

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: P555048

Luminaire Tested: **FUSL-12-2-LD4-2LO-40-UNV-93-88-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: P555048  
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-40-UNV-93-88-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

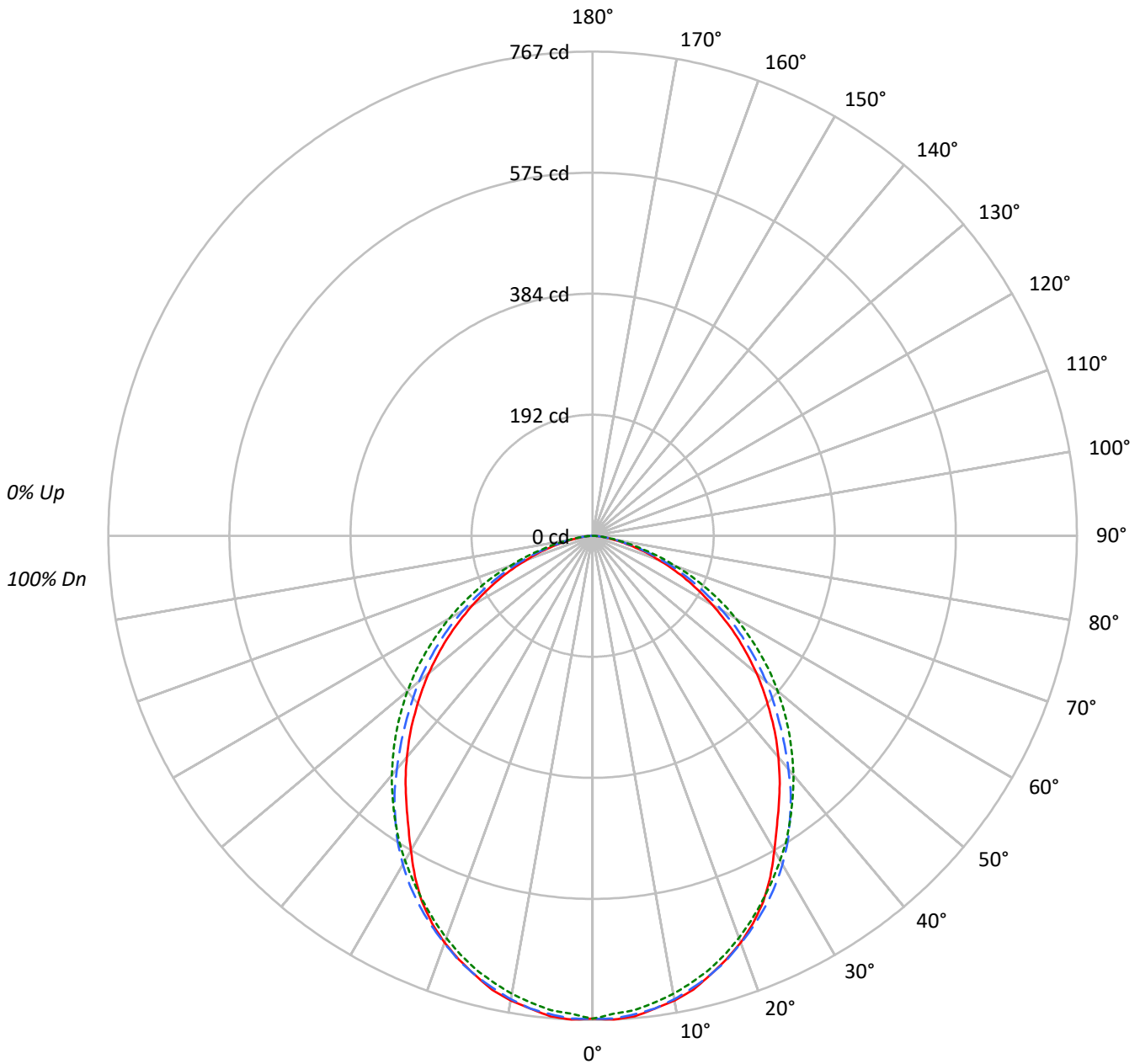
Lumens per Lamp: N/A  
Luminaire Lumens: 1769.0 lumens  
Efficiency: N/A  
Efficacy: 75.6 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 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°	4117	4117	4117
5°	4129	4111	4076
10°	4085	4074	4027
15°	4012	4012	3966
20°	3927	3932	3882
25°	3798	3845	3784
30°	3576	3737	3691
35°	3379	3582	3588
40°	3215	3388	3477
45°	3031	3183	3347
50°	2838	3000	3204
55°	2617	2791	3031
60°	2357	2547	2819
65°	2081	2264	2564
70°	1734	1929	2178
75°	1362	1541	1705
80°	973	1085	1203
85°	636	636	599



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	72.0	4.1
10°-20°	202.4	11.4
20°-30°	295.7	16.7
30°-40°	335.7	19.0
40°-50°	324.0	18.3
50°-60°	267.3	15.1
60°-70°	178.0	10.1
70°-80°	79.7	4.5
80°-90°	14.3	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°	570.1	32.2
0°-40°	905.8	51.2
0°-60°	1497.1	84.6
0°-90°	1769.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1769.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	765	765	765	765	765	
5°	764	764	761	757	754	72
15°	720	722	720	717	712	203
25°	640	644	648	643	637	293
35°	514	521	545	548	546	322
45°	398	405	418	437	440	307
55°	279	284	297	314	323	249
65°	163	168	178	190	201	162
75°	66	69	74	78	82	72
85°	10	10	10	10	10	14
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	765.0	765.0	765.0	765.0	765.0
2.5°	767.1	767.4	765.6	760.9	758.0
5°	764.2	763.9	760.9	756.8	754.5
7.5°	755.6	756.2	755.3	749.5	746.2
10°	747.4	747.7	745.4	740.7	736.8
12.5°	736.8	736.5	733.3	731.0	724.8
15°	720.1	721.8	720.1	716.8	711.8
17.5°	703.9	703.9	705.1	699.5	695.7
20°	685.7	686.6	686.6	682.2	677.8
22.5°	664.5	667.2	668.1	663.4	658.1
25°	639.5	644.5	647.5	642.8	637.2
27.5°	609.3	616.9	625.7	622.2	616.0
30°	575.5	586.6	601.3	598.4	594.0
32.5°	543.4	554.6	574.9	573.7	571.4
35°	514.3	521.4	545.2	548.1	546.1
37.5°	486.7	493.2	515.5	522.3	520.5
40°	457.6	464.7	482.3	494.4	494.9
42.5°	428.8	435.6	450.0	467.3	467.3
45°	398.2	405.0	418.2	437.3	439.7
47.5°	368.3	375.3	388.3	407.4	411.2
50°	338.9	345.3	358.3	376.8	382.7
52.5°	308.3	315.4	328.0	345.0	353.6
55°	278.9	283.6	297.4	313.9	323.0
57.5°	248.4	252.8	268.3	282.4	291.9
60°	219.0	224.5	236.6	251.0	261.9
62.5°	190.7	196.6	206.9	219.6	231.9
65°	163.4	167.8	177.8	190.5	201.3
67.5°	137.0	140.8	150.8	159.6	171.1
70°	110.2	115.2	122.6	131.1	138.4
72.5°	88.8	90.8	97.0	103.2	110.8
75°	65.5	69.1	74.1	77.6	82.0
77.5°	47.0	49.1	52.0	55.0	59.1
80°	31.4	32.3	35.0	35.6	38.8
82.5°	19.1	19.7	20.3	20.6	21.7
85°	10.3	10.3	10.3	9.7	9.7
87.5°	5.9	5.9	5.0	4.1	2.9
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)