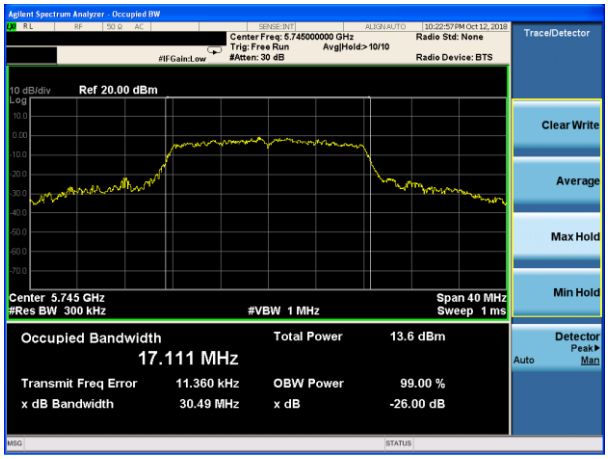
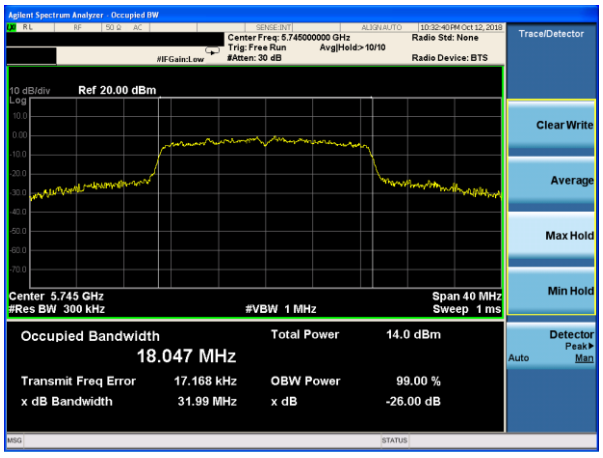
Test plot

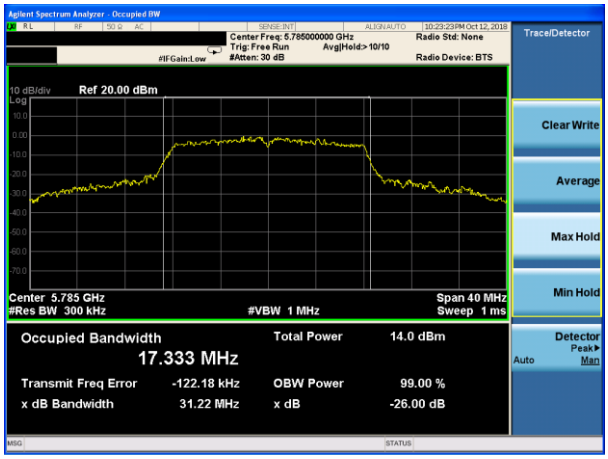
(802.11a) -26dB&99%Bandwidth plot on channel 149



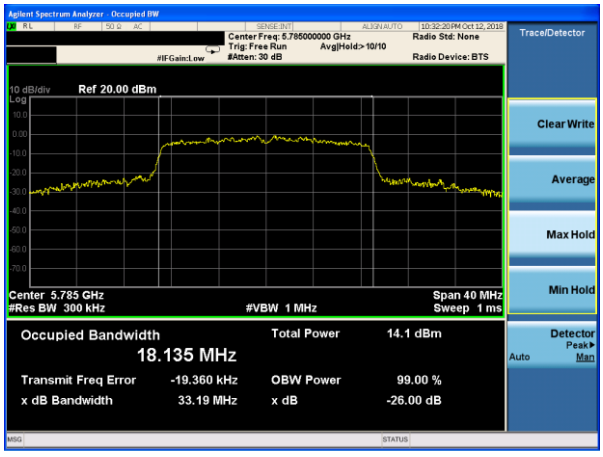
(802.11 n20) -26dB&99%Bandwidth plot on channel 149



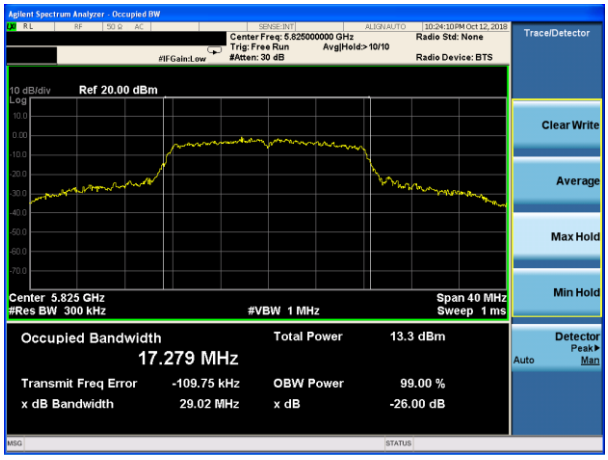
(802.11a) -26dB&99%Bandwidth plot on channel 157



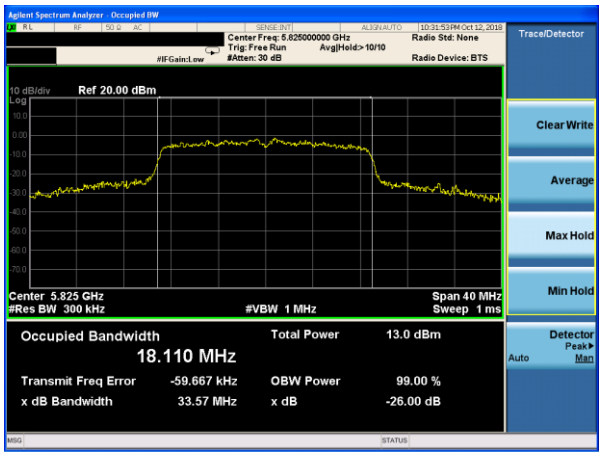
(802.11 n20) -26dB&99%Bandwidth plot on channel 157



(802.11a) -26dB&99%Bandwidth plot on channel 165



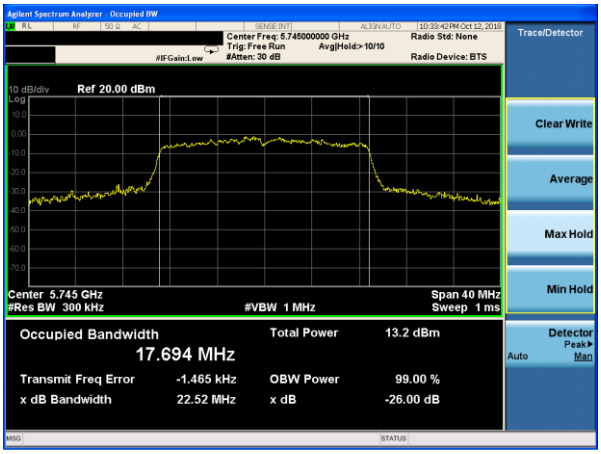
(802.11 n20) -26dB&99%Bandwidth plot on channel 165



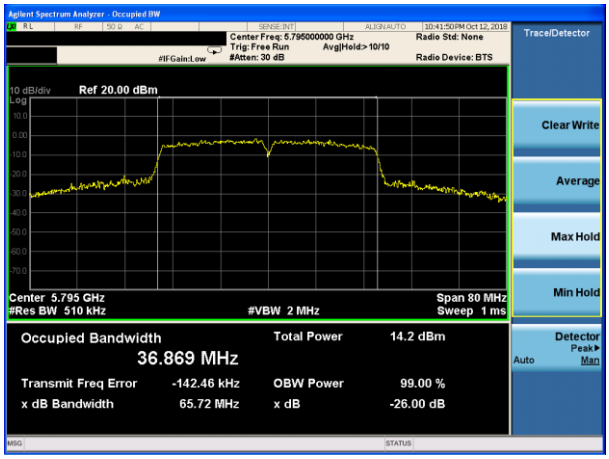
Test plot

(802.11 n40) -26dB&99%Bandwidth plot on channel 151

(802.11 ac20) -26dB&99%Bandwidth plot on channel 149

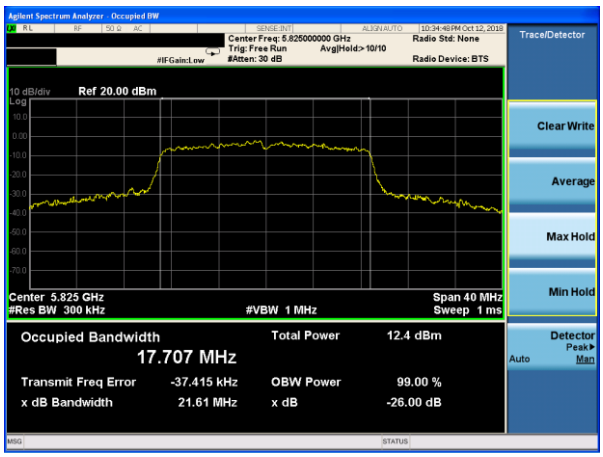


(802.11 n40) -26dB&99%Bandwidth plot on channel 159



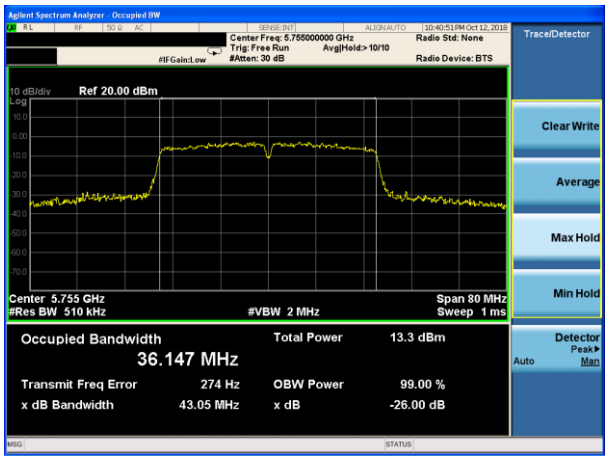
(802.11 ac20) -26dB&99%Bandwidth plot on channel 157

(802.11 ac20) -26dB&99%Bandwidth plot on channel 165

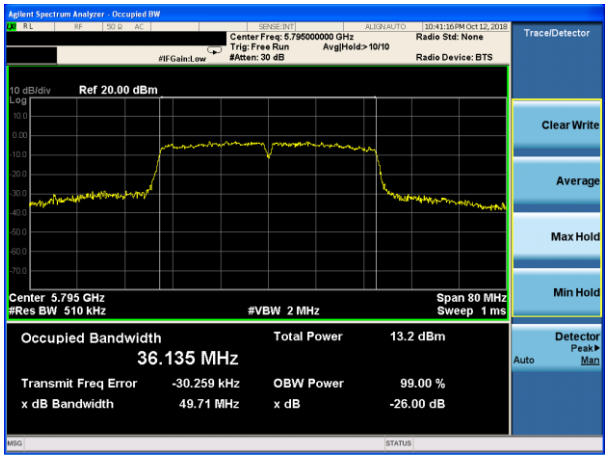


Test plot

(802.11 ac40) -26dB&99%Bandwidth plot on channel 151



(802.11 ac40) -26dB&99%Bandwidth plot on channel 159



6. MINIMUM 6 DB BANDWIDTH

6.1 APPLIED PROCEDURES / LIMIT

According to FCC §15.407(e)
(e) Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

6.2 TEST PROCEDURE

Section 15.407(e) specifies the minimum 6 dB emission bandwidth of at least 500 KHz for the band 5.715-5.85 GHz. The following procedure shall be used for measuring this bandwidth:

a) Set RBW = 100 kHz.

b) Set the video bandwidth (VBW) ≥ 3 × RBW.

c) Detector = Peak.

d) Trace mode = max hold.

e) Sweep = auto couple.

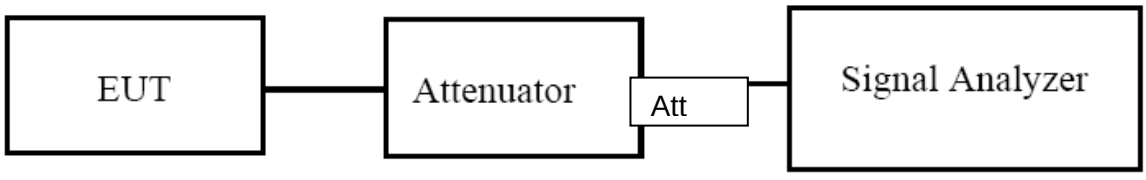
f) Allow the trace to stabilize.

g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

6.3 DEVIATION FROM STANDARD

No deviation.

6.4 TEST SETUP



6.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

6.6 TEST RESULTS

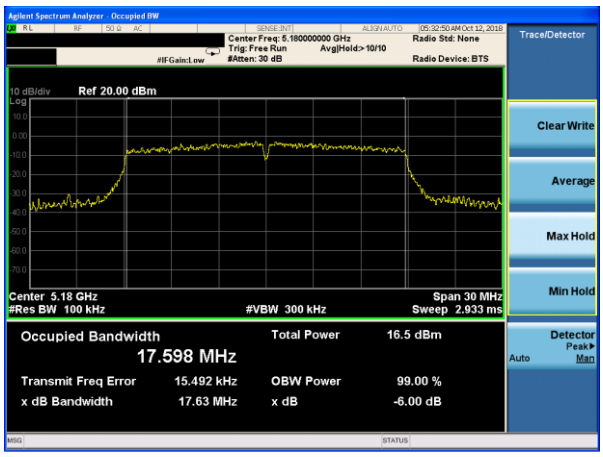
EUT：	Handheld Device	Model Name. ：	GT500V
Temperature：	25 ℃	Relative Humidity：	56%
Pressure：	1012 hPa	Test Voltage ：	DC 3.8V
Test Mode ：	TX Frequency Band I (5150-5250MHz)		

Mode	Channel	Frequency (MHz)	6dB bandwidth (MHz)	Limit (KHz)	Result
802.11a	CH36	5180	16.43	≧500	Pass
	CH40	5200	16.41	≧500	Pass
	CH48	5240	16.40	≧500	Pass
802.11 n20	CH36	5180	17.63	≧500	Pass
	CH40	5200	17.62	≧500	Pass
	CH48	5240	17.62	≧500	Pass
802.11 n40	CH 38	5190	36.35	≧500	Pass
	CH 46	5230	36.34	≧500	Pass
802.11 ac20	CH36	5180	17.43	≧500	Pass
	CH40	5200	17.35	≧500	Pass
	CH48	5240	17.70	≧500	Pass
802.11 ac40	CH 38	5190	36.39	≧500	Pass
	CH 46	5230	36.35	≧500	Pass

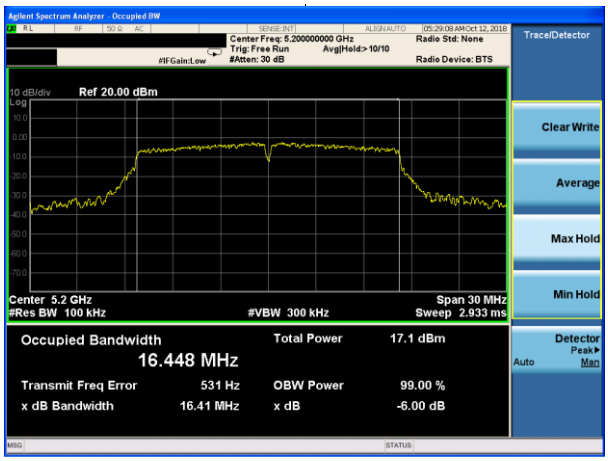
Test plot

(802.11a) 6dB Bandwidth plot on channel 36

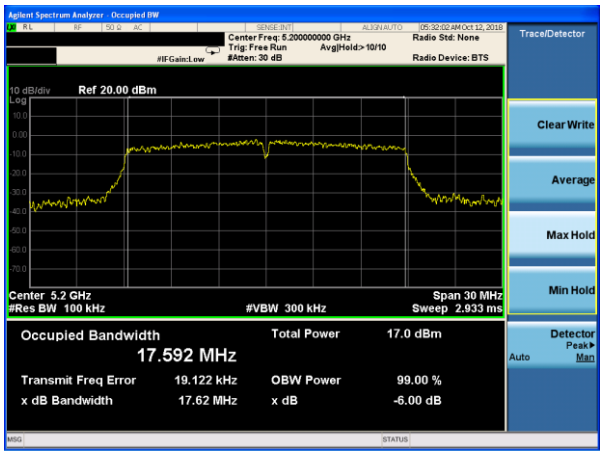
(802.11 n20) 6dB Bandwidth plot on channel 36



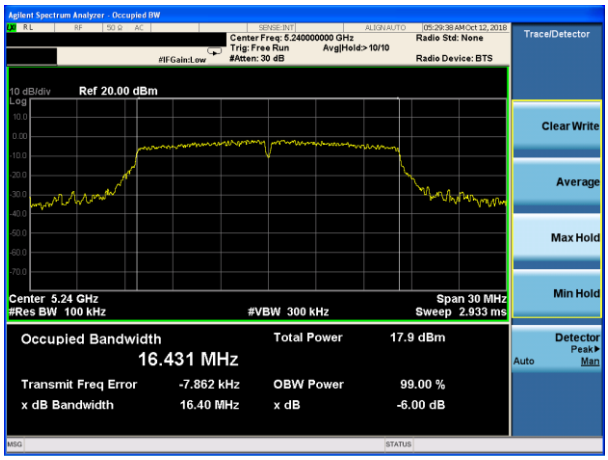
(802.11a) 6dB Bandwidth plot on channel 40



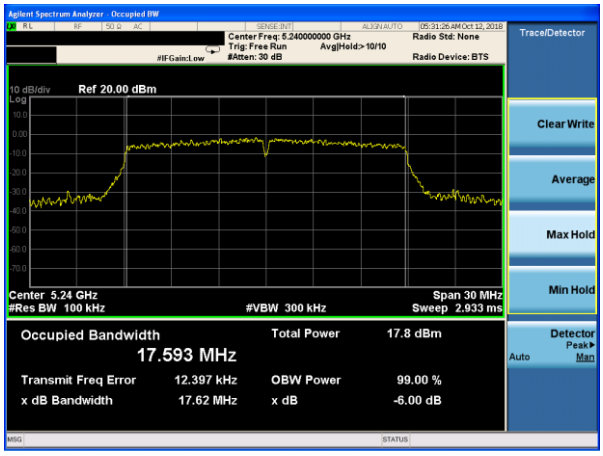
(802.11 n20) 6dB Bandwidth plot on channel 40



(802.11a) 6dB Bandwidth plot on channel 48

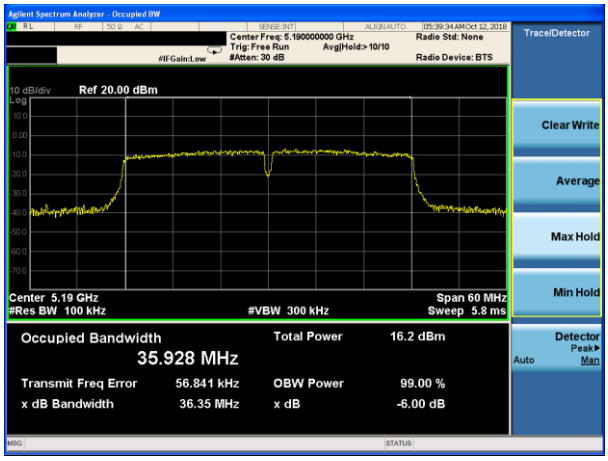


(802.11 n20) 6dB Bandwidth plot on channel 48

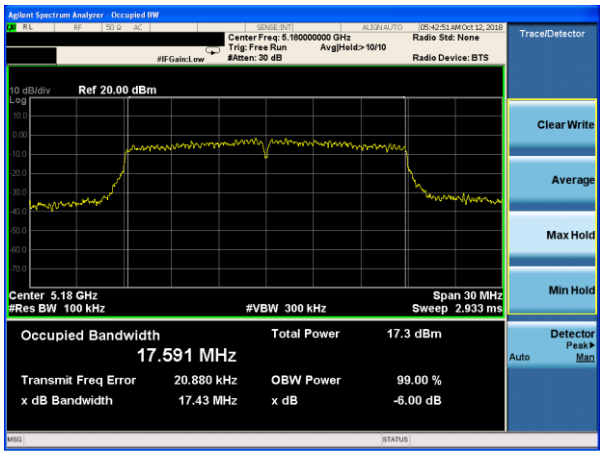


Test plot

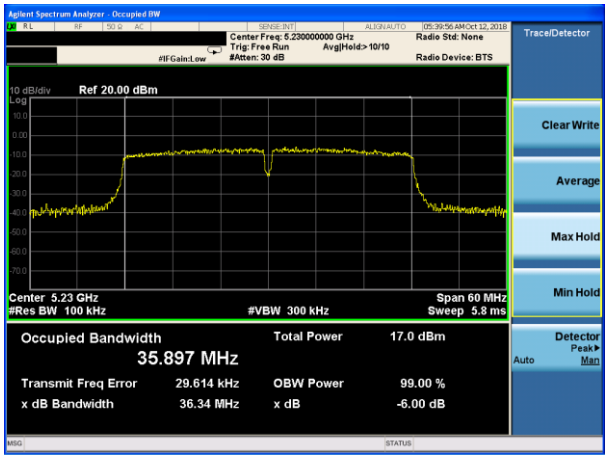
(802.11 n40) 6dB Bandwidth plot on channel 38



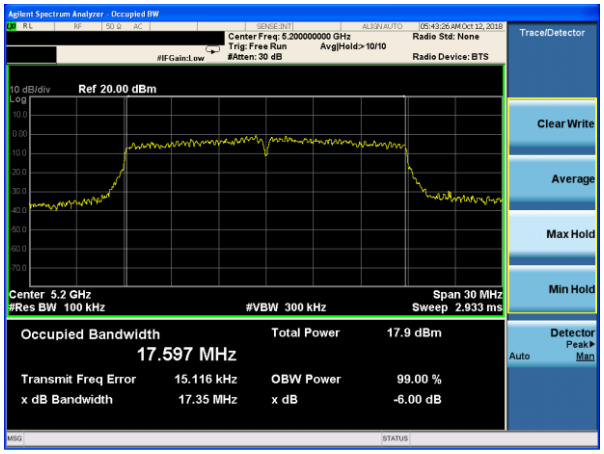
(802.11 ac20) 6dB Bandwidth plot on channel 36



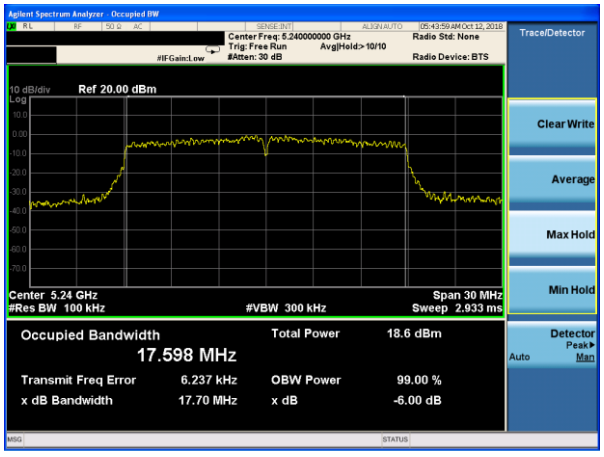
(802.11 n40) 6dB Bandwidth plot on channel 46



(802.11 ac20) 6dB Bandwidth plot on channel 40

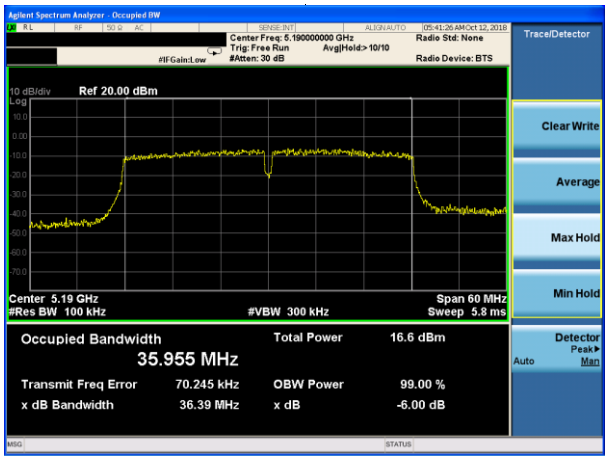


(802.11 ac20) 6dB Bandwidth plot on channel 48

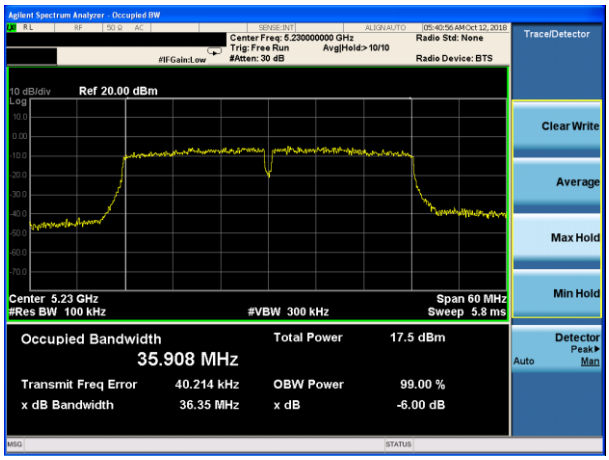


Test plot

(802.11 ac40) 6dB Bandwidth plot on channel 38



(802.11 ac40) 6dB Bandwidth plot on channel 46

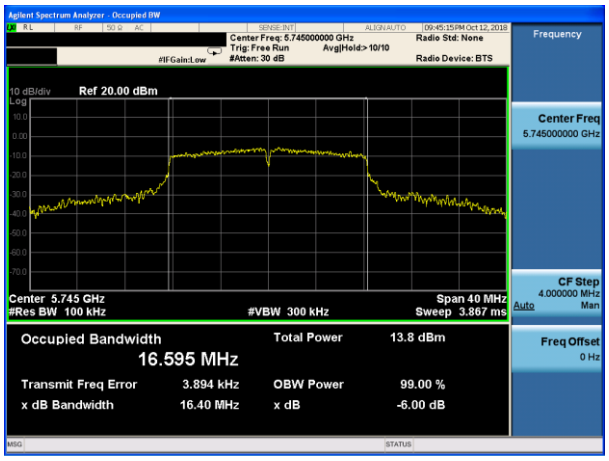


EUT：	Handheld Device	Model Name. ：	GT500V
Temperature：	25 ℃	Relative Humidity：	60%
Pressure：	1012 hPa	Test Voltage ：	DC 3.8V
Test Mode ：	TX (5G) Mode Frequency Band IV (5745-5825MHz)		

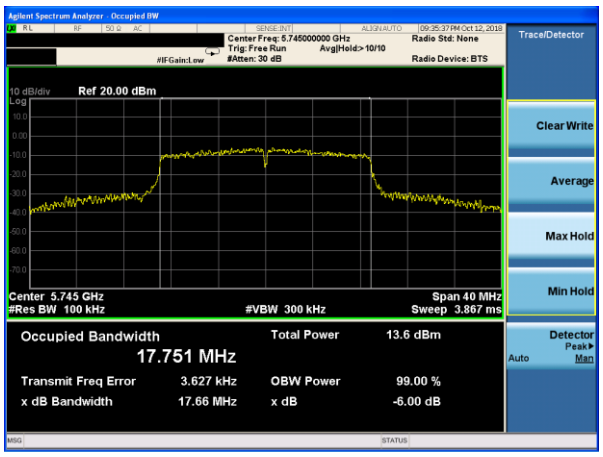
Mode	Channel	Frequency (MHz)	-6dB bandwidth (MHz)	Limit (KHz)	Result
802.11a	149	5745	16.40	≧500	Pass
	157	5785	16.39	≧500	Pass
	165	5825	16.40	≧500	Pass
802.11 n20	149	5745	17.66	≧500	Pass
	157	5785	17.62	≧500	Pass
	165	5825	17.62	≧500	Pass
802.11 n40	151	5755	36.39	≧500	Pass
	159	5795	36.41	≧500	Pass
802.11 ac20	149	5745	17.67	≧500	Pass
	157	5785	17.61	≧500	Pass
	165	5825	17.60	≧500	Pass
802.11 ac40	149	5745	36.41	≧500	Pass
	157	5785	36.41	≧500	Pass

Test plot

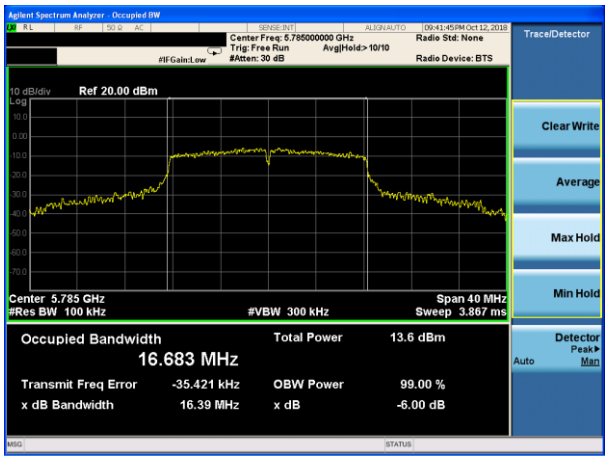
(802.11a) 6dB Bandwidth plot on channel 149



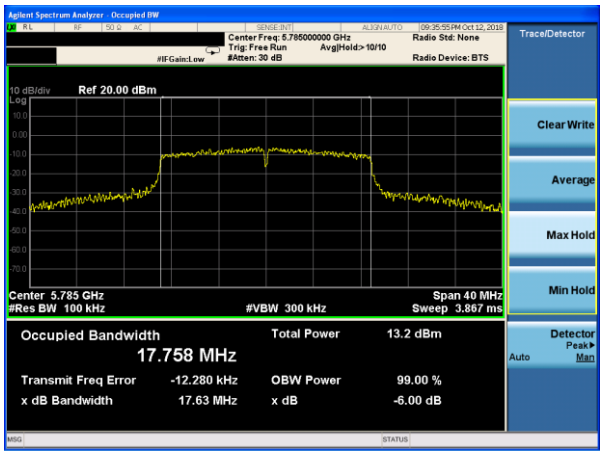
(802.11 n20) 6dB Bandwidth plot on channel 149



(802.11a) 6dB Bandwidth plot on channel 157

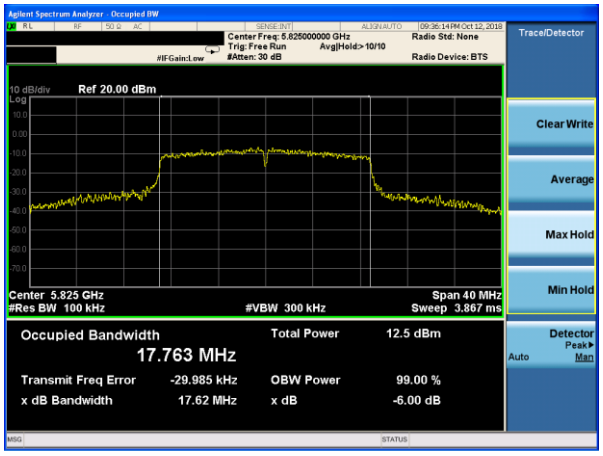


(802.11 n20) 6dB Bandwidth plot on channel 157



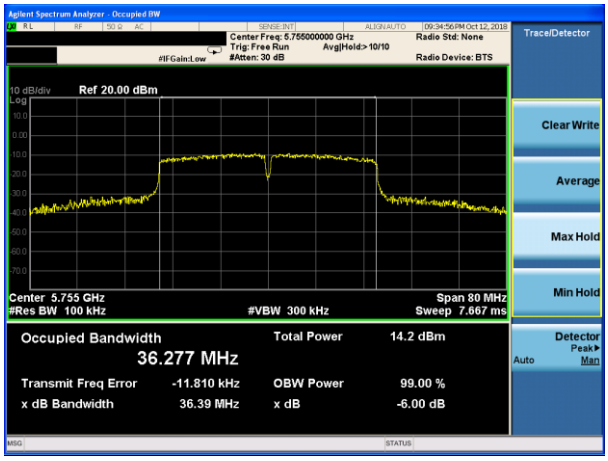
(802.11a) 6dB Bandwidth plot on channel 165

(802.11 n20) 6dB Bandwidth plot on channel 165

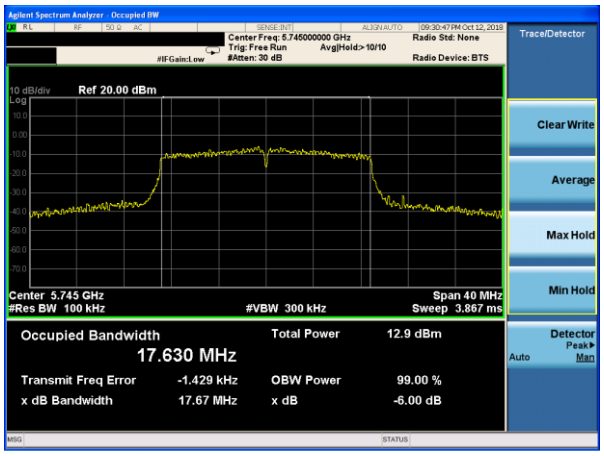


Test plot

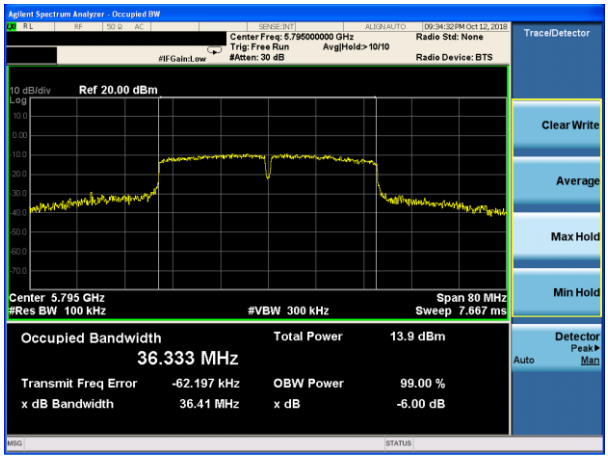
(802.11 n40) 6dB Bandwidth plot on channel 151



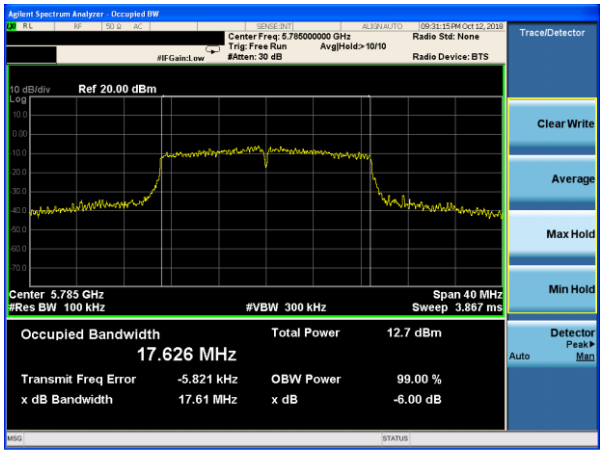
(802.11 ac20) 6dB Bandwidth plot on channel 149



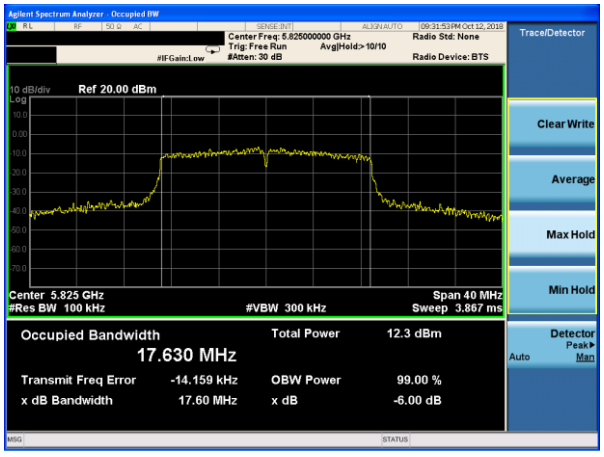
(802.11 n40) 6dB Bandwidth plot on channel 159



(802.11 ac20) 6dB Bandwidth plot on channel 157

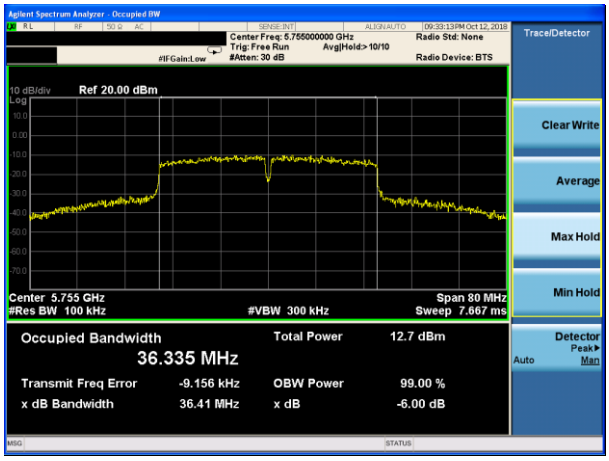


(802.11 ac20) 6dB Bandwidth plot on channel 165

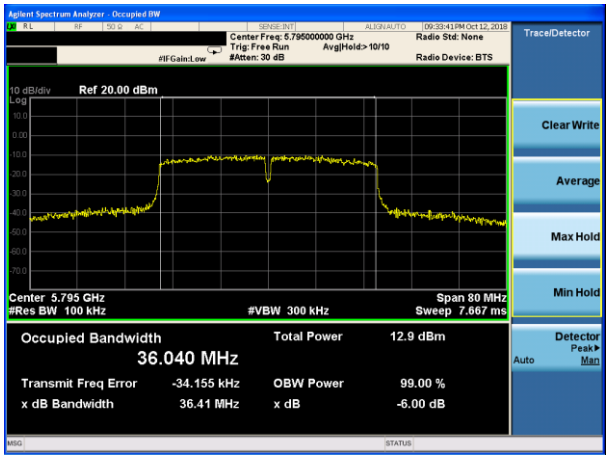


Test plot

(802.11 ac40) 6dB Bandwidth plot on channel 151



(802.11 ac40) 6dB Bandwidth plot on channel 159



7. MAXIMUM CONDUCTED OUTPUT POWER

7.1 PPLIED PROCEDURES / LIMIT

According to FCC §15.407

The maximum conduced output power should not exceed:

Frequency Band(MHz)	Limit
5150~5250	250mW
5725~5850	1W

7.2 TEST PROCEDURE

· Maximum conducted output power may be measured using a spectrum analyzer/EMI receiver or an RF power meter.

1. Device Configuration

If possible, configure or modify the operation of the EUT so that it transmits continuously at its maximum power control level (see section II.B.).

a) The intent is to test at 100 percent duty cycle; however a small reduction in duty cycle (to no lower than 98 percent) is permitted if required by the EUT for amplitude control purposes. Manufacturers are expected to provide software to the test lab to permit such continuous operation.

b) If continuous transmission (or at least 98 percent duty cycle) cannot be achieved due to hardware limitations (e.g., overheating), the EUT shall be operated at its maximum power control level with the transmit duration as long as possible and the duty cycle as high as possible.

2. Measurement using a Spectrum Analyzer or EMI Receiver (SA)

Measurement of maximum conducted output power using a spectrum analyzer requires integrating the spectrum across a frequency span that encompasses, at a minimum, either the EBW or the 99-percent occupied bandwidth of the signal.1 However, the EBW must be used to determine bandwidth dependent limits on maximum conducted output power in accordance with § 15.407(a).

a) The test method shall be selected as follows: (i) Method SA-1 or SA-1 Alternative (averaging with the EUT transmitting at full power throughout each sweep) shall be applied if either of the following conditions can be satisfied:

• The EUT transmits continuously (or with a duty cycle ≥ 98 percent).

• Sweep triggering or gating can be implemented in a way that the device transmits at the maximum power control level throughout the duration of each of the instrument sweeps to be averaged. This condition can generally be achieved by triggering the instrument's sweep if the duration of the sweep (with the analyzer configured as in Method SA-1, below) is equal to or shorter than the duration T of each transmission from the EUT and if those transmissions exhibit full power throughout their durations.

(ii) Method SA-2 or SA-2 Alternative (averaging across on and off times of the EUT transmissions, followed by duty cycle correction) shall be applied if the conditions of (i) cannot be achieved and the transmissions exhibit a constant duty cycle during the measurement duration. Duty cycle will be considered to be constant if variations are less than ± 2 percent.

(iii) Method SA-3 (RMS detection with max hold) or SA-3 Alternative (reduced VBW with max hold) shall be applied if the conditions of (i) and (ii) cannot be achieved.

b) Method SA-1 (trace averaging with the EUT transmitting at full power throughout each sweep): (i) Set span to encompass the entire emission bandwidth (EBW) (or, alternatively, the entire 99% occupied bandwidth) of the signal.

(ii) Set RBW = 1 MHz.

(iii) Set VBW ≥ 3 MHz.

(iv) Number of points in sweep ≥ 2 Span / RBW. (This ensures that bin-to-bin spacing is ≤ RBW/2, so that narrowband signals are not lost between frequency bins.)

(v) Sweep time = auto.

(vi) Detector = RMS (i.e., power averaging), if available. Otherwise, use sample detector mode.

(vii) If transmit duty cycle < 98 percent, use a video trigger with the trigger level set to enable triggering only on full power pulses. Transmitter must operate at maximum power control level for the entire duration of every sweep. If the EUT transmits continuously (i.e., with no off intervals) or at duty cycle ≥ 98 percent, and if each transmission is entirely at the maximum power control level, then the trigger shall be set to "free run".

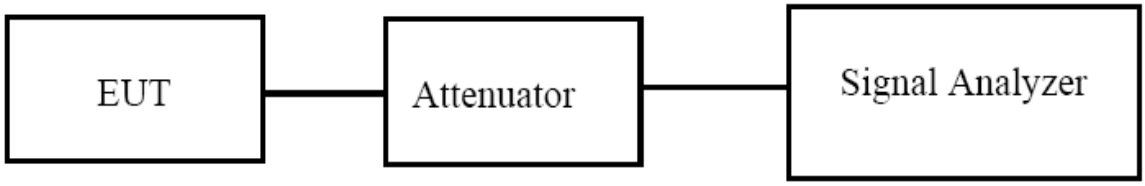
(viii) Trace average at least 100 traces in power averaging (i.e., RMS) mode.

(ix) Compute power by integrating the spectrum across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal using the instrument's band power measurement function with band limits set equal to the EBW (or occupied bandwidth) band edges. If the instrument does not have a band power function, sum the spectrum

7.3 DEVIATION FROM STANDARD

No deviation.

7.4 TEST SETUP



7.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

7.6 TEST RESULTS

EUT：	Handheld Device	Model Name. ：	GT500V
Temperature：	25 ℃	Relative Humidity：	60%
Pressure：	1012 hPa	Test Voltage ：	DC 3.8V
Test Mode ：	TX (5G) Mode Frequency Band I (5150-5250MHz)		

Test Channel	Frequency	Maximum output power. Antenna port (AV)	LIMIT	Result
	(MHz)	(dBm)	dBm	
TX 802.11a Mode				
CH36	5180	10.9	23.98	Pass
CH40	5200	10.9	23.98	Pass
CH48	5240	10.5	23.98	Pass
TX 802.11 n20M Mode				
CH36	5180	10.9	23.98	Pass
CH40	5200	10.9	23.98	Pass
CH48	5240	10.5	23.98	Pass
TX 802.11 n40M Mode				
CH38	5190	10.2	23.98	Pass
CH46	5230	9.5	23.98	Pass
TX 802.11 ac20M Mode				
CH36	5180	10.8	23.98	Pass
CH40	5200	10.9	23.98	Pass
CH48	5240	10.7	23.98	Pass
TX 802.11 ac40M Mode				
CH38	5190	10.2	23.98	Pass
CH46	5230	9.6	23.98	Pass

EUT：	Handheld Device	Model Name. ：	GT500V
Temperature：	25 ℃	Relative Humidity：	60%
Pressure：	1012 hPa	Test Voltage ：	DC 3.8V
Test Mode ：	TX (5G) Mode Frequency Band IV (5725-5825MHz)		

Test Channel	Frequency	Maximum output power. Antenna port (AV)	LIMIT	Result
	(MHz)	(dBm)	dBm	
TX 802.11a Mode				
CH 149	5745	10.8	30	Pass
CH 157	5785	10.4	30	Pass
CH 165	5825	10.6	30	Pass
TX 802.11 n20M Mode				
CH 149	5745	10.6	30	Pass
CH 157	5785	10.0	30	Pass
CH 165	5825	9.5	30	Pass
TX 802.11 n40M Mode				
CH 151	5755	10.5	30	Pass
CH 159	5795	9.9	30	Pass
TX 802.11 ac20M Mode				
CH 149	5745	10.3	30	Pass
CH 157	5785	9.5	30	Pass
CH 165	5825	9.4	30	Pass
TX 802.11 ac40M Mode				
CH 151	5755	10.0	30	Pass
CH 159	5795	9.4	30	Pass

8. OUT OF BAND EMISSIONS

8.1 APPLICABLE STANDARD

According to FCC §15.407(b)

Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

(2) For transmitters operating in the 5.725-5.85 GHz band: All emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an e.i.r.p. of −17 dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an e.i.r.p. of −27 dBm/MHz.

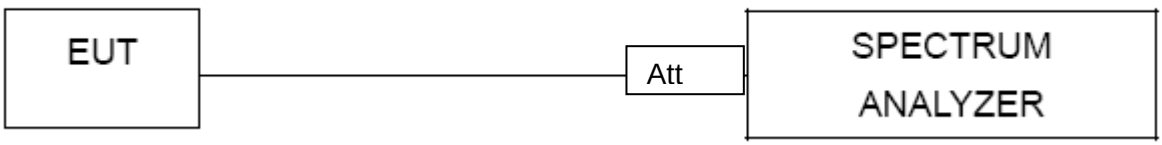
8.2 TEST PROCEDURE

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
3. Set RBW of spectrum analyzer to 1 MHz with a convenient frequency span.
4. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
5. Repeat above procedures until all measured frequencies were complete.

8.3 DEVIATION FROM STANDARD

No deviation.

8.4 TEST SETUP



8.5 EUT OPERATION CONDITIONS

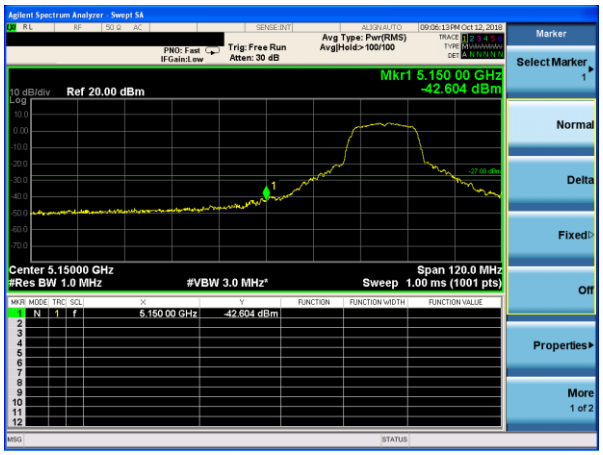
The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

8.6 TEST RESULTS

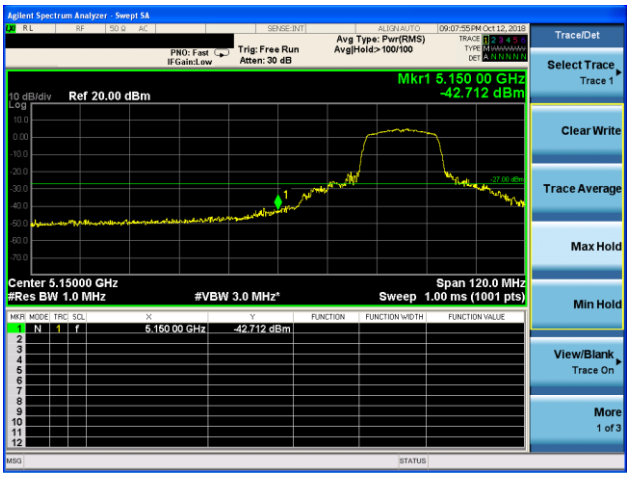
EUT：	Handheld Device	Model Name. ：	GT500V
Temperature：	25 ℃	Relative Humidity：	56%
Pressure：	1012 hPa	Test Voltage ：	DC 3.8V

5.15~5.25 GHz

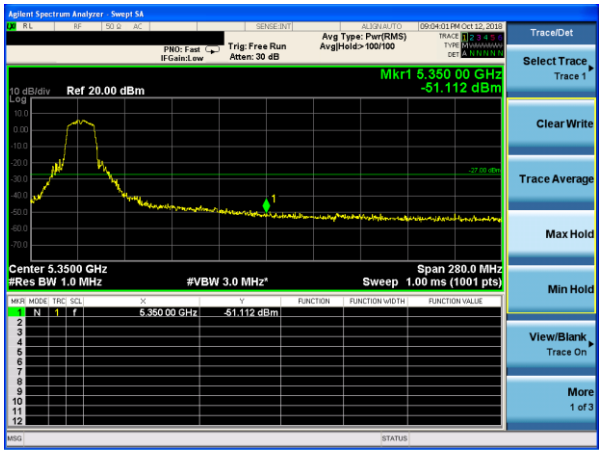
(802.11a) Band Edge, Left Side



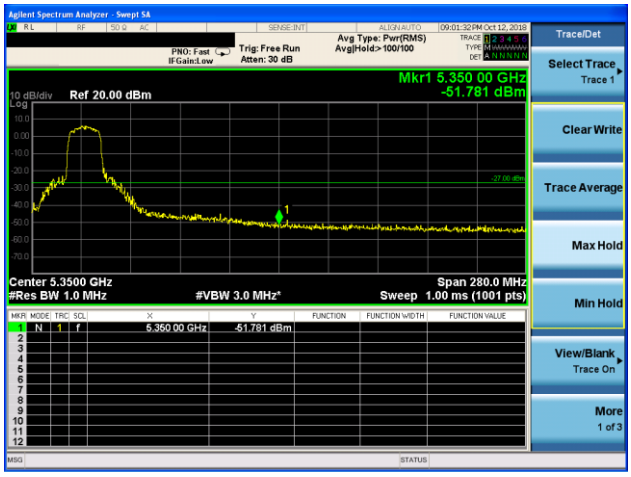
(802.11n20) Band Edge, Left Side



(802.11a) Band Edge, Right Side



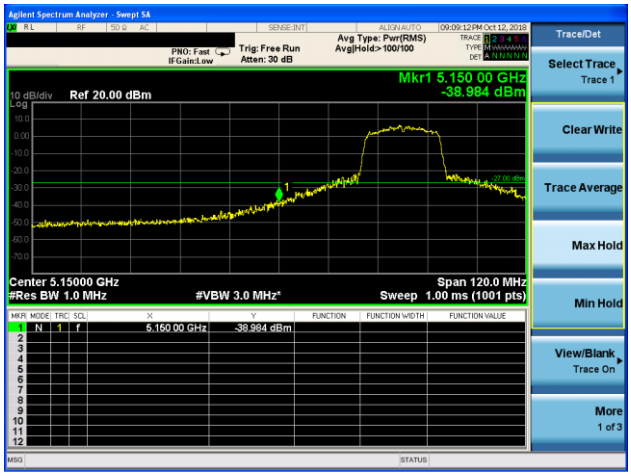
(802.11n20) Band Edge, Right Side



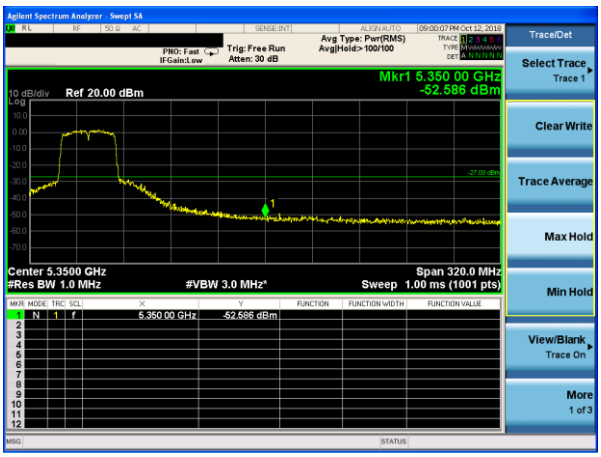
5.15~5.25 GHz

(802.11n40) Band Edge, Left Side

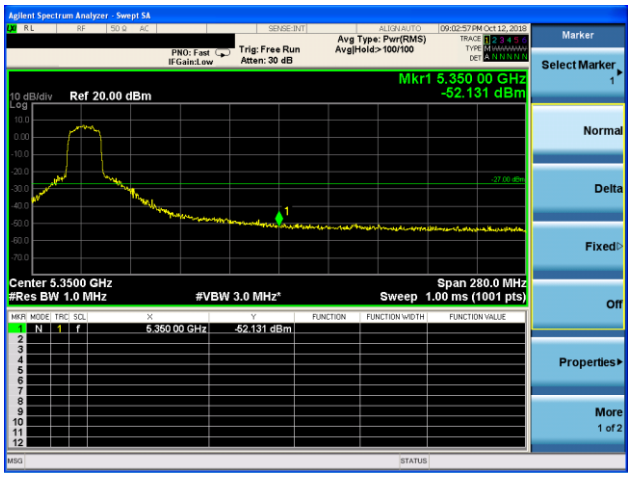
(802.11ac20) Band Edge, Left Side



(802.11n40) Band Edge, Right Side

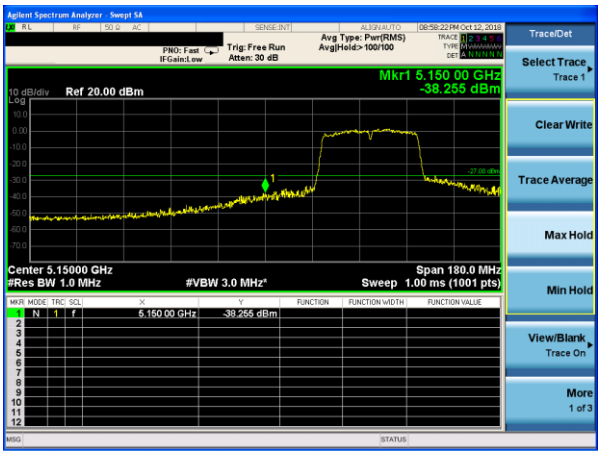


(802.11ac20) Band Edge, Right Side



5.15~5.25 GHz

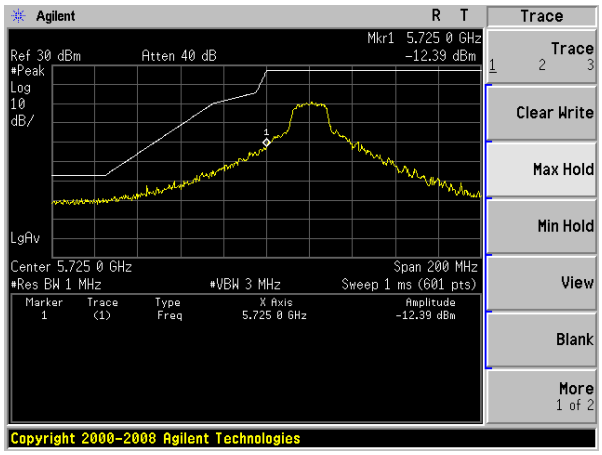
(802.11ac40) Band Edge, Left Side



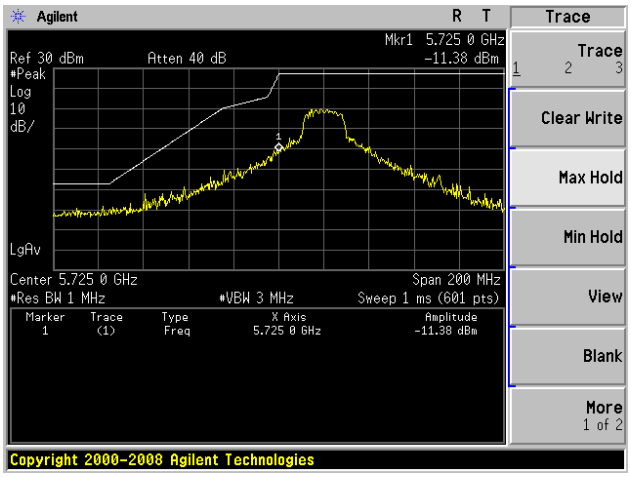
(802.11ac40) Band Edge, Right Side

5.725~5.85 GHz

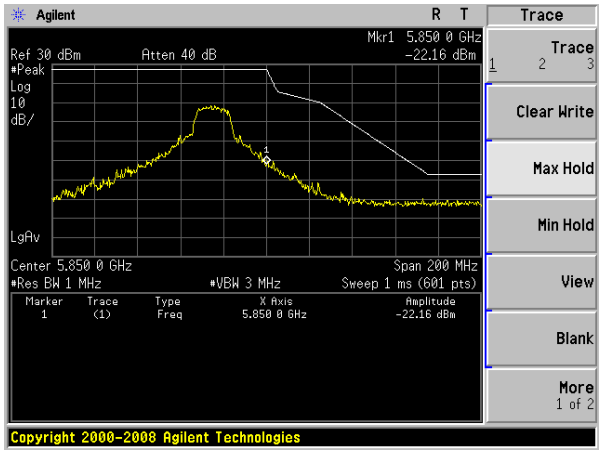
(802.11a) Band Edge, Left Side



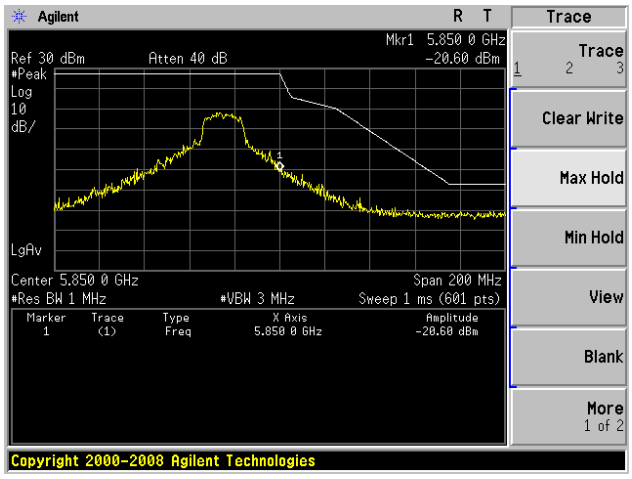
(802.11n20) Band Edge, Left Side



(802.11a) Band Edge, Right Side

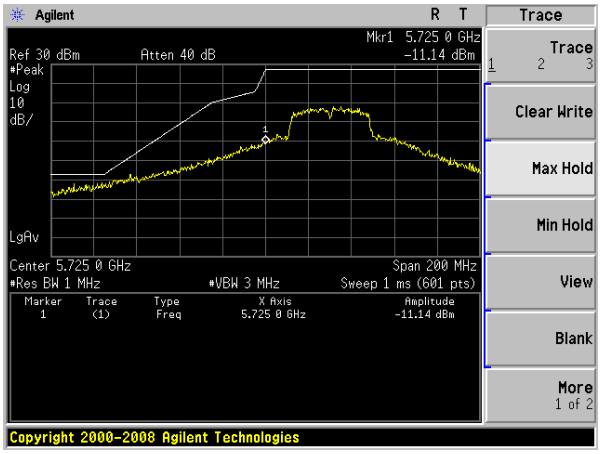


(802.11n20) Band Edge, Right Side

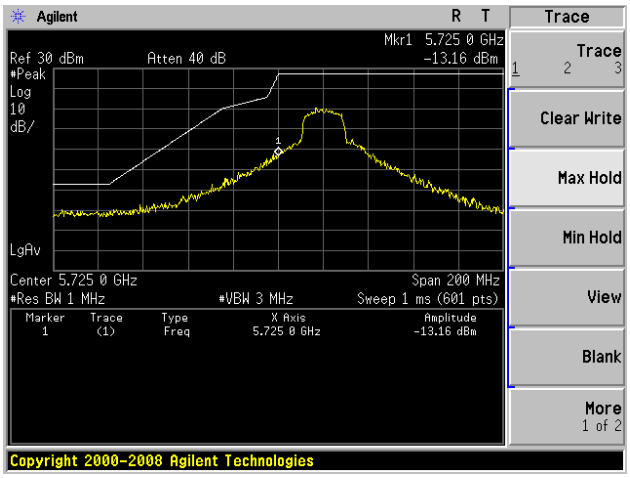


5.725~5.85 GHz

(802.11n40) Band Edge, Left Side

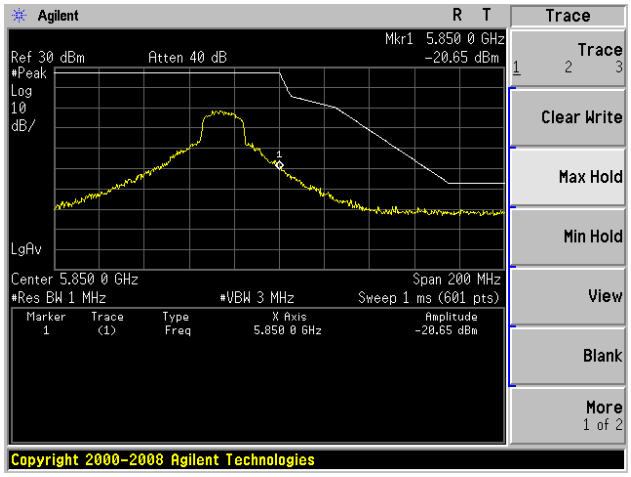


(802.11ac20) Band Edge, Left Side



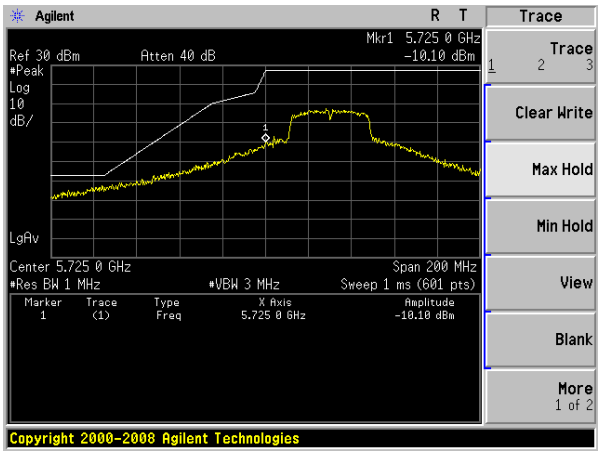
(802.11n40) Band Edge, Right Side

(802.11ac20) Band Edge, Right Side



5.725~5. 85 GHz

(802.11ac40) Band Edge, Left Side



(802.11ac40) Band Edge, Right Side

9. SPURIOUS RF CONDUCTED EMISSIONS

9.1CONFORMANCE LIMIT

§15.407 (b) Undesirable emission limits.

Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

(2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

(3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

9.2MEASURING INSTRUMENTS

The Measuring equipment is listed in the section 6.3 of this test report.

9.3TEST SETUP

Please refer to Section 6.1 of this test report.

9.4TEST PROCEDURE

The Spurious RF conducted emissions compliance of RF radiated emission should be measured by following the guidance in ANSI C63.10-2013 with respect to maximizing the emission by rotating the EUT, measuring the emission while the EUT is situated in three orthogonal planes (if appropriate), adjusting the measurement antenna height and polarization etc. Set RBW=100kHz and VBW= 300KHz to measure the peak field strength , and measure frequency range from 9KHz to 26.5GHz.

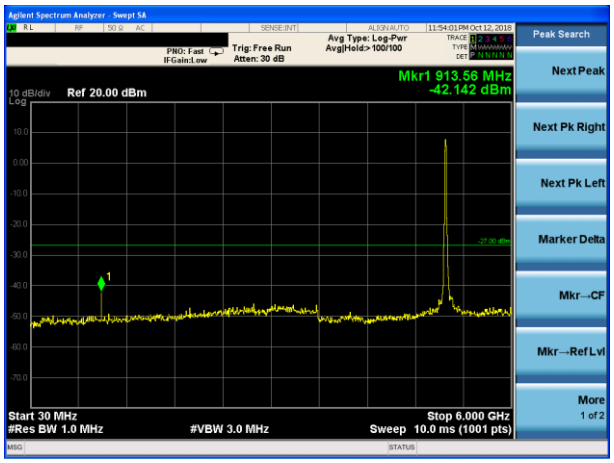
9.5TEST RESULTS

Remark: The measurement frequency range is from 9KHz to the 10th harmonic of the fundamental frequency. The lowest, middle and highest channels are tested to verify the spurious emissions and bandege measurement data.

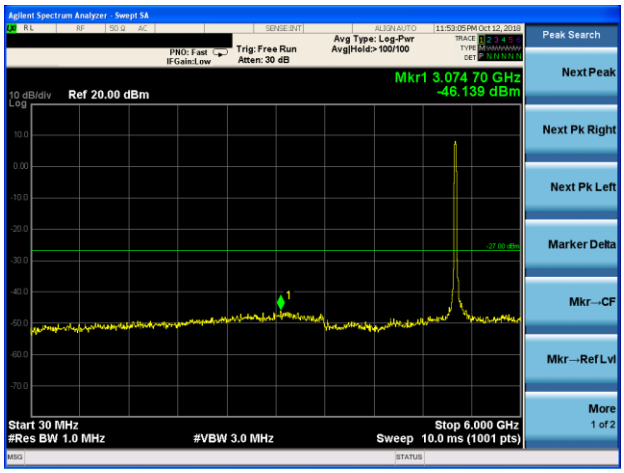
5.2G

Test Plot

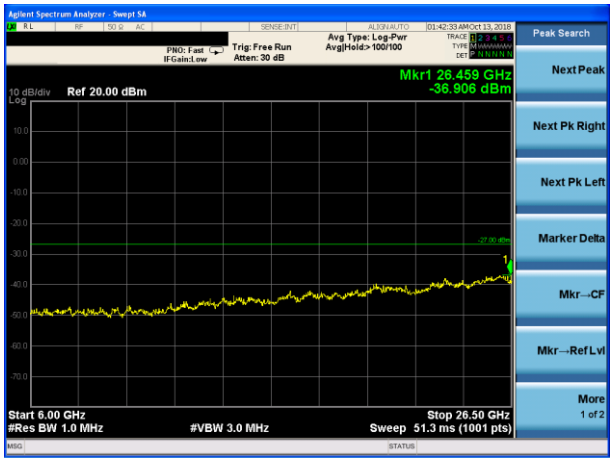
802.11a on channel 36



802.11a on channel 40



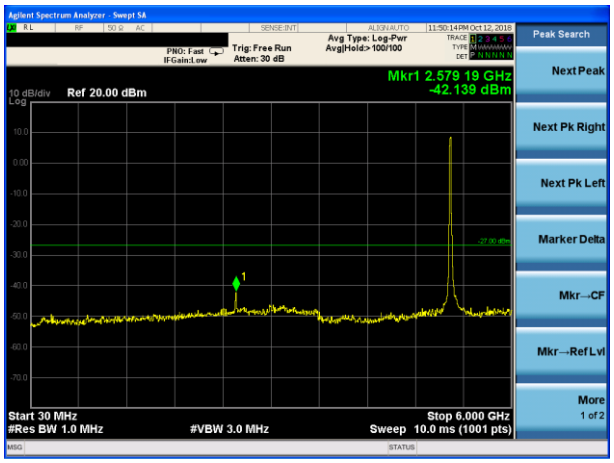
802.11a on channel 36



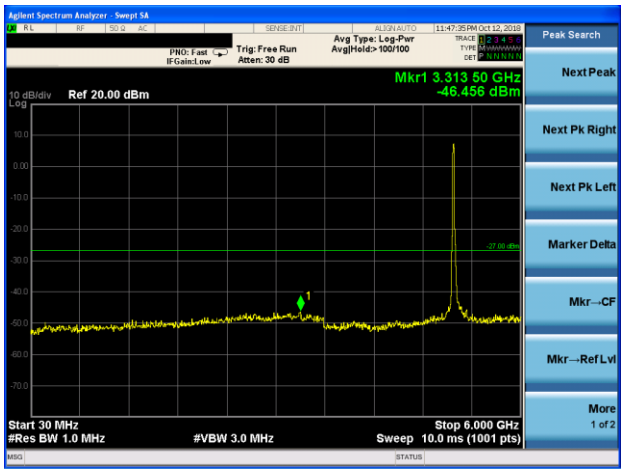
802.11a on channel 40

Test Plot

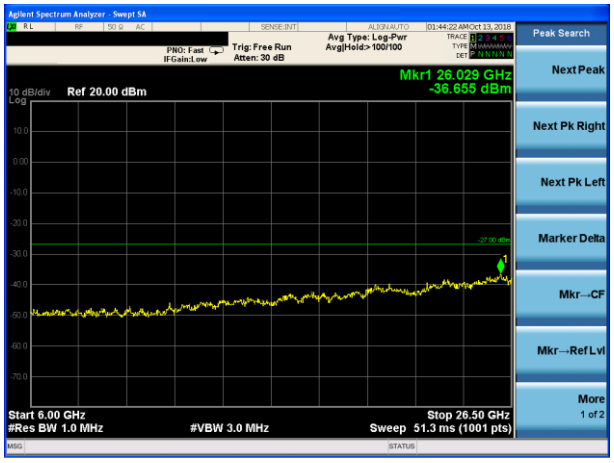
802.11a on channel 48



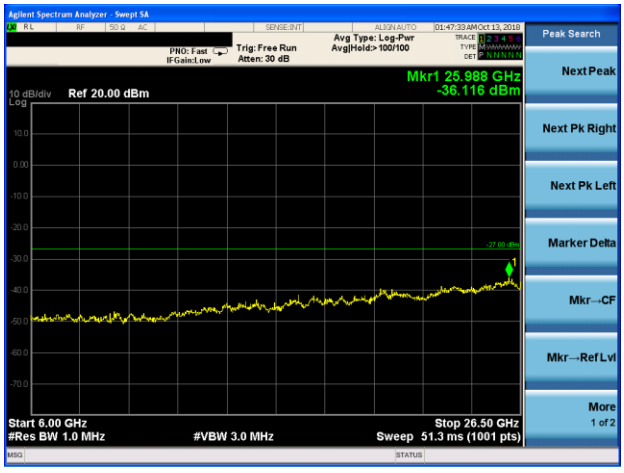
802.11n20 on channel 36



802.11a on channel 48

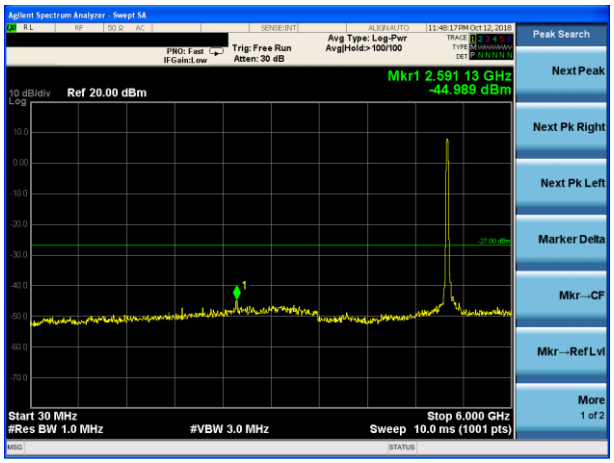


802.11n20 on channel 36

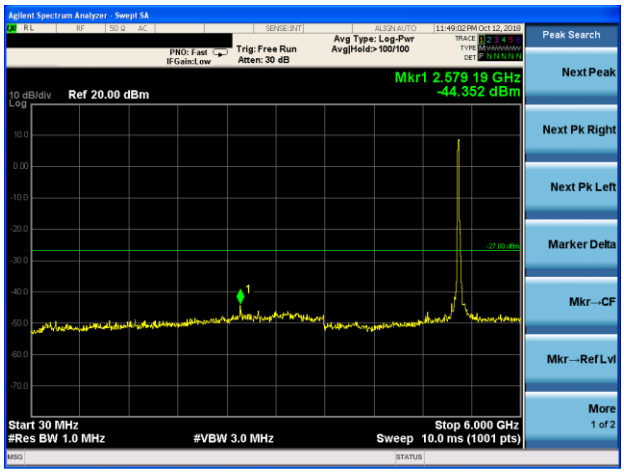


Test Plot

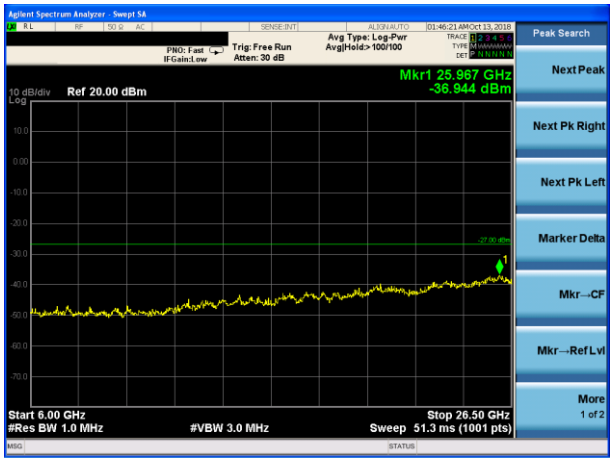
802.11n20 on channel 40



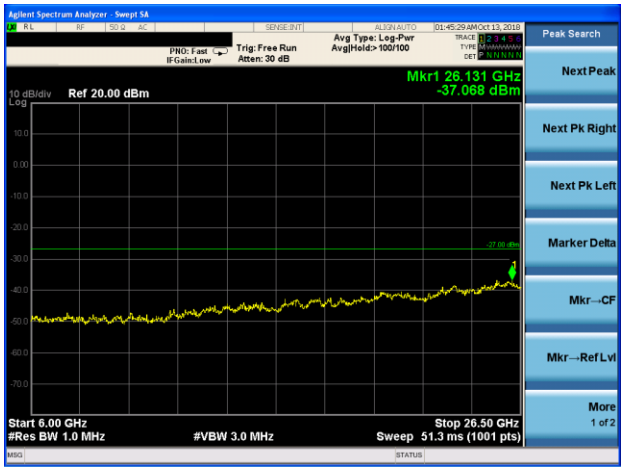
802.11n20 on channel 48



802.11n20 on channel 40

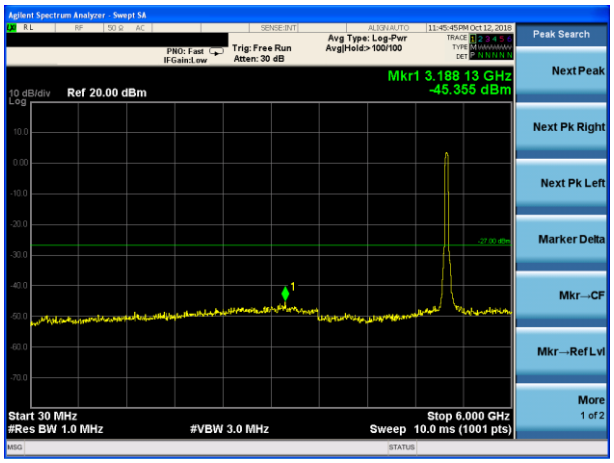


802.11n20 on channel 48

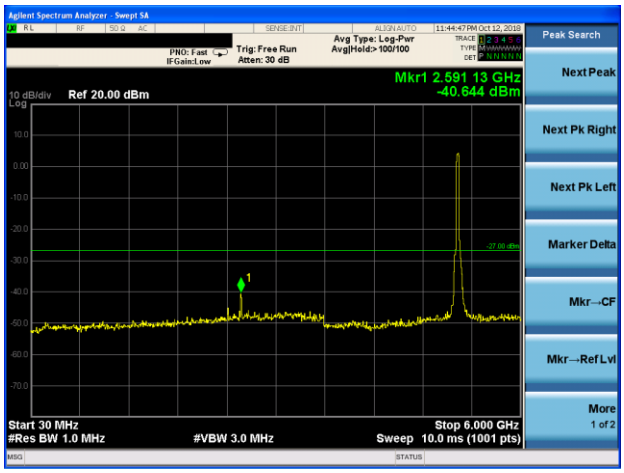


Test Plot

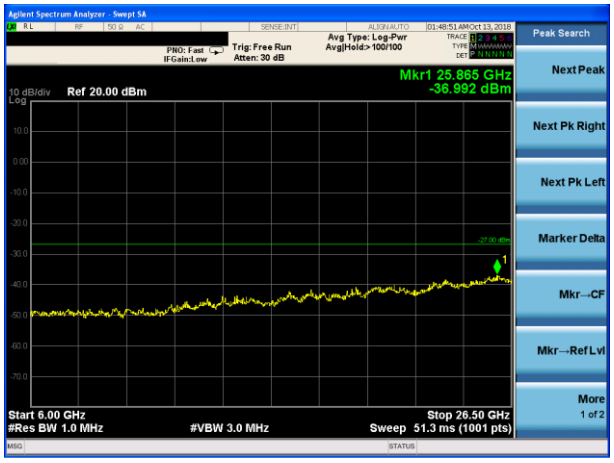
802.11n40 on channel 38



802.11n40 on channel 46



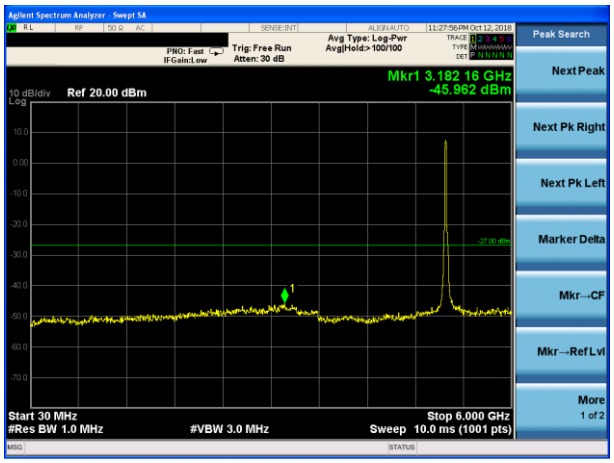
802.11n40 on channel 38



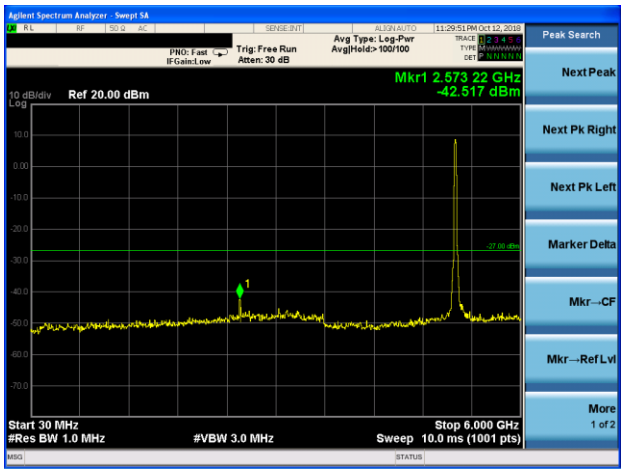
802.11n40 on channel 46

Test Plot

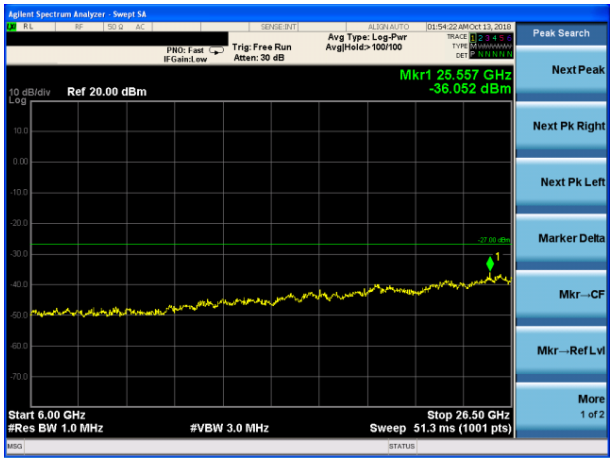
802.11ac20 on channel 36



802.11ac20 on channel 40



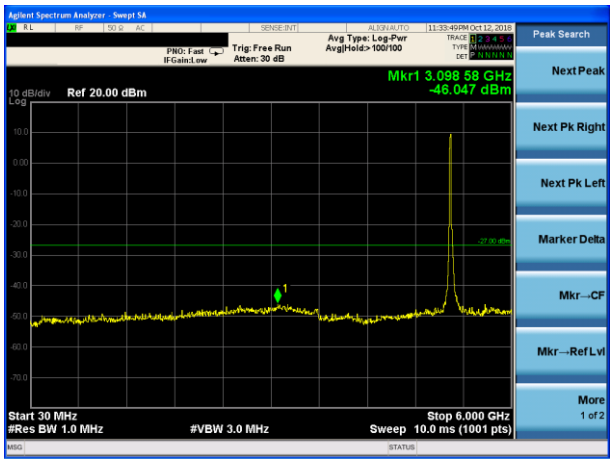
802.11ac20 on channel 36



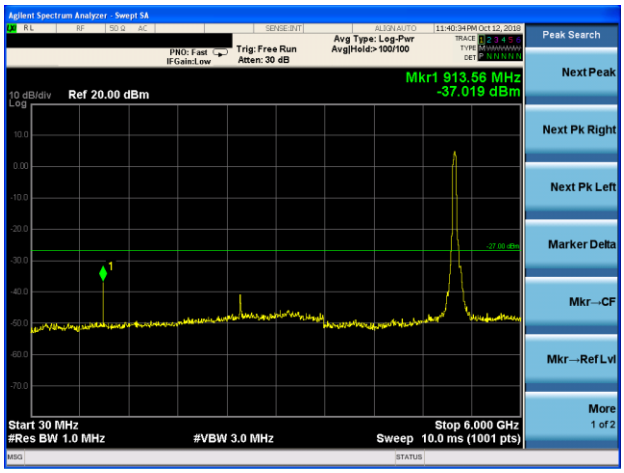
802.11ac20 on channel 40

Test Plot

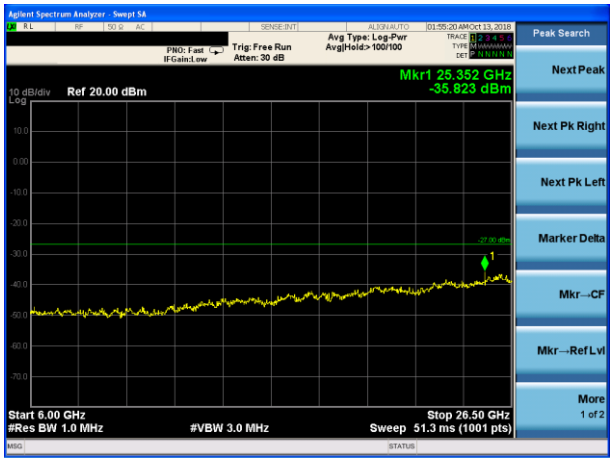
802.11ac20 on channel 48



802.11ac40 on channel 38



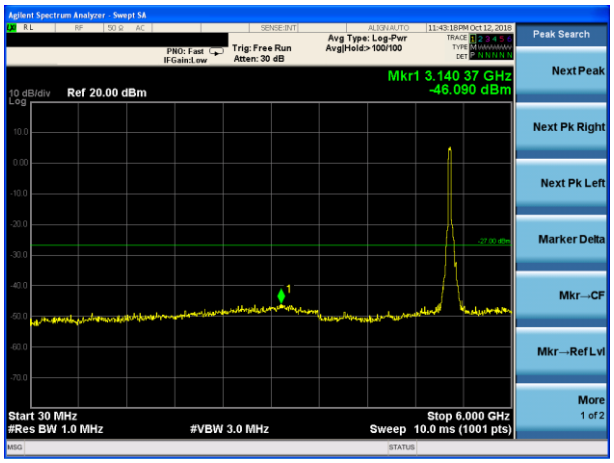
802.11ac20 on channel 48



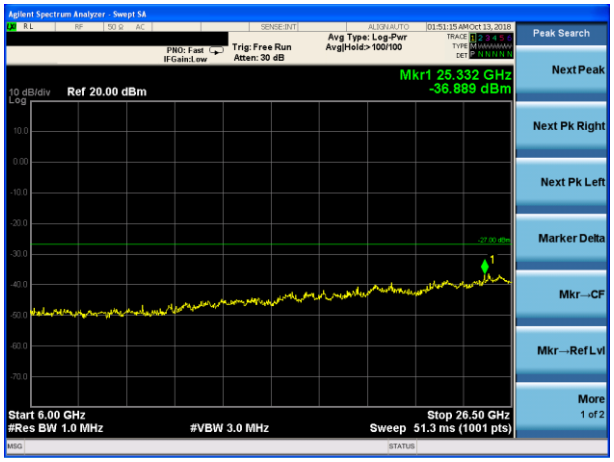
802.11ac40 on channel 38

Test Plot

802.11ac40 on channel 46



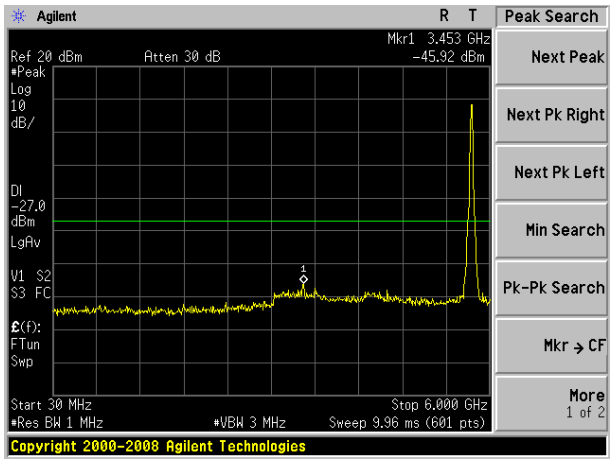
802.11 ac40 on channel 46



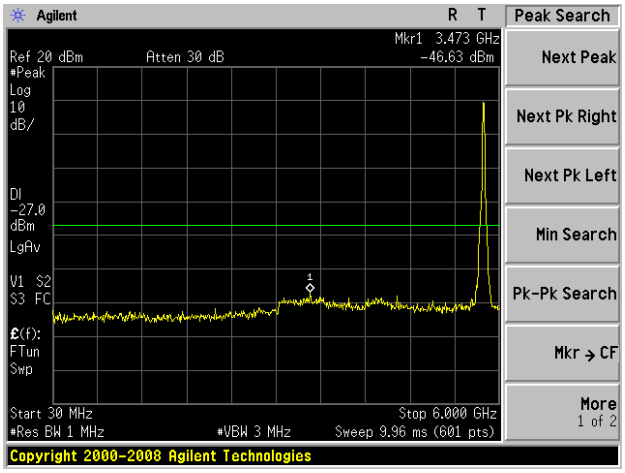
5.8G

Test Plot

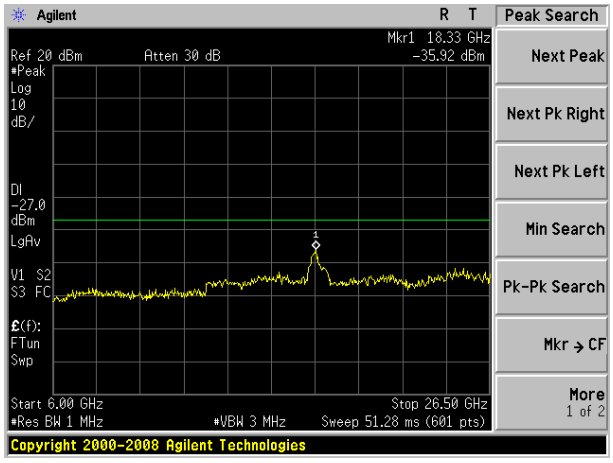
802.11a on channel 149



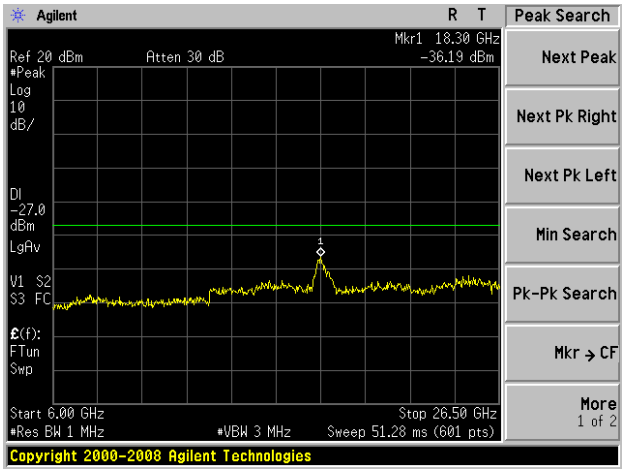
802.11a on channel 157



802.11a on channel 149

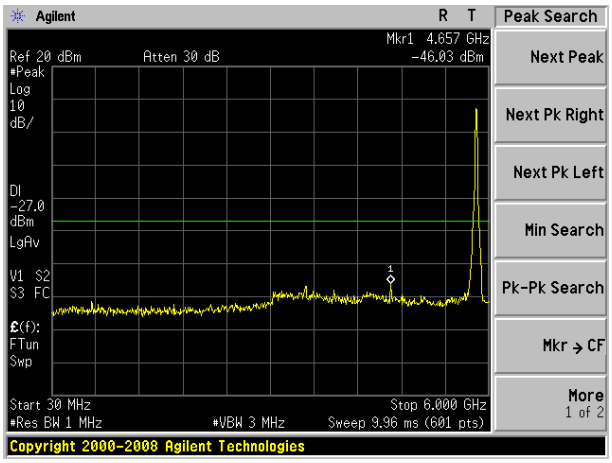


802.11a on channel 157

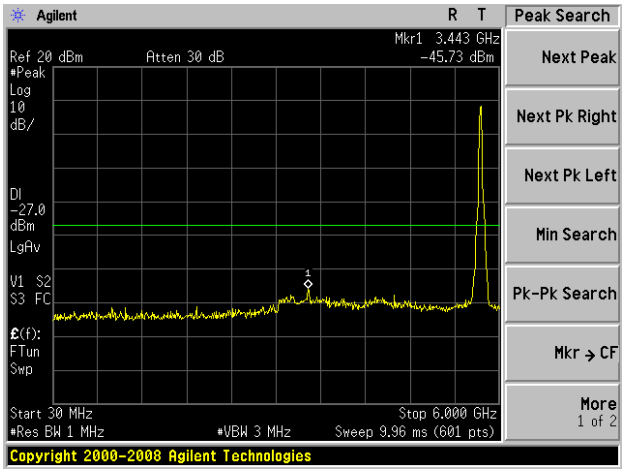


Test Plot

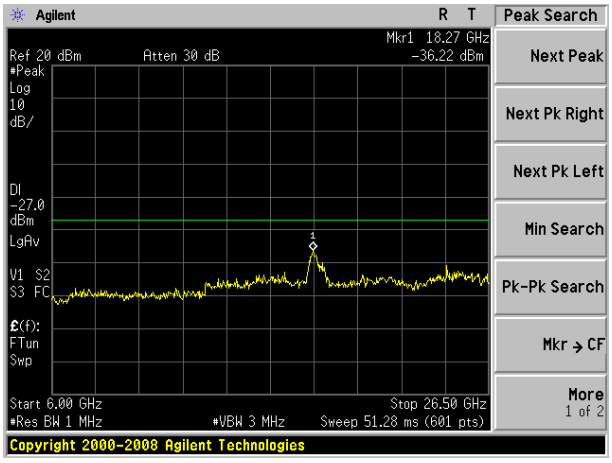
802.11a on channel 165



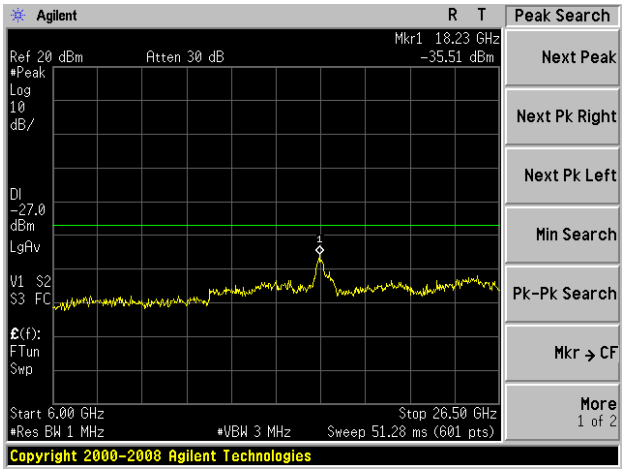
802.11n20 on channel 149



802.11a on channel 165

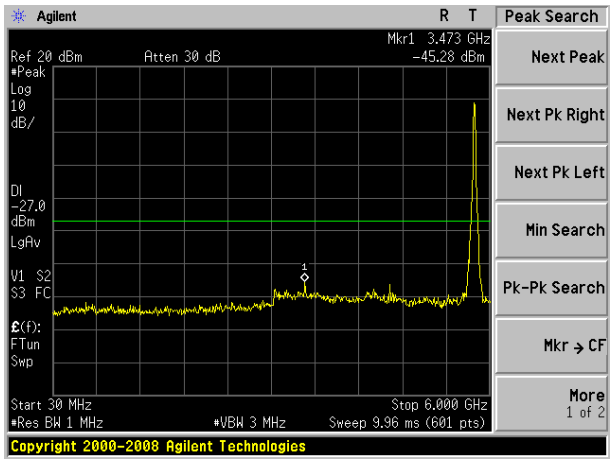


802.11n20 on channel 149

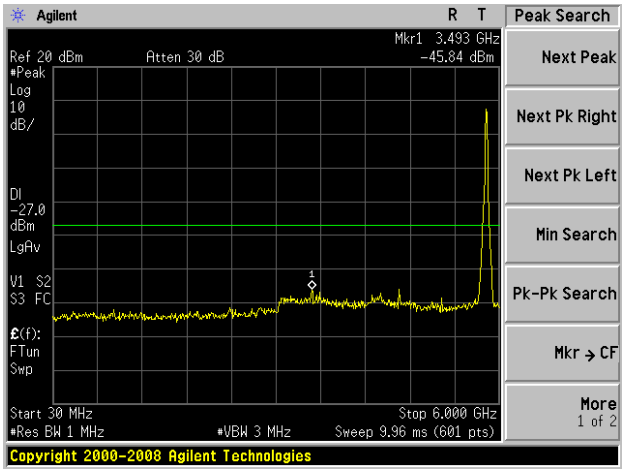


Test Plot

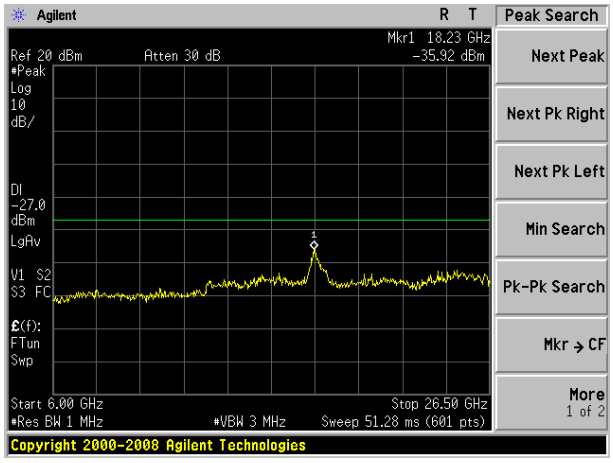
802.11n20 on channel 157



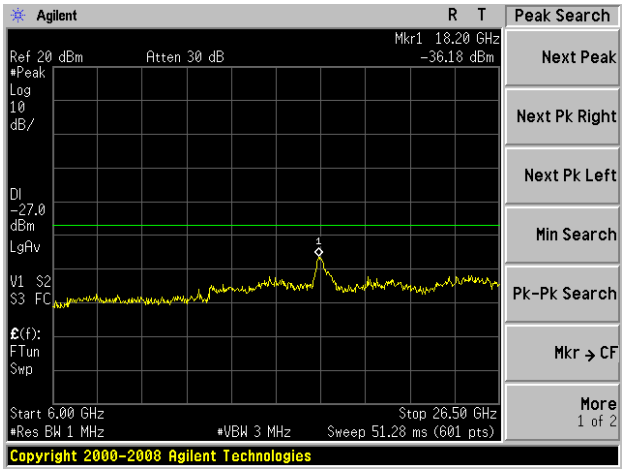
802.11n20 on channel 165



802.11n20 on channel 157

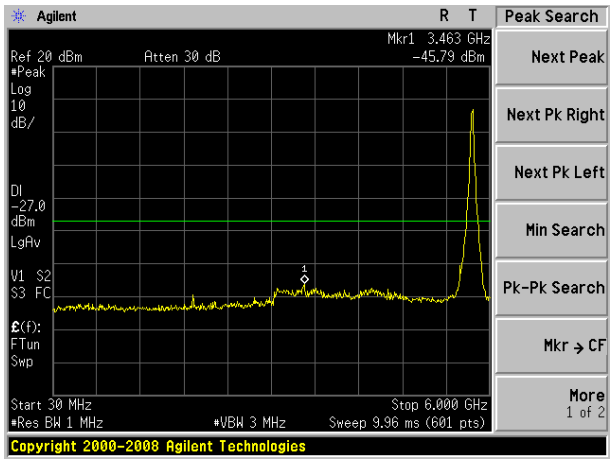


802.11n20 on channel 165

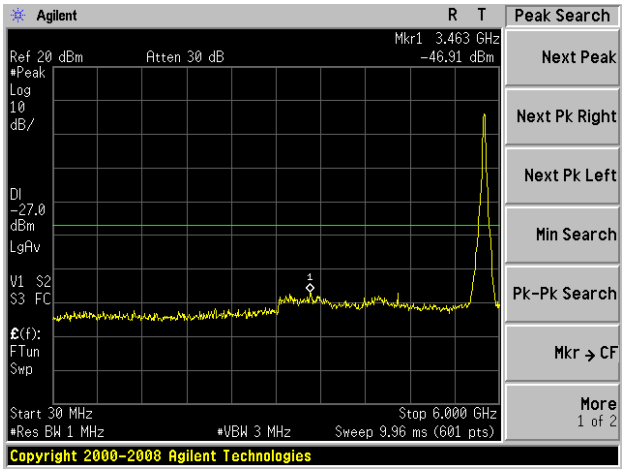


Test Plot

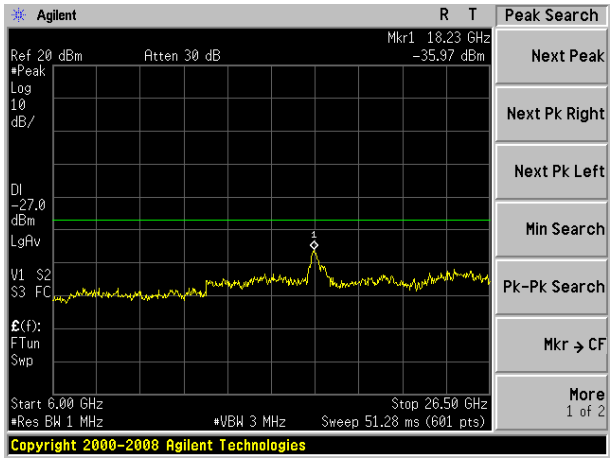
802.11n40 on channel 151



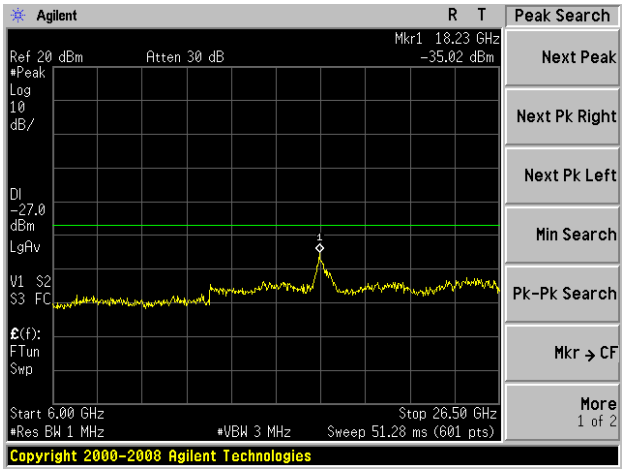
802.11n40 on channel 159



802.11n40 on channel 151

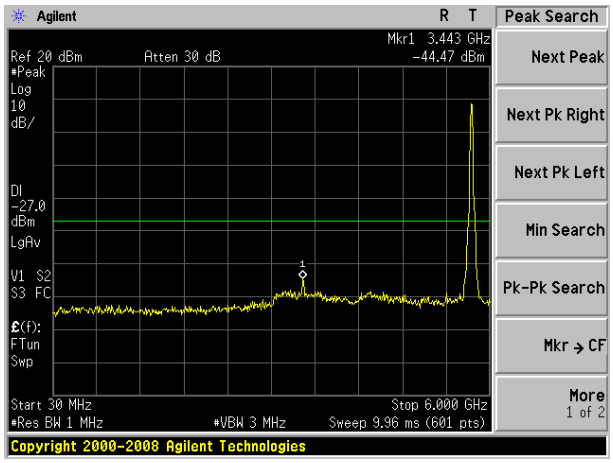


802.11n40 on channel 159

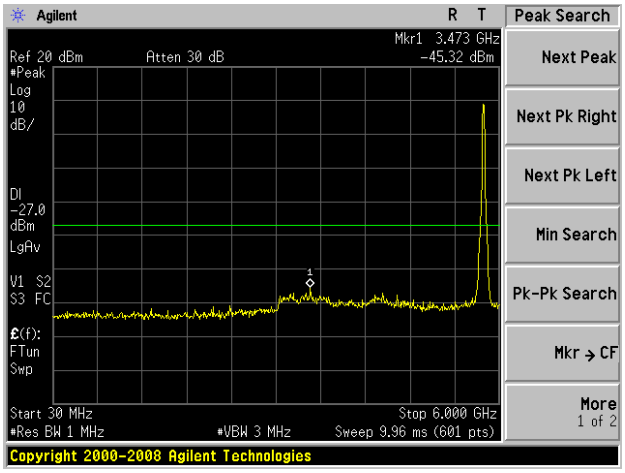


Test Plot

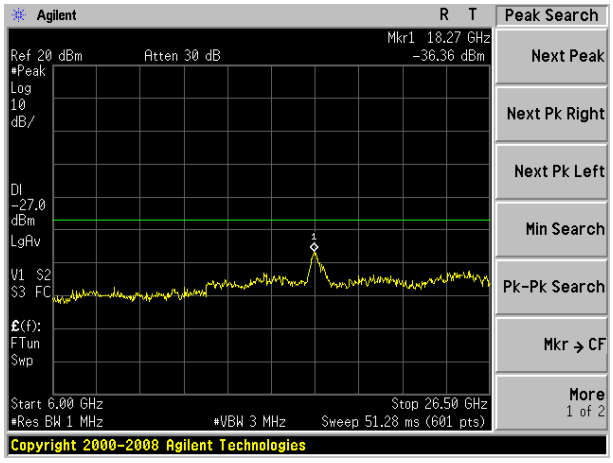
802.11ac20 on channel 149



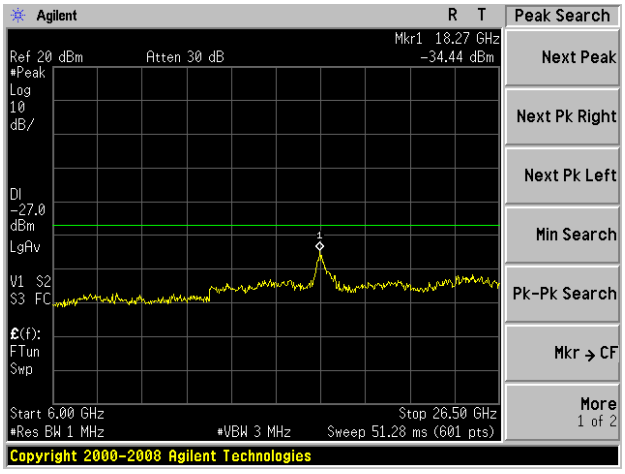
802.11ac20 on channel 157



802.11ac20 on channel 149

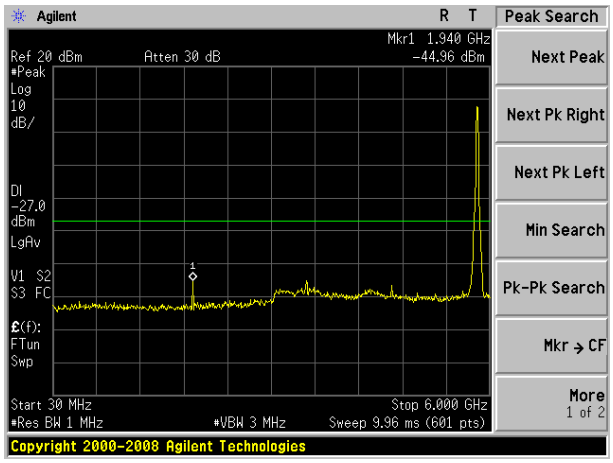


802.11ac20 on channel 157

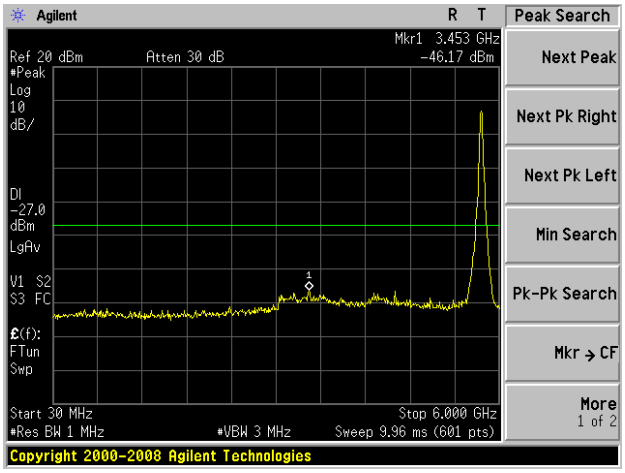


Test Plot

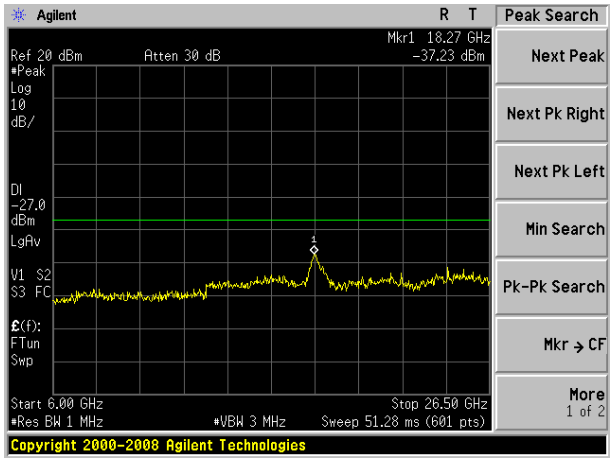
802.11ac20 on channel 165



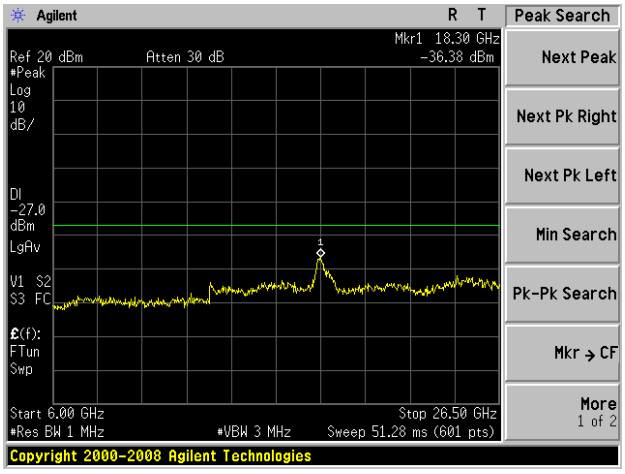
802.11ac40 on channel 151



802.11ac20 on channel 165

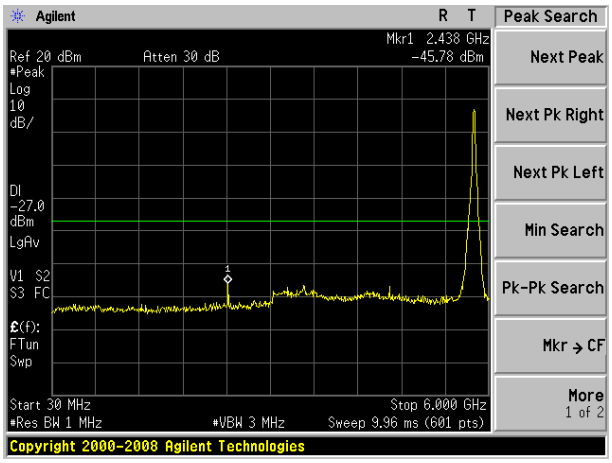


802.11ac40 on channel 151

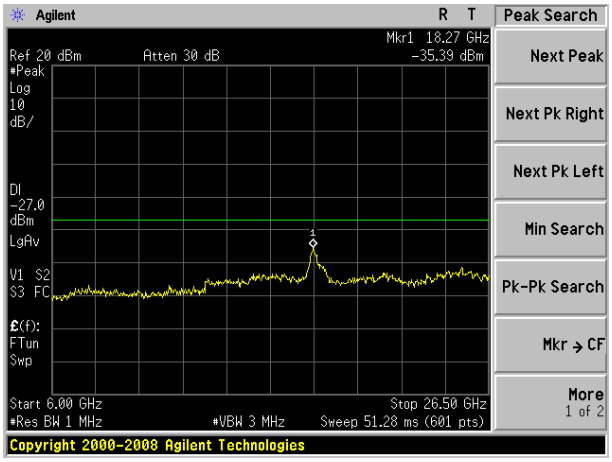


Test Plot

802.11ac40 on channel 159



802.11 ac40 on channel 159



10. Frequency Stability Measurement

10.1 LIMIT

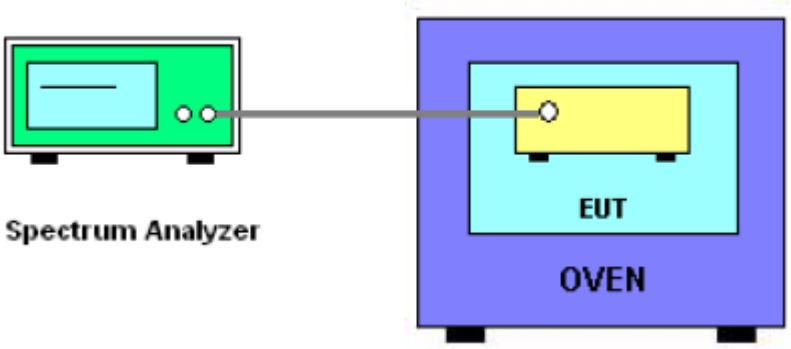
Manufactures of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

The transmitter center frequency tolerance shall be ± 20 ppm maximum for the 5 GHz band (IEEE 802.11n specification).

10.2 TEST PROCEDURES

1. The transmitter output (antenna port) was connected to the spectrum analyzer.
2. EUT have transmitted absence of modulation signal and fixed channelize.
3. Set the spectrum analyzer span to view the entire absence of modulation emissions bandwidth.
4. Set RBW = 10 kHz, VBW = 10 kHz with peak detector and maxhold settings.
5. fc is declaring of channel frequency. Then the frequency error formula is (fc-f)/fc × 10_6 ppm and the limit is less than ±20ppm (IEEE 802.11nspecification).
6. The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value
7. Extreme temperature is -20°C~70°C.

10.3 TEST SETUP LAYOUT



10.4 EUT OPERATION DURING TEST

The EUT was programmed to be in continuously un-modulation transmitting mode.

10.5 TEST RESULTS

EUT：	Handheld Device	Model Name. ：	GT500V
Temperature：	25 ℃	Relative Humidity：	56%
Pressure：	1012 hPa	Test Voltage ：	DC 3.8V
Test Mode ：	TX Frequency Band I (5150-5250MHz)		

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5180MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	3.80	5180.0151	5180	0.0151	-2.9109
		V max (V)	4.37	5180.0081	5180	0.0081	-1.5716
		V min (V)	3.23	5180.0020	5180	0.0020	-0.3915
Limits				± 20 ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5180MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	3.8	T (°C)	-20	5180.0157	5180	0.0157	-3.0306
		T (°C)	-10	5180.0187	5180	0.0187	-3.6098
		T (°C)	0	5180.0164	5180	0.0164	-3.1587
		T (°C)	10	5180.0006	5180	0.0006	-0.1199
		T (°C)	20	5180.0041	5180	0.0041	-0.8003
		T (°C)	30	5180.0104	5180	0.0104	-2.0008
		T (°C)	40	5180.0105	5180	0.0105	-2.0366
		T (°C)	50	5180.0004	5180	0.0004	-0.0765
		T (°C)	60	5180.0177	5180	0.0177	-3.4085
		T (°C)	70	5180.0158	5180	0.0158	-3.0493
Limits				± 20 ppm			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5200MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	3.80	5200.0128	5200	0.0128	-2.4574
		V max (V)	4.37	5200.0013	5200	0.0013	-0.2579
		V min (V)	3.23	5200.0004	5200	0.0004	-0.0767
Limits				± 20 ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5200MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	3.8	T (°C)	-20	5200.0041	5200	0.0041	-0.7970
		T (°C)	-10	5200.0039	5200	0.0039	-0.7529
		T (°C)	0	5200.0059	5200	0.0059	-1.1352
		T (°C)	10	5200.0153	5200	0.0153	-2.9375
		T (°C)	20	5200.0062	5200	0.0062	-1.2016
		T (°C)	30	5200.0071	5200	0.0071	-1.3573
		T (°C)	40	5200.0068	5200	0.0068	-1.3029
		T (°C)	50	5200.0112	5200	0.0112	-2.1478
		T (°C)	60	5200.0183	5200	0.0183	-3.5152
		T (°C)	70	5200.0199	5200	0.0199	-3.8197
Limits				± 20 ppm			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5240MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	3.80	5240.0152	5240	0.0152	-2.9066
		V max (V)	4.37	5240.0018	5240	0.0018	-0.3456
		V min (V)	3.23	5240.0162	5240	0.0162	-3.0877
Limits				± 20 ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5240MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	3.8	T (°C)	-20	5240.0090	5240	0.0090	-1.7263
		T (°C)	-10	5240.0192	5240	0.0192	-3.6704
		T (°C)	0	5240.0072	5240	0.0072	-1.3692
		T (°C)	10	5240.0083	5240	0.0083	-1.5933
		T (°C)	20	5240.0140	5240	0.0140	-2.6631
		T (°C)	30	5240.0062	5240	0.0062	-1.1878
		T (°C)	40	5240.0155	5240	0.0155	-2.9548
		T (°C)	50	5240.0089	5240	0.0089	-1.7044
		T (°C)	60	5240.0105	5240	0.0105	-2.0122
		T (°C)	70	5240.0179	5240	0.0179	-3.4218
Limits				± 20 ppm			
Result				Complies			

EUT：	Handheld Device	Model Name. ：	GT500V
Temperature：	25 ℃	Relative Humidity：	56%
Pressure：	1012 hPa	Test Voltage ：	DC 3.8V
Test Mode ：	TX Frequency(5745-5850MHz)		

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5745MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	3.80	5745.00591	5745	0.00591	-1.0283
		V max (V)	4.37	5745.00351	5745	0.00351	-0.6109
		V min (V)	3.23	5745.00218	5745	0.00218	-0.3795
Limits				± 20 ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5745MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	4	T (°C)	-20	5745.00319	5745	0.00319	-0.5554
		T (°C)	-10	5745.00348	5745	0.00348	-0.6050
		T (°C)	0	5745.00161	5745	0.00161	-0.2808
		T (°C)	10	5745.00822	5745	0.00822	-1.4304
		T (°C)	20	5745.00876	5745	0.00876	-1.5255
		T (°C)	30	5745.00405	5745	0.00405	-0.7058
		T (°C)	40	5745.00969	5745	0.00969	-1.6866
		T (°C)	50	5745.00076	5745	0.00076	-0.1317
		T (°C)	60	5745.00163	5745	0.00163	-0.2832
		T (°C)	70	5745.00960	5745	0.00960	-1.6712
Limits				± 20 ppm			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5785MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	3.80	5785.00961	5785	0.00961	-1.6610
		V max (V)	4.37	5785.00801	5785	0.00801	-1.3849
		V min (V)	3.23	5785.00740	5785	0.00740	-1.2791
Limits				± 20 ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5785MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	3.8	T (°C)	-20	5785.00431	5785	0.00431	-0.7449
		T (°C)	-10	5785.00720	5785	0.00720	-1.2449
		T (°C)	0	5785.00936	5785	0.00936	-1.6173
		T (°C)	10	5785.00408	5785	0.00408	-0.7047
		T (°C)	20	5785.00769	5785	0.00769	-1.3290
		T (°C)	30	5785.00896	5785	0.00896	-1.5492
		T (°C)	40	5785.00782	5785	0.00782	-1.3520
		T (°C)	50	5785.00810	5785	0.00810	-1.4002
		T (°C)	60	5785.00088	5785	0.00088	-0.1526
		T (°C)	70	5785.00264	5785	0.00264	-0.4557
Limits				± 20 ppm			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5825MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	3.80	5825.00838	5825	0.00838	-1.4392
		V max (V)	4.37	5825.00895	5825	0.00895	-1.5357
		V min (V)	3.23	5825.00124	5825	0.00124	-0.2135
Limits				± 20 ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5825MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	3.8	T (°C)	-20	5825.00062	5825	0.00062	-0.1067
		T (°C)	-10	5825.00625	5825	0.00625	-1.0735
		T (°C)	0	5825.00229	5825	0.00229	-0.3928
		T (°C)	10	5825.00850	5825	0.00850	-1.4584
		T (°C)	20	5825.00682	5825	0.00682	-1.1714
		T (°C)	30	5825.00636	5825	0.00636	-1.0922
		T (°C)	40	5825.00377	5825	0.00377	-0.6474
		T (°C)	50	5825.00520	5825	0.00520	-0.8932
		T (°C)	60	5825.00755	5825	0.00755	-1.2966
		T (°C)	70	5825.00052	5825	0.00052	-0.0895
Limits				± 20 ppm			
Result				Complies			

11. ANTENNA REQUIREMENT

11.1 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.

11.2 EUT ANTENNA

The EUT antenna is permanent attached FPCB antenna(antenna gain:1dBi). It comply with the standard requirement.

END OF REPORT