

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: P556892

Luminaire Tested: **FUSL-12-4-LD4-1STD-50-UNV-82-96-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: P556892
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-LD4-1STD-50-UNV-82-96-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

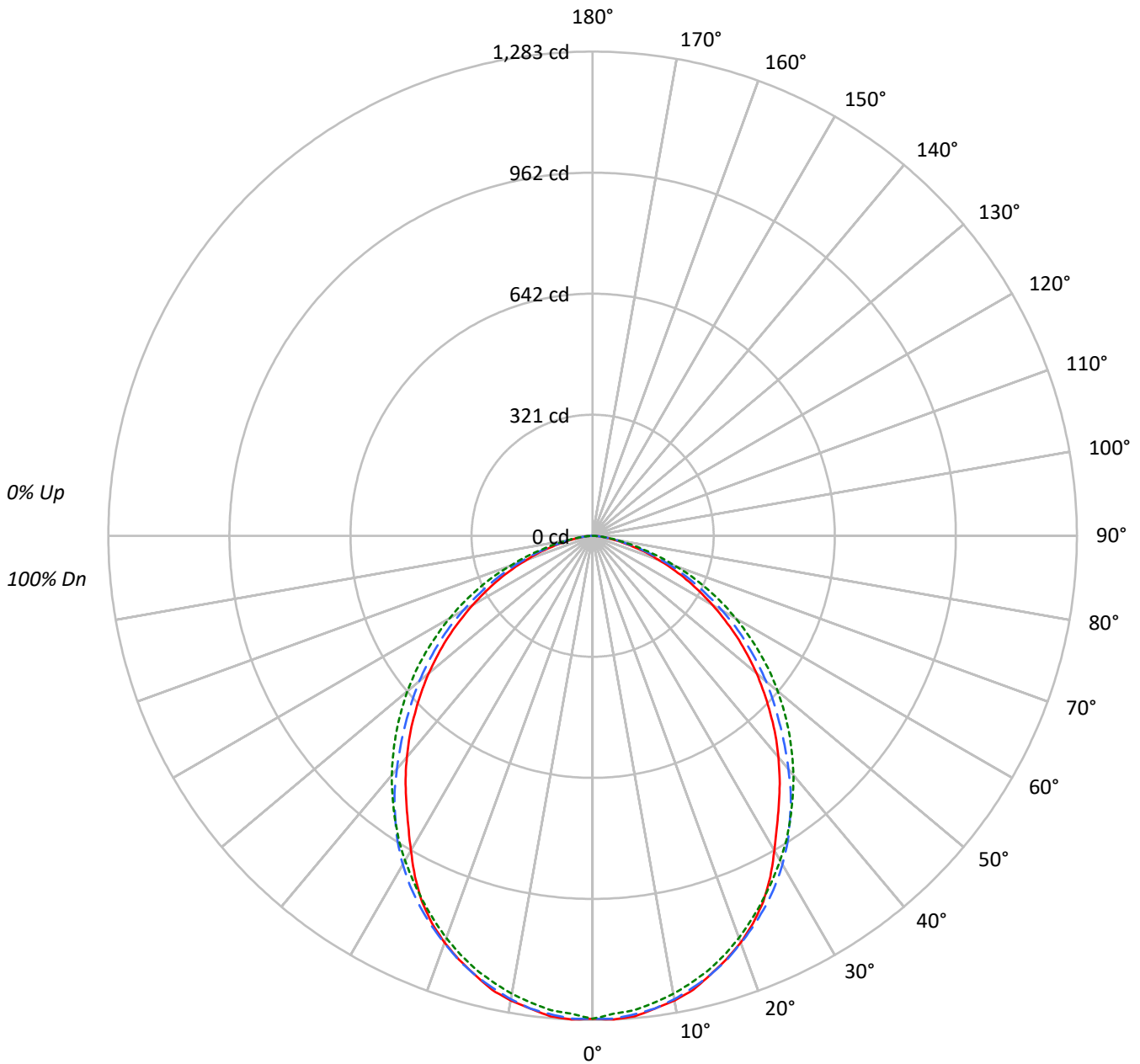
Lumens per Lamp: N/A
Luminaire Lumens: 2959.0 lumens
Efficiency: N/A
Efficacy: 88.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 33.3
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: P556892

CATALOG NUMBER: FUSL-12-4-LD4-1STD-50-UNV-82-96-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P556892

CATALOG NUMBER: FUSL-12-4-LD4-1STD-50-UNV-82-96-EDD-90

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°	3444	3444	3444
5°	3453	3438	3409
10°	3416	3407	3368
15°	3356	3356	3317
20°	3285	3289	3247
25°	3176	3216	3165
30°	2991	3126	3087
35°	2826	2996	3001
40°	2689	2834	2908
45°	2535	2662	2799
50°	2373	2509	2680
55°	2189	2334	2535
60°	1971	2130	2357
65°	1740	1894	2145
70°	1451	1613	1822
75°	1140	1288	1426
80°	815	907	1006
85°	531	531	500



TEST NUMBER: P556892

CATALOG NUMBER: FUSL-12-4-LD4-1STD-50-UNV-82-96-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.5	4.1
10°-20°	338.5	11.4
20°-30°	494.6	16.7
30°-40°	561.5	19.0
40°-50°	542.0	18.3
50°-60°	447.1	15.1
60°-70°	297.7	10.1
70°-80°	133.2	4.5
80°-90°	23.8	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°	953.6	32.2
0°-40°	1515.1	51.2
0°-60°	2504.2	84.6
0°-90°	2959.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2959.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1280	1280	1280	1280	1280	
5°	1278	1278	1273	1266	1262	121
15°	1204	1207	1204	1199	1191	340
25°	1070	1078	1083	1075	1066	490
35°	860	872	912	917	913	539
45°	666	678	700	732	736	514
55°	466	474	498	525	540	416
65°	273	281	297	319	337	271
75°	110	116	124	130	137	120
85°	17	17	17	16	16	23
90°	0	0	0	0	0	



TEST NUMBER: P556892

CATALOG NUMBER: FUSL-12-4-LD4-1STD-50-UNV-82-96-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1279.7	1279.7	1279.7	1279.7	1279.7
2.5°	1283.1	1283.6	1280.7	1272.8	1267.9
5°	1278.2	1277.7	1272.8	1265.9	1262.0
7.5°	1264.0	1264.9	1263.5	1253.6	1248.2
10°	1250.2	1250.7	1246.8	1238.9	1232.5
12.5°	1232.5	1232.0	1226.6	1222.7	1212.3
15°	1204.5	1207.4	1204.5	1199.1	1190.7
17.5°	1177.4	1177.4	1179.4	1170.1	1163.7
20°	1147.0	1148.4	1148.4	1141.1	1133.7
22.5°	1111.6	1116.0	1117.5	1109.6	1100.7
25°	1069.8	1078.1	1083.0	1075.2	1065.8
27.5°	1019.1	1031.9	1046.7	1040.8	1030.4
30°	962.6	981.3	1005.9	1000.9	993.6
32.5°	909.0	927.7	961.6	959.6	955.7
35°	860.3	872.1	912.0	916.9	913.4
37.5°	814.1	824.9	862.3	873.6	870.7
40°	765.5	777.3	806.8	826.9	827.9
42.5°	717.3	728.6	752.7	781.7	781.7
45°	666.1	677.5	699.6	731.5	735.5
47.5°	616.0	627.8	649.4	681.4	687.8
50°	566.8	577.7	599.3	630.3	640.1
52.5°	515.7	527.5	548.6	577.2	591.4
55°	466.5	474.4	497.5	525.1	540.3
57.5°	415.4	422.8	448.9	472.4	488.2
60°	366.3	375.6	395.8	419.8	438.0
62.5°	319.1	328.9	346.1	367.2	387.9
65°	273.3	280.7	297.4	318.6	336.8
67.5°	229.1	235.5	252.2	267.0	286.1
70°	184.4	192.7	205.0	219.3	231.6
72.5°	148.5	151.9	162.2	172.6	185.3
75°	109.6	115.5	123.9	129.8	137.2
77.5°	78.7	82.1	87.0	91.9	98.8
80°	52.6	54.1	58.5	59.5	64.9
82.5°	32.0	32.9	33.9	34.4	36.4
85°	17.2	17.2	17.2	16.2	16.2
87.5°	9.8	9.8	8.4	6.9	4.9
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)