

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: P555175

Luminaire Tested: **FUSL-12-2-LD4-2STD-30-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: P555175  
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-30-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 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

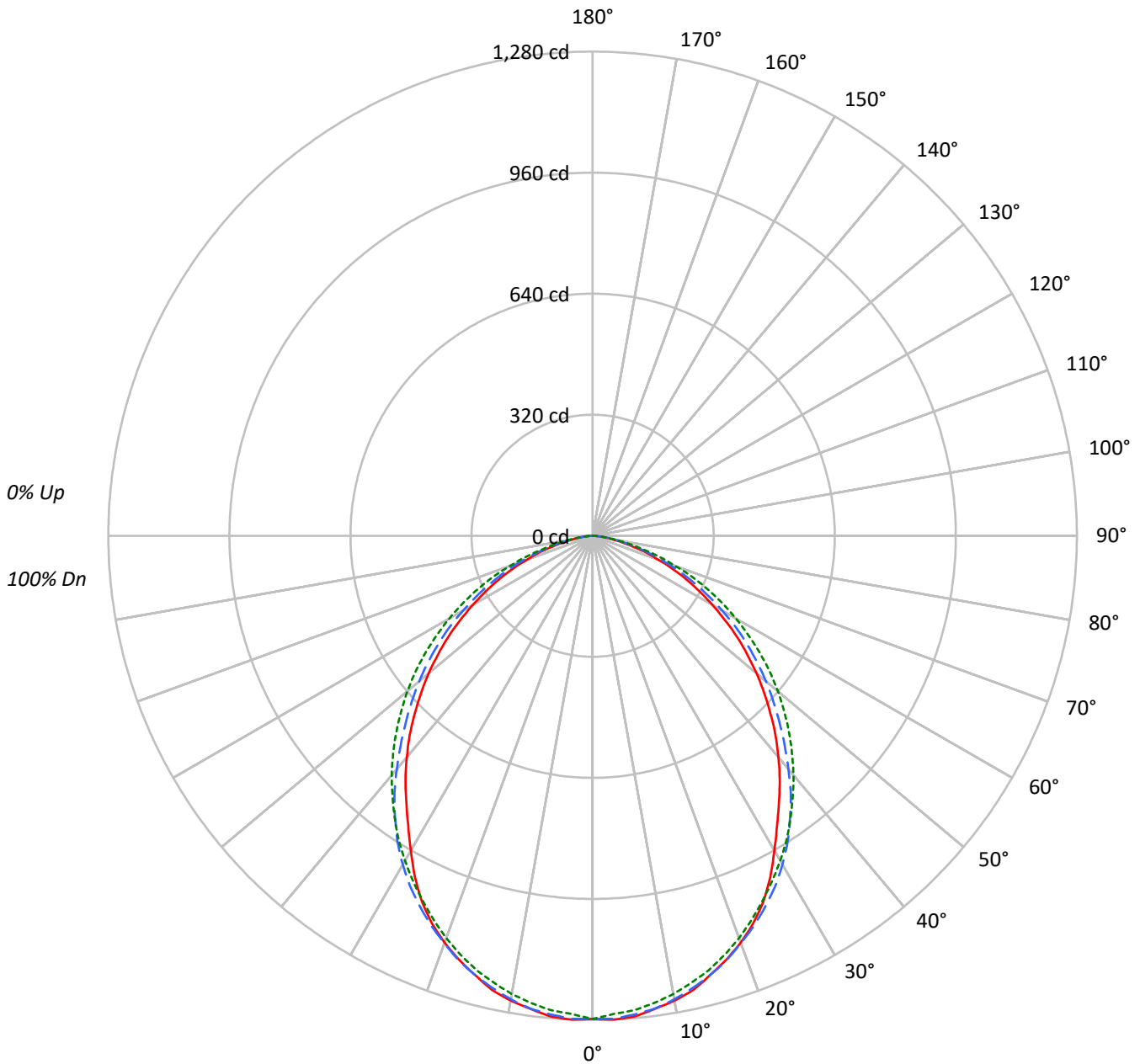
Lumens per Lamp: N/A  
Luminaire Lumens: 2953.0 lumens  
Efficiency: N/A  
Efficacy: 88.7 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	6873	6873	6873
5°	6891	6862	6804
10°	6819	6800	6722
15°	6697	6697	6621
20°	6556	6564	6480
25°	6340	6418	6317
30°	5970	6238	6162
35°	5641	5979	5989
40°	5367	5656	5805
45°	5060	5314	5587
50°	4737	5008	5349
55°	4369	4659	5059
60°	3934	4252	4705
65°	3474	3780	4280
70°	2895	3220	3637
75°	2275	2570	2847
80°	1627	1810	2008
85°	1062	1062	1000



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	120.2	4.1
10°-20°	337.8	11.4
20°-30°	493.6	16.7
30°-40°	560.3	19.0
40°-50°	540.9	18.3
50°-60°	446.2	15.1
60°-70°	297.1	10.1
70°-80°	133.0	4.5
80°-90°	23.8	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°	951.7	32.2
0°-40°	1512.0	51.2
0°-60°	2499.1	84.6
0°-90°	2953.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2953.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1277	1277	1277	1277	1277	
5°	1276	1275	1270	1263	1259	121
15°	1202	1205	1202	1197	1188	339
25°	1068	1076	1081	1073	1064	489
35°	859	870	910	915	912	538
45°	665	676	698	730	734	513
55°	466	474	496	524	539	416
65°	273	280	297	318	336	270
75°	109	115	124	130	137	120
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°	1277.1	1277.1	1277.1	1277.1	1277.1
2.5°	1280.5	1281.0	1278.1	1270.2	1265.3
5°	1275.6	1275.1	1270.2	1263.4	1259.4
7.5°	1261.4	1262.4	1260.9	1251.1	1245.7
10°	1247.7	1248.1	1244.2	1236.4	1230.0
12.5°	1230.0	1229.5	1224.1	1220.2	1209.9
15°	1202.0	1205.0	1202.0	1196.6	1188.3
17.5°	1175.0	1175.0	1177.0	1167.7	1161.3
20°	1144.6	1146.1	1146.1	1138.7	1131.4
22.5°	1109.3	1113.7	1115.2	1107.3	1098.5
25°	1067.6	1075.9	1080.8	1073.0	1063.7
27.5°	1017.1	1029.8	1044.5	1038.7	1028.3
30°	960.6	979.3	1003.8	998.9	991.6
32.5°	907.2	925.8	959.7	957.7	953.8
35°	858.6	870.4	910.1	915.0	911.6
37.5°	812.5	823.3	860.6	871.8	868.9
40°	763.9	775.7	805.1	825.2	826.2
42.5°	715.8	727.1	751.1	780.1	780.1
45°	664.8	676.1	698.2	730.0	734.0
47.5°	614.8	626.5	648.1	680.0	686.4
50°	565.7	576.5	598.1	629.0	638.8
52.5°	514.7	526.4	547.5	576.0	590.2
55°	465.6	473.5	496.5	524.0	539.2
57.5°	414.6	421.9	447.9	471.5	487.2
60°	365.5	374.8	395.0	419.0	437.1
62.5°	318.4	328.2	345.4	366.5	387.1
65°	272.8	280.1	296.8	317.9	336.1
67.5°	228.6	235.0	251.7	266.4	285.5
70°	184.0	192.3	204.6	218.8	231.1
72.5°	148.2	151.6	161.9	172.2	185.0
75°	109.4	115.3	123.6	129.5	136.9
77.5°	78.5	81.9	86.8	91.7	98.6
80°	52.5	54.0	58.4	59.4	64.8
82.5°	31.9	32.9	33.9	34.3	36.3
85°	17.2	17.2	17.2	16.2	16.2
87.5°	9.8	9.8	8.3	6.9	4.9
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)