

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: P554948

Luminaire Tested: **FUSL-12-2-LD4-2LO-35-UNV-81-86-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: P554948
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-LD4-2LO-35-UNV-81-86-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

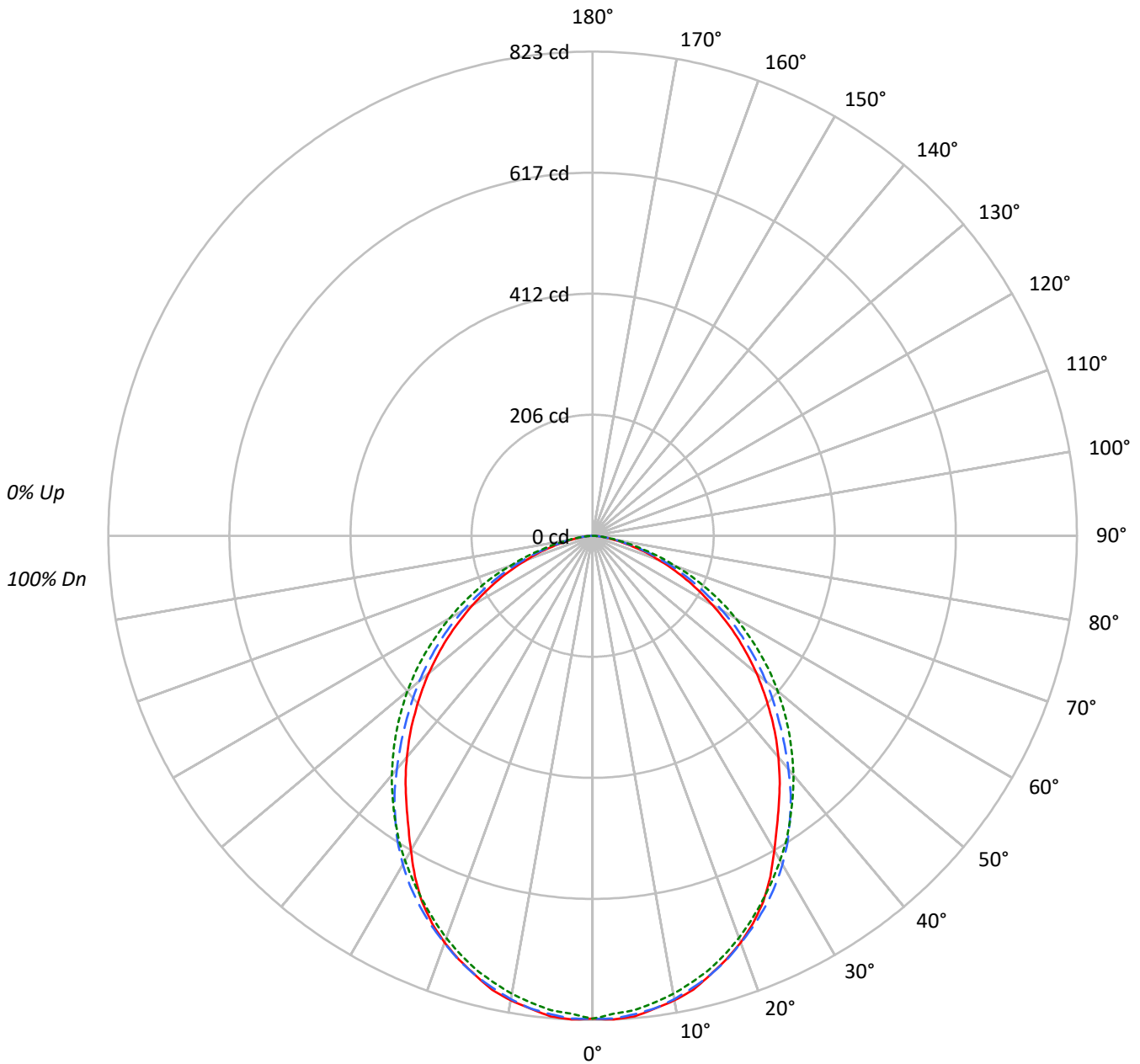
Lumens per Lamp: N/A
Luminaire Lumens: 1898.0 lumens
Efficiency: N/A
Efficacy: 81.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 23.4
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°	4418	4418	4418
5°	4430	4411	4373
10°	4382	4370	4321
15°	4305	4305	4256
20°	4214	4219	4165
25°	4075	4125	4060
30°	3837	4010	3961
35°	3625	3844	3849
40°	3450	3636	3731
45°	3252	3415	3591
50°	3044	3219	3438
55°	2808	2994	3252
60°	2528	2733	3025
65°	2232	2430	2751
70°	1862	2069	2337
75°	1462	1653	1830
80°	1044	1162	1289
85°	679	679	642



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.3	4.1
10°-20°	217.1	11.4
20°-30°	317.3	16.7
30°-40°	360.1	19.0
40°-50°	347.7	18.3
50°-60°	286.8	15.1
60°-70°	191.0	10.1
70°-80°	85.5	4.5
80°-90°	15.3	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°	611.7	32.2
0°-40°	971.8	51.2
0°-60°	1606.3	84.6
0°-90°	1898.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1898.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	821	821	821	821	821	
5°	820	820	816	812	810	78
15°	773	774	773	769	764	218
25°	686	692	695	690	684	314
35°	552	559	585	588	586	346
45°	427	434	449	469	472	330
55°	299	304	319	337	347	267
65°	175	180	191	204	216	174
75°	70	74	80	83	88	77
85°	11	11	11	10	10	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	820.8	820.8	820.8	820.8	820.8
2.5°	823.0	823.4	821.5	816.4	813.3
5°	819.9	819.6	816.4	812.0	809.5
7.5°	810.7	811.4	810.4	804.1	800.7
10°	801.9	802.2	799.7	794.7	790.6
12.5°	790.6	790.2	786.8	784.3	777.6
15°	772.6	774.5	772.6	769.1	763.8
17.5°	755.2	755.2	756.5	750.5	746.4
20°	735.7	736.6	736.6	731.9	727.2
22.5°	713.0	715.8	716.8	711.7	706.1
25°	686.2	691.5	694.7	689.7	683.7
27.5°	653.7	661.9	671.4	667.6	661.0
30°	617.4	629.4	645.2	642.0	637.3
32.5°	583.1	595.1	616.8	615.5	613.0
35°	551.8	559.4	585.0	588.1	585.9
37.5°	522.2	529.1	553.1	560.4	558.5
40°	491.0	498.6	517.5	530.4	531.0
42.5°	460.1	467.3	482.8	501.4	501.4
45°	427.3	434.5	448.7	469.2	471.8
47.5°	395.1	402.7	416.6	437.1	441.2
50°	363.6	370.5	384.4	404.3	410.6
52.5°	330.8	338.4	351.9	370.2	379.4
55°	299.3	304.3	319.1	336.8	346.6
57.5°	266.5	271.2	287.9	303.0	313.1
60°	234.9	240.9	253.9	269.3	281.0
62.5°	204.7	211.0	222.0	235.6	248.8
65°	175.3	180.1	190.8	204.3	216.0
67.5°	146.9	151.0	161.8	171.2	183.5
70°	118.3	123.6	131.5	140.6	148.5
72.5°	95.2	97.4	104.1	110.7	118.9
75°	70.3	74.1	79.5	83.3	88.0
77.5°	50.5	52.7	55.8	59.0	63.4
80°	33.7	34.7	37.5	38.2	41.6
82.5°	20.5	21.1	21.8	22.1	23.3
85°	11.0	11.0	11.0	10.4	10.4
87.5°	6.3	6.3	5.4	4.4	3.2
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)