

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: P554465

Luminaire Tested: **FUSL-12-2-LD4-1STD-35-UNV-93-84-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: P554465  
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-93-84-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS 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**

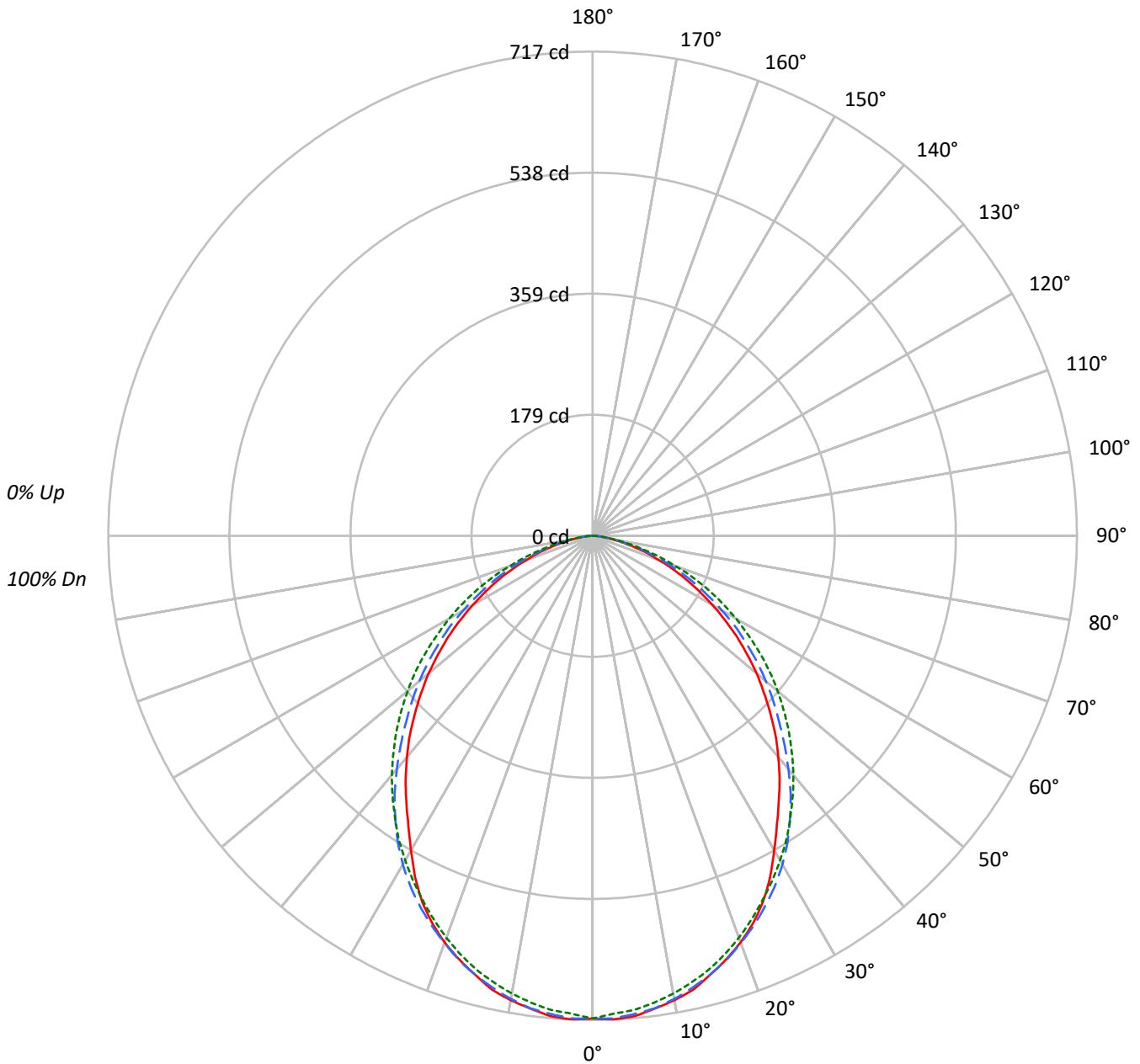
Lumens per Lamp: N/A  
Luminaire Lumens: 1653.0 lumens  
Efficiency: N/A  
Efficacy: 99.6 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	3848	3848	3848
5°	3858	3841	3809
10°	3817	3806	3763
15°	3749	3749	3706
20°	3670	3675	3627
25°	3549	3593	3536
30°	3342	3492	3449
35°	3158	3347	3353
40°	3004	3166	3249
45°	2832	2974	3127
50°	2652	2803	2994
55°	2445	2608	2832
60°	2202	2380	2634
65°	1945	2117	2395
70°	1621	1802	2036
75°	1273	1439	1593
80°	911	1013	1125
85°	593	593	562



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.3	4.1
10°-20°	189.1	11.4
20°-30°	276.3	16.7
30°-40°	313.7	19.0
40°-50°	302.8	18.3
50°-60°	249.8	15.1
60°-70°	166.3	10.1
70°-80°	74.4	4.5
80°-90°	13.3	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°	532.7	32.2
0°-40°	846.4	51.2
0°-60°	1398.9	84.6
0°-90°	1653.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1653.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	715	715	715	715	715	
5°	714	714	711	707	705	68
15°	673	674	673	670	665	190
25°	598	602	605	601	595	274
35°	481	487	510	512	510	301
45°	372	378	391	409	411	287
55°	261	265	278	293	302	233
65°	153	157	166	178	188	151
75°	61	64	69	72	77	67
85°	10	10	10	9	9	13
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	714.9	714.9	714.9	714.9	714.9
2.5°	716.8	717.1	715.4	711.0	708.3
5°	714.1	713.8	711.0	707.2	705.0
7.5°	706.1	706.6	705.8	700.3	697.3
10°	698.4	698.7	696.5	692.1	688.5
12.5°	688.5	688.2	685.2	683.0	677.3
15°	672.9	674.5	672.9	669.8	665.2
17.5°	657.8	657.8	658.9	653.6	650.1
20°	640.7	641.6	641.6	637.4	633.3
22.5°	621.0	623.4	624.2	619.9	614.9
25°	597.6	602.3	605.0	600.6	595.4
27.5°	569.3	576.5	584.7	581.4	575.6
30°	537.7	548.2	561.9	559.2	555.0
32.5°	507.8	518.2	537.2	536.1	533.9
35°	480.6	487.2	509.5	512.2	510.3
37.5°	454.8	460.8	481.7	488.0	486.4
40°	427.6	434.2	450.7	461.9	462.5
42.5°	400.7	407.0	420.5	436.7	436.7
45°	372.1	378.4	390.8	408.7	410.9
47.5°	344.1	350.7	362.8	380.6	384.2
50°	316.7	322.7	334.8	352.1	357.6
52.5°	288.1	294.7	306.5	322.4	330.4
55°	260.6	265.0	277.9	293.3	301.8
57.5°	232.1	236.2	250.7	263.9	272.7
60°	204.6	209.8	221.1	234.5	244.7
62.5°	178.2	183.7	193.3	205.2	216.7
65°	152.7	156.8	166.2	178.0	188.1
67.5°	128.0	131.6	140.9	149.1	159.8
70°	103.0	107.7	114.5	122.5	129.4
72.5°	82.9	84.9	90.6	96.4	103.5
75°	61.2	64.5	69.2	72.5	76.6
77.5°	43.9	45.9	48.6	51.4	55.2
80°	29.4	30.2	32.7	33.2	36.3
82.5°	17.9	18.4	18.9	19.2	20.3
85°	9.6	9.6	9.6	9.1	9.1
87.5°	5.5	5.5	4.7	3.8	2.7
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)