

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: P555587

Luminaire Tested: **FUSL-12-2-LD4-3HI-50-UNV-81-85-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: P555587  
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-81-85-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

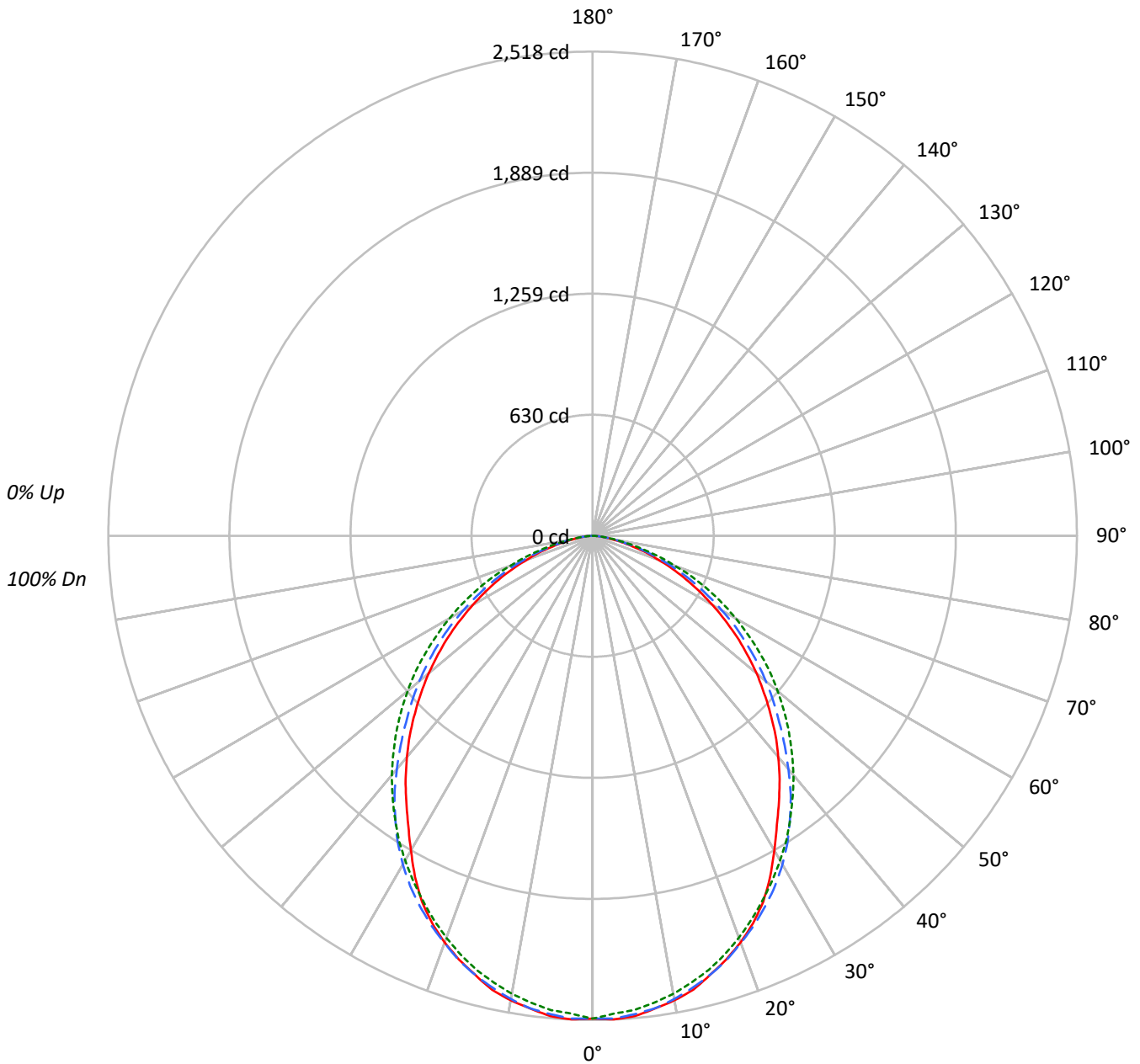
Lumens per Lamp: N/A  
Luminaire Lumens: 5806.0 lumens  
Efficiency: N/A  
Efficacy: 89.6 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 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°	13514	13514	13514
5°	13550	13492	13378
10°	13406	13369	13216
15°	13168	13168	13017
20°	12889	12906	12740
25°	12465	12620	12419
30°	11738	12265	12115
35°	11091	11757	11776
40°	10552	11122	11412
45°	9949	10448	10984
50°	9312	9846	10516
55°	8589	9160	9947
60°	7736	8358	9252
65°	6830	7432	8415
70°	5692	6331	7149
75°	4473	5055	5596
80°	3199	3558	3945
85°	2087	2087	1964



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	236.4	4.1
10°-20°	664.1	11.4
20°-30°	970.5	16.7
30°-40°	1101.7	19.0
40°-50°	1063.5	18.3
50°-60°	877.3	15.1
60°-70°	584.2	10.1
70°-80°	261.4	4.5
80°-90°	46.8	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°	1871.1	32.2
0°-40°	2972.8	51.2
0°-60°	4913.6	84.6
0°-90°	5806.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5806.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2511	2511	2511	2511	2511	
5°	2508	2507	2497	2484	2476	237
15°	2363	2369	2363	2353	2336	666
25°	2099	2115	2125	2110	2091	961
35°	1688	1711	1789	1799	1792	1058
45°	1307	1329	1373	1435	1443	1008
55°	915	931	976	1030	1060	817
65°	536	551	584	625	661	532
75°	215	227	243	255	269	235
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°	2510.9	2510.9	2510.9	2510.9	2510.9
2.5°	2517.7	2518.7	2512.9	2497.4	2487.8
5°	2508.1	2507.1	2497.4	2483.9	2476.2
7.5°	2480.1	2482.0	2479.1	2459.8	2449.2
10°	2453.1	2454.0	2446.3	2430.9	2418.3
12.5°	2418.3	2417.4	2406.8	2399.0	2378.8
15°	2363.4	2369.1	2363.4	2352.7	2336.3
17.5°	2310.3	2310.3	2314.2	2295.8	2283.3
20°	2250.5	2253.4	2253.4	2238.9	2224.4
22.5°	2181.0	2189.7	2192.6	2177.2	2159.8
25°	2099.0	2115.4	2125.1	2109.7	2091.3
27.5°	1999.7	2024.8	2053.7	2042.1	2021.9
30°	1888.8	1925.4	1973.6	1964.0	1949.5
32.5°	1783.6	1820.3	1886.8	1883.0	1875.3
35°	1688.1	1711.3	1789.4	1799.0	1792.3
37.5°	1597.4	1618.7	1692.0	1714.2	1708.4
40°	1501.9	1525.1	1583.0	1622.5	1624.4
42.5°	1407.4	1429.6	1476.9	1533.8	1533.8
45°	1307.1	1329.3	1372.7	1435.4	1443.1
47.5°	1208.7	1231.8	1274.3	1337.0	1349.5
50°	1112.2	1133.4	1175.9	1236.7	1256.0
52.5°	1011.9	1035.1	1076.5	1132.5	1160.5
55°	915.4	930.9	976.2	1030.2	1060.1
57.5°	815.1	829.6	880.7	927.0	957.9
60°	718.7	737.0	776.5	823.8	859.5
62.5°	626.0	645.3	679.1	720.6	761.1
65°	536.3	550.8	583.6	625.1	660.8
67.5°	449.5	462.1	494.9	523.8	561.4
70°	361.7	378.1	402.3	430.2	454.3
72.5°	291.3	298.1	318.3	338.6	363.7
75°	215.1	226.7	243.1	254.7	269.1
77.5°	154.3	161.1	170.7	180.4	193.9
80°	103.2	106.1	114.8	116.7	127.3
82.5°	62.7	64.6	66.6	67.5	71.4
85°	33.8	33.8	33.8	31.8	31.8
87.5°	19.3	19.3	16.4	13.5	9.6
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)