

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: P553890

Luminaire Tested: **FUSL-12-2-LD4-1HI-30-UNV-93-85-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: P553890
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-30-UNV-93-85-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

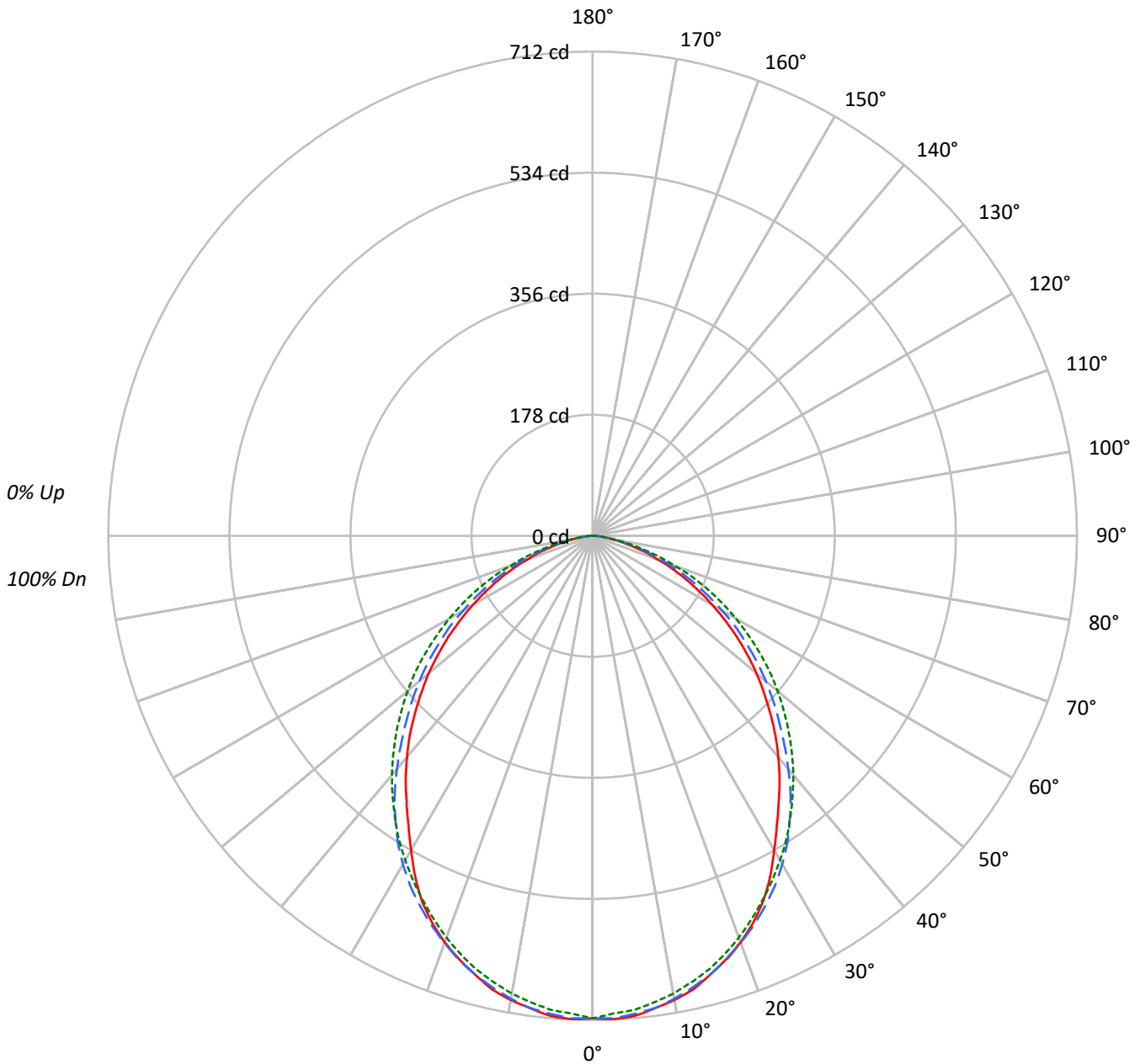
Lumens per Lamp: N/A
Luminaire Lumens: 1641.0 lumens
Efficiency: N/A
Efficacy: 76.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 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

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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°	3820	3820	3820
5°	3830	3814	3781
10°	3789	3778	3735
15°	3722	3722	3679
20°	3643	3648	3601
25°	3523	3567	3510
30°	3317	3466	3424
35°	3135	3323	3328
40°	2982	3143	3225
45°	2812	2953	3105
50°	2632	2783	2972
55°	2427	2589	2811
60°	2186	2363	2615
65°	1931	2100	2379
70°	1608	1789	2020
75°	1264	1429	1582
80°	905	1004	1116
85°	587	587	556



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.8	4.1
10°-20°	187.7	11.4
20°-30°	274.3	16.7
30°-40°	311.4	19.0
40°-50°	300.6	18.3
50°-60°	248.0	15.1
60°-70°	165.1	10.1
70°-80°	73.9	4.5
80°-90°	13.2	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°	528.8	32.2
0°-40°	840.2	51.2
0°-60°	1388.8	84.6
0°-90°	1641.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1641.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	710	710	710	710	710	
5°	709	709	706	702	700	67
15°	668	670	668	665	660	188
25°	593	598	601	596	591	272
35°	477	484	506	508	507	299
45°	369	376	388	406	408	285
55°	259	263	276	291	300	231
65°	152	156	165	177	187	150
75°	61	64	69	72	76	66
85°	10	10	10	9	9	13
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	709.7	709.7	709.7	709.7	709.7
2.5°	711.6	711.9	710.2	705.9	703.1
5°	708.9	708.6	705.9	702.1	699.9
7.5°	701.0	701.5	700.7	695.2	692.2
10°	693.3	693.6	691.4	687.1	683.5
12.5°	683.5	683.2	680.2	678.1	672.3
15°	668.0	669.6	668.0	665.0	660.3
17.5°	653.0	653.0	654.1	648.9	645.3
20°	636.1	636.9	636.9	632.8	628.7
22.5°	616.4	618.9	619.7	615.4	610.4
25°	593.3	597.9	600.6	596.3	591.1
27.5°	565.2	572.3	580.5	577.2	571.5
30°	533.8	544.2	557.8	555.1	551.0
32.5°	504.1	514.5	533.3	532.2	530.0
35°	477.1	483.7	505.8	508.5	506.6
37.5°	451.5	457.5	478.2	484.5	482.9
40°	424.5	431.0	447.4	458.6	459.1
42.5°	397.8	404.1	417.4	433.5	433.5
45°	369.4	375.7	388.0	405.7	407.9
47.5°	341.6	348.2	360.2	377.9	381.4
50°	314.4	320.4	332.4	349.5	355.0
52.5°	286.0	292.5	304.3	320.1	328.0
55°	258.7	263.1	275.9	291.2	299.6
57.5°	230.4	234.5	248.9	262.0	270.7
60°	203.1	208.3	219.5	232.8	242.9
62.5°	176.9	182.4	191.9	203.7	215.1
65°	151.6	155.7	164.9	176.7	186.8
67.5°	127.1	130.6	139.9	148.0	158.7
70°	102.2	106.9	113.7	121.6	128.4
72.5°	82.3	84.2	90.0	95.7	102.8
75°	60.8	64.1	68.7	72.0	76.1
77.5°	43.6	45.5	48.3	51.0	54.8
80°	29.2	30.0	32.4	33.0	36.0
82.5°	17.7	18.3	18.8	19.1	20.2
85°	9.5	9.5	9.5	9.0	9.0
87.5°	5.5	5.5	4.6	3.8	2.7
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)