

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: P557731

Luminaire Tested: **FUSL-12-4-LD4-3HI-30-UNV-93-85-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: P557731
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-30-UNV-93-85-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

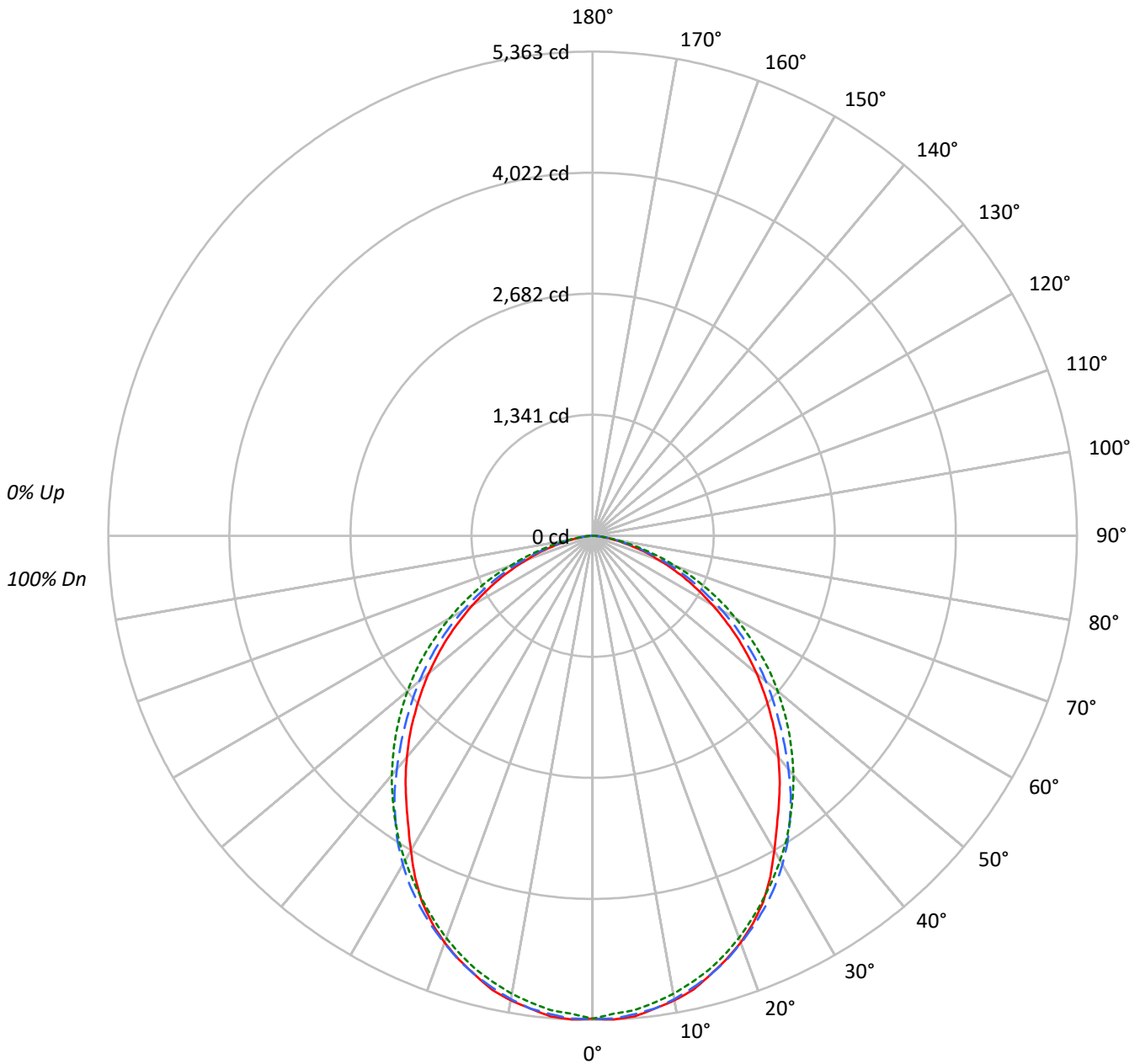
Lumens per Lamp: N/A
Luminaire Lumens: 12368.0 lumens
Efficiency: N/A
Efficacy: 95.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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

TEST NUMBER: P557731

CATALOG NUMBER: FUSL-12-4-LD4-3HI-30-UNV-93-85-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P557731

CATALOG NUMBER: FUSL-12-4-LD4-3HI-30-UNV-93-85-EDD

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°	14394	14394	14394
5°	14432	14371	14249
10°	14279	14240	14077
15°	14025	14025	13865
20°	13728	13746	13570
25°	13276	13441	13228
30°	12502	13064	12904
35°	11813	12522	12542
40°	11239	11846	12156
45°	10596	11128	11699
50°	9919	10487	11200
55°	9149	9756	10595
60°	8239	8903	9854
65°	7275	7916	8963
70°	6063	6742	7615
75°	4764	5384	5961
80°	3408	3789	4203
85°	2220	2220	2093



TEST NUMBER: P557731

CATALOG NUMBER: FUSL-12-4-LD4-3HI-30-UNV-93-85-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	503.6	4.1
10°-20°	1414.8	11.4
20°-30°	2067.5	16.7
30°-40°	2346.8	19.0
40°-50°	2265.5	18.3
50°-60°	1868.9	15.1
60°-70°	1244.5	10.1
70°-80°	556.9	4.5
80°-90°	99.6	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°	3985.8	32.2
0°-40°	6332.6	51.2
0°-60°	10467.0	84.6
0°-90°	12368.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12368.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5349	5349	5349	5349	5349	
5°	5343	5341	5320	5291	5275	506
15°	5034	5047	5034	5012	4977	1419
25°	4471	4506	4527	4494	4455	2048
35°	3596	3645	3812	3832	3818	2253
45°	2784	2832	2924	3058	3074	2148
55°	1950	1983	2080	2195	2258	1741
65°	1142	1173	1243	1332	1408	1133
75°	458	483	518	542	573	501
85°	72	72	72	68	68	97
90°	0	0	0	0	0	



TEST NUMBER: P557731

CATALOG NUMBER: FUSL-12-4-LD4-3HI-30-UNV-93-85-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5348.8	5348.8	5348.8	5348.8	5348.8
2.5°	5363.2	5365.3	5353.0	5320.1	5299.5
5°	5342.7	5340.6	5320.1	5291.3	5274.9
7.5°	5283.1	5287.2	5281.0	5239.9	5217.3
10°	5225.5	5227.6	5211.2	5178.3	5151.6
12.5°	5151.6	5149.5	5126.9	5110.5	5067.3
15°	5034.4	5046.8	5034.4	5011.8	4976.9
17.5°	4921.4	4921.4	4929.6	4890.6	4863.9
20°	4794.0	4800.2	4800.2	4769.4	4738.5
22.5°	4646.1	4664.6	4670.7	4637.9	4600.9
25°	4471.4	4506.3	4526.9	4494.0	4455.0
27.5°	4259.8	4313.2	4374.8	4350.2	4307.0
30°	4023.4	4101.5	4204.3	4183.7	4152.9
32.5°	3799.5	3877.5	4019.3	4011.1	3994.7
35°	3596.0	3645.3	3811.8	3832.3	3818.0
37.5°	3402.9	3448.1	3604.3	3651.5	3639.2
40°	3199.4	3248.8	3372.1	3456.3	3460.4
42.5°	2998.1	3045.3	3146.0	3267.3	3267.3
45°	2784.4	2831.6	2924.1	3057.7	3074.1
47.5°	2574.8	2624.1	2714.5	2848.1	2874.8
50°	2369.3	2414.5	2504.9	2634.4	2675.4
52.5°	2155.6	2204.9	2293.2	2412.4	2472.0
55°	1950.1	1983.0	2079.5	2194.6	2258.3
57.5°	1736.4	1767.2	1876.1	1974.7	2040.5
60°	1530.9	1569.9	1654.2	1754.9	1830.9
62.5°	1333.6	1374.7	1446.6	1535.0	1621.3
65°	1142.5	1173.3	1243.2	1331.6	1407.6
67.5°	957.6	984.3	1054.2	1115.8	1195.9
70°	770.6	805.5	856.9	916.5	967.8
72.5°	620.6	635.0	678.1	721.3	774.7
75°	458.2	482.9	517.8	542.5	573.3
77.5°	328.8	343.2	363.7	384.3	413.0
80°	219.9	226.0	244.5	248.6	271.2
82.5°	133.6	137.7	141.8	143.8	152.1
85°	71.9	71.9	71.9	67.8	67.8
87.5°	41.1	41.1	34.9	28.8	20.5
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)