Applicant: Nokia Solutions and Networks US LLC FCC ID: VBNAAHF-01



**Bell Labs** 

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FCC Authorized Telecommunication Certification Body
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Nokia Global Product Compliance Laboratory 600-700 Mountain Avenue, Room 5B-111 849 N.W. State Road 45, P.O. Box 370

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 US 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 – 2690 MHz). The AAHF was originally filed for one to three 10MHz and/or 20MHz carriers in a 64T64R MIMO configuration with a maximum total RF output power of 120W at its 64 transmit ports. A Class II change was processed for a single 60 MHz 5G-NR carrier at 120W total followed by a Class II Change to add a 40 MHz 5G-NR Emissions Designator transmitting at 80W, then Class II Change to add 60 W for 40 MHz 5G-NR (G7W) operation in 32T32R mode and 60 W LTE (F9W) in 32T32R mode.

This Class II Permissive Change is to add modes of operation for 40 W for 15 MHz Single Carrier LTE (64T64R) or 80 W for 15 +15 MHz Dual Carrier LTE (64T64R) to the existing Grant. These modes of operation have lower total maximum power (120 W) than was previously certified for this device. Nokia Bell Labs, part of the Nokia family of companies, hereby requests this certification for LTE operation.

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

FCC ID: VBNAAHF-01 FCC Rules: Part 27

Frequency Range: E-UTRAN Band 41, 2496-2690MHz

Output Power: 40 Watts Total for all Tx ports with Single Carrier operating in 64T64R

mode. 80 Watts Total for all Tx ports with Dual Carriers operating in

64T64R mode

Frequency Tolerance: ± 0.05 ppm

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.

Public Page 1 of 2

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

Raymond Johnson

**Global Product Compliance Laboratory** 

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## **TABLE OF CONTENTS**

**Cover Letter** 

**Exhibit** 

**Agent Authorization Letter** 

**Required Exhibits:** 

Number	FCC Rule Number	<u>Description</u>
1	Section 2.1033(a)	FCC Form 731
2	Section 2.911(d)	Qualifications and Certifications
12	FCC Test Report	
	Section 2.1033(c)(21)	Photographs of the Test Setups

Public Page 2 of 2