

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: P554228

Luminaire Tested: **FUSL-12-2-LD4-1LO-40-UNV-80-86-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: P554228  
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-LD4-1LO-40-UNV-80-86-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

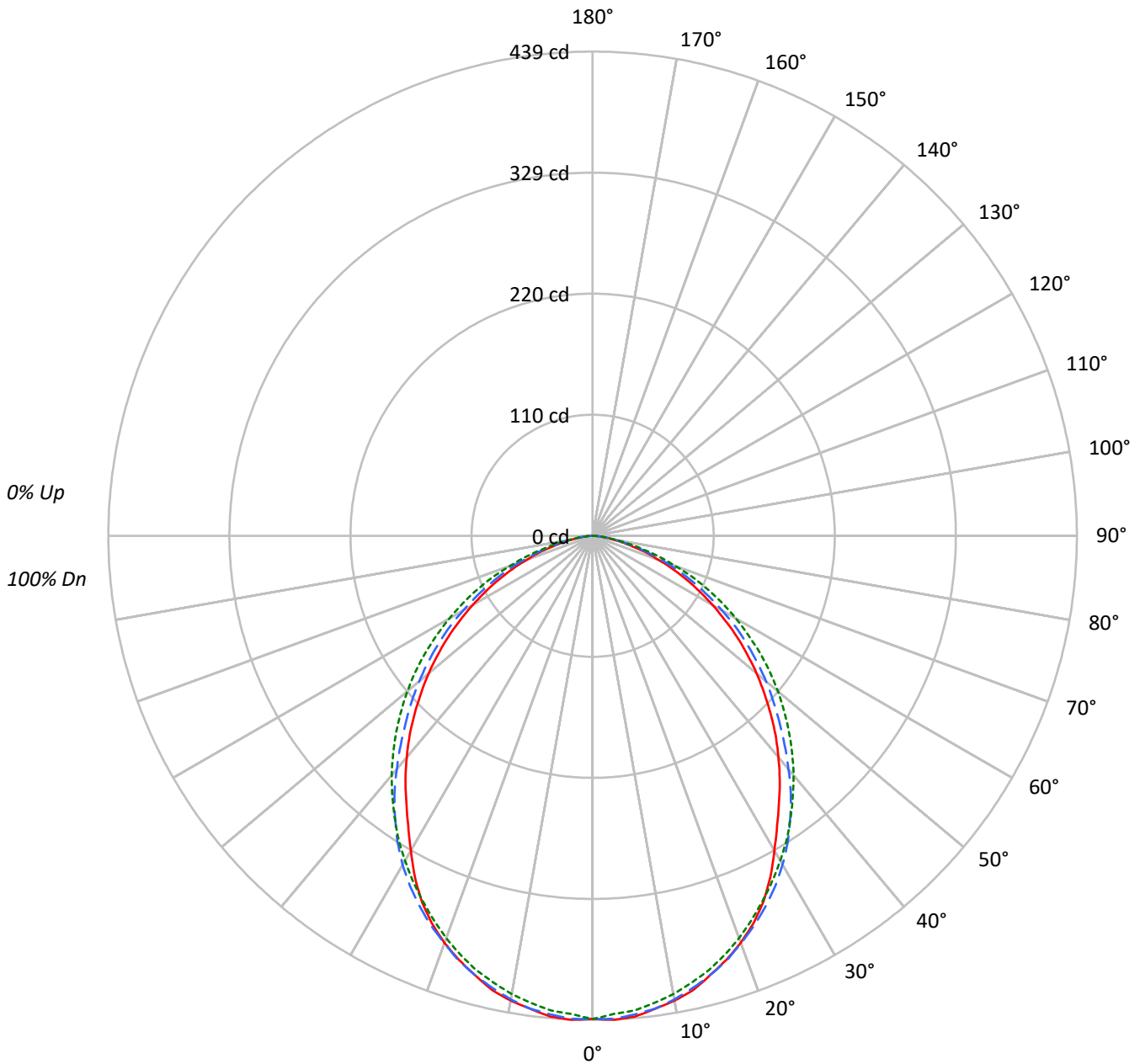
Lumens per Lamp: N/A  
Luminaire Lumens: 1013.0 lumens  
Efficiency: N/A  
Efficacy: 86.6 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 11.7  
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°	2358	2358	2358
5°	2364	2354	2334
10°	2339	2332	2306
15°	2297	2297	2271
20°	2249	2252	2223
25°	2175	2202	2167
30°	2048	2140	2114
35°	1935	2051	2054
40°	1841	1940	1991
45°	1736	1823	1917
50°	1625	1718	1834
55°	1498	1598	1736
60°	1350	1459	1615
65°	1192	1296	1468
70°	993	1105	1248
75°	780	882	977
80°	558	620	688
85°	364	364	346



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	41.2	4.1
10°-20°	115.9	11.4
20°-30°	169.3	16.7
30°-40°	192.2	19.0
40°-50°	185.6	18.3
50°-60°	153.1	15.1
60°-70°	101.9	10.1
70°-80°	45.6	4.5
80°-90°	8.2	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°	326.5	32.2
0°-40°	518.7	51.2
0°-60°	857.3	84.6
0°-90°	1013.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1013.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	438	438	438	438	438	
5°	438	437	436	433	432	41
15°	412	413	412	410	408	116
25°	366	369	371	368	365	168
35°	294	299	312	314	313	185
45°	228	232	240	250	252	176
55°	160	162	170	180	185	143
65°	94	96	102	109	115	93
75°	38	40	42	44	47	41
85°	6	6	6	6	6	8
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	438.1	438.1	438.1	438.1	438.1
2.5°	439.3	439.4	438.4	435.7	434.1
5°	437.6	437.4	435.7	433.4	432.0
7.5°	432.7	433.0	432.5	429.2	427.3
10°	428.0	428.2	426.8	424.1	421.9
12.5°	421.9	421.8	419.9	418.6	415.0
15°	412.3	413.4	412.3	410.5	407.6
17.5°	403.1	403.1	403.8	400.6	398.4
20°	392.7	393.2	393.2	390.6	388.1
22.5°	380.5	382.1	382.6	379.9	376.8
25°	366.2	369.1	370.8	368.1	364.9
27.5°	348.9	353.3	358.3	356.3	352.8
30°	329.5	335.9	344.4	342.7	340.1
32.5°	311.2	317.6	329.2	328.5	327.2
35°	294.5	298.6	312.2	313.9	312.7
37.5°	278.7	282.4	295.2	299.1	298.1
40°	262.0	266.1	276.2	283.1	283.4
42.5°	245.6	249.4	257.7	267.6	267.6
45°	228.1	231.9	239.5	250.4	251.8
47.5°	210.9	214.9	222.3	233.3	235.5
50°	194.1	197.8	205.2	215.8	219.1
52.5°	176.6	180.6	187.8	197.6	202.5
55°	159.7	162.4	170.3	179.7	185.0
57.5°	142.2	144.7	153.7	161.7	167.1
60°	125.4	128.6	135.5	143.7	150.0
62.5°	109.2	112.6	118.5	125.7	132.8
65°	93.6	96.1	101.8	109.1	115.3
67.5°	78.4	80.6	86.3	91.4	98.0
70°	63.1	66.0	70.2	75.1	79.3
72.5°	50.8	52.0	55.5	59.1	63.5
75°	37.5	39.6	42.4	44.4	47.0
77.5°	26.9	28.1	29.8	31.5	33.8
80°	18.0	18.5	20.0	20.4	22.2
82.5°	10.9	11.3	11.6	11.8	12.5
85°	5.9	5.9	5.9	5.6	5.6
87.5°	3.4	3.4	2.9	2.4	1.7
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)