

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: P554012

Luminaire Tested: **FUSL-12-2-LD4-1HI-40-UNV-82-96-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: P554012
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-82-96-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .250
CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT
LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

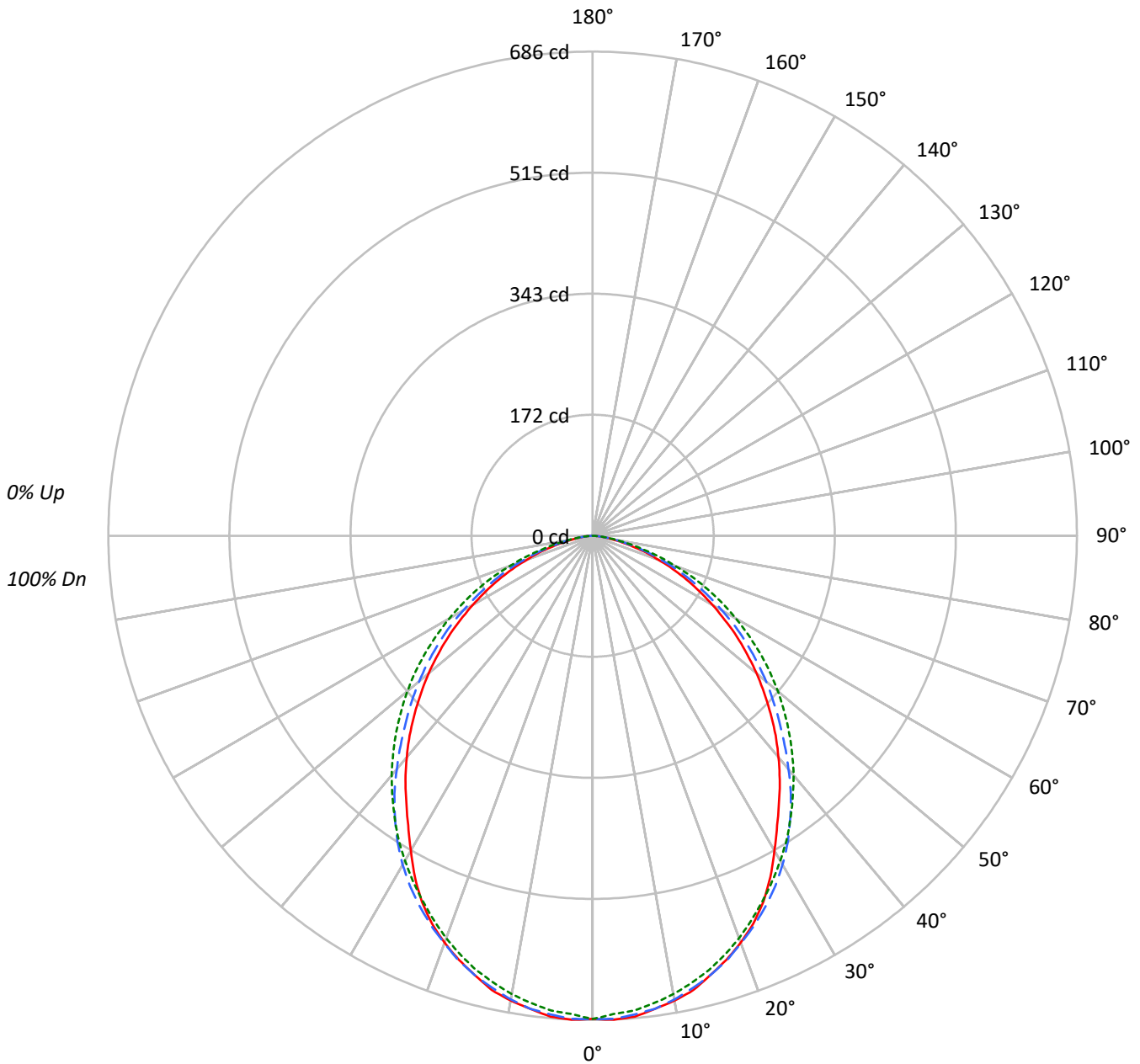
Lumens per Lamp: N/A
Luminaire Lumens: 1583.0 lumens
Efficiency: N/A
Efficacy: 73.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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°	3684	3684	3684
5°	3694	3679	3647
10°	3655	3645	3604
15°	3590	3590	3549
20°	3514	3519	3474
25°	3399	3441	3386
30°	3200	3344	3303
35°	3024	3206	3211
40°	2877	3032	3112
45°	2713	2849	2995
50°	2539	2684	2867
55°	2342	2498	2712
60°	2109	2279	2522
65°	1862	2026	2295
70°	1552	1726	1950
75°	1221	1379	1526
80°	871	970	1075
85°	568	568	537



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.5	4.1
10°-20°	181.1	11.4
20°-30°	264.6	16.7
30°-40°	300.4	19.0
40°-50°	290.0	18.3
50°-60°	239.2	15.1
60°-70°	159.3	10.1
70°-80°	71.3	4.5
80°-90°	12.8	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°	510.2	32.2
0°-40°	810.5	51.2
0°-60°	1339.7	84.6
0°-90°	1583.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1583.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	685	685	685	685	685	
5°	684	684	681	677	675	65
15°	644	646	644	642	637	182
25°	572	577	579	575	570	262
35°	460	467	488	490	489	288
45°	356	362	374	391	394	275
55°	250	254	266	281	289	223
65°	146	150	159	170	180	145
75°	59	62	66	69	73	64
85°	9	9	9	9	9	12
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	684.6	684.6	684.6	684.6	684.6
2.5°	686.4	686.7	685.1	680.9	678.3
5°	683.8	683.6	680.9	677.2	675.1
7.5°	676.2	676.7	675.9	670.7	667.8
10°	668.8	669.1	667.0	662.8	659.4
12.5°	659.4	659.1	656.2	654.1	648.6
15°	644.4	645.9	644.4	641.5	637.0
17.5°	629.9	629.9	631.0	626.0	622.5
20°	613.6	614.4	614.4	610.4	606.5
22.5°	594.7	597.0	597.8	593.6	588.9
25°	572.3	576.8	579.4	575.2	570.2
27.5°	545.2	552.1	559.9	556.8	551.3
30°	515.0	525.0	538.1	535.5	531.5
32.5°	486.3	496.3	514.4	513.4	511.3
35°	460.3	466.6	487.9	490.5	488.7
37.5°	435.5	441.3	461.3	467.4	465.8
40°	409.5	415.8	431.6	442.4	442.9
42.5°	383.7	389.8	402.7	418.2	418.2
45°	356.4	362.4	374.3	391.4	393.5
47.5°	329.5	335.9	347.4	364.5	367.9
50°	303.2	309.0	320.6	337.2	342.4
52.5°	275.9	282.2	293.5	308.8	316.4
55°	249.6	253.8	266.2	280.9	289.0
57.5°	222.2	226.2	240.1	252.7	261.2
60°	195.9	200.9	211.7	224.6	234.3
62.5°	170.7	176.0	185.2	196.5	207.5
65°	146.2	150.2	159.1	170.4	180.2
67.5°	122.6	126.0	134.9	142.8	153.1
70°	98.6	103.1	109.7	117.3	123.9
72.5°	79.4	81.3	86.8	92.3	99.2
75°	58.7	61.8	66.3	69.4	73.4
77.5°	42.1	43.9	46.6	49.2	52.9
80°	28.1	28.9	31.3	31.8	34.7
82.5°	17.1	17.6	18.1	18.4	19.5
85°	9.2	9.2	9.2	8.7	8.7
87.5°	5.3	5.3	4.5	3.7	2.6
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)