

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: P231951

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

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P231951
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-LD4-50-1STD-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

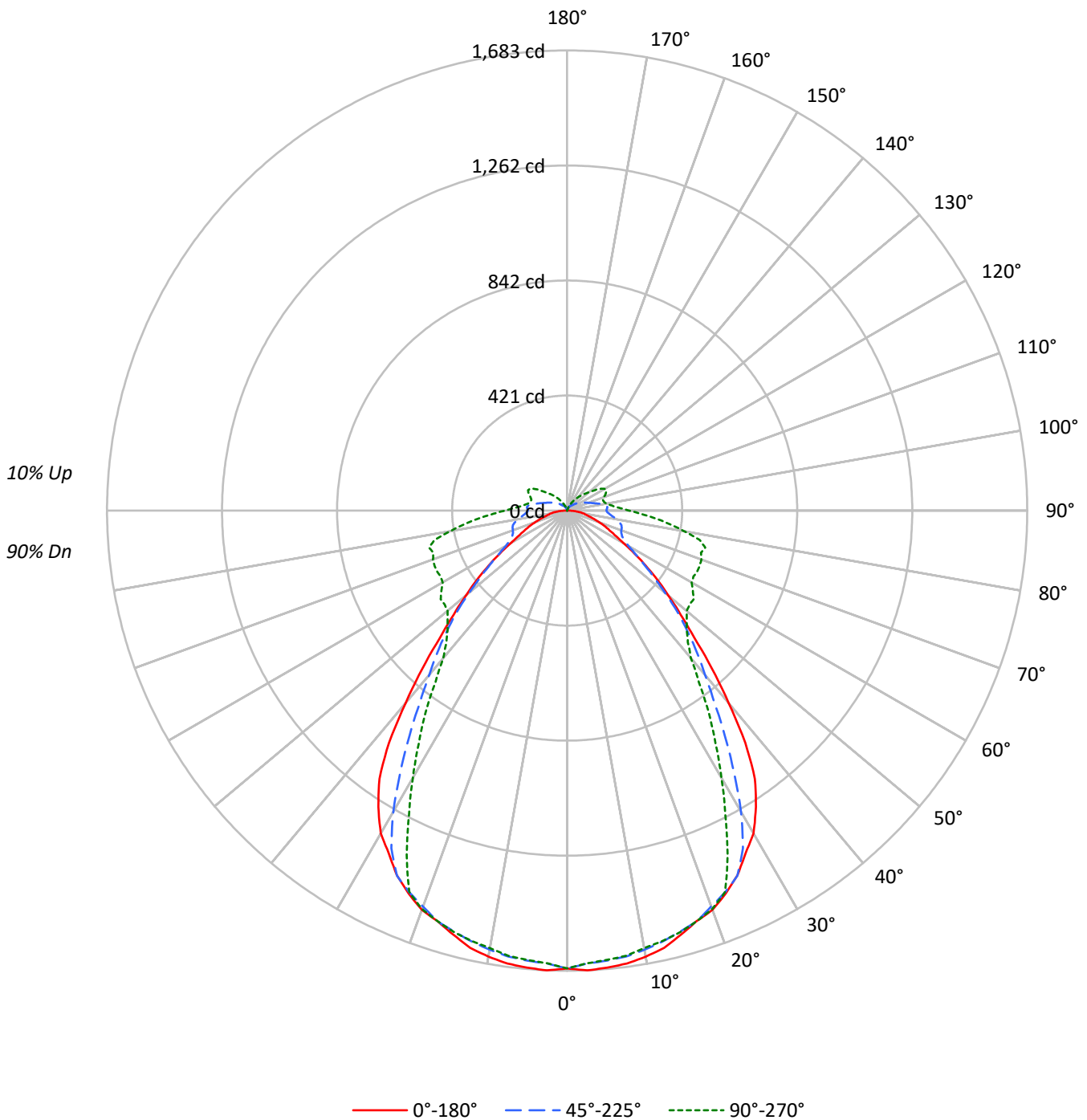
Lumens per Lamp: N/A
Luminaire Lumens: 3938.0 lumens
Efficiency: N/A
Efficacy: 117.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.07 / 1.11
Luminous Opening: Rectangular w/ Sides (W: 0.31' x L: 3.79' x H: 0.19')
CIE Type: Semi-Direct

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: P231951

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

Luminous Intensity Polar Plot





TEST NUMBER: P231951

CATALOG NUMBER: FVS4M-4-LD4-50-1STD-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°	15210	15210	15210
5°	15235	14484	14292
10°	15149	13917	13553
15°	14907	13353	12933
20°	14755	12767	12307
25°	14424	12161	10878
30°	13903	10546	8797
35°	12836	8434	7053
40°	10456	6715	5558
45°	8040	5455	4968
50°	6447	4266	4704
55°	5179	3281	4816
60°	3975	2619	4683
65°	3325	2400	4941
70°	2944	2478	5236
75°	2495	2659	5666
80°	2464	2663	5150
85°	2184	2617	4279



TEST NUMBER: P231951

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.8	4.0
10°-20°	452.1	11.5
20°-30°	660.1	16.8
30°-40°	644.0	16.4
40°-50°	492.8	12.5
50°-60°	357.2	9.1
60°-70°	288.0	7.3
70°-80°	280.1	7.1
80°-90°	202.0	5.1
90°-100°	123.1	3.1
100°-110°	93.2	2.4
110°-120°	79.7	2.0
120°-130°	55.2	1.4
130°-140°	30.8	0.8
140°-150°	15.5	0.4
150°-160°	5.8	0.1
160°-170°	0.8	0.0
170°-180°	0.0	0.0
0°-30°	1269.9	32.2
0°-40°	1913.9	48.6
0°-60°	2763.9	70.2
0°-90°	3534.0	89.7
90°-120°	296.0	7.5
90°-150°	397.5	10.1
90°-180°	404.0	10.3
0°-180°	3938.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1674	1674	1674	1674	1674	
5°	1678	1666	1652	1656	1650	160
15°	1606	1611	1594	1601	1596	454
25°	1472	1475	1473	1441	1389	675
35°	1198	1165	1005	922	903	732
45°	657	644	620	636	619	519
55°	350	321	343	456	565	316
65°	171	171	222	403	526	173
75°	84	135	206	437	523	93
85°	33	65	157	336	323	32
90°	1	37	144	236	226	2
95°	1	34	148	179	173	1
105°	1	30	104	144	136	1
115°	1	27	68	151	157	1
125°	1	25	47	105	136	1
135°	1	20	30	65	83	1
145°	1	13	20	38	49	1
155°	2	7	12	17	22	1
165°	2	3	3	2	2	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P231951

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1674.3	1674.3	1674.3	1674.3	1674.3
2.5°	1683.2	1673.4	1658.4	1662.8	1657.5
5°	1677.9	1665.5	1652.2	1655.7	1649.5
7.5°	1670.8	1655.7	1645.1	1647.7	1642.4
10°	1656.6	1645.1	1630.9	1633.5	1624.7
12.5°	1638.0	1624.7	1614.0	1618.5	1612.3
15°	1606.1	1611.4	1594.5	1600.7	1596.3
17.5°	1575.0	1586.6	1575.0	1581.2	1575.0
20°	1553.8	1550.2	1541.4	1560.9	1551.1
22.5°	1515.7	1514.8	1510.3	1522.7	1509.5
25°	1472.2	1474.9	1473.1	1441.2	1388.9
27.5°	1412.8	1424.4	1392.5	1295.0	1253.3
30°	1363.2	1367.6	1271.9	1170.9	1129.2
32.5°	1285.2	1289.6	1135.4	1038.8	1010.4
35°	1197.5	1164.7	1005.1	921.8	903.2
37.5°	1070.7	1015.8	883.7	829.6	791.5
40°	918.3	866.9	784.4	748.1	704.6
42.5°	784.4	746.3	702.0	688.7	653.2
45°	656.8	644.4	619.6	636.4	618.7
47.5°	562.8	547.8	546.0	583.2	593.0
50°	483.1	459.1	467.1	532.7	570.8
52.5°	416.6	384.7	398.9	491.0	564.6
55°	350.1	320.9	343.0	456.5	564.6
57.5°	291.6	264.1	296.0	440.5	545.1
60°	237.5	221.6	258.8	421.0	525.6
62.5°	199.4	191.5	234.9	406.8	521.2
65°	171.1	171.1	221.6	403.3	525.6
67.5°	148.0	156.9	214.5	408.6	525.6
70°	125.9	148.9	211.0	418.4	522.1
72.5°	103.7	142.7	209.2	428.1	513.2
75°	84.2	134.7	205.6	437.0	522.9
77.5°	70.0	118.8	195.0	437.9	496.4
80°	60.3	100.2	183.5	436.1	433.4
82.5°	47.0	82.4	168.4	397.1	378.5
85°	32.8	64.7	156.9	335.9	322.6
87.5°	15.1	49.6	147.1	281.0	269.5
90°	0.9	37.2	143.6	235.8	226.0
92.5°	0.9	34.6	145.4	204.7	195.0
95°	0.9	33.7	148.0	179.0	172.8
97.5°	0.9	32.8	142.7	161.3	157.8
100°	0.9	31.9	131.2	149.8	146.2
102.5°	0.9	31.0	117.0	143.6	140.0
105°	0.9	30.1	103.7	143.6	136.5
107.5°	0.9	29.2	92.2	148.0	137.4
110°	0.9	28.4	83.3	153.3	142.7



TEST NUMBER: P231951

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

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.9	27.5	75.3	155.1	150.7
115°	0.9	26.6	68.2	150.7	156.9
117.5°	0.9	26.6	62.9	140.0	161.3
120°	0.9	25.7	57.6	129.4	158.7
122.5°	0.9	25.7	52.3	117.9	148.9
125°	0.9	24.8	47.0	104.6	135.6
127.5°	0.9	23.9	42.5	94.0	118.8
130°	0.9	23.0	38.1	83.3	105.5
132.5°	0.9	21.3	34.6	73.6	93.1
135°	0.9	19.5	30.1	64.7	83.3
137.5°	0.9	17.7	27.5	56.7	73.6
140°	0.9	16.8	24.8	49.6	64.7
142.5°	0.9	15.1	22.2	44.3	56.7
145°	0.9	13.3	20.4	38.1	48.7
147.5°	0.9	12.4	19.5	32.8	40.8
150°	0.9	10.6	17.7	26.6	33.7
152.5°	1.8	8.9	15.1	21.3	27.5
155°	1.8	7.1	12.4	16.8	22.2
157.5°	1.8	5.3	10.6	11.5	16.0
160°	1.8	4.4	8.0	7.1	10.6
162.5°	1.8	2.7	5.3	3.5	6.2
165°	1.8	2.7	2.7	1.8	1.8
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)