

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: P557789

Luminaire Tested: **FUSL-12-4-LD4-3HI-35-UNV-82-96-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: P557789
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-LD4-3HI-35-UNV-82-96-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

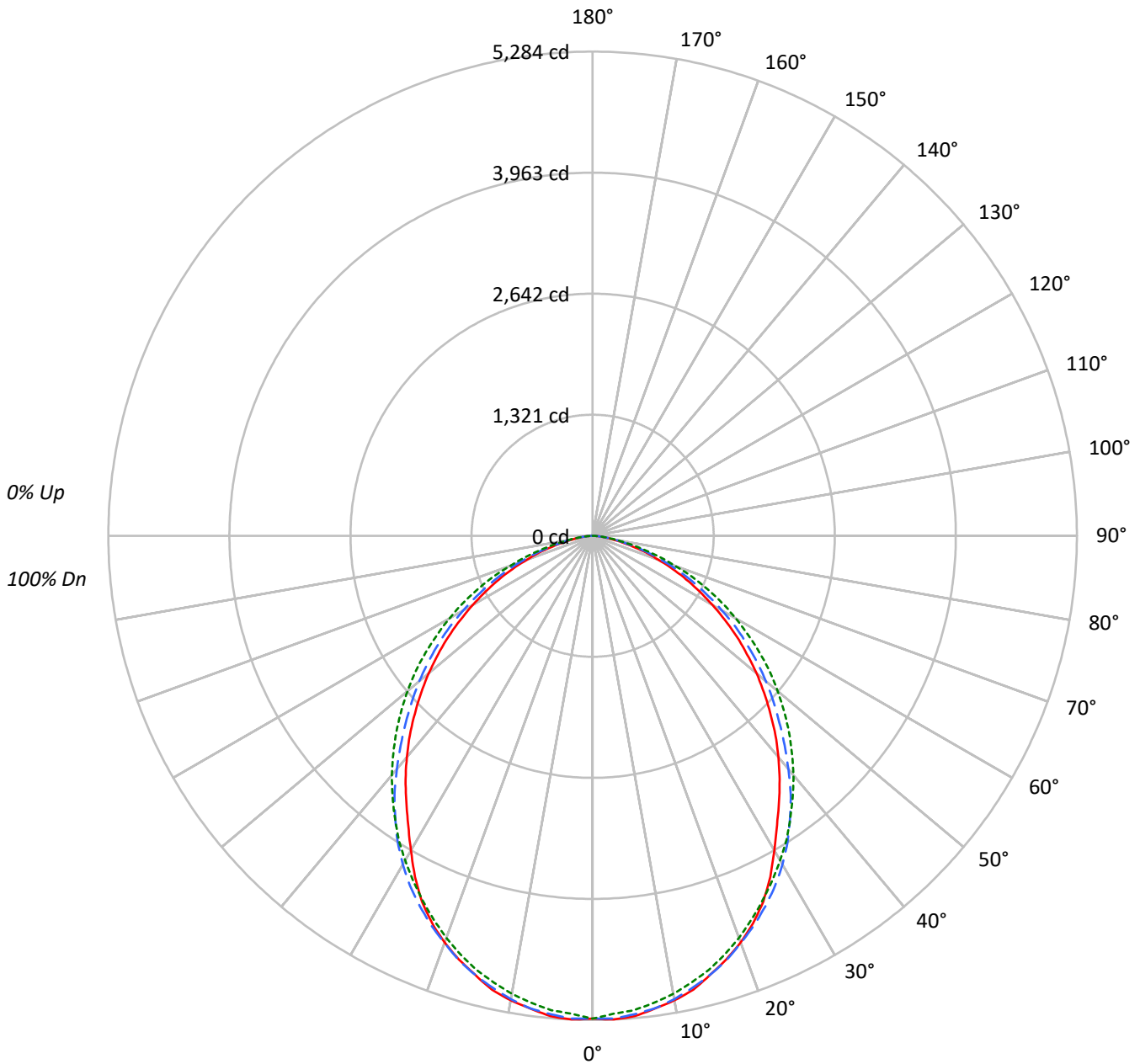
Lumens per Lamp: N/A
Luminaire Lumens: 12185.0 lumens
Efficiency: N/A
Efficacy: 94.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 129.6
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

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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°	14181	14181	14181
5°	14218	14158	14038
10°	14067	14029	13868
15°	13818	13818	13660
20°	13525	13543	13369
25°	13080	13242	13032
30°	12317	12871	12713
35°	11638	12337	12357
40°	11073	11670	11976
45°	10440	10963	11526
50°	9772	10331	11035
55°	9013	9612	10438
60°	8117	8771	9708
65°	7167	7799	8830
70°	5973	6642	7502
75°	4694	5305	5872
80°	3357	3733	4141
85°	2189	2189	2062



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	496.2	4.1
10°-20°	1393.8	11.4
20°-30°	2036.9	16.7
30°-40°	2312.1	19.0
40°-50°	2231.9	18.3
50°-60°	1841.2	15.1
60°-70°	1226.1	10.1
70°-80°	548.7	4.5
80°-90°	98.2	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°	3926.9	32.2
0°-40°	6238.9	51.2
0°-60°	10312.1	84.6
0°-90°	12185.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12185.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5270	5270	5270	5270	5270	
5°	5264	5262	5241	5213	5197	498
15°	4960	4972	4960	4938	4903	1398
25°	4405	4440	4460	4428	4389	2017
35°	3543	3591	3755	3776	3762	2220
45°	2743	2790	2881	3012	3029	2117
55°	1921	1954	2049	2162	2225	1715
65°	1126	1156	1225	1312	1387	1116
75°	452	476	510	534	565	494
85°	71	71	71	67	67	96
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5269.7	5269.7	5269.7	5269.7	5269.7
2.5°	5283.9	5285.9	5273.7	5241.4	5221.1
5°	5263.6	5261.6	5241.4	5213.0	5196.8
7.5°	5204.9	5209.0	5202.9	5162.4	5140.1
10°	5148.2	5150.3	5134.1	5101.7	5075.3
12.5°	5075.3	5073.3	5051.1	5034.9	4992.3
15°	4960.0	4972.1	4960.0	4937.7	4903.3
17.5°	4848.6	4848.6	4856.7	4818.2	4791.9
20°	4723.1	4729.2	4729.2	4698.8	4668.4
22.5°	4577.3	4595.5	4601.6	4569.2	4532.8
25°	4405.2	4439.7	4459.9	4427.5	4389.1
27.5°	4196.7	4249.4	4310.1	4285.8	4243.3
30°	3963.9	4040.8	4142.1	4121.8	4091.5
32.5°	3743.2	3820.2	3959.9	3951.8	3935.6
35°	3542.8	3591.4	3755.4	3775.6	3761.5
37.5°	3352.5	3397.1	3550.9	3597.5	3585.3
40°	3152.1	3200.7	3322.2	3405.2	3409.2
42.5°	2953.7	3000.3	3099.5	3218.9	3218.9
45°	2743.2	2789.7	2880.8	3012.4	3028.6
47.5°	2536.7	2585.2	2674.3	2805.9	2832.2
50°	2334.2	2378.8	2467.8	2595.4	2635.9
52.5°	2123.7	2172.3	2259.3	2376.7	2435.4
55°	1921.2	1953.6	2048.8	2162.1	2224.9
57.5°	1710.7	1741.0	1848.3	1945.5	2010.3
60°	1508.2	1546.7	1629.7	1728.9	1803.8
62.5°	1313.9	1354.4	1425.2	1512.3	1597.3
65°	1125.6	1156.0	1224.8	1311.9	1386.8
67.5°	943.4	969.7	1038.6	1099.3	1178.2
70°	759.2	793.6	844.2	902.9	953.5
72.5°	611.4	625.6	668.1	710.6	763.2
75°	451.5	475.8	510.2	534.5	564.8
77.5°	323.9	338.1	358.3	378.6	406.9
80°	216.6	222.7	240.9	245.0	267.2
82.5°	131.6	135.6	139.7	141.7	149.8
85°	70.9	70.9	70.9	66.8	66.8
87.5°	40.5	40.5	34.4	28.3	20.2
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)