

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: P554846

Luminaire Tested: **FUSL-12-2-LD4-2HI-50-UNV-82-97-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: P554846  
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-50-UNV-82-97-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .375  
CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT  
LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

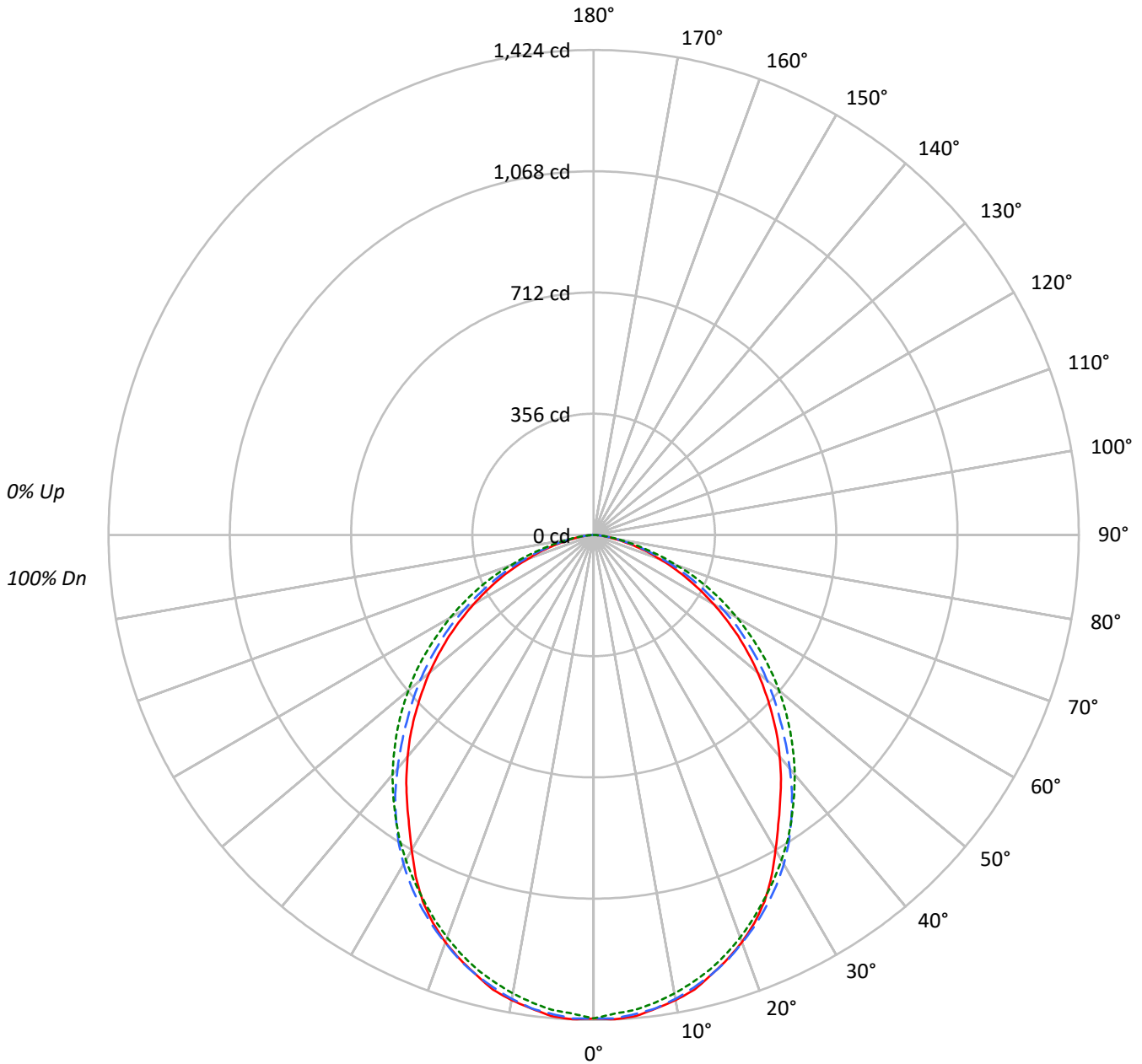
Lumens per Lamp: N/A  
Luminaire Lumens: 3283.0 lumens  
Efficiency: N/A  
Efficacy: 76.0 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	7641	7641	7641
5°	7662	7629	7565
10°	7580	7560	7473
15°	7446	7446	7361
20°	7288	7298	7204
25°	7048	7136	7022
30°	6637	6935	6851
35°	6271	6648	6659
40°	5967	6289	6453
45°	5625	5908	6211
50°	5266	5567	5946
55°	4857	5180	5625
60°	4374	4726	5231
65°	3862	4202	4758
70°	3218	3580	4043
75°	2529	2859	3165
80°	1810	2011	2232
85°	1179	1179	1112



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	133.7	4.1
10°-20°	375.5	11.4
20°-30°	548.8	16.7
30°-40°	622.9	19.0
40°-50°	601.4	18.3
50°-60°	496.1	15.1
60°-70°	330.4	10.1
70°-80°	147.8	4.5
80°-90°	26.4	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°	1058.0	32.2
0°-40°	1681.0	51.2
0°-60°	2778.4	84.6
0°-90°	3283.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3283.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1420	1420	1420	1420	1420	
5°	1418	1418	1412	1404	1400	134
15°	1336	1340	1336	1330	1321	377
25°	1187	1196	1202	1193	1182	544
35°	954	968	1012	1017	1014	598
45°	739	752	776	812	816	570
55°	518	526	552	582	600	462
65°	303	312	330	354	374	301
75°	122	128	138	144	152	133
85°	19	19	19	18	18	26
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1419.8	1419.8	1419.8	1419.8	1419.8
2.5°	1423.6	1424.2	1420.9	1412.2	1406.7
5°	1418.2	1417.6	1412.2	1404.5	1400.2
7.5°	1402.4	1403.4	1401.8	1390.9	1384.9
10°	1387.1	1387.6	1383.3	1374.5	1367.4
12.5°	1367.4	1366.9	1360.9	1356.5	1345.1
15°	1336.4	1339.6	1336.4	1330.4	1321.1
17.5°	1306.4	1306.4	1308.5	1298.2	1291.1
20°	1272.5	1274.2	1274.2	1266.0	1257.8
22.5°	1233.3	1238.2	1239.8	1231.1	1221.3
25°	1186.9	1196.2	1201.6	1192.9	1182.5
27.5°	1130.7	1144.9	1161.3	1154.7	1143.3
30°	1068.0	1088.7	1116.0	1110.5	1102.4
32.5°	1008.5	1029.3	1066.9	1064.7	1060.4
35°	954.5	967.6	1011.8	1017.3	1013.5
37.5°	903.3	915.3	956.7	969.3	966.0
40°	849.3	862.4	895.1	917.5	918.5
42.5°	795.8	808.4	835.1	867.3	867.3
45°	739.1	751.6	776.2	811.6	816.0
47.5°	683.5	696.5	720.5	756.0	763.1
50°	628.9	640.9	664.9	699.3	710.2
52.5°	572.2	585.3	608.7	640.4	656.2
55°	517.6	526.4	552.0	582.5	599.5
57.5°	460.9	469.1	498.0	524.2	541.6
60°	406.4	416.7	439.1	465.8	486.0
62.5°	354.0	364.9	384.0	407.5	430.4
65°	303.3	311.5	330.0	353.5	373.6
67.5°	254.2	261.3	279.8	296.2	317.5
70°	204.5	213.8	227.5	243.3	256.9
72.5°	164.7	168.5	180.0	191.5	205.6
75°	121.6	128.2	137.5	144.0	152.2
77.5°	87.3	91.1	96.5	102.0	109.6
80°	58.4	60.0	64.9	66.0	72.0
82.5°	35.5	36.5	37.6	38.2	40.4
85°	19.1	19.1	19.1	18.0	18.0
87.5°	10.9	10.9	9.3	7.6	5.5
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)