

Electric Vehicle Supply Equipment (EVSE)

Sales of electric vehicles (EVs) in the U.S. are estimated to reach over 1 million by the year 2020. Electric vehicles—including plug-in hybrid electric vehicles (PHEVs)—receive energy from the electrical grid through Electric Vehicle Supply Equipment (EVSE), more commonly known as EV chargers. We at BACL pride ourselves on our long-term commitment to renewable energy- because of this, we recently outfitted our lab with high-end equipment suited for EVSE testing. As a result, we are proud to announce that Bay Area Compliance Laboratories tested and certified the first ever ENERGY STAR® Electric Vehicle Charger based on the EVSE Program Requirements in Version 1.0.



FCC KDB Update

FCC KDB 974614 D01 v05 introduced a two-year transition period for accepting standards ANSI/TIA-603-D-2010 and

ANSI/TIA-102.CAAA-D-2013. These two standards can be used until March 2nd, 2020. KDB 388624 D02 PAG List: LTE-U and LAA devices were removed as well as 700 MHz Band devices under Part 74.



Part 30 devices were added into the list. Certain wireless power transferring (WPT) devices remain on the list, but the exclusion criteria have been updated. KDB 680106 D01 v03 updated the criteria for WPT devices to be exempted from submitting a KDB for device approval. The major updates involve increased output power, the removal of the maximum coupling surface area requirement, and the clarification of the aggregate leakage fields requirement.

Clarification has been given by the FCC regarding DFS evaluation for 802.11ax. 802.11ax, which allows for 80 MHz and 160 MHz channels to notch a 20 MHz portion of their operating bandwidth when radar

is detected within that 20 MHz slice of the spectrum. Therefore, channel closing and move times should be verified when a 20 MHz channel sees radar. This step should be repeated for a second 20 MHz channel.

Innovation Science and Economic Development (ISED) published Radio Standards Specification GEN (RSS-GEN), Issue 5, General Requirements for Compliance of Radio Apparatus on April 26, 2018. The new release replaces RSS-Gen Issue 4, dated November 2014. A transition period of six months following the standard's publication is provided. Compliance with Issue 4 or Issue 5 will be accepted within the transition period.

The product-specific standard EN 303 413 for Global Navigation Satellite System (GNSS) receivers was harmonized earlier this year. The harmonization of the product-specific standards indicates that generic standard EN 300 440 cannot be used as a standard to demonstrate compliance with article 3.2 of directive 2014/53/EU. BACL is capable of GNSS receiver testing in accordance with EN 303 413. The Spirent GSS7000 signal generator supports GPS (L1, L2, L5), GLONASS (G1, G2), Galileo (E1, E5), BDS, and SBAS. The Spirent GSS7725 interference

generator provides an interference signal as specified in the regulation rules. This Spirent system enables an automatic adjacent frequency band selectivity test, and the simulation of multiple constellations simultaneously for receiver spurious emissions testing. The transition period for Adaptivity from EN 301 893 V1.8.1 to V2.1.1 is due at the end of 2018. After December 6th, 2018, manufacturers of 5 GHz RLAN devices must show compliance to Clause 4.2.7 of EN 301 893 V2.1.1 in order to place their devices on the European market. BACL's testing capabilities are up-to-date with the EU RED harmonized standards; please feel free to contact us if you haven't yet updated your device to the latest standards.

The Korea National Radio Research Agency (RRA) reminds all test laboratories to follow the measurement equipment calibration requirements. The RRA also provided the list below, which contains the maximum nominal calibration interval.

Measurement Equipment	Maximum Acceptable Calibration Interval
EMI Receiver	1 year
Antenna	2 years
Line Impedance Stabilization Network	1 year
Clamp	1 year
Coupling/Decoupling Networks (CDN)	1 year
Electric Probe	1 year
Magnetic Probe	1 year

Electrostatic Generator	1 year
Electric Fast Transient (EFT)/Burst Generators	1 year
Surge Generator	1 year
Voltage Dips and Variations Testing	1 year

A new publication procedure of certification for Japanese radio devices has been released. Beginning on April 1st, 2018, RCBs are required to submit 3 additional reporting contents: Test Report, Exterior Photos, and Copy of Certificate. The target equipment requiring additional contents are as follows: Unlicensed radio equipment (1st category); AND Certified with Construction Type; AND Tested in other testing labs (excluding the test with an outsourcing contract between a RCB and a testing lab) Note: unlicensed radio equipment with licensing radio equipment, e.g. smartphones with Wi-Fi function, will be exempted. Please contact BACL's RCB for detailed test report requirements.

European Commission EMC Directive (2014/30/EU) Guide



The European Commission Guide for the EMCD (Directive 2014/30/EU) has been finalized and published.

These guidelines are intended to be a manual for all parties directly or indirectly affected by the "new" Electromagnetic Compatibility Directive 2014/30/EU (EMCD). They assist in the interpretation of the Directive but do not substitute for it; they explain and clarify some of the most important aspects related to its application.

To receive a copy of Guide for EMCD or Additional information on the "new" EMC Directive please contact sales@baclcorp.com.

Japan MIC Certification



Japan's Ministry of Internal Affairs and Communications announced that the frequency of land [radio] mobile station frequency division long term evolution (FD-LTE) band 3 uplink has been changed to 1710.0 – 1785.0 MHz, which will be enforced as of January 25, 2018. This standard applies to any land radio mobile station with or without narrowband Internet of Things (NB-IoT) or enhanced Machine-Type Communication (eMTC).

New land radio mobile station broadcasting LTE network needs to follow this new standard. Already licensed, preliminary licensed, or filed radio equipment can follow the former ordinance due to being able to emit 1710.0 –

1785.0 MHz without changing the already approved land radio mobile station design. If there are any changes to the station design, additional characteristic tests are required. The same certification number will be issued if the new changes fall under “The Guideline of ICCJ.” The Type of Certification received previously is still enforce, while examination for Type Certification will depend on conventional example.

If there are any questions or concerns regarding this new Japan MIC regulation, please contact tech@baclcorp.com.

EPA Update:

ENERGY STAR Luminaires Specs



The Environmental Protection Agency (EPA) has finalized minor adjustments to the ENERGY STAR Luminaires specification, reflected in Version 2.1 (V2.1). Current certifications will not be affected by these changes. The EPA incorporated the following modifications:

-Clarified that testing required to document the additional test data required for product family variations shall be performed by an EPA-recognized laboratory and

that any further data required to support a partner’s engineering rationale for the worst-case variant does not.

- Consolidated requirements in Section 8 for enclosed and recessed luminaires shipping with lamps.

-Added C78.377-2017 as an alternate reference for solid state correlated color temperature.

- Restored section 11.6 (Operating Frequency) and added section 11.7 (Flicker) to distinguish between these requirements. Measurement points were established based on comments received.

EPA received requests to align flicker requirements with those outlined in California Energy Commission’s (CEC) JA10. In the interest of alignment, EPA carried over the waveform digitizer requirements from Lamps V2.1 which allows a single measurement to fulfill flicker reporting requirements for ENERGY STAR and for the CEC.

Partners are encouraged to report flicker performance as soon as possible but are required to do so for new luminaire certifications as of September 1, 2018.

Finally, the EPA clarified in Section 13.1 that adjustments to maximum recommended ballast/driver case temperature requested after a verification testing (VT) failure will not be accepted. EPA recognizes that partners modify products. Partners may update product certification at any time prior to

VT to document changes, including to maximum recommended ballast or driver case temperature. However, revising the maximum recommended ballast or driver case temperature value in response to increased temperatures observed during verification testing is inconsistent with the purpose of certification and verification.

BACL is an independent Commercial Test Laboratory accredited to ISO 17025, a Product Certification Body accredited to ISO 17065 by A2LA, a Notified Body for New EMC and Radio Equipment Directives, and an OSHA NRTL.

Our Test Laboratory has a lengthy list of accredited testing standards and methods for Emissions, Immunity, Radio, RF Exposure, Safety, Telecom, Energy Efficient Lighting Products and the California Energy Commission (CEC).

If you have any questions, please call us at Tel: (408) 732-9162 or send your inquiry to sales@baclcorp.com. We would be more than happy to discuss any testing and certification process in more detail with you in order to meet your specific needs and requirements.

