

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: P554628

Luminaire Tested: **FUSL-12-2-LD4-2HI-30-UNV-81-86-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: P554628  
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-30-UNV-81-86-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

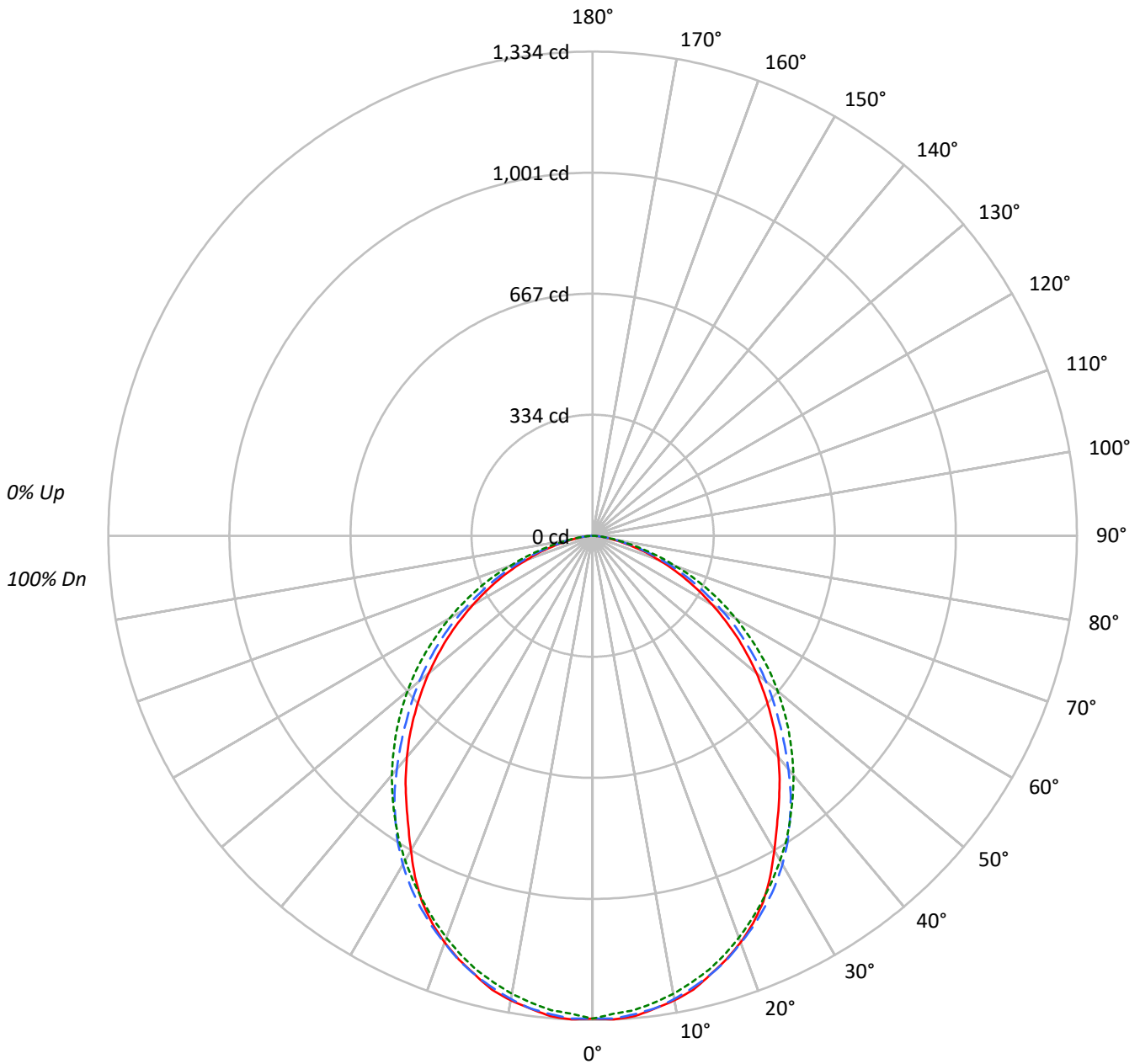
Lumens per Lamp: N/A  
Luminaire Lumens: 3076.0 lumens  
Efficiency: N/A  
Efficacy: 71.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 43.2  
Input Voltage (V): NR  
Input Current (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					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	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°	7160	7160	7160
5°	7179	7148	7088
10°	7102	7083	7002
15°	6976	6976	6897
20°	6829	6837	6750
25°	6604	6686	6580
30°	6219	6498	6419
35°	5876	6229	6239
40°	5590	5892	6046
45°	5271	5535	5819
50°	4934	5216	5571
55°	4551	4853	5271
60°	4098	4428	4902
65°	3618	3938	4458
70°	3015	3353	3788
75°	2371	2678	2965
80°	1695	1884	2092
85°	1105	1105	1044



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	125.2	4.1
10°-20°	351.9	11.4
20°-30°	514.2	16.7
30°-40°	583.7	19.0
40°-50°	563.4	18.3
50°-60°	464.8	15.1
60°-70°	309.5	10.1
70°-80°	138.5	4.5
80°-90°	24.8	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°	991.3	32.2
0°-40°	1575.0	51.2
0°-60°	2603.2	84.6
0°-90°	3076.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3076.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1330	1330	1330	1330	1330	
5°	1329	1328	1323	1316	1312	126
15°	1252	1255	1252	1246	1238	353
25°	1112	1121	1126	1118	1108	509
35°	894	907	948	953	950	560
45°	692	704	727	760	764	534
55°	485	493	517	546	562	433
65°	284	292	309	331	350	282
75°	114	120	129	135	143	125
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°	1330.3	1330.3	1330.3	1330.3	1330.3
2.5°	1333.9	1334.4	1331.3	1323.1	1318.0
5°	1328.8	1328.2	1323.1	1316.0	1311.9
7.5°	1313.9	1315.0	1313.4	1303.2	1297.6
10°	1299.6	1300.1	1296.0	1287.9	1281.2
12.5°	1281.2	1280.7	1275.1	1271.0	1260.3
15°	1252.1	1255.2	1252.1	1246.5	1237.8
17.5°	1224.0	1224.0	1226.0	1216.3	1209.7
20°	1192.3	1193.8	1193.8	1186.2	1178.5
22.5°	1155.5	1160.1	1161.6	1153.5	1144.3
25°	1112.1	1120.8	1125.9	1117.7	1108.0
27.5°	1059.4	1072.7	1088.0	1081.9	1071.2
30°	1000.7	1020.1	1045.6	1040.5	1032.9
32.5°	945.0	964.4	999.6	997.6	993.5
35°	894.4	906.6	948.0	953.1	949.6
37.5°	846.3	857.6	896.4	908.2	905.1
40°	795.7	808.0	838.7	859.6	860.6
42.5°	745.6	757.4	782.4	812.6	812.6
45°	692.5	704.2	727.2	760.5	764.5
47.5°	640.4	652.6	675.1	708.3	715.0
50°	589.3	600.5	623.0	655.2	665.4
52.5°	536.1	548.4	570.3	600.0	614.8
55°	485.0	493.2	517.2	545.8	561.7
57.5°	431.8	439.5	466.6	491.1	507.5
60°	380.7	390.5	411.4	436.4	455.4
62.5°	331.7	341.9	359.8	381.8	403.2
65°	284.1	291.8	309.2	331.2	350.1
67.5°	238.2	244.8	262.2	277.5	297.4
70°	191.6	200.3	213.1	227.9	240.7
72.5°	154.3	157.9	168.6	179.4	192.7
75°	114.0	120.1	128.8	134.9	142.6
77.5°	81.8	85.3	90.5	95.6	102.7
80°	54.7	56.2	60.8	61.8	67.5
82.5°	33.2	34.2	35.3	35.8	37.8
85°	17.9	17.9	17.9	16.9	16.9
87.5°	10.2	10.2	8.7	7.2	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)