

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: P554495

Luminaire Tested: **FUSL-12-2-LD4-1STD-40-UNV-80-97-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: P554495  
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-40-UNV-80-97-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND  
.375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND  
4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

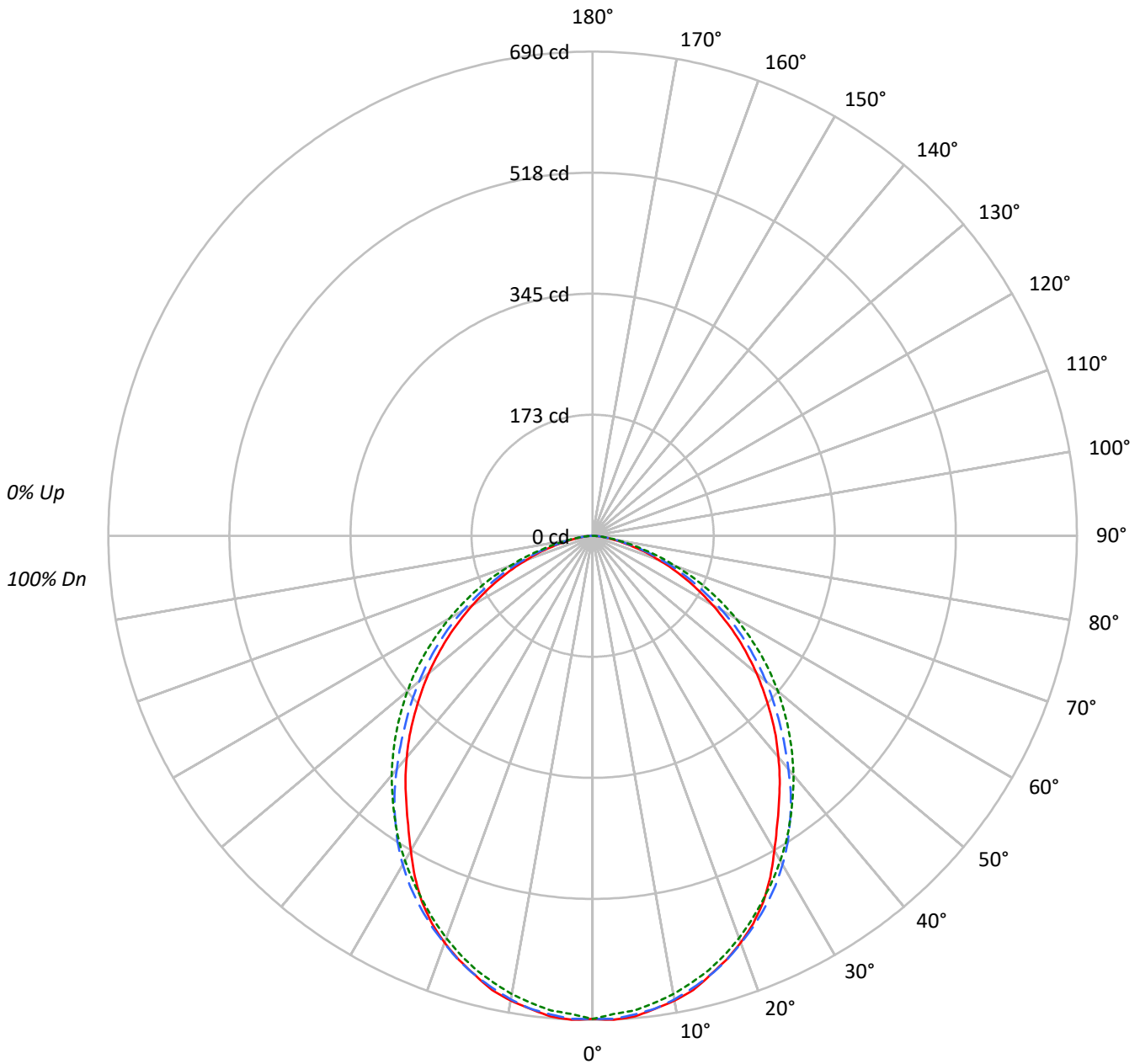
Lumens per Lamp: N/A  
Luminaire Lumens: 1592.0 lumens  
Efficiency: N/A  
Efficacy: 95.9 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 16.6  
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					20					
RC	80					70					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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86					86			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73					73			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63					63			
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54					54			
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47					47			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42					42			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37					37			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34					34			
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30					30			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28					28			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3705	3705	3705
5°	3715	3700	3668
10°	3676	3666	3624
15°	3611	3611	3569
20°	3534	3539	3493
25°	3418	3460	3405
30°	3219	3363	3322
35°	3041	3224	3229
40°	2893	3049	3129
45°	2728	2865	3012
50°	2554	2699	2884
55°	2355	2512	2728
60°	2122	2292	2537
65°	1873	2038	2308
70°	1561	1736	1961
75°	1227	1387	1535
80°	877	976	1082
85°	574	574	537



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	64.8	4.1
10°-20°	182.1	11.4
20°-30°	266.1	16.7
30°-40°	302.1	19.0
40°-50°	291.6	18.3
50°-60°	240.6	15.1
60°-70°	160.2	10.1
70°-80°	71.7	4.5
80°-90°	12.8	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°	513.1	32.2
0°-40°	815.1	51.2
0°-60°	1347.3	84.6
0°-90°	1592.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1592.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	688	688	688	688	688	
5°	688	687	685	681	679	65
15°	648	650	648	645	641	183
25°	576	580	583	578	573	264
35°	463	469	491	493	491	290
45°	358	364	376	394	396	277
55°	251	255	268	282	291	224
65°	147	151	160	171	181	146
75°	59	62	67	70	74	65
85°	9	9	9	9	9	12
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	688.5	688.5	688.5	688.5	688.5
2.5°	690.4	690.6	689.0	684.8	682.2
5°	687.7	687.4	684.8	681.1	679.0
7.5°	680.0	680.6	679.8	674.5	671.6
10°	672.6	672.9	670.8	666.5	663.1
12.5°	663.1	662.8	659.9	657.8	652.3
15°	648.0	649.6	648.0	645.1	640.6
17.5°	633.5	633.5	634.5	629.5	626.1
20°	617.1	617.9	617.9	613.9	609.9
22.5°	598.0	600.4	601.2	597.0	592.2
25°	575.6	580.1	582.7	578.5	573.4
27.5°	548.3	555.2	563.1	560.0	554.4
30°	517.9	527.9	541.2	538.5	534.6
32.5°	489.1	499.1	517.4	516.3	514.2
35°	462.9	469.2	490.7	493.3	491.4
37.5°	438.0	443.8	463.9	470.0	468.4
40°	411.8	418.2	434.0	444.9	445.4
42.5°	385.9	392.0	405.0	420.6	420.6
45°	358.4	364.5	376.4	393.6	395.7
47.5°	331.4	337.8	349.4	366.6	370.0
50°	305.0	310.8	322.4	339.1	344.4
52.5°	277.5	283.8	295.2	310.5	318.2
55°	251.0	255.2	267.7	282.5	290.7
57.5°	223.5	227.5	241.5	254.2	262.7
60°	197.1	202.1	212.9	225.9	235.7
62.5°	171.7	177.0	186.2	197.6	208.7
65°	147.1	151.0	160.0	171.4	181.2
67.5°	123.3	126.7	135.7	143.6	153.9
70°	99.2	103.7	110.3	118.0	124.6
72.5°	79.9	81.7	87.3	92.8	99.7
75°	59.0	62.2	66.7	69.8	73.8
77.5°	42.3	44.2	46.8	49.5	53.2
80°	28.3	29.1	31.5	32.0	34.9
82.5°	17.2	17.7	18.3	18.5	19.6
85°	9.3	9.3	9.3	8.7	8.7
87.5°	5.3	5.3	4.5	3.7	2.6
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)