

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: P554466

Luminaire Tested: **FUSL-12-2-LD4-1STD-35-UNV-93-85-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: P554466  
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-93-85-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

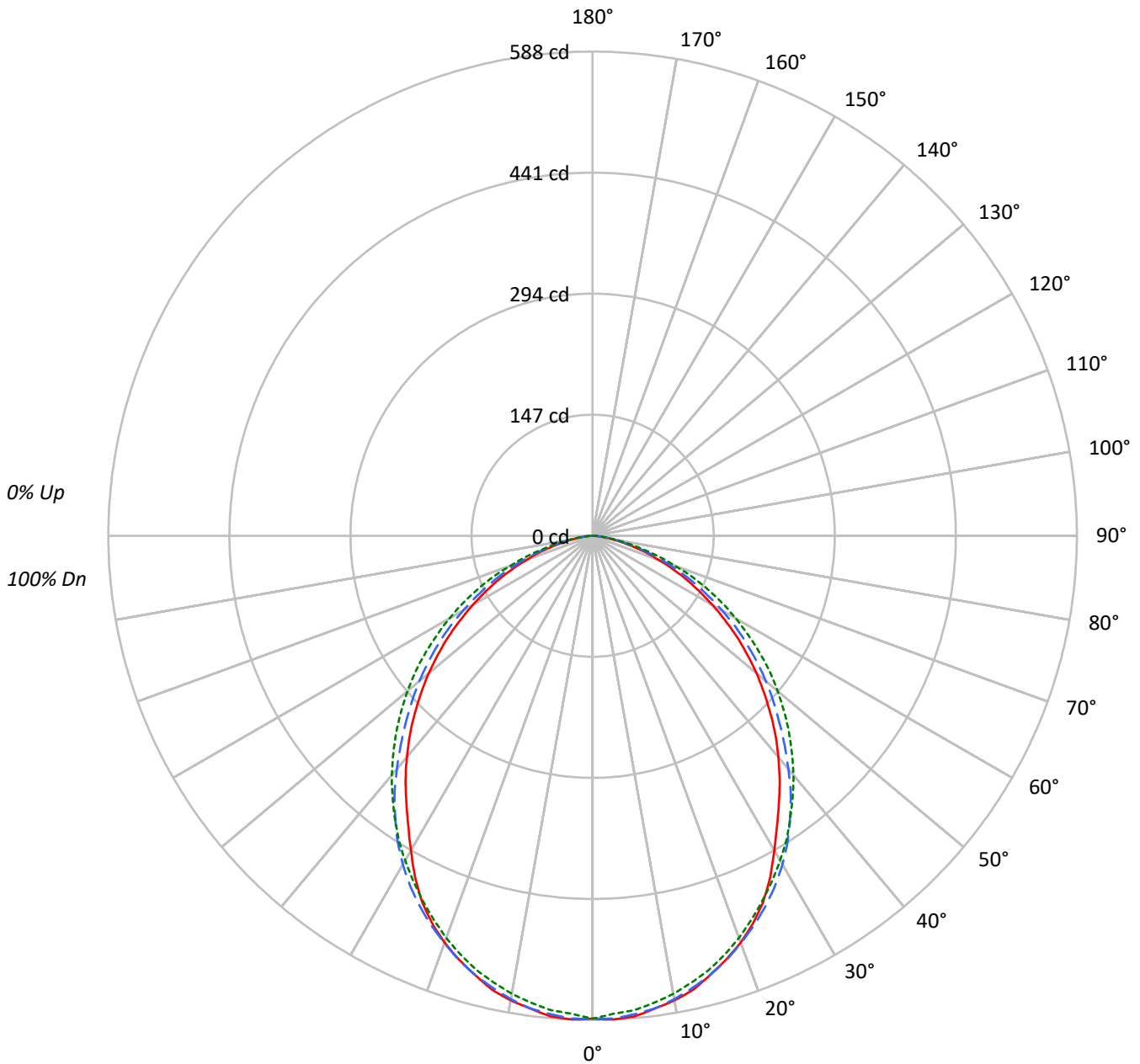
Lumens per Lamp: N/A  
Luminaire Lumens: 1356.0 lumens  
Efficiency: N/A  
Efficacy: 81.7 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 16.6  
Input Voltage (V): NR  
Input Current (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°	3156	3156	3156
5°	3165	3151	3124
10°	3131	3122	3087
15°	3076	3076	3041
20°	3010	3014	2975
25°	2911	2947	2900
30°	2741	2864	2829
35°	2591	2746	2750
40°	2465	2597	2666
45°	2324	2440	2565
50°	2175	2299	2456
55°	2006	2139	2323
60°	1806	1953	2160
65°	1596	1736	1965
70°	1330	1478	1670
75°	1044	1181	1308
80°	747	831	921
85°	488	488	457



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	55.2	4.1
10°-20°	155.1	11.4
20°-30°	226.7	16.7
30°-40°	257.3	19.0
40°-50°	248.4	18.3
50°-60°	204.9	15.1
60°-70°	136.4	10.1
70°-80°	61.0	4.5
80°-90°	10.9	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°	437.0	32.2
0°-40°	694.3	51.2
0°-60°	1147.6	84.6
0°-90°	1356.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1356.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	586	586	586	586	586	
5°	586	586	583	580	578	55
15°	552	553	552	550	546	156
25°	490	494	496	493	488	224
35°	394	400	418	420	419	247
45°	305	310	321	335	337	236
55°	214	217	228	241	248	191
65°	125	129	136	146	154	124
75°	50	53	57	60	63	55
85°	8	8	8	7	7	11
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	586.4	586.4	586.4	586.4	586.4
2.5°	588.0	588.2	586.9	583.3	581.0
5°	585.8	585.5	583.3	580.1	578.3
7.5°	579.2	579.7	579.0	574.5	572.0
10°	572.9	573.1	571.3	567.7	564.8
12.5°	564.8	564.6	562.1	560.3	555.6
15°	552.0	553.3	552.0	549.5	545.7
17.5°	539.6	539.6	540.5	536.2	533.3
20°	525.6	526.3	526.3	522.9	519.5
22.5°	509.4	511.4	512.1	508.5	504.4
25°	490.2	494.1	496.3	492.7	488.4
27.5°	467.0	472.9	479.6	476.9	472.2
30°	441.1	449.7	460.9	458.7	455.3
32.5°	416.6	425.1	440.7	439.8	438.0
35°	394.3	399.7	417.9	420.2	418.6
37.5°	373.1	378.0	395.2	400.3	399.0
40°	350.8	356.2	369.7	378.9	379.4
42.5°	328.7	333.9	344.9	358.2	358.2
45°	305.3	310.5	320.6	335.2	337.0
47.5°	282.3	287.7	297.6	312.3	315.2
50°	259.8	264.7	274.6	288.8	293.3
52.5°	236.3	241.7	251.4	264.5	271.0
55°	213.8	217.4	228.0	240.6	247.6
57.5°	190.4	193.8	205.7	216.5	223.7
60°	167.8	172.1	181.4	192.4	200.7
62.5°	146.2	150.7	158.6	168.3	177.8
65°	125.3	128.6	136.3	146.0	154.3
67.5°	105.0	107.9	115.6	122.3	131.1
70°	84.5	88.3	93.9	100.5	106.1
72.5°	68.0	69.6	74.3	79.1	84.9
75°	50.2	52.9	56.8	59.5	62.9
77.5°	36.0	37.6	39.9	42.1	45.3
80°	24.1	24.8	26.8	27.3	29.7
82.5°	14.6	15.1	15.5	15.8	16.7
85°	7.9	7.9	7.9	7.4	7.4
87.5°	4.5	4.5	3.8	3.2	2.3
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)