

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: P554449

Luminaire Tested: **FUSL-12-2-LD4-1STD-35-UNV-82-84-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: P554449  
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-LD4-1STD-35-UNV-82-84-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

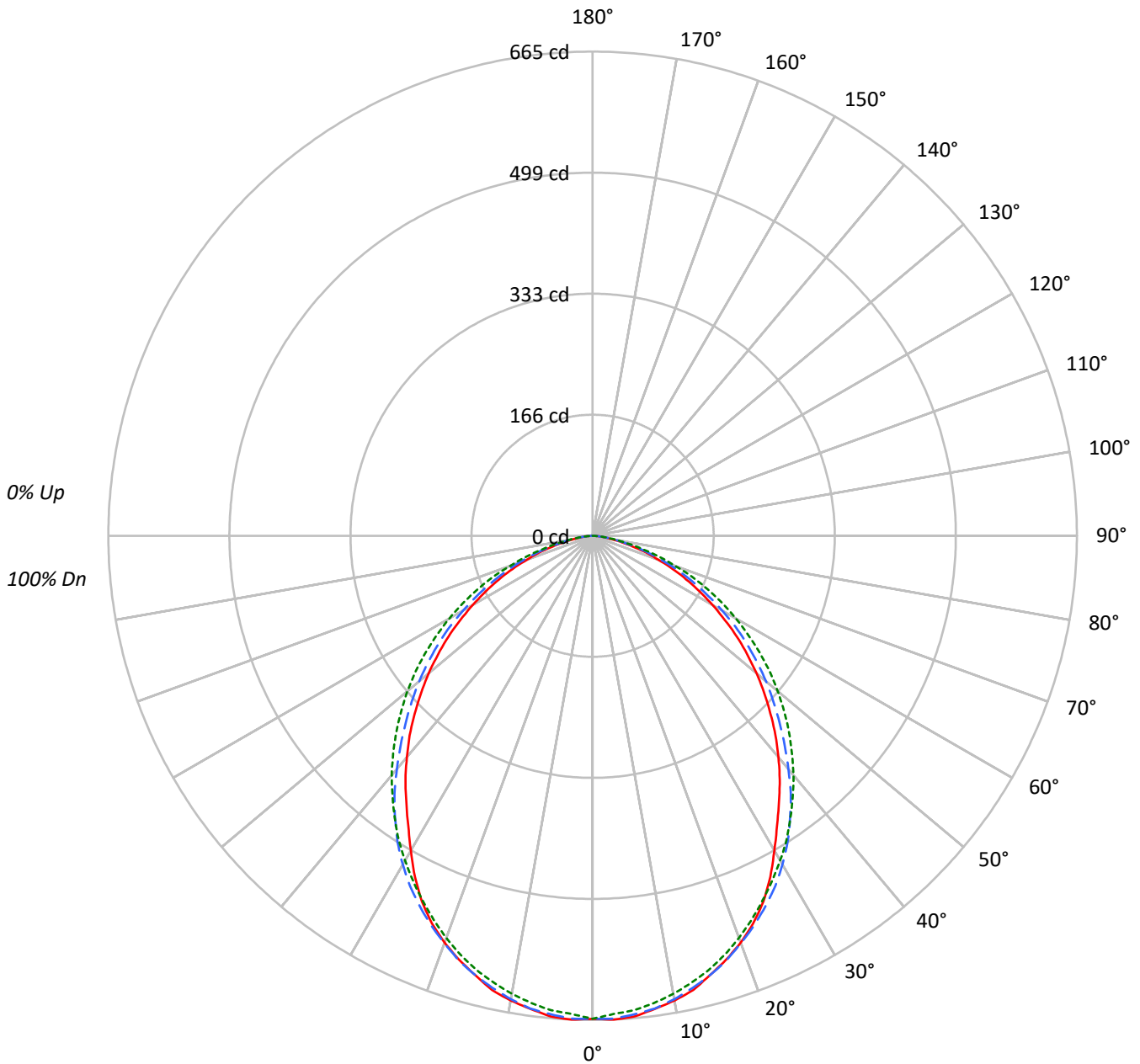
Lumens per Lamp: N/A  
Luminaire Lumens: 1534.0 lumens  
Efficiency: N/A  
Efficacy: 92.4 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 16.6  
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°	3570	3570	3570
5°	3580	3565	3534
10°	3542	3532	3492
15°	3479	3479	3439
20°	3405	3410	3366
25°	3293	3334	3281
30°	3101	3241	3201
35°	2930	3106	3111
40°	2788	2938	3015
45°	2628	2761	2902
50°	2461	2601	2778
55°	2270	2420	2628
60°	2044	2209	2444
65°	1805	1964	2223
70°	1504	1673	1888
75°	1181	1335	1478
80°	846	939	1041
85°	550	550	519



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.5	4.1
10°-20°	175.5	11.4
20°-30°	256.4	16.7
30°-40°	291.1	19.0
40°-50°	281.0	18.3
50°-60°	231.8	15.1
60°-70°	154.4	10.1
70°-80°	69.1	4.5
80°-90°	12.3	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°	494.4	32.2
0°-40°	785.4	51.2
0°-60°	1298.2	84.6
0°-90°	1534.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1534.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	663	663	663	663	663	
5°	663	662	660	656	654	63
15°	624	626	624	622	617	176
25°	555	559	562	557	552	254
35°	446	452	473	475	474	279
45°	345	351	363	379	381	266
55°	242	246	258	272	280	216
65°	142	146	154	165	175	141
75°	57	60	64	67	71	62
85°	9	9	9	8	8	12
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	663.4	663.4	663.4	663.4	663.4
2.5°	665.2	665.5	663.9	659.8	657.3
5°	662.7	662.4	659.8	656.3	654.2
7.5°	655.3	655.8	655.0	649.9	647.1
10°	648.1	648.4	646.3	642.3	638.9
12.5°	638.9	638.7	635.9	633.9	628.5
15°	624.4	626.0	624.4	621.6	617.3
17.5°	610.4	610.4	611.4	606.6	603.3
20°	594.6	595.4	595.4	591.5	587.7
22.5°	576.3	578.5	579.3	575.2	570.6
25°	554.6	558.9	561.5	557.4	552.5
27.5°	528.3	535.0	542.6	539.6	534.2
30°	499.0	508.7	521.5	518.9	515.1
32.5°	471.2	480.9	498.5	497.5	495.5
35°	446.0	452.1	472.8	475.3	473.5
37.5°	422.1	427.7	447.0	452.9	451.4
40°	396.8	402.9	418.2	428.7	429.2
42.5°	371.8	377.7	390.2	405.2	405.2
45°	345.3	351.2	362.7	379.2	381.3
47.5°	319.3	325.5	336.7	353.2	356.6
50°	293.9	299.5	310.7	326.7	331.8
52.5°	267.4	273.5	284.4	299.2	306.6
55°	241.9	245.9	257.9	272.2	280.1
57.5°	215.4	219.2	232.7	244.9	253.1
60°	189.9	194.7	205.2	217.7	227.1
62.5°	165.4	170.5	179.4	190.4	201.1
65°	141.7	145.5	154.2	165.2	174.6
67.5°	118.8	122.1	130.7	138.4	148.3
70°	95.6	99.9	106.3	113.7	120.0
72.5°	77.0	78.8	84.1	89.5	96.1
75°	56.8	59.9	64.2	67.3	71.1
77.5°	40.8	42.6	45.1	47.7	51.2
80°	27.3	28.0	30.3	30.8	33.6
82.5°	16.6	17.1	17.6	17.8	18.9
85°	8.9	8.9	8.9	8.4	8.4
87.5°	5.1	5.1	4.3	3.6	2.5
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)