

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: P554840

Luminaire Tested: **FUSL-12-2-LD4-2HI-50-UNV-82-88-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: P554840  
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-LD4-2HI-50-UNV-82-88-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

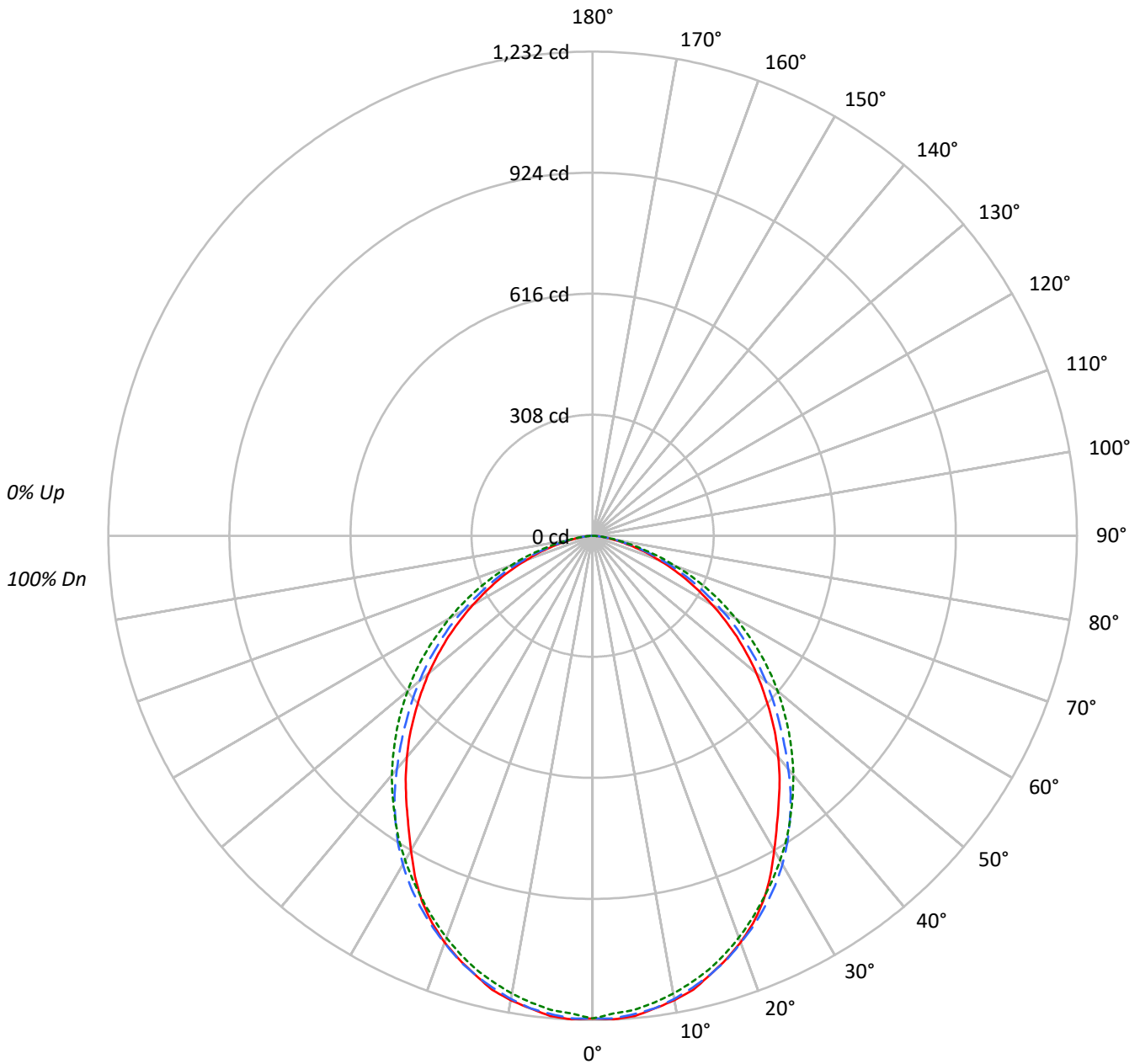
Lumens per Lamp: N/A  
Luminaire Lumens: 2840.0 lumens  
Efficiency: N/A  
Efficacy: 65.7 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 43.2  
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: P554840

CATALOG NUMBER: FUSL-12-2-LD4-2HI-50-UNV-82-88-EDD-90

### Luminous Intensity Polar Plot





TEST NUMBER: P554840

CATALOG NUMBER: FUSL-12-2-LD4-2HI-50-UNV-82-88-EDD-90

**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°	6610	6610	6610
5°	6628	6600	6544
10°	6557	6539	6465
15°	6441	6441	6367
20°	6305	6313	6232
25°	6097	6173	6075
30°	5742	6000	5926
35°	5425	5751	5760
40°	5162	5440	5583
45°	4867	5110	5373
50°	4555	4816	5143
55°	4202	4480	4866
60°	3784	4088	4525
65°	3340	3636	4116
70°	2784	3097	3496
75°	2188	2472	2737
80°	1565	1742	1931
85°	1019	1019	963



TEST NUMBER: P554840

CATALOG NUMBER: FUSL-12-2-LD4-2HI-50-UNV-82-88-EDD-90

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	115.6	4.1
10°-20°	324.9	11.4
20°-30°	474.7	16.7
30°-40°	538.9	19.0
40°-50°	520.2	18.3
50°-60°	429.1	15.1
60°-70°	285.8	10.1
70°-80°	127.9	4.5
80°-90°	22.9	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°	915.3	32.2
0°-40°	1454.1	51.2
0°-60°	2403.5	84.6
0°-90°	2840.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2840.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1228	1228	1228	1228	1228	
5°	1227	1226	1222	1215	1211	116
15°	1156	1159	1156	1151	1143	326
25°	1027	1035	1040	1032	1023	470
35°	826	837	875	880	877	517
45°	639	650	671	702	706	493
55°	448	455	478	504	519	400
65°	262	269	286	306	323	260
75°	105	111	119	125	132	115
85°	16	16	16	16	16	22
90°	0	0	0	0	0	



TEST NUMBER: P554840

CATALOG NUMBER: FUSL-12-2-LD4-2HI-50-UNV-82-88-EDD-90

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1228.2	1228.2	1228.2	1228.2	1228.2
2.5°	1231.5	1232.0	1229.2	1221.6	1216.9
5°	1226.8	1226.3	1221.6	1215.0	1211.2
7.5°	1213.1	1214.1	1212.7	1203.2	1198.0
10°	1199.9	1200.4	1196.6	1189.1	1182.9
12.5°	1182.9	1182.5	1177.3	1173.5	1163.6
15°	1156.0	1158.9	1156.0	1150.8	1142.8
17.5°	1130.1	1130.1	1132.0	1123.0	1116.9
20°	1100.8	1102.2	1102.2	1095.2	1088.1
22.5°	1066.9	1071.1	1072.5	1065.0	1056.5
25°	1026.7	1034.8	1039.5	1031.9	1023.0
27.5°	978.1	990.4	1004.6	998.9	989.0
30°	923.9	941.8	965.4	960.7	953.6
32.5°	872.5	890.4	922.9	921.1	917.3
35°	825.7	837.1	875.3	880.0	876.7
37.5°	781.4	791.8	827.6	838.5	835.6
40°	734.7	746.0	774.3	793.7	794.6
42.5°	688.4	699.3	722.4	750.2	750.2
45°	639.4	650.2	671.4	702.1	705.9
47.5°	591.2	602.6	623.3	654.0	660.1
50°	544.0	554.4	575.2	604.9	614.3
52.5°	495.0	506.3	526.6	554.0	567.6
55°	447.8	455.3	477.5	503.9	518.6
57.5°	398.7	405.8	430.8	453.4	468.5
60°	351.5	360.5	379.8	403.0	420.4
62.5°	306.2	315.7	332.2	352.5	372.3
65°	262.3	269.4	285.5	305.8	323.2
67.5°	219.9	226.0	242.1	256.2	274.6
70°	176.9	185.0	196.8	210.4	222.2
72.5°	142.5	145.8	155.7	165.6	177.9
75°	105.2	110.9	118.9	124.6	131.6
77.5°	75.5	78.8	83.5	88.2	94.8
80°	50.5	51.9	56.2	57.1	62.3
82.5°	30.7	31.6	32.6	33.0	34.9
85°	16.5	16.5	16.5	15.6	15.6
87.5°	9.4	9.4	8.0	6.6	4.7
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)