

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: P554381

Luminaire Tested: **FUSL-12-2-LD4-1STD-30-UNV-81-96-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: P554381
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-81-96-EDD
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .250
CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT
LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

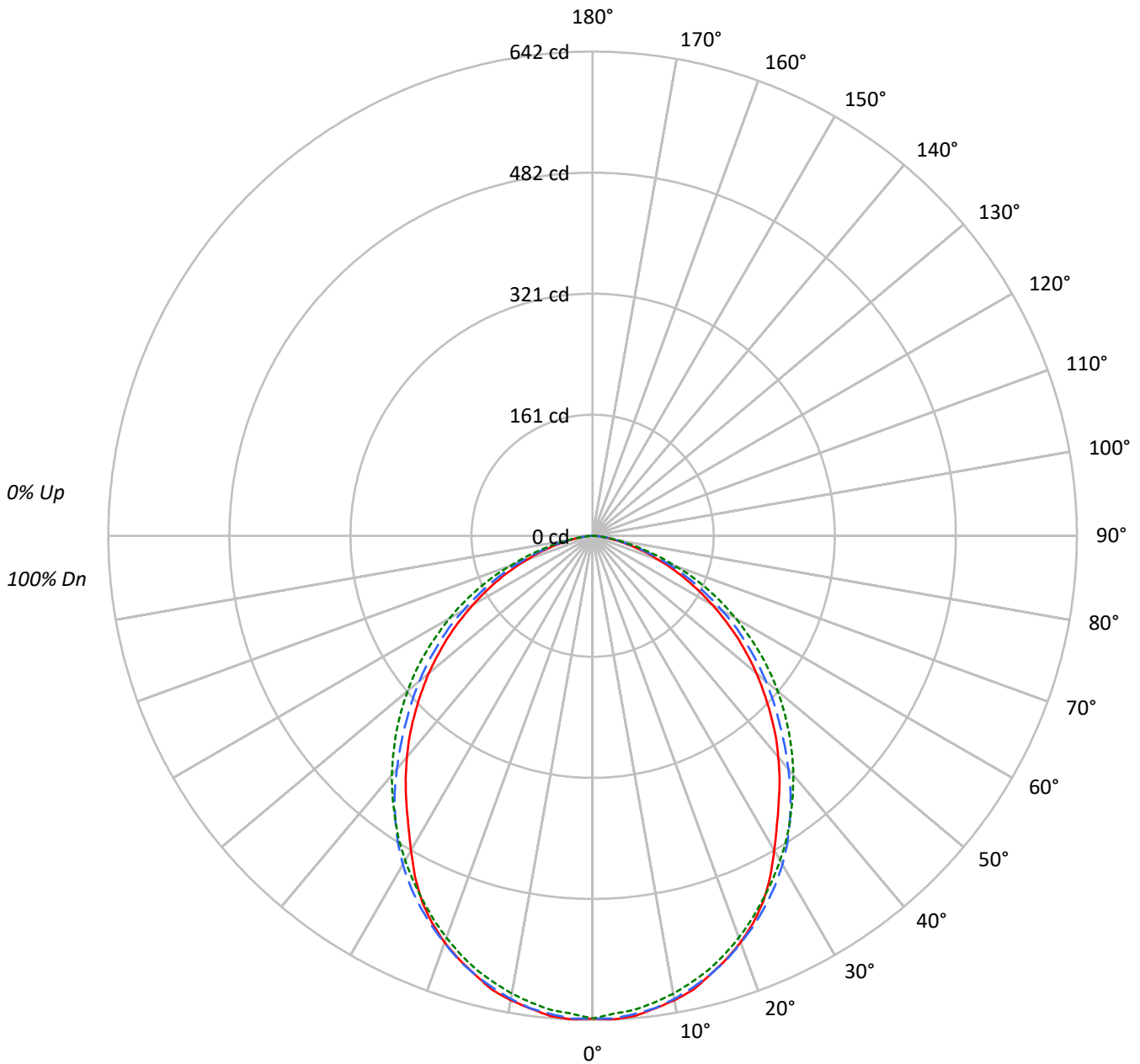
Lumens per Lamp: N/A
Luminaire Lumens: 1480.0 lumens
Efficiency: N/A
Efficacy: 89.2 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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°	3445	3445	3445
5°	3454	3439	3410
10°	3417	3408	3369
15°	3356	3356	3319
20°	3286	3290	3247
25°	3178	3217	3166
30°	2992	3127	3089
35°	2827	2997	3002
40°	2690	2835	2909
45°	2536	2663	2800
50°	2374	2509	2681
55°	2190	2335	2535
60°	1972	2130	2358
65°	1741	1895	2145
70°	1451	1613	1822
75°	1140	1289	1426
80°	815	908	1007
85°	531	531	500



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.3	4.1
10°-20°	169.3	11.4
20°-30°	247.4	16.7
30°-40°	280.8	19.0
40°-50°	271.1	18.3
50°-60°	223.6	15.1
60°-70°	148.9	10.1
70°-80°	66.6	4.5
80°-90°	11.9	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°	477.0	32.2
0°-40°	757.8	51.2
0°-60°	1252.5	84.6
0°-90°	1480.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1480.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	640	640	640	640	640	
5°	639	639	637	633	631	61
15°	602	604	602	600	596	170
25°	535	539	542	538	533	245
35°	430	436	456	459	457	270
45°	333	339	350	366	368	257
55°	233	237	249	263	270	208
65°	137	140	149	159	168	136
75°	55	58	62	65	69	60
85°	9	9	9	8	8	12
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	640.1	640.1	640.1	640.1	640.1
2.5°	641.8	642.0	640.6	636.6	634.2
5°	639.3	639.1	636.6	633.2	631.2
7.5°	632.2	632.7	631.9	627.0	624.3
10°	625.3	625.6	623.6	619.7	616.5
12.5°	616.5	616.2	613.5	611.5	606.4
15°	602.4	603.9	602.4	599.7	595.6
17.5°	588.9	588.9	589.9	585.2	582.0
20°	573.7	574.4	574.4	570.7	567.0
22.5°	556.0	558.2	558.9	555.0	550.6
25°	535.1	539.2	541.7	537.8	533.1
27.5°	509.7	516.1	523.5	520.6	515.4
30°	481.5	490.8	503.1	500.6	497.0
32.5°	454.7	464.0	481.0	480.0	478.0
35°	430.3	436.2	456.1	458.6	456.9
37.5°	407.2	412.6	431.3	437.0	435.5
40°	382.9	388.8	403.5	413.6	414.1
42.5°	358.8	364.4	376.5	391.0	391.0
45°	333.2	338.8	349.9	365.9	367.9
47.5°	308.1	314.0	324.8	340.8	344.0
50°	283.5	288.9	299.7	315.2	320.2
52.5°	257.9	263.8	274.4	288.7	295.8
55°	233.4	237.3	248.8	262.6	270.2
57.5°	207.8	211.5	224.5	236.3	244.2
60°	183.2	187.9	197.9	210.0	219.1
62.5°	159.6	164.5	173.1	183.7	194.0
65°	136.7	140.4	148.8	159.3	168.4
67.5°	114.6	117.8	126.1	133.5	143.1
70°	92.2	96.4	102.5	109.7	115.8
72.5°	74.3	76.0	81.1	86.3	92.7
75°	54.8	57.8	62.0	64.9	68.6
77.5°	39.3	41.1	43.5	46.0	49.4
80°	26.3	27.0	29.3	29.8	32.5
82.5°	16.0	16.5	17.0	17.2	18.2
85°	8.6	8.6	8.6	8.1	8.1
87.5°	4.9	4.9	4.2	3.4	2.5
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)