

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: P554248

Luminaire Tested: **FUSL-12-2-LD4-1LO-40-UNV-81-88-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: P554248
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-81-88-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

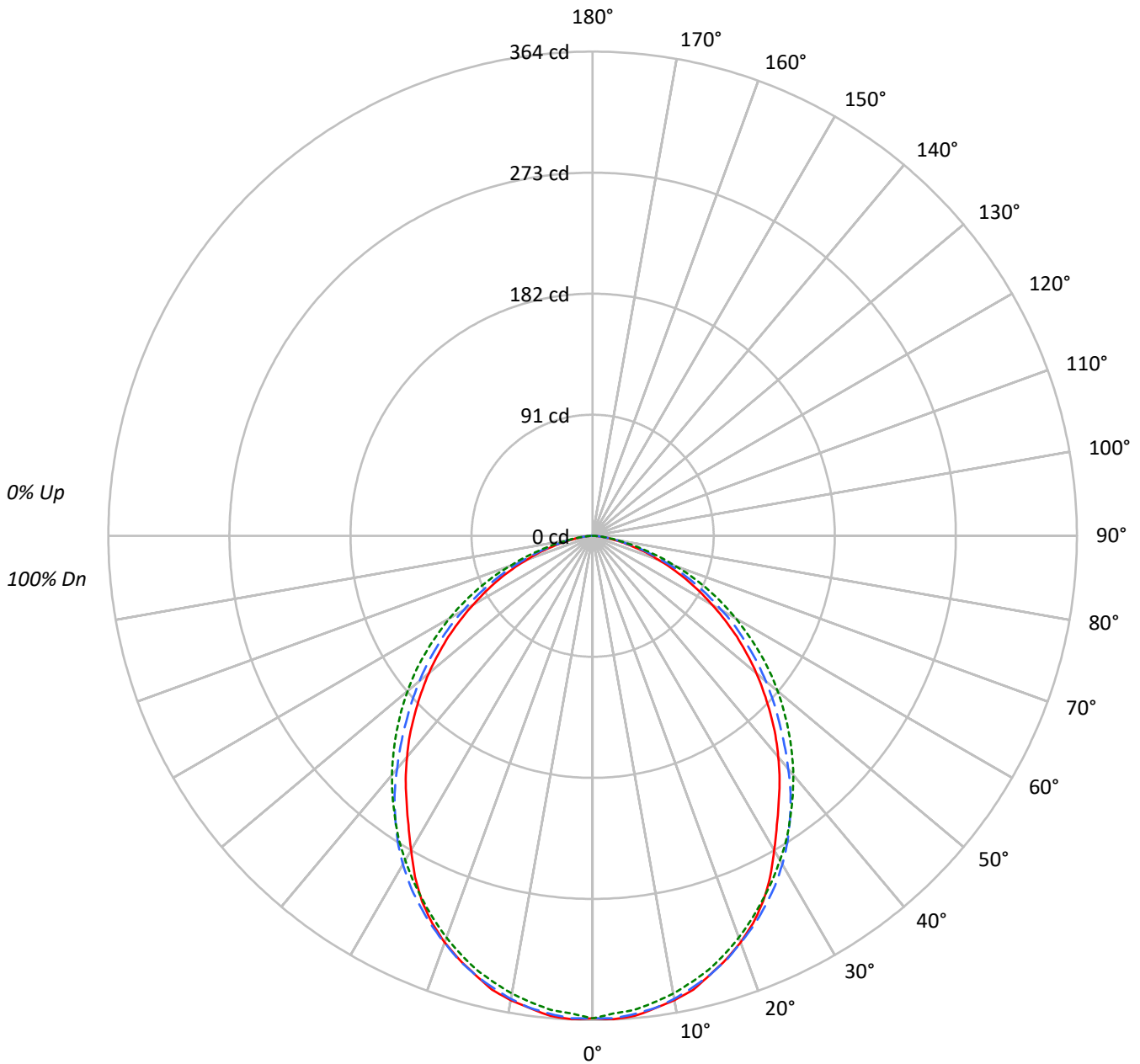
Lumens per Lamp: N/A
Luminaire Lumens: 839.0 lumens
Efficiency: N/A
Efficacy: 71.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
Input Voltage (V): NR
Input Current (Ain): 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				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				100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86				86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73				73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63				63
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54				54
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47				47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42				42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37				37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34				34
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30				30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28				28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1953	1953	1953
5°	1958	1950	1933
10°	1937	1932	1910
15°	1903	1903	1881
20°	1863	1865	1841
25°	1801	1824	1795
30°	1696	1772	1751
35°	1602	1699	1702
40°	1525	1607	1649
45°	1438	1510	1587
50°	1346	1423	1520
55°	1241	1324	1437
60°	1117	1208	1337
65°	987	1074	1216
70°	823	914	1034
75°	647	730	809
80°	462	514	570
85°	303	303	284



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.2	4.1
10°-20°	96.0	11.4
20°-30°	140.2	16.7
30°-40°	159.2	19.0
40°-50°	153.7	18.3
50°-60°	126.8	15.1
60°-70°	84.4	10.1
70°-80°	37.8	4.5
80°-90°	6.8	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°	270.4	32.2
0°-40°	429.6	51.2
0°-60°	710.0	84.6
0°-90°	839.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	839.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	363	363	363	363	363	
5°	362	362	361	359	358	34
15°	342	342	342	340	338	96
25°	303	306	307	305	302	139
35°	244	247	259	260	259	153
45°	189	192	198	207	208	146
55°	132	134	141	149	153	118
65°	78	80	84	90	96	77
75°	31	33	35	37	39	34
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°	362.8	362.8	362.8	362.8	362.8
2.5°	363.8	364.0	363.1	360.9	359.5
5°	362.4	362.3	360.9	358.9	357.8
7.5°	358.4	358.7	358.2	355.5	353.9
10°	354.5	354.6	353.5	351.3	349.5
12.5°	349.5	349.3	347.8	346.7	343.7
15°	341.5	342.4	341.5	340.0	337.6
17.5°	333.9	333.9	334.4	331.8	329.9
20°	325.2	325.6	325.6	323.5	321.4
22.5°	315.2	316.4	316.8	314.6	312.1
25°	303.3	305.7	307.1	304.9	302.2
27.5°	289.0	292.6	296.8	295.1	292.2
30°	272.9	278.2	285.2	283.8	281.7
32.5°	257.7	263.0	272.7	272.1	271.0
35°	243.9	247.3	258.6	260.0	259.0
37.5°	230.8	233.9	244.5	247.7	246.9
40°	217.0	220.4	228.7	234.5	234.7
42.5°	203.4	206.6	213.4	221.6	221.6
45°	188.9	192.1	198.4	207.4	208.5
47.5°	174.7	178.0	184.1	193.2	195.0
50°	160.7	163.8	169.9	178.7	181.5
52.5°	146.2	149.6	155.6	163.7	167.7
55°	132.3	134.5	141.1	148.9	153.2
57.5°	117.8	119.9	127.3	134.0	138.4
60°	103.8	106.5	112.2	119.0	124.2
62.5°	90.5	93.3	98.1	104.1	110.0
65°	77.5	79.6	84.3	90.3	95.5
67.5°	65.0	66.8	71.5	75.7	81.1
70°	52.3	54.6	58.1	62.2	65.7
72.5°	42.1	43.1	46.0	48.9	52.6
75°	31.1	32.8	35.1	36.8	38.9
77.5°	22.3	23.3	24.7	26.1	28.0
80°	14.9	15.3	16.6	16.9	18.4
82.5°	9.1	9.3	9.6	9.8	10.3
85°	4.9	4.9	4.9	4.6	4.6
87.5°	2.8	2.8	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)