

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: P554461

Luminaire Tested: **FUSL-12-2-LD4-1STD-35-UNV-82-96-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: P554461  
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-LD4-1STD-35-UNV-82-96-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDES  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

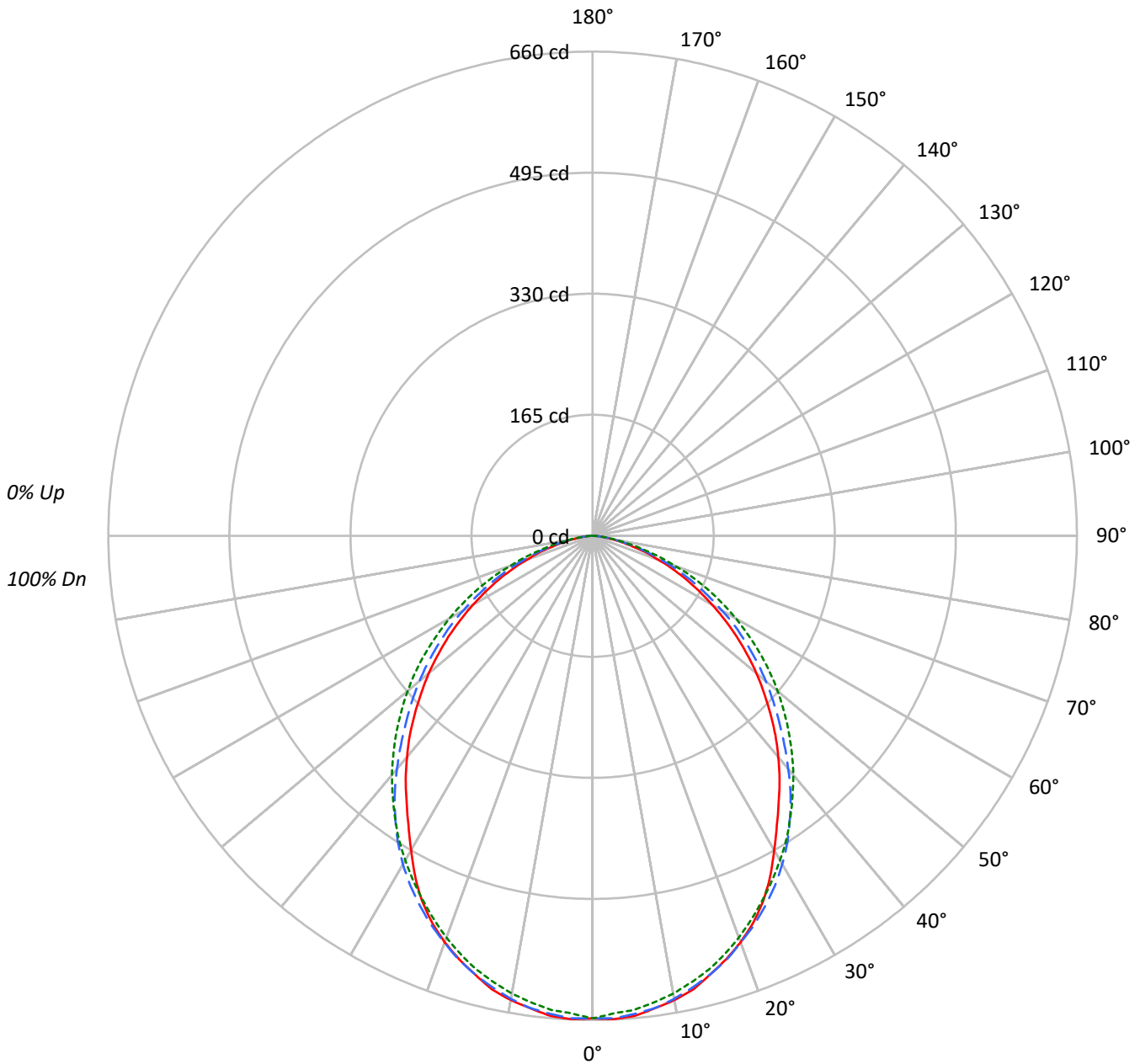
Lumens per Lamp: N/A  
Luminaire Lumens: 1521.0 lumens  
Efficiency: N/A  
Efficacy: 91.6 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 16.6  
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°	3540	3540	3540
5°	3549	3535	3505
10°	3512	3503	3462
15°	3450	3450	3411
20°	3377	3381	3337
25°	3265	3306	3254
30°	3075	3213	3174
35°	2905	3080	3085
40°	2765	2914	2990
45°	2606	2737	2877
50°	2440	2579	2755
55°	2250	2399	2606
60°	2027	2189	2424
65°	1789	1947	2204
70°	1492	1659	1873
75°	1173	1325	1466
80°	837	933	1035
85°	543	543	513



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	61.9	4.1
10°-20°	174.0	11.4
20°-30°	254.3	16.7
30°-40°	288.6	19.0
40°-50°	278.6	18.3
50°-60°	229.8	15.1
60°-70°	153.1	10.1
70°-80°	68.5	4.5
80°-90°	12.2	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°	490.2	32.2
0°-40°	778.8	51.2
0°-60°	1287.2	84.6
0°-90°	1521.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1521.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	658	658	658	658	658	
5°	657	657	654	651	649	62
15°	619	621	619	616	612	175
25°	550	554	557	553	548	252
35°	442	448	469	471	470	277
45°	342	348	360	376	378	264
55°	240	244	256	270	278	214
65°	140	144	153	164	173	139
75°	56	59	64	67	70	62
85°	9	9	9	8	8	12
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	657.8	657.8	657.8	657.8	657.8
2.5°	659.6	659.8	658.3	654.3	651.7
5°	657.0	656.8	654.3	650.7	648.7
7.5°	649.7	650.2	649.5	644.4	641.6
10°	642.6	642.9	640.9	636.8	633.5
12.5°	633.5	633.3	630.5	628.5	623.2
15°	619.1	620.6	619.1	616.3	612.1
17.5°	605.2	605.2	606.2	601.4	598.2
20°	589.6	590.3	590.3	586.5	582.7
22.5°	571.4	573.6	574.4	570.4	565.8
25°	549.9	554.2	556.7	552.7	547.9
27.5°	523.9	530.4	538.0	535.0	529.7
30°	494.8	504.4	517.0	514.5	510.7
32.5°	467.3	476.9	494.3	493.3	491.3
35°	442.2	448.3	468.8	471.3	469.5
37.5°	418.5	424.0	443.2	449.1	447.5
40°	393.5	399.5	414.7	425.1	425.6
42.5°	368.7	374.5	386.9	401.8	401.8
45°	342.4	348.2	359.6	376.0	378.0
47.5°	316.6	322.7	333.8	350.3	353.5
50°	291.4	296.9	308.0	324.0	329.0
52.5°	265.1	271.2	282.0	296.7	304.0
55°	239.8	243.9	255.7	269.9	277.7
57.5°	213.5	217.3	230.7	242.9	250.9
60°	188.3	193.1	203.4	215.8	225.2
62.5°	164.0	169.1	177.9	188.8	199.4
65°	140.5	144.3	152.9	163.8	173.1
67.5°	117.8	121.0	129.6	137.2	147.1
70°	94.8	99.1	105.4	112.7	119.0
72.5°	76.3	78.1	83.4	88.7	95.3
75°	56.4	59.4	63.7	66.7	70.5
77.5°	40.4	42.2	44.7	47.3	50.8
80°	27.0	27.8	30.1	30.6	33.4
82.5°	16.4	16.9	17.4	17.7	18.7
85°	8.8	8.8	8.8	8.3	8.3
87.5°	5.1	5.1	4.3	3.5	2.5
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)