

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: P554540

Luminaire Tested: **FUSL-12-2-LD4-1STD-40-UNV-93-96-EDD-90**

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: P554540
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-12-2-LD4-1STD-40-UNV-93-96-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE
AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND
4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

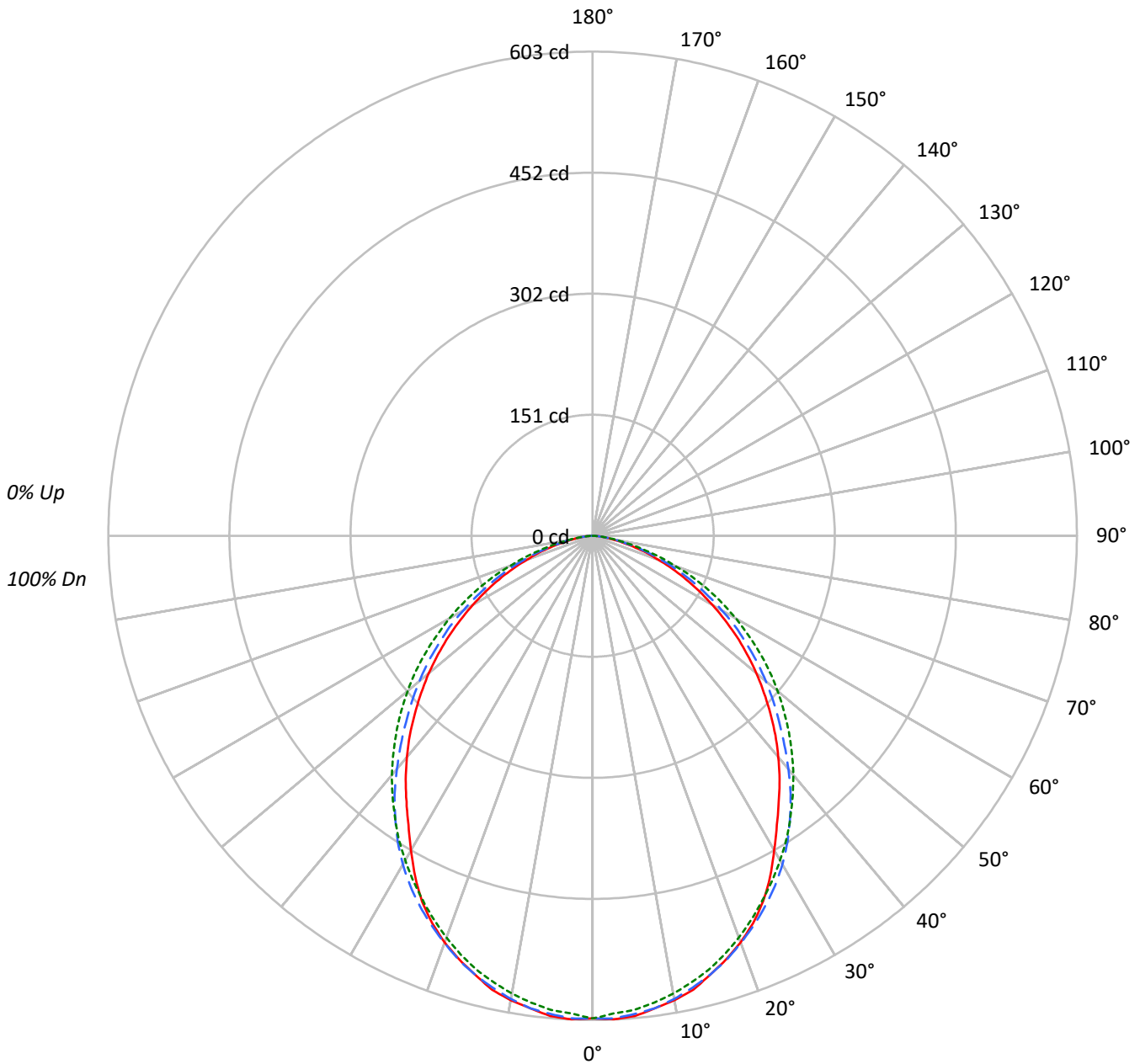
Lumens per Lamp: N/A
Luminaire Lumens: 1390.0 lumens
Efficiency: N/A
Efficacy: 83.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 16.6
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: P554540

CATALOG NUMBER: FUSL-12-2-LD4-1STD-40-UNV-93-96-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P554540

CATALOG NUMBER: FUSL-12-2-LD4-1STD-40-UNV-93-96-EDD-90

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°	3235	3235	3235
5°	3244	3230	3203
10°	3210	3201	3164
15°	3153	3153	3116
20°	3086	3090	3050
25°	2984	3021	2973
30°	2810	2936	2900
35°	2655	2815	2819
40°	2526	2663	2732
45°	2382	2501	2630
50°	2230	2357	2518
55°	2057	2193	2381
60°	1852	2001	2215
65°	1635	1779	2015
70°	1363	1515	1712
75°	1071	1210	1339
80°	766	852	945
85°	500	500	469



TEST NUMBER: P554540

CATALOG NUMBER: FUSL-12-2-LD4-1STD-40-UNV-93-96-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.6	4.1
10°-20°	159.0	11.4
20°-30°	232.4	16.7
30°-40°	263.7	19.0
40°-50°	254.6	18.3
50°-60°	210.0	15.1
60°-70°	139.9	10.1
70°-80°	62.6	4.5
80°-90°	11.2	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°	448.0	32.2
0°-40°	711.7	51.2
0°-60°	1176.3	84.6
0°-90°	1390.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1390.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	601	601	601	601	601	
5°	600	600	598	595	593	57
15°	566	567	566	563	559	160
25°	502	506	509	505	501	230
35°	404	410	428	431	429	253
45°	313	318	329	344	346	241
55°	219	223	234	247	254	196
65°	128	132	140	150	158	127
75°	52	54	58	61	64	56
85°	8	8	8	8	8	11
90°	0	0	0	0	0	



TEST NUMBER: P554540

CATALOG NUMBER: FUSL-12-2-LD4-1STD-40-UNV-93-96-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	601.1	601.1	601.1	601.1	601.1
2.5°	602.8	603.0	601.6	597.9	595.6
5°	600.4	600.2	597.9	594.7	592.8
7.5°	593.7	594.2	593.5	588.9	586.4
10°	587.3	587.5	585.7	582.0	579.0
12.5°	579.0	578.7	576.2	574.3	569.5
15°	565.8	567.2	565.8	563.3	559.3
17.5°	553.1	553.1	554.0	549.6	546.6
20°	538.8	539.5	539.5	536.0	532.5
22.5°	522.2	524.2	524.9	521.2	517.1
25°	502.5	506.5	508.8	505.1	500.7
27.5°	478.7	484.7	491.7	488.9	484.1
30°	452.2	461.0	472.5	470.2	466.7
32.5°	427.0	435.8	451.7	450.8	448.9
35°	404.1	409.7	428.4	430.7	429.1
37.5°	382.4	387.5	405.1	410.4	409.0
40°	359.6	365.1	379.0	388.4	388.9
42.5°	336.9	342.3	353.6	367.2	367.2
45°	312.9	318.2	328.6	343.6	345.5
47.5°	289.4	294.9	305.1	320.1	323.1
50°	266.3	271.4	281.5	296.1	300.7
52.5°	242.3	247.8	257.7	271.1	277.8
55°	219.2	222.9	233.7	246.6	253.8
57.5°	195.1	198.6	210.8	221.9	229.3
60°	172.1	176.4	185.9	197.2	205.8
62.5°	149.9	154.5	162.6	172.5	182.2
65°	128.4	131.9	139.7	149.6	158.2
67.5°	107.6	110.6	118.5	125.4	134.4
70°	86.6	90.5	96.3	103.0	108.8
72.5°	69.7	71.4	76.2	81.1	87.1
75°	51.5	54.3	58.2	61.0	64.4
77.5°	37.0	38.6	40.9	43.2	46.4
80°	24.7	25.4	27.5	27.9	30.5
82.5°	15.0	15.5	15.9	16.2	17.1
85°	8.1	8.1	8.1	7.6	7.6
87.5°	4.6	4.6	3.9	3.2	2.3
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)