

Note: Expanded measurement uncertainty is ± 1 dB, k = 2





A.5 Conducted Spurious Emission

A.5.1 Measurement Method

The following steps outline the procedure used to measure the conducted emissions from the EUT.

- 1. In measuring unwanted emissions, the spectrum shall be investigated from 30 MHz or the lowest radio frequency signal generated in the equipment, whichever is lower, without going below 9 kHz, up to at least the frequency given below:
 - (a) If the equipment operates below 10 GHz: to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower.
 - (b) If the equipment operates at or above 10 GHz: to the fifth harmonic of the highest fundamental frequency or to 100 GHz, whichever is lower.
- 2. Determine EUT transmit frequencies: below outlines the band edge frequencies pertinent to conducted emissions testing.
- 3. The number of sweep points of spectrum analyzer is greater than 2×span/RBW.

A. 5.2 Measurement Limit

Part 25.202(f) specifies The mean power of the emissions shall be attenuated below the mean output power of the transmitter in accordance with the following schedule: In any 4 kHz band, the center frequency of which is removed from the assigned frequency by more than 250 percent of the authorized bandwidth: An amount equal to 43 dB plus 10 times the logarithm (to the base 10) of the transmitter power in watts;

Part 25.216(c) specifies the e.i.r.p. density of emissions from mobile earth stations placed in service after July 21, 2002 with assigned uplink frequencies between 1610 MHz and 1660.5 MHz shall not exceed -70dBW/MHz, averaged over any 2 millisecond active transmission interval, in the band 1559-1605 MHz. The e.i.r.p. of discrete emissions of less than 700 Hz bandwidth from such stations shall not exceed -80dBW, averaged over any 2 millisecond active transmission interval, in the 1559-1605 MHz band.

Part 25.216(e) specifies the e.i.r.p density of emissions from mobile earth stations with assigned uplink frequencies between 1990 MHz and 2025 MHz shall not exceed –70dBW/MHz, averaged over any 2 millisecond active transmission interval, in frequencies between 1559 MHz and 1610 MHz. The e.i.r.p. of discrete emissions of less than 700 Hz bandwidth from such stations between 1559 MHz and 1605 MHz shall not exceed –80dBW, averaged over any 2 millisecond active transmission interval. The e.i.r.p. of discrete emissions of less than 700 Hz bandwidth from such stations between 1605 MHz and 1610 MHz manufactured more

than six months after FEDERAL REGISTER publication of the rule changes adopted in FCC 03-283 shall not exceed ~80 dBW, averaged over any 2 millisecond active transmission interval. Part 25.216(h) specifies mobile earth stations manufactured more than six months after FEDERAL REGISTER publication of the rule changes adopted in FCC 03-283 with assigned uplink frequencies in the 1626.5-1660.5 MHz band shall suppress the power density of emissions in the 1605-1610 MHz band-segment to an extent determined by linear interpolation from ~70 dBW/MHz at 1605 MHz to ~46 dBW/MHz at 1610 MHz, averaged over any 2 millisecond active transmission interval. The e.i.r.p of discrete emissions of less than 700 Hz bandwidth from such stations shall not exceed a level determined by linear interpolation from ~80 dBW at 1605 MHz to ~56 dBW at 1610 MHz, averaged over any 2 millisecond active transmission interval.



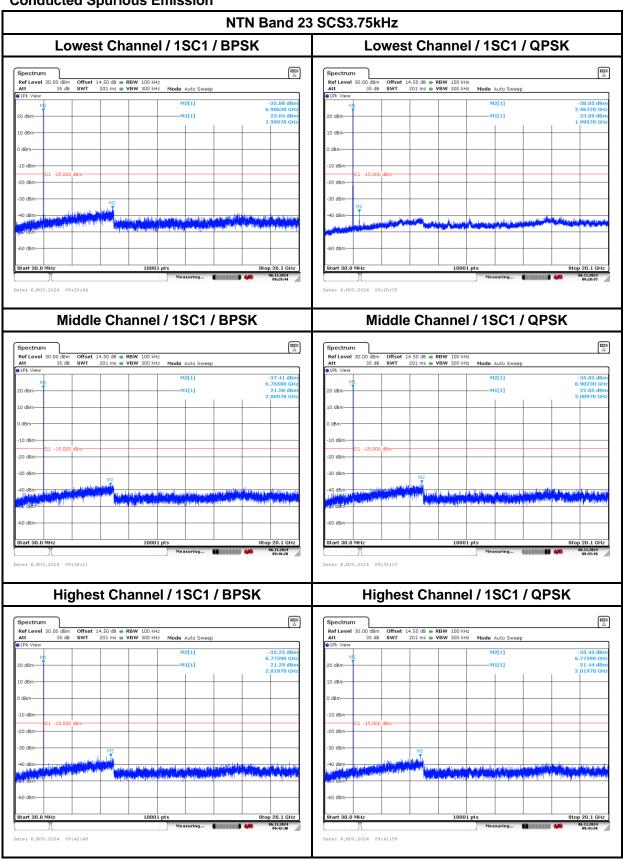


Part 25.216(i) specifies the e.i.r.p density of carrier-off state emissions from mobile earth stations manufactured more than six months after FEDERAL REGISTER publication of the rule changes adopted in FCC 03-283 with assigned uplink frequencies between 1 and 3 GHz shall not exceed –80 dBW/MHz in the 1559-1610 MHz band averaged over any two millisecond interval. Part 25.216(j) specifies a Root-Mean-Square detector shall be used for all power density measurements.



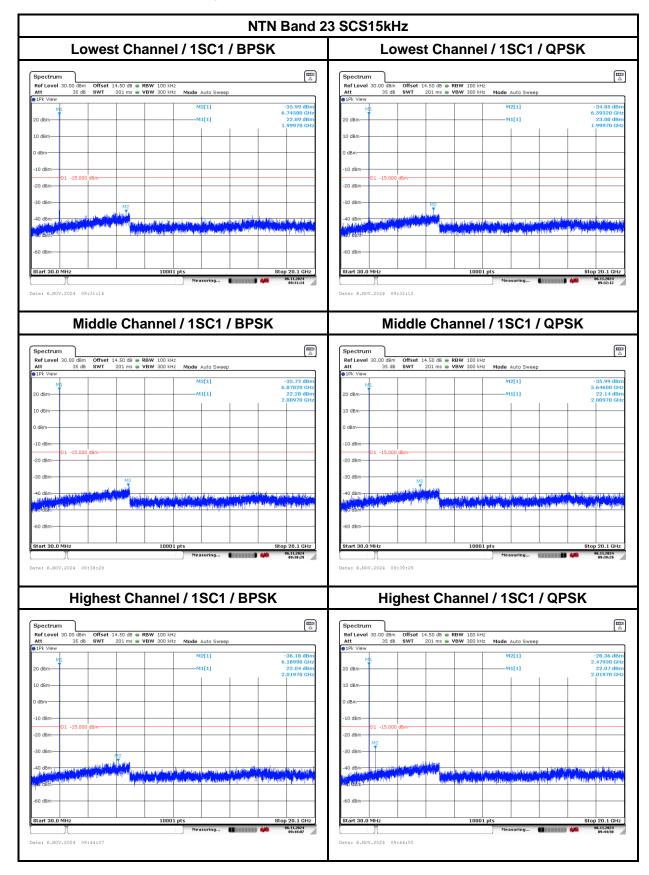


A5.3 Measurement result Conducted Spurious Emission



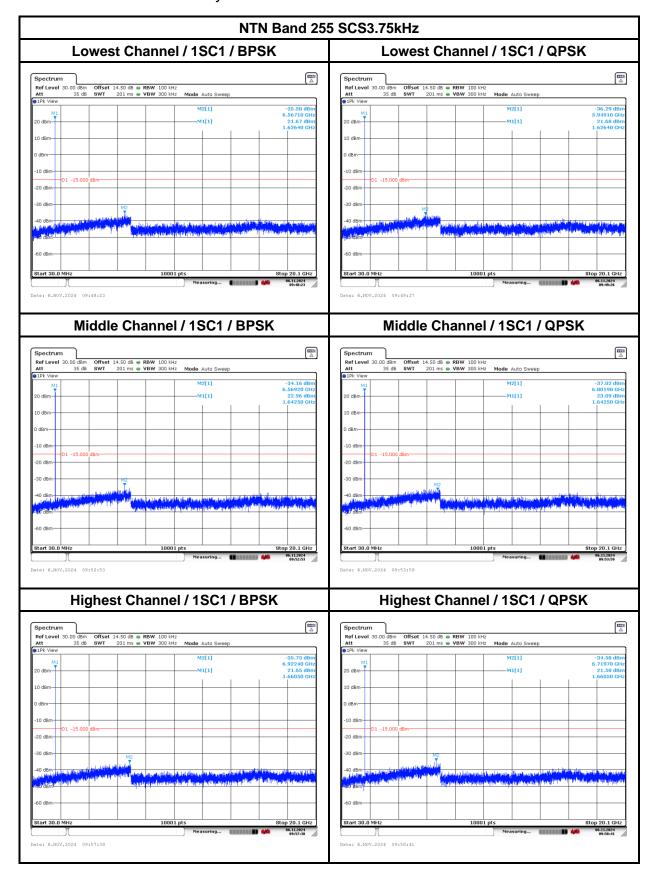






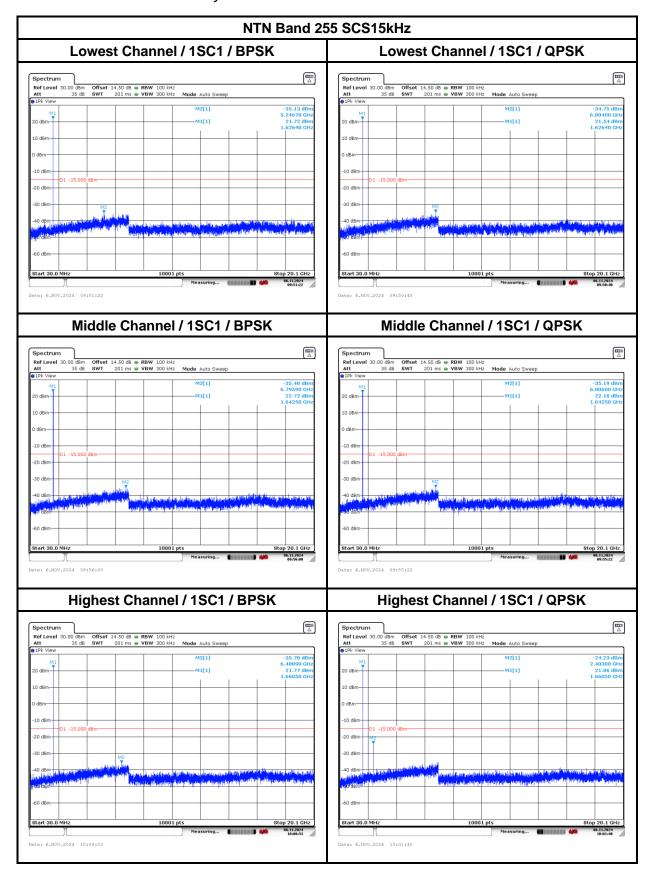






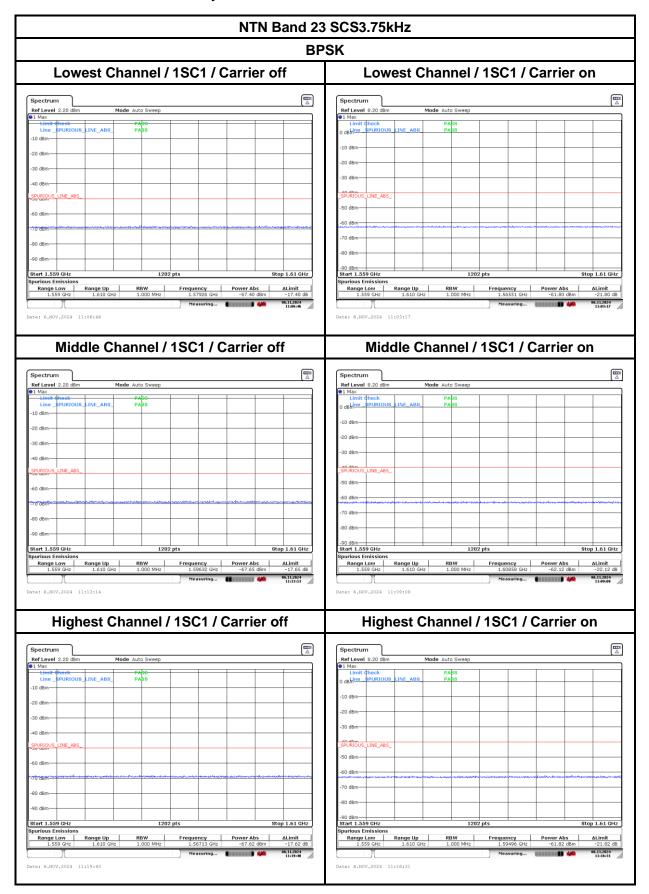












NTN Band 23 SCS3.75kHz





