

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: P554920

Luminaire Tested: **FUSL-12-2-LD4-2LO-30-UNV-93-88-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: P554920
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-30-UNV-93-88-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

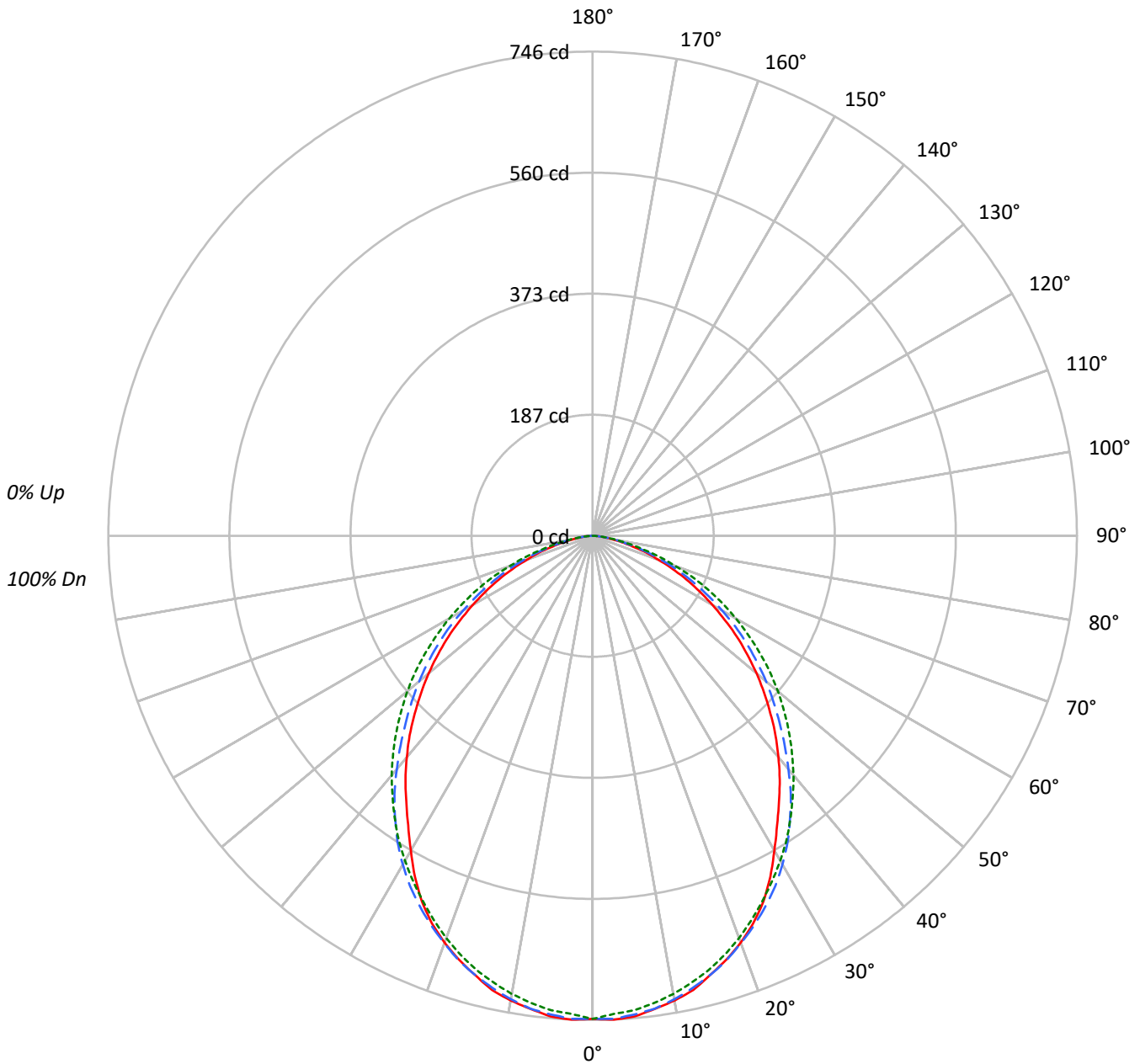
Lumens per Lamp: N/A
Luminaire Lumens: 1721.0 lumens
Efficiency: N/A
Efficacy: 73.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 23.4
Input Voltage (V): NR
Input Current (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°	4006	4006	4006
5°	4016	3999	3965
10°	3974	3963	3917
15°	3903	3903	3858
20°	3821	3825	3777
25°	3695	3741	3681
30°	3480	3636	3591
35°	3288	3485	3491
40°	3128	3296	3383
45°	2949	3097	3256
50°	2761	2919	3117
55°	2547	2715	2948
60°	2293	2478	2743
65°	2025	2203	2495
70°	1687	1876	2120
75°	1327	1499	1659
80°	948	1054	1168
85°	618	618	580



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.1	4.1
10°-20°	196.9	11.4
20°-30°	287.7	16.7
30°-40°	326.6	19.0
40°-50°	315.2	18.3
50°-60°	260.1	15.1
60°-70°	173.2	10.1
70°-80°	77.5	4.5
80°-90°	13.9	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°	554.6	32.2
0°-40°	881.2	51.2
0°-60°	1456.5	84.6
0°-90°	1721.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1721.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	744	744	744	744	744	
5°	743	743	740	736	734	70
15°	700	702	700	697	692	197
25°	622	627	630	625	620	285
35°	500	507	530	533	531	314
45°	387	394	407	426	428	299
55°	271	276	289	305	314	242
65°	159	163	173	185	196	158
75°	64	67	72	76	80	70
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°	744.3	744.3	744.3	744.3	744.3
2.5°	746.3	746.6	744.9	740.3	737.4
5°	743.4	743.1	740.3	736.3	734.0
7.5°	735.1	735.7	734.9	729.1	726.0
10°	727.1	727.4	725.1	720.6	716.8
12.5°	716.8	716.6	713.4	711.1	705.1
15°	700.5	702.3	700.5	697.4	692.5
17.5°	684.8	684.8	686.0	680.5	676.8
20°	667.1	667.9	667.9	663.7	659.4
22.5°	646.5	649.1	649.9	645.4	640.2
25°	622.2	627.1	629.9	625.3	619.9
27.5°	592.7	600.2	608.8	605.3	599.3
30°	559.9	570.7	585.0	582.2	577.9
32.5°	528.7	539.6	559.3	558.1	555.9
35°	500.4	507.2	530.4	533.3	531.3
37.5°	473.5	479.8	501.5	508.1	506.4
40°	445.2	452.1	469.2	480.9	481.5
42.5°	417.2	423.8	437.8	454.6	454.6
45°	387.4	394.0	406.9	425.5	427.8
47.5°	358.3	365.1	377.7	396.3	400.0
50°	329.7	336.0	348.6	366.6	372.3
52.5°	299.9	306.8	319.1	335.7	344.0
55°	271.4	275.9	289.4	305.4	314.2
57.5°	241.6	245.9	261.1	274.8	283.9
60°	213.0	218.5	230.2	244.2	254.8
62.5°	185.6	191.3	201.3	213.6	225.6
65°	159.0	163.3	173.0	185.3	195.9
67.5°	133.2	137.0	146.7	155.3	166.4
70°	107.2	112.1	119.2	127.5	134.7
72.5°	86.4	88.4	94.4	100.4	107.8
75°	63.8	67.2	72.1	75.5	79.8
77.5°	45.7	47.8	50.6	53.5	57.5
80°	30.6	31.5	34.0	34.6	37.7
82.5°	18.6	19.2	19.7	20.0	21.2
85°	10.0	10.0	10.0	9.4	9.4
87.5°	5.7	5.7	4.9	4.0	2.9
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)