

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: P554832

Luminaire Tested: **FUSL-12-2-LD4-2HI-50-UNV-82-84-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: P554832  
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-82-84-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .187 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**

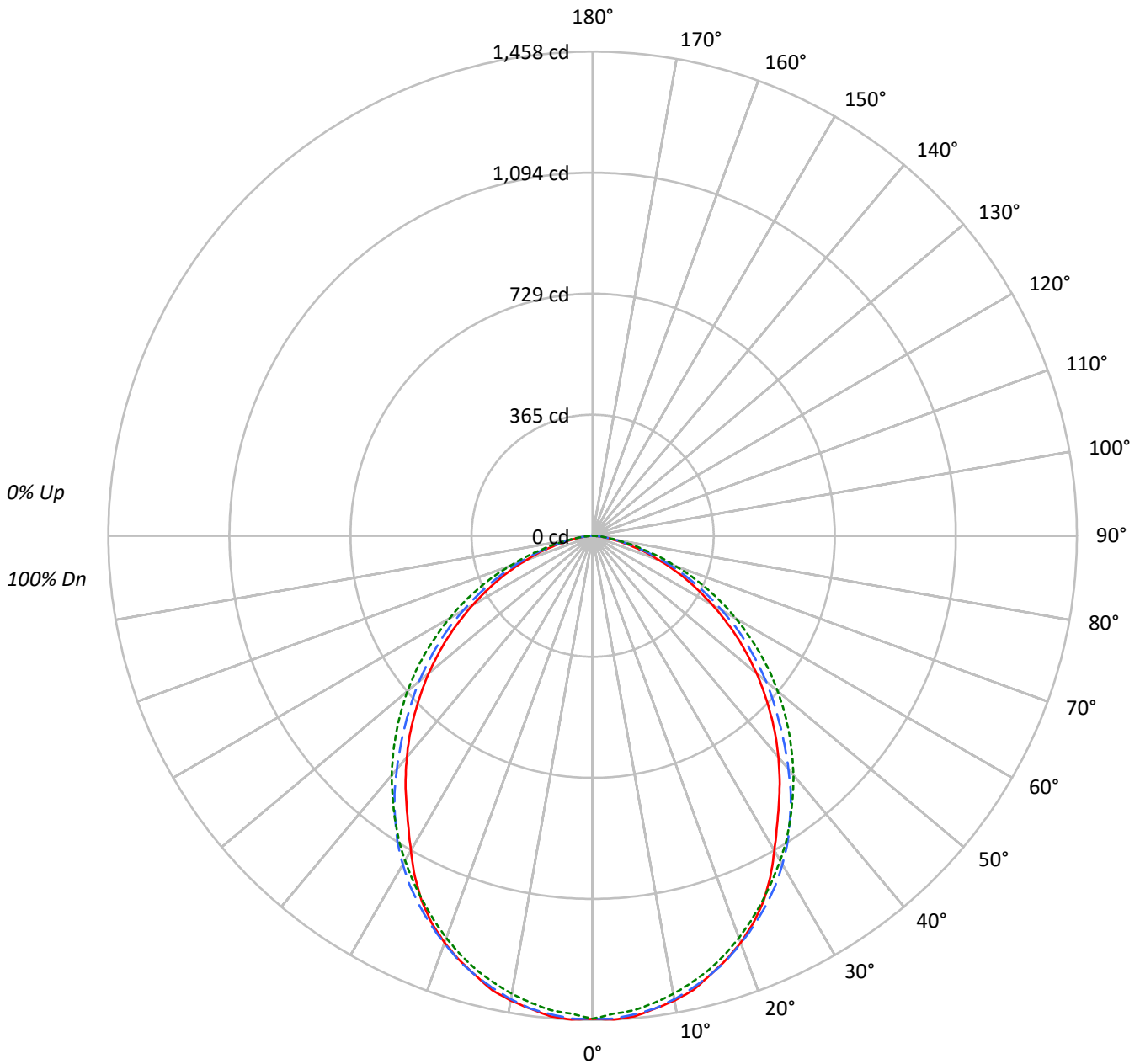
Lumens per Lamp: N/A  
Luminaire Lumens: 3363.0 lumens  
Efficiency: N/A  
Efficacy: 77.8 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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

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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°	7828	7828	7828
5°	7848	7815	7749
10°	7765	7744	7655
15°	7627	7627	7540
20°	7466	7475	7380
25°	7220	7309	7194
30°	6799	7104	7017
35°	6424	6810	6820
40°	6112	6442	6610
45°	5762	6052	6362
50°	5394	5703	6091
55°	4975	5305	5762
60°	4481	4842	5358
65°	3957	4304	4874
70°	3297	3666	4142
75°	2591	2928	3242
80°	1853	2061	2287
85°	1210	1210	1136



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	136.9	4.1
10°-20°	384.7	11.4
20°-30°	562.2	16.7
30°-40°	638.1	19.0
40°-50°	616.0	18.3
50°-60°	508.2	15.1
60°-70°	338.4	10.1
70°-80°	151.4	4.5
80°-90°	27.1	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°	1083.8	32.2
0°-40°	1721.9	51.2
0°-60°	2846.1	84.6
0°-90°	3363.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3363.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1454	1454	1454	1454	1454	
5°	1453	1452	1447	1439	1434	137
15°	1369	1372	1369	1363	1353	386
25°	1216	1225	1231	1222	1211	557
35°	978	991	1036	1042	1038	613
45°	757	770	795	831	836	584
55°	530	539	565	597	614	473
65°	311	319	338	362	383	308
75°	125	131	141	148	156	136
85°	20	20	20	18	18	26
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1454.4	1454.4	1454.4	1454.4	1454.4
2.5°	1458.3	1458.9	1455.5	1446.6	1441.0
5°	1452.7	1452.2	1446.6	1438.8	1434.3
7.5°	1436.5	1437.6	1436.0	1424.8	1418.7
10°	1420.9	1421.4	1417.0	1408.0	1400.8
12.5°	1400.8	1400.2	1394.1	1389.6	1377.9
15°	1368.9	1372.3	1368.9	1362.8	1353.3
17.5°	1338.2	1338.2	1340.4	1329.8	1322.5
20°	1303.5	1305.2	1305.2	1296.8	1288.5
22.5°	1263.3	1268.3	1270.0	1261.1	1251.0
25°	1215.8	1225.3	1230.9	1222.0	1211.4
27.5°	1158.3	1172.8	1189.6	1182.9	1171.1
30°	1094.0	1115.3	1143.2	1137.6	1129.2
32.5°	1033.1	1054.3	1092.9	1090.7	1086.2
35°	977.8	991.2	1036.5	1042.1	1038.1
37.5°	925.3	937.6	980.0	992.9	989.5
40°	870.0	883.4	916.9	939.8	940.9
42.5°	815.2	828.1	855.4	888.4	888.4
45°	757.1	769.9	795.1	831.4	835.9
47.5°	700.1	713.5	738.1	774.4	781.7
50°	644.2	656.5	681.1	716.3	727.5
52.5°	586.1	599.5	623.6	656.0	672.2
55°	530.2	539.2	565.4	596.7	614.1
57.5°	472.1	480.5	510.1	537.0	554.8
60°	416.3	426.9	449.8	477.2	497.8
62.5°	362.6	373.8	393.4	417.4	440.8
65°	310.7	319.0	338.0	362.1	382.7
67.5°	260.4	267.6	286.6	303.4	325.2
70°	209.5	219.0	233.0	249.2	263.2
72.5°	168.7	172.7	184.4	196.1	210.6
75°	124.6	131.3	140.8	147.5	155.9
77.5°	89.4	93.3	98.9	104.5	112.3
80°	59.8	61.5	66.5	67.6	73.8
82.5°	36.3	37.4	38.6	39.1	41.3
85°	19.6	19.6	19.6	18.4	18.4
87.5°	11.2	11.2	9.5	7.8	5.6
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)