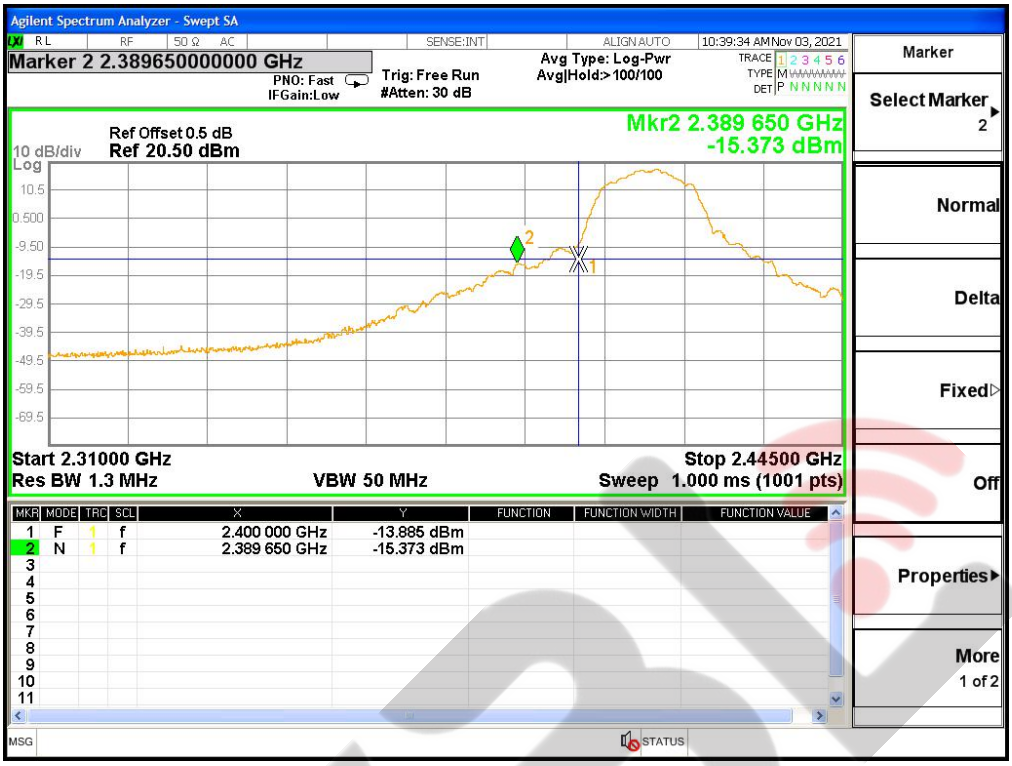
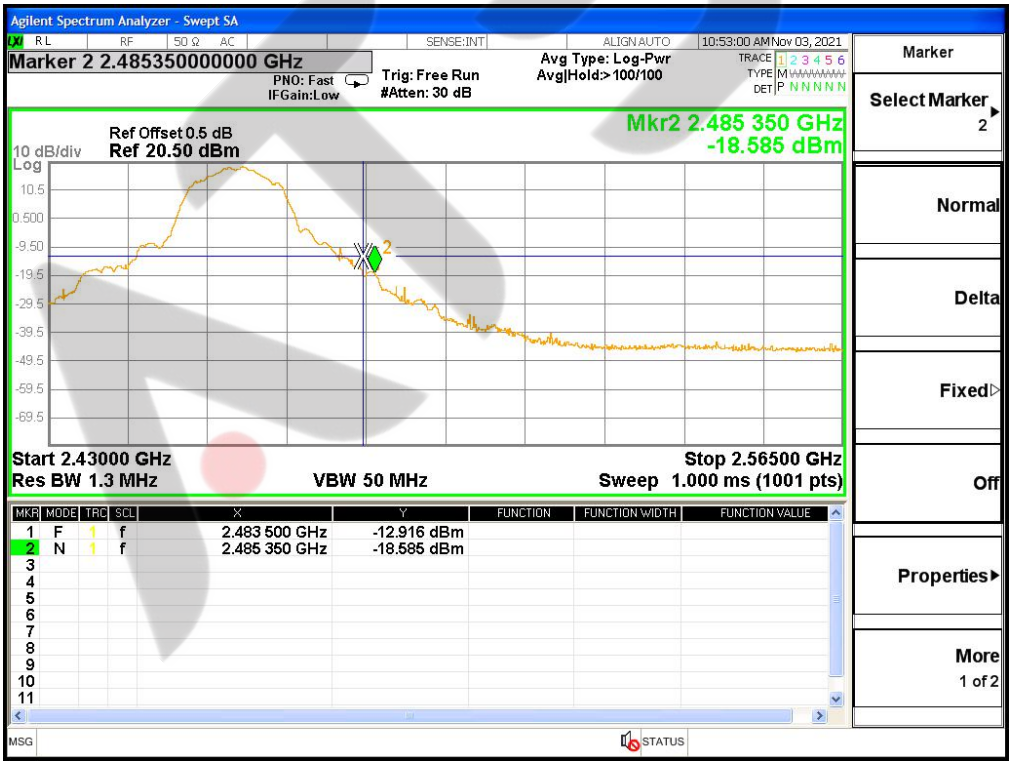
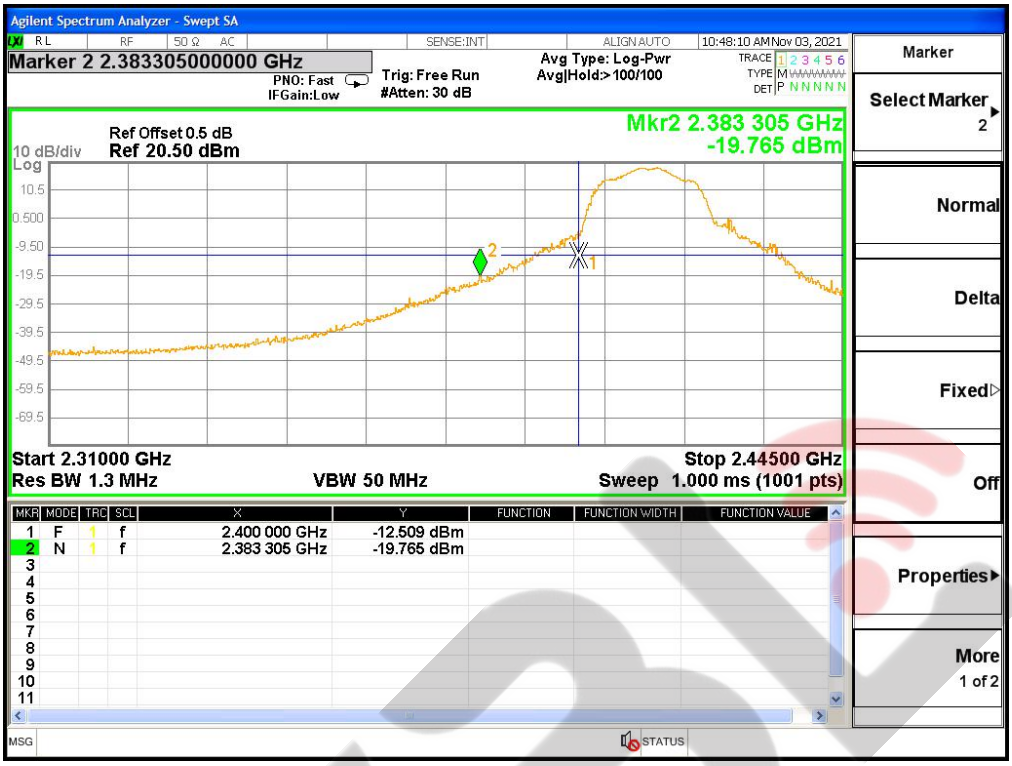
TX Mode4 Channel 1



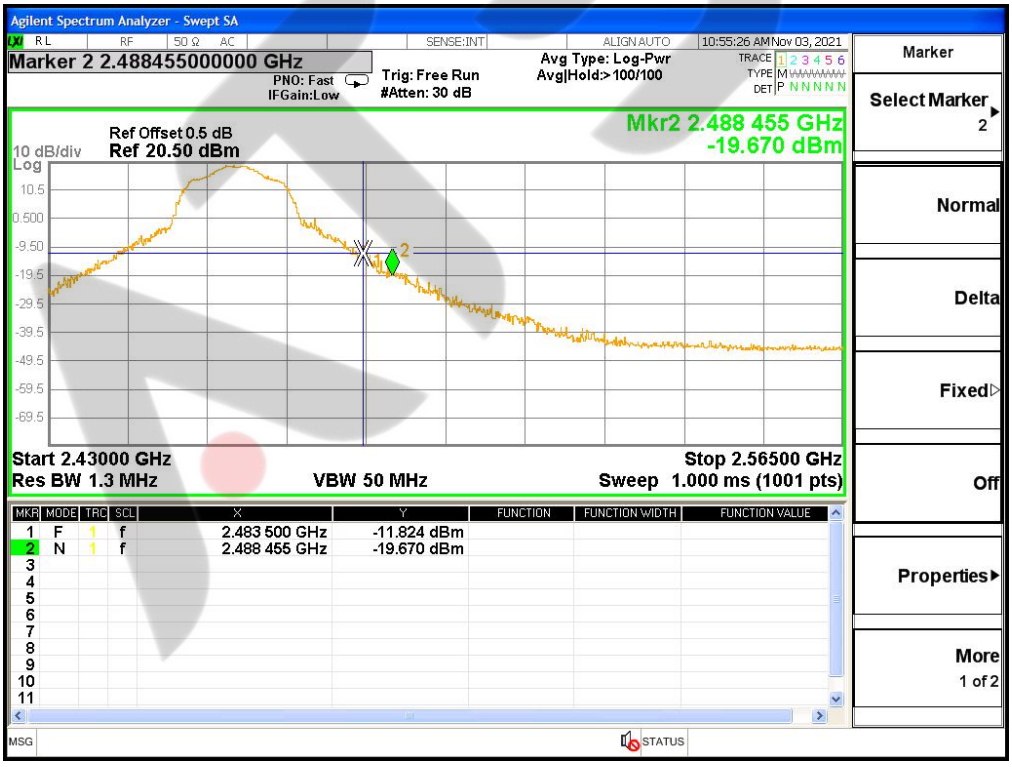
TX Mode6 Channel 11



TX Mode7 Channel 1



TX Mode9 Channel 11



5. POWER SPECTRAL DENSITY TEST

5.1 LIMIT

FCC Part15.247 , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(e) RSS-247 Clause 5.2(b)	Power Spectral Density	≤8 dBm (RBW ≥3KHz)	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 kHz ≥ RBW ≥3 kHz.
4. Set the VBW ≥ 3 x 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

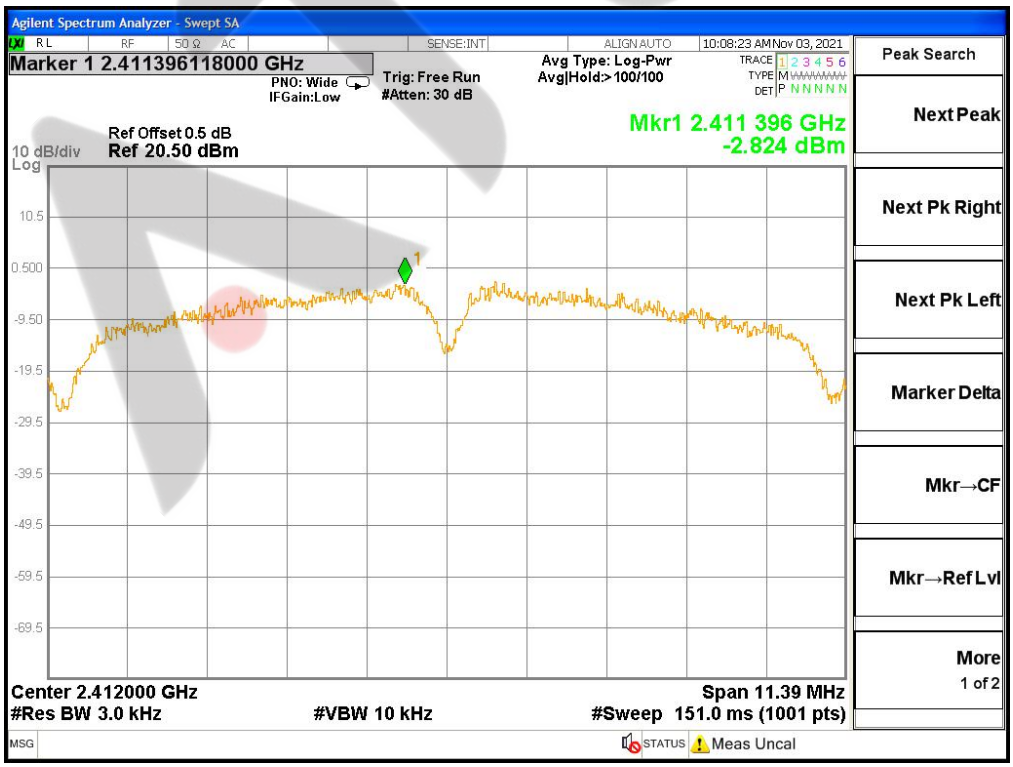
Please refer to section 3.1.4 of this report.

5.6 TEST RESULTS

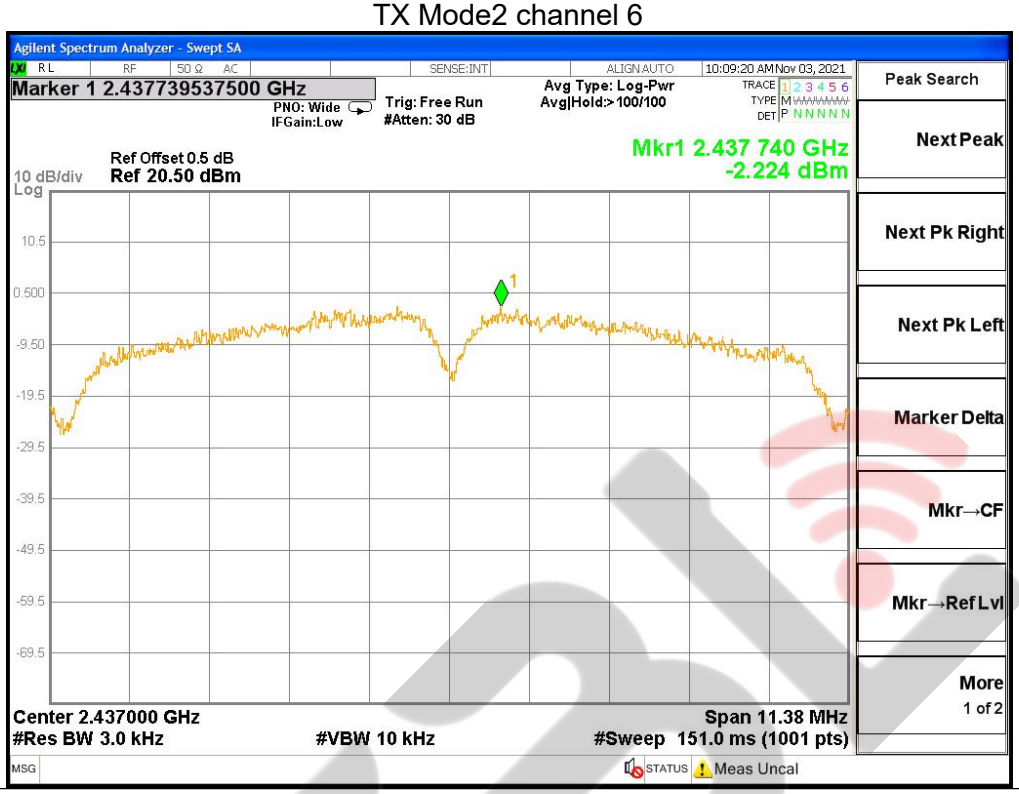
Temperature:	25℃	Relative Humidity:	60%RH
Test Voltage:	AC120V	Test Mode:	TX Mode1/2/3/4/5/6/7/8/9

Test mode	Frequency	Power Density (dBm/3kHz)	Limit (3KHz/dBm)	Result
Mode1	2412 MHz	-2.824	≤8	PASS
Mode2	2437 MHz	-2.224	≤8	PASS
Mode3	2462 MHz	-1.939	≤8	PASS
Mode4	2412 MHz	-4.154	≤8	PASS
Mode5	2437 MHz	-3.520	≤8	PASS
Mode6	2462 MHz	-3.075	≤8	PASS
Mode7	2412 MHz	-2.787	≤8	PASS
Mode8	2437 MHz	-2.638	≤8	PASS
Mode9	2462 MHz	-2.236	≤8	PASS

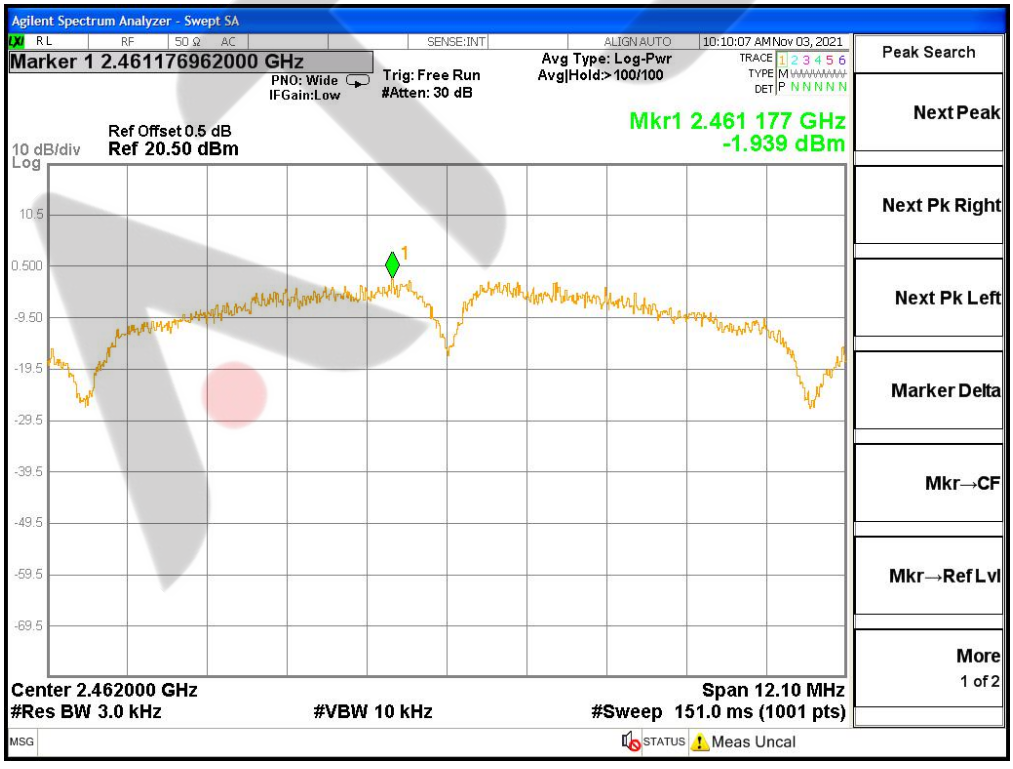
TX Mode1 channel 1



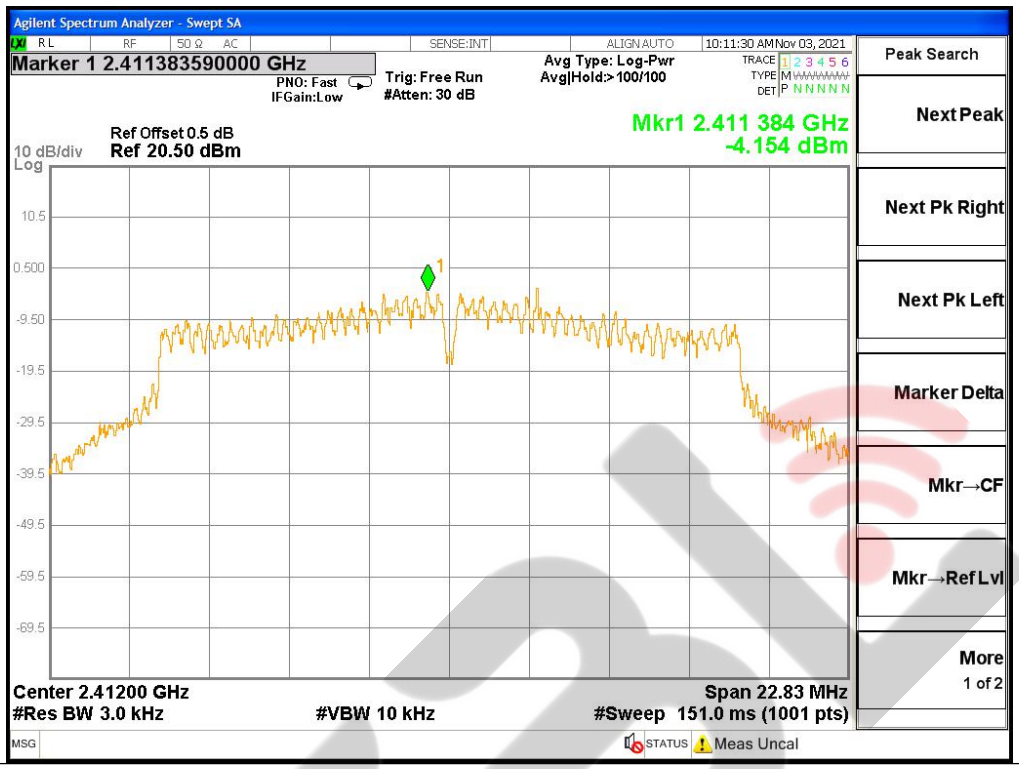
TX Mode2 channel 6



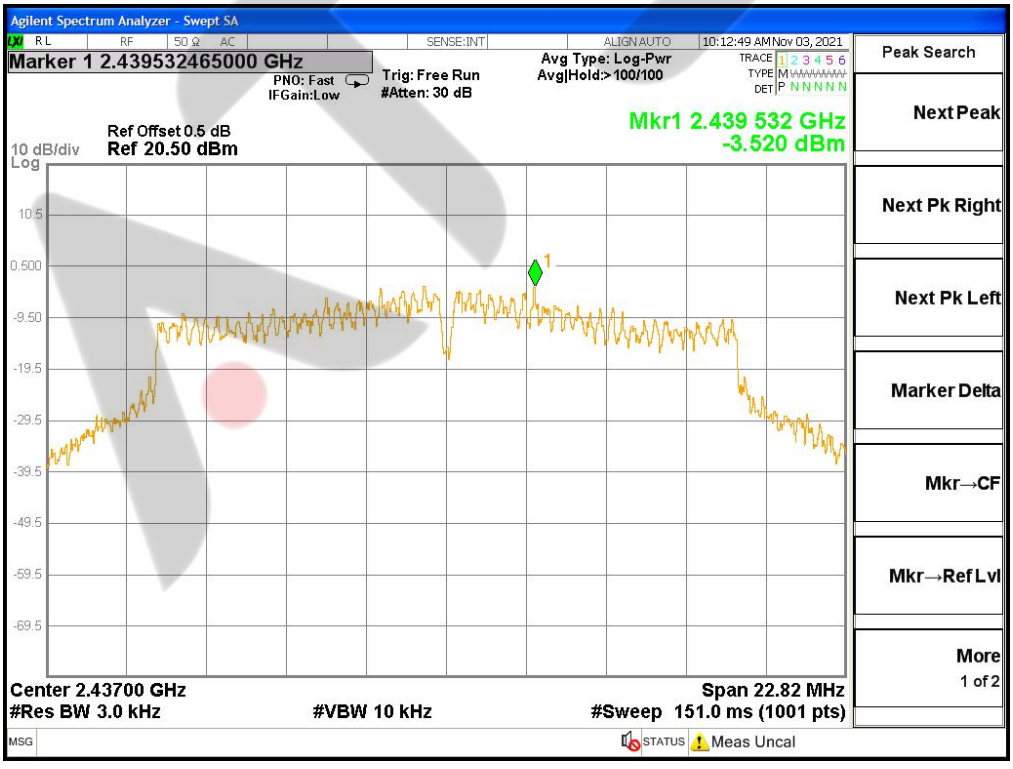
TX Mode3 channel 11



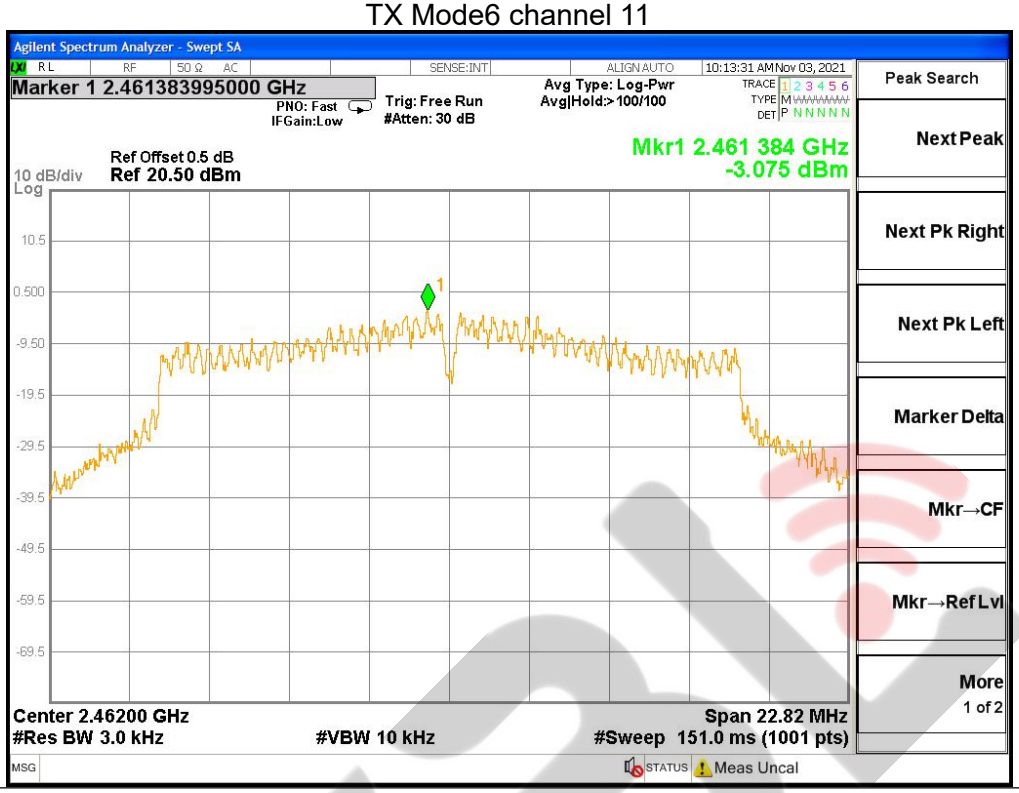
TX Mode4 channel 1



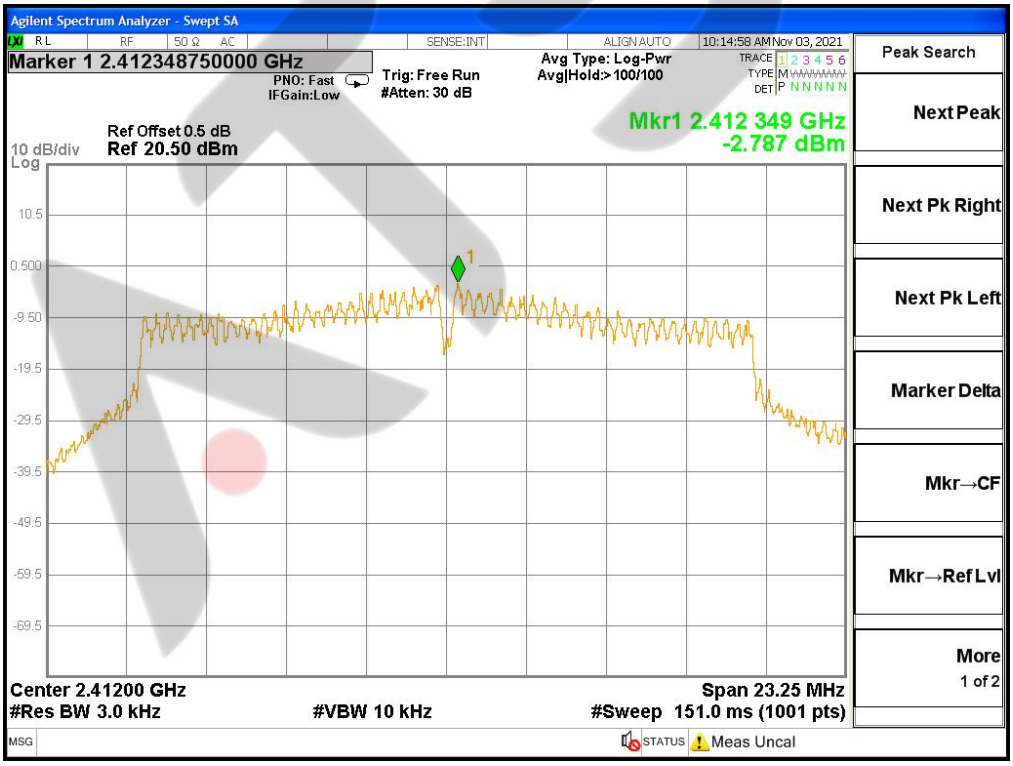
TX Mode5 channel 6



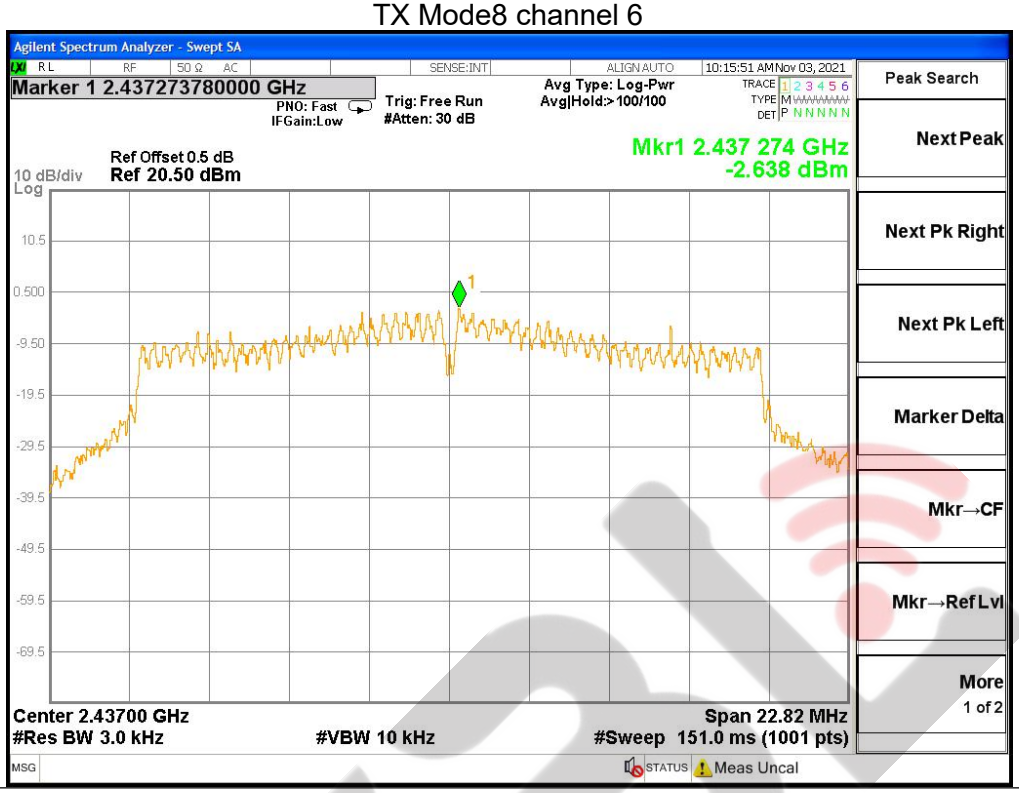
TX Mode6 channel 11



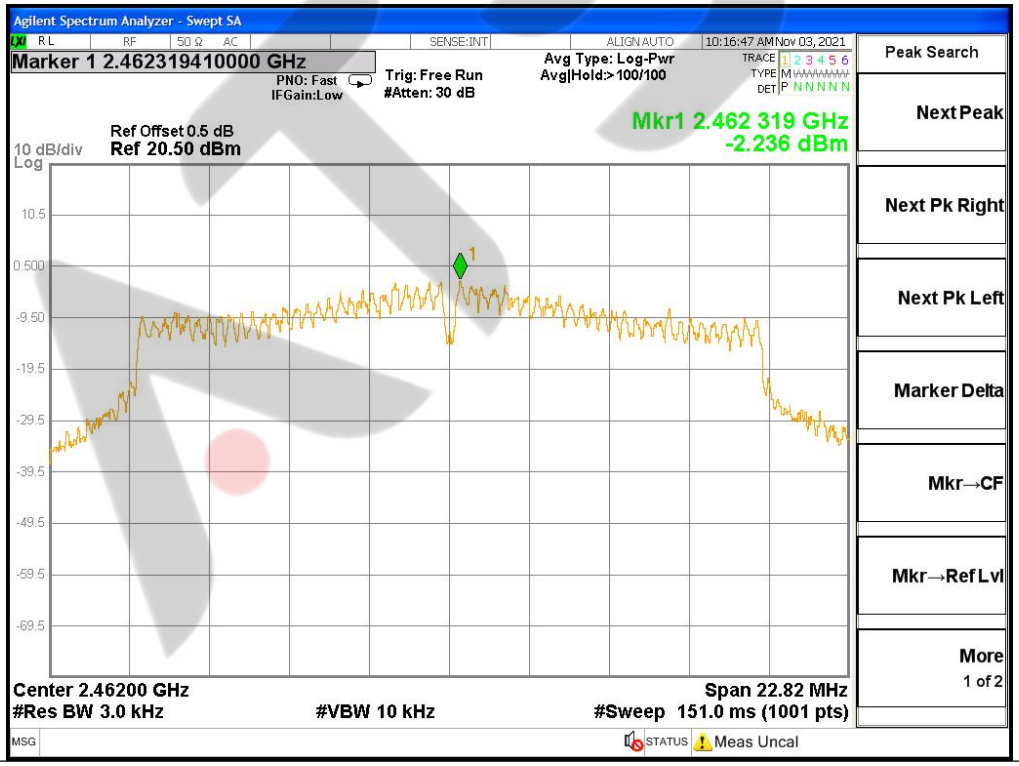
TX Mode7 channel 1



TX Mode8 channel 6



TX Mode9 channel 11



6. BANDWIDTH TEST

6.1 LIMIT

FCC Part15.247,Subpart C RSS-Gen Clause 6.7				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(a)(2) RSS-247 5.2 (a)	Bandwidth	≥500KHz (6dB bandwidth)	2400-2483.5	PASS
RSS-Gen Clause 6.7	99% Bandwidth	For reporting purposes only.	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

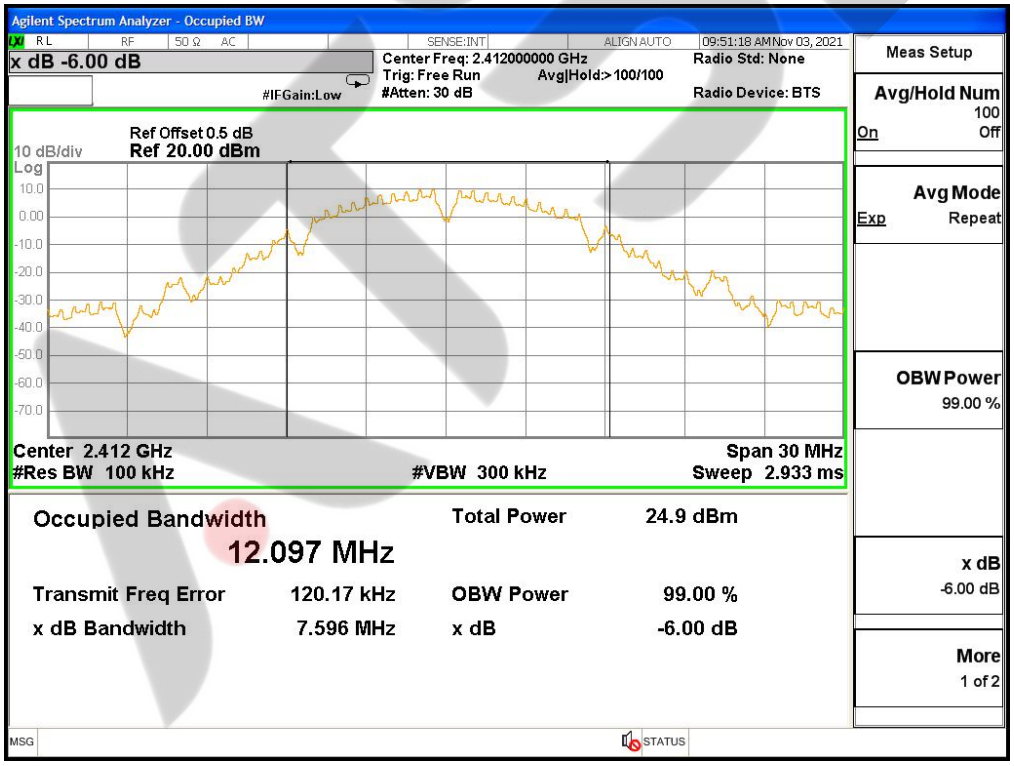
Please refer to section 3.1.4 of this report.

6.6 TEST RESULTS

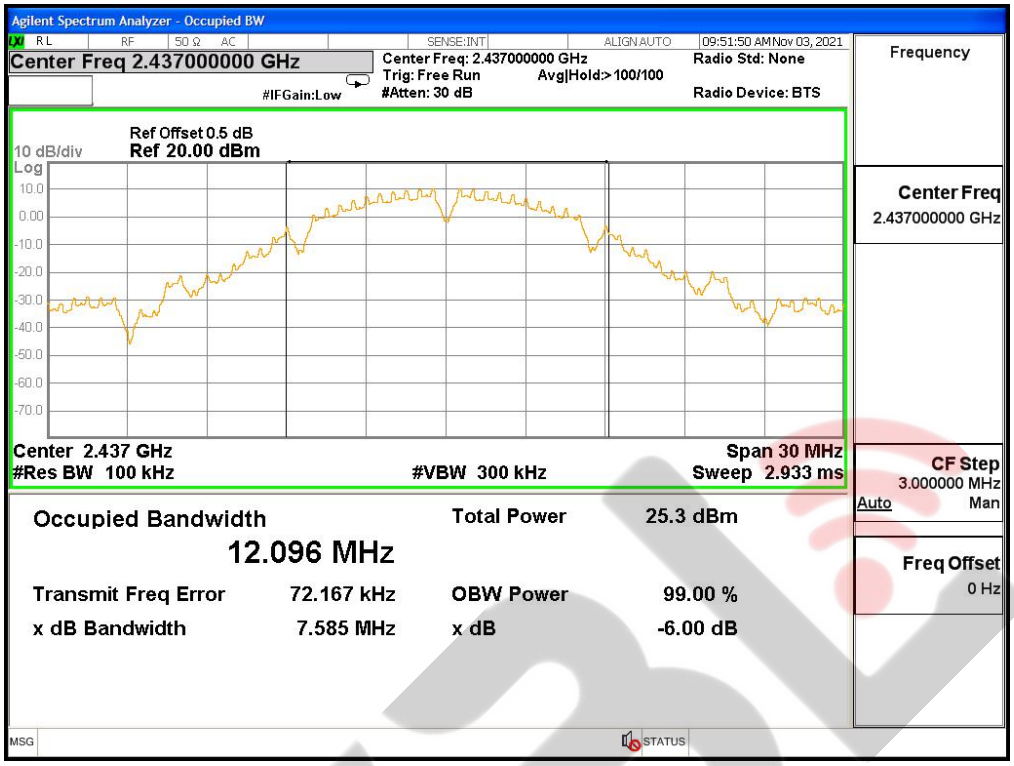
Temperature:	25℃	Relative Humidity:	60%RH
Test Voltage:	AC120V	Test Mode:	TX Mode1/2/3/4/5/6/7/8/9

Test mode	Frequency	6dB Bandwidth (MHz)	99% Bandwidth (MHz)	6dB Bandwidth Limit(KHz)	Result
Mode1	2412 MHz	7.596	12.063	≥500KHz	PASS
Mode2	2437 MHz	7.585	12.150	≥500KHz	PASS
Mode3	2462 MHz	8.069	12.193	≥500KHz	PASS
Mode4	2412 MHz	15.22	18.429	≥500KHz	PASS
Mode5	2437 MHz	15.21	18.326	≥500KHz	PASS
Mode6	2462 MHz	15.21	18.105	≥500KHz	PASS
Mode7	2412 MHz	15.50	19.523	≥500KHz	PASS
Mode8	2437 MHz	15.21	19.329	≥500KHz	PASS
Mode9	2462 MHz	15.21	19.180	≥500KHz	PASS

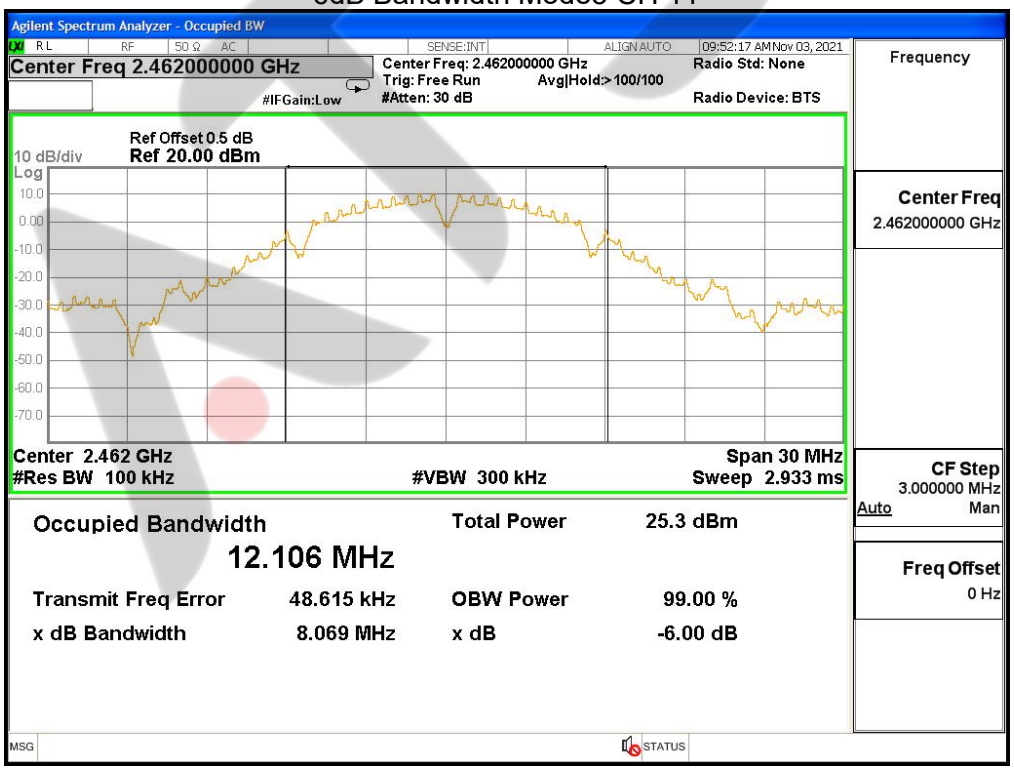
6dB Bandwidth Mode1 CH 01



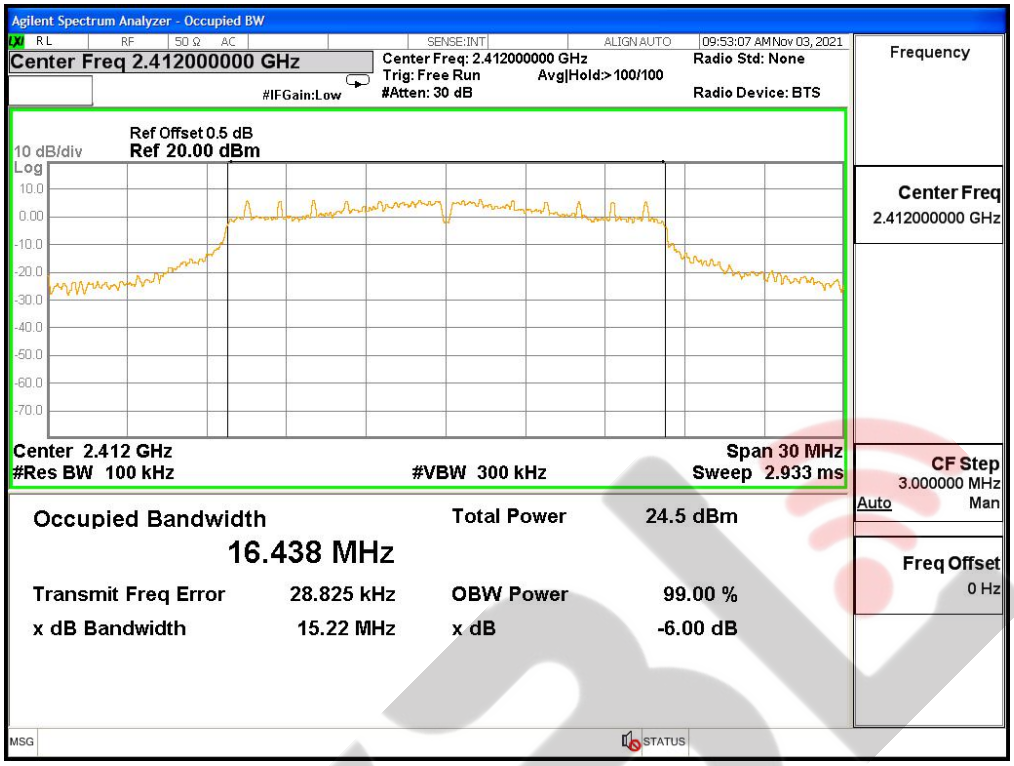
6dB Bandwidth Mode2 CH 06



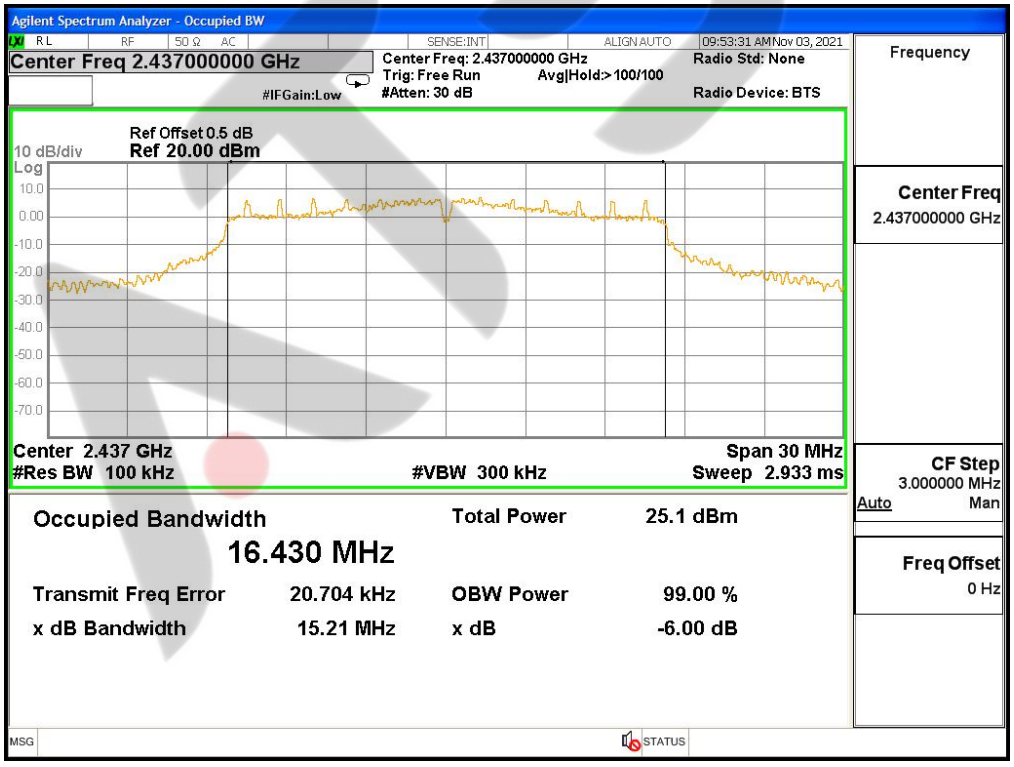
6dB Bandwidth Mode3 CH 11



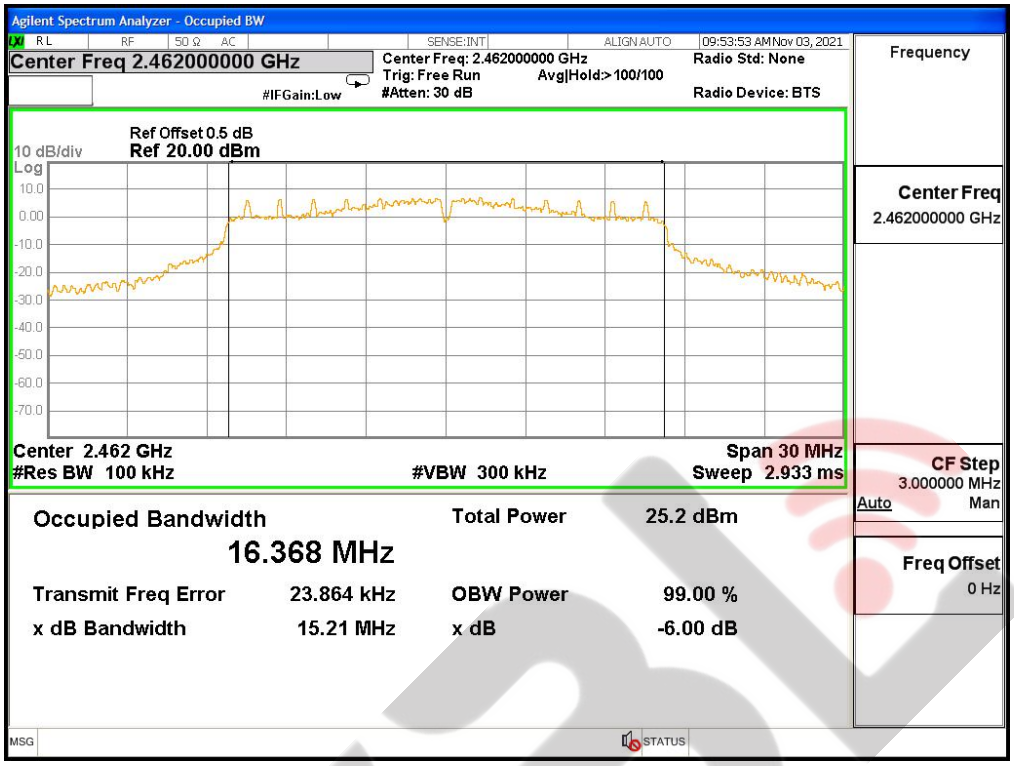
6dB Bandwidth Mode4 CH 01



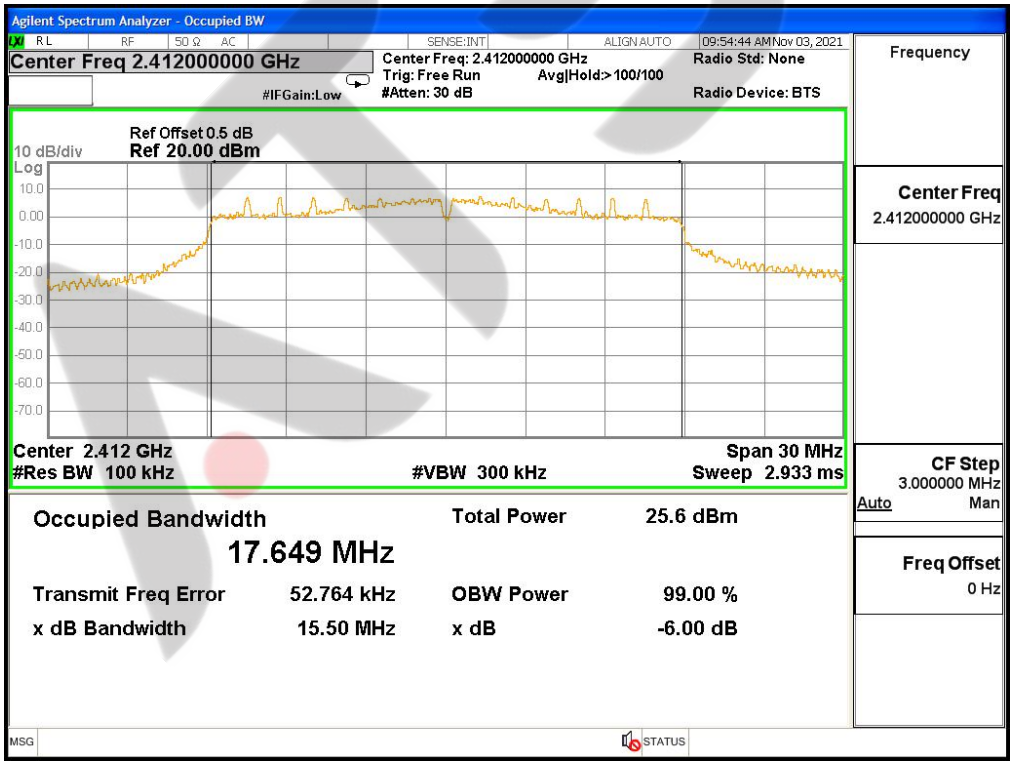
6dB Bandwidth Mode5 CH 06



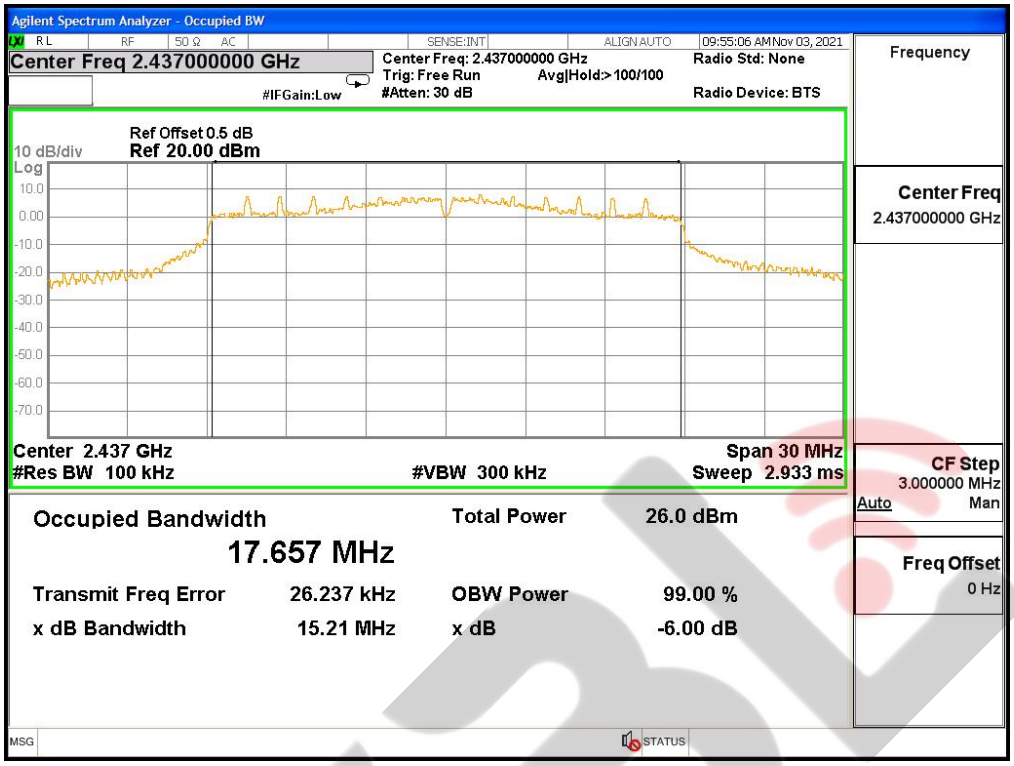
6dB Bandwidth Mode6 CH 11



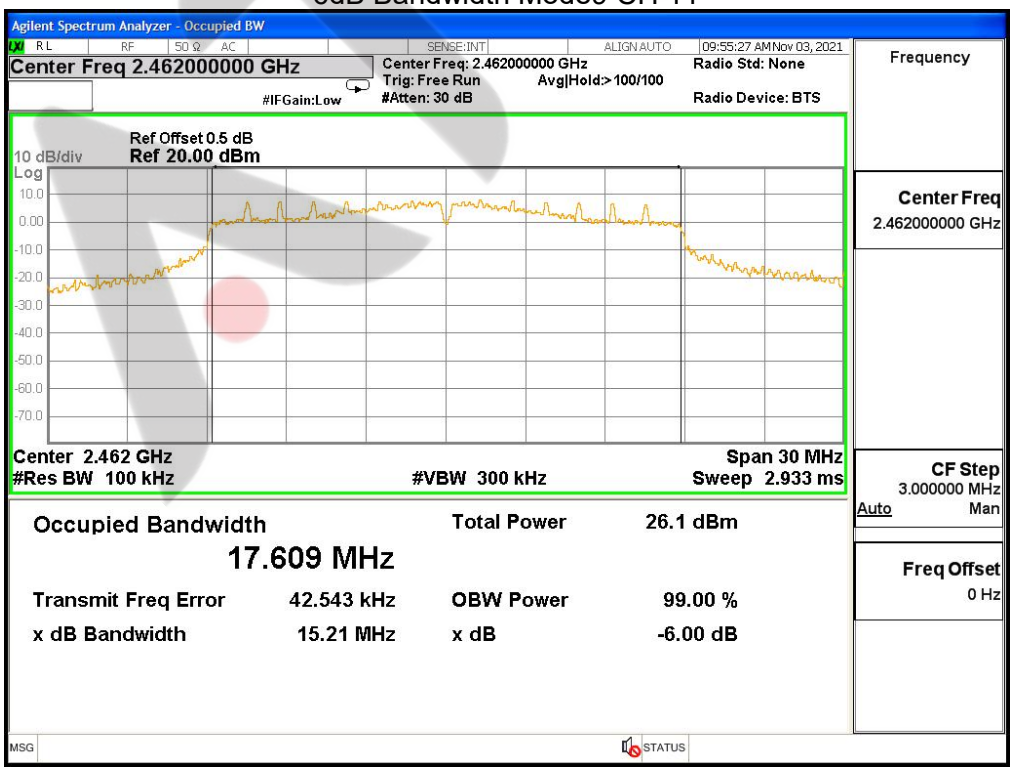
6dB Bandwidth Mode7 CH 01



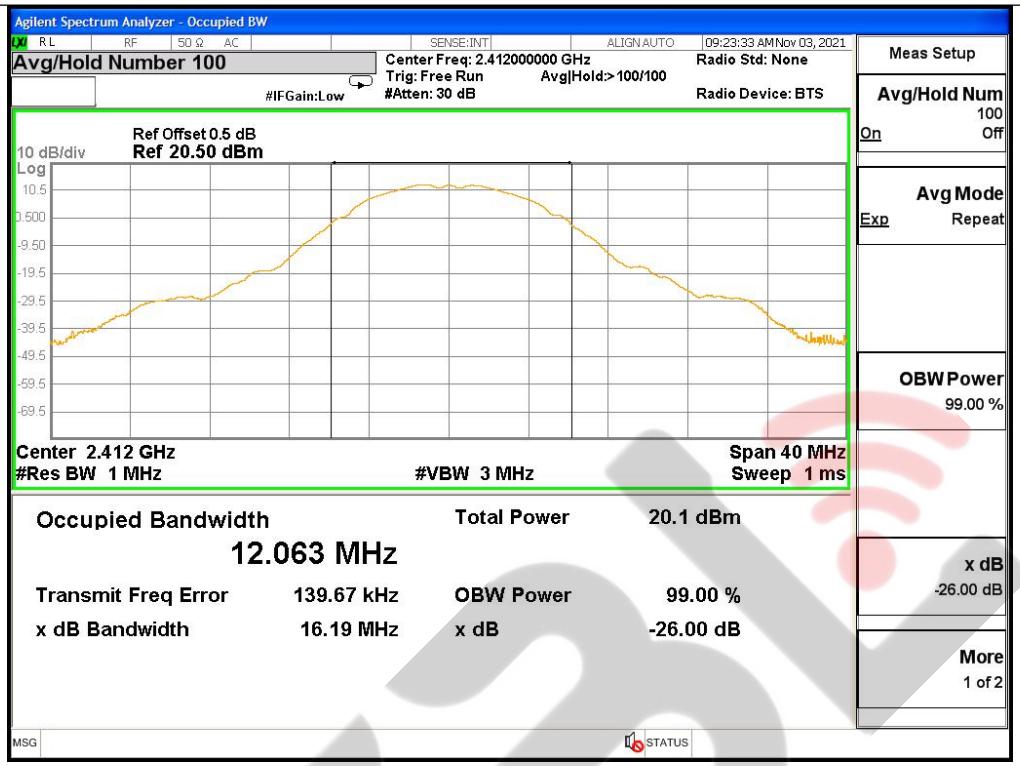
6dB Bandwidth Mode8 CH 06



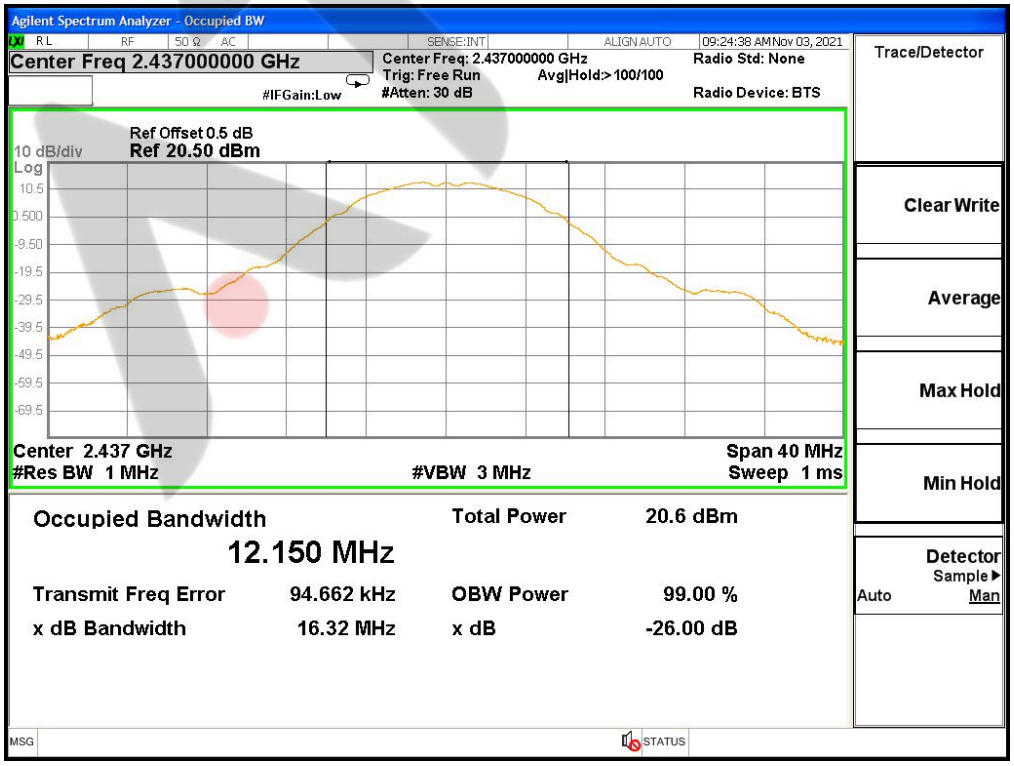
6dB Bandwidth Mode9 CH 11



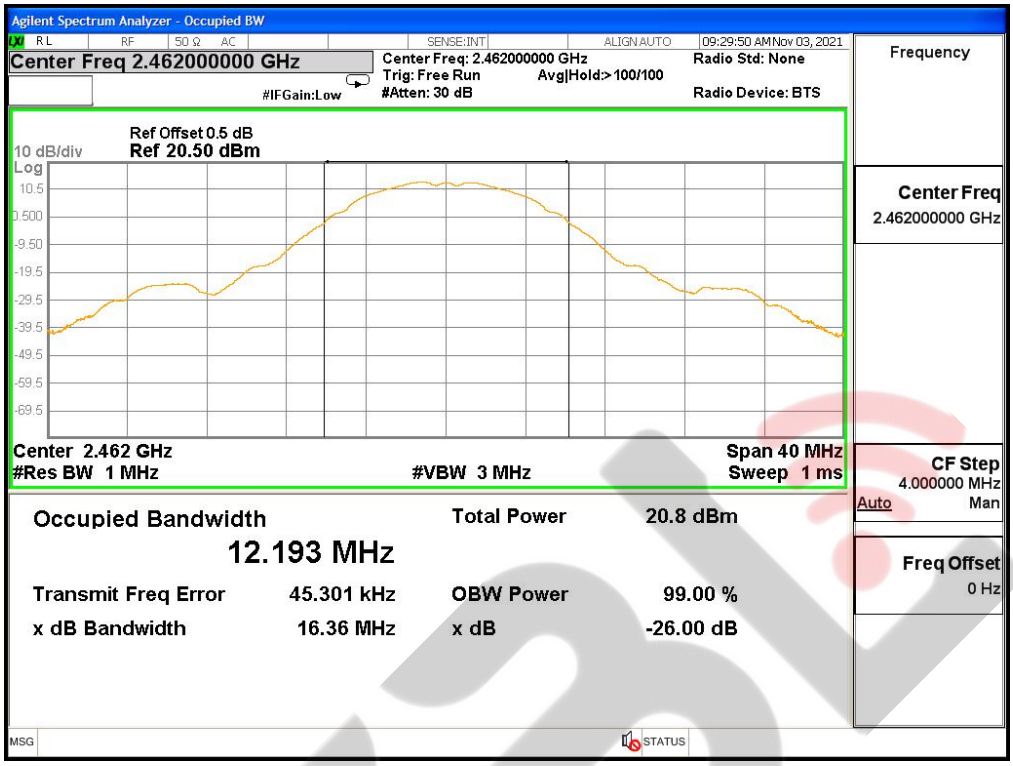
99% Bandwidth Mode1 CH 01



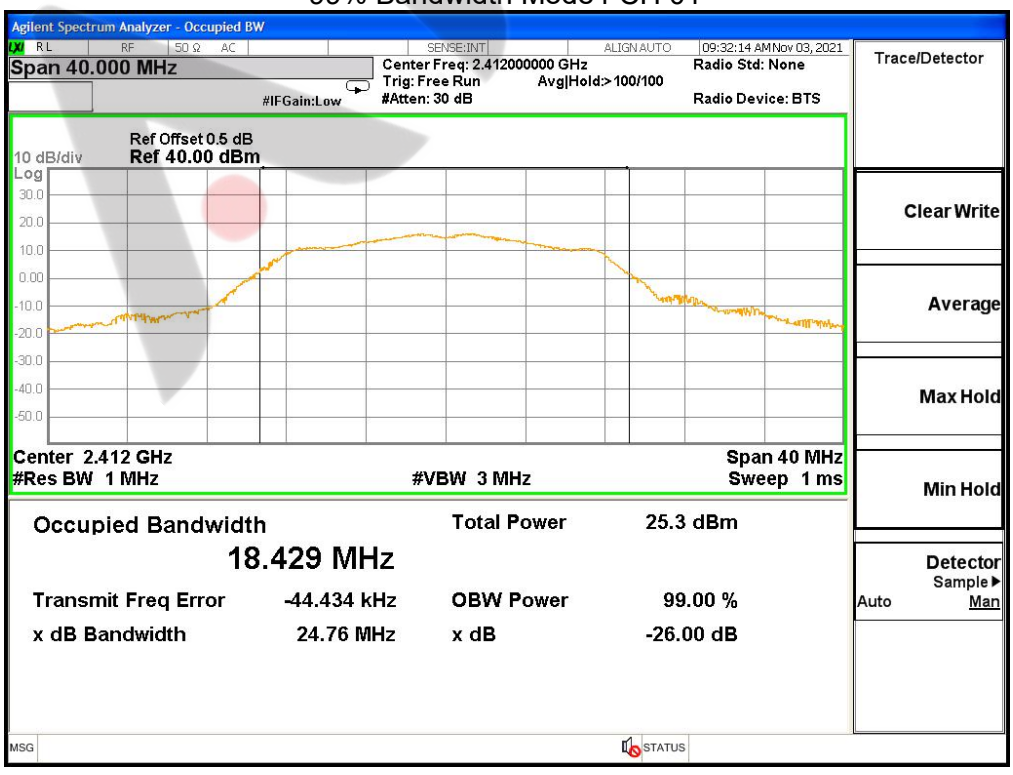
99% Bandwidth Mode2 CH 06



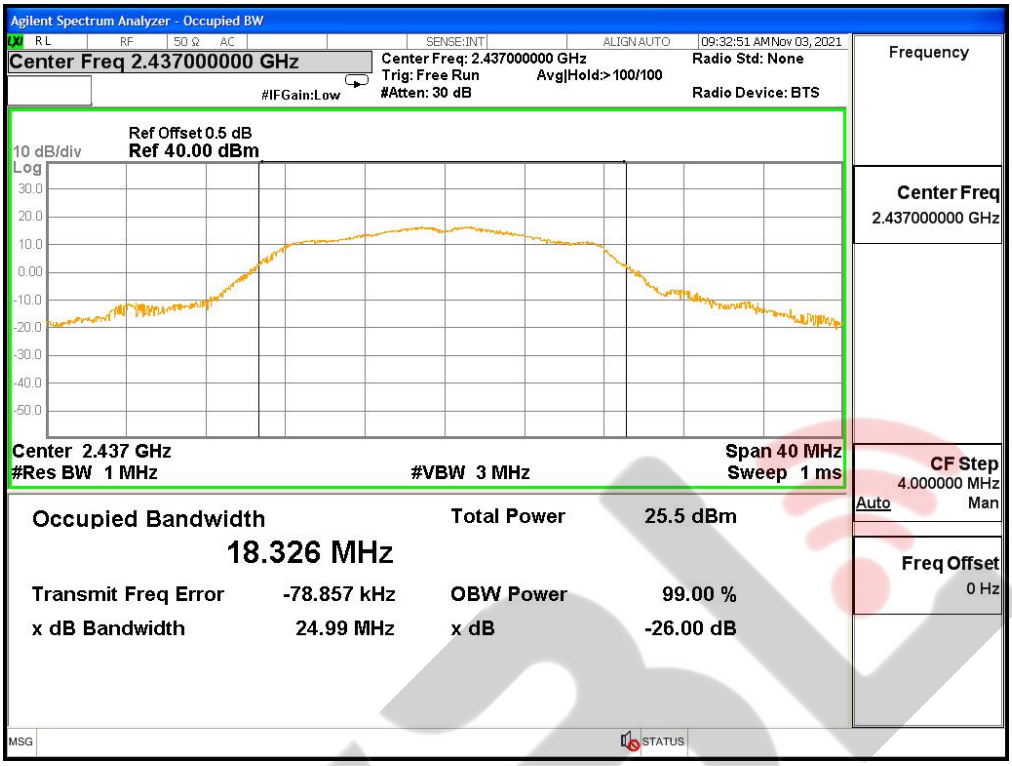
99% Bandwidth Mode3 CH 11



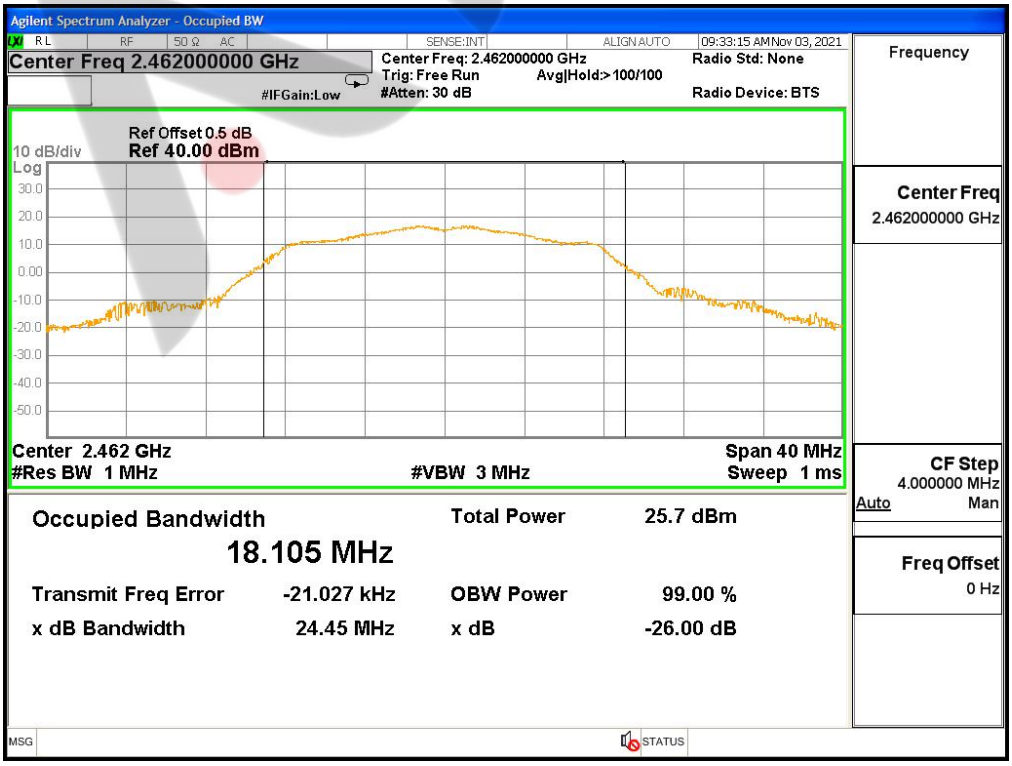
99% Bandwidth Mode4 CH 01



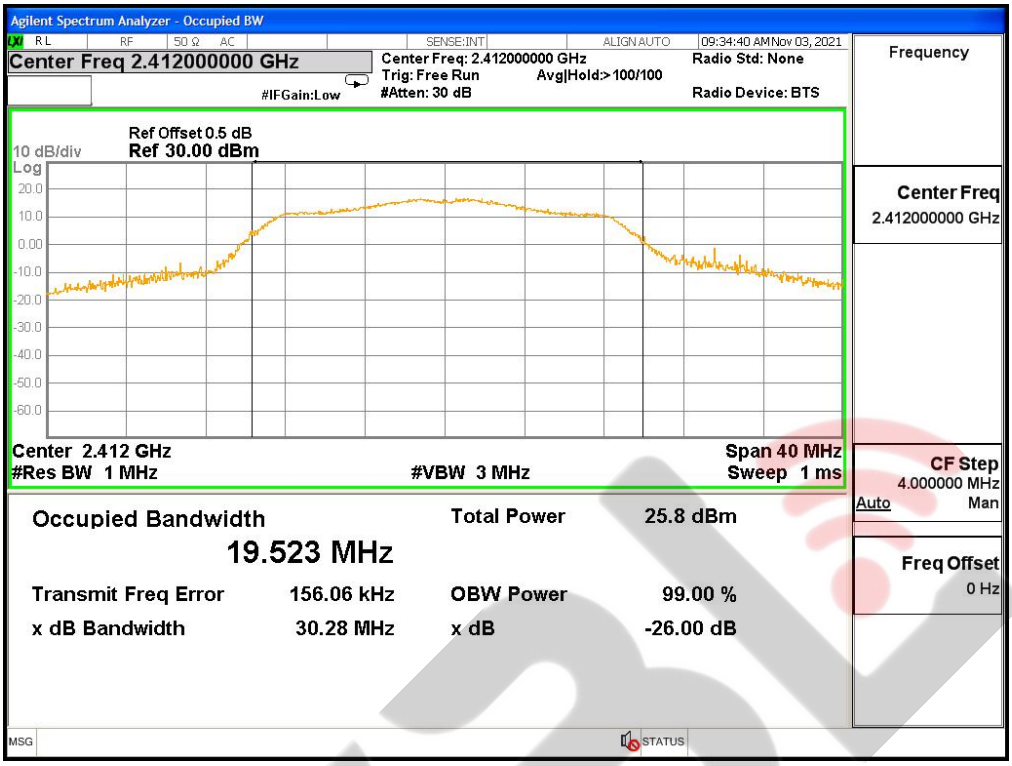
99% Bandwidth Mode5 CH 06



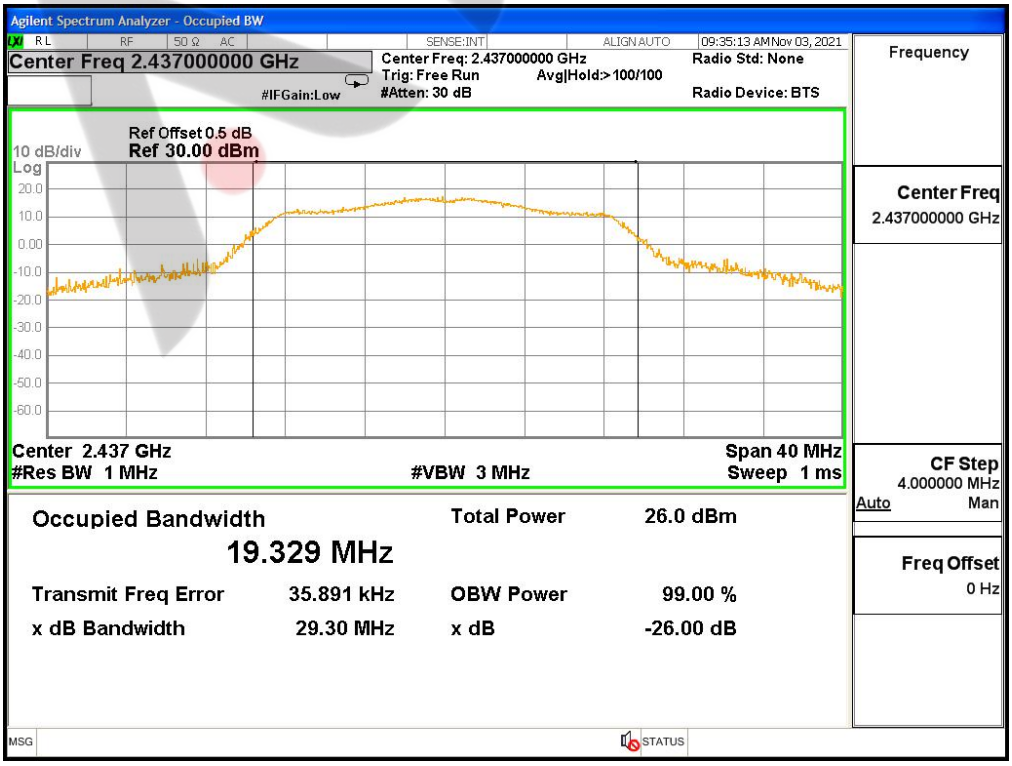
99% Bandwidth Mode6 CH 11



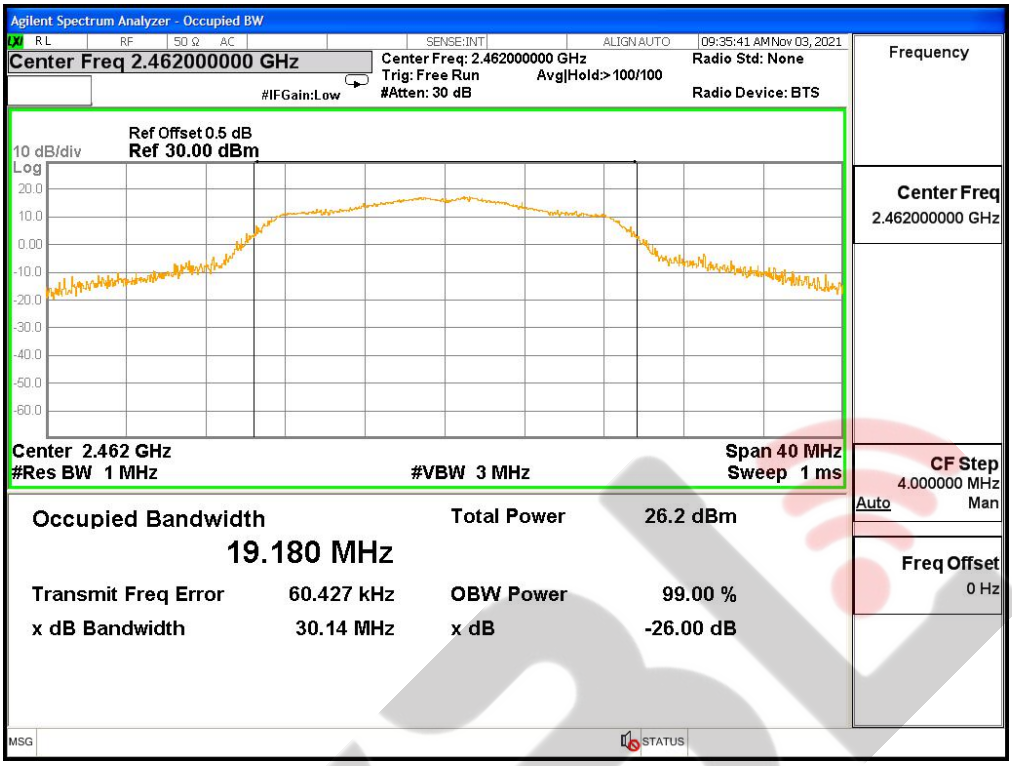
99% Bandwidth Mode7 CH 01



99% Bandwidth Mode8 CH 06



99% Bandwidth Mode9 CH 11



7. PEAK OUTPUT POWER TEST

7.1 LIMIT

FCC Part15.247				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(b)(3) RSS-247 Clause 5.4(d)	Output Power	1 watt or 30dBm	2400-2483.5	PASS
RSS-247	EIRP	4W	2400-2483.5	PASS

7.2 TEST PROCEDURE

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%RH
Test Voltage:	AC120V	Test Mode:	TX Mode1/2/3/4/5/6/7/8/9

Test mode	Test Channel	Frequency	Peak Conducted Output Power	Average Conducted Output Power	LIMIT
		(MHz)	(dBm)	(dBm)	dBm
Mode1	CH01	2412	24.80	17.17	30
Mode2	CH06	2437	25.25	17.74	30
Mode3	CH11	2462	25.34	17.78	30
Mode4	CH01	2412	24.39	17.20	30
Mode5	CH06	2437	24.97	17.70	30
Mode6	CH11	2462	25.11	18.04	30
Mode7	CH01	2412	25.30	17.78	30

Mode8	CH06	2437	25.70	18.33	30
Mode9	CH11	2462	26.14	18.57	30

Test Mode	Frequency	Peak Conducted Output Power	Antenna Gain	EIRP Power	LIMIT
	(MHz)	(dBm)	(dBi)	(dBm)	dBm
Mode1	2412	24.80	2	26.80	36
Mode2	2437	25.25	2	27.25	36
Mode3	2462	25.34	2	27.34	36
Mode4	2412	24.39	2	26.39	36
Mode5	2437	24.97	2	26.97	36
Mode6	2462	25.11	2	27.11	36
Mode7	2412	25.30	2	27.30	36
Mode8	2437	25.70	2	27.70	36
Mode9	2462	26.14	2	28.14	36

Note: Our power sensor test AVG power has no duty cycle display. The power sensor measures AVG power is Burst power. The software has considered the factor of the duty cycle factor, so it is unnecessary to add it again.

8. ANTENNA REQUIREMENT

8.1 STANDARD REQUIREMENT

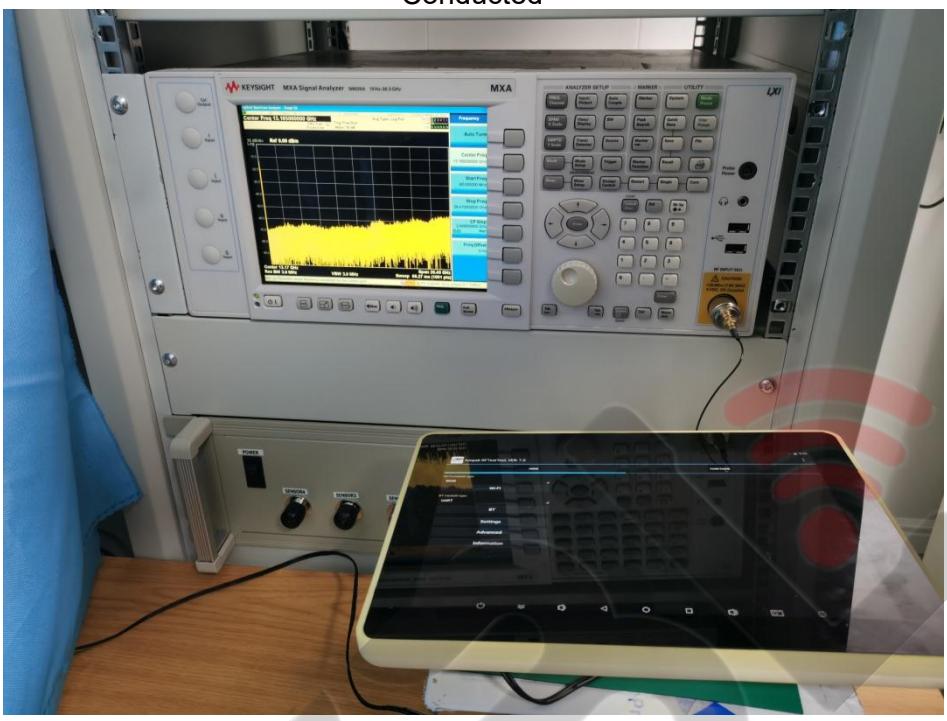
15.203 requirement: For intentional device, according to 15.203: an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

8.2 EUT ANTENNA

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

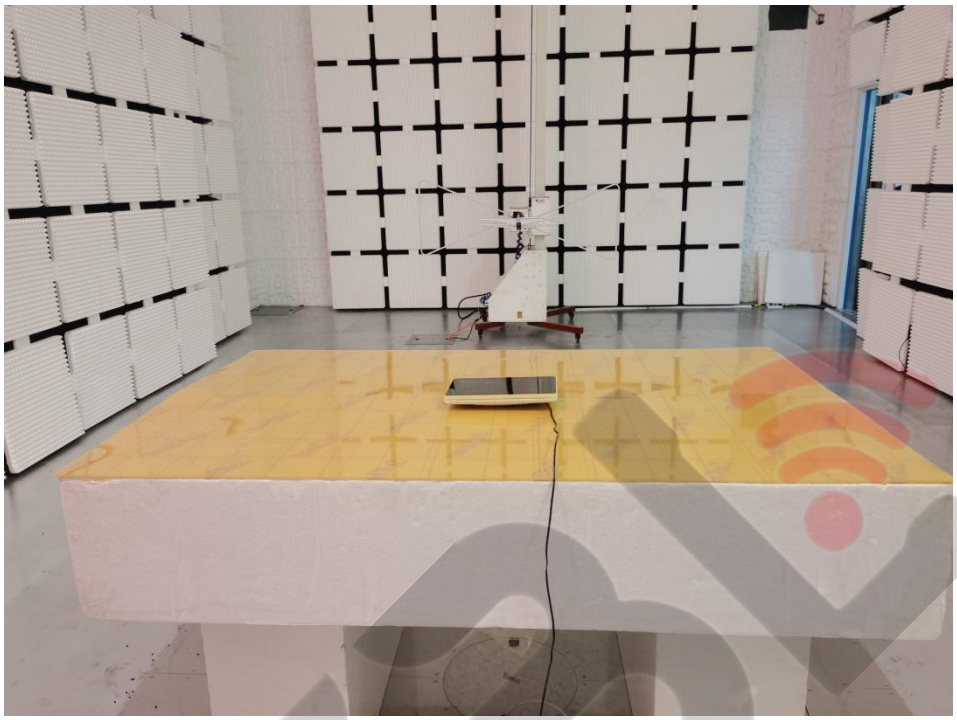
APPENDIX-PHOTOS OF TEST SETUP

Conducted

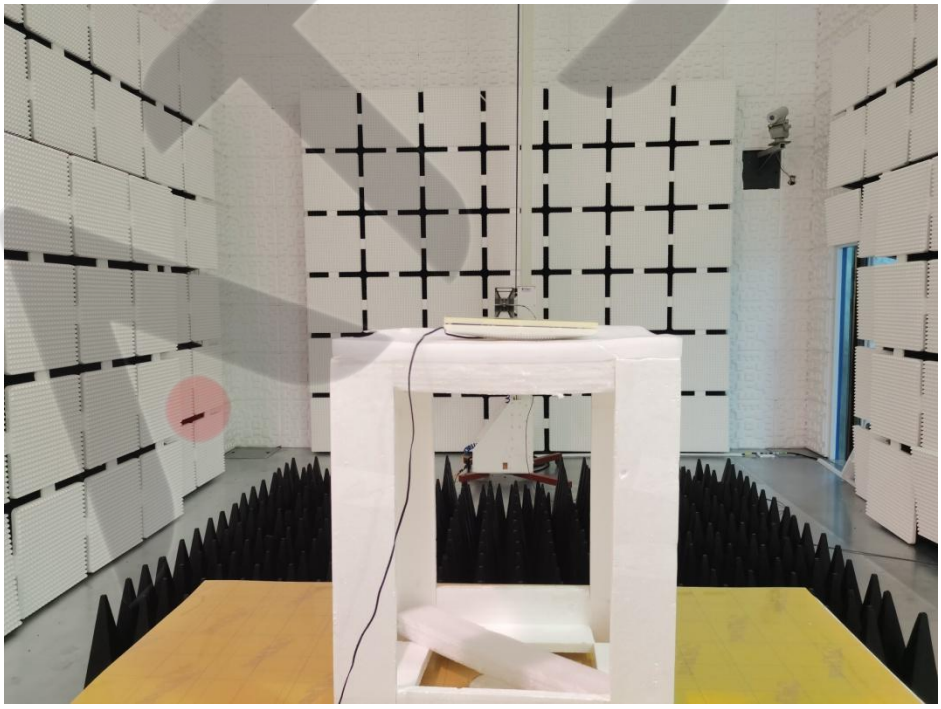


Radiation emission

RSE 30MHz-1000MHz



RSE 1GHz-18GHz



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