

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: P554922

Luminaire Tested: **FUSL-12-2-LD4-2LO-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: P554922
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-93-94-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

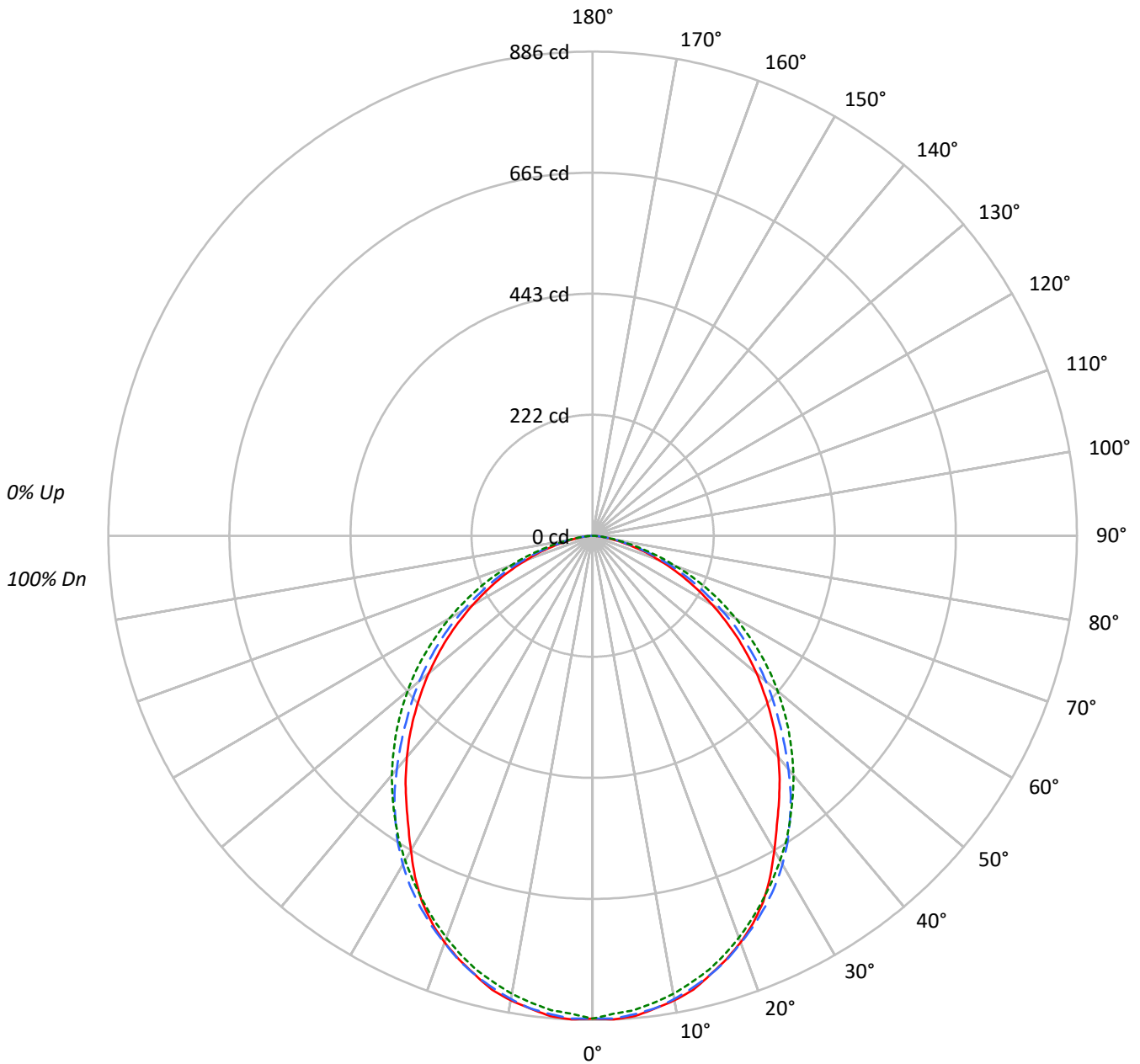
Lumens per Lamp: N/A
Luminaire Lumens: 2043.0 lumens
Efficiency: N/A
Efficacy: 87.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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°	4755	4755	4755
5°	4768	4748	4707
10°	4717	4704	4651
15°	4634	4634	4581
20°	4535	4541	4483
25°	4386	4441	4370
30°	4130	4316	4263
35°	3903	4137	4144
40°	3713	3913	4016
45°	3500	3676	3865
50°	3277	3465	3700
55°	3022	3223	3500
60°	2722	2941	3255
65°	2403	2616	2961
70°	2003	2227	2516
75°	1574	1778	1969
80°	1125	1252	1389
85°	735	735	692



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.2	4.1
10°-20°	233.7	11.4
20°-30°	341.5	16.7
30°-40°	387.7	19.0
40°-50°	374.2	18.3
50°-60°	308.7	15.1
60°-70°	205.6	10.1
70°-80°	92.0	4.5
80°-90°	16.5	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°	658.4	32.2
0°-40°	1046.1	51.2
0°-60°	1729.0	84.6
0°-90°	2043.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2043.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	884	884	884	884	884	
5°	882	882	879	874	871	84
15°	832	834	832	828	822	234
25°	739	744	748	742	736	338
35°	594	602	630	633	631	372
45°	460	468	483	505	508	355
55°	322	328	344	362	373	288
65°	189	194	205	220	232	187
75°	76	80	86	90	95	83
85°	12	12	12	11	11	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	883.5	883.5	883.5	883.5	883.5
2.5°	885.9	886.3	884.2	878.8	875.4
5°	882.5	882.2	878.8	874.0	871.3
7.5°	872.7	873.4	872.3	865.6	861.8
10°	863.2	863.5	860.8	855.4	851.0
12.5°	851.0	850.6	846.9	844.2	837.0
15°	831.6	833.6	831.6	827.9	822.1
17.5°	812.9	812.9	814.3	807.9	803.4
20°	791.9	792.9	792.9	787.8	782.7
22.5°	767.5	770.5	771.5	766.1	760.0
25°	738.6	744.4	747.8	742.3	735.9
27.5°	703.6	712.5	722.7	718.6	711.5
30°	664.6	677.5	694.5	691.1	686.0
32.5°	627.6	640.5	663.9	662.6	659.9
35°	594.0	602.2	629.6	633.0	630.7
37.5°	562.1	569.6	595.4	603.2	601.1
40°	528.5	536.6	557.0	570.9	571.6
42.5°	495.2	503.0	519.7	539.7	539.7
45°	459.9	467.7	483.0	505.1	507.8
47.5°	425.3	433.5	448.4	470.5	474.9
50°	391.4	398.8	413.8	435.2	441.9
52.5°	356.1	364.2	378.8	398.5	408.3
55°	322.1	327.6	343.5	362.5	373.0
57.5°	286.8	291.9	309.9	326.2	337.1
60°	252.9	259.3	273.2	289.9	302.4
62.5°	220.3	227.1	239.0	253.6	267.8
65°	188.7	193.8	205.4	220.0	232.5
67.5°	158.2	162.6	174.1	184.3	197.6
70°	127.3	133.1	141.5	151.4	159.9
72.5°	102.5	104.9	112.0	119.1	128.0
75°	75.7	79.8	85.5	89.6	94.7
77.5°	54.3	56.7	60.1	63.5	68.2
80°	36.3	37.3	40.4	41.1	44.8
82.5°	22.1	22.7	23.4	23.8	25.1
85°	11.9	11.9	11.9	11.2	11.2
87.5°	6.8	6.8	5.8	4.8	3.4
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)