



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

January 24, 2022

Subject: Application for Original Equipment Certification under FCC ID: VBNAEQU-01 for Nokia AirScale MAA 64T64R 192AE n78 200W AEQU

Dear Examiner:

The **Nokia AirScale MAA 64T64R 192AE n78 200W AEQU** (hereinafter referred to as "AEQU") is the subject of this application for a new FCC Product Certification under FCC ID: VBNAEQU-01. The AEQU is a 5G-NR (New Radio) and LTE-TDD (Long Term Evolution-Time Division Duplex) transceiver and operates in **n78 – 5G NR Frequency Band – 3500 MHz TDD**.

This AEQU supports 20MHz, 30 MHz and 40 MHz single 5G-NR carriers. The AEQU is equipped with an integrated antenna with a maximum total gain of 24.5 dBi \pm 1 dB . Nokia Bell Labs, part of the Nokia family of companies, hereby requests this certification for 5G-NR operation.

The key data are summarized below.

FCC ID:	VBNAEQU-01
FCC Rules:	Part 27
Frequency Range:	E-UTRAN Band n78, 3450-3550 MHz
Conducted Output Power:	Up to 34.95 dBm (3.125 W) per port
EIRP Power:	Up to 53.01 dBm (200.0 W) Total
Frequency Tolerance:	\pm 0.05 ppm
Emissions Designators	18M2G7W, 28M0G7W and 37M8G7W 5G-NR with QPSK, 16QAM, 64QAM and 256QAM
Carriers:	Single Carriers: 1x20, 1x30, 1x40 MHz

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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TABLE OF CONTENTS

Cover Letter

Confidentiality Request Letter

Agent Authorization Letter

Required Exhibits:

Exhibit	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)(1,2, 4-7)	Manufacturers, FCC Identifier, Emission, Range of RF Power & Frequency
4	Section 2.1033(c)(11), 2.925(a)(1)	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)
8	Section 2.1033(c)(3)	Installation Manual (Confidential)
8a	Section 2.1033(c)(3)	Manual - NDA (Non-Disclosure Agreement)
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
13	Sections 1.1307 & 1.1310	RF Exposure Assessment (MPE Report)
14	Section 2.1033(c)(10)	Parts List (Confidential)
15	Section 2.1033(14), 2.911(e)	Test Report