

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: P554915

Luminaire Tested: **FUSL-12-2-LD4-2LO-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: P554915
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-LD4-2LO-30-UNV-93-85-EDD
Description: 2FT 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

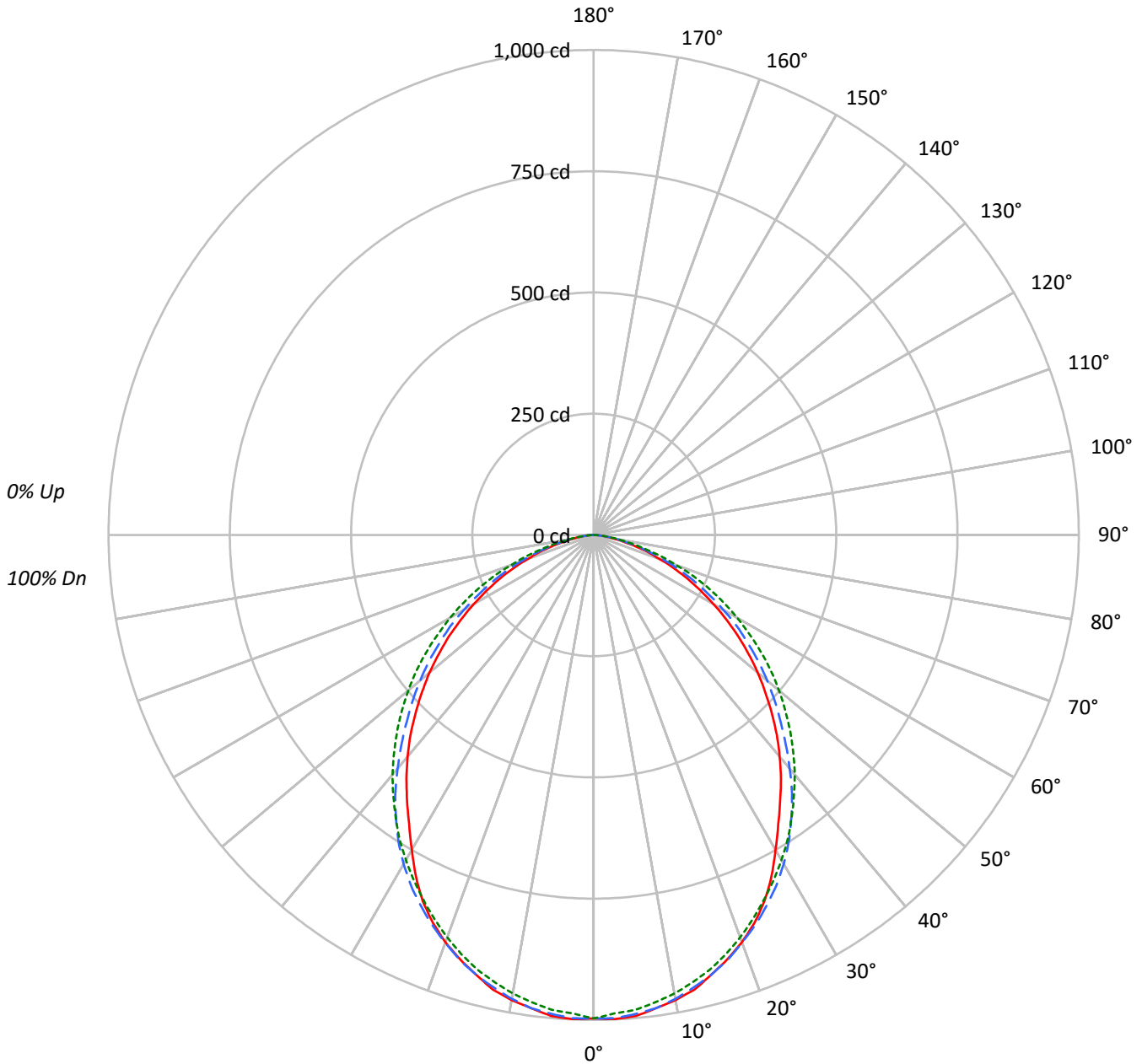
Lumens per Lamp: N/A
Luminaire Lumens: 2305.0 lumens
Efficiency: N/A
Efficacy: 98.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 23.4
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°	5365	5365	5365
5°	5379	5357	5311
10°	5322	5308	5247
15°	5228	5228	5168
20°	5117	5124	5058
25°	4948	5010	4931
30°	4660	4869	4810
35°	4403	4667	4675
40°	4189	4415	4531
45°	3949	4148	4360
50°	3697	3908	4175
55°	3410	3637	3949
60°	3071	3319	3673
65°	2711	2951	3340
70°	2260	2513	2839
75°	1776	2007	2221
80°	1271	1413	1568
85°	827	827	778



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.9	4.1
10°-20°	263.7	11.4
20°-30°	385.3	16.7
30°-40°	437.4	19.0
40°-50°	422.2	18.3
50°-60°	348.3	15.1
60°-70°	231.9	10.1
70°-80°	103.8	4.5
80°-90°	18.6	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°	742.8	32.2
0°-40°	1180.2	51.2
0°-60°	1950.7	84.6
0°-90°	2305.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2305.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	997	997	997	997	997	
5°	996	995	992	986	983	94
15°	938	941	938	934	928	265
25°	833	840	844	838	830	382
35°	670	679	710	714	712	420
45°	519	528	545	570	573	400
55°	363	370	388	409	421	324
65°	213	219	232	248	262	211
75°	85	90	96	101	107	93
85°	13	13	13	13	13	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	996.9	996.9	996.9	996.9	996.9
2.5°	999.5	999.9	997.6	991.5	987.7
5°	995.7	995.3	991.5	986.1	983.1
7.5°	984.6	985.4	984.2	976.6	972.3
10°	973.9	974.3	971.2	965.1	960.1
12.5°	960.1	959.7	955.5	952.4	944.4
15°	938.3	940.6	938.3	934.0	927.5
17.5°	917.2	917.2	918.7	911.5	906.5
20°	893.5	894.6	894.6	888.9	883.1
22.5°	865.9	869.3	870.5	864.3	857.5
25°	833.3	839.8	843.7	837.5	830.3
27.5°	793.9	803.8	815.3	810.7	802.7
30°	749.8	764.4	783.5	779.7	774.0
32.5°	708.1	722.7	749.1	747.5	744.5
35°	670.2	679.4	710.4	714.2	711.5
37.5°	634.2	642.6	671.7	680.5	678.2
40°	596.3	605.5	628.4	644.1	644.9
42.5°	558.7	567.6	586.3	608.9	608.9
45°	518.9	527.7	545.0	569.8	572.9
47.5°	479.9	489.0	505.9	530.8	535.8
50°	441.6	450.0	466.8	491.0	498.6
52.5°	401.7	410.9	427.4	449.6	460.7
55°	363.4	369.6	387.6	409.0	420.9
57.5°	323.6	329.3	349.6	368.0	380.3
60°	285.3	292.6	308.3	327.1	341.2
62.5°	248.5	256.2	269.6	286.1	302.2
65°	212.9	218.7	231.7	248.2	262.3
67.5°	178.5	183.4	196.5	207.9	222.9
70°	143.6	150.1	159.7	170.8	180.4
72.5°	115.7	118.3	126.4	134.4	144.4
75°	85.4	90.0	96.5	101.1	106.8
77.5°	61.3	64.0	67.8	71.6	77.0
80°	41.0	42.1	45.6	46.3	50.6
82.5°	24.9	25.7	26.4	26.8	28.3
85°	13.4	13.4	13.4	12.6	12.6
87.5°	7.7	7.7	6.5	5.4	3.8
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)