

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: P554595

Luminaire Tested: **FUSL-12-2-LD4-1STD-50-UNV-93-85-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: P554595  
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-50-UNV-93-85-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

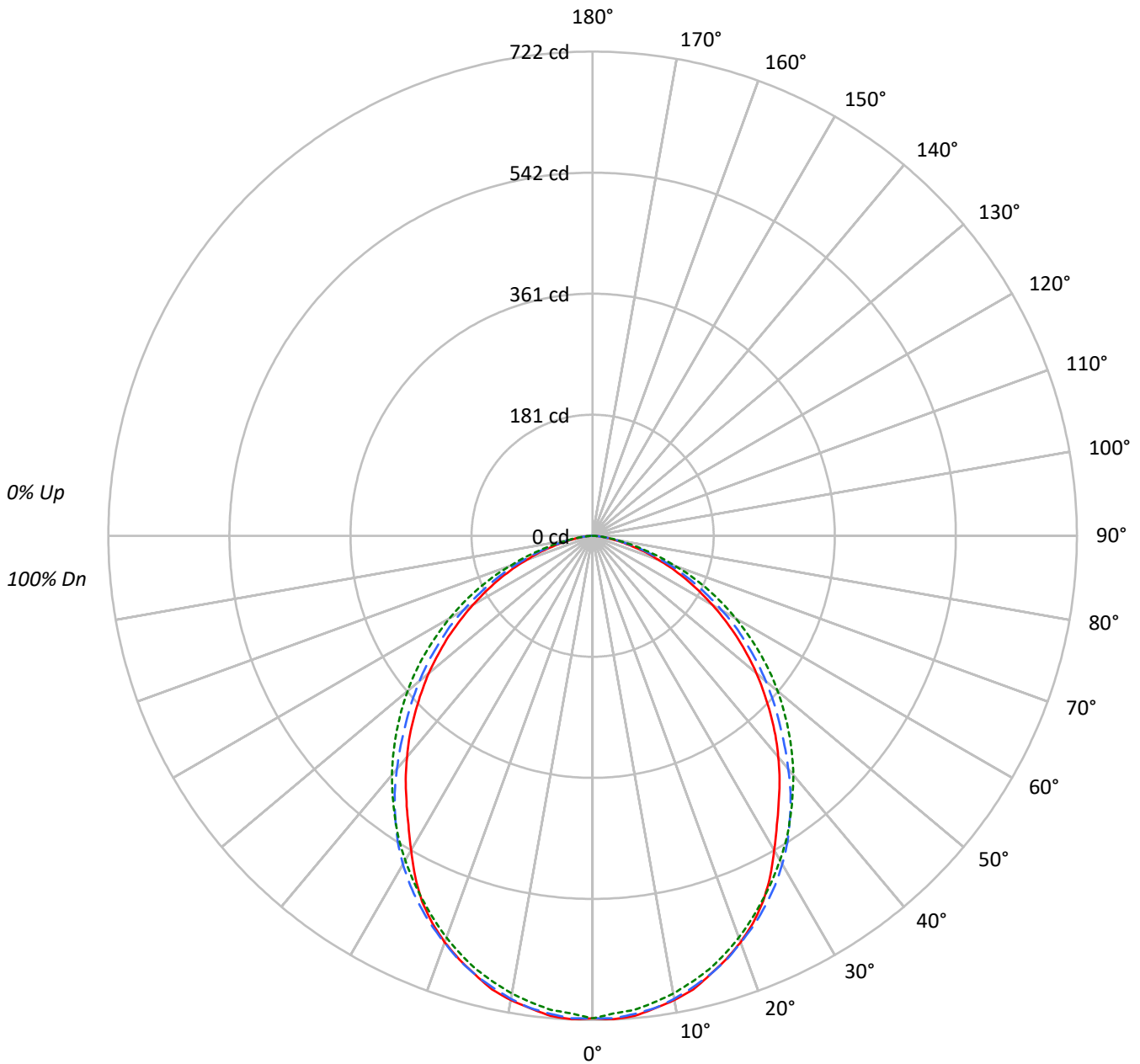
Lumens per Lamp: N/A  
Luminaire Lumens: 1664.0 lumens  
Efficiency: N/A  
Efficacy: 100.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	3873	3873	3873
5°	3883	3867	3834
10°	3842	3831	3788
15°	3774	3774	3731
20°	3694	3699	3651
25°	3573	3617	3559
30°	3364	3515	3472
35°	3179	3369	3375
40°	3025	3188	3271
45°	2851	2994	3148
50°	2669	2822	3014
55°	2462	2625	2851
60°	2217	2396	2651
65°	1957	2131	2412
70°	1632	1814	2049
75°	1283	1449	1603
80°	917	1020	1131
85°	599	599	562



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.8	4.1
10°-20°	190.3	11.4
20°-30°	278.2	16.7
30°-40°	315.7	19.0
40°-50°	304.8	18.3
50°-60°	251.4	15.1
60°-70°	167.4	10.1
70°-80°	74.9	4.5
80°-90°	13.4	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°	536.3	32.2
0°-40°	852.0	51.2
0°-60°	1408.2	84.6
0°-90°	1664.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1664.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	720	720	720	720	720	
5°	719	718	716	712	710	68
15°	677	679	677	674	670	191
25°	602	606	609	605	599	275
35°	484	490	513	516	514	303
45°	375	381	393	411	414	289
55°	262	267	280	295	304	234
65°	154	158	167	179	189	152
75°	62	65	70	73	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°	719.6	719.6	719.6	719.6	719.6
2.5°	721.6	721.8	720.2	715.8	713.0
5°	718.8	718.5	715.8	711.9	709.7
7.5°	710.8	711.3	710.5	705.0	701.9
10°	703.0	703.3	701.1	696.7	693.1
12.5°	693.1	692.8	689.8	687.6	681.8
15°	677.3	679.0	677.3	674.3	669.6
17.5°	662.1	662.1	663.2	658.0	654.4
20°	645.0	645.8	645.8	641.7	637.5
22.5°	625.1	627.6	628.4	624.0	619.0
25°	601.6	606.3	609.1	604.6	599.4
27.5°	573.1	580.3	588.6	585.3	579.5
30°	541.3	551.8	565.6	562.9	558.7
32.5°	511.2	521.7	540.8	539.7	537.4
35°	483.8	490.4	512.8	515.6	513.7
37.5°	457.8	463.9	484.9	491.3	489.6
40°	430.5	437.1	453.7	465.0	465.6
42.5°	403.4	409.7	423.3	439.6	439.6
45°	374.6	381.0	393.4	411.4	413.6
47.5°	346.4	353.0	365.2	383.2	386.8
50°	318.8	324.8	337.0	354.4	360.0
52.5°	290.0	296.6	308.5	324.6	332.6
55°	262.4	266.8	279.8	295.3	303.8
57.5°	233.6	237.8	252.4	265.7	274.5
60°	206.0	211.2	222.6	236.1	246.3
62.5°	179.4	185.0	194.6	206.5	218.1
65°	153.7	157.9	167.3	179.1	189.4
67.5°	128.8	132.4	141.8	150.1	160.9
70°	103.7	108.4	115.3	123.3	130.2
72.5°	83.5	85.4	91.2	97.0	104.2
75°	61.7	65.0	69.7	73.0	77.1
77.5°	44.2	46.2	48.9	51.7	55.6
80°	29.6	30.4	32.9	33.5	36.5
82.5°	18.0	18.5	19.1	19.4	20.5
85°	9.7	9.7	9.7	9.1	9.1
87.5°	5.5	5.5	4.7	3.9	2.8
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)