

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: P555161

Luminaire Tested: **FUSL-12-2-LD4-2STD-30-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: P555161  
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-LD4-2STD-30-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 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

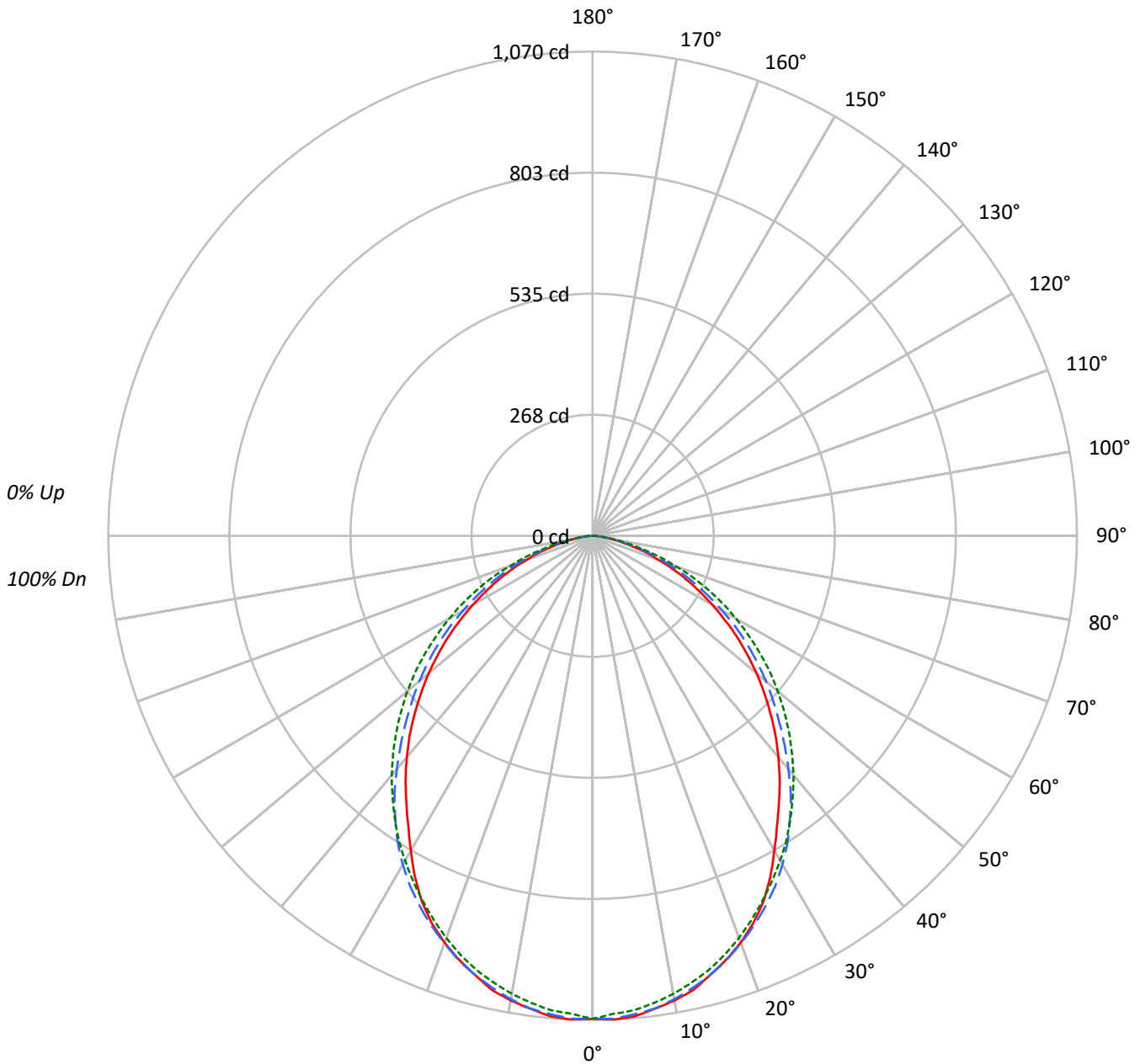
Lumens per Lamp: N/A  
Luminaire Lumens: 2468.0 lumens  
Efficiency: N/A  
Efficacy: 74.1 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 33.3  
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

TEST NUMBER: P555161

CATALOG NUMBER: FUSL-12-2-LD4-2STD-30-UNV-82-88-EDD

### Luminous Intensity Polar Plot





TEST NUMBER: P555161

CATALOG NUMBER: FUSL-12-2-LD4-2STD-30-UNV-82-88-EDD

**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°	5744	5744	5744
5°	5760	5735	5687
10°	5698	5683	5618
15°	5597	5597	5533
20°	5479	5486	5416
25°	5299	5364	5279
30°	4990	5214	5150
35°	4715	4997	5006
40°	4485	4728	4851
45°	4229	4441	4669
50°	3959	4185	4470
55°	3651	3894	4228
60°	3288	3553	3932
65°	2904	3160	3577
70°	2420	2691	3039
75°	1901	2148	2379
80°	1361	1512	1677
85°	889	889	834



TEST NUMBER: P555161

CATALOG NUMBER: FUSL-12-2-LD4-2STD-30-UNV-82-88-EDD

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.5	4.1
10°-20°	282.3	11.4
20°-30°	412.6	16.7
30°-40°	468.3	19.0
40°-50°	452.1	18.3
50°-60°	372.9	15.1
60°-70°	248.3	10.1
70°-80°	111.1	4.5
80°-90°	19.9	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°	795.4	32.2
0°-40°	1263.7	51.2
0°-60°	2088.7	84.6
0°-90°	2468.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2468.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1067	1067	1067	1067	1067	
5°	1066	1066	1062	1056	1053	101
15°	1005	1007	1005	1000	993	283
25°	892	899	903	897	889	409
35°	718	727	761	765	762	450
45°	556	565	584	610	613	429
55°	389	396	415	438	451	347
65°	228	234	248	266	281	226
75°	91	96	103	108	114	100
85°	14	14	14	14	14	19
90°	0	0	0	0	0	



TEST NUMBER: P555161

CATALOG NUMBER: FUSL-12-2-LD4-2STD-30-UNV-82-88-EDD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1067.3	1067.3	1067.3	1067.3	1067.3
2.5°	1070.2	1070.6	1068.2	1061.6	1057.5
5°	1066.1	1065.7	1061.6	1055.9	1052.6
7.5°	1054.2	1055.0	1053.8	1045.6	1041.1
10°	1042.7	1043.2	1039.9	1033.3	1028.0
12.5°	1028.0	1027.6	1023.1	1019.8	1011.2
15°	1004.6	1007.1	1004.6	1000.1	993.1
17.5°	982.1	982.1	983.7	975.9	970.6
20°	956.6	957.9	957.9	951.7	945.6
22.5°	927.1	930.8	932.0	925.5	918.1
25°	892.3	899.2	903.3	896.8	889.0
27.5°	850.0	860.7	873.0	868.1	859.5
30°	802.9	818.4	839.0	834.9	828.7
32.5°	758.2	773.8	802.0	800.4	797.1
35°	717.6	727.4	760.6	764.7	761.9
37.5°	679.0	688.1	719.2	728.6	726.2
40°	638.4	648.3	672.9	689.7	690.5
42.5°	598.3	607.7	627.8	652.0	652.0
45°	555.6	565.0	583.5	610.1	613.4
47.5°	513.8	523.6	541.7	568.3	573.7
50°	472.8	481.8	499.8	525.7	533.9
52.5°	430.1	440.0	457.6	481.4	493.3
55°	389.1	395.7	415.0	437.9	450.6
57.5°	346.5	352.6	374.4	394.1	407.2
60°	305.5	313.3	330.1	350.2	365.3
62.5°	266.1	274.3	288.7	306.3	323.5
65°	228.0	234.1	248.1	265.7	280.9
67.5°	191.1	196.4	210.4	222.7	238.6
70°	153.8	160.7	171.0	182.9	193.1
72.5°	123.8	126.7	135.3	143.9	154.6
75°	91.4	96.4	103.3	108.3	114.4
77.5°	65.6	68.5	72.6	76.7	82.4
80°	43.9	45.1	48.8	49.6	54.1
82.5°	26.7	27.5	28.3	28.7	30.3
85°	14.4	14.4	14.4	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)