

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: P554479

Luminaire Tested: **FUSL-12-2-LD4-1STD-35-UNV-93-97-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: P554479  
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-93-97-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

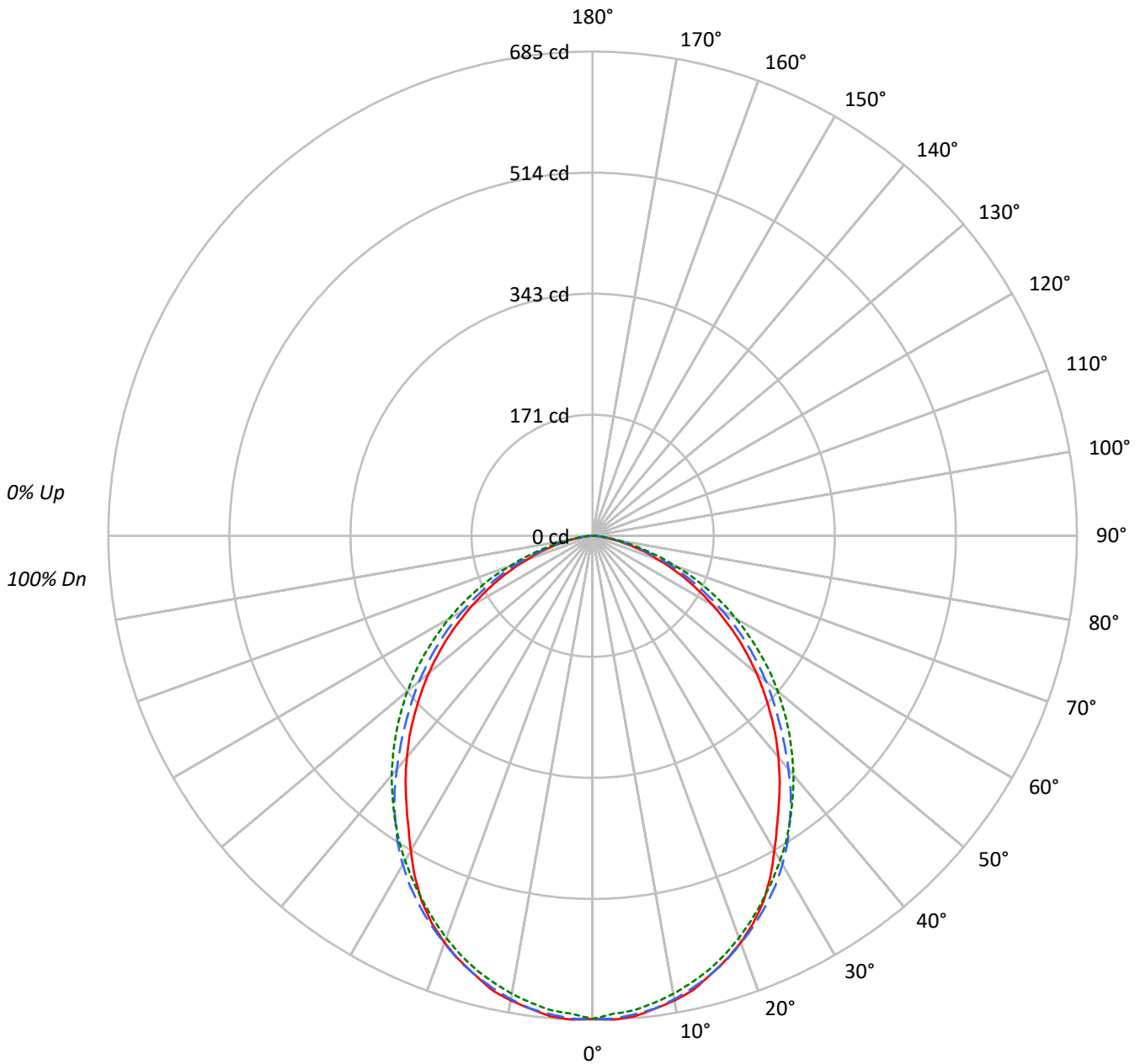
Lumens per Lamp: N/A  
Luminaire Lumens: 1580.0 lumens  
Efficiency: N/A  
Efficacy: 95.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	3677	3677	3677
5°	3687	3672	3641
10°	3648	3638	3597
15°	3583	3583	3543
20°	3507	3512	3467
25°	3392	3434	3380
30°	3194	3338	3297
35°	3018	3200	3204
40°	2871	3027	3106
45°	2707	2843	2989
50°	2534	2679	2862
55°	2337	2493	2707
60°	2105	2274	2518
65°	1859	2022	2290
70°	1548	1723	1945
75°	1216	1377	1522
80°	871	967	1075
85°	568	568	537



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	64.3	4.1
10°-20°	180.7	11.4
20°-30°	264.1	16.7
30°-40°	299.8	19.0
40°-50°	289.4	18.3
50°-60°	238.8	15.1
60°-70°	159.0	10.1
70°-80°	71.1	4.5
80°-90°	12.7	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°	509.2	32.2
0°-40°	809.0	51.2
0°-60°	1337.2	84.6
0°-90°	1580.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1580.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	683	683	683	683	683	
5°	682	682	680	676	674	65
15°	643	645	643	640	636	181
25°	571	576	578	574	569	262
35°	459	466	487	490	488	288
45°	356	362	374	391	393	274
55°	249	253	266	280	288	222
65°	146	150	159	170	180	145
75°	58	62	66	69	73	64
85°	9	9	9	9	9	12
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	683.3	683.3	683.3	683.3	683.3
2.5°	685.1	685.4	683.8	679.6	677.0
5°	682.5	682.3	679.6	676.0	673.9
7.5°	674.9	675.4	674.6	669.4	666.5
10°	667.6	667.8	665.7	661.5	658.1
12.5°	658.1	657.8	655.0	652.9	647.3
15°	643.1	644.7	643.1	640.3	635.8
17.5°	628.7	628.7	629.8	624.8	621.4
20°	612.4	613.2	613.2	609.3	605.3
22.5°	593.5	595.9	596.7	592.5	587.8
25°	571.2	575.7	578.3	574.1	569.1
27.5°	544.2	551.0	558.9	555.7	550.2
30°	514.0	524.0	537.1	534.5	530.5
32.5°	485.4	495.4	513.5	512.4	510.3
35°	459.4	465.7	487.0	489.6	487.7
37.5°	434.7	440.5	460.4	466.5	464.9
40°	408.7	415.0	430.8	441.5	442.1
42.5°	383.0	389.0	401.9	417.4	417.4
45°	355.7	361.7	373.5	390.6	392.7
47.5°	328.9	335.2	346.8	363.8	367.2
50°	302.7	308.4	320.0	336.5	341.8
52.5°	275.4	281.7	293.0	308.2	315.8
55°	249.1	253.3	265.7	280.4	288.5
57.5°	221.8	225.8	239.7	252.3	260.7
60°	195.6	200.6	211.3	224.2	233.9
62.5°	170.4	175.6	184.8	196.1	207.1
65°	146.0	149.9	158.8	170.1	179.8
67.5°	122.3	125.7	134.7	142.5	152.8
70°	98.4	102.9	109.5	117.1	123.6
72.5°	79.3	81.1	86.6	92.1	99.0
75°	58.5	61.7	66.2	69.3	73.2
77.5°	42.0	43.8	46.5	49.1	52.8
80°	28.1	28.9	31.2	31.8	34.7
82.5°	17.1	17.6	18.1	18.4	19.4
85°	9.2	9.2	9.2	8.7	8.7
87.5°	5.3	5.3	4.5	3.7	2.6
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)