



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

Alcatel-Lucent USA Inc.
Building 5B-111
600 Mountain Avenue
Murray Hill, NJ 07974

April 25, 2017

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

Dear Mr. Sanders

The Alcatel-Lucent **Band 13 LTE Remote Radio Head 4x30** Transceiver System (**RRH 4x30 B13**) is the subject of this request for a Class II Permissive Change to the FCC Product Certification under **FCC ID: AS5BBTRX-23**. Alcatel-Lucent USA Inc., part of the Nokia family of companies, hereby requests this Class II change to add 4x MIMO capability to the Grant. The emissions designators remain as previously filed supporting operation under the 3GPP2 Long Term Evolution (LTE) communication standard. The total output power rating, hardware design and operational modes are unchanged from that previously reported to the FCC under **FCC ID: AS5BBTRX-23**

The **LTE RRH 4x30 Band 13** is a LTE Transceiver with a maximum total power for all ports equal to 120 Watts. The product was originally Product Certified as 2x60W MIMO transceiver with future capability to be a 4x30W MIMO transceiver. The product is authorized for Emissions Designator 9M00F9W in the domestic Miscellaneous Wireless Communications Services 700 Upper band C (Tx: 746-756 MHz, Rx: 777-787 MHz), E-UTRAM band 13 with Long Term Evolution (LTE) Technology.

This application for **RRH 4x30 B13** demonstrates 4x30W operation using the 9M00F9W Emissions designator. The power per port is 4x 30W and the total output power is unchanged. The measurement exhibits attached to this application demonstrate full compliance with FCC Part 27 following the procedural requirements specified in FCC Part 2 Subpart J – Equipment Authorization Procedures. The data, summarized below, is in the form presently used by the Commission's Radio Equipment List. All of the information, except for the Grant Notes and 4x30W configuration information, is unchanged.

Equipment Identification:	AS5BBTRX-23
Rules Part Number:	Part 27
Frequency Range:	Transmit: 746 - 756 MHz
Output Power:	0-60W per LTE Carrier, 120W per unit for the 2x60W configuration 0-30W per LTE Carrier, 120W per unit for the 4x30W configuration
Frequency Tolerance:	± 0.05 ppm
Emission Designator:	9M00F9W
New Grant Notes:	Class II Permissive Change: Operation for 4x30W MIMO

Attached are the FCC Form 731 (Application for Equipment Authorization – Radio Frequency Devices), the required measurement data and exhibits specific to this request for Class II change authorization of the **LTE RRH 4x30 Band 13**. The technical or non-technical contact at Alcatel-Lucent will comply with any request for additional information should the need arise. The attached exhibits with the applicable FCC Rule section are assembled and presented in accordance with the *Table of Contents* attachment. Included is a formal letter requesting continued confidentiality for the previously identified confidential exhibits:

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

Sincerely,

A handwritten signature in blue ink that reads "Raymond J. Johnson".

Raymond J. Johnson
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Alcatel-Lucent USA Inc. - Proprietary
Use pursuant to Company Instructions.

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Att. Table of Contents for the **LTE RRH 4x30 Band 13 Outdoor Transceiver System** Product Certification Report

TABLE OF CONTENTS

Cover Letter

<u>Exhibit #</u>	<u>FCC Rule Number</u>	<u>Description</u>
Exhibit 1	Section 2.1033(a)	FCC Form 731
Exhibit 2	Section 2.911 (d)	Attestation Qualifications and Certifications
Exhibit 3	Section 2.1033(c) (10, 13)	Photographs of the Test Setups
Exhibit 4	Section 2.1033(c) (14)	Test Report