NOKIA Bell Labs

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

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March 4, 2019

Timco Engineering Inc.
FCC Authorized Telecommunication Certification Body
849 N.W. State Road 45, P.O. Box 370 Newberry,
Florida 32669

Dear Examiner:

The Nokia **AZHA AirScale RRH 4T4R B41 (AZHA)** is the subject of this request for a new FCC Product Certification under **FCC ID: VBNAZHA-01.** The AZHA is a LTE-TDD (Long Term Evolution-Time Division Duplex) transceiver and operates in Band 41 Broadband Radio Service (BRS) spectrum (2496-2690 MHz). The AZHA supports one to four 20 MHz carriers and 4x4 MIMO operation with a maximum total RF output power of 80W at its 4T/4R transmit ports. Nokia Bell Labs, part of the Nokia family of companies, hereby requests this certification for multicarrier operation. This is a new design and all of the required supporting exhibits are attached.

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.

Equipment Identification:	**VBNAZHA-01**
Rules Part Number:	**Part 27**
Emissions Designator(s):	**18M0F9W**
Frequency Range:	**E-UTRAN Band 41, 2496-2690 MHz**
Output Power:	**80W total with 4x4 MIMO Configuration**
Frequency Tolerance:	**± 0.05 ppm**
Carriers	**1~4 20MHz Carriers**

Enclosed in this application package are FCC 731 Form, agent authorization letter, the required measurement data and other required exhibits specific to this request for authorization of the subject product. 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 supporting exhibits are assembled and presented in accordance with the *Table of Contents* attached below.

List of Confidential Exhibits

Exhibit #	FCC Rule Section	Exhibit Title
Exhibit 5	Section 2.1033(c)(8,9)	Active Circuit Devices Drive Levels, Tune-Up procedure
Exhibit 6	Section 2.1033(c)(10,13)	Block Diagram, Operational Description, Circuitry for determining frequency)
Exhibit 7	Section 2.1033(c)(10)	Complete Circuit Diagrams)
Exhibit 8	Section 2.1033(c)(12,3)	Instruction Book (Installation Manual or User Manual)
Exhibit 9	Section 2.1033(c)(12)	Internal Photographs of the Equipment

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

Filing Engineer

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Att. Table of Contents for the Nokia **AZHA AirScale RRH 4T4R B41 (AZHA)** Product Certification Report

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