

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: P554396

Luminaire Tested: **FUSL-12-2-LD4-1STD-30-UNV-82-96-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: P554396
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-30-UNV-82-96-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .250
CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT
LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

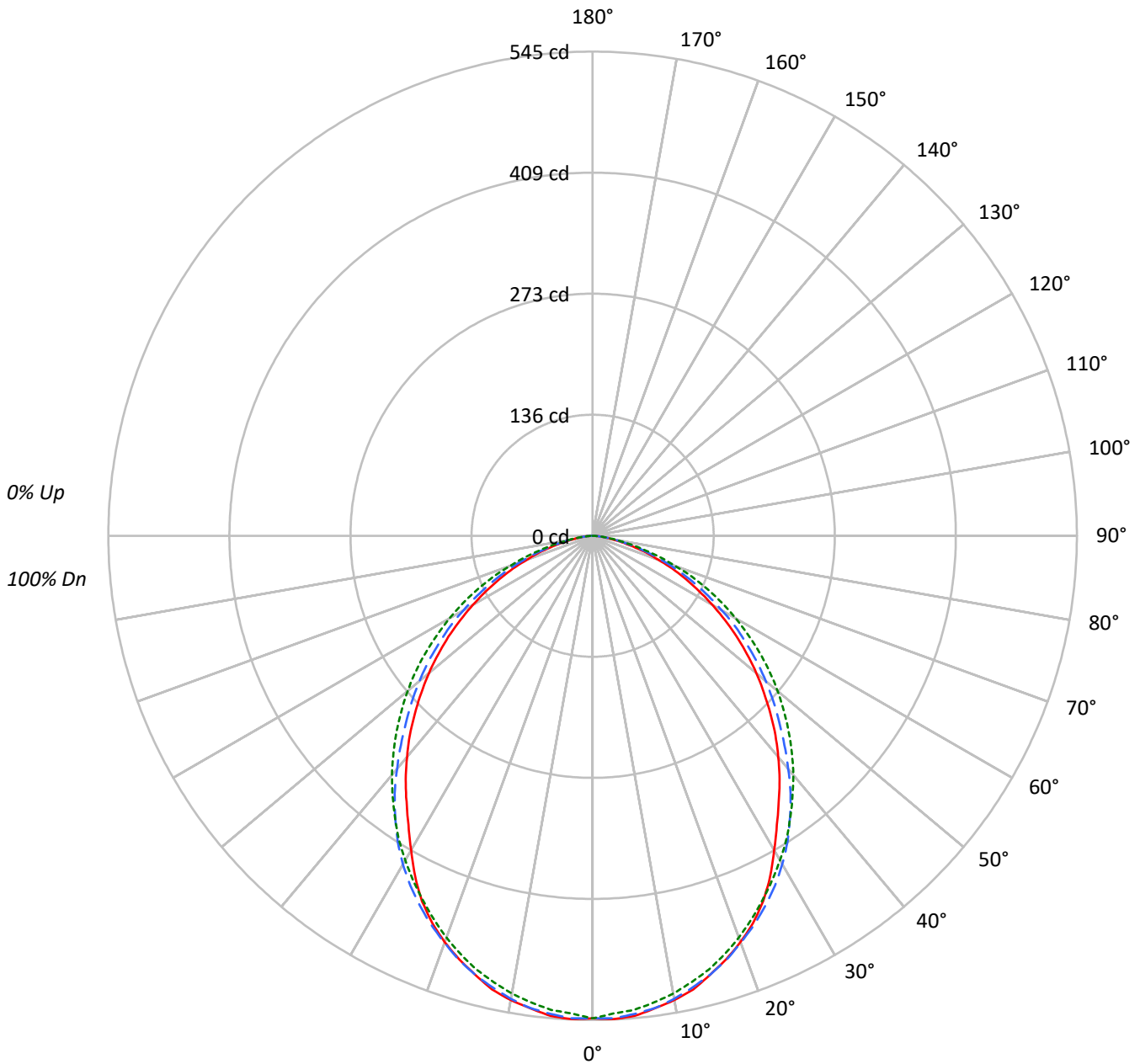
Lumens per Lamp: N/A
Luminaire Lumens: 1256.0 lumens
Efficiency: N/A
Efficacy: 75.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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°	2923	2923	2923
5°	2931	2919	2894
10°	2900	2892	2859
15°	2849	2849	2816
20°	2788	2792	2756
25°	2697	2730	2687
30°	2539	2654	2621
35°	2399	2543	2547
40°	2283	2406	2469
45°	2152	2260	2376
50°	2015	2130	2275
55°	1858	1982	2152
60°	1674	1808	2001
65°	1477	1607	1820
70°	1232	1369	1547
75°	967	1094	1210
80°	691	769	852
85°	451	451	426



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.1	4.1
10°-20°	143.7	11.4
20°-30°	210.0	16.7
30°-40°	238.3	19.0
40°-50°	230.1	18.3
50°-60°	189.8	15.1
60°-70°	126.4	10.1
70°-80°	56.5	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°	404.8	32.2
0°-40°	643.1	51.2
0°-60°	1063.0	84.6
0°-90°	1256.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1256.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	543	543	543	543	543	
5°	543	542	540	537	536	51
15°	511	512	511	509	505	144
25°	454	458	460	456	452	208
35°	365	370	387	389	388	229
45°	283	288	297	310	312	218
55°	198	201	211	223	229	177
65°	116	119	126	135	143	115
75°	46	49	53	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°	543.2	543.2	543.2	543.2	543.2
2.5°	544.6	544.9	543.6	540.3	538.2
5°	542.6	542.4	540.3	537.3	535.7
7.5°	536.5	536.9	536.3	532.1	529.8
10°	530.7	530.9	529.2	525.9	523.2
12.5°	523.2	522.9	520.7	519.0	514.6
15°	511.3	512.5	511.3	509.0	505.4
17.5°	499.8	499.8	500.6	496.7	493.9
20°	486.8	487.5	487.5	484.3	481.2
22.5°	471.8	473.7	474.3	471.0	467.2
25°	454.1	457.6	459.7	456.4	452.4
27.5°	432.6	438.0	444.3	441.8	437.4
30°	408.6	416.5	427.0	424.9	421.7
32.5°	385.8	393.8	408.2	407.3	405.7
35°	365.2	370.2	387.1	389.2	387.7
37.5°	345.6	350.2	366.0	370.8	369.6
40°	324.9	329.9	342.4	351.0	351.4
42.5°	304.5	309.3	319.5	331.8	331.8
45°	282.8	287.6	296.9	310.5	312.2
47.5°	261.5	266.5	275.7	289.2	291.9
50°	240.6	245.2	254.4	267.5	271.7
52.5°	218.9	223.9	232.9	245.0	251.0
55°	198.0	201.4	211.2	222.9	229.3
57.5°	176.3	179.5	190.5	200.5	207.2
60°	155.5	159.4	168.0	178.2	185.9
62.5°	135.4	139.6	146.9	155.9	164.6
65°	116.0	119.2	126.2	135.2	142.9
67.5°	97.2	100.0	107.1	113.3	121.5
70°	78.3	81.8	87.0	93.1	98.3
72.5°	63.0	64.5	68.9	73.2	78.7
75°	46.5	49.0	52.6	55.1	58.2
77.5°	33.4	34.8	36.9	39.0	41.9
80°	22.3	23.0	24.8	25.2	27.5
82.5°	13.6	14.0	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)