

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: P554152

Luminaire Tested: **FUSL-12-2-LD4-1LO-30-UNV-93-88-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: P554152
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-93-88-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

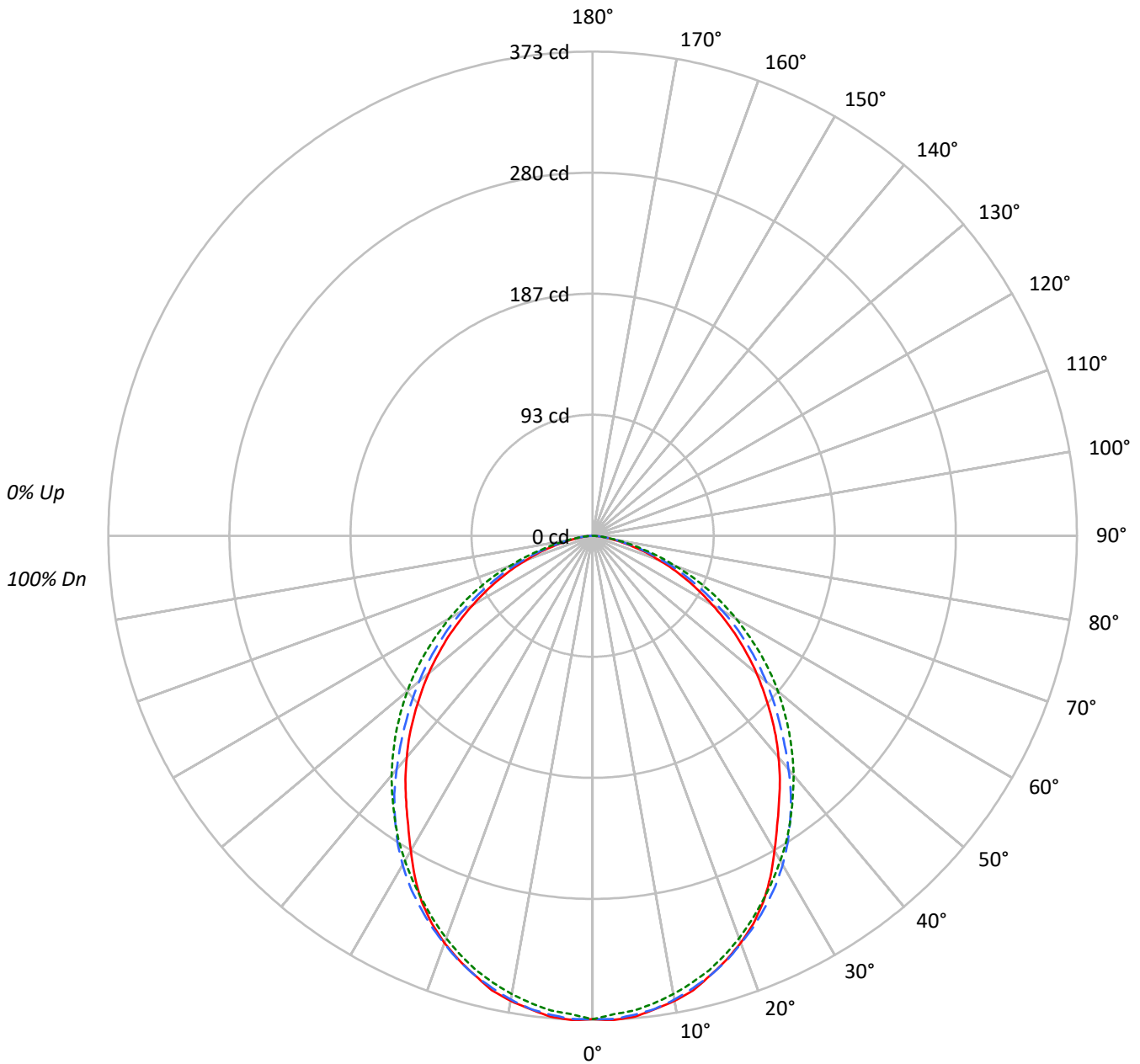
Lumens per Lamp: N/A
Luminaire Lumens: 861.0 lumens
Efficiency: N/A
Efficacy: 73.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 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				20				
RC	80				70				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°	2004	2004	2004
5°	2009	2001	1984
10°	1988	1983	1960
15°	1953	1953	1931
20°	1911	1914	1889
25°	1849	1871	1841
30°	1741	1819	1797
35°	1645	1744	1746
40°	1565	1649	1692
45°	1475	1550	1629
50°	1381	1460	1560
55°	1274	1359	1475
60°	1147	1240	1372
65°	1012	1102	1248
70°	843	939	1061
75°	663	749	830
80°	474	527	586
85°	309	309	290



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.1	4.1
10°-20°	98.5	11.4
20°-30°	143.9	16.7
30°-40°	163.4	19.0
40°-50°	157.7	18.3
50°-60°	130.1	15.1
60°-70°	86.6	10.1
70°-80°	38.8	4.5
80°-90°	6.9	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°	277.5	32.2
0°-40°	440.9	51.2
0°-60°	728.7	84.6
0°-90°	861.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	861.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	372	372	372	372	372	
5°	372	372	370	368	367	35
15°	350	351	350	349	346	99
25°	311	314	315	313	310	143
35°	250	254	265	267	266	157
45°	194	197	204	213	214	150
55°	136	138	145	153	157	121
65°	80	82	86	93	98	79
75°	32	34	36	38	40	35
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°	372.4	372.4	372.4	372.4	372.4
2.5°	373.4	373.5	372.6	370.4	368.9
5°	371.9	371.8	370.4	368.4	367.2
7.5°	367.8	368.1	367.6	364.8	363.2
10°	363.8	363.9	362.8	360.5	358.6
12.5°	358.6	358.5	356.9	355.8	352.8
15°	350.5	351.3	350.5	348.9	346.5
17.5°	342.6	342.6	343.2	340.5	338.6
20°	333.7	334.2	334.2	332.0	329.9
22.5°	323.4	324.7	325.2	322.9	320.3
25°	311.3	313.7	315.1	312.9	310.1
27.5°	296.5	300.3	304.6	302.8	299.8
30°	280.1	285.5	292.7	291.3	289.1
32.5°	264.5	269.9	279.8	279.2	278.1
35°	250.3	253.8	265.4	266.8	265.8
37.5°	236.9	240.0	250.9	254.2	253.3
40°	222.7	226.2	234.7	240.6	240.9
42.5°	208.7	212.0	219.0	227.5	227.5
45°	193.8	197.1	203.6	212.9	214.0
47.5°	179.2	182.7	189.0	198.3	200.1
50°	164.9	168.1	174.4	183.4	186.3
52.5°	150.1	153.5	159.6	167.9	172.1
55°	135.8	138.0	144.8	152.8	157.2
57.5°	120.9	123.0	130.6	137.5	142.0
60°	106.6	109.3	115.2	122.2	127.5
62.5°	92.8	95.7	100.7	106.9	112.9
65°	79.5	81.7	86.5	92.7	98.0
67.5°	66.7	68.5	73.4	77.7	83.3
70°	53.6	56.1	59.7	63.8	67.4
72.5°	43.2	44.2	47.2	50.2	53.9
75°	31.9	33.6	36.0	37.8	39.9
77.5°	22.9	23.9	25.3	26.8	28.8
80°	15.3	15.7	17.0	17.3	18.9
82.5°	9.3	9.6	9.9	10.0	10.6
85°	5.0	5.0	5.0	4.7	4.7
87.5°	2.9	2.9	2.4	2.0	1.4
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)