

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: P554712

Luminaire Tested: **FUSL-12-2-LD4-2HI-35-UNV-82-88-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: P554712  
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-35-UNV-82-88-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

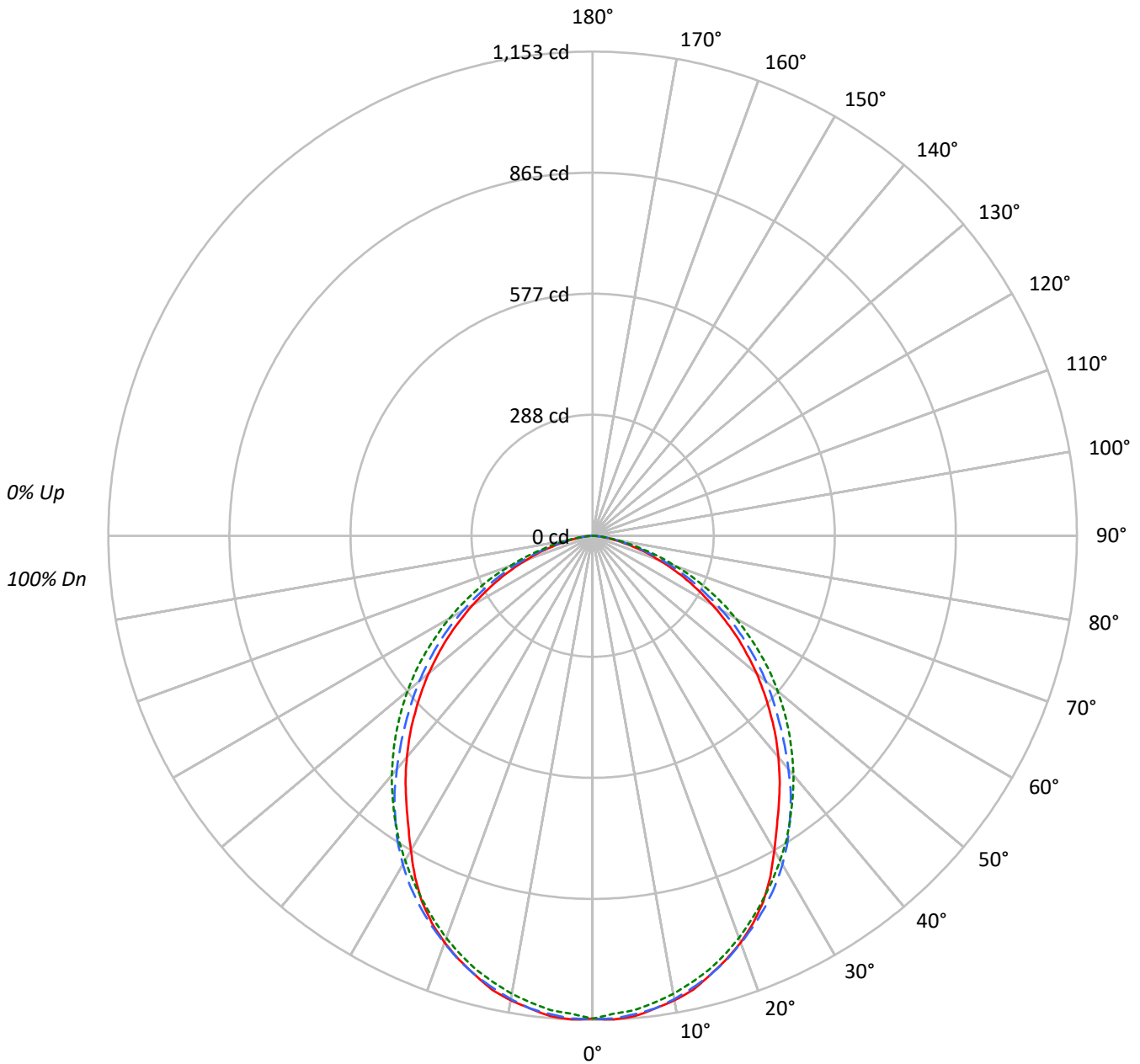
Lumens per Lamp: N/A  
Luminaire Lumens: 2659.0 lumens  
Efficiency: N/A  
Efficacy: 61.6 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 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°	6189	6189	6189
5°	6205	6179	6126
10°	6139	6122	6052
15°	6031	6031	5962
20°	5903	5911	5834
25°	5709	5779	5688
30°	5376	5617	5548
35°	5079	5384	5393
40°	4832	5094	5227
45°	4556	4785	5030
50°	4265	4509	4816
55°	3933	4195	4556
60°	3542	3828	4237
65°	3128	3404	3854
70°	2607	2899	3275
75°	2048	2314	2564
80°	1466	1630	1807
85°	957	957	902



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	108.3	4.1
10°-20°	304.2	11.4
20°-30°	444.5	16.7
30°-40°	504.5	19.0
40°-50°	487.1	18.3
50°-60°	401.8	15.1
60°-70°	267.6	10.1
70°-80°	119.7	4.5
80°-90°	21.4	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°	856.9	32.2
0°-40°	1361.5	51.2
0°-60°	2250.3	84.6
0°-90°	2659.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2659.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1150	1150	1150	1150	1150	
5°	1149	1148	1144	1138	1134	109
15°	1082	1085	1082	1078	1070	305
25°	961	969	973	966	958	440
35°	773	784	820	824	821	484
45°	599	609	629	657	661	462
55°	419	426	447	472	486	374
65°	246	252	267	286	303	244
75°	98	104	111	117	123	108
85°	16	16	16	15	15	21
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1149.9	1149.9	1149.9	1149.9	1149.9
2.5°	1153.0	1153.5	1150.8	1143.8	1139.3
5°	1148.6	1148.2	1143.8	1137.6	1134.0
7.5°	1135.8	1136.7	1135.4	1126.5	1121.7
10°	1123.4	1123.9	1120.3	1113.3	1107.5
12.5°	1107.5	1107.1	1102.2	1098.7	1089.4
15°	1082.4	1085.0	1082.4	1077.5	1070.0
17.5°	1058.1	1058.1	1059.8	1051.4	1045.7
20°	1030.7	1032.0	1032.0	1025.4	1018.7
22.5°	998.9	1002.8	1004.2	997.1	989.1
25°	961.3	968.8	973.2	966.2	957.8
27.5°	915.8	927.3	940.5	935.2	926.0
30°	865.0	881.8	903.9	899.5	892.8
32.5°	816.8	833.6	864.1	862.4	858.8
35°	773.1	783.7	819.5	823.9	820.8
37.5°	731.6	741.3	774.9	785.0	782.4
40°	687.8	698.5	725.0	743.1	744.0
42.5°	644.6	654.7	676.4	702.4	702.4
45°	598.6	608.8	628.7	657.4	660.9
47.5°	553.5	564.2	583.6	612.3	618.0
50°	509.4	519.1	538.5	566.4	575.2
52.5°	463.4	474.0	493.0	518.6	531.5
55°	419.2	426.3	447.1	471.8	485.5
57.5°	373.3	379.9	403.3	424.5	438.7
60°	329.1	337.5	355.6	377.3	393.6
62.5°	286.7	295.5	311.0	330.0	348.6
65°	245.6	252.3	267.3	286.3	302.6
67.5°	205.9	211.6	226.6	239.9	257.1
70°	165.7	173.2	184.2	197.0	208.1
72.5°	133.4	136.5	145.8	155.1	166.6
75°	98.5	103.8	111.3	116.6	123.3
77.5°	70.7	73.8	78.2	82.6	88.8
80°	47.3	48.6	52.6	53.5	58.3
82.5°	28.7	29.6	30.5	30.9	32.7
85°	15.5	15.5	15.5	14.6	14.6
87.5°	8.8	8.8	7.5	6.2	4.4
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)