

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: P554412

Luminaire Tested: **FUSL-12-2-LD4-1STD-30-UNV-93-96-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: P554412  
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-30-UNV-93-96-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

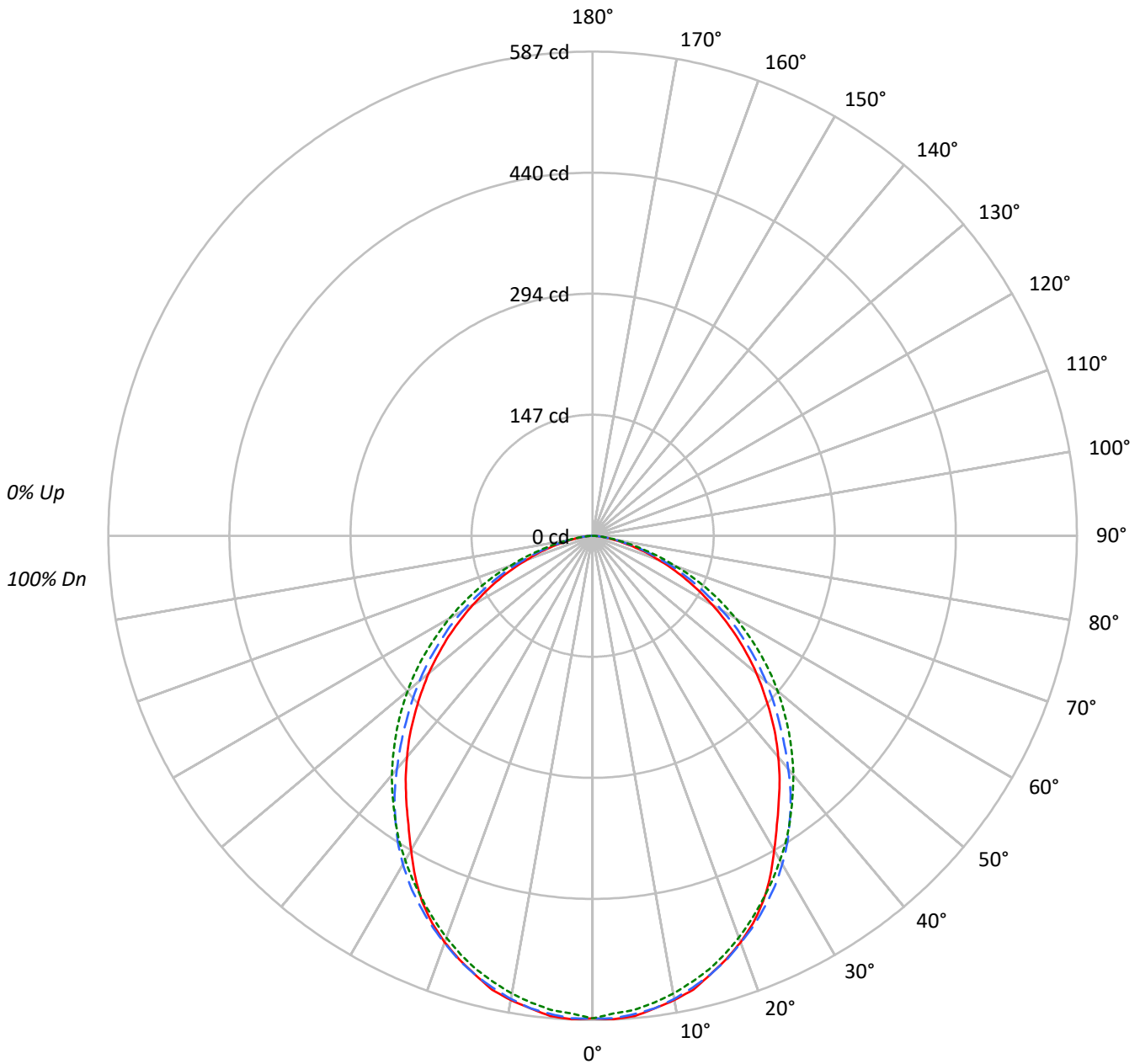
Lumens per Lamp: N/A  
Luminaire Lumens: 1353.0 lumens  
Efficiency: N/A  
Efficacy: 81.5 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	3149	3149	3149
5°	3158	3144	3117
10°	3124	3116	3080
15°	3068	3068	3033
20°	3003	3007	2969
25°	2905	2941	2894
30°	2735	2858	2823
35°	2585	2740	2744
40°	2459	2592	2660
45°	2318	2435	2560
50°	2170	2294	2451
55°	2001	2135	2318
60°	1803	1948	2156
65°	1592	1732	1961
70°	1327	1474	1666
75°	1042	1177	1304
80°	747	831	921
85°	488	488	457



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	55.1	4.1
10°-20°	154.8	11.4
20°-30°	226.2	16.7
30°-40°	256.7	19.0
40°-50°	247.8	18.3
50°-60°	204.4	15.1
60°-70°	136.2	10.1
70°-80°	60.9	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°	436.0	32.2
0°-40°	692.8	51.2
0°-60°	1145.0	84.6
0°-90°	1353.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1353.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	585	585	585	585	585	
5°	584	584	582	579	577	55
15°	551	552	551	548	544	155
25°	489	493	495	492	487	224
35°	393	399	417	419	418	246
45°	305	310	320	334	336	235
55°	213	217	228	240	247	190
65°	125	128	136	146	154	124
75°	50	53	57	59	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°	585.1	585.1	585.1	585.1	585.1
2.5°	586.7	586.9	585.6	582.0	579.7
5°	584.5	584.2	582.0	578.8	577.0
7.5°	577.9	578.4	577.7	573.2	570.8
10°	571.6	571.9	570.1	566.5	563.6
12.5°	563.6	563.3	560.9	559.1	554.3
15°	550.7	552.1	550.7	548.3	544.4
17.5°	538.4	538.4	539.3	535.0	532.1
20°	524.4	525.1	525.1	521.7	518.4
22.5°	508.3	510.3	511.0	507.4	503.3
25°	489.2	493.0	495.2	491.6	487.4
27.5°	466.0	471.8	478.6	475.9	471.2
30°	440.1	448.7	459.9	457.7	454.3
32.5°	415.6	424.2	439.7	438.8	437.0
35°	393.4	398.8	417.0	419.2	417.7
37.5°	372.3	377.2	394.3	399.5	398.1
40°	350.0	355.4	368.9	378.1	378.6
42.5°	328.0	333.1	344.2	357.4	357.4
45°	304.6	309.8	319.9	334.5	336.3
47.5°	281.7	287.1	297.0	311.6	314.5
50°	259.2	264.1	274.0	288.2	292.7
52.5°	235.8	241.2	250.9	263.9	270.4
55°	213.3	216.9	227.5	240.1	247.0
57.5°	190.0	193.3	205.2	216.0	223.2
60°	167.5	171.7	181.0	192.0	200.3
62.5°	145.9	150.4	158.3	167.9	177.4
65°	125.0	128.4	136.0	145.7	154.0
67.5°	104.8	107.7	115.3	122.1	130.8
70°	84.3	88.1	93.7	100.3	105.9
72.5°	67.9	69.5	74.2	78.9	84.7
75°	50.1	52.8	56.6	59.3	62.7
77.5°	36.0	37.5	39.8	42.0	45.2
80°	24.1	24.7	26.8	27.2	29.7
82.5°	14.6	15.1	15.5	15.7	16.6
85°	7.9	7.9	7.9	7.4	7.4
87.5°	4.5	4.5	3.8	3.1	2.2
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)