

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: P231986

Luminaire Tested: **FVS4M-4-LD4-40-2STD-P125-UNV-EDC1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P231986
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-LD4-40-2STD-P125-UNV-EDC1
Description: FAILSAFE FVS LED FIXTURE
4FT LENGTH, 2-MODULE LED WITH P125 LENS
Light Source: (168) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

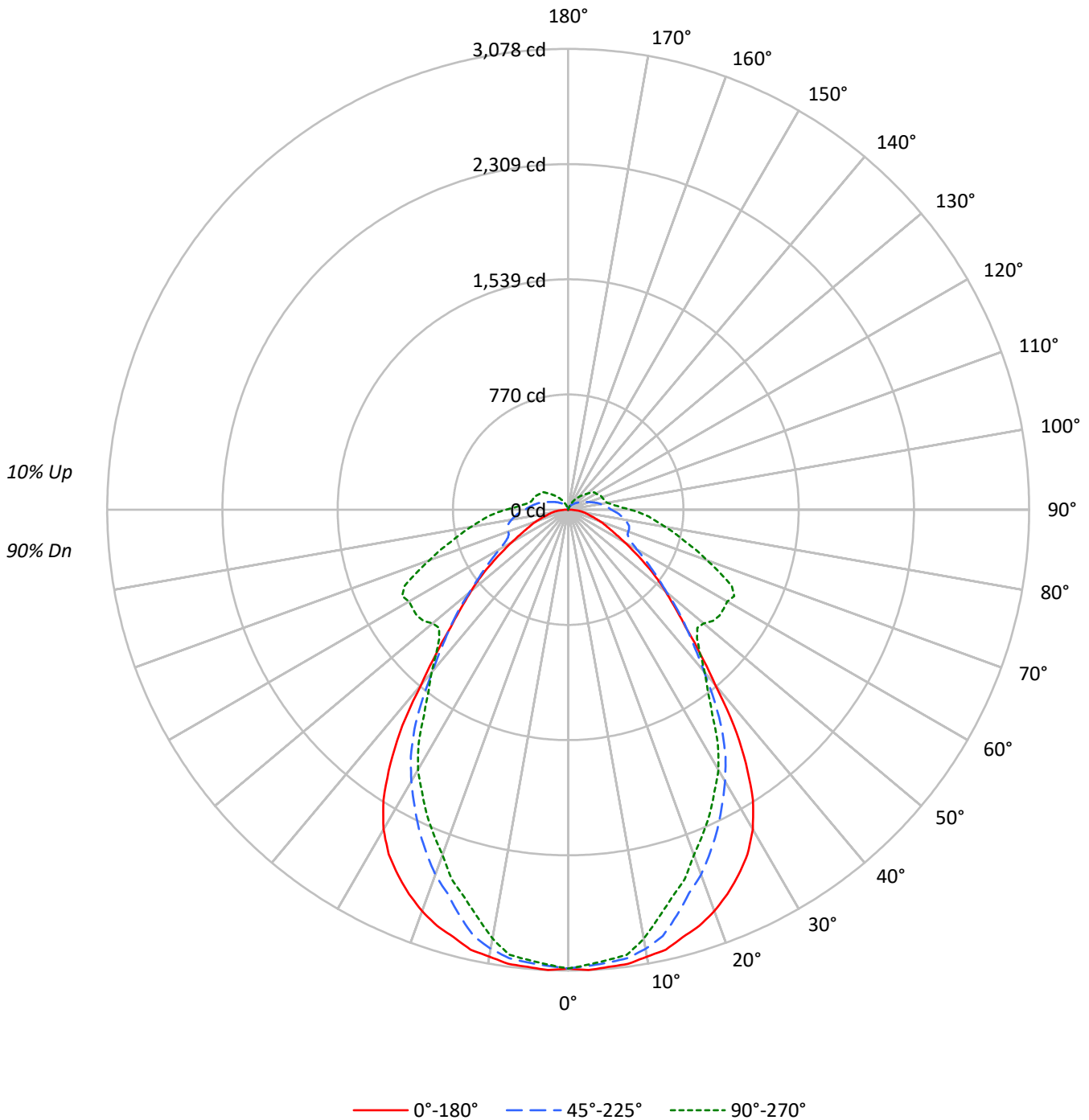
Lumens per Lamp: N/A
Luminaire Lumens: 7124.0 lumens
Efficiency: N/A
Efficacy: 105.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.01 / 1.1
Luminous Opening: Rectangular w/ Sides (W: 0.31' x L: 3.79' x H: 0.19')
CIE Type: Direct

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

TEST NUMBER: P231986

CATALOG NUMBER: FVS4M-4-LD4-40-2STD-P125-UNV-EDC1

Luminous Intensity Polar Plot





TEST NUMBER: P231986

CATALOG NUMBER: FVS4M-4-LD4-40-2STD-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	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°	27840	27840	27840
5°	27833	26621	26161
10°	27717	25414	24268
15°	27429	23481	21705
20°	27096	21481	19468
25°	26359	19462	17530
30°	25140	17364	15624
35°	22183	15022	13125
40°	17396	12065	11194
45°	13590	9809	9765
50°	11292	7849	9730
55°	9244	6441	10520
60°	7280	5342	10923
65°	5992	4817	11323
70°	5287	5012	9879
75°	4531	5445	8660
80°	4470	5573	7807
85°	4215	5678	7188



TEST NUMBER: P231986

CATALOG NUMBER: FVS4M-4-LD4-40-2STD-P125-UNV-EDC1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	288.7	4.1
10°-20°	792.7	11.1
20°-30°	1104.6	15.5
30°-40°	1138.5	16.0
40°-50°	905.7	12.7
50°-60°	704.8	9.9
60°-70°	616.1	8.6
70°-80°	519.5	7.3
80°-90°	352.0	4.9
90°-100°	222.8	3.1
100°-110°	165.3	2.3
110°-120°	126.9	1.8
120°-130°	91.6	1.3
130°-140°	53.8	0.8
140°-150°	28.3	0.4
150°-160°	11.0	0.2
160°-170°	1.7	0.0
170°-180°	0.0	0.0
0°-30°	2186.1	30.7
0°-40°	3324.5	46.7
0°-60°	4935.1	69.3
0°-90°	6422.7	90.2
90°-120°	515.0	7.2
90°-150°	688.6	9.7
90°-180°	701.0	9.8
0°-180°	7124.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3065	3065	3065	3065	3065	
5°	3065	3059	3037	3033	3019	292
15°	2955	2938	2804	2712	2679	835
25°	2690	2531	2357	2274	2238	1236
35°	2070	1953	1790	1710	1681	1273
45°	1110	1138	1114	1233	1216	877
55°	625	558	673	964	1233	562
65°	308	303	445	978	1205	313
75°	153	243	421	832	799	167
85°	63	123	340	522	542	60
90°	2	74	289	410	414	5
95°	2	67	252	326	317	2
105°	2	60	183	254	248	3
115°	2	51	122	219	229	2
125°	2	46	86	175	204	2
135°	3	36	58	110	138	2
145°	3	26	40	67	85	2
155°	3	14	26	30	40	2
165°	4	5	9	3	6	1
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P231986

CATALOG NUMBER: FVS4M-4-LD4-40-2STD-P125-UNV-EDC1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3064.6	3064.6	3064.6	3064.6	3064.6
2.5°	3077.7	3070.3	3049.8	3053.1	3041.6
5°	3065.4	3058.8	3036.6	3033.3	3019.4
7.5°	3059.6	3045.7	3021.0	3010.3	2998.8
10°	3030.9	3015.2	2978.2	2933.8	2909.2
12.5°	3010.3	2988.1	2917.4	2826.9	2789.9
15°	2955.2	2937.9	2803.9	2711.8	2678.9
17.5°	2913.3	2862.3	2685.5	2618.9	2586.8
20°	2853.3	2767.7	2593.4	2506.3	2453.6
22.5°	2778.4	2643.6	2477.5	2392.8	2347.6
25°	2690.4	2530.9	2357.4	2274.4	2238.2
27.5°	2594.2	2396.1	2225.0	2151.0	2117.3
30°	2465.1	2270.3	2094.3	2028.5	2005.5
32.5°	2295.8	2115.7	1954.5	1890.4	1860.0
35°	2069.6	1952.9	1790.1	1709.5	1680.7
37.5°	1818.0	1770.3	1599.3	1563.1	1530.2
40°	1527.8	1550.8	1409.4	1422.5	1419.2
42.5°	1303.3	1335.4	1249.8	1334.5	1302.5
45°	1110.1	1138.0	1114.2	1232.6	1216.1
47.5°	965.3	967.0	989.2	1138.0	1168.4
50°	846.1	809.9	859.3	1055.0	1180.8
52.5°	738.4	670.1	756.5	1002.3	1218.6
55°	624.9	558.3	673.4	963.7	1233.4
57.5°	518.0	461.3	592.9	940.7	1230.9
60°	435.0	388.9	527.9	932.4	1226.0
62.5°	363.4	342.1	477.7	951.4	1249.8
65°	308.3	302.6	444.8	977.7	1204.6
67.5°	265.6	278.7	429.2	1011.4	1092.8
70°	226.1	265.6	426.8	987.5	985.1
72.5°	185.0	256.5	426.8	912.7	894.6
75°	152.9	242.6	421.0	832.1	799.2
77.5°	128.3	216.3	403.7	754.8	728.5
80°	109.4	184.2	384.0	674.3	657.0
82.5°	85.5	152.9	361.0	592.9	592.9
85°	63.3	123.3	340.4	522.1	541.9
87.5°	31.2	97.0	314.1	461.3	479.4
90°	2.5	74.0	288.6	410.3	414.4
92.5°	1.6	68.2	270.5	365.1	354.4
95°	2.5	66.6	252.4	325.6	316.6
97.5°	2.5	65.0	236.0	296.8	287.8
100°	1.6	63.3	218.7	277.9	264.8
102.5°	2.5	61.7	203.1	265.6	253.3
105°	2.5	60.0	183.4	254.1	248.3
107.5°	2.5	57.6	164.5	245.0	244.2
110°	2.5	55.1	148.8	233.5	240.9



TEST NUMBER: P231986

CATALOG NUMBER: FVS4M-4-LD4-40-2STD-P125-UNV-EDC1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	2.5	53.4	133.2	222.8	237.6
115°	2.5	51.0	121.7	218.7	229.4
117.5°	2.5	49.3	112.7	217.9	222.0
120°	2.5	48.5	102.8	208.9	214.6
122.5°	2.5	47.7	93.7	194.1	212.1
125°	2.5	46.0	85.5	175.1	203.9
127.5°	2.5	44.4	78.1	157.9	184.2
130°	2.5	41.1	70.7	140.6	166.1
132.5°	2.5	38.6	64.1	122.5	151.3
135°	3.3	36.2	58.4	110.2	138.1
137.5°	3.3	33.7	51.8	97.8	125.0
140°	3.3	30.4	47.7	87.2	110.2
142.5°	3.3	28.0	43.6	77.3	98.7
145°	3.3	25.5	40.3	67.4	84.7
147.5°	3.3	23.0	37.8	59.2	72.4
150°	3.3	19.7	33.7	49.3	60.8
152.5°	3.3	16.4	30.4	39.5	49.3
155°	3.3	14.0	25.5	30.4	40.3
157.5°	3.3	11.5	21.4	22.2	29.6
160°	3.3	8.2	17.3	14.8	20.6
162.5°	4.1	6.6	13.2	8.2	12.3
165°	4.1	4.9	9.0	3.3	5.8
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)