



Bell Labs

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Subject: Application for Class II Change to FCC ID: VBNAEHC-01 for Nokia AirScale MAA 64T64R 320W AEHC Radio Unit, Operating in Band 41

Dear Examiner:

The **Nokia Solutions and Networks**, AirScale MAA 64T64R 320W AEHC Radio Unit (hereinafter referred to as “AEHC”) is the subject of this application for a FCC Class II Change to the Product Certification under FCC ID: VBNAEHC-01. The AEHC is an LTE-TDD (Long Term Evolution-Time Division Duplex) transceiver and operates in Band 41 Broadband Radio Service (BRS) spectrum (2496 – 2690 MHz). The AEHC was originally filed for Single and Multiple LTE carriers, 20 MHz, 40 MHz, 60 MHz and 100 MHz Single 5G-NR carriers and 64x64 MIMO operation with a maximum total output RF power of 320W at the 64T/64R transmit ports.

A Class II Permissive Change was filed on March 01, 2021 to add modes of operation for **LTE (F9W) 10MHz single carrier plus 5G-NR (G7W) 20, 50, 80 and 90 MHz single carriers and multiple contiguous/non-contiguous 5G NR +LTE (total up to three 20 MHz) carrier configurations (20MHz+20MHz, 40MHz+20MHz, 20MHz+20MHz+20MHz, 40MHz+20MHz+20MHz, 20MHz+20MHz+20MHz and 40MHz+20MHz+20MHz).**

A subsequent Class II Permissive Change was **added to include multi carrier 5G-NR/LTE configurations (LTE 20+NR 90, NR 50+LTE 20, NR 50+LTE 2x20, NR 50+LTE 3x20, LTE 2x20 + NR 90, NR 2x40+LTE 2x20, NR 2x50+LTE 2x20, NR 2x40+LTE 3x20, NR 2x50+LTE 3x20, LTE 3x20 + NR 90) and 5G-NR only configurations (100+20, 100+40, 60+100, 80+100, 60+40) to the existing grant. No new bandwidths were added. Total power is 320W for all ports, 64Tx64R MIMO.**

This Class II Change is to add 30 MHz Bandwidth to the grant, demonstrate operation of 190 MHz contiguous, and additional concurrent carrier configurations associated with these capabilities.

The key data for this Class II change is summarized below.

FCC ID:	VBNAEHC-01
FCC Rules:	Part 27
Frequency Range:	E-UTRAN Band 41, 2496-2690MHz
Output Power:	120 Watts maximum (Total for all ports with 64Tx64R MIMO Configuration)
Frequency Tolerance:	± 0.05 ppm
Emissions Designators:	27M7G7W

Carriers: **30 MHz Bandwidth Single Carriers and Multiple carrier LTE/5G NR Configurations**

Enclosed in this application package are the FCC 731 Form, an Agent Authorization letter, the required measurement data and other required exhibits specific to this request for a FCC Class II Change 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.

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

Sincerely,



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TABLE OF CONTENTS

Cover Letter

Agent Authorization Letter

Required Exhibits:

Exhibit		
Number	FCC Rule Number	Description
1	Section 2.1033(a)	FCC Form 731
2	Section 2.911(d)	Qualifications and Certifications
3	Section 2.1033(c)(21)	Photographs of the Test Setups
4	FCC Test Report	