

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: P555801

Luminaire Tested: **FUSL-12-2-LD4-3LO-40-UNV-82-88-EDD**

Issue Date: 7/16/2021

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



**Test Information**

Test Method: LM-79-08  
Report Number: P555801  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2105-257-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/16/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: FUSL-12-2-LD4-3LO-40-UNV-82-88-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

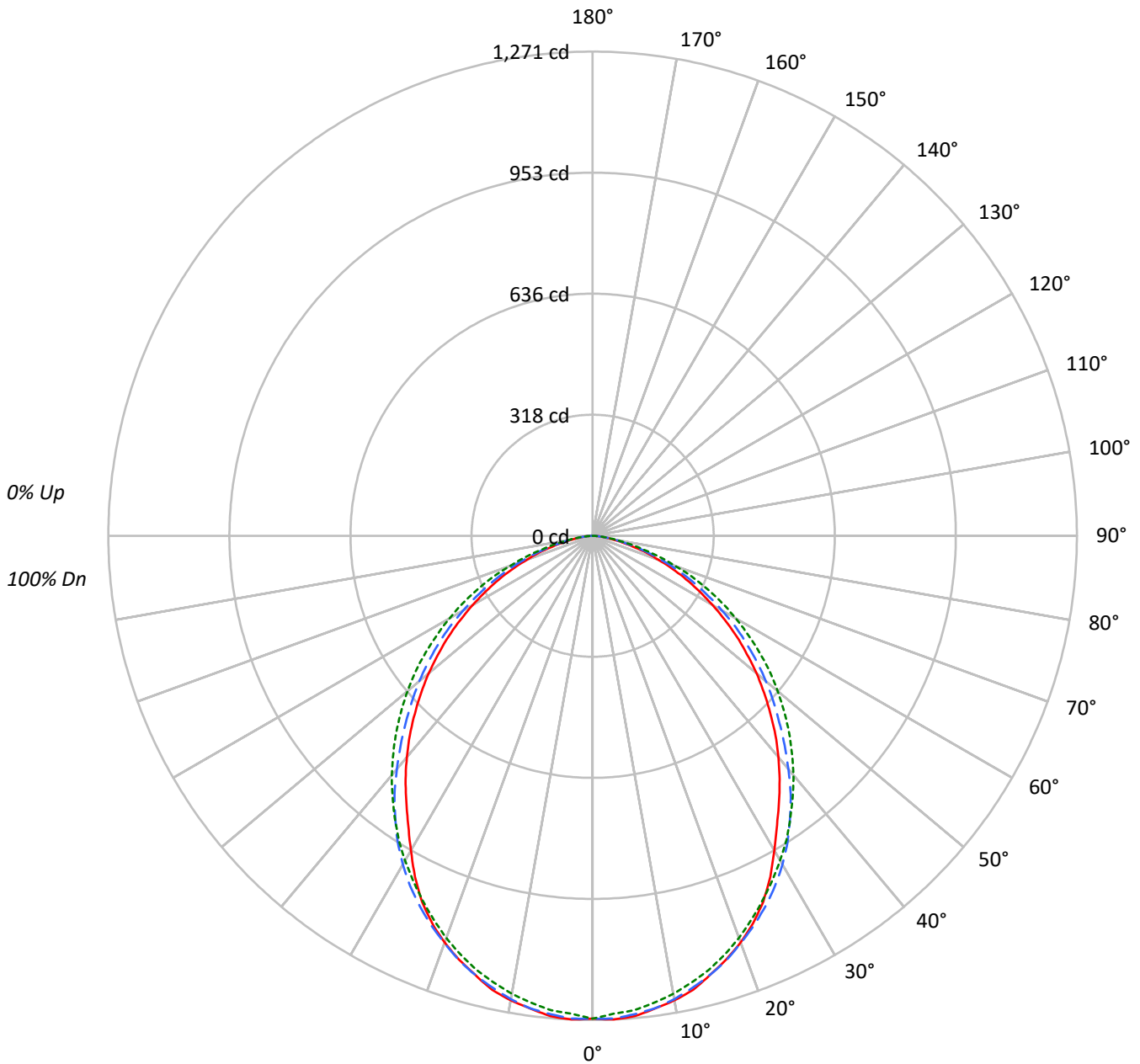
Lumens per Lamp: N/A  
Luminaire Lumens: 2931.0 lumens  
Efficiency: N/A  
Efficacy: 83.5 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 35.1  
Input Voltage (V): NR  
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									
RC	80									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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86																			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73																			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63																			
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54																			
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47																			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42																			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37																			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34																			
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30																			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	6822	6822	6822
5°	6840	6811	6754
10°	6768	6749	6672
15°	6648	6648	6571
20°	6507	6515	6432
25°	6292	6371	6270
30°	5926	6192	6116
35°	5599	5935	5945
40°	5327	5614	5762
45°	5022	5275	5545
50°	4701	4970	5308
55°	4336	4624	5022
60°	3905	4219	4670
65°	3449	3752	4248
70°	2873	3196	3610
75°	2258	2551	2826
80°	1615	1795	1993
85°	1050	1050	994



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	119.3	4.1
10°-20°	335.3	11.4
20°-30°	490.0	16.7
30°-40°	556.1	19.0
40°-50°	536.9	18.3
50°-60°	442.9	15.1
60°-70°	294.9	10.1
70°-80°	132.0	4.5
80°-90°	23.6	0.8
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	944.6	32.2
0°-40°	1500.7	51.2
0°-60°	2480.5	84.6
0°-90°	2931.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2931.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1268	1268	1268	1268	1268	
5°	1266	1266	1261	1254	1250	120
15°	1193	1196	1193	1188	1179	336
25°	1060	1068	1073	1065	1056	485
35°	852	864	903	908	905	534
45°	660	671	693	725	728	509
55°	462	470	493	520	535	412
65°	271	278	295	316	334	268
75°	109	114	123	129	136	119
85°	17	17	17	16	16	23
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1267.6	1267.6	1267.6	1267.6	1267.6
2.5°	1271.0	1271.5	1268.6	1260.8	1255.9
5°	1266.1	1265.6	1260.8	1253.9	1250.1
7.5°	1252.0	1253.0	1251.5	1241.8	1236.4
10°	1238.4	1238.9	1235.0	1227.2	1220.8
12.5°	1220.8	1220.3	1215.0	1211.1	1200.9
15°	1193.1	1196.0	1193.1	1187.7	1179.4
17.5°	1166.3	1166.3	1168.2	1159.0	1152.7
20°	1136.1	1137.6	1137.6	1130.3	1123.0
22.5°	1101.0	1105.4	1106.9	1099.1	1090.3
25°	1059.6	1067.9	1072.8	1065.0	1055.8
27.5°	1009.5	1022.1	1036.8	1030.9	1020.7
30°	953.5	972.0	996.3	991.5	984.2
32.5°	900.4	918.9	952.5	950.6	946.7
35°	852.2	863.9	903.3	908.2	904.8
37.5°	806.4	817.1	854.1	865.3	862.4
40°	758.2	769.9	799.1	819.1	820.1
42.5°	710.5	721.7	745.6	774.3	774.3
45°	659.8	671.0	693.0	724.6	728.5
47.5°	610.2	621.9	643.3	674.9	681.3
50°	561.5	572.2	593.6	624.3	634.0
52.5°	510.8	522.5	543.5	571.7	585.8
55°	462.1	469.9	492.8	520.1	535.2
57.5°	411.5	418.8	444.6	468.0	483.6
60°	362.8	372.0	392.0	415.9	433.9
62.5°	316.0	325.8	342.8	363.8	384.2
65°	270.8	278.1	294.6	315.6	333.6
67.5°	226.9	233.3	249.8	264.4	283.4
70°	182.6	190.9	203.1	217.2	229.4
72.5°	147.1	150.5	160.7	170.9	183.6
75°	108.6	114.4	122.7	128.6	135.9
77.5°	77.9	81.3	86.2	91.1	97.9
80°	52.1	53.6	57.9	58.9	64.3
82.5°	31.7	32.6	33.6	34.1	36.0
85°	17.0	17.0	17.0	16.1	16.1
87.5°	9.7	9.7	8.3	6.8	4.9
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-MV3F9LC







— 0°-180°    - - 45°-225°    - - - - 90°-270°







(END OF REPORT)