

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: P555143

Luminaire Tested: **FUSL-12-2-LD4-2STD-30-UNV-81-87-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: P555143  
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-LD4-2STD-30-UNV-81-87-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

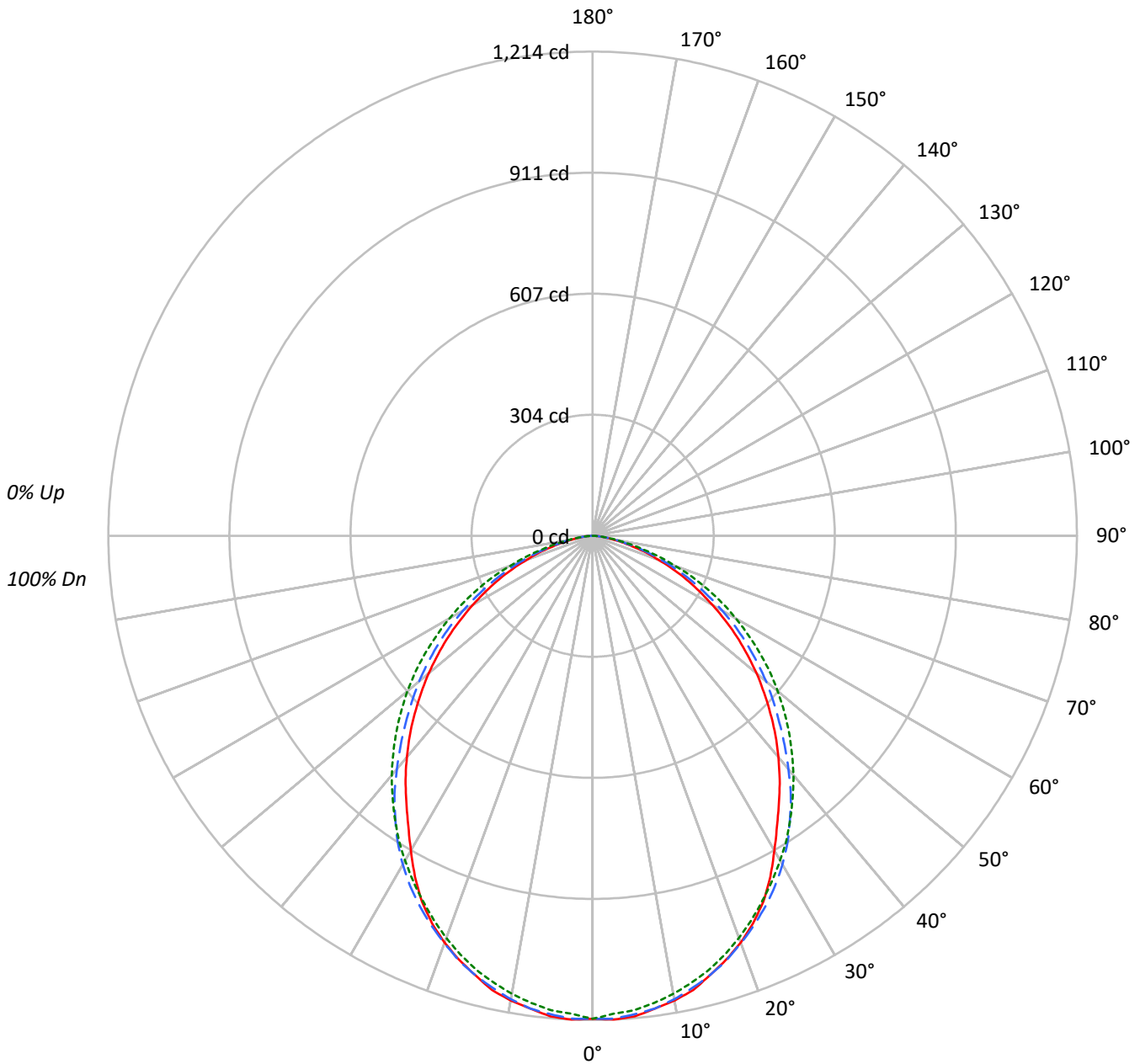
Lumens per Lamp: N/A  
Luminaire Lumens: 2800.0 lumens  
Efficiency: N/A  
Efficacy: 84.1 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 33.3  
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°	6517	6517	6517
5°	6534	6507	6452
10°	6465	6448	6374
15°	6351	6351	6278
20°	6216	6224	6144
25°	6011	6086	5989
30°	5661	5915	5843
35°	5349	5670	5679
40°	5089	5363	5504
45°	4798	5039	5297
50°	4491	4748	5071
55°	4143	4418	4798
60°	3731	4031	4462
65°	3294	3584	4059
70°	2746	3053	3448
75°	2156	2437	2699
80°	1543	1717	1903
85°	1007	1007	951



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	114.0	4.1
10°-20°	320.3	11.4
20°-30°	468.1	16.7
30°-40°	531.3	19.0
40°-50°	512.9	18.3
50°-60°	423.1	15.1
60°-70°	281.7	10.1
70°-80°	126.1	4.5
80°-90°	22.6	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°	902.4	32.2
0°-40°	1433.7	51.2
0°-60°	2369.6	84.6
0°-90°	2800.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2800.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1211	1211	1211	1211	1211	
5°	1210	1209	1204	1198	1194	114
15°	1140	1142	1140	1135	1127	321
25°	1012	1020	1025	1017	1009	464
35°	814	825	863	868	864	510
45°	630	641	662	692	696	486
55°	442	449	471	497	511	394
65°	259	266	281	302	319	256
75°	104	109	117	123	130	113
85°	16	16	16	15	15	22
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1210.9	1210.9	1210.9	1210.9	1210.9
2.5°	1214.2	1214.6	1211.9	1204.4	1199.8
5°	1209.5	1209.1	1204.4	1197.9	1194.2
7.5°	1196.0	1197.0	1195.6	1186.3	1181.2
10°	1183.0	1183.5	1179.8	1172.3	1166.3
12.5°	1166.3	1165.8	1160.7	1157.0	1147.2
15°	1139.8	1142.5	1139.8	1134.6	1126.7
17.5°	1114.2	1114.2	1116.0	1107.2	1101.1
20°	1085.3	1086.7	1086.7	1079.7	1072.8
22.5°	1051.8	1056.0	1057.4	1050.0	1041.6
25°	1012.3	1020.2	1024.8	1017.4	1008.6
27.5°	964.4	976.5	990.4	984.8	975.1
30°	910.9	928.5	951.8	947.2	940.2
32.5°	860.2	877.8	909.9	908.1	904.4
35°	814.1	825.3	863.0	867.6	864.4
37.5°	770.4	780.6	816.0	826.7	823.9
40°	724.3	735.5	763.4	782.5	783.4
42.5°	678.7	689.4	712.2	739.7	739.7
45°	630.4	641.1	662.0	692.2	695.9
47.5°	582.9	594.1	614.5	644.8	650.8
50°	536.4	546.6	567.1	596.4	605.7
52.5°	488.0	499.2	519.2	546.2	559.6
55°	441.5	448.9	470.8	496.8	511.3
57.5°	393.1	400.1	424.7	447.1	461.9
60°	346.6	355.4	374.5	397.3	414.5
62.5°	301.9	311.2	327.5	347.5	367.0
65°	258.7	265.6	281.4	301.5	318.7
67.5°	216.8	222.8	238.6	252.6	270.7
70°	174.5	182.4	194.0	207.5	219.1
72.5°	140.5	143.7	153.5	163.3	175.4
75°	103.7	109.3	117.2	122.8	129.8
77.5°	74.4	77.7	82.3	87.0	93.5
80°	49.8	51.2	55.4	56.3	61.4
82.5°	30.2	31.2	32.1	32.6	34.4
85°	16.3	16.3	16.3	15.4	15.4
87.5°	9.3	9.3	7.9	6.5	4.7
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)