

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: P557083

Luminaire Tested: **FUSL-12-4-LD4-2HI-40-UNV-82-94-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: P557083
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-LD4-2HI-40-UNV-82-94-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDES
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

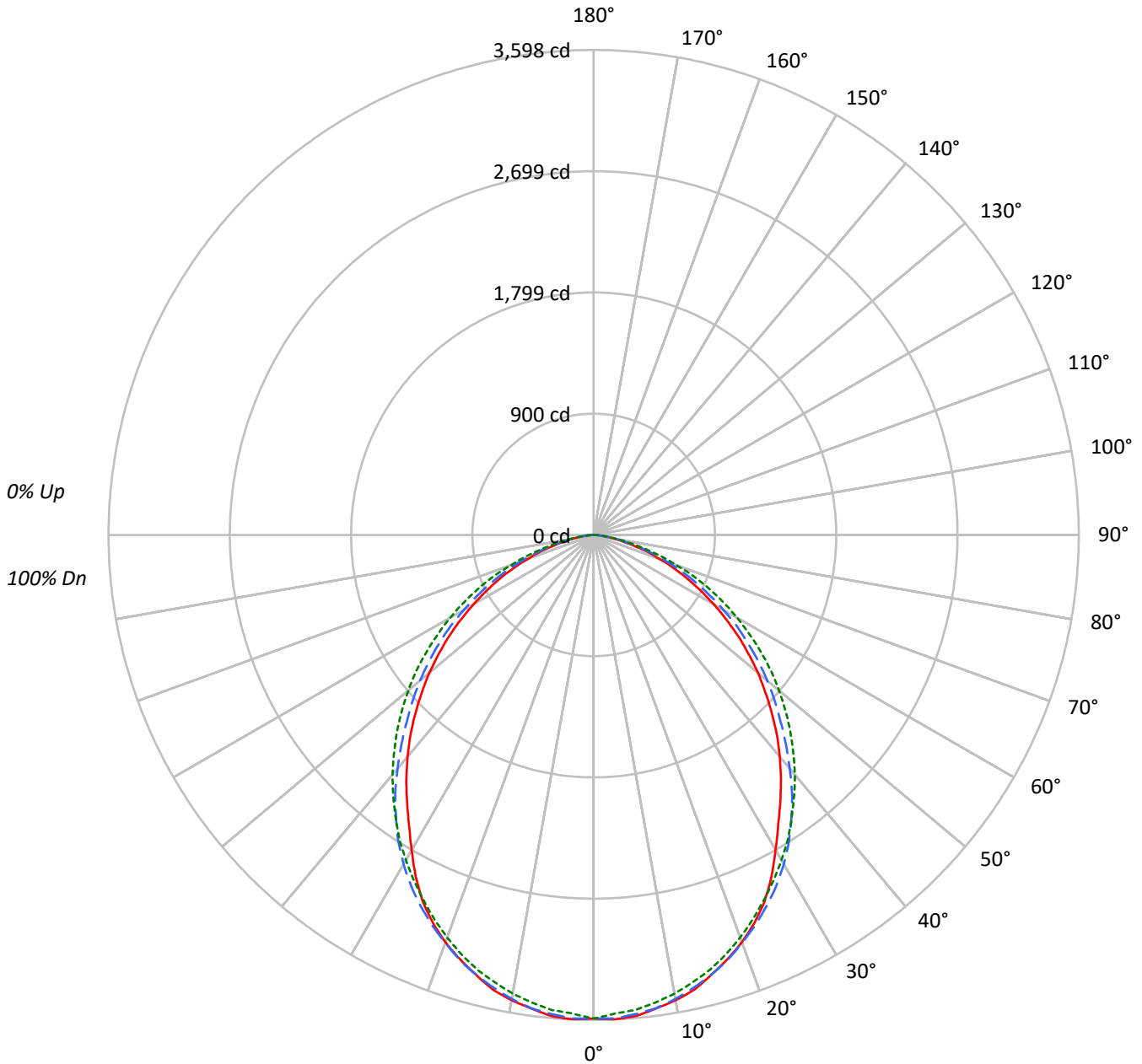
Lumens per Lamp: N/A
Luminaire Lumens: 8296.0 lumens
Efficiency: N/A
Efficacy: 96.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 86.4
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°	9655	9655	9655
5°	9680	9639	9558
10°	9578	9551	9442
15°	9408	9408	9300
20°	9209	9220	9102
25°	8905	9016	8872
30°	8386	8763	8656
35°	7924	8399	8413
40°	7539	7945	8154
45°	7107	7464	7847
50°	6653	7034	7513
55°	6137	6544	7107
60°	5527	5972	6610
65°	4880	5310	6012
70°	4067	4522	5108
75°	3196	3611	3999
80°	2286	2541	2819
85°	1488	1488	1405



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	337.8	4.1
10°-20°	949.0	11.4
20°-30°	1386.8	16.7
30°-40°	1574.1	19.0
40°-50°	1519.6	18.3
50°-60°	1253.6	15.1
60°-70°	834.8	10.1
70°-80°	373.5	4.5
80°-90°	66.8	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°	2673.6	32.2
0°-40°	4247.7	51.2
0°-60°	7020.9	84.6
0°-90°	8296.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8296.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3588	3588	3588	3588	3588	
5°	3584	3582	3568	3549	3538	339
15°	3377	3385	3377	3362	3338	952
25°	2999	3023	3036	3014	2988	1374
35°	2412	2445	2557	2571	2561	1511
45°	1868	1899	1961	2051	2062	1441
55°	1308	1330	1395	1472	1515	1167
65°	766	787	834	893	944	760
75°	307	324	347	364	385	336
85°	48	48	48	46	46	65
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3587.8	3587.8	3587.8	3587.8	3587.8
2.5°	3597.5	3598.8	3590.6	3568.5	3554.7
5°	3583.7	3582.3	3568.5	3549.2	3538.2
7.5°	3543.7	3546.5	3542.3	3514.8	3499.6
10°	3505.1	3506.5	3495.5	3473.4	3455.5
12.5°	3455.5	3454.1	3438.9	3427.9	3399.0
15°	3376.9	3385.2	3376.9	3361.8	3338.3
17.5°	3301.1	3301.1	3306.6	3280.4	3262.5
20°	3215.7	3219.8	3219.8	3199.1	3178.4
22.5°	3116.4	3128.8	3133.0	3110.9	3086.1
25°	2999.3	3022.7	3036.5	3014.4	2988.2
27.5°	2857.3	2893.1	2934.5	2917.9	2889.0
30°	2698.8	2751.2	2820.1	2806.3	2785.6
32.5°	2548.5	2600.9	2696.0	2690.5	2679.5
35°	2412.1	2445.2	2556.8	2570.6	2560.9
37.5°	2282.5	2312.8	2417.6	2449.3	2441.0
40°	2146.1	2179.1	2261.8	2318.4	2321.1
42.5°	2011.0	2042.7	2110.2	2191.6	2191.6
45°	1867.6	1899.3	1961.4	2051.0	2062.0
47.5°	1727.1	1760.1	1820.8	1910.4	1928.3
50°	1589.2	1619.5	1680.2	1767.0	1794.6
52.5°	1445.9	1479.0	1538.2	1618.2	1658.1
55°	1308.0	1330.1	1394.9	1472.1	1514.8
57.5°	1164.7	1185.4	1258.4	1324.6	1368.7
60°	1026.9	1053.0	1109.6	1177.1	1228.1
62.5°	894.5	922.1	970.3	1029.6	1087.5
65°	766.4	787.0	833.9	893.2	944.2
67.5°	642.3	660.2	707.1	748.4	802.2
70°	516.9	540.3	574.8	614.7	649.2
72.5°	416.3	425.9	454.9	483.8	519.6
75°	307.4	323.9	347.3	363.9	384.6
77.5°	220.5	230.2	244.0	257.7	277.0
80°	147.5	151.6	164.0	166.8	181.9
82.5°	89.6	92.3	95.1	96.5	102.0
85°	48.2	48.2	48.2	45.5	45.5
87.5°	27.6	27.6	23.4	19.3	13.8
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)