

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: P554190

Luminaire Tested: **FUSL-12-2-LD4-1LO-35-UNV-81-97-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: P554190
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-35-UNV-81-97-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC 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

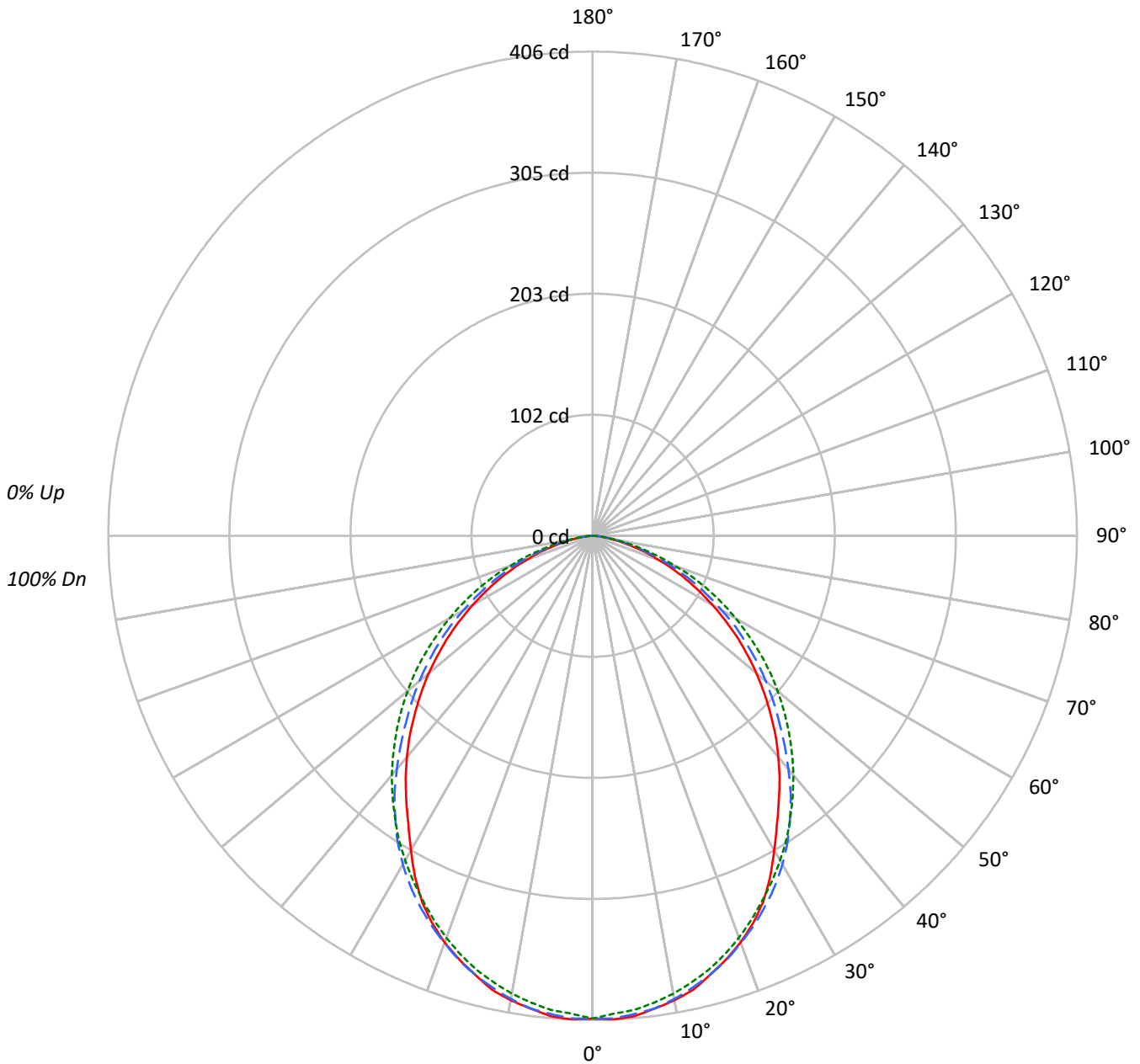
Lumens per Lamp: N/A
Luminaire Lumens: 936.0 lumens
Efficiency: N/A
Efficacy: 80.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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: P554190

CATALOG NUMBER: FUSL-12-2-LD4-1LO-35-UNV-81-97-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°	2179	2179	2179
5°	2184	2175	2157
10°	2161	2155	2131
15°	2123	2123	2098
20°	2078	2081	2054
25°	2010	2034	2002
30°	1892	1977	1953
35°	1788	1895	1898
40°	1701	1793	1840
45°	1604	1684	1770
50°	1501	1587	1696
55°	1385	1477	1604
60°	1248	1348	1492
65°	1102	1198	1356
70°	917	1020	1152
75°	722	815	902
80°	514	573	635
85°	333	333	315



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.1	4.1
10°-20°	107.1	11.4
20°-30°	156.5	16.7
30°-40°	177.6	19.0
40°-50°	171.5	18.3
50°-60°	141.4	15.1
60°-70°	94.2	10.1
70°-80°	42.2	4.5
80°-90°	7.5	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°	301.6	32.2
0°-40°	479.2	51.2
0°-60°	792.1	84.6
0°-90°	936.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	936.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	405	405	405	405	405	
5°	404	404	403	400	399	38
15°	381	382	381	379	377	107
25°	338	341	343	340	337	155
35°	272	276	288	290	289	170
45°	211	214	221	231	233	163
55°	148	150	157	166	171	132
65°	86	89	94	101	106	86
75°	35	36	39	41	43	38
85°	5	5	5	5	5	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	404.8	404.8	404.8	404.8	404.8
2.5°	405.9	406.0	405.1	402.6	401.1
5°	404.3	404.2	402.6	400.4	399.2
7.5°	399.8	400.1	399.7	396.6	394.8
10°	395.5	395.6	394.4	391.9	389.9
12.5°	389.9	389.7	388.0	386.8	383.5
15°	381.0	381.9	381.0	379.3	376.6
17.5°	372.4	372.4	373.1	370.1	368.1
20°	362.8	363.3	363.3	360.9	358.6
22.5°	351.6	353.0	353.5	351.0	348.2
25°	338.4	341.0	342.6	340.1	337.1
27.5°	322.4	326.4	331.1	329.2	326.0
30°	304.5	310.4	318.2	316.6	314.3
32.5°	287.5	293.4	304.2	303.6	302.3
35°	272.1	275.9	288.5	290.0	288.9
37.5°	257.5	260.9	272.8	276.3	275.4
40°	242.1	245.9	255.2	261.6	261.9
42.5°	226.9	230.5	238.1	247.3	247.3
45°	210.7	214.3	221.3	231.4	232.6
47.5°	194.9	198.6	205.4	215.5	217.6
50°	179.3	182.7	189.6	199.4	202.5
52.5°	163.1	166.9	173.6	182.6	187.1
55°	147.6	150.1	157.4	166.1	170.9
57.5°	131.4	133.7	142.0	149.4	154.4
60°	115.9	118.8	125.2	132.8	138.6
62.5°	100.9	104.0	109.5	116.2	122.7
65°	86.5	88.8	94.1	100.8	106.5
67.5°	72.5	74.5	79.8	84.4	90.5
70°	58.3	61.0	64.8	69.4	73.2
72.5°	47.0	48.1	51.3	54.6	58.6
75°	34.7	36.5	39.2	41.1	43.4
77.5°	24.9	26.0	27.5	29.1	31.3
80°	16.6	17.1	18.5	18.8	20.5
82.5°	10.1	10.4	10.7	10.9	11.5
85°	5.4	5.4	5.4	5.1	5.1
87.5°	3.1	3.1	2.6	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)