

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: P554472

Luminaire Tested: **FUSL-12-2-LD4-1STD-35-UNV-93-88-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: P554472
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-35-UNV-93-88-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

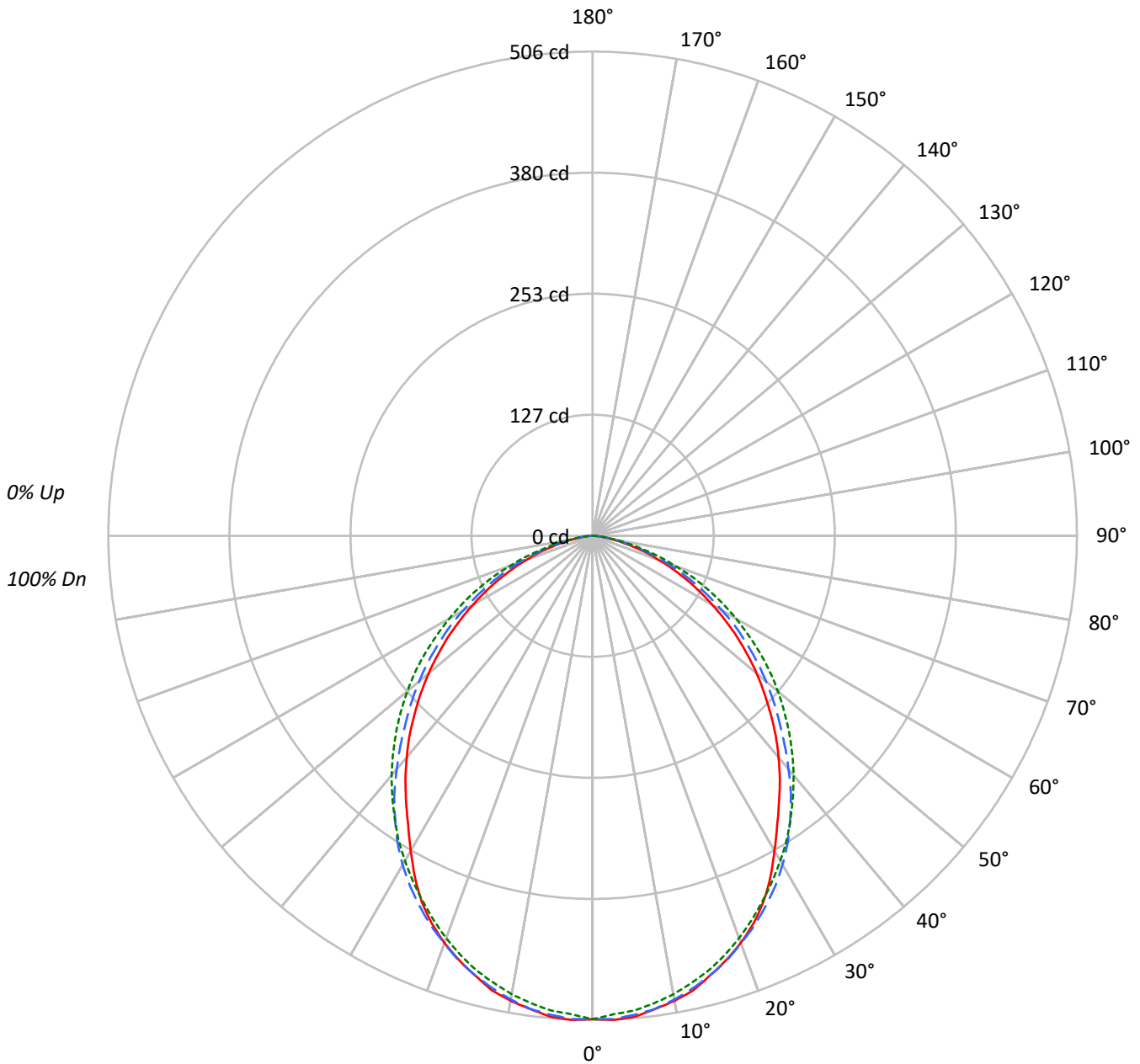
Lumens per Lamp: N/A
Luminaire Lumens: 1168.0 lumens
Efficiency: N/A
Efficacy: 70.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 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									
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°	2718	2718	2718
5°	2726	2714	2691
10°	2697	2689	2659
15°	2649	2649	2619
20°	2593	2596	2563
25°	2508	2539	2498
30°	2362	2467	2437
35°	2231	2365	2369
40°	2122	2237	2296
45°	2001	2101	2210
50°	1873	1981	2116
55°	1728	1843	2001
60°	1556	1681	1861
65°	1374	1495	1692
70°	1146	1273	1438
75°	900	1017	1125
80°	645	716	793
85°	420	420	395



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.6	4.1
10°-20°	133.6	11.4
20°-30°	195.2	16.7
30°-40°	221.6	19.0
40°-50°	213.9	18.3
50°-60°	176.5	15.1
60°-70°	117.5	10.1
70°-80°	52.6	4.5
80°-90°	9.4	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°	376.4	32.2
0°-40°	598.0	51.2
0°-60°	988.5	84.6
0°-90°	1168.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1168.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	505	505	505	505	505	
5°	504	504	502	500	498	48
15°	475	477	475	473	470	134
25°	422	426	428	424	421	193
35°	340	344	360	362	361	213
45°	263	267	276	289	290	203
55°	184	187	196	207	213	164
65°	108	111	117	126	133	107
75°	43	46	49	51	54	47
85°	7	7	7	6	6	9
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	505.1	505.1	505.1	505.1	505.1
2.5°	506.5	506.7	505.5	502.4	500.5
5°	504.5	504.4	502.4	499.7	498.1
7.5°	498.9	499.3	498.7	494.8	492.7
10°	493.5	493.7	492.1	489.0	486.5
12.5°	486.5	486.3	484.2	482.6	478.5
15°	475.4	476.6	475.4	473.3	470.0
17.5°	464.8	464.8	465.5	461.9	459.3
20°	452.7	453.3	453.3	450.4	447.5
22.5°	438.8	440.5	441.1	438.0	434.5
25°	422.3	425.6	427.5	424.4	420.7
27.5°	402.3	407.3	413.1	410.8	406.7
30°	380.0	387.3	397.0	395.1	392.2
32.5°	358.8	366.2	379.6	378.8	377.2
35°	339.6	344.3	360.0	361.9	360.6
37.5°	321.4	325.6	340.4	344.8	343.7
40°	302.1	306.8	318.4	326.4	326.8
42.5°	283.1	287.6	297.1	308.6	308.6
45°	262.9	267.4	276.1	288.8	290.3
47.5°	243.2	247.8	256.3	269.0	271.5
50°	223.7	228.0	236.6	248.8	252.7
52.5°	203.6	208.2	216.6	227.8	233.5
55°	184.2	187.3	196.4	207.3	213.3
57.5°	164.0	166.9	177.2	186.5	192.7
60°	144.6	148.3	156.2	165.7	172.9
62.5°	125.9	129.8	136.6	145.0	153.1
65°	107.9	110.8	117.4	125.7	132.9
67.5°	90.4	93.0	99.6	105.4	112.9
70°	72.8	76.1	80.9	86.5	91.4
72.5°	58.6	60.0	64.0	68.1	73.2
75°	43.3	45.6	48.9	51.2	54.1
77.5°	31.0	32.4	34.3	36.3	39.0
80°	20.8	21.3	23.1	23.5	25.6
82.5°	12.6	13.0	13.4	13.6	14.4
85°	6.8	6.8	6.8	6.4	6.4
87.5°	3.9	3.9	3.3	2.7	1.9
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)