

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: P554374

Luminaire Tested: **FUSL-12-2-LD4-1STD-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: P554374  
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-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**

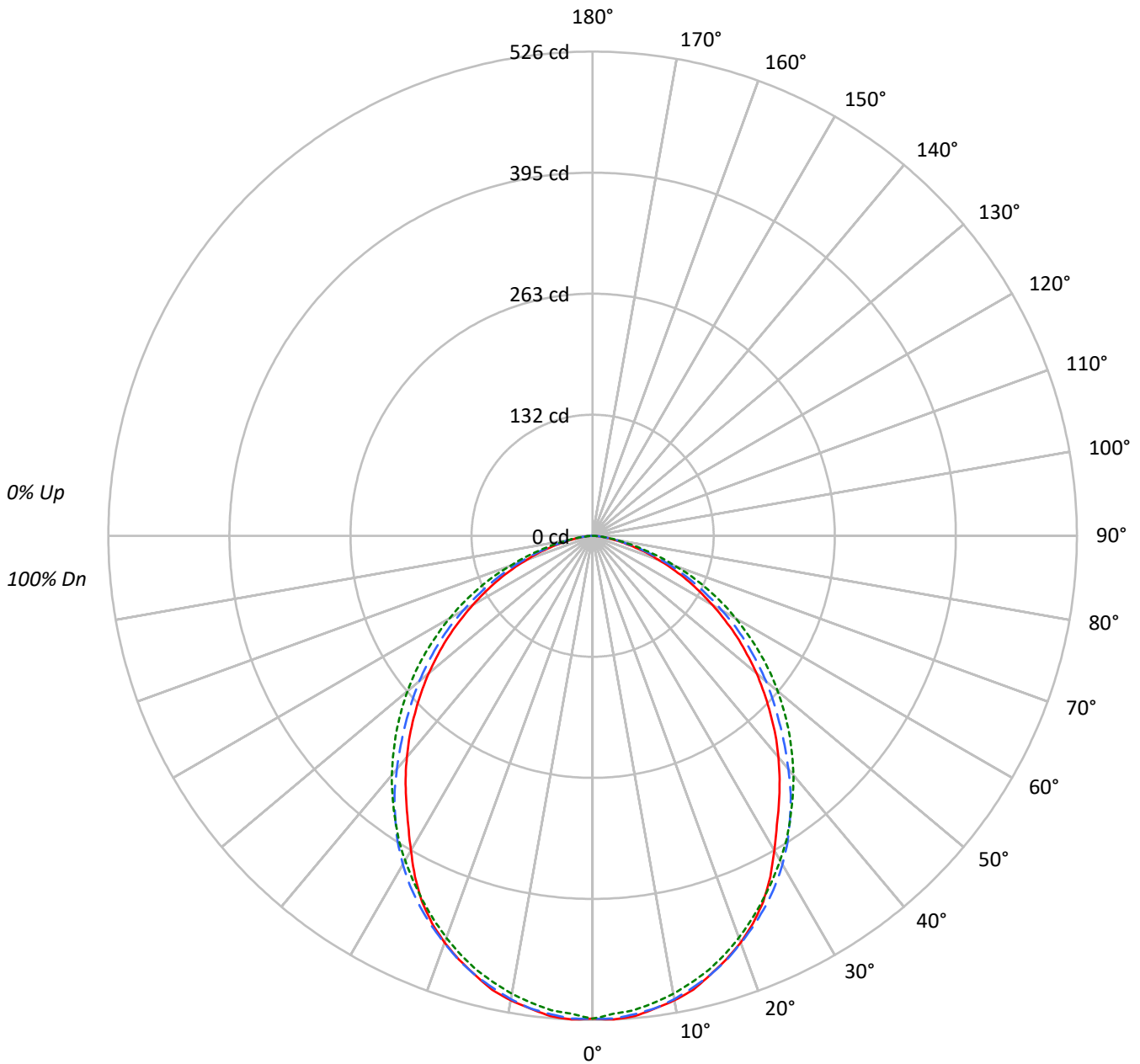
Lumens per Lamp: N/A  
Luminaire Lumens: 1213.0 lumens  
Efficiency: N/A  
Efficacy: 73.1 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 16.6  
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°	2823	2823	2823
5°	2831	2819	2795
10°	2801	2793	2761
15°	2751	2751	2720
20°	2693	2696	2662
25°	2604	2637	2594
30°	2452	2562	2531
35°	2317	2456	2460
40°	2205	2323	2385
45°	2079	2183	2295
50°	1946	2057	2197
55°	1795	1914	2078
60°	1616	1746	1933
65°	1428	1552	1759
70°	1190	1322	1493
75°	934	1056	1169
80°	669	744	824
85°	438	438	414



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	49.4	4.1
10°-20°	138.8	11.4
20°-30°	202.8	16.7
30°-40°	230.2	19.0
40°-50°	222.2	18.3
50°-60°	183.3	15.1
60°-70°	122.1	10.1
70°-80°	54.6	4.5
80°-90°	9.8	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°	390.9	32.2
0°-40°	621.1	51.2
0°-60°	1026.6	84.6
0°-90°	1213.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1213.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	525	525	525	525	525	
5°	524	524	522	519	517	50
15°	494	495	494	492	488	139
25°	438	442	444	441	437	201
35°	353	358	374	376	374	221
45°	273	278	287	300	302	211
55°	191	194	204	215	222	171
65°	112	115	122	131	138	111
75°	45	47	51	53	56	49
85°	7	7	7	7	7	10
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	524.6	524.6	524.6	524.6	524.6
2.5°	526.0	526.2	525.0	521.8	519.8
5°	524.0	523.8	521.8	518.9	517.3
7.5°	518.1	518.5	517.9	513.9	511.7
10°	512.5	512.7	511.1	507.9	505.2
12.5°	505.2	505.0	502.8	501.2	497.0
15°	493.8	495.0	493.8	491.5	488.1
17.5°	482.7	482.7	483.5	479.6	477.0
20°	470.2	470.8	470.8	467.8	464.7
22.5°	455.7	457.5	458.1	454.9	451.2
25°	438.5	442.0	444.0	440.8	436.9
27.5°	417.8	423.0	429.1	426.6	422.4
30°	394.6	402.3	412.3	410.3	407.3
32.5°	372.6	380.3	394.2	393.4	391.8
35°	352.7	357.5	373.8	375.9	374.4
37.5°	333.7	338.2	353.5	358.1	356.9
40°	313.8	318.6	330.7	339.0	339.4
42.5°	294.0	298.7	308.5	320.4	320.4
45°	273.1	277.7	286.8	299.9	301.5
47.5°	252.5	257.4	266.2	279.3	281.9
50°	232.4	236.8	245.7	258.4	262.4
52.5°	211.4	216.2	224.9	236.6	242.4
55°	191.3	194.5	204.0	215.2	221.5
57.5°	170.3	173.3	184.0	193.7	200.1
60°	150.1	154.0	162.2	172.1	179.6
62.5°	130.8	134.8	141.9	150.5	159.0
65°	112.1	115.1	121.9	130.6	138.1
67.5°	93.9	96.5	103.4	109.4	117.3
70°	75.6	79.0	84.0	89.9	94.9
72.5°	60.9	62.3	66.5	70.7	76.0
75°	44.9	47.4	50.8	53.2	56.2
77.5°	32.2	33.7	35.7	37.7	40.5
80°	21.6	22.2	24.0	24.4	26.6
82.5°	13.1	13.5	13.9	14.1	14.9
85°	7.1	7.1	7.1	6.7	6.7
87.5°	4.0	4.0	3.4	2.8	2.0
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)