

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: P554019

Luminaire Tested: **FUSL-12-2-LD4-1HI-40-UNV-93-85-EDD**

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: P554019
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-LD4-1HI-40-UNV-93-85-EDD
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDES
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

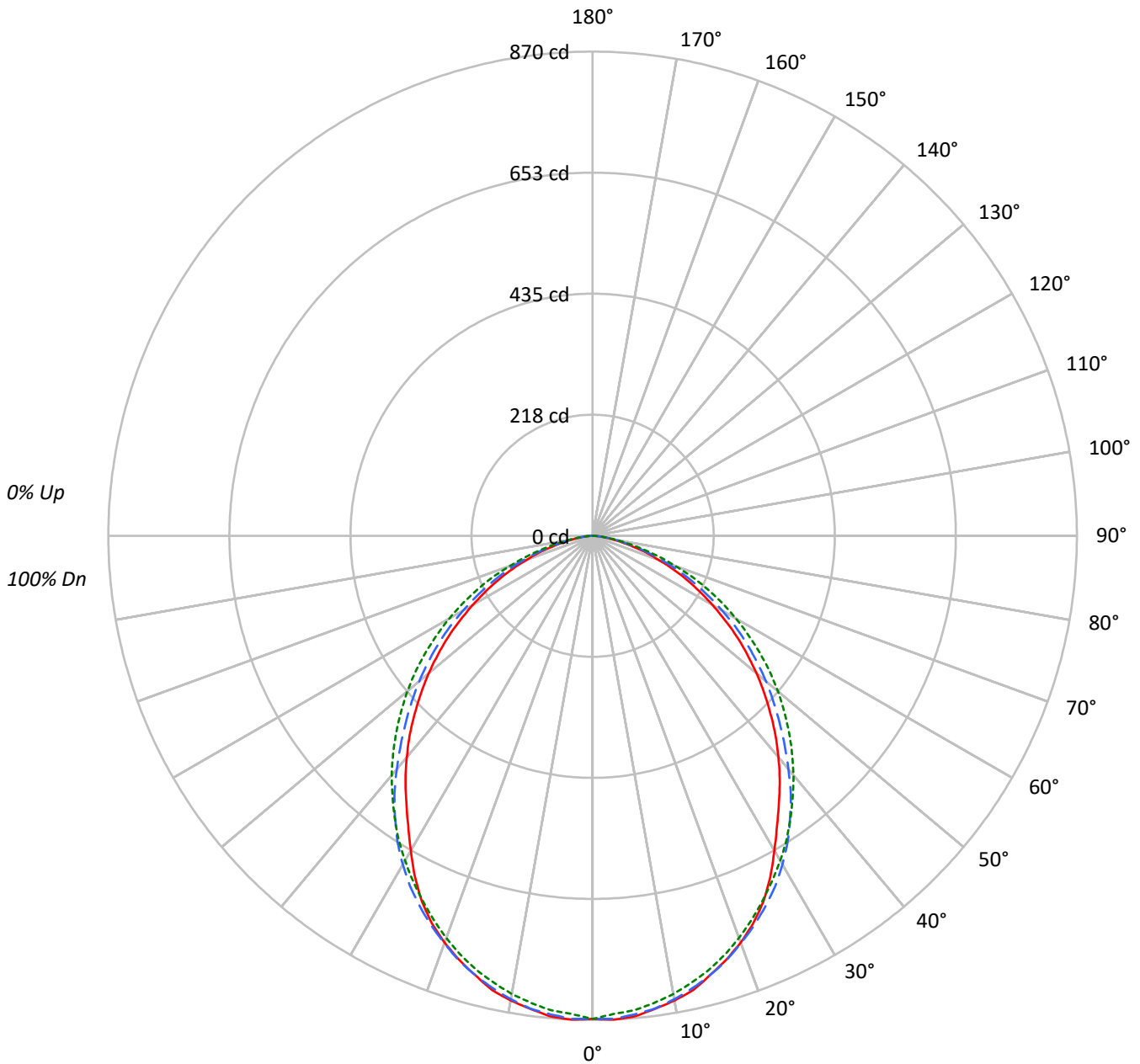
Lumens per Lamp: N/A
Luminaire Lumens: 2007.0 lumens
Efficiency: N/A
Efficacy: 92.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 21.6
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: P554019

CATALOG NUMBER: FUSL-12-2-LD4-1HI-40-UNV-93-85-EDD

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°	4672	4672	4672
5°	4684	4664	4625
10°	4634	4621	4569
15°	4552	4552	4500
20°	4455	4461	4404
25°	4309	4362	4293
30°	4057	4240	4188
35°	3834	4064	4071
40°	3648	3844	3945
45°	3439	3612	3796
50°	3219	3404	3635
55°	2969	3167	3439
60°	2674	2889	3198
65°	2361	2569	2909
70°	1967	2187	2472
75°	1547	1747	1934
80°	1106	1230	1364
85°	722	722	679



TEST NUMBER: P554019

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.7	4.1
10°-20°	229.6	11.4
20°-30°	335.5	16.7
30°-40°	380.8	19.0
40°-50°	367.6	18.3
50°-60°	303.3	15.1
60°-70°	202.0	10.1
70°-80°	90.4	4.5
80°-90°	16.2	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°	646.8	32.2
0°-40°	1027.6	51.2
0°-60°	1698.5	84.6
0°-90°	2007.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2007.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	868	868	868	868	868	
5°	867	867	863	859	856	82
15°	817	819	817	813	808	230
25°	726	731	735	729	723	332
35°	584	592	619	622	620	366
45°	452	460	474	496	499	349
55°	316	322	338	356	366	282
65°	185	190	202	216	228	184
75°	74	78	84	88	93	81
85°	12	12	12	11	11	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	868.0	868.0	868.0	868.0	868.0
2.5°	870.3	870.6	868.6	863.3	860.0
5°	867.0	866.6	863.3	858.6	856.0
7.5°	857.3	858.0	857.0	850.3	846.6
10°	848.0	848.3	845.6	840.3	836.0
12.5°	836.0	835.6	832.0	829.3	822.3
15°	817.0	819.0	817.0	813.3	807.6
17.5°	798.6	798.6	800.0	793.6	789.3
20°	777.9	778.9	778.9	773.9	768.9
22.5°	753.9	756.9	757.9	752.6	746.6
25°	725.6	731.3	734.6	729.3	722.9
27.5°	691.2	699.9	709.9	705.9	698.9
30°	652.9	665.6	682.2	678.9	673.9
32.5°	616.6	629.2	652.2	650.9	648.2
35°	583.5	591.5	618.6	621.9	619.6
37.5°	552.2	559.5	584.9	592.5	590.5
40°	519.2	527.2	547.2	560.9	561.5
42.5°	486.5	494.2	510.5	530.2	530.2
45°	451.8	459.5	474.5	496.2	498.8
47.5°	417.8	425.8	440.5	462.2	466.5
50°	384.5	391.8	406.5	427.5	434.2
52.5°	349.8	357.8	372.1	391.5	401.1
55°	316.4	321.8	337.5	356.1	366.5
57.5°	281.8	286.8	304.4	320.4	331.1
60°	248.4	254.8	268.4	284.8	297.1
62.5°	216.4	223.1	234.8	249.1	263.1
65°	185.4	190.4	201.7	216.1	228.4
67.5°	155.4	159.7	171.1	181.1	194.1
70°	125.0	130.7	139.0	148.7	157.1
72.5°	100.7	103.0	110.0	117.0	125.7
75°	74.4	78.4	84.0	88.0	93.0
77.5°	53.4	55.7	59.0	62.4	67.0
80°	35.7	36.7	39.7	40.3	44.0
82.5°	21.7	22.3	23.0	23.3	24.7
85°	11.7	11.7	11.7	11.0	11.0
87.5°	6.7	6.7	5.7	4.7	3.3
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)