

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: P555156

Luminaire Tested: **FUSL-12-2-LD4-2STD-30-UNV-82-86-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: P555156  
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-30-UNV-82-86-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

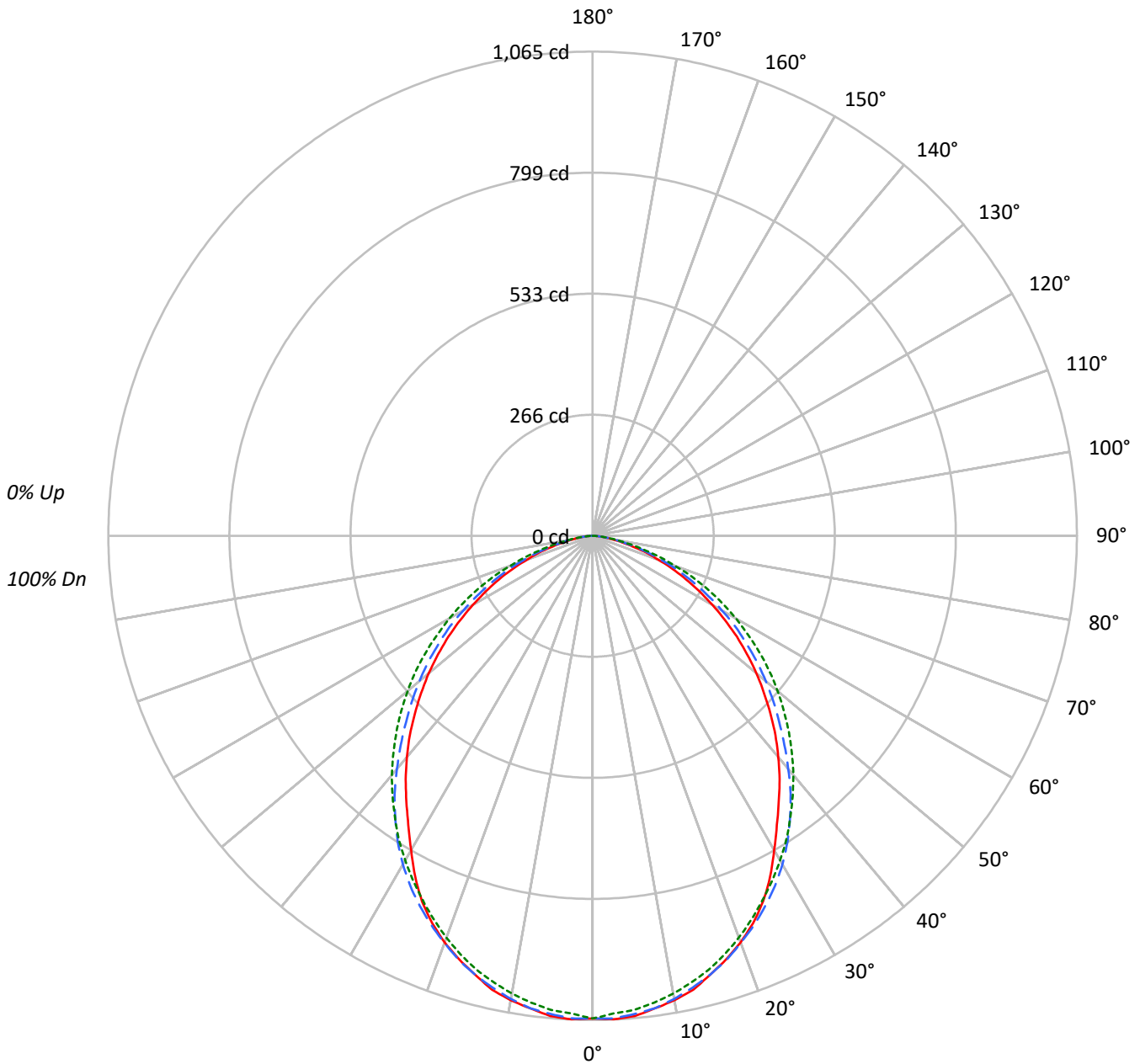
Lumens per Lamp: N/A  
Luminaire Lumens: 2455.0 lumens  
Efficiency: N/A  
Efficacy: 73.7 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 33.3  
Input Voltage (V): NR  
Input Current (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					
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	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°	5714	5714	5714
5°	5729	5705	5656
10°	5669	5653	5588
15°	5568	5568	5504
20°	5450	5457	5387
25°	5271	5336	5251
30°	4963	5186	5123
35°	4690	4971	4979
40°	4462	4702	4826
45°	4207	4418	4644
50°	3938	4163	4447
55°	3632	3873	4206
60°	3271	3534	3912
65°	2888	3143	3558
70°	2408	2677	3023
75°	1892	2138	2366
80°	1351	1503	1667
85°	883	883	834



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.0	4.1
10°-20°	280.8	11.4
20°-30°	410.4	16.7
30°-40°	465.8	19.0
40°-50°	449.7	18.3
50°-60°	371.0	15.1
60°-70°	247.0	10.1
70°-80°	110.6	4.5
80°-90°	19.8	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°	791.2	32.2
0°-40°	1257.0	51.2
0°-60°	2077.7	84.6
0°-90°	2455.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2455.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1062	1062	1062	1062	1062	
5°	1060	1060	1056	1050	1047	100
15°	999	1002	999	995	988	282
25°	888	894	899	892	884	406
35°	714	724	757	761	758	447
45°	553	562	580	607	610	426
55°	387	394	413	436	448	346
65°	227	233	247	264	279	225
75°	91	96	103	108	114	99
85°	14	14	14	14	14	19
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1061.7	1061.7	1061.7	1061.7	1061.7
2.5°	1064.6	1065.0	1062.5	1056.0	1051.9
5°	1060.5	1060.1	1056.0	1050.3	1047.0
7.5°	1048.7	1049.5	1048.3	1040.1	1035.6
10°	1037.3	1037.7	1034.4	1027.9	1022.6
12.5°	1022.6	1022.2	1017.7	1014.4	1005.8
15°	999.3	1001.8	999.3	994.8	987.9
17.5°	976.9	976.9	978.5	970.8	965.5
20°	951.6	952.8	952.8	946.7	940.6
22.5°	922.2	925.9	927.1	920.6	913.3
25°	887.6	894.5	898.6	892.0	884.3
27.5°	845.5	856.2	868.4	863.5	854.9
30°	798.6	814.1	834.5	830.5	824.3
32.5°	754.2	769.7	797.8	796.2	792.9
35°	713.8	723.6	756.6	760.7	757.8
37.5°	675.5	684.4	715.4	724.8	722.4
40°	635.1	644.9	669.3	686.1	686.9
42.5°	595.1	604.5	624.5	648.5	648.5
45°	552.7	562.1	580.4	606.9	610.2
47.5°	511.1	520.9	538.8	565.3	570.6
50°	470.3	479.3	497.2	522.9	531.1
52.5°	427.9	437.7	455.2	478.9	490.7
55°	387.1	393.6	412.8	435.6	448.3
57.5°	344.7	350.8	372.4	392.0	405.0
60°	303.9	311.6	328.3	348.3	363.4
62.5°	264.7	272.9	287.2	304.7	321.8
65°	226.8	232.9	246.8	264.3	279.4
67.5°	190.1	195.4	209.2	221.5	237.4
70°	153.0	159.9	170.1	181.9	192.1
72.5°	123.2	126.0	134.6	143.2	153.8
75°	91.0	95.9	102.8	107.7	113.8
77.5°	65.3	68.1	72.2	76.3	82.0
80°	43.6	44.9	48.5	49.4	53.8
82.5°	26.5	27.3	28.1	28.6	30.2
85°	14.3	14.3	14.3	13.5	13.5
87.5°	8.2	8.2	6.9	5.7	4.1
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)