

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: P555204

Luminaire Tested: **FUSL-12-2-LD4-2STD-35-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: P555204  
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-LD4-2STD-35-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 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

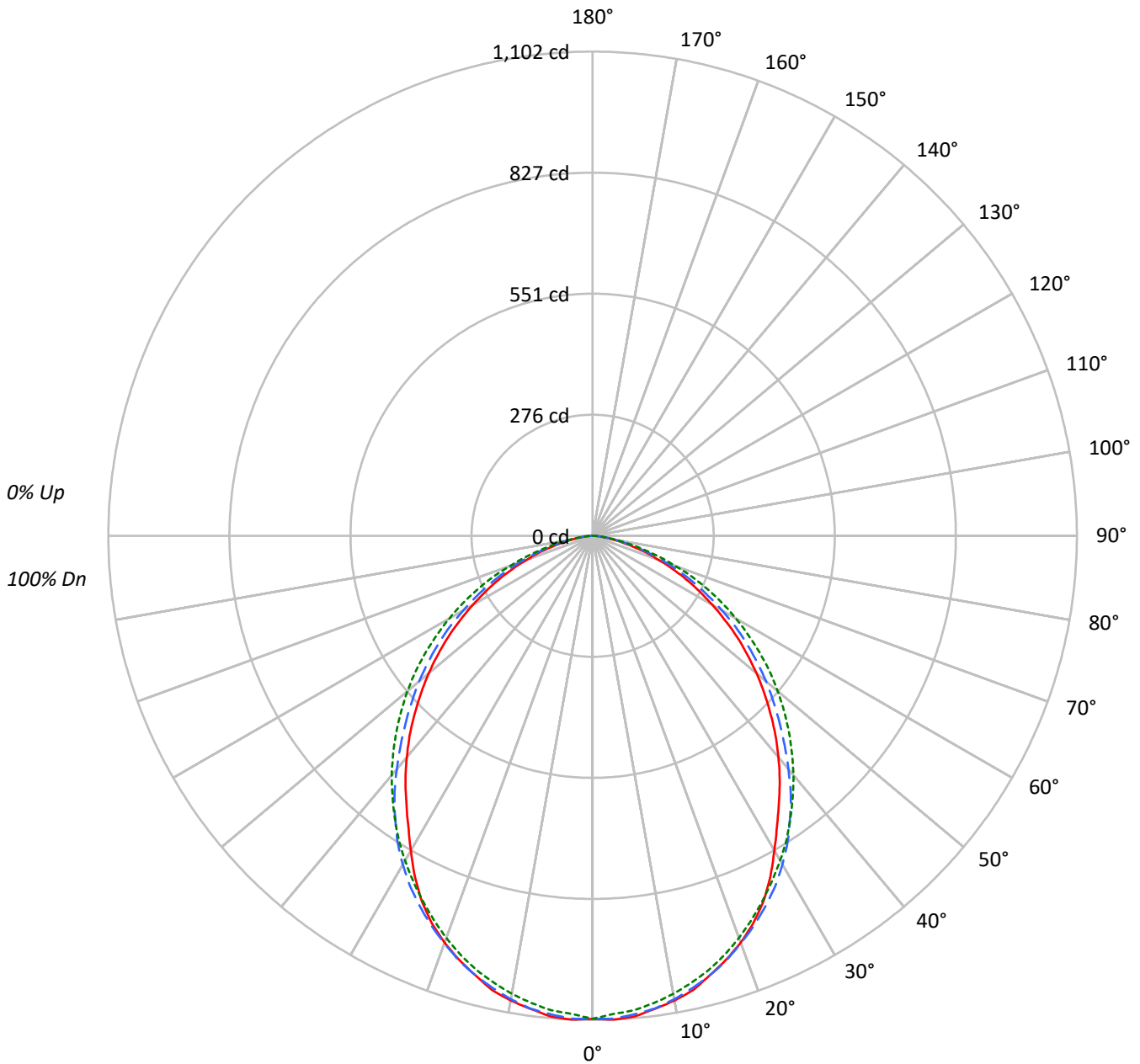
Lumens per Lamp: N/A  
Luminaire Lumens: 2542.0 lumens  
Efficiency: N/A  
Efficacy: 76.3 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 33.3  
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				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	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°	5916	5916	5916
5°	5933	5907	5857
10°	5869	5854	5786
15°	5765	5765	5699
20°	5643	5651	5578
25°	5457	5525	5437
30°	5139	5370	5304
35°	4856	5147	5156
40°	4620	4869	4997
45°	4356	4574	4809
50°	4078	4310	4604
55°	3761	4010	4356
60°	3386	3660	4050
65°	2990	3254	3684
70°	2493	2771	3130
75°	1959	2213	2450
80°	1401	1559	1726
85°	914	914	858



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.5	4.1
10°-20°	290.8	11.4
20°-30°	424.9	16.7
30°-40°	482.3	19.0
40°-50°	465.6	18.3
50°-60°	384.1	15.1
60°-70°	255.8	10.1
70°-80°	114.5	4.5
80°-90°	20.5	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°	819.2	32.2
0°-40°	1301.6	51.2
0°-60°	2151.3	84.6
0°-90°	2542.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2542.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1099	1099	1099	1099	1099	
5°	1098	1098	1093	1088	1084	104
15°	1035	1037	1035	1030	1023	292
25°	919	926	930	924	916	421
35°	739	749	783	788	785	463
45°	572	582	601	628	632	442
55°	401	408	427	451	464	358
65°	235	241	256	274	289	233
75°	94	99	106	112	118	103
85°	15	15	15	14	14	20
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1099.3	1099.3	1099.3	1099.3	1099.3
2.5°	1102.3	1102.7	1100.2	1093.4	1089.2
5°	1098.1	1097.7	1093.4	1087.5	1084.1
7.5°	1085.8	1086.7	1085.4	1077.0	1072.3
10°	1074.0	1074.4	1071.1	1064.3	1058.8
12.5°	1058.8	1058.4	1053.7	1050.4	1041.5
15°	1034.7	1037.3	1034.7	1030.1	1022.9
17.5°	1011.5	1011.5	1013.2	1005.2	999.7
20°	985.3	986.6	986.6	980.2	973.9
22.5°	954.9	958.7	960.0	953.2	945.6
25°	919.0	926.2	930.4	923.7	915.6
27.5°	875.5	886.5	899.2	894.1	885.2
30°	826.9	843.0	864.1	859.9	853.5
32.5°	780.9	797.0	826.1	824.4	821.0
35°	739.1	749.2	783.4	787.7	784.7
37.5°	699.4	708.7	740.8	750.5	748.0
40°	657.6	667.7	693.1	710.4	711.2
42.5°	616.2	625.9	646.6	671.5	671.5
45°	572.3	582.0	601.0	628.4	631.8
47.5°	529.2	539.3	557.9	585.4	590.9
50°	487.0	496.2	514.8	541.4	549.9
52.5°	443.0	453.2	471.3	495.8	508.1
55°	400.8	407.6	427.4	451.1	464.2
57.5°	356.9	363.2	385.6	405.9	419.4
60°	314.6	322.7	340.0	360.7	376.3
62.5°	274.1	282.5	297.3	315.5	333.2
65°	234.8	241.2	255.5	273.7	289.3
67.5°	196.8	202.3	216.7	229.3	245.8
70°	158.4	165.6	176.1	188.4	198.9
72.5°	127.5	130.5	139.4	148.2	159.2
75°	94.2	99.2	106.4	111.5	117.8
77.5°	67.6	70.5	74.8	79.0	84.9
80°	45.2	46.5	50.3	51.1	55.7
82.5°	27.5	28.3	29.1	29.6	31.3
85°	14.8	14.8	14.8	13.9	13.9
87.5°	8.4	8.4	7.2	5.9	4.2
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)