

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: P554944

Luminaire Tested: **FUSL-12-2-LD4-2LO-35-UNV-81-84-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: P554944
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-LD4-2LO-35-UNV-81-84-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

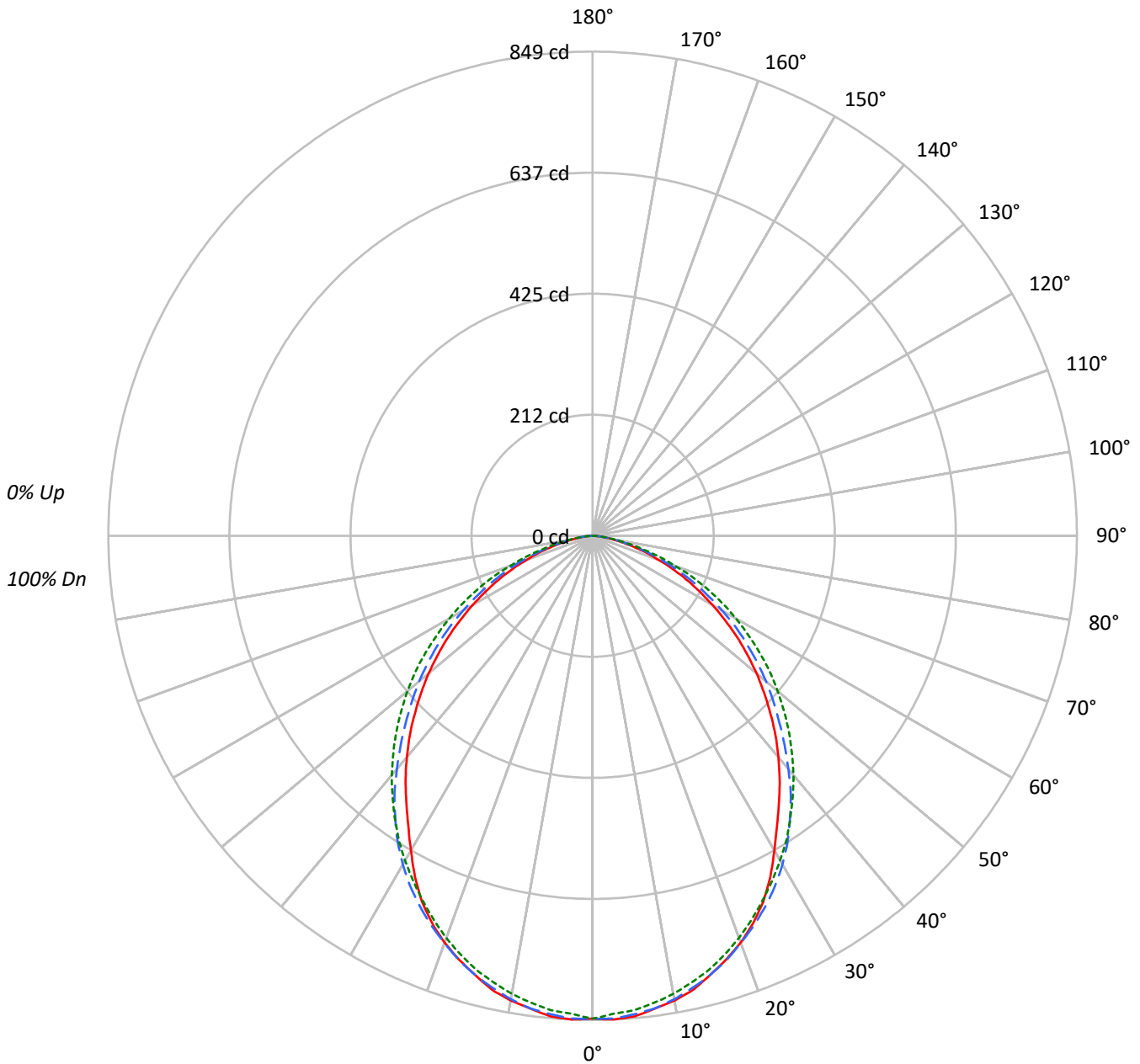
Lumens per Lamp: N/A
Luminaire Lumens: 1958.0 lumens
Efficiency: N/A
Efficacy: 83.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 23.4
Input Voltage (V): NR
Input Current (Ain): 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				20				20	
RC	80				70				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				100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86				86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73				73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63				63
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54				54
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47				47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42				42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37				37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34				34
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30				30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28				28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4557	4557	4557
5°	4569	4550	4512
10°	4521	4509	4457
15°	4441	4441	4390
20°	4347	4352	4297
25°	4204	4256	4188
30°	3959	4136	4086
35°	3740	3965	3971
40°	3558	3750	3849
45°	3355	3523	3704
50°	3141	3321	3547
55°	2897	3089	3354
60°	2609	2819	3120
65°	2304	2506	2837
70°	1920	2135	2411
75°	1508	1705	1888
80°	1079	1199	1330
85°	704	704	661



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.7	4.1
10°-20°	224.0	11.4
20°-30°	327.3	16.7
30°-40°	371.5	19.0
40°-50°	358.6	18.3
50°-60°	295.9	15.1
60°-70°	197.0	10.1
70°-80°	88.2	4.5
80°-90°	15.8	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°	631.0	32.2
0°-40°	1002.5	51.2
0°-60°	1657.0	84.6
0°-90°	1958.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1958.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	847	847	847	847	847	
5°	846	846	842	838	835	80
15°	797	799	797	793	788	225
25°	708	713	717	712	705	324
35°	569	577	604	607	604	357
45°	441	448	463	484	487	340
55°	309	314	329	347	358	276
65°	181	186	197	211	223	179
75°	72	76	82	86	91	79
85°	11	11	11	11	11	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	846.8	846.8	846.8	846.8	846.8
2.5°	849.1	849.4	847.4	842.2	839.0
5°	845.8	845.5	842.2	837.7	835.1
7.5°	836.4	837.0	836.0	829.5	826.0
10°	827.3	827.6	825.0	819.8	815.6
12.5°	815.6	815.2	811.7	809.0	802.2
15°	797.0	799.0	797.0	793.4	787.9
17.5°	779.1	779.1	780.4	774.2	770.0
20°	759.0	759.9	759.9	755.0	750.2
22.5°	735.5	738.5	739.4	734.2	728.4
25°	707.9	713.4	716.7	711.5	705.3
27.5°	674.4	682.8	692.6	688.7	681.9
30°	637.0	649.3	665.6	662.3	657.5
32.5°	601.5	613.9	636.3	635.0	632.4
35°	569.3	577.1	603.5	606.7	604.4
37.5°	538.7	545.9	570.6	578.1	576.1
40°	506.5	514.3	533.8	547.2	547.8
42.5°	474.6	482.1	498.1	517.2	517.2
45°	440.8	448.3	462.9	484.1	486.7
47.5°	407.6	415.4	429.7	450.9	455.1
50°	375.1	382.2	396.6	417.0	423.6
52.5°	341.3	349.1	363.0	381.9	391.3
55°	308.7	313.9	329.2	347.4	357.5
57.5°	274.9	279.8	297.0	312.6	323.0
60°	242.4	248.5	261.9	277.8	289.9
62.5°	211.1	217.6	229.0	243.0	256.7
65°	180.9	185.8	196.8	210.8	222.8
67.5°	151.6	155.8	166.9	176.6	189.3
70°	122.0	127.5	135.7	145.1	153.2
72.5°	98.2	100.5	107.4	114.2	122.6
75°	72.5	76.4	82.0	85.9	90.8
77.5°	52.0	54.3	57.6	60.8	65.4
80°	34.8	35.8	38.7	39.4	42.9
82.5°	21.1	21.8	22.4	22.8	24.1
85°	11.4	11.4	11.4	10.7	10.7
87.5°	6.5	6.5	5.5	4.6	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)