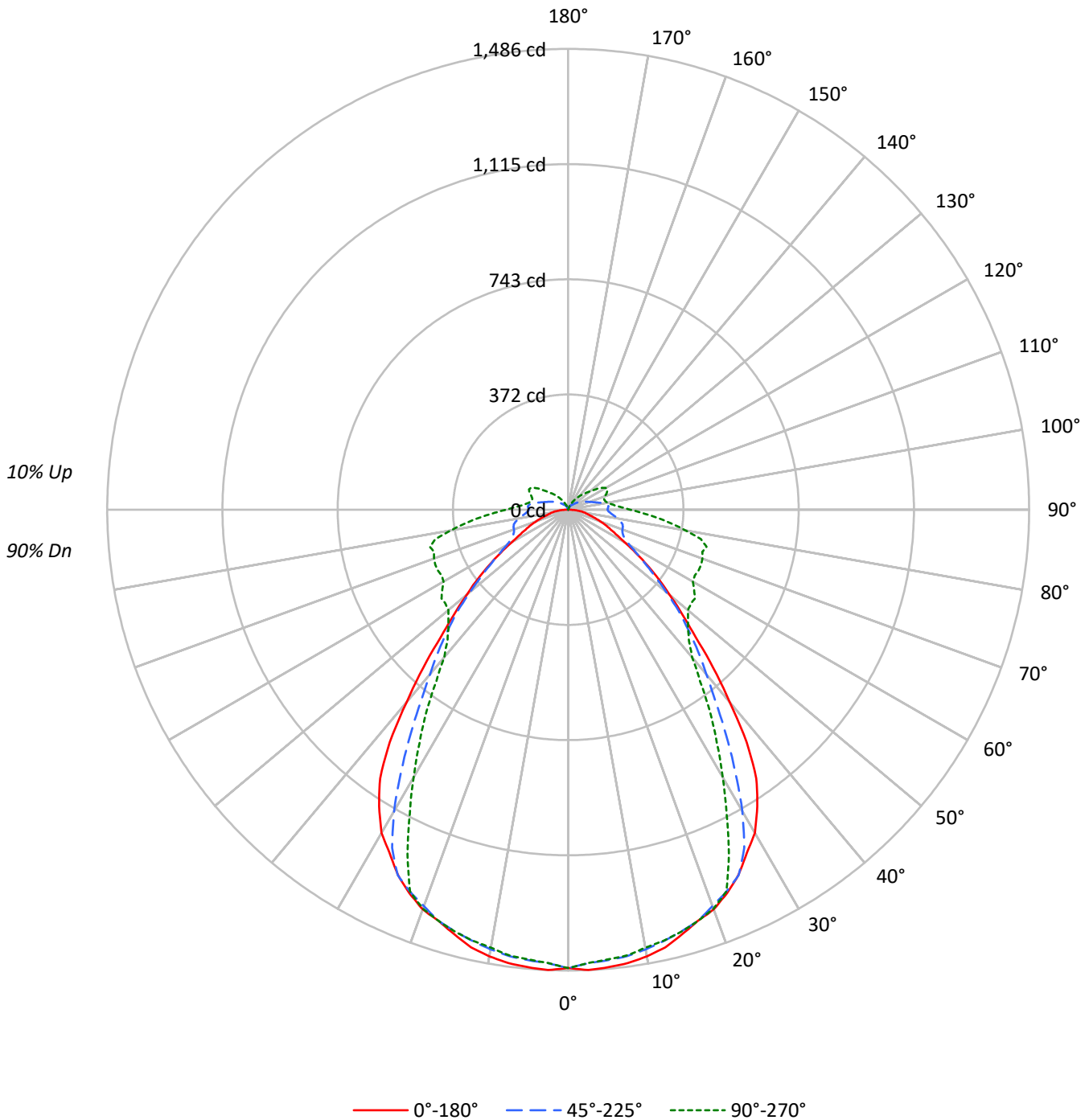
Lumens per Lamp: N/A
Luminaire Lumens: 3476.0 lumens
Efficiency: N/A
Efficacy: 103.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.07 / 1.11
Luminous Opening: Rectangular w/ Sides (W: 0.31' x L: 3.79' x H: 0.19')
CIE Type: Semi-Direct

Input Watts (W): 33.6
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: P231948

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

Luminous Intensity Polar Plot





TEST NUMBER: P231948

CATALOG NUMBER: FVS4M-4-LD4-30-1STD-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°	13426	13426	13426
5°	13447	12785	12615
10°	13371	12285	11963
15°	13158	11787	11416
20°	13024	11269	10863
25°	12732	10735	9602
30°	12272	9309	7765
35°	11330	7445	6225
40°	9229	5927	4906
45°	7097	4815	4385
50°	5691	3766	4151
55°	4571	2896	4251
60°	3509	2312	4133
65°	2935	2118	4361
70°	2598	2187	4621
75°	2202	2347	5002
80°	2174	2350	4546
85°	1924	2310	3778



TEST NUMBER: P231948

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.3	4.0
10°-20°	399.0	11.5
20°-30°	582.7	16.8
30°-40°	568.4	16.4
40°-50°	435.0	12.5
50°-60°	315.3	9.1
60°-70°	254.2	7.3
70°-80°	247.3	7.1
80°-90°	178.3	5.1
90°-100°	108.7	3.1
100°-110°	82.2	2.4
110°-120°	70.3	2.0
120°-130°	48.7	1.4
130°-140°	27.2	0.8
140°-150°	13.7	0.4
150°-160°	5.1	0.1
160°-170°	0.7	0.0
170°-180°	0.0	0.0
0°-30°	1121.0	32.2
0°-40°	1689.4	48.6
0°-60°	2439.6	70.2
0°-90°	3119.4	89.7
90°-120°	261.2	7.5
90°-150°	350.9	10.1
90°-180°	357.0	10.3
0°-180°	3476.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1478	1478	1478	1478	1478	
5°	1481	1470	1458	1462	1456	141
15°	1418	1422	1408	1413	1409	400
25°	1300	1302	1300	1272	1226	596
35°	1057	1028	887	814	797	646
45°	580	569	547	562	546	458
55°	309	283	303	403	498	279
65°	151	151	196	356	464	153
75°	74	119	182	386	462	82
85°	29	57	138	296	285	28
90°	1	33	127	208	200	2
95°	1	30	131	158	153	1
105°	1	27	92	127	120	1
115°	1	24	60	133	138	1
125°	1	22	42	92	120	1
135°	1	17	27	57	74	1
145°	1	12	18	34	43	1
155°	2	6	11	15	20	1
165°	2	2	2	2	2	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P231948

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1477.9	1477.9	1477.9	1477.9	1477.9
2.5°	1485.7	1477.1	1463.8	1467.7	1463.0
5°	1481.0	1470.1	1458.3	1461.5	1456.0
7.5°	1474.8	1461.5	1452.1	1454.4	1449.7
10°	1462.2	1452.1	1439.6	1441.9	1434.1
12.5°	1445.8	1434.1	1424.7	1428.6	1423.1
15°	1417.6	1422.3	1407.5	1413.0	1409.0
17.5°	1390.3	1400.4	1390.3	1395.7	1390.3
20°	1371.5	1368.4	1360.5	1377.7	1369.1
22.5°	1337.8	1337.1	1333.1	1344.1	1332.4
25°	1299.5	1301.9	1300.3	1272.1	1226.0
27.5°	1247.1	1257.3	1229.1	1143.0	1106.3
30°	1203.3	1207.2	1122.7	1033.5	996.7
32.5°	1134.4	1138.3	1002.2	916.9	891.9
35°	1057.0	1028.0	887.2	813.7	797.2
37.5°	945.1	896.6	780.0	732.3	698.7
40°	810.5	765.2	692.4	660.3	622.0
42.5°	692.4	658.8	619.6	607.9	576.6
45°	579.7	568.8	546.9	561.7	546.1
47.5°	496.8	483.5	481.9	514.8	523.4
50°	426.4	405.3	412.3	470.2	503.8
52.5°	367.7	339.5	352.1	433.4	498.4
55°	309.0	283.2	302.8	402.9	498.4
57.5°	257.4	233.1	261.3	388.8	481.2
60°	209.7	195.6	228.5	371.6	463.9
62.5°	176.0	169.0	207.3	359.1	460.0
65°	151.0	151.0	195.6	356.0	463.9
67.5°	130.7	138.5	189.3	360.7	463.9
70°	111.1	131.4	186.2	369.3	460.8
72.5°	91.5	126.0	184.6	377.9	453.0
75°	74.3	118.9	181.5	385.7	461.6
77.5°	61.8	104.8	172.1	386.5	438.1
80°	53.2	88.4	161.9	384.9	382.6
82.5°	41.5	72.8	148.6	350.5	334.1
85°	28.9	57.1	138.5	296.5	284.8
87.5°	13.3	43.8	129.9	248.0	237.8
90°	0.8	32.9	126.7	208.1	199.5
92.5°	0.8	30.5	128.3	180.7	172.1
95°	0.8	29.7	130.7	158.0	152.6
97.5°	0.8	28.9	126.0	142.4	139.3
100°	0.8	28.2	115.8	132.2	129.1
102.5°	0.8	27.4	103.3	126.7	123.6
105°	0.8	26.6	91.5	126.7	120.5
107.5°	0.8	25.8	81.4	130.7	121.3
110°	0.8	25.0	73.5	135.3	126.0



TEST NUMBER: P231948

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

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.8	24.3	66.5	136.9	133.0
115°	0.8	23.5	60.2	133.0	138.5
117.5°	0.8	23.5	55.5	123.6	142.4
120°	0.8	22.7	50.9	114.2	140.0
122.5°	0.8	22.7	46.2	104.1	131.4
125°	0.8	21.9	41.5	92.3	119.7
127.5°	0.8	21.1	37.6	82.9	104.8
130°	0.8	20.3	33.6	73.5	93.1
132.5°	0.8	18.8	30.5	64.9	82.1
135°	0.8	17.2	26.6	57.1	73.5
137.5°	0.8	15.6	24.3	50.1	64.9
140°	0.8	14.9	21.9	43.8	57.1
142.5°	0.8	13.3	19.6	39.1	50.1
145°	0.8	11.7	18.0	33.6	43.0
147.5°	0.8	11.0	17.2	28.9	36.0
150°	0.8	9.4	15.6	23.5	29.7
152.5°	1.6	7.8	13.3	18.8	24.3
155°	1.6	6.3	11.0	14.9	19.6
157.5°	1.6	4.7	9.4	10.2	14.1
160°	1.6	3.9	7.0	6.3	9.4
162.5°	1.6	2.3	4.7	3.1	5.5
165°	1.6	2.3	2.3	1.6	1.6
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)