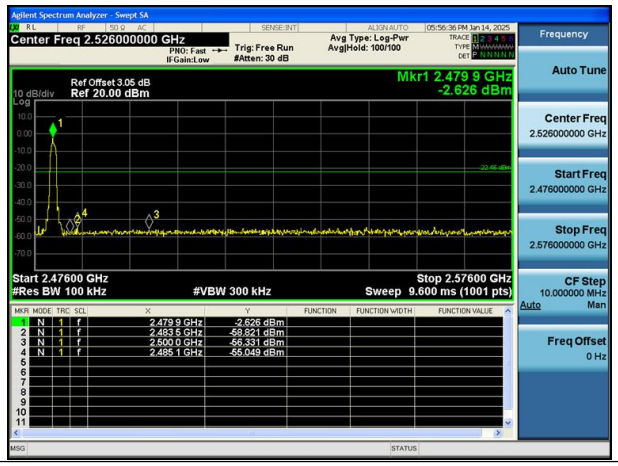
No-Hopping Pi/4 DQPSK Highest

Reference Power

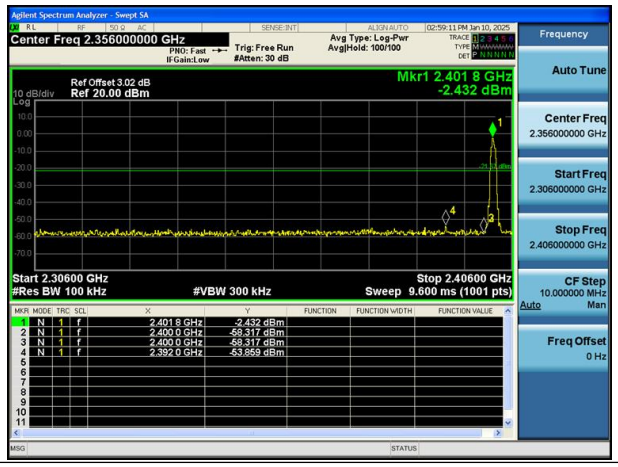
Band-edge Emission



No-Hopping 8DPSK Lowest

Reference Power

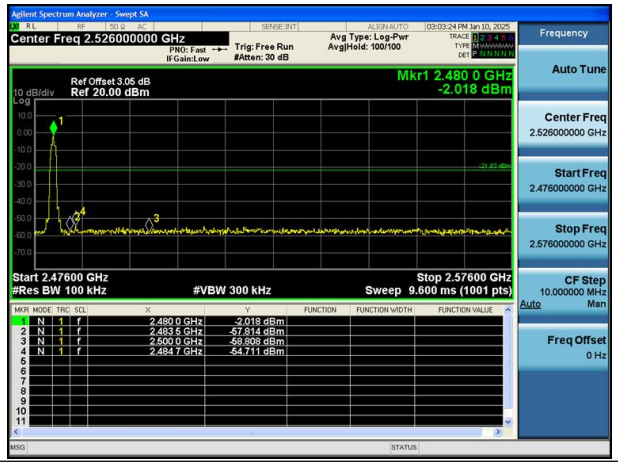
Band-edge Emission



No-Hopping 8DPSK Highest

Reference Power

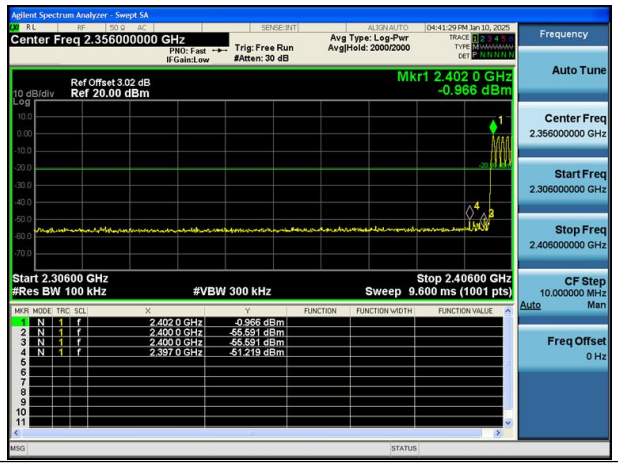
Band-edge Emission



Hopping GFSK Lowest

Reference Power

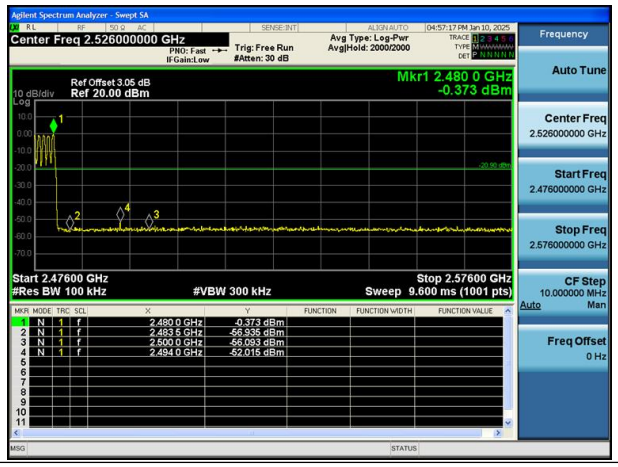
Band-edge Emission



Hopping GFSK Highest

Reference Power

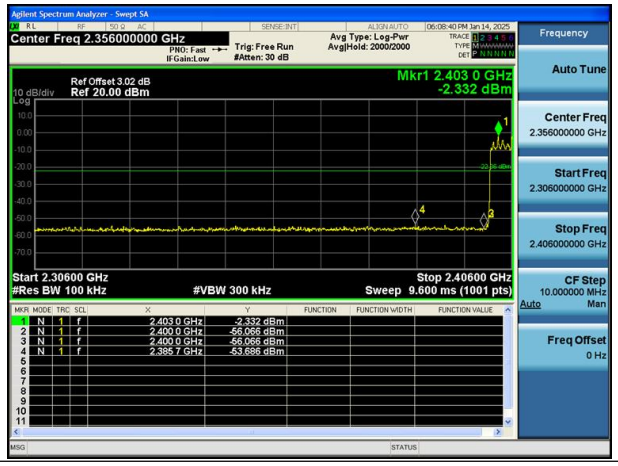
Band-edge Emission



Hopping Pi/4 DQPSK Lowest

Reference Power

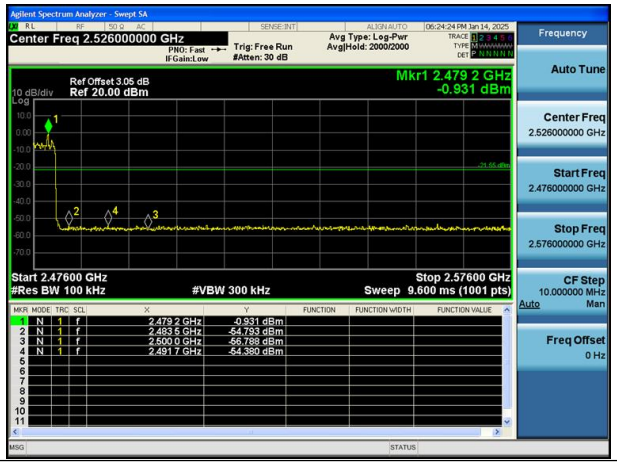
Band-edge Emission



Hopping Pi/4 DQPSK Highest

Reference Power

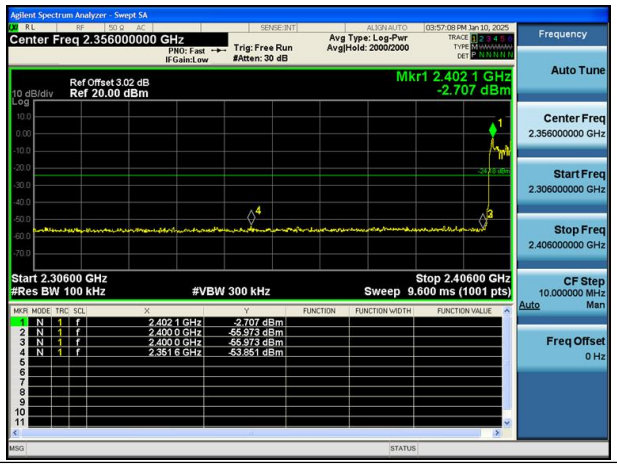
Band-edge Emission



Hopping 8DPSK Lowest

Reference Power

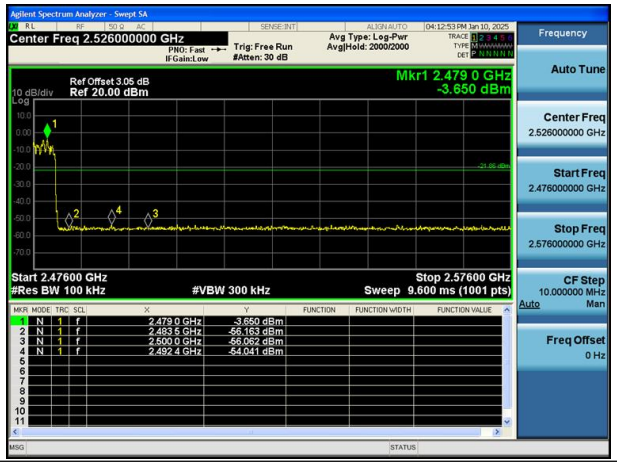
Band-edge Emission



Hopping 8DPSK Highest

Reference Power

Band-edge Emission



14. Conducted RF Spurious Emissions

14.1 Standard and Limit

According to §15.247(d), In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in § 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c)).

14.2 Test Procedure

Test is conducting under the description of ANSI C63.10 - 2013 section 6.7.
1) Remove the antenna from the EUT and connect to the spectrum analyzer via a low loss RF cable.
2) Set the spectrum analyzer to any one measured frequency within its operating range.
3) Set RBW = 100kHz, VBW = 300kHz, Sweep = Auto, Detector = Peak.
4) Measure the highest amplitude appearing on spectral display and set it as a reference level.
5) Measure the spurious emissions with frequency range from 9kHz to 26.5GHz.
6) Repeat above procedures until all measured frequencies were complete.

Test Setup Block Diagram

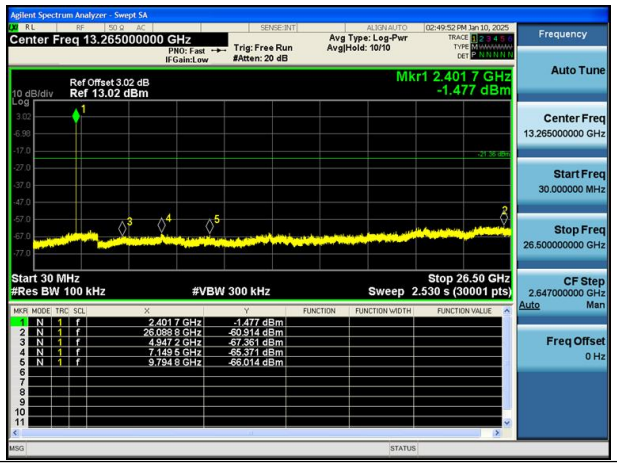
14.3 Test Data and Results

Note: The measurement frequency range is from 9kHz to the 10th harmonic of the fundamental frequency. The lowest, middle and highest channels are tested to verify the spurious emissions measurement data.

GFSK Lowest

Reference Power

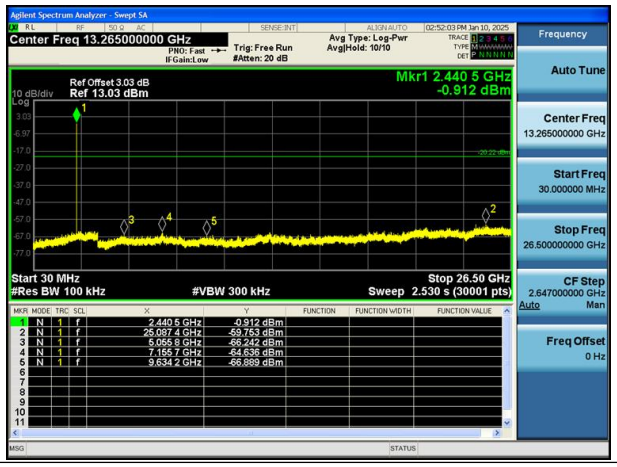
Spurious Emissions



GFSK Middle

Reference Power

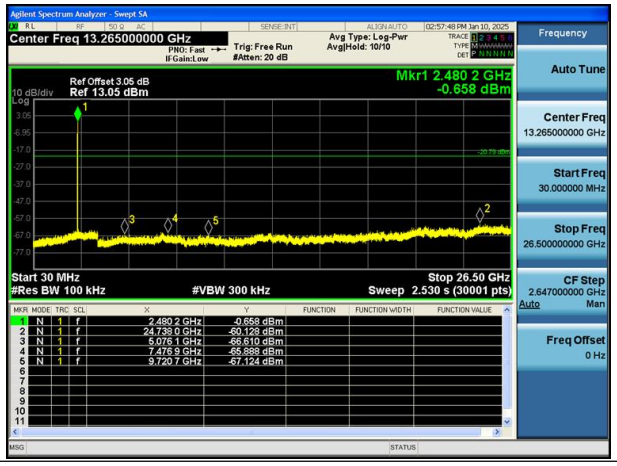
Spurious Emissions



GFSK Highest

Reference Power

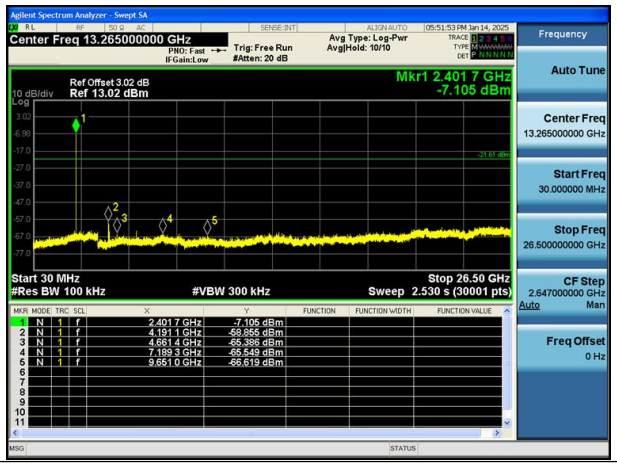
Spurious Emissions



Pi/4 DQPSK Lowest

Reference Power

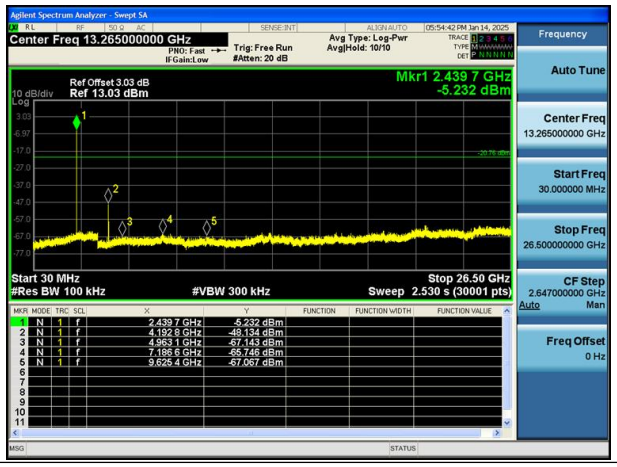
Spurious Emissions



Pi/4 DQPSK Middle

Reference Power

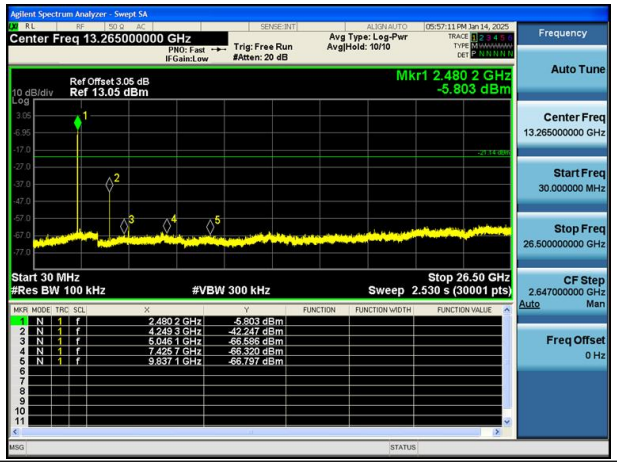
Spurious Emissions



Pi/4 DQPSK Highest

Reference Power

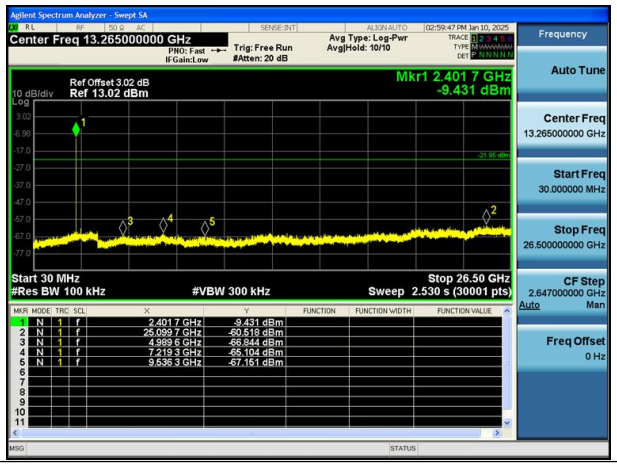
Spurious Emissions



8DPSK Lowest

Reference Power

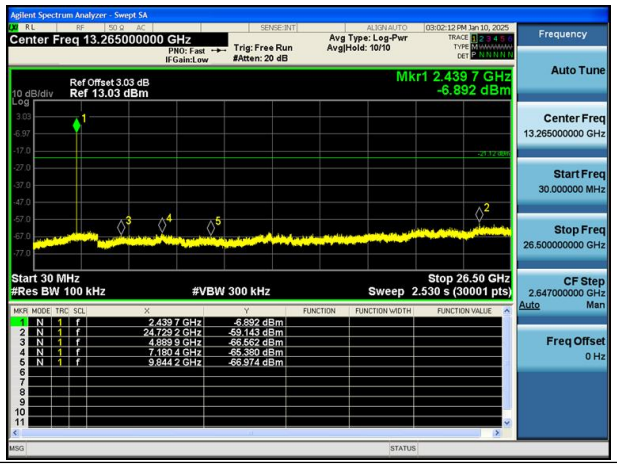
Spurious Emissions



8DPSK Middle

Reference Power

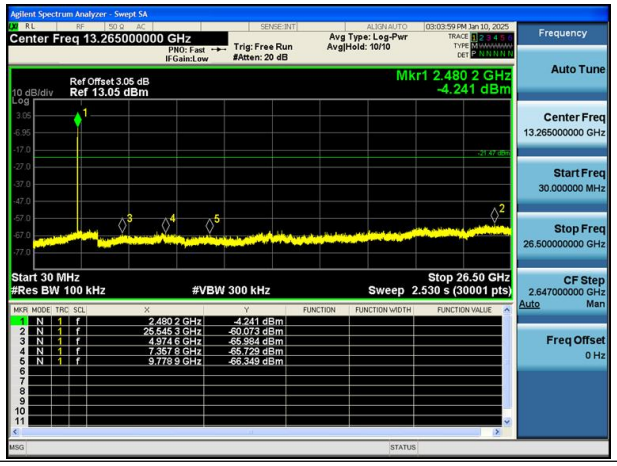
Spurious Emissions



8DPSK Highest

Reference Power

Spurious Emissions



******* END OF REPORT *******