

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: P555136

Luminaire Tested: **FUSL-12-2-LD4-2STD-30-UNV-81-84-EDD-90**

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: P555136  
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-81-84-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

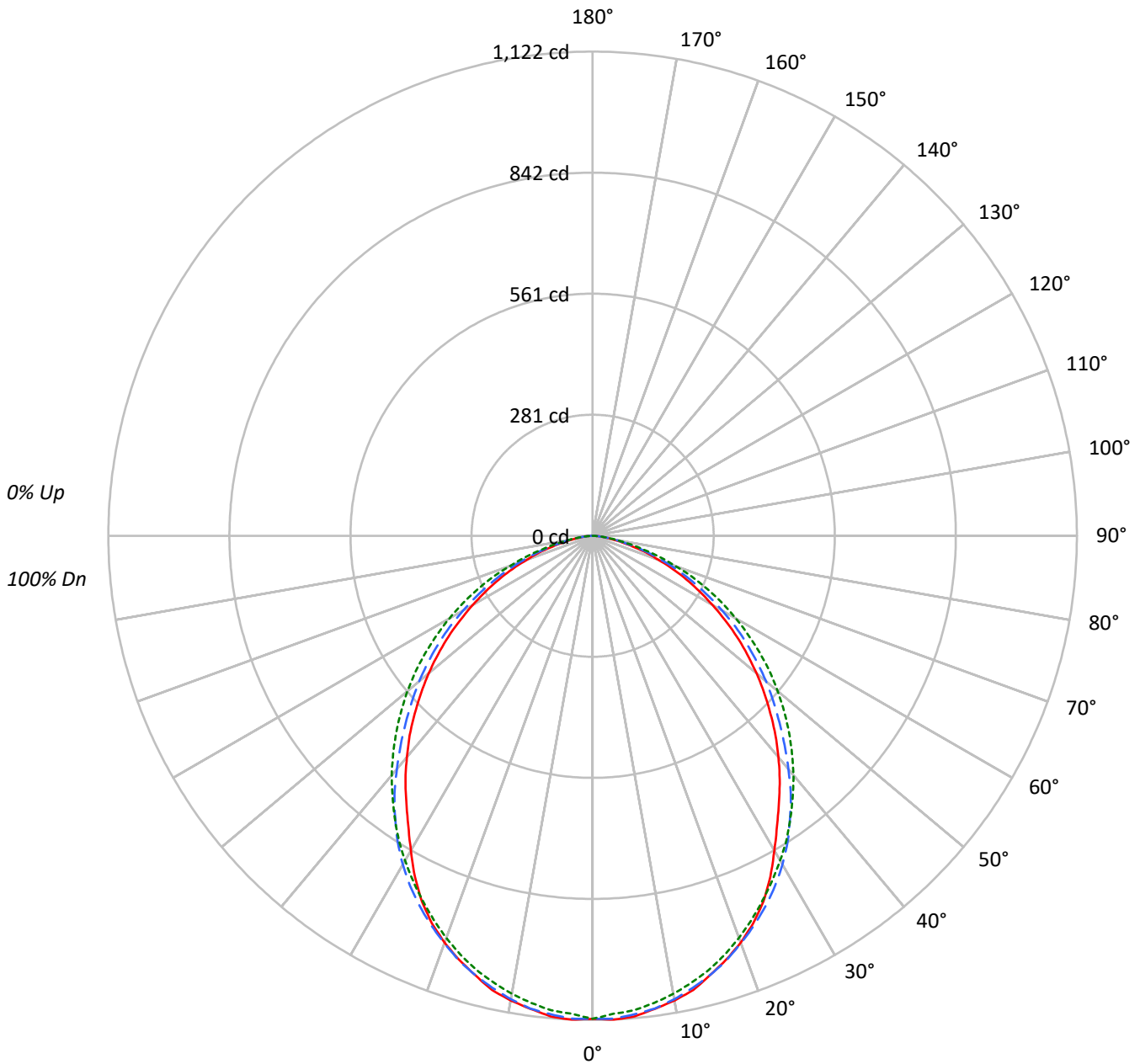
Lumens per Lamp: N/A  
Luminaire Lumens: 2588.0 lumens  
Efficiency: N/A  
Efficacy: 77.7 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 33.3  
Input Voltage (V): NR  
Input Current (Ain): 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°	6023	6023	6023
5°	6040	6014	5963
10°	5975	5959	5891
15°	5870	5870	5802
20°	5745	5753	5679
25°	5556	5625	5536
30°	5232	5467	5400
35°	4944	5240	5249
40°	4704	4957	5087
45°	4434	4657	4896
50°	4151	4388	4687
55°	3829	4083	4434
60°	3448	3725	4124
65°	3045	3312	3750
70°	2537	2821	3186
75°	1994	2254	2495
80°	1426	1587	1760
85°	926	926	877



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.4	4.1
10°-20°	296.0	11.4
20°-30°	432.6	16.7
30°-40°	491.1	19.0
40°-50°	474.0	18.3
50°-60°	391.1	15.1
60°-70°	260.4	10.1
70°-80°	116.5	4.5
80°-90°	20.8	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°	834.0	32.2
0°-40°	1325.1	51.2
0°-60°	2190.2	84.6
0°-90°	2588.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2588.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1119	1119	1119	1119	1119	
5°	1118	1118	1113	1107	1104	106
15°	1054	1056	1054	1049	1041	297
25°	936	943	947	940	932	428
35°	752	763	798	802	799	471
45°	583	592	612	640	643	450
55°	408	415	435	459	473	364
65°	239	246	260	279	294	237
75°	96	101	108	114	120	105
85°	15	15	15	14	14	20
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1119.2	1119.2	1119.2	1119.2	1119.2
2.5°	1122.3	1122.7	1120.1	1113.2	1108.9
5°	1118.0	1117.5	1113.2	1107.2	1103.8
7.5°	1105.5	1106.3	1105.1	1096.5	1091.7
10°	1093.4	1093.9	1090.4	1083.6	1078.0
12.5°	1078.0	1077.5	1072.8	1069.4	1060.3
15°	1053.5	1056.0	1053.5	1048.7	1041.4
17.5°	1029.8	1029.8	1031.5	1023.4	1017.8
20°	1003.1	1004.4	1004.4	998.0	991.5
22.5°	972.2	976.1	977.3	970.5	962.7
25°	935.6	943.0	947.3	940.4	932.2
27.5°	891.4	902.5	915.4	910.3	901.2
30°	841.9	858.2	879.7	875.4	869.0
32.5°	795.0	811.4	841.0	839.3	835.9
35°	752.5	762.8	797.6	801.9	798.9
37.5°	712.1	721.5	754.2	764.1	761.5
40°	669.5	679.8	705.6	723.2	724.1
42.5°	627.3	637.2	658.3	683.7	683.7
45°	582.6	592.5	611.9	639.8	643.3
47.5°	538.8	549.1	568.0	596.0	601.5
50°	495.8	505.2	524.1	551.2	559.8
52.5°	451.1	461.4	479.9	504.8	517.3
55°	408.1	414.9	435.1	459.2	472.6
57.5°	363.3	369.8	392.6	413.2	427.0
60°	320.3	328.5	346.1	367.2	383.1
62.5°	279.1	287.7	302.7	321.2	339.3
65°	239.1	245.5	260.1	278.6	294.5
67.5°	200.4	206.0	220.6	233.5	250.2
70°	161.2	168.6	179.3	191.8	202.5
72.5°	129.9	132.9	141.9	150.9	162.1
75°	95.9	101.0	108.4	113.5	120.0
77.5°	68.8	71.8	76.1	80.4	86.4
80°	46.0	47.3	51.2	52.0	56.8
82.5°	27.9	28.8	29.7	30.1	31.8
85°	15.0	15.0	15.0	14.2	14.2
87.5°	8.6	8.6	7.3	6.0	4.3
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)