

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: P554460

Luminaire Tested: **FUSL-12-2-LD4-1STD-35-UNV-82-96-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: P554460
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-35-UNV-82-96-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .250
CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT
LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

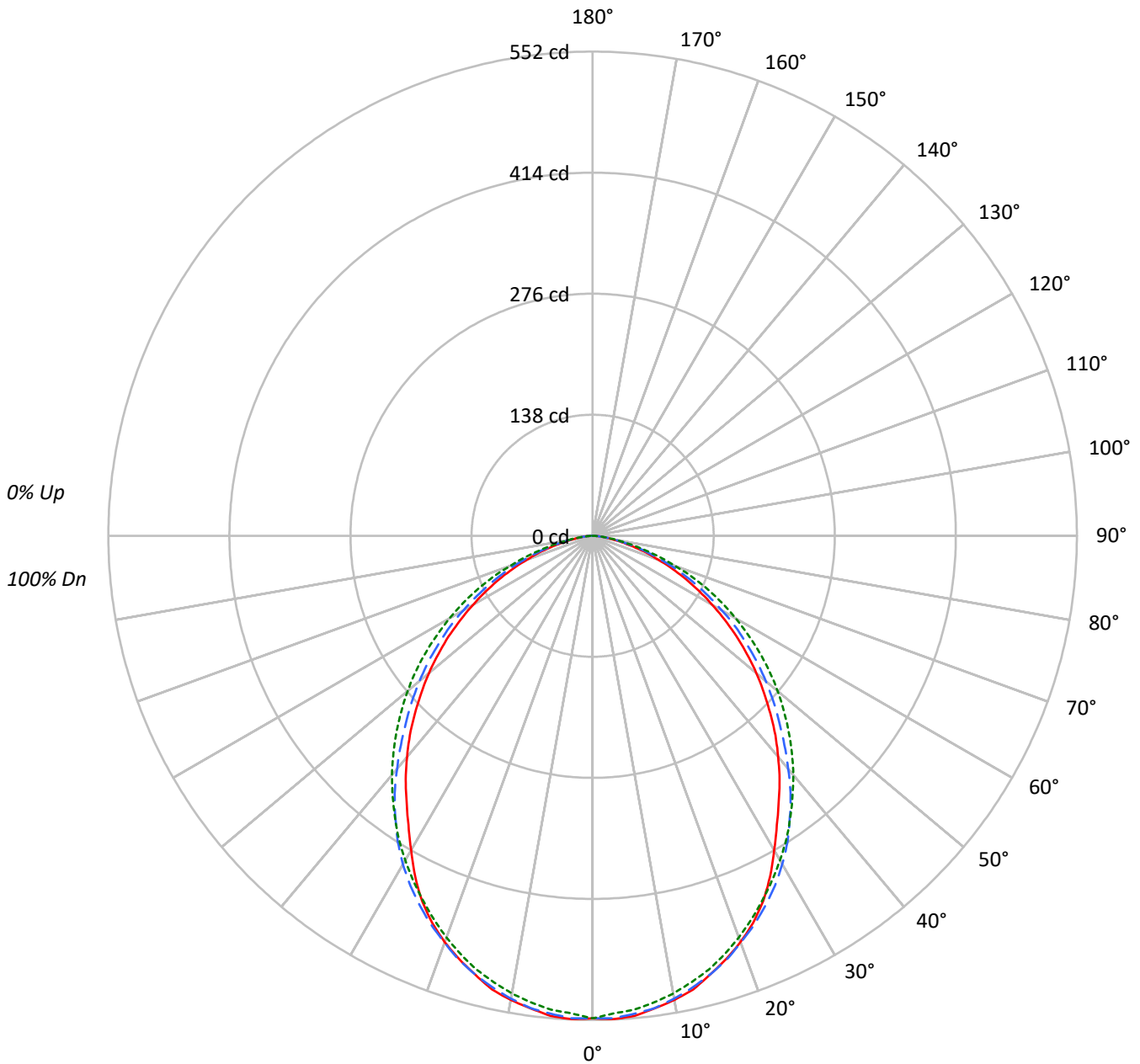
Lumens per Lamp: N/A
Luminaire Lumens: 1272.0 lumens
Efficiency: N/A
Efficacy: 76.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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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CATALOG NUMBER: FUSL-12-2-LD4-1STD-35-UNV-82-96-EDD-90

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86					86			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73					73			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63					63			
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54					54			
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47					47			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42					42			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37					37			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34					34			
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30					30			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28					28			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2961	2961	2961
5°	2969	2956	2931
10°	2937	2929	2895
15°	2885	2885	2852
20°	2824	2828	2791
25°	2731	2765	2721
30°	2572	2687	2654
35°	2430	2576	2580
40°	2311	2436	2500
45°	2180	2289	2407
50°	2040	2157	2304
55°	1882	2007	2180
60°	1694	1831	2027
65°	1496	1629	1844
70°	1248	1386	1566
75°	979	1108	1227
80°	700	778	865
85°	457	457	432



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.8	4.1
10°-20°	145.5	11.4
20°-30°	212.6	16.7
30°-40°	241.4	19.0
40°-50°	233.0	18.3
50°-60°	192.2	15.1
60°-70°	128.0	10.1
70°-80°	57.3	4.5
80°-90°	10.2	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°	409.9	32.2
0°-40°	651.3	51.2
0°-60°	1076.5	84.6
0°-90°	1272.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1272.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	550	550	550	550	550	
5°	550	549	547	544	542	52
15°	518	519	518	515	512	146
25°	460	464	466	462	458	211
35°	370	375	392	394	393	232
45°	286	291	301	314	316	221
55°	201	204	214	226	232	179
65°	118	121	128	137	145	117
75°	47	50	53	56	59	52
85°	7	7	7	7	7	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	550.1	550.1	550.1	550.1	550.1
2.5°	551.6	551.8	550.5	547.1	545.0
5°	549.5	549.3	547.1	544.2	542.5
7.5°	543.3	543.8	543.1	538.9	536.6
10°	537.4	537.6	535.9	532.6	529.8
12.5°	529.8	529.6	527.3	525.6	521.2
15°	517.8	519.0	517.8	515.4	511.9
17.5°	506.1	506.1	507.0	503.0	500.2
20°	493.0	493.7	493.7	490.5	487.3
22.5°	477.8	479.7	480.4	477.0	473.2
25°	459.9	463.5	465.6	462.2	458.2
27.5°	438.1	443.6	449.9	447.4	443.0
30°	413.8	421.8	432.4	430.3	427.1
32.5°	390.8	398.8	413.4	412.5	410.8
35°	369.8	374.9	392.0	394.1	392.7
37.5°	350.0	354.6	370.7	375.5	374.3
40°	329.0	334.1	346.8	355.5	355.9
42.5°	308.3	313.2	323.6	336.0	336.0
45°	286.4	291.2	300.7	314.5	316.2
47.5°	264.8	269.9	279.2	292.9	295.7
50°	243.7	248.3	257.6	270.9	275.2
52.5°	221.7	226.8	235.9	248.1	254.2
55°	200.6	203.9	213.9	225.7	232.3
57.5°	178.6	181.7	192.9	203.1	209.9
60°	157.4	161.5	170.1	180.5	188.3
62.5°	137.2	141.4	148.8	157.9	166.7
65°	117.5	120.7	127.9	136.9	144.8
67.5°	98.5	101.2	108.4	114.8	123.0
70°	79.3	82.8	88.1	94.3	99.5
72.5°	63.8	65.3	69.7	74.2	79.7
75°	47.1	49.7	53.3	55.8	59.0
77.5°	33.8	35.3	37.4	39.5	42.5
80°	22.6	23.2	25.1	25.6	27.9
82.5°	13.7	14.2	14.6	14.8	15.6
85°	7.4	7.4	7.4	7.0	7.0
87.5°	4.2	4.2	3.6	3.0	2.1
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)