

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: P554014

Luminaire Tested: **FUSL-12-2-LD4-1HI-40-UNV-82-97-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: P554014
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-40-UNV-82-97-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .375
CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT
LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

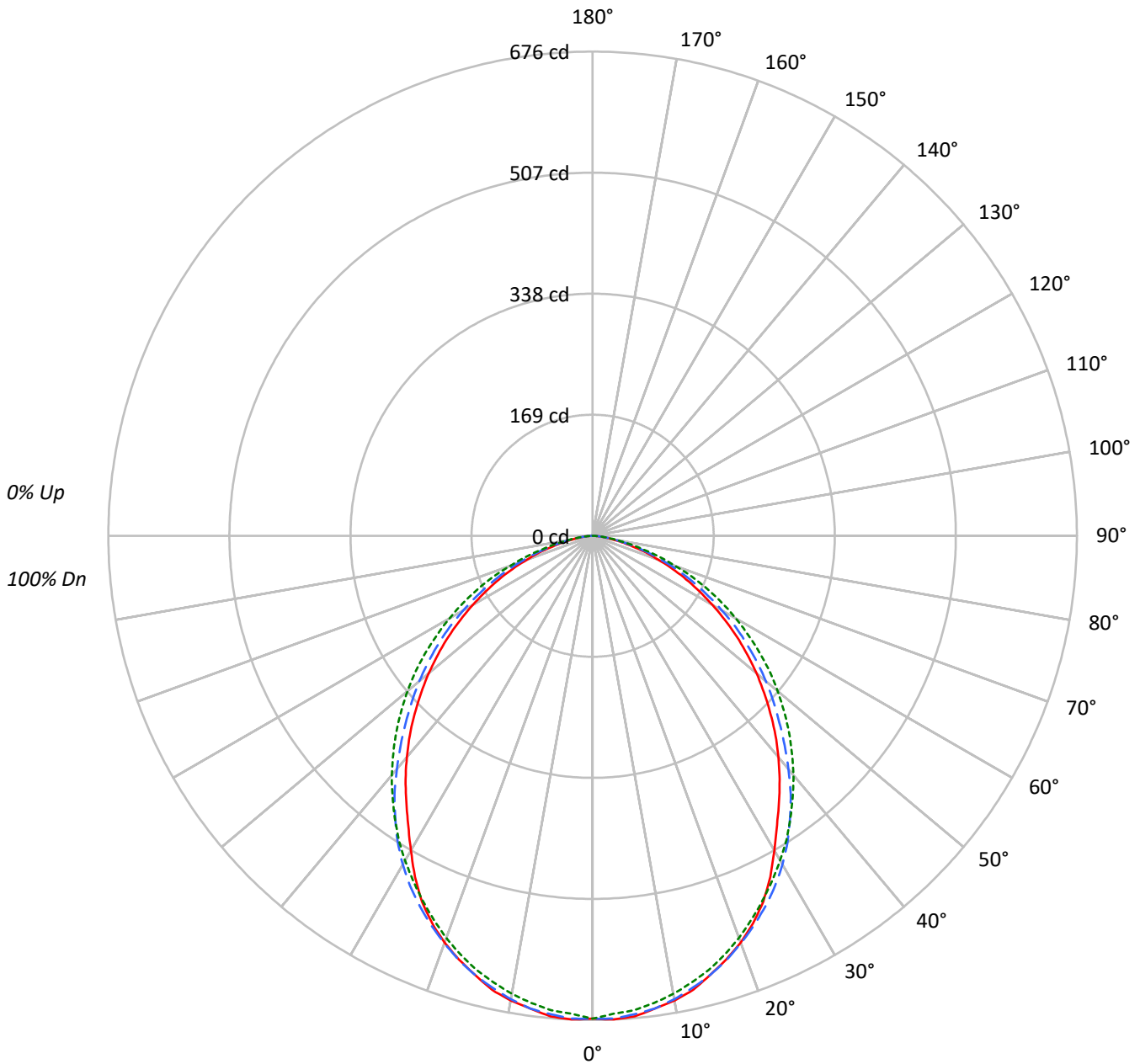
Lumens per Lamp: N/A
Luminaire Lumens: 1559.0 lumens
Efficiency: N/A
Efficacy: 72.2 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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									
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°	3629	3629	3629
5°	3639	3623	3592
10°	3600	3590	3549
15°	3536	3536	3495
20°	3461	3466	3421
25°	3347	3388	3335
30°	3152	3294	3253
35°	2978	3157	3162
40°	2833	2987	3065
45°	2672	2806	2949
50°	2500	2643	2823
55°	2306	2459	2671
60°	2077	2244	2484
65°	1834	1996	2259
70°	1528	1699	1920
75°	1202	1358	1503
80°	859	955	1060
85°	562	562	525



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.5	4.1
10°-20°	178.3	11.4
20°-30°	260.6	16.7
30°-40°	295.8	19.0
40°-50°	285.6	18.3
50°-60°	235.6	15.1
60°-70°	156.9	10.1
70°-80°	70.2	4.5
80°-90°	12.6	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°	502.4	32.2
0°-40°	798.2	51.2
0°-60°	1319.4	84.6
0°-90°	1559.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1559.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	674	674	674	674	674	
5°	674	673	671	667	665	64
15°	635	636	635	632	627	179
25°	564	568	571	566	562	258
35°	453	460	480	483	481	284
45°	351	357	369	385	388	271
55°	246	250	262	277	285	219
65°	144	148	157	168	177	143
75°	58	61	65	68	72	63
85°	9	9	9	8	8	12
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	674.2	674.2	674.2	674.2	674.2
2.5°	676.0	676.3	674.7	670.6	668.0
5°	673.5	673.2	670.6	667.0	664.9
7.5°	665.9	666.5	665.7	660.5	657.7
10°	658.7	658.9	656.9	652.7	649.4
12.5°	649.4	649.1	646.3	644.2	638.7
15°	634.6	636.2	634.6	631.7	627.3
17.5°	620.4	620.4	621.4	616.5	613.1
20°	604.3	605.1	605.1	601.2	597.3
22.5°	585.6	588.0	588.8	584.6	579.9
25°	563.6	568.0	570.6	566.5	561.6
27.5°	536.9	543.7	551.5	548.3	542.9
30°	507.2	517.0	530.0	527.4	523.5
32.5°	478.9	488.8	506.6	505.6	503.5
35°	453.3	459.5	480.5	483.1	481.3
37.5°	428.9	434.6	454.3	460.3	458.7
40°	403.3	409.5	425.1	435.7	436.2
42.5°	377.9	383.9	396.6	411.8	411.8
45°	351.0	356.9	368.6	385.4	387.5
47.5°	324.6	330.8	342.2	359.0	362.4
50°	298.6	304.3	315.7	332.1	337.2
52.5°	271.7	277.9	289.1	304.1	311.6
55°	245.8	250.0	262.1	276.6	284.7
57.5°	218.9	222.8	236.5	248.9	257.2
60°	193.0	197.9	208.5	221.2	230.8
62.5°	168.1	173.3	182.3	193.5	204.4
65°	144.0	147.9	156.7	167.8	177.4
67.5°	120.7	124.1	132.9	140.6	150.7
70°	97.1	101.5	108.0	115.5	122.0
72.5°	78.2	80.0	85.5	90.9	97.7
75°	57.8	60.9	65.3	68.4	72.3
77.5°	41.4	43.3	45.8	48.4	52.1
80°	27.7	28.5	30.8	31.3	34.2
82.5°	16.8	17.4	17.9	18.1	19.2
85°	9.1	9.1	9.1	8.5	8.5
87.5°	5.2	5.2	4.4	3.6	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)