Applicant: Alcatel-Lucent USA, Inc. FCC ID: AS5BBTRX-22

Exhibit 3 FCC REQUIRED INFORMATION

The following information is presented in the content and format requested by the FCC:

Section 2.1033 (c)(1):

The full name and mailing address of the manufacturer of the device and the applicant for certification.

Manufacturer: Alcatel-Lucent USA, Inc.

600-700 Mountain Avenue, P.O. Box 636

Murray Hill, N.J. 07974-0636 Attention: Raymond J. Johnson

Applicant: Alcatel-Lucent USA, Inc.

600-700 Mountain Avenue, P.O. Box 636

Murray Hill, N.J. 07974-0636 Attention: Raymond J. Johnson

Phone: 908-582-5575

email: ray.johnson@nokia.com

Alcatel-Lucent USA Inc., part of the Nokia family of companies, is the manufacturer of this product. The **AS5BBTRX-22** will only be marketed under the Alcatel-Lucent trademark.

Section 2.1033(c)(2): FCC Identifier: AS5BBTRX-22

Section 2.1033(c)(4): Type or types of emission: 5M00F9W and 10M0F9W

These designators are requested for authorization of 5 MHz and 10 MHz bandwidth LTE Transmissions for three-carrier operation.

This Transceiver System supports multiple LTE technologies. The subject of this Class II Change request is authorization for LTE Three-Carrier Operation. This product can now transmit either 3 contiguous carriers or 3 non-contiguous carriers over the spectrum 1930 - 1995 MHz, configured as 5 + 5 + 5 MHz, 10 + 5 + 5 MHz and 5 + 5 + 10 MHz. The transceiver can be configured for the various technologies by varying the digital information provided from the baseband channel electronics alone, without physical, hardware or circuit changes to the transceiver.

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Exhibit 3 FCC REQUIRED INFORMATION continued

Section 2.1033(c)(5): Frequency range, Transmit: 1930–1995MHz PCS Blocks A-D-B-E-F-C-G

Section 2.1033(c)(6): Range of operating power values or specific operating power levels, and description of any means provided for variation of operating power.

The **B25 RRH 4x30** is capable of operating from 0.002 to 60 Watts/port in the 2x60 MIMO 2T4R mode or 0.002 to 30 Watts/port in the 4x30 MIMO 4T4R mode. The nominal transmit output power for each Tx path shall be translation settable over a **range of 16 dB.** The 2T4R mode is from 60 W down to 1.5 W, and the 4T4R mode is from 30 W down to 0.75W. Tx output power is controlled by digital step attenuator via software. The gain of the Tx path is adjusted by a FPGA to account for gain variations in the Tx chain over the operating temperatures and frequency ranges. Moreover, the FPGC provides fine output power control with a high resolution. The Tx chain parameters are carefully characterized during the manufacturing process and provide high accuracy of setting the Tx power and maintaining it over the operating frequency and temperature ranges.

CLGC (Closed Loop Gain Control) and Alcatel-Lucent's proprietary Enhanced Digital Pre-Distortion (EDPD) technology to provide constant output power over temperature. The features are controlled by software.

Section 2.1033(c)(7): Maximum power rating as defined in the applicable part (s) of the rules.

The maximum continuous RF output power available at each of the 2 transmit antenna terminals, for 2T4R operation, is 60 W (47.78 dBm), and at each of the 4 transmit antenna terminals, for 4T4R operation, is 30 W (44.77 dBm). Same as stated in the original filing.

Section 2.1033(c)(8): The dc voltages applied to and dc currents into the several elements of the final radio frequency amplifying device for normal operation over the power range.

The **B25 RRH 4X30** nominally uses the following normal operating voltages and currents. The nominal input of the **B25 RRH 4X30** is -48Vdc at 10 Adc. The +28V is achieved using a DC to DC converter.

Stage	Voltage	Current
Final Stage	+28Vdc	4.6Adc

Section 2.1033(c)(9): Tune-up procedure over the power range, or at specific operating power levels.

The Nokia **B25 RRH 4X30**, subject of this application, cannot be "tuned-up" by the user. There are no user tune-up features. All tuning is performed by the manufacturer during, and as part of, the manufacturing process. The B25 RRH 4x30 units are tested and verified with 60W (47.8dBm) power at EAC 1 & 2 with +/- 0.3dB tolerance in the factory. Same as stated in the original filing.

Applicant: Alcatel-Lucent USA, Inc.

Section 2.1033 (c)(10): A description of all circuitry and devices for determining and stabilizing frequency.

FCC ID: AS5BBTRX-22

The B25 RRH 4x30, under FCC ID: AS5BBTRX-22, is a 65 MHz bandwidth digital transceiver designed to operate in the Broadband PCS frequency spectrum (1930 - 1995 MHz). Frequency stability of the LTE carrier frequency is achieved with an accuracy better than the rated \pm 0.05 ppm by reference frequency locking using a proprietary phase-locked-loop (PLL) circuitry. External reference timing is provided by locking to GPS disciplined reference signals. Same as stated in the original filing. Same as stated in the original filing.

Section 2.1033 (c)(10): A description of all circuitry and devices provided for suppression of spurious radiation.

The **B25 RRH 4X30**, subject of this application, was designed in adherence to the proper Electromagnetic Compatibility (EMC) guidelines extending from the combination of Nokia proprietary Enhanced Digital Pre-Distortion (EDPD) firmware-SW algorithm and Filter module used to suppress spurious emissions. Same as stated in the original filing.