

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: P554446

Luminaire Tested: **FUSL-12-2-LD4-1STD-35-UNV-81-97-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: P554446
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-81-97-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .375
CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT
LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

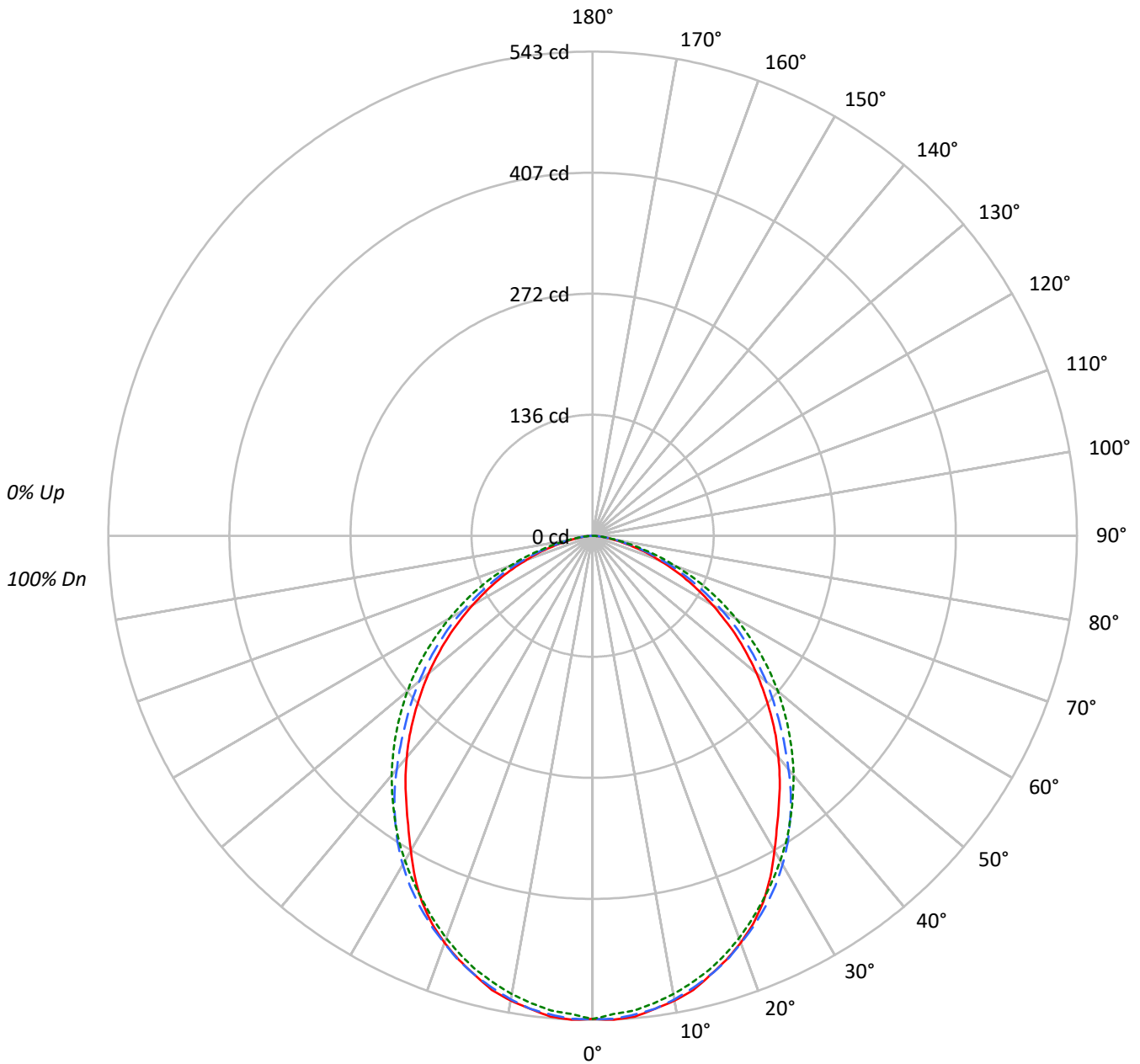
Lumens per Lamp: N/A
Luminaire Lumens: 1253.0 lumens
Efficiency: N/A
Efficacy: 75.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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				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°	2916	2916	2916
5°	2924	2912	2887
10°	2893	2885	2852
15°	2842	2842	2809
20°	2782	2785	2750
25°	2690	2723	2680
30°	2533	2647	2614
35°	2394	2537	2541
40°	2277	2400	2463
45°	2147	2254	2370
50°	2009	2125	2269
55°	1854	1977	2147
60°	1669	1804	1997
65°	1473	1603	1816
70°	1229	1366	1544
75°	965	1092	1208
80°	691	769	852
85°	451	451	426



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.0	4.1
10°-20°	143.3	11.4
20°-30°	209.5	16.7
30°-40°	237.7	19.0
40°-50°	229.5	18.3
50°-60°	189.3	15.1
60°-70°	126.1	10.1
70°-80°	56.4	4.5
80°-90°	10.1	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°	403.8	32.2
0°-40°	641.6	51.2
0°-60°	1060.4	84.6
0°-90°	1253.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1253.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	542	542	542	542	542	
5°	541	541	539	536	534	51
15°	510	511	510	508	504	144
25°	453	456	459	455	451	207
35°	364	369	386	388	387	228
45°	282	287	296	310	311	218
55°	198	201	211	222	229	176
65°	116	119	126	135	143	115
75°	46	49	52	55	58	51
85°	7	7	7	7	7	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	541.9	541.9	541.9	541.9	541.9
2.5°	543.3	543.6	542.3	539.0	536.9
5°	541.3	541.1	539.0	536.1	534.4
7.5°	535.2	535.6	535.0	530.9	528.6
10°	529.4	529.6	527.9	524.6	521.9
12.5°	521.9	521.7	519.4	517.7	513.4
15°	510.0	511.3	510.0	507.7	504.2
17.5°	498.6	498.6	499.4	495.5	492.8
20°	485.7	486.3	486.3	483.2	480.1
22.5°	470.7	472.6	473.2	469.9	466.1
25°	453.0	456.5	458.6	455.3	451.3
27.5°	431.6	437.0	443.2	440.7	436.3
30°	407.6	415.5	425.9	423.9	420.7
32.5°	384.9	392.8	407.2	406.4	404.7
35°	364.3	369.3	386.2	388.3	386.8
37.5°	344.7	349.3	365.1	369.9	368.7
40°	324.1	329.1	341.6	350.2	350.6
42.5°	303.7	308.5	318.7	331.0	331.0
45°	282.1	286.9	296.2	309.8	311.4
47.5°	260.8	265.8	275.0	288.5	291.2
50°	240.0	244.6	253.8	266.9	271.0
52.5°	218.4	223.4	232.3	244.4	250.4
55°	197.6	200.9	210.7	222.3	228.8
57.5°	175.9	179.0	190.1	200.1	206.7
60°	155.1	159.0	167.6	177.8	185.5
62.5°	135.1	139.3	146.6	155.5	164.3
65°	115.7	118.9	125.9	134.9	142.6
67.5°	97.0	99.7	106.8	113.0	121.2
70°	78.1	81.6	86.8	92.8	98.1
72.5°	62.9	64.3	68.7	73.1	78.5
75°	46.4	48.9	52.5	55.0	58.1
77.5°	33.3	34.8	36.8	38.9	41.8
80°	22.3	22.9	24.8	25.2	27.5
82.5°	13.5	13.9	14.4	14.6	15.4
85°	7.3	7.3	7.3	6.9	6.9
87.5°	4.2	4.2	3.5	2.9	2.1
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)