

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: P554158

Luminaire Tested: **FUSL-12-2-LD4-1LO-30-UNV-93-97-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: P554158  
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-30-UNV-93-97-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

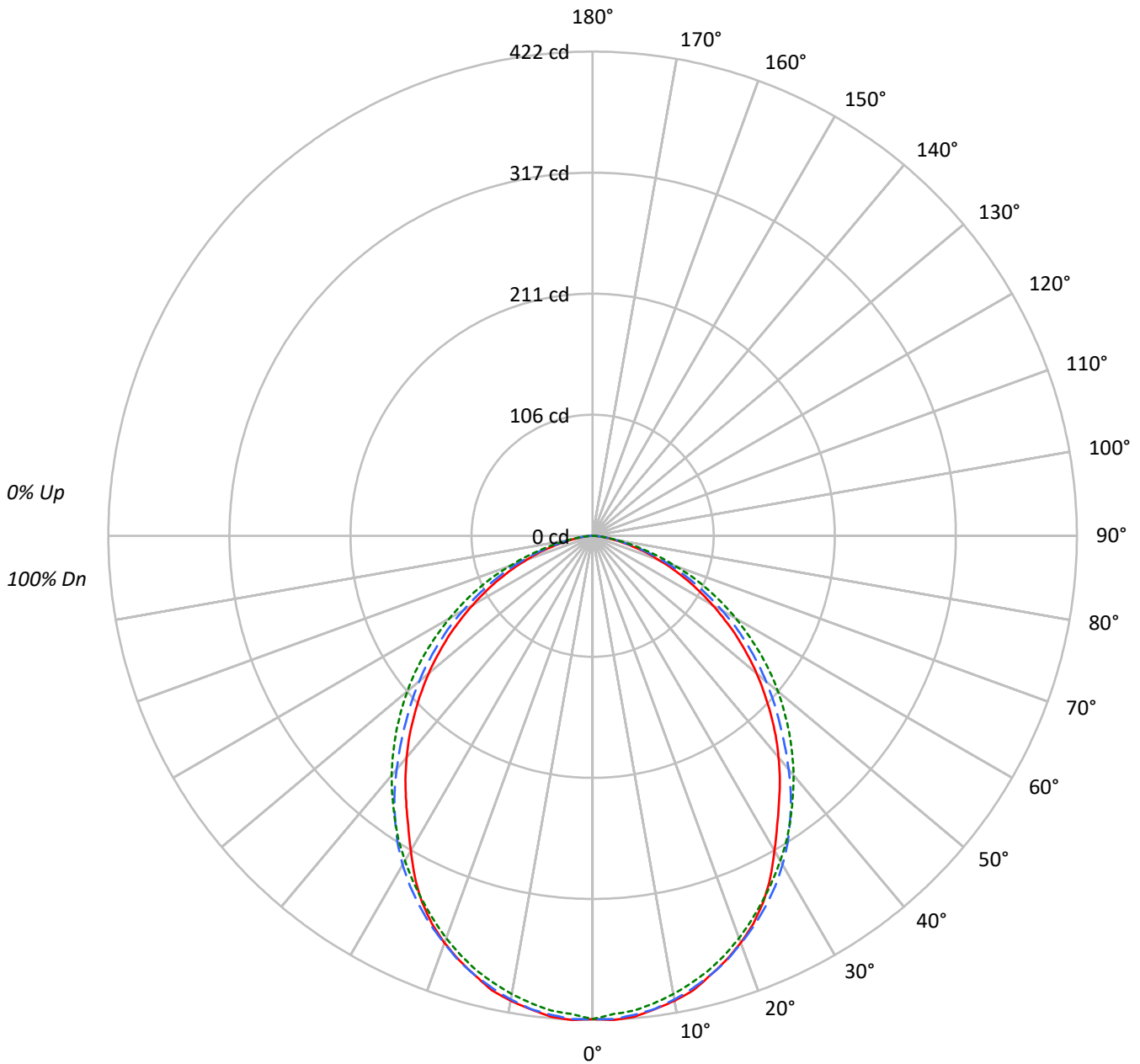
Lumens per Lamp: N/A  
Luminaire Lumens: 974.0 lumens  
Efficiency: N/A  
Efficacy: 83.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 11.7  
Input Voltage (V): NR  
Input Current (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				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°	2267	2267	2267
5°	2273	2264	2244
10°	2249	2243	2217
15°	2209	2209	2184
20°	2162	2165	2137
25°	2091	2117	2083
30°	1969	2058	2032
35°	1861	1972	1976
40°	1770	1866	1914
45°	1669	1753	1843
50°	1562	1652	1764
55°	1441	1537	1668
60°	1298	1403	1552
65°	1146	1247	1411
70°	955	1062	1199
75°	751	848	938
80°	536	598	663
85°	352	352	327



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	39.7	4.1
10°-20°	111.4	11.4
20°-30°	162.8	16.7
30°-40°	184.8	19.0
40°-50°	178.4	18.3
50°-60°	147.2	15.1
60°-70°	98.0	10.1
70°-80°	43.9	4.5
80°-90°	7.8	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°	313.9	32.2
0°-40°	498.7	51.2
0°-60°	824.3	84.6
0°-90°	974.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	974.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	421	421	421	421	421	
5°	421	421	419	417	415	40
15°	396	397	396	395	392	112
25°	352	355	356	354	351	161
35°	283	287	300	302	301	177
45°	219	223	230	241	242	169
55°	154	156	164	173	178	137
65°	90	92	98	105	111	89
75°	36	38	41	43	45	39
85°	6	6	6	5	5	8
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	421.2	421.2	421.2	421.2	421.2
2.5°	422.4	422.5	421.6	419.0	417.3
5°	420.7	420.6	419.0	416.7	415.4
7.5°	416.1	416.4	415.9	412.7	410.9
10°	411.5	411.7	410.4	407.8	405.7
12.5°	405.7	405.5	403.8	402.5	399.1
15°	396.5	397.4	396.5	394.7	391.9
17.5°	387.6	387.6	388.2	385.1	383.0
20°	377.5	378.0	378.0	375.6	373.2
22.5°	365.9	367.3	367.8	365.2	362.3
25°	352.1	354.9	356.5	353.9	350.8
27.5°	335.5	339.7	344.5	342.6	339.2
30°	316.9	323.0	331.1	329.5	327.0
32.5°	299.2	305.4	316.5	315.9	314.6
35°	283.2	287.1	300.2	301.8	300.7
37.5°	268.0	271.5	283.8	287.6	286.6
40°	252.0	255.8	265.6	272.2	272.5
42.5°	236.1	239.8	247.8	257.3	257.3
45°	219.3	223.0	230.3	240.8	242.1
47.5°	202.8	206.7	213.8	224.3	226.4
50°	186.6	190.1	197.3	207.5	210.7
52.5°	169.8	173.6	180.6	190.0	194.7
55°	153.6	156.2	163.8	172.8	177.8
57.5°	136.7	139.2	147.7	155.5	160.7
60°	120.6	123.6	130.3	138.2	144.2
62.5°	105.0	108.3	113.9	120.9	127.7
65°	90.0	92.4	97.9	104.9	110.8
67.5°	75.4	77.5	83.0	87.9	94.2
70°	60.7	63.4	67.5	72.2	76.2
72.5°	48.9	50.0	53.4	56.8	61.0
75°	36.1	38.0	40.8	42.7	45.1
77.5°	25.9	27.0	28.6	30.3	32.5
80°	17.3	17.8	19.3	19.6	21.4
82.5°	10.5	10.8	11.2	11.3	12.0
85°	5.7	5.7	5.7	5.3	5.3
87.5°	3.2	3.2	2.8	2.3	1.6
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)