

Prepared (also subject responsible if other) EHUAYAN		No. TA8AKRD901145-1		
Approved Hua Yang	Checked	Date 2020-01-17	Rev B	Reference

Federal Communications Commission
Authorization & Evaluation Division
7435 Oakland Mills Road
Columbia, Maryland 21046
Attention: Equipment Authorization Branch

Subject: Class II Permissive Change for FCC ID: TA8AKRD901145-1

To Whom It May Concern:

Ericsson AB requests a Class II Permissive Change for the above mentioned FCC Identifier.

New functionality (NR) has been added in software, as described/covered in exhibit 12 and supporting documentation.

The radio operates in the broadband radio service band as per 47 CFR Part 24 and Part 27.

This radio (AIR 4455 B2/B25 B66A) is designed for use in GSM, WCDMA, LTE, NB-IoT and NR cellular telephone system. This dual-band FDD radio operates in Band 2 or Band 25 and Band 66A. For B2, the transmitter is from 1930 MHz to 1990 MHz and the receiver is from 1850 MHz to 1910 MHz. For B25, the transmitter is from 1930 MHz to 1995 MHz and the receiver is from 1850 MHz to 1915 MHz. For B66A, the transmitter is from 2110 MHz to 2180 MHz and the receiver is from 1710 MHz to 1780 MHz. It supports radio access technology SR & MR GSM, WCDMA, NB-IoT (IB, GB, SA), NR.

It supports channel bandwidths of 200 kHz for GSM, 3.8-5 MHz for WCDMA, 5, 10, 15 and 20 MHz for LTE and NR. The radio supports modulation types of GMSK, AQPSK and 8PSK for GSM, QPSK, 16QAM and 64QAM for WCDMA, QPSK, 16QAM, 64QAM and 256QAM for LTE & NR.

The radio has the ability to be used in a RBS system configured for 3GPP MIMO/Spatial multiplexing, carrier aggregation and NB-IoT technologies.

This radio will in normal mode operates at a maximum power of 30W per port per band, 40W per port dual-band, the radio has 4 combined TX/RX ports.

The AIR 4455 B2/B25 B66A is identical to the Radio 4455 B2/B25 B66A regarding RF circuitry, they have the same Radio board and Filter unit, the difference is AIR 4455 has integrated antenna. Therefore the NR measurements were performed on the Radio 4455 and no extra testing is required for AIR 4455, the test report is applicable for both AIR and Radio 4455 B2/B25 B66A.

This radio will always require a license for transmission. The Exhibit 8 user manuals submitted with this application is generic and may cover multiple products. This application is only valid for the model specified in the Exhibit 12 circuit description.

Ericsson AB requests confidentiality under CFR 0.459 according to attached letter. We further certify that the applicant nor any party to the application is subject to a denial of Federal benefits, that includes FCC benefits, pursuant to section 5301 of the Anti-Drug abuse Act of 1988, 21 U.S.C. Section 862.
If additional information is needed, please contact me on the below listed number.

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