

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: P554162

Luminaire Tested: **FUSL-12-2-LD4-1LO-35-UNV-80-85-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: P554162  
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-35-UNV-80-85-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND  
.187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

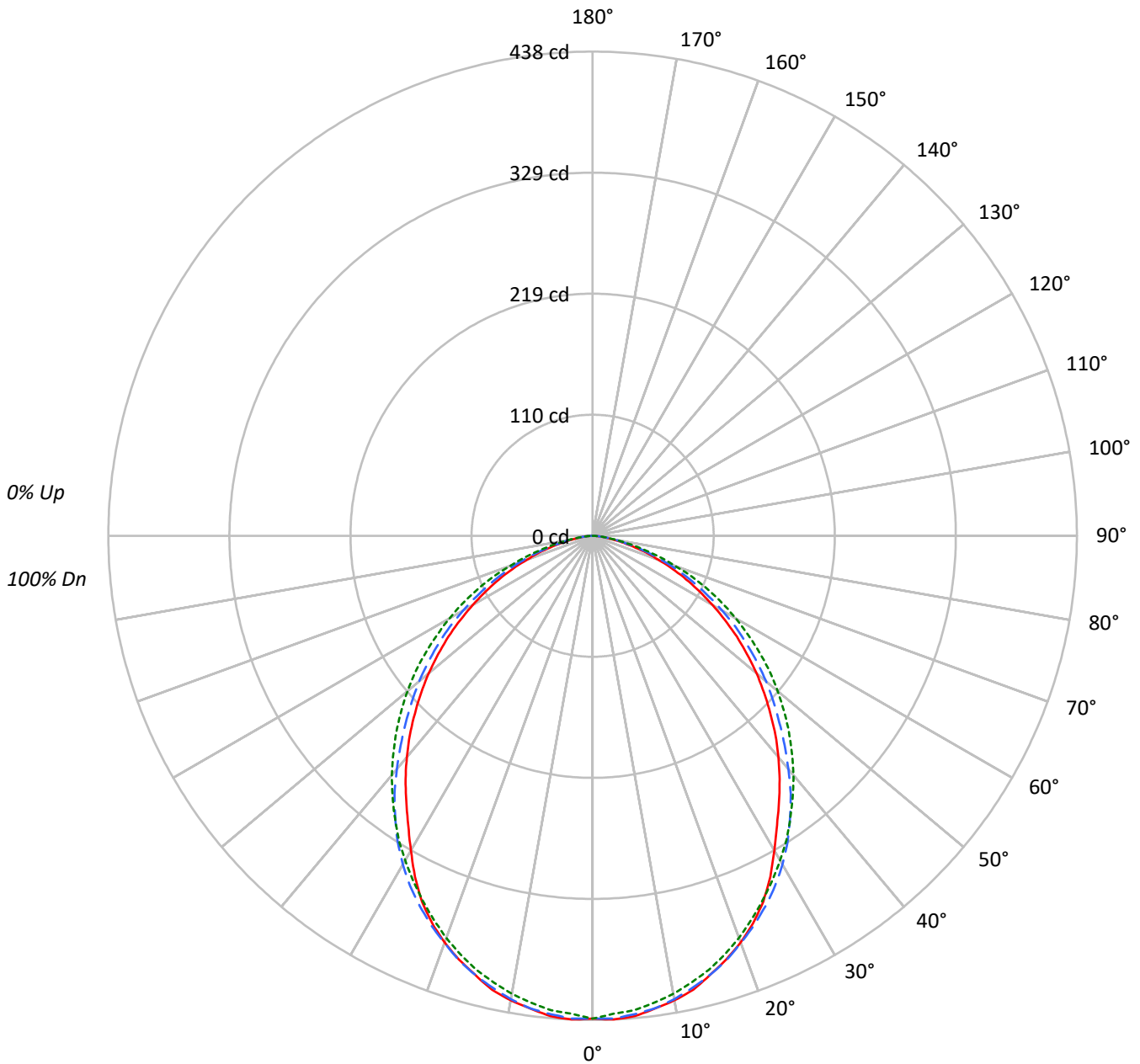
Lumens per Lamp: N/A  
Luminaire Lumens: 1010.0 lumens  
Efficiency: N/A  
Efficacy: 86.3 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 11.7  
Input Voltage (V): NR  
Input Current (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: P554162

CATALOG NUMBER: FUSL-12-2-LD4-1LO-35-UNV-80-85-EDD-90

### Luminous Intensity Polar Plot





TEST NUMBER: P554162

CATALOG NUMBER: FUSL-12-2-LD4-1LO-35-UNV-80-85-EDD-90

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				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	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°	2351	2351	2351
5°	2357	2347	2327
10°	2332	2326	2299
15°	2291	2291	2264
20°	2242	2245	2216
25°	2168	2195	2160
30°	2042	2133	2107
35°	1930	2045	2049
40°	1836	1935	1985
45°	1731	1818	1910
50°	1620	1713	1829
55°	1494	1593	1730
60°	1345	1454	1609
65°	1188	1293	1463
70°	990	1102	1243
75°	778	880	973
80°	558	620	688
85°	364	364	340



TEST NUMBER: P554162

CATALOG NUMBER: FUSL-12-2-LD4-1LO-35-UNV-80-85-EDD-90

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	41.1	4.1
10°-20°	115.5	11.4
20°-30°	168.8	16.7
30°-40°	191.6	19.0
40°-50°	185.0	18.3
50°-60°	152.6	15.1
60°-70°	101.6	10.1
70°-80°	45.5	4.5
80°-90°	8.1	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°	325.5	32.2
0°-40°	517.1	51.2
0°-60°	854.8	84.6
0°-90°	1010.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1010.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	437	437	437	437	437	
5°	436	436	434	432	431	41
15°	411	412	411	409	406	116
25°	365	368	370	367	364	167
35°	294	298	311	313	312	184
45°	227	231	239	250	251	175
55°	159	162	170	179	184	142
65°	93	96	102	109	115	93
75°	37	39	42	44	47	41
85°	6	6	6	6	6	8
90°	0	0	0	0	0	



TEST NUMBER: P554162

CATALOG NUMBER: FUSL-12-2-LD4-1LO-35-UNV-80-85-EDD-90

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	436.8	436.8	436.8	436.8	436.8
2.5°	438.0	438.1	437.1	434.4	432.8
5°	436.3	436.1	434.4	432.1	430.8
7.5°	431.4	431.8	431.3	427.9	426.1
10°	426.7	426.9	425.6	422.9	420.7
12.5°	420.7	420.5	418.7	417.3	413.8
15°	411.1	412.1	411.1	409.3	406.4
17.5°	401.9	401.9	402.6	399.4	397.2
20°	391.5	392.0	392.0	389.5	387.0
22.5°	379.4	380.9	381.4	378.7	375.7
25°	365.1	368.0	369.7	367.0	363.8
27.5°	347.9	352.2	357.3	355.2	351.7
30°	328.6	334.9	343.3	341.7	339.1
32.5°	310.3	316.6	328.2	327.6	326.2
35°	293.7	297.7	311.3	313.0	311.8
37.5°	277.9	281.6	294.3	298.2	297.2
40°	261.3	265.3	275.4	282.2	282.6
42.5°	244.8	248.7	256.9	266.8	266.8
45°	227.4	231.2	238.8	249.7	251.0
47.5°	210.3	214.3	221.7	232.6	234.8
50°	193.5	197.2	204.6	215.1	218.5
52.5°	176.0	180.1	187.3	197.0	201.9
55°	159.2	161.9	169.8	179.2	184.4
57.5°	141.8	144.3	153.2	161.3	166.6
60°	125.0	128.2	135.1	143.3	149.5
62.5°	108.9	112.3	118.1	125.4	132.4
65°	93.3	95.8	101.5	108.7	114.9
67.5°	78.2	80.4	86.1	91.1	97.7
70°	62.9	65.8	70.0	74.8	79.0
72.5°	50.7	51.9	55.4	58.9	63.3
75°	37.4	39.4	42.3	44.3	46.8
77.5°	26.8	28.0	29.7	31.4	33.7
80°	18.0	18.5	20.0	20.3	22.2
82.5°	10.9	11.2	11.6	11.7	12.4
85°	5.9	5.9	5.9	5.5	5.5
87.5°	3.4	3.4	2.9	2.3	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)