



Subject: Application for Class II Permissive Change
under FCC ID: AS5ONEBTS-27 to Add the
15 MHz Emission Bandwidth Fundamental and
Emission Designator to the Original Filing.

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April 16, 2014

Mr. Sid Sanders, President
Timco Engineering, Inc.
849 N. W. State Road 45, P. O. Box 370
Newberry, Florida 32669

Dear Mr. Sanders:

The purpose and objective of this application for a Class II Permissive Change, under FCC ID: AS5ONEBTS-27, is to add the 15 MHz emission bandwidth fundamental and emission designator to the RRH2x60-1900A filing, which is both LTE operational and 2x60 MIMO compliant. The spectrum covered is Rule Part 24E, 1930 – 1990 MHz. The current product, designated on the equipment label as RRH2x60-1900A, incorporates the same radio, the same power amplifier, and the same digital (D/A) circuitry. There is no change to the radio frequency determining and stabilization circuitry. The only change is to the controlling software.

The LTE MIMO requirements are specified in *OET Bulletin 662911 D011 Multiple Transmitter Output v02r01*. The long term average power rating at each of the two transmit antenna terminals is 60 W (47.8 dBm) and a total composite power combined in the air interface of 120 W (50.8 dBm). Three LTE (Long Term Evolution) modulation schemes are supported: QPSK, 16QAM and 64QAM. Design and operation employs the guidelines set forth in ETSI TS 36.104 *LTE; Evolved Universal Terrestrial Radio Access (E-UTRA); Base Station (BS) radio transmission and reception (3GPP TS 36.104 version 10.9.0 Release 10)*. Full compliance has been demonstrated with FCC Part 24 — Personal Communications Services, § 24.238 Emission Limitations for Broadband PCS Equipment, following the procedural requirements specified in Part 2 — Frequency Allocations And Radio Treaty Matters; General Rules And Regulations Subpart J — Equipment Authorization Procedures.

The footnote on the Grant should include:

Class II Permissive Change: Adds the 15 MHz emission bandwidth fundamental to the RRH2x60-1900A and is both LTE operational and 2x60 MIMO compliant.

In accordance with Sec. 2.1043 *Changes In Certificated Equipment*, only the characteristics affected by the change need to be reported. As such, the applicable measurements affected are contained in the Test Report Exhibits, and all other Exhibits submitted with the initial filing, that remain unchanged will not be repeated for brevity. All initial exhibits that were granted permanent confidentiality are unchanged and continue to remain confidential, and will not be repeated with this submission.

The data summarized below is in the form presently used by the Commission's Radio Equipment List, Equipment Acceptable for Licensing.

Manufacturer	Alcatel-Lucent USA, Inc.
Equipment Identification	AS5ONEBTS-27
Rules Part Number	Part 24 — Personal Communications Services, § 24.238 Emission Limitations for Broadband PCS Equipment
Frequency Ranges	Transmit 1930 – 1990 MHz
Output Power	60 Watts (+47.8 dBm) at each Tx Antenna Terminal
Frequency Tolerance	± 0.05 ppm
Emission Bandwidth	15 MHz
Emission Designator	13M4F9W

Attached are the FCC Form 731 (Application for Equipment Authorization – Radio Frequency Devices) and the required measurement data and exhibits specific to this request for Class II Permissive Change authorization. The technical contact at Alcatel-Lucent USA, Inc., will comply with any request for additional information should the need arise. The attached exhibits are assembled and presented in the sequence recommended by Timco Engineering, in accordance with the *Table of Contents* attachment.

Sincerely,



Rudolf J. Pillmeier
GPCL Technical Manager
FCC/EMC Compliance Test Group

Att.
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