

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: P231987

Luminaire Tested: **FVS4M-4-LD4-50-2STD-P125-UNV-EDC1**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P231987  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1706-121-18)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: FVS4M-4-LD4-50-2STD-P125-UNV-EDC1  
Description: FAILSAFE FVS LED FIXTURE  
4FT LENGTH, 2-MODULE LED WITH P125 LENS  
Light Source: (168) 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

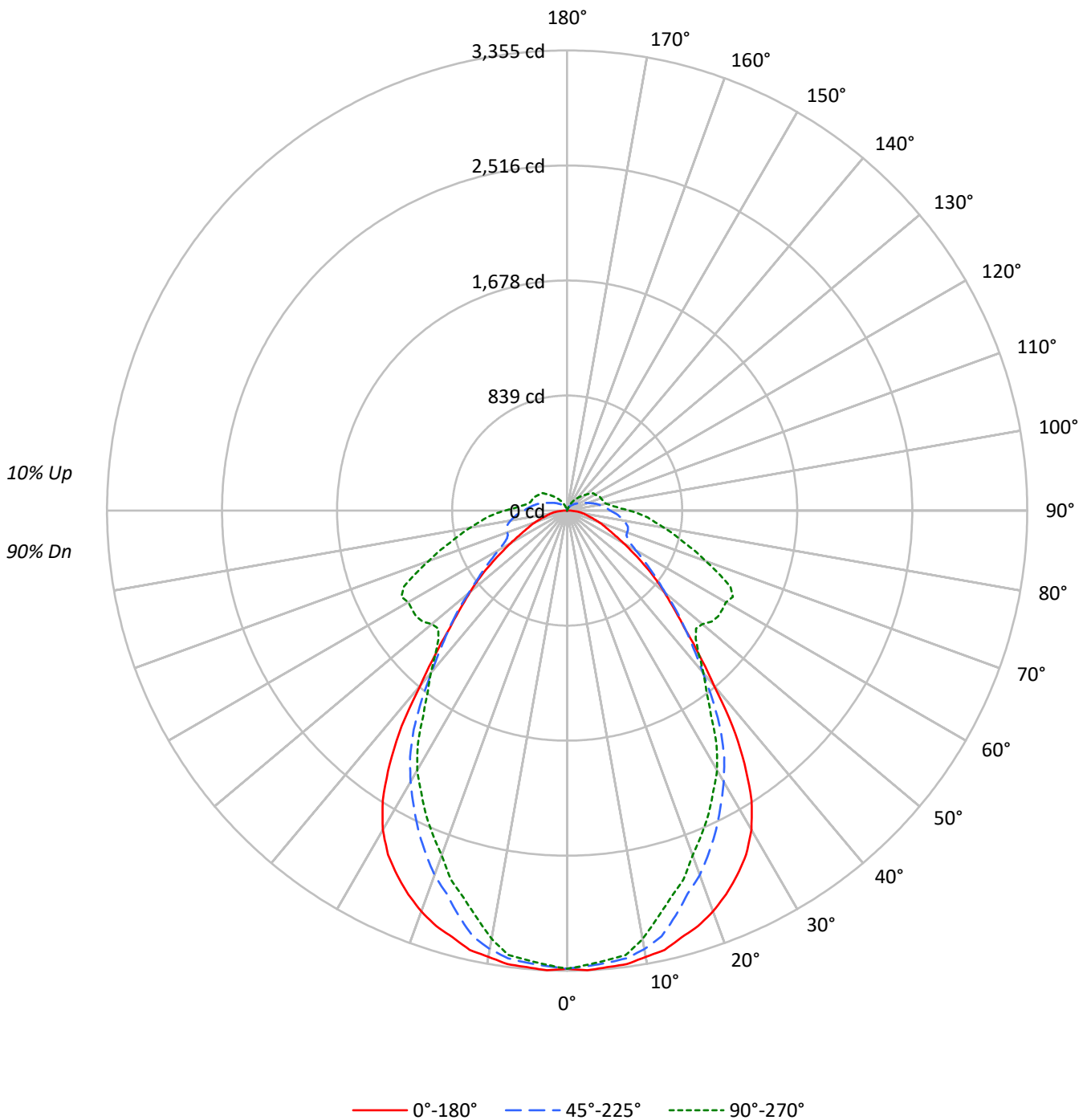
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7765.0 lumens  
Efficiency: N/A  
Efficacy: 115.0 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.01 / 1.1  
Luminous Opening: Rectangular w/ Sides (W: 0.31' x L: 3.79' x H: 0.19')  
CIE Type: Direct  
  
Input Watts (W): 67.5  
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

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### 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	106	106	106	99	99	99	93	93	93	90
1	106	101	96	92	102	97	93	90	91	88	85	86	83	81	81	78	76	74
2	96	88	81	76	93	85	79	74	80	75	71	76	71	68	71	68	65	62
3	89	78	70	64	85	76	69	63	72	65	60	67	62	58	64	59	56	53
4	82	70	62	55	79	68	60	54	64	58	52	61	55	51	58	53	49	46
5	75	63	55	48	73	61	53	47	58	51	46	55	49	45	53	47	43	41
6	70	57	49	43	68	56	48	42	53	46	41	51	45	40	48	43	39	37
7	65	52	44	38	63	51	43	38	49	42	37	47	40	36	44	39	35	33
8	61	48	40	35	59	47	39	34	45	38	33	43	37	33	41	36	32	30
9	57	45	37	31	55	44	36	31	42	35	30	40	34	30	38	33	29	27
10	54	41	34	29	52	40	33	28	39	32	28	37	31	27	36	31	27	25

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

	0°	45°	90°
0°	30344	30344	30344
5°	30337	29016	28514
10°	30210	27701	26451
15°	29897	25593	23658
20°	29534	23414	21220
25°	28731	21213	19107
30°	27403	18927	17031
35°	24180	16373	14305
40°	18960	13150	12201
45°	14811	10692	10644
50°	12308	8555	10605
55°	10076	7021	11467
60°	7934	5823	11906
65°	6532	5251	12342
70°	5764	5463	10768
75°	4939	5935	9440
80°	4870	6074	8509
85°	4595	6188	7834



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	314.7	4.1
10°-20°	864.0	11.1
20°-30°	1204.0	15.5
30°-40°	1240.9	16.0
40°-50°	987.2	12.7
50°-60°	768.2	9.9
60°-70°	671.5	8.6
70°-80°	566.2	7.3
80°-90°	383.7	4.9
90°-100°	242.9	3.1
100°-110°	180.1	2.3
110°-120°	138.3	1.8
120°-130°	99.9	1.3
130°-140°	58.6	0.8
140°-150°	30.8	0.4
150°-160°	12.0	0.2
160°-170°	1.9	0.0
170°-180°	0.0	0.0
0°-30°	2382.8	30.7
0°-40°	3623.7	46.7
0°-60°	5379.1	69.3
0°-90°	7000.6	90.2
90°-120°	561.3	7.2
90°-150°	750.6	9.7
90°-180°	764.0	9.8
0°-180°	7765.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3340	3340	3340	3340	3340	
5°	3341	3334	3310	3306	3291	318
15°	3221	3202	3056	2956	2920	910
25°	2932	2759	2570	2479	2440	1347
35°	2256	2129	1951	1863	1832	1388
45°	1210	1240	1214	1344	1326	956
55°	681	609	734	1050	1344	613
65°	336	330	485	1066	1313	342
75°	167	264	459	907	871	182
85°	69	134	371	569	591	65
90°	3	81	315	447	452	6
95°	3	73	275	355	345	2
105°	3	65	200	277	271	3
115°	3	56	133	238	250	3
125°	3	50	93	191	222	2
135°	4	39	64	120	151	3
145°	4	28	44	74	92	2
155°	4	15	28	33	44	2
165°	4	5	10	4	6	1
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3340.3	3340.3	3340.3	3340.3	3340.3
2.5°	3354.7	3346.6	3324.2	3327.8	3315.2
5°	3341.2	3334.0	3309.8	3306.3	3291.0
7.5°	3334.9	3319.7	3292.8	3281.2	3268.6
10°	3303.6	3286.5	3246.2	3197.8	3170.9
12.5°	3281.2	3257.0	3179.9	3081.3	3041.0
15°	3221.1	3202.3	3056.2	2955.8	2920.0
17.5°	3175.4	3119.8	2927.1	2854.6	2819.6
20°	3110.0	3016.8	2826.8	2731.8	2674.4
22.5°	3028.4	2881.4	2700.4	2608.1	2558.8
25°	2932.5	2758.7	2569.5	2479.0	2439.6
27.5°	2827.7	2611.7	2425.2	2344.6	2307.8
30°	2687.0	2474.5	2282.7	2211.0	2186.0
32.5°	2502.3	2306.0	2130.4	2060.5	2027.3
35°	2255.9	2128.6	1951.1	1863.3	1831.9
37.5°	1981.6	1929.6	1743.2	1703.8	1667.9
40°	1665.2	1690.3	1536.2	1550.5	1546.9
42.5°	1420.6	1455.5	1362.3	1454.6	1419.7
45°	1209.9	1240.4	1214.4	1343.5	1325.6
47.5°	1052.2	1054.0	1078.2	1240.4	1273.6
50°	922.2	882.8	936.6	1149.9	1287.0
52.5°	804.8	730.4	824.5	1092.5	1328.2
55°	681.1	608.6	734.0	1050.4	1344.4
57.5°	564.6	502.8	646.2	1025.3	1341.7
60°	474.1	423.9	575.4	1016.3	1336.3
62.5°	396.1	372.8	520.7	1037.0	1362.3
65°	336.1	329.8	484.9	1065.6	1313.0
67.5°	289.5	303.8	467.8	1102.4	1191.1
70°	246.5	289.5	465.2	1076.4	1073.7
72.5°	201.7	279.6	465.2	994.8	975.1
75°	166.7	264.4	458.9	907.0	871.2
77.5°	139.8	235.7	440.1	822.8	794.1
80°	119.2	200.8	418.5	734.9	716.1
82.5°	93.2	166.7	393.5	646.2	646.2
85°	69.0	134.4	371.0	569.1	590.6
87.5°	34.1	105.8	342.4	502.8	522.5
90°	2.7	80.7	314.6	447.2	451.7
92.5°	1.8	74.4	294.9	397.9	386.3
95°	2.7	72.6	275.1	354.9	345.1
97.5°	2.7	70.8	257.2	323.5	313.7
100°	1.8	69.0	238.4	302.9	288.6
102.5°	2.7	67.2	221.4	289.5	276.0
105°	2.7	65.4	199.9	276.9	270.7
107.5°	2.7	62.7	179.2	267.1	266.2
110°	2.7	60.0	162.2	254.5	262.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	2.7	58.3	145.2	242.9	259.0
115°	2.7	55.6	132.6	238.4	250.1
117.5°	2.7	53.8	122.8	237.5	242.0
120°	2.7	52.9	112.0	227.6	233.9
122.5°	2.7	52.0	102.2	211.5	231.2
125°	2.7	50.2	93.2	190.9	222.3
127.5°	2.7	48.4	85.1	172.1	200.8
130°	2.7	44.8	77.1	153.3	181.0
132.5°	2.7	42.1	69.9	133.5	164.9
135°	3.6	39.4	63.6	120.1	150.6
137.5°	3.6	36.7	56.5	106.7	136.2
140°	3.6	33.2	52.0	95.0	120.1
142.5°	3.6	30.5	47.5	84.2	107.5
145°	3.6	27.8	43.9	73.5	92.3
147.5°	3.6	25.1	41.2	64.5	78.9
150°	3.6	21.5	36.7	53.8	66.3
152.5°	3.6	17.9	33.2	43.0	53.8
155°	3.6	15.2	27.8	33.2	43.9
157.5°	3.6	12.5	23.3	24.2	32.3
160°	3.6	9.0	18.8	16.1	22.4
162.5°	4.5	7.2	14.3	9.0	13.4
165°	4.5	5.4	9.9	3.6	6.3
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)