

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: P555144

Luminaire Tested: **FUSL-12-2-LD4-2STD-30-UNV-81-88-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: P555144  
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-81-88-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

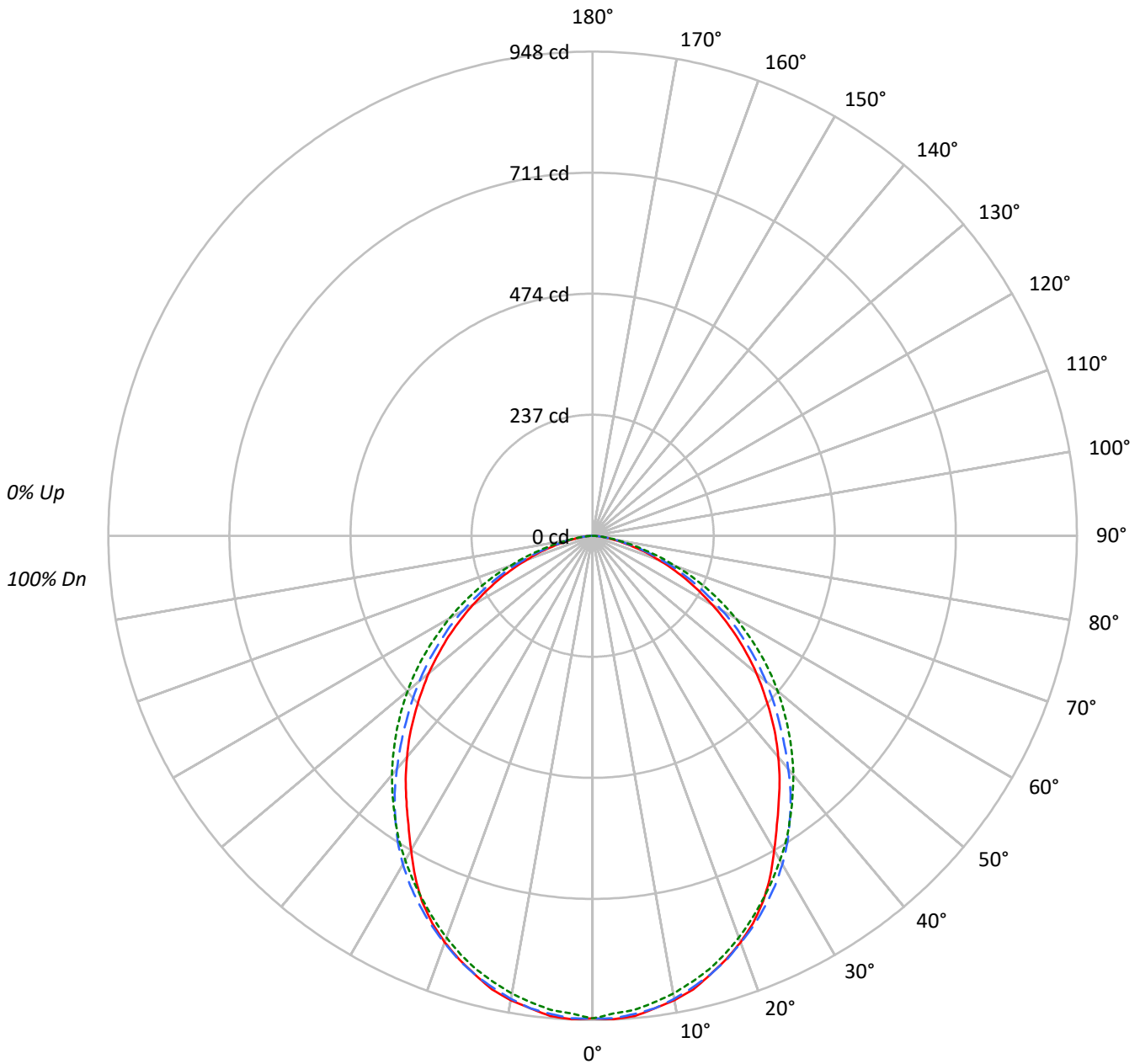
Lumens per Lamp: N/A  
Luminaire Lumens: 2185.0 lumens  
Efficiency: N/A  
Efficacy: 65.6 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 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									
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°	5086	5086	5086
5°	5099	5078	5035
10°	5045	5031	4974
15°	4956	4956	4899
20°	4851	4857	4794
25°	4691	4749	4673
30°	4417	4616	4560
35°	4174	4424	4432
40°	3971	4185	4295
45°	3744	3932	4134
50°	3505	3705	3958
55°	3232	3447	3744
60°	2912	3145	3482
65°	2570	2797	3167
70°	2142	2382	2691
75°	1684	1903	2106
80°	1203	1339	1485
85°	784	784	741



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.0	4.1
10°-20°	249.9	11.4
20°-30°	365.2	16.7
30°-40°	414.6	19.0
40°-50°	400.2	18.3
50°-60°	330.2	15.1
60°-70°	219.9	10.1
70°-80°	98.4	4.5
80°-90°	17.6	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°	704.2	32.2
0°-40°	1118.7	51.2
0°-60°	1849.1	84.6
0°-90°	2185.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2185.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	945	945	945	945	945	
5°	944	944	940	935	932	89
15°	889	892	889	885	879	251
25°	790	796	800	794	787	362
35°	635	644	673	677	674	398
45°	492	500	517	540	543	380
55°	344	350	367	388	399	308
65°	202	207	220	235	249	200
75°	81	85	92	96	101	89
85°	13	13	13	12	12	17
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	945.0	945.0	945.0	945.0	945.0
2.5°	947.5	947.9	945.7	939.9	936.2
5°	943.9	943.5	939.9	934.8	931.9
7.5°	933.3	934.1	933.0	925.7	921.7
10°	923.2	923.5	920.6	914.8	910.1
12.5°	910.1	909.7	905.7	902.8	895.2
15°	889.4	891.6	889.4	885.4	879.2
17.5°	869.4	869.4	870.9	864.0	859.3
20°	846.9	848.0	848.0	842.6	837.1
22.5°	820.8	824.1	825.2	819.3	812.8
25°	789.9	796.1	799.7	793.9	787.0
27.5°	752.6	762.0	772.9	768.5	760.9
30°	710.8	724.6	742.8	739.1	733.7
32.5°	671.2	685.0	710.1	708.6	705.7
35°	635.3	644.0	673.4	677.0	674.5
37.5°	601.2	609.2	636.7	645.1	642.9
40°	565.2	573.9	595.7	610.6	611.3
42.5°	529.7	538.0	555.8	577.2	577.2
45°	491.9	500.2	516.6	540.2	543.1
47.5°	454.9	463.6	479.6	503.2	507.9
50°	418.6	426.6	442.5	465.4	472.7
52.5°	380.8	389.5	405.1	426.2	436.7
55°	344.5	350.3	367.4	387.7	399.0
57.5°	306.8	312.2	331.4	348.9	360.5
60°	270.5	277.4	292.2	310.0	323.5
62.5°	235.6	242.9	255.6	271.2	286.4
65°	201.8	207.3	219.6	235.2	248.7
67.5°	169.2	173.9	186.2	197.1	211.3
70°	136.1	142.3	151.4	161.9	171.0
72.5°	109.6	112.2	119.8	127.4	136.9
75°	81.0	85.3	91.5	95.8	101.3
77.5°	58.1	60.6	64.3	67.9	73.0
80°	38.8	39.9	43.2	43.9	47.9
82.5°	23.6	24.3	25.0	25.4	26.9
85°	12.7	12.7	12.7	12.0	12.0
87.5°	7.3	7.3	6.2	5.1	3.6
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)