

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: P554092

Luminaire Tested: **FUSL-12-2-LD4-1HI-50-UNV-93-96-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: P554092
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-LD4-1HI-50-UNV-93-96-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

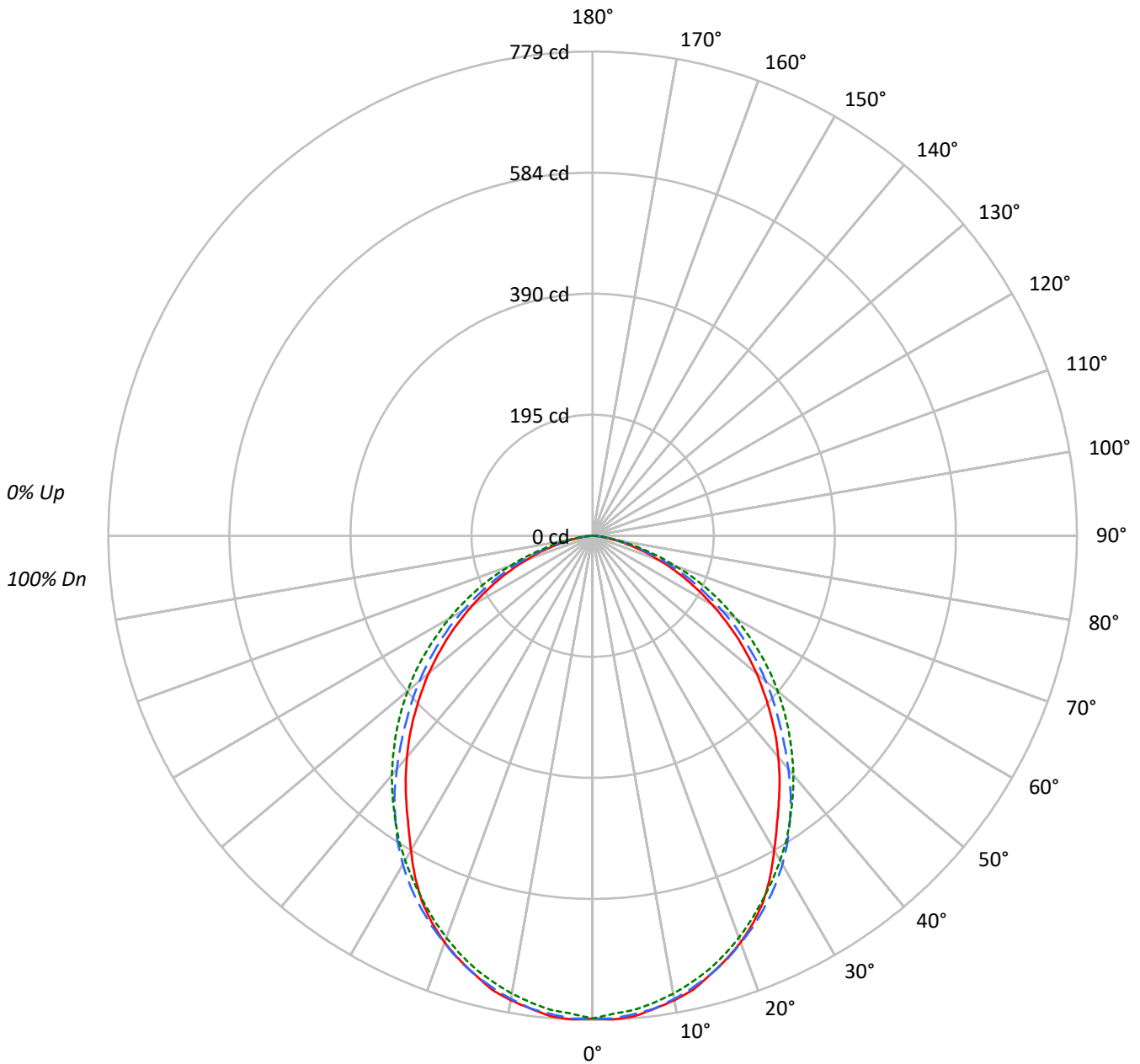
Lumens per Lamp: N/A
Luminaire Lumens: 1796.0 lumens
Efficiency: N/A
Efficacy: 83.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 21.6
Input Voltage (V): NR
Input Current (A_{in}): 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				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	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°	4180	4180	4180
5°	4191	4173	4138
10°	4147	4135	4088
15°	4074	4074	4027
20°	3987	3993	3941
25°	3856	3904	3842
30°	3631	3794	3748
35°	3431	3637	3642
40°	3264	3440	3530
45°	3077	3232	3398
50°	2881	3045	3253
55°	2657	2834	3077
60°	2393	2585	2862
65°	2113	2299	2603
70°	1761	1958	2211
75°	1383	1564	1732
80°	989	1100	1221
85°	642	642	605



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.1	4.1
10°-20°	205.5	11.4
20°-30°	300.2	16.7
30°-40°	340.8	19.0
40°-50°	329.0	18.3
50°-60°	271.4	15.1
60°-70°	180.7	10.1
70°-80°	80.9	4.5
80°-90°	14.5	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°	578.8	32.2
0°-40°	919.6	51.2
0°-60°	1520.0	84.6
0°-90°	1796.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1796.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	777	777	777	777	777	
5°	776	776	772	768	766	73
15°	731	733	731	728	723	206
25°	649	654	657	653	647	297
35°	522	529	554	556	554	327
45°	404	411	425	444	446	312
55°	283	288	302	319	328	253
65°	166	170	180	193	204	165
75°	66	70	75	79	83	73
85°	10	10	10	10	10	14
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	776.7	776.7	776.7	776.7	776.7
2.5°	778.8	779.1	777.3	772.5	769.6
5°	775.8	775.5	772.5	768.4	766.0
7.5°	767.2	767.8	766.9	760.9	757.6
10°	758.8	759.1	756.7	752.0	748.1
12.5°	748.1	747.8	744.5	742.1	735.8
15°	731.1	732.9	731.1	727.8	722.7
17.5°	714.7	714.7	715.9	710.2	706.3
20°	696.2	697.1	697.1	692.6	688.1
22.5°	674.7	677.4	678.3	673.5	668.1
25°	649.3	654.4	657.4	652.6	646.9
27.5°	618.6	626.3	635.3	631.7	625.4
30°	584.3	595.6	610.5	607.5	603.1
32.5°	551.7	563.1	583.7	582.5	580.1
35°	522.2	529.4	553.5	556.5	554.4
37.5°	494.1	500.7	523.4	530.2	528.5
40°	464.6	471.8	489.7	501.9	502.5
42.5°	435.4	442.2	456.8	474.4	474.4
45°	404.3	411.2	424.6	444.0	446.4
47.5°	373.9	381.1	394.2	413.6	417.5
50°	344.1	350.6	363.7	382.5	388.5
52.5°	313.0	320.2	333.0	350.3	359.0
55°	283.2	288.0	302.0	318.7	327.9
57.5°	252.1	256.6	272.4	286.8	296.3
60°	222.3	228.0	240.2	254.8	265.9
62.5°	193.7	199.6	210.1	222.9	235.4
65°	165.9	170.4	180.5	193.4	204.4
67.5°	139.1	142.9	153.1	162.0	173.7
70°	111.9	117.0	124.4	133.1	140.5
72.5°	90.1	92.2	98.5	104.7	112.5
75°	66.5	70.1	75.2	78.8	83.3
77.5°	47.7	49.8	52.8	55.8	60.0
80°	31.9	32.8	35.5	36.1	39.4
82.5°	19.4	20.0	20.6	20.9	22.1
85°	10.4	10.4	10.4	9.8	9.8
87.5°	6.0	6.0	5.1	4.2	3.0
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)