

Alcatel-Lucent USA Rm. 28-114H 600-700 Mountain Ave. PO Box 636 Murray Hill, NJ 07974

April 4, 2014

Timco Engineering Inc. Telecommunication Certification Bodies 849 NW State Road 45 Newberry, Florida 32669

Subject: Application for Class II Permissive Change under FCC ID: AS5BBTRX-10A for 9764 MetroCell Outdoor (MCO) Access Point (AP) Module, Operating in the UNII-2 (5250-5350MHz) and UNII-2e (5470-5725MHz) bands (Unlicensed National Information Infrastructure Devices).

## **Dear Examiner:**

The Alcatel-Lucent 9764 LightRadio<sup>™</sup> MetroCell AP Module, henceforth Wi-Fi AP, has been authorized and granted under FCC ID AS5BBTRX-10A, effective December 3, 2013, for operation in the domestic 2400-2483.5MHz DTS band and 5725-5825MHz UNII-3 band. The purpose of this Class II Permissive Change Application is to get authorization for the above Wi-Fi AP for operating in the 5250-5350 MHz UNII-2 band and 5470-5725MHz UNII-2e band.

In accordance with Parts 2 and 15 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 the Class II permissive change certification of the Alcatel-Lucent 9764 LightRadio<sup>TM</sup> MetroCell AP Module under FCC ID AS5BBTRX-10A, for operation in the 5250-5350 and 5470-5725MHz UNII-2 and -2e bands.

The 9764 MCO Wi-Fi AP module is an optional component attached to a 9764 MetroCell Outdoor, a small base station, in public places for high-density hotspots. The Wi-Fi AP is a plug-in module and is installed on the bottom of the 9764 MetroCell. The WiFi AP gets its DC power source from the MetroCell through an interface connector between MetroCell and WiFi AP.

The WiFi AP has two Tx/Rx ports which support MIMO (Multiple Input Multiple Output) operation. It has a choice for installing two different types of antenna modules: high-gain antenna module and medium-gain antenna module. Each antenna module consists of a 2.4GHz antenna and a 5GHz antenna. Each antenna has two built-in ports and two antenna elements where two antenna elements are connected to Tx/Rx Port 1 and Tx/Rx Port 2, respectively.

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

| Manufacturer             | Alcatel-Lucent, Inc.   |
|--------------------------|--|
| Equipment Identification | AS5BBTRX-10A   |
| Rules Part Number        | Part 15E   |
| Frequency Range          | Transmit: 5250-5350 UNII-2 and 5470-5725MHz UNIII-2e band.   |
| Conducted Output Power   | 0-17dBm per chain and 3-20dBm total for 5GHz UNII-2/2e Band  |
| Max EIRP Power           | -2-23dBm per chain and 1-26dBm total for 5GHz UNII-2/2e Band |

Only the documents, photos and testing data, which are affected by this Class II permissive change, are being submitted. Those documents and responses submitted to the FCC in the previous certification applications under AS5BBTRX-10A, which are still valid for this application, are not being resubmitted. There is no change in WiFi AP hardware. Therefore, most of exhibits, except the test report, RF exposure and setup photo exhibits, submitted in the original certification under AS5BBTRX-10A are still valid. Only FCC Application Form 731, test reports, RF exposure and setup photos exhibits are enclosed in this application package. These exhibits contain the technical data and the required statements and documents for equipment certification. The technical contact at Alcatel-Lucent will comply with any request for additional information should the need arise.

The fees are submitted as required for radio equipment certification filing.

Sincerely,

Rudolf & Pillmein

R.J. Pillmeier Technical Manager FCC Compliance Test Group