



**Timco Engineering Inc.
FCC Authorized Telecommunications
Certification Body (TCB)**

Alcatel-Lucent USA Inc.
Building 28-114H
600 Mountain Avenue
New Providence, NJ 07974

November 22, 2010

Sid Sanders - President
Timco Engineering Inc.
849 N.W. State Road 45
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Newberry, Florida 32669

Dear Mr. Sanders

The Alcatel- Lucent AWS Base Station System, the subject of this request for a Class II Permissive Change, was previously authorized under **FCC ID: AS5ONEBTS-16**. The original authorization was for the CDMA operation using the emissions designator **1M25F9W**. Alcatel- Lucent hereby requests that the emissions designator **5M00F9W** be added. **This emissions designator supports operation under the 3GPP2 Long Term Evolution (LTE) communication standard.** There were no physical, hardware or circuit changes required to either the AWS Multi Carrier Radio, **MCR-1721**, or to the AWS IMT Band Power Linear Amplifier Module, 60W IPAM. Only the digital circuit components necessary to provide the baseband digital information to the AWS Band Multi Carrier Radio (**MCR-1721**) was changed to accommodate this additional capability. The **MCR-1721**, which is the frequency generating and stabilizing component of the AWS Base Station System authorized under FCC ID: AS5ONEBTS-16 has not changed. There is no change to the principle RF components which have been previously filed under FCC ID: **AS5ONEBTS-16**. These include the (1) Multi-Carrier Radio (**MCR-1721**), (2) 60W IPAM power amplifier, and (3) 35/45 MHz wide Dual Duplex (DDpx) low loss transmit filters covering the AWS transmit spectrum of 2110-2155 MHz and the AWS receive spectrum of 1710-1755 MHz. All required supporting exhibits, not previously submitted with the initial filing, are attached.

This Class II change applies 5M00F9W Emissions designator for **AWS Block E** operation under **FCC ID: AS5ONEBTS-16**. Future Class II Changes will apply for additional blocks of operation. The operation of LTE operates differently from CDMA in the regard of overload control. Because LTE does not use overload control the total output power is reduced to 48 Watts per amplifier. Post amplifier combiners and post filter combiners are both utilized. The measurement exhibits attached to this application demonstrate full compliance with FCC Part 27.53 following the procedural requirements specified in FCC Part 2 Subpart J – Equipment Authorization Procedures. The data for this Class II change, summarized below, is in the form presently used by the Commission's Radio Equipment List.

Equipment Identification:	AS5ONEBTS-16
Rules Part Number:	Part 27 – Broadband AWS
Frequency Range:	Transmit 2140-2145 MHz (AWS Block E)
Output Power:	0.048 to 48 Watts per amplifier
Frequency Tolerance:	± 0.05 ppm
Emission Designator:	5M00F9W

Attached are the FCC Form 731 (Application for Equipment Authorization – Radio Frequency Devices), the required measurement data and exhibits specific to this request for authorization of the AWS AWS Base Station System. The technical or non-technical contact at Alcatel-Lucent will comply with any request for additional information should the need arise. The previously attached exhibits with the applicable FCC Rule section were assembled and presented in accordance with the *Table of Contents* attachment. These exhibits were previously

submitted as confidential and included is a formal letter requesting continued confidentiality for the following exhibits:

<u>Exhibit #</u>	<u>FCC Rule Section</u>	<u>Exhibit Title</u>
Exhibit 3	Section 2.1033 (c)(3)	Installation and Operating Instructions -> Confidential
Exhibit 5	Section 2.1033 (c)(10)	Circuit Schematic Diagrams and Parts list -> Confidential
Exhibit 7	Section 2.1033 (c)(10)	Circuitry for Determining and Stabilizing Frequency and for Limiting Modulation and Power -> Confidential
Exhibit 10	Section 2.1033 (c) (13)	Description of the Digital Modulation System -> Confidential

Should there be any questions or procedural issues please feel free to contact me by email and/or phone.

Sincerely,

Rudolf J. Pillmeier

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Att. Table of Contents for the FLEXENT® AWS Base Station System Product Certification Report

TABLE OF CONTENTS

Exhibit 1	Section 2.911 (d)	Certifications and Qualifications
Exhibit 2	Section 2.1033 (c) (1, 2, 4-7)	Manufacturer, Applicant, Identifier, Emission Types, Frequency Range, Operating Power Range and Maximum Power Rating
Exhibit 3	Section 2.1033 (c)(3)	Installation and Operating Instructions -> Confidential
Exhibit 4	Section 2.1033 (c)(8, 9)	DC Voltages and Currents; Tune-up Procedure
Exhibit 5	Section 2.1033 (c)(10)	Circuit Schematic Diagrams and Parts list -> Confidential
Exhibit 6	Section 2.1033 (c)(10)	Circuitry and Devices for Suppression of Spurious Radiation
Exhibit 7	Section 2.1033 (c)(10)	Circuitry for Determining and Stabilizing Frequency and for Limiting Modulation and Power -> Confidential
Exhibit 8	Section 2.1033 (c) (11)	Equipment Identification Label
Exhibit 9	Section 2.1033 (c) (12)	Photograph of the Equipment
Exhibit 10	Section 2.1033 (c) (13)	Description of the Digital Modulation System -> Confidential
Exhibit 11-17		Test Report
Exhibit 11	Section 2.1033 (c)(14)	Required Measurement Data
Exhibit 12	Section 2.1046	Measurements Required: RF Power Output
Exhibit 13	Section 2.1047	Measurements Required: Modulation Characteristics
Exhibit 14	Section 2.1049, 27.53(g)	Measurements Required: Occupied Bandwidth and Out-of- Band Emissions
Exhibit 15	Section 2.1051, 27.53(g)	Measurements Required: Spurious Emissions at Antenna Terminal
Exhibit 16	Section 2.1053, 27.53(g)	Measurements Required: Field Strength of Spurious Radiation
Exhibit 17	Section 2.1055, 27.54	Measurements Required: Frequency Stability