

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: P231914

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

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P231914
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-LD4-40-2STD-P125-UNV-EDC1
Description: FAILSAFE FVS LED FIXTURE
2FT LENGTH, 2-MODULE LED WITH P125 LENS
Light Source: (84) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

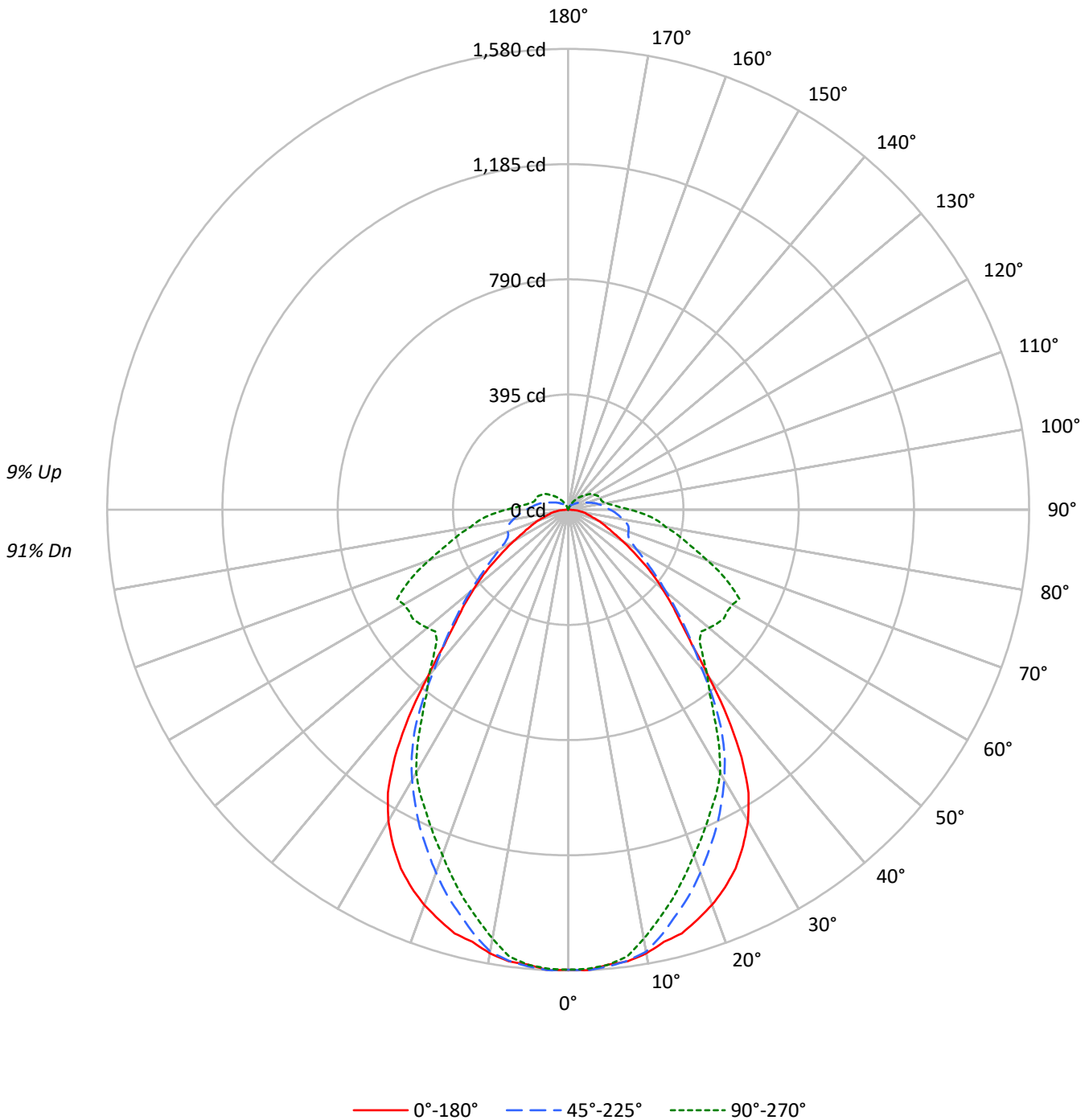
Lumens per Lamp: N/A
Luminaire Lumens: 3612.0 lumens
Efficiency: N/A
Efficacy: 106.5 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.01 / 1.1
Luminous Opening: Rectangular w/ Sides (W: 0.31' x L: 1.92' x H: 0.19')
CIE Type: Direct

Input Watts (W): 33.9
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°	28342	28342	28342
5°	28005	27188	26850
10°	27707	25833	24641
15°	27264	23585	22145
20°	26627	21475	19781
25°	25736	19382	17796
30°	24209	17287	16058
35°	21275	14916	13516
40°	16266	11826	11580
45°	12598	9593	10106
50°	10524	7716	10278
55°	8486	6273	10983
60°	6611	5209	11458
65°	5325	4729	11436
70°	4589	4905	10053
75°	3769	5215	8870
80°	3521	5193	7966
85°	2930	5211	7481



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.6	4.1
10°-20°	404.9	11.2
20°-30°	562.1	15.6
30°-40°	577.5	16.0
40°-50°	458.1	12.7
50°-60°	361.0	10.0
60°-70°	317.1	8.8
70°-80°	263.3	7.3
80°-90°	179.2	5.0
90°-100°	111.3	3.1
100°-110°	80.6	2.2
110°-120°	61.0	1.7
120°-130°	43.3	1.2
130°-140°	25.4	0.7
140°-150°	13.4	0.4
150°-160°	4.9	0.1
160°-170°	0.5	0.0
170°-180°	0.0	0.0
0°-30°	1115.7	30.9
0°-40°	1693.2	46.9
0°-60°	2512.3	69.6
0°-90°	3271.8	90.6
90°-120°	252.8	7.0
90°-150°	334.8	9.3
90°-180°	340.0	9.4
0°-180°	3612.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1577	1577	1577	1577	1577	
5°	1566	1568	1572	1567	1566	149
15°	1504	1498	1435	1390	1382	423
25°	1357	1276	1202	1162	1149	622
35°	1036	976	915	878	875	634
45°	544	556	564	644	636	430
55°	309	271	341	506	651	278
65°	152	152	229	517	615	154
75°	74	120	213	423	414	82
85°	30	60	168	269	285	28
90°	0	37	143	216	212	2
95°	0	33	124	165	160	0
105°	0	29	89	125	118	0
115°	0	25	58	104	112	0
125°	0	22	41	83	94	0
135°	0	17	28	52	65	0
145°	0	12	21	32	39	0
155°	1	5	12	15	17	0
165°	1	1	2	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°	1577.1	1577.1	1577.1	1577.1	1577.1
2.5°	1580.3	1579.5	1580.3	1576.3	1575.5
5°	1565.7	1568.1	1572.2	1567.3	1566.5
7.5°	1561.6	1562.4	1560.0	1551.0	1545.3
10°	1544.5	1546.1	1538.8	1507.0	1493.2
12.5°	1517.6	1520.1	1490.7	1454.9	1437.0
15°	1503.8	1498.1	1435.3	1389.7	1381.6
17.5°	1473.6	1454.1	1384.0	1332.7	1320.5
20°	1441.9	1401.1	1324.6	1278.9	1260.2
22.5°	1402.8	1335.1	1262.6	1225.2	1205.6
25°	1357.1	1276.5	1202.4	1162.4	1148.6
27.5°	1298.5	1210.5	1136.4	1103.0	1098.9
30°	1232.5	1142.1	1070.4	1042.7	1041.9
32.5°	1150.2	1061.4	997.9	975.9	962.9
35°	1036.2	975.9	914.8	878.1	874.9
37.5°	898.5	870.8	814.6	799.1	796.7
40°	750.3	760.8	712.8	738.0	742.1
42.5°	627.2	650.1	633.8	692.4	683.5
45°	544.2	556.4	563.7	644.4	636.2
47.5°	482.2	466.0	496.9	589.0	618.3
50°	420.3	395.1	438.3	550.7	630.5
52.5°	365.8	326.7	386.9	525.4	641.9
55°	308.7	271.3	341.3	505.9	650.9
57.5°	257.4	226.5	303.0	491.2	646.8
60°	215.1	193.1	268.8	486.3	650.1
62.5°	177.6	167.8	244.4	492.0	661.5
65°	151.5	151.5	228.9	517.3	615.0
67.5°	129.5	140.9	222.4	527.9	563.7
70°	110.8	134.4	219.9	502.6	506.7
72.5°	89.6	129.5	217.5	457.0	457.0
75°	74.1	119.7	213.4	422.8	413.8
77.5°	63.5	105.1	202.8	386.9	378.0
80°	52.9	90.4	190.6	345.4	338.9
82.5°	40.7	74.9	178.4	306.3	313.6
85°	30.1	60.3	167.8	268.8	285.1
87.5°	12.2	47.2	156.4	241.9	247.6
90°	0.0	36.7	143.4	215.9	211.8
92.5°	0.0	33.4	132.0	187.4	180.0
95°	0.0	32.6	123.8	165.4	160.5
97.5°	0.0	31.8	115.7	146.6	143.4
100°	0.0	31.0	106.7	135.2	132.8
102.5°	0.0	30.1	99.4	129.5	123.0
105°	0.0	29.3	88.8	125.4	118.1
107.5°	0.0	28.5	79.0	122.2	117.3
110°	0.0	27.7	70.9	115.7	117.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	26.1	64.4	109.2	115.7
115°	0.0	25.3	57.8	103.5	112.4
117.5°	0.0	24.4	52.9	101.8	107.5
120°	0.0	23.6	48.9	99.4	102.6
122.5°	0.0	22.8	44.8	92.1	98.6
125°	0.0	22.0	40.7	83.1	94.5
127.5°	0.0	21.2	36.7	74.9	86.3
130°	0.0	20.4	33.4	66.0	77.4
132.5°	0.0	18.7	30.1	58.7	70.9
135°	0.0	17.1	27.7	52.1	65.2
137.5°	0.0	16.3	26.1	45.6	58.7
140°	0.0	14.7	23.6	40.7	52.1
142.5°	0.0	13.0	22.8	35.8	45.6
145°	0.0	12.2	21.2	31.8	39.1
147.5°	0.8	10.6	19.6	27.7	33.4
150°	0.8	9.0	17.1	22.8	27.7
152.5°	0.8	7.3	14.7	18.7	22.8
155°	0.8	4.9	12.2	14.7	17.1
157.5°	0.8	3.3	9.0	10.6	11.4
160°	0.8	1.6	6.5	6.5	6.5
162.5°	0.8	0.8	4.1	3.3	3.3
165°	0.8	0.8	1.6	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)