

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: P554278

Luminaire Tested: **FUSL-12-2-LD4-1LO-40-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: P554278
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-40-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 4000K CCT LEDES
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

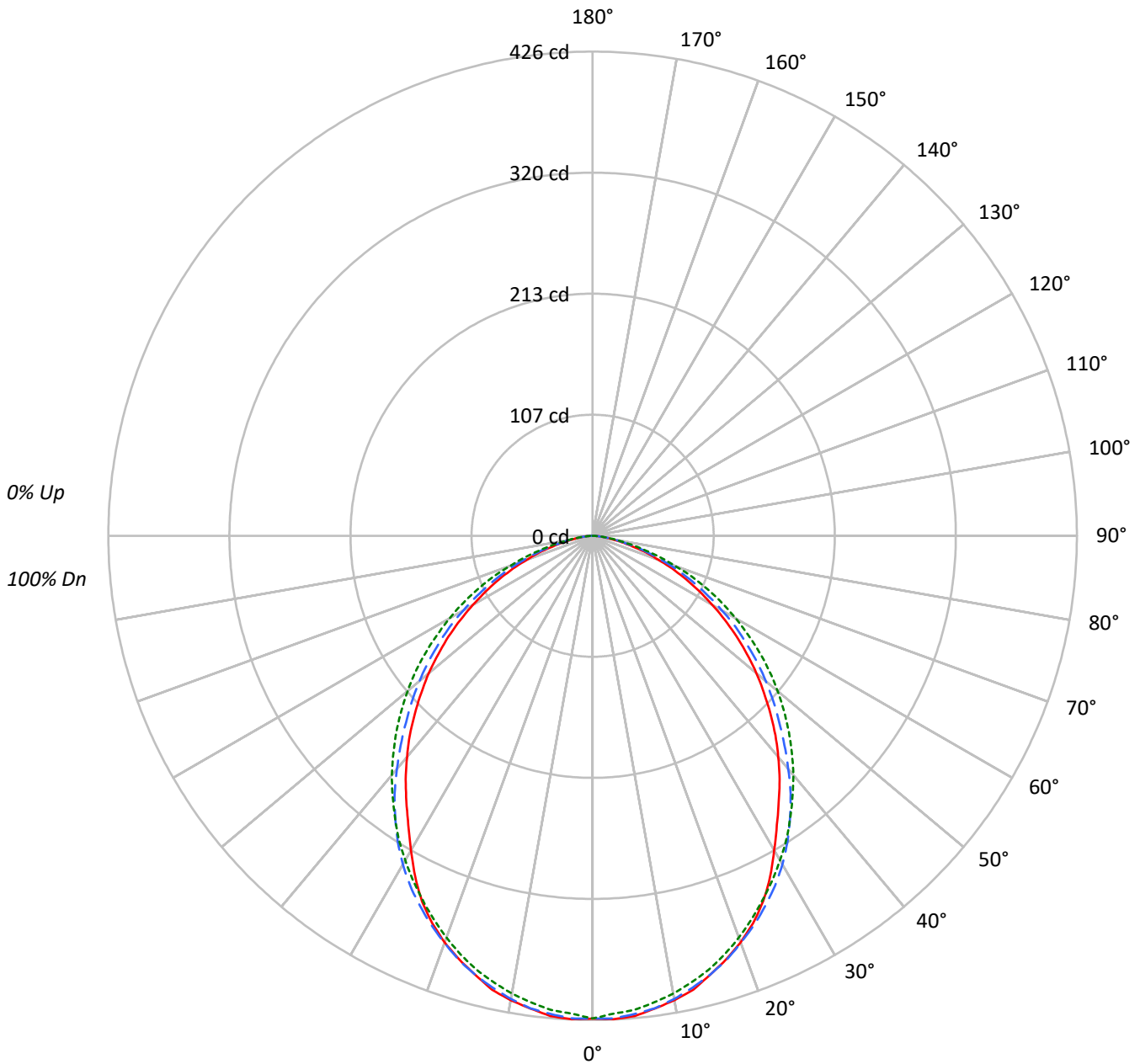
Lumens per Lamp: N/A
Luminaire Lumens: 982.0 lumens
Efficiency: N/A
Efficacy: 83.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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

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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°	2286	2286	2286
5°	2292	2282	2263
10°	2267	2261	2235
15°	2227	2227	2202
20°	2180	2183	2155
25°	2108	2134	2100
30°	1986	2074	2049
35°	1876	1989	1991
40°	1785	1881	1931
45°	1683	1767	1858
50°	1575	1665	1778
55°	1453	1549	1682
60°	1308	1413	1565
65°	1155	1257	1424
70°	963	1070	1209
75°	757	855	946
80°	542	601	666
85°	352	352	333



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.0	4.1
10°-20°	112.3	11.4
20°-30°	164.2	16.7
30°-40°	186.3	19.0
40°-50°	179.9	18.3
50°-60°	148.4	15.1
60°-70°	98.8	10.1
70°-80°	44.2	4.5
80°-90°	7.9	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°	316.5	32.2
0°-40°	502.8	51.2
0°-60°	831.1	84.6
0°-90°	982.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	982.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	425	425	425	425	425	
5°	424	424	422	420	419	40
15°	400	401	400	398	395	113
25°	355	358	359	357	354	163
35°	286	289	303	304	303	179
45°	221	225	232	243	244	171
55°	155	157	165	174	179	138
65°	91	93	99	106	112	90
75°	36	38	41	43	46	40
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°	424.7	424.7	424.7	424.7	424.7
2.5°	425.8	426.0	425.0	422.4	420.8
5°	424.2	424.0	422.4	420.1	418.8
7.5°	419.5	419.8	419.3	416.0	414.2
10°	414.9	415.1	413.8	411.1	409.0
12.5°	409.0	408.9	407.1	405.8	402.3
15°	399.7	400.7	399.7	397.9	395.2
17.5°	390.8	390.8	391.4	388.3	386.2
20°	380.6	381.1	381.1	378.7	376.2
22.5°	368.9	370.4	370.8	368.2	365.3
25°	355.0	357.8	359.4	356.8	353.7
27.5°	338.2	342.5	347.4	345.4	342.0
30°	319.5	325.7	333.8	332.2	329.7
32.5°	301.7	307.9	319.1	318.5	317.2
35°	285.5	289.4	302.7	304.3	303.1
37.5°	270.2	273.8	286.2	289.9	288.9
40°	254.0	257.9	267.7	274.4	274.8
42.5°	238.0	241.8	249.8	259.4	259.4
45°	221.1	224.8	232.2	242.8	244.1
47.5°	204.4	208.3	215.5	226.1	228.3
50°	188.1	191.7	198.9	209.2	212.4
52.5°	171.1	175.1	182.1	191.5	196.3
55°	154.8	157.4	165.1	174.2	179.3
57.5°	137.9	140.3	149.0	156.8	162.0
60°	121.5	124.6	131.3	139.3	145.4
62.5°	105.9	109.1	114.9	121.9	128.7
65°	90.7	93.2	98.7	105.7	111.8
67.5°	76.0	78.2	83.7	88.6	95.0
70°	61.2	64.0	68.0	72.8	76.8
72.5°	49.3	50.4	53.8	57.3	61.5
75°	36.4	38.3	41.1	43.1	45.5
77.5°	26.1	27.2	28.9	30.5	32.8
80°	17.5	17.9	19.4	19.7	21.5
82.5°	10.6	10.9	11.3	11.4	12.1
85°	5.7	5.7	5.7	5.4	5.4
87.5°	3.3	3.3	2.8	2.3	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)