

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: P231909

Luminaire Tested: **FVS4M-2-LD4-35-2LO-P125-UNV-EDC1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P231909
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1706-121-8)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FVS4M-2-LD4-35-2LO-P125-UNV-EDC1
Description: FAILSAFE FVS LED FIXTURE
2FT LENGTH, 2-MODULE LED WITH P125 LENS
Light Source: (84) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

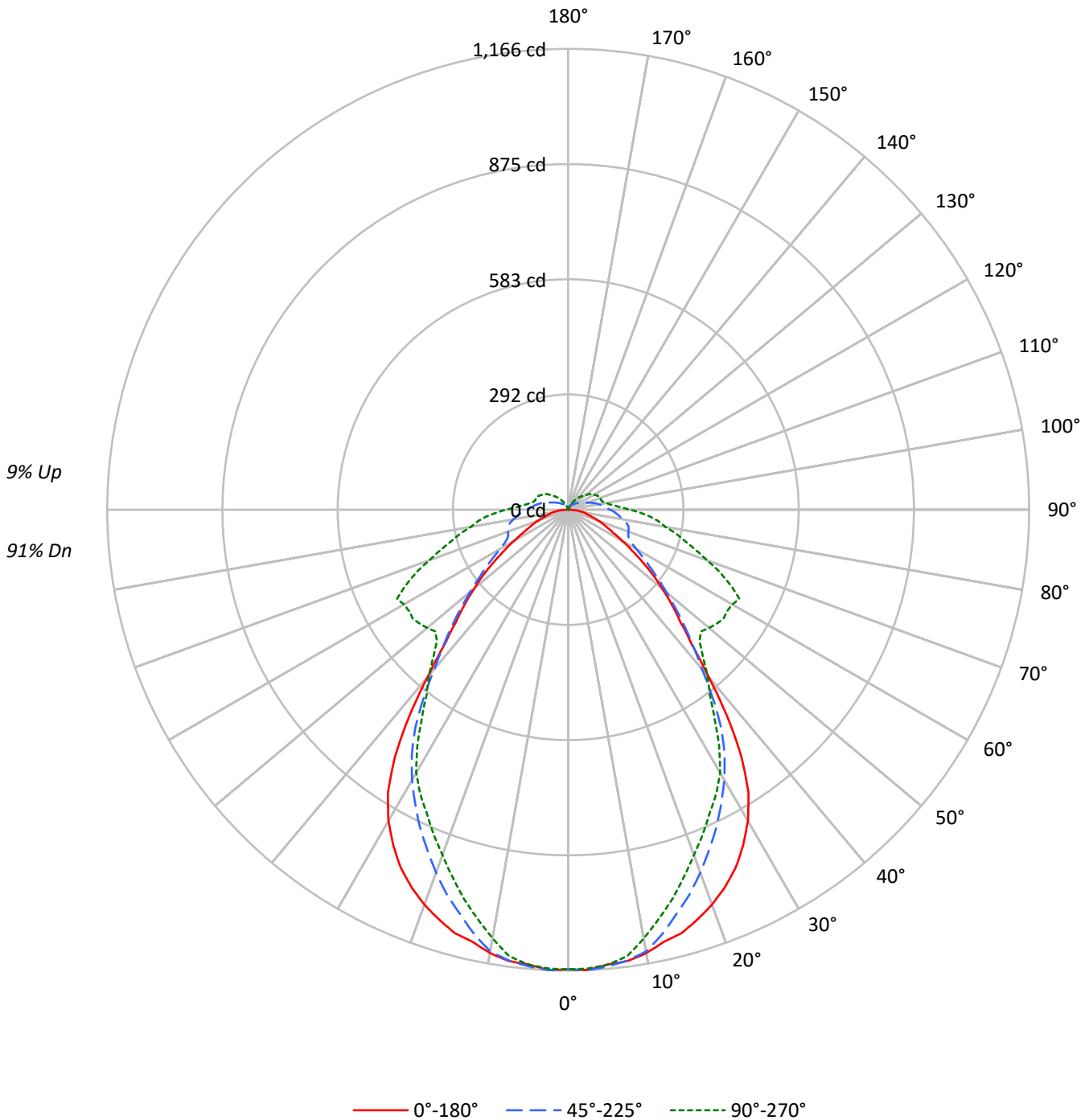
Lumens per Lamp: N/A
Luminaire Lumens: 2663.9 lumens
Efficiency: N/A
Efficacy: 110.5 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.01 / 1.1
Luminous Opening: Rectangular w/ Sides (W: 0.31' x L: 1.92' x H: 0.19')
CIE Type: Direct

Input Watts (W): 24.1
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	91
1	106	101	96	92	102	97	93	90	91	88	85	86	83	81	81	79	77	74
2	97	88	81	76	93	86	79	74	81	75	71	76	72	68	72	68	65	62
3	89	78	70	64	85	76	69	63	72	66	60	68	63	58	64	60	56	54
4	82	70	62	55	79	68	60	54	64	58	52	61	55	51	58	53	49	47
5	76	63	55	48	73	62	54	48	58	51	46	55	50	45	53	48	44	41
6	70	57	49	43	68	56	48	42	53	46	41	51	45	40	48	43	39	37
7	65	53	44	38	63	51	43	38	49	42	37	47	41	36	45	39	35	33
8	61	48	40	35	59	47	40	34	45	38	33	43	37	33	41	36	32	30
9	57	45	37	31	56	44	36	31	42	35	31	40	34	30	39	33	29	27
10	54	41	34	29	52	41	33	29	39	32	28	37	32	27	36	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20904	20904	20904
5°	20655	20053	19804
10°	20434	19052	18174
15°	20108	17395	16333
20°	19638	15838	14590
25°	18981	14295	13125
30°	17854	12751	11843
35°	15691	11001	9969
40°	11996	8722	8540
45°	9290	7076	7453
50°	7762	5690	7580
55°	6260	4626	8099
60°	4874	3843	8450
65°	3930	3488	8435
70°	3383	3618	7414
75°	2782	3846	6542
80°	2603	3831	5874
85°	2161	3844	5518



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.6	4.1
10°-20°	298.7	11.2
20°-30°	414.6	15.6
30°-40°	425.9	16.0
40°-50°	337.9	12.7
50°-60°	266.3	10.0
60°-70°	233.8	8.8
70°-80°	194.2	7.3
80°-90°	132.1	5.0
90°-100°	82.1	3.1
100°-110°	59.4	2.2
110°-120°	45.0	1.7
120°-130°	31.9	1.2
130°-140°	18.7	0.7
140°-150°	9.9	0.4
150°-160°	3.6	0.1
160°-170°	0.3	0.0
170°-180°	0.0	0.0
0°-30°	822.9	30.9
0°-40°	1248.8	46.9
0°-60°	1852.9	69.6
0°-90°	2413.1	90.6
90°-120°	186.4	7.0
90°-150°	246.9	9.3
90°-180°	251.0	9.4
0°-180°	2663.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1163	1163	1163	1163	1163	
5°	1155	1157	1160	1156	1155	110
15°	1109	1105	1059	1025	1019	312
25°	1001	942	887	857	847	458
35°	764	720	675	648	645	468
45°	401	410	416	475	469	317
55°	228	200	252	373	480	205
65°	112	112	169	382	454	113
75°	55	88	157	312	305	60
85°	22	44	124	198	210	21
90°	0	27	106	159	156	1
95°	0	24	91	122	118	0
105°	0	22	66	92	87	0
115°	0	19	43	76	83	0
125°	0	16	30	61	70	0
135°	0	13	20	38	48	0
145°	0	9	16	23	29	0
155°	1	4	9	11	13	0
165°	1	1	1	0	0	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°	1163.2	1163.2	1163.2	1163.2	1163.2
2.5°	1165.6	1165.0	1165.6	1162.6	1162.0
5°	1154.8	1156.6	1159.6	1156.0	1155.4
7.5°	1151.7	1152.4	1150.5	1143.9	1139.7
10°	1139.1	1140.3	1134.9	1111.5	1101.3
12.5°	1119.3	1121.1	1099.5	1073.0	1059.8
15°	1109.1	1104.9	1058.6	1025.0	1019.0
17.5°	1086.9	1072.4	1020.8	982.9	973.9
20°	1063.4	1033.4	976.9	943.3	929.5
22.5°	1034.6	984.7	931.3	903.6	889.2
25°	1000.9	941.5	886.8	857.4	847.1
27.5°	957.7	892.8	838.1	813.5	810.5
30°	909.0	842.3	789.5	769.0	768.4
32.5°	848.3	782.9	736.0	719.8	710.2
35°	764.2	719.8	674.7	647.7	645.3
37.5°	662.7	642.3	600.8	589.4	587.6
40°	553.3	561.2	525.7	544.3	547.3
42.5°	462.6	479.4	467.4	510.7	504.1
45°	401.3	410.4	415.8	475.2	469.2
47.5°	355.7	343.7	366.5	434.4	456.0
50°	310.0	291.4	323.2	406.1	465.0
52.5°	269.8	240.9	285.4	387.5	473.4
55°	227.7	200.1	251.7	373.1	480.0
57.5°	189.9	167.0	223.5	362.3	477.0
60°	158.6	142.4	198.3	358.7	479.4
62.5°	131.0	123.8	180.2	362.9	487.9
65°	111.8	111.8	168.8	381.5	453.6
67.5°	95.5	103.9	164.0	389.3	415.8
70°	81.7	99.1	162.2	370.7	373.7
72.5°	66.1	95.5	160.4	337.1	337.1
75°	54.7	88.3	157.4	311.8	305.2
77.5°	46.9	77.5	149.6	285.4	278.8
80°	39.1	66.7	140.6	254.7	249.9
82.5°	30.0	55.3	131.6	225.9	231.3
85°	22.2	44.5	123.8	198.3	210.3
87.5°	9.0	34.8	115.4	178.4	182.6
90°	0.0	27.0	105.7	159.2	156.2
92.5°	0.0	24.6	97.3	138.2	132.8
95°	0.0	24.0	91.3	122.0	118.4
97.5°	0.0	23.4	85.3	108.1	105.7
100°	0.0	22.8	78.7	99.7	97.9
102.5°	0.0	22.2	73.3	95.5	90.7
105°	0.0	21.6	65.5	92.5	87.1
107.5°	0.0	21.0	58.3	90.1	86.5
110°	0.0	20.4	52.3	85.3	86.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	19.2	47.5	80.5	85.3
115°	0.0	18.6	42.7	76.3	82.9
117.5°	0.0	18.0	39.1	75.1	79.3
120°	0.0	17.4	36.0	73.3	75.7
122.5°	0.0	16.8	33.0	67.9	72.7
125°	0.0	16.2	30.0	61.3	69.7
127.5°	0.0	15.6	27.0	55.3	63.7
130°	0.0	15.0	24.6	48.7	57.1
132.5°	0.0	13.8	22.2	43.3	52.3
135°	0.0	12.6	20.4	38.5	48.1
137.5°	0.0	12.0	19.2	33.6	43.3
140°	0.0	10.8	17.4	30.0	38.5
142.5°	0.0	9.6	16.8	26.4	33.6
145°	0.0	9.0	15.6	23.4	28.8
147.5°	0.6	7.8	14.4	20.4	24.6
150°	0.6	6.6	12.6	16.8	20.4
152.5°	0.6	5.4	10.8	13.8	16.8
155°	0.6	3.6	9.0	10.8	12.6
157.5°	0.6	2.4	6.6	7.8	8.4
160°	0.6	1.2	4.8	4.8	4.8
162.5°	0.6	0.6	3.0	2.4	2.4
165°	0.6	0.6	1.2	0.0	0.0
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)