

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: P231990

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

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P231990
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-LD4-40-2HI-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

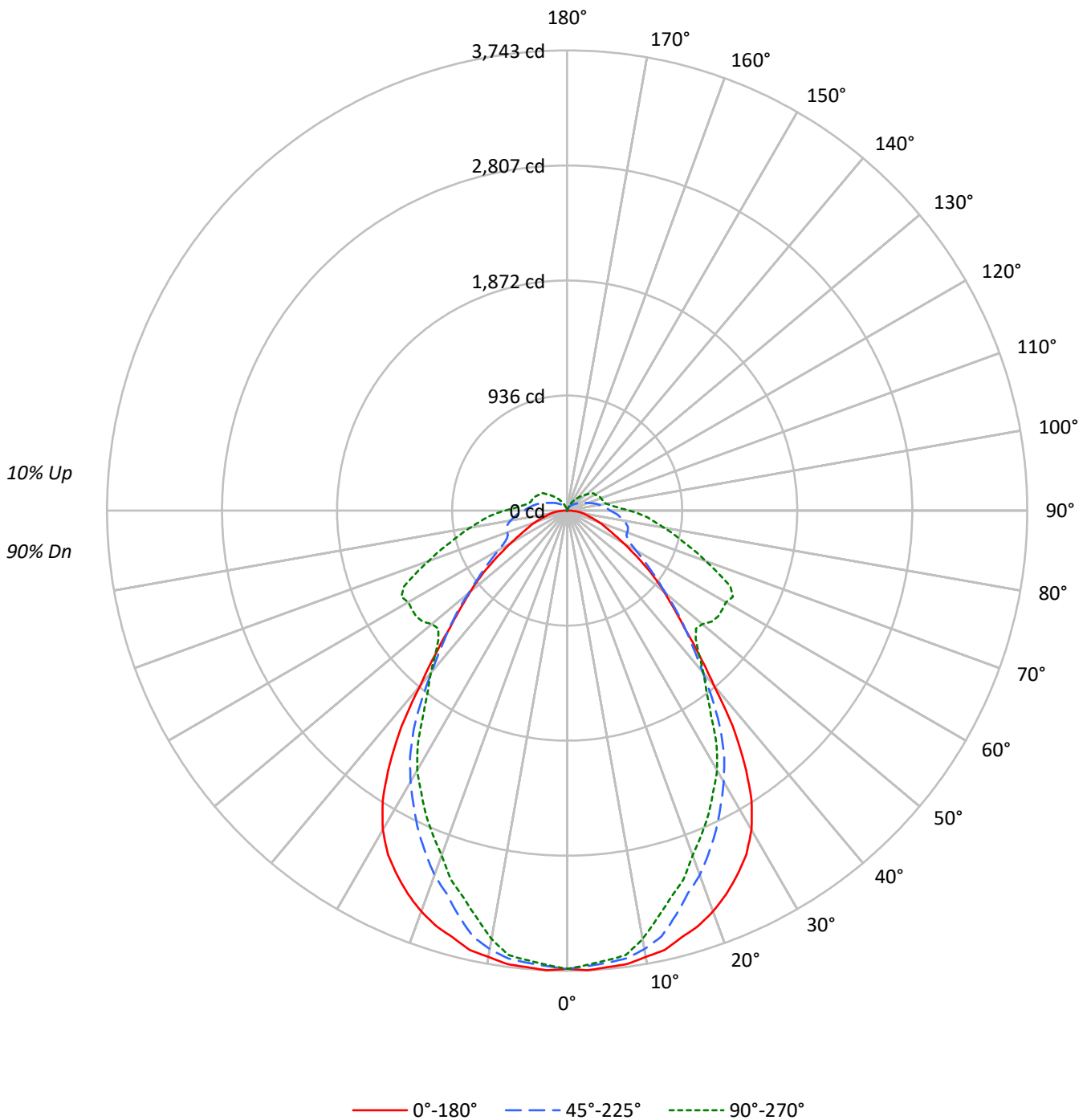
Lumens per Lamp: N/A
Luminaire Lumens: 8663.9 lumens
Efficiency: N/A
Efficacy: 97.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.01 / 1.1
Luminous Opening: Rectangular w/ Sides (W: 0.31' x L: 3.79' x H: 0.19')
CIE Type: Direct

Input Watts (W): 89.3
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°	33857	33857	33857
5°	33849	32376	31815
10°	33707	30908	29514
15°	33359	28556	26397
20°	32952	26124	23677
25°	32057	23669	21319
30°	30575	21118	19002
35°	26979	18268	15962
40°	21156	14672	13614
45°	16526	11929	11876
50°	13733	9545	11833
55°	11243	7834	12794
60°	8853	6497	13284
65°	7288	5859	13771
70°	6430	6095	12014
75°	5511	6622	10532
80°	5434	6778	9494
85°	5128	6905	8741



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	351.1	4.1
10°-20°	964.1	11.1
20°-30°	1343.4	15.5
30°-40°	1384.6	16.0
40°-50°	1101.5	12.7
50°-60°	857.1	9.9
60°-70°	749.3	8.6
70°-80°	631.8	7.3
80°-90°	428.1	4.9
90°-100°	271.0	3.1
100°-110°	201.0	2.3
110°-120°	154.3	1.8
120°-130°	111.4	1.3
130°-140°	65.4	0.8
140°-150°	34.4	0.4
150°-160°	13.3	0.2
160°-170°	2.1	0.0
170°-180°	0.0	0.0
0°-30°	2658.6	30.7
0°-40°	4043.2	46.7
0°-60°	6001.8	69.3
0°-90°	7811.0	90.2
90°-120°	626.3	7.2
90°-150°	837.5	9.7
90°-180°	853.0	9.8
0°-180°	8663.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3727	3727	3727	3727	3727	
5°	3728	3720	3693	3689	3672	355
15°	3594	3573	3410	3298	3258	1016
25°	3272	3078	2867	2766	2722	1503
35°	2517	2375	2177	2079	2044	1548
45°	1350	1384	1355	1499	1479	1066
55°	760	679	819	1172	1500	683
65°	375	368	541	1189	1465	381
75°	186	295	512	1012	972	203
85°	77	150	414	635	659	72
90°	3	90	351	499	504	6
95°	3	81	307	396	385	2
105°	3	73	223	309	302	3
115°	3	62	148	266	279	3
125°	3	56	104	213	248	3
135°	4	44	71	134	168	3
145°	4	31	49	82	103	3
155°	4	17	31	37	49	2
165°	5	6	11	4	7	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°	3727	3727	3727	3727	3727
2.5°	3743	3734	3709	3713	3699
5°	3728	3720	3693	3689	3672
7.5°	3721	3704	3674	3661	3647
10°	3686	3667	3622	3568	3538
12.5°	3661	3634	3548	3438	3393
15°	3594	3573	3410	3298	3258
17.5°	3543	3481	3266	3185	3146
20°	3470	3366	3154	3048	2984
22.5°	3379	3215	3013	2910	2855
25°	3272	3078	2867	2766	2722
27.5°	3155	2914	2706	2616	2575
30°	2998	2761	2547	2467	2439
32.5°	2792	2573	2377	2299	2262
35°	2517	2375	2177	2079	2044
37.5°	2211	2153	1945	1901	1861
40°	1858	1886	1714	1730	1726
42.5°	1585	1624	1520	1623	1584
45°	1350	1384	1355	1499	1479
47.5°	1174	1176	1203	1384	1421
50°	1029	985	1045	1283	1436
52.5°	898	815	920	1219	1482
55°	760	679	819	1172	1500
57.5°	630	561	721	1144	1497
60°	529	473	642	1134	1491
62.5°	442	416	581	1157	1520
65°	375	368	541	1189	1465
67.5°	323	339	522	1230	1329
70°	275	323	519	1201	1198
72.5°	225	312	519	1110	1088
75°	186	295	512	1012	972
77.5°	156	263	491	918	886
80°	133	224	467	820	799
82.5°	104	186	439	721	721
85°	77	150	414	635	659
87.5°	38	118	382	561	583
90°	3	90	351	499	504
92.5°	2	83	329	444	431
95°	3	81	307	396	385
97.5°	3	79	287	361	350
100°	2	77	266	338	322
102.5°	3	75	247	323	308
105°	3	73	223	309	302
107.5°	3	70	200	298	297
110°	3	67	181	284	293



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	3	65	162	271	289
115°	3	62	148	266	279
117.5°	3	60	137	265	270
120°	3	59	125	254	261
122.5°	3	58	114	236	258
125°	3	56	104	213	248
127.5°	3	54	95	192	224
130°	3	50	86	171	202
132.5°	3	47	78	149	184
135°	4	44	71	134	168
137.5°	4	41	63	119	152
140°	4	37	58	106	134
142.5°	4	34	53	94	120
145°	4	31	49	82	103
147.5°	4	28	46	72	88
150°	4	24	41	60	74
152.5°	4	20	37	48	60
155°	4	17	31	37	49
157.5°	4	14	26	27	36
160°	4	10	21	18	25
162.5°	5	8	16	10	15
165°	5	6	11	4	7
167.5°	0	0	0	0	0
170°	0	0	0	0	0
172.5°	0	0	0	0	0
175°	0	0	0	0	0
177.5°	0	0	0	0	0
180°	0	0	0	0	0

(END OF REPORT)