

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: P231950

Luminaire Tested: **FVS4M-4-LD4-40-1STD-P125-UNV-EDC1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P231950
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-LD4-40-1STD-P125-UNV-EDC1
Description: FAILSAFE FVS LED FIXTURE
4FT LENGTH, 1-MODULE LED WITH P125 LENS
Light Source: (84) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

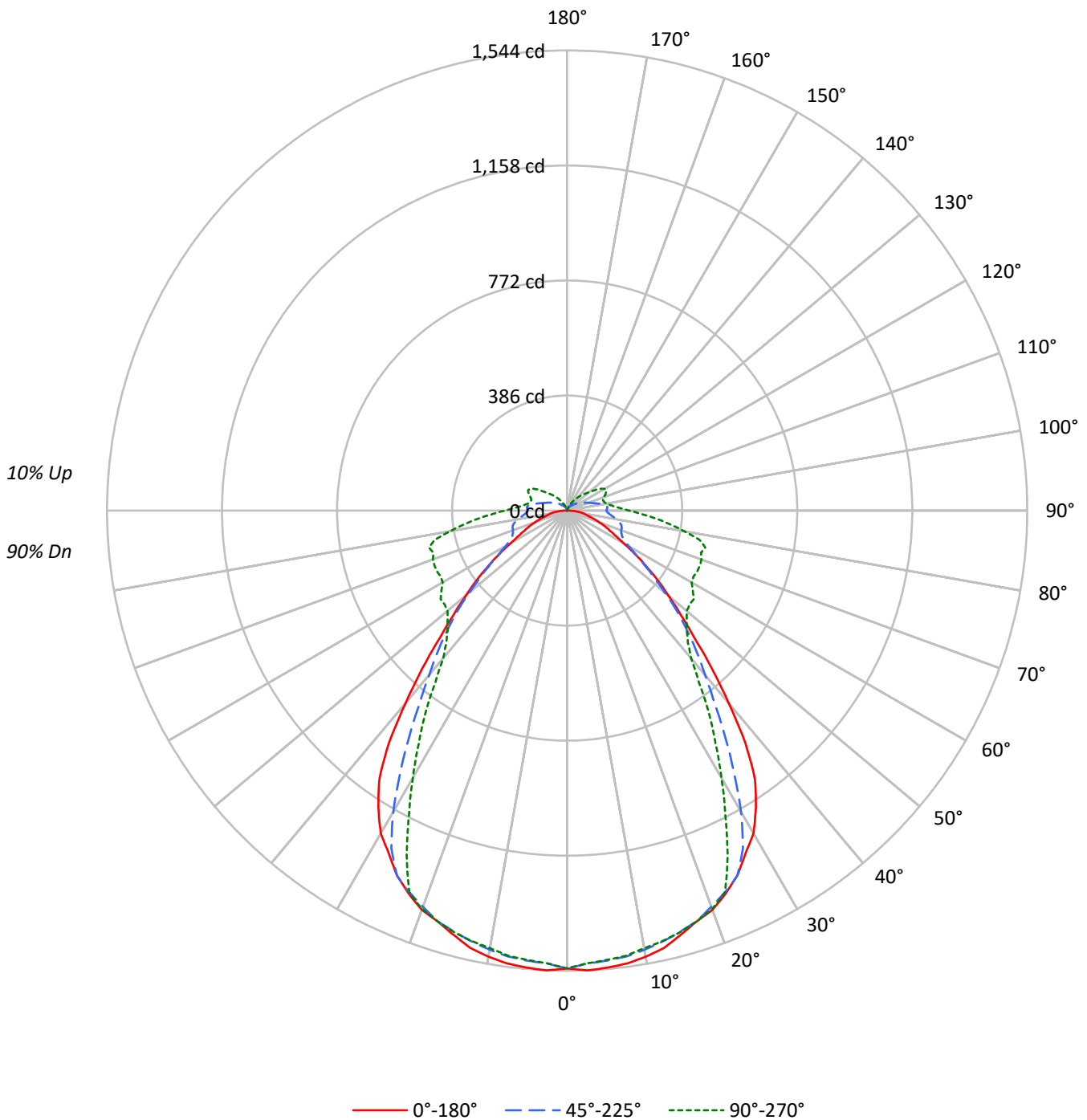
Lumens per Lamp: N/A
Luminaire Lumens: 3613.0 lumens
Efficiency: N/A
Efficacy: 107.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.07 / 1.11
Luminous Opening: Rectangular w/ Sides (W: 0.31' x L: 3.79' x H: 0.19')
CIE Type: Semi-Direct

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

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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	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°	13954	13954	13954
5°	13977	13289	13112
10°	13899	12769	12434
15°	13677	12251	11866
20°	13537	11714	11292
25°	13233	11157	9980
30°	12755	9675	8071
35°	11776	7739	6471
40°	9593	6161	5099
45°	7377	5004	4558
50°	5915	3915	4315
55°	4752	3010	4418
60°	3647	2403	4296
65°	3049	2202	4533
70°	2701	2272	4804
75°	2290	2440	5199
80°	2259	2443	4726
85°	2004	2400	3926



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.8	4.0
10°-20°	414.8	11.5
20°-30°	605.6	16.8
30°-40°	590.8	16.4
40°-50°	452.1	12.5
50°-60°	327.7	9.1
60°-70°	264.3	7.3
70°-80°	257.0	7.1
80°-90°	185.3	5.1
90°-100°	112.9	3.1
100°-110°	85.5	2.4
110°-120°	73.1	2.0
120°-130°	50.7	1.4
130°-140°	28.3	0.8
140°-150°	14.2	0.4
150°-160°	5.3	0.1
160°-170°	0.7	0.0
170°-180°	0.0	0.0
0°-30°	1165.1	32.2
0°-40°	1756.0	48.6
0°-60°	2535.7	70.2
0°-90°	3242.3	89.7
90°-120°	271.5	7.5
90°-150°	364.7	10.1
90°-180°	371.0	10.3
0°-180°	3613.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1536	1536	1536	1536	1536	
5°	1539	1528	1516	1519	1513	146
15°	1474	1478	1463	1469	1465	416
25°	1351	1353	1352	1322	1274	620
35°	1099	1068	922	846	829	671
45°	603	591	568	584	568	476
55°	321	294	315	419	518	290
65°	157	157	203	370	482	159
75°	77	124	189	401	480	85
85°	30	59	144	308	296	29
90°	1	34	132	216	207	2
95°	1	31	136	164	159	1
105°	1	28	95	132	125	1
115°	1	24	63	138	144	1
125°	1	23	43	96	124	1
135°	1	18	28	59	76	1
145°	1	12	19	35	45	1
155°	2	6	11	16	20	1
165°	2	2	2	2	2	0
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°	1536.1	1536.1	1536.1	1536.1	1536.1
2.5°	1544.3	1535.3	1521.5	1525.6	1520.7
5°	1539.4	1528.0	1515.8	1519.1	1513.4
7.5°	1532.9	1519.1	1509.3	1511.7	1506.9
10°	1519.9	1509.3	1496.3	1498.7	1490.6
12.5°	1502.8	1490.6	1480.8	1484.9	1479.2
15°	1473.5	1478.4	1462.9	1468.6	1464.6
17.5°	1445.1	1455.6	1445.1	1450.7	1445.1
20°	1425.5	1422.3	1414.2	1432.0	1423.1
22.5°	1390.6	1389.8	1385.7	1397.1	1384.9
25°	1350.7	1353.2	1351.5	1322.3	1274.3
27.5°	1296.2	1306.8	1277.5	1188.1	1149.9
30°	1250.7	1254.8	1166.9	1074.2	1036.0
32.5°	1179.1	1183.2	1041.7	953.1	927.0
35°	1098.6	1068.5	922.2	845.7	828.7
37.5°	982.3	931.9	810.8	761.2	726.2
40°	842.5	795.3	719.7	686.3	646.5
42.5°	719.7	684.7	644.1	631.9	599.3
45°	602.6	591.2	568.4	583.9	567.6
47.5°	516.4	502.6	500.9	535.1	544.0
50°	443.2	421.2	428.6	488.7	523.7
52.5°	382.2	352.9	365.9	450.5	518.0
55°	321.2	294.4	314.7	418.8	518.0
57.5°	267.5	242.3	271.6	404.2	500.1
60°	217.9	203.3	237.5	386.3	482.2
62.5°	183.0	175.7	215.5	373.3	478.2
65°	156.9	156.9	203.3	370.0	482.2
67.5°	135.8	143.9	196.8	374.9	482.2
70°	115.5	136.6	193.5	383.8	479.0
72.5°	95.1	130.9	191.9	392.8	470.8
75°	77.3	123.6	188.7	400.9	479.8
77.5°	64.2	109.0	178.9	401.7	455.4
80°	55.3	91.9	168.3	400.1	397.7
82.5°	43.1	75.6	154.5	364.3	347.2
85°	30.1	59.4	143.9	308.2	296.0
87.5°	13.8	45.5	135.0	257.8	247.2
90°	0.8	34.2	131.7	216.3	207.4
92.5°	0.8	31.7	133.4	187.8	178.9
95°	0.8	30.9	135.8	164.3	158.6
97.5°	0.8	30.1	130.9	148.0	144.7
100°	0.8	29.3	120.4	137.4	134.2
102.5°	0.8	28.5	107.3	131.7	128.5
105°	0.8	27.6	95.1	131.7	125.2
107.5°	0.8	26.8	84.6	135.8	126.0
110°	0.8	26.0	76.4	140.7	130.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.8	25.2	69.1	142.3	138.2
115°	0.8	24.4	62.6	138.2	143.9
117.5°	0.8	24.4	57.7	128.5	148.0
120°	0.8	23.6	52.9	118.7	145.6
122.5°	0.8	23.6	48.0	108.2	136.6
125°	0.8	22.8	43.1	96.0	124.4
127.5°	0.8	22.0	39.0	86.2	109.0
130°	0.8	21.1	35.0	76.4	96.8
132.5°	0.8	19.5	31.7	67.5	85.4
135°	0.8	17.9	27.6	59.4	76.4
137.5°	0.8	16.3	25.2	52.0	67.5
140°	0.8	15.5	22.8	45.5	59.4
142.5°	0.8	13.8	20.3	40.7	52.0
145°	0.8	12.2	18.7	35.0	44.7
147.5°	0.8	11.4	17.9	30.1	37.4
150°	0.8	9.8	16.3	24.4	30.9
152.5°	1.6	8.1	13.8	19.5	25.2
155°	1.6	6.5	11.4	15.5	20.3
157.5°	1.6	4.9	9.8	10.6	14.6
160°	1.6	4.1	7.3	6.5	9.8
162.5°	1.6	2.4	4.9	3.3	5.7
165°	1.6	2.4	2.4	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)