

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: P231988

Luminaire Tested: **FVS4M-4-LD4-30-2HI-P125-UNV-EDC1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P231988
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-LD4-30-2HI-P125-UNV-EDC1
Description: FAILSAFE FVS LED FIXTURE
4FT LENGTH, 2-MODULE LED WITH P125 LENS
Light Source: (168) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

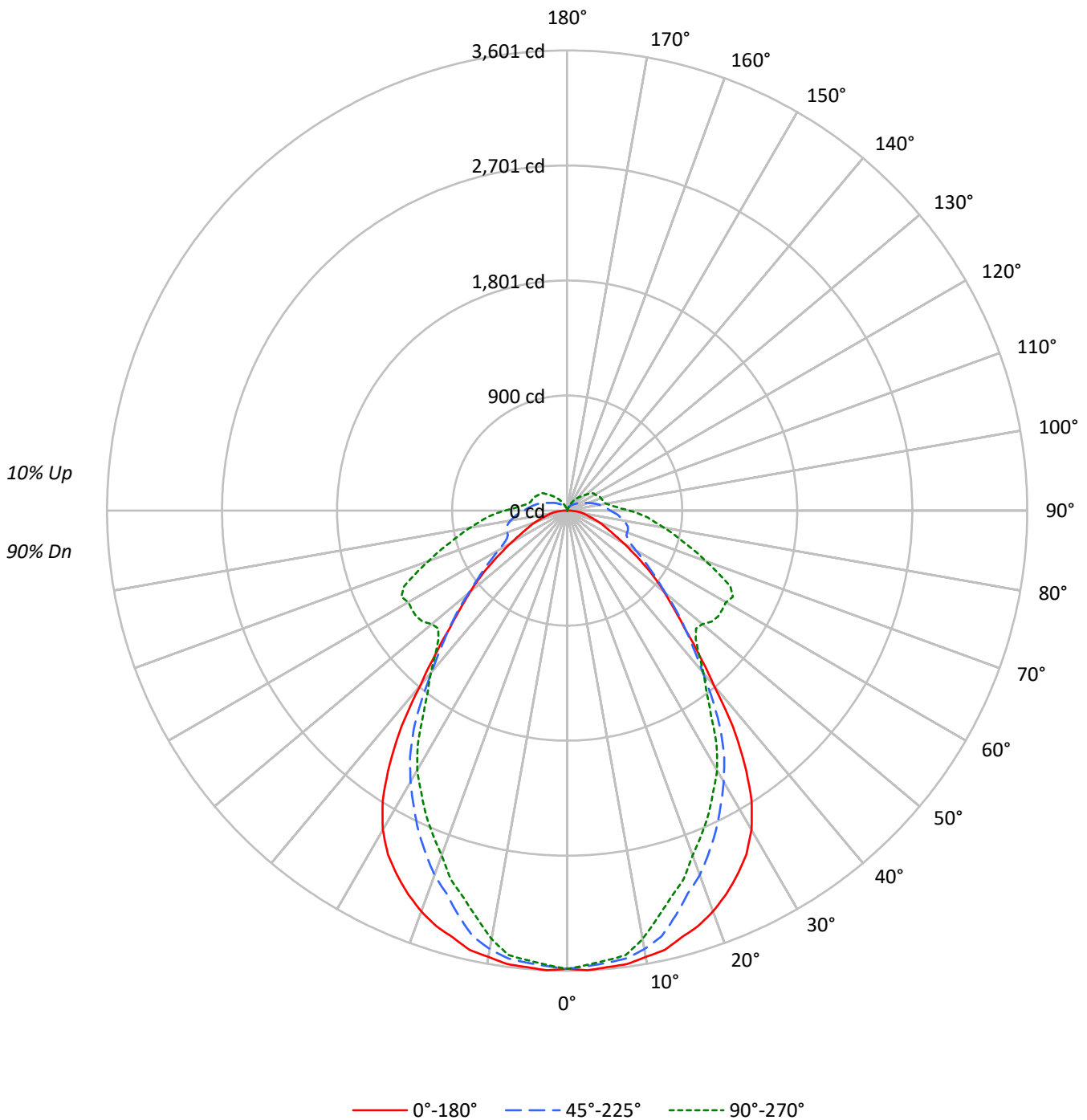
Lumens per Lamp: N/A
Luminaire Lumens: 8335.0 lumens
Efficiency: N/A
Efficacy: 93.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.01 / 1.1
Luminous Opening: Rectangular w/ Sides (W: 0.31' x L: 3.79' x H: 0.19')
CIE Type: Direct

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°	32572	32572	32572
5°	32564	31146	30607
10°	32428	29735	28393
15°	32093	27473	25395
20°	31702	25133	22778
25°	30840	22770	20510
30°	29414	20316	18280
35°	25955	17575	15356
40°	20353	14115	13097
45°	15900	11477	11425
50°	13211	9182	11384
55°	10815	7536	12309
60°	8517	6250	12780
65°	7012	5637	13248
70°	6187	5864	11558
75°	5301	6371	10132
80°	5230	6521	9134
85°	4934	6643	8409



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	337.8	4.1
10°-20°	927.5	11.1
20°-30°	1292.4	15.5
30°-40°	1332.0	16.0
40°-50°	1059.7	12.7
50°-60°	824.6	9.9
60°-70°	720.8	8.6
70°-80°	607.8	7.3
80°-90°	411.9	4.9
90°-100°	260.7	3.1
100°-110°	193.4	2.3
110°-120°	148.4	1.8
120°-130°	107.2	1.3
130°-140°	62.9	0.8
140°-150°	33.1	0.4
150°-160°	12.8	0.2
160°-170°	2.0	0.0
170°-180°	0.0	0.0
0°-30°	2557.7	30.7
0°-40°	3889.7	46.7
0°-60°	5774.0	69.3
0°-90°	7514.5	90.2
90°-120°	602.5	7.2
90°-150°	805.7	9.7
90°-180°	820.0	9.8
0°-180°	8335.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3586	3586	3586	3586	3586	
5°	3586	3579	3553	3549	3533	341
15°	3458	3437	3281	3173	3134	977
25°	3148	2961	2758	2661	2619	1446
35°	2422	2285	2094	2000	1966	1490
45°	1299	1332	1304	1442	1423	1026
55°	731	653	788	1128	1443	658
65°	361	354	520	1144	1409	367
75°	179	284	493	974	935	196
85°	74	144	398	611	634	70
90°	3	87	338	480	485	6
95°	3	78	295	381	370	2
105°	3	70	214	297	290	3
115°	3	60	142	256	268	3
125°	3	54	100	205	239	3
135°	4	42	68	129	162	3
145°	4	30	47	79	99	2
155°	4	16	30	36	47	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°	3585.5	3585.5	3585.5	3585.5	3585.5
2.5°	3600.9	3592.3	3568.2	3572.1	3558.6
5°	3586.5	3578.8	3552.8	3549.0	3532.6
7.5°	3579.7	3563.4	3534.5	3522.0	3508.6
10°	3546.1	3527.8	3484.5	3432.6	3403.7
12.5°	3522.0	3496.1	3413.3	3307.5	3264.2
15°	3457.6	3437.4	3280.6	3172.8	3134.3
17.5°	3408.5	3348.9	3142.0	3064.1	3026.6
20°	3338.3	3238.2	3034.3	2932.3	2870.7
22.5°	3250.7	3093.0	2898.6	2799.5	2746.6
25°	3147.8	2961.2	2758.2	2661.0	2618.7
27.5°	3035.2	2803.4	2603.3	2516.7	2477.3
30°	2884.2	2656.2	2450.3	2373.4	2346.4
32.5°	2686.0	2475.3	2286.8	2211.7	2176.1
35°	2421.5	2284.8	2094.4	2000.1	1966.4
37.5°	2127.1	2071.3	1871.2	1828.8	1790.4
40°	1787.5	1814.4	1648.9	1664.3	1660.5
42.5°	1524.8	1562.4	1462.3	1561.4	1523.9
45°	1298.8	1331.5	1303.6	1442.1	1422.9
47.5°	1129.4	1131.4	1157.3	1331.5	1367.1
50°	989.9	947.6	1005.3	1234.3	1381.5
52.5°	863.9	784.1	885.1	1172.7	1425.7
55°	731.1	653.2	787.9	1127.5	1443.1
57.5°	606.1	539.7	693.6	1100.6	1440.2
60°	508.9	455.0	617.6	1091.0	1434.4
62.5°	425.2	400.2	558.9	1113.1	1462.3
65°	360.8	354.0	520.5	1143.9	1409.4
67.5°	310.7	326.1	502.2	1183.3	1278.6
70°	264.6	310.7	499.3	1155.4	1152.5
72.5°	216.5	300.2	499.3	1067.9	1046.7
75°	178.9	283.8	492.6	973.6	935.1
77.5°	150.1	253.0	472.4	883.2	852.4
80°	128.0	215.5	449.3	788.9	768.7
82.5°	100.1	178.9	422.3	693.6	693.6
85°	74.1	144.3	398.3	610.9	634.0
87.5°	36.6	113.5	367.5	539.7	560.9
90°	2.9	86.6	337.7	480.1	484.9
92.5°	1.9	79.8	316.5	427.1	414.6
95°	2.9	77.9	295.3	381.0	370.4
97.5°	2.9	76.0	276.1	347.3	336.7
100°	1.9	74.1	255.9	325.2	309.8
102.5°	2.9	72.2	237.6	310.7	296.3
105°	2.9	70.2	214.5	297.3	290.5
107.5°	2.9	67.3	192.4	286.7	285.7
110°	2.9	64.5	174.1	273.2	281.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	2.9	62.5	155.9	260.7	278.0
115°	2.9	59.6	142.4	255.9	268.4
117.5°	2.9	57.7	131.8	254.9	259.8
120°	2.9	56.8	120.3	244.4	251.1
122.5°	2.9	55.8	109.7	227.0	248.2
125°	2.9	53.9	100.1	204.9	238.6
127.5°	2.9	52.0	91.4	184.7	215.5
130°	2.9	48.1	82.7	164.5	194.3
132.5°	2.9	45.2	75.0	143.3	177.0
135°	3.8	42.3	68.3	128.9	161.6
137.5°	3.8	39.4	60.6	114.5	146.2
140°	3.8	35.6	55.8	102.0	128.9
142.5°	3.8	32.7	51.0	90.4	115.4
145°	3.8	29.8	47.1	78.9	99.1
147.5°	3.8	26.9	44.3	69.3	84.7
150°	3.8	23.1	39.4	57.7	71.2
152.5°	3.8	19.2	35.6	46.2	57.7
155°	3.8	16.4	29.8	35.6	47.1
157.5°	3.8	13.5	25.0	26.0	34.6
160°	3.8	9.6	20.2	17.3	24.1
162.5°	4.8	7.7	15.4	9.6	14.4
165°	4.8	5.8	10.6	3.8	6.7
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)