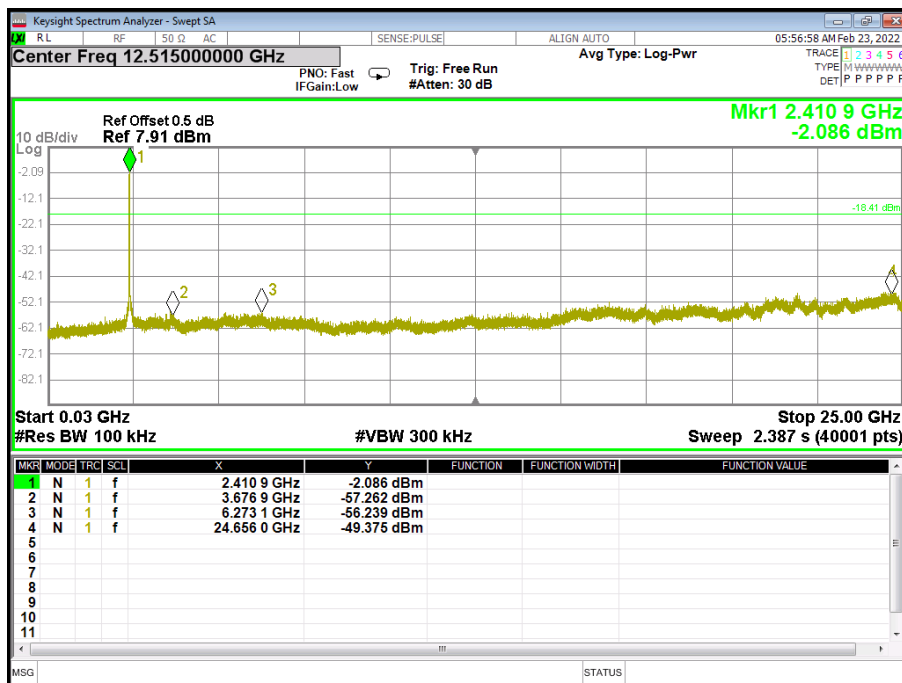


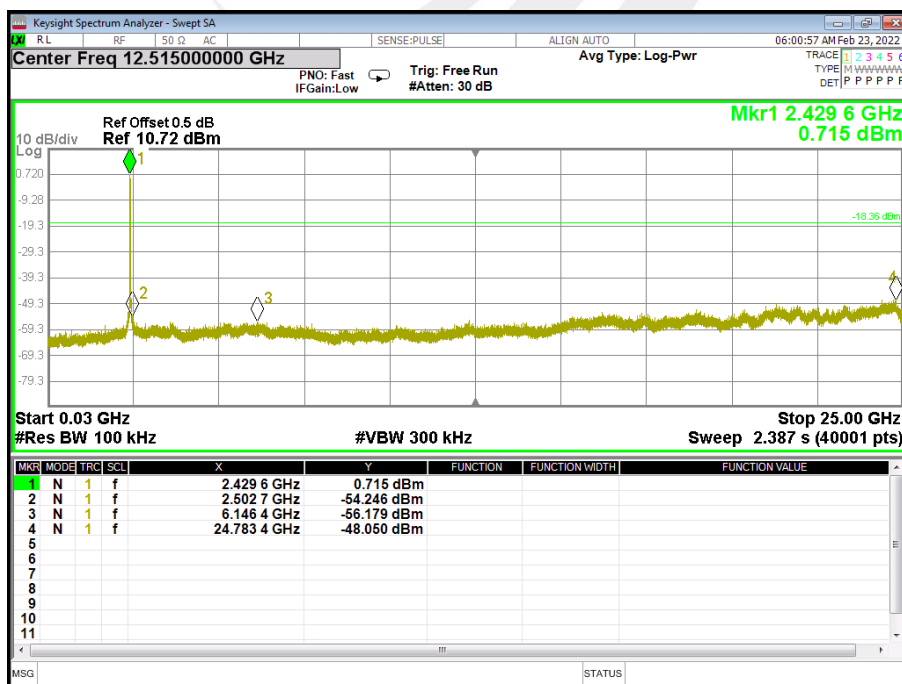


Temperature:	25°C	Relative Humidity:	60%
Test Voltage:	DC 3.7V	Test Mode:	TX g Mode /CH01, CH06, CH11

CH 01

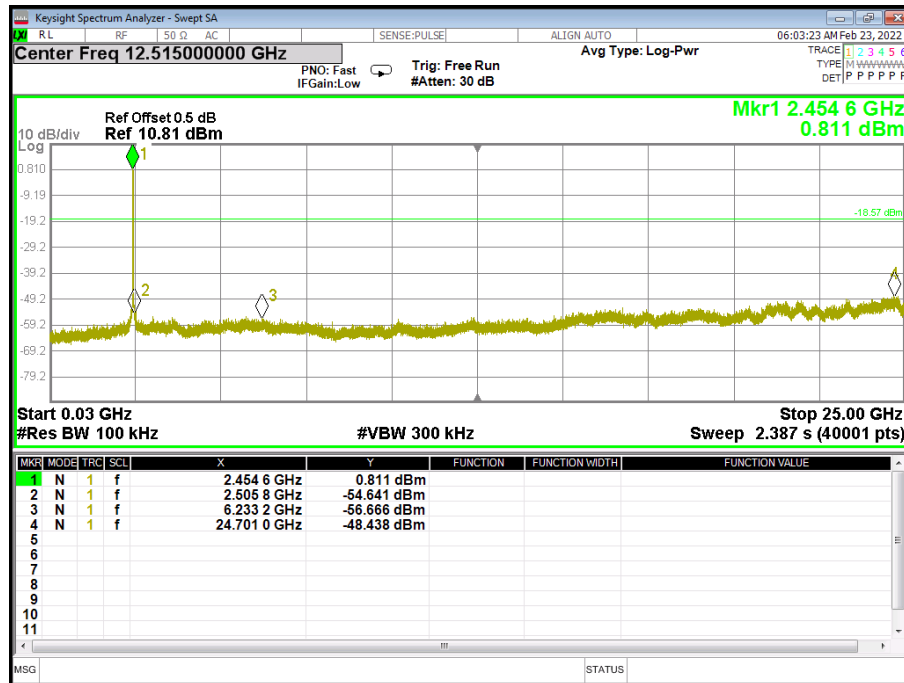


CH06





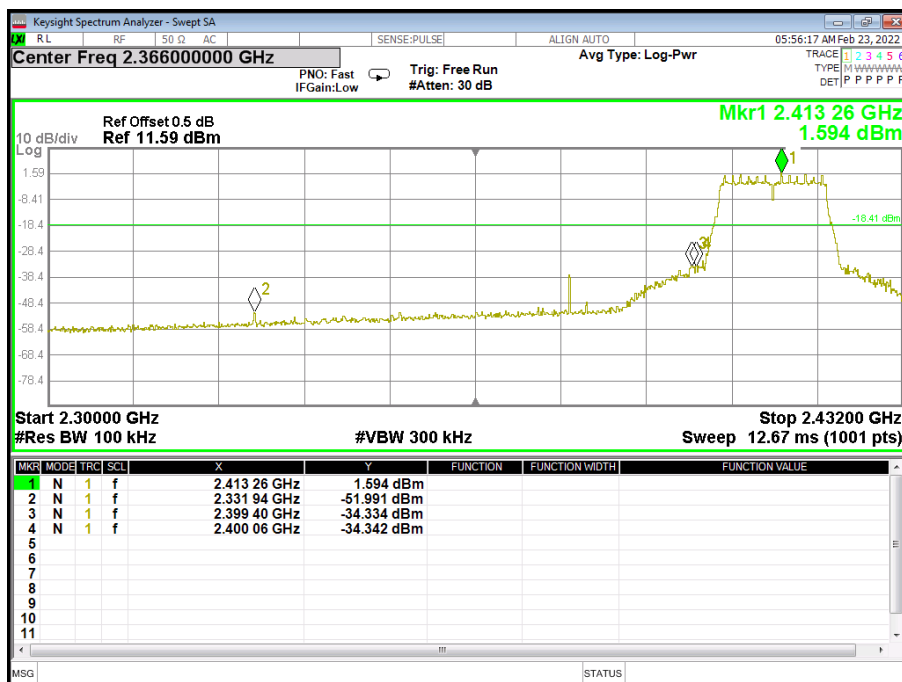
CH 11



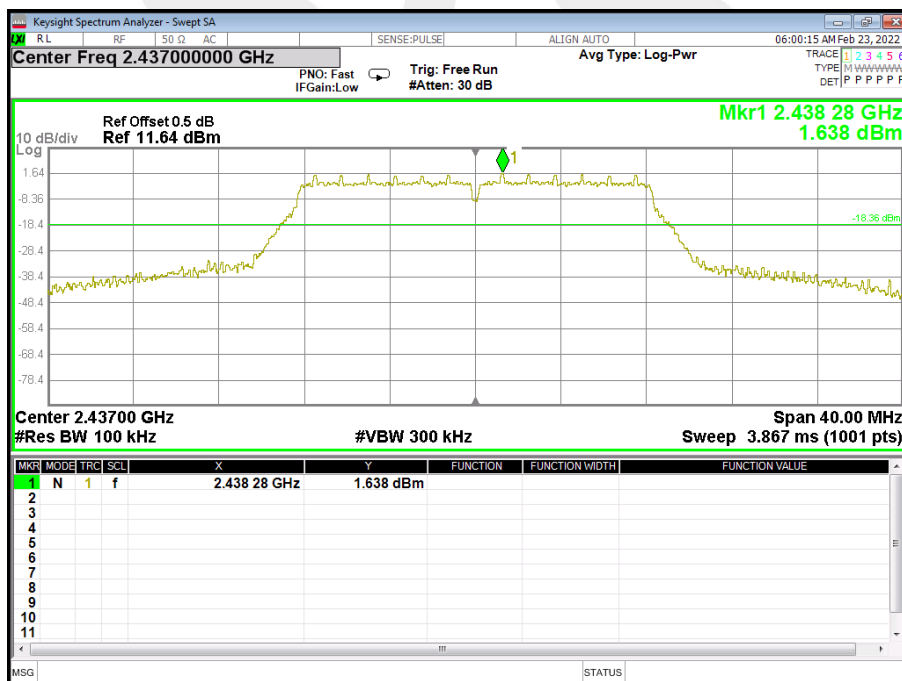


Band edge(it's also the reference level for conducted spurious emission)

CH 01

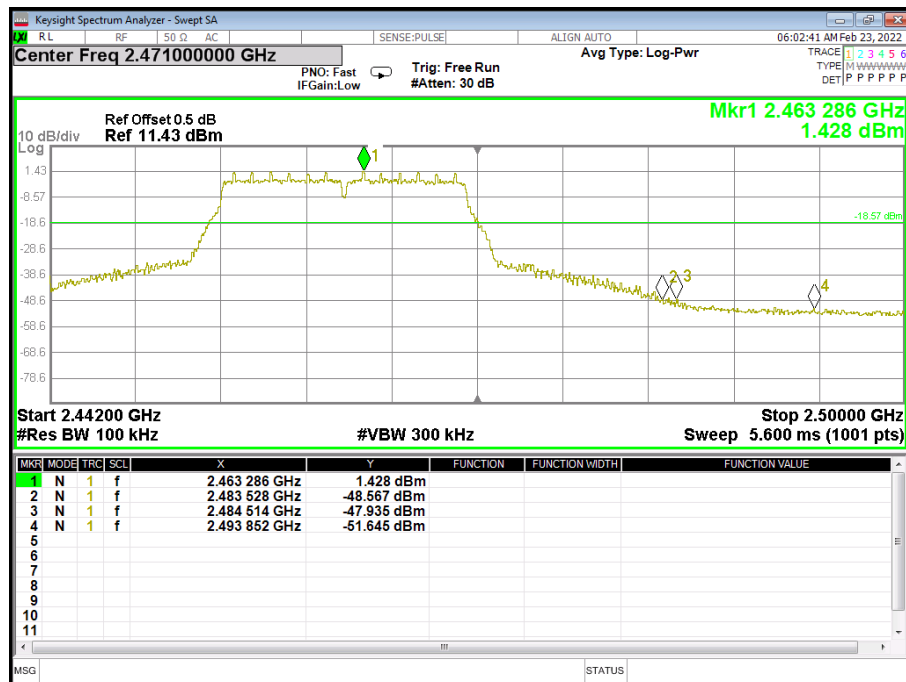


CH06





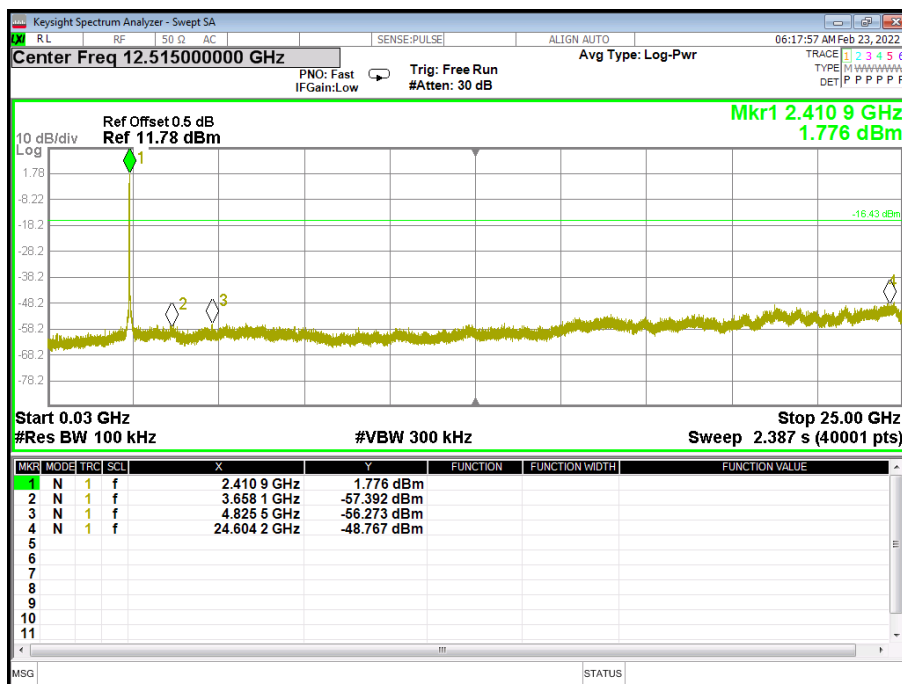
CH11



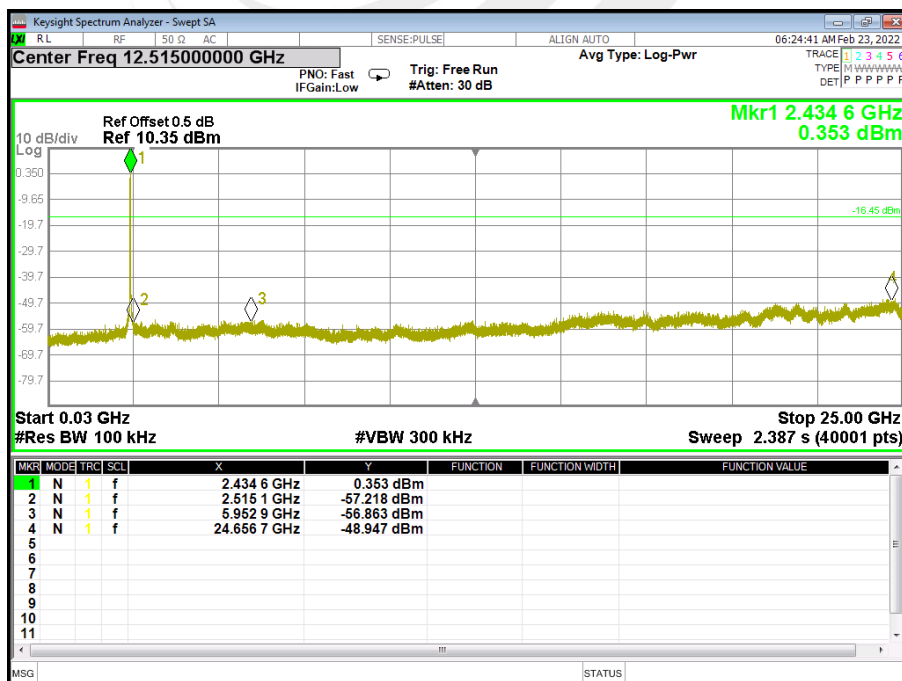


Temperature:	25°C	Relative Humidity:	60%
Test Voltage:	DC 3.7V	Test Mode:	TX n Mode(20M) /CH01, CH06, CH11

CH 01

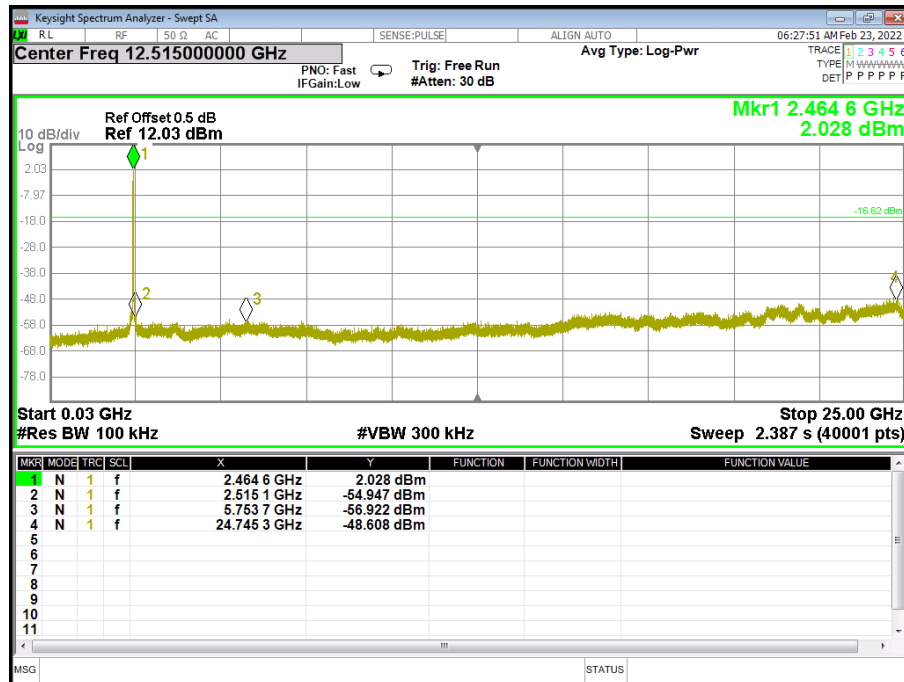


CH 06





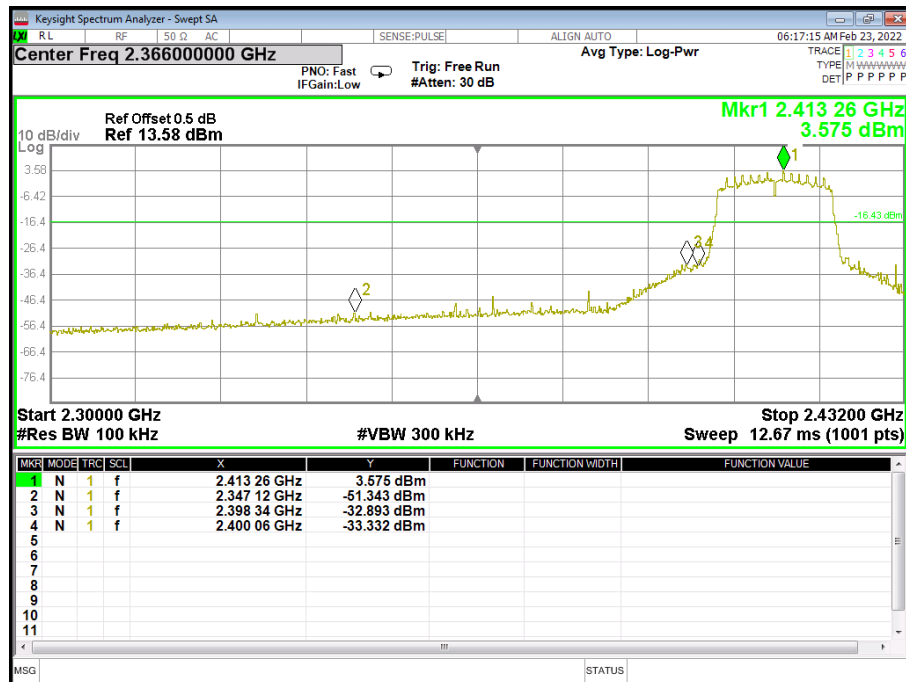
CH 11



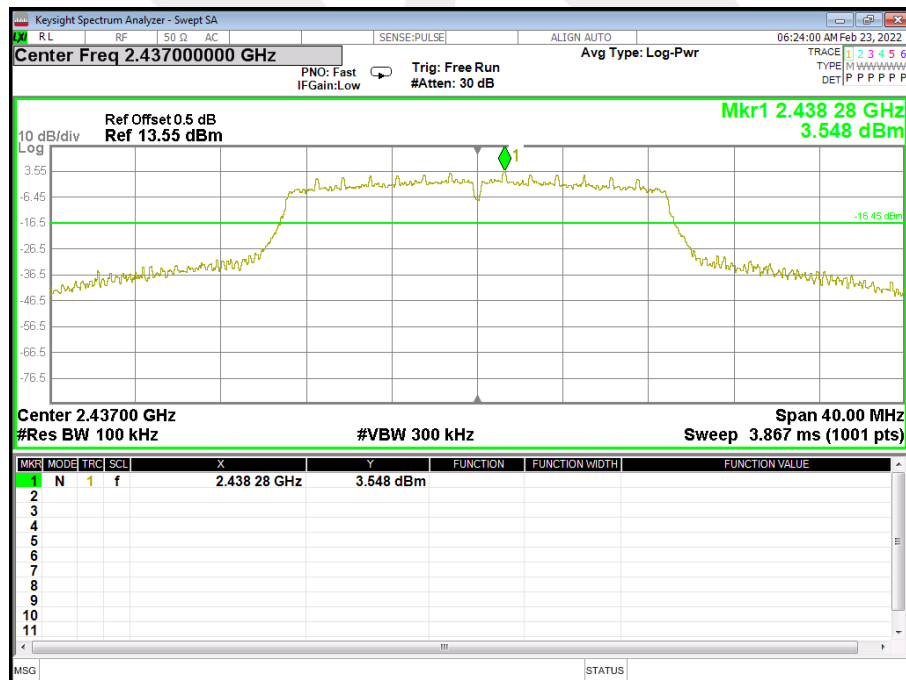


Band edge(it's also the reference level for conducted spurious emission)

CH 01

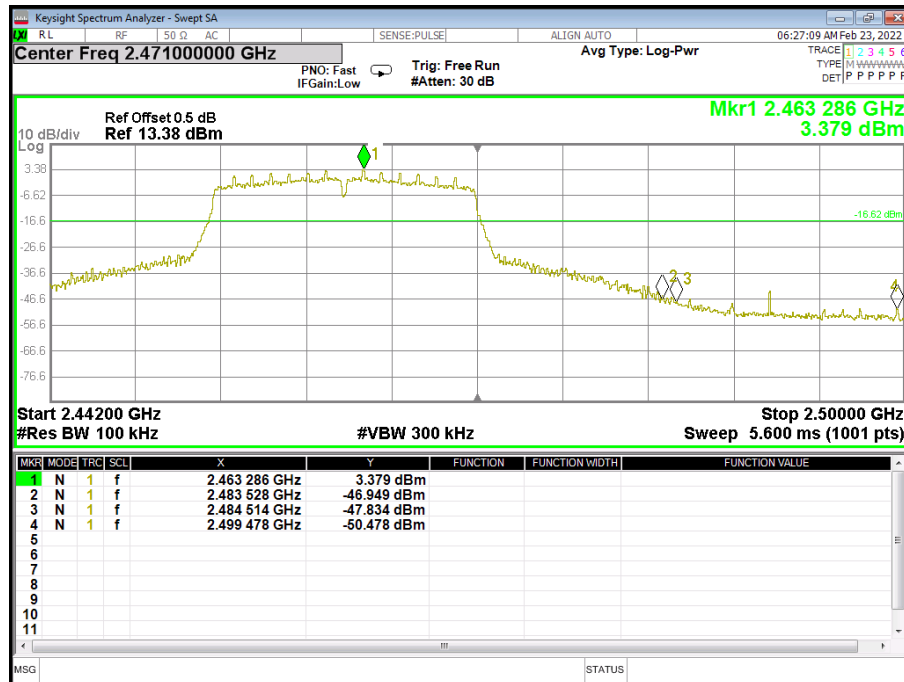


CH 06





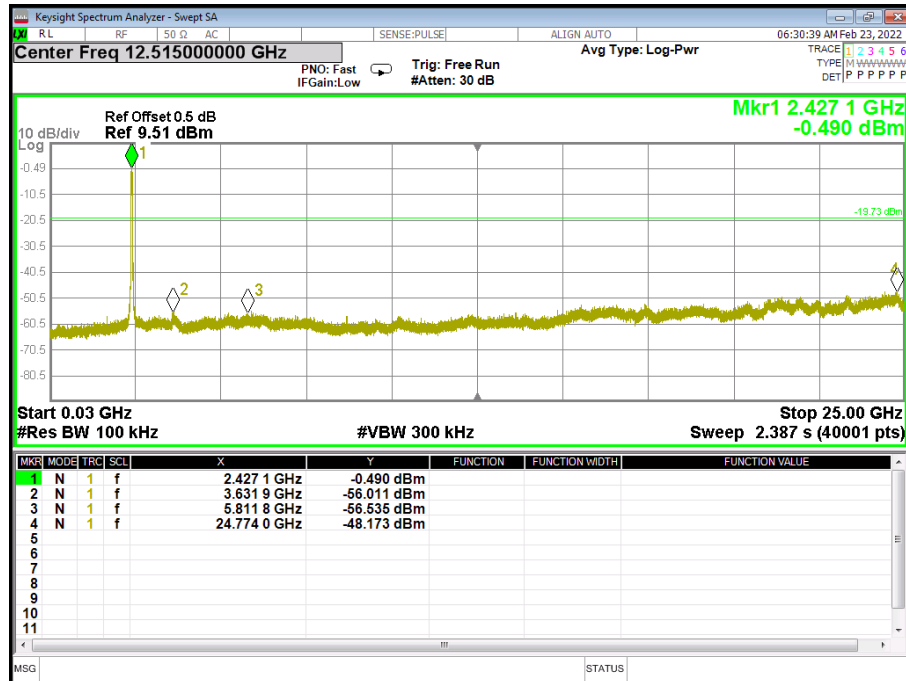
CH 11





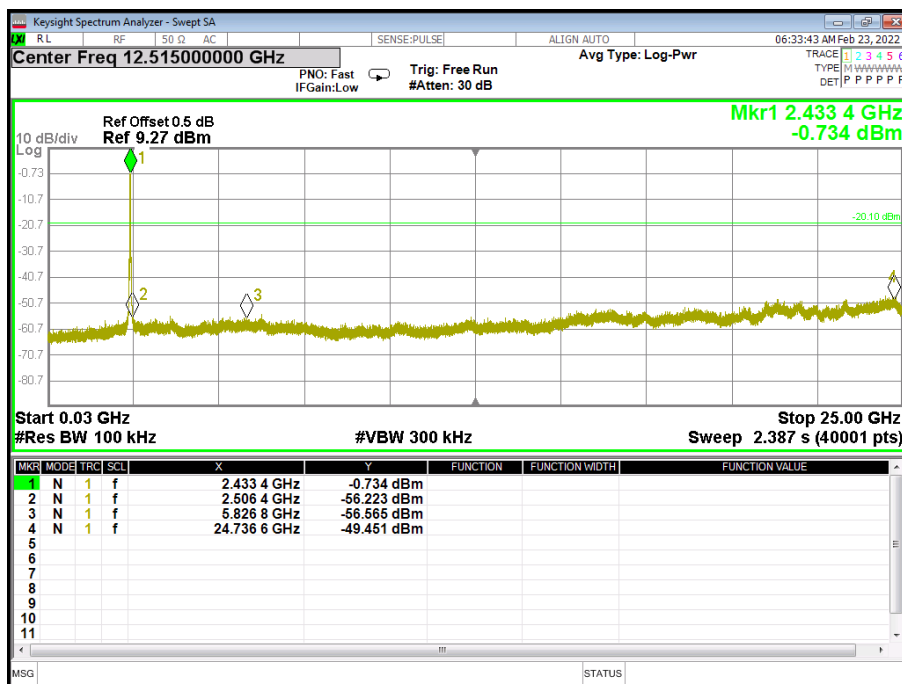
Temperature:	25°C	Relative Humidity:	60%
Test Voltage:	DC 3.7V	Test Mode:	TX n Mode(40M) /CH03, CH06, CH09

CH 03

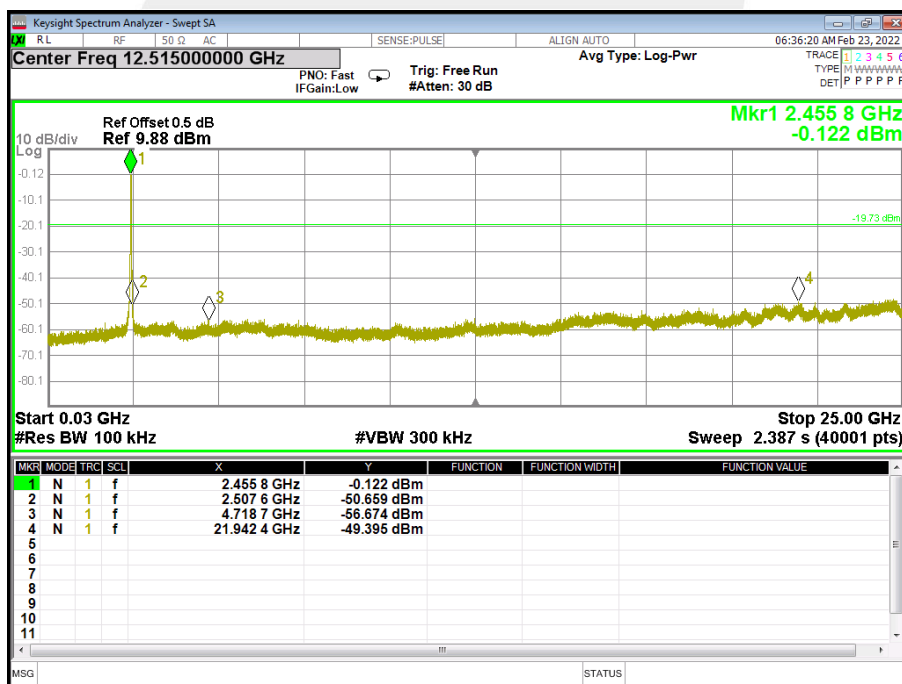




CH06



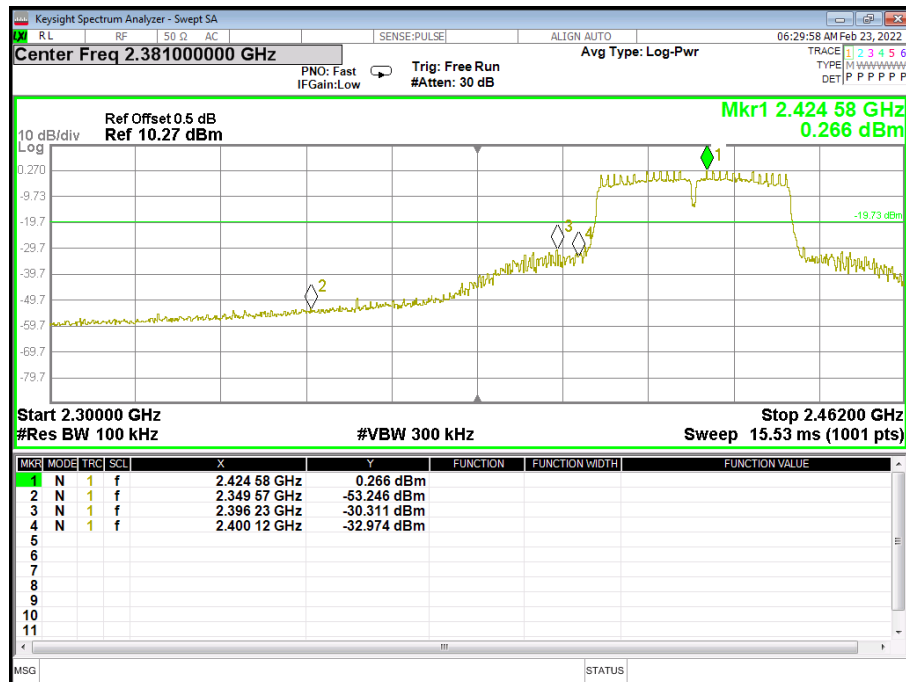
CH09



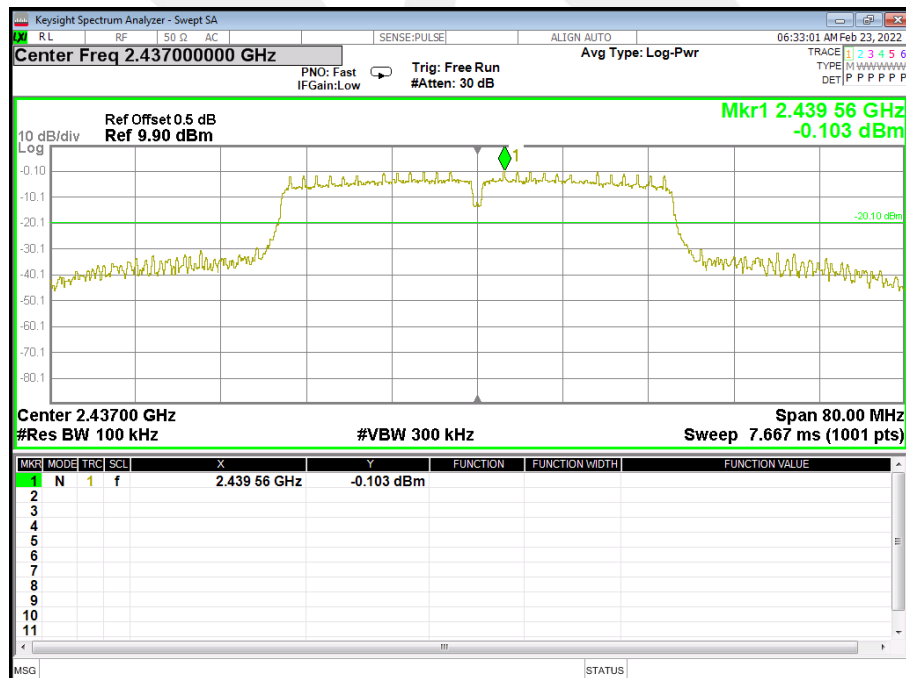


Band edge(it's also the reference level for conducted spurious emission)

CH03

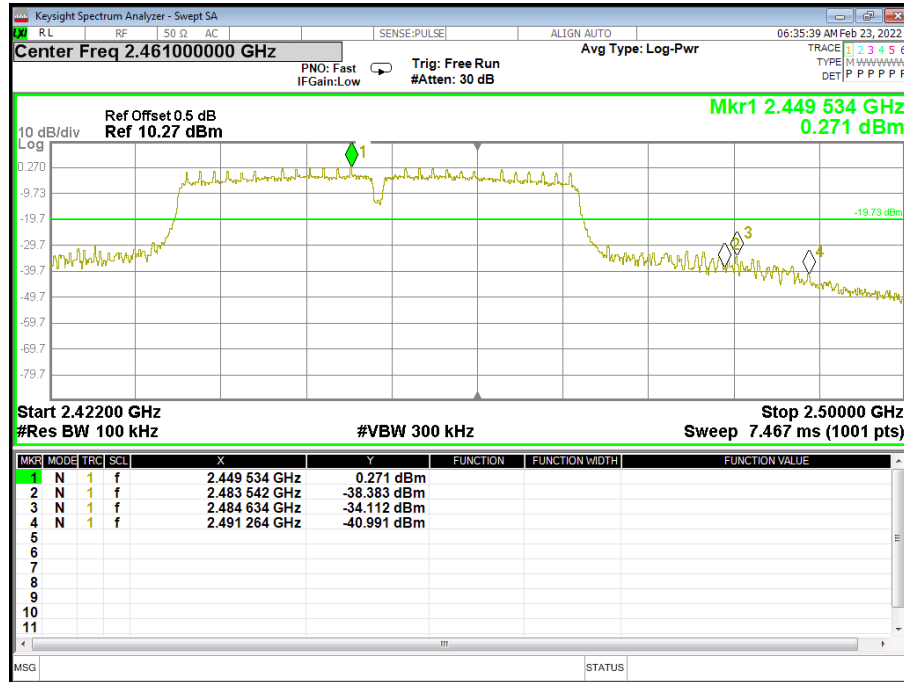


CH 06





CH 09





5. POWER SPECTRAL DENSITY TEST

5.1 LIMIT

FCC Part15.247 , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(e)	Power Spectral Density	≤ 8 dBm (RBW ≥ 3 KHz)	2400-2483.5	PASS

5.2 TEST PROCEDURE

1. Set analyzer center frequency to DTS channel center frequency.
2. Set the span to 1.5 times the DTS channel bandwidth.
3. Set the $100 \text{ kHz} \geq \text{RBW} \geq 3 \text{ kHz}$.
4. Set the $\text{VBW} \geq 3 \times \text{RBW}$.
5. Detector = peak.
6. Sweep time = auto couple.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. Use the peak marker function to determine the maximum amplitude level.
10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

5.3 DEVIATION FROM STANDARD

No deviation.

5.4 TEST SETUP



5.5 EUT OPERATION CONDITIONS

Please refer to section 3.1.4 of this report.



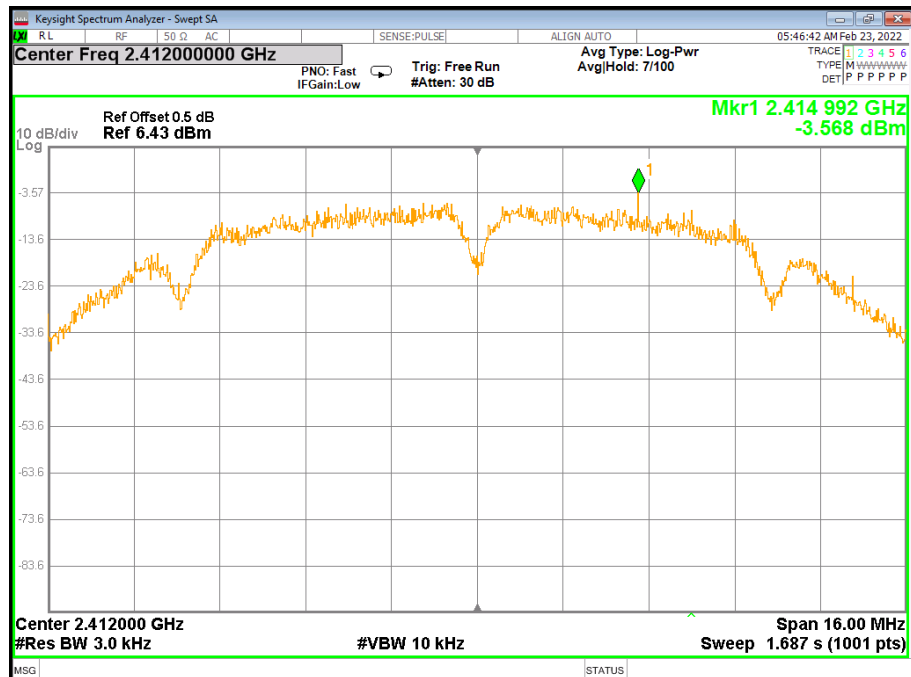
5.6 TEST RESULTS

Temperature:	25℃	Relative Humidity:	60%
Test Voltage:	DC 3.7V	Test Mode:	TX b/g/n20/n40 Mode

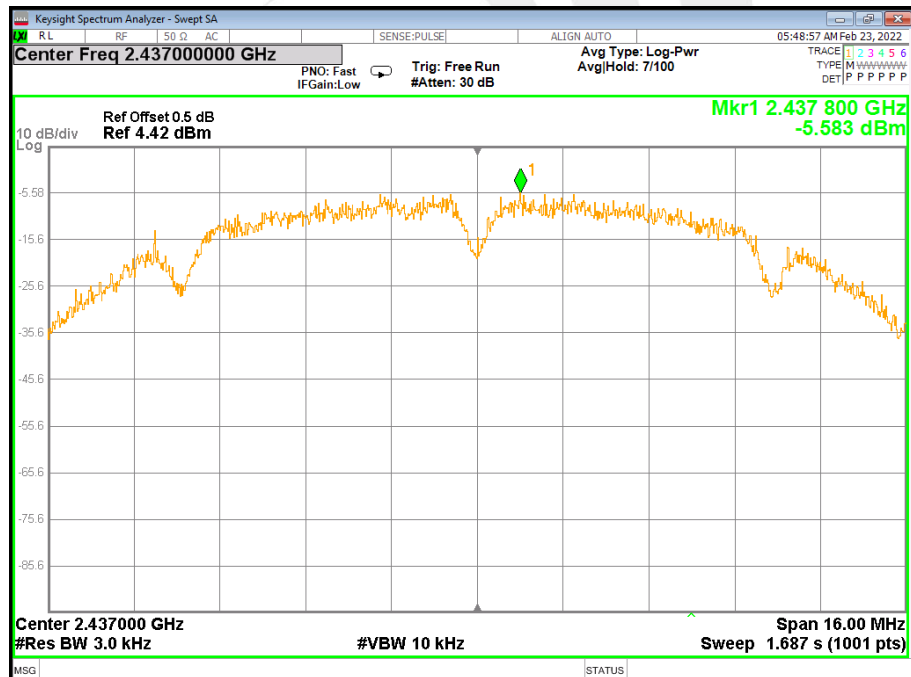
Modulation	Frequency (MHz)	Power Density (dBm/3kHz)	Limit (dBm/3KHz)	Result
802.11b	2412	-3.568	8	Pass
	2437	-5.583	8	Pass
	2462	-5.482	8	Pass
802.11g	2412	-13.067	8	Pass
	2437	-12.770	8	Pass
	2462	-12.676	8	Pass
802.11n(HT20)	2412	-9.805	8	Pass
	2437	-10.645	8	Pass
	2462	-11.205	8	Pass
802.11n(HT40)	2422	-13.355	8	Pass
	2437	-15.077	8	Pass
	2452	-13.076	8	Pass



802.11b TX CH01

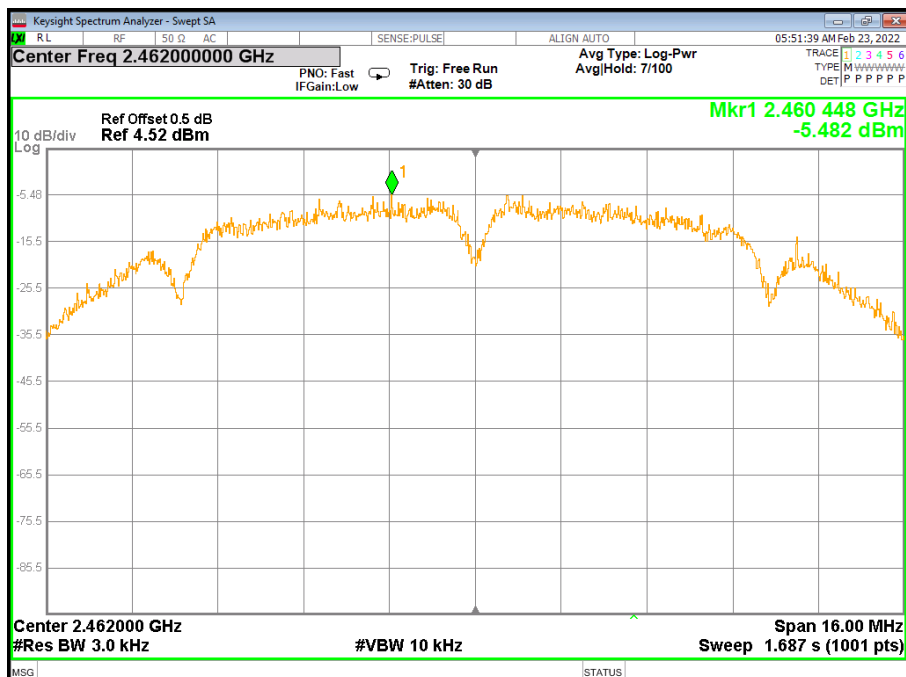


802.11b TX CH06

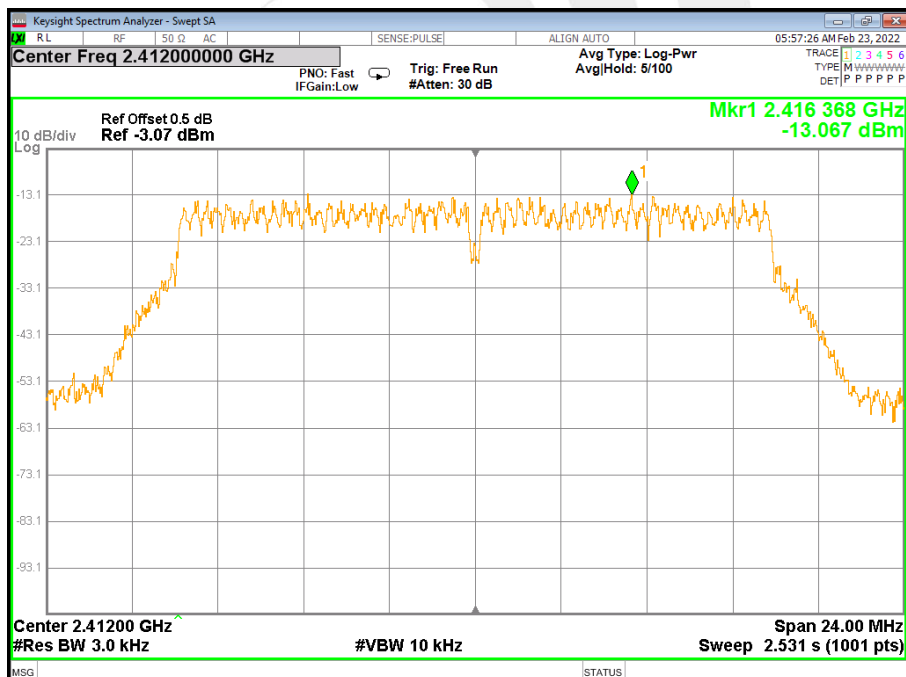




802.11b TX CH11

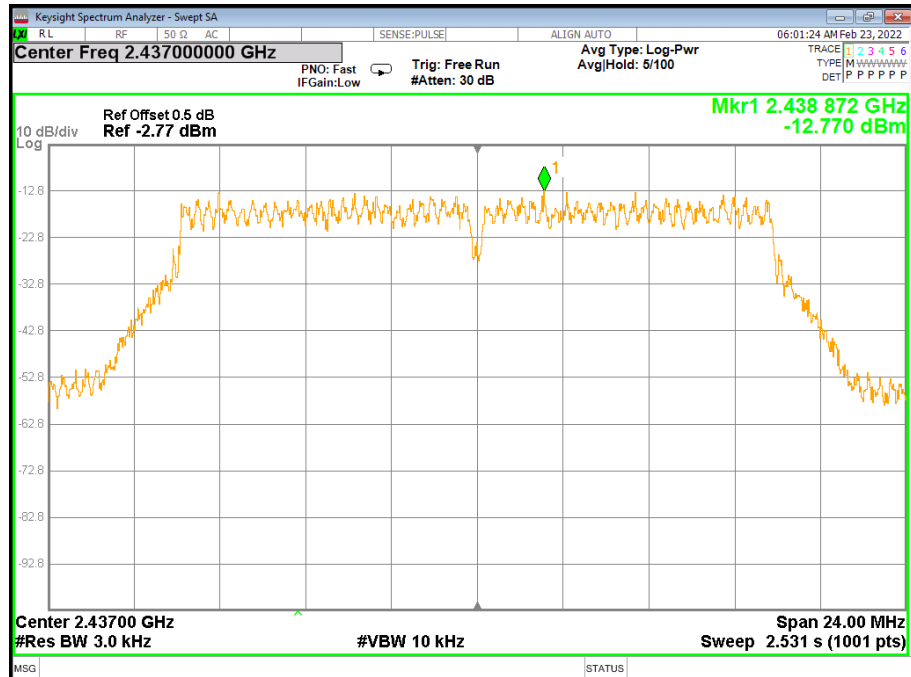


802.11g TX CH01

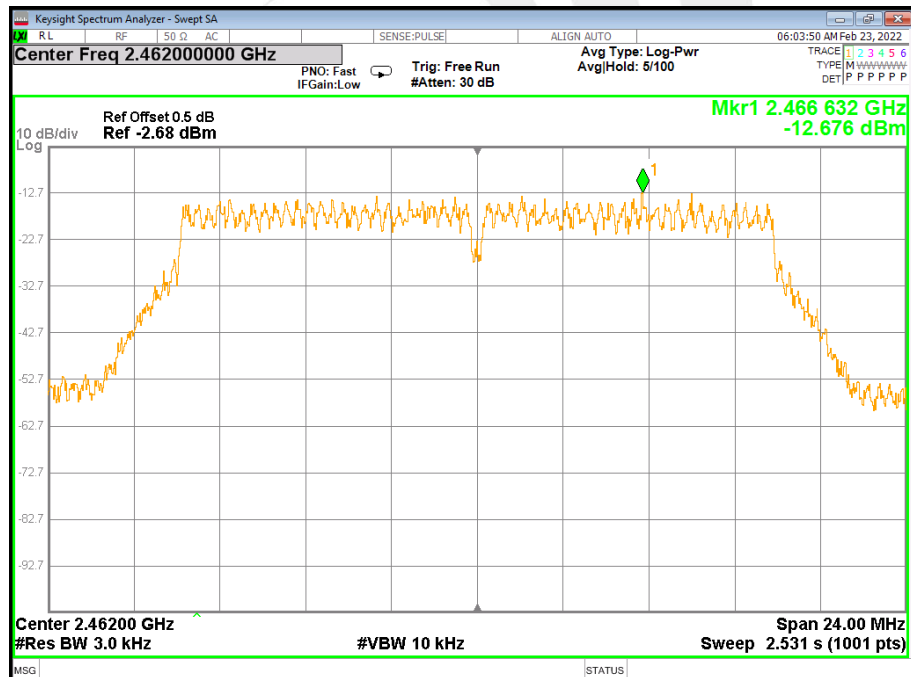




802.11g TX CH06

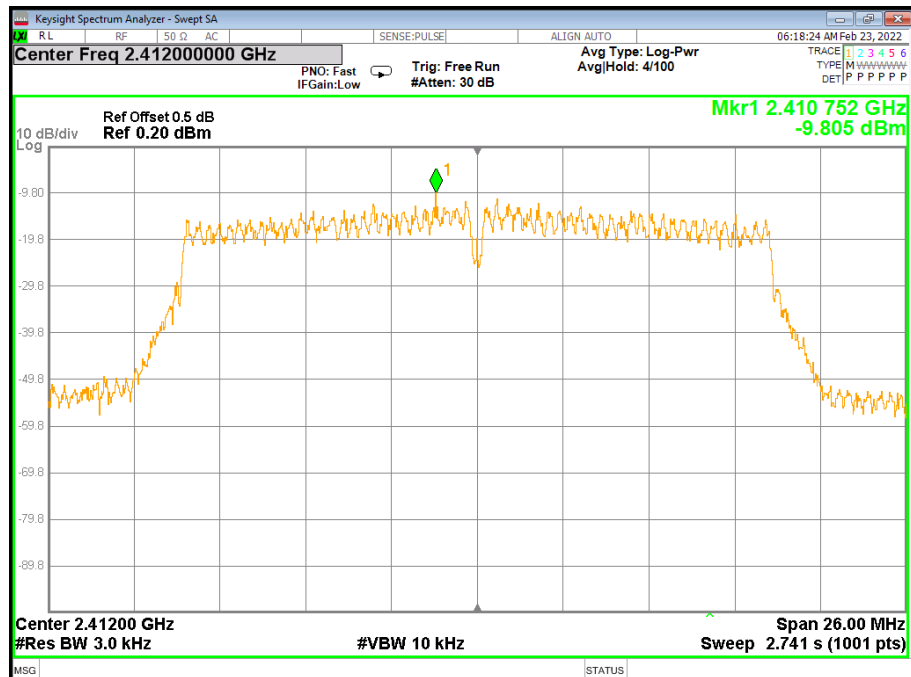


802.11g TX CH11

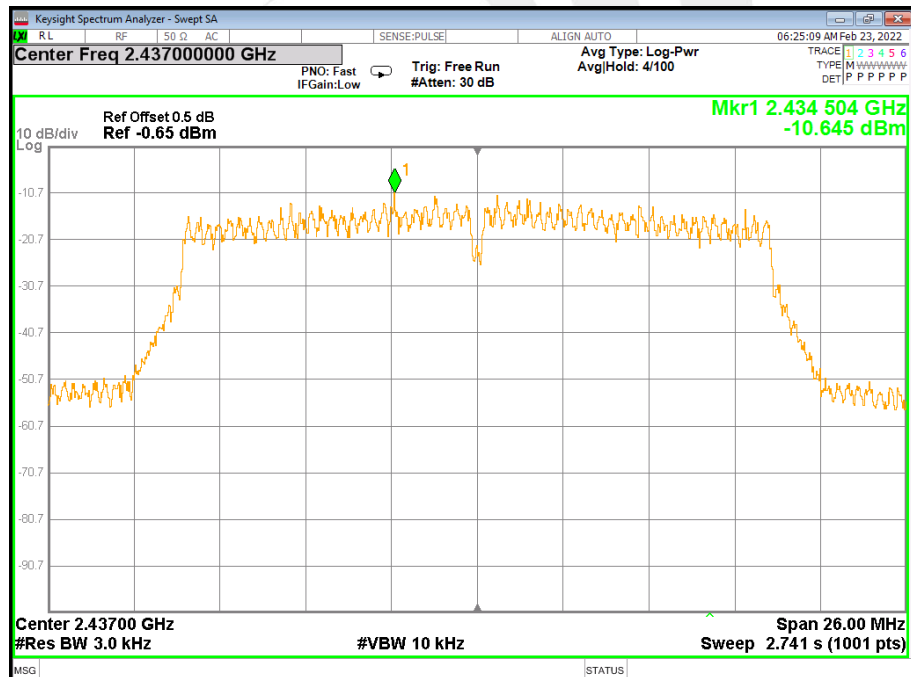




802.11n(HT20) TX CH01

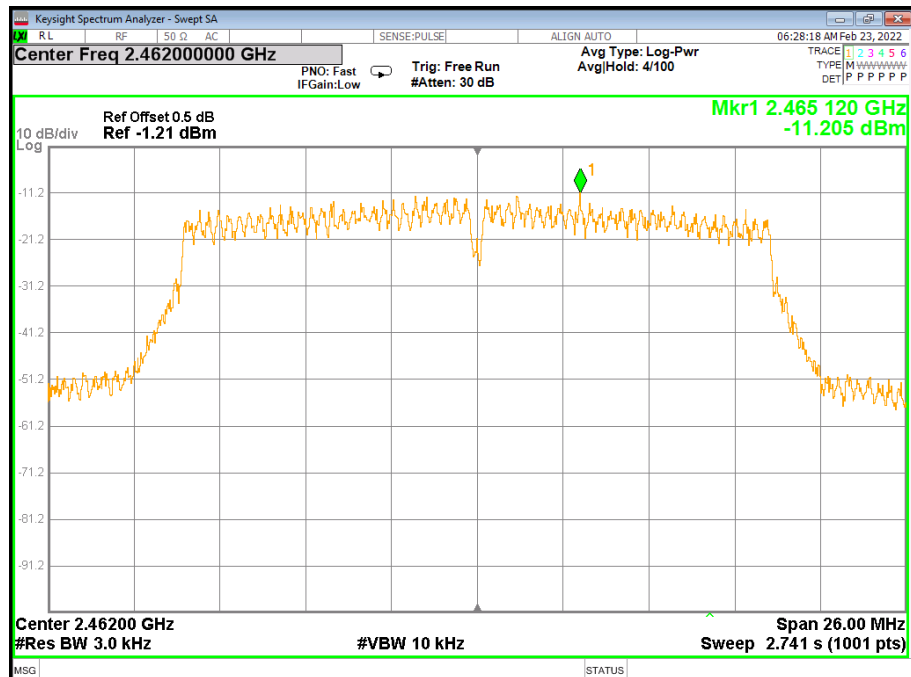


802.11n(HT20) TX CH06

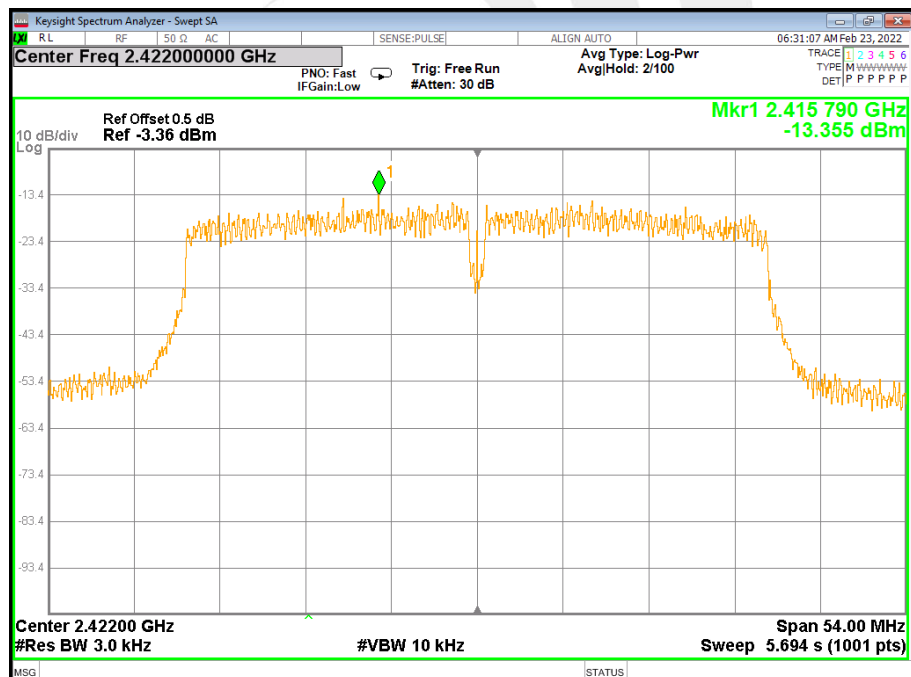




802.11n(HT20) TX CH11

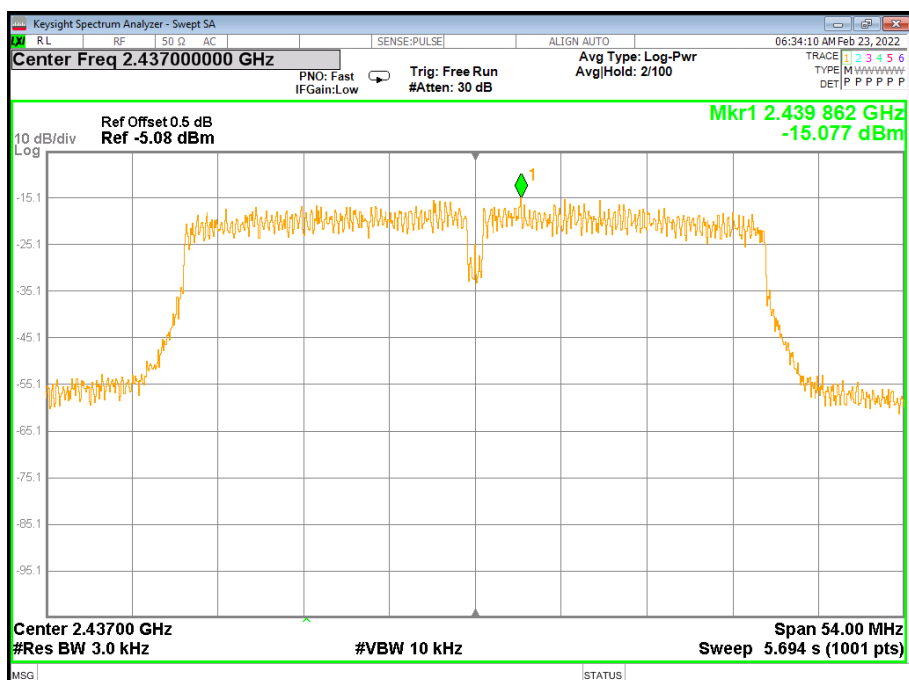


802.11n(HT40) TX CH03

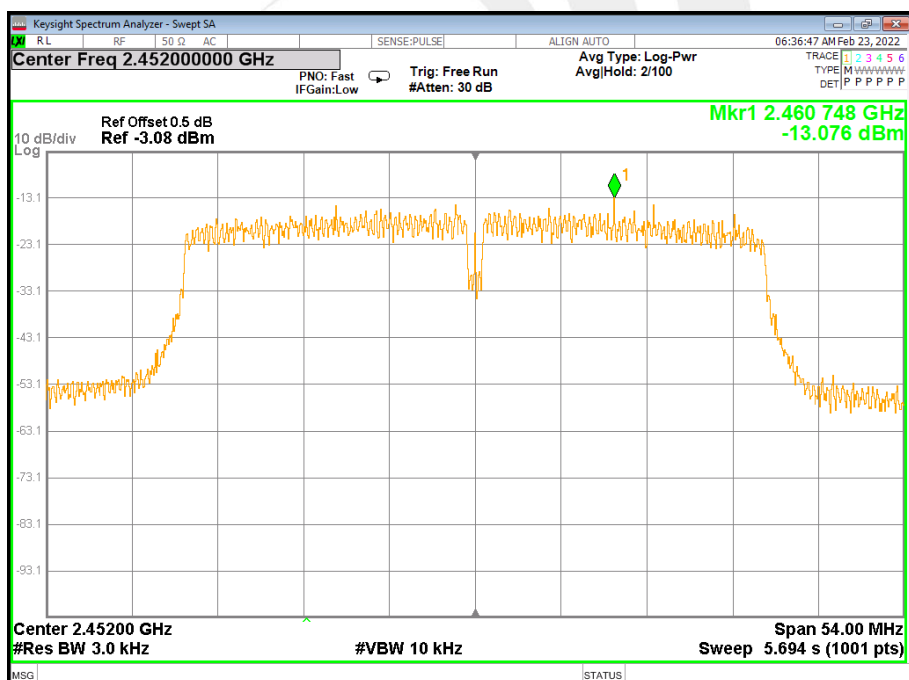




802.11n(HT40) TX CH06



802.11n(HT40) TX CH09





6. BANDWIDTH TEST

6.1 LIMIT

FCC Part15.247,Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(a)(2)	Bandwidth	$\geq 500\text{KHz}$ (6dB bandwidth)	2400-2483.5	PASS

6.2 TEST PROCEDURE

The automatic bandwidth measurement capability of an instrument may be employed using the X dB bandwidth mode with X set to 6 dB, if the functionality described above (i.e., RBW = 100 kHz, VBW $\geq$ 3RBW, peak detector with maximum hold) is implemented by the instrumentation function. When using this capability, care shall be taken so that the bandwidth measurement is not influenced by any intermediate power nulls in the fundamental emission that might be ≥ 6 dB.

6.3 DEVIATION FROM STANDARD

No deviation.

6.4 TEST SETUP



6.5 EUT OPERATION CONDITIONS

Please refer to section 3.1.4 of this report.



6.6 TEST RESULTS

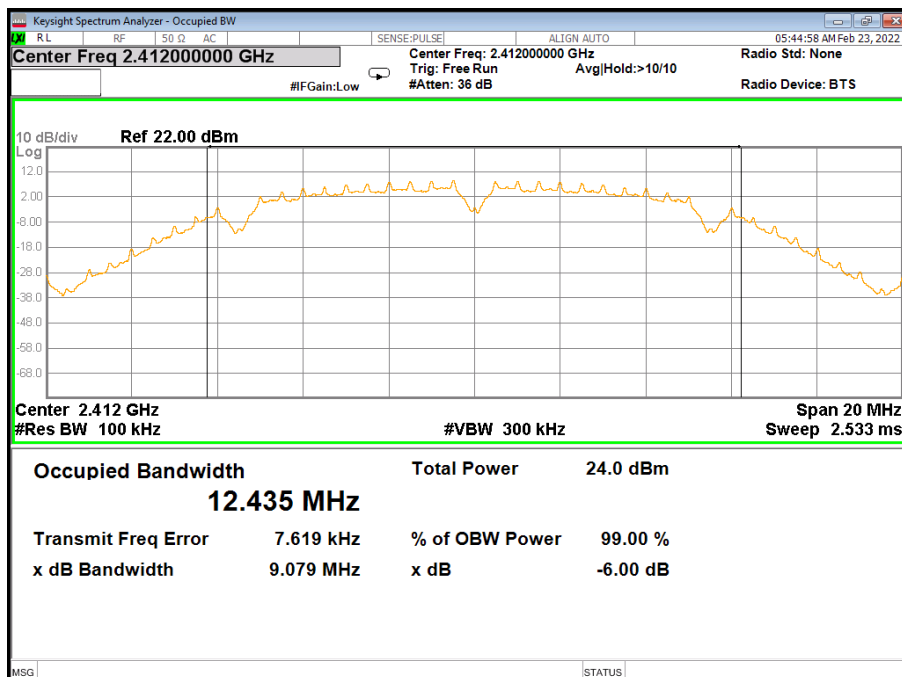
Temperature:	25℃	Relative Humidity:	60%
Test Voltage:	DC 3.7V	Test Mode:	TX b/g/n20/n40 Mode

Remark: PEAK DETECTOR IS USED

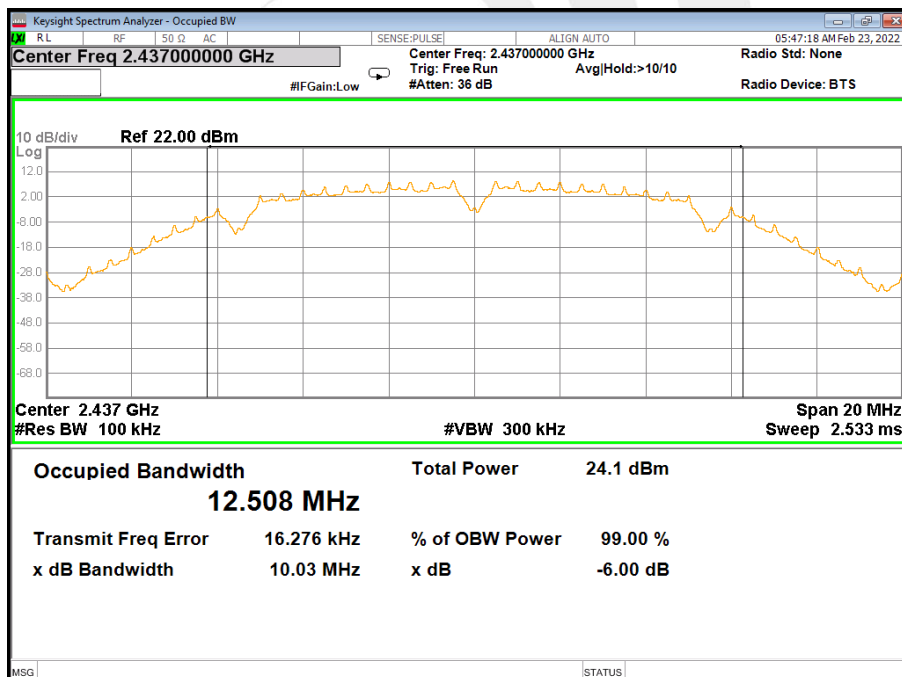
Modulation	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (KHz)	Result
802.11b	2412	9.079	500	Pass
	2437	10.030	500	Pass
	2462	10.020	500	Pass
802.11g	2412	16.37	500	Pass
	2437	16.36	500	Pass
	2462	16.36	500	Pass
802.11n(HT20)	2412	15.13	500	Pass
	2437	15.13	500	Pass
	2462	15.94	500	Pass
802.11n(HT40)	2422	35.18	500	Pass
	2437	35.17	500	Pass
	2452	35.18	500	Pass



802.11b TX CH 01

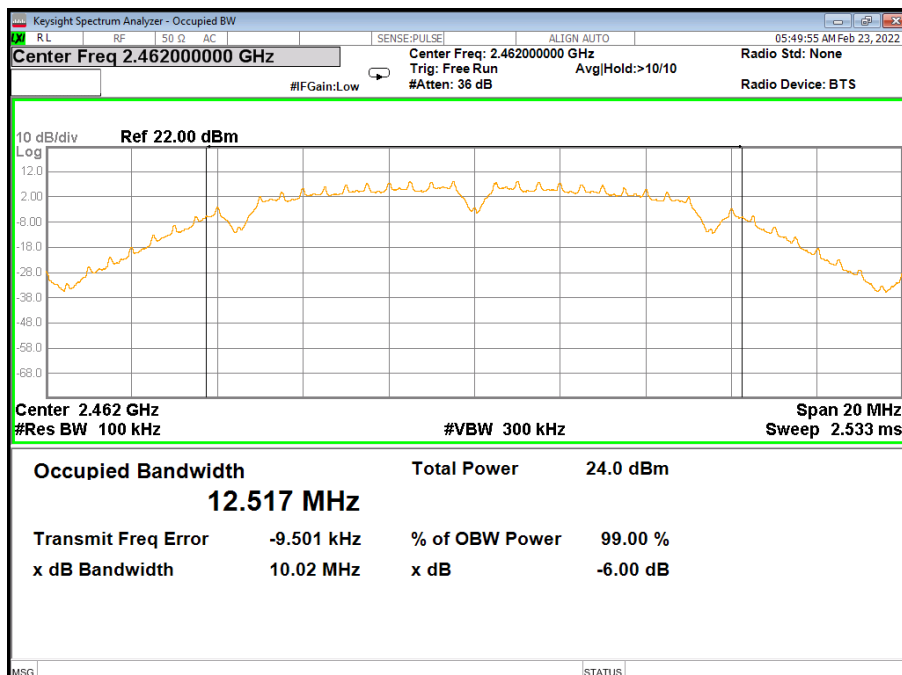


802.11b TX CH 06

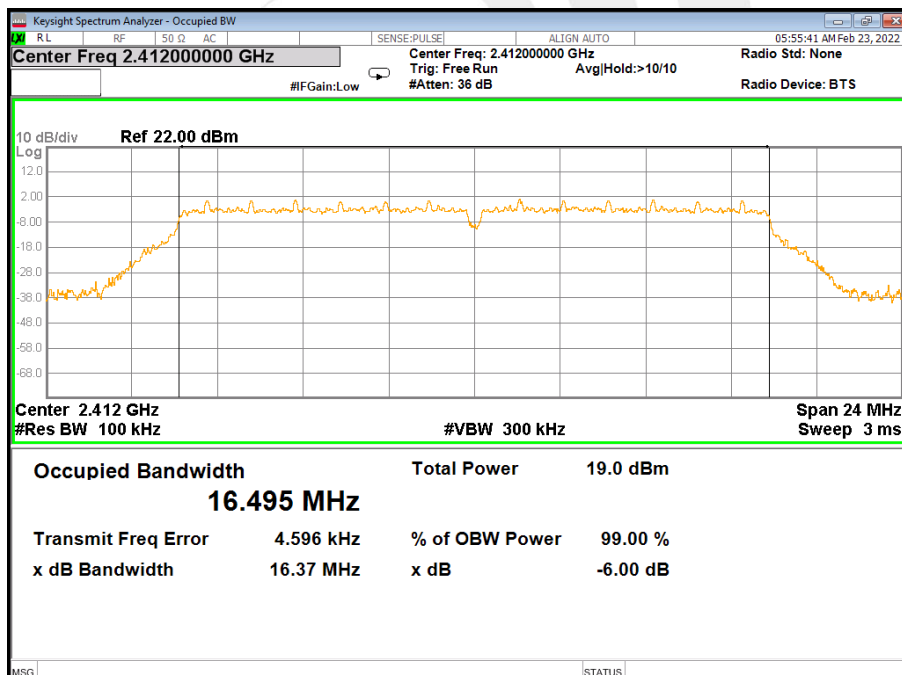




802.11b TX CH 11

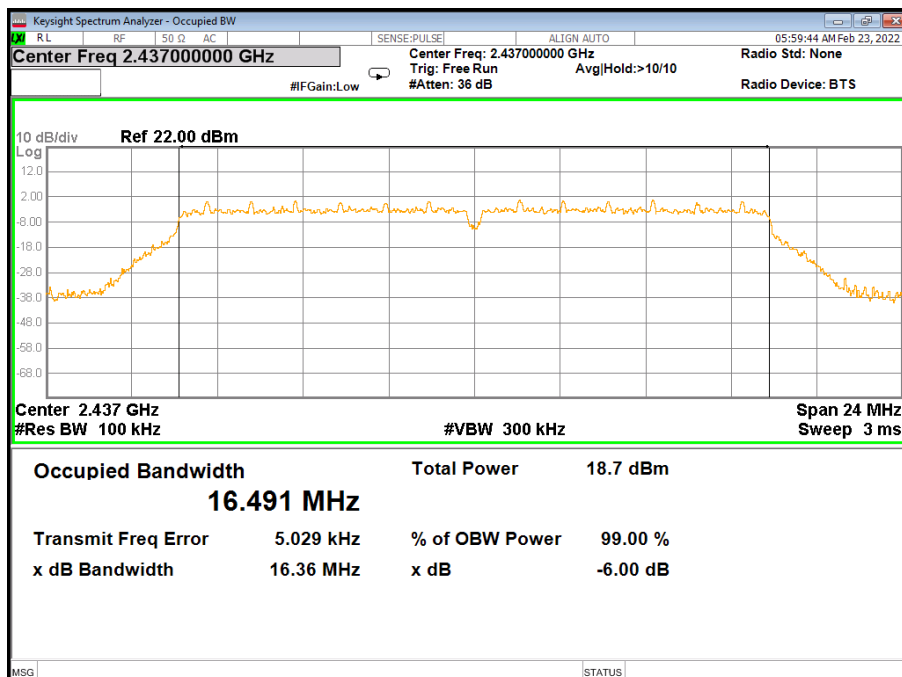


802.11g TX CH 01

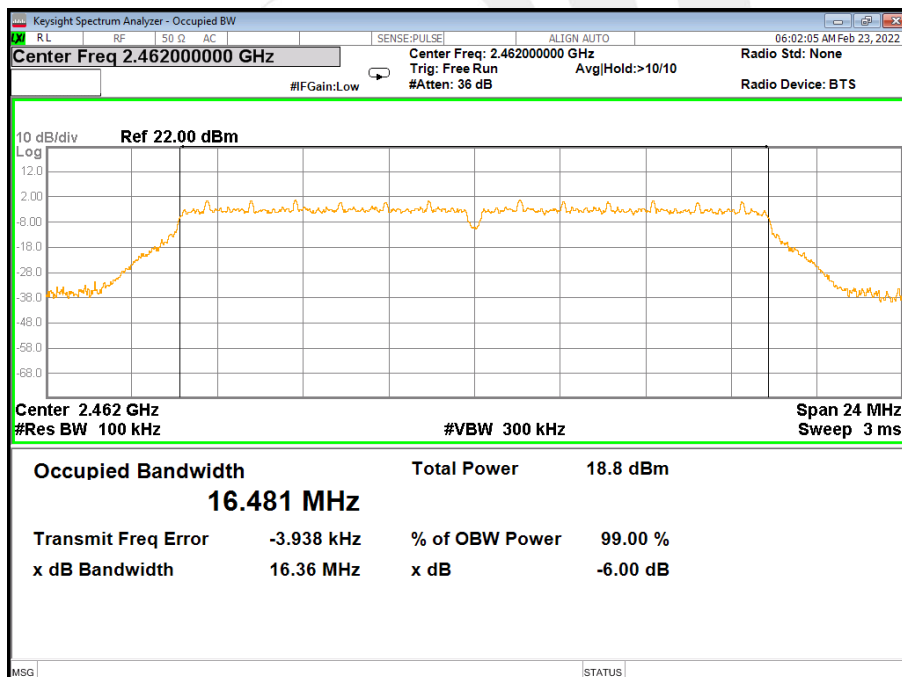




802.11g TX CH 06

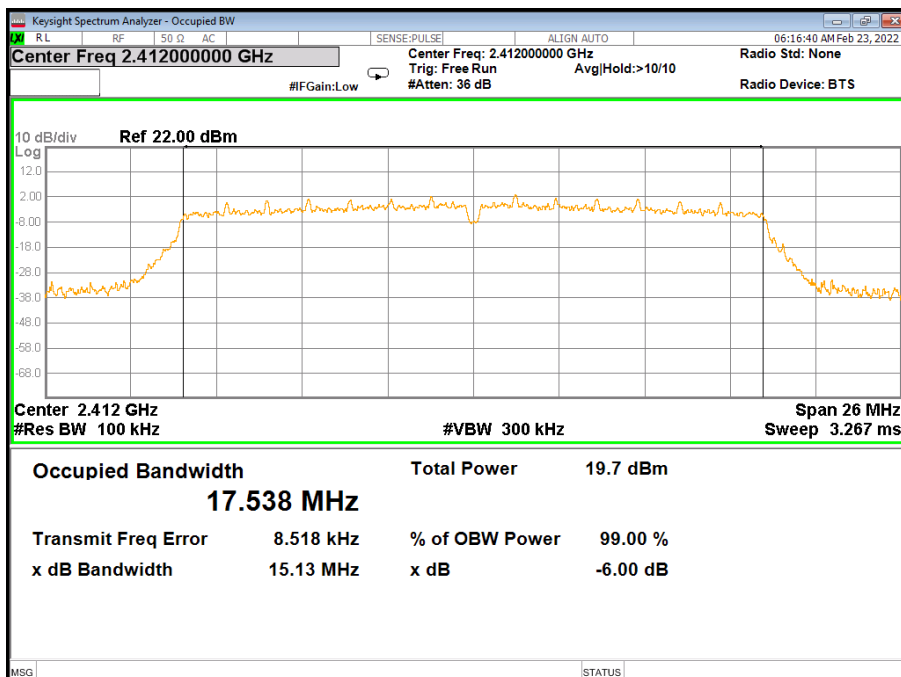


802.11g TX CH 11

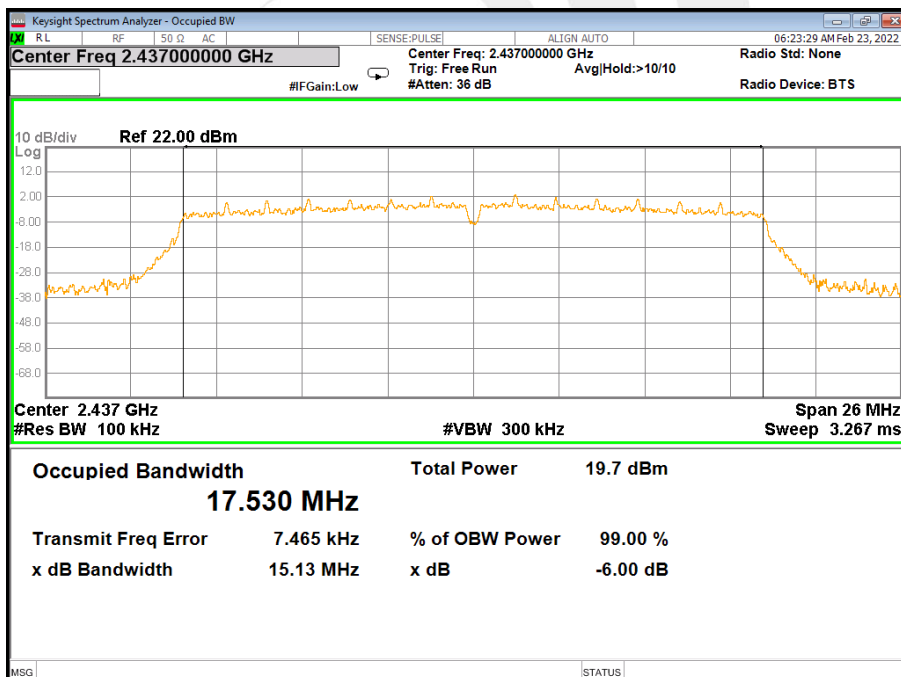




802.11n(HT20) TX CH 01

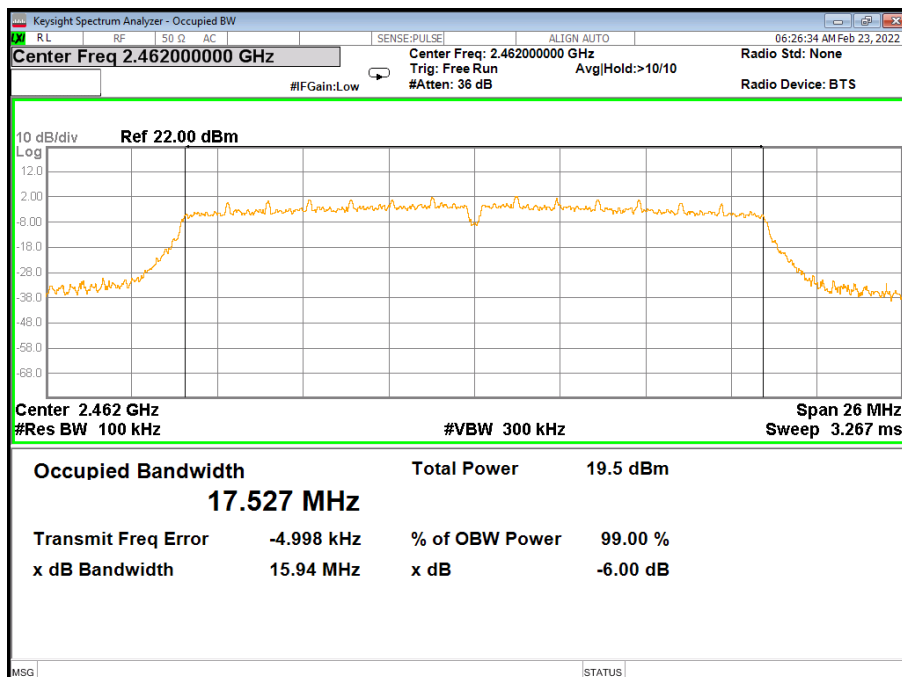


802.11n(HT20) TX CH 06

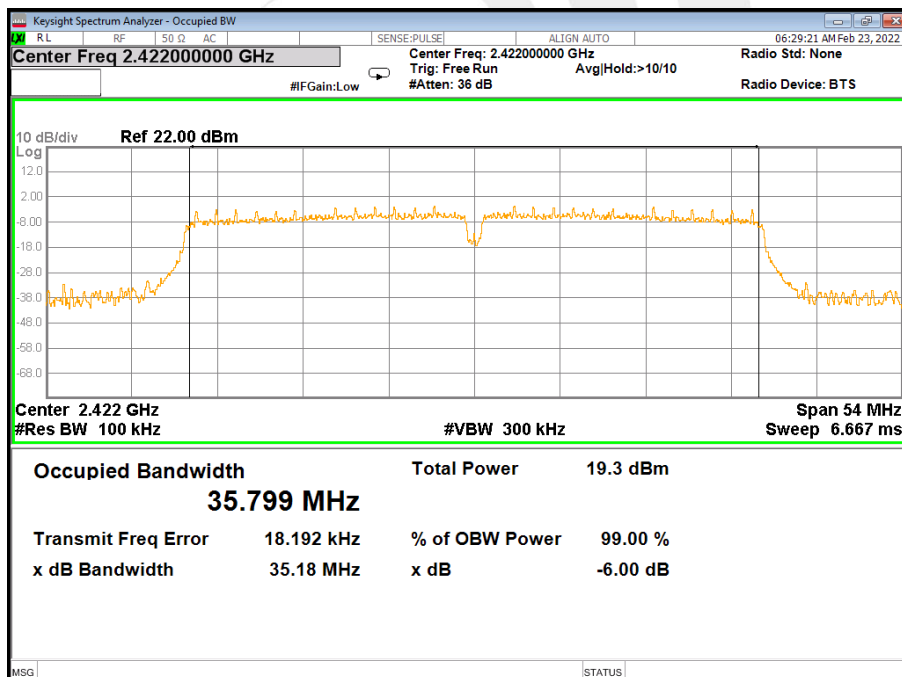




802.11n(HT20) TX CH 11

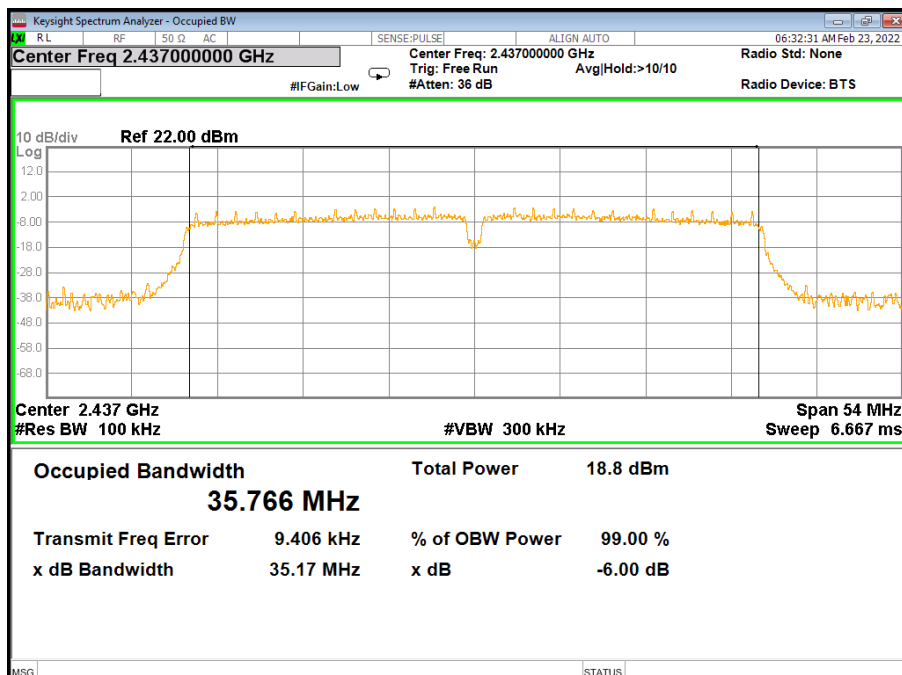


802.11n(HT40) TX CH 03

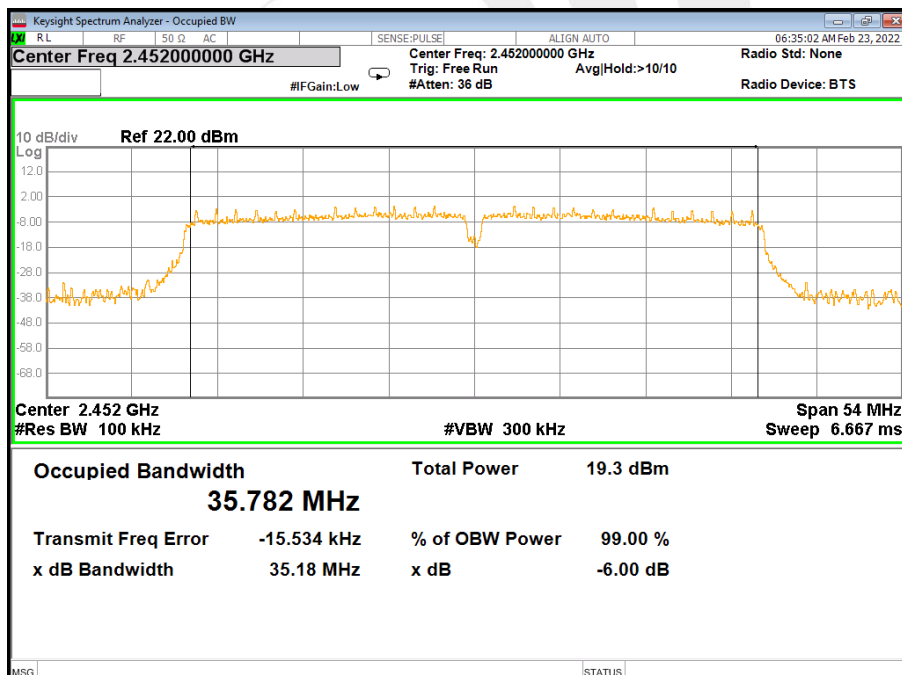




802.11n(HT40) TX CH 06



802.11n(HT40) TX CH 09





7. PEAK OUTPUT POWER TEST

7.1 LIMIT

FCC Part15.247,Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(b)(3)	Output Power	1 watt or 30dBm	2400-2483.5	PASS

7.2 TEST PROCEDURE

One of the following procedures may be used to determine the maximum peak conducted output power of a DTS EUT.

RBW $\geq$ DTS bandwidth

The following procedure shall be used when an instrument with a resolution bandwidth that is greater than the DTS bandwidth is available to perform the measurement:

- Set the RBW $\geq$ DTS bandwidth.
- Set VBW $\geq$ [3 $\times$ RBW].
- Set span $\geq$ [3 $\times$ RBW].
- Sweep time = auto couple.
- Detector = peak.
- Trace mode = max hold.
- Allow trace to fully stabilize.
- Use peak marker function to determine the peak amplitude level.

Integrated band power method:

The following procedure can be used when the maximum available RBW of the instrument is less than the

DTS bandwidth:

- Set the RBW = 1 MHz.
- Set the VBW $\geq$ [3 $\times$ RBW].
- Set the span $\geq$ [1.5 $\times$ DTS bandwidth].
- Detector = peak.
- Sweep time = auto couple.
- Trace mode = max hold.
- Allow trace to fully stabilize.
- Use the instrument's band/channel power measurement function with the band limits set equal to the DTS bandwidth edges (for some instruments, this may require a manual override to select the peak detector). If the instrument does not have a band power function, then sum the spectrum levels (in linear power units) at intervals equal to the RBW extending across the DTS channel bandwidth.

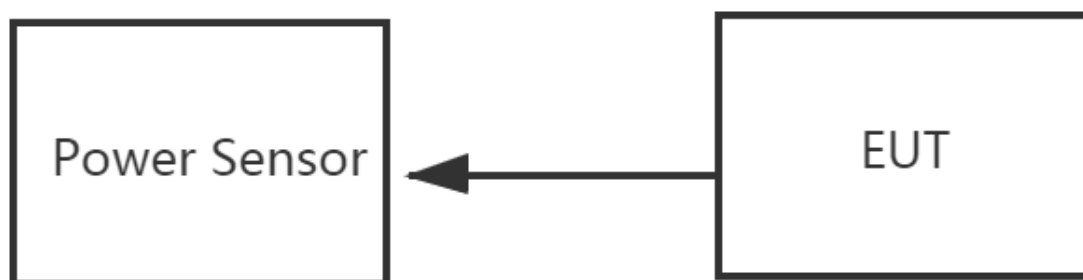
PKPM1 Peak power meter method:

The maximum peak conducted output power may be measured using a broadband peak RF power meter. The power meter shall have a video bandwidth that is greater than or equal to the DTS bandwidth and shall use a fast-responding diode detector.

7.3 DEVIATION FROM STANDARD

No deviation.

7.4 TEST SETUP



7.5 EUT OPERATION CONDITIONS

Please refer to section 3.1.4 of this report.





7.6 TEST RESULTS

Temperature:	25℃	Relative Humidity:	60%
Test Voltage:	DC 3.7V		

Modulation	Frequency (MHz)	Peak Output Power (dBm)	Average Reading Power (dBm)	Duty Cycle Factor (dB)	Final Average Output Power (dBm)	Limit (dBm)
802.11b	2412	21.30	18.43	0.00	18.43	30
	2437	21.68	18.79	0.00	18.79	30
	2462	21.20	18.30	0.00	18.30	30
802.11g	2412	22.13	13.23	0.09	13.32	30
	2437	22.28	13.34	0.09	13.43	30
	2462	23.31	14.03	0.09	14.12	30
802.11n(HT20)	2412	23.51	14.26	0.08	14.34	30
	2437	22.74	14.02	0.08	14.10	30
	2462	22.88	14.12	0.08	14.20	30
802.11n(HT40)	2422	22.84	14.01	0.20	14.21	30
	2437	22.85	14.14	0.20	14.34	30
	2452	22.62	13.93	0.20	14.13	30



Duty cycle

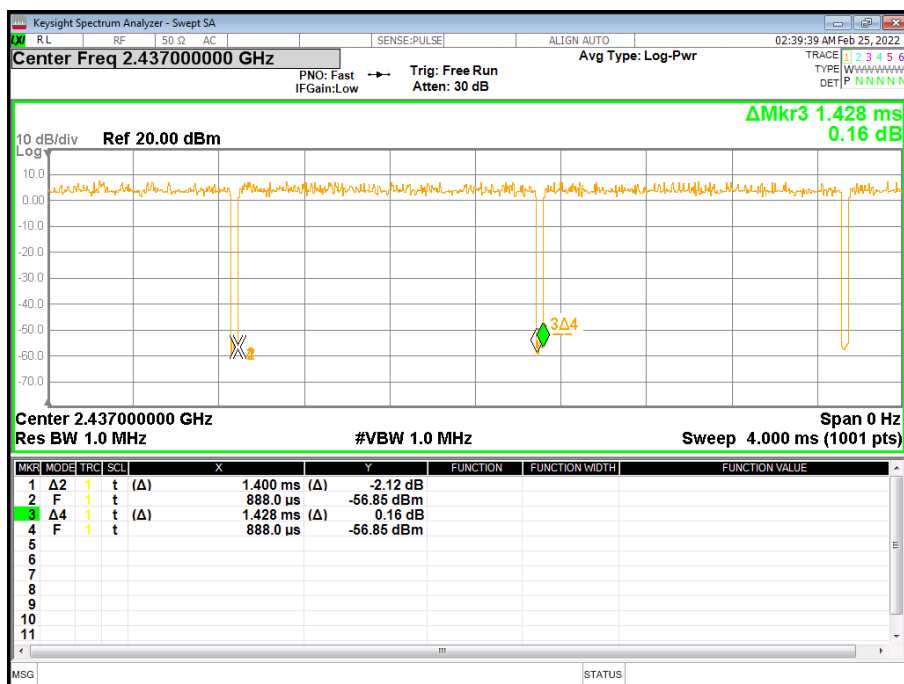
Modulation	Frequency (MHz)	TOn (ms)	TP (ms)	Duty cycle (%)	Duty Cycle Factor (dB)
802.11b	2437	100.0000	100.0000	100.00%	0.00
802.11g	2437	1.4000	1.4280	98.04%	0.09
802.11n(HT20)	2437	1.3040	1.3280	98.19%	0.08
802.11n(HT40)	2437	0.6420	0.6720	95.54%	0.20

802.11b

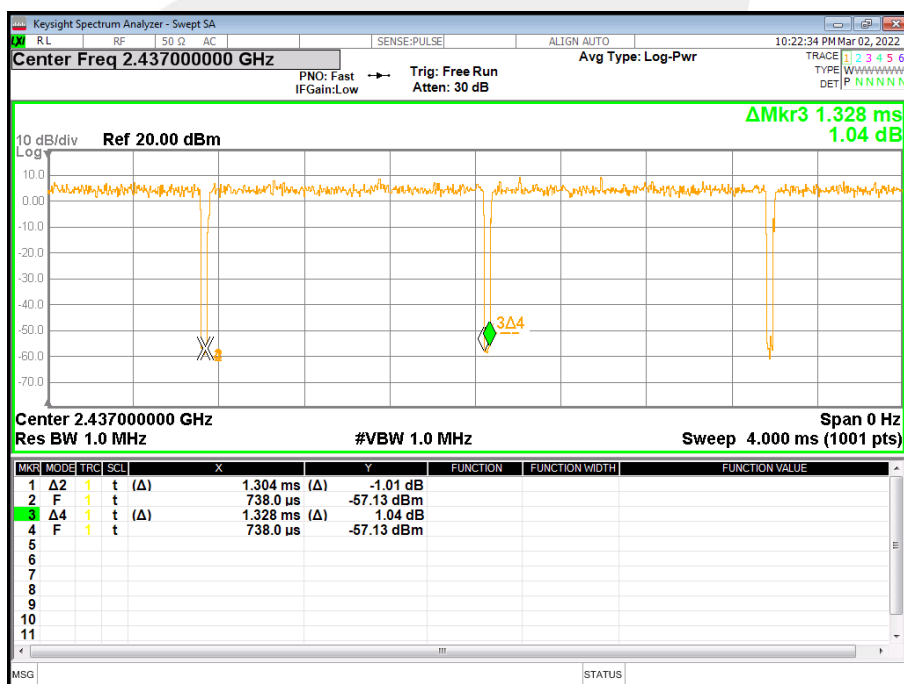




802.11g

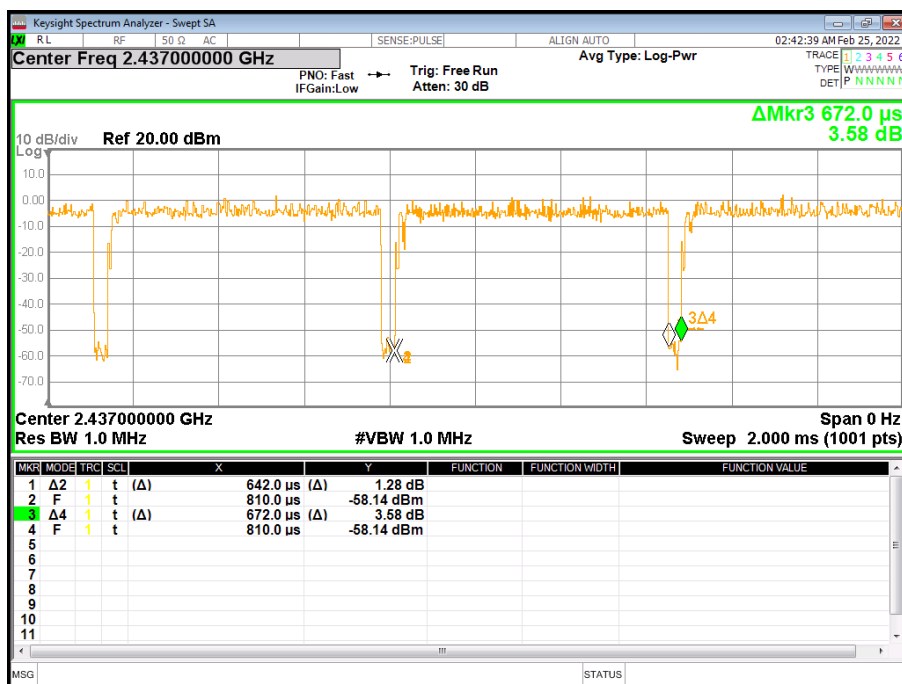


802.11n(HT20)





802.11n(HT40)





8. ANTENNA REQUIREMENT

8.1 STANDARD REQUIREMENT

15.203 requirement: For intentional device, according to 15.203: an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

8.2 EUT ANTENNA

The EUT antenna is PIFA Antenna. It comply with the standard requirement.





APPENDIX-PHOTOS OF TEST SETUP

Note: See test photos in setup photo document for the actual connections between Product and support equipment.

※※※※※END OF THE REPORT※※※※※

