



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

Nokia, Global Product Compliance Laboratory
600-700 Mountain Avenue
Room 5B-108
Murray Hill, New Jersey 07974-0636 USA

July 20, 2022

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

Subject: Application for Class II Permissive Change Certificate Approval for Nokia AirScale Micro RRH 3.5GHz 4T/4R 20W (AZQCRH1) under Certification Number **FCC ID: 2AD8UAZQCRH1**.

Dear Examiner,

The Nokia AirScale Micro RRH 3.5GHz 4T/4R 20W (**AZQCRH1**) is the subject of this request for a Part 96 Class II Permissive Change FCC Product Certification Filing under **FCC ID: 2AD8UAZQCRH1**.

The **AZQC-CBRS** is a 150 MHz instantaneous bandwidth LTE Transceiver with a total power output capability of 20 Watts for all 4 ports. This 4x5W MIMO transmitter supports 4 **LTE-TDD** carriers placed anywhere in the **Part 96Z Citizens Broadband Radio Service (CBRS)** spectrum of 3550-3700 MHz.

The Original Filing under **FCC ID: 2AD8UAZQCRH1** for Part 96 Certification with multiple emissions designators and multicarrier LTE operation supported 4x5W MIMO operation with 10M0F9W and 20M0F9W emissions designators. A C2PC application for 5G-NR operation followed for 20 MHz bandwidth and emission designator 20M0W7W.

This C2PC application is to add 2x20 5G Multicarrier (Contiguous and Non-Contiguous) operation to this project. Nokia Bell Labs, part of the Nokia family of companies, hereby requests this certification for 5G-NR operation.

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 **AZQC-CBRS AZQCRH1**. The technical or non-technical contact at Nokia Bell Labs 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.

Equipment Identification:	2AD8UAZQCRH1
Rules Part Number:	Part 96
Frequency Range:	Transmit/ Receive 3550-3700 MHz (LTE-TDD & 5G-NR)
Output Power:	20 Watts Total Output for 4 Ports operating in a 4x5W configuration
Output EIRP:	50.12 Watts EIRP
Frequency Tolerance:	± 0.05 ppm
Grant Notes:	EP, MO, 20W total for 4 ports, Multicarrier MIMO Operation

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



Raymond J. Johnson
Technical Manager
FCC Compliance Test Group
Nokia, Global Product Compliance Laboratory
Phone: +1 908 679 6220
email: ray.johnson@alcatel-lucent.com

Primary Administrative Contact

Raymond J. Johnson
Technical Manager
FCC Compliance Test Group
Nokia, Global Product Compliance Laboratory
Building 5A-127
600 Mountain Avenue
Murray Hill, NJ 07974
Phone: +1 908 679 6220
email: ray.johnson@nokia-bell-labs.com

Filing Engineer

Steve E. Gordon
Filing Lead Engineer
Nokia, Global Product Compliance Laboratory
Building 5A-107
600 Mountain Avenue
Murray Hill, NJ 07974
Phone +1 908 679-5014
email: steve.gordon@nokia-bell-labs.com

Att. Table of Contents for the Nokia **Flexi Zone Multiband Outdoor (AZQC) Micro BTS CBRS (2AD8UAZQCRH1)**
Product Certification Report

TABLE OF CONTENTS**Cover Letter****Agent Authorization 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 (e)	Qualifications and Certifications
Exhibit 3	Section 2.1033(c)(21)	Setup Photographs
Exhibit 4		Test Report