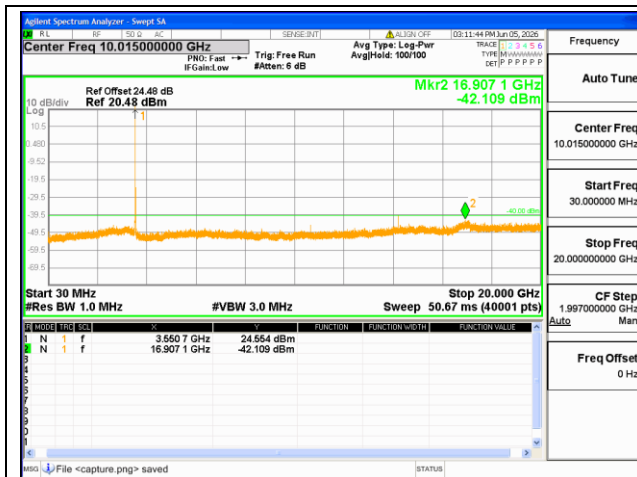


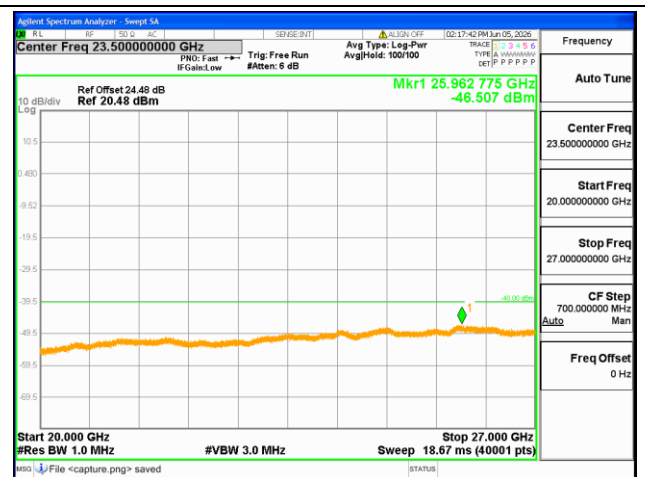


2.5.2. Test Result

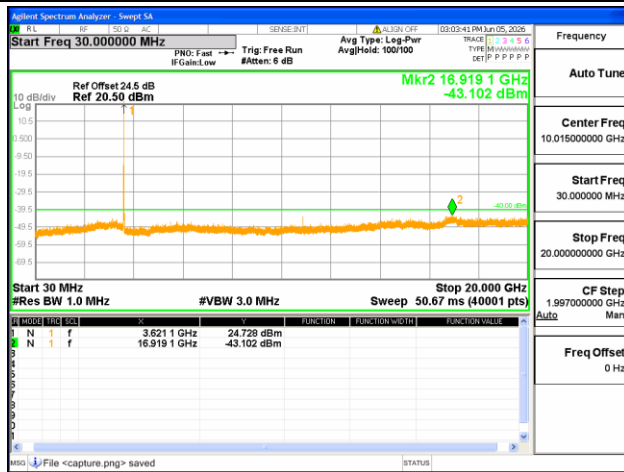




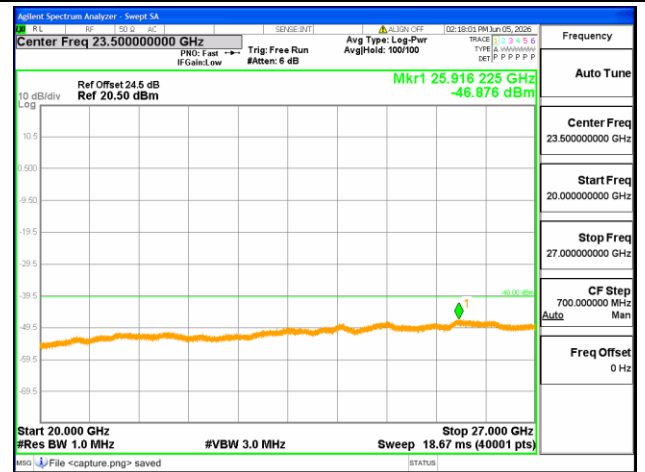
B48-30M-20G / 10MHz / Low CH / QPSK



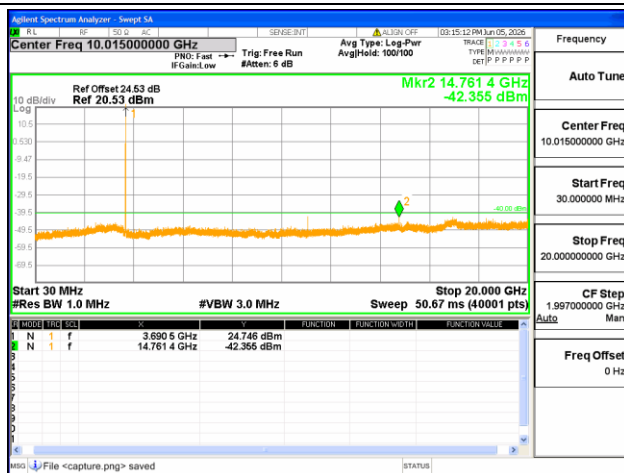
B48-20G-37G / 10MHz / Low CH / QPSK



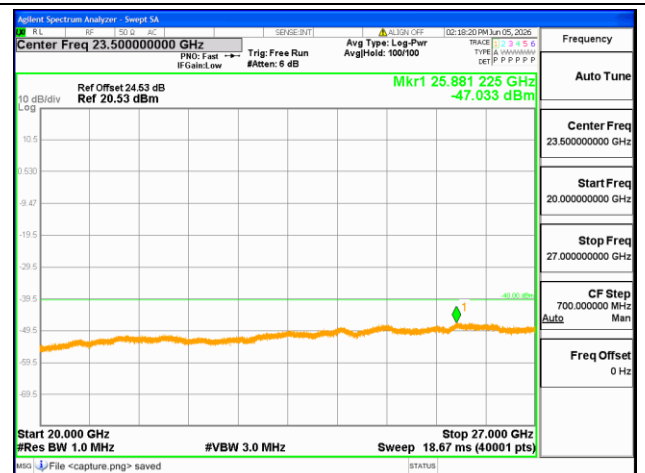
B48-30M-20G / 10MHz / Mid CH / QPSK



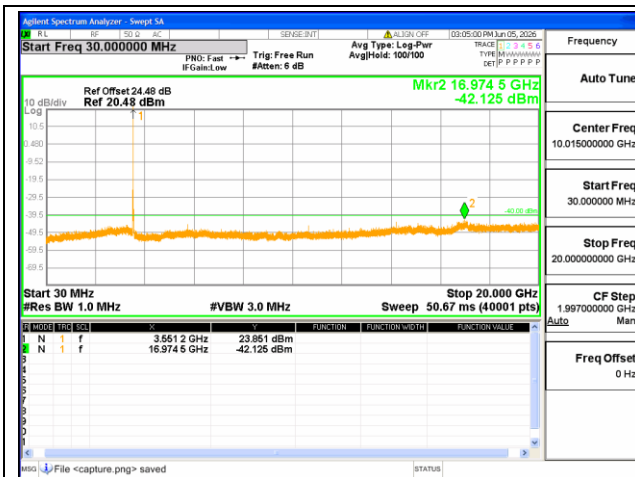
B48-20G-37G / 10MHz / Mid CH / QPSK



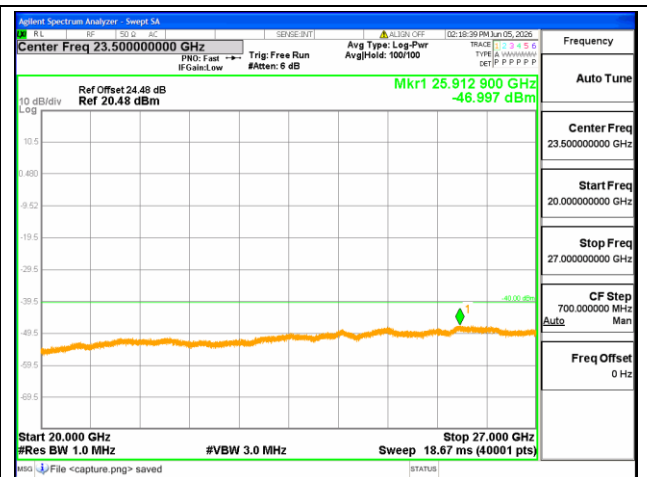
B48-30M-20G / 10MHz / High CH / QPSK



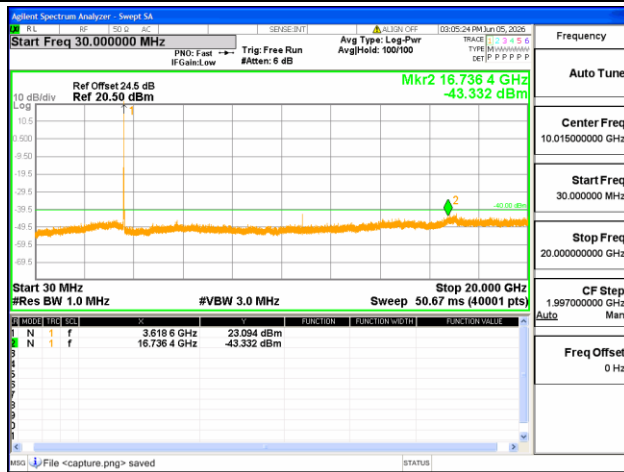
B48-20G-37G / 10MHz / High CH / QPSK



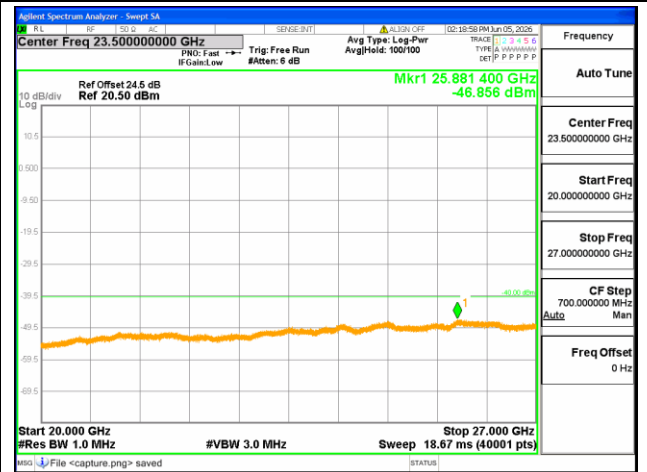
B48-30M-20G / 15MHz / Low CH / QPSK



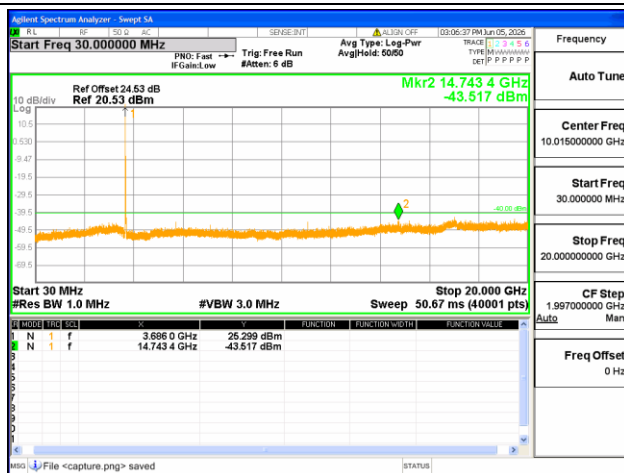
B48-20G-37G / 15MHz / Low CH / QPSK



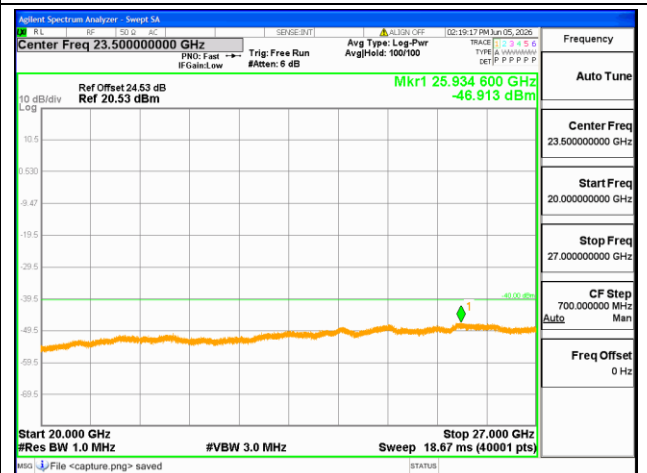
B48-30M-20G / 15MHz / Mid CH / QPSK



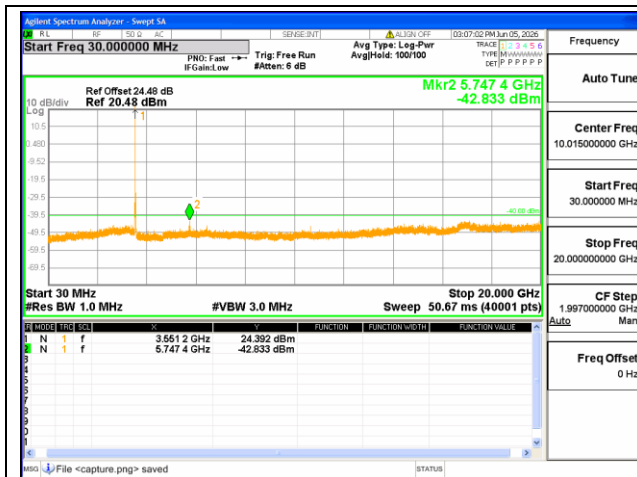
B48-20G-37G / 15MHz / Mid CH / QPSK



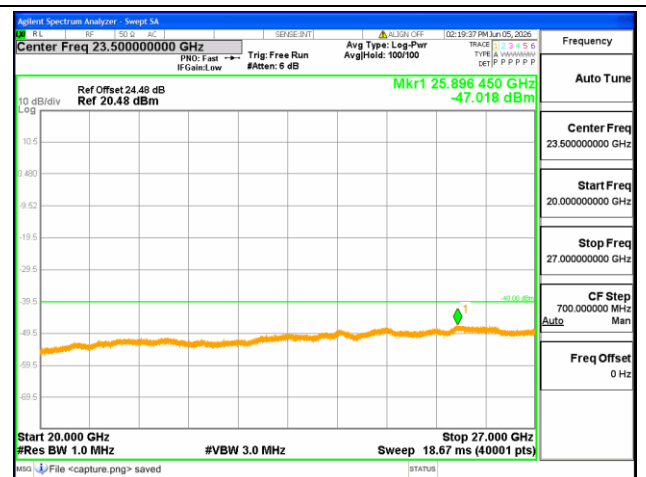
B48-30M-20G / 15MHz / High CH / QPSK



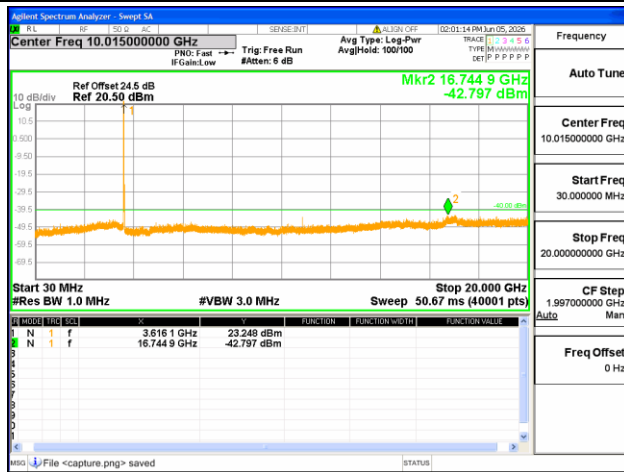
B48-20G-37G / 15MHz / High CH / QPSK



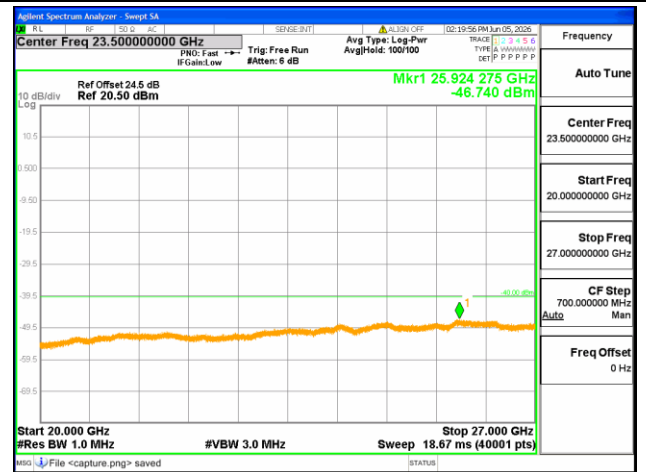
B48-30M-20G / 20MHz / Low CH / QPSK



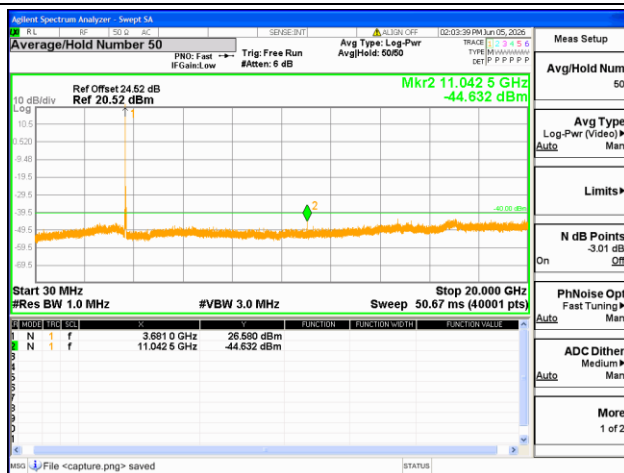
B48-20G-37G / 20MHz / Low CH / QPSK



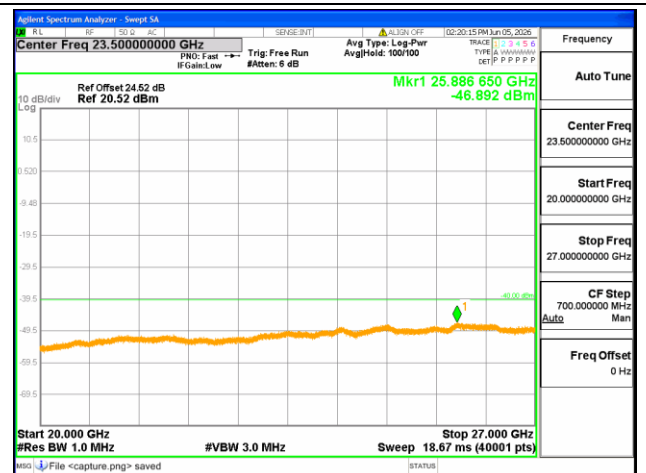
B48-30M-20G / 20MHz / Mid CH / QPSK



B48-20G-37G / 20MHz / Mid CH / QPSK



B48-30M-20G / 20MHz / High CH / QPSK



B48-20G-37G / 20MHz / High CH / QPSK



2.6. Band Edge

2.6.1. Requirement

Part 96.41(e)(1)(i)

For channel and frequency assignments made by the SAS to CBSDs, the conducted power of any CBSD emission outside the fundamental emission bandwidth as specified in paragraph (e)(3) of this section (whether the emission is inside or outside of the authorized band) shall not exceed -13 dBm/MHz within 0-10 megahertz above the upper SAS-assigned channel edge and within 0-10 megahertz below the lower SAS-assigned channel edge. At all frequencies greater than 10 megahertz above the upper SAS assigned channel edge and less than 10 MHz below the lower SAS assigned channel edge, the conducted power of any CBSD emission shall not exceed -25 dBm/MHz.

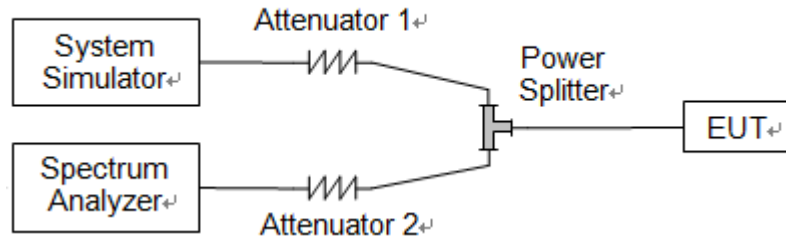
Part 96.41(e)(1)(ii)

For channel and frequency assignments made by a CBSD to End User Devices, the conducted power of any End User Device emission outside the fundamental emission (whether in or outside of the authorized band) shall not exceed -13 dBm/MHz within 0 to B megahertz (where B is the bandwidth in megahertz of the assigned channel or multiple contiguous channels of the End User Device) above the upper CBSD-assigned channel edge and within 0 to B megahertz below the lower CBSD-assigned channel edge. At all frequencies greater than B megahertz above the upper CBSD assigned channel edge and less than B megahertz below the lower CBSD-assigned channel edge, the conducted power of any End User Device emission shall not exceed -25 dBm/MHz.

Part 96.41(e)(2)

For CBSDs and End User Devices, the conducted power of emissions below 3540 MHz or above 3710 MHz shall not exceed -25 dBm/MHz, and the conducted power of emissions below 3530 MHz or above 3720 MHz shall not exceed -40 dBm/MHz.

2.6.2. Test Description



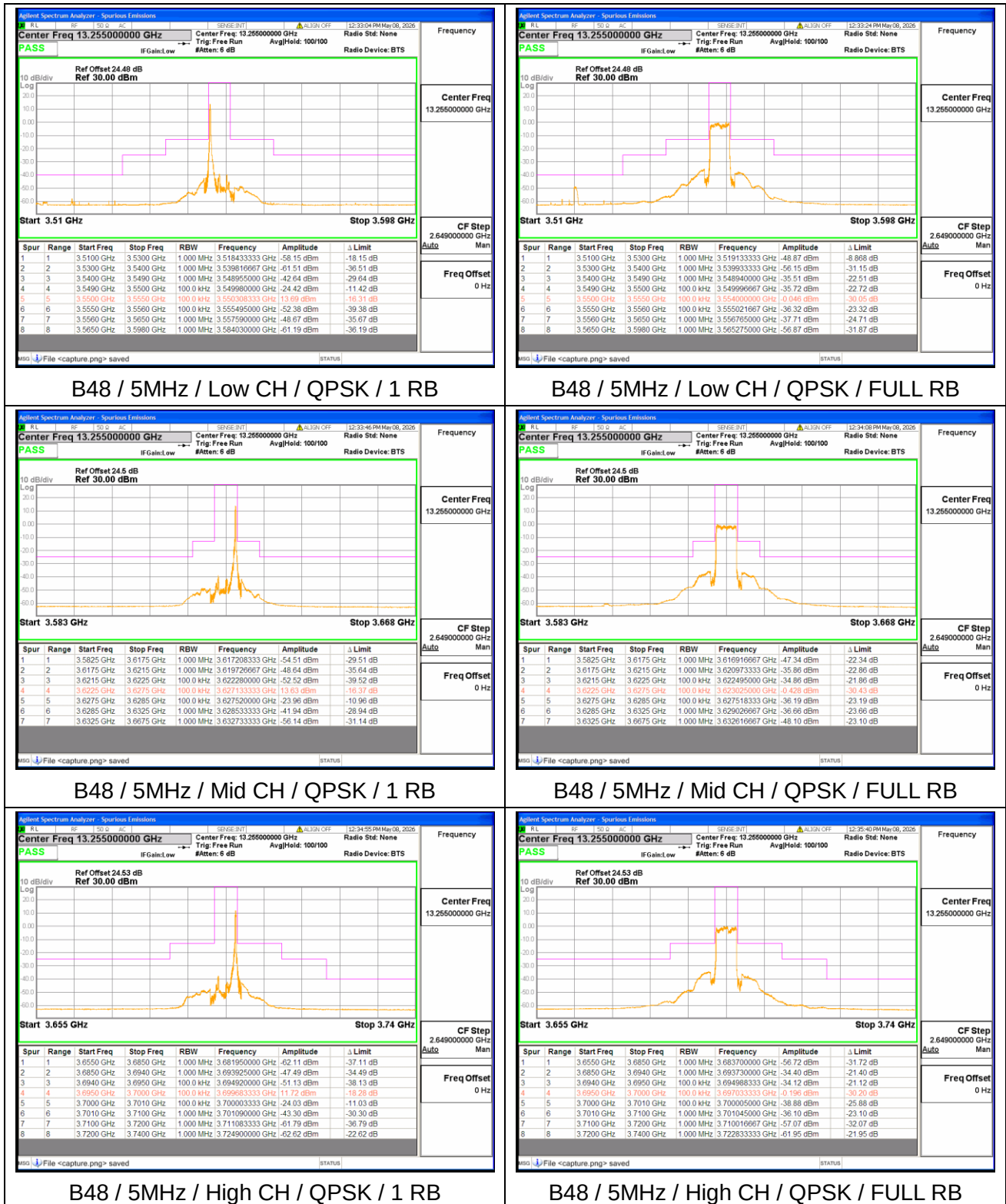
The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power. A call is established between the EUT and the SS.

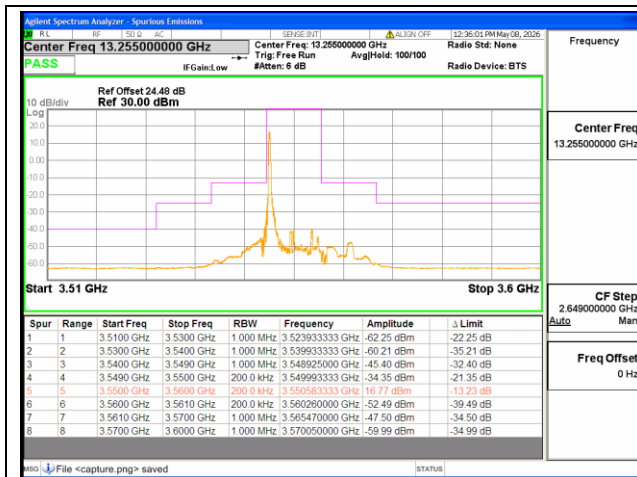
2.6.3. Test procedure

KDB 971168 D01v03 Section 6.0 and ANSI/TIA-603-E-2016.

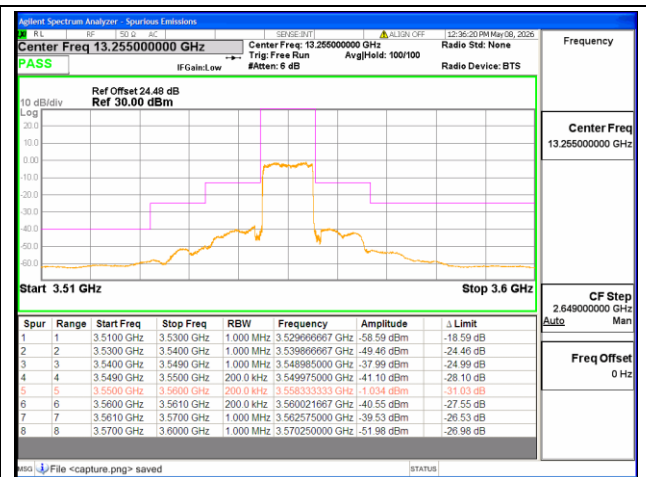


2.6.4. Test Result

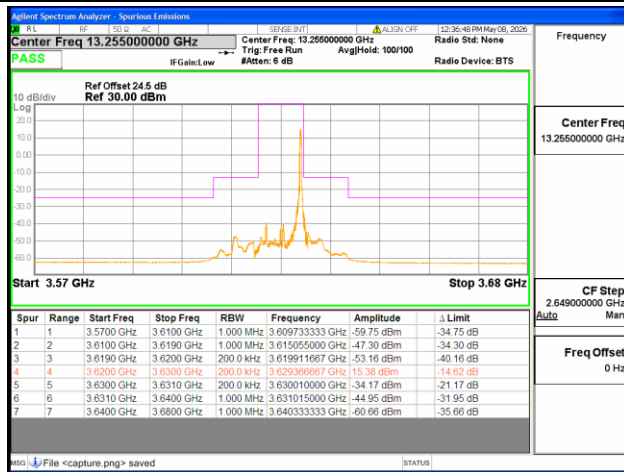




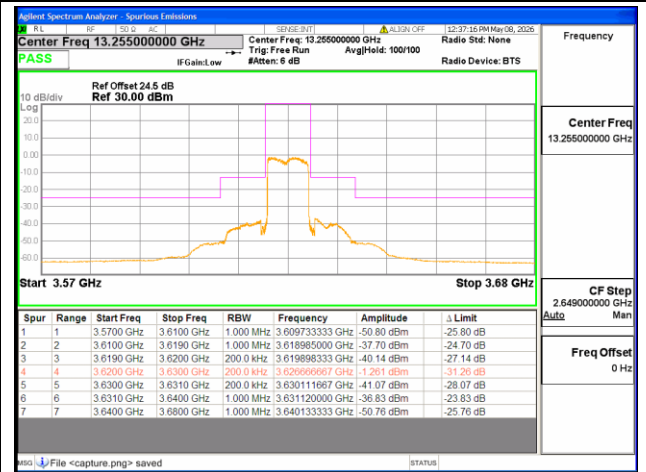
B48 / 10MHz / Low CH / QPSK / 1 RB



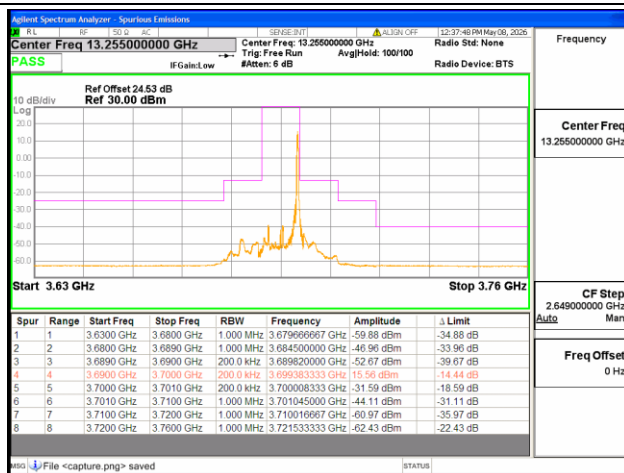
B48 / 10MHz / Low CH / QPSK / FULL RB



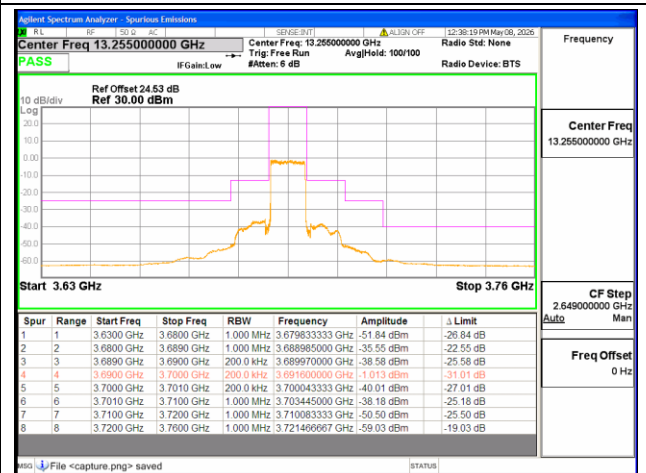
B48 / 10MHz / Mid CH / QPSK / 1 RB



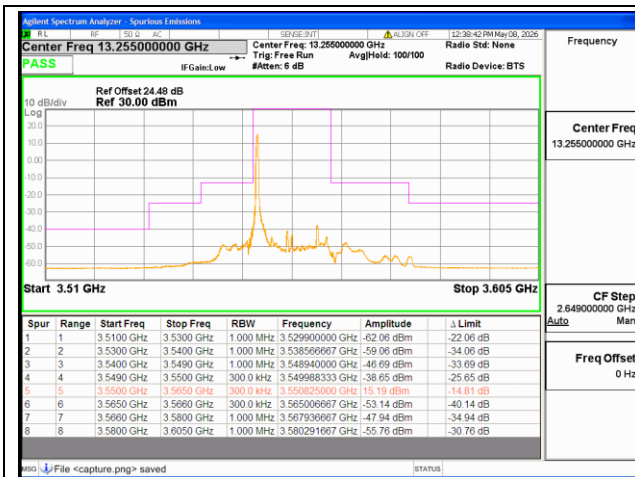
B48 / 10MHz / Mid CH / QPSK / FULL RB



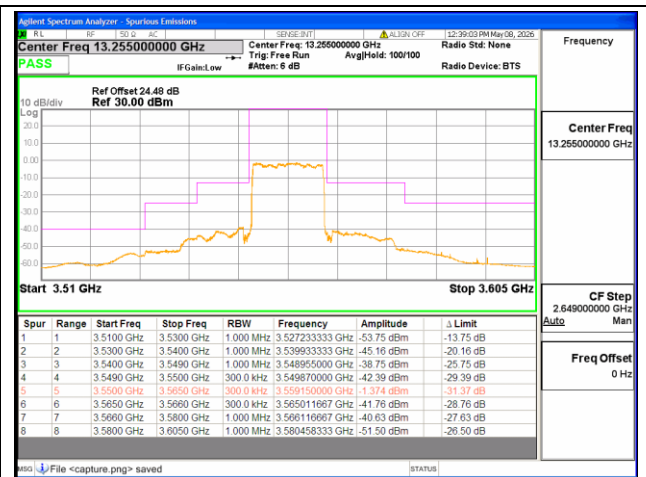
B48 / 10MHz / High CH / QPSK / 1 RB



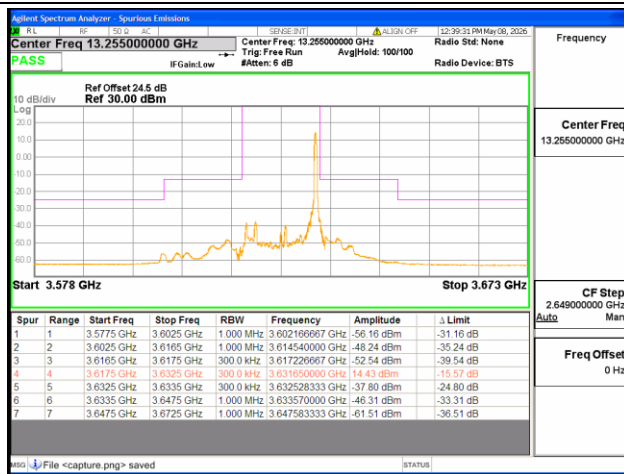
B48 / 10MHz / High CH / QPSK / FULL RB



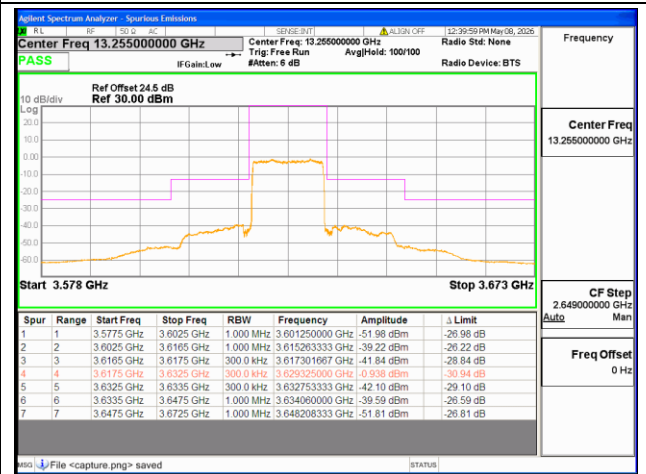
B48 / 15MHz / Low CH / QPSK / 1 RB



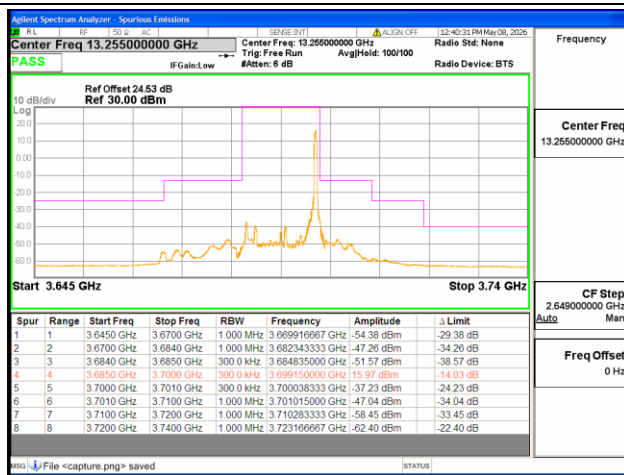
B48 / 15MHz / Low CH / QPSK / FULL RB



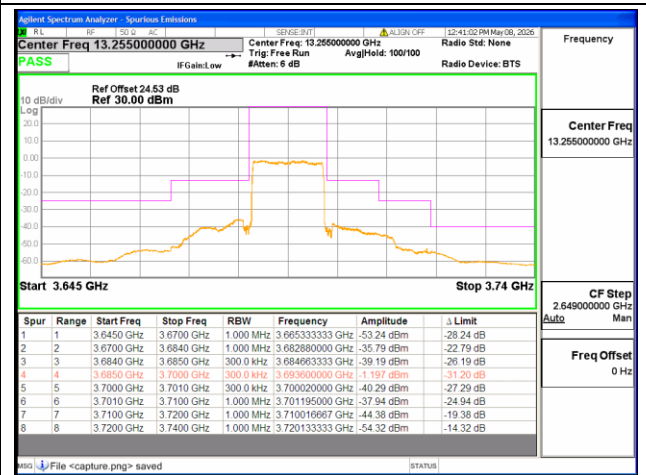
B48 / 15MHz / Mid CH / QPSK / 1 RB



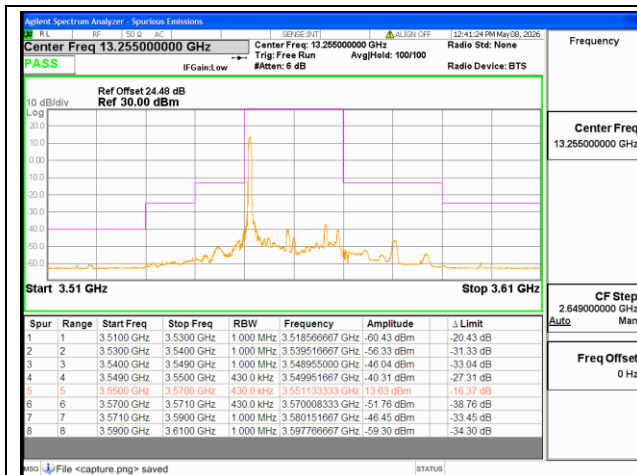
B48 / 15MHz / Mid CH / QPSK / FULL RB



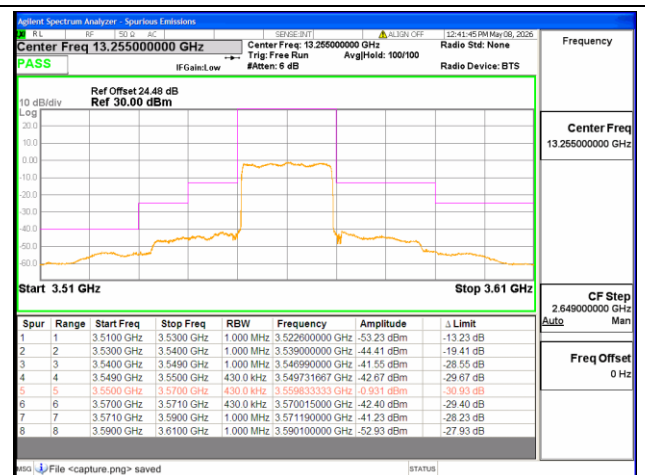
B48 / 15MHz / High CH / QPSK / 1 RB



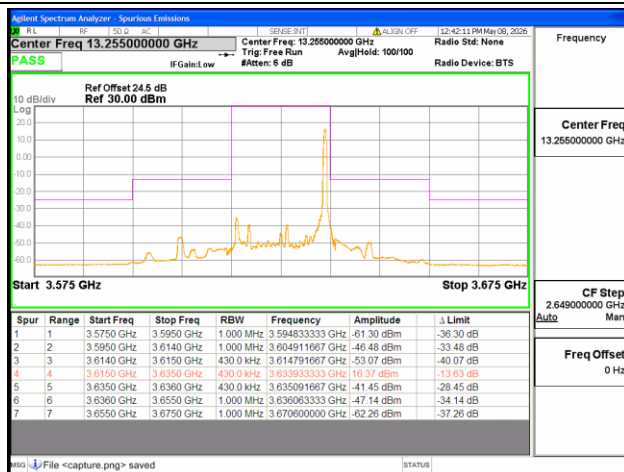
B48 / 15MHz / High CH / QPSK / FULL RB



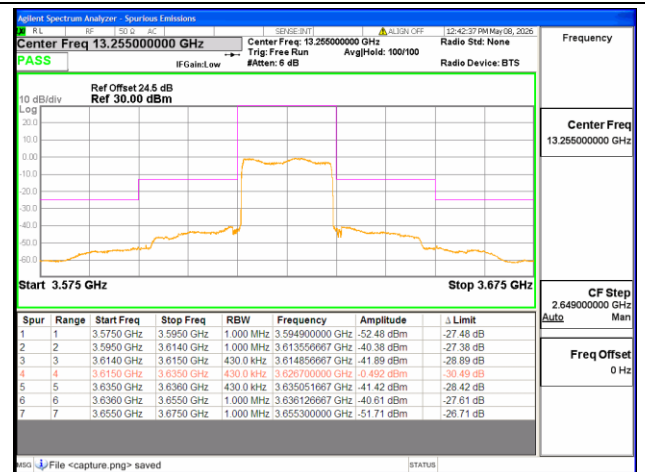
B48 / 20MHz / Low CH / QPSK / 1 RB



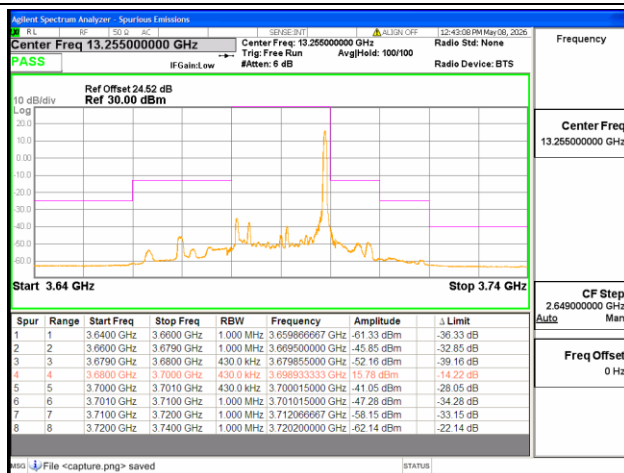
B48 / 20MHz / Low CH / QPSK / FULL RB



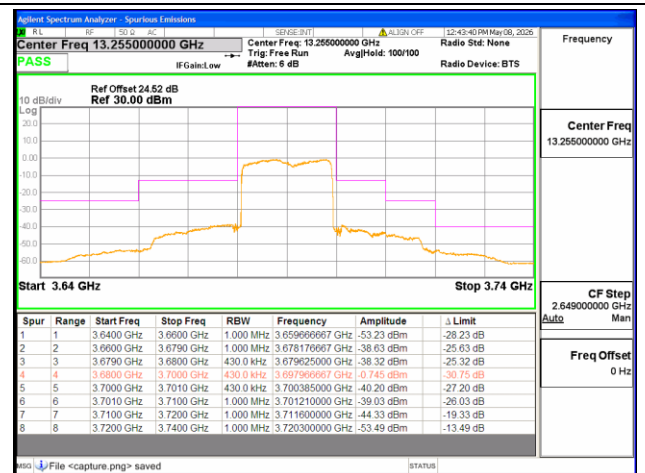
B48 / 20MHz / Mid CH / QPSK / 1 RB



B48 / 20MHz / Mid CH / QPSK / FULL RB



B48 / 20MHz / High CH / QPSK / 1 RB



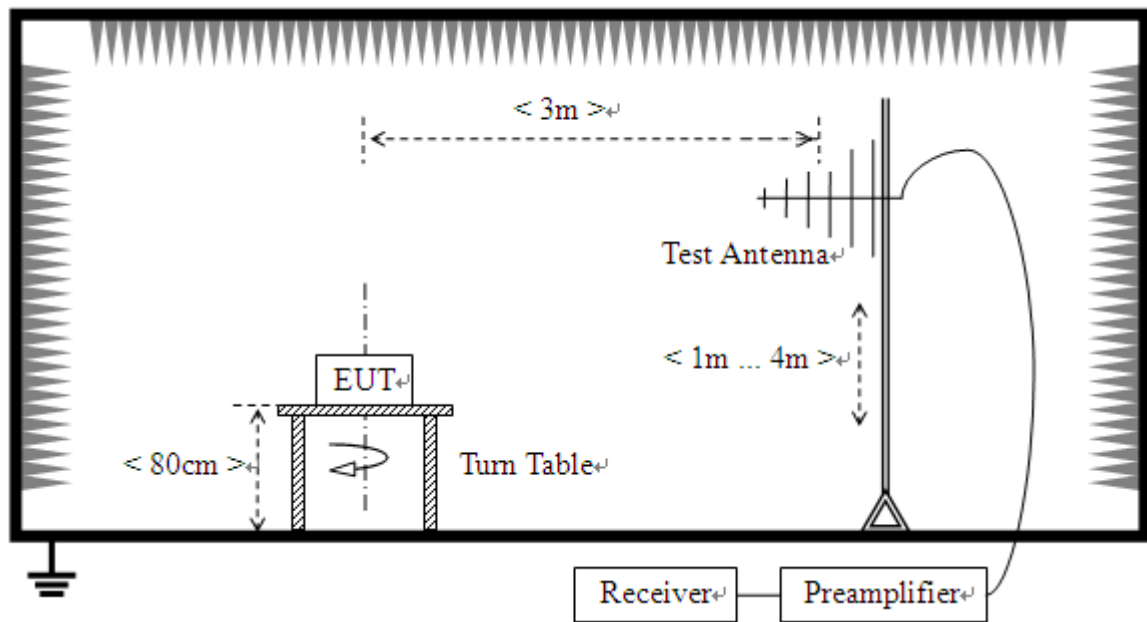
B48 / 20MHz / High CH / QPSK / FULL RB

2.7. Radiated Spurious Emissions

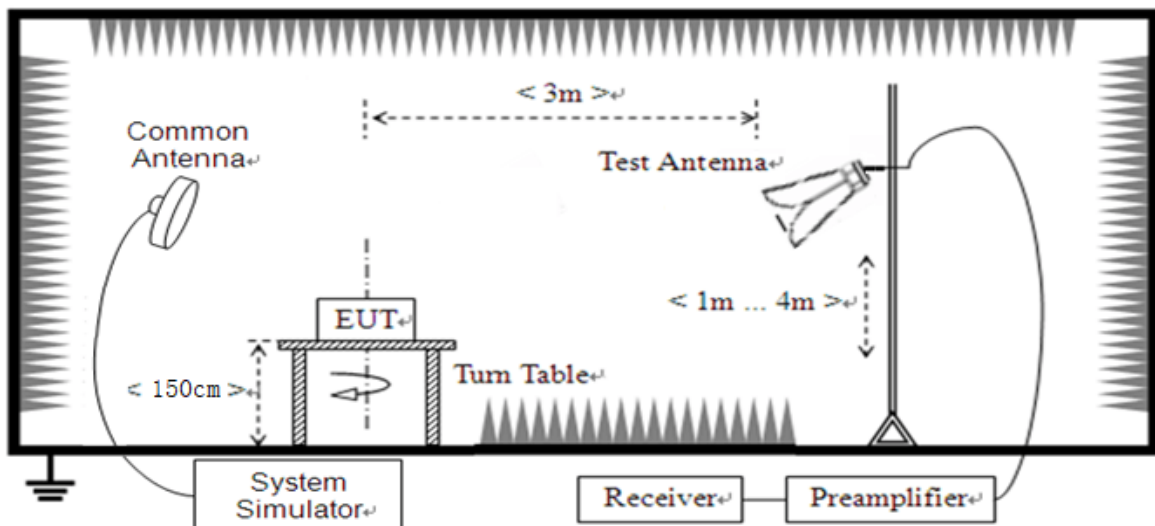
2.7.1. Requirement

The power of any emissions below 3530 MHz or above 3720 MHz shall not exceed -40dBm/MHz .

2.7.2. Test Description



(For the test frequency from 30MHz to 1GHz)



(For the test frequency above 1GHz)



The EUT is located in a 3m Full-Anechoic Chamber, the cable loss, air loss and so on of the site as factors are pre-calibrated using the "Substitution" method, and calculated to correct the reading.

A call is established between the EUT and the SS via a Common Antenna. The EUT is commanded by the SS to operate at the maximum and minimum output power, and only the test result of the maximum output power was recorded.

In the frequency range above 30MHz, Bi-Log Test Antenna (30MHz to 1GHz) and Horn Test Antenna (above 1GHz) are used. Test Antenna is 3m away from the EUT. Test Antenna height is varied from 1m to 4m above the ground and the Turn Table is actuated to turn from 0° to 360° to determine the maximum value of the radiated power. The emission levels at both horizontal and vertical polarizations should be tested. The Filters consists of Notch Filters and High Pass Filter.

Note: when doing measurements above 1GHz, the EUT has been within the 3dB cone width of the horn antenna during horizontal antenna.

2.7.3.Test procedure

KDB 971168 D01v03 Section 5.8 and ANSI/TIA-603-E-2016.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements.

For measurements above 1GHz the resolution bandwidth is set to 1MHz, the video band width is set to 3MHz for peak measurements.



2.7.4. Test Result

The measurement frequency range is from 30MHz to the 10th harmonic of the fundamental frequency. The Turn Table is actuated to turn from 0° to 360°, and both horizontal and vertical polarizations of the Test Antenna are used to find the maximum radiated power. The lowest, middle and highest channels are tested to verify the out of band emissions.

The substitution corrections are obtained as described below:

$$A_{\text{SUBST}} = P_{\text{SUBST_TX}} - P_{\text{SUBST_RX}} - L_{\text{SUBST_CABLES}} + G_{\text{SUBST_TX_ANT}}$$

$$A_{\text{TOT}} = L_{\text{CABLES}} + A_{\text{SUBST}}$$

Where A_{SUBST} is the final substitution correction including receive antenna gain.

$P_{\text{SUBST_TX}}$ is signal generator level,

$P_{\text{SUBST_RX}}$ is receiver level,

$L_{\text{SUBST_CABLES}}$ is cable losses including TX cable,

$G_{\text{SUBST_TX_ANT}}$ is substitution antenna gain.

A_{TOT} is total correction factor including cable loss and substitution correction

During the test, the data of A_{TOT} was added in the test spectrum analyze, so spectrum analyze reading is the final values which contain the data of A_{TOT} .

Note1: The power of the EUT transmitting frequency should be ignored.

Note2: All Spurious Emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

Note3: All bandwidth and modulation were considered and evaluated respectively by performing full test for each band, only the worst cases (Max Bandwidth and QPSK mode) were recorded in this test report.

Note 4: N/A means the frequency is the basic frequency or the base station frequency, they are no need to verdict.

Note5: The amplitude of emissions(18GHz to 10th harmonics) which are attenuated more than 20 dB below the limit are not be reported.

