Federal Communications Commission
Office of Engineering and Technology
Equipment Authorization Division
Application Processing Branch

7435 Oakland Mills Road
Columbia, MD 21046

Global Product Compliance Laboratory
MH 5A-115, Alcatel-Lucent
600, Mountain Avenue
Murray Hill, NJ 07974-0636

December 19, 2012

Dear Examiner:

In accordance with **Parts 2** and **27** of the Commission's Rules and Regulations, we are submitting herewith, statements and supporting data to show compliance with the requirements of the Commission for Product Certification of the Alcatel-Lucent "**LTE TRDU 2x60-7L (BC12/17)**", henceforth '**TRDU 2x60-7L'**, **FCC ID: AS5BBTRX-09**. The TRDU 2x60-7L is used in **Alcatel-Lucent's 9412 eNodeB Compact (700 MHz)** cabinet systems using the 3GPP standards Long time Evolution (LTE) technology, for use in Domestic Miscellaneous Wireless Communication Services (WCS).

This application for the TRDU 2x60-7L under FCC ID: AS5BBTRX-09**,** is for operation in the domestic WCS band with a LTE signal. The data summarized below is in the form presently used by the Commission's Radio Equipment List.

Manufacturer	**Alcatel-Lucent**
Equipment Identification	**AS5BBTRX-09**
Rules Part Number	**27.5(c) (1), 27.53(g), and OET Rules 662911 D01 and D02**
Frequency Range	**729 to 745 MHz (A, B, and C Blocks)**
Output Power	**+3 dBm (.002W) to +47.8dBm (60W) Varied by Software**
Frequency Tolerance	**+/- 0.001 ppm**
Emission Designator	**9M44F9W for 10MHz BW and 4M74F9W for 5 MHz BW**

The TRDU 2x60-7L, under FCC ID: AS5BBTRX-09 is designed to be operated and marketed in Alcatel-Lucent's 9412 eNodeB Compact (700 MHz) cabinet systems. Each of the TRDU 2x60-7L contains two identical Transceiver paths and ports. Each transceiver ports outputs 60W maximum of at the External antenna connector (EAC) port. The TRDU 2x60-7L will be typically operated in Multiple and input and Multiple output (MIMO) mode using multiple antennas. Each Transceiver path is supported by its own RF filter. The TRDU 2x60-7Ls were evaluated in a 9412 eNodeB Compact (700 MHz) cabinet with three TRDUs with total of six transceiver ports. During all antenna port conducted emissions, the transceiver ports were randomly selected for each of the tests. The TRDU will be marketed in indoor/outdoor cabinets. The integrated cabinet shall continue to be compliant with **FCC** emissions requirements.

The TRDU 2x60-7L is designed operate at large number of sub-carriers which are modulated with QPSK, 16QAM, and 64QAM formats. The TRDU 2x60-7L was evaluated and data is provided for all three modulation formats.

(a) QPSK
(b) 16QAM
(c) 64QAM

The actual power level delivered by the **TRDU 2x60-7L** to transmit antenna is under the software control of the IP based Mobile Switching Center of the local Cellular system.

List of exhibits attached with this submissions are indicated in the following page of this cover letter.

The attached exhibits contain the technical data, and the required statements and documents for Product Certification. The technical contact at Alcatel-Lucent will comply with any request for additional information should the need arise.

Sincerely,

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List of Exhibits

	COVER LETTER
	Cover Letter
	Product Configuration – Explained in test reports
	Letter for Confidential Treatment of Exhibits
	ATTESTATION STATEMENT
Section 2.911 (d)	**Qualifications and Certifications**
Section 2.1033 (c) (1,2)	**Manufacturers, FCC Identification**
Section 2.1033 (c) (4-7)	**Emissions, Frequency Range, Power Level**
	USERS MANUAL
Section 2.1033 (c) (3)	**Users Manual**
Section 2.1033 (c) (9)	**PARTS LIST/TUNE-UP PROCEDURE**
	Tune-Up Procedure
Section 2.1033 (c) (13)	**OPERATIONAL DESCRIPTION**
	Description of Modulation System
Section 2.1033 (c) (10)	**SCHEMATICS**
	Schematic
Section 2.1043 (b) (2)	**Block Diagrams**
Section 2.1033 (c) (11) and 2.925 (a) (1)	**ID LABEL/LOCATION INFORMATION**
Section 2.1033 (c) (12)	**EXTERNAL PHOTOS**
	INTERNAL PHOTOS
Section 2.1033 (c) (12)	**Internal Photos**
	TEST REPORT
Section 2.1033 (c) (8)	**Measurement of DC Power**
Section 2.1033 (c) (14)	**Listing of Required Measurements**
Section 2.1046	**Measurement of Radio Frequency Power Output**
Section 2.1047	**Measurement of Modulation Characteristics**
Section 2.1049 and Section 24.238 (b) and 27.58 (g)	**Measurement of Occupied Bandwidth**
Section 2.1051	**Measurement of Spurious Emissions at Antenna**
Section 2.1053	**Field Strength of Spurious Radiation**
Section 2.1055	**Measurement of Frequency Stability**
Section 2.1057	**Frequency Spectrum to be Investigated**
	Test Instruments Used for Test – See Test Reports
	RF Exposure Information
Section 24.51 (c)	**Human Exposure – Not performed**