

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: P558193

Luminaire Tested: **FUSL-12-4-LD4-3STD-30-UNV-80-84-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: P558193
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-30-UNV-80-84-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

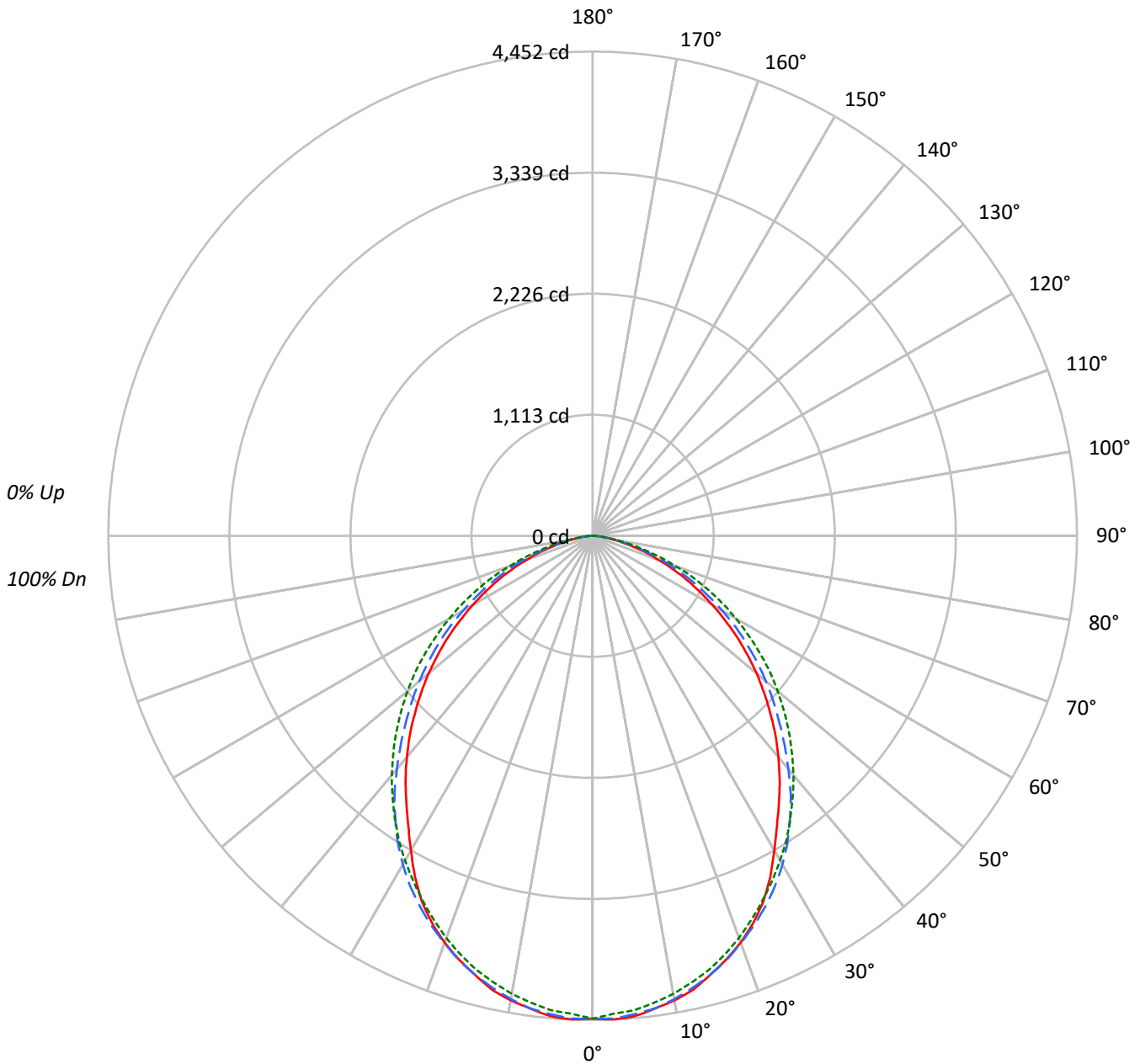
Lumens per Lamp: N/A
Luminaire Lumens: 10267.0 lumens
Efficiency: N/A
Efficacy: 102.8 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 99.9
Input Voltage (V): NR
Input Current (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

TEST NUMBER: P558193

CATALOG NUMBER: FUSL-12-4-LD4-3STD-30-UNV-80-84-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P558193

CATALOG NUMBER: FUSL-12-4-LD4-3STD-30-UNV-80-84-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°	11948	11948	11948
5°	11980	11930	11828
10°	11853	11820	11685
15°	11643	11643	11510
20°	11396	11411	11265
25°	11021	11158	10981
30°	10378	10845	10712
35°	9807	10395	10412
40°	9330	9833	10091
45°	8796	9238	9712
50°	8234	8705	9298
55°	7595	8099	8795
60°	6839	7391	8180
65°	6039	6571	7440
70°	5033	5596	6321
75°	3955	4470	4948
80°	2828	3146	3490
85°	1843	1843	1738



TEST NUMBER: P558193

CATALOG NUMBER: FUSL-12-4-LD4-3STD-30-UNV-80-84-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	418.1	4.1
10°-20°	1174.4	11.4
20°-30°	1716.3	16.7
30°-40°	1948.1	19.0
40°-50°	1880.6	18.3
50°-60°	1551.4	15.1
60°-70°	1033.1	10.1
70°-80°	462.3	4.5
80°-90°	82.7	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°	3308.8	32.2
0°-40°	5256.9	51.2
0°-60°	8688.9	84.6
0°-90°	10267.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10267.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4440	4440	4440	4440	4440	
5°	4435	4433	4416	4392	4379	420
15°	4179	4190	4179	4160	4132	1178
25°	3712	3741	3758	3731	3698	1700
35°	2985	3026	3164	3181	3169	1870
45°	2311	2351	2427	2538	2552	1783
55°	1619	1646	1726	1822	1875	1445
65°	948	974	1032	1105	1168	940
75°	380	401	430	450	476	416
85°	60	60	60	56	56	80
90°	0	0	0	0	0	



TEST NUMBER: P558193

CATALOG NUMBER: FUSL-12-4-LD4-3STD-30-UNV-80-84-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4440.2	4440.2	4440.2	4440.2	4440.2
2.5°	4452.2	4453.9	4443.6	4416.3	4399.3
5°	4435.1	4433.4	4416.3	4392.4	4378.8
7.5°	4385.6	4389.0	4383.9	4349.8	4331.0
10°	4337.9	4339.6	4325.9	4298.6	4276.5
12.5°	4276.5	4274.7	4256.0	4242.3	4206.5
15°	4179.2	4189.5	4179.2	4160.5	4131.5
17.5°	4085.4	4085.4	4092.2	4059.8	4037.6
20°	3979.6	3984.8	3984.8	3959.2	3933.6
22.5°	3856.8	3872.2	3877.3	3850.0	3819.3
25°	3711.8	3740.8	3757.9	3730.6	3698.2
27.5°	3536.1	3580.5	3631.7	3611.2	3575.4
30°	3340.0	3404.8	3490.1	3473.0	3447.4
32.5°	3154.0	3218.9	3336.6	3329.7	3316.1
35°	2985.2	3026.1	3164.3	3181.3	3169.4
37.5°	2824.8	2862.3	2992.0	3031.2	3021.0
40°	2655.9	2696.9	2799.2	2869.2	2872.6
42.5°	2488.8	2528.0	2611.6	2712.2	2712.2
45°	2311.4	2350.6	2427.4	2538.2	2551.9
47.5°	2137.4	2178.3	2253.4	2364.2	2386.4
50°	1966.8	2004.3	2079.4	2186.8	2221.0
52.5°	1789.4	1830.3	1903.7	2002.6	2052.1
55°	1618.8	1646.1	1726.3	1821.8	1874.7
57.5°	1441.4	1467.0	1557.4	1639.3	1693.9
60°	1270.8	1303.2	1373.2	1456.8	1519.9
62.5°	1107.1	1141.2	1200.9	1274.2	1345.9
65°	948.4	974.0	1032.0	1105.4	1168.5
67.5°	794.9	817.1	875.1	926.3	992.8
70°	639.7	668.7	711.3	760.8	803.4
72.5°	515.2	527.1	562.9	598.7	643.1
75°	380.4	400.9	429.9	450.3	475.9
77.5°	272.9	284.9	301.9	319.0	342.9
80°	182.5	187.6	203.0	206.4	225.2
82.5°	110.9	114.3	117.7	119.4	126.2
85°	59.7	59.7	59.7	56.3	56.3
87.5°	34.1	34.1	29.0	23.9	17.1
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)