

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: P555589

Luminaire Tested: **FUSL-12-2-LD4-3HI-50-UNV-81-86-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: P555589  
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-81-86-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

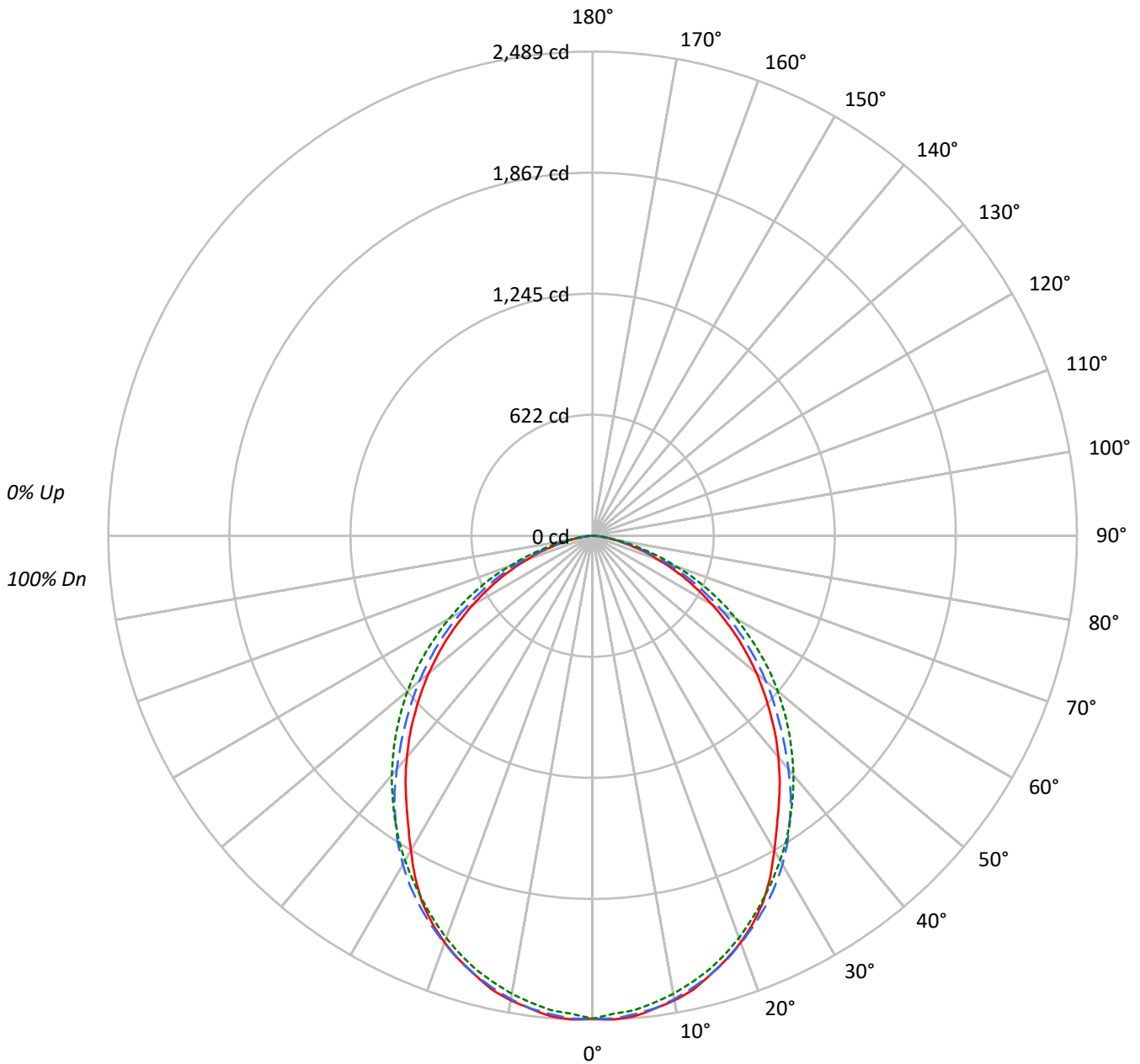
Lumens per Lamp: N/A  
Luminaire Lumens: 5740.0 lumens  
Efficiency: N/A  
Efficacy: 88.6 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	13360	13360	13360
5°	13396	13339	13226
10°	13254	13217	13066
15°	13019	13019	12870
20°	12743	12759	12596
25°	12323	12476	12278
30°	11604	12126	11978
35°	10965	11623	11642
40°	10432	10995	11283
45°	9835	10329	10859
50°	9207	9733	10397
55°	8492	9056	9834
60°	7648	8263	9146
65°	6752	7348	8320
70°	5627	6258	7069
75°	4423	4997	5533
80°	3161	3518	3902
85°	2062	2062	1945



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	233.7	4.1
10°-20°	656.6	11.4
20°-30°	959.5	16.7
30°-40°	1089.2	19.0
40°-50°	1051.4	18.3
50°-60°	867.3	15.1
60°-70°	577.6	10.1
70°-80°	258.5	4.5
80°-90°	46.3	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°	1849.8	32.2
0°-40°	2939.0	51.2
0°-60°	4857.7	84.6
0°-90°	5740.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5740.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2482	2482	2482	2482	2482	
5°	2480	2479	2469	2456	2448	235
15°	2336	2342	2336	2326	2310	659
25°	2075	2091	2101	2086	2068	950
35°	1669	1692	1769	1779	1772	1046
45°	1292	1314	1357	1419	1427	997
55°	905	920	965	1018	1048	808
65°	530	544	577	618	653	526
75°	213	224	240	252	266	233
85°	33	33	33	32	32	45
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2482.4	2482.4	2482.4	2482.4	2482.4
2.5°	2489.1	2490.0	2484.3	2469.1	2459.5
5°	2479.5	2478.6	2469.1	2455.7	2448.1
7.5°	2451.9	2453.8	2450.9	2431.9	2421.4
10°	2425.2	2426.1	2418.5	2403.2	2390.8
12.5°	2390.8	2389.9	2379.4	2371.8	2351.7
15°	2336.5	2342.2	2336.5	2326.0	2309.8
17.5°	2284.0	2284.0	2287.9	2269.7	2257.3
20°	2224.9	2227.8	2227.8	2213.5	2199.2
22.5°	2156.2	2164.8	2167.7	2152.4	2135.3
25°	2075.2	2091.4	2100.9	2085.7	2067.6
27.5°	1977.0	2001.8	2030.4	2018.9	1998.9
30°	1867.3	1903.5	1951.2	1941.7	1927.4
32.5°	1763.3	1799.6	1865.4	1861.6	1853.9
35°	1668.9	1691.8	1769.1	1778.6	1771.9
37.5°	1579.3	1600.3	1672.7	1694.7	1688.9
40°	1484.9	1507.8	1565.0	1604.1	1606.0
42.5°	1391.4	1413.3	1460.1	1516.3	1516.3
45°	1292.2	1314.2	1357.1	1419.1	1426.7
47.5°	1194.9	1217.8	1259.8	1321.8	1334.2
50°	1099.6	1120.6	1162.5	1222.6	1241.7
52.5°	1000.4	1023.3	1064.3	1119.6	1147.3
55°	905.0	920.3	965.1	1018.5	1048.1
57.5°	805.9	820.2	870.7	916.5	947.0
60°	710.5	728.6	767.7	814.4	849.7
62.5°	618.9	638.0	671.4	712.4	752.4
65°	530.2	544.5	577.0	618.0	653.3
67.5°	444.4	456.8	489.2	517.8	555.0
70°	357.6	373.8	397.7	425.3	449.2
72.5°	288.0	294.7	314.7	334.7	359.5
75°	212.7	224.1	240.3	251.8	266.1
77.5°	152.6	159.3	168.8	178.3	191.7
80°	102.0	104.9	113.5	115.4	125.9
82.5°	62.0	63.9	65.8	66.8	70.6
85°	33.4	33.4	33.4	31.5	31.5
87.5°	19.1	19.1	16.2	13.4	9.5
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)