

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: P555142

Luminaire Tested: **FUSL-12-2-LD4-2STD-30-UNV-81-87-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: P555142  
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-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .375  
CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

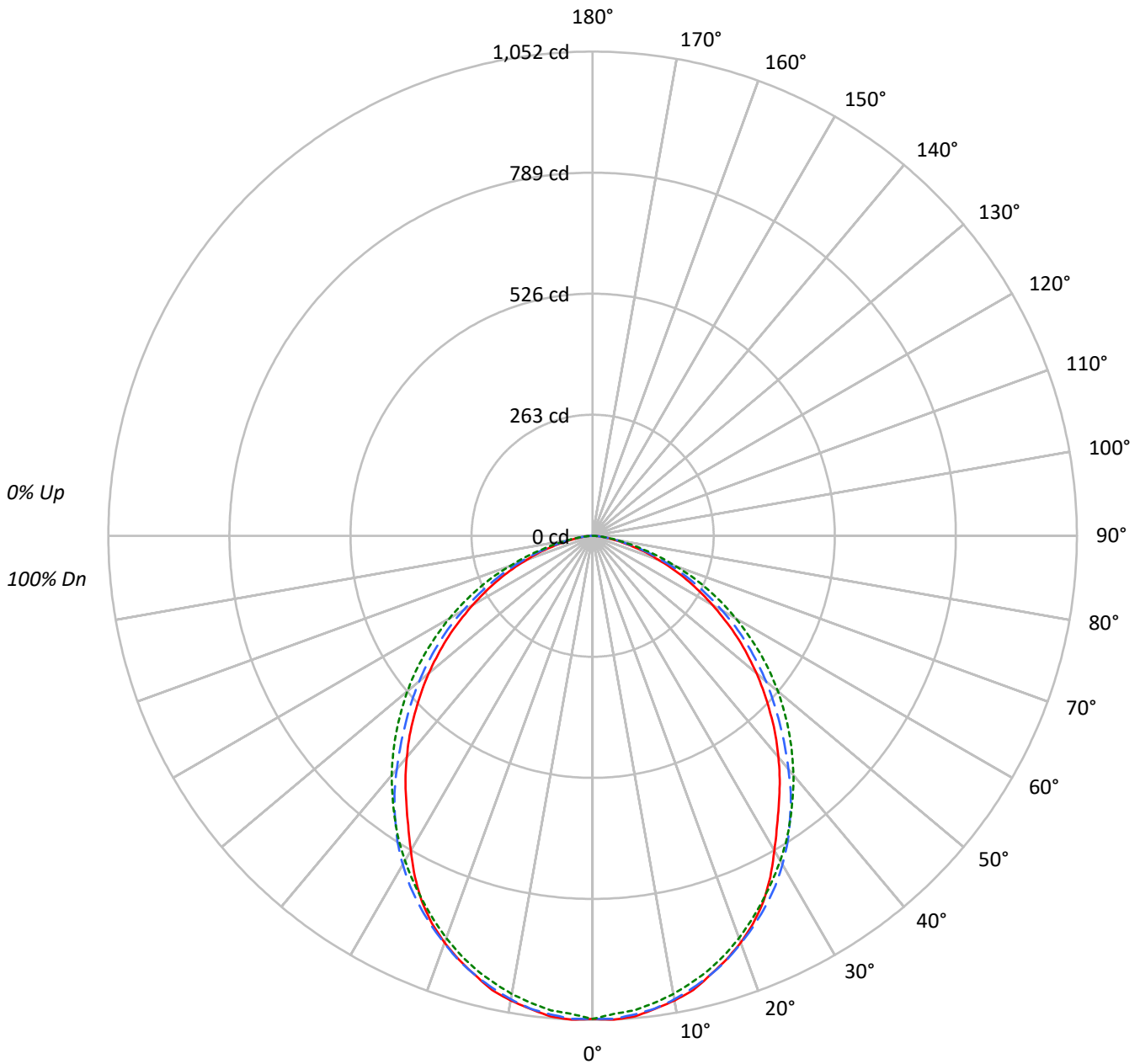
Lumens per Lamp: N/A  
Luminaire Lumens: 2427.0 lumens  
Efficiency: N/A  
Efficacy: 72.9 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	5649	5649	5649
5°	5664	5640	5592
10°	5604	5588	5525
15°	5504	5504	5441
20°	5388	5395	5326
25°	5210	5275	5191
30°	4906	5127	5064
35°	4637	4914	4922
40°	4411	4649	4770
45°	4159	4367	4591
50°	3893	4115	4396
55°	3591	3829	4159
60°	3233	3494	3867
65°	2855	3107	3517
70°	2379	2645	2988
75°	1869	2113	2339
80°	1336	1488	1649
85°	871	871	821



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	98.8	4.1
10°-20°	277.6	11.4
20°-30°	405.7	16.7
30°-40°	460.5	19.0
40°-50°	444.6	18.3
50°-60°	366.7	15.1
60°-70°	244.2	10.1
70°-80°	109.3	4.5
80°-90°	19.5	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°	782.1	32.2
0°-40°	1242.7	51.2
0°-60°	2053.9	84.6
0°-90°	2427.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2427.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1050	1050	1050	1050	1050	
5°	1048	1048	1044	1038	1035	99
15°	988	990	988	984	977	278
25°	877	884	888	882	874	402
35°	706	715	748	752	749	442
45°	546	556	574	600	603	422
55°	383	389	408	431	443	342
65°	224	230	244	261	276	222
75°	90	95	102	106	112	98
85°	14	14	14	13	13	19
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1049.6	1049.6	1049.6	1049.6	1049.6
2.5°	1052.4	1052.8	1050.4	1044.0	1039.9
5°	1048.4	1048.0	1044.0	1038.3	1035.1
7.5°	1036.7	1037.5	1036.3	1028.2	1023.8
10°	1025.4	1025.8	1022.6	1016.1	1010.9
12.5°	1010.9	1010.5	1006.1	1002.8	994.4
15°	987.9	990.3	987.9	983.5	976.6
17.5°	965.7	965.7	967.4	959.7	954.5
20°	940.7	942.0	942.0	935.9	929.9
22.5°	911.7	915.3	916.5	910.1	902.8
25°	877.4	884.3	888.3	881.9	874.2
27.5°	835.9	846.4	858.5	853.6	845.2
30°	789.5	804.9	825.0	821.0	814.9
32.5°	745.6	760.9	788.7	787.1	783.9
35°	705.7	715.3	748.0	752.0	749.2
37.5°	667.8	676.6	707.3	716.5	714.1
40°	627.8	637.5	661.7	678.2	679.0
42.5°	588.3	597.6	617.3	641.1	641.1
45°	546.4	555.7	573.8	600.0	603.2
47.5°	505.3	514.9	532.7	558.9	564.1
50°	464.9	473.8	491.5	516.9	525.0
52.5°	423.0	432.7	450.0	473.4	485.1
55°	382.7	389.1	408.1	430.7	443.2
57.5°	340.7	346.8	368.2	387.5	400.4
60°	300.4	308.1	324.6	344.4	359.3
62.5°	261.7	269.8	283.9	301.2	318.2
65°	224.2	230.2	244.0	261.3	276.2
67.5°	187.9	193.1	206.9	219.0	234.7
70°	151.2	158.1	168.1	179.8	189.9
72.5°	121.8	124.6	133.1	141.5	152.0
75°	89.9	94.8	101.6	106.5	112.5
77.5°	64.5	67.3	71.4	75.4	81.0
80°	43.1	44.4	48.0	48.8	53.2
82.5°	26.2	27.0	27.8	28.2	29.8
85°	14.1	14.1	14.1	13.3	13.3
87.5°	8.1	8.1	6.9	5.6	4.0
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)