

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: P554917

Luminaire Tested: **FUSL-12-2-LD4-2LO-30-UNV-93-86-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: P554917
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-93-86-EDD
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

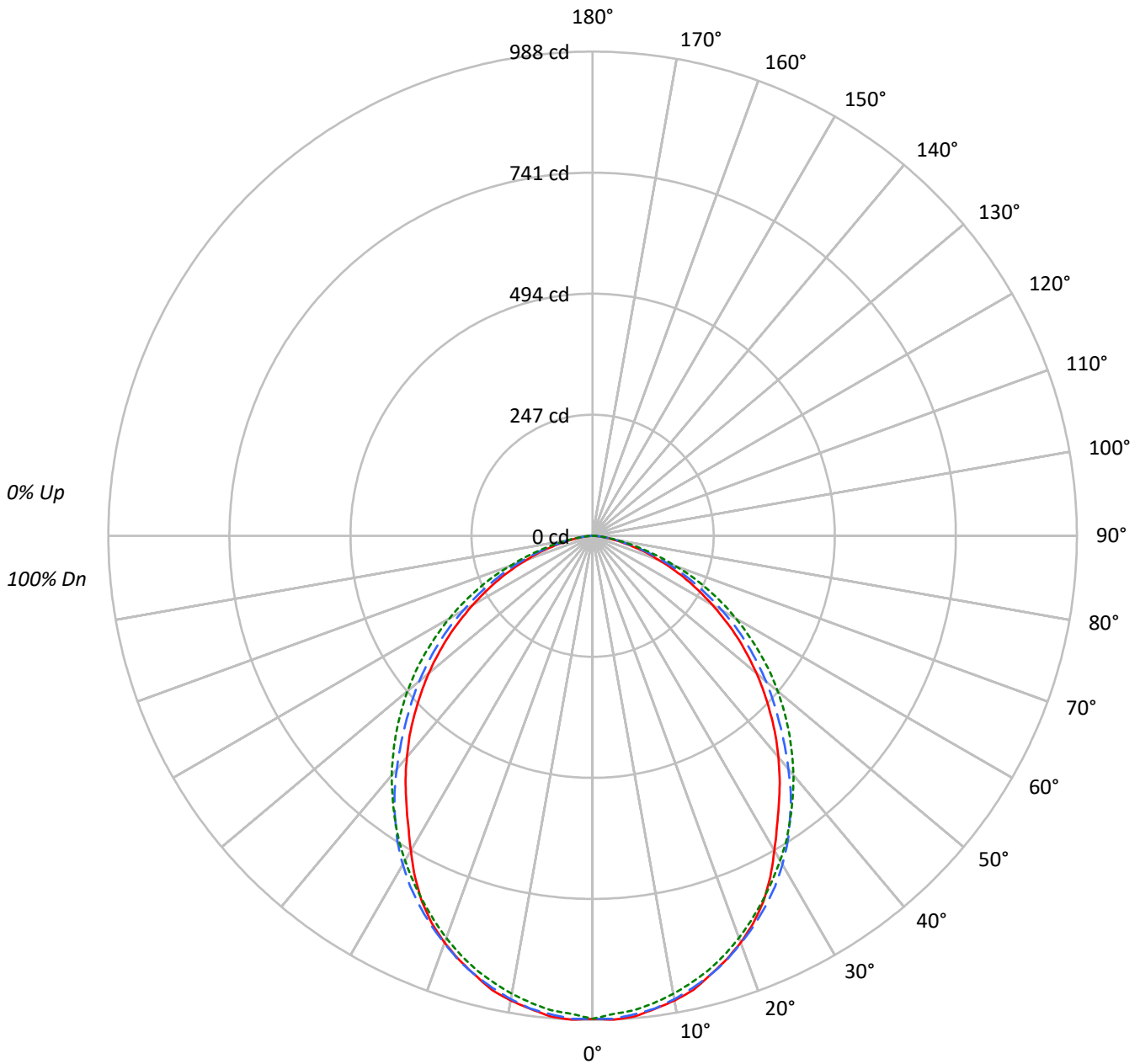
Lumens per Lamp: N/A
Luminaire Lumens: 2279.0 lumens
Efficiency: N/A
Efficacy: 97.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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°	5304	5304	5304
5°	5319	5296	5251
10°	5262	5247	5188
15°	5169	5169	5110
20°	5060	5066	5001
25°	4893	4954	4875
30°	4607	4814	4755
35°	4353	4615	4622
40°	4142	4366	4480
45°	3905	4101	4312
50°	3656	3865	4128
55°	3371	3596	3904
60°	3037	3281	3632
65°	2681	2918	3303
70°	2234	2485	2806
75°	1755	1984	2196
80°	1255	1398	1550
85°	821	821	772



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.8	4.1
10°-20°	260.7	11.4
20°-30°	381.0	16.7
30°-40°	432.4	19.0
40°-50°	417.4	18.3
50°-60°	344.4	15.1
60°-70°	229.3	10.1
70°-80°	102.6	4.5
80°-90°	18.4	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°	734.5	32.2
0°-40°	1166.9	51.2
0°-60°	1928.7	84.6
0°-90°	2279.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2279.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	986	986	986	986	986	
5°	984	984	980	975	972	93
15°	928	930	928	924	917	262
25°	824	830	834	828	821	377
35°	663	672	702	706	704	415
45°	513	522	539	563	566	396
55°	359	365	383	404	416	321
65°	210	216	229	245	259	209
75°	84	89	95	100	106	92
85°	13	13	13	12	12	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	985.6	985.6	985.6	985.6	985.6
2.5°	988.3	988.6	986.4	980.3	976.5
5°	984.5	984.1	980.3	975.0	972.0
7.5°	973.5	974.2	973.1	965.5	961.4
10°	962.9	963.3	960.2	954.2	949.3
12.5°	949.3	948.9	944.7	941.7	933.7
15°	927.7	929.9	927.7	923.5	917.1
17.5°	906.9	906.9	908.4	901.2	896.2
20°	883.4	884.5	884.5	878.8	873.2
22.5°	856.1	859.5	860.7	854.6	847.8
25°	823.9	830.4	834.2	828.1	820.9
27.5°	784.9	794.8	806.1	801.6	793.6
30°	741.4	755.8	774.7	770.9	765.2
32.5°	700.1	714.5	740.6	739.1	736.1
35°	662.6	671.7	702.4	706.2	703.5
37.5°	627.0	635.4	664.1	672.8	670.6
40°	589.5	598.6	621.4	636.9	637.6
42.5°	552.4	561.1	579.7	602.0	602.0
45°	513.1	521.8	538.8	563.4	566.5
47.5°	474.4	483.5	500.2	524.8	529.7
50°	436.6	444.9	461.6	485.4	493.0
52.5°	397.2	406.3	422.6	444.5	455.5
55°	359.3	365.4	383.2	404.4	416.1
57.5°	320.0	325.6	345.7	363.9	376.0
60°	282.1	289.3	304.8	323.4	337.4
62.5°	245.7	253.3	266.6	282.8	298.7
65°	210.5	216.2	229.1	245.4	259.4
67.5°	176.4	181.4	194.2	205.6	220.4
70°	142.0	148.4	157.9	168.9	178.3
72.5°	114.4	117.0	125.0	132.9	142.7
75°	84.4	89.0	95.4	100.0	105.6
77.5°	60.6	63.2	67.0	70.8	76.1
80°	40.5	41.7	45.1	45.8	50.0
82.5°	24.6	25.4	26.1	26.5	28.0
85°	13.3	13.3	13.3	12.5	12.5
87.5°	7.6	7.6	6.4	5.3	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)