

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: P556486

Luminaire Tested: **FUSL-12-4-LD4-1LO-35-UNV-81-87-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: P556486
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-35-UNV-81-87-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .375
CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

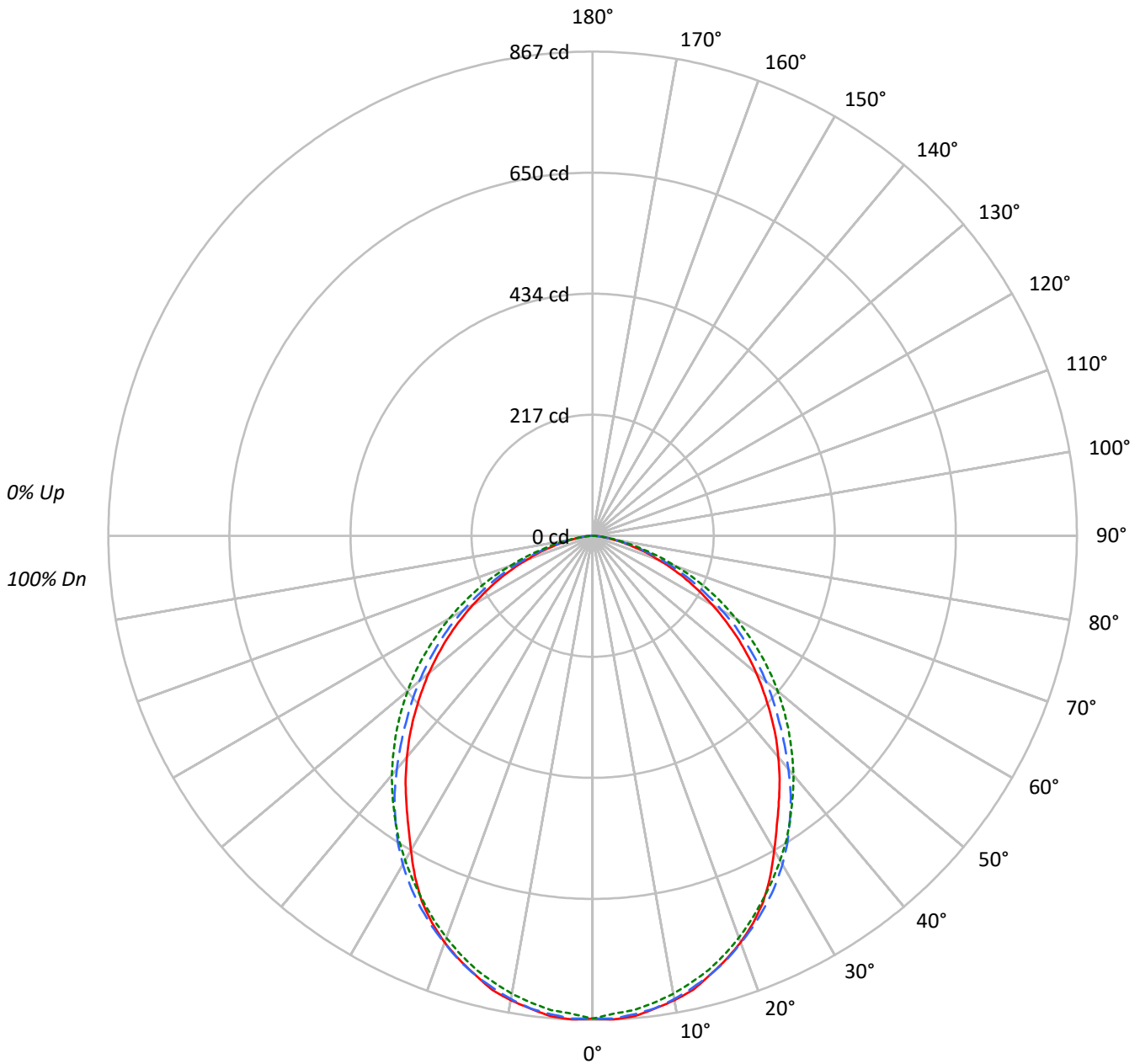
Lumens per Lamp: N/A
Luminaire Lumens: 1999.0 lumens
Efficiency: N/A
Efficacy: 85.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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: P556486

CATALOG NUMBER: FUSL-12-4-LD4-1LO-35-UNV-81-87-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P556486

CATALOG NUMBER: FUSL-12-4-LD4-1LO-35-UNV-81-87-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°	2326	2326	2326
5°	2333	2323	2303
10°	2308	2302	2275
15°	2267	2267	2241
20°	2219	2222	2193
25°	2146	2173	2138
30°	2021	2111	2086
35°	1909	2024	2027
40°	1816	1914	1965
45°	1713	1799	1891
50°	1603	1695	1810
55°	1479	1577	1712
60°	1331	1439	1593
65°	1176	1279	1449
70°	980	1090	1231
75°	770	870	964
80°	550	612	679
85°	358	358	340



TEST NUMBER: P556486

CATALOG NUMBER: FUSL-12-4-LD4-1LO-35-UNV-81-87-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.4	4.1
10°-20°	228.7	11.4
20°-30°	334.2	16.7
30°-40°	379.3	19.0
40°-50°	366.2	18.3
50°-60°	302.0	15.1
60°-70°	201.1	10.1
70°-80°	90.0	4.5
80°-90°	16.1	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°	644.2	32.2
0°-40°	1023.5	51.2
0°-60°	1691.7	84.6
0°-90°	1999.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1999.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	864	864	864	864	864	
5°	864	863	860	855	853	82
15°	814	816	814	810	804	229
25°	723	728	732	726	720	331
35°	581	589	616	619	617	364
45°	450	458	473	494	497	347
55°	315	320	336	355	365	281
65°	185	190	201	215	228	183
75°	74	78	84	88	93	81
85°	12	12	12	11	11	16
90°	0	0	0	0	0	



TEST NUMBER: P556486

CATALOG NUMBER: FUSL-12-4-LD4-1LO-35-UNV-81-87-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	864.5	864.5	864.5	864.5	864.5
2.5°	866.8	867.2	865.2	859.9	856.5
5°	863.5	863.2	859.9	855.2	852.6
7.5°	853.9	854.6	853.6	846.9	843.3
10°	844.6	844.9	842.3	836.9	832.6
12.5°	832.6	832.3	828.6	826.0	819.0
15°	813.7	815.7	813.7	810.0	804.4
17.5°	795.4	795.4	796.8	790.5	786.1
20°	774.8	775.8	775.8	770.9	765.9
22.5°	750.9	753.9	754.9	749.6	743.6
25°	722.7	728.3	731.7	726.4	720.0
27.5°	688.5	697.1	707.1	703.1	696.1
30°	650.3	662.9	679.5	676.2	671.2
32.5°	614.1	626.7	649.6	648.3	645.6
35°	581.2	589.2	616.1	619.4	617.1
37.5°	550.0	557.3	582.5	590.2	588.2
40°	517.1	525.1	545.0	558.6	559.3
42.5°	484.6	492.2	508.5	528.1	528.1
45°	450.0	457.7	472.6	494.2	496.9
47.5°	416.1	424.1	438.7	460.3	464.6
50°	382.9	390.2	404.9	425.8	432.4
52.5°	348.4	356.4	370.6	389.9	399.5
55°	315.2	320.5	336.1	354.7	365.0
57.5°	280.6	285.6	303.2	319.2	329.8
60°	247.4	253.7	267.4	283.6	295.9
62.5°	215.5	222.2	233.8	248.1	262.0
65°	184.7	189.6	200.9	215.2	227.5
67.5°	154.8	159.1	170.4	180.3	193.3
70°	124.5	130.2	138.5	148.1	156.4
72.5°	100.3	102.6	109.6	116.6	125.2
75°	74.1	78.0	83.7	87.7	92.7
77.5°	53.1	55.5	58.8	62.1	66.8
80°	35.5	36.5	39.5	40.2	43.8
82.5°	21.6	22.3	22.9	23.2	24.6
85°	11.6	11.6	11.6	11.0	11.0
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)