

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: P555917

Luminaire Tested: **FUSL-12-2-LD4-3STD-30-UNV-81-96-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: P555917  
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-81-96-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDES  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

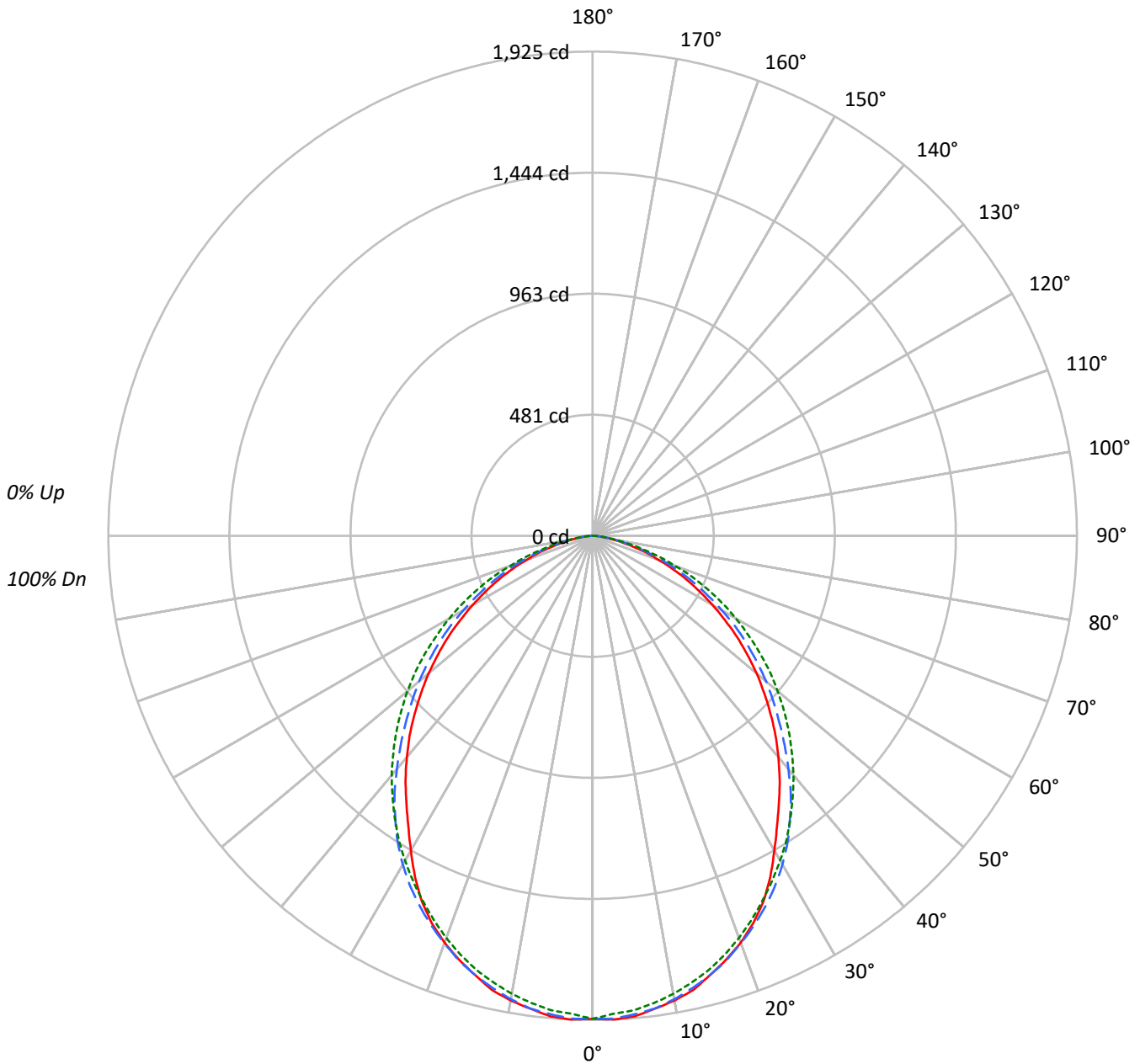
Lumens per Lamp: N/A  
Luminaire Lumens: 4440.0 lumens  
Efficiency: N/A  
Efficacy: 88.8 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 50  
Input Voltage (V): NR  
Input Current (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°	10334	10334	10334
5°	10362	10318	10230
10°	10252	10224	10107
15°	10070	10070	9955
20°	9857	9869	9743
25°	9532	9650	9497
30°	8976	9380	9265
35°	8481	8991	9005
40°	8070	8505	8728
45°	7608	7990	8400
50°	7121	7529	8042
55°	6569	7005	7607
60°	5916	6392	7075
65°	5224	5684	6435
70°	4353	4840	5467
75°	3421	3866	4279
80°	2445	2721	3019
85°	1593	1593	1501



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	180.8	4.1
10°-20°	507.9	11.4
20°-30°	742.2	16.7
30°-40°	842.5	19.0
40°-50°	813.3	18.3
50°-60°	670.9	15.1
60°-70°	446.8	10.1
70°-80°	199.9	4.5
80°-90°	35.8	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°	1430.9	32.2
0°-40°	2273.4	51.2
0°-60°	3757.5	84.6
0°-90°	4440.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4440.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1920	1920	1920	1920	1920	
5°	1918	1917	1910	1900	1894	182
15°	1807	1812	1807	1799	1787	509
25°	1605	1618	1625	1613	1599	735
35°	1291	1309	1368	1376	1371	809
45°	1000	1016	1050	1098	1104	771
55°	700	712	746	788	811	625
65°	410	421	446	478	505	407
75°	164	173	186	195	206	180
85°	26	26	26	24	24	35
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1920.2	1920.2	1920.2	1920.2	1920.2
2.5°	1925.3	1926.1	1921.7	1909.9	1902.5
5°	1918.0	1917.2	1909.9	1899.5	1893.6
7.5°	1896.6	1898.1	1895.8	1881.1	1873.0
10°	1875.9	1876.7	1870.8	1859.0	1849.4
12.5°	1849.4	1848.6	1840.5	1834.6	1819.1
15°	1807.3	1811.7	1807.3	1799.2	1786.7
17.5°	1766.7	1766.7	1769.7	1755.7	1746.1
20°	1721.0	1723.2	1723.2	1712.2	1701.1
22.5°	1667.9	1674.5	1676.8	1664.9	1651.7
25°	1605.2	1617.7	1625.1	1613.3	1599.3
27.5°	1529.2	1548.4	1570.5	1561.7	1546.2
30°	1444.4	1472.4	1509.3	1501.9	1490.9
32.5°	1364.0	1392.0	1442.9	1440.0	1434.1
35°	1290.9	1308.6	1368.4	1375.8	1370.6
37.5°	1221.6	1237.8	1293.9	1310.9	1306.4
40°	1148.6	1166.3	1210.5	1240.8	1242.3
42.5°	1076.3	1093.2	1129.4	1172.9	1172.9
45°	999.6	1016.5	1049.7	1097.7	1103.6
47.5°	924.3	942.0	974.5	1022.4	1032.0
50°	850.5	866.8	899.2	945.7	960.5
52.5°	773.8	791.5	823.3	866.0	887.4
55°	700.1	711.9	746.5	787.8	810.7
57.5°	623.3	634.4	673.5	708.9	732.5
60°	549.6	563.6	593.8	630.0	657.3
62.5°	478.8	493.5	519.3	551.0	582.0
65°	410.2	421.2	446.3	478.0	505.3
67.5°	343.8	353.3	378.4	400.6	429.3
70°	276.6	289.2	307.6	329.0	347.4
72.5°	222.8	227.9	243.4	258.9	278.1
75°	164.5	173.4	185.9	194.7	205.8
77.5°	118.0	123.2	130.6	137.9	148.3
80°	78.9	81.1	87.8	89.3	97.4
82.5°	47.9	49.4	50.9	51.6	54.6
85°	25.8	25.8	25.8	24.3	24.3
87.5°	14.8	14.8	12.5	10.3	7.4
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)