



Bell Labs

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600-700 Mountain Avenue, Room 5B-111  
Murray Hill, NJ 07974, USA

June 07, 2019

**Subject: Application for Class II Change to FCC ID: FCC ID: VBNAAHF-01 for Nokia AirScale MAA 64T64R 128AE B41 120W AAHF Radio Unit, Operating in Band 41**

Dear Examiner:

The Nokia Solutions and Networks USA LLC AirScale MAA 64T64R B41 AAHF (hereinafter referred to as "AAHF") is the subject of this application for a FCC Class II Change to the Product Certification under FCC ID: VBNAAHF-01. The AAHF is a LTE-TDD (Long Term Evolution-Time Division Duplex) transceiver and operates in Band 41 Broadband Radio Service (BRS) spectrum (2496 – 2690MHz). The AAHF was originally filed for one to three 10MHz and/or 20MHz carriers in a 64x64 MIMO configuration with a maximum total RF output power of 120W at its 64 transmit ports. A Class II change was also processed for a single 60 MHz 5G-NR carrier at 120W total.

This Class II Change is to add a 40 MHz 5G-NR Emissions Designator transmitting at 80W. Nokia Bell Labs, part of the Nokia family of companies, hereby requests this certification for 5G-NR operation.

The key data for this Class II Change are summarized below.

<b>FCC ID:</b>	<b>VBNAAHF-01</b>
<b>FCC Rules:</b>	<b>Part 27</b>
<b>Frequency Range:</b>	<b>E-UTRAN Band 41, 2496-2690MHz</b>
<b>Output Power:</b>	<b>80 Watts Total for all ports transmitting 40M0G7 in 64Tx 64R MIMO Configuration</b>
<b>Frequency Tolerance:</b>	<b>± 0.05 ppm</b>
<b>Emissions Designators</b>	<b>40M0G7W for 5G-New Radio with QPSK, 16QAM, 64QAM and 256QAM</b>

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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**Cover Letter**

**Agent Authorization Letter**

**Required Exhibits:**

<b><u>Exhibit Number</u></b>	<b><u>FCC Rule Number</u></b>	<b><u>Description</u></b>
1	Section 2.1033(a)	FCC Form 731
2	Section 2.911(d)	Qualifications and Certifications
3	Section 2.1033(c)(1,2, 4-7)	Manufacturers, FCC Identifier, Emission, Range of RF Power & Frequency
11	Section 2.1033(c)(10, 13)	Description of Modulation System,
12	Section 2.1033(c)(21)	Photographs of the Test Setups

**FCC Test Report**