

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: P554459

Luminaire Tested: **FUSL-12-2-LD4-1STD-35-UNV-82-94-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: P554459  
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-82-94-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDES  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

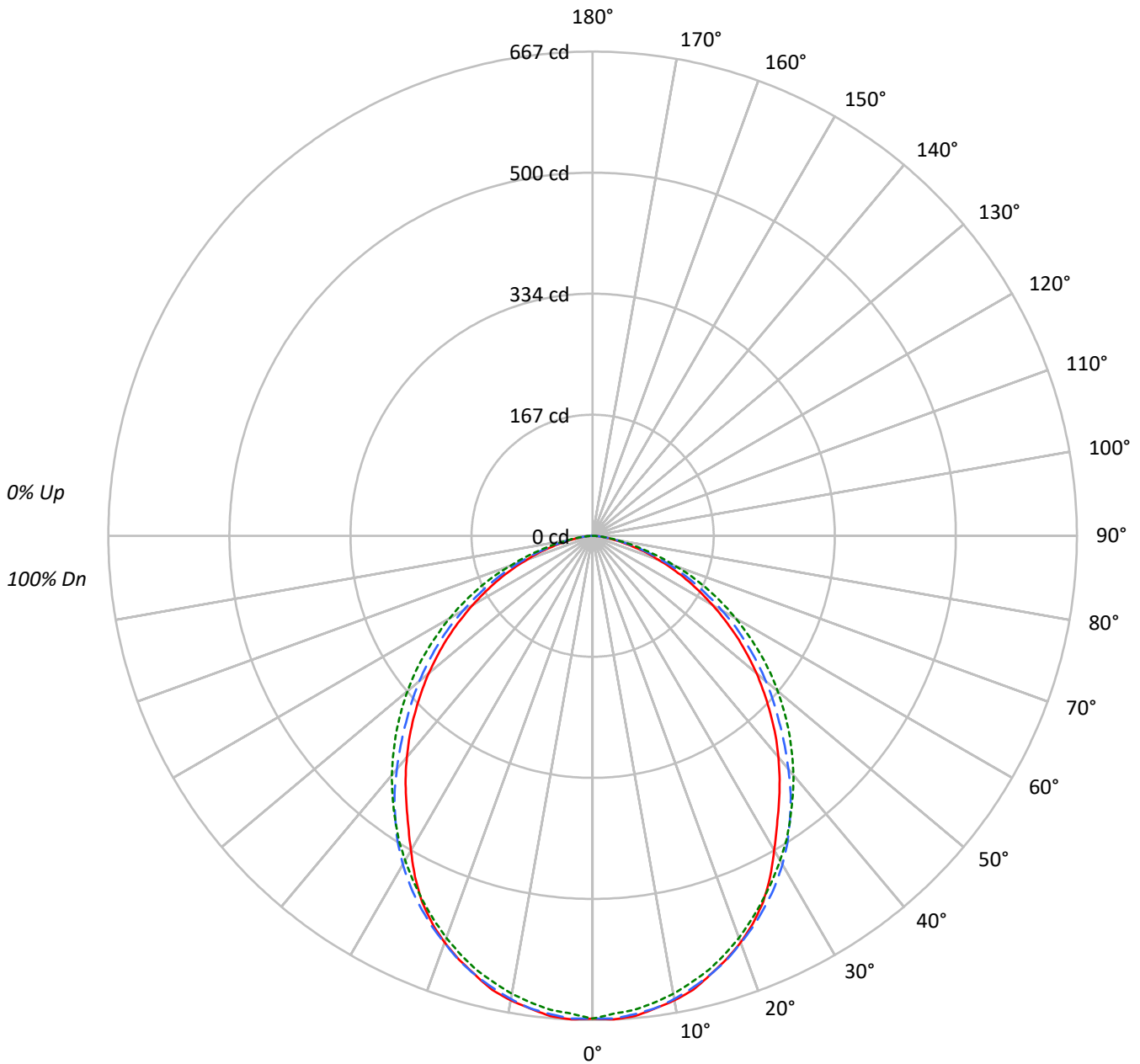
Lumens per Lamp: N/A  
Luminaire Lumens: 1538.0 lumens  
Efficiency: N/A  
Efficacy: 92.7 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	3580	3580	3580
5°	3589	3574	3544
10°	3551	3541	3501
15°	3488	3488	3448
20°	3415	3419	3375
25°	3302	3343	3290
30°	3109	3249	3209
35°	2938	3114	3120
40°	2796	2946	3023
45°	2635	2767	2910
50°	2467	2608	2786
55°	2275	2426	2635
60°	2049	2214	2451
65°	1810	1969	2229
70°	1507	1677	1895
75°	1185	1339	1483
80°	846	942	1044
85°	550	550	519



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.6	4.1
10°-20°	175.9	11.4
20°-30°	257.1	16.7
30°-40°	291.8	19.0
40°-50°	281.7	18.3
50°-60°	232.4	15.1
60°-70°	154.8	10.1
70°-80°	69.3	4.5
80°-90°	12.4	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°	495.7	32.2
0°-40°	787.5	51.2
0°-60°	1301.6	84.6
0°-90°	1538.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1538.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	665	665	665	665	665	
5°	664	664	662	658	656	63
15°	626	628	626	623	619	176
25°	556	560	563	559	554	255
35°	447	453	474	477	475	280
45°	346	352	364	380	382	267
55°	242	247	259	273	281	216
65°	142	146	155	166	175	141
75°	57	60	64	68	71	62
85°	9	9	9	8	8	12
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	665.1	665.1	665.1	665.1	665.1
2.5°	666.9	667.2	665.7	661.6	659.0
5°	664.4	664.1	661.6	658.0	655.9
7.5°	657.0	657.5	656.7	651.6	648.8
10°	649.8	650.1	648.0	643.9	640.6
12.5°	640.6	640.4	637.5	635.5	630.1
15°	626.0	627.6	626.0	623.2	618.9
17.5°	612.0	612.0	613.0	608.2	604.8
20°	596.2	596.9	596.9	593.1	589.3
22.5°	577.8	580.1	580.8	576.7	572.1
25°	556.0	560.4	562.9	558.8	554.0
27.5°	529.7	536.4	544.0	541.0	535.6
30°	500.3	510.0	522.8	520.3	516.4
32.5°	472.5	482.2	499.8	498.8	496.8
35°	447.2	453.3	474.0	476.6	474.8
37.5°	423.2	428.8	448.2	454.1	452.5
40°	397.9	404.0	419.3	429.8	430.3
42.5°	372.8	378.7	391.2	406.3	406.3
45°	346.2	352.1	363.6	380.2	382.3
47.5°	320.2	326.3	337.6	354.2	357.5
50°	294.6	300.2	311.5	327.6	332.7
52.5°	268.1	274.2	285.2	300.0	307.4
55°	242.5	246.6	258.6	272.9	280.8
57.5°	215.9	219.8	233.3	245.6	253.7
60°	190.4	195.2	205.7	218.2	227.7
62.5°	165.8	170.9	179.9	190.9	201.6
65°	142.1	145.9	154.6	165.6	175.0
67.5°	119.1	122.4	131.1	138.8	148.7
70°	95.8	100.2	106.6	114.0	120.4
72.5°	77.2	79.0	84.3	89.7	96.3
75°	57.0	60.0	64.4	67.5	71.3
77.5°	40.9	42.7	45.2	47.8	51.4
80°	27.3	28.1	30.4	30.9	33.7
82.5°	16.6	17.1	17.6	17.9	18.9
85°	8.9	8.9	8.9	8.4	8.4
87.5°	5.1	5.1	4.3	3.6	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)