

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: P554734

Luminaire Tested: **FUSL-12-2-LD4-2HI-35-UNV-93-97-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: P554734  
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-35-UNV-93-97-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

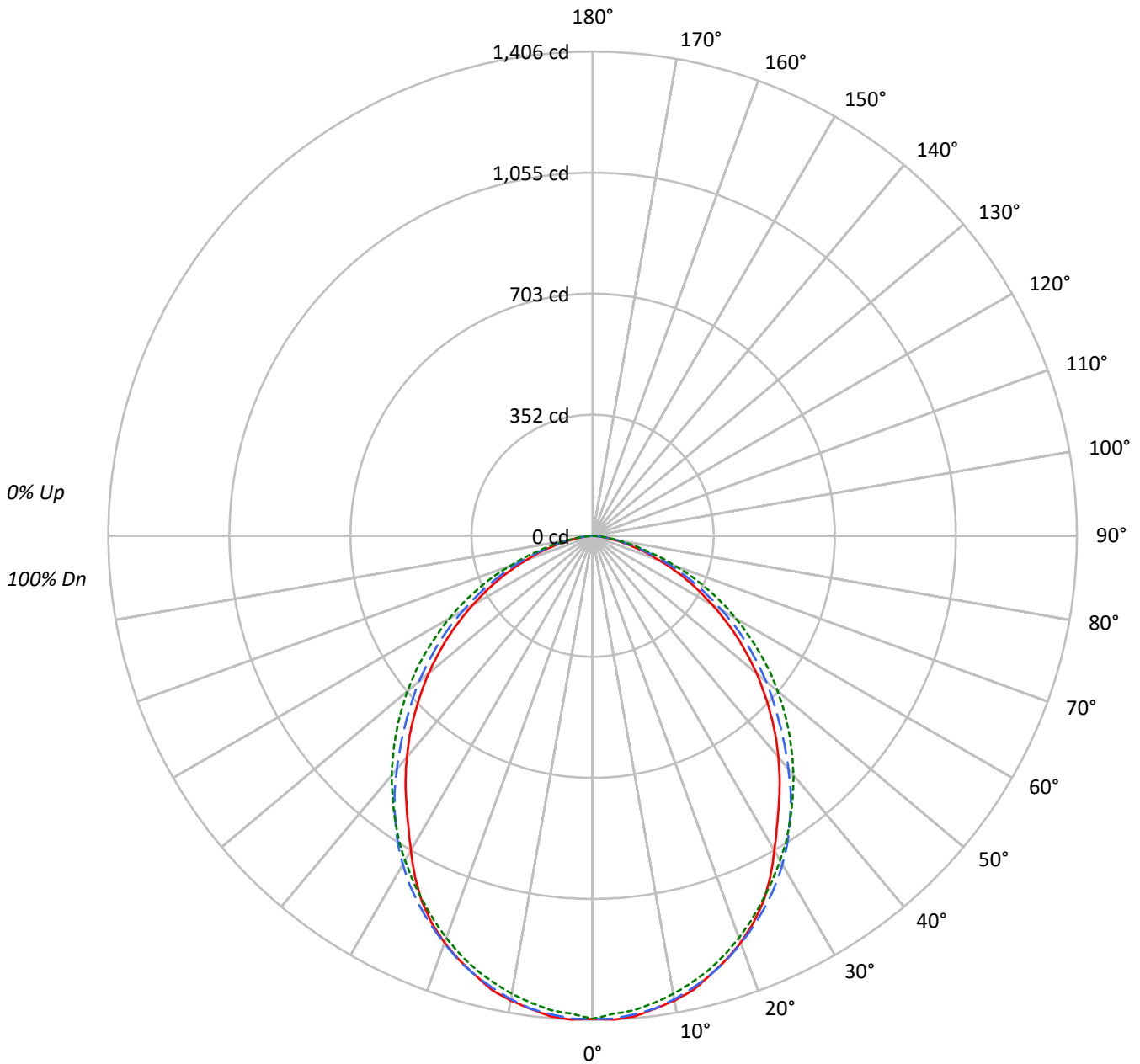
Lumens per Lamp: N/A  
Luminaire Lumens: 3243.0 lumens  
Efficiency: N/A  
Efficacy: 75.1 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 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				20				
RC	80				70				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			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°	7548	7548	7548
5°	7568	7537	7472
10°	7488	7467	7382
15°	7355	7355	7271
20°	7199	7209	7116
25°	6962	7049	6937
30°	6556	6851	6767
35°	6195	6567	6577
40°	5894	6212	6375
45°	5557	5836	6135
50°	5201	5499	5874
55°	4798	5117	5556
60°	4321	4668	5168
65°	3815	4152	4700
70°	3180	3536	3994
75°	2499	2824	3125
80°	1788	1987	2204
85°	1167	1167	1099



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	132.1	4.1
10°-20°	371.0	11.4
20°-30°	542.1	16.7
30°-40°	615.4	19.0
40°-50°	594.0	18.3
50°-60°	490.0	15.1
60°-70°	326.3	10.1
70°-80°	146.0	4.5
80°-90°	26.1	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°	1045.1	32.2
0°-40°	1660.5	51.2
0°-60°	2744.5	84.6
0°-90°	3243.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3243.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1402	1402	1402	1402	1402	
5°	1401	1400	1395	1387	1383	133
15°	1320	1323	1320	1314	1305	372
25°	1172	1182	1187	1178	1168	537
35°	943	956	1000	1005	1001	591
45°	730	742	767	802	806	563
55°	511	520	545	575	592	456
65°	300	308	326	349	369	297
75°	120	127	136	142	150	131
85°	19	19	19	18	18	25
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1402.5	1402.5	1402.5	1402.5	1402.5
2.5°	1406.3	1406.8	1403.6	1395.0	1389.6
5°	1400.9	1400.4	1395.0	1387.4	1383.1
7.5°	1385.3	1386.3	1384.7	1374.0	1368.0
10°	1370.2	1370.7	1366.4	1357.8	1350.8
12.5°	1350.8	1350.2	1344.3	1340.0	1328.7
15°	1320.1	1323.3	1320.1	1314.1	1305.0
17.5°	1290.4	1290.4	1292.6	1282.4	1275.4
20°	1257.0	1258.7	1258.7	1250.6	1242.5
22.5°	1218.2	1223.1	1224.7	1216.1	1206.4
25°	1172.4	1181.6	1187.0	1178.4	1168.1
27.5°	1116.9	1131.0	1147.1	1140.7	1129.3
30°	1055.0	1075.5	1102.4	1097.0	1088.9
32.5°	996.3	1016.7	1053.9	1051.8	1047.4
35°	942.9	955.8	999.5	1004.9	1001.1
37.5°	892.3	904.1	945.1	957.5	954.2
40°	838.9	851.9	884.2	906.3	907.4
42.5°	786.1	798.5	824.9	856.7	856.7
45°	730.1	742.5	766.7	801.7	806.1
47.5°	675.1	688.1	711.8	746.8	753.8
50°	621.2	633.1	656.8	690.8	701.5
52.5°	565.2	578.1	601.3	632.6	648.2
55°	511.3	519.9	545.3	575.4	592.1
57.5°	455.3	463.4	491.9	517.8	535.0
60°	401.4	411.6	433.7	460.1	480.1
62.5°	349.7	360.5	379.3	402.5	425.1
65°	299.6	307.7	326.0	349.1	369.1
67.5°	251.1	258.1	276.4	292.6	313.6
70°	202.1	211.2	224.7	240.3	253.8
72.5°	162.7	166.5	177.8	189.1	203.1
75°	120.2	126.6	135.8	142.2	150.3
77.5°	86.2	90.0	95.4	100.8	108.3
80°	57.7	59.3	64.1	65.2	71.1
82.5°	35.0	36.1	37.2	37.7	39.9
85°	18.9	18.9	18.9	17.8	17.8
87.5°	10.8	10.8	9.2	7.5	5.4
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)