

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: P554316

Luminaire Tested: **FUSL-12-2-LD4-1LO-50-UNV-81-96-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: P554316  
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-50-UNV-81-96-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

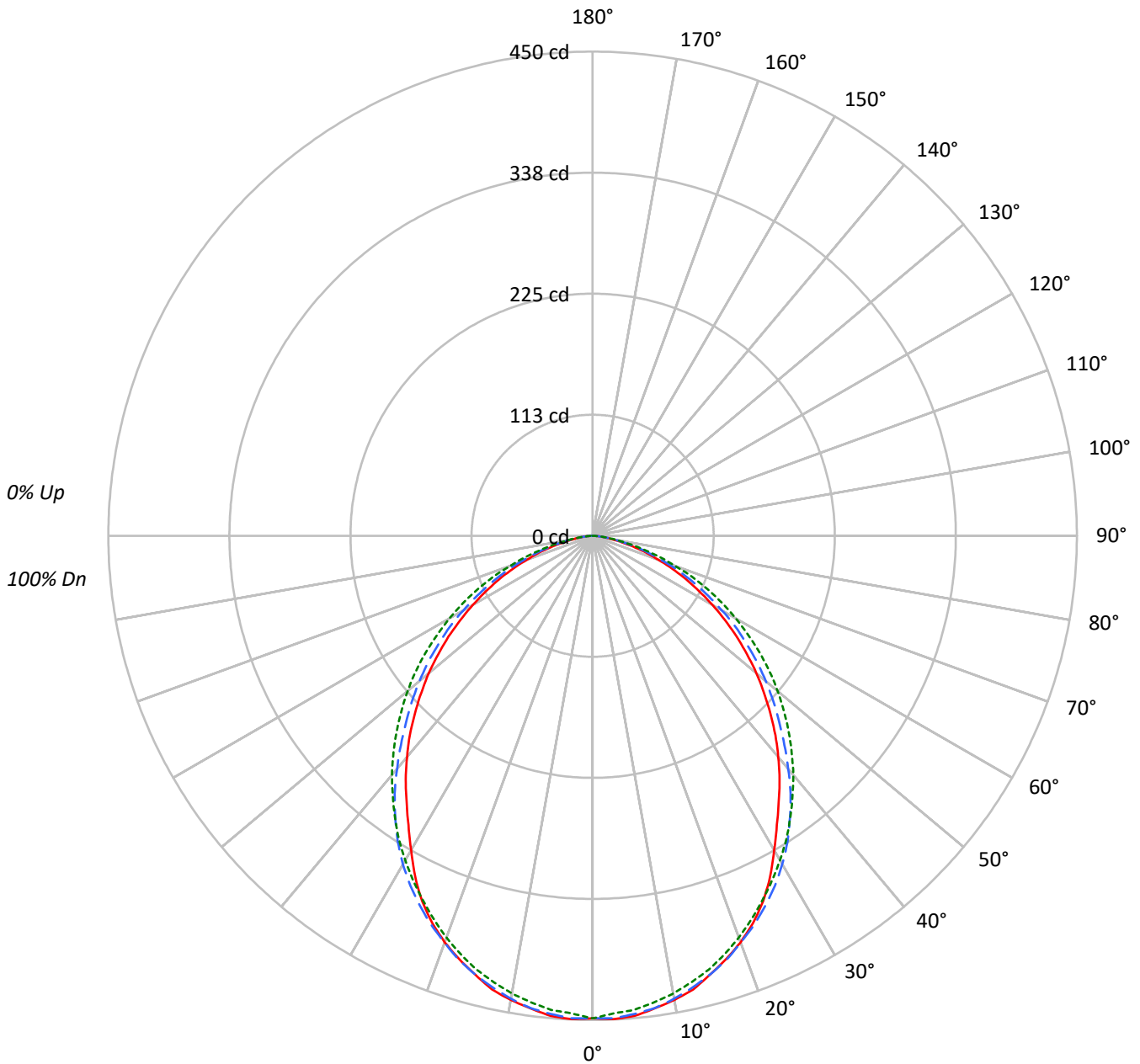
Lumens per Lamp: N/A  
Luminaire Lumens: 1037.0 lumens  
Efficiency: N/A  
Efficacy: 88.6 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 11.7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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					
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	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°	2414	2414	2414
5°	2420	2410	2390
10°	2394	2388	2360
15°	2352	2352	2325
20°	2302	2305	2275
25°	2226	2254	2218
30°	2096	2191	2164
35°	1981	2100	2103
40°	1885	1986	2038
45°	1777	1866	1961
50°	1664	1758	1878
55°	1534	1636	1776
60°	1382	1493	1652
65°	1220	1327	1503
70°	1017	1130	1276
75°	799	902	1000
80°	570	635	704
85°	371	371	352



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	42.2	4.1
10°-20°	118.6	11.4
20°-30°	173.3	16.7
30°-40°	196.8	19.0
40°-50°	189.9	18.3
50°-60°	156.7	15.1
60°-70°	104.3	10.1
70°-80°	46.7	4.5
80°-90°	8.3	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°	334.2	32.2
0°-40°	531.0	51.2
0°-60°	877.6	84.6
0°-90°	1037.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1037.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	448	448	448	448	448	
5°	448	448	446	444	442	42
15°	422	423	422	420	417	119
25°	375	378	380	377	374	172
35°	302	306	320	321	320	189
45°	234	237	245	256	258	180
55°	164	166	174	184	189	146
65°	96	98	104	112	118	95
75°	38	40	43	46	48	42
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°	448.5	448.5	448.5	448.5	448.5
2.5°	449.7	449.9	448.8	446.1	444.3
5°	448.0	447.8	446.1	443.7	442.3
7.5°	443.0	443.3	442.8	439.3	437.4
10°	438.1	438.3	436.9	434.2	431.9
12.5°	431.9	431.8	429.9	428.5	424.9
15°	422.1	423.1	422.1	420.2	417.3
17.5°	412.6	412.6	413.3	410.1	407.8
20°	402.0	402.5	402.5	399.9	397.3
22.5°	389.6	391.1	391.6	388.9	385.8
25°	374.9	377.8	379.6	376.8	373.5
27.5°	357.2	361.6	366.8	364.7	361.1
30°	337.3	343.9	352.5	350.8	348.2
32.5°	318.6	325.1	337.0	336.3	334.9
35°	301.5	305.6	319.6	321.3	320.1
37.5°	285.3	289.1	302.2	306.2	305.1
40°	268.3	272.4	282.7	289.8	290.1
42.5°	251.4	255.3	263.8	273.9	273.9
45°	233.5	237.4	245.2	256.4	257.7
47.5°	215.9	220.0	227.6	238.8	241.0
50°	198.7	202.4	210.0	220.9	224.3
52.5°	180.7	184.9	192.3	202.3	207.3
55°	163.5	166.3	174.4	184.0	189.3
57.5°	145.6	148.2	157.3	165.6	171.1
60°	128.4	131.6	138.7	147.1	153.5
62.5°	111.8	115.3	121.3	128.7	135.9
65°	95.8	98.4	104.2	111.6	118.0
67.5°	80.3	82.5	88.4	93.6	100.3
70°	64.6	67.5	71.8	76.8	81.1
72.5°	52.0	53.2	56.9	60.5	65.0
75°	38.4	40.5	43.4	45.5	48.1
77.5°	27.6	28.8	30.5	32.2	34.6
80°	18.4	19.0	20.5	20.8	22.7
82.5°	11.2	11.5	11.9	12.1	12.7
85°	6.0	6.0	6.0	5.7	5.7
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)