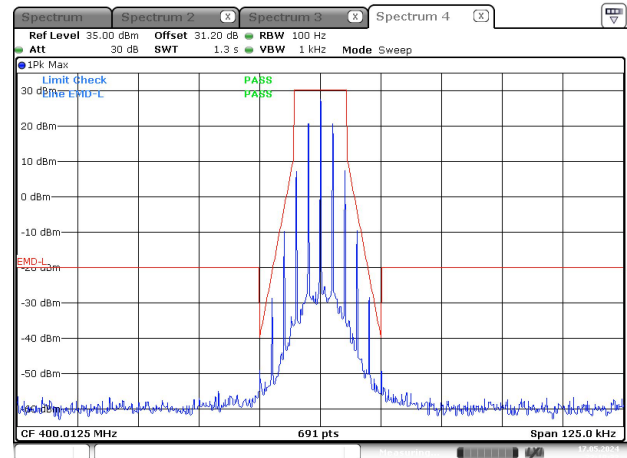
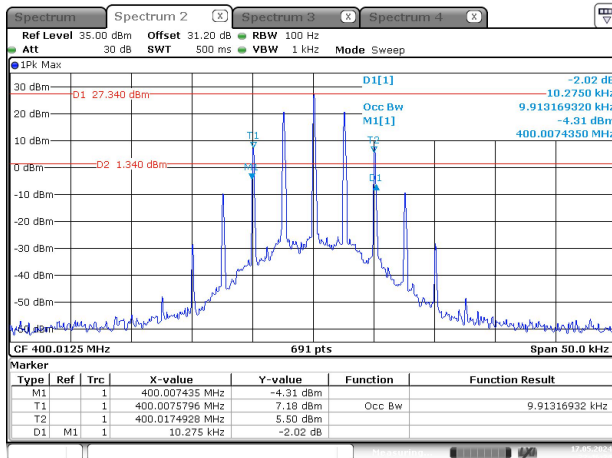
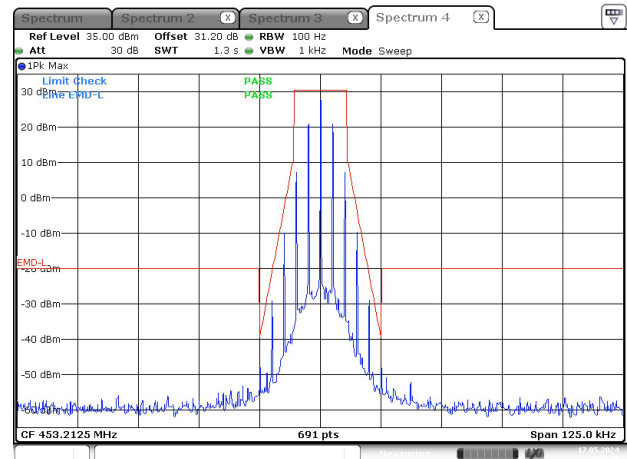
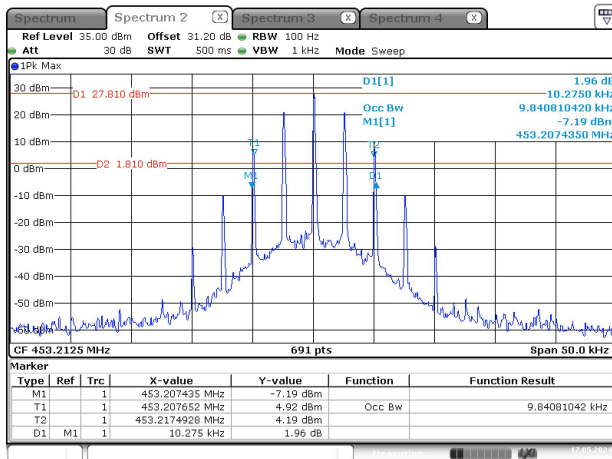


FM, 12.5kHz, Low Power:

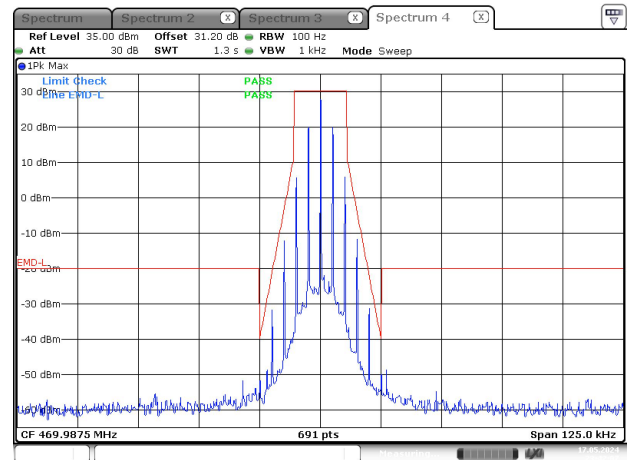
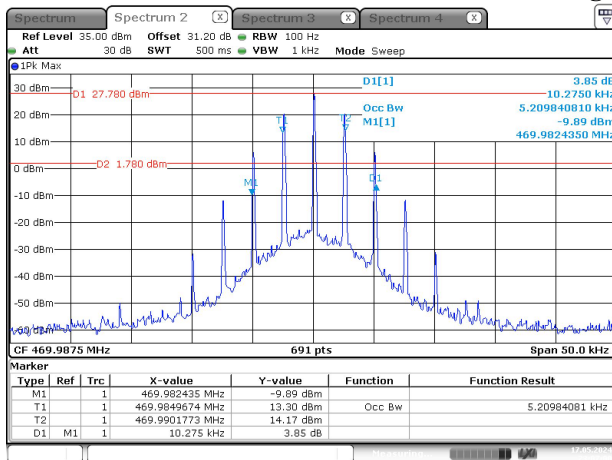
Low Channel



Middle Channel

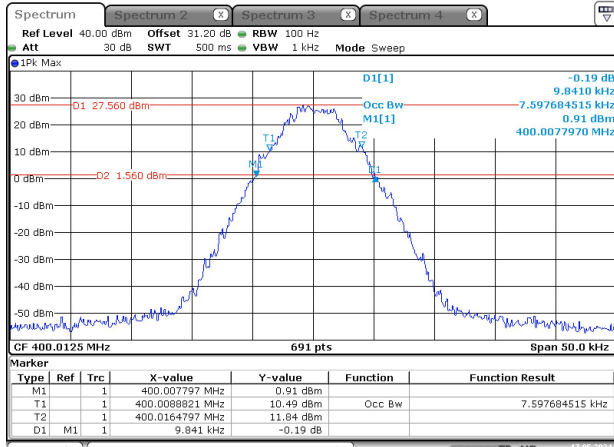


High Channel

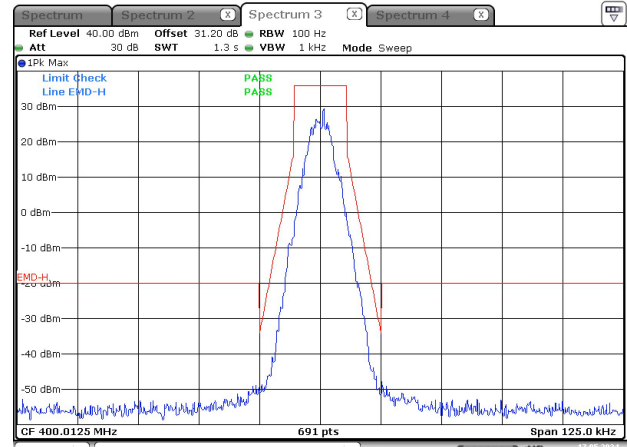


4FSK, 12.5kHz, High Power:

Low Channel

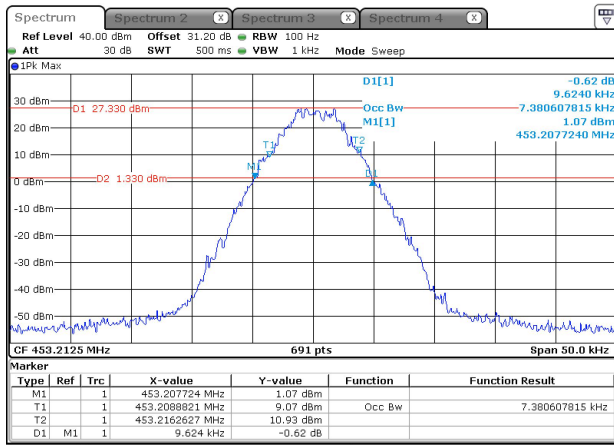


ProjectNo.:2402S45679-RF Tester:Stu Song
Date: 17.MAY.2024 22:50:07

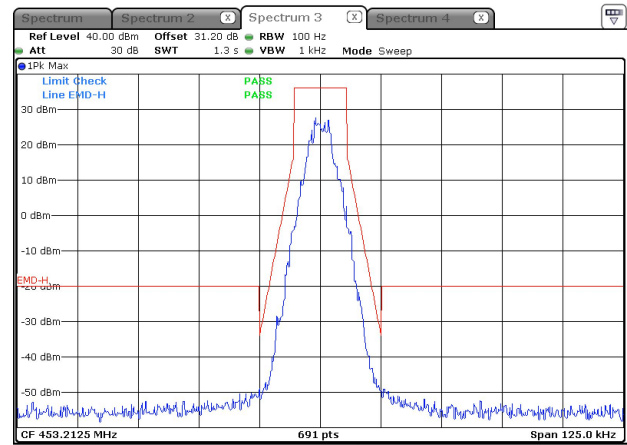


ProjectNo.:2402S45679-RF Tester:Stu Song
Date: 17.MAY.2024 23:21:45

Middle Channel

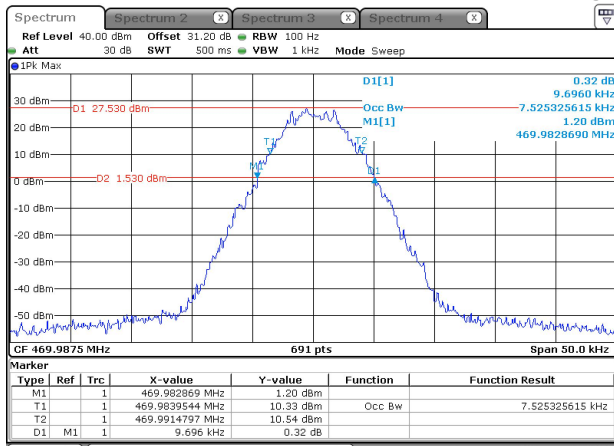


ProjectNo.:2402S45679-RF Tester:Stu Song
Date: 17.MAY.2024 23:01:14

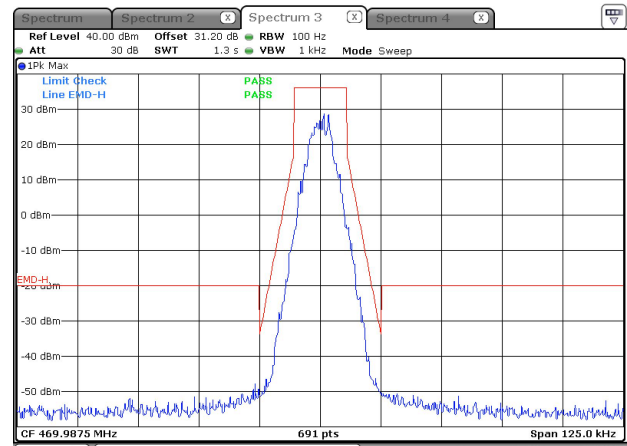


ProjectNo.:2402S45679-RF Tester:Stu Song
Date: 17.MAY.2024 23:31:42

High Channel



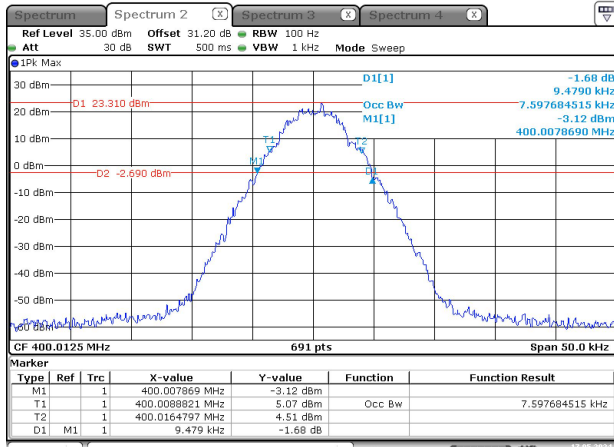
ProjectNo.:2402S45679-RF Tester:Stu Song
Date: 17.MAY.2024 23:09:38



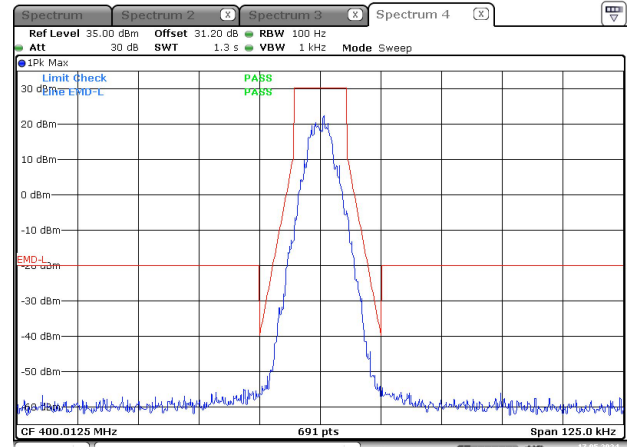
ProjectNo.:2402S45679-RF Tester:Stu Song
Date: 17.MAY.2024 23:44:02

4FSK, 12.5kHz, Low Power:

Low Channel

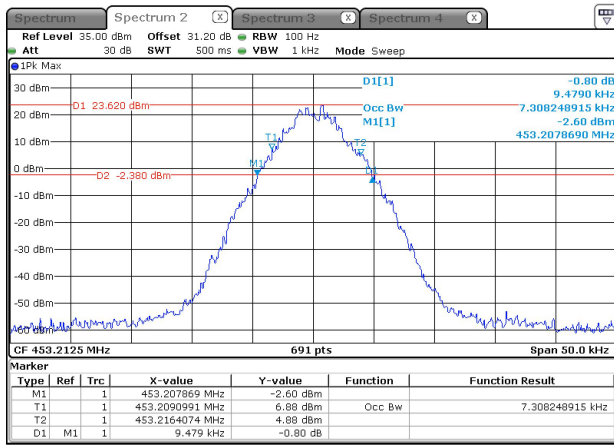


ProjectNo.:2402S45679-RF Tester:Stu Song
Date: 17.MAY.2024 22:55:15

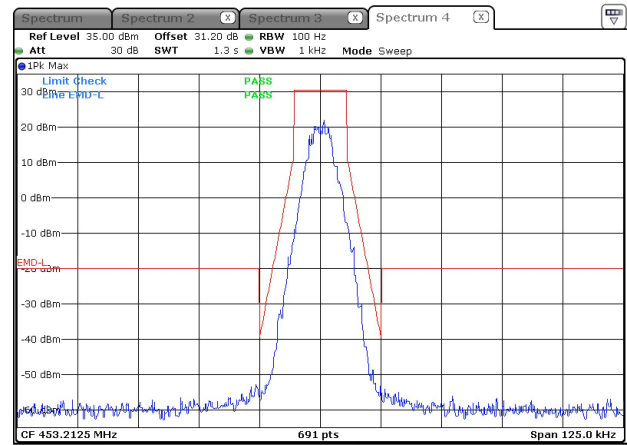


ProjectNo.:2402S45679-RF Tester:Stu Song
Date: 17.MAY.2024 23:23:39

Middle Channel

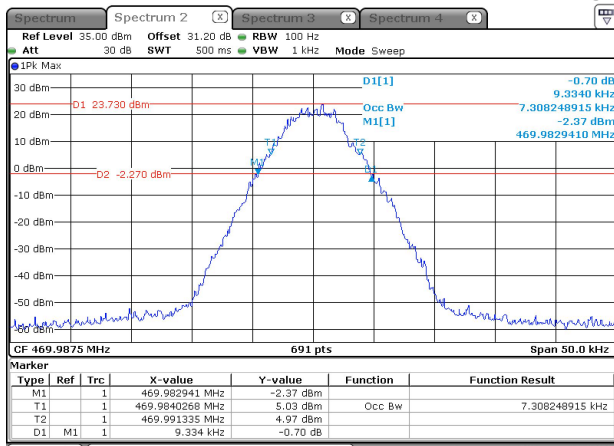


ProjectNo.:2402S45679-RF Tester:Stu Song
Date: 17.MAY.2024 23:02:48

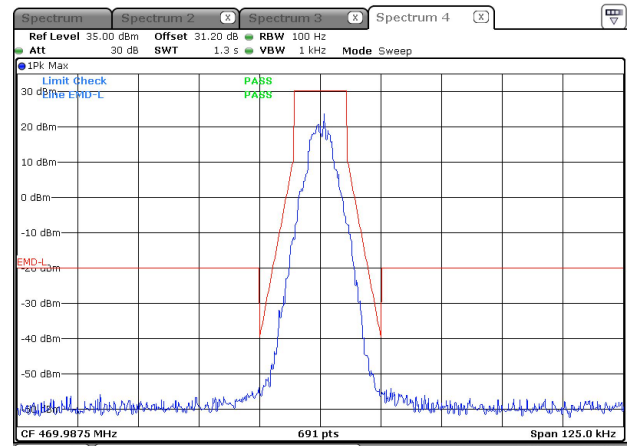


ProjectNo.:2402S45679-RF Tester:Stu Song
Date: 17.MAY.2024 23:38:17

High Channel



ProjectNo.:2402S45679-RF Tester:Stu Song
Date: 17.MAY.2024 23:12:53



ProjectNo.:2402S45679-RF Tester:Stu Song
Date: 17.MAY.2024 23:45:12

4.4 Transmitter Unwanted Emissions(Conducted)

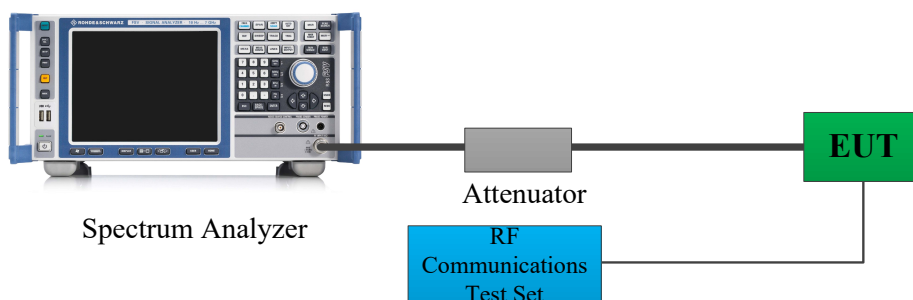
4.4.1 Applicable Standard

FCC §90.210

Emission Mask D—12.5 kHz channel bandwidth equipment. For transmitters designed to operate with a 12.5 kHz channel bandwidth, any emission must be attenuated below the power (P) of the highest emission contained within the authorized bandwidth as follows:

- (1) On any frequency from the center of the authorized bandwidth f_0 to 5.625 kHz removed from f_0 : Zero dB.
- (2) On any frequency removed from the center of the authorized bandwidth by a displacement frequency (f_d in kHz) of more than 5.625 kHz but no more than 12.5 kHz: At least $7.27(f_d - 2.88)$ dB.
- (3) On any frequency removed from the center of the authorized bandwidth by a displacement frequency (f_d in kHz) of more than 12.5 kHz: At least $50 + 10 \log(P)$ dB or 70 dB, whichever is the lesser attenuation.
- (4) The reference level for showing compliance with the emission mask shall be established using a resolution bandwidth sufficiently wide (usually two or three times the channel bandwidth) to capture the true peak emission of the equipment under test. In order to show compliance with the emission mask up to and including 50 kHz removed from the edge of the authorized bandwidth, adjust the resolution bandwidth to 100 Hz with the measuring instrument in a peak hold mode. A sufficient number of sweeps must be measured to insure that the emission profile is developed. If video filtering is used, its bandwidth must not be less than the instrument resolution bandwidth. For emissions beyond 50 kHz from the edge of the authorized bandwidth, see paragraph (o) of this section. If it can be shown that use of the above instrumentation settings do not accurately represent the true interference potential of the equipment under test, an alternate procedure may be used provided prior Commission approval is obtained.

4.4.2 EUT Setup Block Diagram



Note: The Insertion loss of the RF cable, Attenuators was offset into the Spectrum Analyzer.

4.4.3 Test Procedure

According to ANSI C63.26-2015 Section 5.7.4:

- a) Set the spectrum analyzer start frequency to the lowest frequency generated by the EUT, without going below 9 kHz, and the stop frequency to the lower frequency covered by the measurements previously performed in 5.7.3. As an alternative, the stop frequency can be set to the value specified in 5.1.1, depending on the EUT operating range, if the resulting plot can clearly demonstrate compliance for all frequencies not addressed by the out-of-band emissions measurements performed as per 5.7.3.
- b) When using an average power (rms) detector, ensure that the number of points in the sweep $\geq 2 \times (\text{span} / \text{RBW})$. This may require that the measurement range defined by the start and stop frequencies be subdivided, depending on the spectrum analyzer capabilities. This requirement does not apply to peak-detected power measurements. When average power is specified by the applicable regulation, a peak-detector can be utilized for preliminary measurements to accommodate wider frequency spans. Any emissions found in the preliminary measurement to exceed the applicable limit(s) shall be further examined using a power averaging (rms) detector with the minimum number of measurement points as defined above.
- c) The sweep time should be set to auto-couple for performing peak-detector measurements. For measurements that use a power averaging (rms) detector, the sweep time shall be set as described for out-of-band emissions measurements in item d) of 5.7.3.
- d) Identify and measure the highest spurious emission levels in each frequency range. It is not necessary to re-measure the out-of-band emissions as a part of this test. Record the frequencies and amplitudes corresponding to the measured emissions and capture the data plots.
- e) Repeat step b) through step d) for the upper spurious emission frequency range if not already captured by a wide span measurement performed as per the alternative provided in step a). The upper frequency for this measurement is defined in 5.1.1 as a function of the EUT operating range.
- f) Compare the results with the corresponding limit in the applicable regulation.
- g) The test report shall include the data plots of the measuring instrument display and the measured data.

4.4.4 Test Data And Result

Serial Number:	2JLO-2	Test Date:	2024/5/19
Test Site:	RF	Test Mode:	Transmitting
Tester:	Stu Song	Test Result:	Pass

Environmental Conditions:					
Temperature: (°C)	25.5	Relative Humidity: (%)	56	ATM Pressure: (kPa)	100.8

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40	101947	2023/10/18	2024/10/17
Unknown	Coaxial Cable	C-NJNJ-50	C-0200-03	2023/9/2	2024/9/1
Huaxiang	Coaxial Attenuator	DTS250-30	11022109	2024/3/1	2025/3/1
HP	RF Communications Test Set	8920A	3438A05201	2023/10/18	2024/10/17

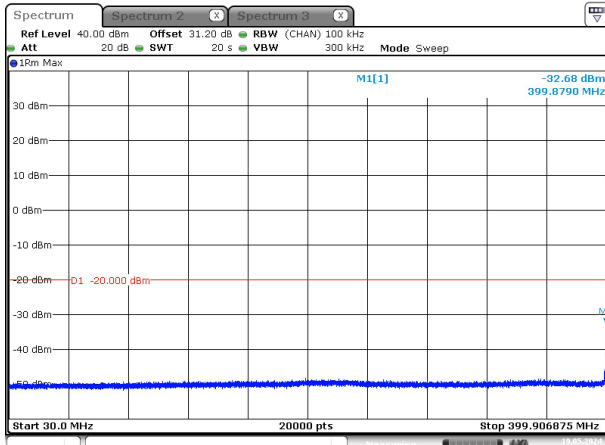
* Statement of Traceability: Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data:

Note: Test only was performed at high power level.

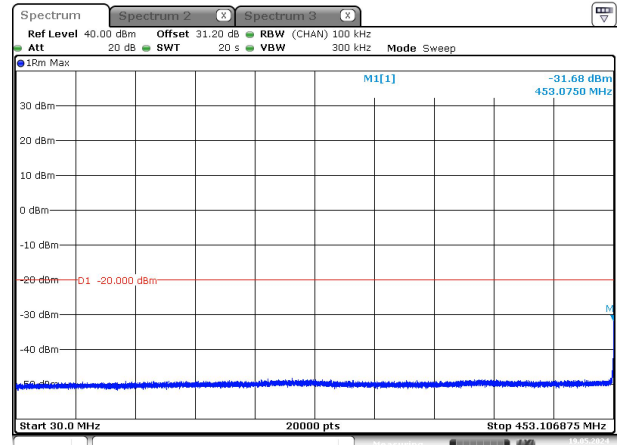
FM, 12.5kHz:

Low Channel

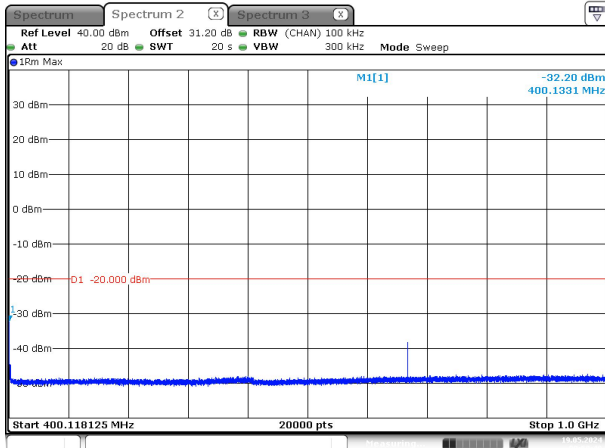


ProjectNo.:2402S45679-RF Tester:Stu Song
Date: 19.MAY.2024 09:57:40

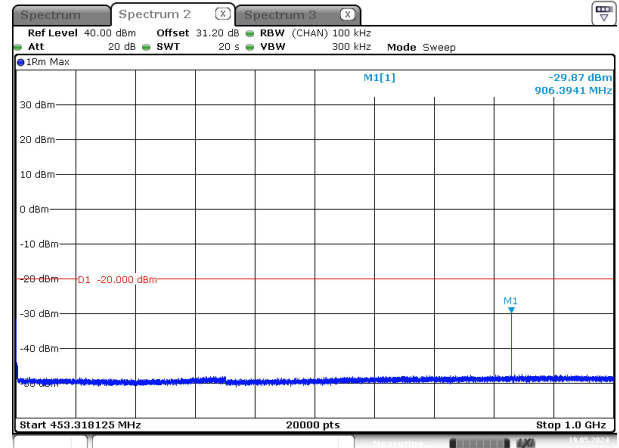
Middle Channel



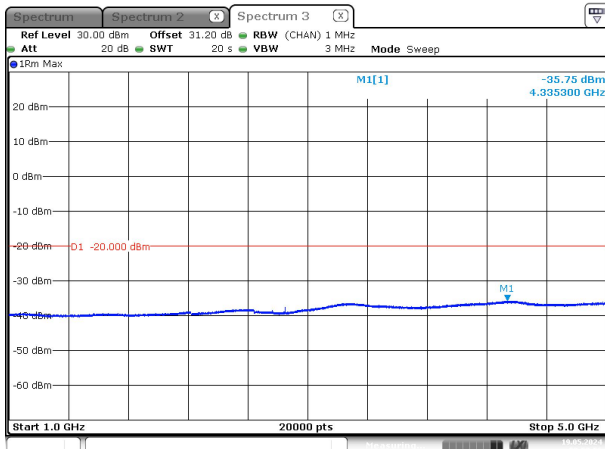
ProjectNo.:2402S45679-RF Tester:Stu Song
Date: 19.MAY.2024 10:06:04



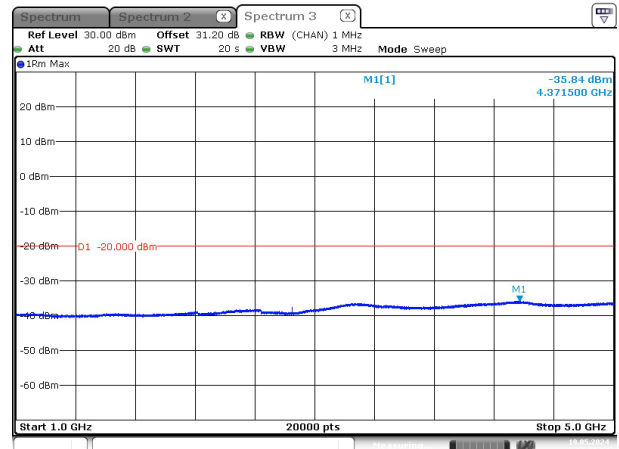
ProjectNo.:2402S45679-RF Tester:Stu Song
Date: 19.MAY.2024 09:58:49



ProjectNo.:2402S45679-RF Tester:Stu Song
Date: 19.MAY.2024 10:07:54



ProjectNo.:2402S45679-RF Tester:Stu Song
Date: 19.MAY.2024 09:59:57



ProjectNo.:2402S45679-RF Tester:Stu Song
Date: 19.MAY.2024 10:08:24