

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: P231942

Luminaire Tested: **FVS4M-2-LD4-40-2HI-PA187-UNV-EDC1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P231942
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1706-121-10)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FVS4M-2-LD4-40-2HI-PA187-UNV-EDC1
Description: FAILSAFE FVS LED FIXTURE
2FT LENGTH, 2-MODULE LED WITH PA187 LENS
Light Source: (84) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

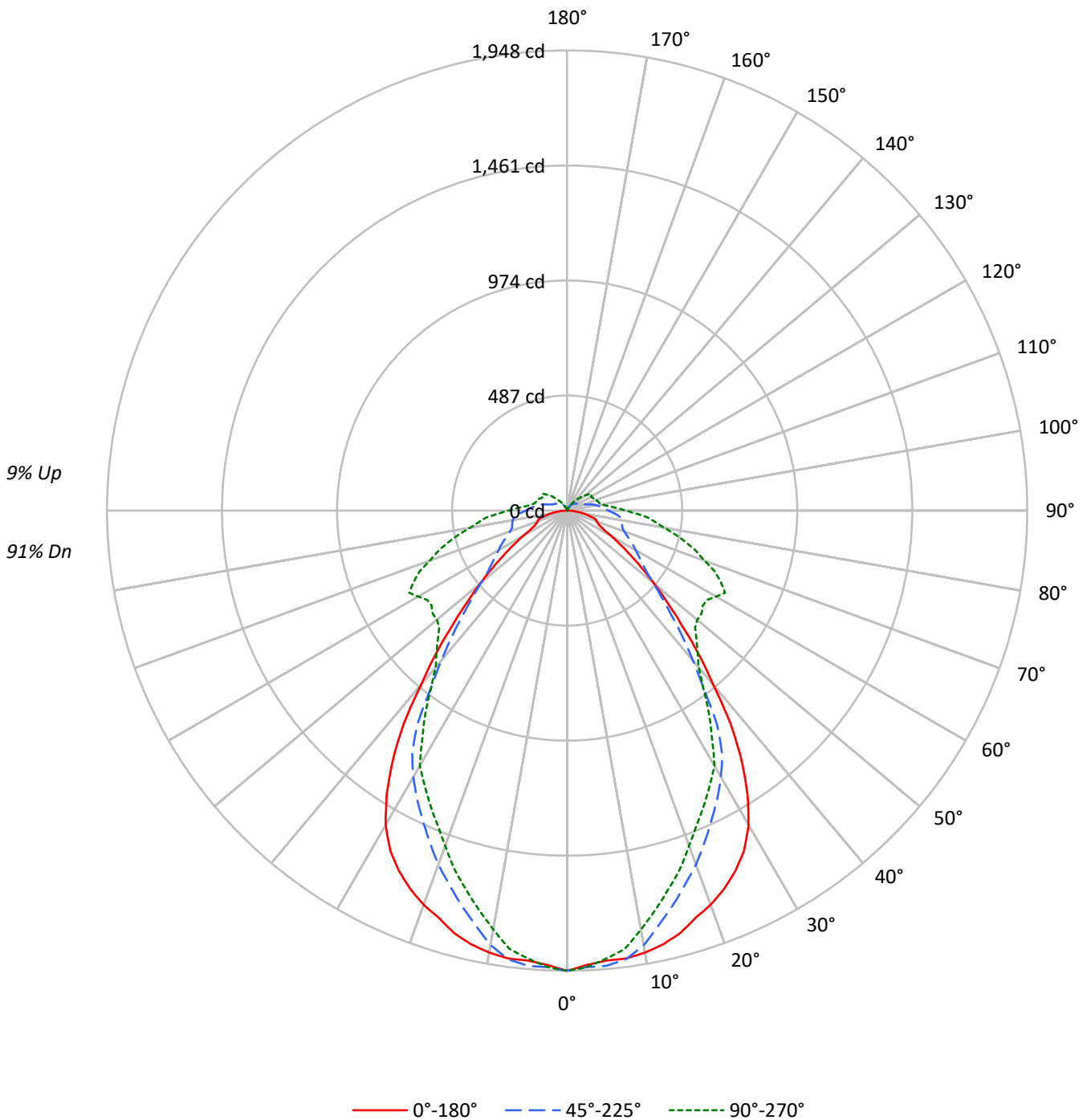
Lumens per Lamp: N/A
Luminaire Lumens: 4307.9 lumens
Efficiency: N/A
Efficacy: 96.2 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 0.98 / 1.07
Luminous Opening: Rectangular w/ Sides (W: 0.31' x L: 1.92' x H: 0.19')
CIE Type: Direct

Input Watts (W): 44.8
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	98	93	90	92	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	61	68	63	58	64	60	56	54
4	82	70	62	55	79	68	60	54	65	58	53	61	56	51	58	53	49	47
5	76	63	55	48	73	62	54	48	59	52	46	56	50	45	53	48	44	41
6	70	58	49	43	68	56	48	42	53	47	41	51	45	40	49	43	39	37
7	66	53	44	39	63	51	44	38	49	42	37	47	41	36	45	40	35	33
8	61	49	40	35	59	47	40	34	45	39	34	43	37	33	42	36	32	30
9	58	45	37	32	56	44	36	31	42	35	31	40	34	30	39	33	30	28
10	54	42	34	29	53	41	34	29	39	33	28	38	32	28	36	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	35008	35008	35008
5°	34199	33445	32617
10°	34084	31359	29704
15°	33558	28412	26575
20°	32797	25843	23686
25°	31935	23309	21273
30°	30170	21028	19219
35°	26384	18033	16159
40°	20856	13737	13497
45°	15881	10602	12310
50°	12019	8362	11721
55°	8935	7131	11828
60°	6700	6492	12831
65°	5343	6033	13352
70°	5467	5710	12261
75°	5697	5889	11189
80°	4393	6348	9778
85°	2920	6614	9053



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.5	4.2
10°-20°	489.7	11.4
20°-30°	680.1	15.8
30°-40°	697.2	16.2
40°-50°	524.2	12.2
50°-60°	410.9	9.5
60°-70°	392.5	9.1
70°-80°	316.3	7.3
80°-90°	214.2	5.0
90°-100°	132.2	3.1
100°-110°	92.7	2.2
110°-120°	69.6	1.6
120°-130°	52.4	1.2
130°-140°	31.3	0.7
140°-150°	16.1	0.4
150°-160°	6.0	0.1
160°-170°	0.9	0.0
170°-180°	0.0	0.0
0°-30°	1351.3	31.4
0°-40°	2048.5	47.6
0°-60°	2983.6	69.3
0°-90°	3906.6	90.7
90°-120°	294.5	6.8
90°-150°	394.4	9.2
90°-180°	401.0	9.3
0°-180°	4307.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1948	1948	1948	1948	1948	
5°	1912	1926	1934	1913	1903	183
15°	1851	1816	1729	1670	1658	521
25°	1684	1548	1446	1394	1373	772
35°	1285	1198	1106	1045	1046	792
45°	686	642	623	681	775	538
55°	325	333	388	565	701	297
65°	152	212	292	655	718	159
75°	112	124	241	510	522	113
85°	30	69	213	318	345	32
90°	0	40	174	259	247	2
95°	0	38	150	194	187	0
105°	0	36	100	144	138	0
115°	0	31	63	119	123	0
125°	0	26	52	96	124	0
135°	1	21	41	58	79	0
145°	1	15	31	35	39	1
155°	1	8	15	18	16	0
165°	1	2	4	2	4	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°	1948	1948	1948	1948	1948
2.5°	1925	1929	1934	1937	1934
5°	1912	1926	1934	1913	1903
7.5°	1912	1914	1915	1885	1872
10°	1900	1894	1868	1811	1800
12.5°	1880	1867	1796	1741	1730
15°	1851	1816	1729	1670	1658
17.5°	1808	1755	1660	1602	1590
20°	1776	1693	1594	1537	1509
22.5°	1734	1622	1520	1464	1437
25°	1684	1548	1446	1394	1373
27.5°	1622	1466	1376	1321	1308
30°	1536	1392	1302	1256	1247
32.5°	1421	1301	1221	1151	1140
35°	1285	1198	1106	1045	1046
37.5°	1135	1084	947	946	946
40°	962	912	828	839	865
42.5°	823	763	720	752	818
45°	686	642	623	681	775
47.5°	574	540	541	629	734
50°	480	458	475	592	719
52.5°	396	386	422	573	717
55°	325	333	388	565	701
57.5°	264	292	359	579	703
60°	218	260	335	597	728
62.5°	176	233	315	621	754
65°	152	212	292	655	718
67.5°	141	187	272	685	677
70°	132	163	256	644	618
72.5°	129	142	245	572	574
75°	112	124	241	510	522
77.5°	87	112	238	453	469
80°	66	98	233	404	416
82.5°	48	83	228	359	377
85°	30	69	213	318	345
87.5°	13	52	193	290	291
90°	0	40	174	259	247
92.5°	0	39	163	223	214
95°	0	38	150	194	187
97.5°	0	38	138	175	163
100°	0	37	128	160	150
102.5°	0	36	116	149	142
105°	0	36	100	144	138
107.5°	0	35	87	138	134
110°	0	34	76	129	132



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0	33	69	123	130
115°	0	31	63	119	123
117.5°	0	30	60	122	119
120°	0	29	57	121	117
122.5°	0	28	55	108	122
125°	0	26	52	96	124
127.5°	0	25	49	85	111
130°	0	23	46	75	100
132.5°	0	22	43	66	91
135°	1	21	41	58	79
137.5°	1	20	39	52	68
140°	1	19	36	46	57
142.5°	1	17	34	40	48
145°	1	15	31	35	39
147.5°	1	14	27	30	31
150°	1	12	23	26	24
152.5°	1	10	19	22	19
155°	1	8	15	18	16
157.5°	1	6	12	15	13
160°	1	4	10	10	11
162.5°	1	3	7	6	8
165°	1	2	4	2	4
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)