



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

F2 LABS
26501 Ridge Road
Damascus, MD 20872
Wendy Fuster Phone: 301 253 4500 x101

ELECTRICAL

Valid To: September 30, 2025

Certificate Number: 0793.01

In recognition of the successful completion of the A2LA evaluation process (including an assessment of the organization's compliance with A2LA's FDA ASCA Accreditation Program ¹ requirements), accreditation is granted to this laboratory to perform the following Product Safety Tests (excluding UV Tests, as applicable):

Test:

Test Method(s) ²:

Industrial, Machinery,
and Controls

UL: 22, 67, 98, 293, 294, 325, 353, 429, 508, 508a, 508b, 508c,
508e, 541, 561, 632, 751, 756, 763, 778, 863, 867, 873, 916, 917,
984, 1004-1 to -8, 1008, 1069, 1433, 1472, 1564, 1594, 1647, 2157,
2158, 61800-5-1, 60839-11-1;
NFPA 79;
CSA: 10, 14, 46, 100, 113, 128, 178, 195, 274, 301, Z432, 60839-11-1;
IEC/EN: 4413, 4414, 12100, 13849-1, 13849-2, 60034-1, 60092-504,
61800-5-1, 60204-1, 60204-11, 60204-31, 60204-32, 60839-11-1;
BS: 12100, 13849-1, 13849-2, 60034-1, 60092-504, 61800-5-1, 60204-1,
60204-11, 60204-31

Laboratory

UL: 61010-1 (including all part 2s), 61010A-1 (including all part 2s),
61010B-1 (including all part 2s), 61010C-1, 1262, 3111-1;
CSA 61010-1 (including all part 2s);
EN 61010-1 (including all part 2s);
IEC 61010-1 (including all part 2s);
BS 61010-1 (including all part 2s);
IEC 61010-1 Edition 3.1 2017-01 CONSOLIDATED VERSION

Test:

Medical

Test Method(s) 2:

UL: 544, 1069, 2601-1, 60601-1, 60601-1-4, 60601-1-6, 60601-1-8, 60601-1-11, 60601 (including all part 2s);
ANSI/AAMI ES60601-1; ANSI/AAMI HA60601-1-11;
CSA: 601.1, 60601-1, 60601-1-4, 60601-1-6, 60601-1-8, 60601-1-11, 60601 (including all part 2s);
IEC: 60601-1, 60601-1-4, 60601-1-6, 60601-1-8, 60601-1-11, 60601 (including all part 2s), 62366, 62304, 80601 (all part 2s);
EN: 60601-1, 60601-1-4, 60601-1-6, 60601-1-8, 60601-1-11, 60601 (including all part 2s), 62366, 62304, 80601 (all part 2s),
EN 45502-1 (including all part 2s);
ISO 7176-14/RESNA WC-2 Section 14; ISO 7176-25;

BS EN ISO 10079-1;

BS EN ISO 7376; BS ISO 18190;

BS: 60601-1, 60601-1-6, 60601-1-8, 60601-1-11,
60601 (including all part 2s), 62366, 62304, 80601 (all part 2s);

ANSI AAMI ES60601-1:2005/(R)2012 & A1:2012, C1:2009/(R)2012 & A2:2010/(R)2012 (Cons. Text) [Incl. AMD2:2021];
IEC 60601-1 Edition 3.2 2020-08 CONSOLIDATED VERSION;

ANSI AAMI HA60601-1-11:2015 [Including AMD1:2021];
IEC 60601-1-11 Edition 2.1 2020-07 CONSOLIDATED VERSION;

IEC 60601-1-10 Edition 1.2 2020-07 CONSOLIDATED VERSION;
IEC 60601-1-6 Edition 3.2 2020-07 CONSOLIDATED VERSION;

ANSI AAMI IEC 60601-1-8:2006 and A1:2012 [Including AMD 2:2021];
IEC 60601-1-8 Edition 2.1 2012-11;
IEC 60601-1-8 Edition 2.2 2020-07 CONSOLIDATED VERSION;

ANSI AAMI IEC 60601-1-12:2016 [Including AMD 1:2021];
IEC 60601-1-12 Edition 1.0 2014-06;
IEC 60601-1-12 Edition 1.1 2020-07 CONSOLIDATED VERSION;

IEC 60601-2-10 Edition 2.1 2016-04;

IEC 60601-2-18 Edition 3.0 2009-08;

ANSI AAMI IEC 60601-2-19 Edition 2.1 2016-04;
ANSI AAMI IEC 60601-2-19 Edition 3.0 2020-09;

ANSI AAMI IEC 60601-2-2:2017;
IEC 60601-2-2 Edition 6.0 2017-03;
IEC 60601-2-2 Edition 6.1 2023-02;

ANSI AAMI IEC 60601-2-20 Edition 2.1 2016-04;
ANSI AAMI IEC 60601-2-20 Edition 3.0 2020-09

Test:

Test Method(s) ²:

Medical (*continued*)

IEC 60601-2-21 Edition 2.1 2016-04;
IEC 60601-2-21 Edition 3.0 2020-09;
IEC 60601-2-22 Edition 3.1 2012-10;
ANSI AAMI IEC 60601-2-25:2011/(R)2016;
IEC 60601-2-25 Edition 2.0 2011-10;
ANSI AAMI IEC 60601-2-27:2011(R)2016;
IEC 60601-2-27 Edition 3.0 2011-03;

ANSI AAMI IEC 60601-2-47:2012/(R)2016;
IEC 60601-2-47 Edition 2.0 2012-02;

ANSI AAMI IEC 60601-2-50 Edition 2.1 2016-04;
ANSI AAMI IEC 60601-2-50 Edition 3.0 2020-09;

IEC 60601-2-52 Edition 1.1 2015-03 CONSOLIDATED VERSION;
IEC 60601-2-57 Edition 1.0 2011-01;
IEC 60601-2-6 Edition 2.1 2016-04;
IEC 80601-2-35 Edition 2.1 2016-04;
IEC 60601-2-35 Edition 2.0 2020-09;

IEC 60601-2-37 Edition 2.1 2015;

IEC 80601-2-59 Edition 2.0 2017-09;

IEC 80601-2-60 Edition 2.0 2019-06;

ISO 80601-2-56 Second Edition 2017-03;

ISO 80601-2-69 Second Edition 2020-11;

ISO 80601-2-70 Second edition 2020-11;

ISO 80601-2-74 First Edition 2017-05

Household Appliances

UL: 73, 82, 130, 141, 174, 197, 244a, 250, 471, 484, 498, 499, 507,
563, 621, 749, 826, 858, 859, 921, 923, 982, 998, 1005, 1017, 1018,
1026, 1028, 1042, 1083, 1086, 1206, 1261, 1278, 1286, 1431, 1445,
1563, 1638, 1727, 1995, 60335-1 (including all part 2s),
60730-1 (including all part 2s);
CSA: 64-10, 68, 236, 243, 60335-1 (including all part 2s),
60730-1 (including all part 2s);
IEC/EN: 60335-1 (including all part 2s), 60730-1 (including all part 2s);
BS: 60335-1 (including all part 2s), 60730-1 (including all part 2s)

IT Equipment,
Audio, Video, and
Communication

UL: 122, 469, 813, 1459, 1492, 2044, 3044, 60065-1, 60950-1, 62368-1;
CSA: 107.3, 60065-1, 60950-1, 62368-1;
IEC/EN/BS: 60065-1, 60950-1, 60950-22,
60945 (*excluding sections 10, 11, & 11.2*), 62040-1, 62368-1;
AS/NZS: 60065-1, 60950-1, 62040-1, 62368-1;
BS: 60950-1, 60950-22, 62368-1

<u>Test:</u>	<u>Test Method(s) ²:</u>
Hazardous Location	UL: 698A, 913, 1203, 1604, 60079 series, 121201; NFPA 496; CSA: 157, 213.17, 60079 series; C22.2 25, C22.2 30; IEC/EN 60079 series; BS 60079 series; ISA 12.12.01
Lighting	UL: 48, 482, 153, 298, 496, 542, 676, 924, 935, 970, 1029, 1088, 1230, 1573, 1574, 1598, 1786, 1838, 1993, 2108, 2703, 8750, 60598-1 (including all part 2s); CSA: 12, 89, 166, 207, 250 (including all parts), E60598-1; IEC/EN: 60598-1, 61347-1 (including all part 2s); BS: 60598-1, 61347-1 (including all part 2s)
Power Supplies and Transformers	UL: 506, 697, 1012, 1236, 1310, 1561, 1562, 1585, 2161; CSA: 47, 107.1, 107.2
Tools	UL: 45, 987, 1447, 1448, 60745-1 (including all part 2s), 62841-1 (including all particular standards); CSA: 60745-1 (including all part 2s), 62841-1 (including all particular standards); IEC/EN: 60745-1 (including all part 2s), 62841-1 (including all particular standards); BS: 60745-1 (including all part 2s), 62841-1 (including all particular standards)
Enclosures	UL: 50, 50e, 514; CSA: 0.4, 94-1, 94-2; IEC/EN 60529; BS 60529; NEMA 250; ISO 20653
Wiring, Insulation, and Flammability	UL: 94, 213, 355, 467, 796, 817, 840; IEC 60695-11-10; IEC 60695-11-20; IEC 60695-11-5; IEC 60695-2-11; IEC 60695-2-12; IEC 60695-2-13; IEC 60695-10-2; IEC 60695-10-3
Other	UL: 609, 696, 869a, 961, 962, 969, 1097, 1244, 1418, 2305, 2361, 4200A; EN 50085-1 (including all part 2s); EN/IEC 63000; CSA 203; SPE1000; SPE3000

Testing Activities performed under the scope of the U.S FDA ASCA Pilot Program Specifications: *Basic Safety and Essential Performance of Medical Electrical Equipment, Medical Electrical Systems, and Laboratory Medical Equipment – Standards Specific Information for the Accreditation Scheme for Conformity Assessment (ASCA) Pilot Program* published on September 25th, 2020, and in accordance with all requirements of A2LA R256 *Specific Requirements- FDA ASCA Program* ³:

<u>Standards:</u>	<u>Document Number:</u>
ANSI AAMI ES60601-1:2005/(R)2012 & A1:2012, C1:2009/(R)2012 & A2:2010/(R)2012 (Cons. Text) [Incl. AMD2:2021]	19-46
IEC 60601-1 Edition 3.2 2020-08 CONSOLIDATED VERSION	19-49
ANSI AAMI HA60601-1-11:2015 [Including AMD1:2021]	19-47
IEC 60601-1-11 Edition 2.1 2020-07 CONSOLIDATED VERSION	19-39
IEC 60601-1-10 Edition 1.2 2020-07 CONSOLIDATED VERSION	19-37
IEC 60601-1-6 Edition 3.2 2020-07 CONSOLIDATED VERSION	5-132
ANSI AAMI IEC 60601-1-8:2006 and A1:2012 [Including AMD 2:2021]	5-131
IEC 60601-1-12 Edition 1.1 2020-07 CONSOLIDATED VERSION	19-39
IEC 60601-2-10 Edition 2.1 2016-04	17-16
IEC 60601-2-18 Edition 3.0 2009-08	9-114
ANSI AAMI IEC 60601-2-19 Edition 3.0 2020-09	6-461
ANSI AAMI IEC 60601-2-2:2017	6-389
IEC 60601-2-2 Edition 6.0 2017-03	6-389
IEC 60601-2-21 Edition 3.0 2020-09	6-463
IEC 60601-2-22 Edition 3.1 2012-10	12-268
ANSI AAMI IEC 60601-2-25:2011/(R)2016	3-105
IEC 60601-2-25 Edition 2.0 2011-10	3-105
ANSI AAMI IEC 60601-2-27:2011(R)2016	3-126
IEC 60601-2-27 Edition 3.0 2011-03	3-126
ANSI AAMI IEC 60601-2-47:2012/(R)2016	3-155
IEC 60601-2-47 Edition 2.0 2012-02	3-155
IEC 60601-2-52 Edition 1.1 2015-03 CONSOLIDATED VERSION	6-489
IEC 60601-2-57 Edition 1.0 2011-01	12-242
IEC 60601-2-6 Edition 2.1 2016-04	6-423
IEC 60601-2-35 Edition 2.0 2020-09	6-483
IEC 60601-2-37 Edition 2.1 2015	12-293
IEC 80601-2-59 Edition 2.0 2017-09	6-405
IEC 80601-2-60 Edition 2.0 2019-06	4-262
ISO 80601-2-56 Second Edition 2017-03	6-421
ISO 80601-2-70 Second edition 2020-11	1-151
ISO 80601-2-74 First Edition 2017-05	1-138
IEC 61010-1 Edition 3.1 2017-01 CONSOLIDATED VERSION	19-34

¹ The laboratory is only accredited for testing activities outlined within the test methods listed above. Reference to any other activity within these standards, such as risk management or risk assessment, does not fall within the laboratory's accredited capabilities.

² This laboratory performs field testing activities for these tests.

³ These methods have been assessed by A2LA according to A2LA's FDA ASCA Program requirements. Accreditation by A2LA does not imply FDA ASCA-Accreditation. All ASCA-accreditation decisions for testing laboratory applications are made solely by the FDA, a list of approved laboratories can be found at www.FDA.gov.



Accredited Laboratory

A2LA has accredited

F2 LABS

Damascus, MD

for technical competence in the field of

Electrical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This laboratory also meets the A2LA – R256 – Specific Requirements – FDA ASCA Program. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (*refer to joint ISO-ILAC-IAF Communiqué dated April 2017*).



Presented this 26th day of December 2023.

A blue ink signature of Mr. Trace McInturff, written over a horizontal line.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 793.01
Valid to September 30, 2025

For the tests to which this accreditation applies, please refer to the laboratory's Electrical Scope of Accreditation.