

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: P553840

Luminaire Tested: **FUSL-12-2-LD4-1HI-30-UNV-80-84-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: P553840  
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-30-UNV-80-84-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

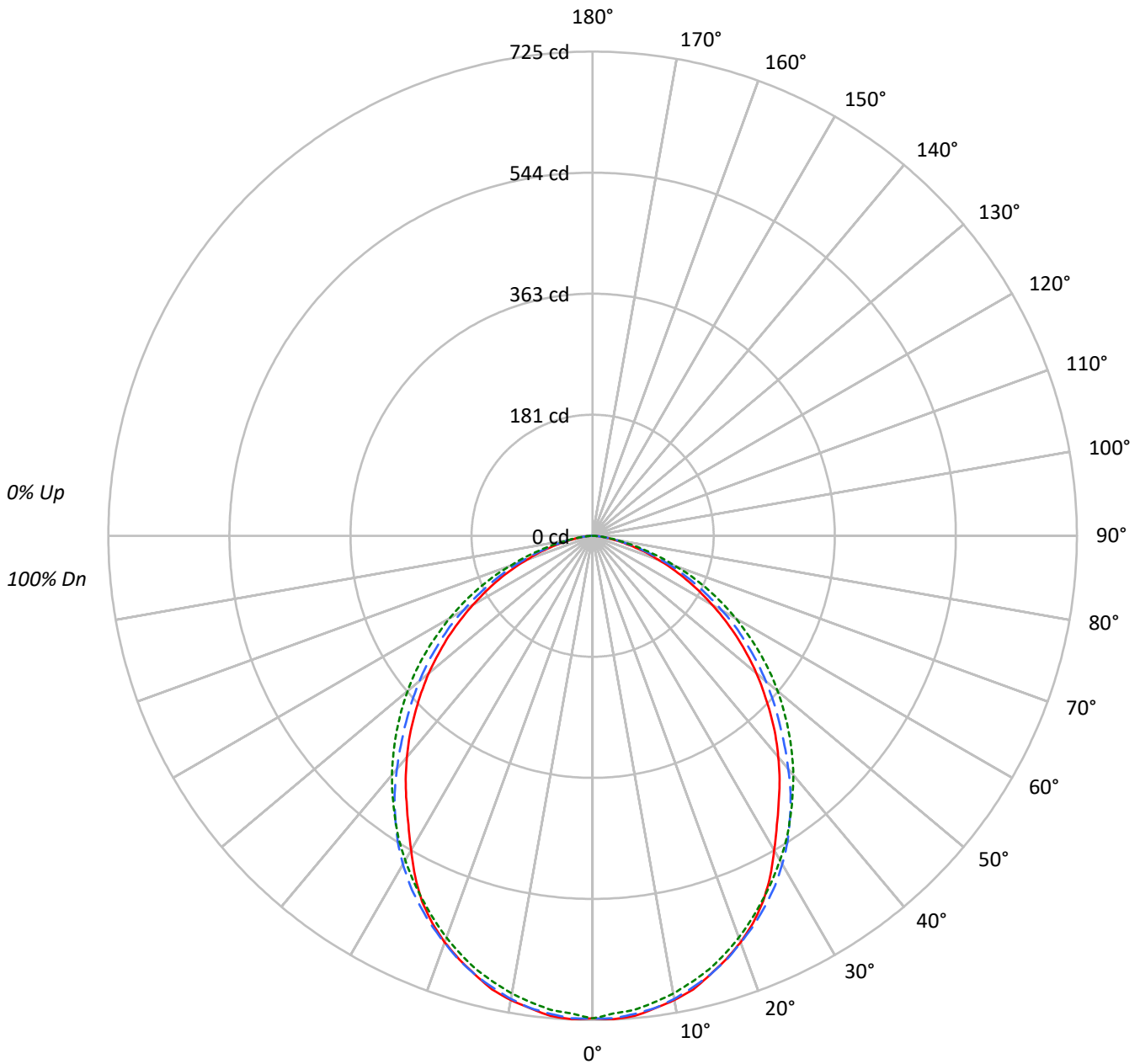
Lumens per Lamp: N/A  
Luminaire Lumens: 1671.0 lumens  
Efficiency: N/A  
Efficacy: 77.4 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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: P553840

CATALOG NUMBER: FUSL-12-2-LD4-1HI-30-UNV-80-84-EDD-90

### Luminous Intensity Polar Plot





TEST NUMBER: P553840

CATALOG NUMBER: FUSL-12-2-LD4-1HI-30-UNV-80-84-EDD-90

**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°	3890	3890	3890
5°	3900	3883	3850
10°	3858	3848	3804
15°	3790	3790	3746
20°	3710	3714	3667
25°	3587	3632	3574
30°	3378	3530	3487
35°	3192	3384	3389
40°	3037	3201	3284
45°	2863	3007	3161
50°	2680	2833	3027
55°	2472	2637	2863
60°	2226	2406	2663
65°	1966	2139	2422
70°	1638	1822	2058
75°	1287	1456	1612
80°	921	1023	1134
85°	599	599	568



TEST NUMBER: P553840

CATALOG NUMBER: FUSL-12-2-LD4-1HI-30-UNV-80-84-EDD-90

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	68.0	4.1
10°-20°	191.1	11.4
20°-30°	279.3	16.7
30°-40°	317.1	19.0
40°-50°	306.1	18.3
50°-60°	252.5	15.1
60°-70°	168.1	10.1
70°-80°	75.2	4.5
80°-90°	13.5	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°	538.5	32.2
0°-40°	855.6	51.2
0°-60°	1414.1	84.6
0°-90°	1671.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1671.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	723	723	723	723	723	
5°	722	722	719	715	713	68
15°	680	682	680	677	672	192
25°	604	609	612	607	602	277
35°	486	492	515	518	516	304
45°	376	383	395	413	415	290
55°	264	268	281	296	305	235
65°	154	158	168	180	190	153
75°	62	65	70	73	78	68
85°	10	10	10	9	9	13
90°	0	0	0	0	0	



TEST NUMBER: P553840

CATALOG NUMBER: FUSL-12-2-LD4-1HI-30-UNV-80-84-EDD-90

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	722.7	722.7	722.7	722.7	722.7
2.5°	724.6	724.9	723.2	718.8	716.0
5°	721.8	721.6	718.8	714.9	712.7
7.5°	713.8	714.3	713.5	708.0	704.9
10°	706.0	706.3	704.1	699.6	696.0
12.5°	696.0	695.7	692.7	690.5	684.6
15°	680.2	681.9	680.2	677.1	672.4
17.5°	664.9	664.9	666.0	660.8	657.1
20°	647.7	648.5	648.5	644.4	640.2
22.5°	627.7	630.2	631.0	626.6	621.6
25°	604.1	608.8	611.6	607.2	601.9
27.5°	575.5	582.7	591.1	587.7	581.9
30°	543.6	554.1	568.0	565.2	561.1
32.5°	513.3	523.9	543.0	541.9	539.7
35°	485.8	492.5	515.0	517.8	515.8
37.5°	459.8	465.9	487.0	493.3	491.7
40°	432.3	438.9	455.6	467.0	467.5
42.5°	405.1	411.4	425.0	441.4	441.4
45°	376.2	382.6	395.1	413.1	415.3
47.5°	347.9	354.5	366.7	384.8	388.4
50°	320.1	326.2	338.4	355.9	361.5
52.5°	291.2	297.9	309.8	325.9	334.0
55°	263.5	267.9	281.0	296.5	305.1
57.5°	234.6	238.8	253.5	266.8	275.7
60°	206.8	212.1	223.5	237.1	247.4
62.5°	180.2	185.7	195.4	207.4	219.0
65°	154.4	158.5	168.0	179.9	190.2
67.5°	129.4	133.0	142.4	150.8	161.6
70°	104.1	108.8	115.8	123.8	130.8
72.5°	83.8	85.8	91.6	97.4	104.7
75°	61.9	65.2	70.0	73.3	77.5
77.5°	44.4	46.4	49.1	51.9	55.8
80°	29.7	30.5	33.0	33.6	36.6
82.5°	18.0	18.6	19.2	19.4	20.5
85°	9.7	9.7	9.7	9.2	9.2
87.5°	5.6	5.6	4.7	3.9	2.8
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)