

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: P554410

Luminaire Tested: **FUSL-12-2-LD4-1STD-30-UNV-93-94-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: P554410
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-30-UNV-93-94-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE
AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND
3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

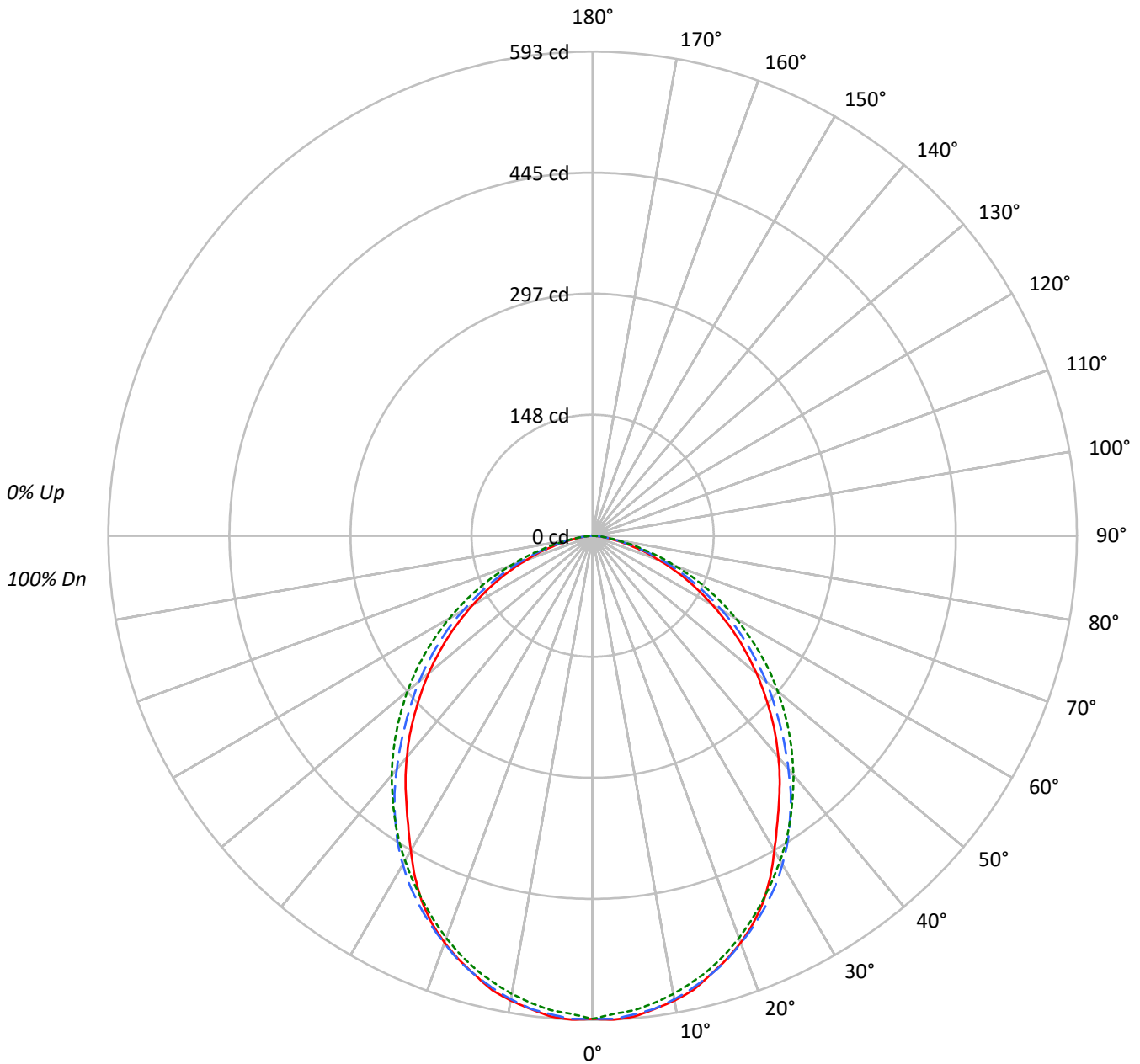
Lumens per Lamp: N/A
Luminaire Lumens: 1368.0 lumens
Efficiency: N/A
Efficacy: 82.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	3184	3184	3184
5°	3192	3179	3152
10°	3159	3150	3114
15°	3102	3102	3067
20°	3037	3041	3002
25°	2937	2973	2926
30°	2765	2890	2854
35°	2613	2770	2775
40°	2486	2621	2689
45°	2344	2461	2588
50°	2195	2320	2478
55°	2024	2158	2344
60°	1822	1970	2180
65°	1610	1751	1983
70°	1341	1492	1685
75°	1054	1192	1318
80°	753	837	930
85°	494	494	463



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.7	4.1
10°-20°	156.5	11.4
20°-30°	228.7	16.7
30°-40°	259.6	19.0
40°-50°	250.6	18.3
50°-60°	206.7	15.1
60°-70°	137.7	10.1
70°-80°	61.6	4.5
80°-90°	11.0	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°	440.9	32.2
0°-40°	700.4	51.2
0°-60°	1157.7	84.6
0°-90°	1368.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1368.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	592	592	592	592	592	
5°	591	591	588	585	583	56
15°	557	558	557	554	550	157
25°	495	498	501	497	493	226
35°	398	403	422	424	422	249
45°	308	313	323	338	340	238
55°	216	219	230	243	250	193
65°	126	130	138	147	156	125
75°	51	53	57	60	63	55
85°	8	8	8	8	8	11
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	591.6	591.6	591.6	591.6	591.6
2.5°	593.2	593.4	592.1	588.4	586.2
5°	590.9	590.7	588.4	585.3	583.4
7.5°	584.4	584.8	584.1	579.6	577.1
10°	578.0	578.2	576.4	572.8	569.8
12.5°	569.8	569.6	567.1	565.3	560.5
15°	556.8	558.2	556.8	554.3	550.5
17.5°	544.3	544.3	545.3	540.9	538.0
20°	530.3	530.9	530.9	527.5	524.1
22.5°	513.9	515.9	516.6	513.0	508.9
25°	494.6	498.4	500.7	497.1	492.8
27.5°	471.2	477.1	483.9	481.2	476.4
30°	445.0	453.7	465.0	462.8	459.3
32.5°	420.3	428.9	444.6	443.7	441.8
35°	397.7	403.2	421.6	423.9	422.3
37.5°	376.4	381.4	398.7	403.9	402.5
40°	353.9	359.3	373.0	382.3	382.7
42.5°	331.6	336.8	348.0	361.4	361.4
45°	308.0	313.2	323.4	338.2	340.0
47.5°	284.8	290.2	300.2	315.0	318.0
50°	262.1	267.1	277.1	291.4	295.9
52.5°	238.4	243.9	253.7	266.8	273.4
55°	215.7	219.3	230.0	242.7	249.8
57.5°	192.1	195.5	207.5	218.4	225.7
60°	169.3	173.6	183.0	194.1	202.5
62.5°	147.5	152.1	160.0	169.8	179.3
65°	126.4	129.8	137.5	147.3	155.7
67.5°	105.9	108.9	116.6	123.4	132.3
70°	85.2	89.1	94.8	101.4	107.1
72.5°	68.6	70.2	75.0	79.8	85.7
75°	50.7	53.4	57.3	60.0	63.4
77.5°	36.4	38.0	40.2	42.5	45.7
80°	24.3	25.0	27.0	27.5	30.0
82.5°	14.8	15.2	15.7	15.9	16.8
85°	8.0	8.0	8.0	7.5	7.5
87.5°	4.5	4.5	3.9	3.2	2.3
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)