

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: P554050

Luminaire Tested: **FUSL-12-2-LD4-1HI-50-UNV-81-85-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: P554050
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-81-85-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

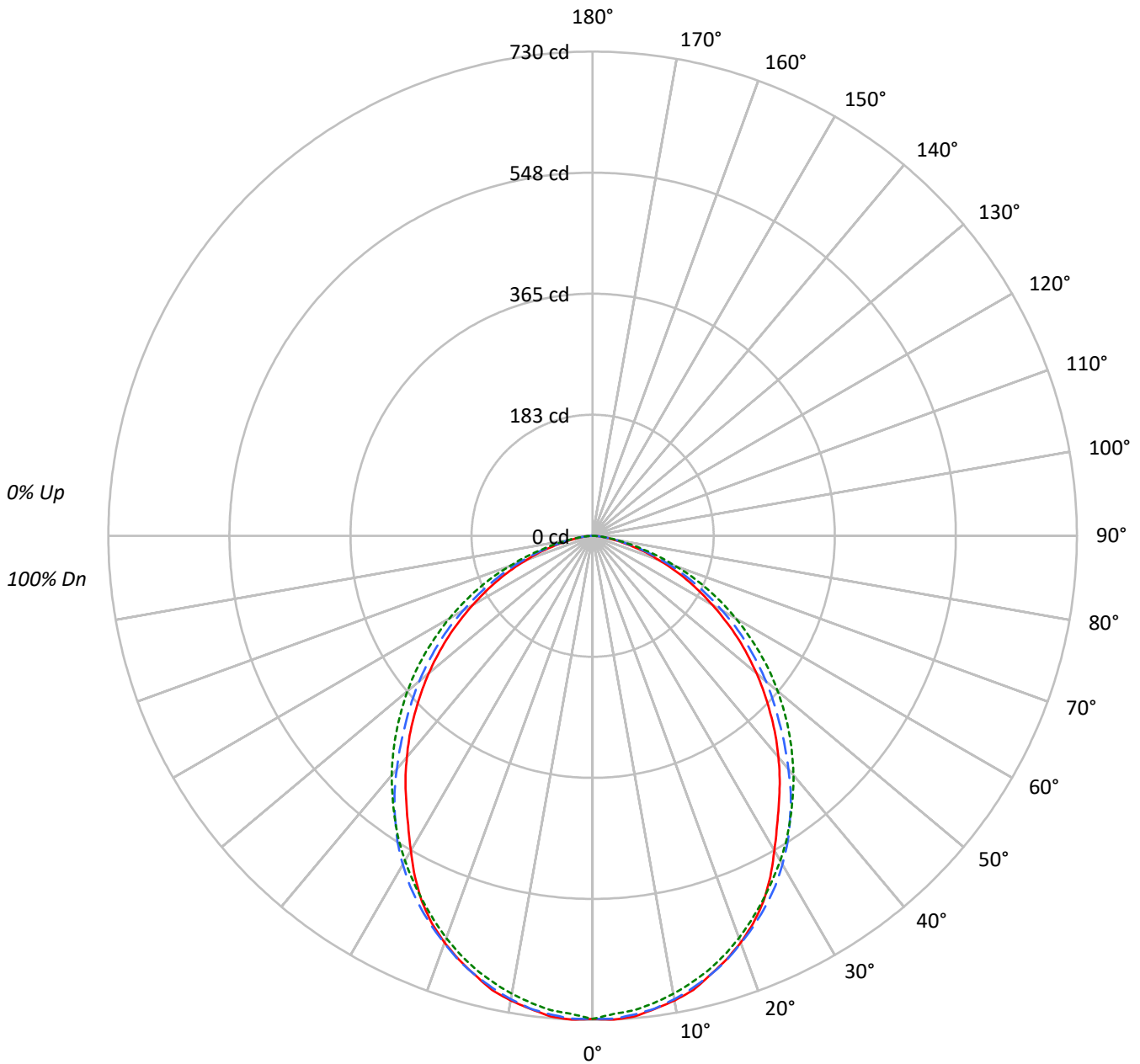
Lumens per Lamp: N/A
Luminaire Lumens: 1684.0 lumens
Efficiency: N/A
Efficacy: 78.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 21.6
Input Voltage (V): NR
Input Current (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°	3920	3920	3920
5°	3930	3914	3880
10°	3888	3877	3833
15°	3819	3819	3775
20°	3738	3743	3695
25°	3615	3660	3602
30°	3404	3557	3514
35°	3217	3410	3415
40°	3060	3225	3310
45°	2885	3030	3186
50°	2701	2856	3050
55°	2491	2656	2885
60°	2243	2424	2683
65°	1982	2156	2441
70°	1651	1836	2074
75°	1298	1466	1624
80°	927	1032	1144
85°	605	605	568



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.6	4.1
10°-20°	192.6	11.4
20°-30°	281.5	16.7
30°-40°	319.5	19.0
40°-50°	308.5	18.3
50°-60°	254.5	15.1
60°-70°	169.5	10.1
70°-80°	75.8	4.5
80°-90°	13.6	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°	542.7	32.2
0°-40°	862.2	51.2
0°-60°	1425.2	84.6
0°-90°	1684.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1684.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	728	728	728	728	728	
5°	727	727	724	720	718	69
15°	686	687	686	682	678	193
25°	609	614	616	612	607	279
35°	490	496	519	522	520	307
45°	379	386	398	416	419	293
55°	266	270	283	299	308	237
65°	156	160	169	181	192	154
75°	62	66	70	74	78	68
85°	10	10	10	9	9	13
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	728.3	728.3	728.3	728.3	728.3
2.5°	730.2	730.5	728.8	724.4	721.6
5°	727.4	727.2	724.4	720.5	718.2
7.5°	719.3	719.9	719.1	713.5	710.4
10°	711.5	711.8	709.5	705.1	701.4
12.5°	701.4	701.1	698.1	695.8	690.0
15°	685.5	687.2	685.5	682.4	677.6
17.5°	670.1	670.1	671.2	665.9	662.3
20°	652.7	653.6	653.6	649.4	645.2
22.5°	632.6	635.1	636.0	631.5	626.4
25°	608.8	613.6	616.4	611.9	606.6
27.5°	580.0	587.3	595.7	592.3	586.4
30°	547.8	558.5	572.4	569.6	565.5
32.5°	517.3	528.0	547.3	546.1	543.9
35°	489.6	496.3	519.0	521.8	519.8
37.5°	463.3	469.5	490.7	497.2	495.5
40°	435.6	442.3	459.1	470.6	471.2
42.5°	408.2	414.6	428.4	444.9	444.9
45°	379.1	385.5	398.1	416.3	418.6
47.5°	350.6	357.3	369.6	387.8	391.4
50°	322.6	328.8	341.1	358.7	364.3
52.5°	293.5	300.2	312.2	328.5	336.6
55°	265.5	270.0	283.1	298.8	307.5
57.5°	236.4	240.6	255.4	268.9	277.8
60°	208.4	213.8	225.2	238.9	249.3
62.5°	181.6	187.2	197.0	209.0	220.8
65°	155.6	159.8	169.3	181.3	191.7
67.5°	130.4	134.0	143.5	151.9	162.8
70°	104.9	109.7	116.7	124.8	131.8
72.5°	84.5	86.5	92.3	98.2	105.5
75°	62.4	65.8	70.5	73.9	78.1
77.5°	44.8	46.7	49.5	52.3	56.2
80°	29.9	30.8	33.3	33.9	36.9
82.5°	18.2	18.7	19.3	19.6	20.7
85°	9.8	9.8	9.8	9.2	9.2
87.5°	5.6	5.6	4.8	3.9	2.8
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)