



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

INTERTEK TESTING SERVICES NA INC.
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ELECTRICAL

Valid To: March 31, 2025

Certificate Number: 1249.01

In recognition of the successful completion of the A2LA evaluation process (including an assessment of the organization’s compliance with A2LA’s EPA ENERGY STAR® Accreditation Program¹ requirements), accreditation is granted to the laboratory listed above, as well as the one satellite laboratory location listed below to perform the following energy efficiency, automotive and airport lighting, and product safety tests:

Technology:

Test Method(s):

Lighting and Transportation Test³
(100 ft, 5 m, 25 m Goniophotometric System)

Chromaticity

SAE J576, J578C, J578; FAA AC 150/5345 -12, -46, -43, -28, -50, -51, -52; FAA EB 67; ICAO Annex 14; TP312; ITE Vehicle Traffic Control Signal Heads: Light Emitting Diode (LED) Circular Signal Supplement – June 27, 2005; ITE Vehicle Traffic Control Signal Heads: Light Emitting Diode (LED) Vehicle Arrow Traffic Signal Supplement – July 1, 2007; ITE Pedestrian Traffic Control Signal Indications: Light Emitting Diode (LED) Signal Modules – August 4, 2010; EASA Regulation (EU) No 139; CASA Part 139 (Aerodromes) Manual of Standards; IEC 61827; CAA CAP 437; CAA CAP 168; Transport Canada CAR 621; SAE AS8017; SAE AS8037

Spectral Irradiance

FAA AC 150/5345 -43;
ANSI/ASABE S642 SEP2018

Radiant Intensity

FAA AC 150/5345 -43;
ANSI/ASABE S642 SEP2018

Luminous Intensity

FAA AC 150/5345 -46, -43, -12, -28, -50, -52, -51, -55;
FAA EB 67B; ICAO Annex 14; TP312;
SAE J95, J575, J581, J582, J583, J852, J1383, J1735, J2009, J2087, J186, J222, J585, J586, J587, J588, J591, J592, J593, J594, J914, J1319, J1373, J1395, J1398, J1424, J1432, J1889, J2039, J2040, J2041, J3053, J2283, J2139, J2261, J1957, J595, J774, J887, J845, J1133, J1318, J943, J137, J974, J975, J96, J572, J598;
SAE J1623 (ATVs); SAE J131, J584, J1306 (motorcycles); SAE J278, J279, J280, J292 (snowmobiles); JIS D0203, D1601, D5500, D5504;

Technology:

Test Method(s)²:

Luminous Intensity (continued)

JIS 32, 33; 49 CFR 571.108; ECE R1, R5, R8, R19, R20, R31, R38, R45, R56, R57, R76, R98, R112, R113, R119; ECE R3, R4, R6, R7, R23, R27, R38, R50, R77, R87, R91, R65; ITE Vehicle Traffic Control Signal Heads: Light Emitting Diode (LED) Circular Signal Supplement – June 27, 2005; ITE Vehicle Traffic Control Signal Heads: Light Emitting Diode (LED) Vehicle Arrow Traffic Signal Supplement – July 1, 2007; ITE Pedestrian Traffic Control Signal Indications: Light Emitting Diode (LED) Signal Modules – August 4, 2010; EN12368; EASA Regulation (EU) No 139; CASA Part 139 (Aerodromes) Manual of Standards; EN12368; IEC 61827; CAA CAP 437; CAA CAP 168; Transport Canada CAR 621; SAE AS8017; SAE AS8037

Illuminance

FAA AC 150/5345 -46, -43, -28, -27

Luminance

FAA AC 150/5345 -44, -27; ITE Vehicle Traffic Control Signal Heads: Light Emitting Diode (LED) Circular Signal Supplement – June 27, 2005 ITE Vehicle Traffic Control Signal Heads: Light Emitting Diode (LED) Vehicle Arrow Traffic Signal Supplement – July 1, 2007; ITE Pedestrian Traffic Control Signal Indications: Light Emitting Diode (LED) Signal Modules – August 4, 2010, EN12368; ICAO Annex 14; TP312

Luminous Transmittance

ATPD-2352

Relative Light Output

FAA AC 150/5345 -44, -53; FAA EB67; IEC 61827

Specific Intensity of Retro-reflective and Reflex Materials

SAE J594, J1967; FAA AC 150/5345 -39; ECE R3, R27

Luminous Flux

SAE J573; ECE R37, R99; ANSI/IES LM-90-20

Reflectance

ECE R46, R81; SAE J964; 49 CFR 571.111

Current Regulation

FAA AC 150/5345 -10, -47

Remote Control

FAA AC 150/5345 -10
IEC 61822

Temperature Rise (resistance method)

FAA AC 150/5345 -10, -47, -54;
IEC 61823; CSA C22.2 No. 180; IEC 61822

Efficiency

FAA AC 150/5345 -10, -47;
IEC 61823; CSA C22.2 No. 180; IEC 61822

Power Factor

FAA AC 150/5345 -10, -47, -44, FAA EB67; IEC 61823; CSA C22.2 No. 180; IEC 61822; ITE Vehicle Traffic Control Signal Heads: Light Emitting Diode (LED) Circular Signal Supplement – June 27, 2005; ITE Vehicle Traffic Control Signal Heads: Light Emitting Diode (LED) Vehicle Arrow Traffic Signal Supplement – July 1, 2007; ITE Pedestrian Traffic Control Signal Indications: Light Emitting Diode (LED) Signal Modules – August 4, 2010

Technology:

Test Method(s)²:

Crest Factor

FAA AC 150/5345 -10

Dielectric (up to 25 kV)

FAA AC 150/5345 -10, -26, -5, -54, -51, -3;
IEC 61827; IEC 61822

Protective Device

FAA AC 150/5345 -10, -55;
ITE Pedestrian Traffic Control Signal Indications: Light
Emitting Diode (LED) Signal Modules – August 4, 2010;
IEC 61822

Output Current Surge

FAA AC 150/5345 -10;
IEC 61822

Monitor

FAA AC 150/5345 -10, -43

Surge Suppression (up to 10 kV/5 kA
combination)

FAA AC 150/5345 -10, -54, -12, -43, -51, -44, -28, -52,
-49; FAA EB67; IEEE C62.41

Ring Wave Immunity (up to 6 kV Ring
Wave)/Transient Voltage Immunity

ITE Vehicle Traffic Control Signal Heads: Light Emitting
Diode (LED) Circular Signal Supplement – June 27, 2005;
ITE Vehicle Traffic Control Signal Heads: Light Emitting
Diode (LED) Vehicle Arrow Traffic Signal Supplement –
July 1, 2007; ITE Pedestrian Traffic Control Signal
Indications: Light Emitting Diode (LED) Signal Modules
– August 4, 2010; IEEE C62.41

Momentary Input Overvoltage

FAA AC 150/5345 -10, -51

Insulation Resistance

FAA AC 150/5345 -47, -46

Voltage Drop

FAA AC 150/5345 -26, -5;
SAE J68, J589, J910, J1167, 49 CFR 571.108

Leakage Current

FAA AC 150/5345 -43

Light Source Failure Test / Failed State

FAA AC 150/5345 -44, FAA EB 67

Impedance

ITE Vehicle Traffic Control Signal Heads: Light Emitting
Diode (LED) Circular Signal Supplement – June 27, 2005;
ITE Vehicle Traffic Control Signal Heads: Light Emitting
Diode (LED) Vehicle Arrow Traffic Signal Supplement –
July 1, 2007; ITE Pedestrian Traffic Control Signal
Indications: Light Emitting Diode (LED) Signal Modules –
August 4, 2010

Battery Cycling

FAA AC 150/5345 -50

Current Consumption
(Temperature Chamber)

FAA EB67; J68, J589, J910, J1167; 49 CFR 571.108;
ITE Vehicle Traffic Control Signal Heads: Light Emitting
Diode (LED) Circular Signal Supplement – June 27, 2005;
ITE Vehicle Traffic Control Signal Heads: Light Emitting
Diode (LED) Vehicle Arrow Traffic Signal Supplement –
July 1, 2007; ITE Pedestrian Traffic Control Signal
Indications: Light Emitting Diode (LED) Signal Modules –
August 4, 2010

Technology:

Test Method(s)²:

Power Consumption

FAA EB67;
ITE Pedestrian Traffic Control Signal Indications: Light Emitting Diode (LED) Signal Modules – August 4, 2010

Low-Voltage Turn Off

ITE Vehicle Traffic Control Signal Heads: Light Emitting Diode (LED) Circular Signal Supplement – June 27, 2005;
ITE Vehicle Traffic Control Signal Heads: Light Emitting Diode (LED) Vehicle Arrow Traffic Signal Supplement – July 1, 2007; ITE Pedestrian Traffic Control Signal Indications: Light Emitting Diode (LED) Signal Modules – August 4, 2010

Total Harmonic Distortion

ITE Vehicle Traffic Control Signal Heads: Light Emitting Diode (LED) Circular Signal Supplement – June 27, 2005;
ITE Vehicle Traffic Control Signal Heads: Light Emitting Diode (LED) Vehicle Arrow Traffic Signal Supplement – July 1, 2007; ITE Pedestrian Traffic Control Signal Indications: Light Emitting Diode (LED) Signal Modules – August 4, 2010

Turn-On/Turn-off Times

49 CFR 571.131;
ITE Vehicle Traffic Control Signal Heads: Light Emitting Diode (LED) Circular Signal Supplement – June 27, 2005;
ITE Vehicle Traffic Control Signal Heads: Light Emitting Diode (LED) Vehicle Arrow Traffic Signal Supplement – July 1, 2007; ITE Pedestrian Traffic Control Signal Indications: Light Emitting Diode (LED) Signal Modules – August 4, 2010

Off-State Voltage Decay

ITE Vehicle Traffic Control Signal Heads: Light Emitting Diode (LED) Circular Signal Supplement – June 27, 2005;
ITE Vehicle Traffic Control Signal Heads: Light Emitting Diode (LED) Vehicle Arrow Traffic Signal Supplement – July 1, 2007; ITE Pedestrian Traffic Control Signal Indications: Light Emitting Diode (LED) Signal Modules – August 4, 2010

Verification of protection by enclosures

IEC 61822

Photobiological

IEC 62471

HVAC Testing

Datacom Air-Conditioners

ANSI/AHRI 1360; ASHRAE 127

Small Unitary Air-Conditioners

ANSI/AHRI 210/240

Portable Air-Conditioners

AHAM PAC 1; CSA-C370-13 (R2018);
10 CFR, Subchapter D, Part 430, Subpart B, Appendix CC

Commercial Finned Tube Radiation

AHRI 1410

Non-Ducted Air Conditioners and Heat Pump

SASO 2681:2013 with ISO 5151:2010⁶

Ducted Air-Conditioners and Air-Air heat Pumps

SASO 2682:2013 with ISO 13253:2011⁶

Technology:**Test Method(s)²:**

Air Conditioners-Minimum Energy Performance for Low Capacity Window and Single-Split Types	SASO 2663
Air Conditioners – Minimum Energy Performance for Electrically operated air conditioners, Condensing Units, Chillers, Absorption Chillers Electrically operated variable refrigerant flow (VRF) air conditioners and Close control air conditioners and condensing units serving computer rooms	SASO 2874
Methods of Testing and Rating Pool Heaters	ANSI/ASHRAE 146
Method of Testing Forced Circulation Air Cooling and Air Heating Coils	ANSI/ASHRAE 33
Uniform Test Method for Measuring the Energy Consumption of Vented Home Heating Equipment	10 CFR 430, Subpart B, Appendix O
Drinking Fountains & Self-Contained, Mechanically-Refrigerated Drinking-Water Coolers	AHRI 1010
Unit Ventilators	AHRI 840-1998
Air Terminals	AHRI 880
Performance Rating of Indoor Dehumidifiers	AHRI 910
Performance Rating of Commercial Refrigerated Display Merchandisers and Display Cabinets	ANSI/AHRI 1200-2008
Method of Testing Air-To-Air Heat Exchangers	ASHRAE 84
Performance Standard for Rating Packaged Water Chillers	CSA C743
Standard for Packaged Terminal Air Conditioners and Heat Pumps	CSA C744
Performance Standard for Rating Large Air Conditioners and Heat Pumps	CSA C746
Air conditioners, liquid chilling packages and heat pumps with electrically driven compressors for space heating and cooling	EN 14511-1, -2, -3, -4
Rating Air-To-Air Energy Recovery Ventilation Equipment	AHRI 1060
Mechanical Transport Refrigeration Units ⁴	AHRI 1110

<u>Technology:</u>	<u>Test Method(s)²:</u>
Standard for Performance Rating of Heat Pump Pool Heaters	AHRI 1160
Sound Rating of Outdoor Unitary Equipment	AHRI 270
Packaged Terminal Air Conditioners	AHRI 310/380
Water-Source Heat Pumps	AHRI 320
Ground Water Source Heat Pumps	AHRI 325
Ground Source Closed-Loop Heat Pumps	AHRI 330
Commercial and Industrial Unitary Air-Conditioning Condensing Units	AHRI 365
Single Package Vertical Air - Conditioners and Heat Pumps	AHRI 390
Standard for Liquid-to-Liquid Heat ⁴ Exchangers	AHRI 400
Forced-Circulation Air-Cooling and Air-Heating Coils	AHRI 410
Central-Station Air-Handling Units	AHRI 430
Room Fan-Coil	AHRI 440
Centrifugal & Rotary Screw Water-Chilling Packages ⁴	AHRI 550/590
Performance Standard for Split-System Central Air Conditioners and Heat Pumps	CSA C273.3
Performance Standard for Room Air Conditioners	CSA C368.1
Cooling Performance of Portable Air Conditioners	CSA C370
Performance of Ground Source Heat Pumps	CSA C446
Performance Standard for Internal Water Loop Heat Pumps	CSA C655
Performance Standard for Single Package Central Air-Conditioners and Heat Pumps	CSA C656
Uniform Test Method for Measuring the Energy Consumption of Central Air Conditioners and Heat Pumps	10 CFR 430 Subpart B, Appendix M
Methods of Testing for Rating Electrically Driven Unitary Air-Conditioning and Heat Pump Equipment	ANSI/ASHRAE 37
Unitary Air-Conditioning and Air-Source Heat Pump Equipment	AHRI 210/240-94
Performance Rating of Unitary Air-Conditioning & Air-Source Heat Pump Equipment	ANSI/AHRI 210/240

Technology:**Test Method(s)²:**

Uniform Test Method for Measuring the Energy Consumption of Dehumidifiers	10 CFR Part 430, Appendix X1, Subpart B
Dehumidifiers	ANSI/AHAM DH-1
Performance of Dehumidifiers	CSA C749
Standard for Performance Rating of Direct GeoExchange Heat Pumps	AHRI 870
Water-Source Heat Pumps - Testing and Rating for Performance	ISO 13256-1
Water-Source Heat Pumps - Testing and Rating for Performance	ISO 13256-2
Light Commercial HVAC	10 CFR part 431, Subpart F §431.96
Performance Rating of Unitary Air-Conditioning & Air-Source Heat Pump Equipment	ANSI/AHRI 210/240
Performance Rating of Commercial and Industrial Unitary Air-Conditioning and Heat Pump Equipment	ANSI/AHRI 340/360
Uniform Test Method for Measuring the Energy Consumption of Room Air Conditioners	(EPA ENERGY STAR Program Requirements Product Specification for Room Air Conditioners Version 4.1); 10 CFR 430, Subpart B, Appendix F
Energy Consumption Test Methods for Household Electric Ranges	CSA C358
Method To Determine Efficiency of Commercial Space Heating Boilers ⁴	BTS-2000
Testing Method for Measuring Annual Fuel Utilization Efficiencies of Residential Furnaces and Boilers ⁴	CGA P.2
Testing and Rating Standard for Finned Tube (Commercial) Radiation	IBR 009
Testing and Rating Standard for Baseboard Radiation	IBR 008
Uniform Test Method for The Measurement of Energy Efficiency of Commercial Water Heaters and Hot Water Supply Boilers (Other than Commercial Heat Pump Water Heaters)	10 CFR Part 431.106
Commercial Water Heaters, Hot Water Supply Boilers and Unfired Hot Water Storage Tanks ⁴	10 CFR 431, Sub Part G
Water Heaters Energy Performance Requirements and Labeling	SASO 2884

Technology:**Test Method(s)²:**

Performance of Electric Storage Tank Water Heaters

CSA C191

Method of Test for Determining the Airtightness of HVAC Equipment

ANSI/ASHRAE 193-2010

Uniform Test Method for Measuring the Energy Consumption of Furnaces and Boilers⁴

10 CFR 430, Subpart B, Appendix N

Methods of Testing for Rating Combination Space-Heating and Water-Heating Appliances

ANSI/ASHRAE 124

Uniform Test Method for the Measurement of Thermal Efficiency and Combustion Efficiency of Commercial Packaged Boilers

10 CFR 431, Subpart E, Appendix A

Performance Rating of Commercial Space Heating Boilers

ANSI/AHRI 1500

Commercial Water Heaters, Hot Water Supply Boilers and Unfired Hot Water Storage Tanks⁴

10 CFR 431, Subpart G

Uniform Test Method for Measuring the Energy Consumption of Water Heaters

10 CFR 430, Subpart B, Appendix E

Methods of Testing for Rating Combination Space-Heating and Water-Heating Appliances

ANSI/ASHRAE 118.2

Energy Efficiency

Household Electrical Appliances: Measurement of Standby Power

IEC 62301:2005 (Edition 1.0)⁶, 62301:2011-01 (Edition 2.0)

Battery Chargers

10 CFR Part 430.23 (aa) and Appendix Y to Subpart B

External Power Supplies

10 CFR Part 430.23 (bb) and Appendix Z to Subpart B; CSA C381.1-17

Audio, Video, Television (standby)

CSA C62301-11 (R2016)

Portable Electric Spas

ANSI/APSP/ICC-14 2014⁶; ANSI/APSP/ICC-14 2019**Product Safety**Electrical Appliances⁴

IEC 60598-1, -2-1, -2-2, -2-3, -2-4, -2-5, -2-18, -2-22, -2-23, IEC 61347-1, -2-13, IEC 62031; EN 60598-1:2015, -2-1:1998, -2-2:2012, -2-3:2003, -2-4:1997, -2-5:1998, -2-18:1994, -2-22:1998, -2-23:1996, EN 61347-1:2008, -2-13:2006, EN 62031:2008; AS/NZS 60598.1, 2.1, 2.2, 2.3, 2.4, 2.5, 2.18, 2.22, 2.23

Area Lighting Controls

ANSI C136.10

Technology:

Hazardous Locations

Test Method(s)²:

IEC 60079-0; 60079-1; 60079-11; 60079-13; 60079-15;
60079-18; 60079-2; 60079-25; 60079-26; 60079-28;
60079-31; 60079-40; 60079-46; 60079-5; 60079-6;
60079-7; 61241-0, 61241-1, 61241-1-1, 61241-4;
ISO 80079-36; 80079-37;
ISO 19880-1; 19880-3; 19880-5

Wire and Cable

C22.2 No. 233; No. 239; No. 245; No. 2556; No. 262;
No. 271; No. 48; No. 96.2; No. 214; No. 232; No. 0.3;
No. 131; No. 208; No. 21; No. 38; No. 49; No. 51; No. 75;
No. 327;
UL 1309; UL 2556; UL 2024; UL 719; UL 1650; UL 444;
UL 1072
C68.10

EPA ENERGY STAR Tests

Audio/Video Equipment

ENERGY STAR Program Requirements, Product
Specification for Audio/Video Version 3.0;
ENERGY STAR Test Method for Audio/Video
(July 2012)

Computers

ENERGY STAR Program Requirements, Product
Specification for Computers Version 6.1;
ENERGY STAR Computer Test Method (March 2016)

Displays

ENERGY STAR Program Requirements, Product
Specification for Displays Version 7.1; ENERGY STAR
Test Method for Determining Display Energy
(September 2015)

Demand Response

ENERGY STAR® Program Requirements Product
Specification for Room Air Conditioners Test Method to
Validate Demand Response (June 2017)

Imaging Equipment

ENERGY STAR Program Requirements, Product
Specification for Imaging Equipment Version 2.0;
ENERGY STAR Imaging Equipment Test Method
(September 2013)

Telephony

ENERGY STAR Program Requirements, Product
Specification for Telephony Version 3.0

Televisions

ENERGY STAR Program Requirements, Product
Specification for Televisions Version 7.0;
Uniform Test Method for Measuring the Energy
Consumption of Television Sets incorporated in Appendix
H to Subpart B of 10 CFR Part 430

Uninterruptible Power Supplies

ENERGY STAR Program Requirements, Product
Specification for Uninterruptible Power Supplies
Version 1.1; ENERGY STAR Test Method for
Uninterruptible Power Supplies (May 2012)

Technology:

Test Method(s)²:

Thermostats

ENERGY STAR Program Requirements, Product Specification for Connected Thermostat Products; ENERGY STAR Method to Demonstrate Connected Thermostat Field Savings, Version 1.0

Data Center Storage

ENERGY STAR Program Requirements, Product Specification for Data Center Storage Version 1.0

Enterprise Servers

ENERGY STAR Program Requirements Product Specification for Computer Servers Version 2.1 (April 2016)

Residential Dishwashers

EPA ENERGY STAR Program Requirements Product Specification for Residential Dishwashers (v 4.1); EPA ENERGY STAR Program Requirements Product Specification for Residential Dishwashers (v 6.0); 10 CFR 430, Subpart B, Appendix C; 10 CFR 430, Subpart B, Appendix C1

Residential Clothes Washers

EPA ENERGY STAR Program Requirements Product Specification for Residential Clothes Washers (v 5.1); EPA ENERGY STAR Program Requirements Product Specification for Residential Clothes Washers (v 6.1); EPA ENERGY STAR Program Requirements Product Specification for Residential Clothes Washers (v 7.1); 10 CFR 430, Subpart B, Appendix J1; 10 CFR 430, Subpart B, Appendix J2; SASO 2692:2013 (AS/NZS 2040.1); SASO 2693:2007; SASO 2683:2007, SASO 2885:2018; EN 60456:2016

Residential Clothes Dryers

EPA ENERGY STAR Program Requirements Product Specification for Residential Clothes Dryers (v 1.1); 10 CFR 430, Subpart B, Appendix D1 & Appendix D2; SASO 2883:2017; EN 61121:2013

Residential Ceiling Fans
(excluding light kit testing)

EPA ENERGY STAR Program Requirements Product Specification for Residential Ceiling Fans (v 2.4); EPA ENERGY STAR Program Requirements Product Specification for Residential Ceiling Fans (v 3.1); ENERGY STAR Testing Facility Guidance Manual Ver 1.2

Room Air Cleaners

EPA ENERGY STAR Program Requirements Product Specification for Room Air Cleaners (v 1.2); ANSI/AHAM AC-1-2006; ANSI/AHAM AC-7-2006; UL 867 (ed 4.0); IEC 62301 (ed 1.0)

Cabling Products Electrical Performance Testing⁵

Cables

ASTM D4566; ANSI/TIA-568.2-D, 568.2.D-2; ANSI/TIA-568.5; ANSI/TIA-1183-B; TIA-TSB-184-A; TIA-TSB-184-A-1; ISO/IEC TS 29125; ANSI/SCTE 74;

Technology:

Test Method(s)²:

Patch Cords

IEC 61156-1, -5, -6, -7, -8, -9, -10, -11, -12;
IEC 62153-4-3, -4-4, -4-9, -4-15;
EN 50228-2-1, -2-2, -3-1, -3-2, -4-1, -4-2, -5-1, -5-2, -6-1,
-6-2, -9-1, -10-1, -11-1

Connecting Hardware

ASTM D4566; ANSI/TIA-568.2-D; IEC 61935-2
ANSI/TIA-568.2-D; ANSI/TIA-568.5;
IEC 60603-7-2, -3, -4, -5, -41, -51, -7, -71;
IEC 60512-99-002

Cabling (Links and Channels)

ASTM D4566; ANSI/TIA-568.2-D, .2-D-2;
ISO/IEC 11801-1; EN 50173-1;
IEEE 802.3-2022 Section 145 (Cabling Parameters);
IEEE 802.3-2022 (BER and FCS Errors Testing of 4-Pair
Base-T)

Inverter Testing

Inverter/UPS Safety⁴

IEC 62109-1, -2; IEC 62477-1, IEC 62040-1

Energy Storage⁴

IEC 62933-IEC 62933-1/2/3/4/5, AS/NZS 5139, UL 9540

Power Quality Grid Code⁴

IEC 62116; AS/NZS 3100, 4777.2; IEEE 1547, 1547.1;
UK G59, G83; VDE 4105, 0124; CEI 0-21; NBR 16419,
16150; RD 1699 / UNE 206007-1; NERSA ; JEAC 9701;
California Rule 21, Hawaii Rule 14H; UNE 206007-2,
UNE 217001, P.O.12.3; NRS 097-2-1; BLPC; C10/11;
TOR D4; IEC/EN 50438; IEC/EN 50549; Philippines Grid
code; MEA: and PEA: DEWA; CEI 0-16; Nepco
Transmission code; IRR-DCC-MV; Malaysian Grid Code:
SPS-SGSF-025; SSDG (Small Scale Distributed
Generation); AS/NZS 4777.2; G98; G99; G100; PO12.2;
Grid Code Slovenia; VDE0124 / VDE 4100 / VDE 4105;
C10/11; TFINC; TSO (non-storage); TSO (storage);
Beglich-Staatblad (BS); SPP (>1 MW); EN 50549-1;
Barbados -BLPC

INTERTEK TESTING SERVICES NA INC.²
75 Clinton Ave.
Cortland, NY 13045

Product Safety

Electrical Appliances^{2,4}

IEC 60335-1, -2-2, -2-8, -2-9, -2-14, -2-29, -2-41, -2-34, 2-77, 2-100, 2-107,
AS/NZS 60335.1:2020; AS/NZS 60335.1:2011, A1:2012, A2:2014, A3:2015, A4:2017, A5:2019;
AS/NZS 60335.2.29:2017; AS/NZS 60335.1:2011, A1:2012, A2:2014, A3:2015, A4:2017, A5:2019; AS/NZS 60335.2.29:2017;
AS/NZS 60335.2.77:2002, A1:2003; AS/NZS 60335.2.91:2008, A1:2009; AS/NZS 60335.2.100:2003; AS/NZS 60335.2.107:2020;
AS/NZS 60335.2.107:2013, A1:2015

Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery⁴

IEC 62841-1 (*except sections 6.1 and 6.2*),
IEC 62841 -4-3

¹ A2LA provides accreditation to the U.S. EPA's [Conditions and Criteria for Recognition of Laboratories for the ENERGY STAR Program](#) by verifying an organization's compliance to A2LA document [R222 - Specific Requirements - EPA ENERGY STAR Accreditation Program](#) and to the related test methods listed above.

Accreditation by A2LA does not infer Recognition by the EPA for ENERGY STAR testing. Please verify this organization's recognition status by using the EPA's searchable database, located at http://www.energystar.gov/index.cfm?fuseaction=recognized_bodies_list.show_RCB_search_form

² Mechanical testing contained in the specification(s) listed is covered under the Mechanical Scope 1249.02

³ Lighting tests also use customer supplied standards and methods within the parameters listed above.

⁴ This laboratory performs field testing activities for these tests.

⁵ Cabling Products Testing Standards may include one or more of the following tests:

- DC Resistance and DC Resistance Unbalance
- Mutual Capacitance
- Capacitance Unbalance: Pair-to-Ground
- Impedance
- Attenuation (Insertion Loss), including Attenuation at elevated temperature
- Return Loss and Structural Return Loss
- Crosstalk Loss, near-end (NEXT, PSNEXT)
- Crosstalk Loss, far-end (FEXT, ELFEXT/ACRF, PSELFEXT/PSACRF)
- Alien Crosstalk (ANEXT, PSANEXT, AFEXT, PSAFEXT, PSAACRF)
- Coupling Attenuation
- Surface Transfer Impedance (cables) and Shield Transfer Impedance (connectors)
- Balance (TCL/LCL, TCTL/LCTL, ELTCTL/ELLCTL)
- Propagation Delay and Propagation Delay Skew
- Cable Heating Test for Support of Remote Powering Applications
- Cabling Systems Bit Error Rate

⁶NOTE: This laboratory's scope contains withdrawn or superseded methods. As a clarifier, this indicates that the applicable method itself has been withdrawn or is now considered "historical" and not that the laboratory's accreditation for the method has been withdrawn.

Specifications Client Proprietary:

The accreditation also includes customer supplied standards within the parameters listed on the scope and examples of methods listed below:

GMUTS – General Motors Uniform Test Standards

Chrysler – Compliance and Performance Procedures

Ford – System Design Specifications

Saturn – Component Technical Specifications

Nissan – Nissan Engineering Standards



Accredited Laboratory

A2LA has accredited

INTERTEK TESTING SERVICES NA INC.

Cortland, NY

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 R222 - Specific Requirements - EPA ENERGY STAR Accreditation 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 31st day of July 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 1249.01
Valid to March 31, 2025

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