

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: P555089

Luminaire Tested: **FUSL-12-2-LD4-2LO-50-UNV-82-84-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: P555089  
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-LD4-2LO-50-UNV-82-84-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

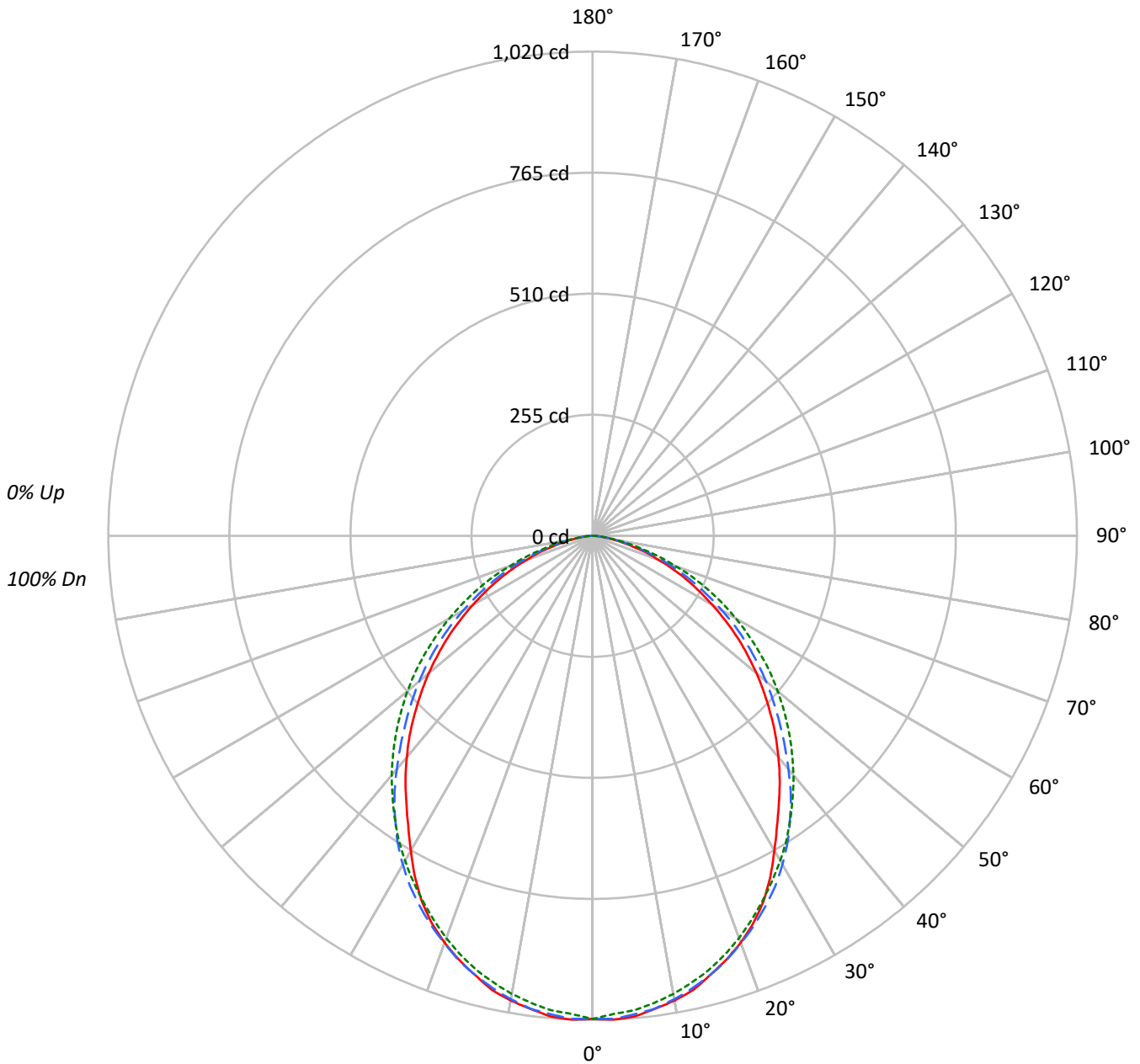
Lumens per Lamp: N/A  
Luminaire Lumens: 2353.0 lumens  
Efficiency: N/A  
Efficacy: 100.6 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 23.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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°	5477	5477	5477
5°	5491	5468	5421
10°	5433	5418	5356
15°	5337	5337	5276
20°	5224	5230	5163
25°	5052	5114	5033
30°	4757	4971	4910
35°	4495	4765	4773
40°	4277	4507	4625
45°	4032	4234	4451
50°	3774	3990	4262
55°	3481	3712	4031
60°	3134	3387	3749
65°	2769	3012	3410
70°	2307	2565	2897
75°	1813	2048	2269
80°	1296	1441	1599
85°	846	846	797



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	95.8	4.1
10°-20°	269.2	11.4
20°-30°	393.3	16.7
30°-40°	446.5	19.0
40°-50°	431.0	18.3
50°-60°	355.6	15.1
60°-70°	236.8	10.1
70°-80°	106.0	4.5
80°-90°	19.0	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°	758.3	32.2
0°-40°	1204.8	51.2
0°-60°	1991.3	84.6
0°-90°	2353.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2353.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1018	1018	1018	1018	1018	
5°	1016	1016	1012	1007	1004	96
15°	958	960	958	954	947	270
25°	851	857	861	855	848	390
35°	684	694	725	729	726	429
45°	530	539	556	582	585	409
55°	371	377	396	418	430	331
65°	217	223	236	253	268	216
75°	87	92	98	103	109	95
85°	14	14	14	13	13	18
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1017.6	1017.6	1017.6	1017.6	1017.6
2.5°	1020.3	1020.7	1018.4	1012.1	1008.2
5°	1016.4	1016.0	1012.1	1006.7	1003.5
7.5°	1005.1	1005.9	1004.7	996.9	992.6
10°	994.2	994.5	991.4	985.2	980.1
12.5°	980.1	979.7	975.4	972.3	964.1
15°	957.8	960.1	957.8	953.5	946.9
17.5°	936.3	936.3	937.9	930.4	925.4
20°	912.1	913.2	913.2	907.4	901.5
22.5°	883.9	887.4	888.6	882.3	875.3
25°	850.7	857.3	861.2	855.0	847.6
27.5°	810.4	820.6	832.3	827.6	819.4
30°	765.5	780.3	799.9	795.9	790.1
32.5°	722.8	737.7	764.7	763.1	760.0
35°	684.1	693.5	725.2	729.1	726.4
37.5°	647.4	656.0	685.7	694.7	692.4
40°	608.7	618.1	641.5	657.6	658.3
42.5°	570.4	579.4	598.5	621.6	621.6
45°	529.7	538.7	556.3	581.7	584.8
47.5°	489.8	499.2	516.4	541.8	546.9
50°	450.8	459.4	476.6	501.2	509.0
52.5°	410.1	419.5	436.3	459.0	470.3
55°	371.0	377.3	395.6	417.5	429.6
57.5°	330.3	336.2	356.9	375.7	388.2
60°	291.2	298.7	314.7	333.9	348.3
62.5°	253.7	261.5	275.2	292.0	308.5
65°	217.4	223.2	236.5	253.3	267.8
67.5°	182.2	187.3	200.6	212.3	227.5
70°	146.6	153.2	163.0	174.4	184.1
72.5°	118.1	120.8	129.0	137.2	147.4
75°	87.2	91.9	98.5	103.2	109.1
77.5°	62.6	65.3	69.2	73.1	78.6
80°	41.8	43.0	46.5	47.3	51.6
82.5°	25.4	26.2	27.0	27.4	28.9
85°	13.7	13.7	13.7	12.9	12.9
87.5°	7.8	7.8	6.6	5.5	3.9
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)