

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: P555153

Luminaire Tested: **FUSL-12-2-LD4-2STD-30-UNV-82-84-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: P555153  
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-82-84-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

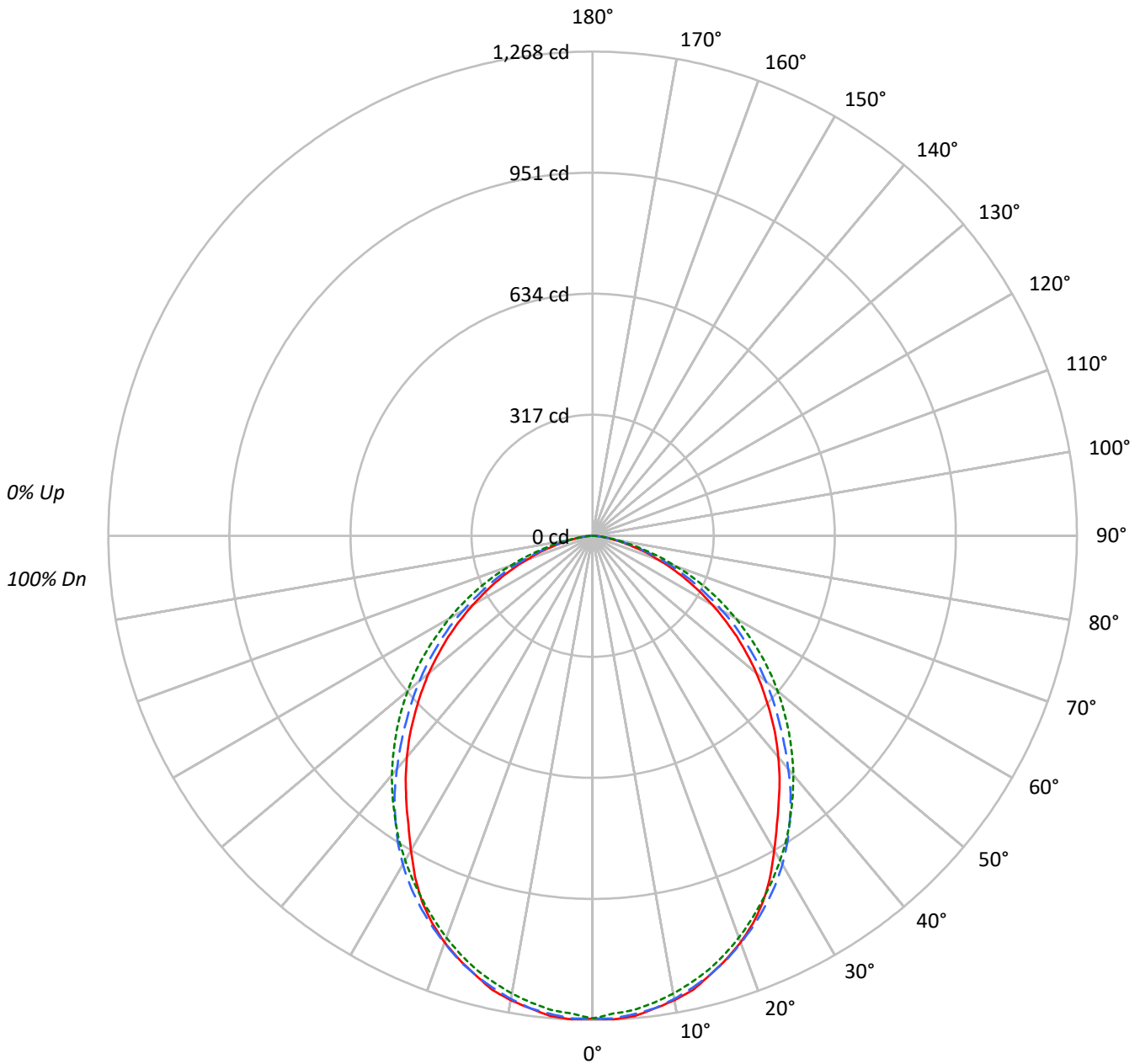
Lumens per Lamp: N/A  
Luminaire Lumens: 2923.0 lumens  
Efficiency: N/A  
Efficacy: 87.8 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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

TEST NUMBER: P555153

CATALOG NUMBER: FUSL-12-2-LD4-2STD-30-UNV-82-84-EDD

### Luminous Intensity Polar Plot





TEST NUMBER: P555153

CATALOG NUMBER: FUSL-12-2-LD4-2STD-30-UNV-82-84-EDD

**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°	6803	6803	6803
5°	6822	6793	6735
10°	6749	6731	6654
15°	6629	6629	6554
20°	6489	6498	6414
25°	6276	6353	6252
30°	5909	6175	6100
35°	5584	5919	5928
40°	5312	5599	5746
45°	5008	5260	5530
50°	4688	4957	5294
55°	4325	4612	5008
60°	3894	4208	4658
65°	3438	3741	4237
70°	2865	3186	3599
75°	2252	2545	2818
80°	1612	1791	1987
85°	1050	1050	988



TEST NUMBER: P555153

CATALOG NUMBER: FUSL-12-2-LD4-2STD-30-UNV-82-84-EDD

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	119.0	4.1
10°-20°	334.4	11.4
20°-30°	488.6	16.7
30°-40°	554.6	19.0
40°-50°	535.4	18.3
50°-60°	441.7	15.1
60°-70°	294.1	10.1
70°-80°	131.6	4.5
80°-90°	23.5	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°	942.0	32.2
0°-40°	1496.6	51.2
0°-60°	2473.7	84.6
0°-90°	2923.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2923.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1264	1264	1264	1264	1264	
5°	1263	1262	1257	1250	1247	120
15°	1190	1193	1190	1184	1176	335
25°	1057	1065	1070	1062	1053	484
35°	850	862	901	906	902	532
45°	658	669	691	723	726	508
55°	461	469	492	519	534	411
65°	270	277	294	315	333	268
75°	108	114	122	128	136	118
85°	17	17	17	16	16	23
90°	0	0	0	0	0	



TEST NUMBER: P555153

CATALOG NUMBER: FUSL-12-2-LD4-2STD-30-UNV-82-84-EDD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1264.1	1264.1	1264.1	1264.1	1264.1
2.5°	1267.5	1268.0	1265.1	1257.3	1252.5
5°	1262.7	1262.2	1257.3	1250.5	1246.6
7.5°	1248.6	1249.6	1248.1	1238.4	1233.0
10°	1235.0	1235.5	1231.6	1223.8	1217.5
12.5°	1217.5	1217.0	1211.7	1207.8	1197.6
15°	1189.8	1192.7	1189.8	1184.5	1176.2
17.5°	1163.1	1163.1	1165.1	1155.8	1149.5
20°	1133.0	1134.5	1134.5	1127.2	1119.9
22.5°	1098.0	1102.4	1103.9	1096.1	1087.3
25°	1056.8	1065.0	1069.9	1062.1	1052.9
27.5°	1006.7	1019.4	1033.9	1028.1	1017.9
30°	950.9	969.3	993.6	988.8	981.5
32.5°	897.9	916.4	949.9	948.0	944.1
35°	849.9	861.5	900.9	905.7	902.3
37.5°	804.2	814.9	851.8	863.0	860.1
40°	756.1	767.8	796.9	816.8	817.8
42.5°	708.5	719.7	743.5	772.2	772.2
45°	658.0	669.2	691.1	722.6	726.5
47.5°	608.5	620.2	641.5	673.1	679.4
50°	559.9	570.6	592.0	622.6	632.3
52.5°	509.4	521.1	542.0	570.1	584.2
55°	460.9	468.6	491.5	518.7	533.7
57.5°	410.4	417.7	443.4	466.7	482.2
60°	361.8	371.0	390.9	414.7	432.7
62.5°	315.2	324.9	341.9	362.8	383.2
65°	270.0	277.3	293.8	314.7	332.7
67.5°	226.3	232.6	249.1	263.7	282.6
70°	182.1	190.4	202.5	216.6	228.7
72.5°	146.7	150.1	160.3	170.5	183.1
75°	108.3	114.1	122.4	128.2	135.5
77.5°	77.7	81.1	86.0	90.8	97.6
80°	52.0	53.4	57.8	58.8	64.1
82.5°	31.6	32.5	33.5	34.0	35.9
85°	17.0	17.0	17.0	16.0	16.0
87.5°	9.7	9.7	8.3	6.8	4.9
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)