

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: P555203

Luminaire Tested: **FUSL-12-2-LD4-2STD-35-UNV-81-85-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: P555203  
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-81-85-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

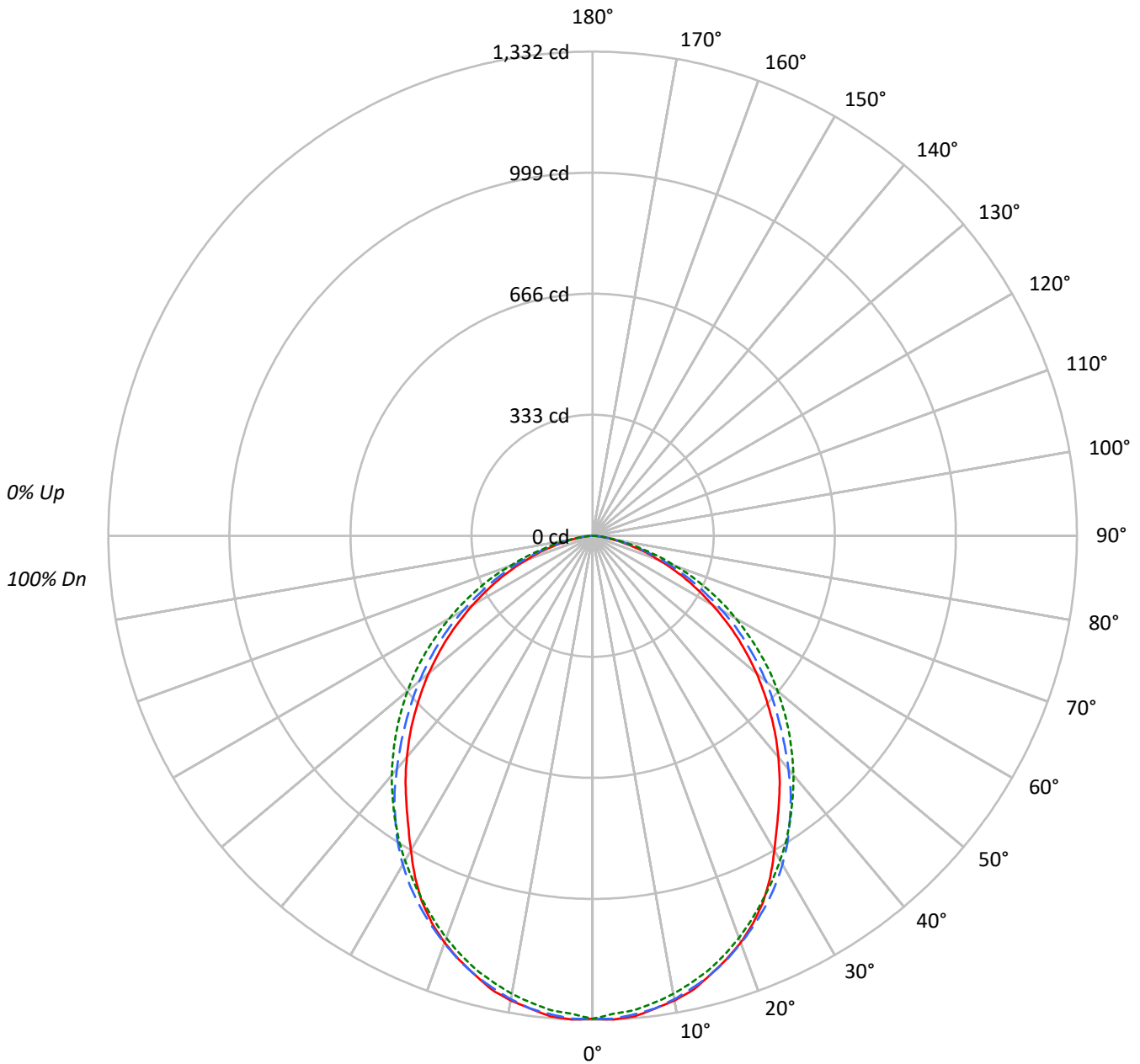
Lumens per Lamp: N/A  
Luminaire Lumens: 3072.0 lumens  
Efficiency: N/A  
Efficacy: 92.3 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 33.3  
Input Voltage (V): NR  
Input Current (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°	7150	7150	7150
5°	7169	7139	7078
10°	7093	7074	6993
15°	6968	6968	6888
20°	6820	6829	6741
25°	6595	6677	6571
30°	6211	6490	6410
35°	5868	6221	6230
40°	5583	5885	6039
45°	5264	5528	5812
50°	4927	5210	5564
55°	4545	4846	5263
60°	4092	4423	4895
65°	3614	3933	4452
70°	3012	3349	3783
75°	2366	2674	2961
80°	1692	1881	2089
85°	1105	1105	1037



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	125.1	4.1
10°-20°	351.4	11.4
20°-30°	513.5	16.7
30°-40°	582.9	19.0
40°-50°	562.7	18.3
50°-60°	464.2	15.1
60°-70°	309.1	10.1
70°-80°	138.3	4.5
80°-90°	24.7	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°	990.0	32.2
0°-40°	1572.9	51.2
0°-60°	2599.8	84.6
0°-90°	3072.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3072.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1329	1329	1329	1329	1329	
5°	1327	1326	1321	1314	1310	126
15°	1250	1254	1250	1245	1236	353
25°	1111	1119	1124	1116	1106	509
35°	893	905	947	952	948	560
45°	692	703	726	760	764	534
55°	484	492	516	545	561	432
65°	284	291	309	331	350	281
75°	114	120	129	135	142	124
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°	1328.6	1328.6	1328.6	1328.6	1328.6
2.5°	1332.1	1332.6	1329.6	1321.4	1316.3
5°	1327.0	1326.5	1321.4	1314.3	1310.2
7.5°	1312.2	1313.2	1311.7	1301.5	1295.9
10°	1297.9	1298.4	1294.4	1286.2	1279.6
12.5°	1279.6	1279.1	1273.4	1269.4	1258.6
15°	1250.5	1253.5	1250.5	1244.9	1236.2
17.5°	1222.4	1222.4	1224.4	1214.7	1208.1
20°	1190.8	1192.3	1192.3	1184.6	1177.0
22.5°	1154.0	1158.6	1160.1	1152.0	1142.8
25°	1110.6	1119.3	1124.4	1116.2	1106.5
27.5°	1058.1	1071.3	1086.6	1080.5	1069.8
30°	999.4	1018.8	1044.3	1039.2	1031.5
32.5°	943.7	963.1	998.3	996.3	992.2
35°	893.2	905.4	946.8	951.9	948.3
37.5°	845.2	856.4	895.2	907.0	903.9
40°	794.7	806.9	837.6	858.5	859.5
42.5°	744.7	756.4	781.4	811.5	811.5
45°	691.6	703.3	726.3	759.5	763.6
47.5°	639.5	651.8	674.2	707.4	714.0
50°	588.5	599.7	622.2	654.3	664.5
52.5°	535.4	547.7	569.6	599.2	614.0
55°	484.4	492.5	516.5	545.1	560.9
57.5°	431.3	438.9	466.0	490.5	506.8
60°	380.2	389.9	410.9	435.9	454.8
62.5°	331.2	341.5	359.3	381.3	402.7
65°	283.8	291.4	308.8	330.7	349.6
67.5°	237.8	244.5	261.8	277.1	297.1
70°	191.4	200.1	212.8	227.6	240.4
72.5°	154.1	157.7	168.4	179.1	192.4
75°	113.8	119.9	128.6	134.7	142.4
77.5°	81.7	85.2	90.3	95.4	102.6
80°	54.6	56.1	60.7	61.8	67.4
82.5°	33.2	34.2	35.2	35.7	37.8
85°	17.9	17.9	17.9	16.8	16.8
87.5°	10.2	10.2	8.7	7.1	5.1
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)