

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: P554654

Luminaire Tested: **FUSL-12-2-LD4-2HI-30-UNV-82-97-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: P554654  
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-82-97-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .375  
CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT  
LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

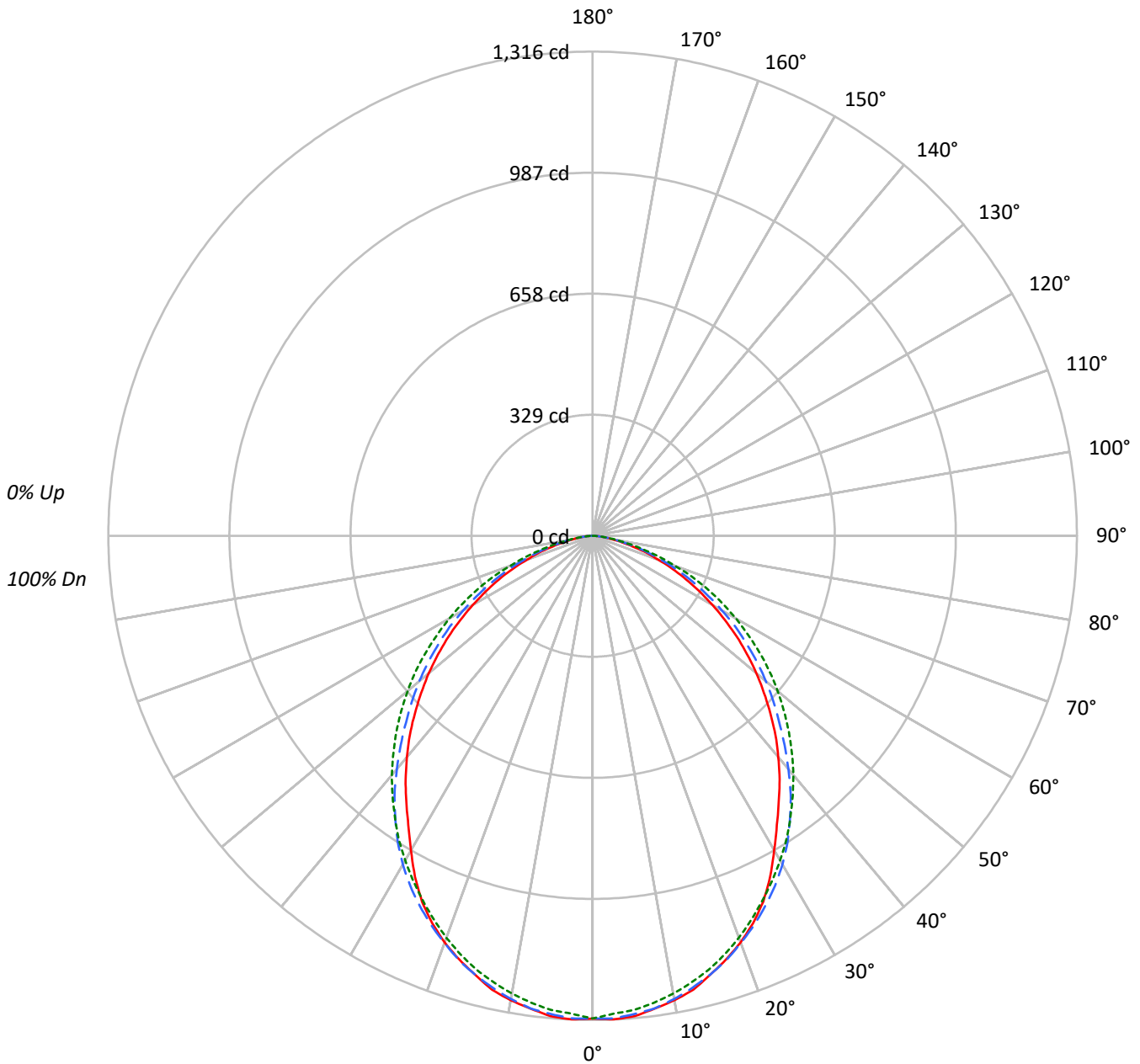
Lumens per Lamp: N/A  
Luminaire Lumens: 3034.0 lumens  
Efficiency: N/A  
Efficacy: 70.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 43.2  
Input Voltage (V): NR  
Input Current (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									
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°	7062	7062	7062
5°	7081	7051	6991
10°	7006	6986	6906
15°	6881	6881	6803
20°	6735	6744	6657
25°	6514	6595	6490
30°	6134	6410	6331
35°	5796	6144	6154
40°	5514	5812	5964
45°	5198	5460	5740
50°	4866	5145	5495
55°	4489	4786	5198
60°	4042	4368	4834
65°	3570	3884	4397
70°	2974	3308	3736
75°	2337	2641	2924
80°	1671	1860	2061
85°	1087	1087	1025



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	123.5	4.1
10°-20°	347.1	11.4
20°-30°	507.2	16.7
30°-40°	575.7	19.0
40°-50°	555.8	18.3
50°-60°	458.4	15.1
60°-70°	305.3	10.1
70°-80°	136.6	4.5
80°-90°	24.4	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°	977.8	32.2
0°-40°	1553.5	51.2
0°-60°	2567.7	84.6
0°-90°	3034.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3034.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1312	1312	1312	1312	1312	
5°	1311	1310	1305	1298	1294	124
15°	1235	1238	1235	1230	1221	348
25°	1097	1106	1110	1102	1093	502
35°	882	894	935	940	937	553
45°	683	695	717	750	754	527
55°	478	486	510	538	554	427
65°	280	288	305	327	345	278
75°	112	118	127	133	141	123
85°	18	18	18	17	17	24
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1312.1	1312.1	1312.1	1312.1	1312.1
2.5°	1315.7	1316.2	1313.1	1305.1	1300.0
5°	1310.6	1310.1	1305.1	1298.0	1294.0
7.5°	1296.0	1297.0	1295.5	1285.4	1279.9
10°	1281.9	1282.4	1278.4	1270.3	1263.7
12.5°	1263.7	1263.2	1257.7	1253.7	1243.1
15°	1235.0	1238.0	1235.0	1229.5	1220.9
17.5°	1207.3	1207.3	1209.3	1199.7	1193.2
20°	1176.0	1177.5	1177.5	1170.0	1162.4
22.5°	1139.7	1144.3	1145.8	1137.7	1128.6
25°	1096.9	1105.5	1110.5	1102.4	1092.9
27.5°	1045.0	1058.1	1073.2	1067.1	1056.6
30°	987.0	1006.1	1031.4	1026.3	1018.8
32.5°	932.0	951.2	986.0	984.0	979.9
35°	882.1	894.2	935.1	940.1	936.6
37.5°	834.8	845.9	884.2	895.8	892.7
40°	784.9	797.0	827.2	847.9	848.9
42.5°	735.5	747.1	771.8	801.5	801.5
45°	683.0	694.6	717.3	750.1	754.1
47.5°	631.6	643.7	665.9	698.7	705.2
50°	581.2	592.3	614.5	646.2	656.3
52.5°	528.8	540.9	562.6	591.8	606.4
55°	478.4	486.4	510.1	538.4	554.0
57.5°	425.9	433.5	460.2	484.4	500.6
60°	375.5	385.1	405.8	430.5	449.1
62.5°	327.1	337.2	354.9	376.5	397.7
65°	280.3	287.8	305.0	326.6	345.3
67.5°	234.9	241.5	258.6	273.7	293.4
70°	189.0	197.6	210.2	224.8	237.4
72.5°	152.2	155.8	166.3	176.9	190.0
75°	112.4	118.5	127.0	133.1	140.6
77.5°	80.7	84.2	89.2	94.3	101.3
80°	53.9	55.4	60.0	61.0	66.5
82.5°	32.8	33.8	34.8	35.3	37.3
85°	17.6	17.6	17.6	16.6	16.6
87.5°	10.1	10.1	8.6	7.1	5.0
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)