

## EXHIBIT 11: DETAILED DESCRIPTION OF THE MODULATION SYSTEM

### SECTION 2.1033(c) (13)

For equipment employing digital modulation techniques, a detailed description of the modulation system to be used, including response characteristics of any filters provided, and a description of the modulating wavetrain, shall be submitted for the maximum rated conditions under which the equipment will be operated.

#### Response

The Nokia **AWEWA/B 5G AirScale 39 GHz mmWave Radio** supports the LTE Based 5G New Radio access technology defined in 3GPP, including multiple-input multiple-output (MIMO). The 5G-NR access technologies are being developed and standardized under 3GPP TS 38-x, release 15 for radio type 2-O.

The latest released document detailing modulation was:

**3GPP TS 38.211 V15.6.0 (2019-06)** *3rd Generation Partnership Project; Technical Specification Group Radio Access Network; NR; Physical channels and modulation (Release 15)*

This above standard incorporates coding for QPSK, 16QAM, and 64QAM so the overall spectral appearance is similar to LTE.

Additional information is in Exhibit 6 of this application.