

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: P555800

Luminaire Tested: **FUSL-12-2-LD4-3LO-40-UNV-82-88-EDD-90**

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: P555800  
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-90  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

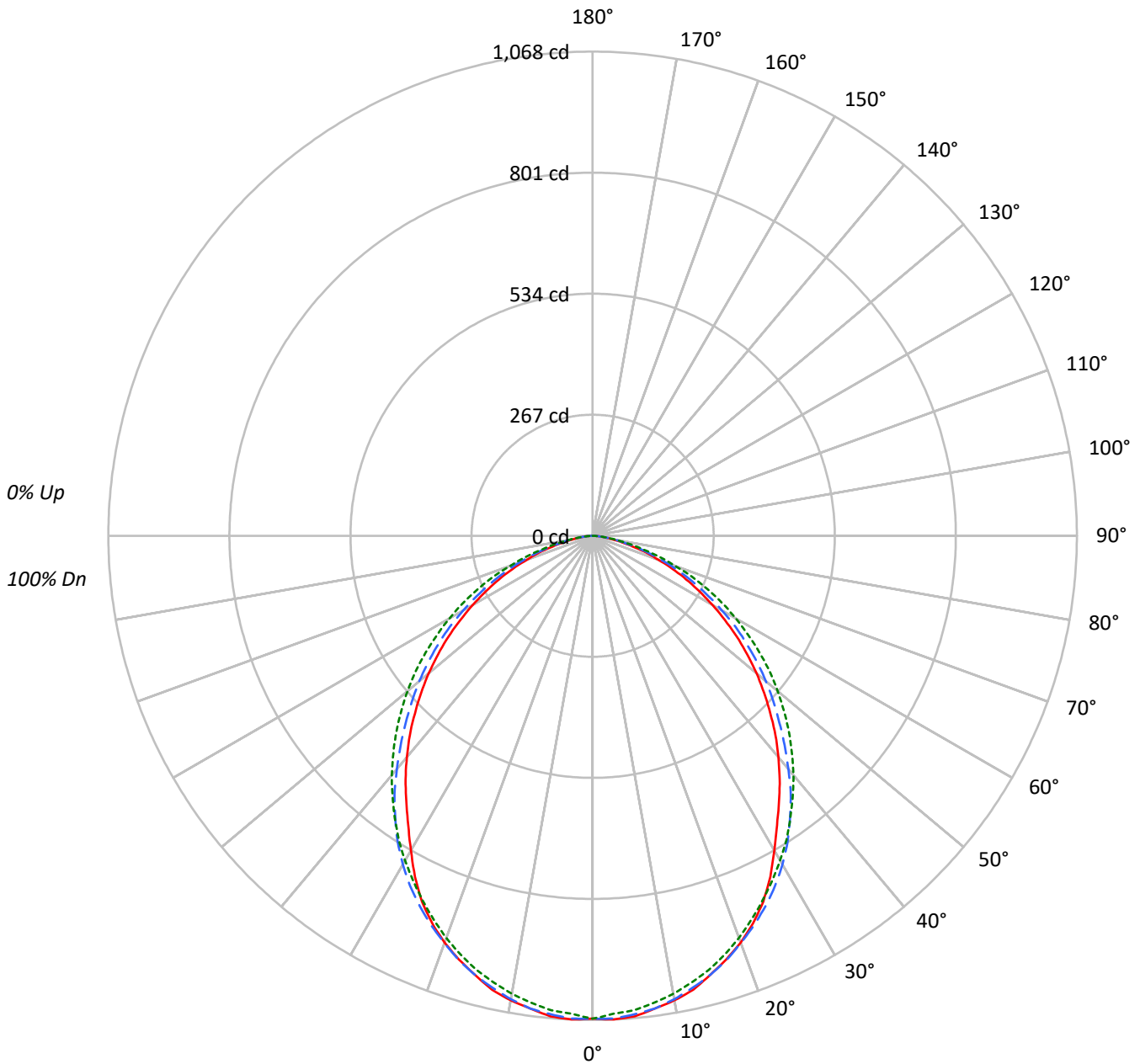
Lumens per Lamp: N/A  
Luminaire Lumens: 2463.0 lumens  
Efficiency: N/A  
Efficacy: 70.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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

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

	0°	45°	90°
0°	5733	5733	5733
5°	5748	5724	5675
10°	5687	5672	5607
15°	5586	5586	5522
20°	5468	5475	5404
25°	5287	5353	5268
30°	4979	5203	5139
35°	4705	4987	4995
40°	4476	4718	4841
45°	4220	4432	4660
50°	3950	4176	4461
55°	3643	3886	4220
60°	3282	3546	3925
65°	2897	3153	3570
70°	2415	2685	3032
75°	1899	2144	2375
80°	1358	1509	1674
85°	883	883	834



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.3	4.1
10°-20°	281.7	11.4
20°-30°	411.7	16.7
30°-40°	467.4	19.0
40°-50°	451.2	18.3
50°-60°	372.2	15.1
60°-70°	247.8	10.1
70°-80°	110.9	4.5
80°-90°	19.8	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°	793.8	32.2
0°-40°	1261.1	51.2
0°-60°	2084.4	84.6
0°-90°	2463.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2463.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1065	1065	1065	1065	1065	
5°	1064	1064	1060	1054	1050	101
15°	1003	1005	1003	998	991	283
25°	890	897	902	895	887	408
35°	716	726	759	763	760	449
45°	554	564	582	609	612	428
55°	388	395	414	437	450	347
65°	228	234	248	265	280	226
75°	91	96	103	108	114	100
85°	14	14	14	14	14	19
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1065.2	1065.2	1065.2	1065.2	1065.2
2.5°	1068.0	1068.5	1066.0	1059.5	1055.4
5°	1064.0	1063.5	1059.5	1053.7	1050.5
7.5°	1052.1	1052.9	1051.7	1043.5	1039.0
10°	1040.6	1041.0	1037.8	1031.2	1025.9
12.5°	1025.9	1025.5	1021.0	1017.7	1009.1
15°	1002.6	1005.0	1002.6	998.1	991.1
17.5°	980.1	980.1	981.7	973.9	968.6
20°	954.7	955.9	955.9	949.8	943.6
22.5°	925.2	928.9	930.1	923.6	916.2
25°	890.4	897.4	901.5	895.0	887.2
27.5°	848.3	858.9	871.2	866.3	857.7
30°	801.2	816.8	837.3	833.2	827.0
32.5°	756.6	772.2	800.4	798.8	795.5
35°	716.1	725.9	759.1	763.2	760.3
37.5°	677.7	686.7	717.8	727.2	724.7
40°	637.1	647.0	671.5	688.3	689.1
42.5°	597.0	606.5	626.5	650.7	650.7
45°	554.5	563.9	582.3	608.9	612.2
47.5°	512.7	522.6	540.6	567.2	572.5
50°	471.8	480.8	498.8	524.6	532.8
52.5°	429.3	439.1	456.7	480.4	492.3
55°	388.3	394.9	414.1	437.0	449.7
57.5°	345.8	351.9	373.6	393.3	406.3
60°	304.9	312.6	329.4	349.5	364.6
62.5°	265.6	273.8	288.1	305.7	322.9
65°	227.5	233.7	247.6	265.2	280.3
67.5°	190.7	196.0	209.9	222.2	238.2
70°	153.5	160.4	170.6	182.5	192.7
72.5°	123.6	126.4	135.0	143.6	154.3
75°	91.3	96.2	103.1	108.0	114.2
77.5°	65.5	68.3	72.4	76.5	82.3
80°	43.8	45.0	48.7	49.5	54.0
82.5°	26.6	27.4	28.2	28.6	30.3
85°	14.3	14.3	14.3	13.5	13.5
87.5°	8.2	8.2	7.0	5.7	4.1
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)