

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: P554580

Luminaire Tested: **FUSL-12-2-LD4-1STD-50-UNV-82-86-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: P554580
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-50-UNV-82-86-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

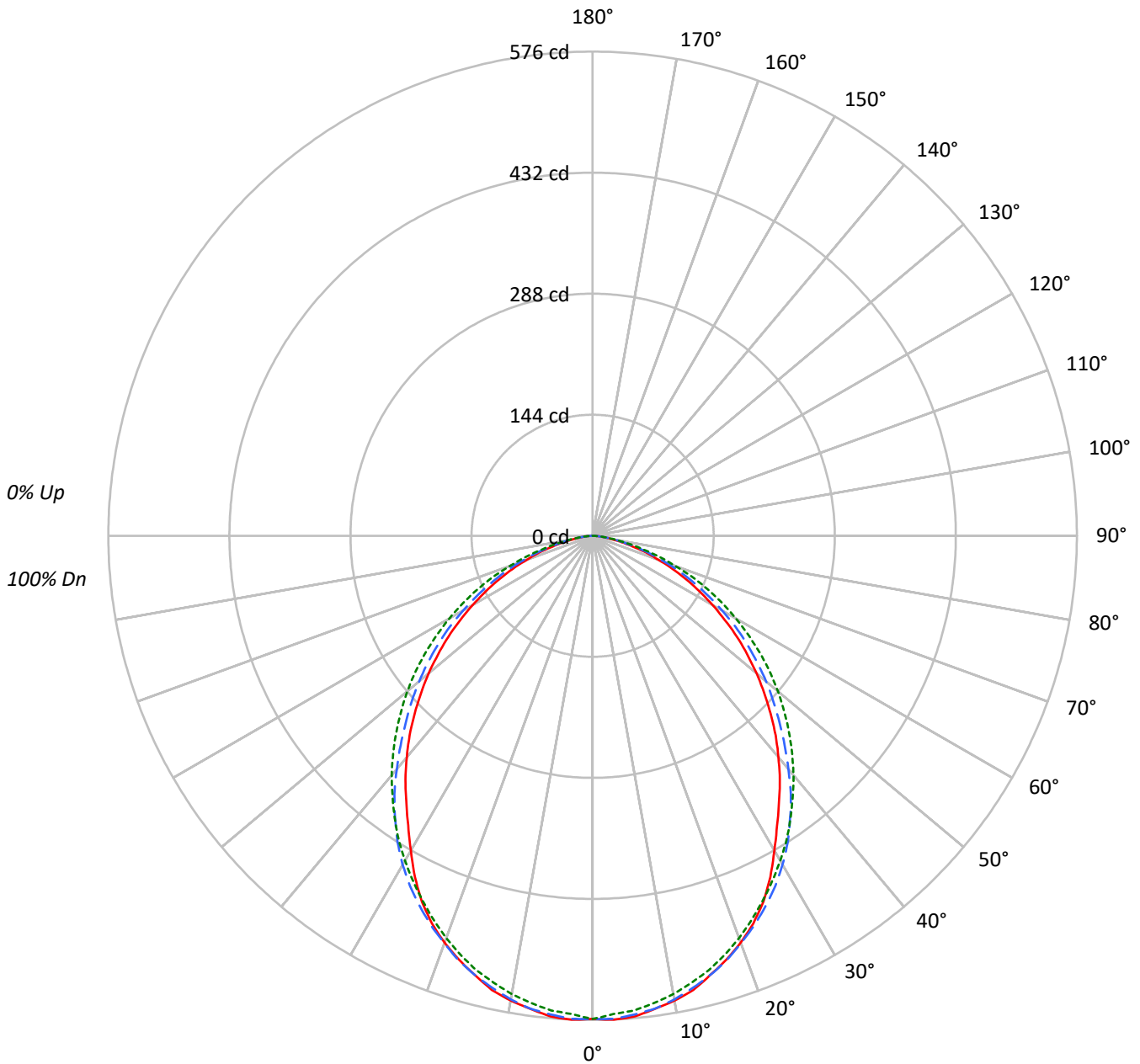
Lumens per Lamp: N/A
Luminaire Lumens: 1329.0 lumens
Efficiency: N/A
Efficacy: 80.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 16.6
Input Voltage (V): NR
Input Current (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°	3094	3094	3094
5°	3102	3089	3062
10°	3069	3060	3025
15°	3014	3014	2980
20°	2950	2954	2916
25°	2853	2888	2843
30°	2687	2808	2773
35°	2539	2691	2696
40°	2415	2545	2612
45°	2277	2391	2514
50°	2132	2254	2407
55°	1966	2097	2277
60°	1771	1913	2117
65°	1564	1701	1927
70°	1303	1449	1637
75°	1023	1156	1281
80°	731	815	902
85°	475	475	451



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.1	4.1
10°-20°	152.0	11.4
20°-30°	222.2	16.7
30°-40°	252.2	19.0
40°-50°	243.4	18.3
50°-60°	200.8	15.1
60°-70°	133.7	10.1
70°-80°	59.8	4.5
80°-90°	10.7	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°	428.3	32.2
0°-40°	680.5	51.2
0°-60°	1124.7	84.6
0°-90°	1329.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1329.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	575	575	575	575	575	
5°	574	574	572	569	567	54
15°	541	542	541	538	535	153
25°	480	484	486	483	479	220
35°	386	392	410	412	410	242
45°	299	304	314	329	330	231
55°	210	213	224	236	243	187
65°	123	126	134	143	151	122
75°	49	52	56	58	62	54
85°	8	8	8	7	7	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	574.8	574.8	574.8	574.8	574.8
2.5°	576.3	576.5	575.2	571.7	569.5
5°	574.1	573.9	571.7	568.6	566.8
7.5°	567.7	568.1	567.5	563.1	560.6
10°	561.5	561.7	560.0	556.4	553.6
12.5°	553.6	553.3	550.9	549.1	544.5
15°	541.0	542.3	541.0	538.5	534.8
17.5°	528.8	528.8	529.7	525.5	522.6
20°	515.1	515.8	515.8	512.5	509.2
22.5°	499.2	501.2	501.9	498.4	494.4
25°	480.5	484.2	486.4	482.9	478.7
27.5°	457.7	463.5	470.1	467.4	462.8
30°	432.3	440.7	451.8	449.6	446.2
32.5°	408.3	416.7	431.9	431.0	429.2
35°	386.4	391.7	409.6	411.8	410.3
37.5°	365.7	370.5	387.3	392.4	391.0
40°	343.8	349.1	362.3	371.4	371.8
42.5°	322.2	327.2	338.1	351.1	351.1
45°	299.2	304.3	314.2	328.6	330.3
47.5°	276.7	282.0	291.7	306.0	308.9
50°	254.6	259.4	269.2	283.1	287.5
52.5°	231.6	236.9	246.4	259.2	265.6
55°	209.5	213.1	223.5	235.8	242.7
57.5°	186.6	189.9	201.6	212.2	219.3
60°	164.5	168.7	177.7	188.6	196.7
62.5°	143.3	147.7	155.4	164.9	174.2
65°	122.8	126.1	133.6	143.1	151.3
67.5°	102.9	105.8	113.3	119.9	128.5
70°	82.8	86.6	92.1	98.5	104.0
72.5°	66.7	68.2	72.9	77.5	83.2
75°	49.2	51.9	55.6	58.3	61.6
77.5°	35.3	36.9	39.1	41.3	44.4
80°	23.6	24.3	26.3	26.7	29.1
82.5°	14.4	14.8	15.2	15.5	16.3
85°	7.7	7.7	7.7	7.3	7.3
87.5°	4.4	4.4	3.8	3.1	2.2
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)