

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: P554597

Luminaire Tested: **FUSL-12-2-LD4-1STD-50-UNV-93-86-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: P554597
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-LD4-1STD-50-UNV-93-86-EDD
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

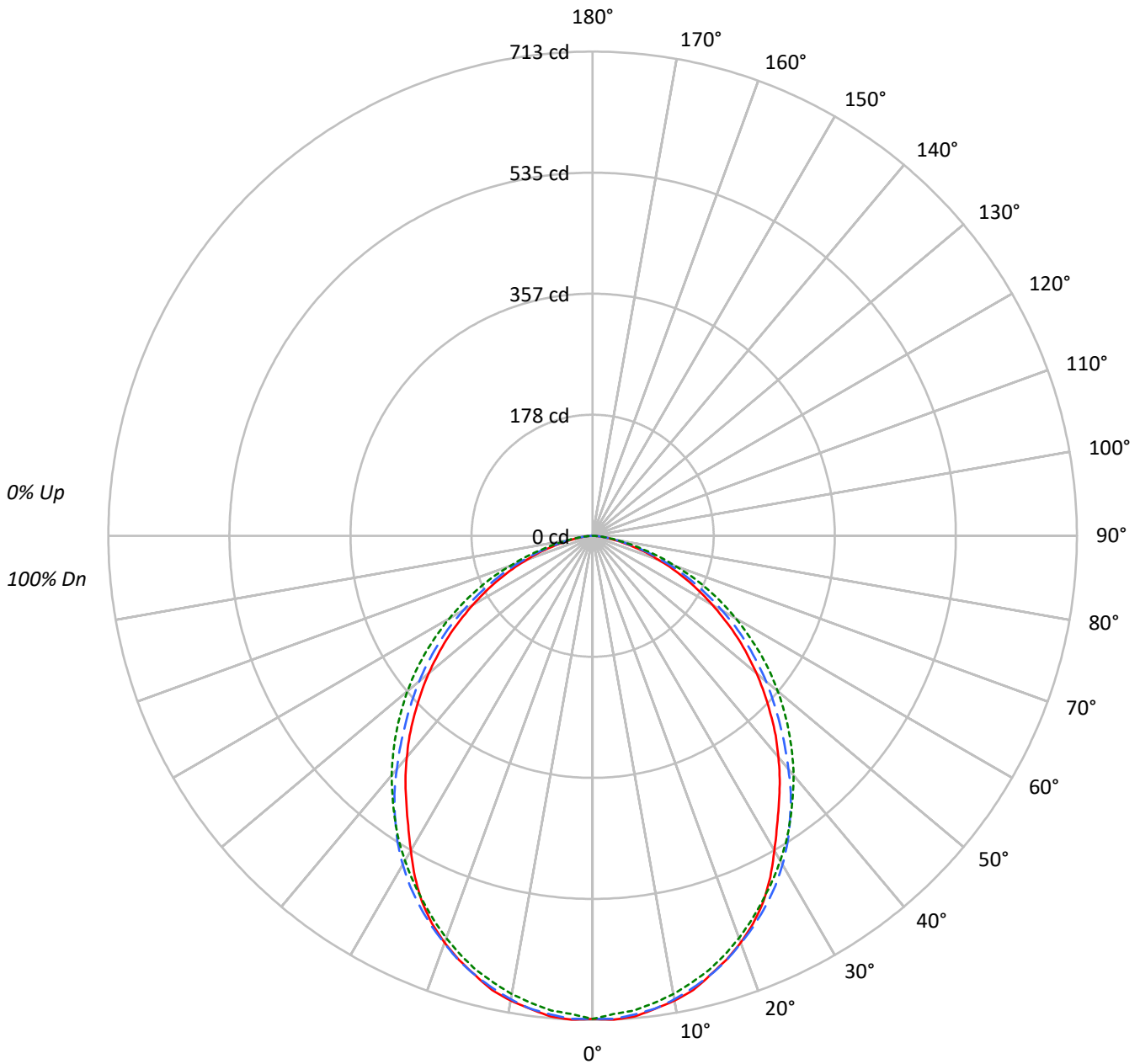
Lumens per Lamp: N/A
Luminaire Lumens: 1645.0 lumens
Efficiency: N/A
Efficacy: 99.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 16.6
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°	3829	3829	3829
5°	3839	3823	3790
10°	3798	3788	3745
15°	3731	3731	3689
20°	3652	3656	3609
25°	3532	3575	3518
30°	3325	3475	3433
35°	3143	3331	3336
40°	2989	3151	3234
45°	2818	2960	3112
50°	2638	2790	2979
55°	2434	2595	2819
60°	2192	2368	2621
65°	1936	2106	2384
70°	1613	1794	2025
75°	1266	1433	1587
80°	905	1007	1119
85°	593	593	556



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.0	4.1
10°-20°	188.2	11.4
20°-30°	275.0	16.7
30°-40°	312.1	19.0
40°-50°	301.3	18.3
50°-60°	248.6	15.1
60°-70°	165.5	10.1
70°-80°	74.1	4.5
80°-90°	13.3	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°	530.1	32.2
0°-40°	842.3	51.2
0°-60°	1392.1	84.6
0°-90°	1645.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1645.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	711	711	711	711	711	
5°	711	710	708	704	702	67
15°	670	671	670	667	662	189
25°	595	599	602	598	592	272
35°	478	485	507	510	508	300
45°	370	377	389	407	409	286
55°	259	264	277	292	300	231
65°	152	156	165	177	187	151
75°	61	64	69	72	76	67
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°	711.4	711.4	711.4	711.4	711.4
2.5°	713.3	713.6	712.0	707.6	704.9
5°	710.6	710.3	707.6	703.8	701.6
7.5°	702.7	703.2	702.4	696.9	693.9
10°	695.0	695.3	693.1	688.7	685.2
12.5°	685.2	684.9	681.9	679.7	674.0
15°	669.6	671.2	669.6	666.6	662.0
17.5°	654.6	654.6	655.7	650.5	646.9
20°	637.6	638.4	638.4	634.3	630.2
22.5°	617.9	620.4	621.2	616.9	611.9
25°	594.7	599.4	602.1	597.7	592.5
27.5°	566.6	573.7	581.9	578.6	572.9
30°	535.1	545.5	559.2	556.5	552.4
32.5°	505.3	515.7	534.6	533.5	531.3
35°	478.3	484.8	507.0	509.7	507.8
37.5°	452.6	458.6	479.4	485.7	484.0
40°	425.5	432.1	448.5	459.7	460.3
42.5°	398.8	405.0	418.4	434.6	434.6
45°	370.3	376.6	388.9	406.7	408.9
47.5°	342.5	349.0	361.0	378.8	382.4
50°	315.1	321.1	333.2	350.4	355.8
52.5°	286.7	293.3	305.0	320.9	328.8
55°	259.4	263.7	276.6	291.9	300.4
57.5°	230.9	235.0	249.5	262.6	271.4
60°	203.6	208.8	220.0	233.4	243.5
62.5°	177.4	182.8	192.4	204.2	215.6
65°	152.0	156.1	165.4	177.1	187.2
67.5°	127.4	130.9	140.2	148.4	159.1
70°	102.5	107.1	114.0	121.9	128.7
72.5°	82.5	84.5	90.2	95.9	103.0
75°	60.9	64.2	68.9	72.2	76.3
77.5°	43.7	45.6	48.4	51.1	54.9
80°	29.2	30.1	32.5	33.1	36.1
82.5°	17.8	18.3	18.9	19.1	20.2
85°	9.6	9.6	9.6	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)