

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: P555288

Luminaire Tested: **FUSL-12-2-LD4-2STD-40-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: P555288  
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-LD4-2STD-40-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 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

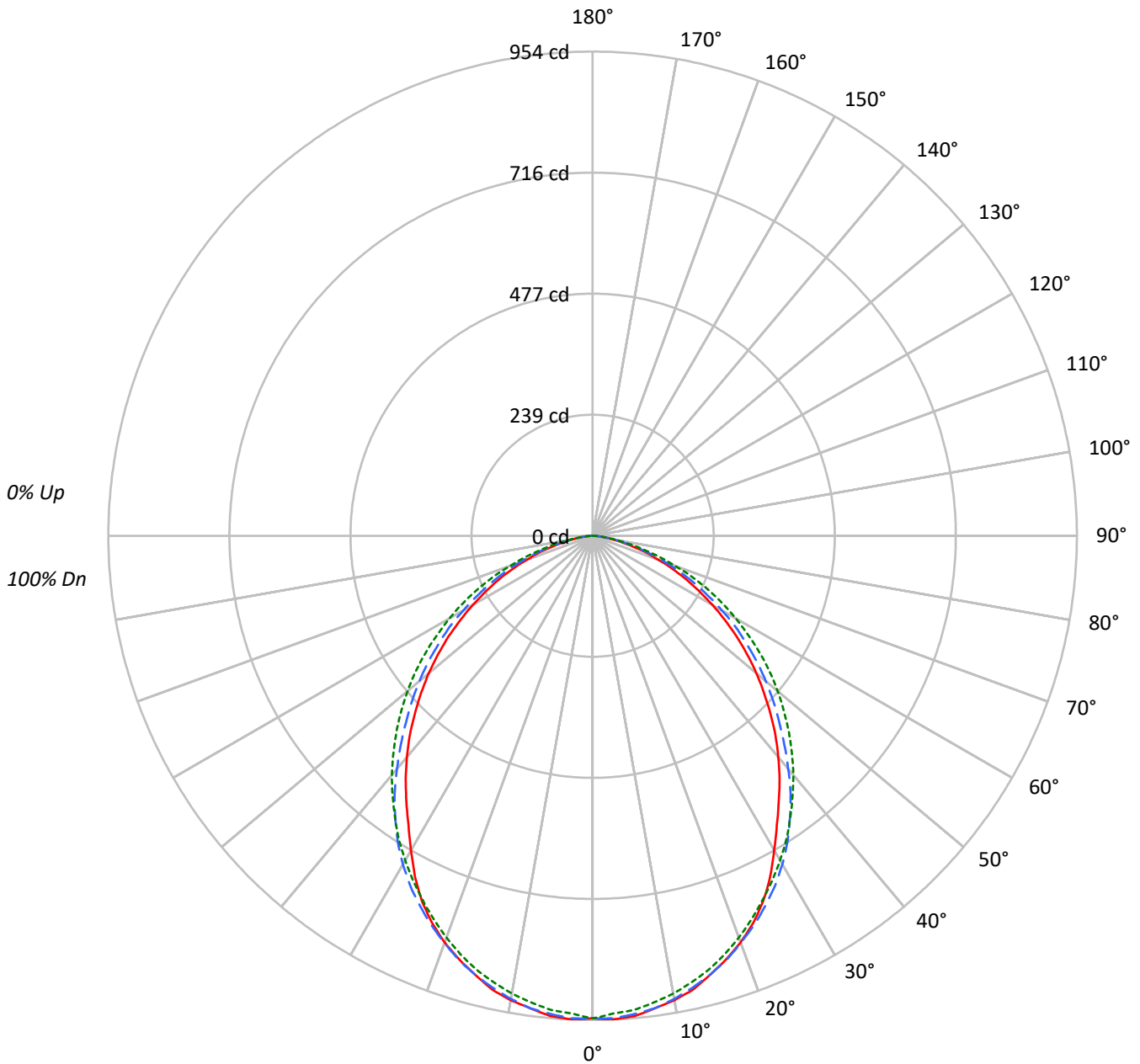
Lumens per Lamp: N/A  
Luminaire Lumens: 2199.0 lumens  
Efficiency: N/A  
Efficacy: 66.0 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 33.3  
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°	5118	5118	5118
5°	5132	5110	5067
10°	5078	5063	5005
15°	4987	4987	4930
20°	4882	4888	4825
25°	4721	4780	4704
30°	4446	4645	4589
35°	4201	4453	4460
40°	3997	4212	4323
45°	3768	3957	4160
50°	3527	3729	3983
55°	3253	3469	3767
60°	2930	3166	3504
65°	2586	2814	3188
70°	2156	2398	2708
75°	1695	1915	2119
80°	1212	1348	1494
85°	790	790	747



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.5	4.1
10°-20°	251.5	11.4
20°-30°	367.6	16.7
30°-40°	417.2	19.0
40°-50°	402.8	18.3
50°-60°	332.3	15.1
60°-70°	221.3	10.1
70°-80°	99.0	4.5
80°-90°	17.7	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°	708.7	32.2
0°-40°	1125.9	51.2
0°-60°	1861.0	84.6
0°-90°	2199.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2199.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	951	951	951	951	951	
5°	950	950	946	941	938	90
15°	895	897	895	891	885	252
25°	795	801	805	799	792	364
35°	639	648	678	681	679	401
45°	495	504	520	544	547	382
55°	347	353	370	390	402	309
65°	203	209	221	237	250	201
75°	82	86	92	96	102	89
85°	13	13	13	12	12	17
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	951.0	951.0	951.0	951.0	951.0
2.5°	953.6	953.9	951.7	945.9	942.2
5°	949.9	949.5	945.9	940.8	937.9
7.5°	939.3	940.1	939.0	931.6	927.6
10°	929.1	929.5	926.5	920.7	915.9
12.5°	915.9	915.6	911.6	908.6	901.0
15°	895.1	897.3	895.1	891.1	884.9
17.5°	875.0	875.0	876.5	869.5	864.8
20°	852.4	853.5	853.5	848.0	842.5
22.5°	826.1	829.3	830.4	824.6	818.0
25°	795.0	801.2	804.9	799.0	792.1
27.5°	757.4	766.9	777.8	773.4	765.8
30°	715.4	729.2	747.5	743.9	738.4
32.5°	675.5	689.4	714.6	713.2	710.2
35°	639.4	648.1	677.7	681.4	678.8
37.5°	605.0	613.1	640.8	649.2	647.0
40°	568.9	577.6	599.5	614.5	615.3
42.5°	533.0	541.5	559.4	580.9	580.9
45°	495.1	503.5	519.9	543.6	546.6
47.5°	457.8	466.6	482.6	506.4	511.1
50°	421.3	429.3	445.4	468.4	475.7
52.5°	383.3	392.0	407.7	428.9	439.5
55°	346.7	352.6	369.7	390.2	401.5
57.5°	308.7	314.2	333.6	351.1	362.8
60°	272.2	279.1	294.1	312.0	325.5
62.5°	237.1	244.4	257.2	272.9	288.3
65°	203.1	208.6	221.0	236.7	250.3
67.5°	170.3	175.0	187.4	198.4	212.6
70°	137.0	143.2	152.4	162.9	172.1
72.5°	110.3	112.9	120.6	128.2	137.7
75°	81.5	85.9	92.1	96.5	101.9
77.5°	58.5	61.0	64.7	68.3	73.4
80°	39.1	40.2	43.5	44.2	48.2
82.5°	23.7	24.5	25.2	25.6	27.0
85°	12.8	12.8	12.8	12.1	12.1
87.5°	7.3	7.3	6.2	5.1	3.7
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)