

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: P555904

Luminaire Tested: **FUSL-12-2-LD4-3STD-30-UNV-81-84-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: P555904  
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-LD4-3STD-30-UNV-81-84-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

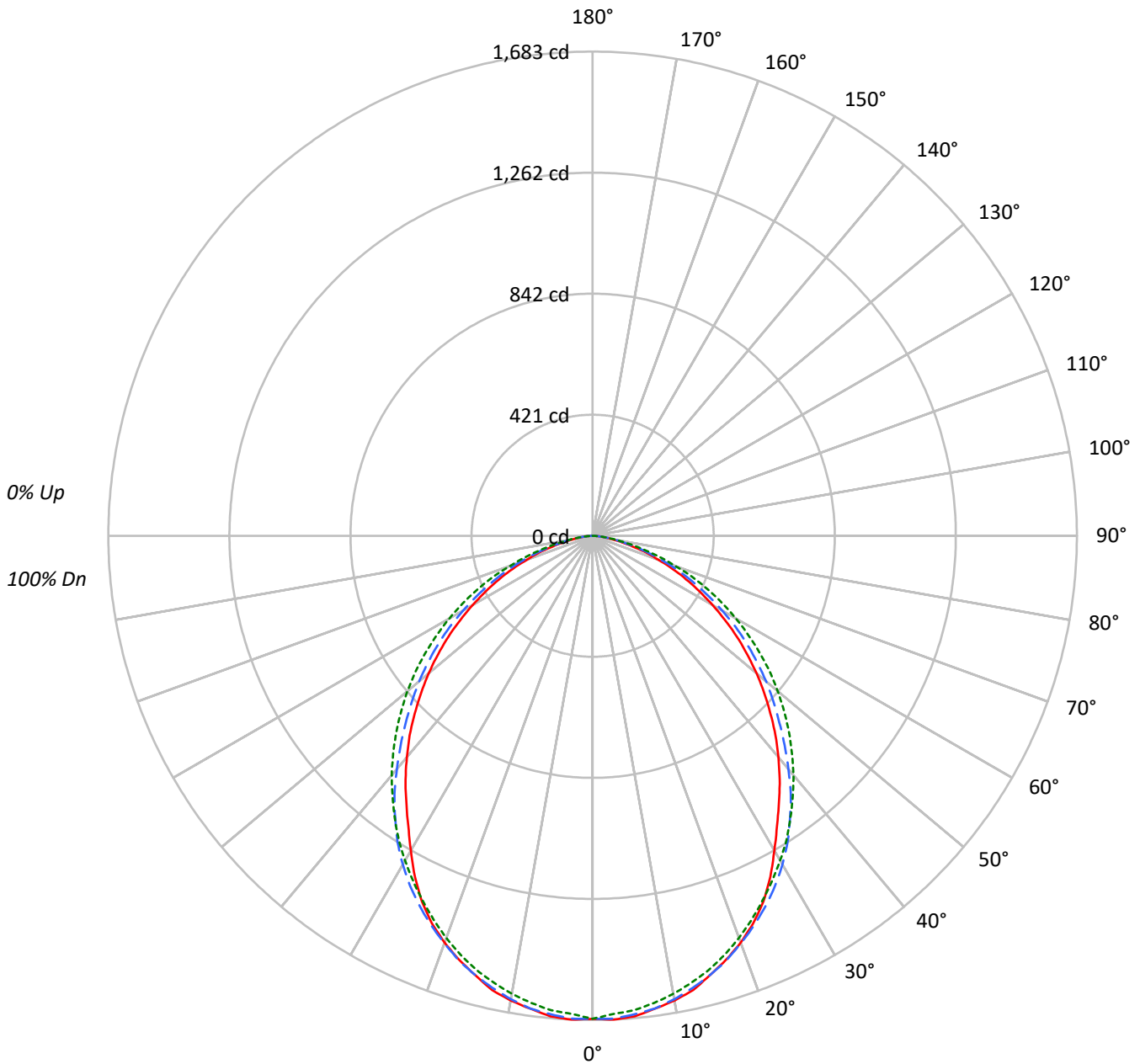
Lumens per Lamp: N/A  
Luminaire Lumens: 3882.0 lumens  
Efficiency: N/A  
Efficacy: 77.6 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 50  
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°	9036	9036	9036
5°	9059	9021	8944
10°	8964	8939	8836
15°	8805	8805	8704
20°	8618	8629	8518
25°	8334	8438	8304
30°	7848	8201	8101
35°	7416	7861	7874
40°	7055	7436	7631
45°	6651	6986	7344
50°	6227	6583	7032
55°	5743	6124	6651
60°	5172	5589	6186
65°	4567	4969	5626
70°	3806	4233	4781
75°	2990	3379	3741
80°	2139	2380	2638
85°	1396	1396	1315



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	158.1	4.1
10°-20°	444.1	11.4
20°-30°	648.9	16.7
30°-40°	736.6	19.0
40°-50°	711.1	18.3
50°-60°	586.6	15.1
60°-70°	390.6	10.1
70°-80°	174.8	4.5
80°-90°	31.3	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°	1251.1	32.2
0°-40°	1987.7	51.2
0°-60°	3285.3	84.6
0°-90°	3882.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3882.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1679	1679	1679	1679	1679	
5°	1677	1676	1670	1661	1656	159
15°	1580	1584	1580	1573	1562	445
25°	1404	1414	1421	1411	1398	643
35°	1129	1144	1196	1203	1198	707
45°	874	889	918	960	965	674
55°	612	622	653	689	709	546
65°	359	368	390	418	442	356
75°	144	152	162	170	180	157
85°	23	23	23	21	21	30
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1678.9	1678.9	1678.9	1678.9	1678.9
2.5°	1683.4	1684.0	1680.2	1669.8	1663.4
5°	1676.9	1676.3	1669.8	1660.8	1655.6
7.5°	1658.2	1659.5	1657.6	1644.7	1637.6
10°	1640.2	1640.8	1635.7	1625.3	1616.9
12.5°	1616.9	1616.3	1609.2	1604.0	1590.5
15°	1580.2	1584.1	1580.2	1573.1	1562.1
17.5°	1544.7	1544.7	1547.3	1535.0	1526.7
20°	1504.7	1506.7	1506.7	1497.0	1487.3
22.5°	1458.3	1464.1	1466.0	1455.7	1444.1
25°	1403.5	1414.4	1420.9	1410.6	1398.3
27.5°	1337.0	1353.8	1373.1	1365.4	1351.9
30°	1262.9	1287.4	1319.6	1313.2	1303.5
32.5°	1192.6	1217.1	1261.6	1259.0	1253.8
35°	1128.7	1144.2	1196.4	1202.9	1198.4
37.5°	1068.1	1082.3	1131.3	1146.1	1142.2
40°	1004.2	1019.7	1058.4	1084.8	1086.1
42.5°	941.0	955.9	987.5	1025.5	1025.5
45°	873.9	888.8	917.8	959.7	964.9
47.5°	808.2	823.6	852.0	893.9	902.3
50°	743.7	757.8	786.2	826.9	839.8
52.5°	676.6	692.1	719.8	757.2	775.9
55°	612.1	622.4	652.7	688.8	708.8
57.5°	545.0	554.7	588.9	619.8	640.5
60°	480.5	492.8	519.2	550.8	574.7
62.5°	418.6	431.5	454.1	481.8	508.9
65°	358.6	368.3	390.2	417.9	441.8
67.5°	300.6	308.9	330.9	350.2	375.4
70°	241.9	252.8	269.0	287.7	303.8
72.5°	194.8	199.3	212.8	226.4	243.2
75°	143.8	151.6	162.5	170.3	179.9
77.5°	103.2	107.7	114.2	120.6	129.6
80°	69.0	70.9	76.8	78.0	85.1
82.5°	41.9	43.2	44.5	45.1	47.7
85°	22.6	22.6	22.6	21.3	21.3
87.5°	12.9	12.9	11.0	9.0	6.4
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)