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FCC Authorized
Telecommunication Certification Body (TCB)
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September 2, 2022

Subject: Application for C2PC Equipment Authorization under FCC ID: 2AD8UASMR24FA3UB for Nokia AWEUC/D Airscale mmWave Radio 5G n258 24GHz 192AE Concurrent with FA3WA Extension Module 5G n260 39 GHz 192AE, Operating in the Bands n258 and n260

Dear Examiner:

The Nokia AWEUC/D Airscale mmWave Radio 5G n258 24 GHz 192AE is part of Nokia ASMR family of products supporting 5G New Radio technology. This system is composed of a base unit and up to two extension modules. The Radio Base Unit, an AWEWC (AC version) or an AWEWD (DC version) can be paired with the FA3UB (24GHz 192AE) or FA3WA (39 GHz 192AE) extension modules.

The AWEUC/D Airscale mmWave Radio 5G n258 24 GHz base unit has been certified under FCC ID: 2AD8UASMR24FA3UB with option of pairing with FA3UB 24GHz extension modules for up to 360 deg coverage. The FA3UB 24GHz Extension Module has also been individually certified under FCC ID: 2AD8UAFA3UB01. This application is for Class II permissive change (C2PC) authorizing the operation of the AWEUC/D base units (24GHz) paired with FA3WA (39GHz) extension module for concurrent operation, where these two transmitters operate at maximum power within their approved band and may be transmitting **in the same sector**. The FA3WA 39GHz Extension Module has also been individually certified under FCC ID: 2AD8UAFA3WA01.

The AWEUC/D transceiver modules implement two individually polarized 8x12 arrays with a total power output capability of 52 dBm EIRP per polarization and a total combined power of 55 dBm EIRP in n258, Upper Microwave Flexible Use Service spectrum (24.25-25.25 GHz) under 47CFR Part 30. It can be configured to provide one to seven 100MHz carriers in n258, where one or two carriers in 24.25-24.45GHz and one to five carriers in the 24.75-25.25 GHz. The total RF power of AWEWC/D will be equally divided among the carriers.

The FA3WA extension module implements two individually polarized 8x12 arrays with a total power output capability of 52 dBm EIRP per polarization and a total combined power of 55 dBm EIRP in n260, Upper Microwave Flexible Use Service spectrum (37 – 40 GHz) under 47CFR Part 30. It can be configured to provide one to eight 100MHz carriers. The total RF power of FA3WA will be equally divided among the carriers.

The measurement and RF exposure exhibits attached to this application demonstrate full compliance with FCC Part 30 following the procedural requirements specified in FCC Part 2 Subpart J – Equipment Authorization Procedures.

The data are summarized below:

FCC ID of Main Unit AWEUC/D:	**2AD8UASMR24FA3UB**
Rules Part Number:	**Part 30**
Frequency Range:	**Transmit/ Receive: 24.25-25.25 GHz**
Output Power:	**52 dBm EIRP per polarization and 55 dBm EIRP Total per unit**

Carriers:	**1~7 Carriers**
FCC ID of Extension FA3WA:	**2AD8UAFA3WA01**
Rules Part Number:	**Part 30**
Frequency Range:	**Transmit/ Receive: 37 – 40 GHz**
Output Power:	**52 dBm EIRP per polarization and 55 dBm EIRP Total per unit**
Carriers:	**1~8 carriers**

Attached are the FCC Form 731 (Application for Equipment Authorization – Radio Frequency Devices), the required measurement data and exhibits specific to this request for authorization of the AWEUC/D AirScale mmWave Radio 5G n258 24 GHz Radio Unit paring with FA3WA 39 GHz Extension Unit.

Both 2AD8UASMR24FA3UB AWEUC/D and 2AD8UAFA3WA01 FA3WA were approved under PAGs previously. Both devices are electrically identical to the devices previously approved under a PAG and there are no changes. The test procedures and evaluation conditions are consistent with that approved previously under PAG.

Per KDB 388624 D01 Pre-Approval Guidance, it is not necessary for manufacturers to file PAG requests for permissive changes on devices previously processed under the pre-approval process if the earlier guidance remains fully applicable; however, the TCB must re-open by replying in the original PAG KDB to request FCC review of the subsequent permissive change application and enable it to be granted.

The technical or non-technical contact at Nokia Bell Labs will comply with any request for additional information should the need arise. The attached exhibits with the applicable FCC Rule section are assembled and presented in accordance with the *Table of Contents* attachment.

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

Sincerely,

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Required Exhibits*:

EXHIBIT	FCC RULES	CONTENTS
Exhibit 1	Section 2.1033(a)	TCB Application Form 731
Exhibit 2	Sections 2.911 (d)(1, 2) & 2.911 (e)	Certifications and Qualification
Exhibit 3	Sections 2.1033 (c)(14), 2.911 (e)	Test Report
Exhibit 4	Sections 1.1307 & 1.1310	RF Exposure Assessment
Exhibit 5	Section 2.1033 (c)(21)	Setup Drawings or Photographs

*The information in the exhibits submitted in the original filings under FCC ID 2AD8UASMR24FA3UB and FCC ID 2AD8UAFA3WA01 about Manufacturer, Applicant and Identifier, Descriptions of Operation, Block Diagrams, Schematics, Photos and Product Label are still valid and will not be resubmitted here.