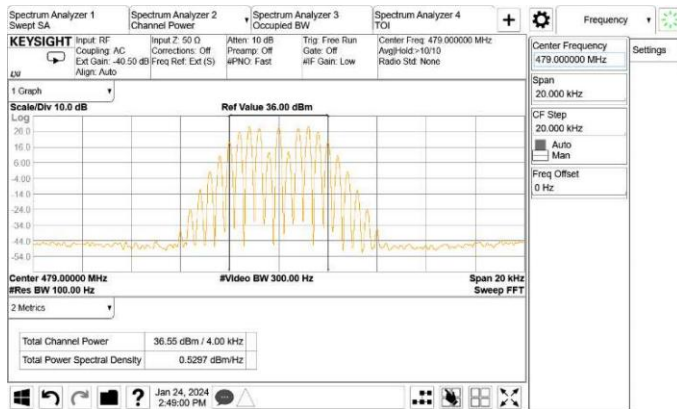
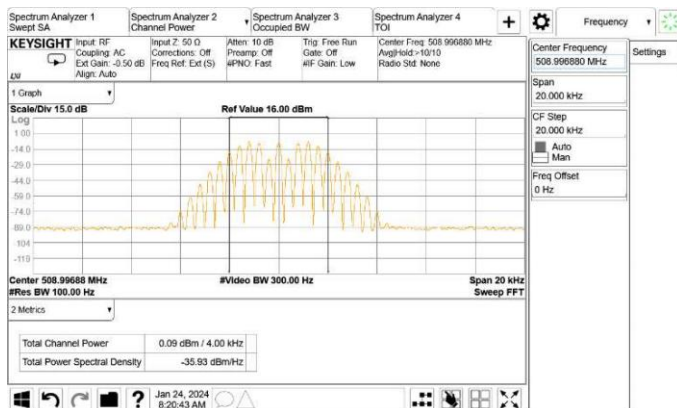
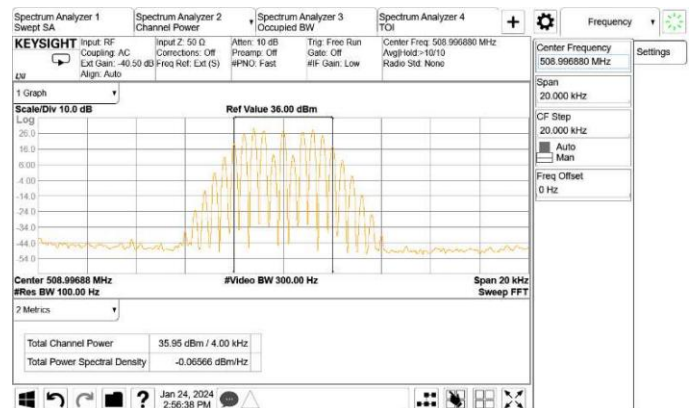




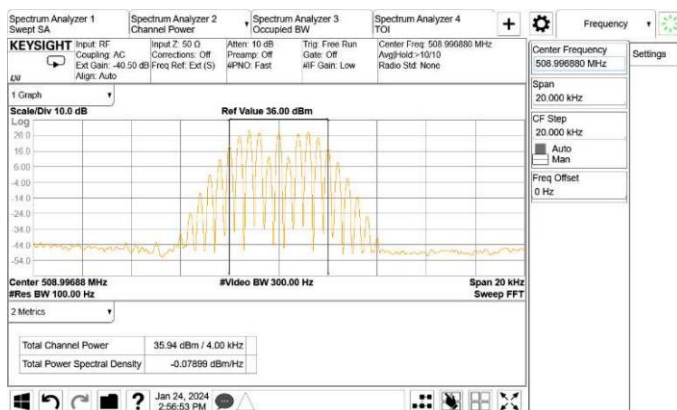
With the input signal amplitude set 3 dB above the AGC threshold
Middle Frequency: 479.0MHz



Input signal
High Frequency: 508.99688MHz

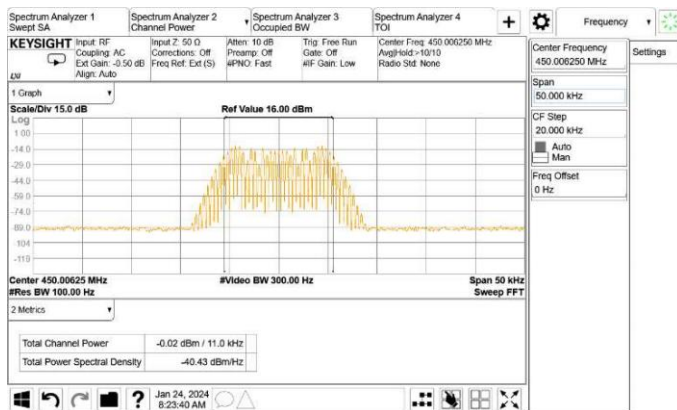


With the input signal amplitude set the AGC threshold
High Frequency: 508.99688MHz

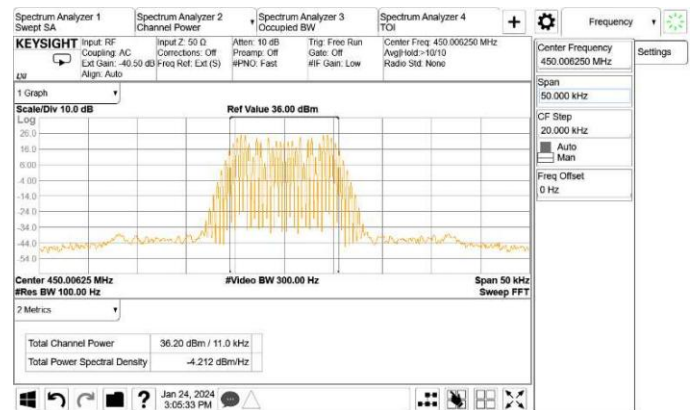


With the input signal amplitude set 3 dB above the AGC threshold
High Frequency: 508.99688MHz

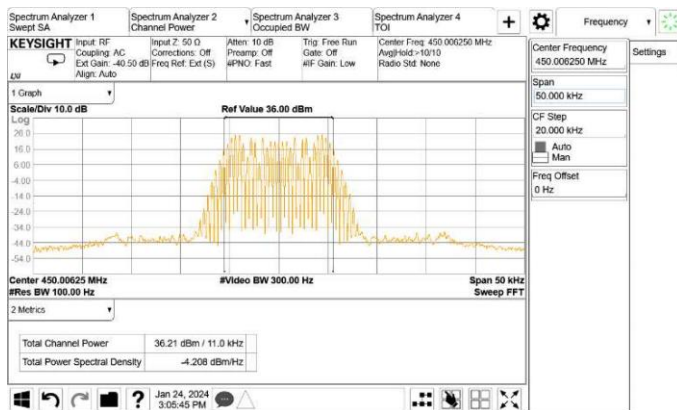
10.5.5.3.1.4. 12.5kHz Analog FM mode



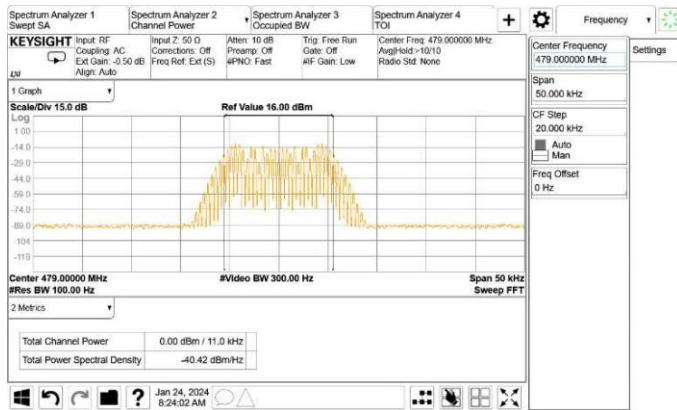
Input signal
Low Frequency: 450.00625MHz



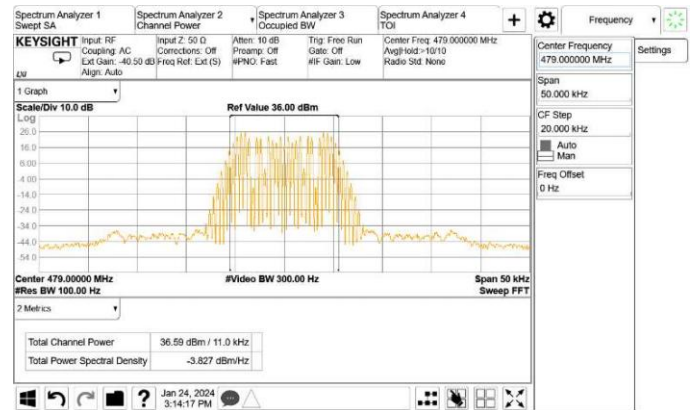
With the input signal amplitude set the AGC threshold
Low Frequency: 450.00625MHz



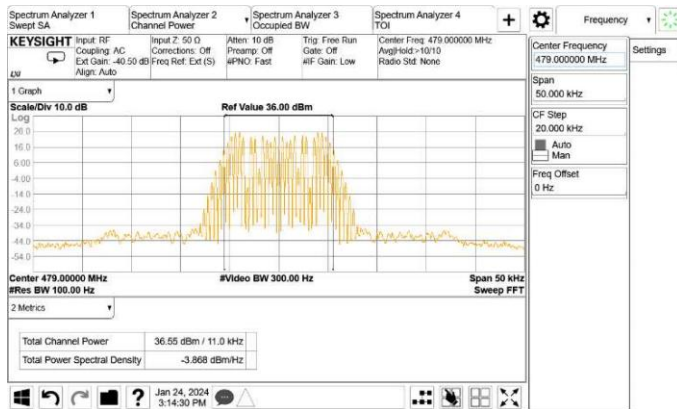
With the input signal amplitude set 3 dB above the AGC threshold
Low Frequency: 450.00625MHz



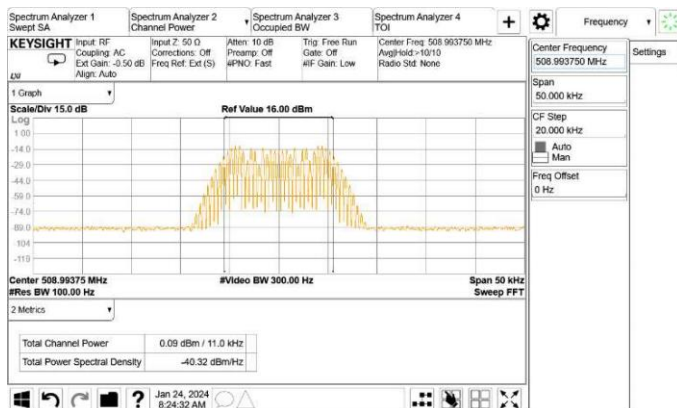
Input signal
Middle Frequency: 479.0MHz



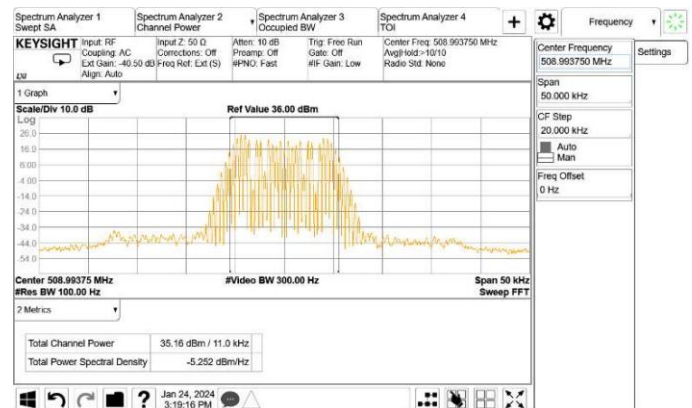
With the input signal amplitude set the AGC threshold
Middle Frequency: 479.0MHz



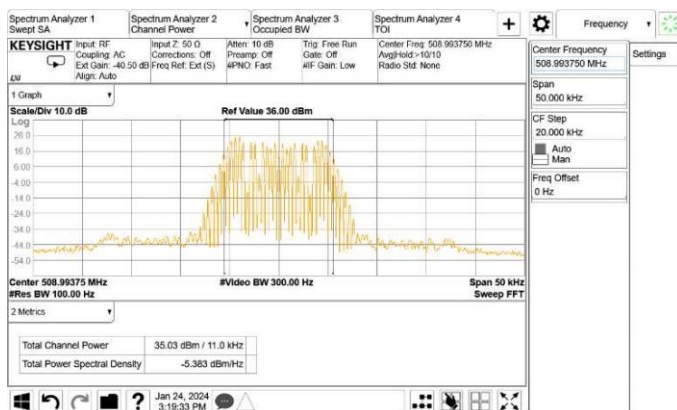
With the input signal amplitude set 3 dB above the AGC threshold
Middle Frequency: 479.0MHz



Input signal
High Frequency: 508.99375MHz

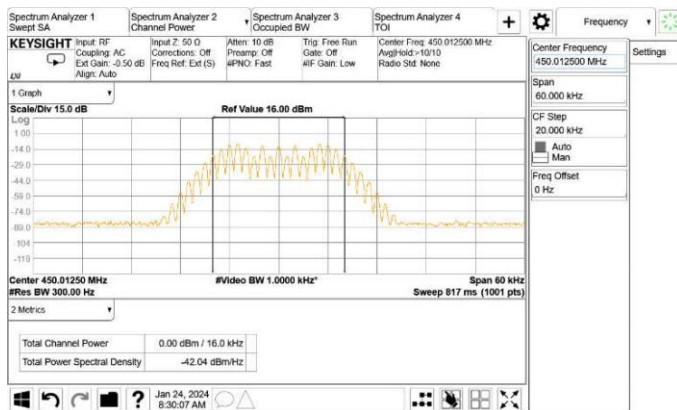


With the input signal amplitude set the AGC threshold
High Frequency: 508.99375MHz

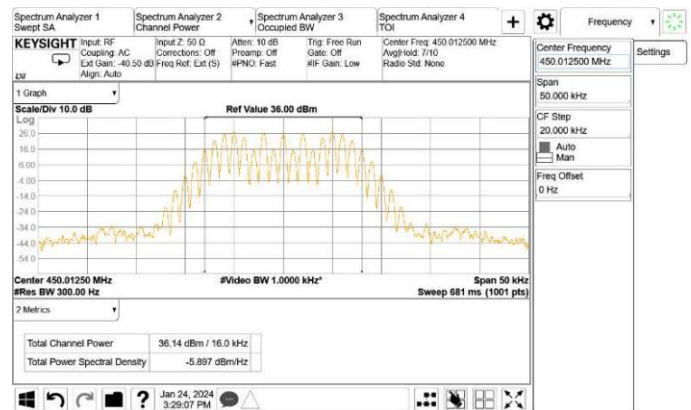


With the input signal amplitude set 3 dB above the AGC threshold
High Frequency: 508.99375MHz

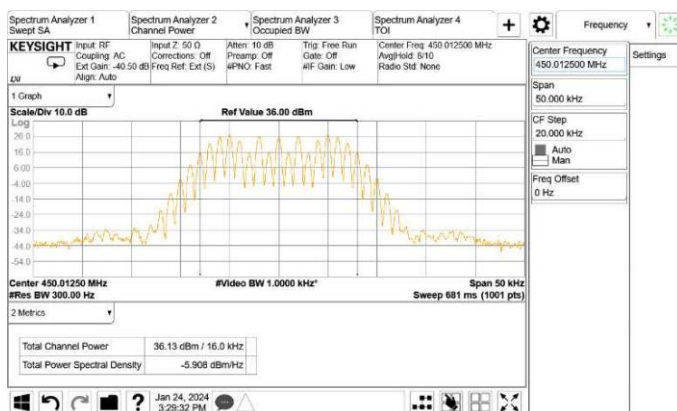
10.5.5.3.1.5. 25kHz Analog FM mode



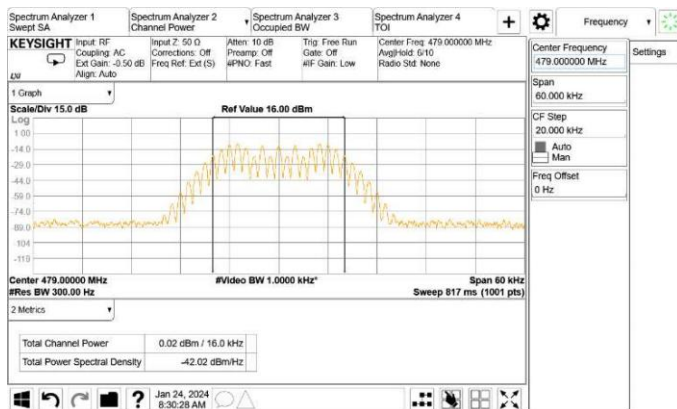
Input signal
Low Frequency: 450.0125MHz



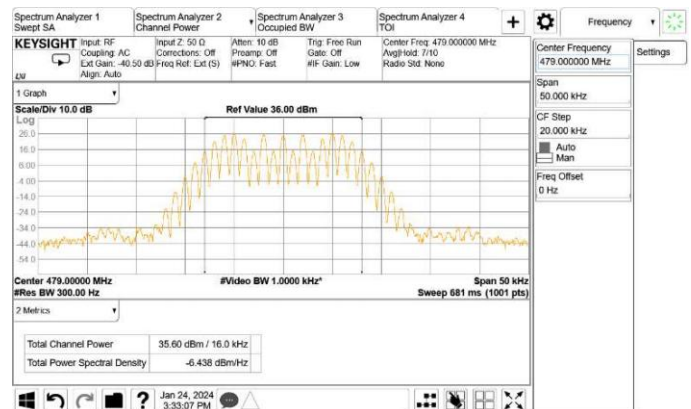
With the input signal amplitude set the AGC threshold
Low Frequency: 450.0125MHz



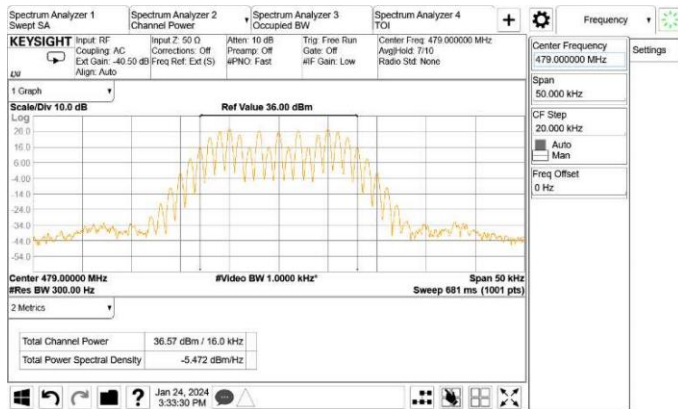
With the input signal amplitude set 3 dB above the AGC threshold
Low Frequency: 450.0125MHz



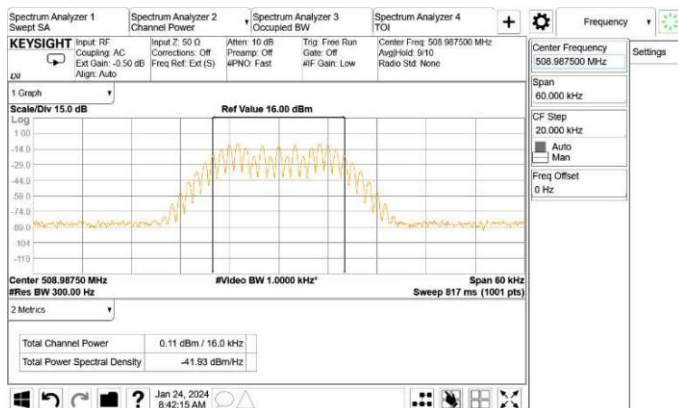
Input signal
Middle Frequency: 479.0MHz



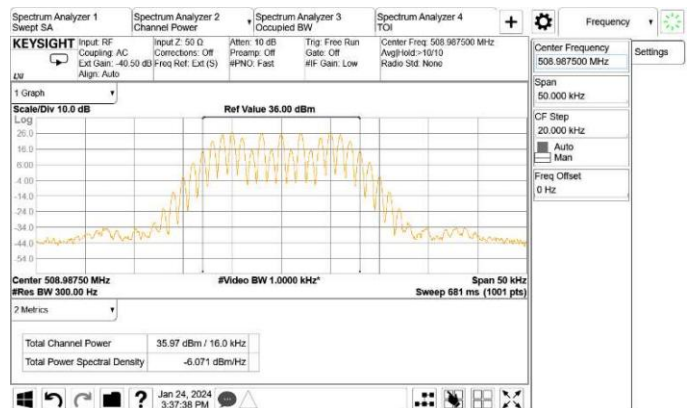
With the input signal amplitude set the AGC threshold
Middle Frequency: 479.0MHz



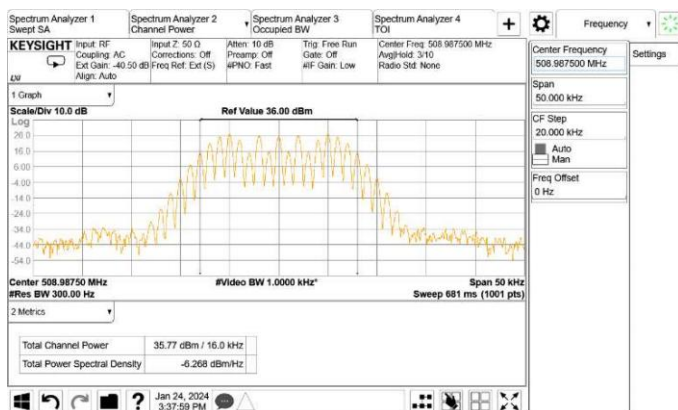
With the input signal amplitude set 3 dB above the AGC threshold
Middle Frequency: 479.0MHz



Input signal
High Frequency: 508.9875MHz



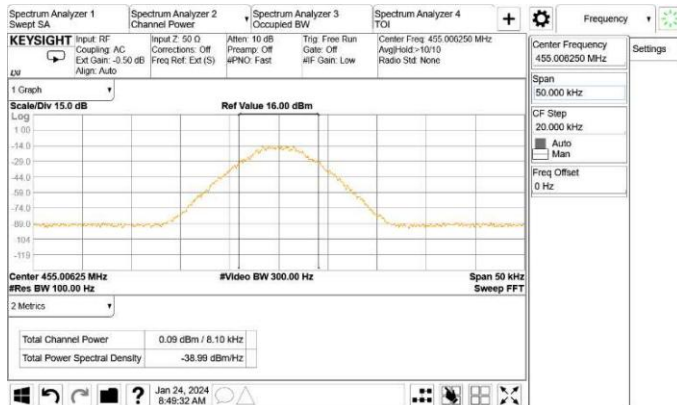
With the input signal amplitude set the AGC threshold
High Frequency: 508.9875MHz



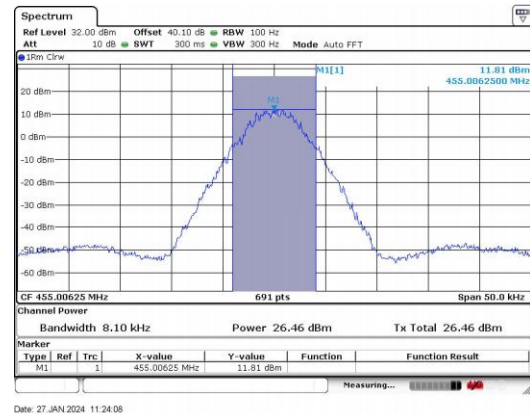
With the input signal amplitude set 3 dB above the AGC threshold
High Frequency: 508.9875MHz

10.5.5.3.2. Uplink

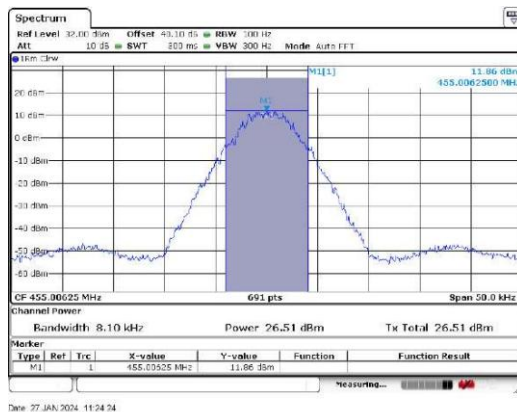
10.5.5.3.2.1. P25 Phase I(C4FM) mode



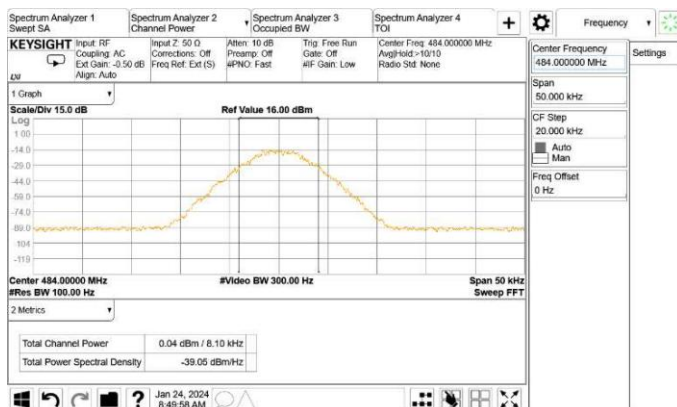
Input signal
Low Frequency: 455.00625MHz



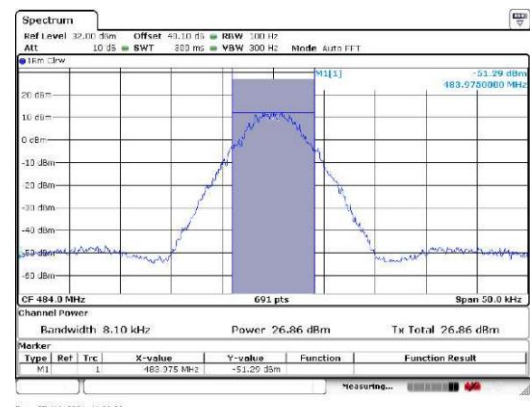
With the input signal amplitude set the AGC threshold
Low Frequency: 455.00625MHz



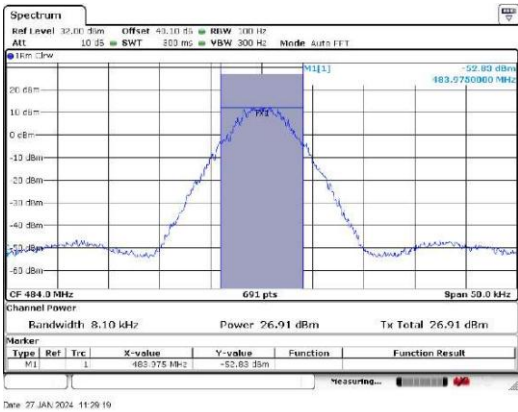
With the input signal amplitude set 3 dB above the AGC threshold
Low Frequency: 455.00625MHz



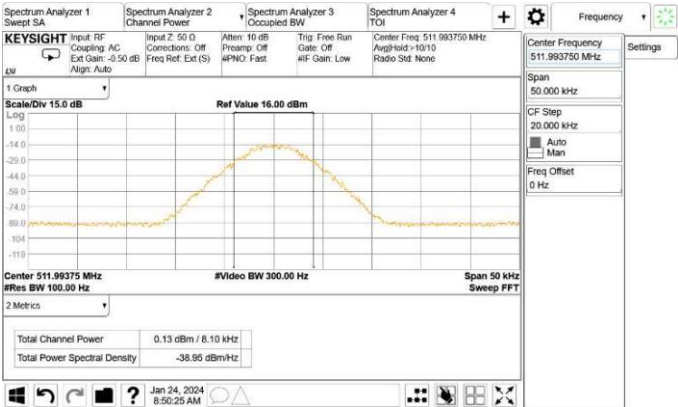
Input signal
Middle Frequency: 484.0MHz



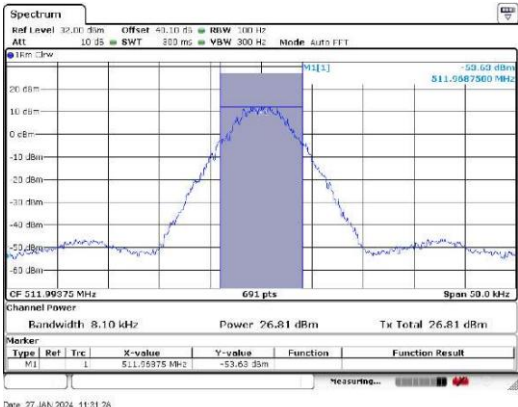
With the input signal amplitude set the AGC threshold
Middle Frequency: 484.0MHz



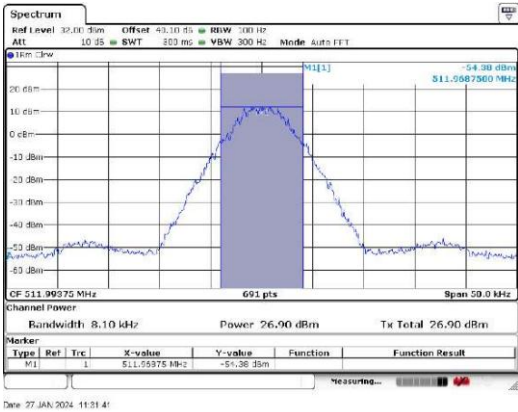
With the input signal amplitude set 3 dB above the AGC threshold
Middle Frequency: 484.0MHz



Input signal
High Frequency: 511.99375MHz

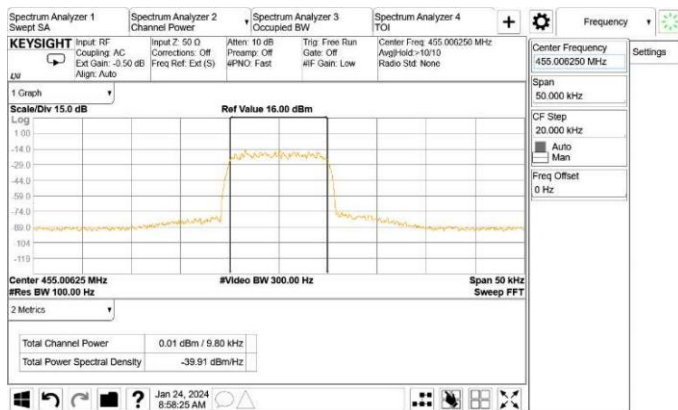


With the input signal amplitude set the AGC threshold
High Frequency: 511.99375MHz

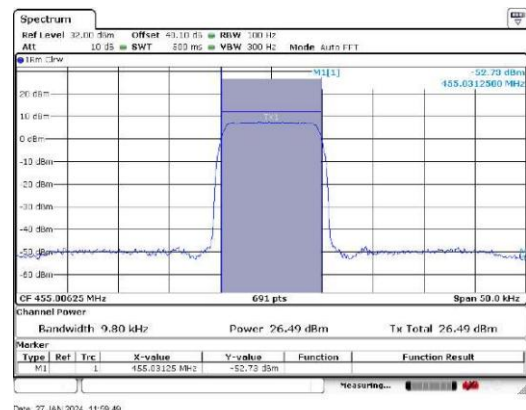


With the input signal amplitude set 3 dB above the AGC threshold
High Frequency: 511.99375MHz

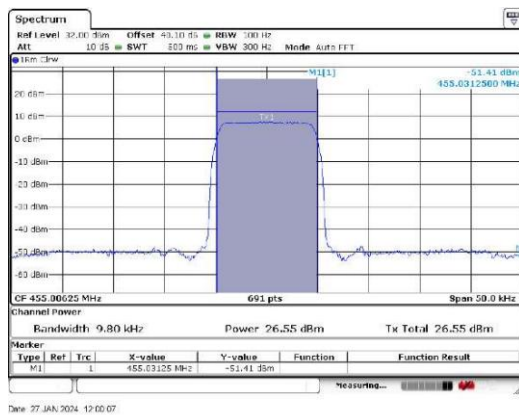
10.5.5.3.2.2. P25 Phase II(H-DQPSK) mode



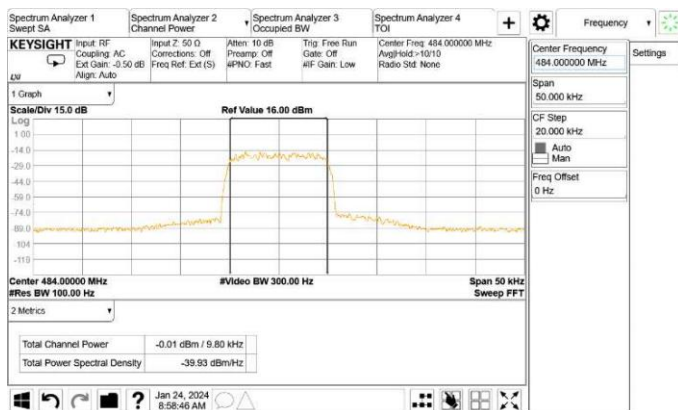
Input signal
Low Frequency: 455.00625MHz



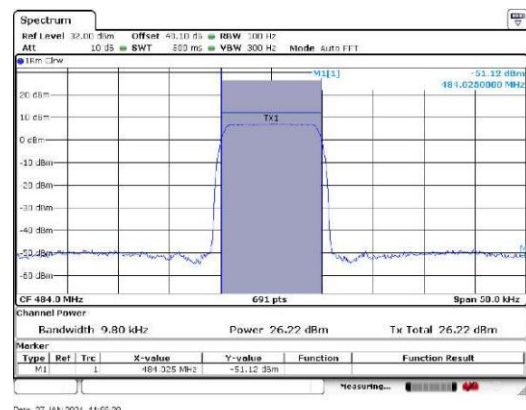
With the input signal amplitude set the AGC threshold
Low Frequency: 455.00625MHz



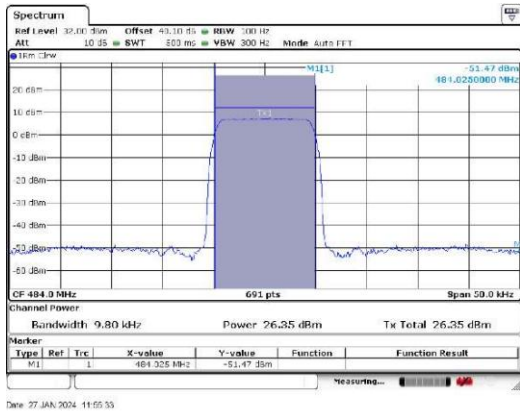
With the input signal amplitude set 3 dB above the AGC threshold
Low Frequency: 455.00625MHz



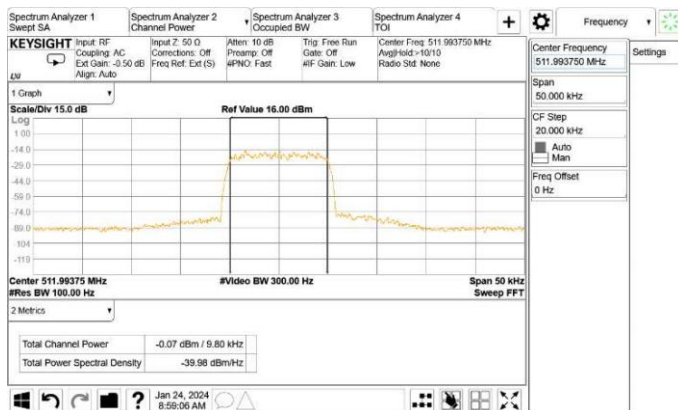
Input signal
Middle Frequency: 484.0MHz



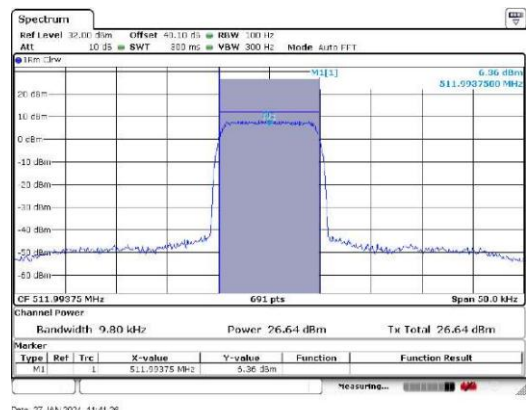
With the input signal amplitude set the AGC threshold
Middle Frequency: 484.0MHz



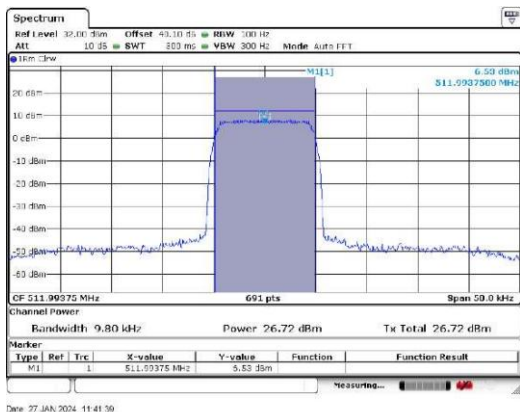
With the input signal amplitude set 3 dB above the AGC threshold
Middle Frequency: 484.0MHz



Input signal
High Frequency: 511.99375MHz

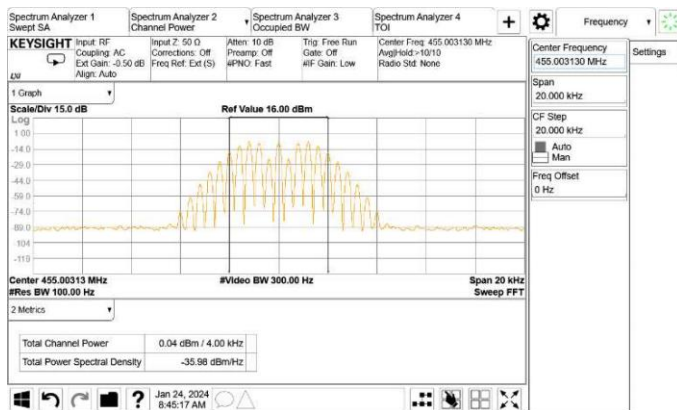


With the input signal amplitude set the AGC threshold
High Frequency: 511.99375MHz

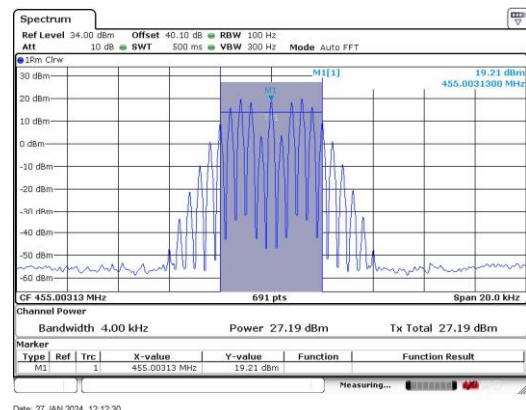


With the input signal amplitude set 3 dB above the AGC threshold
High Frequency: 511.99375MHz

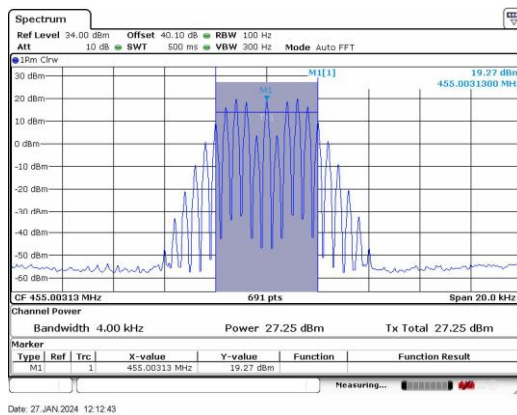
10.5.5.3.2.3. 6.25kHz Analog FM mode



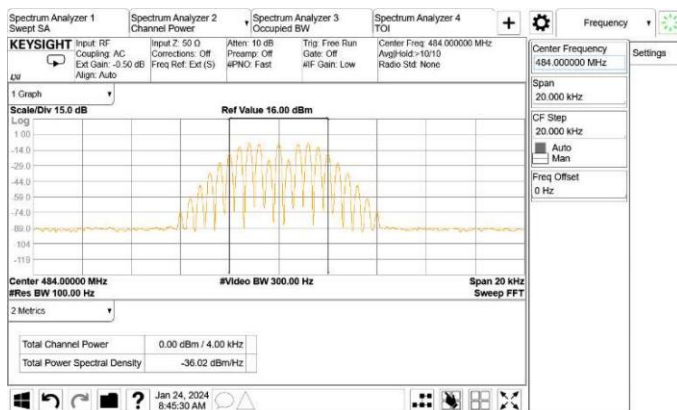
Input signal
Low Frequency: 455.00313MHz



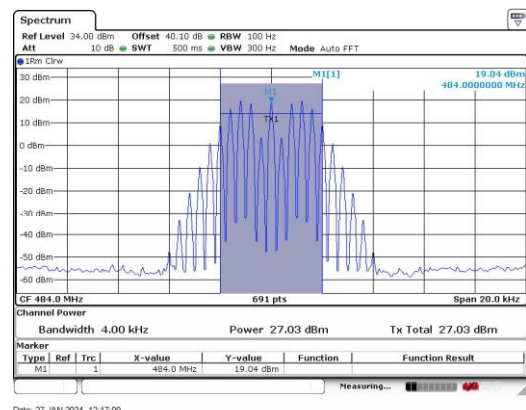
With the input signal amplitude set the AGC threshold
Low Frequency: 455.00313MHz



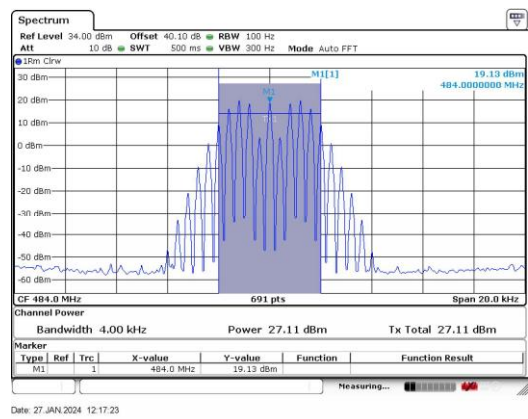
With the input signal amplitude set 3 dB above the AGC threshold
Low Frequency: 455.00313MHz



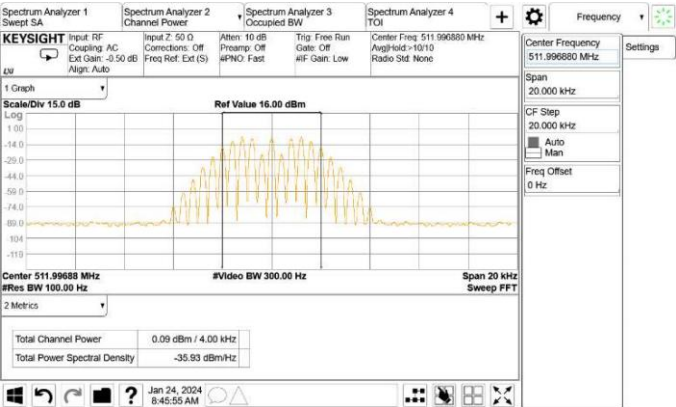
Input signal
Middle Frequency: 484.0MHz



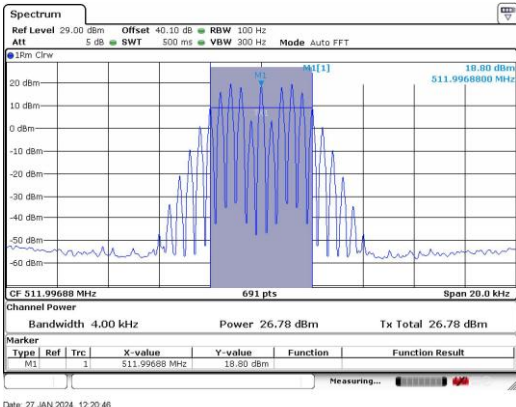
With the input signal amplitude set the AGC threshold
Middle Frequency: 484.0MHz



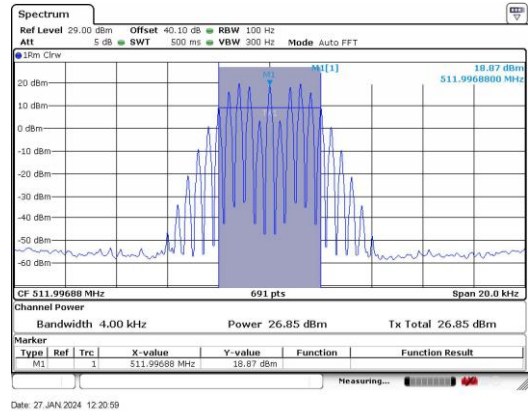
With the input signal amplitude set 3 dB above the AGC threshold
Middle Frequency: 484.0MHz



Input signal
High Frequency: 511.99688MHz

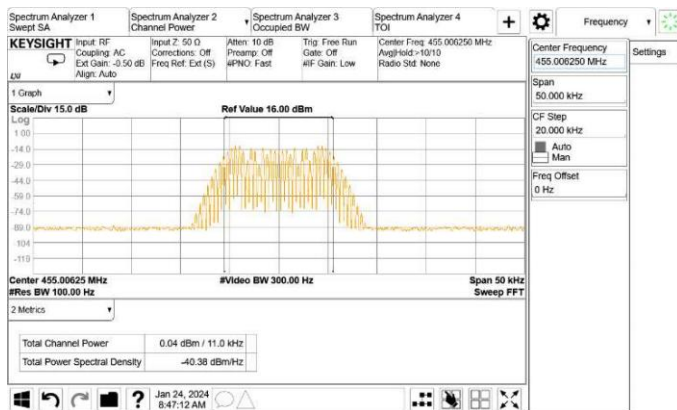


With the input signal amplitude set the AGC threshold
High Frequency: 511.99688MHz

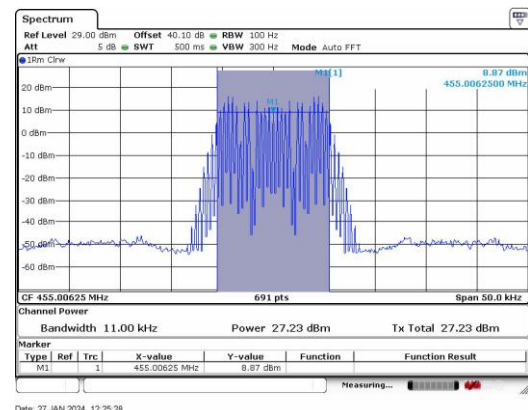


With the input signal amplitude set 3 dB above the AGC threshold
High Frequency: 511.99688MHz

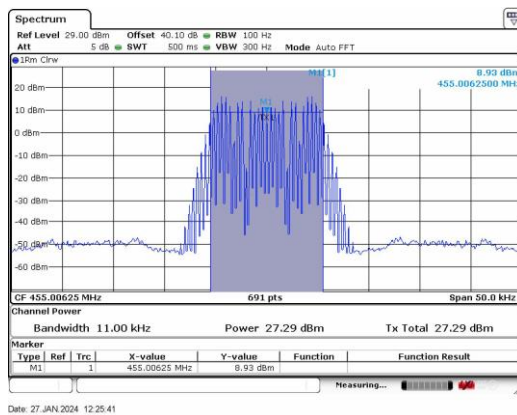
10.5.5.3.2.4. 12.5kHz Analog FM mode



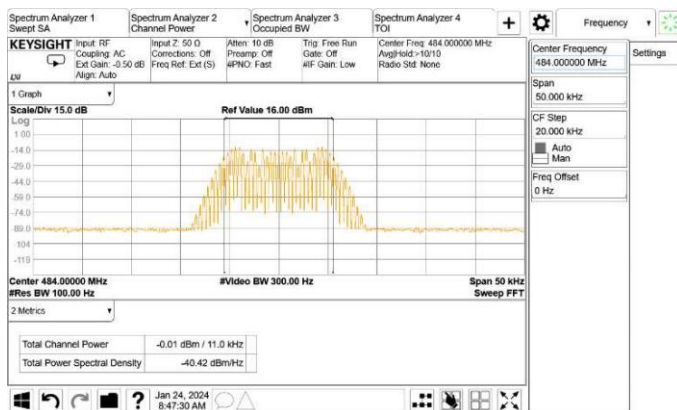
Input signal
Low Frequency: 455.00625MHz



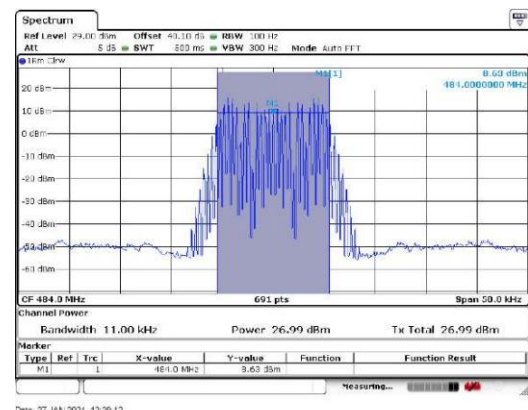
With the input signal amplitude set the AGC threshold
Low Frequency: 455.00625MHz



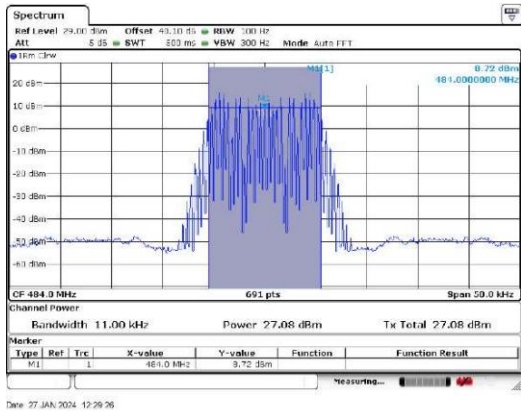
With the input signal amplitude set 3 dB above the AGC threshold
Low Frequency: 455.00625MHz



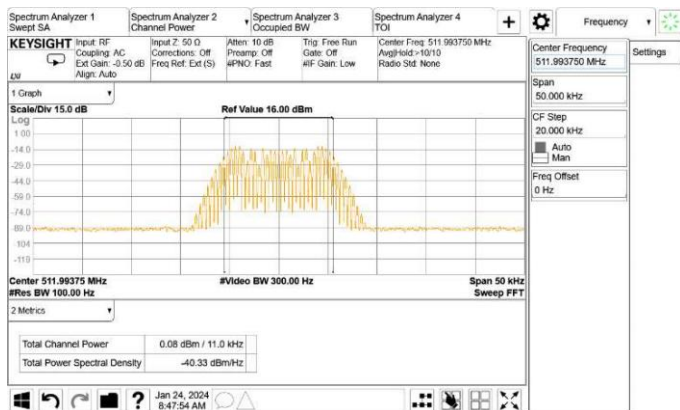
Input signal
Middle Frequency: 484.0MHz



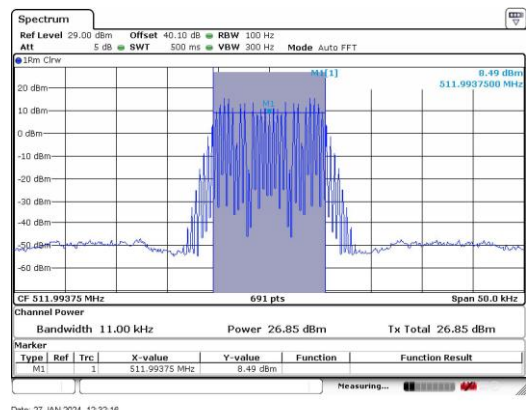
With the input signal amplitude set the AGC threshold
Middle Frequency: 484.0MHz



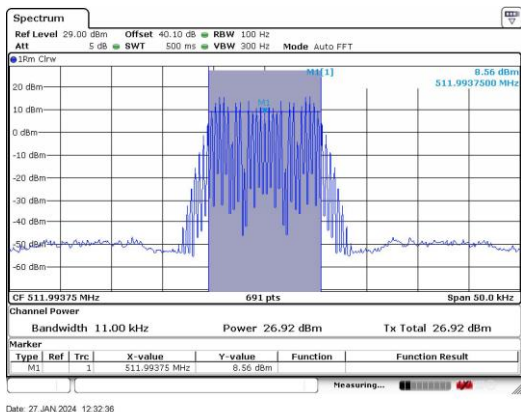
With the input signal amplitude set 3 dB above the AGC threshold
Middle Frequency: 484.0MHz



Input signal
High Frequency: 511.99375MHz

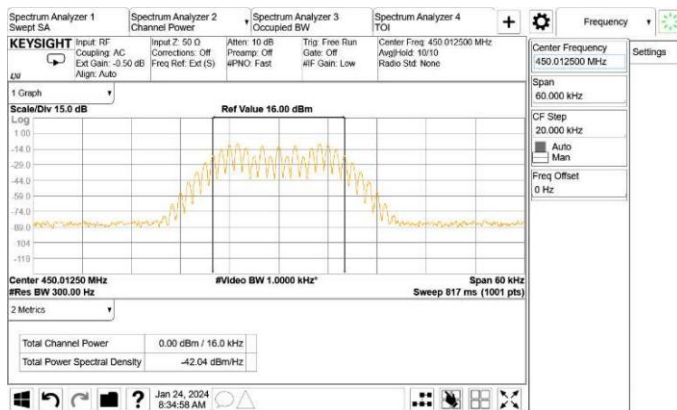


With the input signal amplitude set the AGC threshold
High Frequency: 511.99375MHz

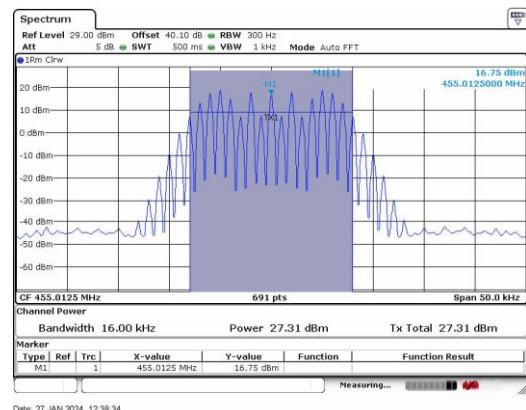


With the input signal amplitude set 3 dB above the AGC threshold
High Frequency: 511.99375MHz

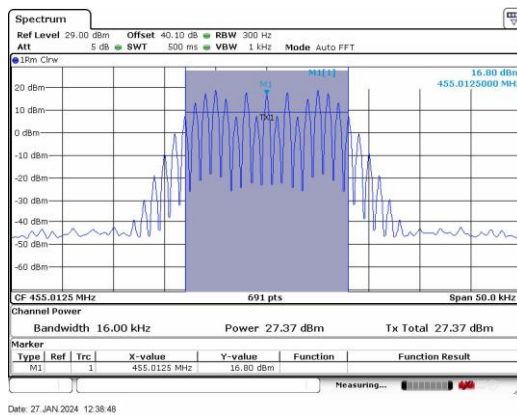
10.5.5.3.2.5. 25kHz Analog FM mode



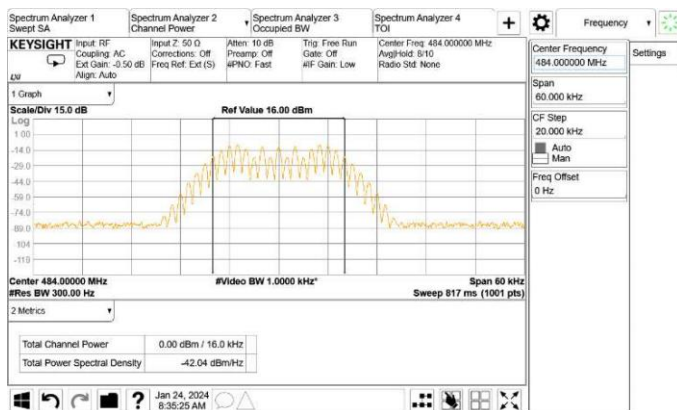
Input signal
Low Frequency: 455.0125MHz



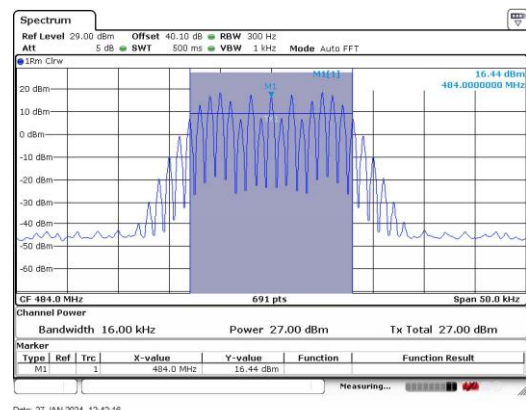
With the input signal amplitude set the AGC threshold
Low Frequency: 455.0125MHz



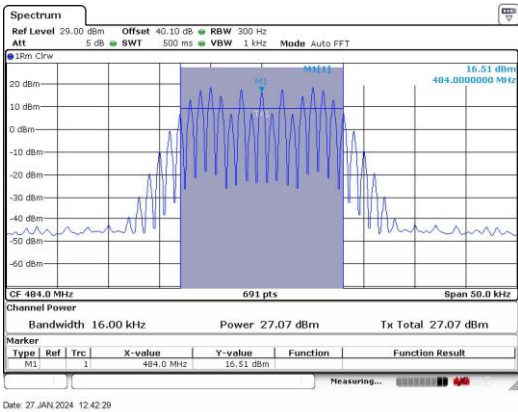
With the input signal amplitude set 3 dB above the AGC threshold
Low Frequency: 455.0125MHz



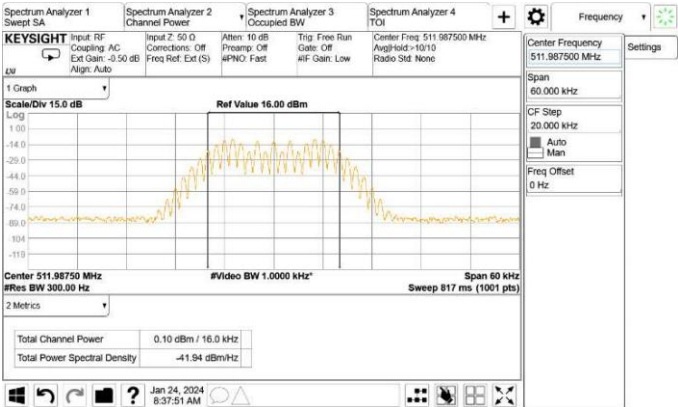
Input signal
Middle Frequency: 484.0MHz



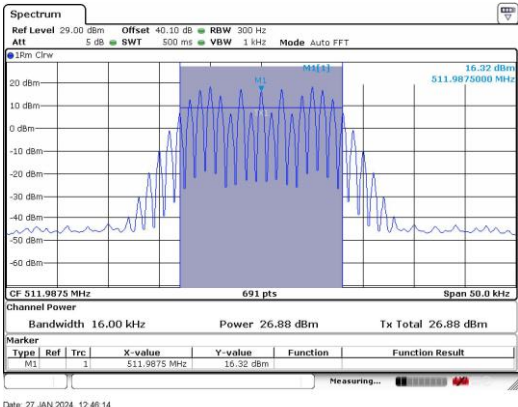
With the input signal amplitude set the AGC threshold
Middle Frequency: 484.0MHz



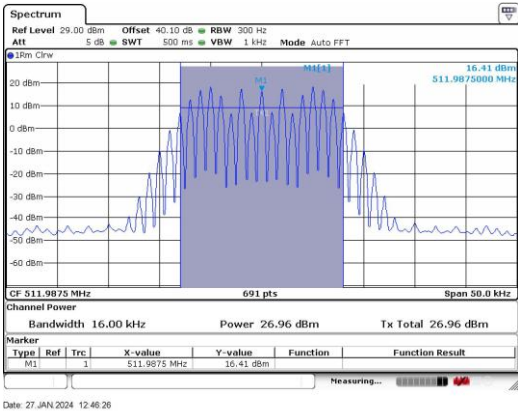
With the input signal amplitude set 3 dB above the AGC threshold
Middle Frequency: 484.0MHz



Input signal
High Frequency: 511.9875MHz



With the input signal amplitude set the AGC threshold
High Frequency: 511.9875MHz



With the input signal amplitude set 3 dB above the AGC threshold
High Frequency: 511.9875MHz

10.6. Mean power and amplifier/booster gain

Test requirement: KDB 935210 D05 clause 4.5
FCC PART 90.219 (e)(1)

Test Method: KDB 935210 D05 clause 4.5

10.6.1. Requirements

According to KDB 935210 D05 clause 4.5, the mean input and output power and the amplifier gain was measured by adjusting the internal gain control of the EUT to the maximum gain for which equipment certification is sought. Any EUT attenuation settings were set to their minimum value.

Input power levels (Downlink and Uplink) were set to maximum input ratings while confirming that the device is not capable of operating in saturation (Non-linear mode) at the rated input levels, including during the performance of the input/output power measurements.

FCC PART 90.219 (e)(1) requirement:

(e) Device Specifications. In addition to the general rules for equipment certification in §90.203(a)(2) and part 2, subpart J of this chapter, a signal booster must also meet the rules in this paragraph.

(1) The output power capability of a signal booster must be designed for deployments providing a radiated power not exceeding 5 Watts ERP for each retransmitted channel.

10.6.2. Test configuration

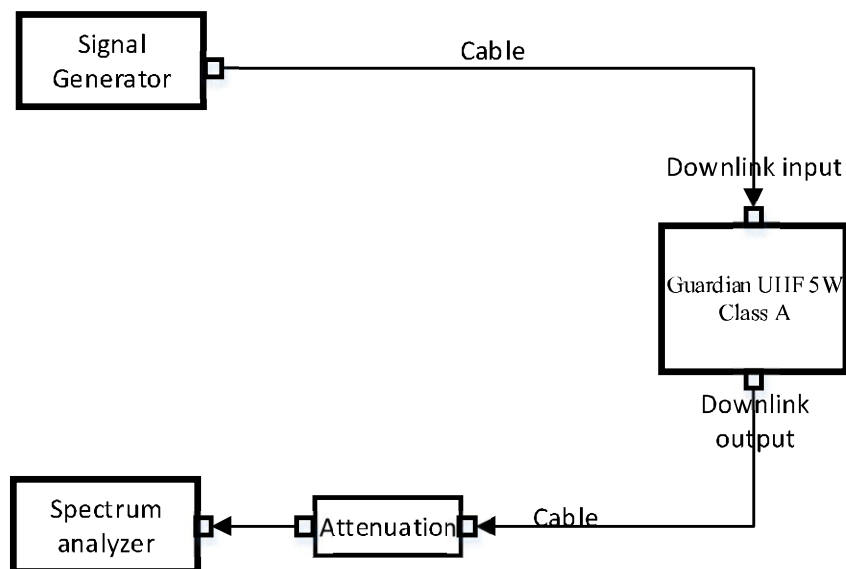


Figure 10.6-1 Downlink connection diagram