

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: P555224

Luminaire Tested: **FUSL-12-2-LD4-2STD-35-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: P555224  
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-35-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 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

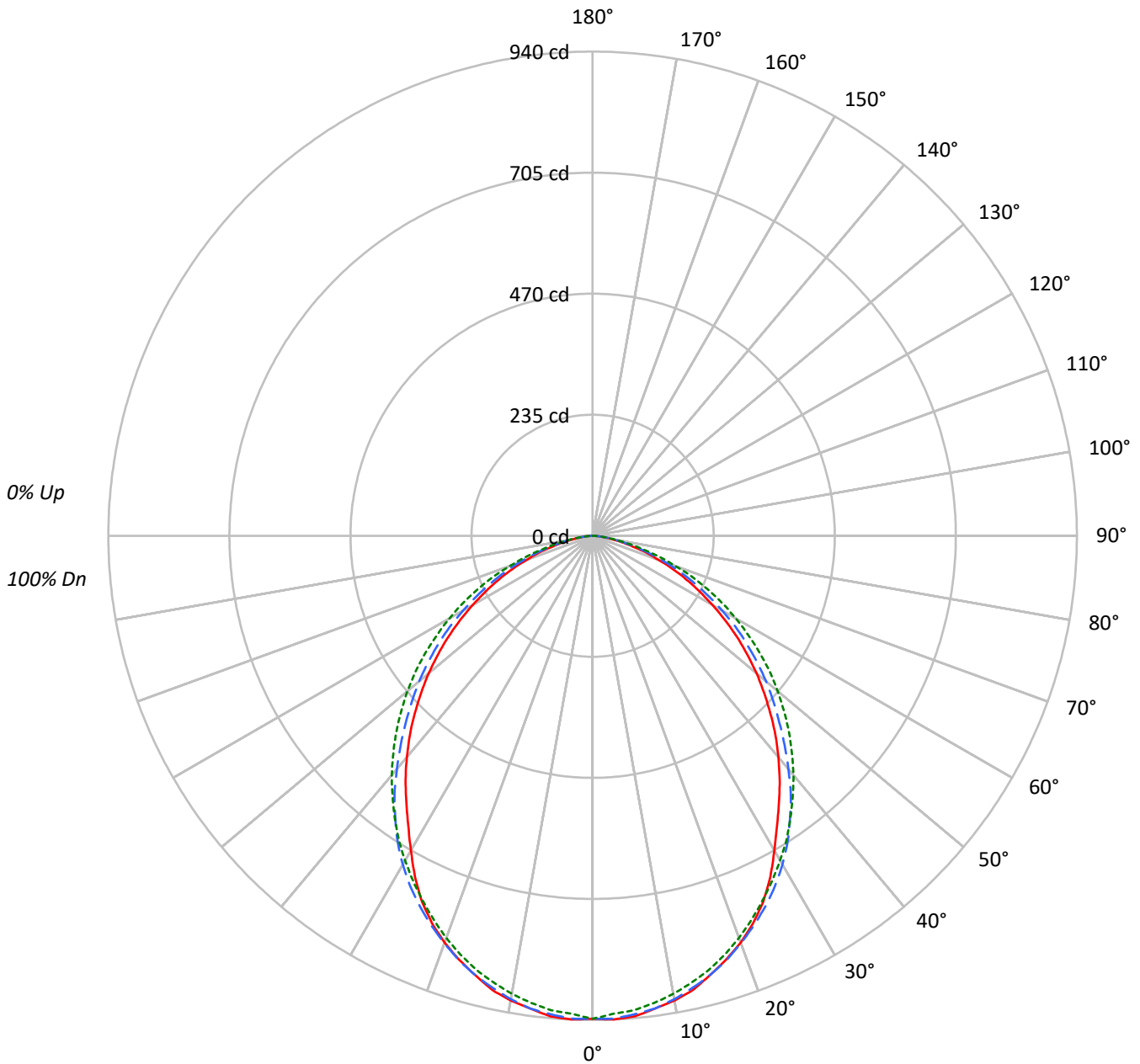
Lumens per Lamp: N/A  
Luminaire Lumens: 2168.0 lumens  
Efficiency: N/A  
Efficacy: 65.1 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 33.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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°	5046	5046	5046
5°	5059	5038	4995
10°	5006	4992	4935
15°	4917	4917	4861
20°	4813	4819	4757
25°	4654	4712	4637
30°	4383	4580	4524
35°	4142	4390	4397
40°	3940	4153	4262
45°	3715	3902	4102
50°	3477	3677	3927
55°	3207	3420	3715
60°	2888	3122	3454
65°	2551	2775	3142
70°	2126	2364	2670
75°	1670	1888	2090
80°	1193	1330	1472
85°	778	778	735



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	88.3	4.1
10°-20°	248.0	11.4
20°-30°	362.4	16.7
30°-40°	411.4	19.0
40°-50°	397.1	18.3
50°-60°	327.6	15.1
60°-70°	218.2	10.1
70°-80°	97.6	4.5
80°-90°	17.5	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°	698.7	32.2
0°-40°	1110.1	51.2
0°-60°	1834.8	84.6
0°-90°	2168.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2168.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	938	938	938	938	938	
5°	936	936	933	928	925	89
15°	882	885	882	878	872	249
25°	784	790	794	788	781	359
35°	630	639	668	672	669	395
45°	488	496	513	536	539	377
55°	342	348	364	385	396	305
65°	200	206	218	233	247	199
75°	80	85	91	95	100	88
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°	937.6	937.6	937.6	937.6	937.6
2.5°	940.1	940.5	938.3	932.6	929.0
5°	936.5	936.2	932.6	927.5	924.6
7.5°	926.1	926.8	925.7	918.5	914.6
10°	916.0	916.4	913.5	907.7	903.0
12.5°	903.0	902.7	898.7	895.8	888.3
15°	882.5	884.7	882.5	878.5	872.4
17.5°	862.7	862.7	864.1	857.3	852.6
20°	840.3	841.4	841.4	836.0	830.6
22.5°	814.4	817.7	818.7	813.0	806.5
25°	783.8	789.9	793.5	787.8	780.9
27.5°	746.7	756.1	766.9	762.5	755.0
30°	705.3	719.0	737.0	733.4	728.0
32.5°	666.0	679.7	704.6	703.1	700.2
35°	630.4	639.0	668.2	671.8	669.3
37.5°	596.5	604.4	631.8	640.1	637.9
40°	560.8	569.5	591.1	605.9	606.6
42.5°	525.5	533.8	551.5	572.7	572.7
45°	488.1	496.4	512.6	536.0	538.9
47.5°	451.3	460.0	475.8	499.2	503.9
50°	415.3	423.2	439.1	461.8	469.0
52.5°	377.9	386.5	402.0	422.9	433.3
55°	341.8	347.6	364.5	384.7	395.9
57.5°	304.4	309.8	328.9	346.2	357.7
60°	268.3	275.2	290.0	307.6	320.9
62.5°	233.8	241.0	253.6	269.1	284.2
65°	200.3	205.7	217.9	233.4	246.7
67.5°	167.9	172.5	184.8	195.6	209.6
70°	135.1	141.2	150.2	160.6	169.7
72.5°	108.8	111.3	118.9	126.4	135.8
75°	80.3	84.6	90.8	95.1	100.5
77.5°	57.6	60.2	63.8	67.4	72.4
80°	38.5	39.6	42.9	43.6	47.5
82.5°	23.4	24.1	24.9	25.2	26.7
85°	12.6	12.6	12.6	11.9	11.9
87.5°	7.2	7.2	6.1	5.0	3.6
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)