

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: P555585

Luminaire Tested: **FUSL-12-2-LD4-3HI-50-UNV-81-84-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: P555585  
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-LD4-3HI-50-UNV-81-84-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 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**

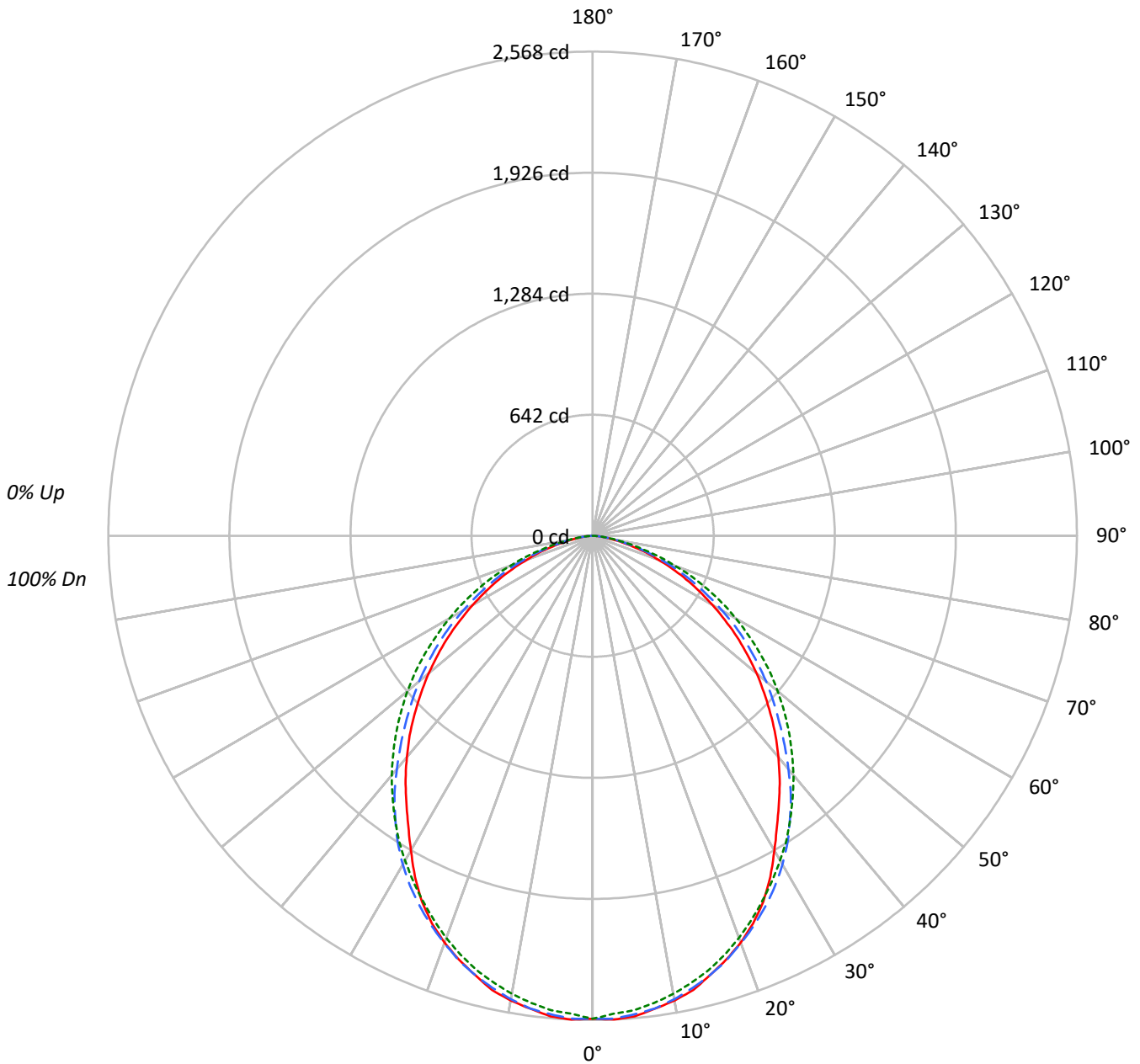
Lumens per Lamp: N/A  
Luminaire Lumens: 5923.0 lumens  
Efficiency: N/A  
Efficacy: 91.4 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 64.8  
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°	13786	13786	13786
5°	13823	13765	13647
10°	13676	13638	13483
15°	13434	13434	13280
20°	13149	13166	12997
25°	12716	12874	12669
30°	11974	12512	12359
35°	11314	11994	12013
40°	10765	11346	11643
45°	10149	10658	11205
50°	9500	10044	10728
55°	8763	9345	10148
60°	7891	8527	9438
65°	6967	7582	8585
70°	5807	6458	7294
75°	4562	5157	5710
80°	3264	3629	4026
85°	2124	2124	2007



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	241.2	4.1
10°-20°	677.5	11.4
20°-30°	990.1	16.7
30°-40°	1123.9	19.0
40°-50°	1084.9	18.3
50°-60°	895.0	15.1
60°-70°	596.0	10.1
70°-80°	266.7	4.5
80°-90°	47.7	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°	1908.8	32.2
0°-40°	3032.7	51.2
0°-60°	5012.6	84.6
0°-90°	5923.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5923.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2562	2562	2562	2562	2562	
5°	2559	2558	2548	2534	2526	242
15°	2411	2417	2411	2400	2383	680
25°	2141	2158	2168	2152	2134	981
35°	1722	1746	1826	1835	1828	1079
45°	1333	1356	1400	1464	1472	1029
55°	934	950	996	1051	1082	834
65°	547	562	595	638	674	543
75°	219	231	248	260	275	240
85°	34	34	34	32	32	46
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2561.5	2561.5	2561.5	2561.5	2561.5
2.5°	2568.4	2569.4	2563.5	2547.8	2537.9
5°	2558.6	2557.6	2547.8	2534.0	2526.1
7.5°	2530.1	2532.0	2529.1	2509.4	2498.6
10°	2502.5	2503.5	2495.6	2479.9	2467.1
12.5°	2467.1	2466.1	2455.3	2447.4	2426.7
15°	2411.0	2416.9	2411.0	2400.2	2383.4
17.5°	2356.9	2356.9	2360.8	2342.1	2329.3
20°	2295.8	2298.8	2298.8	2284.0	2269.3
22.5°	2225.0	2233.8	2236.8	2221.1	2203.3
25°	2141.3	2158.1	2167.9	2152.2	2133.5
27.5°	2040.0	2065.6	2095.1	2083.3	2062.6
30°	1926.8	1964.2	2013.4	2003.6	1988.8
32.5°	1819.6	1856.9	1924.8	1920.9	1913.0
35°	1722.1	1745.7	1825.5	1835.3	1828.4
37.5°	1629.6	1651.3	1726.1	1748.7	1742.8
40°	1532.2	1555.8	1614.9	1655.2	1657.2
42.5°	1435.8	1458.4	1506.6	1564.7	1564.7
45°	1333.4	1356.1	1400.3	1464.3	1472.2
47.5°	1233.0	1256.7	1300.0	1363.9	1376.7
50°	1134.6	1156.3	1199.6	1261.6	1281.3
52.5°	1032.3	1055.9	1098.2	1155.3	1183.8
55°	933.9	949.6	995.9	1051.0	1081.5
57.5°	831.5	846.3	898.5	945.7	977.2
60°	733.1	751.8	792.2	840.4	876.8
62.5°	638.7	658.3	692.8	735.1	776.4
65°	547.1	561.9	595.4	637.7	674.1
67.5°	458.6	471.4	504.8	534.4	572.7
70°	369.0	385.8	410.4	438.9	463.5
72.5°	297.2	304.1	324.7	345.4	371.0
75°	219.4	231.3	248.0	259.8	274.6
77.5°	157.5	164.3	174.2	184.0	197.8
80°	105.3	108.2	117.1	119.1	129.9
82.5°	64.0	65.9	67.9	68.9	72.8
85°	34.4	34.4	34.4	32.5	32.5
87.5°	19.7	19.7	16.7	13.8	9.8
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)