



Timco Engineering Inc.
FCC Authorized Telecommunication
Certification Body
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Nokia Global Product Compliance Laboratory
600-700 Mountain Avenue, Room 5A-107

Murray Hill, NJ 07974, USA

May 29, 2020

Subject: Application for Original Equipment Certification under FCC ID: VBNAEHC-01 for Nokia AirScale MAA 64T64R 192AE B41 320W AEHC (AEHC)

Dear Examiner:

The Nokia **AirScale MAA 64T64R 192AE B41 320W AEHC** (hereinafter referred to as "AEHC") is the subject of this application for a new FCC Product Certification under FCC ID: VBNAEHC-01. The AEHC is a 5G-NR and LTE-TDD (Long Term Evolution-Time Division Duplex) transceiver and operates in Band 41 Broadband Radio Service (BRS) spectrum (2496-2690 MHz). The AEHC supports Single and Multiple LTE 20 MHz carriers, 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 its 64T/64R transmit ports. Nokia Bell Labs, part of the Nokia family of companies, hereby requests this certification for LTE and 5G-NR operation.

The key data are summarized below.

FCC ID:	VBNAEHC-01
FCC Rules:	Part 27
Frequency Range:	E-UTRAN Band 41, 2496-2690MHz
Output Power:	320 Watts Total for all ports with 64Tx 64R MIMO Configuration
Frequency Tolerance:	± 0.05 ppm
Emissions Designators	17M8F9W LTE and / 38M0G7W, 57M7G7W, 97M2G7W 5G-NR with QPSK, 16QAM, 64QAM and 256QAM
Carriers:	Single Carrier & Multiple Carriers LTE; Single Carrier 5G-NR

Enclosed in this application package are FCC 731 Form, letters of Request for Permanent Confidentiality, 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 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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Confidentiality Request Letter

Agent Authorization Letter

Required Exhibits:

<u>Exhibit Number</u>	<u>FCC Rule Number</u>	<u>Description</u>
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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
4	Section 2.1033(c)(11)	Drawing of the Identification Label
5	Section 2.1033(c)(8,9)	Active Circuit Devices Drive Levels, Tune-Up procedure (Confidential)
6	Section 2.1033(c)(10,13)	Block Diagram, Operational Description, Circuitry for determining frequency (Confidential)
7	Section 2.1033(c)(10)	Complete Circuit Diagrams (Confidential)
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9	Section 2.1033(c)(12)	Internal Photographs of the Equipment (Confidential)
10	Section 2.1033(c)(12)	External Photographs of the Equipment
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

RF Exposure Assessment (MPE Report)