

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: P554961

Luminaire Tested: **FUSL-12-2-LD4-2LO-35-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: P554961  
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-35-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 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

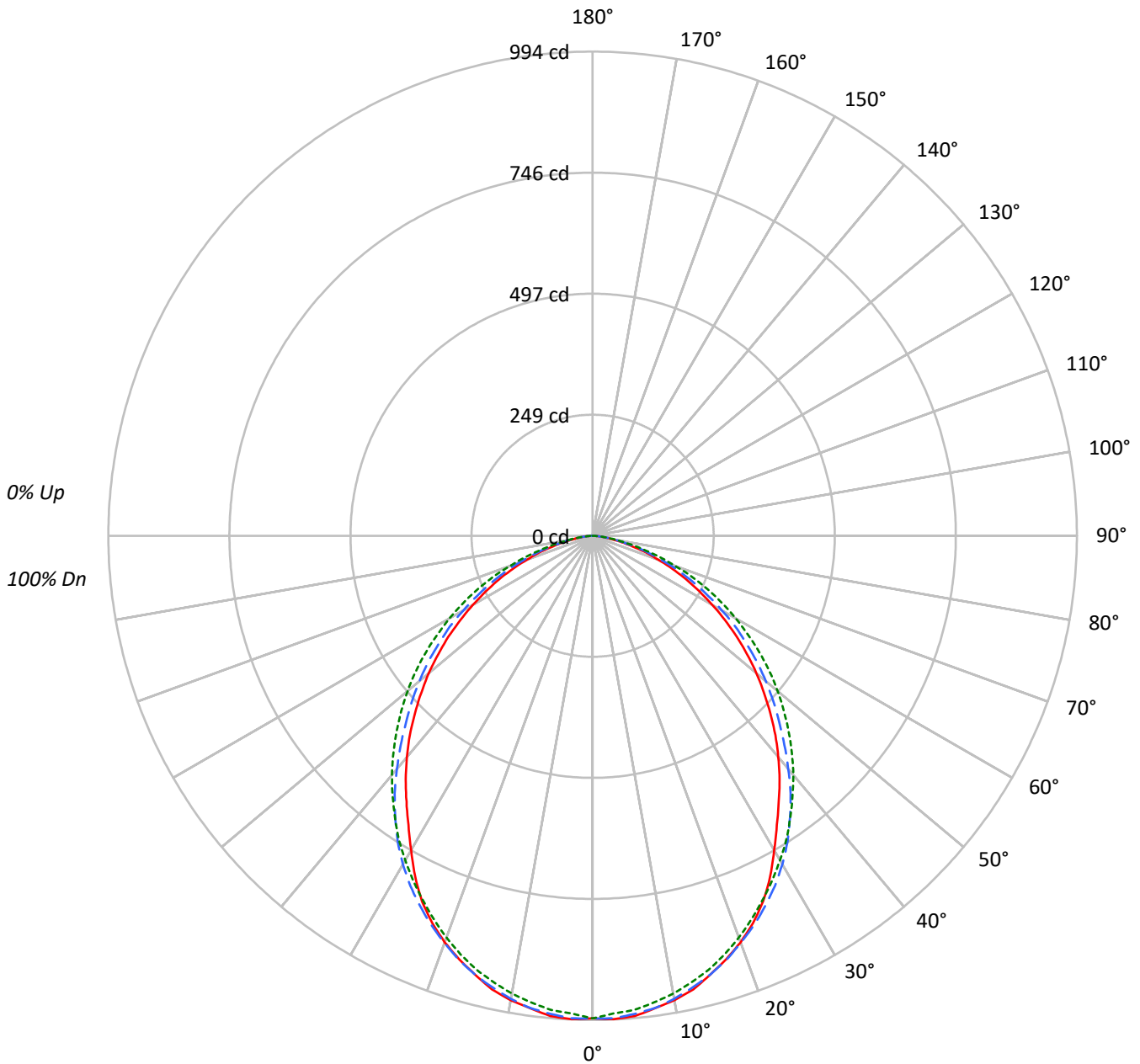
Lumens per Lamp: N/A  
Luminaire Lumens: 2291.0 lumens  
Efficiency: N/A  
Efficacy: 97.9 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	5332	5332	5332
5°	5347	5324	5279
10°	5290	5275	5215
15°	5196	5196	5137
20°	5086	5093	5027
25°	4919	4979	4900
30°	4632	4840	4781
35°	4376	4639	4646
40°	4164	4388	4503
45°	3926	4122	4334
50°	3675	3885	4150
55°	3389	3614	3925
60°	3053	3298	3650
65°	2695	2933	3320
70°	2245	2497	2821
75°	1765	1994	2208
80°	1261	1404	1556
85°	821	821	778



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	93.3	4.1
10°-20°	262.1	11.4
20°-30°	383.0	16.7
30°-40°	434.7	19.0
40°-50°	419.6	18.3
50°-60°	346.2	15.1
60°-70°	230.5	10.1
70°-80°	103.2	4.5
80°-90°	18.5	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°	738.3	32.2
0°-40°	1173.0	51.2
0°-60°	1938.9	84.6
0°-90°	2291.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2291.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	991	991	991	991	991	
5°	990	989	986	980	977	94
15°	933	935	933	928	922	263
25°	828	835	838	832	825	379
35°	666	675	706	710	707	417
45°	516	524	542	566	569	398
55°	361	367	385	406	418	322
65°	212	217	230	247	261	210
75°	85	89	96	100	106	93
85°	13	13	13	13	13	18
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	990.8	990.8	990.8	990.8	990.8
2.5°	993.5	993.8	991.6	985.5	981.7
5°	989.7	989.3	985.5	980.1	977.1
7.5°	978.6	979.4	978.2	970.6	966.4
10°	968.0	968.3	965.3	959.2	954.3
12.5°	954.3	953.9	949.7	946.6	938.7
15°	932.6	934.8	932.6	928.4	921.9
17.5°	911.6	911.6	913.1	905.9	901.0
20°	888.0	889.2	889.2	883.5	877.7
22.5°	860.6	864.0	865.2	859.1	852.2
25°	828.3	834.7	838.5	832.5	825.2
27.5°	789.1	799.0	810.4	805.8	797.8
30°	745.3	759.8	778.8	775.0	769.3
32.5°	703.8	718.3	744.5	743.0	740.0
35°	666.1	675.3	706.1	709.9	707.2
37.5°	630.3	638.7	667.6	676.4	674.1
40°	592.7	601.8	624.6	640.2	641.0
42.5°	555.3	564.1	582.8	605.2	605.2
45°	515.8	524.5	541.6	566.4	569.4
47.5°	476.9	486.1	502.8	527.6	532.5
50°	438.9	447.2	464.0	488.0	495.6
52.5°	399.3	408.4	424.8	446.9	457.9
55°	361.2	367.3	385.2	406.5	418.3
57.5°	321.6	327.3	347.5	365.8	378.0
60°	283.6	290.8	306.4	325.1	339.1
62.5°	247.0	254.6	268.0	284.3	300.3
65°	211.6	217.3	230.3	246.7	260.7
67.5°	177.4	182.3	195.3	206.7	221.5
70°	142.7	149.2	158.7	169.8	179.3
72.5°	115.0	117.6	125.6	133.6	143.5
75°	84.9	89.4	95.9	100.5	106.2
77.5°	60.9	63.6	67.4	71.2	76.5
80°	40.7	41.9	45.3	46.1	50.2
82.5°	24.7	25.5	26.3	26.6	28.2
85°	13.3	13.3	13.3	12.6	12.6
87.5°	7.6	7.6	6.5	5.3	3.8
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)