

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: P555328

Luminaire Tested: **FUSL-12-2-LD4-2STD-50-UNV-81-84-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: P555328  
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-50-UNV-81-84-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

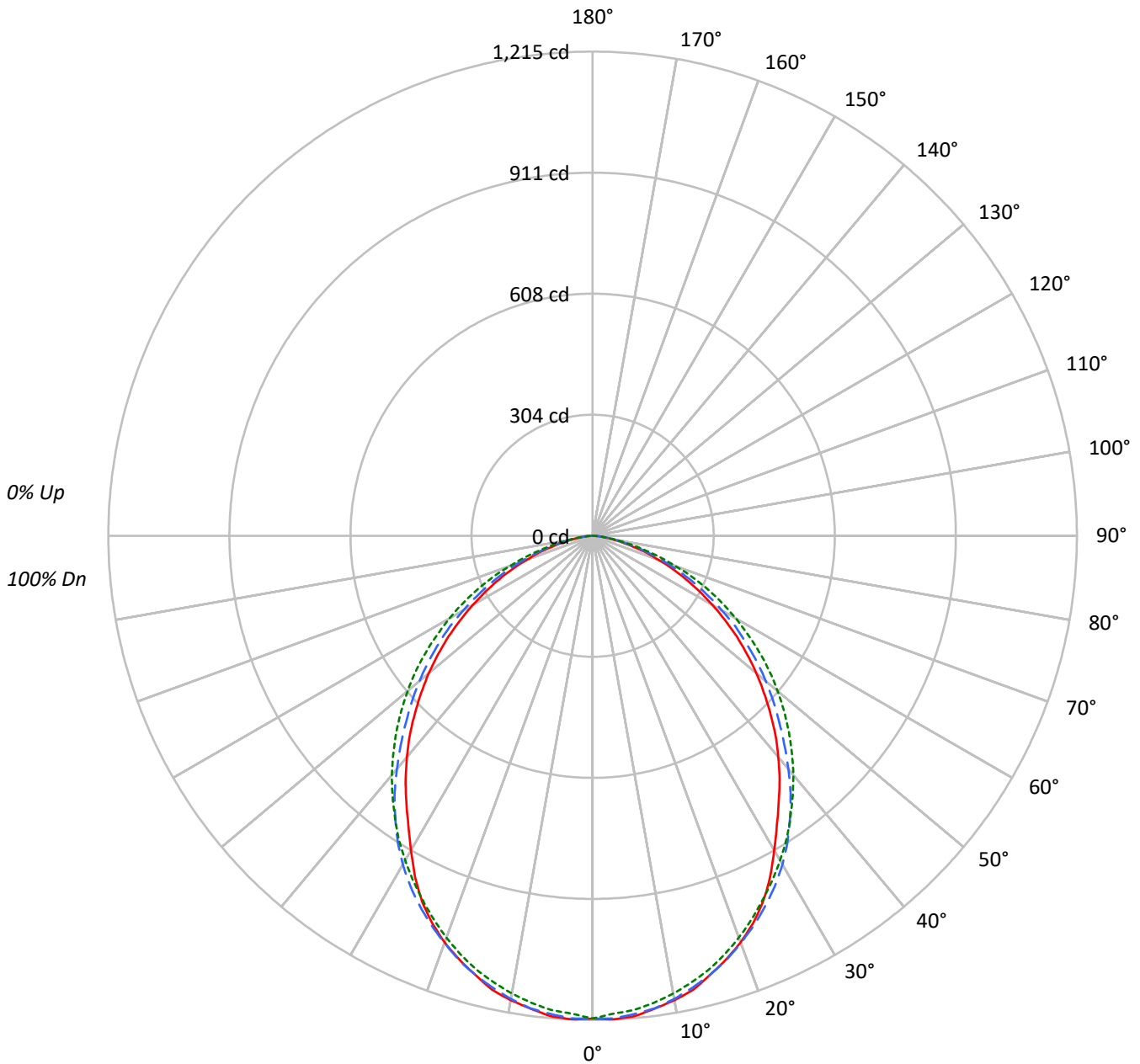
Lumens per Lamp: N/A  
Luminaire Lumens: 2801.0 lumens  
Efficiency: N/A  
Efficacy: 84.1 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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

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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°	6520	6520	6520
5°	6537	6509	6454
10°	6467	6450	6376
15°	6353	6353	6280
20°	6218	6226	6146
25°	6013	6088	5991
30°	5663	5917	5845
35°	5351	5672	5681
40°	5091	5365	5506
45°	4800	5040	5299
50°	4493	4750	5073
55°	4144	4419	4799
60°	3732	4032	4463
65°	3294	3585	4060
70°	2746	3054	3449
75°	2158	2439	2699
80°	1543	1717	1903
85°	1007	1007	951



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	114.1	4.1
10°-20°	320.4	11.4
20°-30°	468.2	16.7
30°-40°	531.5	19.0
40°-50°	513.1	18.3
50°-60°	423.2	15.1
60°-70°	281.8	10.1
70°-80°	126.1	4.5
80°-90°	22.6	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°	902.7	32.2
0°-40°	1434.2	51.2
0°-60°	2370.5	84.6
0°-90°	2801.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2801.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1211	1211	1211	1211	1211	
5°	1210	1210	1205	1198	1195	115
15°	1140	1143	1140	1135	1127	321
25°	1013	1021	1025	1018	1009	464
35°	814	826	863	868	865	510
45°	631	641	662	692	696	487
55°	442	449	471	497	511	394
65°	259	266	282	302	319	257
75°	104	109	117	123	130	113
85°	16	16	16	15	15	22
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1211.4	1211.4	1211.4	1211.4	1211.4
2.5°	1214.6	1215.1	1212.3	1204.8	1200.2
5°	1210.0	1209.5	1204.8	1198.3	1194.6
7.5°	1196.5	1197.4	1196.0	1186.7	1181.6
10°	1183.4	1183.9	1180.2	1172.7	1166.7
12.5°	1166.7	1166.2	1161.1	1157.4	1147.6
15°	1140.2	1143.0	1140.2	1135.0	1127.1
17.5°	1114.6	1114.6	1116.4	1107.6	1101.5
20°	1085.7	1087.1	1087.1	1080.1	1073.1
22.5°	1052.2	1056.4	1057.8	1050.3	1042.0
25°	1012.6	1020.6	1025.2	1017.8	1008.9
27.5°	964.7	976.8	990.8	985.2	975.4
30°	911.2	928.9	952.1	947.5	940.5
32.5°	860.5	878.2	910.3	908.4	904.7
35°	814.4	825.6	863.3	867.9	864.7
37.5°	770.7	780.9	816.3	827.0	824.2
40°	724.6	735.8	763.7	782.8	783.7
42.5°	679.0	689.7	712.5	739.9	739.9
45°	630.6	641.3	662.2	692.5	696.2
47.5°	583.1	594.3	614.8	645.0	651.1
50°	536.6	546.8	567.3	596.6	605.9
52.5°	488.2	499.3	519.4	546.3	559.8
55°	441.6	449.1	471.0	497.0	511.4
57.5°	393.2	400.2	424.9	447.2	462.1
60°	346.7	355.5	374.6	397.4	414.6
62.5°	302.0	311.3	327.6	347.6	367.2
65°	258.7	265.7	281.5	301.6	318.8
67.5°	216.9	222.9	238.7	252.7	270.8
70°	174.5	182.4	194.1	207.6	219.2
72.5°	140.5	143.8	153.6	163.3	175.4
75°	103.8	109.4	117.3	122.9	129.8
77.5°	74.5	77.7	82.4	87.0	93.5
80°	49.8	51.2	55.4	56.3	61.4
82.5°	30.2	31.2	32.1	32.6	34.4
85°	16.3	16.3	16.3	15.4	15.4
87.5°	9.3	9.3	7.9	6.5	4.7
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)