

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: P554304

Luminaire Tested: **FUSL-12-2-LD4-1LO-50-UNV-81-84-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: P554304
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-LD4-1LO-50-UNV-81-84-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

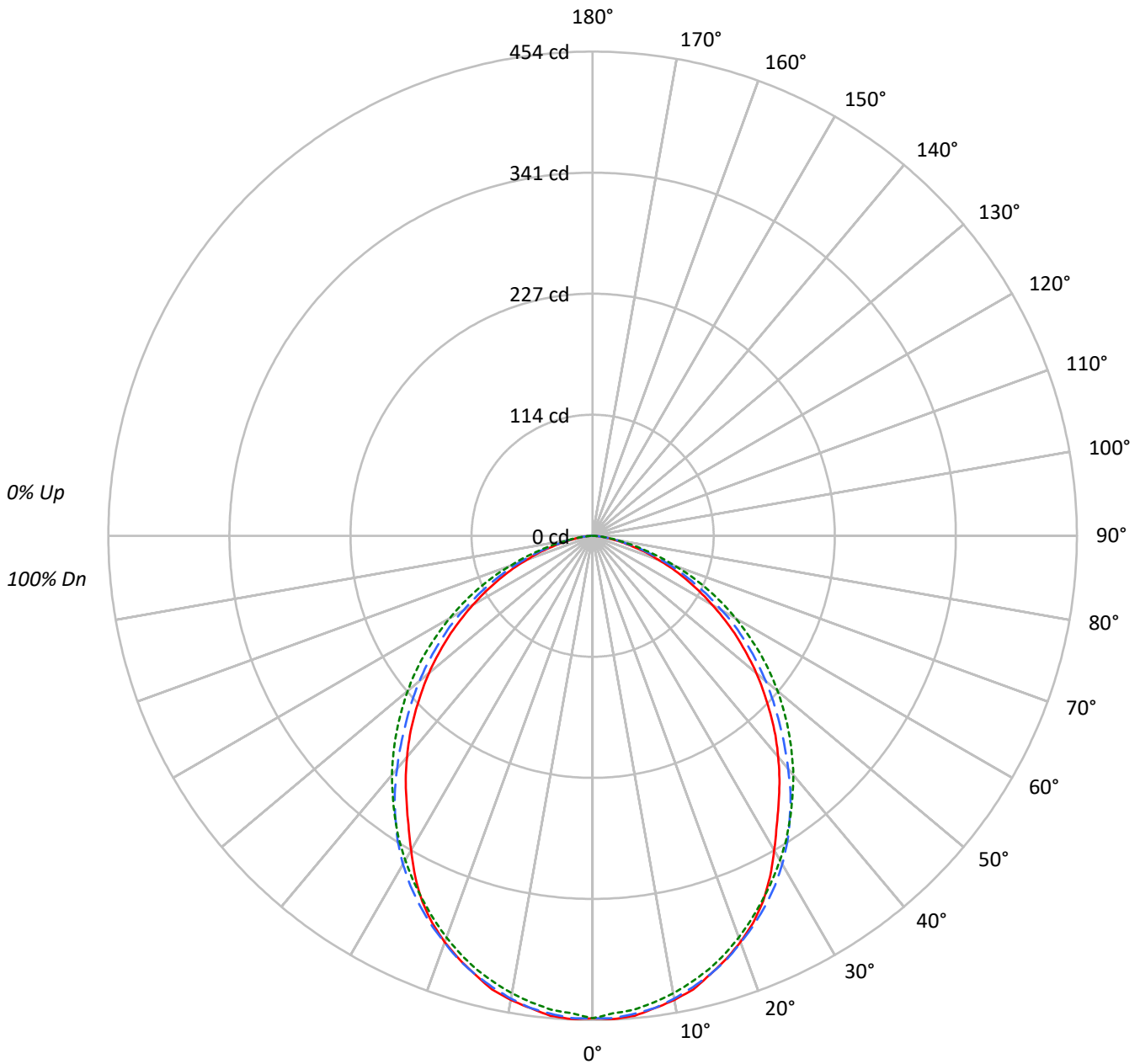
Lumens per Lamp: N/A
Luminaire Lumens: 1046.0 lumens
Efficiency: N/A
Efficacy: 89.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
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°	2435	2435	2435
5°	2441	2431	2410
10°	2415	2408	2381
15°	2372	2372	2345
20°	2322	2325	2296
25°	2246	2274	2238
30°	2115	2210	2183
35°	1998	2118	2122
40°	1901	2004	2056
45°	1792	1882	1979
50°	1678	1773	1895
55°	1547	1650	1792
60°	1394	1506	1666
65°	1230	1338	1515
70°	1026	1141	1289
75°	807	911	1009
80°	576	642	710
85°	377	377	352



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.6	4.1
10°-20°	119.7	11.4
20°-30°	174.9	16.7
30°-40°	198.5	19.0
40°-50°	191.6	18.3
50°-60°	158.1	15.1
60°-70°	105.2	10.1
70°-80°	47.1	4.5
80°-90°	8.4	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°	337.1	32.2
0°-40°	535.6	51.2
0°-60°	885.2	84.6
0°-90°	1046.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1046.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	452	452	452	452	452	
5°	452	452	450	448	446	43
15°	426	427	426	424	421	120
25°	378	381	383	380	377	173
35°	304	308	322	324	323	191
45°	236	240	247	259	260	182
55°	165	168	176	186	191	147
65°	97	99	105	113	119	96
75°	39	41	44	46	48	42
85°	6	6	6	6	6	8
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	452.4	452.4	452.4	452.4	452.4
2.5°	453.6	453.8	452.7	449.9	448.2
5°	451.8	451.7	449.9	447.5	446.1
7.5°	446.8	447.2	446.6	443.2	441.2
10°	441.9	442.1	440.7	437.9	435.7
12.5°	435.7	435.5	433.6	432.2	428.6
15°	425.8	426.8	425.8	423.9	420.9
17.5°	416.2	416.2	416.9	413.6	411.4
20°	405.4	406.0	406.0	403.4	400.8
22.5°	392.9	394.5	395.0	392.2	389.1
25°	378.2	381.1	382.9	380.1	376.8
27.5°	360.3	364.8	370.0	367.9	364.3
30°	340.3	346.9	355.6	353.8	351.2
32.5°	321.3	327.9	339.9	339.2	337.8
35°	304.1	308.3	322.4	324.1	322.9
37.5°	287.8	291.6	304.8	308.8	307.8
40°	270.6	274.8	285.2	292.3	292.7
42.5°	253.6	257.6	266.1	276.3	276.3
45°	235.5	239.5	247.3	258.6	260.0
47.5°	217.8	221.9	229.6	240.9	243.1
50°	200.4	204.2	211.8	222.8	226.3
52.5°	182.3	186.5	193.9	204.0	209.1
55°	164.9	167.7	175.9	185.6	191.0
57.5°	146.9	149.5	158.7	167.0	172.6
60°	129.5	132.8	139.9	148.4	154.8
62.5°	112.8	116.3	122.3	129.8	137.1
65°	96.6	99.2	105.1	112.6	119.0
67.5°	81.0	83.2	89.2	94.4	101.1
70°	65.2	68.1	72.5	77.5	81.9
72.5°	52.5	53.7	57.3	61.0	65.5
75°	38.8	40.8	43.8	45.9	48.5
77.5°	27.8	29.0	30.8	32.5	34.9
80°	18.6	19.1	20.7	21.0	22.9
82.5°	11.3	11.6	12.0	12.2	12.9
85°	6.1	6.1	6.1	5.7	5.7
87.5°	3.5	3.5	3.0	2.4	1.7
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)