

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: P555333

Luminaire Tested: **FUSL-12-2-LD4-2STD-50-UNV-81-86-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: P555333  
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-LD4-2STD-50-UNV-81-86-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

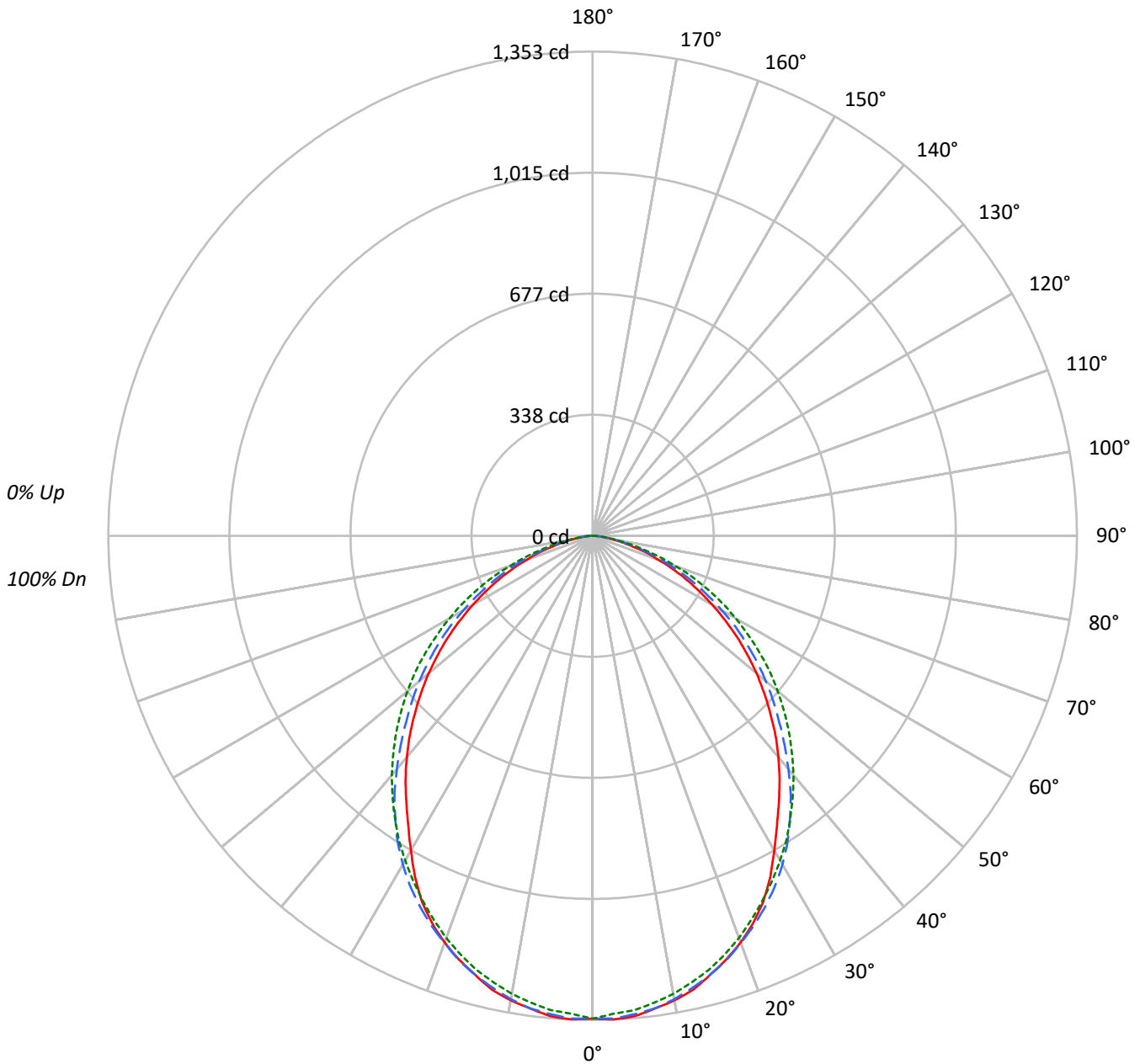
Lumens per Lamp: N/A  
Luminaire Lumens: 3120.0 lumens  
Efficiency: N/A  
Efficacy: 93.7 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 33.3  
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°	7262	7262	7262
5°	7282	7251	7189
10°	7204	7184	7102
15°	7076	7076	6995
20°	6927	6935	6846
25°	6698	6782	6673
30°	6308	6591	6510
35°	5960	6318	6328
40°	5670	5976	6133
45°	5346	5614	5903
50°	5004	5291	5651
55°	4616	4922	5346
60°	4157	4492	4972
65°	3670	3994	4522
70°	3059	3402	3843
75°	2404	2716	3007
80°	1720	1912	2120
85°	1118	1118	1056



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	127.0	4.1
10°-20°	356.9	11.4
20°-30°	521.6	16.7
30°-40°	592.0	19.0
40°-50°	571.5	18.3
50°-60°	471.4	15.1
60°-70°	313.9	10.1
70°-80°	140.5	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°	1005.5	32.2
0°-40°	1597.5	51.2
0°-60°	2640.4	84.6
0°-90°	3120.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3120.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1349	1349	1349	1349	1349	
5°	1348	1347	1342	1335	1331	128
15°	1270	1273	1270	1264	1256	358
25°	1128	1137	1142	1134	1124	517
35°	907	920	962	967	963	568
45°	702	714	738	771	776	542
55°	492	500	525	554	570	439
65°	288	296	314	336	355	286
75°	116	122	131	137	145	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°	1349.3	1349.3	1349.3	1349.3	1349.3
2.5°	1352.9	1353.5	1350.4	1342.1	1336.9
5°	1347.8	1347.2	1342.1	1334.8	1330.7
7.5°	1332.7	1333.8	1332.2	1321.8	1316.1
10°	1318.2	1318.7	1314.6	1306.3	1299.6
12.5°	1299.6	1299.0	1293.3	1289.2	1278.3
15°	1270.0	1273.1	1270.0	1264.3	1255.5
17.5°	1241.5	1241.5	1243.6	1233.7	1227.0
20°	1209.4	1210.9	1210.9	1203.1	1195.4
22.5°	1172.0	1176.7	1178.3	1170.0	1160.6
25°	1128.0	1136.8	1142.0	1133.7	1123.8
27.5°	1074.6	1088.1	1103.6	1097.4	1086.5
30°	1015.0	1034.7	1060.6	1055.4	1047.6
32.5°	958.5	978.2	1013.9	1011.9	1007.7
35°	907.1	919.6	961.6	966.8	963.1
37.5°	858.4	869.8	909.2	921.1	918.0
40°	807.1	819.5	850.6	871.9	872.9
42.5°	756.3	768.2	793.6	824.2	824.2
45°	702.4	714.3	737.6	771.3	775.5
47.5°	649.5	662.0	684.8	718.5	725.2
50°	597.7	609.1	631.9	664.6	674.9
52.5°	543.8	556.2	578.5	608.6	623.6
55°	491.9	500.2	524.6	553.6	569.7
57.5°	438.0	445.8	473.3	498.2	514.7
60°	386.2	396.0	417.3	442.7	461.9
62.5°	336.4	346.8	364.9	387.2	409.0
65°	288.2	296.0	313.6	335.9	355.1
67.5°	241.6	248.3	265.9	281.5	301.7
70°	194.4	203.2	216.2	231.2	244.2
72.5°	156.5	160.2	171.1	181.9	195.4
75°	115.6	121.8	130.6	136.8	144.6
77.5°	82.9	86.6	91.8	96.9	104.2
80°	55.5	57.0	61.7	62.7	68.4
82.5°	33.7	34.7	35.8	36.3	38.4
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)