



November 9, 2016

Jennifer Sanchez  
American Telecommunications Certification Body Inc.  
6731 Whittier Ave  
McLean, VA 22101

RE: Comments of November 06, 2016  
APPLICATION: Eaton Cooper Power  
FCC: P9X-500LG  
IC: 6766A-500LG

Jennifer L. Sanchez:

Below are the comments that you have provided regarding the application for certification referenced above. Our responses to those comments are in ***bold italic***. Many responses refer you to additional exhibit(s) which has been uploaded to the application folder at the ATCB website.

Thank you for your attention. Please feel free to contact us for any additional information that you may require.

Regards,

*John P. Repella*  
Manager, EMC & Wireless Services

1) Regarding the response to comment 6, first please note that EMC testing and RFX testing are intrinsically different. From an EMC perspective, when tests are performed on a device that is physically and electrically identical to other units that will be produced, the results can be said to be representative of all units that will be rolling off of the assembly line. However, this is not the case for RFX testing, which, due to its safety dimension, is more conservative. Tests performed on a device that is physically and electrically identical to other units that will be produced yield results that must still be adjusted to account for the potential variance in output power of all devices being manufactured, so that the scaled results are representative of the highest output power device that could ever possibly roll off the assembly line – the target output plus the acceptable manufacturing tolerance (the FCC refers to this as the “tune- up tolerance”).

In your response, it appears that you are stating that, because the EUT in this case has an antenna port for conducted power measurements, use of the target plus tolerance level is not required. This is apparently based upon the inverse of the quoted statement from KDB447498) D01)4.1)b):

When an antenna port is not available on the device to support conducted power measurement, such as for FRS (Part 95) devices and certain Part 15 transmitters with built-in integral antennas, the maximum output power and tolerance allowed for production units should be used to determine RF exposure test exclusion and compliance.

However, it is noted that this does not state that the use of the target plus tolerance level is not required for devices that have an antenna port, as your response infers. A few paragraphs further down in Section 4.1 of the same KDB Publication (paragraph (e)), it clearly states that the target plus tolerance level is required to be used, even when there is an antenna port:

When SAR or MPE is not measured at the maximum power level allowed for production units, the results must be scaled to the maximum tune-up tolerance limit according to the power applied to the individual channels tested to determine compliance... When an antenna port is not available on the device to support conducted power measurement and test software is used to establish transmitter power levels, the power level must be demonstrated and verified separately, according to design and component specifications and product development information; otherwise, a KDB inquiry is necessary. Therefore, the original comment remains: please confirm that the measured output level used in the MPE calculations is equivalent to the EUT’s max output target level plus production tolerance.

***Response:***

***The tune-up procedure has been provided by the manufacturer, and the original conducted measurement is within the stated tolerances. A maximum power of 30dBm is assumed for the calculations and a duty cycle correction was utilized as allowed for this requirement.***

***The MPE test report has been updated and reflects all the changes.***