

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: P553995

Luminaire Tested: **FUSL-12-2-LD4-1HI-40-UNV-81-94-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: P553995  
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-LD4-1HI-40-UNV-81-94-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

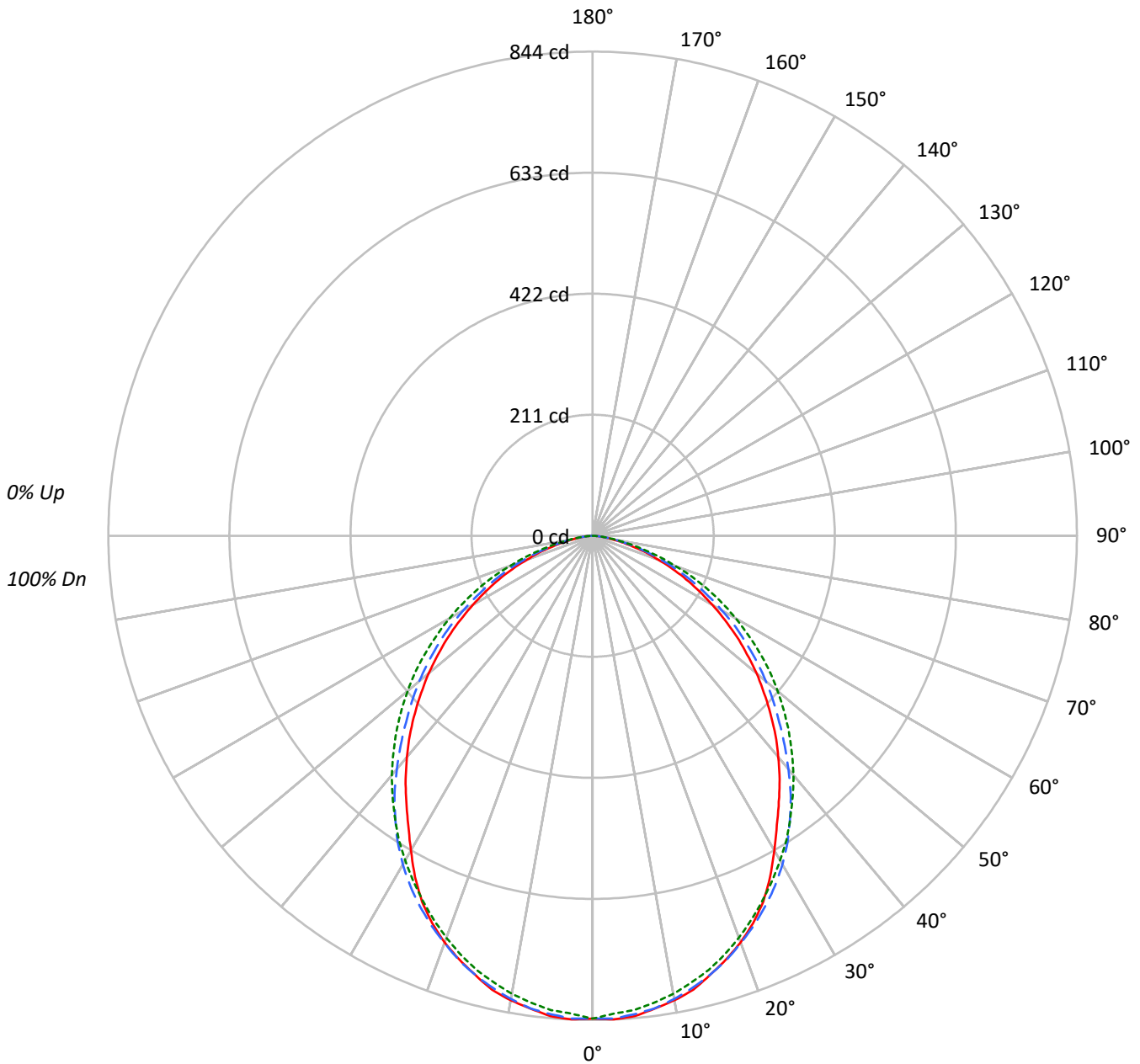
Lumens per Lamp: N/A  
Luminaire Lumens: 1946.0 lumens  
Efficiency: N/A  
Efficacy: 90.1 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 21.6  
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

TEST NUMBER: P553995

CATALOG NUMBER: FUSL-12-2-LD4-1HI-40-UNV-81-94-EDD

### Luminous Intensity Polar Plot





TEST NUMBER: P553995

CATALOG NUMBER: FUSL-12-2-LD4-1HI-40-UNV-81-94-EDD

**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°	4529	4529	4529
5°	4541	4522	4484
10°	4493	4481	4430
15°	4413	4413	4363
20°	4320	4326	4270
25°	4178	4230	4163
30°	3934	4111	4061
35°	3717	3941	3947
40°	3537	3728	3825
45°	3334	3502	3682
50°	3121	3300	3525
55°	2879	3070	3334
60°	2593	2802	3101
65°	2290	2491	2821
70°	1907	2121	2397
75°	1499	1695	1876
80°	1072	1193	1323
85°	698	698	661



TEST NUMBER: P553995

CATALOG NUMBER: FUSL-12-2-LD4-1HI-40-UNV-81-94-EDD

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.2	4.1
10°-20°	222.6	11.4
20°-30°	325.3	16.7
30°-40°	369.2	19.0
40°-50°	356.5	18.3
50°-60°	294.1	15.1
60°-70°	195.8	10.1
70°-80°	87.6	4.5
80°-90°	15.7	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°	627.1	32.2
0°-40°	996.4	51.2
0°-60°	1646.9	84.6
0°-90°	1946.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1946.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	842	842	842	842	842	
5°	841	840	837	832	830	80
15°	792	794	792	789	783	223
25°	704	709	712	707	701	322
35°	566	574	600	603	601	355
45°	438	446	460	481	484	338
55°	307	312	327	345	355	274
65°	180	185	196	210	222	178
75°	72	76	82	85	90	79
85°	11	11	11	11	11	15
90°	0	0	0	0	0	



TEST NUMBER: P553995

CATALOG NUMBER: FUSL-12-2-LD4-1HI-40-UNV-81-94-EDD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	841.6	841.6	841.6	841.6	841.6
2.5°	843.9	844.2	842.2	837.1	833.8
5°	840.6	840.3	837.1	832.5	830.0
7.5°	831.2	831.9	830.9	824.5	820.9
10°	822.2	822.5	819.9	814.8	810.6
12.5°	810.6	810.2	806.7	804.1	797.3
15°	792.1	794.1	792.1	788.6	783.1
17.5°	774.3	774.3	775.6	769.5	765.3
20°	754.3	755.3	755.3	750.4	745.6
22.5°	731.0	733.9	734.9	729.7	723.9
25°	703.5	709.0	712.3	707.1	701.0
27.5°	670.2	678.6	688.3	684.5	677.7
30°	633.1	645.3	661.5	658.3	653.4
32.5°	597.8	610.1	632.4	631.1	628.5
35°	565.8	573.6	599.8	603.0	600.7
37.5°	535.4	542.5	567.1	574.5	572.6
40°	503.4	511.2	530.6	543.8	544.5
42.5°	471.7	479.2	495.0	514.1	514.1
45°	438.1	445.5	460.1	481.1	483.7
47.5°	405.1	412.9	427.1	448.1	452.3
50°	372.8	379.9	394.1	414.5	421.0
52.5°	339.2	346.9	360.8	379.6	389.0
55°	306.8	312.0	327.2	345.3	355.3
57.5°	273.2	278.1	295.2	310.7	321.1
60°	240.9	247.0	260.3	276.1	288.1
62.5°	209.8	216.3	227.6	241.5	255.1
65°	179.8	184.6	195.6	209.5	221.5
67.5°	150.7	154.9	165.9	175.6	188.2
70°	121.2	126.7	134.8	144.2	152.3
72.5°	97.6	99.9	106.7	113.5	121.9
75°	72.1	76.0	81.5	85.4	90.2
77.5°	51.7	54.0	57.2	60.5	65.0
80°	34.6	35.6	38.5	39.1	42.7
82.5°	21.0	21.7	22.3	22.6	23.9
85°	11.3	11.3	11.3	10.7	10.7
87.5°	6.5	6.5	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)