

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: P558381

Luminaire Tested: **FUSL-12-4-LD4-3STD-40-UNV-93-96-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: P558381
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-12-4-LD4-3STD-40-UNV-93-96-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

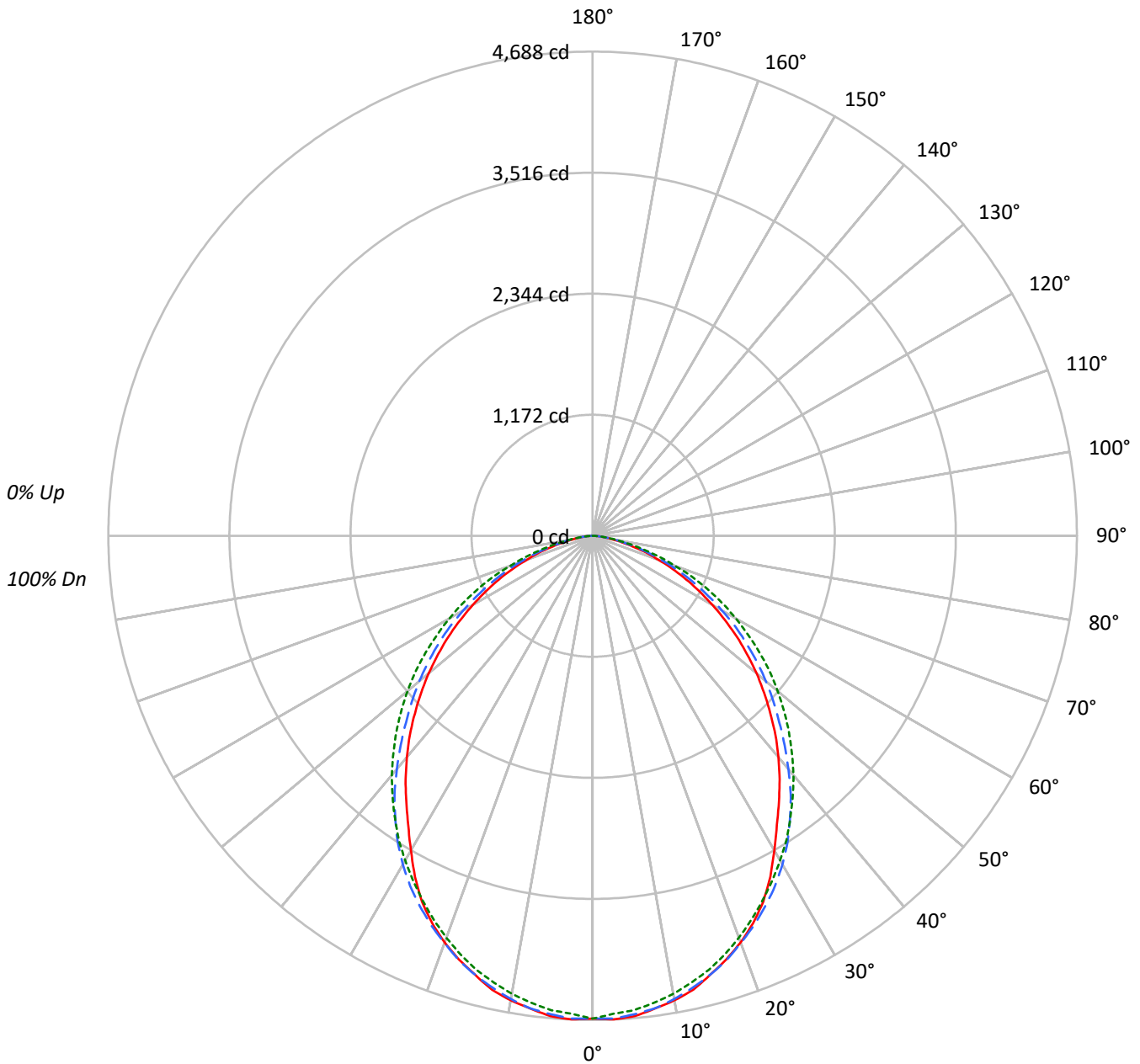
Lumens per Lamp: N/A
Luminaire Lumens: 10810.0 lumens
Efficiency: N/A
Efficacy: 108.2 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 99.9
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

TEST NUMBER: P558381

CATALOG NUMBER: FUSL-12-4-LD4-3STD-40-UNV-93-96-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P558381

CATALOG NUMBER: FUSL-12-4-LD4-3STD-40-UNV-93-96-EDD

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°	12580	12580	12580
5°	12614	12561	12454
10°	12480	12446	12303
15°	12259	12259	12119
20°	11999	12015	11860
25°	11604	11748	11561
30°	10927	11418	11279
35°	10325	10945	10962
40°	9823	10353	10625
45°	9261	9726	10225
50°	8669	9166	9790
55°	7996	8527	9260
60°	7201	7781	8613
65°	6358	6919	7834
70°	5299	5892	6655
75°	4164	4706	5210
80°	2978	3312	3674
85°	1942	1942	1831



TEST NUMBER: P558381

CATALOG NUMBER: FUSL-12-4-LD4-3STD-40-UNV-93-96-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	440.2	4.1
10°-20°	1236.6	11.4
20°-30°	1807.0	16.7
30°-40°	2051.2	19.0
40°-50°	1980.1	18.3
50°-60°	1633.4	15.1
60°-70°	1087.7	10.1
70°-80°	486.7	4.5
80°-90°	87.1	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°	3483.8	32.2
0°-40°	5534.9	51.2
0°-60°	9148.4	84.6
0°-90°	10810.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10810.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4675	4675	4675	4675	4675	
5°	4670	4668	4650	4625	4610	442
15°	4400	4411	4400	4380	4350	1240
25°	3908	3939	3957	3928	3894	1790
35°	3143	3186	3332	3350	3337	1969
45°	2434	2475	2556	2672	2687	1878
55°	1704	1733	1818	1918	1974	1521
65°	999	1026	1087	1164	1230	990
75°	400	422	453	474	501	438
85°	63	63	63	59	59	85
90°	0	0	0	0	0	



TEST NUMBER: P558381

CATALOG NUMBER: FUSL-12-4-LD4-3STD-40-UNV-93-96-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4675.0	4675.0	4675.0	4675.0	4675.0
2.5°	4687.6	4689.4	4678.6	4649.9	4631.9
5°	4669.7	4667.9	4649.9	4624.8	4610.4
7.5°	4617.6	4621.2	4615.8	4579.9	4560.1
10°	4567.3	4569.1	4554.7	4526.0	4502.6
12.5°	4502.6	4500.8	4481.1	4466.7	4429.0
15°	4400.3	4411.0	4400.3	4380.5	4350.0
17.5°	4301.5	4301.5	4308.7	4274.5	4251.2
20°	4190.1	4195.5	4195.5	4168.6	4141.6
22.5°	4060.8	4077.0	4082.4	4053.6	4021.3
25°	3908.1	3938.7	3956.6	3927.9	3893.8
27.5°	3723.2	3769.9	3823.7	3802.2	3764.5
30°	3516.6	3584.9	3674.7	3656.7	3629.8
32.5°	3320.8	3389.1	3513.0	3505.8	3491.5
35°	3143.0	3186.1	3331.6	3349.6	3337.0
37.5°	2974.2	3013.7	3150.2	3191.5	3180.8
40°	2796.4	2839.5	2947.3	3020.9	3024.5
42.5°	2620.4	2661.7	2749.7	2855.7	2855.7
45°	2433.6	2474.9	2555.7	2672.5	2686.8
47.5°	2250.4	2293.5	2372.5	2489.3	2512.6
50°	2070.8	2110.3	2189.4	2302.5	2338.4
52.5°	1884.0	1927.1	2004.4	2108.5	2160.6
55°	1704.4	1733.2	1817.6	1918.2	1973.8
57.5°	1517.6	1544.6	1639.8	1726.0	1783.5
60°	1338.0	1372.2	1445.8	1533.8	1600.3
62.5°	1165.6	1201.5	1264.4	1341.6	1417.1
65°	998.6	1025.5	1086.6	1163.8	1230.3
67.5°	836.9	860.3	921.4	975.2	1045.3
70°	673.5	704.0	748.9	801.0	845.9
72.5°	542.4	555.0	592.7	630.4	677.1
75°	400.5	422.1	452.6	474.1	501.1
77.5°	287.4	299.9	317.9	335.9	361.0
80°	192.2	197.6	213.7	217.3	237.1
82.5°	116.7	120.3	123.9	125.7	132.9
85°	62.9	62.9	62.9	59.3	59.3
87.5°	35.9	35.9	30.5	25.1	18.0
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)