

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: P555239

Luminaire Tested: **FUSL-12-2-LD4-2STD-35-UNV-93-87-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: P555239  
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-35-UNV-93-87-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

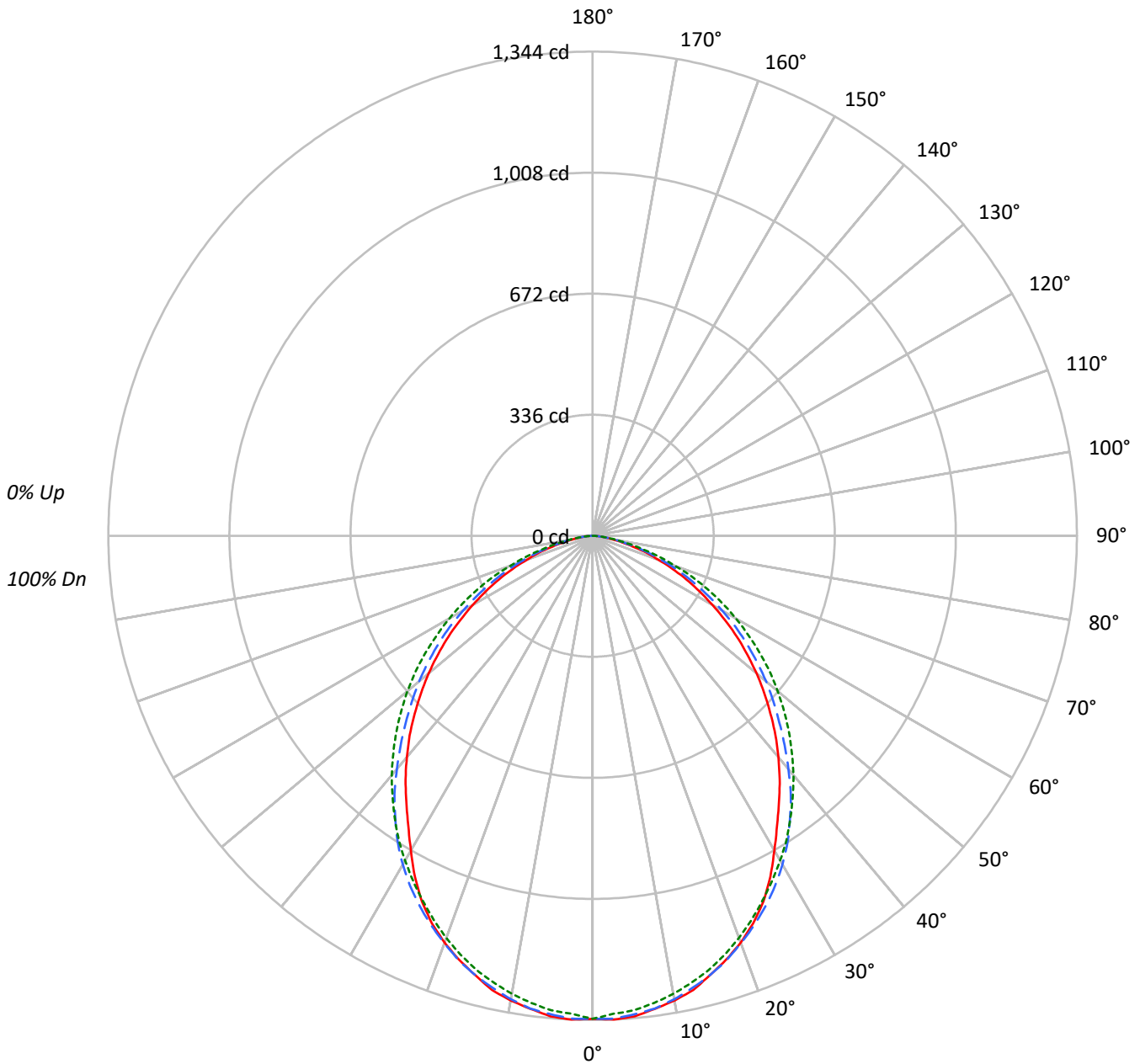
Lumens per Lamp: N/A  
Luminaire Lumens: 3100.0 lumens  
Efficiency: N/A  
Efficacy: 93.1 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 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°	7216	7216	7216
5°	7235	7204	7143
10°	7158	7138	7056
15°	7031	7031	6950
20°	6882	6891	6802
25°	6655	6738	6631
30°	6267	6549	6469
35°	5922	6277	6288
40°	5634	5938	6093
45°	5312	5578	5864
50°	4973	5256	5615
55°	4586	4891	5311
60°	4130	4463	4940
65°	3647	3968	4493
70°	3039	3380	3818
75°	2389	2699	2988
80°	1708	1900	2108
85°	1112	1112	1050



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	126.2	4.1
10°-20°	354.6	11.4
20°-30°	518.2	16.7
30°-40°	588.2	19.0
40°-50°	567.8	18.3
50°-60°	468.4	15.1
60°-70°	311.9	10.1
70°-80°	139.6	4.5
80°-90°	25.0	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°	999.0	32.2
0°-40°	1587.3	51.2
0°-60°	2623.5	84.6
0°-90°	3100.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3100.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1341	1341	1341	1341	1341	
5°	1339	1339	1334	1326	1322	127
15°	1262	1265	1262	1256	1247	356
25°	1121	1130	1135	1126	1117	513
35°	901	914	955	961	957	565
45°	698	710	733	766	770	538
55°	489	497	521	550	566	436
65°	286	294	312	334	353	284
75°	115	121	130	136	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°	1340.7	1340.7	1340.7	1340.7	1340.7
2.5°	1344.3	1344.8	1341.7	1333.5	1328.3
5°	1339.1	1338.6	1333.5	1326.2	1322.1
7.5°	1324.2	1325.2	1323.7	1313.4	1307.7
10°	1309.8	1310.3	1306.2	1297.9	1291.2
12.5°	1291.2	1290.7	1285.0	1280.9	1270.1
15°	1261.9	1265.0	1261.9	1256.2	1247.4
17.5°	1233.5	1233.5	1235.6	1225.8	1219.1
20°	1201.6	1203.2	1203.2	1195.4	1187.7
22.5°	1164.5	1169.2	1170.7	1162.5	1153.2
25°	1120.7	1129.5	1134.7	1126.4	1116.6
27.5°	1067.7	1081.1	1096.5	1090.4	1079.5
30°	1008.5	1028.0	1053.8	1048.6	1040.9
32.5°	952.3	971.9	1007.4	1005.4	1001.3
35°	901.3	913.7	955.4	960.6	957.0
37.5°	852.9	864.3	903.4	915.2	912.2
40°	801.9	814.3	845.2	866.3	867.3
42.5°	751.5	763.3	788.5	818.9	818.9
45°	697.9	709.7	732.9	766.4	770.5
47.5°	645.4	657.7	680.4	713.9	720.6
50°	593.9	605.2	627.8	660.3	670.6
52.5°	540.3	552.6	574.8	604.7	619.6
55°	488.8	497.0	521.2	550.1	566.0
57.5°	435.2	442.9	470.2	495.0	511.4
60°	383.7	393.5	414.6	439.9	458.9
62.5°	334.3	344.6	362.6	384.7	406.4
65°	286.4	294.1	311.6	333.8	352.8
67.5°	240.0	246.7	264.2	279.7	299.8
70°	193.1	201.9	214.8	229.7	242.6
72.5°	155.5	159.1	170.0	180.8	194.2
75°	114.9	121.0	129.8	136.0	143.7
77.5°	82.4	86.0	91.2	96.3	103.5
80°	55.1	56.7	61.3	62.3	68.0
82.5°	33.5	34.5	35.5	36.1	38.1
85°	18.0	18.0	18.0	17.0	17.0
87.5°	10.3	10.3	8.8	7.2	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)