

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: P554404

Luminaire Tested: **FUSL-12-2-LD4-1STD-30-UNV-93-86-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: P554404
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-30-UNV-93-86-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

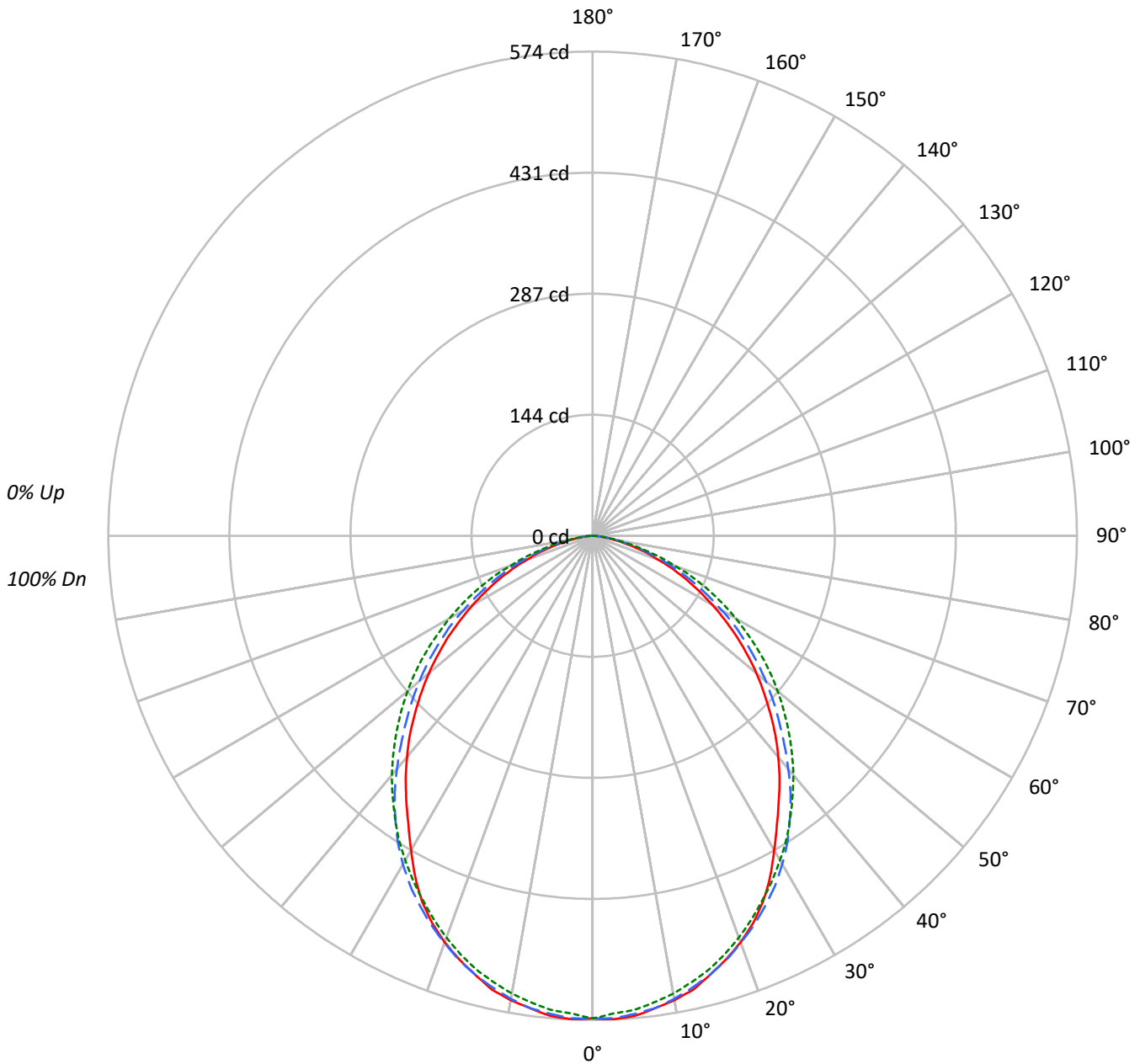
Lumens per Lamp: N/A
Luminaire Lumens: 1323.0 lumens
Efficiency: N/A
Efficacy: 79.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				
RC	80				70				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°	3080	3080	3080
5°	3088	3075	3049
10°	3055	3046	3012
15°	3000	3000	2966
20°	2937	2941	2903
25°	2840	2875	2830
30°	2675	2795	2761
35°	2528	2679	2683
40°	2404	2534	2601
45°	2267	2381	2503
50°	2122	2243	2396
55°	1957	2087	2267
60°	1763	1904	2108
65°	1556	1694	1918
70°	1297	1443	1629
75°	1019	1152	1275
80°	728	812	899
85°	475	475	451



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.9	4.1
10°-20°	151.3	11.4
20°-30°	221.2	16.7
30°-40°	251.0	19.0
40°-50°	242.3	18.3
50°-60°	199.9	15.1
60°-70°	133.1	10.1
70°-80°	59.6	4.5
80°-90°	10.7	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°	426.4	32.2
0°-40°	677.4	51.2
0°-60°	1119.6	84.6
0°-90°	1323.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1323.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	572	572	572	572	572	
5°	572	571	569	566	564	54
15°	538	540	538	536	532	152
25°	478	482	484	481	476	219
35°	385	390	408	410	408	241
45°	298	303	313	327	329	230
55°	209	212	222	235	242	186
65°	122	126	133	142	151	121
75°	49	52	55	58	61	54
85°	8	8	8	7	7	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	572.2	572.2	572.2	572.2	572.2
2.5°	573.7	573.9	572.6	569.1	566.9
5°	571.5	571.3	569.1	566.0	564.3
7.5°	565.1	565.6	564.9	560.5	558.1
10°	559.0	559.2	557.4	553.9	551.1
12.5°	551.1	550.8	548.4	546.7	542.0
15°	538.5	539.9	538.5	536.1	532.4
17.5°	526.4	526.4	527.3	523.1	520.3
20°	512.8	513.5	513.5	510.2	506.9
22.5°	497.0	499.0	499.6	496.1	492.2
25°	478.3	482.0	484.2	480.7	476.5
27.5°	455.7	461.4	468.0	465.3	460.7
30°	430.4	438.7	449.7	447.5	444.2
32.5°	406.4	414.8	429.9	429.1	427.3
35°	384.7	389.9	407.7	409.9	408.4
37.5°	364.0	368.8	385.5	390.6	389.3
40°	342.2	347.5	360.7	369.7	370.2
42.5°	320.7	325.8	336.5	349.5	349.5
45°	297.8	302.9	312.8	327.1	328.8
47.5°	275.4	280.7	290.4	304.7	307.5
50°	253.4	258.3	267.9	281.8	286.2
52.5°	230.6	235.9	245.3	258.1	264.4
55°	208.6	212.1	222.4	234.8	241.6
57.5°	185.7	189.0	200.7	211.2	218.3
60°	163.8	167.9	176.9	187.7	195.8
62.5°	142.7	147.1	154.7	164.2	173.4
65°	122.2	125.5	133.0	142.4	150.6
67.5°	102.4	105.3	112.8	119.4	127.9
70°	82.4	86.2	91.7	98.0	103.5
72.5°	66.4	67.9	72.5	77.2	82.9
75°	49.0	51.7	55.4	58.0	61.3
77.5°	35.2	36.7	38.9	41.1	44.2
80°	23.5	24.2	26.2	26.6	29.0
82.5°	14.3	14.7	15.2	15.4	16.3
85°	7.7	7.7	7.7	7.3	7.3
87.5°	4.4	4.4	3.7	3.1	2.2
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)