

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: P554150

Luminaire Tested: **FUSL-12-2-LD4-1LO-30-UNV-93-87-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: P554150
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-LD4-1LO-30-UNV-93-87-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDES
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

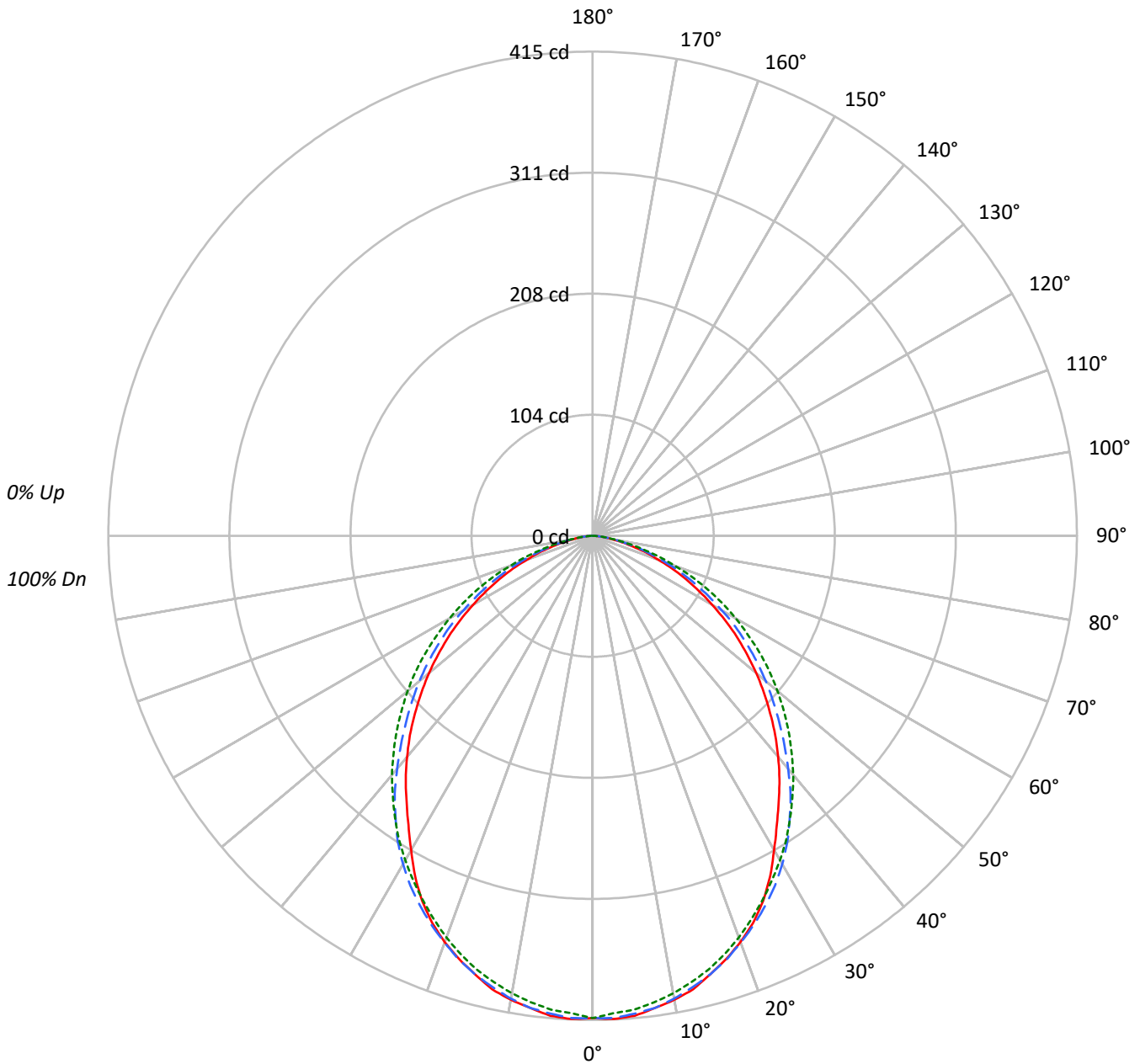
Lumens per Lamp: N/A
Luminaire Lumens: 956.0 lumens
Efficiency: N/A
Efficacy: 81.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
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

TEST NUMBER: P554150

CATALOG NUMBER: FUSL-12-2-LD4-1LO-30-UNV-93-87-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°	2225	2225	2225
5°	2231	2222	2203
10°	2207	2201	2176
15°	2168	2168	2143
20°	2123	2125	2098
25°	2052	2078	2045
30°	1933	2020	1995
35°	1827	1936	1939
40°	1737	1831	1879
45°	1638	1720	1808
50°	1533	1621	1732
55°	1414	1508	1638
60°	1273	1377	1523
65°	1124	1224	1386
70°	938	1042	1177
75°	736	832	921
80°	527	586	651
85°	346	346	321



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.9	4.1
10°-20°	109.4	11.4
20°-30°	159.8	16.7
30°-40°	181.4	19.0
40°-50°	175.1	18.3
50°-60°	144.4	15.1
60°-70°	96.2	10.1
70°-80°	43.0	4.5
80°-90°	7.7	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°	308.1	32.2
0°-40°	489.5	51.2
0°-60°	809.0	84.6
0°-90°	956.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	956.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	413	413	413	413	413	
5°	413	413	411	409	408	39
15°	389	390	389	387	385	110
25°	346	348	350	347	344	158
35°	278	282	295	296	295	174
45°	215	219	226	236	238	166
55°	151	153	161	170	175	135
65°	88	91	96	103	109	88
75°	35	37	40	42	44	39
85°	6	6	6	5	5	8
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	413.4	413.4	413.4	413.4	413.4
2.5°	414.6	414.7	413.8	411.2	409.6
5°	413.0	412.8	411.2	409.0	407.7
7.5°	408.4	408.7	408.2	405.0	403.3
10°	403.9	404.1	402.8	400.3	398.2
12.5°	398.2	398.0	396.3	395.0	391.7
15°	389.1	390.1	389.1	387.4	384.7
17.5°	380.4	380.4	381.0	378.0	376.0
20°	370.6	371.0	371.0	368.7	366.3
22.5°	359.1	360.6	361.0	358.5	355.6
25°	345.6	348.3	349.9	347.4	344.4
27.5°	329.3	333.4	338.2	336.3	332.9
30°	311.0	317.0	325.0	323.4	321.0
32.5°	293.7	299.7	310.7	310.0	308.8
35°	278.0	281.8	294.6	296.2	295.1
37.5°	263.0	266.5	278.6	282.2	281.3
40°	247.3	251.1	260.6	267.2	267.5
42.5°	231.7	235.4	243.2	252.5	252.5
45°	215.2	218.9	226.0	236.3	237.6
47.5°	199.0	202.8	209.8	220.1	222.2
50°	183.1	186.6	193.6	203.6	206.8
52.5°	166.6	170.4	177.3	186.5	191.1
55°	150.7	153.3	160.7	169.6	174.6
57.5°	134.2	136.6	145.0	152.6	157.7
60°	118.3	121.3	127.9	135.6	141.5
62.5°	103.1	106.3	111.8	118.6	125.3
65°	88.3	90.7	96.1	102.9	108.8
67.5°	74.0	76.1	81.5	86.2	92.4
70°	59.6	62.3	66.2	70.8	74.8
72.5°	48.0	49.1	52.4	55.8	59.9
75°	35.4	37.3	40.0	41.9	44.3
77.5°	25.4	26.5	28.1	29.7	31.9
80°	17.0	17.5	18.9	19.2	21.0
82.5°	10.3	10.6	11.0	11.1	11.8
85°	5.6	5.6	5.6	5.2	5.2
87.5°	3.2	3.2	2.7	2.2	1.6
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)