

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: P555857

Luminaire Tested: **FUSL-12-2-LD4-3LO-50-UNV-82-84-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: P555857  
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-LD4-3LO-50-UNV-82-84-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

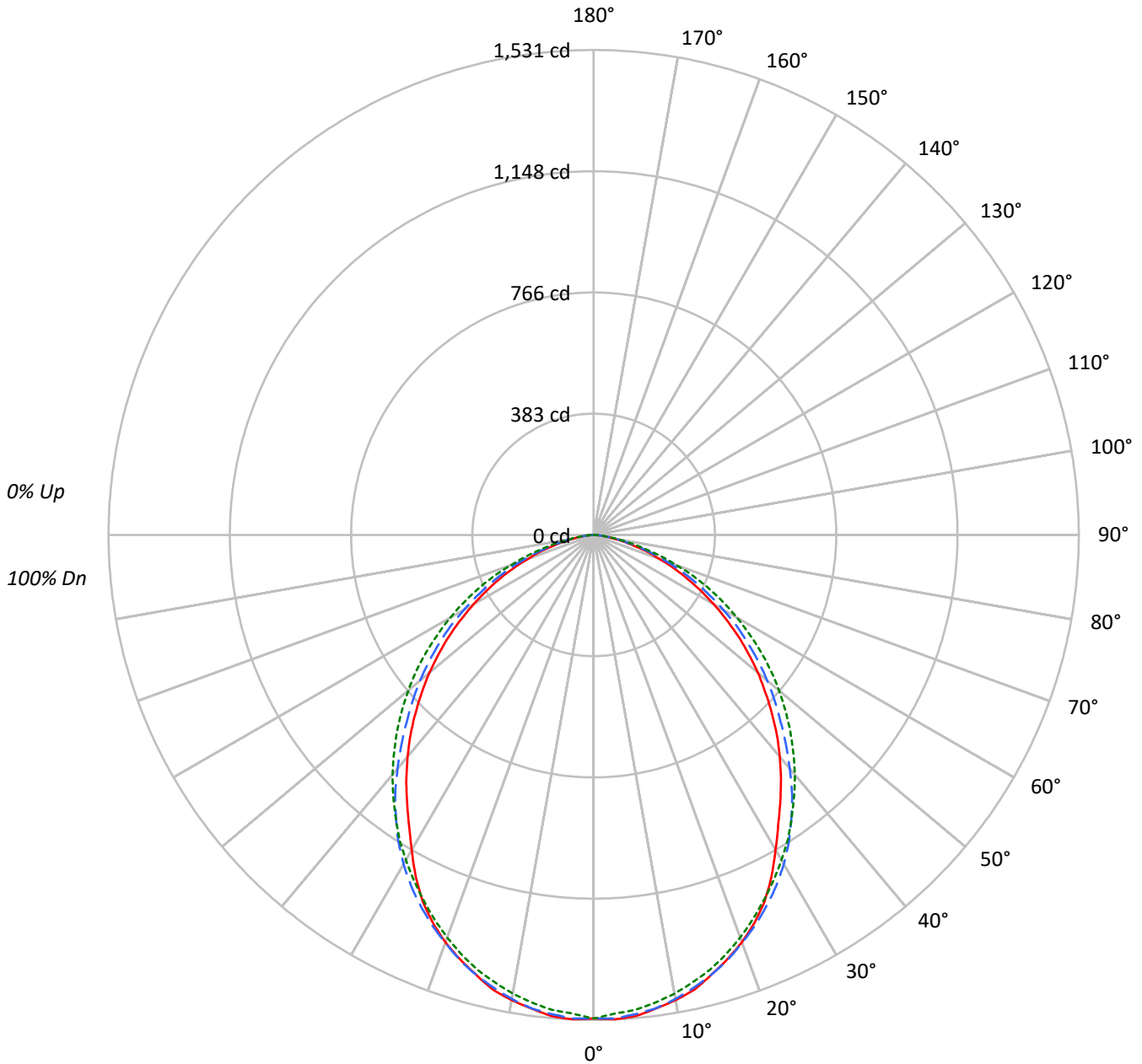
Lumens per Lamp: N/A  
Luminaire Lumens: 3530.0 lumens  
Efficiency: N/A  
Efficacy: 100.6 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 35.1  
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

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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°	8216	8216	8216
5°	8238	8203	8133
10°	8150	8128	8035
15°	8006	8006	7915
20°	7837	7846	7746
25°	7579	7672	7551
30°	7136	7457	7366
35°	6744	7148	7160
40°	6416	6761	6939
45°	6049	6352	6678
50°	5662	5986	6394
55°	5223	5569	6048
60°	4703	5082	5625
65°	4153	4518	5116
70°	3460	3849	4346
75°	2720	3073	3402
80°	1946	2163	2399
85°	1266	1266	1198



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	143.7	4.1
10°-20°	403.8	11.4
20°-30°	590.1	16.7
30°-40°	669.8	19.0
40°-50°	646.6	18.3
50°-60°	533.4	15.1
60°-70°	355.2	10.1
70°-80°	158.9	4.5
80°-90°	28.4	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°	1137.6	32.2
0°-40°	1807.4	51.2
0°-60°	2987.4	84.6
0°-90°	3530.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3530.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1527	1527	1527	1527	1527	
5°	1525	1524	1518	1510	1506	144
15°	1437	1440	1437	1430	1420	405
25°	1276	1286	1292	1283	1272	584
35°	1026	1040	1088	1094	1090	643
45°	795	808	835	873	877	613
55°	557	566	594	626	645	497
65°	326	335	355	380	402	323
75°	131	138	148	155	164	143
85°	20	20	20	19	19	28
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1526.6	1526.6	1526.6	1526.6	1526.6
2.5°	1530.7	1531.3	1527.8	1518.4	1512.6
5°	1524.9	1524.3	1518.4	1510.2	1505.5
7.5°	1507.9	1509.0	1507.3	1495.5	1489.1
10°	1491.4	1492.0	1487.3	1478.0	1470.3
12.5°	1470.3	1469.7	1463.3	1458.6	1446.3
15°	1436.9	1440.4	1436.9	1430.4	1420.5
17.5°	1404.6	1404.6	1407.0	1395.8	1388.2
20°	1368.3	1370.0	1370.0	1361.2	1352.4
22.5°	1326.1	1331.3	1333.1	1323.7	1313.2
25°	1276.2	1286.2	1292.0	1282.7	1271.5
27.5°	1215.8	1231.0	1248.6	1241.6	1229.3
30°	1148.3	1170.6	1200.0	1194.1	1185.3
32.5°	1084.4	1106.7	1147.2	1144.8	1140.1
35°	1026.4	1040.4	1087.9	1093.8	1089.7
37.5°	971.2	984.1	1028.7	1042.2	1038.7
40°	913.2	927.2	962.4	986.5	987.6
42.5°	855.7	869.2	897.9	932.5	932.5
45°	794.7	808.2	834.6	872.7	877.4
47.5°	734.9	748.9	774.8	812.9	820.5
50°	676.2	689.1	714.9	751.9	763.6
52.5°	615.2	629.3	654.5	688.5	705.5
55°	556.6	566.0	593.5	626.4	644.6
57.5°	495.6	504.4	535.5	563.6	582.4
60°	436.9	448.1	472.1	500.9	522.6
62.5°	380.6	392.4	412.9	438.1	462.7
65°	326.1	334.9	354.8	380.0	401.7
67.5°	273.3	280.9	300.9	318.5	341.3
70°	219.9	229.9	244.6	261.6	276.2
72.5°	177.1	181.2	193.5	205.9	221.1
75°	130.8	137.8	147.8	154.8	163.6
77.5°	93.8	97.9	103.8	109.7	117.9
80°	62.8	64.5	69.8	71.0	77.4
82.5°	38.1	39.3	40.5	41.1	43.4
85°	20.5	20.5	20.5	19.4	19.4
87.5°	11.7	11.7	10.0	8.2	5.9
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)