

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: P554643

Luminaire Tested: **FUSL-12-2-LD4-2HI-30-UNV-82-85-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: P554643  
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-82-85-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

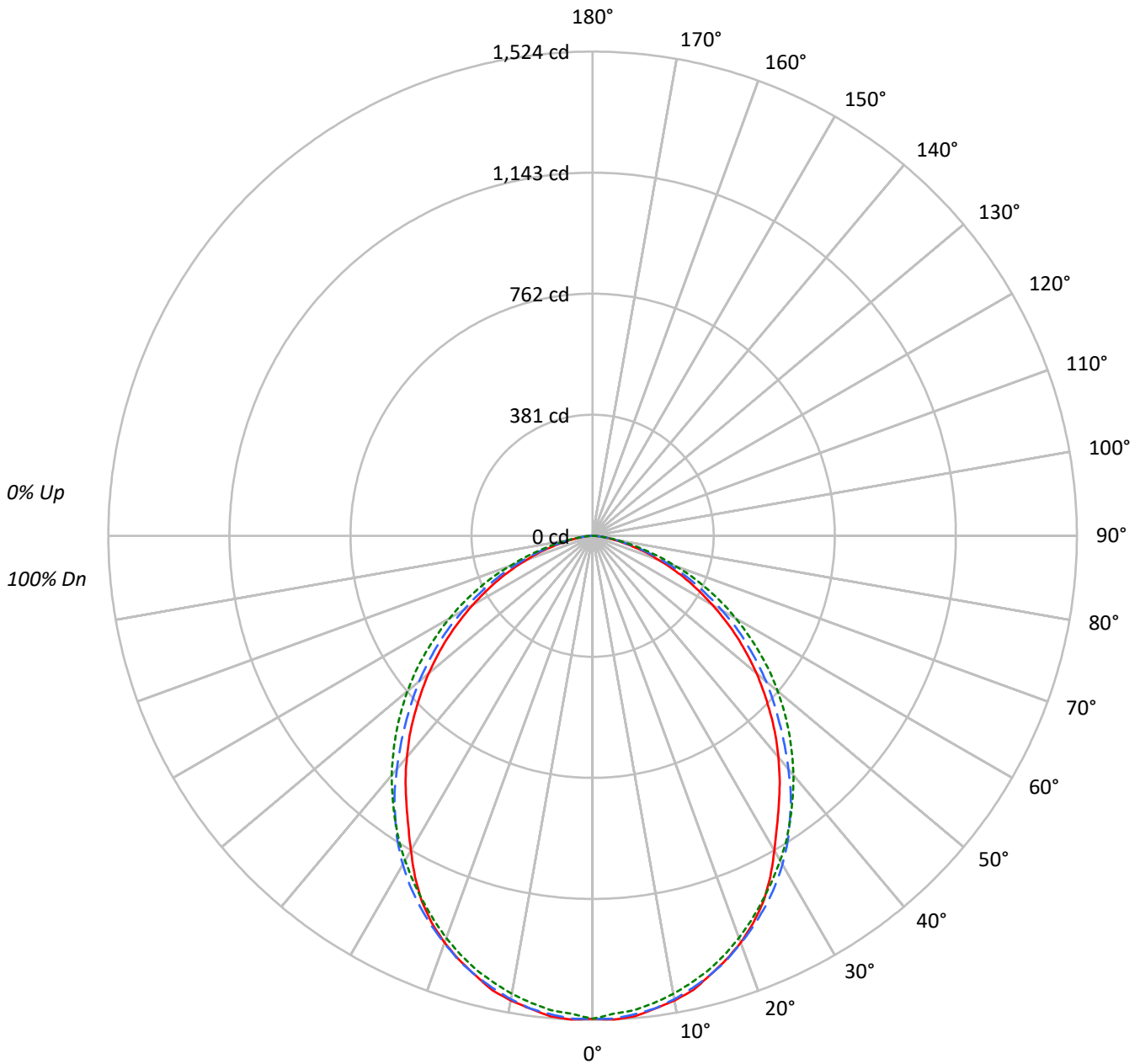
Lumens per Lamp: N/A  
Luminaire Lumens: 3515.0 lumens  
Efficiency: N/A  
Efficacy: 81.4 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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									
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°	8181	8181	8181
5°	8203	8169	8099
10°	8116	8094	8001
15°	7972	7972	7881
20°	7804	7813	7713
25°	7546	7640	7519
30°	7106	7426	7335
35°	6715	7117	7129
40°	6388	6733	6910
45°	6023	6325	6650
50°	5637	5961	6367
55°	5200	5545	6022
60°	4683	5060	5600
65°	4135	4499	5094
70°	3446	3832	4329
75°	2707	3061	3387
80°	1937	2154	2390
85°	1260	1260	1192



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	143.1	4.1
10°-20°	402.1	11.4
20°-30°	587.6	16.7
30°-40°	667.0	19.0
40°-50°	643.9	18.3
50°-60°	531.1	15.1
60°-70°	353.7	10.1
70°-80°	158.3	4.5
80°-90°	28.3	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°	1132.8	32.2
0°-40°	1799.7	51.2
0°-60°	2974.7	84.6
0°-90°	3515.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3515.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1520	1520	1520	1520	1520	
5°	1518	1518	1512	1504	1499	144
15°	1431	1434	1431	1424	1414	403
25°	1271	1281	1286	1277	1266	582
35°	1022	1036	1083	1089	1085	640
45°	791	805	831	869	874	611
55°	554	564	591	624	642	495
65°	325	334	353	378	400	322
75°	130	137	147	154	163	142
85°	20	20	20	19	19	28
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1520.1	1520.1	1520.1	1520.1	1520.1
2.5°	1524.2	1524.8	1521.3	1512.0	1506.1
5°	1518.4	1517.8	1512.0	1503.8	1499.1
7.5°	1501.5	1502.6	1500.9	1489.2	1482.8
10°	1485.1	1485.7	1481.0	1471.7	1464.1
12.5°	1464.1	1463.5	1457.1	1452.4	1440.1
15°	1430.8	1434.3	1430.8	1424.4	1414.4
17.5°	1398.7	1398.7	1401.0	1389.9	1382.3
20°	1362.5	1364.2	1364.2	1355.5	1346.7
22.5°	1320.4	1325.7	1327.4	1318.1	1307.6
25°	1270.8	1280.7	1286.5	1277.2	1266.1
27.5°	1210.6	1225.8	1243.3	1236.3	1224.1
30°	1143.5	1165.7	1194.9	1189.0	1180.3
32.5°	1079.8	1102.0	1142.3	1140.0	1135.3
35°	1022.0	1036.0	1083.3	1089.2	1085.1
37.5°	967.1	979.9	1024.3	1037.8	1034.3
40°	909.3	923.3	958.3	982.3	983.5
42.5°	852.1	865.5	894.1	928.6	928.6
45°	791.3	804.7	831.0	869.0	873.7
47.5°	731.7	745.8	771.5	809.4	817.0
50°	673.3	686.2	711.9	748.7	760.4
52.5°	612.6	626.6	651.7	685.6	702.5
55°	554.2	563.6	591.0	623.7	641.8
57.5°	493.5	502.2	533.2	561.2	579.9
60°	435.1	446.2	470.1	498.7	520.3
62.5°	379.0	390.7	411.1	436.2	460.8
65°	324.7	333.5	353.3	378.4	400.0
67.5°	272.1	279.7	299.6	317.1	339.9
70°	219.0	228.9	243.5	260.5	275.1
72.5°	176.4	180.5	192.7	205.0	220.2
75°	130.2	137.2	147.2	154.2	162.9
77.5°	93.4	97.5	103.4	109.2	117.4
80°	62.5	64.2	69.5	70.7	77.1
82.5°	38.0	39.1	40.3	40.9	43.2
85°	20.4	20.4	20.4	19.3	19.3
87.5°	11.7	11.7	9.9	8.2	5.8
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)