

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: P231949

Luminaire Tested: **FVS4M-4-LD4-35-1STD-P125-UNV-EDC1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P231949
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1706-121-13)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FVS4M-4-LD4-35-1STD-P125-UNV-EDC1
Description: FAILSAFE FVS LED FIXTURE
4FT LENGTH, 1-MODULE LED WITH P125 LENS
Light Source: (84) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

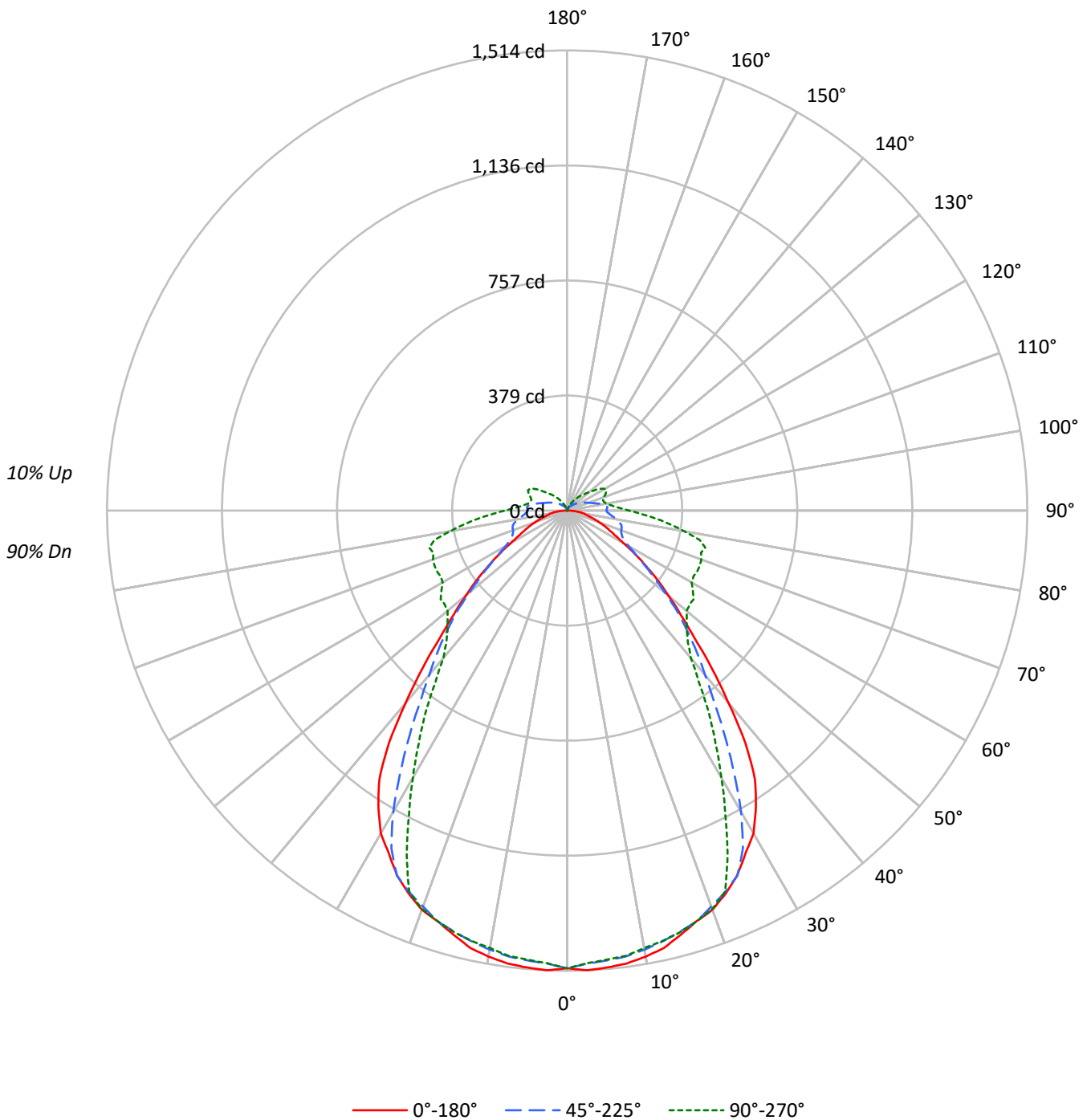
Lumens per Lamp: N/A
Luminaire Lumens: 3542.0 lumens
Efficiency: N/A
Efficacy: 105.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.07 / 1.11
Luminous Opening: Rectangular w/ Sides (W: 0.31' x L: 3.79' x H: 0.19')
CIE Type: Semi-Direct

Input Watts (W): 33.6
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	50	30	10	0	
RCR																						
0	117	117	117	117	113	113	113	113	105	105	105	99	99	99	93	93	93	90				
1	106	101	96	92	102	97	93	90	91	88	85	86	83	81	80	78	76	74				
2	97	89	82	76	93	86	80	74	81	76	71	76	72	68	71	68	65	62				
3	89	79	71	65	86	76	69	63	72	66	61	68	63	59	64	60	56	54				
4	82	71	62	56	79	69	61	55	65	58	53	61	56	51	58	54	50	47				
5	76	64	55	49	73	62	54	48	59	52	47	56	50	46	53	48	44	42				
6	71	58	50	44	68	57	49	43	54	47	42	51	45	41	49	44	40	38				
7	66	53	45	39	64	52	44	39	50	43	38	47	41	37	45	40	36	34				
8	62	49	41	36	60	48	40	35	46	39	34	44	38	34	42	37	33	31				
9	58	45	38	32	56	44	37	32	42	36	31	41	35	31	39	34	30	28				
10	55	42	35	30	53	41	34	29	40	33	29	38	32	28	37	31	28	26				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13680	13680	13680
5°	13702	13027	12854
10°	13626	12518	12190
15°	13408	12010	11633
20°	13271	11483	11069
25°	12974	10939	9784
30°	12504	9485	7913
35°	11544	7586	6344
40°	9404	6039	4999
45°	7231	4906	4468
50°	5799	3837	4231
55°	4658	2951	4331
60°	3576	2356	4212
65°	2991	2158	4444
70°	2647	2228	4709
75°	2243	2393	5097
80°	2214	2395	4632
85°	1964	2353	3849



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.9	4.0
10°-20°	406.6	11.5
20°-30°	593.7	16.8
30°-40°	579.2	16.4
40°-50°	443.2	12.5
50°-60°	321.2	9.1
60°-70°	259.1	7.3
70°-80°	252.0	7.1
80°-90°	181.7	5.1
90°-100°	110.7	3.1
100°-110°	83.8	2.4
110°-120°	71.7	2.0
120°-130°	49.6	1.4
130°-140°	27.7	0.8
140°-150°	13.9	0.4
150°-160°	5.2	0.1
160°-170°	0.7	0.0
170°-180°	0.0	0.0
0°-30°	1142.2	32.2
0°-40°	1721.4	48.6
0°-60°	2485.9	70.2
0°-90°	3178.6	89.7
90°-120°	266.2	7.5
90°-150°	357.5	10.1
90°-180°	363.0	10.2
0°-180°	3542.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1506	1506	1506	1506	1506	
5°	1509	1498	1486	1489	1484	143
15°	1445	1449	1434	1440	1436	408
25°	1324	1327	1325	1296	1249	607
35°	1077	1048	904	829	812	658
45°	591	580	557	572	556	467
55°	315	289	308	411	508	284
65°	154	154	199	363	473	156
75°	76	121	185	393	470	83
85°	30	58	141	302	290	29
90°	1	34	129	212	203	2
95°	1	30	133	161	156	1
105°	1	27	93	129	123	1
115°	1	24	61	136	141	1
125°	1	22	42	94	122	1
135°	1	18	27	58	75	1
145°	1	12	18	34	44	1
155°	2	6	11	15	20	1
165°	2	2	2	2	2	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°	1505.9	1505.9	1505.9	1505.9	1505.9
2.5°	1513.9	1505.2	1491.6	1495.6	1490.8
5°	1509.1	1498.0	1486.0	1489.2	1483.6
7.5°	1502.8	1489.2	1479.6	1482.0	1477.2
10°	1490.0	1479.6	1466.9	1469.3	1461.3
12.5°	1473.3	1461.3	1451.7	1455.7	1450.1
15°	1444.6	1449.3	1434.2	1439.8	1435.8
17.5°	1416.7	1427.0	1416.7	1422.2	1416.7
20°	1397.5	1394.3	1386.4	1403.9	1395.1
22.5°	1363.2	1362.4	1358.5	1369.6	1357.7
25°	1324.2	1326.6	1325.0	1296.3	1249.2
27.5°	1270.8	1281.1	1252.4	1164.7	1127.3
30°	1226.1	1230.1	1144.0	1053.1	1015.7
32.5°	1156.0	1160.0	1021.2	934.3	908.8
35°	1077.0	1047.5	904.0	829.1	812.4
37.5°	963.0	913.6	794.8	746.2	711.9
40°	825.9	779.7	705.5	672.9	633.8
42.5°	705.5	671.3	631.4	619.4	587.6
45°	590.7	579.6	557.3	572.4	556.5
47.5°	506.2	492.7	491.1	524.6	533.3
50°	434.5	413.0	420.1	479.1	513.4
52.5°	374.7	346.0	358.7	441.7	507.8
55°	314.9	288.6	308.5	410.6	507.8
57.5°	262.3	237.6	266.3	396.2	490.3
60°	213.7	199.3	232.8	378.7	472.8
62.5°	179.4	172.2	211.3	365.9	468.8
65°	153.9	153.9	199.3	362.7	472.8
67.5°	133.1	141.1	192.9	367.5	472.8
70°	113.2	133.9	189.7	376.3	469.6
72.5°	93.3	128.4	188.1	385.1	461.6
75°	75.7	121.2	185.0	393.0	470.4
77.5°	63.0	106.8	175.4	393.8	446.4
80°	54.2	90.1	165.0	392.2	389.8
82.5°	42.3	74.1	151.5	357.2	340.4
85°	29.5	58.2	141.1	302.1	290.2
87.5°	13.6	44.6	132.3	252.7	242.4
90°	0.8	33.5	129.1	212.1	203.3
92.5°	0.8	31.1	130.7	184.2	175.4
95°	0.8	30.3	133.1	161.0	155.5
97.5°	0.8	29.5	128.4	145.1	141.9
100°	0.8	28.7	118.0	134.7	131.5
102.5°	0.8	27.9	105.2	129.1	126.0
105°	0.8	27.1	93.3	129.1	122.8
107.5°	0.8	26.3	82.9	133.1	123.6
110°	0.8	25.5	74.9	137.9	128.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.8	24.7	67.8	139.5	135.5
115°	0.8	23.9	61.4	135.5	141.1
117.5°	0.8	23.9	56.6	126.0	145.1
120°	0.8	23.1	51.8	116.4	142.7
122.5°	0.8	23.1	47.0	106.0	133.9
125°	0.8	22.3	42.3	94.1	122.0
127.5°	0.8	21.5	38.3	84.5	106.8
130°	0.8	20.7	34.3	74.9	94.9
132.5°	0.8	19.1	31.1	66.2	83.7
135°	0.8	17.5	27.1	58.2	74.9
137.5°	0.8	15.9	24.7	51.0	66.2
140°	0.8	15.1	22.3	44.6	58.2
142.5°	0.8	13.6	19.9	39.9	51.0
145°	0.8	12.0	18.3	34.3	43.8
147.5°	0.8	11.2	17.5	29.5	36.7
150°	0.8	9.6	15.9	23.9	30.3
152.5°	1.6	8.0	13.6	19.1	24.7
155°	1.6	6.4	11.2	15.1	19.9
157.5°	1.6	4.8	9.6	10.4	14.3
160°	1.6	4.0	7.2	6.4	9.6
162.5°	1.6	2.4	4.8	3.2	5.6
165°	1.6	2.4	2.4	1.6	1.6
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)