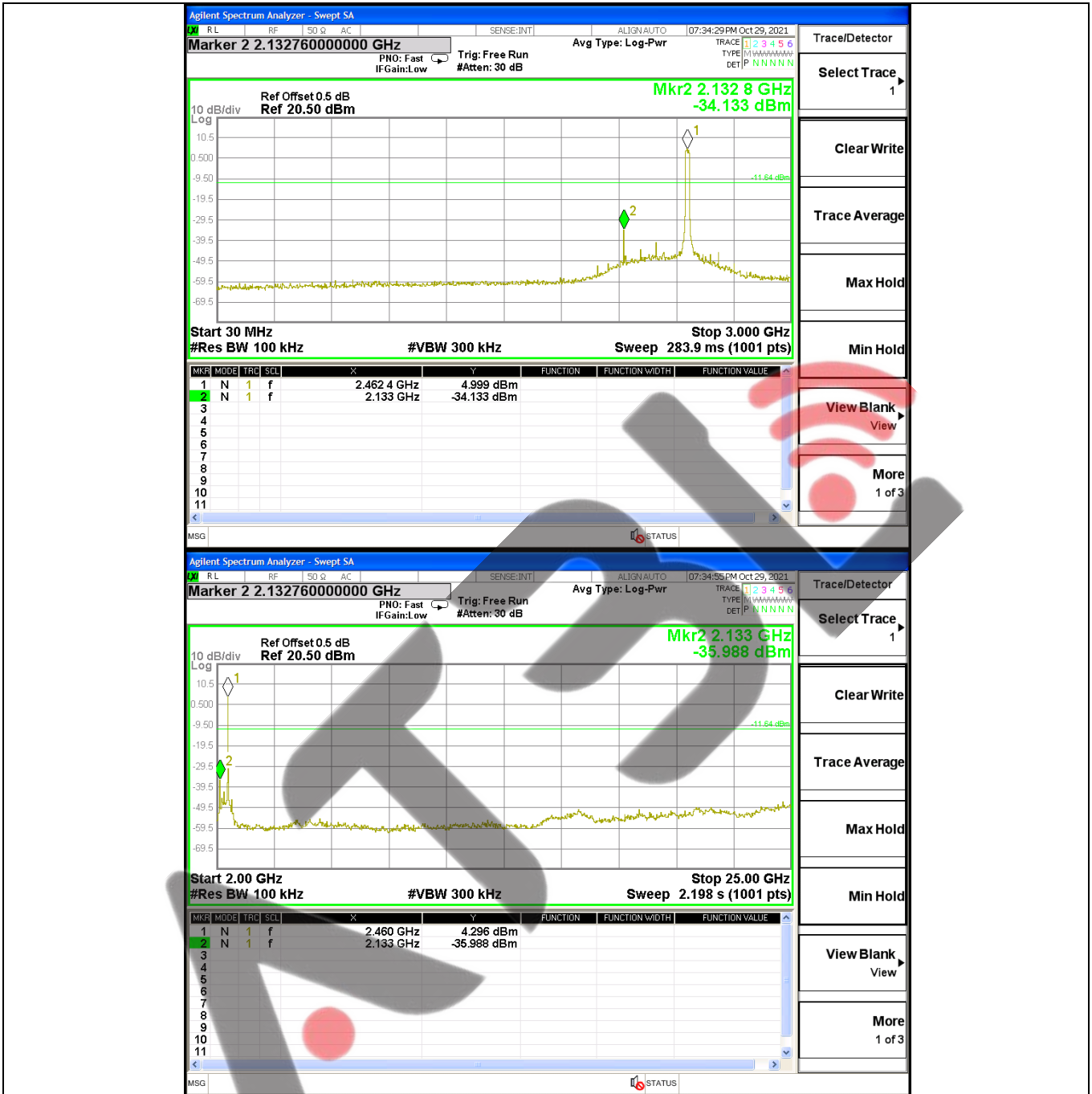




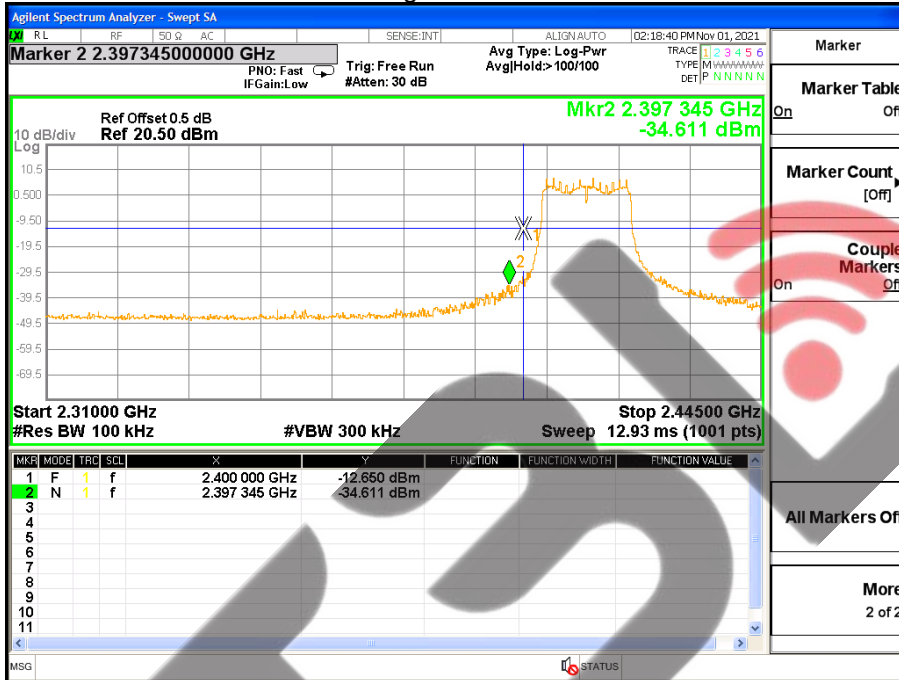
11g Ants 2462



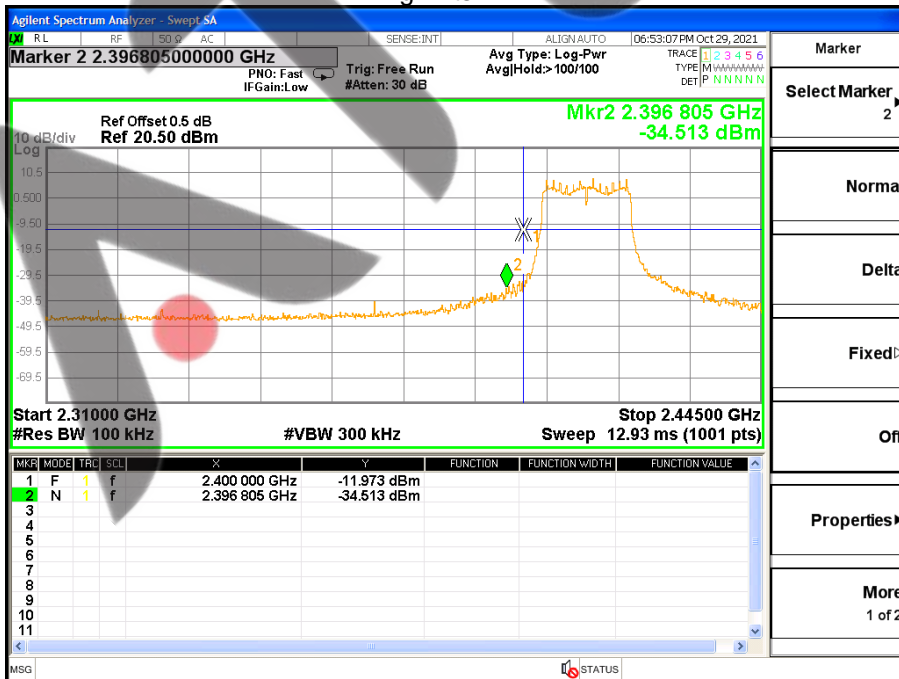
Band edge(it's also the reference level for conducted spurious emission)

Mode	Frequency(MHz)	Test value (dBm)	Limit(dBm)	Result
11g Antl	2412	-34.611	-12.650	Pass
11g Ants	2412	-34.513	-11.973	Pass
11g Antl	2462	-40.327	-13.199	Pass
11g Ants	2462	-40.990	-11.639	Pass

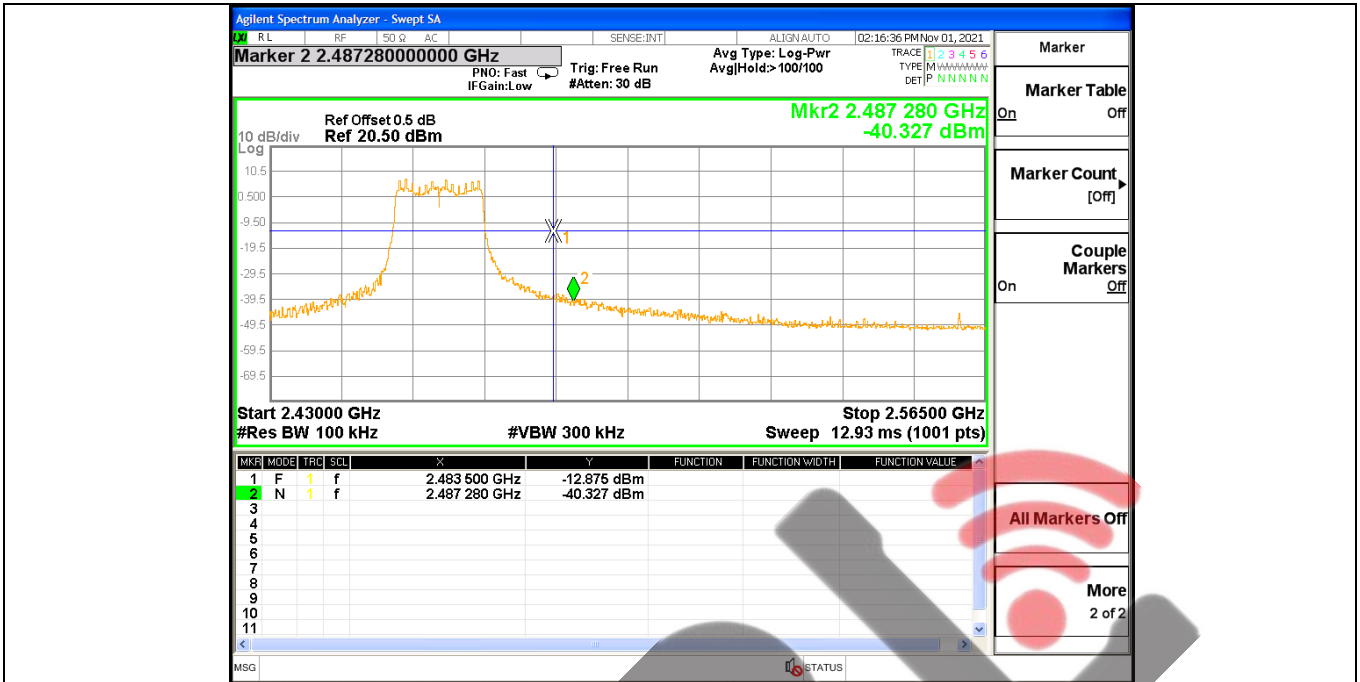
11g Antl 2412



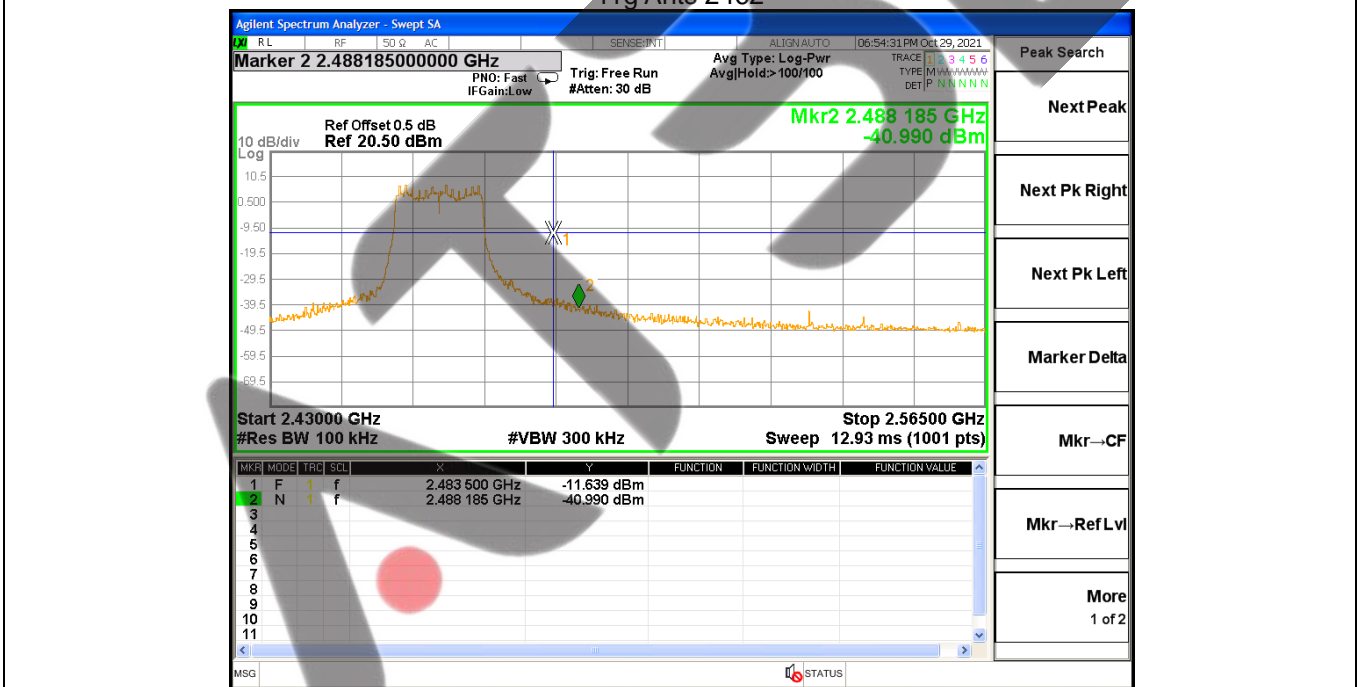
11g Ants 2412



11g Antl 2462



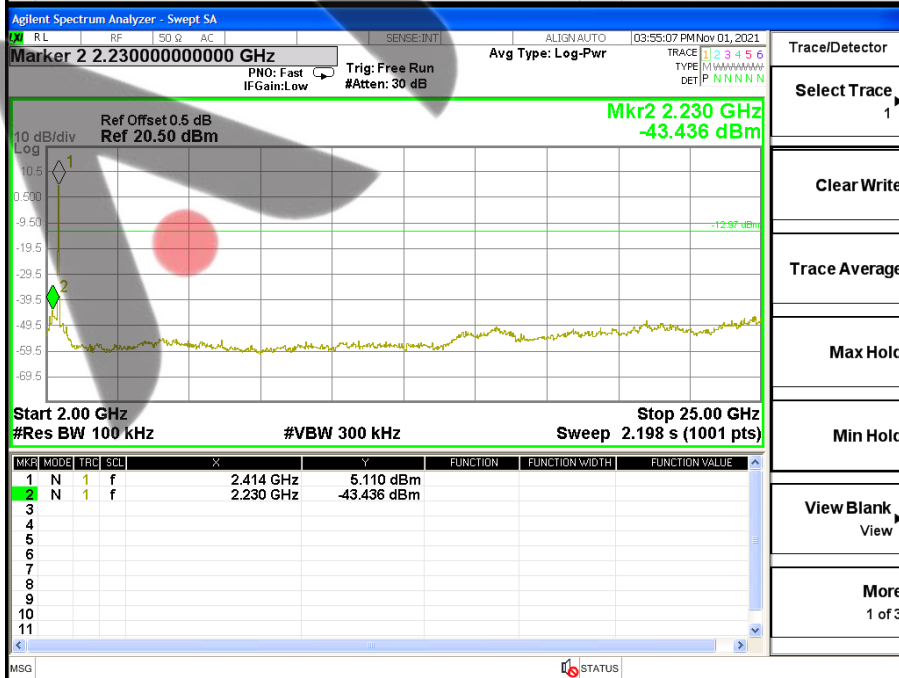
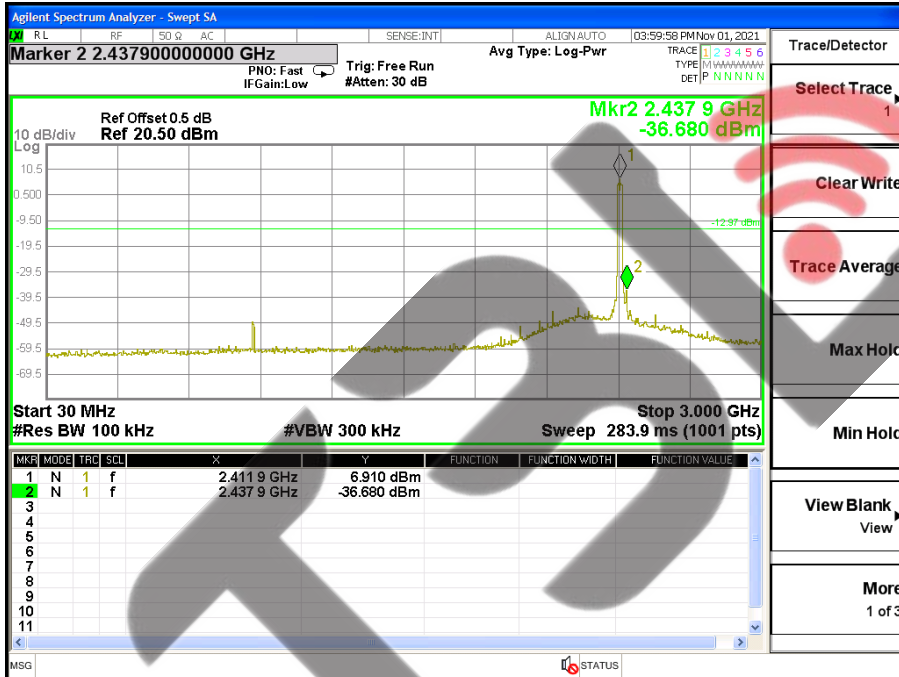
11g Ants 2462



Temperature:	25°C	Relative Humidity:	60%
Test Voltage:	DC 5V	Test Mode:	TX n20 Mode /CH01, CH11

Mode	Frequency(MHz)	Test value(MHz)	Test value(dBm)	Limit(dBm)	Results
11n20 Antl	2412	2437.9	-36.680	-12.965	Pass
11n20 Ants	2412	2132.8	-35.084	-12.368	Pass
11n20 Antl	2462	2239.7	-43.133	-12.875	Pass
11n20 Ants	2462	2133.0	-35.424	-11.544	Pass

11n20 Antl 2412



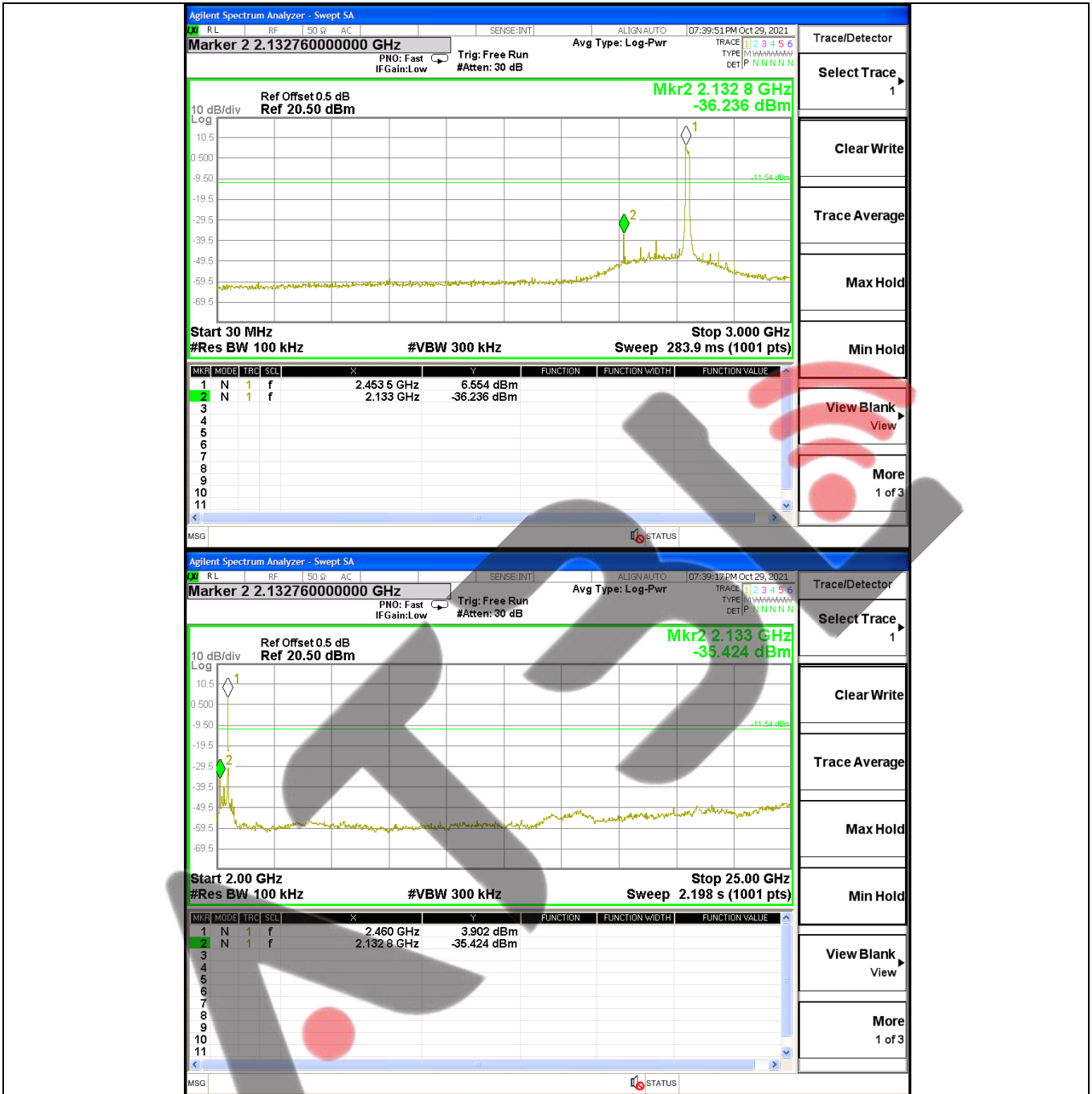
11n20 Ants 2412



11n20 Antl 2462



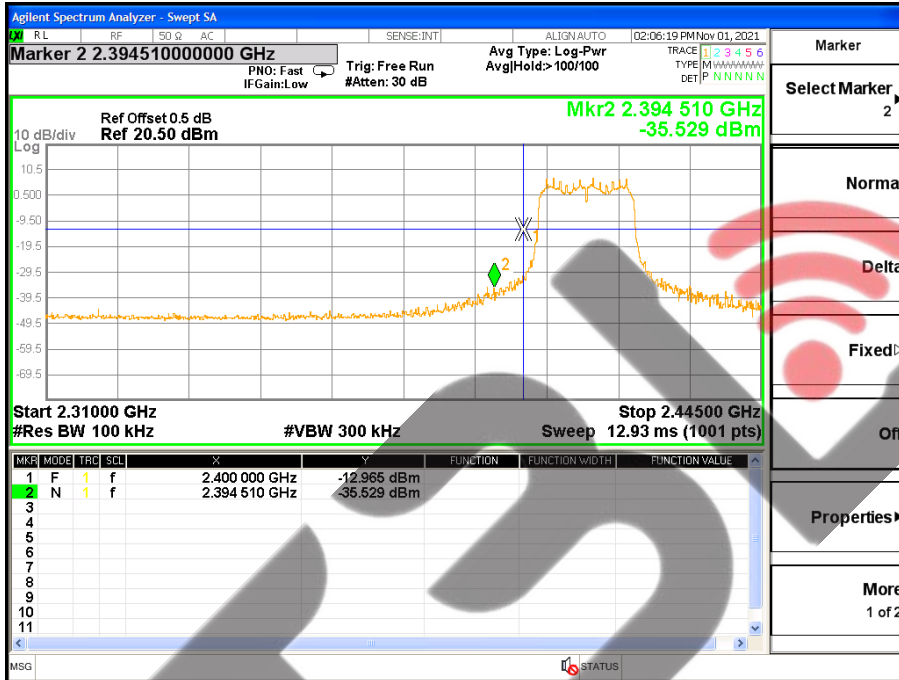
11n20 Ants 2462



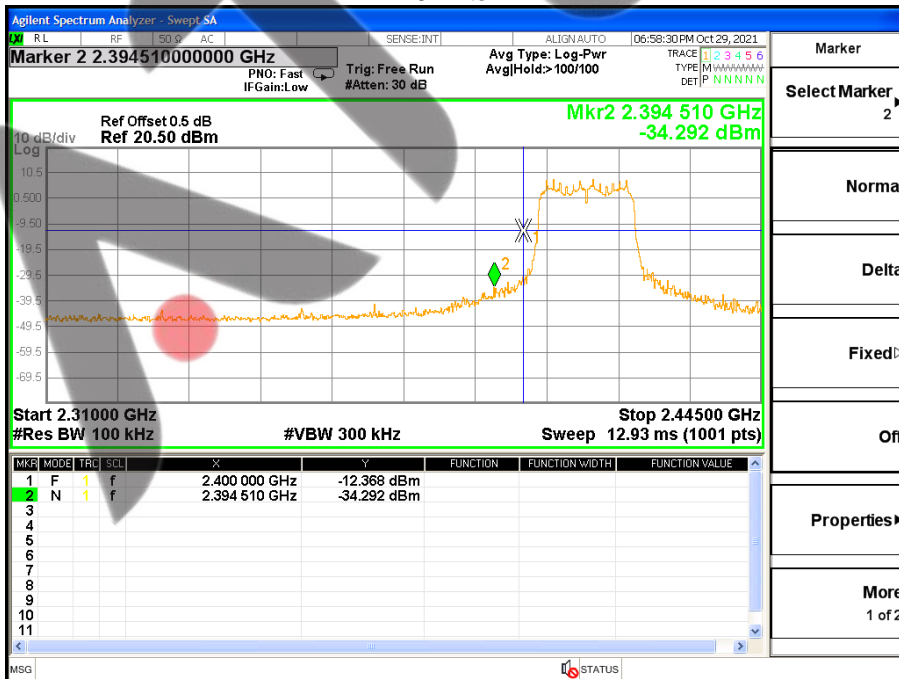
Band edge(it's also the reference level for conducted spurious emission)

Mode	Frequency(MHz)	Test value (dBm)	Limit(dBm)	Result
11n20 Antl	2412	-35.529	-12.965	Pass
11n20 Ants	2412	-34.292	-12.368	Pass
11n20 Antl	2462	-37.820	-12.875	Pass
11n20 Ants	2462	-38.775	-11.544	Pass

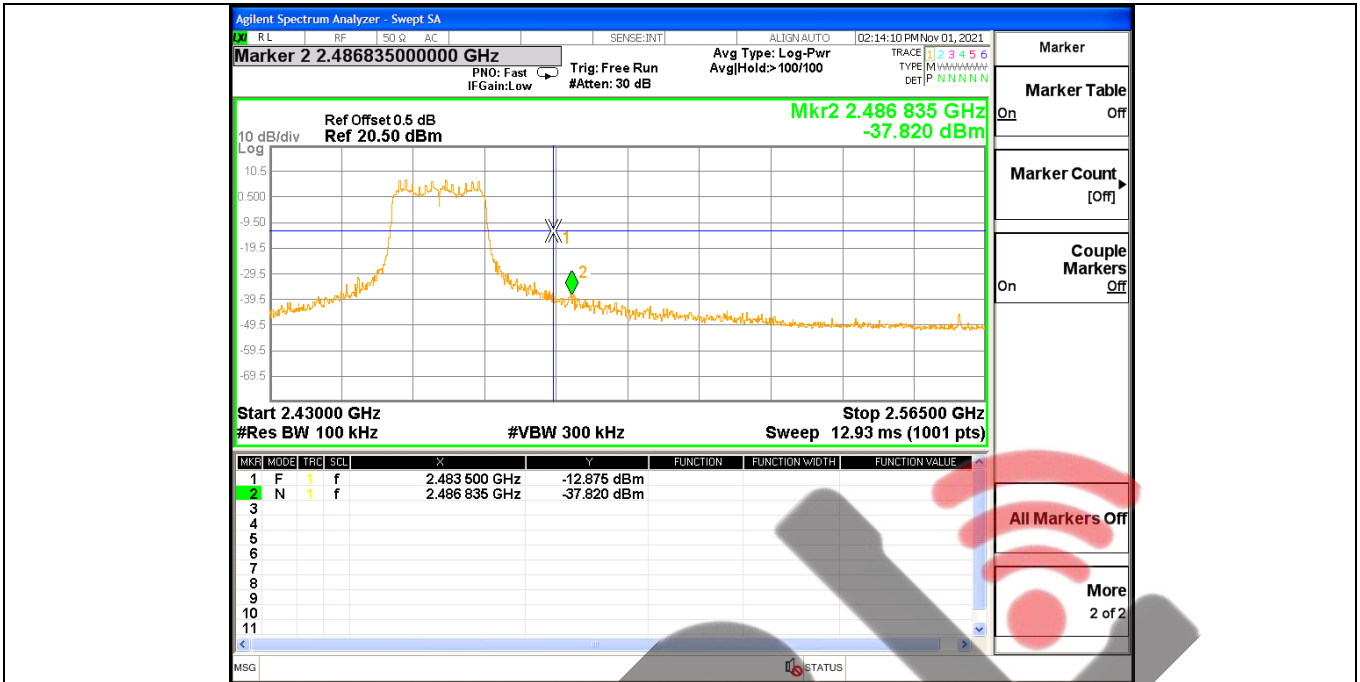
11n20 Antl 2412



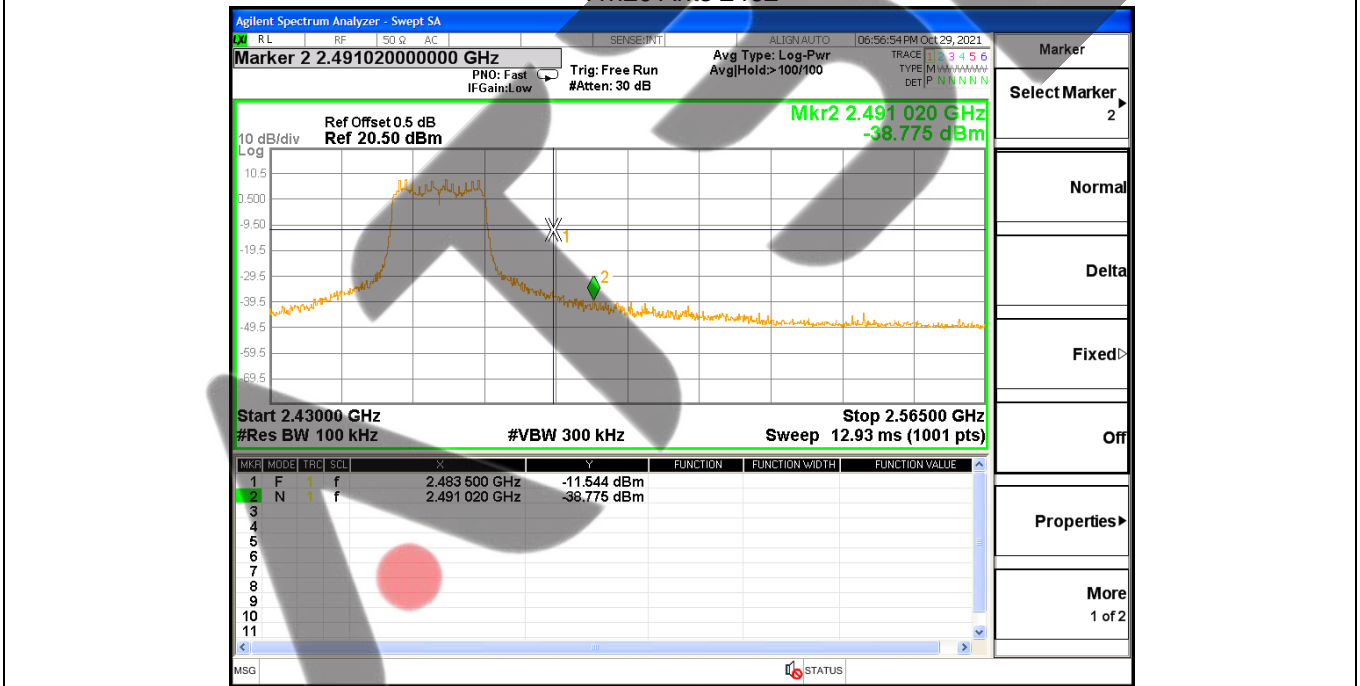
11n20 Ants 2412



11n20 Antl 2462



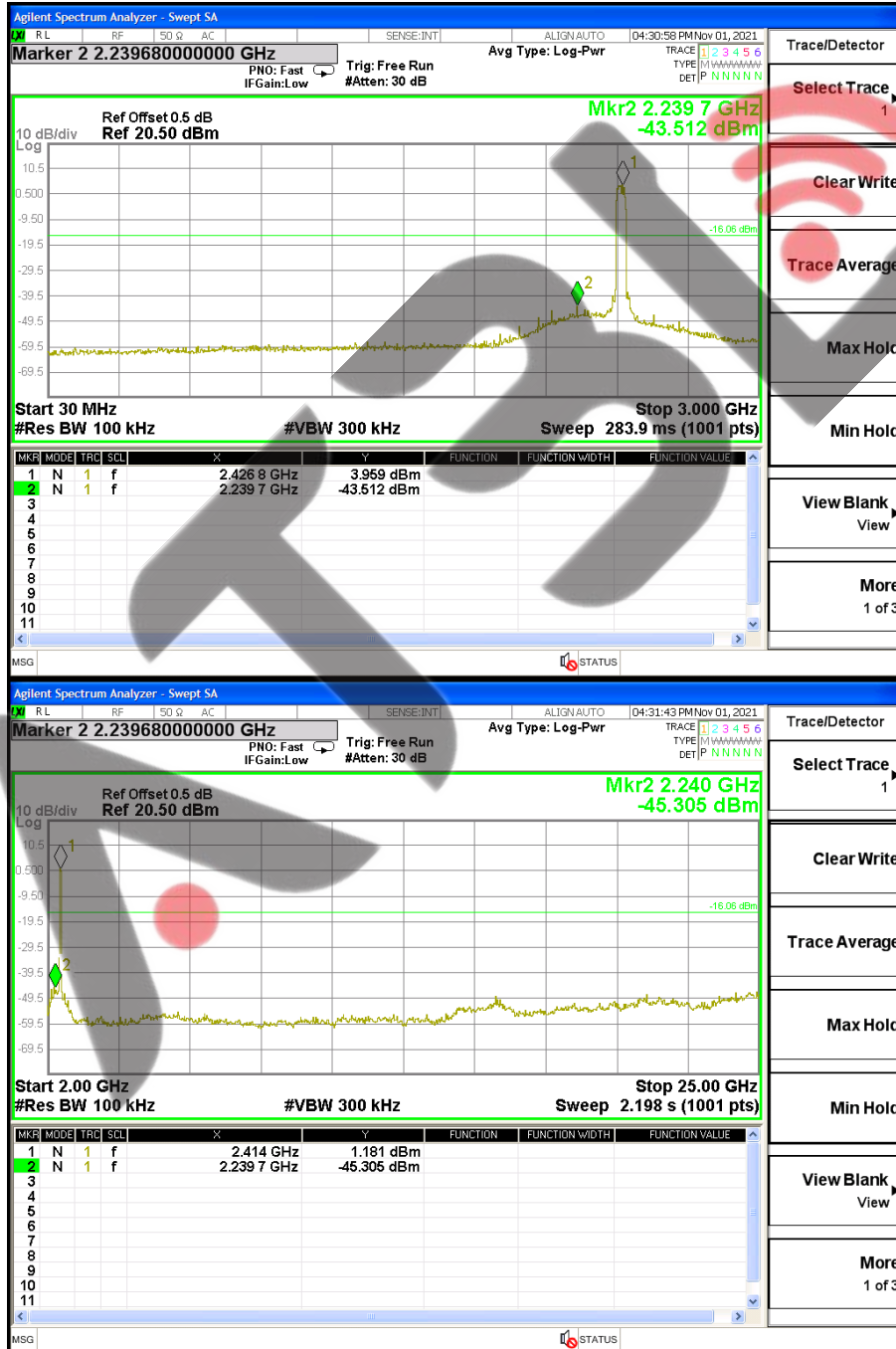
11n20 Ants 2462



Temperature:	25°C	Relative Humidity:	60%
Test Voltage:	DC 5V	Test Mode:	TX n40 Mode /CH03, CH09

Mode	Frequency(MHz)	Test value(MHz)	Test value(dBm)	Limit(dBm)	Results
11n40 Antl	2422	2239.7	-43.512	-16.062	Pass
11n40 Ants	2422	2132.8	-34.060	-15.613	Pass
11n40 Antl	2452	2239.7	-43.067	-15.620	Pass
11n40 Ants	2452	2132.8	-32.704	-15.056	Pass

11n40 Antl 2422



11n40 Ants 2422

Agilent Spectrum Analyzer - Swept SA

Marker 3 2.411940000000 GHz

Ref Offset 0.5 dB
Ref 20.50 dBm

Mkr3 2.411 9 GHz
4.06 dBm

Start 30 MHz Stop 3.000 GHz
#Res BW 100 kHz #VBW 300 kHz Sweep 283.9 ms (1001 pts)

MKR	MODE	TRG	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	903.2 MHz	-38.21 dBm			
2	N	1	f	2.132 8 GHz	-34.06 dBm			
3	N	1	f	2.411 9 GHz	4.06 dBm			

Agilent Spectrum Analyzer - Swept SA

Marker 2 2.414000000000 GHz

Ref Offset 0.5 dB
Ref 20.50 dBm

Mkr2 2.414 GHz
3.248 dBm

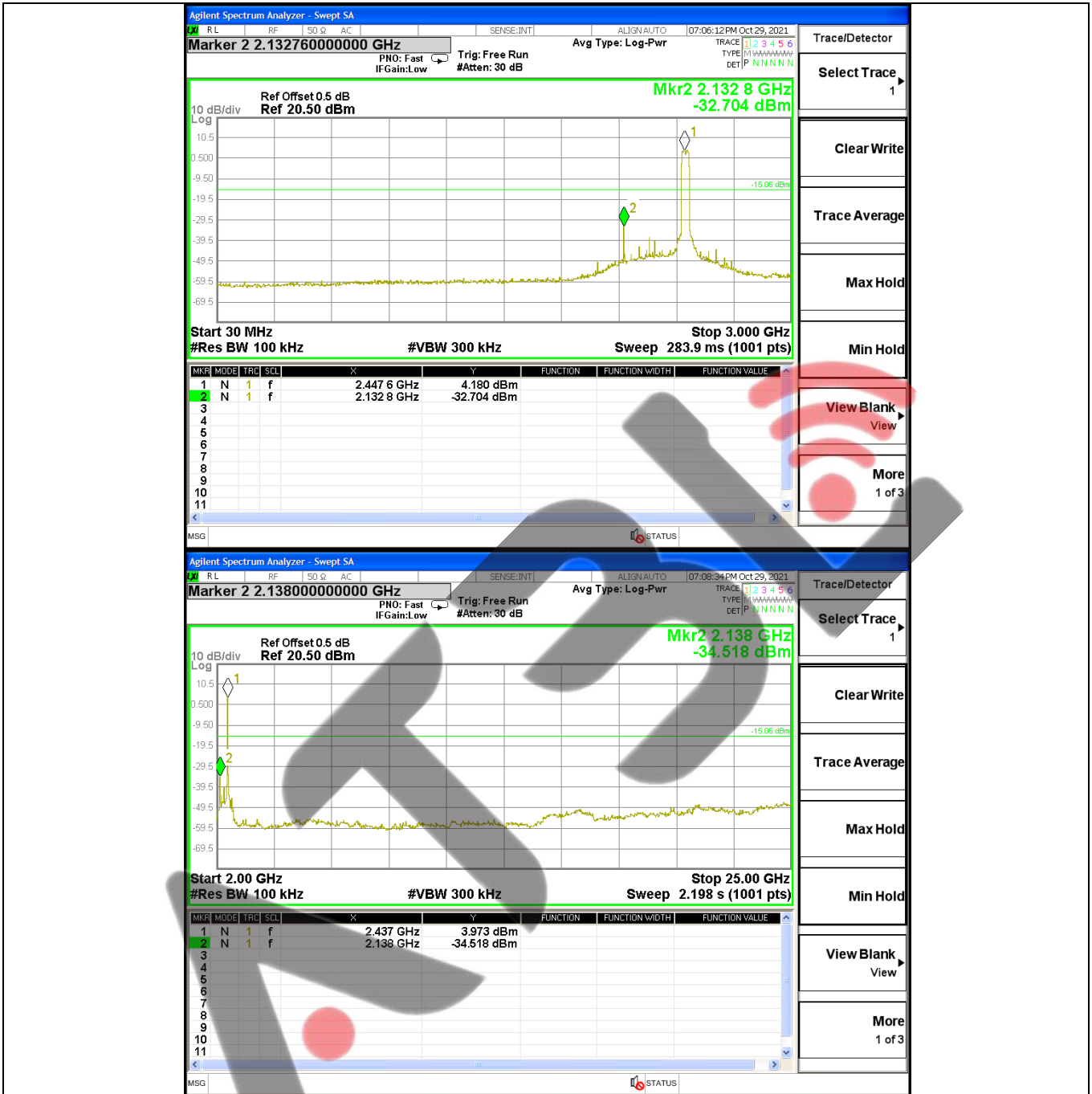
Start 2.00 GHz Stop 25.00 GHz
#Res BW 100 kHz #VBW 300 kHz Sweep 2.198 s (1001 pts)

MKR	MODE	TRG	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.138 GHz	-35.394 dBm			
2	N	1	f	2.414 GHz	3.248 dBm			

11n40 Antl 2452



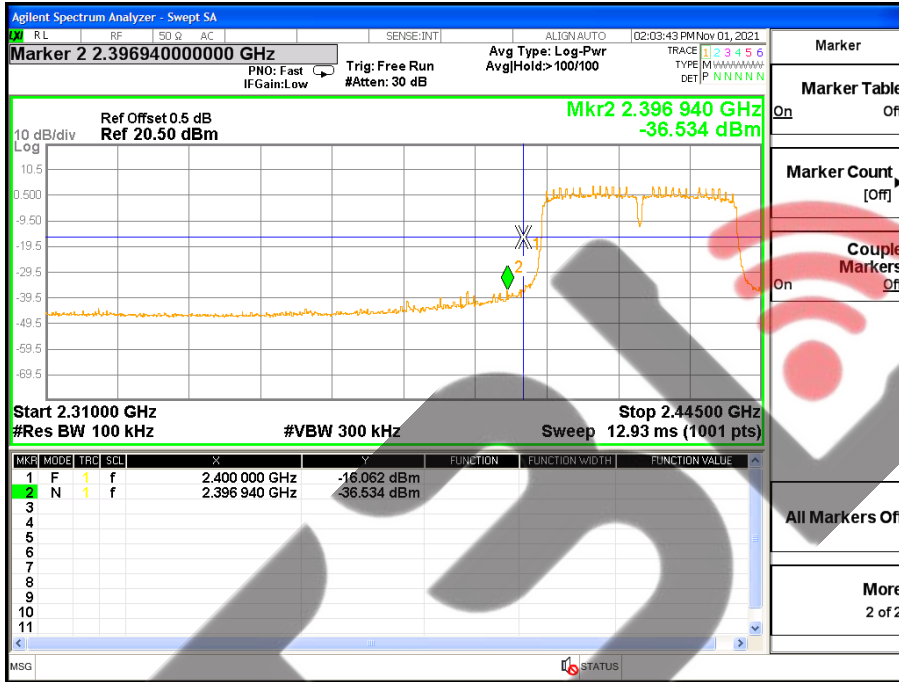
11n40 Ants 2452



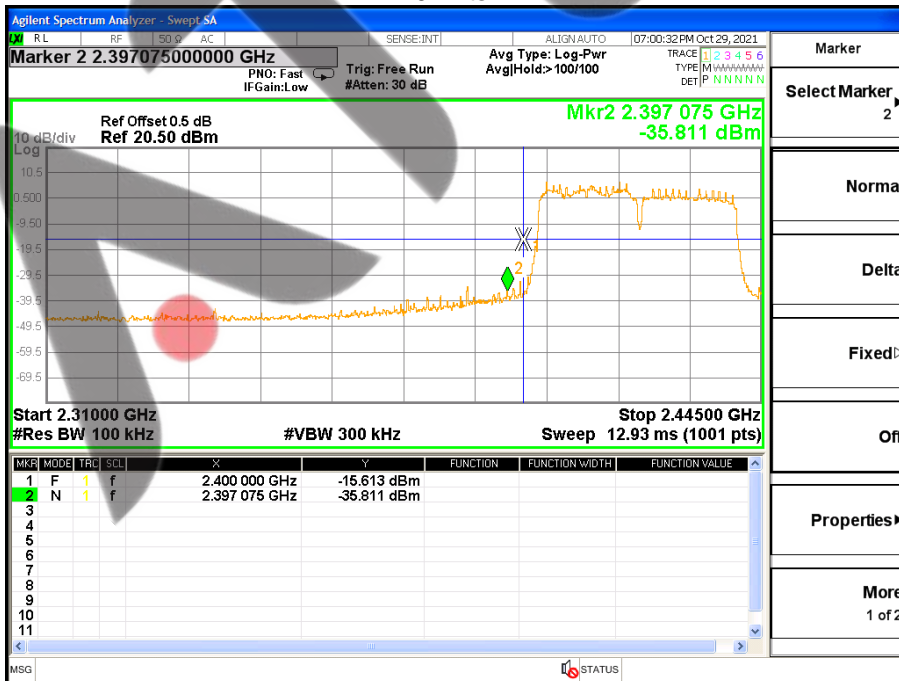
Band edge(it's also the reference level for conducted spurious emission)

Mode	Frequency(MHz)	Test value (dBm)	Limit(dBm)	Result
11n40 Antl	2422	-36.534	-16.062	Pass
11n40 Ants	2422	-35.811	-15.613	Pass
11n40 Antl	2452	-36.898	-15.620	Pass
11n40 Ants	2452	-40.430	-15.056	Pass

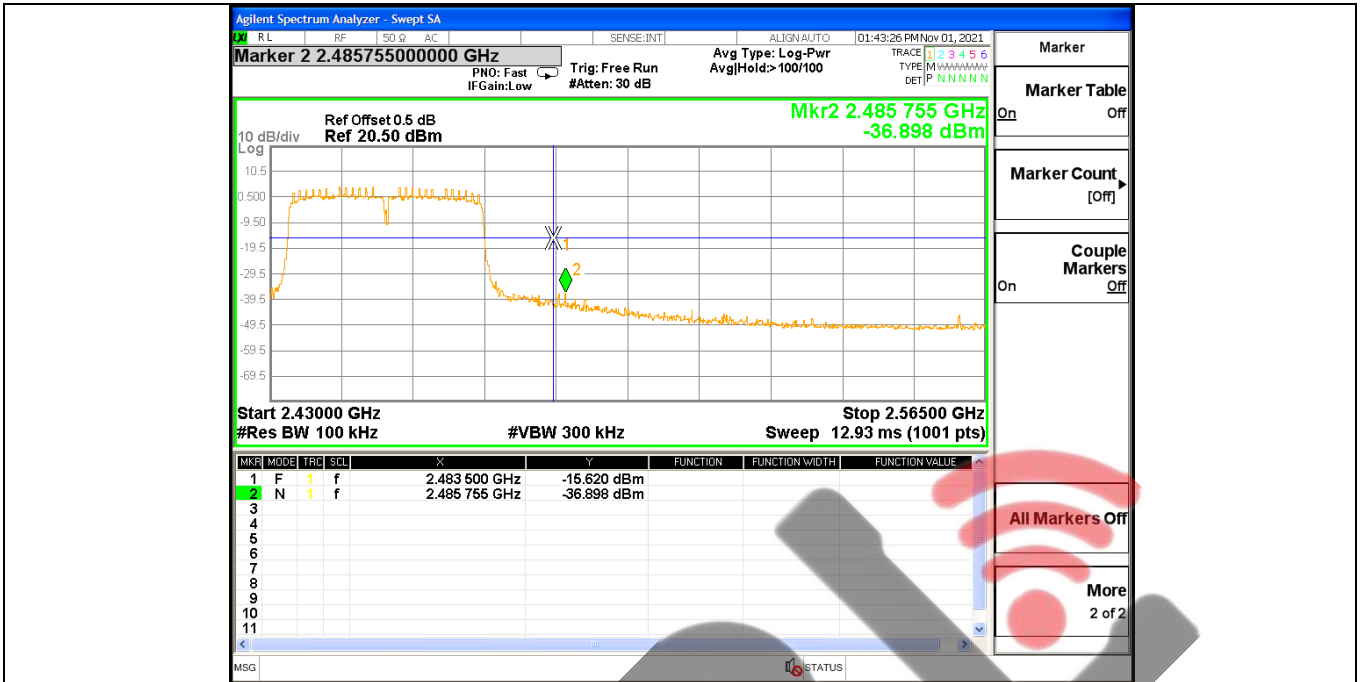
11n40 Antl 2422



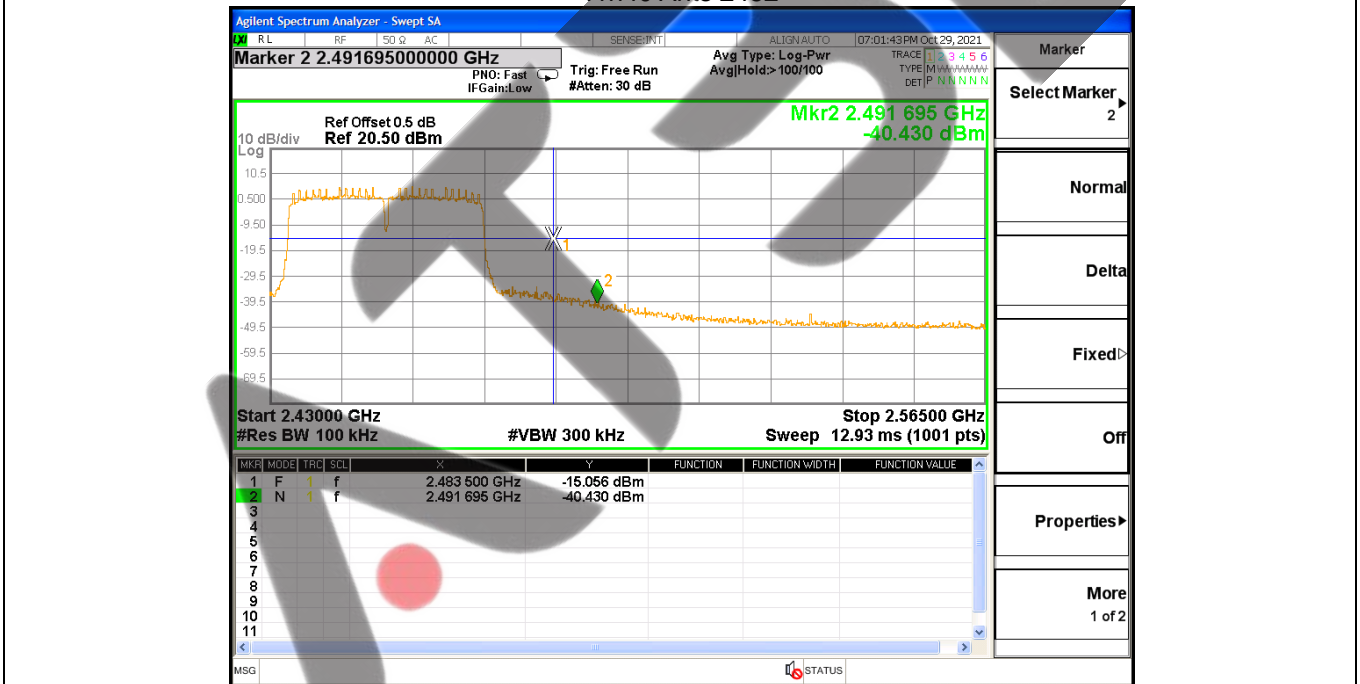
11n40 Ants 2422



11n40 Antl 2452



11n40 Ants 2452



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

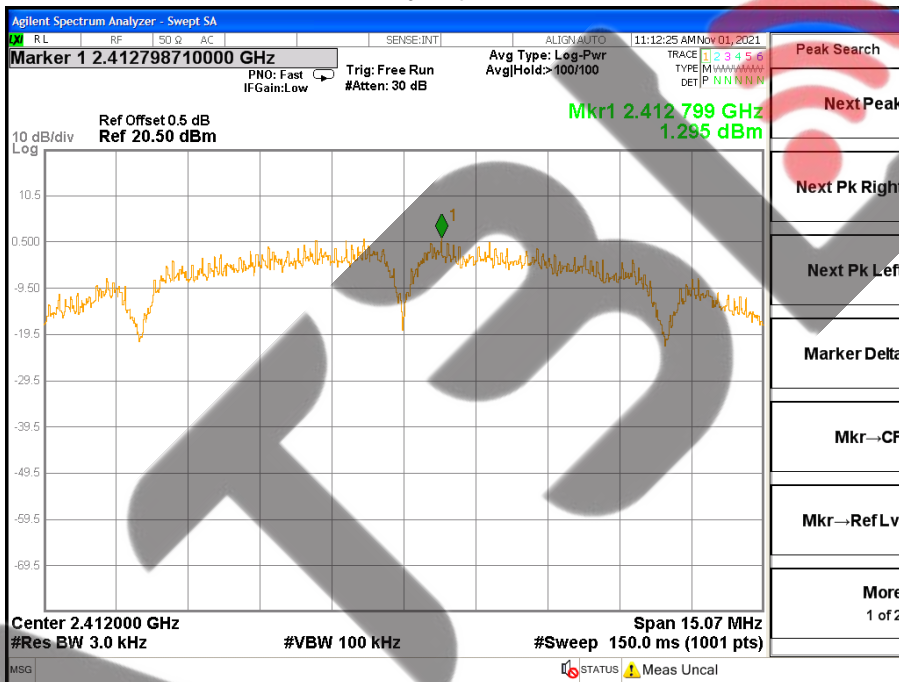
Please refer to section 3.1.4 of this report.

5.6 TEST RESULTS

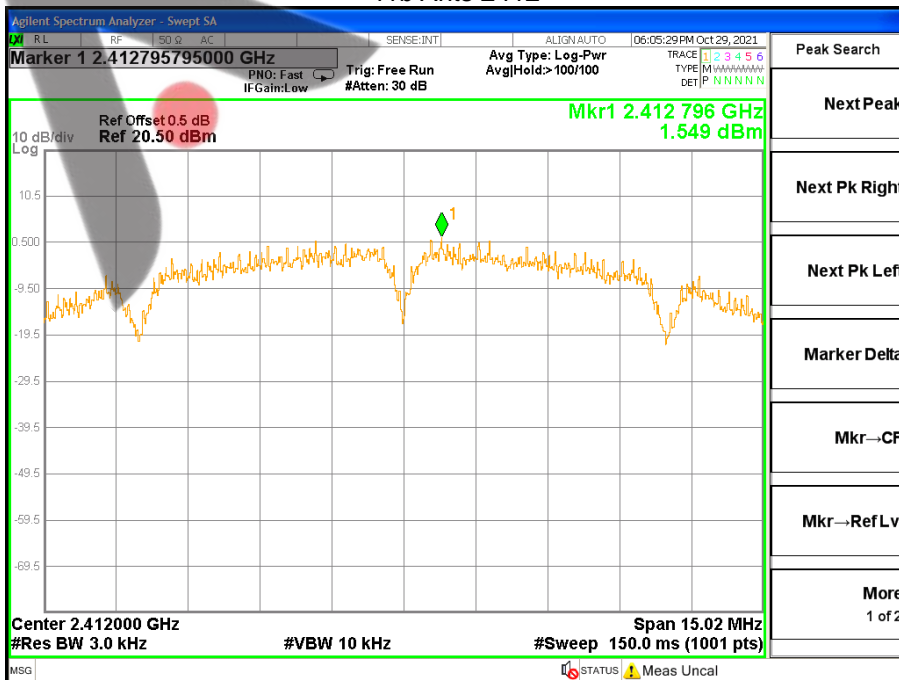
Temperature:	25°C	Relative Humidity:	60%
Test Voltage:	DC 5V	Test Mode:	TX b Mode /CH01,CH06, CH11

Mode	Frequency(MHz)	Test value(dBm)	Combine(dBm)	Limit(dBm)	Results
11b Antl	2412	1.295	4.559	8dBm/3KHz	pass
11b Ants	2412	1.549		8dBm/3KHz	pass
11b Antl	2437	1.060	4.431	8dBm/3KHz	pass
11b Ants	2437	1.421		8dBm/3KHz	pass
11b Antl	2462	0.946	3.986	8dBm/3KHz	pass
11b Ants	2462	0.976		8dBm/3KHz	pass

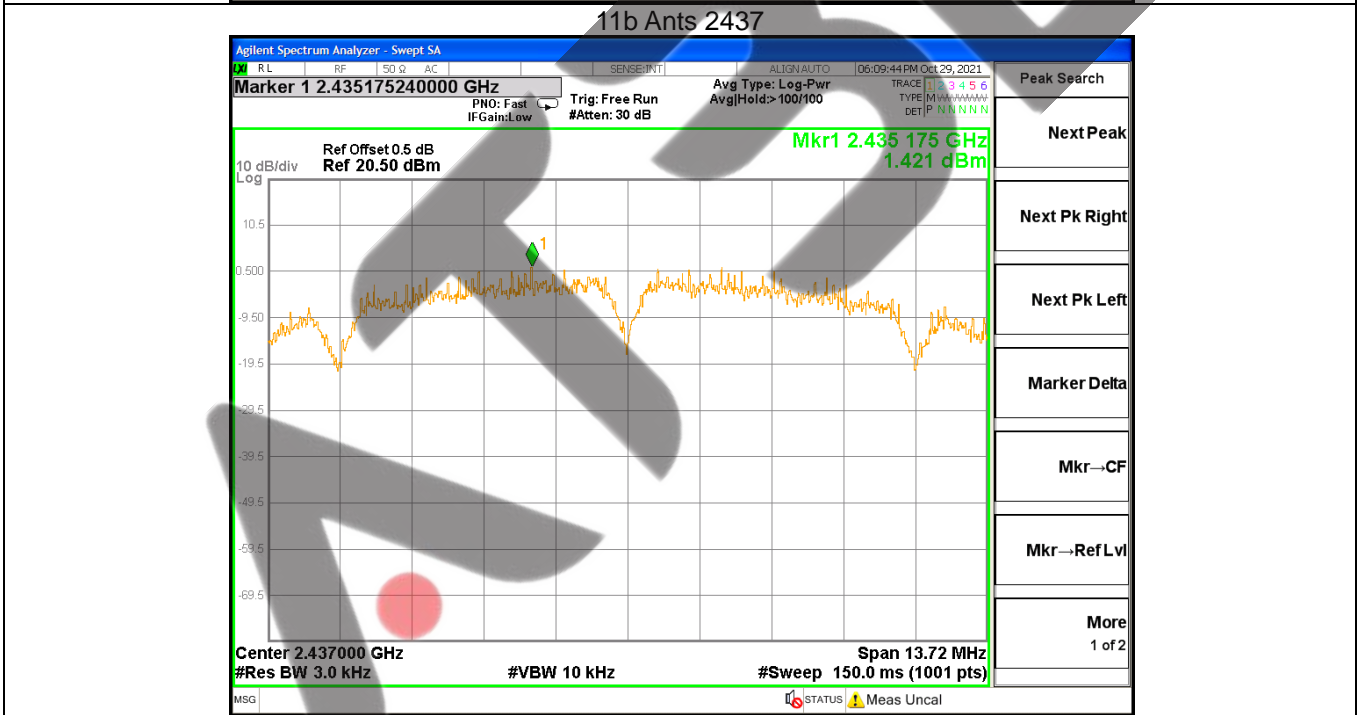
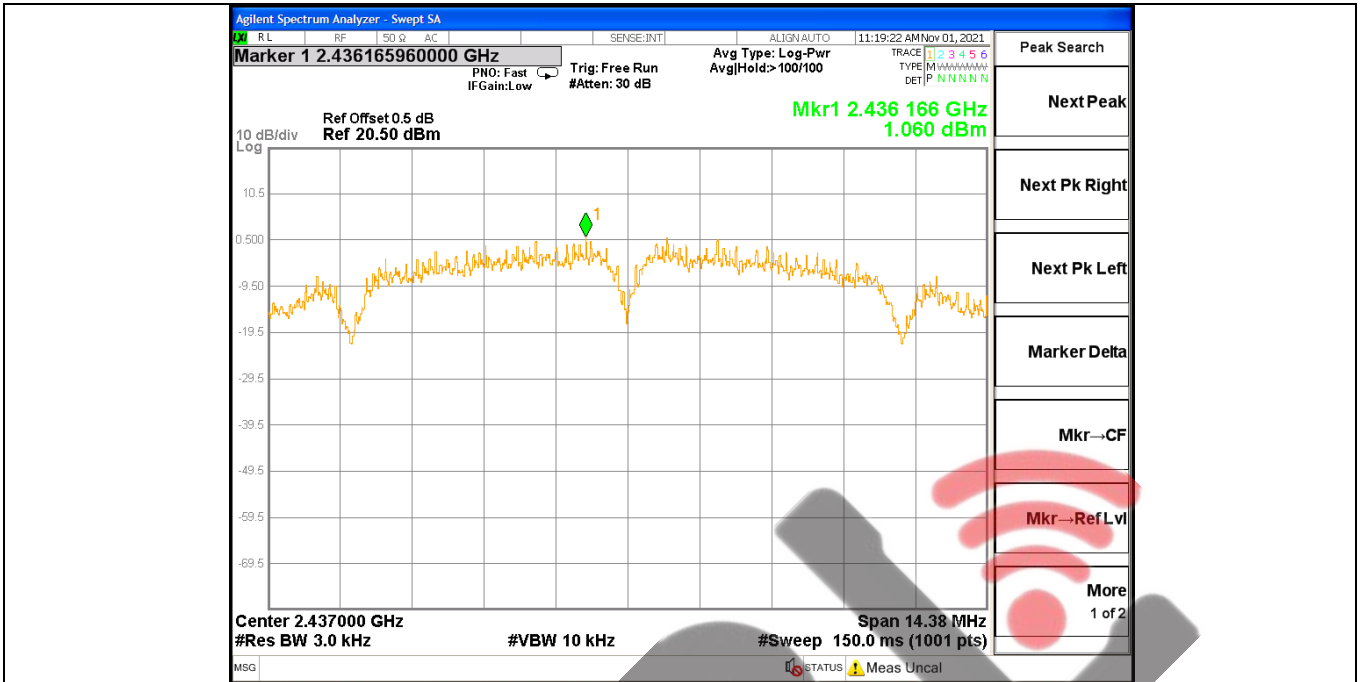
11b Antl 2412

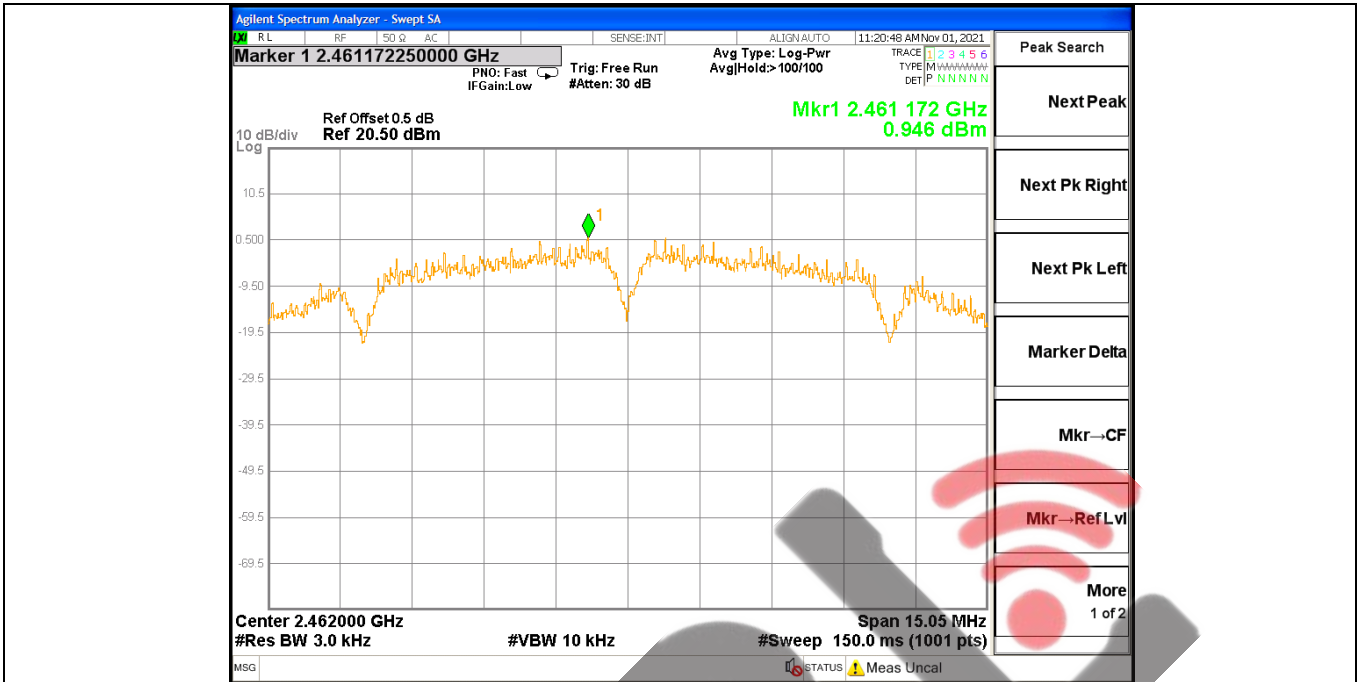


11b Ants 2412

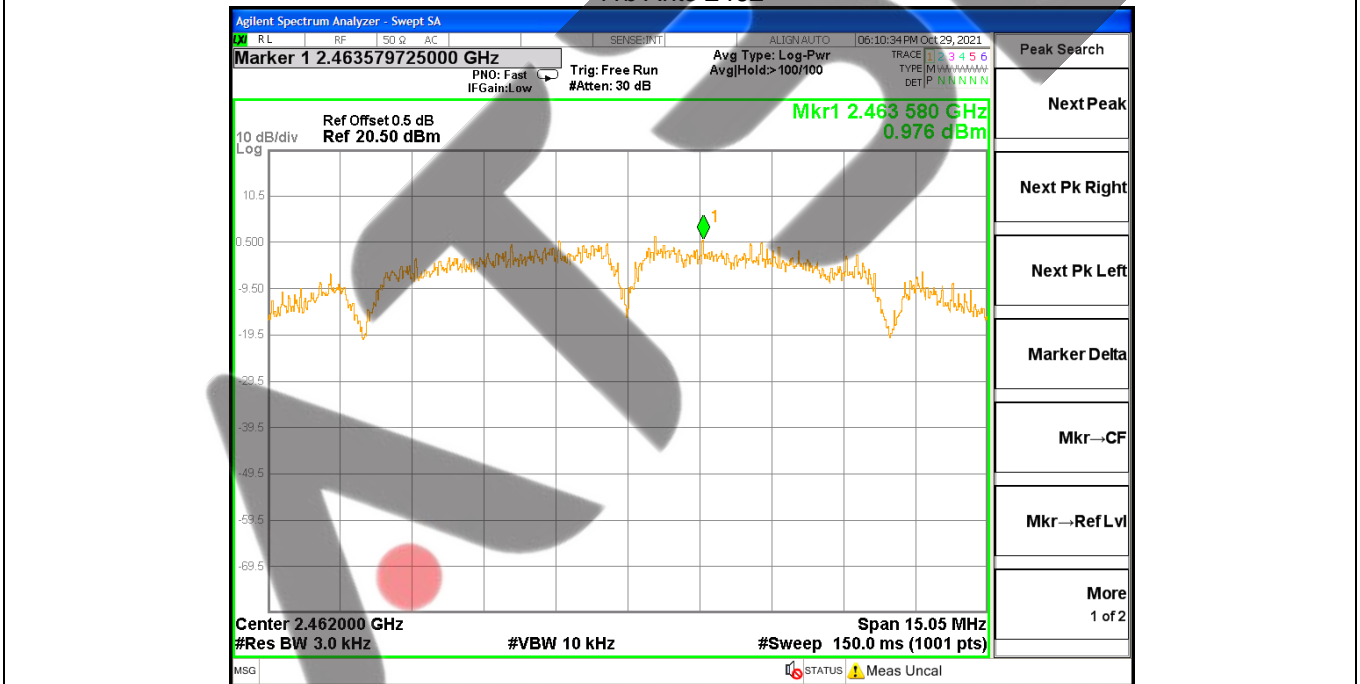


11b Antl 2437





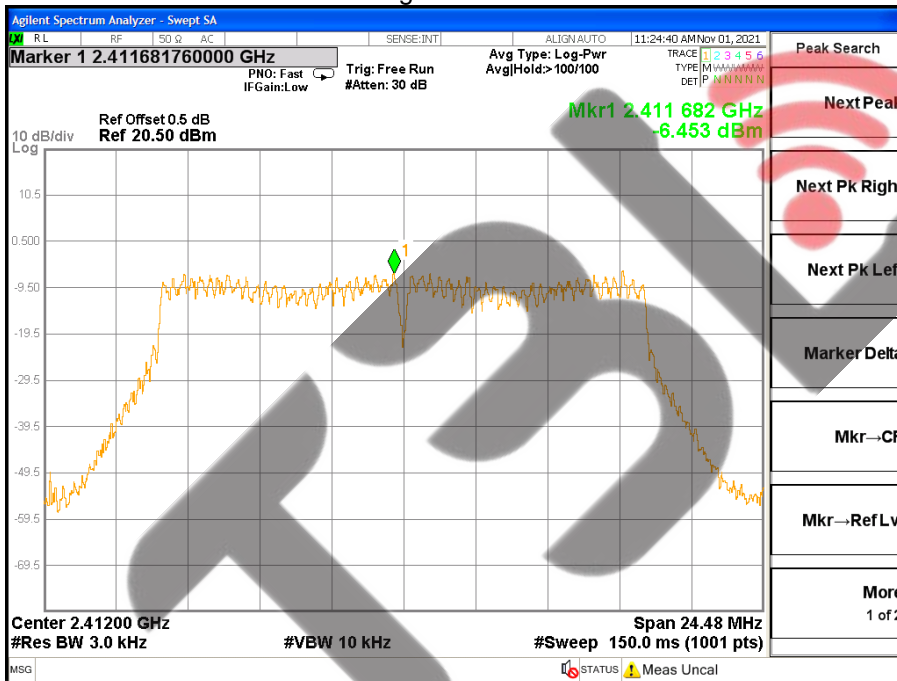
11b Ants 2462



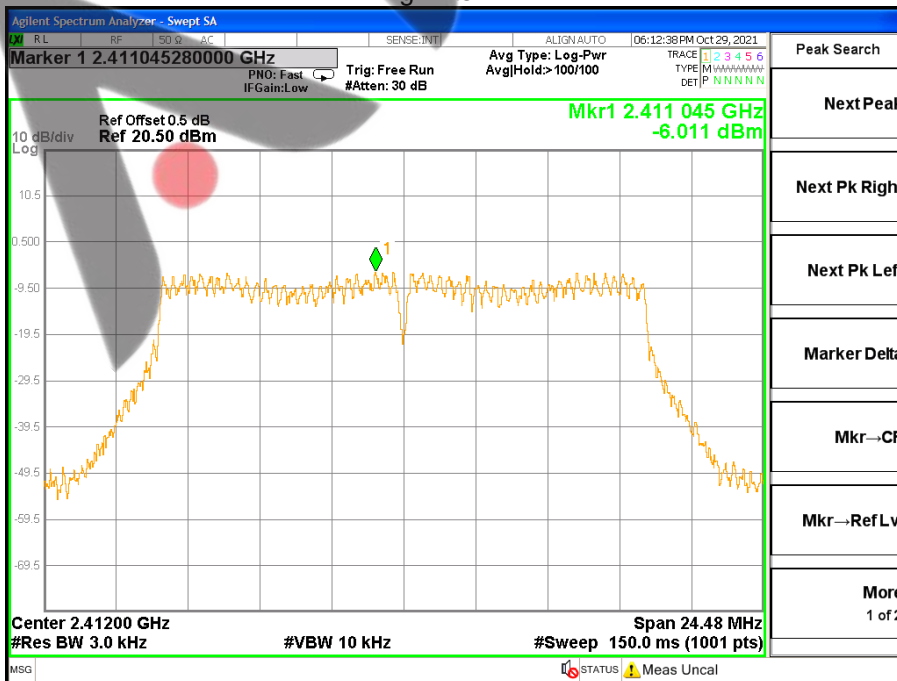
Temperature:	25°C	Relative Humidity:	60%
Test Voltage:	DC 5V	Test Mode:	TX g Mode /CH01, CH06, CH11

Mode	Frequency(MHz)	Test value(dBm)	Combine(dBm)	Limit(dBm)	Results
11g Antl	2412	-6.453	-3.001	8dBm/3KHz	pass
11g Ants	2412	-6.011		8dBm/3KHz	pass
11g Antl	2437	-6.862	-2.621	8dBm/3KHz	pass
11g Ants	2437	-5.631		8dBm/3KHz	pass
11g Antl	2462	-6.852	-2.704	8dBm/3KHz	pass
11g Ants	2462	-5.714		8dBm/3KHz	pass

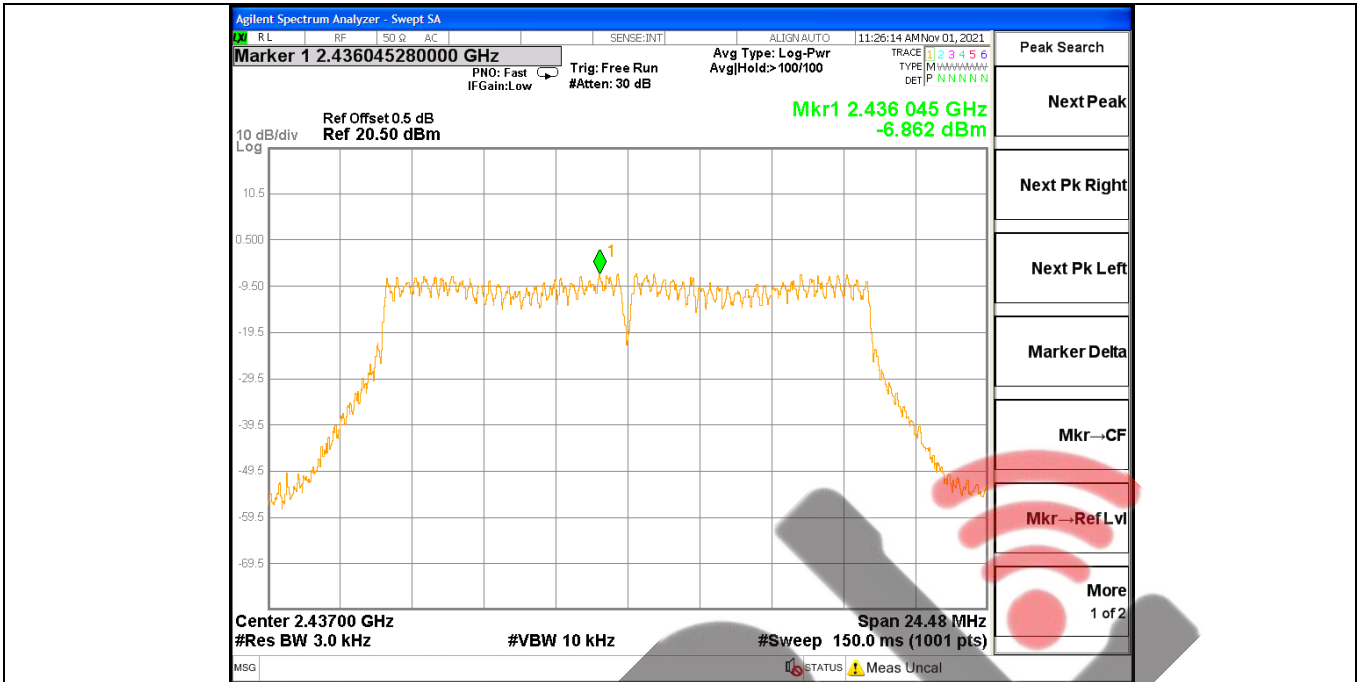
11g Ant0 2412



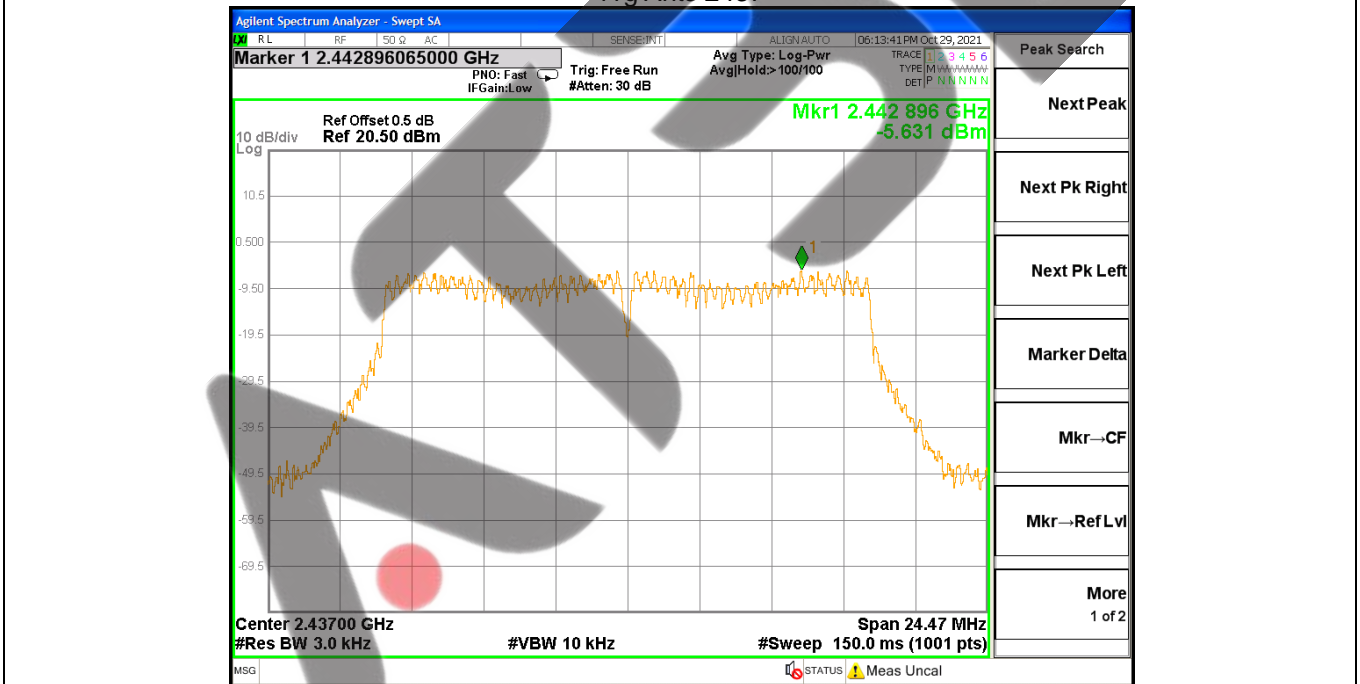
11g Ants 2412



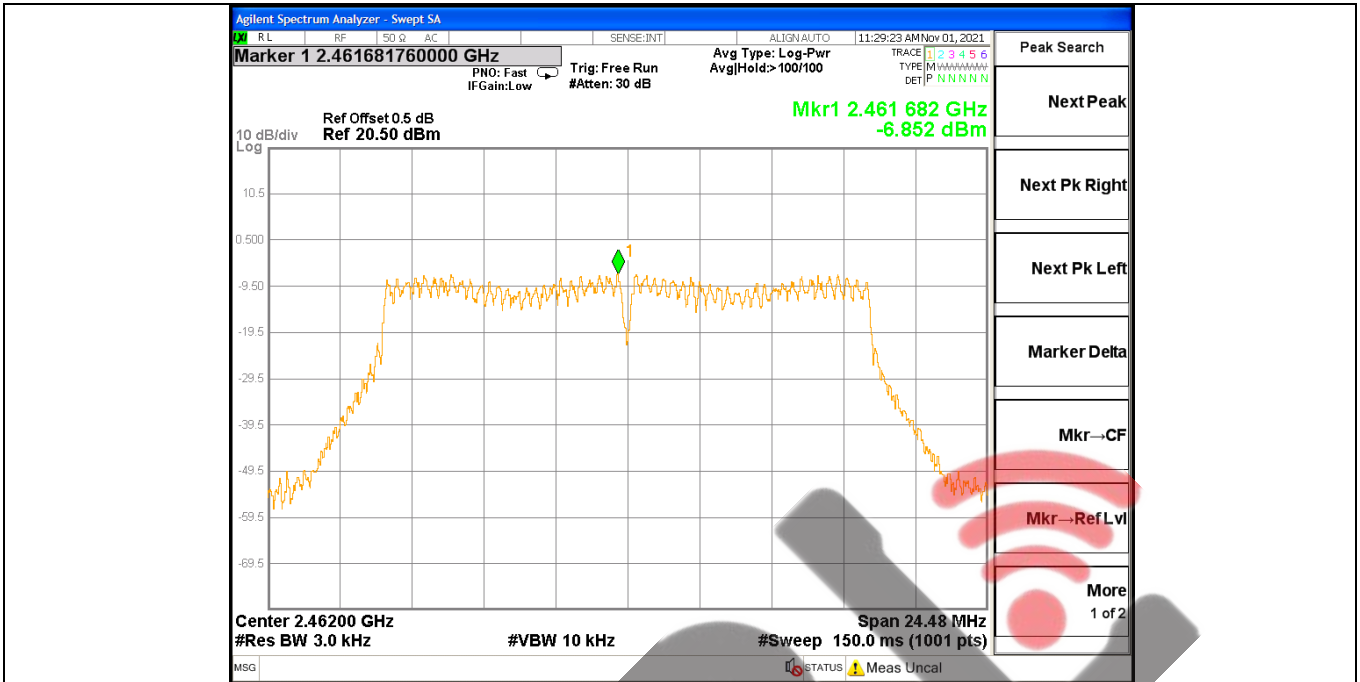
11g Antl 2437



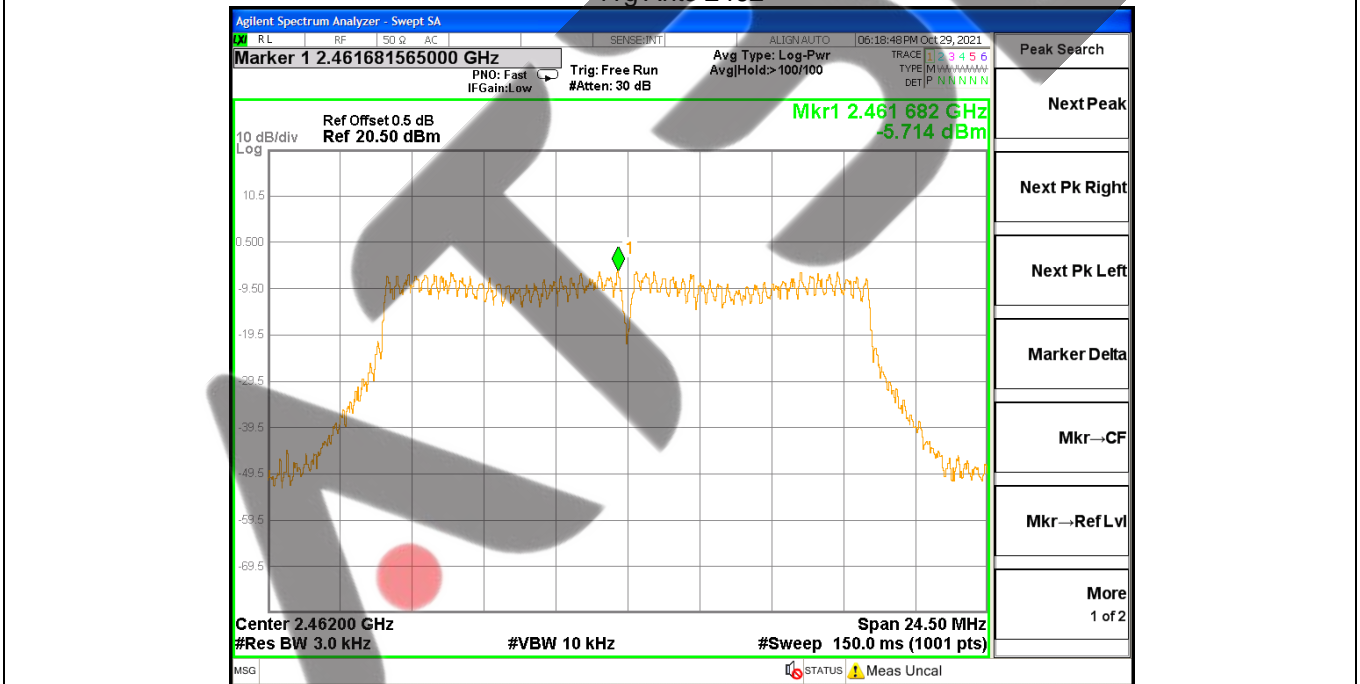
11g Ants 2437



11g Antl 2462



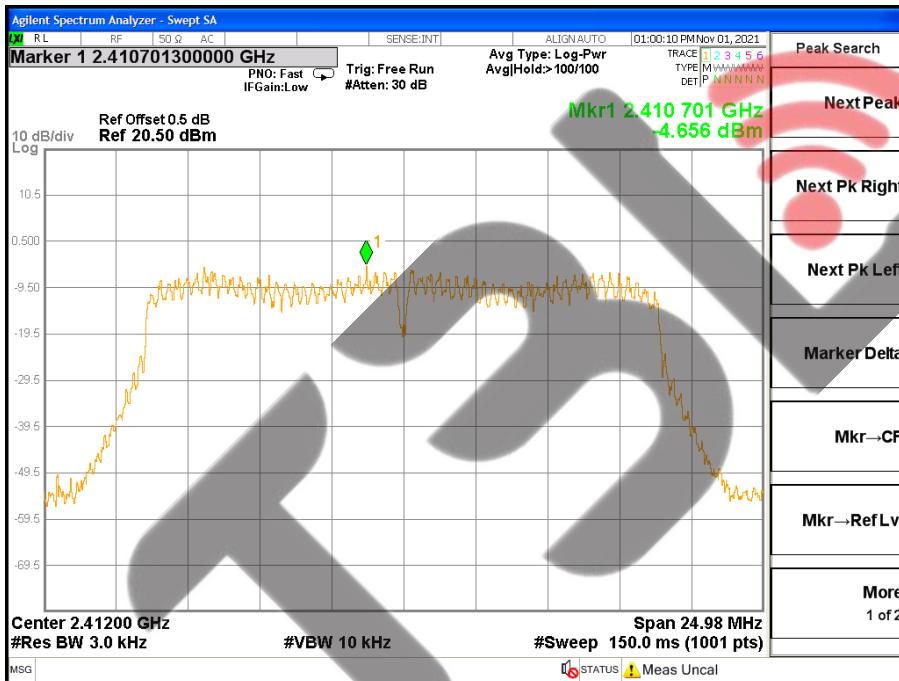
11g Ants 2462



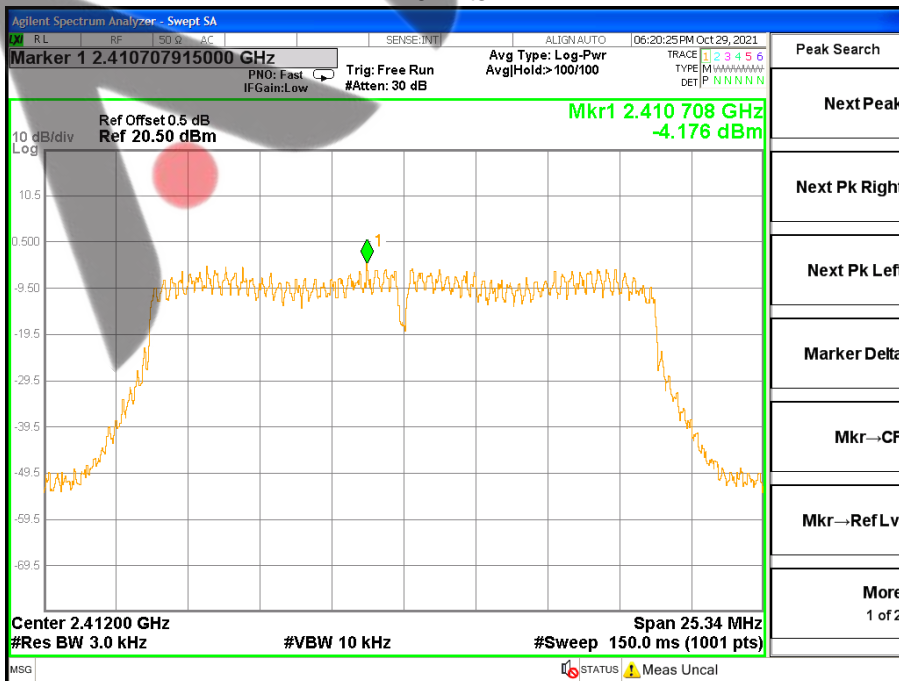
Temperature:	25°C	Relative Humidity:	60%
Test Voltage:	DC 5V	Test Mode:	TX n20 Mode /CH01, CH06, CH11

Mode	Frequency(MHz)	Test value(dBm)	Combine(dBm)	Limit(dBm)	Results
11n20 Antl	2412	-4.856	-1.166	8dBm/3KHz	pass
11n20 Ants	2412	-4.176		8dBm/3KHz	pass
11n20 Antl	2437	-5.599	-1.047	8dBm/3KHz	pass
11n20 Ants	2437	-4.057		8dBm/3KHz	pass
11n20 Antl	2462	-4.897	-1.456	8dBm/3KHz	pass
11n20 Ants	2462	-4.466		8dBm/3KHz	pass

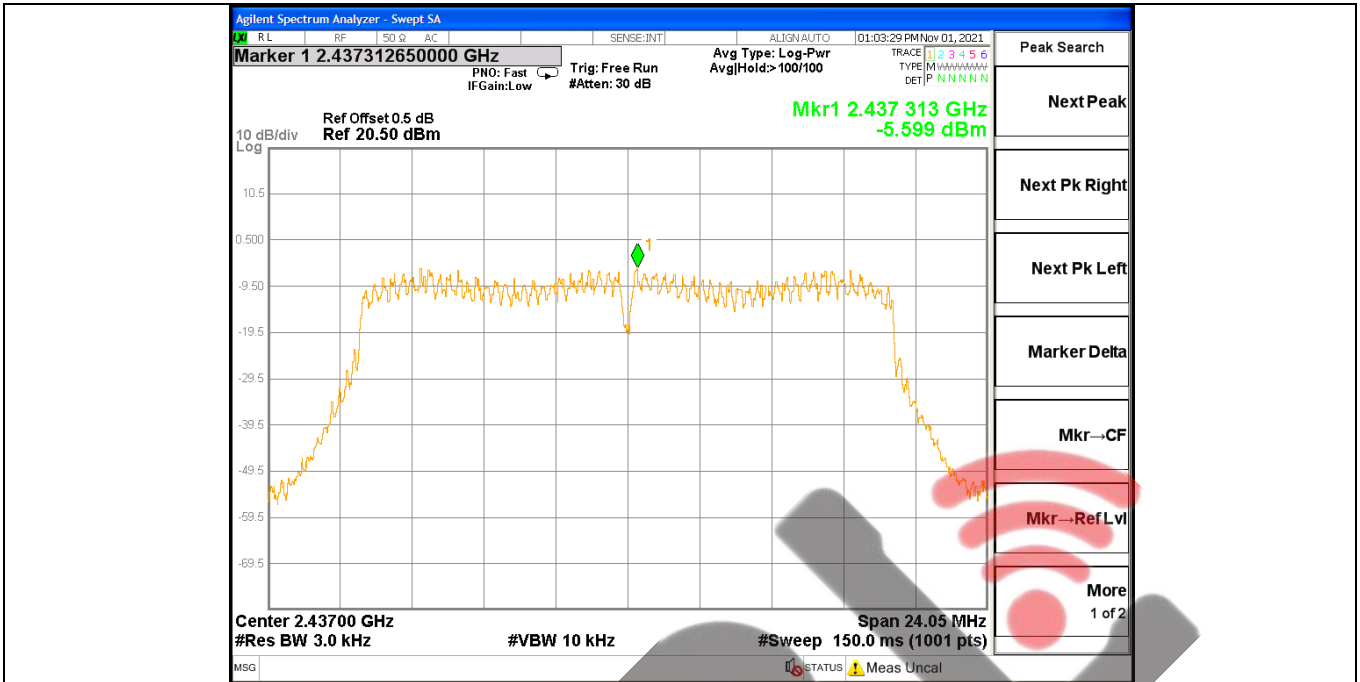
11n20 Antl 2412



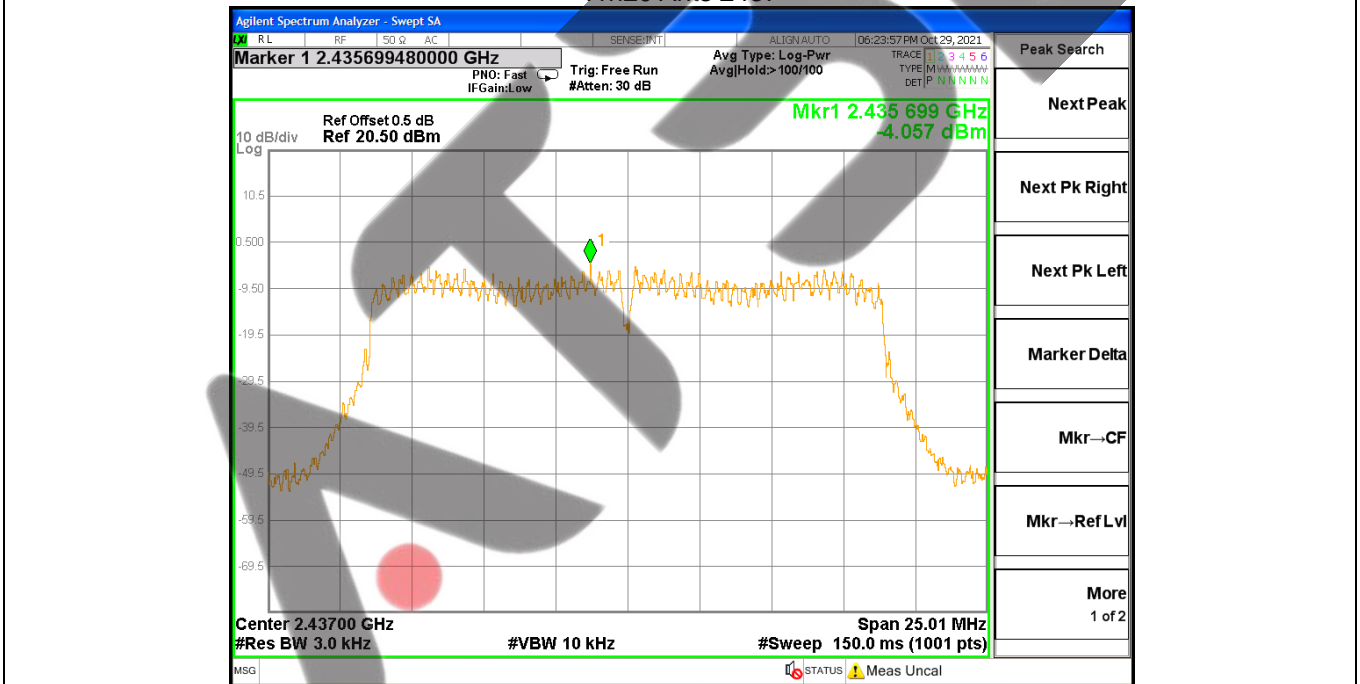
11n20 Ants 2412



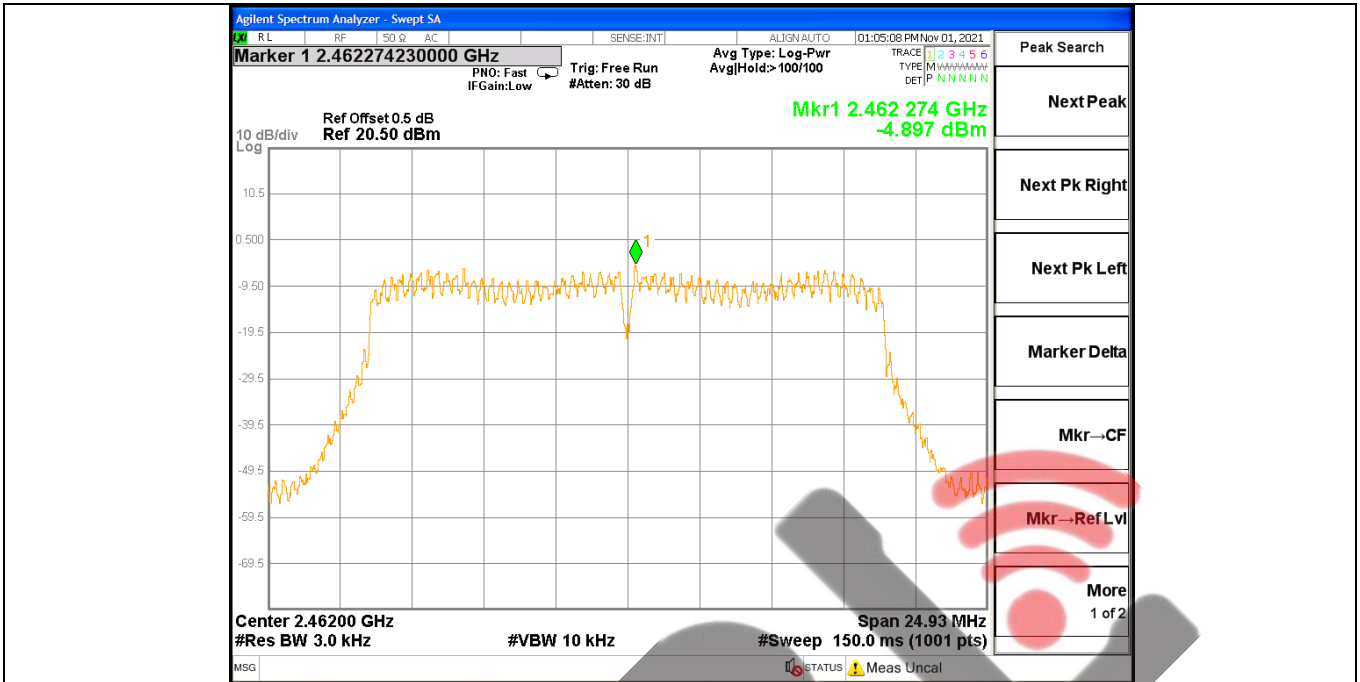
11n20 Antl 2437



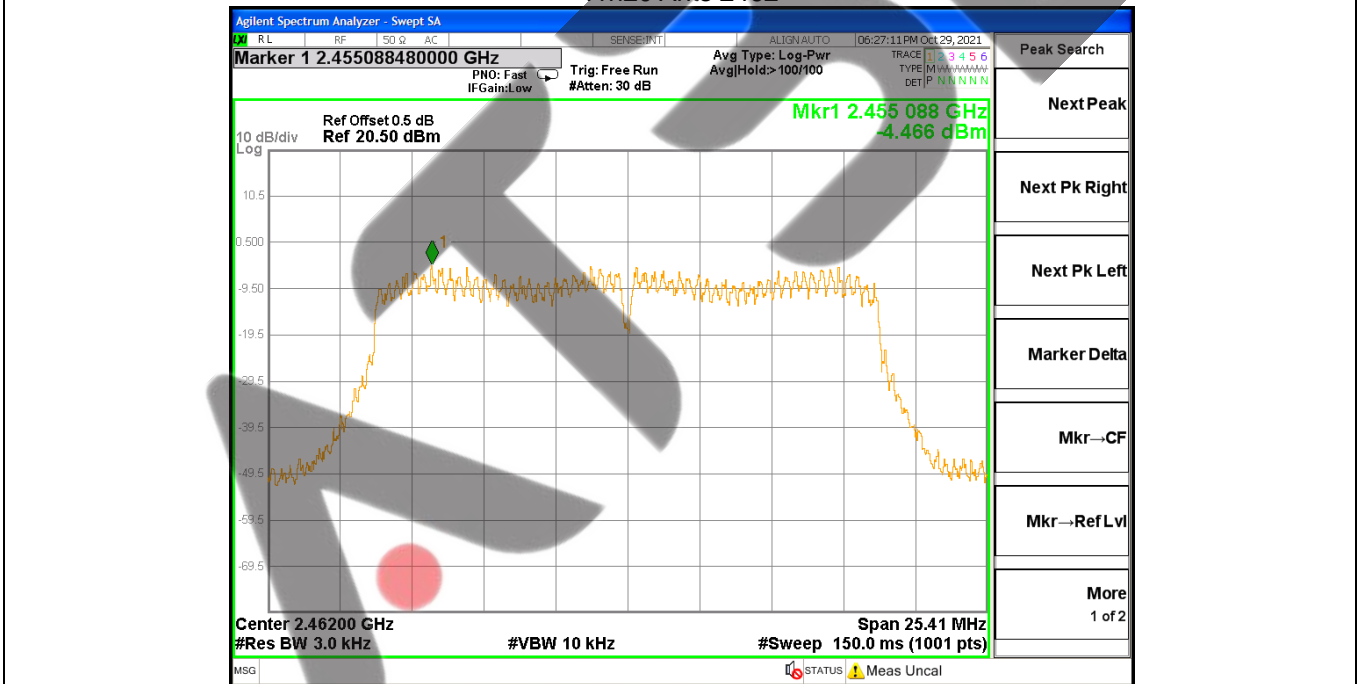
11n20 Ants 2437



11n20 Antl 2462



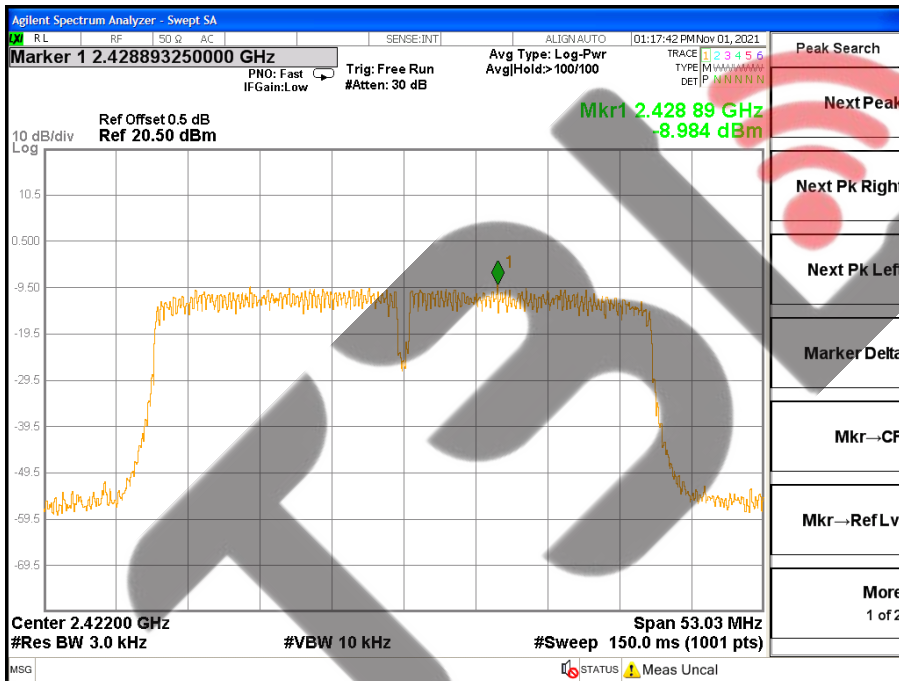
11n20 Ants 2462



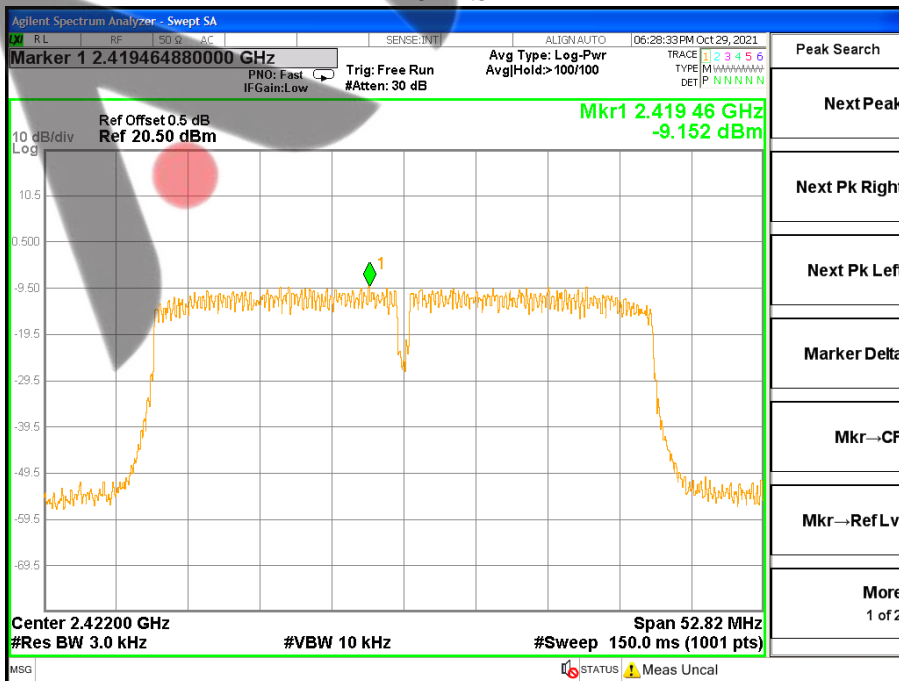
Temperature:	25°C	Relative Humidity:	60%
Test Voltage:	DC 5V	Test Mode:	TX n40 Mode /CH03, CH06, CH09

Mode	Frequency(MHz)	Test value(dBm)	Combine(dBm)	Limit(dBm)	Results
11n40 Antl	2422	-8.984	-5.974	8dBm/3KHz	pass
11n40 Ants	2422	-9.152		8dBm/3KHz	pass
11n40 Antl	2437	-9.933	-5.885	8dBm/3KHz	pass
11n40 Ants	2437	-8.895		8dBm/3KHz	pass
11n40 Antl	2452	-8.614	-4.743	8dBm/3KHz	pass
11n40 Ants	2452	-7.753		8dBm/3KHz	pass

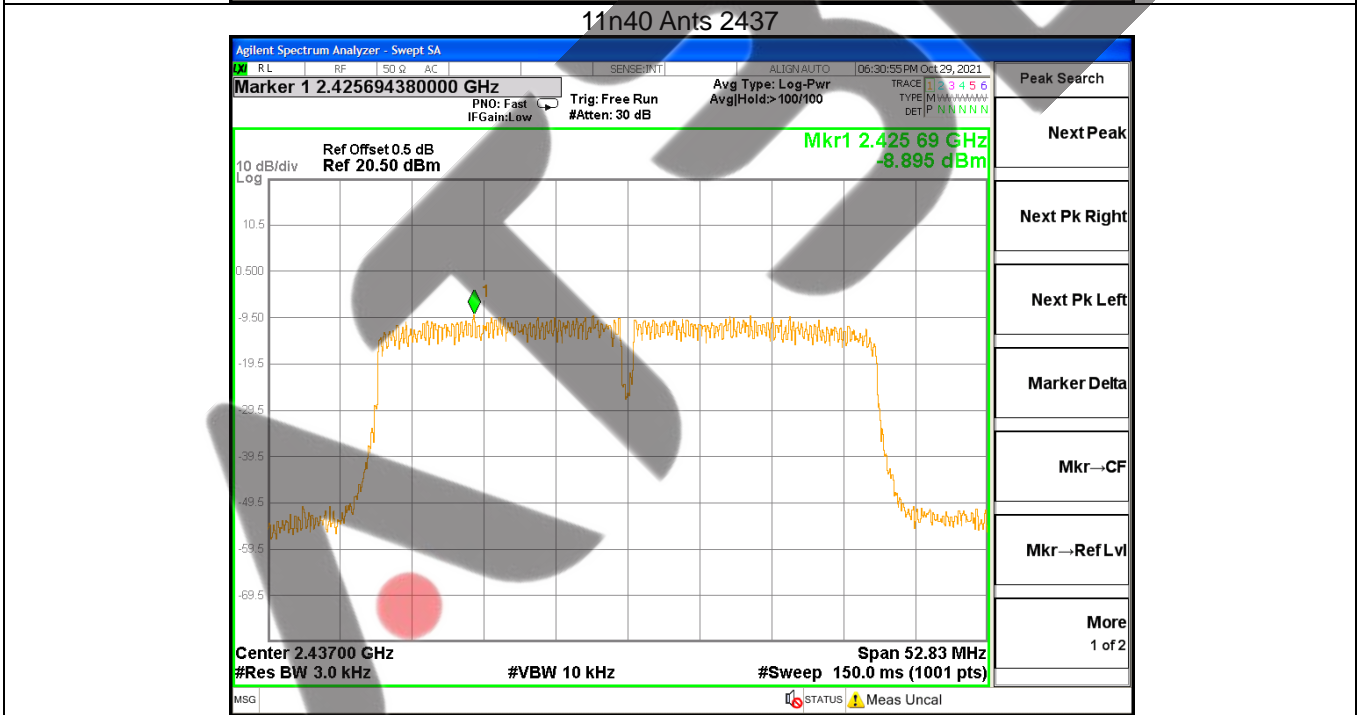
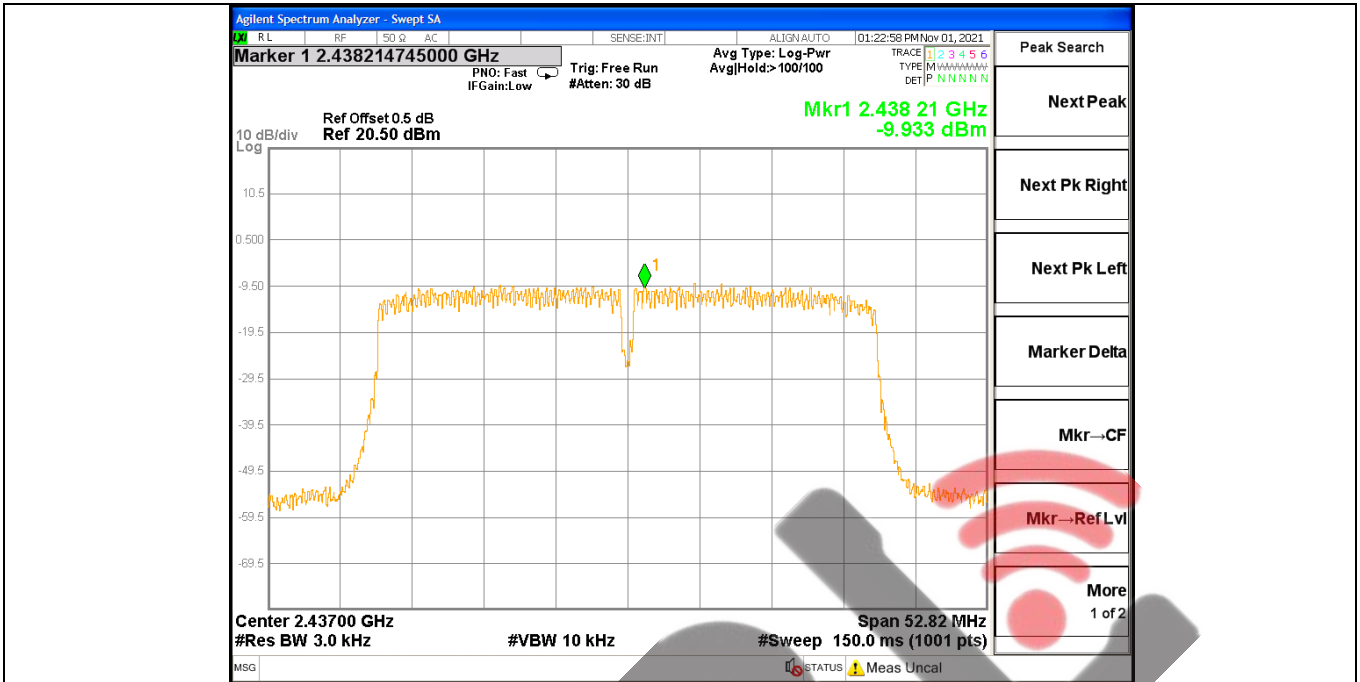
11n40 Antl 2422

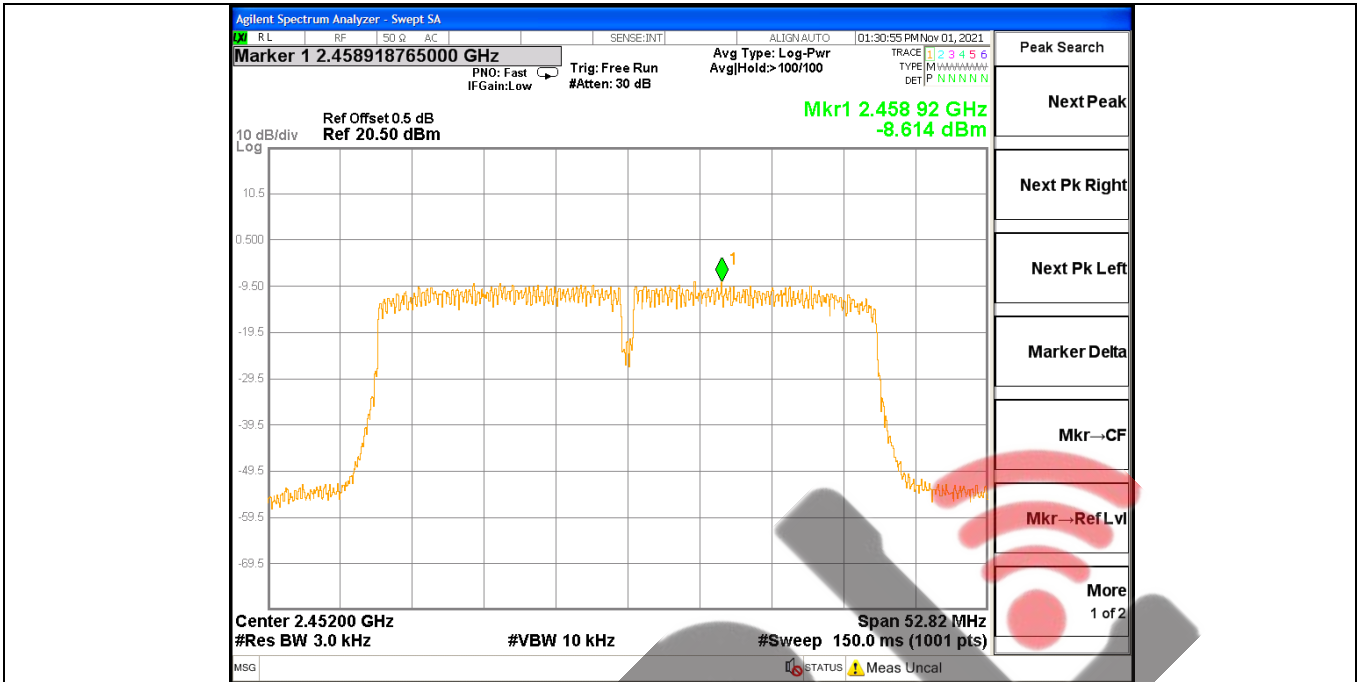


11n40 Ants 2422

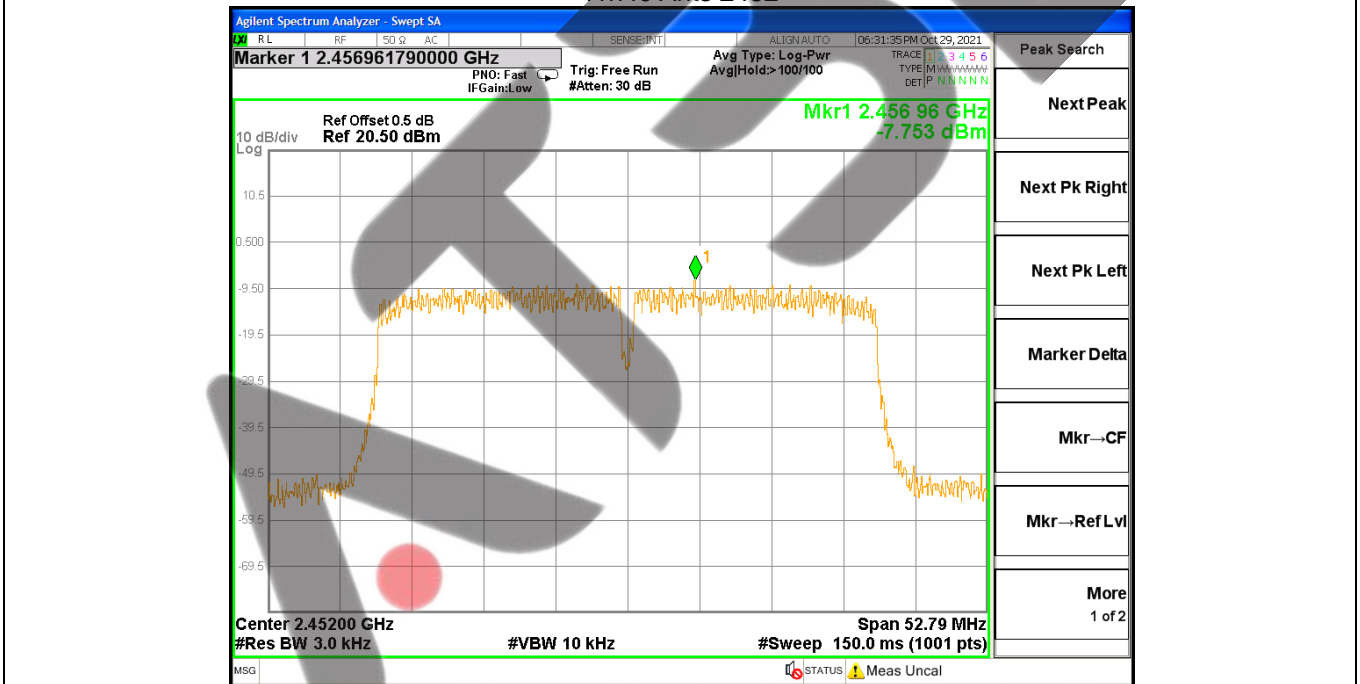


11n40 Antl 2437





11n40 Ants 2452



6. BANDWIDTH TEST

6.1 LIMIT

FCC Part15.247,Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(a)(2)	Bandwidth	≥500KHz (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 ≥ 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

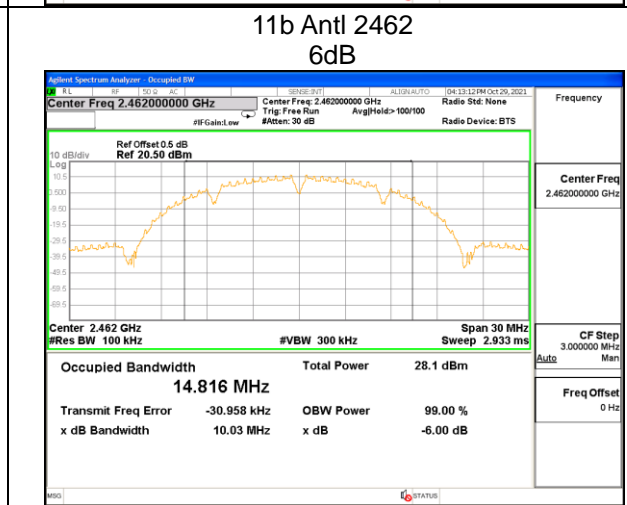
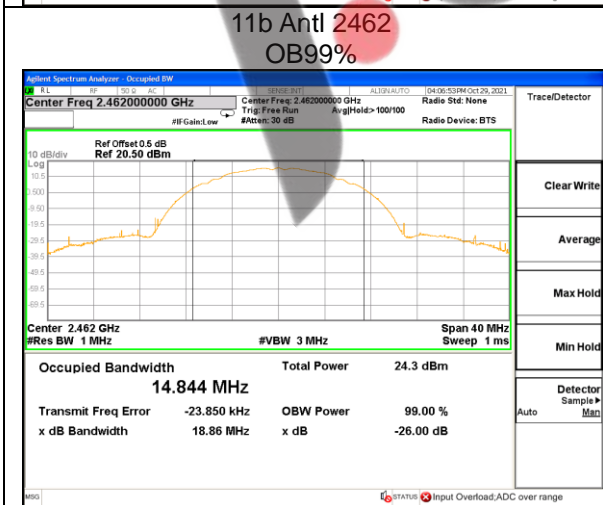
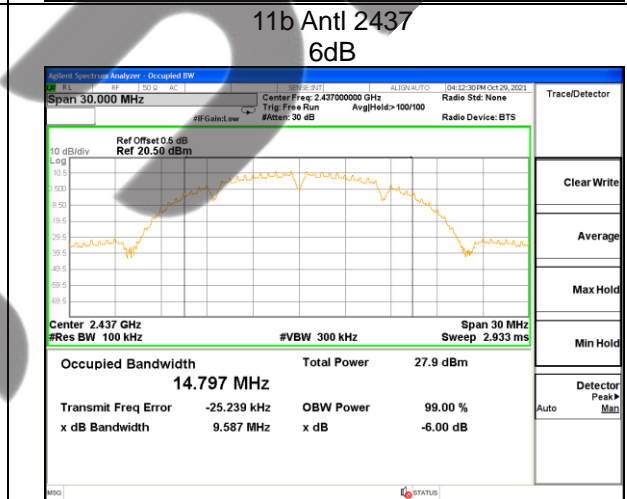
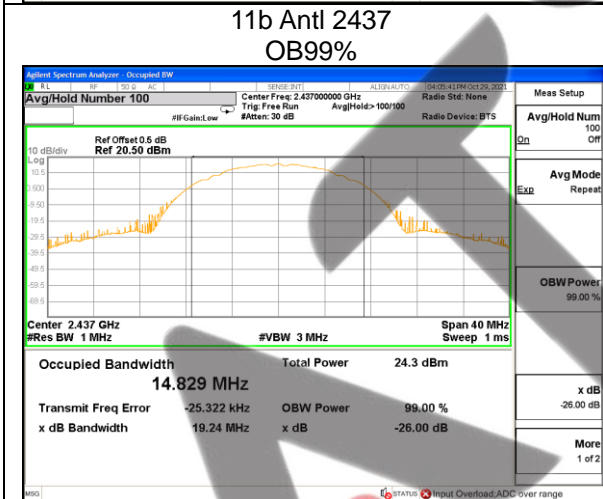
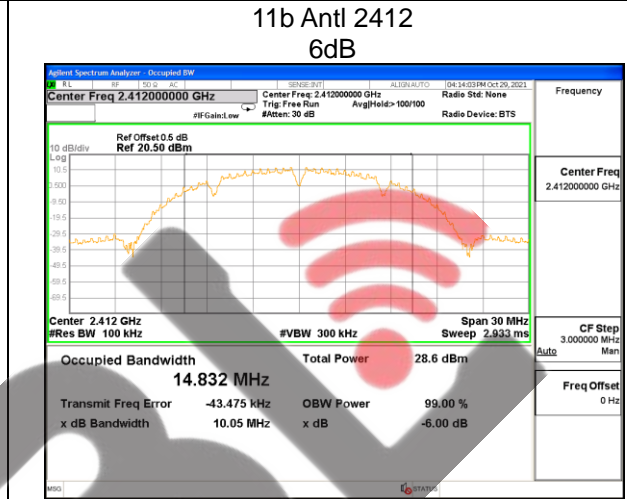
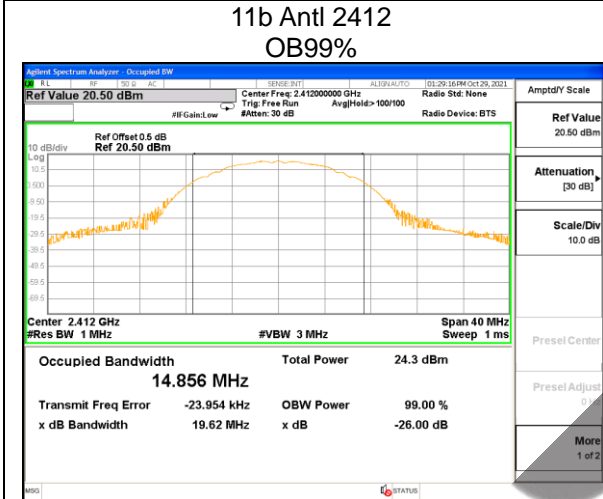
Please refer to section 3.1.4 of this report.

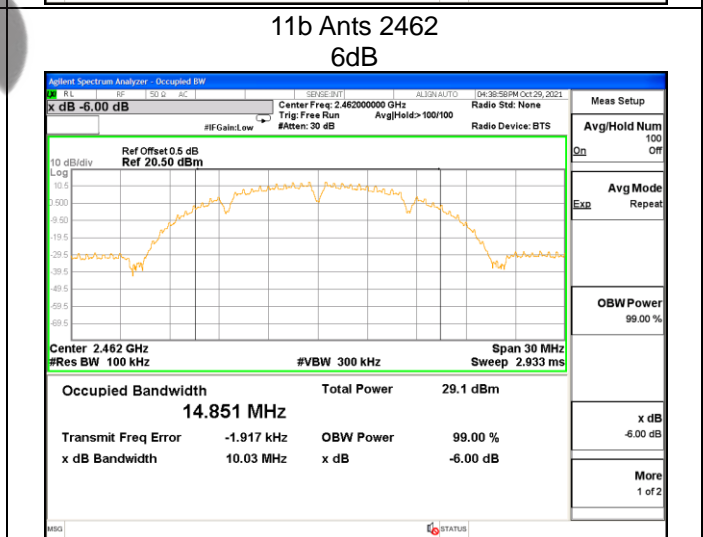
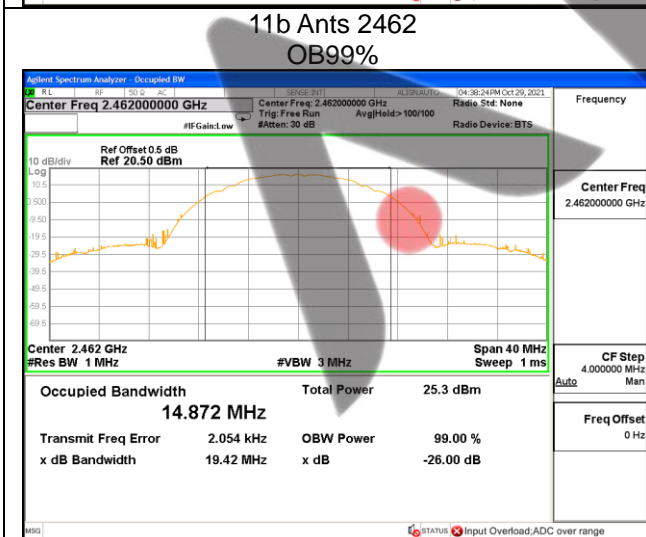
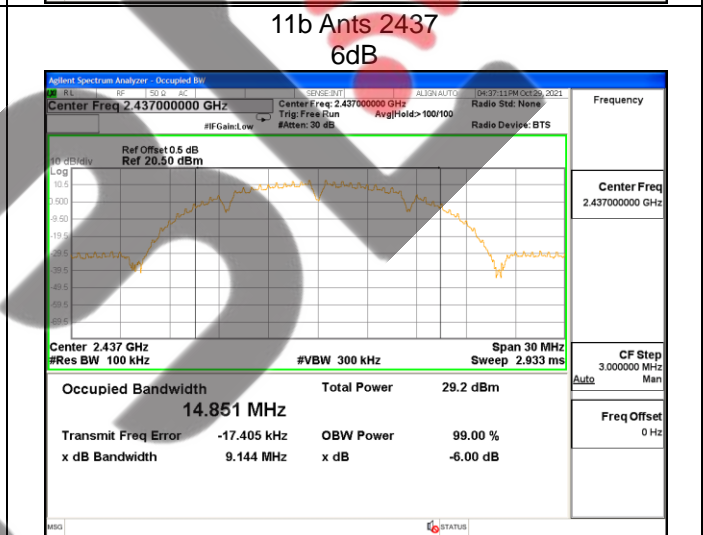
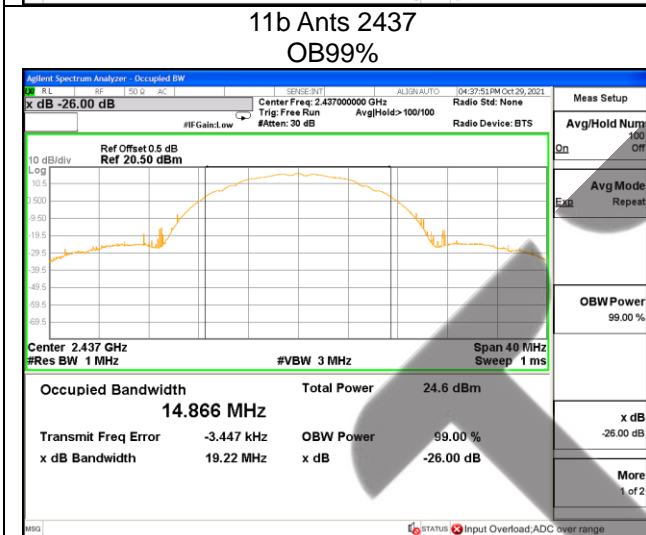
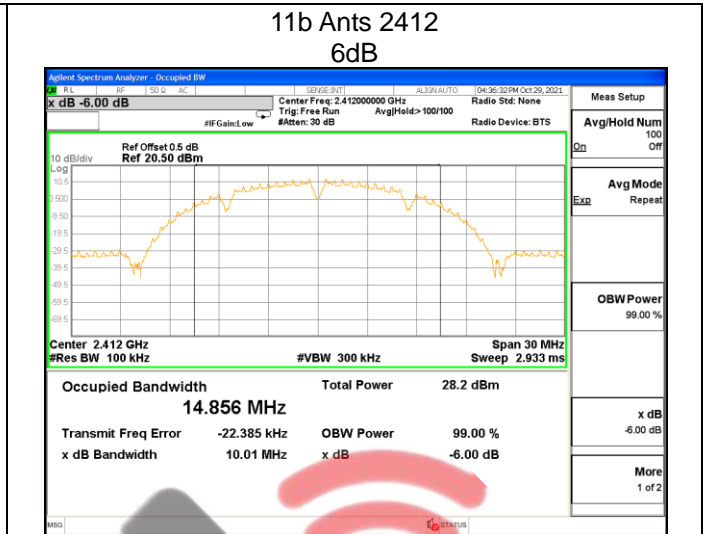
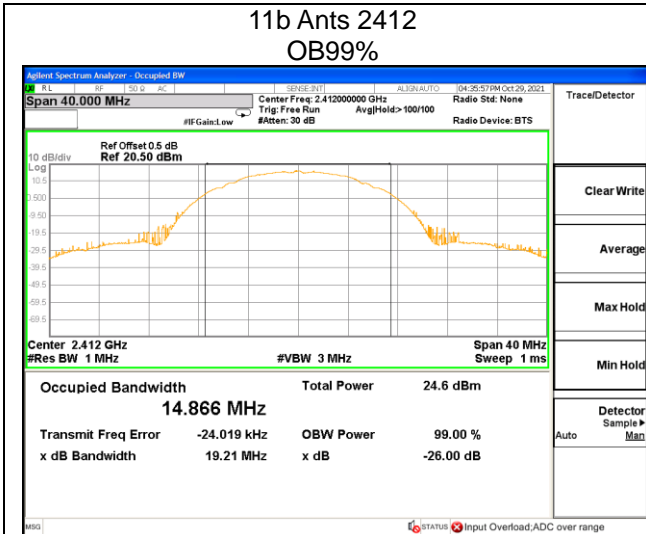
6.6 TEST RESULTS

Temperature:	25°C	Relative Humidity:	60%
Test Voltage:	DC 5V	Test Mode:	TX b Mode /CH01, CH06, CH11

Remark: PEAK DETECTOR IS USED

Mode	Frequency(MHz)	OB99%(MHz)	6dB(MHz)
11b Antl	2412	14.856	10.05
11b Ants	2412	14.866	10.01
11b Antl	2437	14.829	9.587
11b Ants	2437	14.866	9.144
11b Antl	2462	14.844	10.03
11b Ants	2462	14.872	10.03

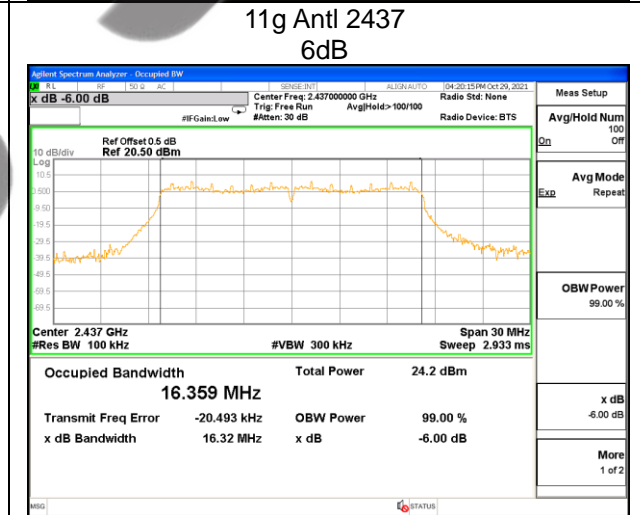
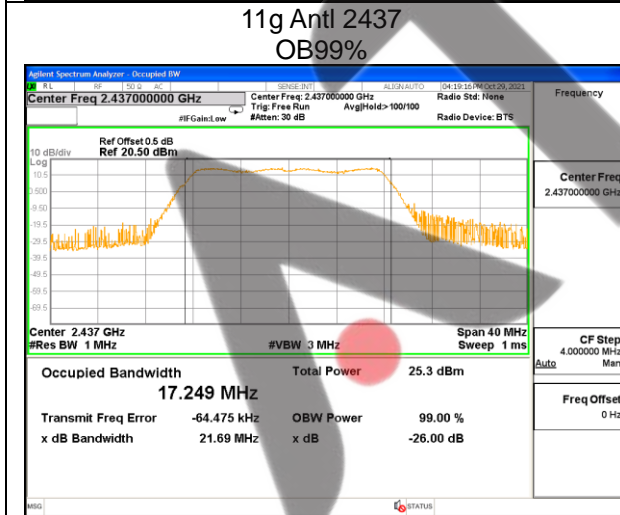
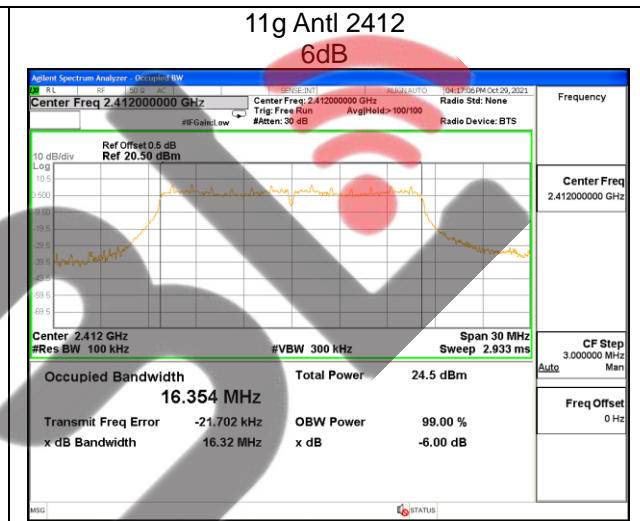
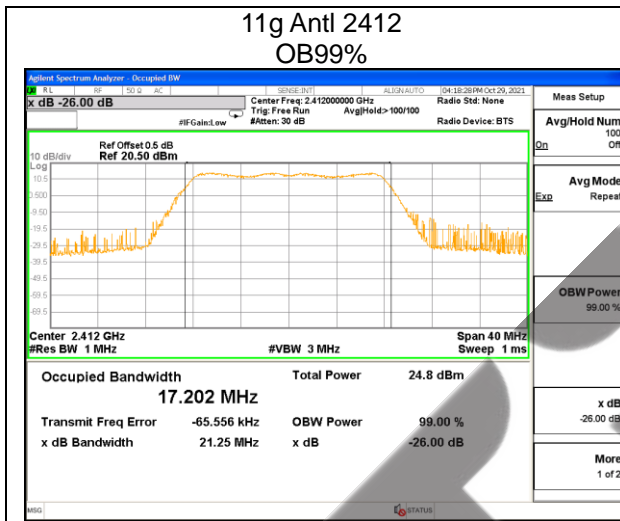




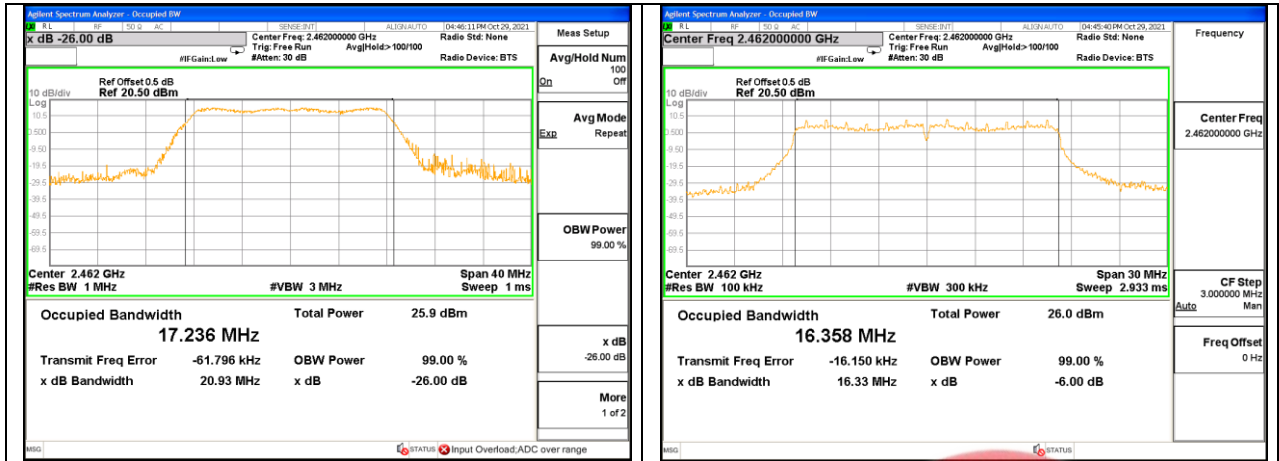
Temperature:	25°C	Relative Humidity:	60%
Test Voltage:	DC 5V	Test Mode:	TX g Mode /CH01, CH06, CH11

Remark: PEAK DETECTOR IS USED

Mode	Frequency(MHz)	OB99%(MHz)	6dB(MHz)
11g Antl	2412	17.202	16.32
11g Ants	2412	17.242	16.32
11g Antl	2437	17.249	16.32
11g Ants	2437	17.301	16.31
11g Antl	2462	17.128	16.32
11g Ants	2462	17.236	16.33



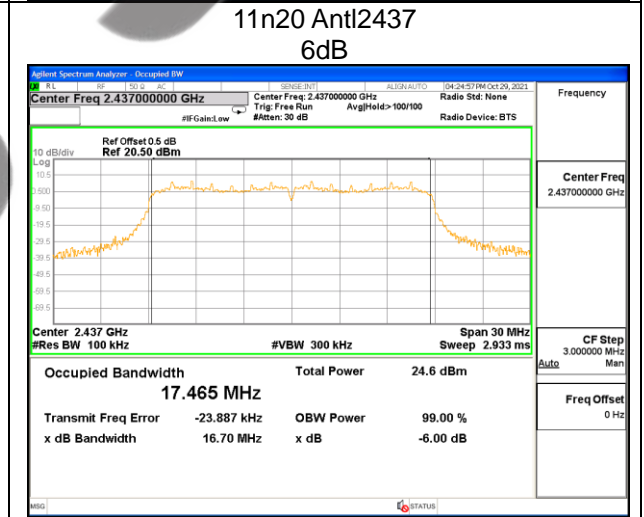
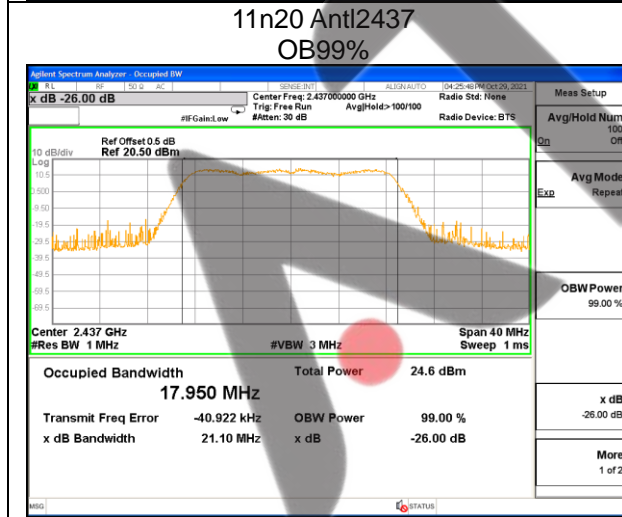
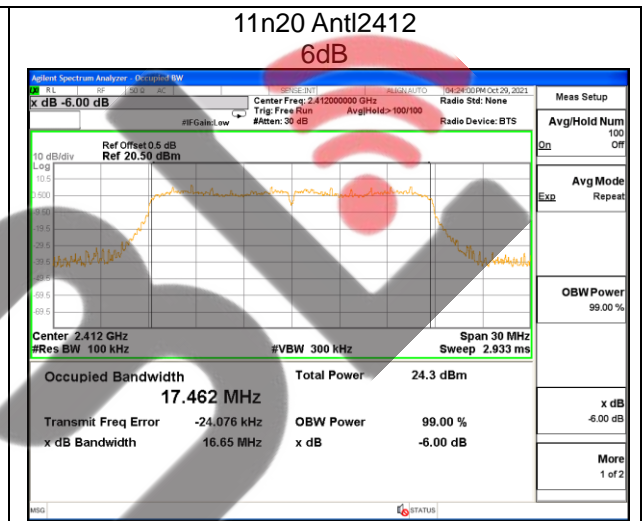
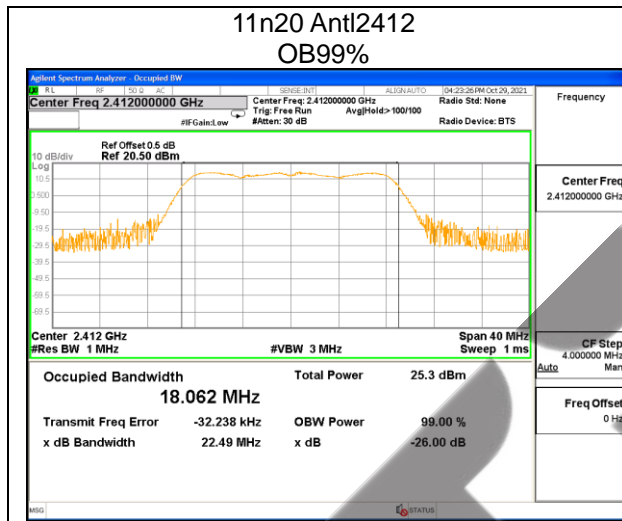




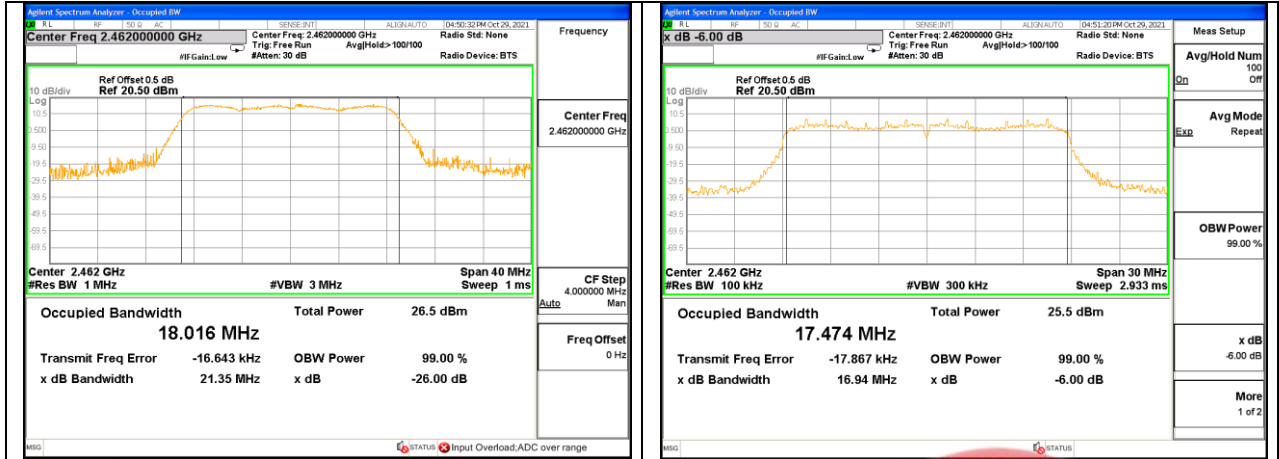
Temperature:	25°C	Relative Humidity:	60%
Test Voltage:	DC 5V	Test Mode:	TX n20 Mode /CH01, CH06, CH11

Remark: PEAK DETECTOR IS USED

Mode	Frequency(MHz)	OB99%(MHz)	6dB(MHz)
11n20 Antl	2412	18.062	16.65
11n20 Ants	2412	18.031	16.89
11n20 Antl	2437	17.950	16.70
11n20 Ants	2437	17.925	16.67
11n20 Antl	2462	18.023	16.62
11n20 Ants	2462	18.016	16.94



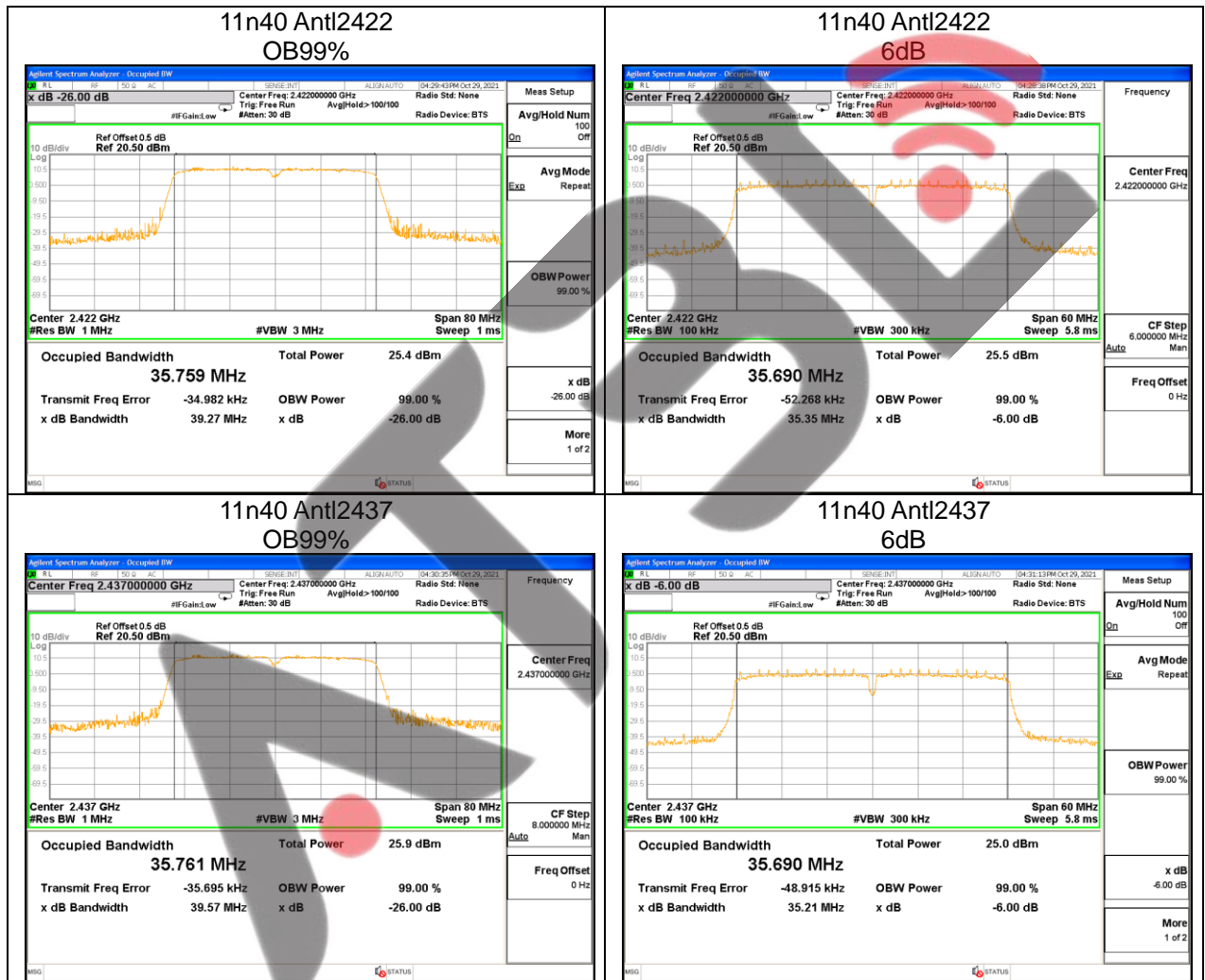




Temperature:	25°C	Relative Humidity:	60%
Test Voltage:	DC 5V	Test Mode:	TX n40 Mode /CH01, CH06, CH11

Remark: PEAK DETECTOR IS USED

Mode	Frequency(MHz)	OB99%(MHz)	6dB(MHz)
11n40 Antl	2422	35.759	35.35
11n40 Ants	2422	35.778	35.21
11n40 Antl	2437	35.761	35.21
11n40 Ants	2437	35.789	35.22
11n40 Antl	2452	35.746	35.21
11n40 Ants	2452	35.790	35.19







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 ≥ 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 ≥ DTS bandwidth.
- Set VBW ≥ [3 × RBW].
- Set span ≥ [3 × 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 ≥ [3 × RBW].
- Set the span ≥ [1.5 × 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.

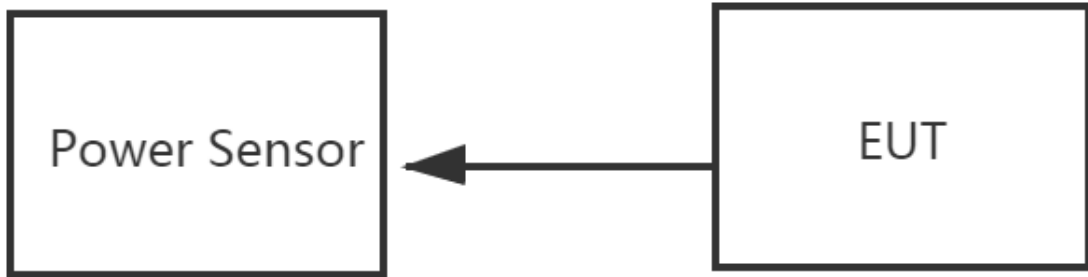
PKPM1 Peak power meter method:

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

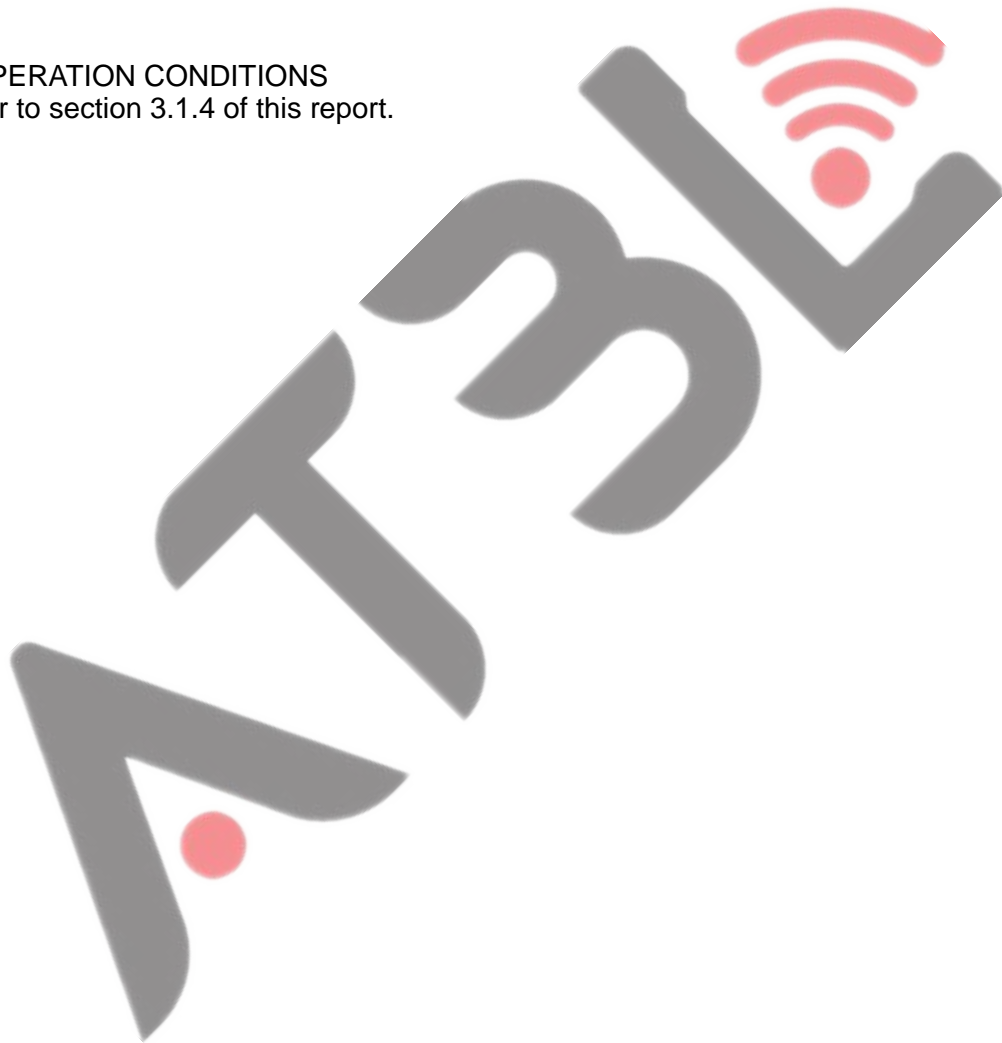
No deviation.

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°C	Relative Humidity:	60%
Test Voltage:	DC 5V		

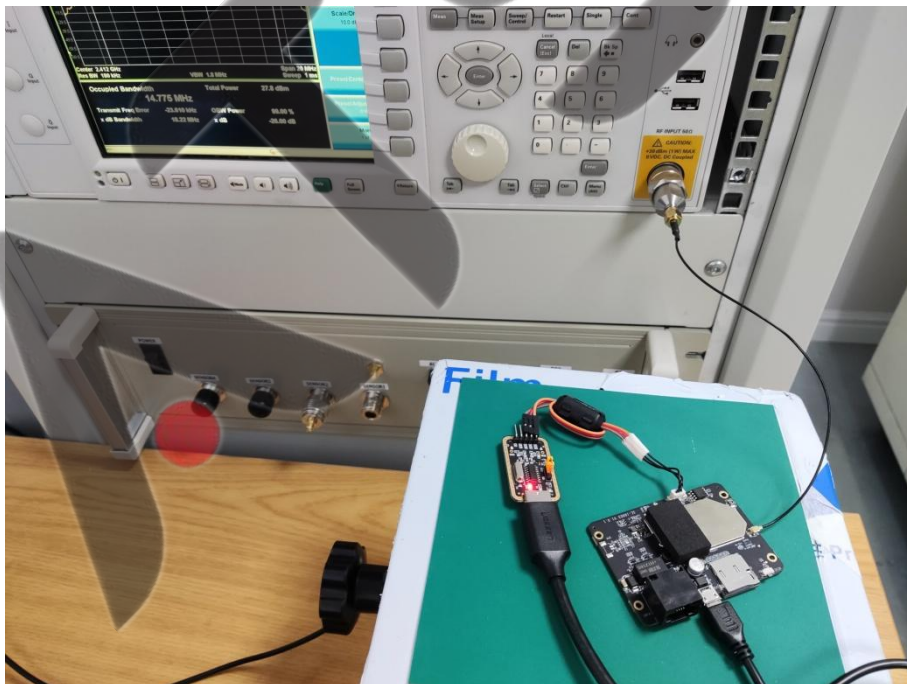
Mode	Test Channel	Frequency	Peak Conducted Output Power	Average Conducted Output Power	LIMIT
		(MHz)	(dBm)	(dBm)	dBm
TX 802.11b (Combine)	CH01	2412	26.78	24.44	30
	CH06	2437	26.68	24.52	30
	CH11	2462	26.48	24.37	30
TX 802.11g (Combine)	CH01	2412	27.44	20.52	30
	CH06	2437	27.43	21.00	30
	CH11	2462	27.44	21.40	30
TX 802.11n20 (Combine)	CH01	2412	27.41	21.08	30
	CH06	2437	27.41	21.57	30
	CH11	2462	27.42	21.74	30
TX 802.11n40 (Combine)	CH03	2422	27.29	21.69	30
	CH06	2437	27.30	21.72	30
	CH09	2452	27.30	21.87	30

APPENDIX-PHOTOS OF TEST SETUP

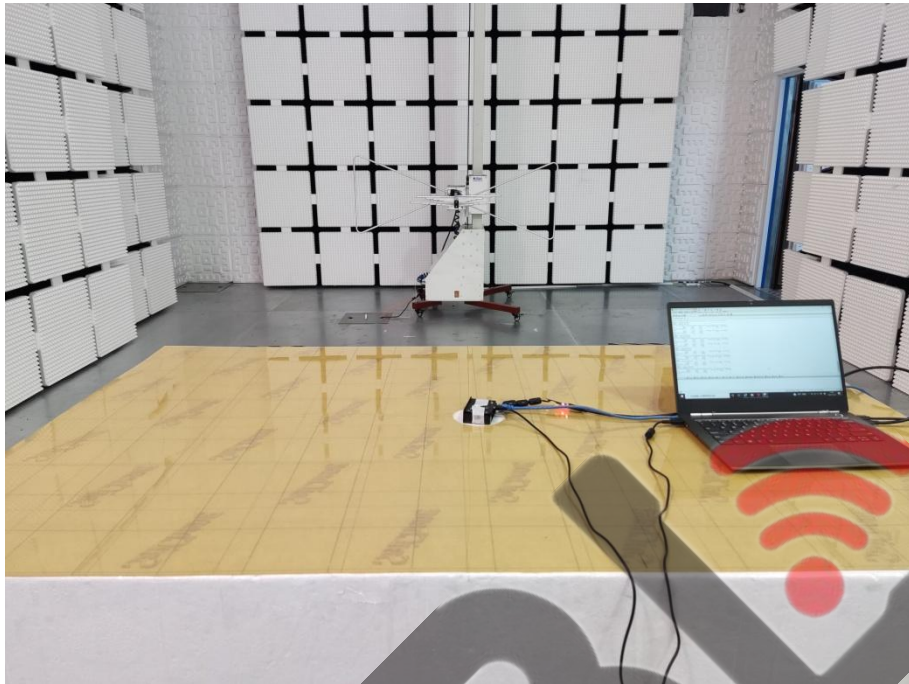
Conduction



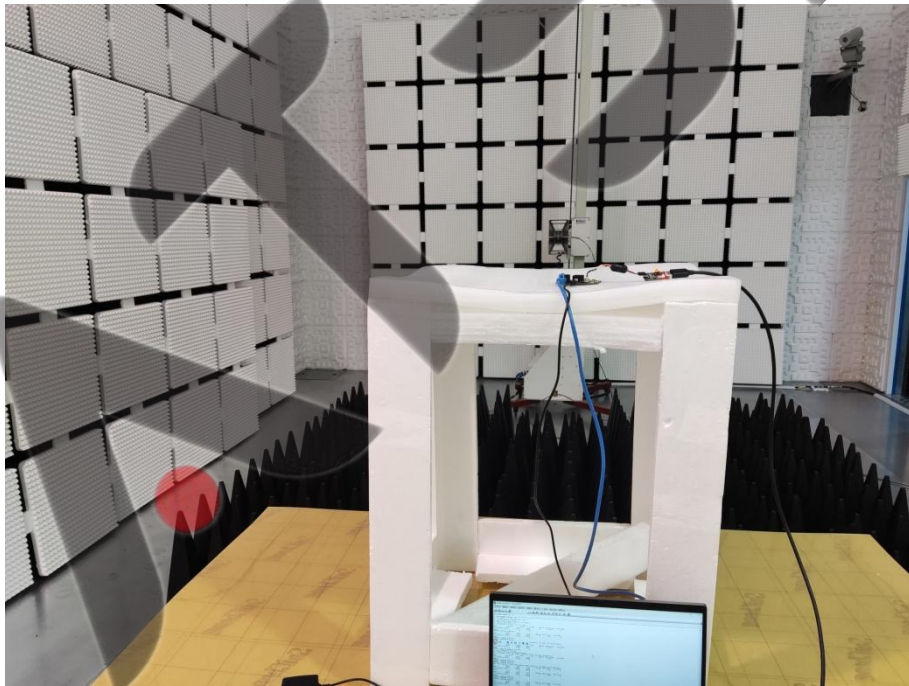
Conducted



30MHz-1000MHz



1GHz-18GHz



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