

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: P556566

Luminaire Tested: **FUSL-12-4-LD4-1LO-40-UNV-82-87-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: P556566
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-LD4-1LO-40-UNV-82-87-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

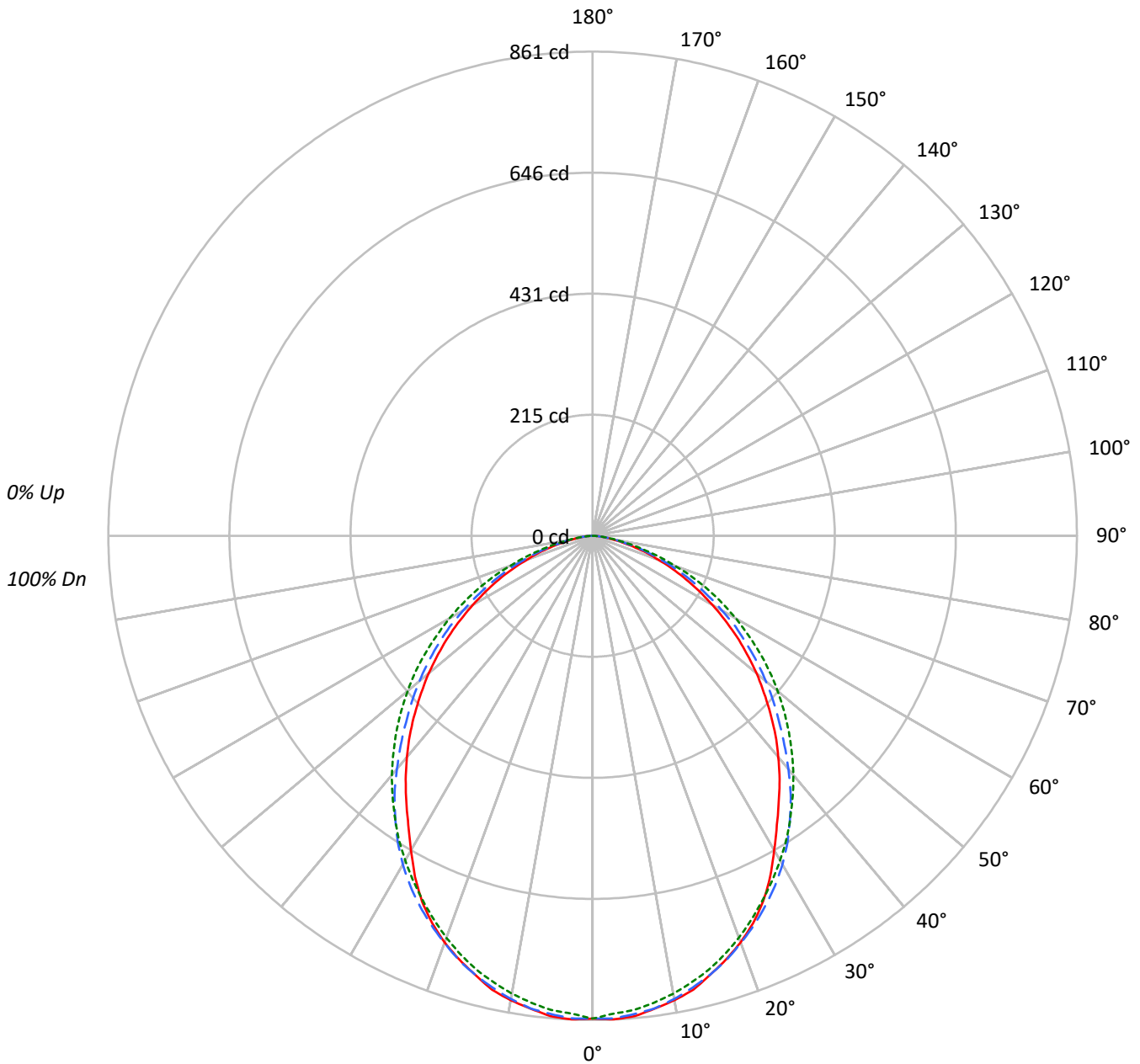
Lumens per Lamp: N/A
Luminaire Lumens: 1985.0 lumens
Efficiency: N/A
Efficacy: 84.8 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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

TEST NUMBER: P556566

CATALOG NUMBER: FUSL-12-4-LD4-1LO-40-UNV-82-87-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P556566

CATALOG NUMBER: FUSL-12-4-LD4-1LO-40-UNV-82-87-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°	2310	2310	2310
5°	2316	2306	2287
10°	2292	2285	2259
15°	2251	2251	2225
20°	2203	2206	2178
25°	2131	2157	2123
30°	2006	2097	2071
35°	1896	2010	2013
40°	1804	1901	1951
45°	1701	1786	1878
50°	1592	1683	1798
55°	1468	1566	1700
60°	1322	1429	1581
65°	1168	1270	1438
70°	973	1082	1222
75°	764	864	957
80°	547	607	674
85°	355	355	337



TEST NUMBER: P556566

CATALOG NUMBER: FUSL-12-4-LD4-1LO-40-UNV-82-87-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.8	4.1
10°-20°	227.1	11.4
20°-30°	331.8	16.7
30°-40°	376.7	19.0
40°-50°	363.6	18.3
50°-60°	299.9	15.1
60°-70°	199.7	10.1
70°-80°	89.4	4.5
80°-90°	16.0	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°	639.7	32.2
0°-40°	1016.4	51.2
0°-60°	1679.9	84.6
0°-90°	1985.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1985.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	858	858	858	858	858	
5°	858	857	854	849	847	81
15°	808	810	808	804	799	228
25°	718	723	726	721	715	329
35°	577	585	612	615	613	362
45°	447	454	469	491	493	345
55°	313	318	334	352	362	279
65°	183	188	200	214	226	182
75°	74	78	83	87	92	80
85°	12	12	12	11	11	16
90°	0	0	0	0	0	



TEST NUMBER: P556566

CATALOG NUMBER: FUSL-12-4-LD4-1LO-40-UNV-82-87-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	858.5	858.5	858.5	858.5	858.5
2.5°	860.8	861.1	859.1	853.8	850.5
5°	857.5	857.1	853.8	849.2	846.6
7.5°	847.9	848.6	847.6	841.0	837.4
10°	838.7	839.0	836.4	831.1	826.8
12.5°	826.8	826.5	822.8	820.2	813.3
15°	808.0	810.0	808.0	804.4	798.8
17.5°	789.9	789.9	791.2	784.9	780.6
20°	769.4	770.4	770.4	765.5	760.5
22.5°	745.7	748.6	749.6	744.4	738.4
25°	717.6	723.2	726.5	721.3	715.0
27.5°	683.7	692.2	702.1	698.2	691.3
30°	645.7	658.3	674.8	671.5	666.5
32.5°	609.8	622.3	645.1	643.8	641.1
35°	577.1	585.1	611.8	615.1	612.8
37.5°	546.1	553.4	578.5	586.0	584.1
40°	513.5	521.4	541.2	554.7	555.4
42.5°	481.2	488.8	504.9	524.4	524.4
45°	446.9	454.5	469.3	490.7	493.4
47.5°	413.2	421.2	435.7	457.1	461.4
50°	380.3	387.5	402.0	422.8	429.4
52.5°	346.0	353.9	368.1	387.2	396.7
55°	313.0	318.3	333.8	352.2	362.4
57.5°	278.7	283.6	301.1	316.9	327.5
60°	245.7	252.0	265.5	281.6	293.8
62.5°	214.0	220.6	232.2	246.4	260.2
65°	183.4	188.3	199.5	213.7	225.9
67.5°	153.7	158.0	169.2	179.1	191.9
70°	123.7	129.3	137.5	147.1	155.3
72.5°	99.6	101.9	108.8	115.8	124.3
75°	73.5	77.5	83.1	87.1	92.0
77.5°	52.8	55.1	58.4	61.7	66.3
80°	35.3	36.3	39.2	39.9	43.5
82.5°	21.4	22.1	22.8	23.1	24.4
85°	11.5	11.5	11.5	10.9	10.9
87.5°	6.6	6.6	5.6	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)