

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: P554982

Luminaire Tested: **FUSL-12-2-LD4-2LO-35-UNV-93-87-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: P554982  
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-93-87-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

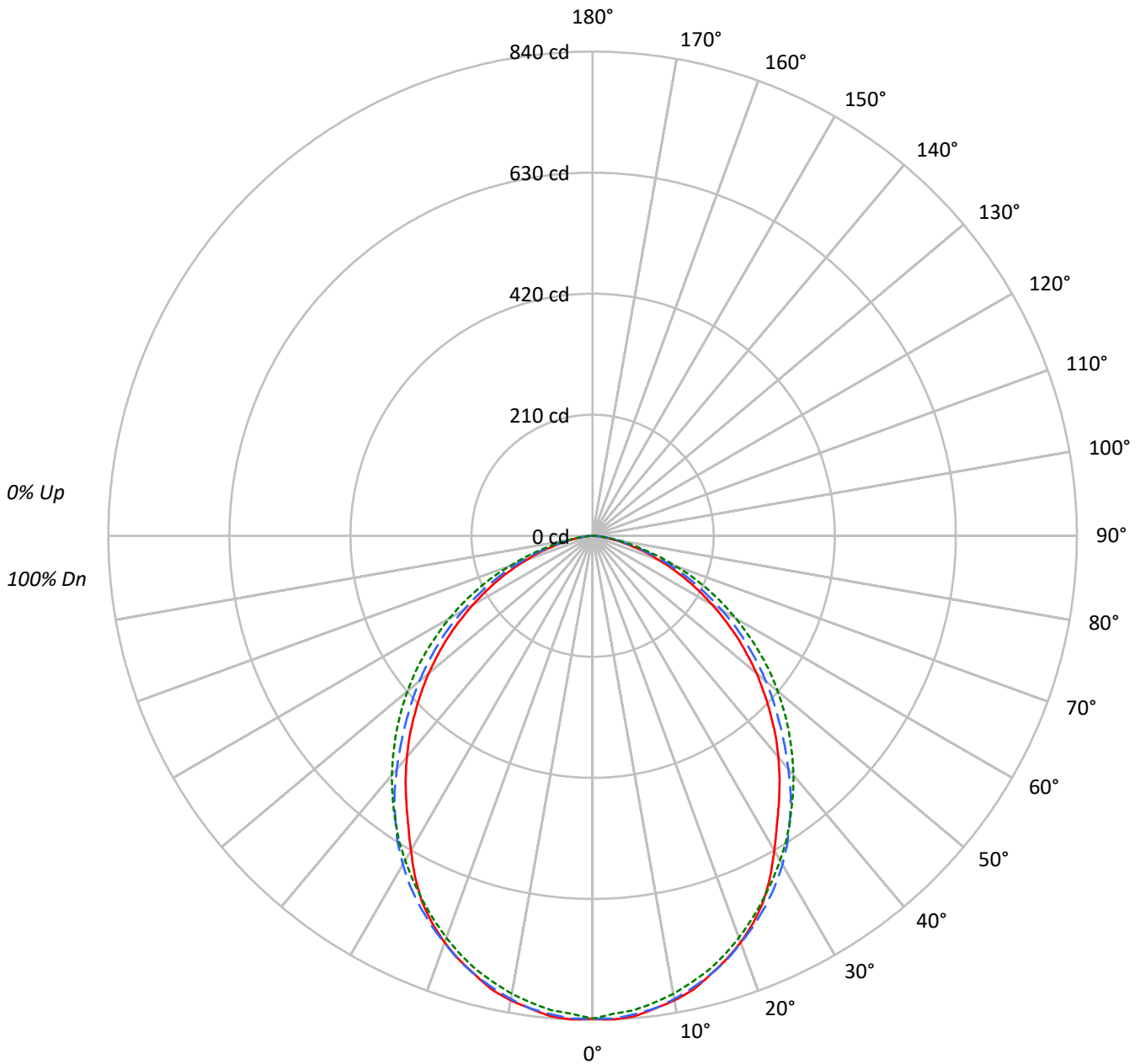
Lumens per Lamp: N/A  
Luminaire Lumens: 1937.0 lumens  
Efficiency: N/A  
Efficacy: 82.8 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 23.4  
Input Voltage (V): NR  
Input Current (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									
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°	4508	4508	4508
5°	4520	4501	4463
10°	4473	4460	4409
15°	4393	4393	4343
20°	4300	4306	4250
25°	4159	4210	4143
30°	3916	4092	4042
35°	3700	3922	3928
40°	3521	3710	3807
45°	3319	3486	3664
50°	3107	3285	3508
55°	2866	3056	3319
60°	2581	2789	3086
65°	2278	2479	2807
70°	1899	2112	2386
75°	1493	1686	1867
80°	1066	1187	1317
85°	698	698	655



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	78.9	4.1
10°-20°	221.6	11.4
20°-30°	323.8	16.7
30°-40°	367.5	19.0
40°-50°	354.8	18.3
50°-60°	292.7	15.1
60°-70°	194.9	10.1
70°-80°	87.2	4.5
80°-90°	15.6	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°	624.2	32.2
0°-40°	991.8	51.2
0°-60°	1639.3	84.6
0°-90°	1937.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1937.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	838	838	838	838	838	
5°	837	836	833	829	826	79
15°	788	790	788	785	780	222
25°	700	706	709	704	698	321
35°	563	571	597	600	598	353
45°	436	444	458	479	481	336
55°	305	311	326	344	354	273
65°	179	184	195	208	220	177
75°	72	76	81	85	90	78
85°	11	11	11	11	11	15
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	837.7	837.7	837.7	837.7	837.7
2.5°	840.0	840.3	838.3	833.2	830.0
5°	836.7	836.4	833.2	828.7	826.1
7.5°	827.4	828.0	827.1	820.6	817.1
10°	818.4	818.7	816.1	811.0	806.8
12.5°	806.8	806.5	802.9	800.4	793.6
15°	788.5	790.4	788.5	784.9	779.5
17.5°	770.8	770.8	772.1	765.9	761.8
20°	750.8	751.8	751.8	746.9	742.1
22.5°	727.6	730.5	731.5	726.4	720.6
25°	700.3	705.8	709.0	703.8	697.7
27.5°	667.1	675.5	685.2	681.3	674.5
30°	630.1	642.4	658.4	655.2	650.4
32.5°	595.0	607.3	629.5	628.2	625.6
35°	563.2	570.9	597.0	600.2	597.9
37.5°	532.9	540.0	564.5	571.9	569.9
40°	501.1	508.8	528.1	541.3	541.9
42.5°	469.5	476.9	492.7	511.7	511.7
45°	436.1	443.5	458.0	478.9	481.4
47.5°	403.2	411.0	425.1	446.0	450.2
50°	371.1	378.1	392.3	412.6	419.0
52.5°	337.6	345.3	359.2	377.8	387.2
55°	305.4	310.6	325.7	343.7	353.7
57.5°	271.9	276.8	293.8	309.3	319.6
60°	239.8	245.9	259.1	274.8	286.7
62.5°	208.9	215.3	226.6	240.4	253.9
65°	178.9	183.8	194.7	208.5	220.4
67.5°	150.0	154.2	165.1	174.7	187.3
70°	120.7	126.2	134.2	143.5	151.6
72.5°	97.2	99.4	106.2	113.0	121.3
75°	71.8	75.6	81.1	85.0	89.8
77.5°	51.5	53.7	57.0	60.2	64.7
80°	34.4	35.4	38.3	38.9	42.5
82.5°	20.9	21.6	22.2	22.5	23.8
85°	11.3	11.3	11.3	10.6	10.6
87.5°	6.4	6.4	5.5	4.5	3.2
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)