

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: P554528

Luminaire Tested: **FUSL-12-2-LD4-1STD-40-UNV-93-84-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: P554528
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-93-84-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

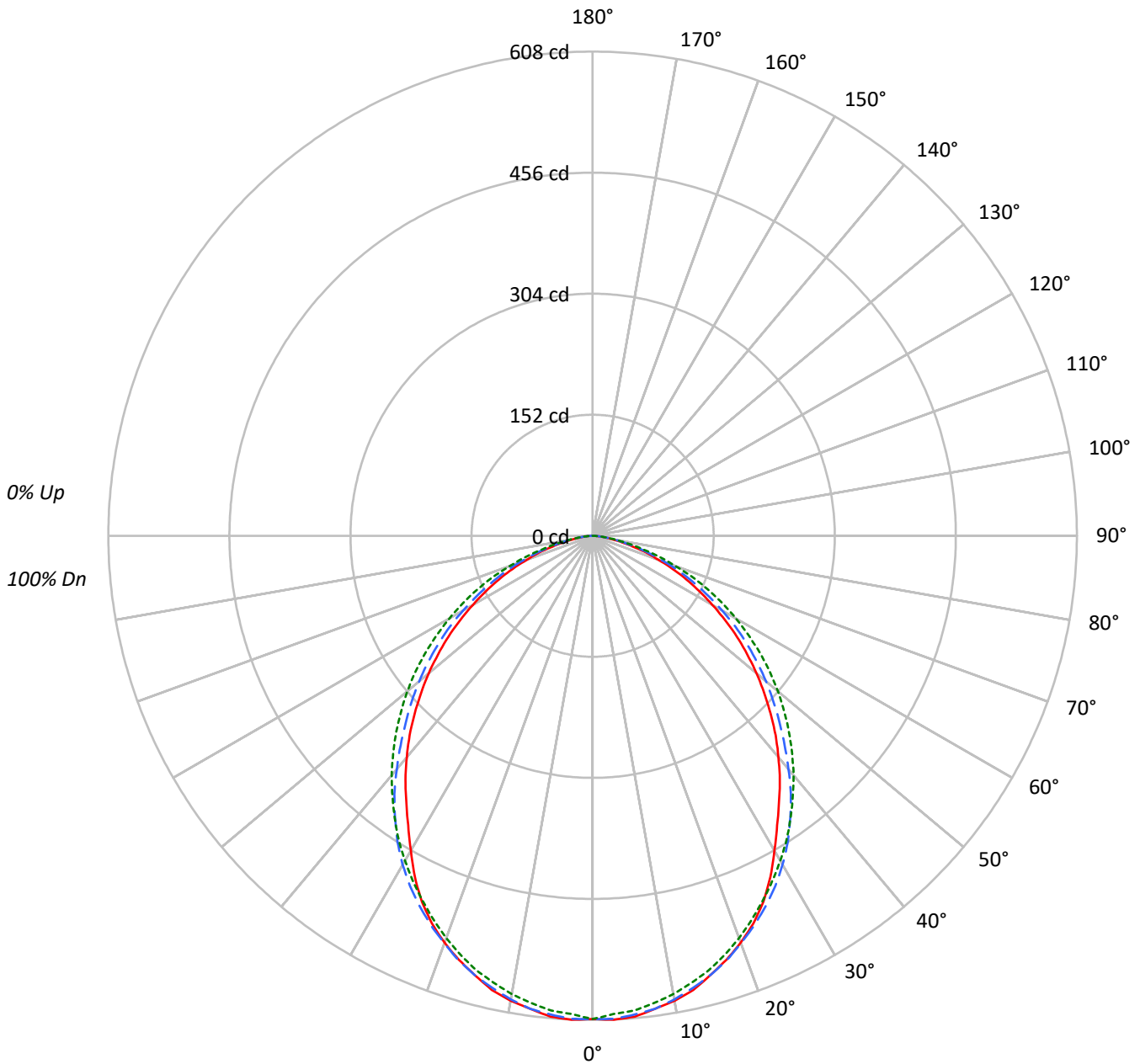
Lumens per Lamp: N/A
Luminaire Lumens: 1403.0 lumens
Efficiency: N/A
Efficacy: 84.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	3266	3266	3266
5°	3274	3260	3233
10°	3240	3230	3194
15°	3182	3182	3146
20°	3115	3119	3078
25°	3012	3049	3001
30°	2836	2964	2928
35°	2680	2841	2846
40°	2550	2687	2758
45°	2404	2525	2654
50°	2251	2379	2541
55°	2076	2213	2404
60°	1870	2019	2236
65°	1650	1796	2034
70°	1375	1530	1728
75°	1081	1221	1352
80°	772	859	955
85°	506	506	475



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.1	4.1
10°-20°	160.5	11.4
20°-30°	234.5	16.7
30°-40°	266.2	19.0
40°-50°	257.0	18.3
50°-60°	212.0	15.1
60°-70°	141.2	10.1
70°-80°	63.2	4.5
80°-90°	11.3	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°	452.1	32.2
0°-40°	718.4	51.2
0°-60°	1187.3	84.6
0°-90°	1403.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1403.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	607	607	607	607	607	
5°	606	606	604	600	598	57
15°	571	572	571	568	565	161
25°	507	511	514	510	505	232
35°	408	414	432	435	433	256
45°	316	321	332	347	349	244
55°	221	225	236	249	256	197
65°	130	133	141	151	160	129
75°	52	55	59	62	65	57
85°	8	8	8	8	8	11
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	606.8	606.8	606.8	606.8	606.8
2.5°	608.4	608.6	607.2	603.5	601.2
5°	606.1	605.8	603.5	600.2	598.4
7.5°	599.3	599.8	599.1	594.4	591.8
10°	592.8	593.0	591.1	587.4	584.4
12.5°	584.4	584.2	581.6	579.7	574.8
15°	571.1	572.5	571.1	568.5	564.6
17.5°	558.3	558.3	559.2	554.8	551.7
20°	543.8	544.5	544.5	541.0	537.5
22.5°	527.0	529.1	529.8	526.1	521.9
25°	507.2	511.2	513.5	509.8	505.4
27.5°	483.2	489.3	496.3	493.5	488.6
30°	456.4	465.3	476.9	474.6	471.1
32.5°	431.0	439.9	455.9	455.0	453.1
35°	407.9	413.5	432.4	434.7	433.1
37.5°	386.0	391.1	408.9	414.2	412.8
40°	362.9	368.5	382.5	392.1	392.5
42.5°	340.1	345.5	356.9	370.6	370.6
45°	315.9	321.2	331.7	346.9	348.7
47.5°	292.1	297.7	307.9	323.1	326.1
50°	268.8	273.9	284.1	298.8	303.5
52.5°	244.5	250.1	260.1	273.7	280.4
55°	221.2	224.9	235.9	249.0	256.2
57.5°	197.0	200.5	212.8	224.0	231.5
60°	173.7	178.1	187.6	199.1	207.7
62.5°	151.3	155.9	164.1	174.1	183.9
65°	129.6	133.1	141.0	151.0	159.7
67.5°	108.6	111.7	119.6	126.6	135.7
70°	87.4	91.4	97.2	104.0	109.8
72.5°	70.4	72.0	76.9	81.8	87.9
75°	52.0	54.8	58.7	61.5	65.0
77.5°	37.3	38.9	41.3	43.6	46.9
80°	24.9	25.6	27.7	28.2	30.8
82.5°	15.2	15.6	16.1	16.3	17.2
85°	8.2	8.2	8.2	7.7	7.7
87.5°	4.7	4.7	4.0	3.3	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)