

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: P555079

Luminaire Tested: **FUSL-12-2-LD4-2LO-50-UNV-81-87-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: P555079  
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-81-87-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .375  
CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

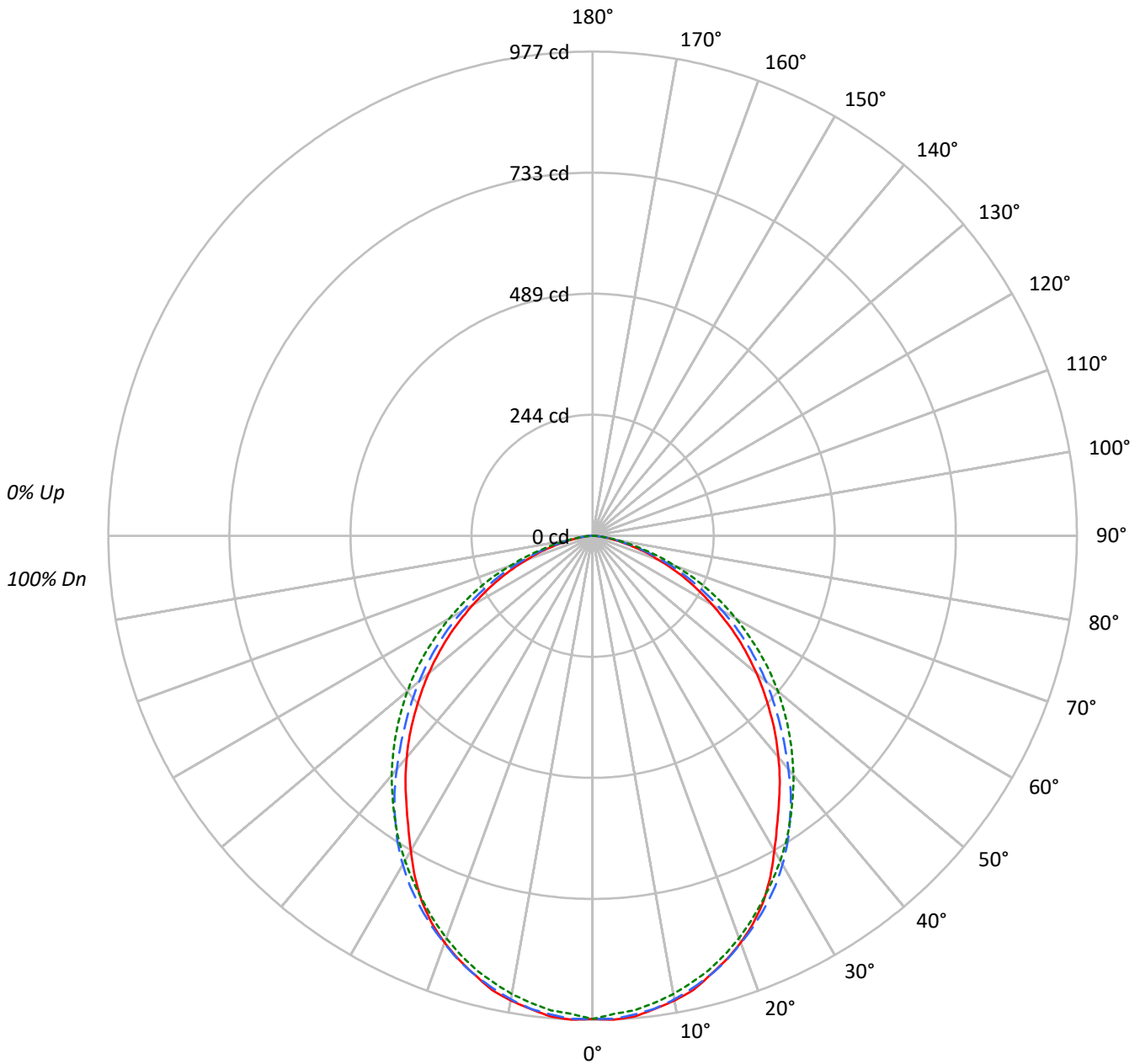
Lumens per Lamp: N/A  
Luminaire Lumens: 2254.0 lumens  
Efficiency: N/A  
Efficacy: 96.3 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 23.4  
Input Voltage (V): NR  
Input Current (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°	5246	5246	5246
5°	5260	5238	5193
10°	5204	5190	5131
15°	5112	5112	5054
20°	5004	5010	4946
25°	4839	4899	4821
30°	4557	4762	4703
35°	4306	4564	4572
40°	4097	4317	4430
45°	3862	4056	4264
50°	3615	3822	4083
55°	3335	3556	3862
60°	3003	3245	3592
65°	2651	2886	3266
70°	2209	2458	2776
75°	1736	1963	2173
80°	1243	1382	1531
85°	809	809	766



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	91.8	4.1
10°-20°	257.8	11.4
20°-30°	376.8	16.7
30°-40°	427.7	19.0
40°-50°	412.9	18.3
50°-60°	340.6	15.1
60°-70°	226.8	10.1
70°-80°	101.5	4.5
80°-90°	18.2	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°	726.4	32.2
0°-40°	1154.1	51.2
0°-60°	1907.5	84.6
0°-90°	2254.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2254.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	975	975	975	975	975	
5°	974	973	970	964	961	92
15°	918	920	918	913	907	259
25°	815	821	825	819	812	373
35°	655	664	695	698	696	411
45°	507	516	533	557	560	392
55°	355	361	379	400	412	317
65°	208	214	227	243	256	206
75°	84	88	94	99	104	91
85°	13	13	13	12	12	18
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	974.8	974.8	974.8	974.8	974.8
2.5°	977.4	977.8	975.5	969.6	965.8
5°	973.7	973.3	969.6	964.3	961.3
7.5°	962.8	963.6	962.4	954.9	950.8
10°	952.3	952.7	949.7	943.7	938.8
12.5°	938.8	938.5	934.4	931.4	923.5
15°	917.5	919.7	917.5	913.4	907.0
17.5°	896.9	896.9	898.4	891.3	886.4
20°	873.7	874.8	874.8	869.2	863.6
22.5°	846.7	850.1	851.2	845.2	838.5
25°	814.9	821.3	825.0	819.0	811.9
27.5°	776.3	786.1	797.3	792.8	784.9
30°	733.3	747.5	766.2	762.5	756.8
32.5°	692.4	706.7	732.5	731.0	728.0
35°	655.4	664.3	694.7	698.4	695.8
37.5°	620.2	628.4	656.9	665.5	663.2
40°	583.1	592.1	614.5	629.9	630.6
42.5°	546.4	555.0	573.3	595.4	595.4
45°	507.4	516.0	532.9	557.2	560.2
47.5°	469.2	478.2	494.7	519.0	523.9
50°	431.8	440.0	456.5	480.1	487.6
52.5°	392.8	401.8	417.9	439.7	450.5
55°	355.4	361.4	379.0	400.0	411.6
57.5°	316.4	322.1	341.9	359.9	371.9
60°	279.0	286.1	301.5	319.8	333.7
62.5°	243.0	250.5	263.6	279.7	295.5
65°	208.2	213.8	226.6	242.7	256.5
67.5°	174.5	179.4	192.1	203.3	218.0
70°	140.4	146.8	156.2	167.0	176.4
72.5°	113.1	115.7	123.6	131.4	141.2
75°	83.5	88.0	94.4	98.9	104.5
77.5°	59.9	62.5	66.3	70.0	75.3
80°	40.1	41.2	44.6	45.3	49.4
82.5°	24.3	25.1	25.8	26.2	27.7
85°	13.1	13.1	13.1	12.4	12.4
87.5°	7.5	7.5	6.4	5.2	3.7
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)