

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: P555792

Luminaire Tested: **FUSL-12-2-LD4-3LO-40-UNV-82-84-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: P555792  
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-LD4-3LO-40-UNV-82-84-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

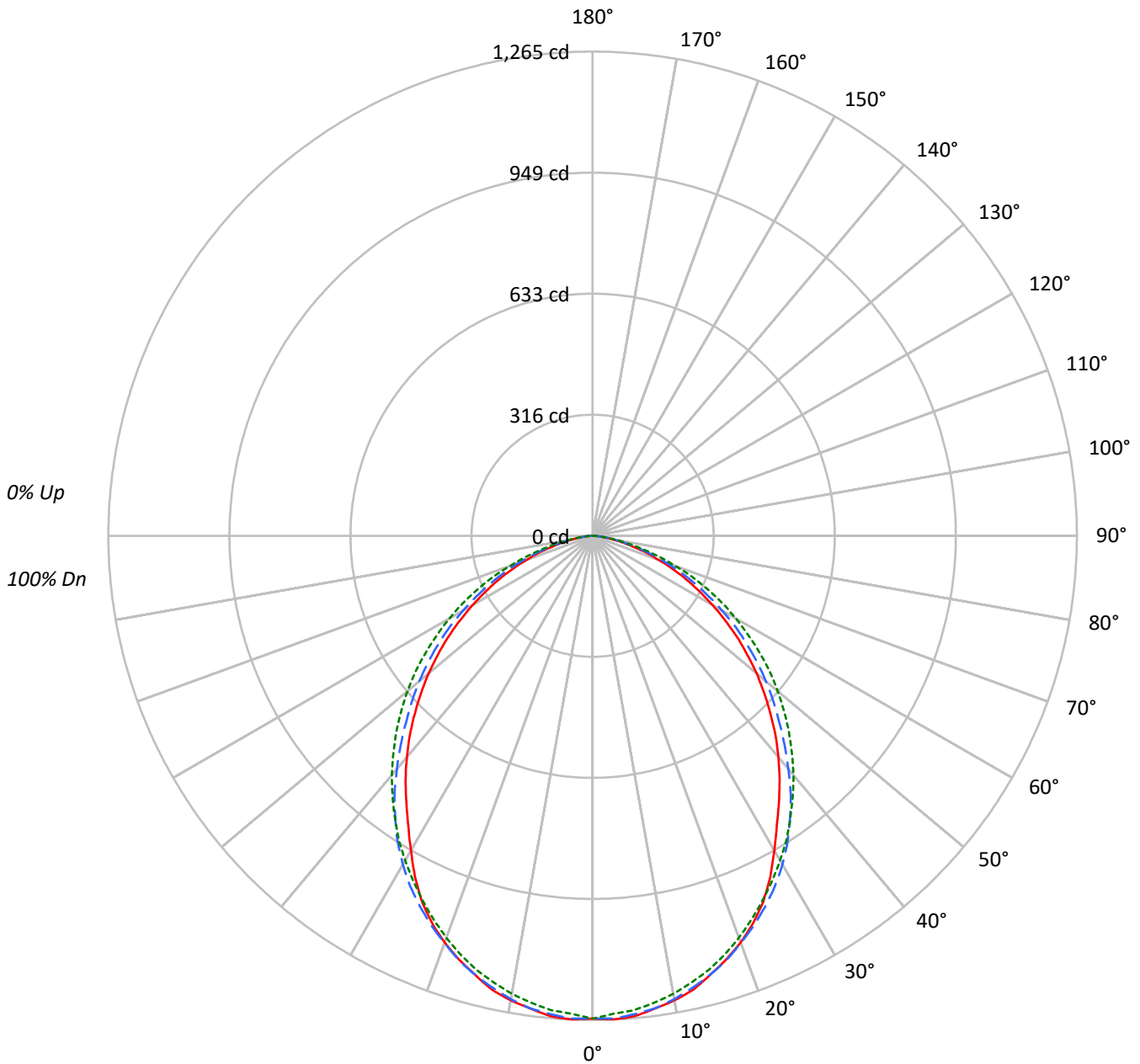
Lumens per Lamp: N/A  
Luminaire Lumens: 2917.0 lumens  
Efficiency: N/A  
Efficacy: 83.1 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 35.1  
Input Voltage (V): NR  
Input Current (Ain): 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°	6789	6789	6789
5°	6808	6779	6721
10°	6735	6717	6640
15°	6616	6616	6540
20°	6476	6484	6401
25°	6263	6340	6239
30°	5897	6162	6087
35°	5572	5907	5916
40°	5302	5587	5734
45°	4998	5249	5518
50°	4679	4947	5283
55°	4315	4602	4997
60°	3887	4199	4648
65°	3432	3734	4228
70°	2859	3180	3592
75°	2248	2539	2811
80°	1609	1788	1984
85°	1050	1050	988



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	118.8	4.1
10°-20°	333.7	11.4
20°-30°	487.6	16.7
30°-40°	553.5	19.0
40°-50°	534.3	18.3
50°-60°	440.8	15.1
60°-70°	293.5	10.1
70°-80°	131.3	4.5
80°-90°	23.5	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°	940.1	32.2
0°-40°	1493.6	51.2
0°-60°	2468.6	84.6
0°-90°	2917.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2917.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1262	1262	1262	1262	1262	
5°	1260	1260	1255	1248	1244	119
15°	1187	1190	1187	1182	1174	335
25°	1055	1063	1068	1060	1051	483
35°	848	860	899	904	900	531
45°	657	668	690	721	725	507
55°	460	468	490	518	533	410
65°	270	277	293	314	332	267
75°	108	114	122	128	135	118
85°	17	17	17	16	16	23
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1261.5	1261.5	1261.5	1261.5	1261.5
2.5°	1264.9	1265.4	1262.5	1254.7	1249.9
5°	1260.1	1259.6	1254.7	1248.0	1244.1
7.5°	1246.0	1247.0	1245.5	1235.8	1230.5
10°	1232.4	1232.9	1229.1	1221.3	1215.0
12.5°	1215.0	1214.5	1209.2	1205.3	1195.1
15°	1187.4	1190.3	1187.4	1182.0	1173.8
17.5°	1160.7	1160.7	1162.7	1153.5	1147.2
20°	1130.7	1132.1	1132.1	1124.9	1117.6
22.5°	1095.8	1100.1	1101.6	1093.8	1085.1
25°	1054.6	1062.8	1067.7	1059.9	1050.7
27.5°	1004.7	1017.3	1031.8	1026.0	1015.8
30°	948.9	967.3	991.6	986.7	979.5
32.5°	896.1	914.5	948.0	946.0	942.1
35°	848.1	859.8	899.0	903.9	900.5
37.5°	802.6	813.2	850.1	861.2	858.3
40°	754.6	766.2	795.3	815.2	816.1
42.5°	707.1	718.2	742.0	770.6	770.6
45°	656.7	667.8	689.6	721.1	725.0
47.5°	607.3	618.9	640.2	671.7	678.0
50°	558.8	569.5	590.8	621.3	631.0
52.5°	508.4	520.0	540.9	569.0	583.0
55°	459.9	467.7	490.5	517.6	532.6
57.5°	409.5	416.8	442.5	465.7	481.3
60°	361.1	370.3	390.1	413.9	431.8
62.5°	314.5	324.2	341.2	362.0	382.4
65°	269.5	276.7	293.2	314.0	332.0
67.5°	225.8	232.1	248.6	263.2	282.1
70°	181.7	190.0	202.1	216.2	228.3
72.5°	146.4	149.8	159.9	170.1	182.7
75°	108.1	113.9	122.1	127.9	135.2
77.5°	77.5	80.9	85.8	90.6	97.4
80°	51.9	53.3	57.7	58.6	64.0
82.5°	31.5	32.5	33.4	33.9	35.9
85°	17.0	17.0	17.0	16.0	16.0
87.5°	9.7	9.7	8.2	6.8	4.8
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)