

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: P554766

Luminaire Tested: **FUSL-12-2-LD4-2HI-40-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: P554766  
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-LD4-2HI-40-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 4000K CCT  
LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

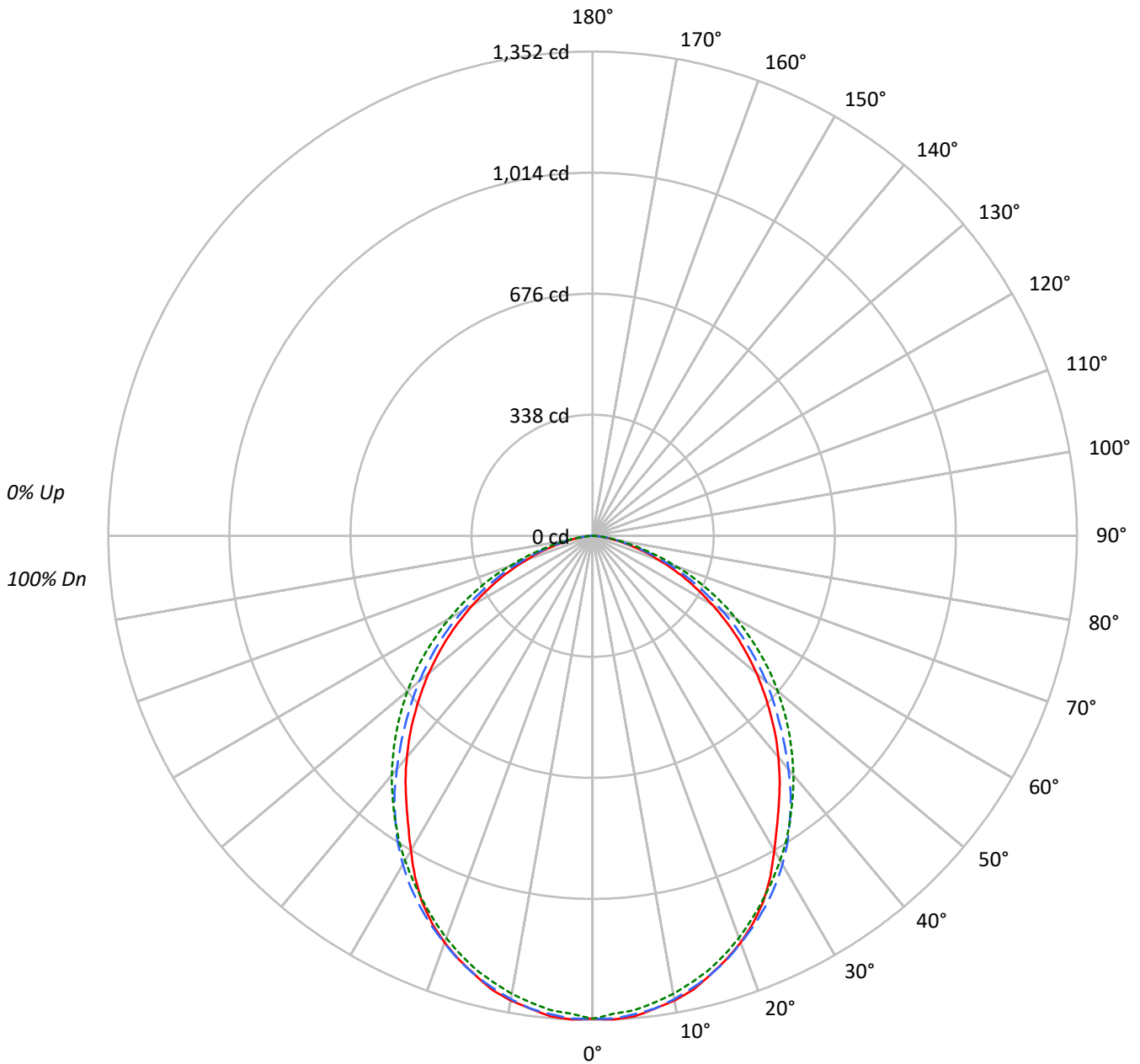
Lumens per Lamp: N/A  
Luminaire Lumens: 3118.0 lumens  
Efficiency: N/A  
Efficacy: 72.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 43.2  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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°	7258	7258	7258
5°	7277	7246	7184
10°	7200	7179	7097
15°	7072	7072	6991
20°	6922	6931	6842
25°	6694	6777	6669
30°	6303	6587	6507
35°	5957	6314	6324
40°	5667	5973	6129
45°	5342	5611	5899
50°	5001	5287	5647
55°	4613	4920	5342
60°	4154	4489	4969
65°	3668	3991	4520
70°	3057	3399	3840
75°	2402	2714	3005
80°	1717	1909	2120
85°	1118	1118	1056



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	127.0	4.1
10°-20°	356.7	11.4
20°-30°	521.2	16.7
30°-40°	591.6	19.0
40°-50°	571.1	18.3
50°-60°	471.1	15.1
60°-70°	313.7	10.1
70°-80°	140.4	4.5
80°-90°	25.1	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°	1004.8	32.2
0°-40°	1596.5	51.2
0°-60°	2638.7	84.6
0°-90°	3118.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3118.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1348	1348	1348	1348	1348	
5°	1347	1346	1341	1334	1330	127
15°	1269	1272	1269	1264	1255	358
25°	1127	1136	1141	1133	1123	516
35°	907	919	961	966	962	568
45°	702	714	737	771	775	542
55°	492	500	524	553	569	439
65°	288	296	313	336	355	286
75°	116	122	130	137	144	126
85°	18	18	18	17	17	24
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1348.5	1348.5	1348.5	1348.5	1348.5
2.5°	1352.1	1352.6	1349.5	1341.2	1336.0
5°	1346.9	1346.4	1341.2	1333.9	1329.8
7.5°	1331.9	1332.9	1331.4	1321.0	1315.3
10°	1317.4	1317.9	1313.7	1305.5	1298.7
12.5°	1298.7	1298.2	1292.5	1288.4	1277.5
15°	1269.2	1272.3	1269.2	1263.5	1254.7
17.5°	1240.7	1240.7	1242.8	1232.9	1226.2
20°	1208.6	1210.1	1210.1	1202.4	1194.6
22.5°	1171.3	1175.9	1177.5	1169.2	1159.9
25°	1127.3	1136.1	1141.2	1133.0	1123.1
27.5°	1073.9	1087.4	1102.9	1096.7	1085.8
30°	1014.3	1034.0	1059.9	1054.7	1047.0
32.5°	957.9	977.5	1013.3	1011.2	1007.1
35°	906.6	919.0	961.0	966.1	962.5
37.5°	857.9	869.3	908.6	920.6	917.4
40°	806.6	819.0	850.1	871.3	872.4
42.5°	755.8	767.7	793.1	823.7	823.7
45°	701.9	713.9	737.2	770.8	775.0
47.5°	649.1	661.5	684.3	718.0	724.7
50°	597.3	608.7	631.5	664.1	674.5
52.5°	543.4	555.9	578.1	608.2	623.2
55°	491.6	499.9	524.3	553.3	569.3
57.5°	437.7	445.5	473.0	497.8	514.4
60°	385.9	395.8	417.0	442.4	461.6
62.5°	336.2	346.6	364.7	387.0	408.7
65°	288.0	295.8	313.4	335.7	354.9
67.5°	241.4	248.1	265.8	281.3	301.5
70°	194.3	203.1	216.0	231.0	244.0
72.5°	156.4	160.1	171.0	181.8	195.3
75°	115.5	121.7	130.5	136.8	144.5
77.5°	82.9	86.5	91.7	96.9	104.1
80°	55.4	57.0	61.6	62.7	68.4
82.5°	33.7	34.7	35.7	36.3	38.3
85°	18.1	18.1	18.1	17.1	17.1
87.5°	10.4	10.4	8.8	7.3	5.2
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)