

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: P555023

Luminaire Tested: **FUSL-12-2-LD4-2LO-40-UNV-81-97-EDD**

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: P555023  
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-LD4-2LO-40-UNV-81-97-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .375  
CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT  
LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

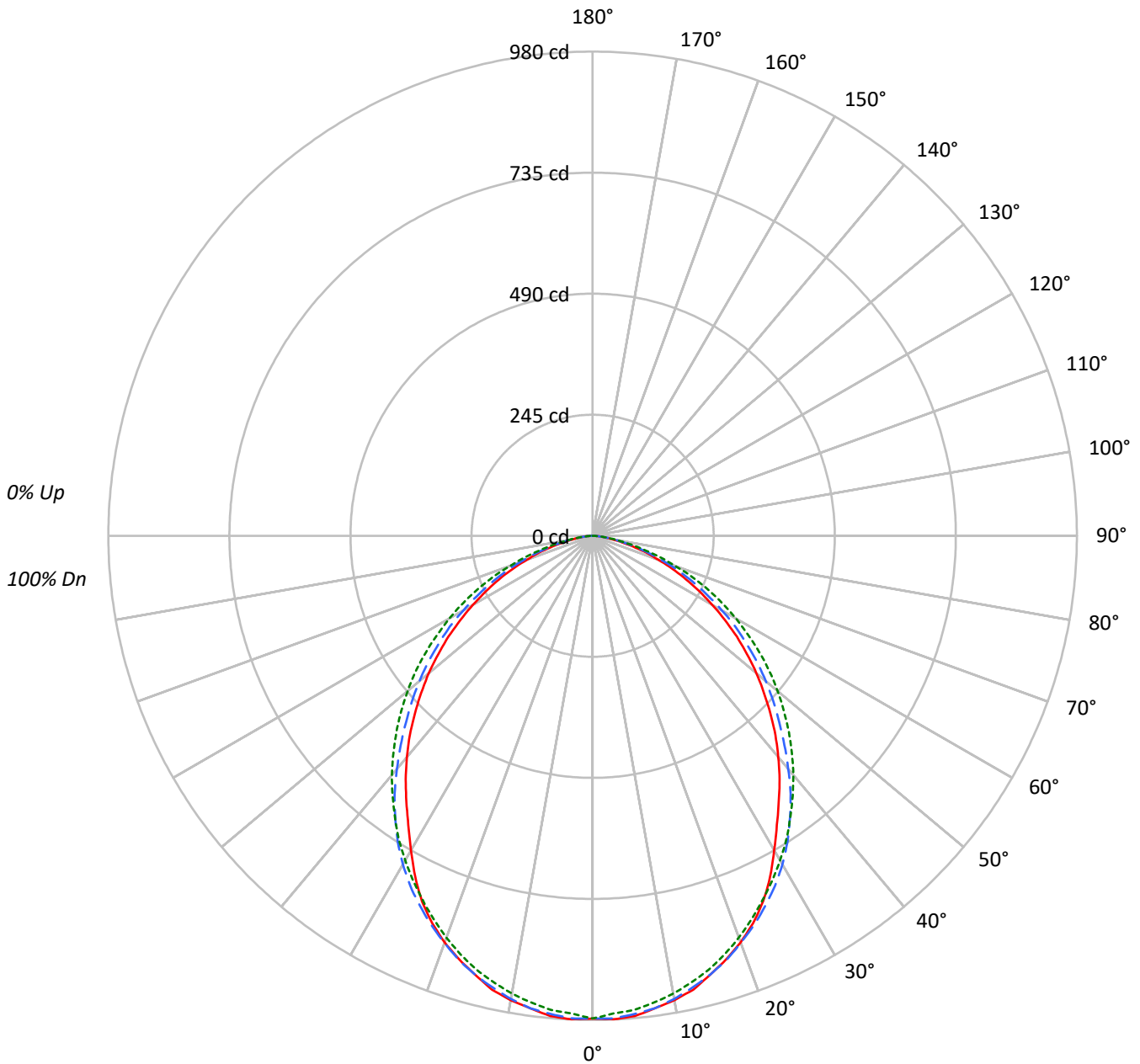
Lumens per Lamp: N/A  
Luminaire Lumens: 2259.0 lumens  
Efficiency: N/A  
Efficacy: 96.5 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 23.4  
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°	5258	5258	5258
5°	5272	5250	5205
10°	5216	5202	5142
15°	5123	5123	5065
20°	5015	5021	4957
25°	4850	4910	4832
30°	4567	4772	4714
35°	4315	4574	4581
40°	4106	4327	4440
45°	3871	4065	4274
50°	3623	3831	4092
55°	3342	3564	3871
60°	3010	3252	3599
65°	2658	2892	3274
70°	2214	2463	2782
75°	1740	1967	2177
80°	1246	1385	1534
85°	809	809	766



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	92.0	4.1
10°-20°	258.4	11.4
20°-30°	377.6	16.7
30°-40°	428.6	19.0
40°-50°	413.8	18.3
50°-60°	341.3	15.1
60°-70°	227.3	10.1
70°-80°	101.7	4.5
80°-90°	18.2	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°	728.0	32.2
0°-40°	1156.6	51.2
0°-60°	1911.8	84.6
0°-90°	2259.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2259.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	977	977	977	977	977	
5°	976	976	972	966	963	92
15°	920	922	920	915	909	259
25°	817	823	827	821	814	374
35°	657	666	696	700	697	412
45°	509	517	534	558	562	392
55°	356	362	380	401	412	318
65°	209	214	227	243	257	207
75°	84	88	95	99	105	92
85°	13	13	13	12	12	18
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	977.0	977.0	977.0	977.0	977.0
2.5°	979.6	980.0	977.7	971.7	968.0
5°	975.8	975.5	971.7	966.5	963.4
7.5°	964.9	965.7	964.6	957.1	952.9
10°	954.4	954.8	951.8	945.8	940.9
12.5°	940.9	940.6	936.4	933.4	925.5
15°	919.5	921.8	919.5	915.4	909.0
17.5°	898.9	898.9	900.4	893.3	888.4
20°	875.6	876.7	876.7	871.1	865.5
22.5°	848.6	852.0	853.1	847.1	840.3
25°	816.7	823.1	826.8	820.8	813.7
27.5°	778.0	787.8	799.1	794.6	786.7
30°	734.9	749.1	767.9	764.2	758.5
32.5°	694.0	708.2	734.1	732.6	729.6
35°	656.8	665.8	696.2	700.0	697.3
37.5°	621.5	629.8	658.3	666.9	664.7
40°	584.4	593.4	615.9	631.3	632.0
42.5°	547.6	556.2	574.6	596.8	596.8
45°	508.6	517.2	534.1	558.5	561.5
47.5°	470.3	479.3	495.8	520.2	525.1
50°	432.7	441.0	457.5	481.2	488.7
52.5°	393.7	402.7	418.9	440.6	451.5
55°	356.2	362.2	379.8	400.8	412.5
57.5°	317.1	322.8	342.7	360.7	372.7
60°	279.6	286.7	302.1	320.5	334.4
62.5°	243.6	251.1	264.2	280.4	296.1
65°	208.7	214.3	227.1	243.2	257.1
67.5°	174.9	179.8	192.5	203.8	218.4
70°	140.7	147.1	156.5	167.4	176.8
72.5°	113.3	116.0	123.9	131.7	141.5
75°	83.7	88.2	94.6	99.1	104.7
77.5°	60.1	62.7	66.4	70.2	75.4
80°	40.2	41.3	44.7	45.4	49.5
82.5°	24.4	25.1	25.9	26.3	27.8
85°	13.1	13.1	13.1	12.4	12.4
87.5°	7.5	7.5	6.4	5.3	3.8
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)