

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: P554506

Luminaire Tested: **FUSL-12-2-LD4-1STD-40-UNV-81-94-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: P554506
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-40-UNV-81-94-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .187
CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT
LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

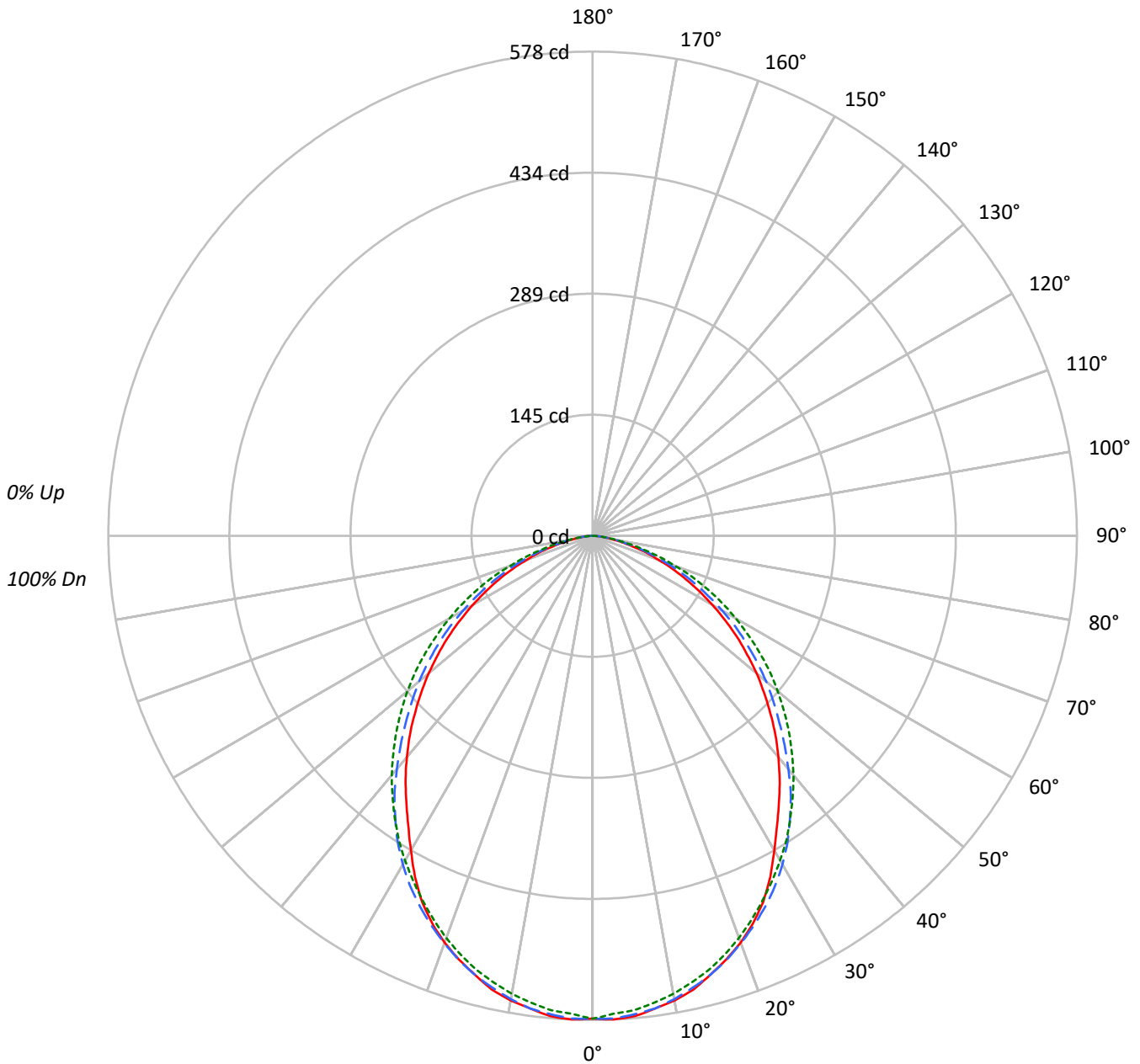
Lumens per Lamp: N/A
Luminaire Lumens: 1333.0 lumens
Efficiency: N/A
Efficacy: 80.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	3103	3103	3103
5°	3111	3098	3071
10°	3078	3069	3034
15°	3023	3023	2989
20°	2959	2963	2925
25°	2862	2897	2851
30°	2695	2816	2782
35°	2547	2699	2704
40°	2422	2553	2621
45°	2284	2399	2522
50°	2138	2261	2415
55°	1972	2103	2284
60°	1776	1919	2124
65°	1568	1706	1932
70°	1308	1454	1641
75°	1027	1160	1285
80°	735	818	905
85°	482	482	451



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.3	4.1
10°-20°	152.5	11.4
20°-30°	222.8	16.7
30°-40°	252.9	19.0
40°-50°	244.2	18.3
50°-60°	201.4	15.1
60°-70°	134.1	10.1
70°-80°	60.0	4.5
80°-90°	10.7	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°	429.6	32.2
0°-40°	682.5	51.2
0°-60°	1128.1	84.6
0°-90°	1333.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1333.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	576	576	576	576	576	
5°	576	576	573	570	568	55
15°	543	544	543	540	536	153
25°	482	486	488	484	480	221
35°	388	393	411	413	412	243
45°	300	305	315	330	331	232
55°	210	214	224	236	243	188
65°	123	126	134	144	152	122
75°	49	52	56	58	62	54
85°	8	8	8	7	7	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	576.5	576.5	576.5	576.5	576.5
2.5°	578.0	578.3	576.9	573.4	571.2
5°	575.8	575.6	573.4	570.3	568.5
7.5°	569.4	569.8	569.2	564.8	562.3
10°	563.2	563.4	561.6	558.1	555.2
12.5°	555.2	555.0	552.6	550.8	546.1
15°	542.6	543.9	542.6	540.2	536.4
17.5°	530.4	530.4	531.3	527.1	524.2
20°	516.7	517.4	517.4	514.0	510.7
22.5°	500.7	502.7	503.4	499.9	495.9
25°	481.9	485.7	487.9	484.4	480.1
27.5°	459.1	464.9	471.5	468.9	464.2
30°	433.6	442.1	453.1	450.9	447.6
32.5°	409.5	417.9	433.2	432.3	430.5
35°	387.6	392.9	410.8	413.0	411.5
37.5°	366.8	371.6	388.5	393.6	392.2
40°	344.8	350.1	363.4	372.5	373.0
42.5°	323.1	328.2	339.1	352.1	352.1
45°	300.1	305.2	315.2	329.5	331.3
47.5°	277.5	282.8	292.6	307.0	309.8
50°	255.4	260.2	270.0	283.9	288.4
52.5°	232.3	237.6	247.2	260.0	266.4
55°	210.2	213.7	224.1	236.5	243.4
57.5°	187.1	190.5	202.2	212.8	219.9
60°	165.0	169.2	178.3	189.1	197.3
62.5°	143.7	148.2	155.9	165.4	174.7
65°	123.1	126.5	134.0	143.5	151.7
67.5°	103.2	106.1	113.6	120.3	128.9
70°	83.1	86.8	92.4	98.8	104.3
72.5°	66.9	68.4	73.1	77.7	83.5
75°	49.4	52.0	55.8	58.5	61.8
77.5°	35.4	37.0	39.2	41.4	44.5
80°	23.7	24.4	26.4	26.8	29.2
82.5°	14.4	14.8	15.3	15.5	16.4
85°	7.8	7.8	7.8	7.3	7.3
87.5°	4.4	4.4	3.8	3.1	2.2
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)