

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: P554052

Luminaire Tested: **FUSL-12-2-LD4-1HI-50-UNV-81-86-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: P554052
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-LD4-1HI-50-UNV-81-86-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

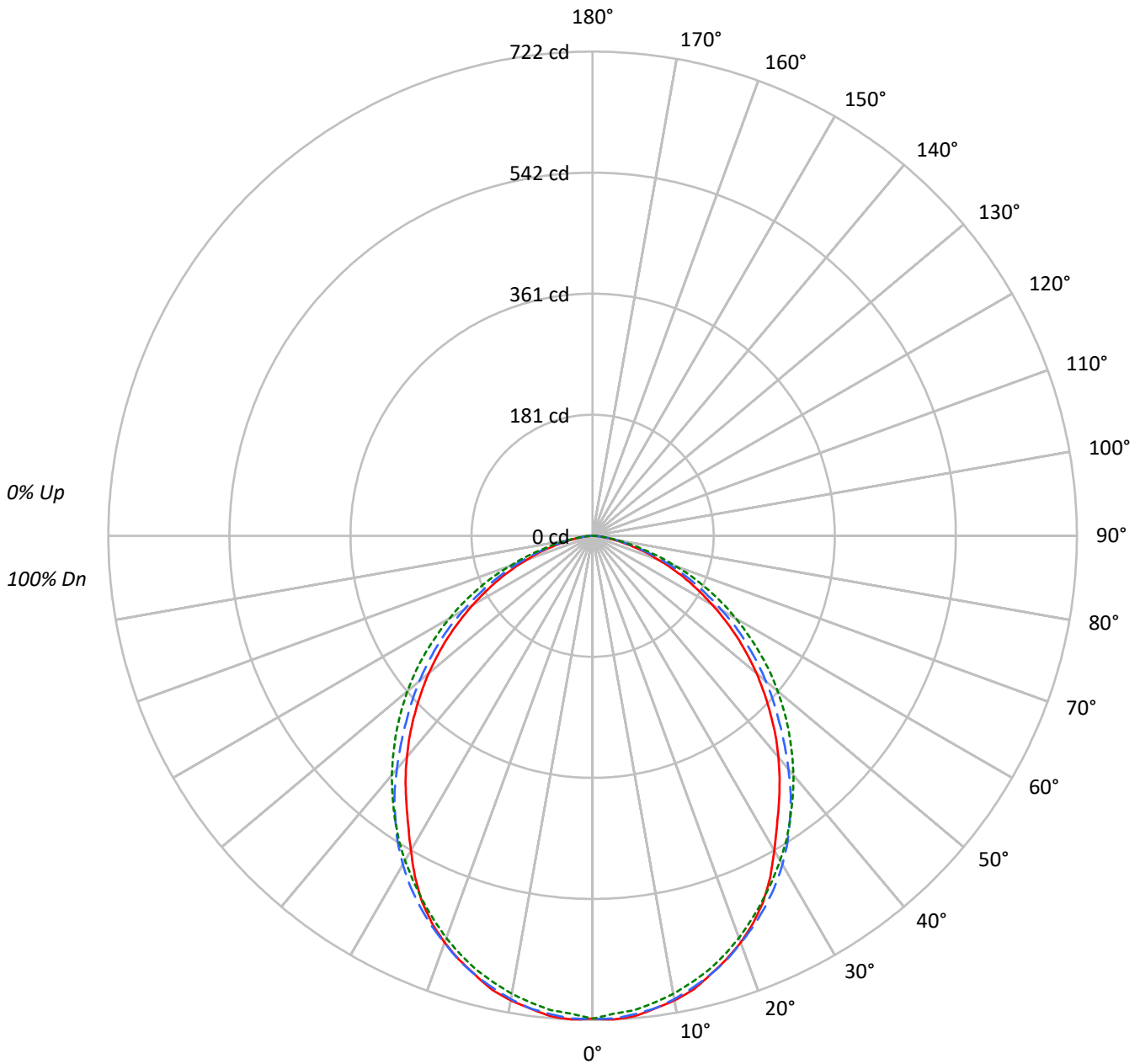
Lumens per Lamp: N/A
Luminaire Lumens: 1665.0 lumens
Efficiency: N/A
Efficacy: 77.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 21.6
Input Voltage (V): NR
Input Current (Ain): 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	50	30	10	0													
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100						100													
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86						86													
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73						73													
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63						63													
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54						54													
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47						47													
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42						42													
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37						37													
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34						34													
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30						30													
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28						28													

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3876	3876	3876
5°	3885	3869	3836
10°	3845	3834	3790
15°	3776	3776	3733
20°	3696	3701	3653
25°	3574	3619	3561
30°	3366	3517	3475
35°	3181	3371	3377
40°	3026	3190	3273
45°	2853	2996	3150
50°	2671	2823	3016
55°	2463	2627	2852
60°	2218	2397	2653
65°	1959	2132	2413
70°	1632	1816	2050
75°	1283	1449	1605
80°	917	1020	1131
85°	599	599	562



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.8	4.1
10°-20°	190.5	11.4
20°-30°	278.3	16.7
30°-40°	315.9	19.0
40°-50°	305.0	18.3
50°-60°	251.6	15.1
60°-70°	167.5	10.1
70°-80°	75.0	4.5
80°-90°	13.4	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°	536.6	32.2
0°-40°	852.5	51.2
0°-60°	1409.1	84.6
0°-90°	1665.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1665.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	720	720	720	720	720	
5°	719	719	716	712	710	68
15°	678	679	678	675	670	191
25°	602	607	609	605	600	276
35°	484	491	513	516	514	303
45°	375	381	394	412	414	289
55°	262	267	280	295	304	234
65°	154	158	167	179	190	152
75°	62	65	70	73	77	67
85°	10	10	10	9	9	13
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	720.1	720.1	720.1	720.1	720.1
2.5°	722.0	722.3	720.6	716.2	713.4
5°	719.2	719.0	716.2	712.3	710.1
7.5°	711.2	711.8	710.9	705.4	702.4
10°	703.5	703.7	701.5	697.1	693.5
12.5°	693.5	693.2	690.2	688.0	682.2
15°	677.7	679.4	677.7	674.7	670.0
17.5°	662.5	662.5	663.6	658.4	654.8
20°	645.4	646.2	646.2	642.1	637.9
22.5°	625.5	628.0	628.8	624.4	619.4
25°	601.9	606.7	609.4	605.0	599.7
27.5°	573.5	580.6	588.9	585.6	579.8
30°	541.6	552.2	566.0	563.2	559.1
32.5°	511.5	522.0	541.1	540.0	537.8
35°	484.1	490.7	513.1	515.9	514.0
37.5°	458.1	464.2	485.2	491.6	489.9
40°	430.7	437.4	454.0	465.3	465.8
42.5°	403.6	410.0	423.5	439.8	439.8
45°	374.8	381.2	393.6	411.6	413.8
47.5°	346.6	353.3	365.4	383.4	387.0
50°	319.0	325.0	337.2	354.6	360.2
52.5°	290.2	296.8	308.7	324.8	332.8
55°	262.5	266.9	280.0	295.4	304.0
57.5°	233.8	237.9	252.6	265.8	274.7
60°	206.1	211.3	222.7	236.2	246.5
62.5°	179.5	185.1	194.7	206.6	218.3
65°	153.8	158.0	167.4	179.3	189.5
67.5°	128.9	132.5	141.9	150.2	161.0
70°	103.7	108.4	115.4	123.4	130.3
72.5°	83.5	85.5	91.3	97.1	104.3
75°	61.7	65.0	69.7	73.0	77.2
77.5°	44.3	46.2	49.0	51.7	55.6
80°	29.6	30.4	32.9	33.5	36.5
82.5°	18.0	18.5	19.1	19.4	20.5
85°	9.7	9.7	9.7	9.1	9.1
87.5°	5.5	5.5	4.7	3.9	2.8
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)