

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: P556505

Luminaire Tested: **FUSL-12-4-LD4-1LO-35-UNV-82-88-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: P556505
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-82-88-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

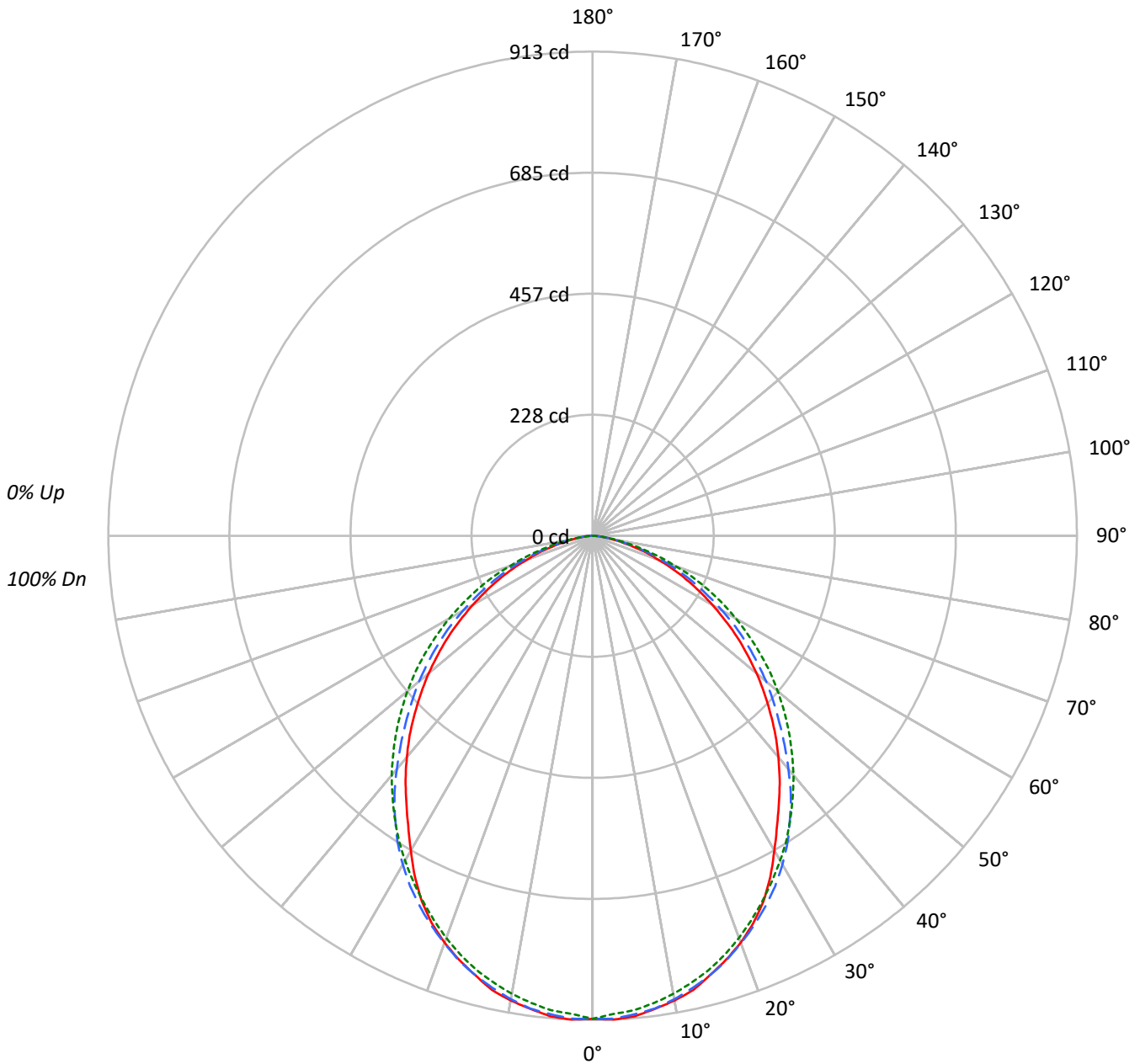
Lumens per Lamp: N/A
Luminaire Lumens: 2106.0 lumens
Efficiency: N/A
Efficacy: 90.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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: P556505

CATALOG NUMBER: FUSL-12-4-LD4-1LO-35-UNV-82-88-EDD

Luminous Intensity Polar Plot





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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°	2451	2451	2451
5°	2457	2447	2426
10°	2431	2425	2397
15°	2388	2388	2361
20°	2338	2341	2311
25°	2261	2289	2252
30°	2129	2224	2197
35°	2011	2132	2136
40°	1914	2017	2070
45°	1804	1895	1992
50°	1689	1786	1907
55°	1558	1661	1804
60°	1403	1516	1678
65°	1238	1348	1526
70°	1032	1148	1297
75°	811	917	1015
80°	580	645	716
85°	377	377	355



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.8	4.1
10°-20°	240.9	11.4
20°-30°	352.0	16.7
30°-40°	399.6	19.0
40°-50°	385.8	18.3
50°-60°	318.2	15.1
60°-70°	211.9	10.1
70°-80°	94.8	4.5
80°-90°	16.9	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°	678.7	32.2
0°-40°	1078.3	51.2
0°-60°	1782.3	84.6
0°-90°	2106.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2106.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	911	911	911	911	911	
5°	910	909	906	901	898	86
15°	857	859	857	853	848	242
25°	761	767	771	765	759	349
35°	612	621	649	653	650	384
45°	474	482	498	521	524	366
55°	332	338	354	374	384	296
65°	194	200	212	227	240	193
75°	78	82	88	92	98	85
85°	12	12	12	12	12	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	910.8	910.8	910.8	910.8	910.8
2.5°	913.2	913.6	911.5	905.9	902.4
5°	909.7	909.4	905.9	901.0	898.2
7.5°	899.6	900.3	899.2	892.2	888.4
10°	889.8	890.1	887.3	881.7	877.2
12.5°	877.2	876.9	873.0	870.2	862.9
15°	857.3	859.4	857.3	853.4	847.5
17.5°	838.0	838.0	839.4	832.8	828.2
20°	816.3	817.4	817.4	812.1	806.9
22.5°	791.1	794.3	795.3	789.7	783.4
25°	761.4	767.3	770.8	765.2	758.6
27.5°	725.3	734.4	744.9	740.7	733.4
30°	685.1	698.4	715.9	712.4	707.1
32.5°	647.0	660.3	684.4	683.0	680.2
35°	612.3	620.7	649.1	652.6	650.1
37.5°	579.4	587.1	613.7	621.8	619.7
40°	544.8	553.2	574.2	588.5	589.2
42.5°	510.5	518.6	535.7	556.3	556.3
45°	474.1	482.2	497.9	520.7	523.5
47.5°	438.4	446.8	462.2	485.0	489.5
50°	403.4	411.1	426.5	448.6	455.6
52.5°	367.0	375.4	390.5	410.8	420.9
55°	332.1	337.7	354.1	373.7	384.5
57.5°	295.7	300.9	319.5	336.3	347.5
60°	260.7	267.3	281.7	298.8	311.8
62.5°	227.1	234.1	246.3	261.4	276.1
65°	194.5	199.8	211.7	226.7	239.7
67.5°	163.1	167.6	179.5	190.0	203.6
70°	131.2	137.2	145.9	156.1	164.8
72.5°	105.7	108.1	115.5	122.8	131.9
75°	78.0	82.2	88.2	92.4	97.6
77.5°	56.0	58.4	61.9	65.4	70.3
80°	37.4	38.5	41.6	42.3	46.2
82.5°	22.7	23.4	24.1	24.5	25.9
85°	12.2	12.2	12.2	11.5	11.5
87.5°	7.0	7.0	5.9	4.9	3.5
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)