Bell Labs

NOKIA

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

Nokia Global Product Compliance Laboratory
600-700 Mountain Avenue, Room 5A-107

Murray Hill, NJ 07974, USA

August 08, 2023

Subject: **Application for Class II Permissive Change under FCC ID: 2AD8UAWPQYAWPQZ01 for Nokia AirScale Indoor pico RRH 4T4R n48 AWPQY/Z.**

Dear Examiner:

The Nokia **AirScale Indoor pico RRH 4T4R n48 AWPQY/Z** (hereinafter referred to as "AWPQY/Z") is the subject of this application for Class II Permissive Change Certification under FCC ID: 2AD8UAWPQYAWPQZ01. The **AWPQY/Z** is an LTE-TDD (Long Term Evolution-Time Division Duplex) and 5G-NR transceiver which operates in Band 48 Citizens Broadband Radio Service (CBRS) spectrum (3550-3700 MHz).

The Original **AWPQY/Z Certification** supported 10 MHz and 20 MHz single LTE carriers, plus 10+10 MHz multiple carriers. The **AWPQY/Z** also supported 5G-NR 20, 30, 40, 50, 60, 70, 80, 90 and 100 MHz single carriers and Multicarrier operation with 4T/4R modes of operation and a maximum total RF power output capacity of 1.0 W at its 4T/4R transmit ports.

A Class II Permissive Change introduced the addition of a single 10 MHz New Radio (NR) carrier, alongside an increased maximum limit of four carriers for Long-Term Evolution (LTE) or NR. These multi-carrier configurations can be either contiguous or non-contiguous.

This Class II Permissive Change will add Concurrent 5G and LTE (7 carrier) at maximum power with either technology having up to 4 carriers. Nokia Bell Labs, part of the Nokia family of companies, hereby requests this certification for 5G-NR and LTE (7 carrier) operation.

The key data are summarized below.

FCC ID:	**2AD8UAWPQYAWPQZ01**
FCC Rules:	**Part 96**
Frequency Range:	**E-UTRAN Band 48, 3550-3700 MHz**
Conducted Output Power:	**Up to 30.0 dBm (1.0 W) Total**
EIRP Power:	**Up to 57.51dBm (563.6 W) Average Total**
Frequency Tolerance:	**± 0.05 ppm**
Carriers:	**Concurrent Multiple 5G-NR & LTE 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 96 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.

Sincerely,

Raymond J. Johnson
Technical Manager
Global Product Compliance Laboratory
Phone: 908-679-6220
email: ray.johnson@nokia-bell-labs.com

Filing Engineer
Steve Gordon
email: steve.gordon@nokia-bell-labs.com

TABLE OF CONTENTS

Required Exhibits: