

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: P554478

Luminaire Tested: **FUSL-12-2-LD4-1STD-35-UNV-93-97-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: P554478
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-93-97-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE
AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND
3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

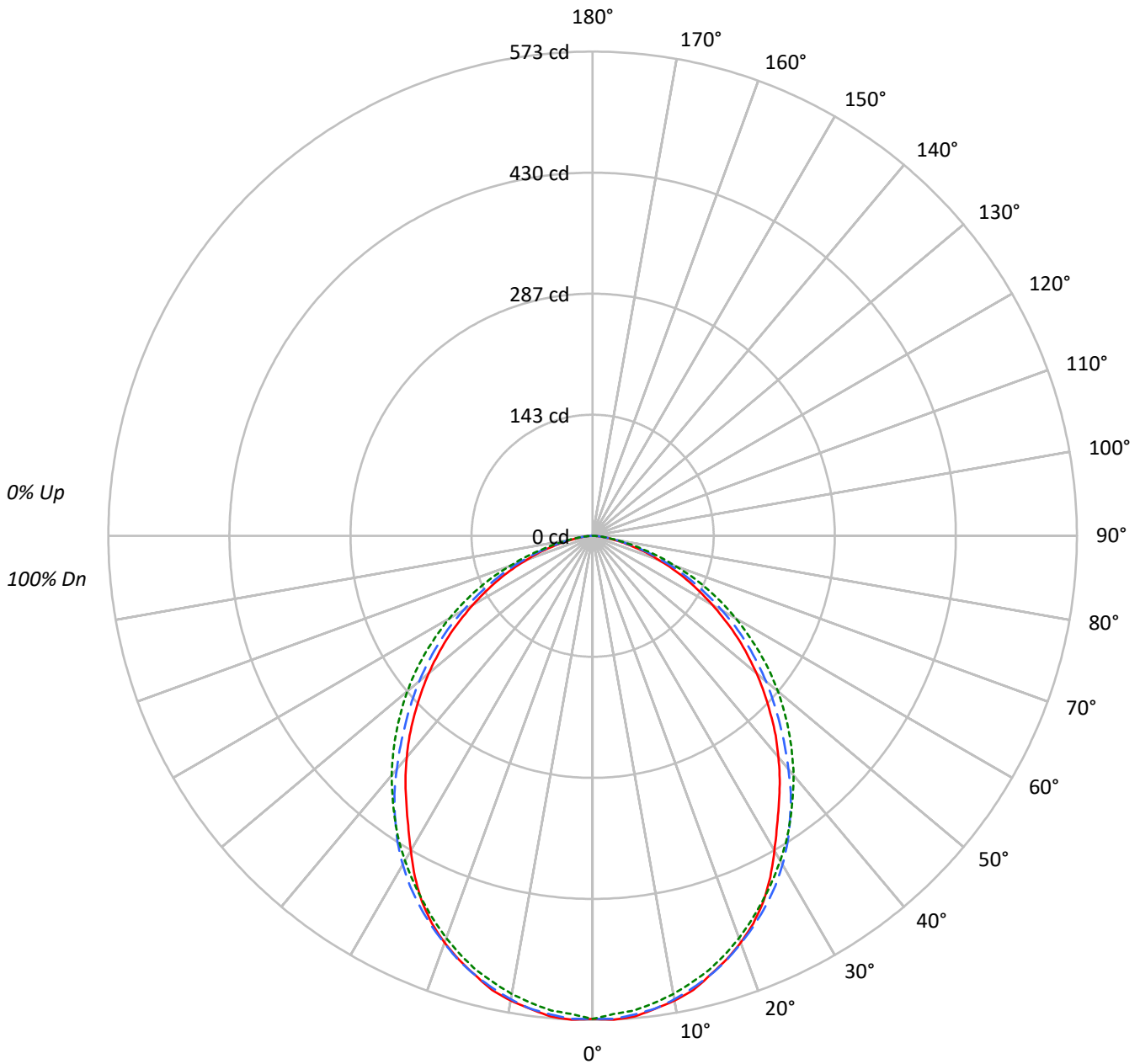
Lumens per Lamp: N/A
Luminaire Lumens: 1322.0 lumens
Efficiency: N/A
Efficacy: 79.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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-93-97-EDD-90

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°	3077	3077	3077
5°	3085	3072	3046
10°	3053	3044	3009
15°	2998	2998	2964
20°	2935	2939	2901
25°	2838	2874	2828
30°	2673	2793	2759
35°	2526	2677	2681
40°	2403	2532	2599
45°	2265	2379	2501
50°	2120	2241	2395
55°	1955	2086	2265
60°	1761	1903	2106
65°	1555	1692	1917
70°	1297	1441	1629
75°	1019	1152	1275
80°	728	809	899
85°	475	475	445



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.8	4.1
10°-20°	151.2	11.4
20°-30°	221.0	16.7
30°-40°	250.8	19.0
40°-50°	242.2	18.3
50°-60°	199.8	15.1
60°-70°	133.0	10.1
70°-80°	59.5	4.5
80°-90°	10.7	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°	426.0	32.2
0°-40°	676.9	51.2
0°-60°	1118.8	84.6
0°-90°	1322.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1322.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	572	572	572	572	572	
5°	571	571	569	566	564	54
15°	538	539	538	536	532	152
25°	478	482	484	480	476	219
35°	384	390	407	410	408	241
45°	298	303	313	327	329	230
55°	208	212	222	235	241	186
65°	122	125	133	142	150	121
75°	49	52	55	58	61	54
85°	8	8	8	7	7	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	571.7	571.7	571.7	571.7	571.7
2.5°	573.3	573.5	572.2	568.7	566.5
5°	571.1	570.9	568.7	565.6	563.8
7.5°	564.7	565.1	564.5	560.1	557.7
10°	558.6	558.8	557.0	553.5	550.6
12.5°	550.6	550.4	548.0	546.3	541.6
15°	538.1	539.4	538.1	535.7	532.0
17.5°	526.0	526.0	526.9	522.8	519.9
20°	512.4	513.1	513.1	509.8	506.5
22.5°	496.6	498.6	499.2	495.7	491.8
25°	477.9	481.7	483.9	480.4	476.2
27.5°	455.3	461.0	467.6	465.0	460.4
30°	430.1	438.4	449.4	447.2	443.9
32.5°	406.1	414.5	429.6	428.7	427.0
35°	384.4	389.6	407.4	409.6	408.1
37.5°	363.7	368.6	385.3	390.3	389.0
40°	342.0	347.3	360.4	369.4	369.9
42.5°	320.5	325.5	336.3	349.2	349.2
45°	297.6	302.7	312.6	326.8	328.6
47.5°	275.2	280.5	290.1	304.4	307.3
50°	253.2	258.1	267.7	281.6	286.0
52.5°	230.4	235.7	245.1	257.9	264.2
55°	208.4	212.0	222.3	234.6	241.4
57.5°	185.6	188.9	200.5	211.1	218.1
60°	163.6	167.8	176.8	187.6	195.7
62.5°	142.5	146.9	154.6	164.1	173.3
65°	122.1	125.4	132.9	142.3	150.5
67.5°	102.4	105.2	112.7	119.3	127.8
70°	82.4	86.1	91.6	98.0	103.5
72.5°	66.3	67.9	72.5	77.1	82.8
75°	49.0	51.6	55.4	58.0	61.3
77.5°	35.1	36.7	38.9	41.1	44.1
80°	23.5	24.2	26.1	26.6	29.0
82.5°	14.3	14.7	15.2	15.4	16.3
85°	7.7	7.7	7.7	7.2	7.2
87.5°	4.4	4.4	3.7	3.1	2.2
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)