

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

October 12, 2022

Bruno Clavier- General Manager
Timco Engineering Inc.
849 N.W. State Road 45
P.O. Box 370
Newberry, Florida 32669

Dear Mr. Clavier

The **Nokia AWEWA/B AirScale mmWave Radio 5G n260 39 GHz** is the subject of this request for a Class II Permissive Change to its Product Certification under **FCC ID: 2AD8UAWEWAB01**. The typical ASMR configuration is composed of an ASMR base unit (AWEWA/B) and up to two extension modules (FA3WA). The previously filed Radio Base Unit, **FCC ID: 2AD8UAWEWAB01**, can be paired with up to two of the previously filed **FA3WA** Extension Modules, **FCC ID: AD8UFA3WA01**, to provide 360 degree coverage.

Currently only one these units transmits at a time. This Class II change requests simultaneous operation of the ASMR Main unit while a single Extension unit operates as previously filed in the identical UMFUS n260 39 GHz band. This operation is to provide greater user capacity in high density applications. The units may be configured to transmit in the same sector as well. The maximum power of each unit remains unchanged but since the beams may overlap a new RF Exposure document is supplied which defines the exposure guidelines for the new worst case installation. A new RF test report documenting simultaneous operation is supplied as well.

The **AWEWA/B ASMR Main unit** and the **FA3WA AirScale mmWave Extension Module** incorporates identical mmWave 5G LTE / New Radio Transceiver modules. The 39 GHz transceiver modules implement two individually polarized 8x12 active element phased arrays. These 1400 MHz instantaneous downlink bandwidth units have a total power output capability of 52 dBm EIRP per polarization for a total combined power of 55 dBm EIRP. It can be configured to provide one to eight carriers of **97M0G7W** emissions designator in the **Upper Microwave Flexible Use Service** spectrum (37 – 40 GHz) as allowed under **47CFR Part 30**. The operational parameters allows the unit to place up to eight carriers anywhere within a 1400 MHz portion of the US n260 spectrum, and these carriers are divided between the Main and Extension Units during simultaneous operation..

Nokia Bell Labs, part of the Nokia family of companies, hereby requests Class II Permissive Change authorization for simultaneous operation of the above identified ASMR Radio Base Unit and Extension unit. The required supporting exhibits are attached. The measurement exhibits attached to this application demonstrate full compliance with FCC Part 30 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:	2AD8UFA3WA01
Rules Part Number:	Part 30
Emissions Designators:	97M0G7W, 497MG7W and 797MG7W (5G-NR LTE-TDD Based)
Frequency Range:	Transmit/ Receive: 37 – 40 GHz
Output Power:	52 dBm EIRP per polarization, 55 dBm EIRP Total Output for 2 polarizations operating in a 2x2 MIMO configuration One through Eight Carrier MIMO Operation
Frequency Tolerance:	± 0.05 ppm

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 **AWEWA/B AirScale mmWave Radio 5G n260 39 GHz**. This request also authorizes TIMCO Engineering Inc. to submit a **KDB PAG** request for processing of this filing. 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.

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@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

W. Steve Majkowski NCE
Filing Lead Engineer
Nokia, Global Product Compliance Laboratory
Building 5B-103
600 Mountain Avenue
Murray Hill, NJ 07974
Phone +1 908 608-8004
email: steve.majkowski@nokia-bell-labs.com

Att. Table of Contents for the **AWEWA/B AirScale mmWave Radio 5G n260 39 GHz** Class II Permissive Change Product Certification

TABLE OF CONTENTS

Cover Letter

Agent Letter

Confidentiality Letter

Exhibit

<u>Number</u>	<u>FCC Rule Number</u>	<u>Description</u>	
1	Section 2.1033(a)	FCC Form 731	
2	Section 2.911(d)	Qualifications and Certifications	
3	Section 2.1033(c)(14)	RF Test Report	
4	Section 1.1307(b)	RF Exposure Report	
5	Section 2.1033(c)(21)	Photographs of the Test Setups	
6	Section 2.1033(c)(12,3)	Instruction Book AWEWA/B (Installation Manual or User's Manual)	(Confidential)