

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: P553862

Luminaire Tested: **FUSL-12-2-LD4-1HI-30-UNV-81-87-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: P553862  
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-LD4-1HI-30-UNV-81-87-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

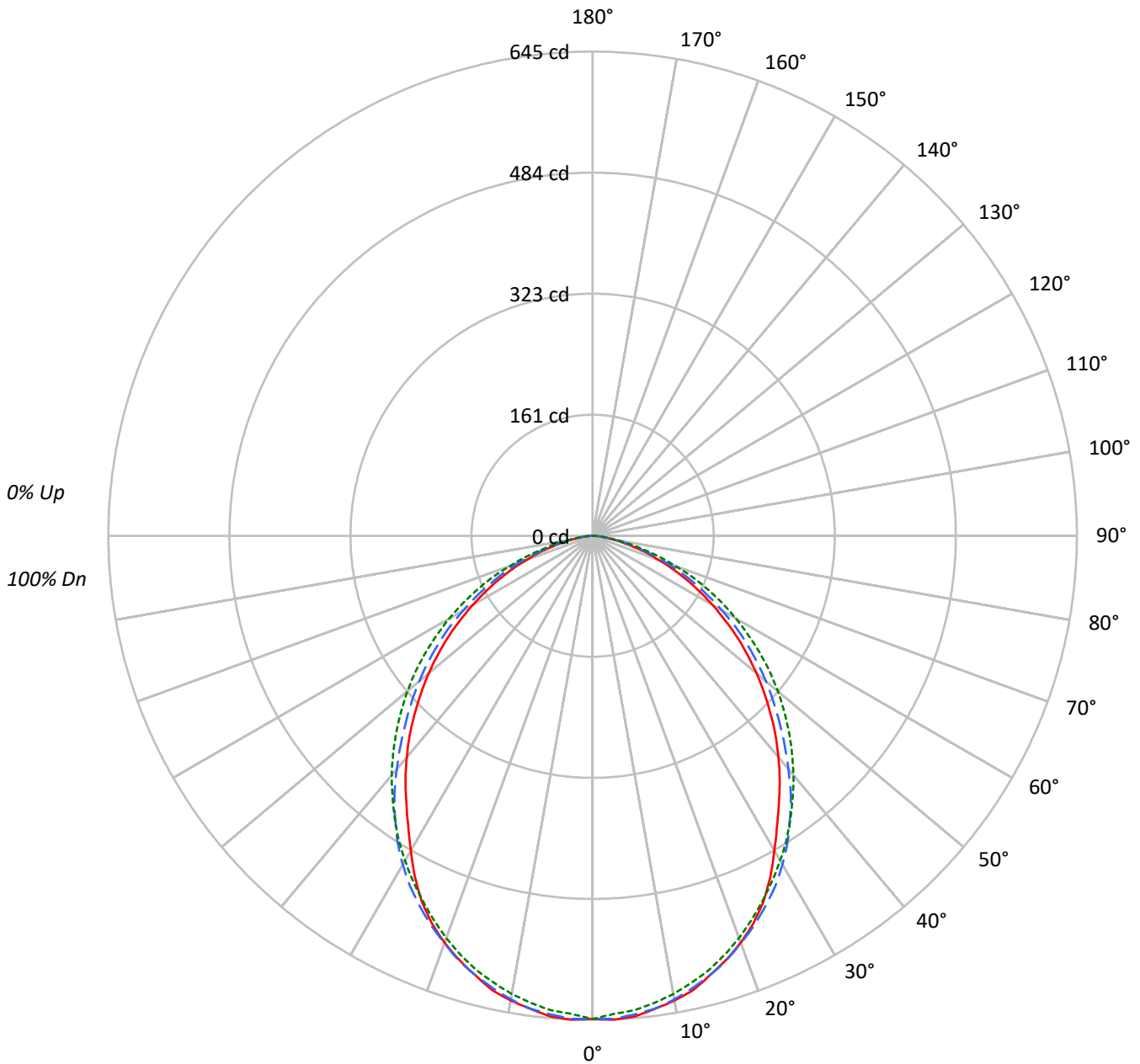
Lumens per Lamp: N/A  
Luminaire Lumens: 1488.0 lumens  
Efficiency: N/A  
Efficacy: 68.9 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 21.6  
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				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°	3463	3463	3463
5°	3473	3458	3428
10°	3436	3427	3387
15°	3375	3375	3336
20°	3304	3308	3265
25°	3195	3234	3183
30°	3008	3143	3105
35°	2842	3013	3018
40°	2704	2850	2925
45°	2550	2678	2815
50°	2386	2524	2695
55°	2201	2348	2549
60°	1983	2142	2371
65°	1751	1905	2156
70°	1459	1622	1832
75°	1146	1295	1435
80°	821	911	1010
85°	537	537	506



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	60.6	4.1
10°-20°	170.2	11.4
20°-30°	248.7	16.7
30°-40°	282.3	19.0
40°-50°	272.6	18.3
50°-60°	224.8	15.1
60°-70°	149.7	10.1
70°-80°	67.0	4.5
80°-90°	12.0	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°	479.5	32.2
0°-40°	761.9	51.2
0°-60°	1259.3	84.6
0°-90°	1488.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1488.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	644	644	644	644	644	
5°	643	642	640	637	635	61
15°	606	607	606	603	599	171
25°	538	542	545	541	536	246
35°	433	439	459	461	459	271
45°	335	341	352	368	370	258
55°	235	239	250	264	272	209
65°	138	141	150	160	169	136
75°	55	58	62	65	69	60
85°	9	9	9	8	8	12
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	643.5	643.5	643.5	643.5	643.5
2.5°	645.3	645.5	644.0	640.1	637.6
5°	642.8	642.5	640.1	636.6	634.6
7.5°	635.6	636.1	635.4	630.4	627.7
10°	628.7	628.9	627.0	623.0	619.8
12.5°	619.8	619.5	616.8	614.8	609.7
15°	605.7	607.2	605.7	603.0	598.8
17.5°	592.1	592.1	593.1	588.4	585.2
20°	576.8	577.5	577.5	573.8	570.1
22.5°	559.0	561.2	561.9	558.0	553.5
25°	538.0	542.2	544.6	540.7	536.0
27.5°	512.5	518.9	526.3	523.4	518.2
30°	484.1	493.5	505.8	503.3	499.6
32.5°	457.1	466.5	483.6	482.6	480.6
35°	432.6	438.6	458.6	461.1	459.3
37.5°	409.4	414.8	433.6	439.3	437.8
40°	384.9	390.9	405.7	415.8	416.3
42.5°	360.7	366.4	378.5	393.1	393.1
45°	335.0	340.7	351.8	367.9	369.8
47.5°	309.8	315.7	326.6	342.7	345.9
50°	285.0	290.5	301.4	316.9	321.9
52.5°	259.3	265.3	275.9	290.2	297.4
55°	234.6	238.6	250.2	264.0	271.7
57.5°	208.9	212.6	225.7	237.6	245.5
60°	184.2	188.9	199.0	211.1	220.3
62.5°	160.4	165.4	174.0	184.7	195.1
65°	137.5	141.2	149.6	160.2	169.3
67.5°	115.2	118.4	126.8	134.2	143.9
70°	92.7	96.9	103.1	110.3	116.4
72.5°	74.7	76.4	81.6	86.8	93.2
75°	55.1	58.1	62.3	65.3	69.0
77.5°	39.6	41.3	43.8	46.2	49.7
80°	26.5	27.2	29.4	29.9	32.6
82.5°	16.1	16.6	17.1	17.3	18.3
85°	8.7	8.7	8.7	8.2	8.2
87.5°	4.9	4.9	4.2	3.5	2.5
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)