

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: P557037

Luminaire Tested: **FUSL-12-4-LD4-2HI-35-UNV-93-96-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: P557037
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-35-UNV-93-96-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS 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

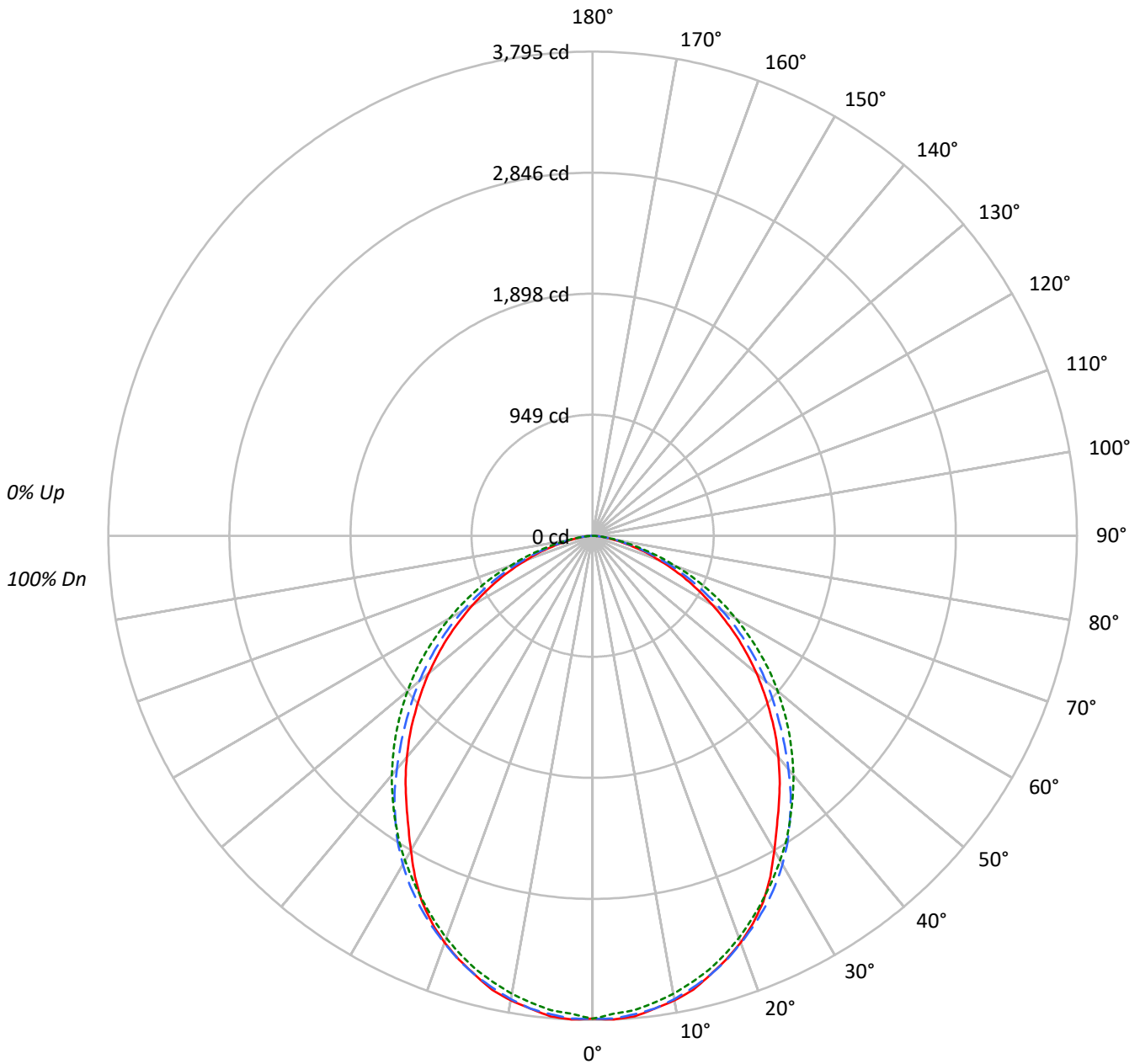
Lumens per Lamp: N/A
Luminaire Lumens: 8752.0 lumens
Efficiency: N/A
Efficacy: 101.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P557037

CATALOG NUMBER: FUSL-12-4-LD4-2HI-35-UNV-93-96-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P557037

CATALOG NUMBER: FUSL-12-4-LD4-2HI-35-UNV-93-96-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°	10185	10185	10185
5°	10213	10169	10083
10°	10104	10076	9961
15°	9925	9925	9811
20°	9715	9727	9602
25°	9395	9511	9360
30°	8847	9244	9131
35°	8360	8861	8875
40°	7953	8382	8602
45°	7498	7875	8278
50°	7019	7420	7926
55°	6474	6904	7498
60°	5830	6300	6973
65°	5148	5601	6343
70°	4290	4771	5389
75°	3372	3810	4218
80°	2411	2681	2974
85°	1572	1572	1482



TEST NUMBER: P557037

CATALOG NUMBER: FUSL-12-4-LD4-2HI-35-UNV-93-96-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	356.4	4.1
10°-20°	1001.1	11.4
20°-30°	1463.0	16.7
30°-40°	1660.7	19.0
40°-50°	1603.1	18.3
50°-60°	1322.5	15.1
60°-70°	880.7	10.1
70°-80°	394.1	4.5
80°-90°	70.5	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°	2820.5	32.2
0°-40°	4481.2	51.2
0°-60°	7406.8	84.6
0°-90°	8752.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8752.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3785	3785	3785	3785	3785	
5°	3781	3779	3765	3744	3733	358
15°	3562	3571	3562	3546	3522	1004
25°	3164	3189	3203	3180	3152	1449
35°	2545	2580	2697	2712	2702	1594
45°	1970	2004	2069	2164	2175	1520
55°	1380	1403	1472	1553	1598	1232
65°	808	830	880	942	996	802
75°	324	342	366	384	406	355
85°	51	51	51	48	48	69
90°	0	0	0	0	0	



TEST NUMBER: P557037

CATALOG NUMBER: FUSL-12-4-LD4-2HI-35-UNV-93-96-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3785.0	3785.0	3785.0	3785.0	3785.0
2.5°	3795.2	3796.6	3787.9	3764.7	3750.1
5°	3780.7	3779.2	3764.7	3744.3	3732.7
7.5°	3738.5	3741.4	3737.0	3707.9	3692.0
10°	3697.8	3699.2	3687.6	3664.3	3645.4
12.5°	3645.4	3644.0	3628.0	3616.3	3585.8
15°	3562.5	3571.3	3562.5	3546.5	3521.8
17.5°	3482.6	3482.6	3488.4	3460.8	3441.8
20°	3392.4	3396.8	3396.8	3375.0	3353.1
22.5°	3287.7	3300.8	3305.2	3281.9	3255.7
25°	3164.1	3188.8	3203.4	3180.1	3152.5
27.5°	3014.3	3052.1	3095.8	3078.3	3047.8
30°	2847.1	2902.4	2975.1	2960.5	2938.7
32.5°	2688.6	2743.9	2844.2	2838.4	2826.8
35°	2544.7	2579.6	2697.3	2711.9	2701.7
37.5°	2408.0	2440.0	2550.5	2583.9	2575.2
40°	2264.0	2298.9	2386.2	2445.8	2448.7
42.5°	2121.5	2155.0	2226.2	2312.0	2312.0
45°	1970.3	2003.7	2069.2	2163.7	2175.3
47.5°	1822.0	1856.9	1920.9	2015.4	2034.3
50°	1676.6	1708.6	1772.5	1864.2	1893.2
52.5°	1525.3	1560.2	1622.8	1707.1	1749.3
55°	1379.9	1403.2	1471.5	1553.0	1598.1
57.5°	1228.7	1250.5	1327.6	1397.4	1443.9
60°	1083.3	1110.9	1170.5	1241.8	1295.6
62.5°	943.7	972.8	1023.7	1086.2	1147.3
65°	808.5	830.3	879.7	942.3	996.1
67.5°	677.6	696.5	746.0	789.6	846.3
70°	545.3	570.0	606.4	648.5	684.9
72.5°	439.1	449.3	479.9	510.4	548.2
75°	324.3	341.7	366.4	383.9	405.7
77.5°	232.7	242.8	257.4	271.9	292.3
80°	155.6	160.0	173.0	175.9	191.9
82.5°	94.5	97.4	100.3	101.8	107.6
85°	50.9	50.9	50.9	48.0	48.0
87.5°	29.1	29.1	24.7	20.4	14.5
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)