



Nokia Solutions and Network, OY
2000 W. Lucent Lane
Naperville, IL 60563

August 18, 2022

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

Subject: Application for Original Equipment Certification for Nokia AirScale Micro RRH (AWHKB) 4T4R B24 8W under FCC ID: 2AD8UAWHKB01

Dear Examiner:

Nokia AirScale AWHKB is a variant of 5G/LTE Micro Remote Radio Head (mRRH), operating in B24/n24 with 1526-1536MHz (DL) and 1627.5-1637.5 MHz/1646.5-1656.5 MHz (UL). It supports LTE and NR technologies, 5MHz and 10MHz carriers and 4xMIMOs with 2W per port.

FCC 20-48 Order and Authorization, adopted on April 19, 2020, authorized Ligado to deploy a low-power terrestrial nationwide network in the 1526-1536 MHz, 1627.5-1637.5 MHz, and 1646.5-1656.5 MHz bands that will primarily support Internet of Things (IoT) services to promote more efficient and effective use of spectrum resources by making available additional spectrum for advanced wireless services, including 5G. FCC gave the conditions including technical requirements for ATC authority to ensure adjacent band operations, including Global Positioning System (GPS), are sufficiently protected from harmful interference. The spectrum 1526-1536MHz (DL) and 1627.5-1637.5 MHz/1646.5-1656.5 MHz (UL) was originally covered in FCC Part 25 for Mobile-Satellite Services (MSS). KDB 273109 D01 v02r02 2011 provided Equipment Authorization Guidance for Part 25 Transceivers including ancillary terrestrial components (ATC) devices.

Nokia hereby requests an original certification for the AWHKB station under FCC ID: 2AD8UAWHKB01. The technical requirements specified in FCC 20-48 Order and Authorization, Part 25 and KDB 273109 were followed for application and evaluation for compliance. The ANSI C63.26-2015 was followed for measurement methods and procedures.

The key data of the subject equipment are summarized below:

FCC ID	2AD8UAWHKB01
Manufacturer	Nokia Solutions and Network
Subject Equipment	AWHKB
Equipment Type	Transceiver
Frequency Band	E-UTRAN B24 and NR n24: 1526-1536MHz (DL)

	1627.5-1637.5 MHz/1646.5-1656.5 MHz (UL)
Maximum Output Power	2W (33dBm) per port and 8W (39dBm) per unit, conducted
Maximum EIRP Power	10W (40dBm)
Frequency Tolerance	± 0.05 ppm
Carriers	1x5 MHz, 2x5MHz and 1x10 MHz
FCC Rules	Part 25, Order 20-48

Enclosed in this application package are FCC 731 Form, a letter of Request for Confidentiality, 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 Order 20-48, Part 25 and KDB 273109 D01 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.

Should there be any questions or procedural issues, please feel free to contact me by email and/or phone. The contacts at Nokia will comply with any request for additional information should the need arise.

Sincerely,



Raymond J. Johnson
Technical Manager
FCC Compliance Test Group
Nokia, Global Product Compliance Laboratory
Phone: +1 908 679 6220
email: ray.johnson@nokia-bell-labs.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
Qin Yu
Global Product Compliance Laboratory
email: q.yu@nokia-bell-labs.com

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