

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: P555840

Luminaire Tested: **FUSL-12-2-LD4-3LO-50-UNV-81-84-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: P555840  
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-81-84-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

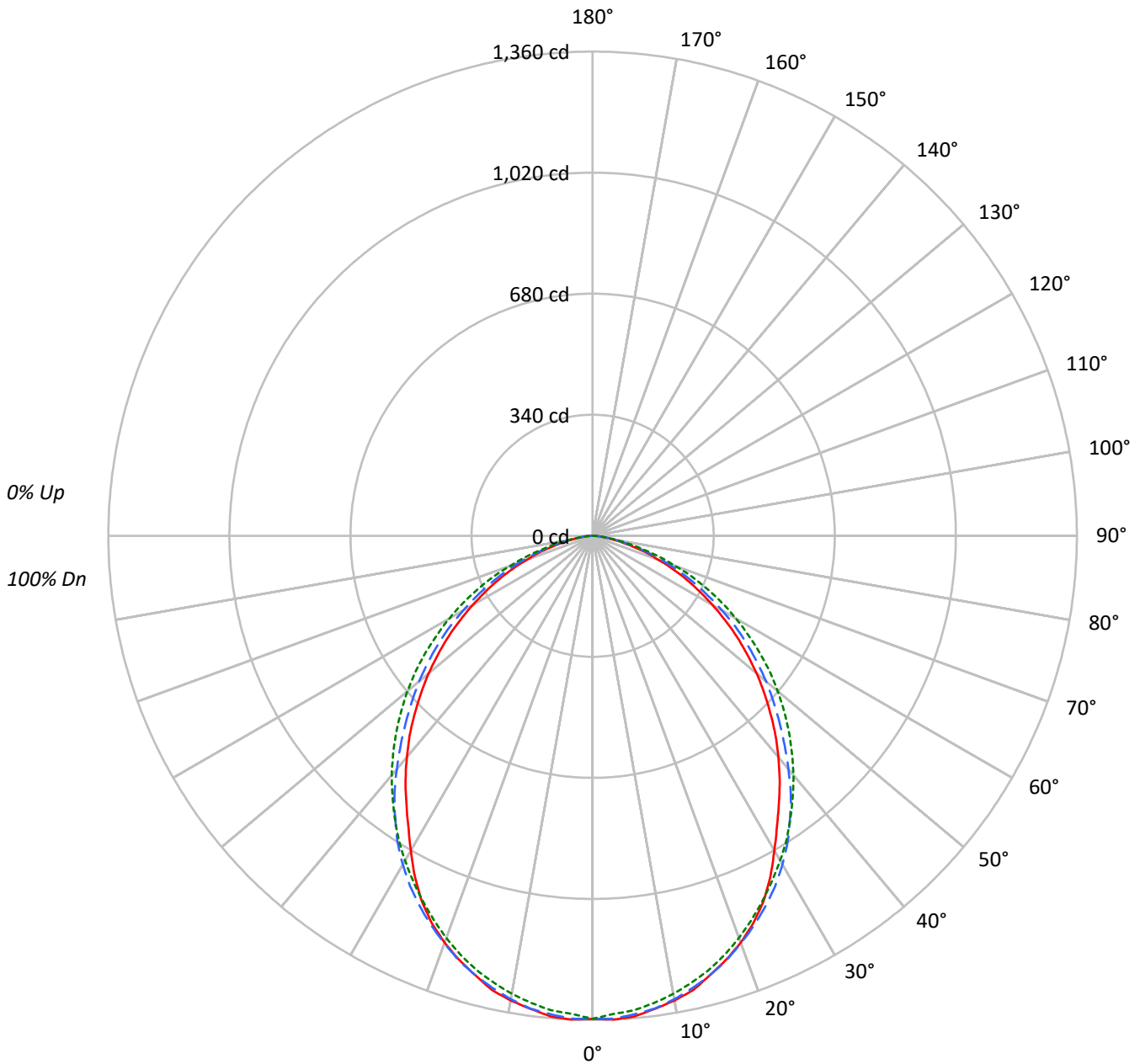
Lumens per Lamp: N/A  
Luminaire Lumens: 3137.0 lumens  
Efficiency: N/A  
Efficacy: 89.4 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 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°	7302	7302	7302
5°	7321	7290	7228
10°	7243	7224	7141
15°	7115	7115	7033
20°	6964	6973	6884
25°	6735	6818	6710
30°	6342	6627	6546
35°	5993	6352	6363
40°	5701	6009	6166
45°	5375	5645	5934
50°	5031	5319	5682
55°	4641	4949	5375
60°	4180	4517	4999
65°	3691	4015	4546
70°	3075	3419	3863
75°	2416	2730	3023
80°	1729	1922	2132
85°	1124	1124	1062



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	127.7	4.1
10°-20°	358.8	11.4
20°-30°	524.4	16.7
30°-40°	595.2	19.0
40°-50°	574.6	18.3
50°-60°	474.0	15.1
60°-70°	315.7	10.1
70°-80°	141.2	4.5
80°-90°	25.3	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°	1011.0	32.2
0°-40°	1606.2	51.2
0°-60°	2654.8	84.6
0°-90°	3137.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3137.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1357	1357	1357	1357	1357	
5°	1355	1355	1349	1342	1338	128
15°	1277	1280	1277	1271	1262	360
25°	1134	1143	1148	1140	1130	519
35°	912	925	967	972	968	571
45°	706	718	742	776	780	545
55°	495	503	527	557	573	441
65°	290	298	315	338	357	287
75°	116	122	131	138	145	127
85°	18	18	18	17	17	25
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1356.7	1356.7	1356.7	1356.7	1356.7
2.5°	1360.3	1360.8	1357.7	1349.4	1344.2
5°	1355.1	1354.6	1349.4	1342.1	1337.9
7.5°	1340.0	1341.0	1339.5	1329.0	1323.3
10°	1325.4	1325.9	1321.8	1313.4	1306.6
12.5°	1306.6	1306.1	1300.4	1296.2	1285.3
15°	1276.9	1280.1	1276.9	1271.2	1262.3
17.5°	1248.3	1248.3	1250.3	1240.4	1233.7
20°	1215.9	1217.5	1217.5	1209.7	1201.9
22.5°	1178.4	1183.1	1184.7	1176.3	1167.0
25°	1134.1	1143.0	1148.2	1139.9	1130.0
27.5°	1080.4	1094.0	1109.6	1103.4	1092.4
30°	1020.5	1040.3	1066.4	1061.2	1053.3
32.5°	963.7	983.5	1019.5	1017.4	1013.2
35°	912.1	924.6	966.8	972.0	968.4
37.5°	863.1	874.6	914.2	926.2	923.0
40°	811.5	824.0	855.3	876.7	877.7
42.5°	760.4	772.4	798.0	828.7	828.7
45°	706.2	718.2	741.7	775.5	779.7
47.5°	653.1	665.6	688.5	722.4	729.2
50°	600.9	612.4	635.3	668.2	678.6
52.5°	546.7	559.2	581.7	611.9	627.0
55°	494.6	503.0	527.4	556.6	572.8
57.5°	440.4	448.2	475.9	500.9	517.5
60°	388.3	398.2	419.6	445.1	464.4
62.5°	338.3	348.7	366.9	389.3	411.2
65°	289.8	297.6	315.3	337.7	357.0
67.5°	242.9	249.7	267.4	283.0	303.3
70°	195.4	204.3	217.3	232.5	245.5
72.5°	157.4	161.0	172.0	182.9	196.5
75°	116.2	122.5	131.3	137.6	145.4
77.5°	83.4	87.0	92.3	97.5	104.8
80°	55.8	57.3	62.0	63.1	68.8
82.5°	33.9	34.9	36.0	36.5	38.6
85°	18.2	18.2	18.2	17.2	17.2
87.5°	10.4	10.4	8.9	7.3	5.2
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)