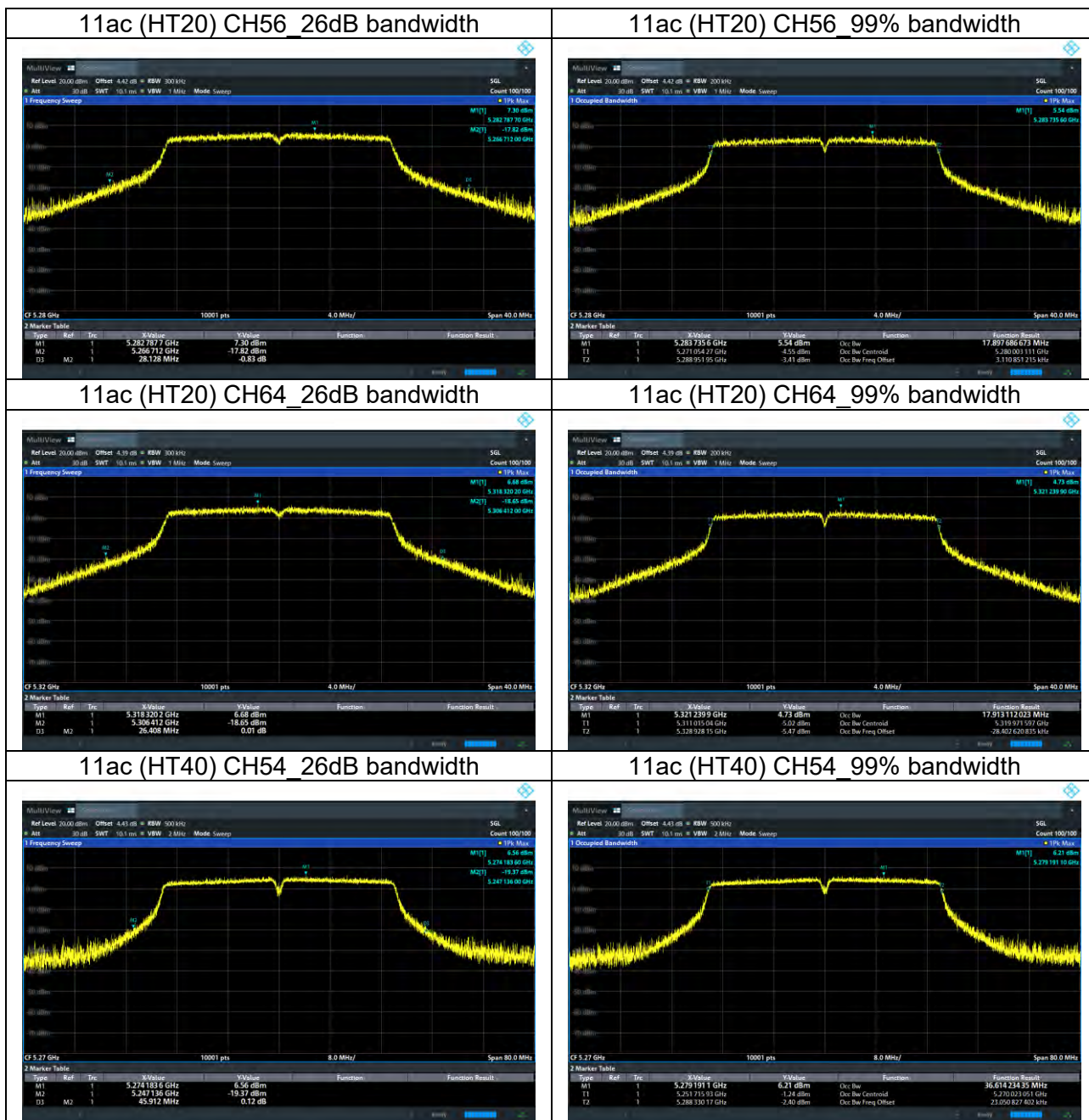
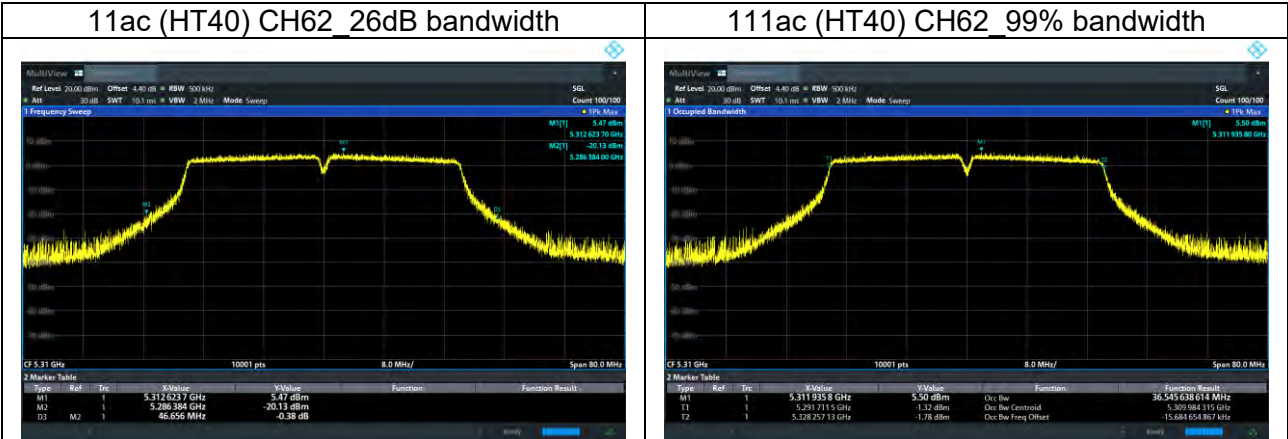


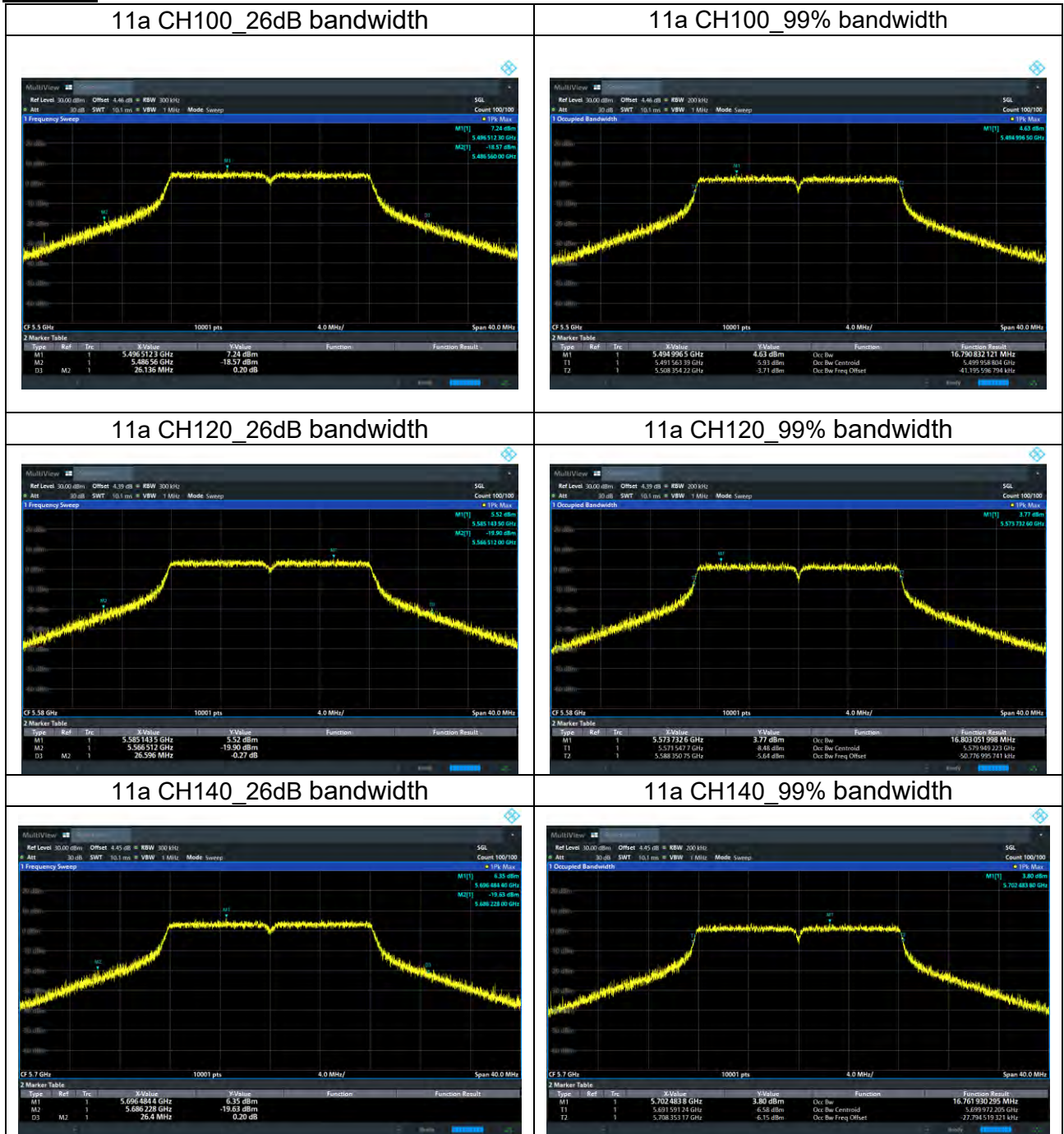


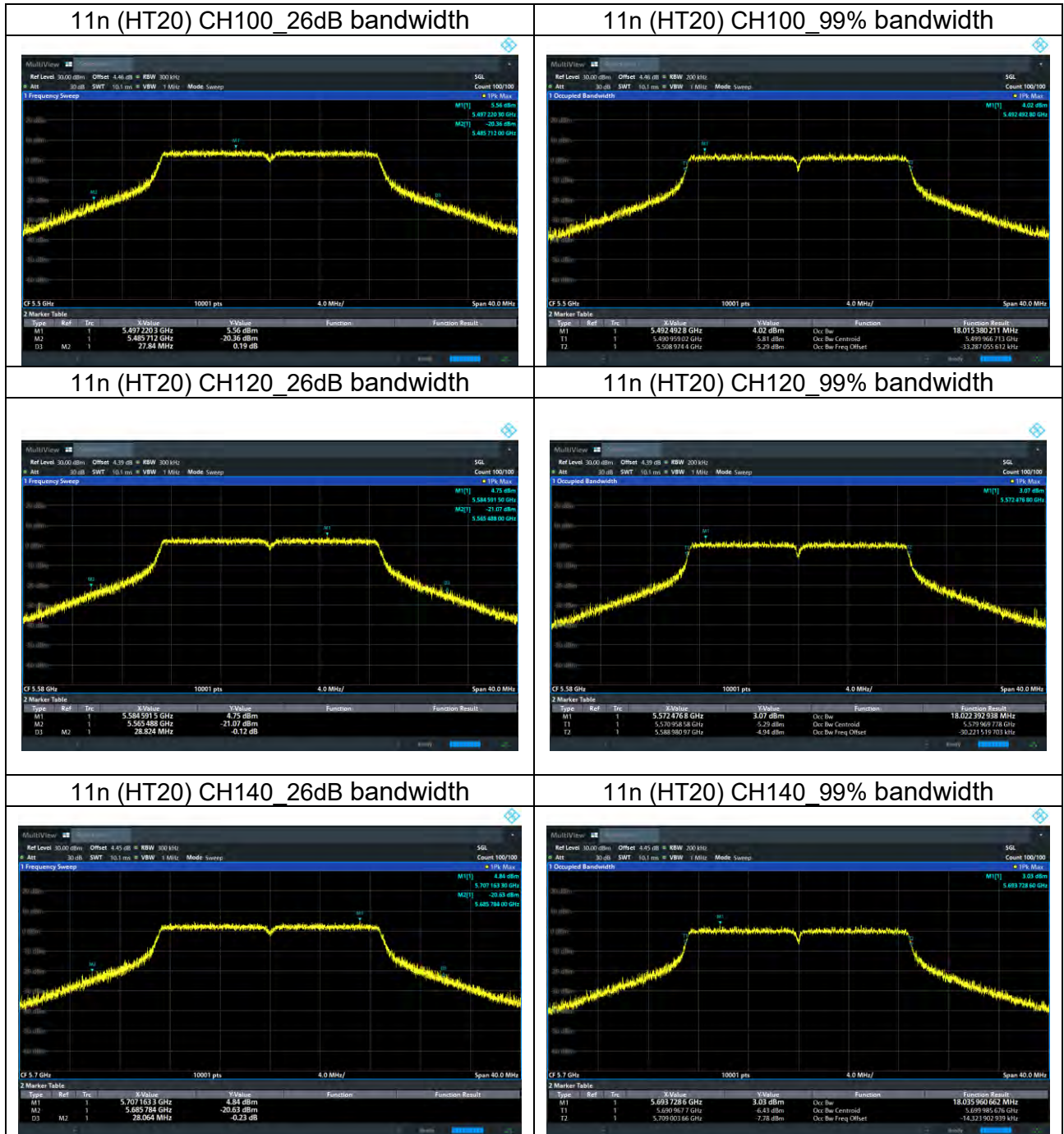


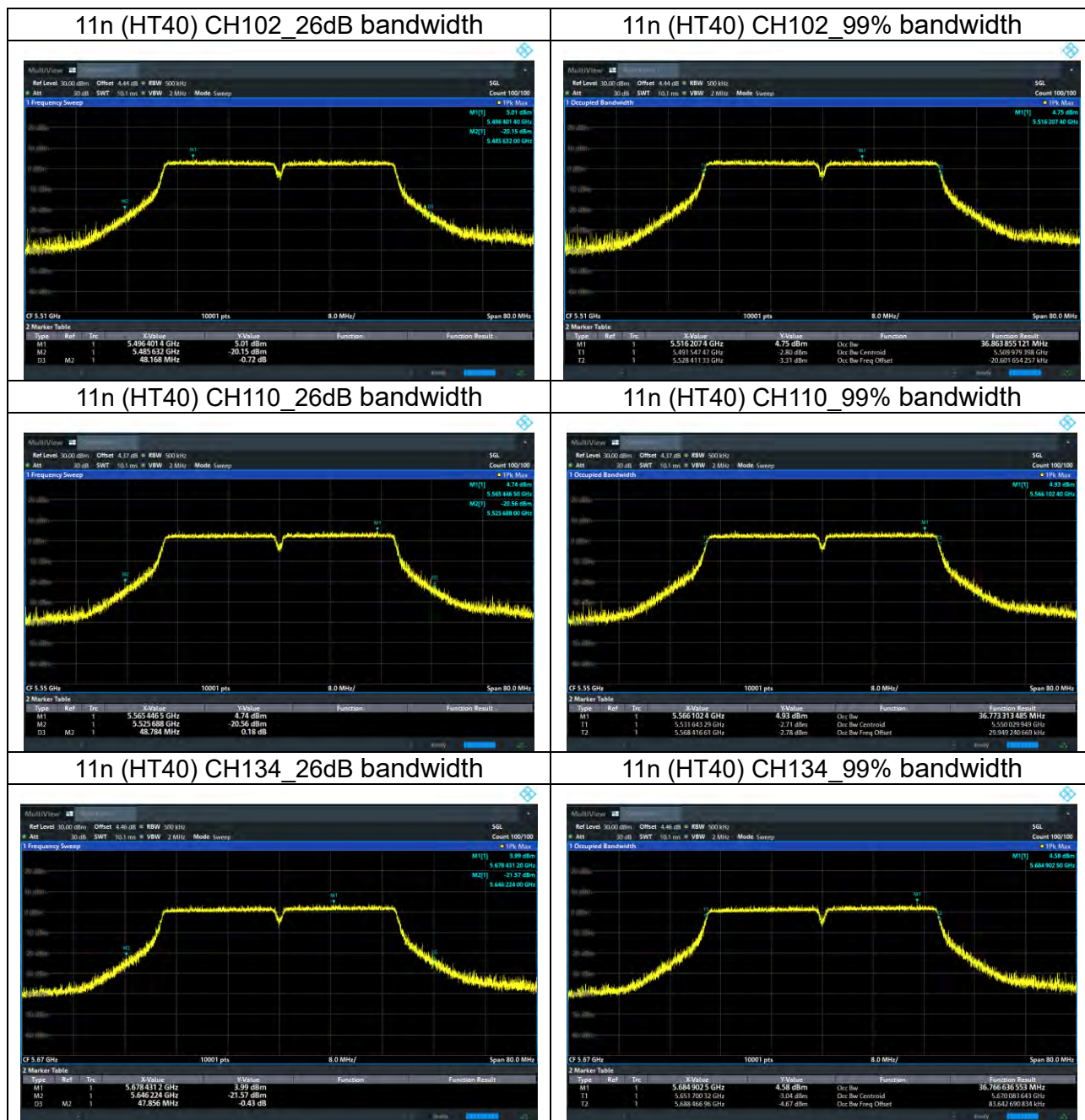
U-NII-2C

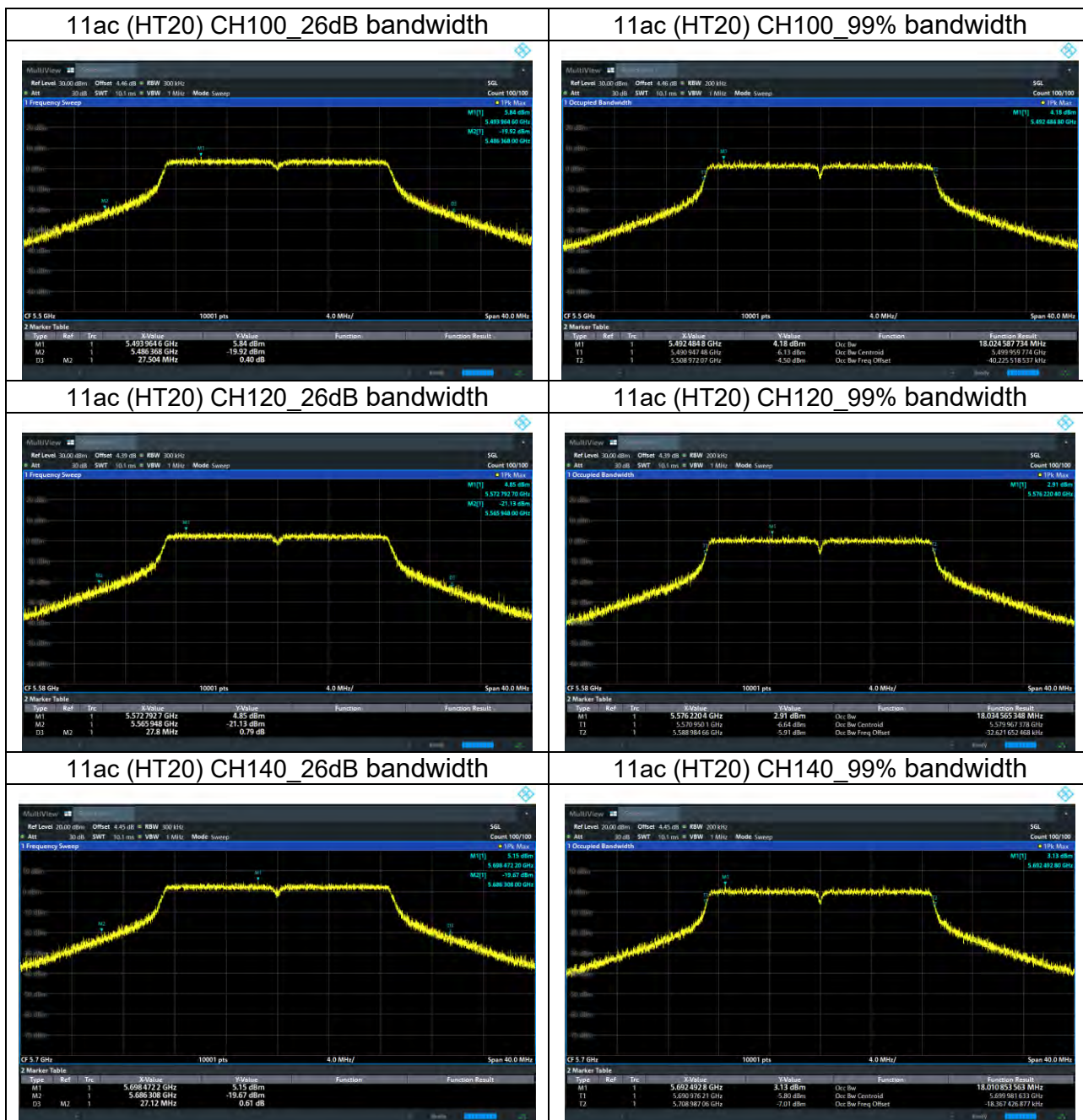
Channel	Test Channel	Frequency (MHz)	26dB bandwidth (MHz)	Limit (kHz)	99% bandwidth	Limit (kHz)	Result
11a	CH100	5500	26.136	/	16.791	/	Pass
11a	CH120	5600	26.596	/	16.803	/	Pass
11a	CH140	5700	26.4	/	16.762	/	Pass
11n (HT20)	CH100	5500	27.84	/	18.015	/	Pass
11n (HT20)	CH120	5600	28.824	/	18.022	/	Pass
11n (HT20)	CH140	5700	28.064	/	18.036	/	Pass
11n (HT40)	CH102	5510	48.168	/	36.864	/	Pass
11n (HT40)	CH110	5550	48.784	/	36.773	/	Pass
11n (HT40)	CH134	5670	47.856	/	36.767	/	Pass
11ac (HT20)	CH100	5500	27.504	/	18.025	/	Pass
11ac (HT20)	CH120	5600	27.8	/	18.035	/	Pass
11ac (HT20)	CH140	5700	27.12	/	18.011	/	Pass
11ac (HT40)	CH102	5510	47.264	/	36.937	/	Pass
11ac (HT40)	CH110	5550	47.104	/	36.824	/	Pass
11ac (HT40)	CH134	5670	47.32	/	36.786	/	Pass

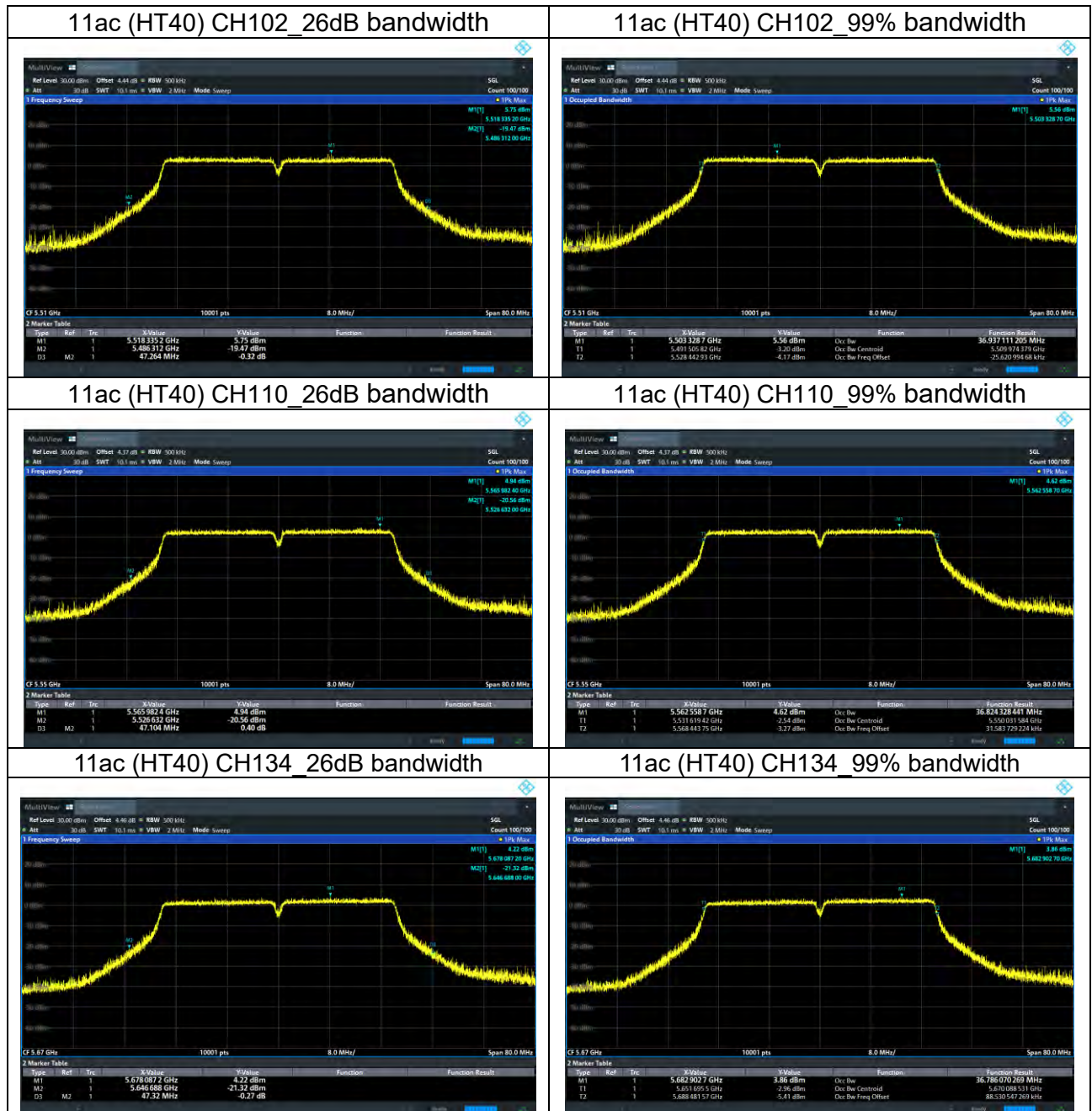
Test plots: U-NII-2C











5.7 6 dB Bandwidth

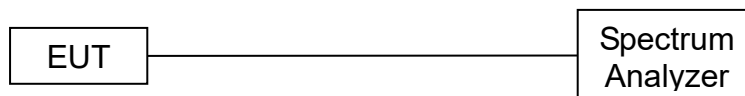
5.7.1 Limit

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

5.7.2 Test Procedure

1. Set RBW= 100 kHz.
2. Set the video bandwidth (VBW) $\geq 3 \times$ RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower) that are attenuated by 26 dB relative to the maximum level measured in the fundamental emission.

5.7.3 Test Setup



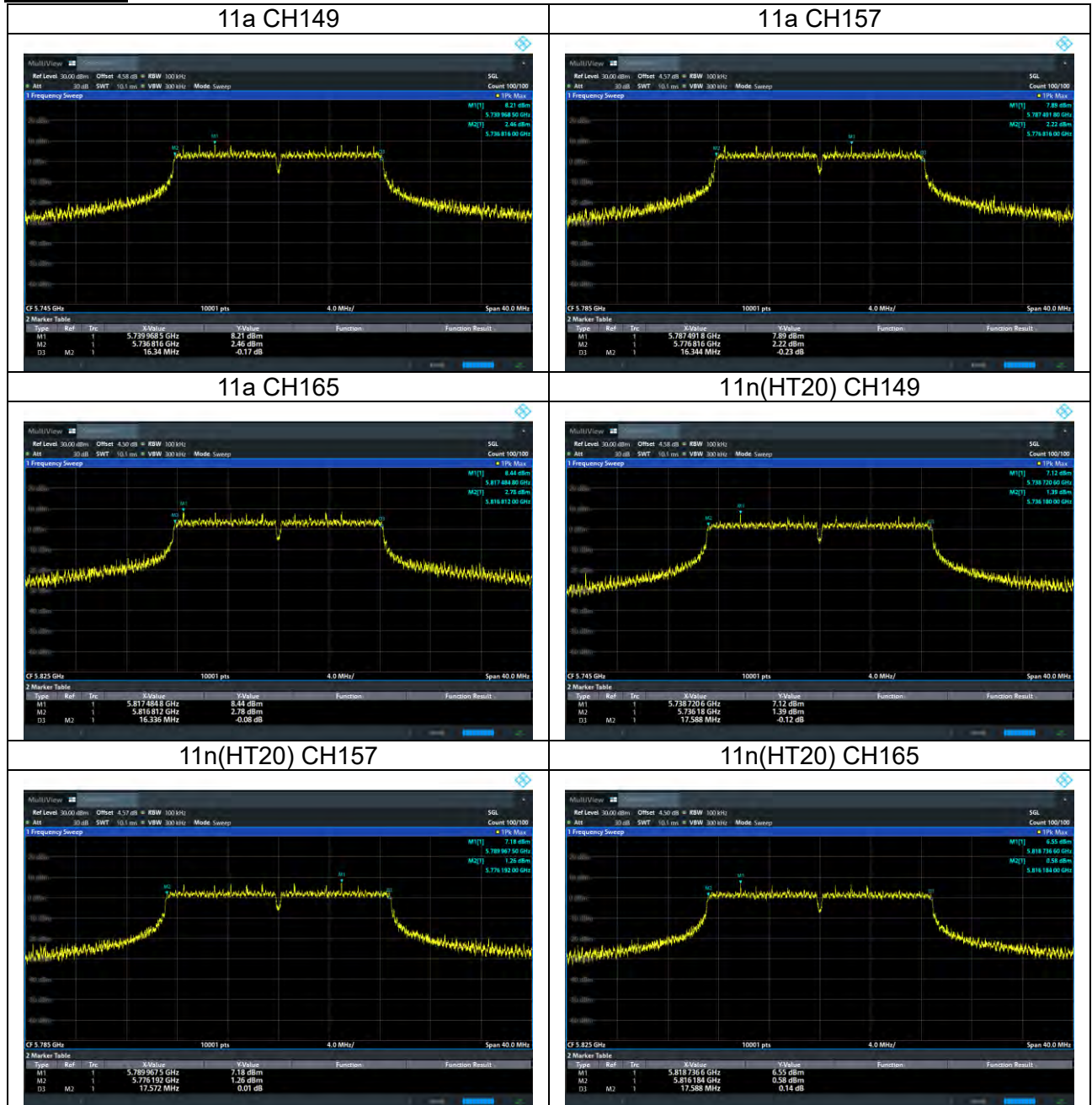
5.7.4 Test Results

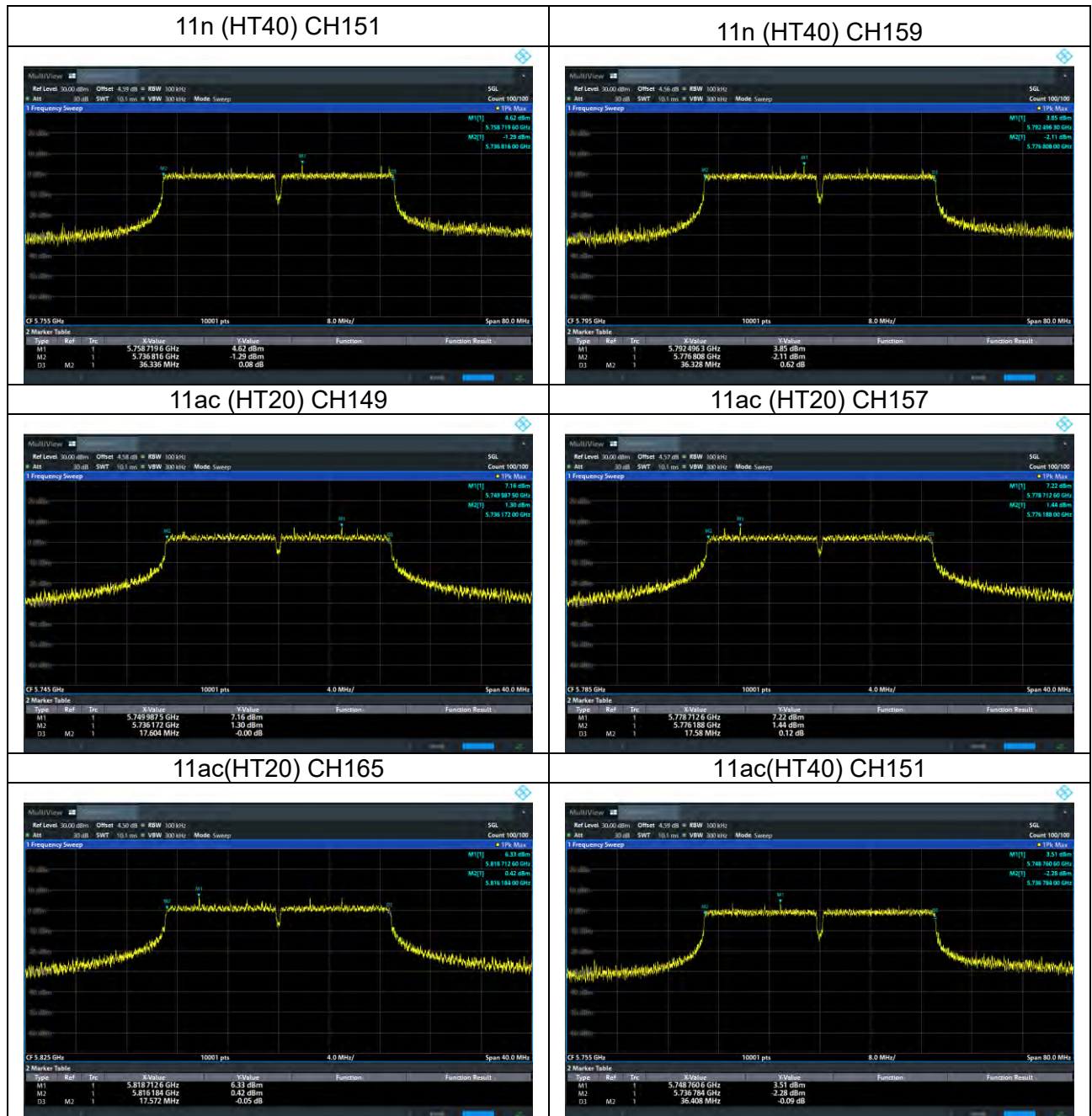
EUT:	Wireless carplay adapter	Model Name:	KY-4194
Test Mode:	TX	Test Voltage:	DC 5V from adapter AC 120V/60Hz

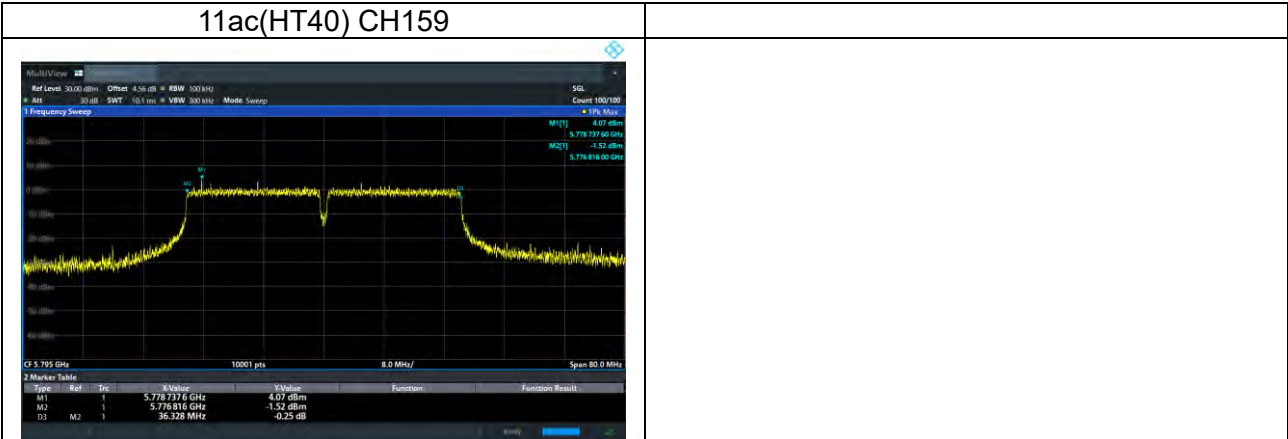
For U-NII-3

Channel	Test Channel	Frequency (MHz)	6dB bandwidth (MHz)	Limit (kHz)	Result
11a	CH149	5745	16.34	500	Pass
11a	CH157	5785	16.344	500	Pass
11a	CH165	5825	16.336	500	Pass
11n (HT20)	CH149	5745	17.588	500	Pass
11n (HT20)	CH157	5785	17.572	500	Pass
11n (HT20)	CH165	5825	17.588	500	Pass
11n (HT40)	CH151	5755	36.336	500	Pass
11n (HT40)	CH159	5795	36.328	500	Pass
11ac (HT20)	CH149	5745	17.604	500	Pass
11ac (HT20)	CH157	5785	17.58	500	Pass
11ac (HT20)	CH165	5825	17.572	500	Pass
11ac (HT40)	CH151	5755	36.408	500	Pass
11ac (HT40)	CH159	5795	36.328	500	Pass

Test plots:
For U-NII-3







5.8 Out Of Band Emission

5.8.1 Limit

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 5.25–5.35 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.
- (4) For transmitters operating solely in the 5.725–5.850 GHz band:
 - (i) All emissions shall be limited to a level of –27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

5.8.2 Test Procedure

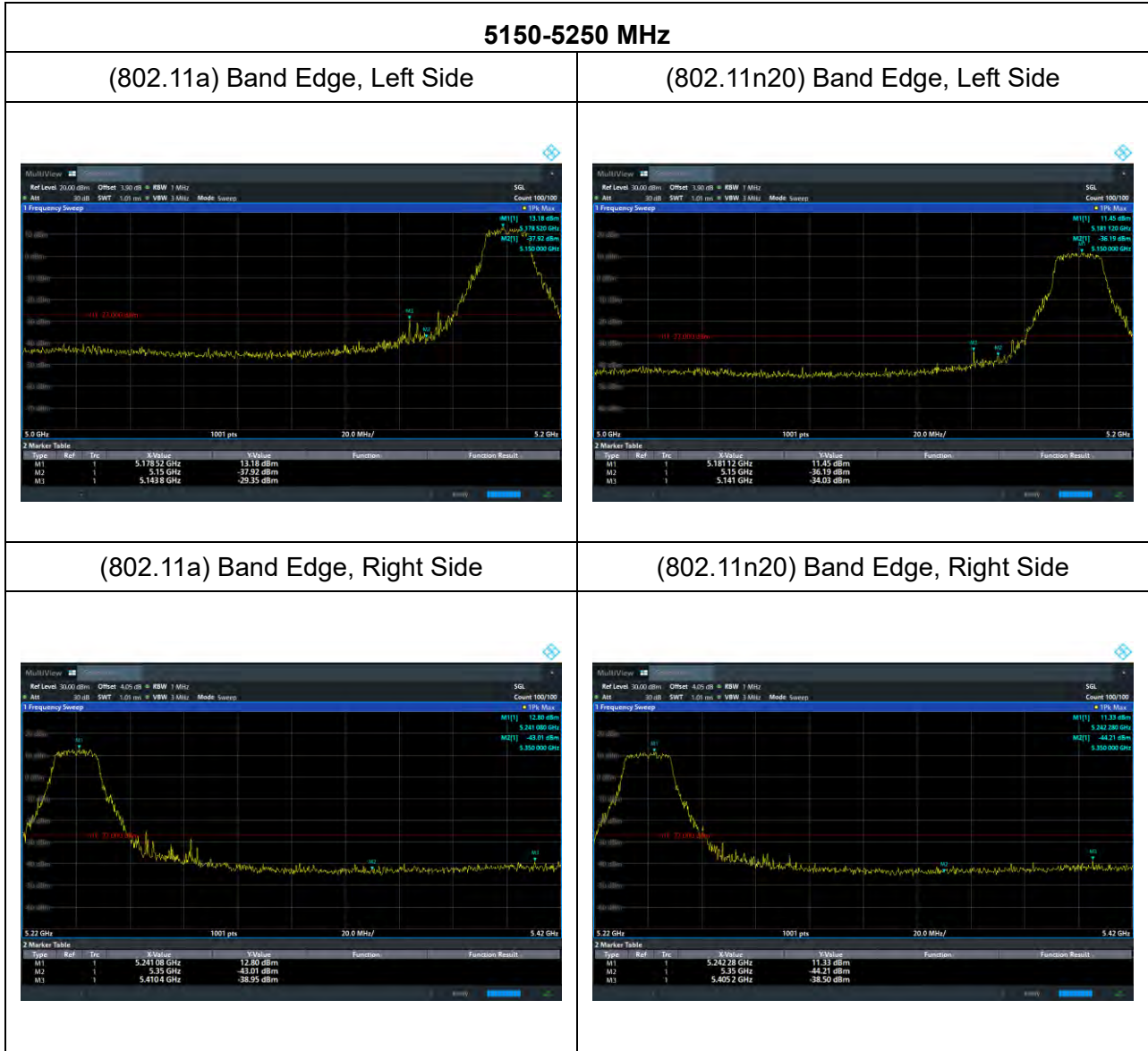
- a) Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
- b) Position the EUT without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
- c) Set RBW of spectrum analyzer to 1 MHz with a convenient frequency span.
- d) 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.
- e) Repeat above procedures until all measured frequencies were complete.

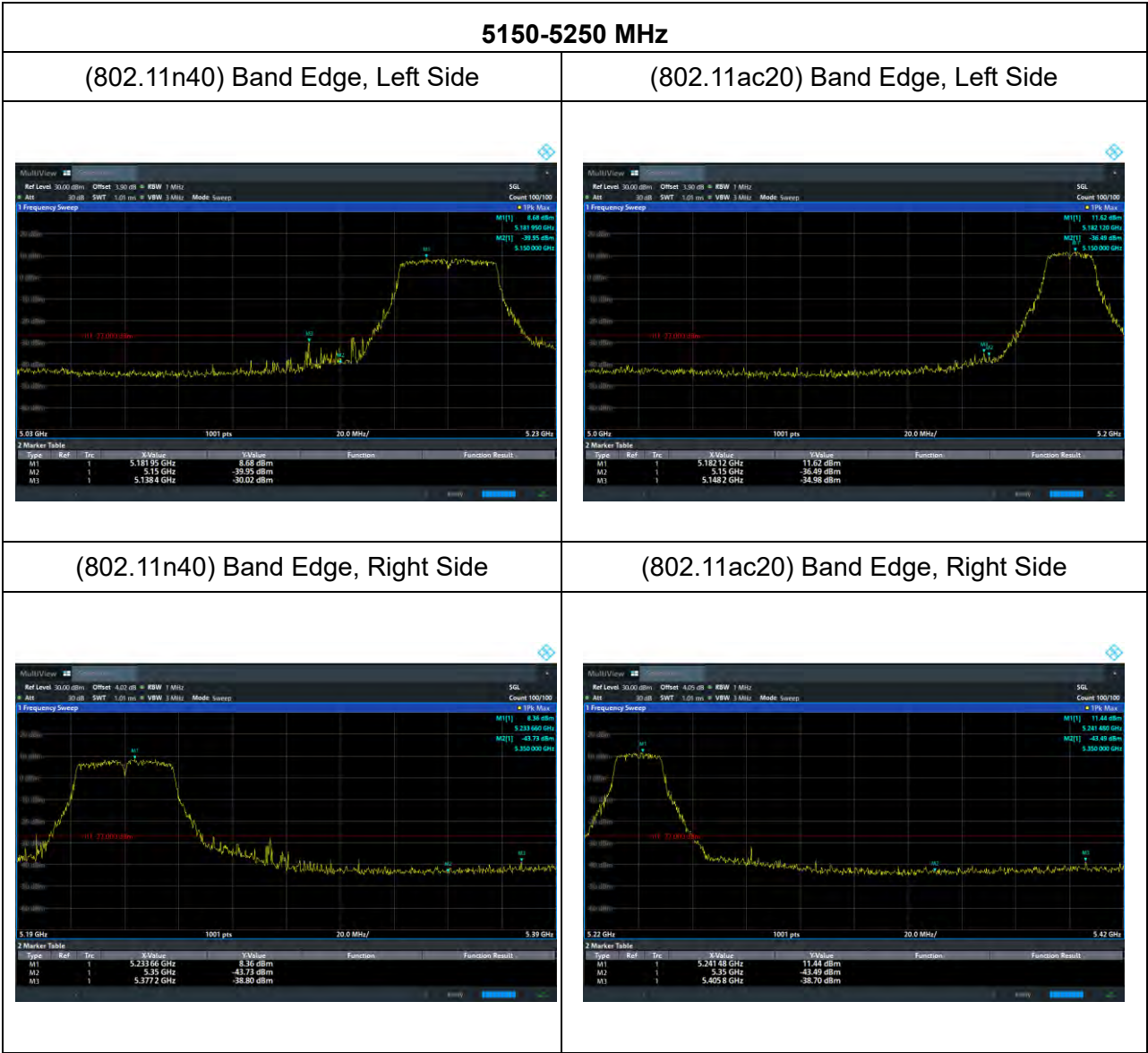
5.8.3 Test Setup

EUT

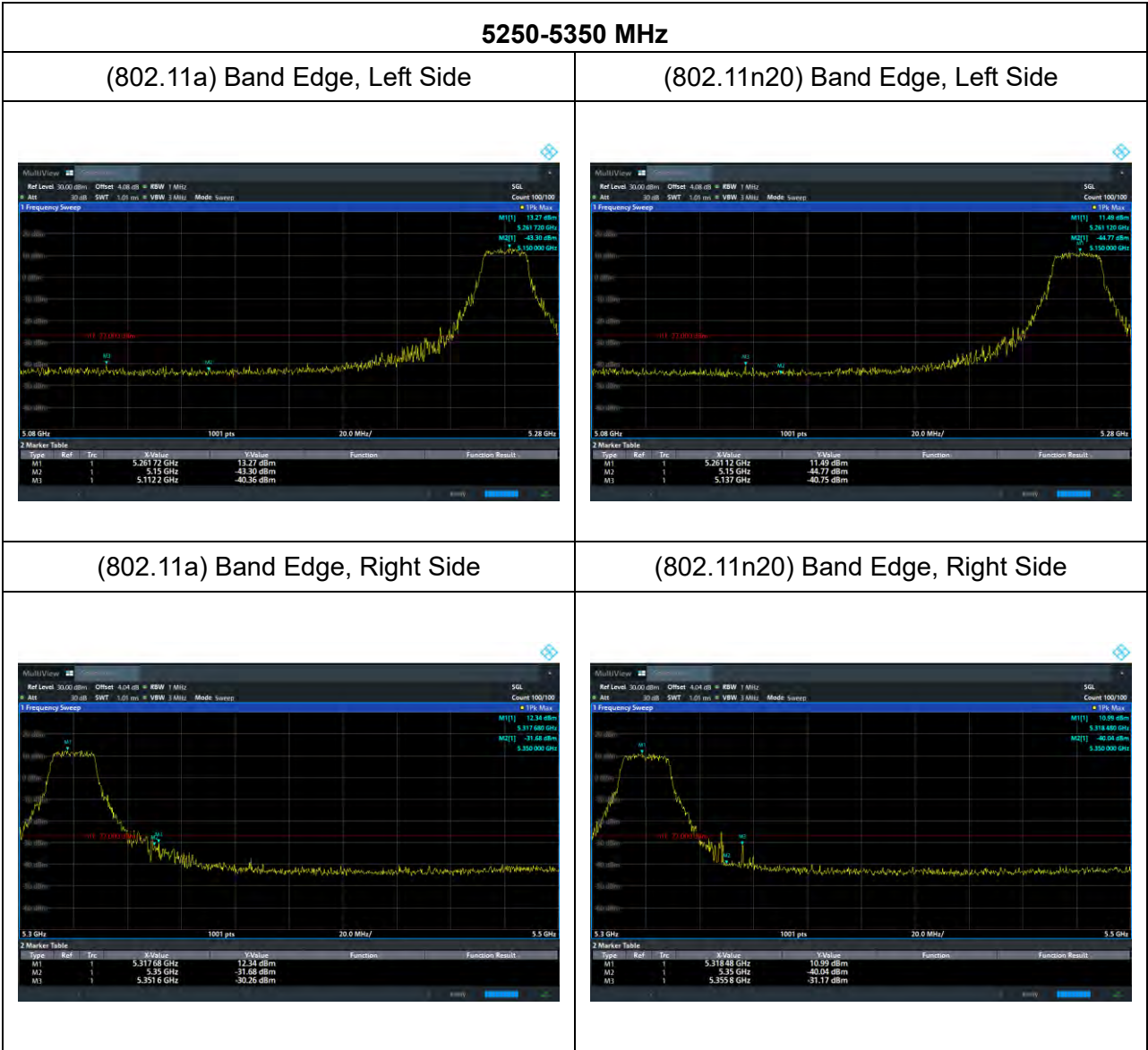
Spectrum
Analyzer

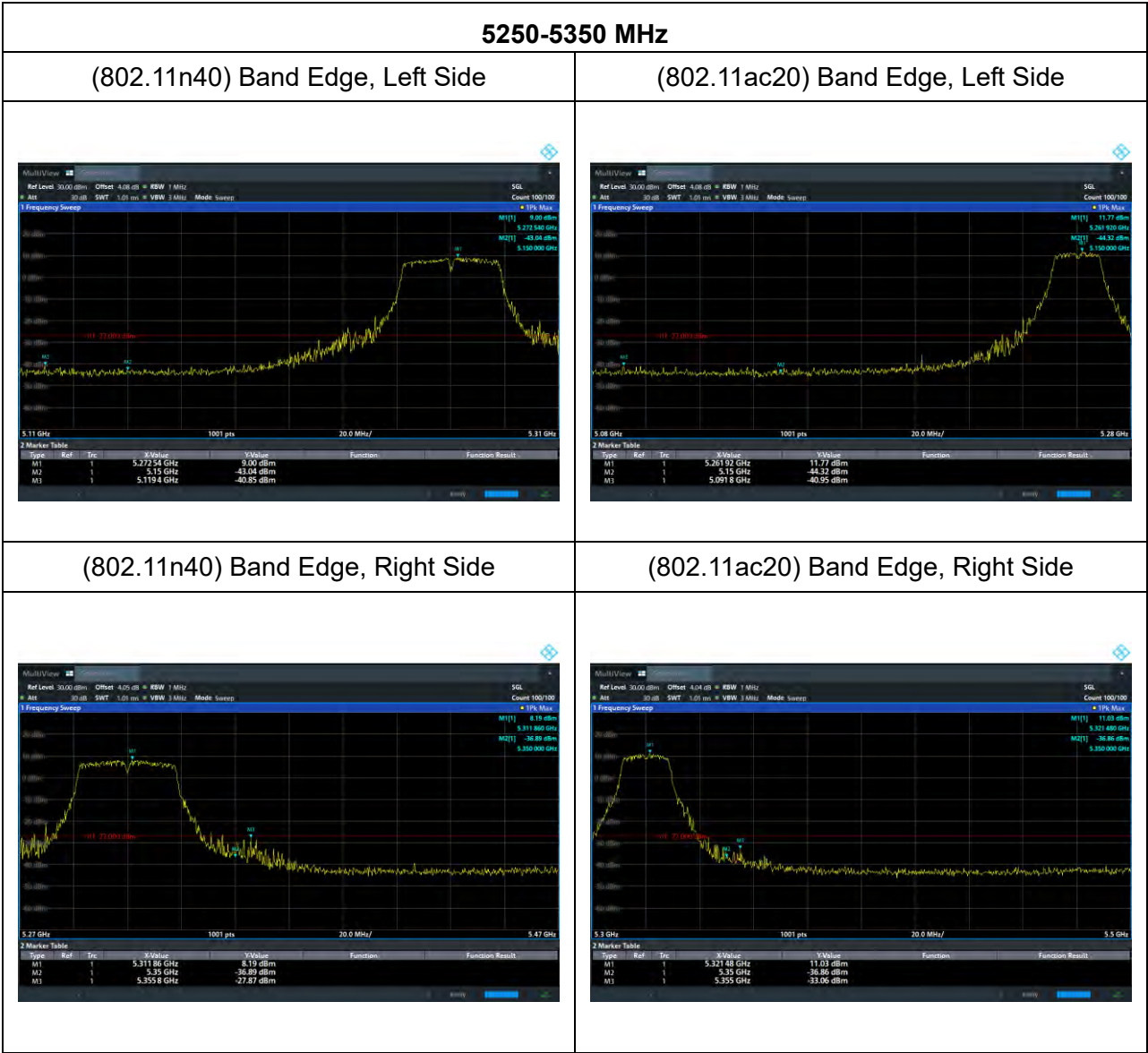
5.8.4 Test Results



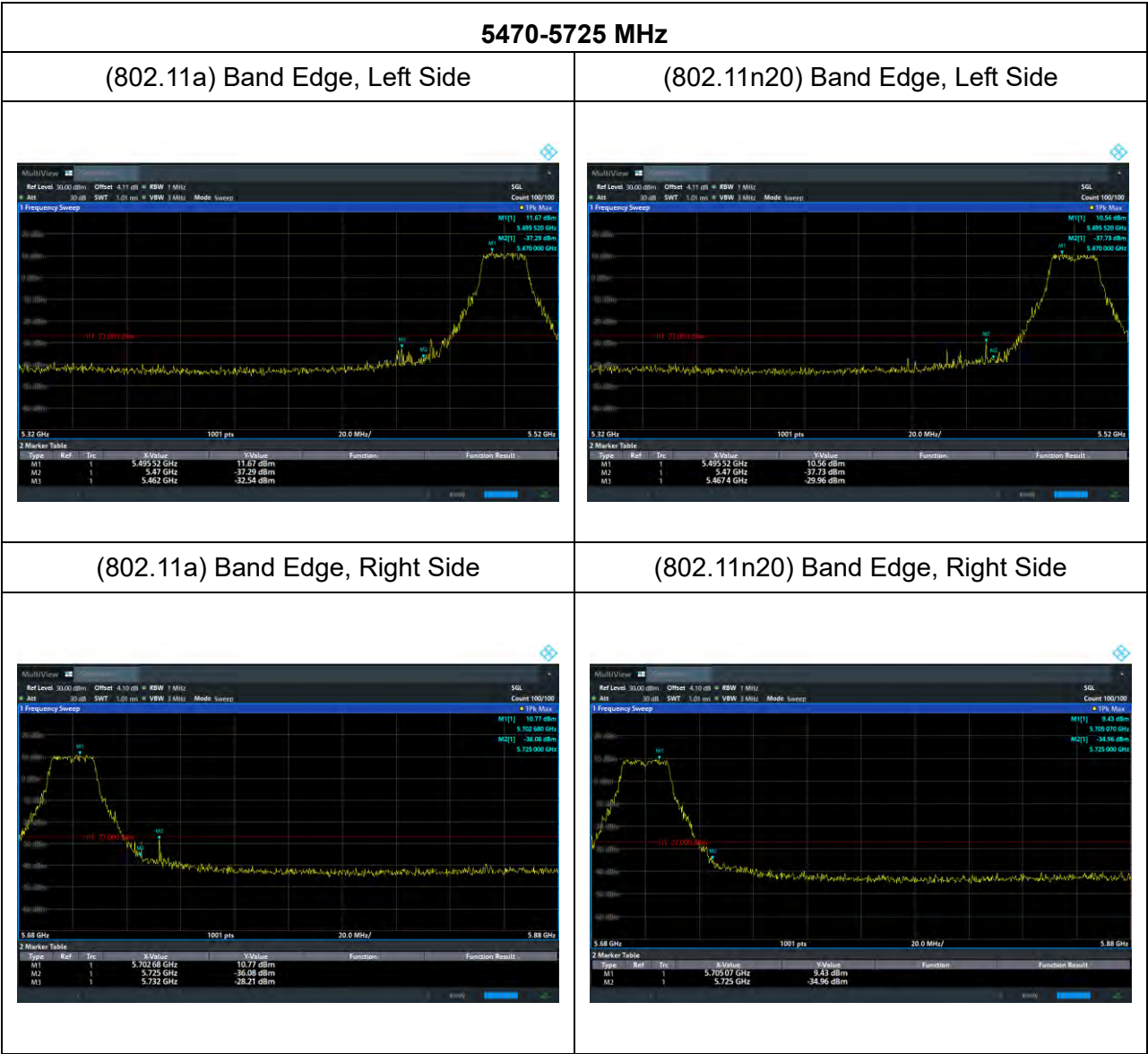


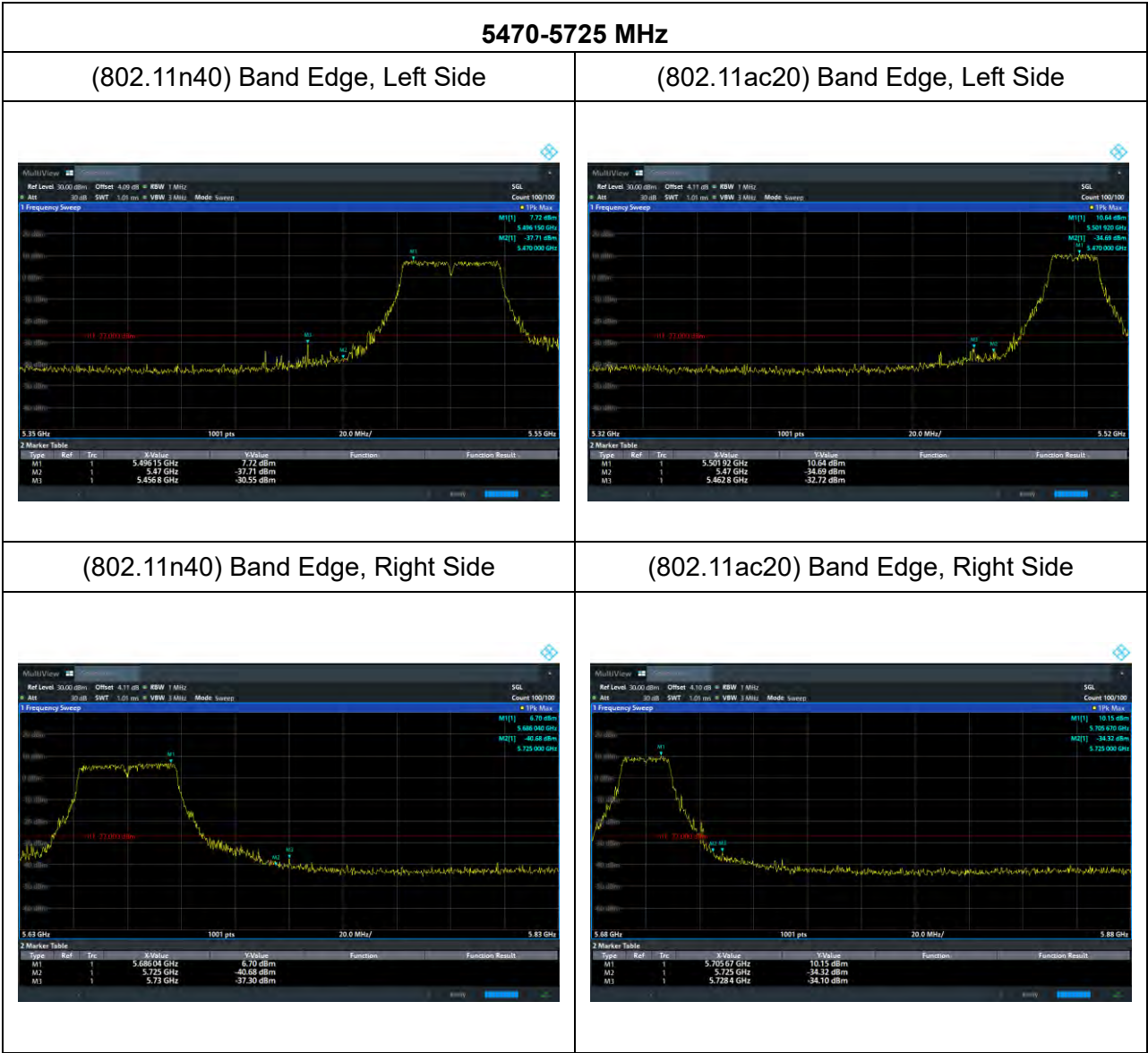
5150-5250 MHz	
(802.11ac40) Band Edge, Left Side	
	
(802.11ac40) Band Edge, Right Side	
	



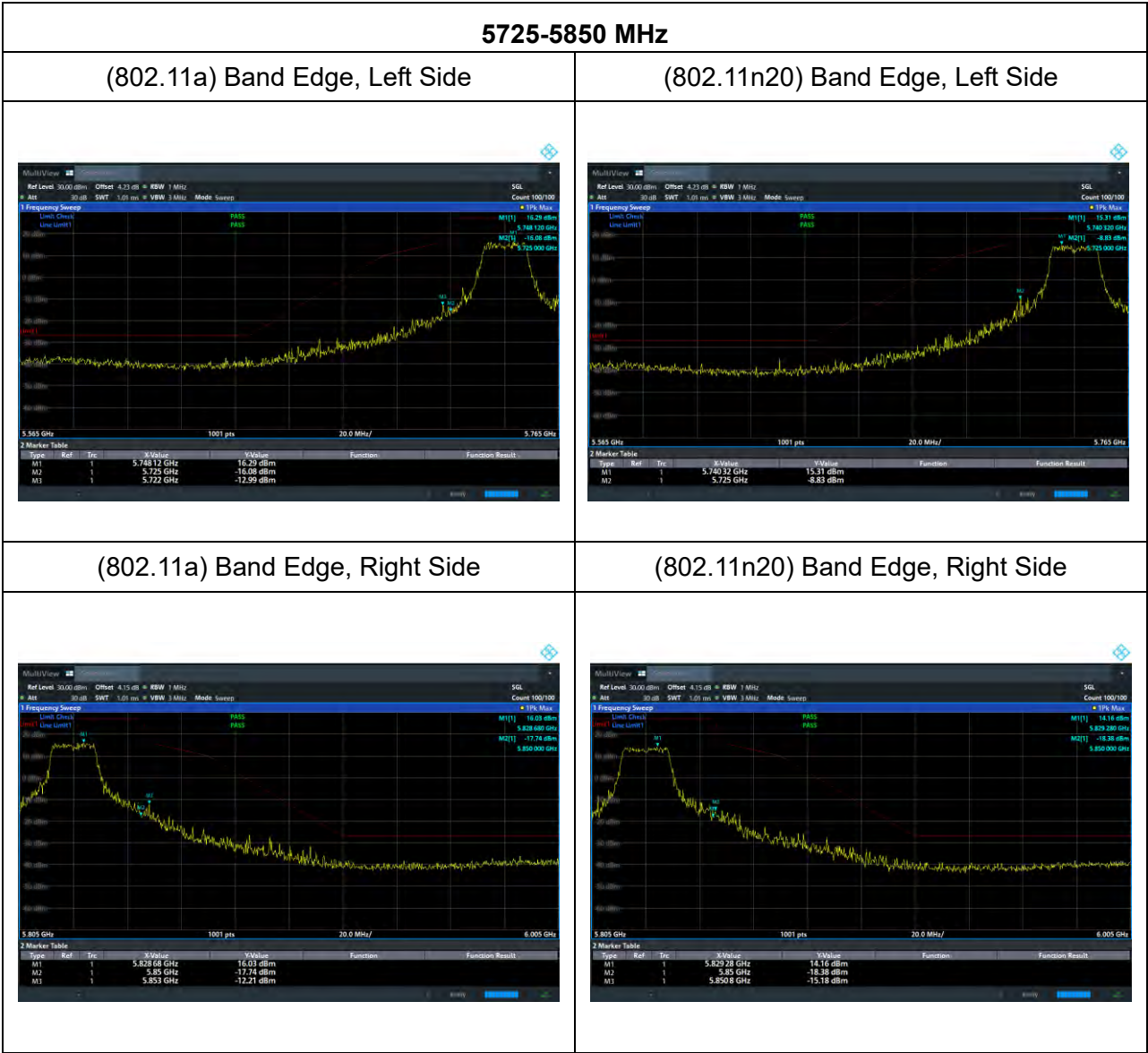


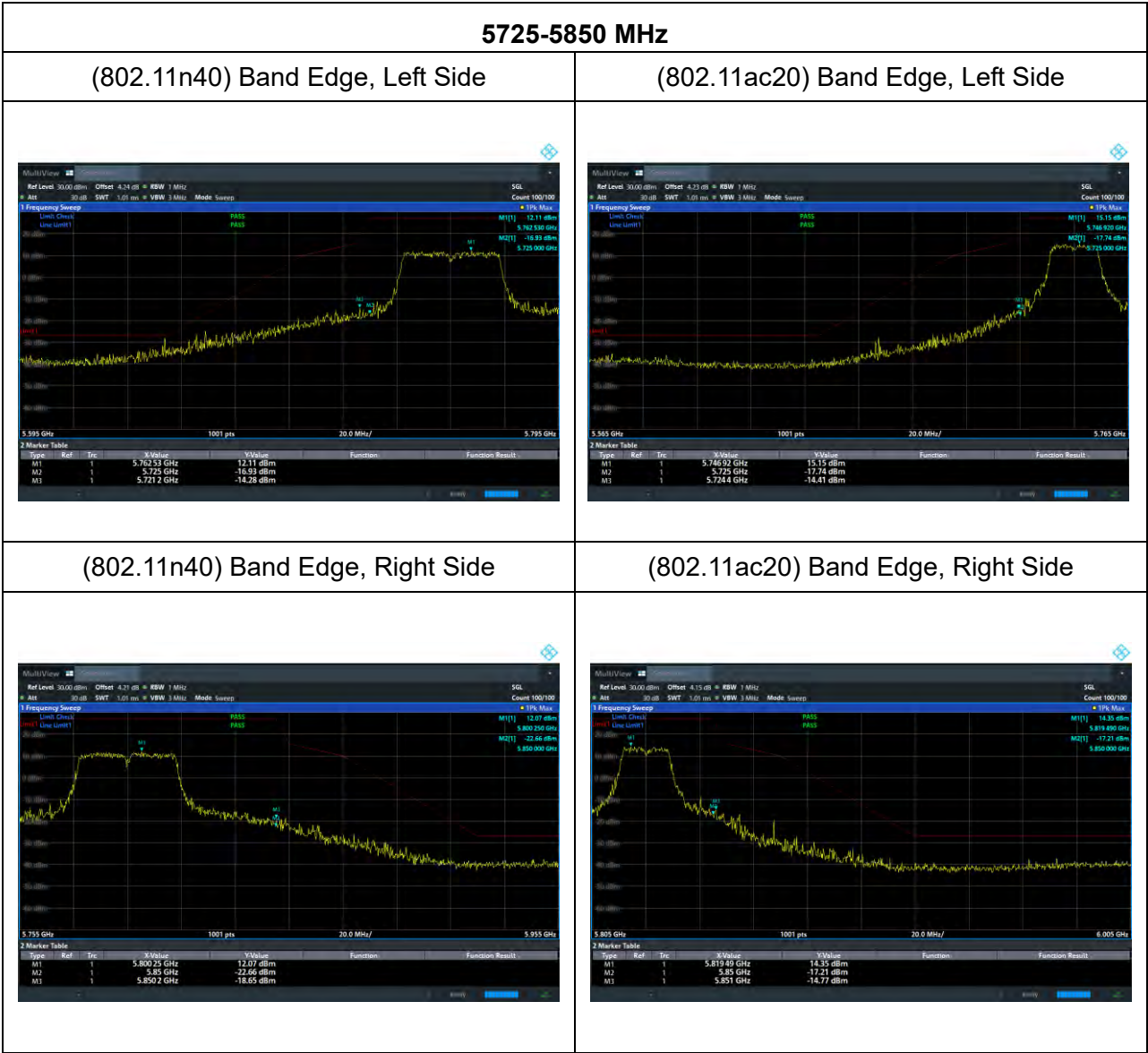
5250-5350 MHz	
(802.11ac40) Band Edge, Left Side	
	
(802.11ac40) Band Edge, Right Side	
	





5470-5725 MHz	
(802.11ac40) Band Edge, Left Side	
	
(802.11ac40) Band Edge, Right Side	
	





5725-5850 MHz	
(802.11ac40) Band Edge, Left Side	
	
(802.11ac40) Band Edge, Right Side	
	

5.9 Spurious RF Conducted Emissions

5.9.1 Limit

According to FCC §15.407(b).

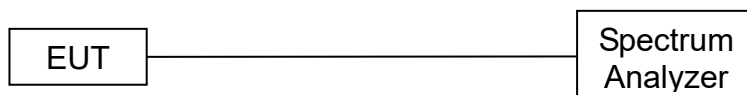
Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

- (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 5.25–5.35 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.
- (4) For transmitters operating solely in the 5.725–5.850 GHz band:
 - (i) All emissions shall be limited to a level of –27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

5.9.2 Test Procedure

The Spurious RF conducted emissions compliance of RF radiated emission should be measured by following the guidance in ANSI C63.10-2020 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.

5.9.3 Test Setup



5.9.4 Test Results

Note: 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 band edge measurement data.

U-NII-1

11a CH36



11a CH40



11a CH48



11n (HT20) CH36



11n (HT20) CH40



11n (HT20) CH48



11n (HT40) CH38



11n (HT40) CH46



11ac (HT20) CH36



11ac (HT20) CH40

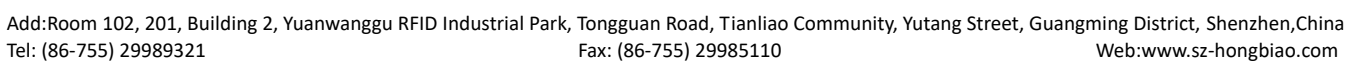


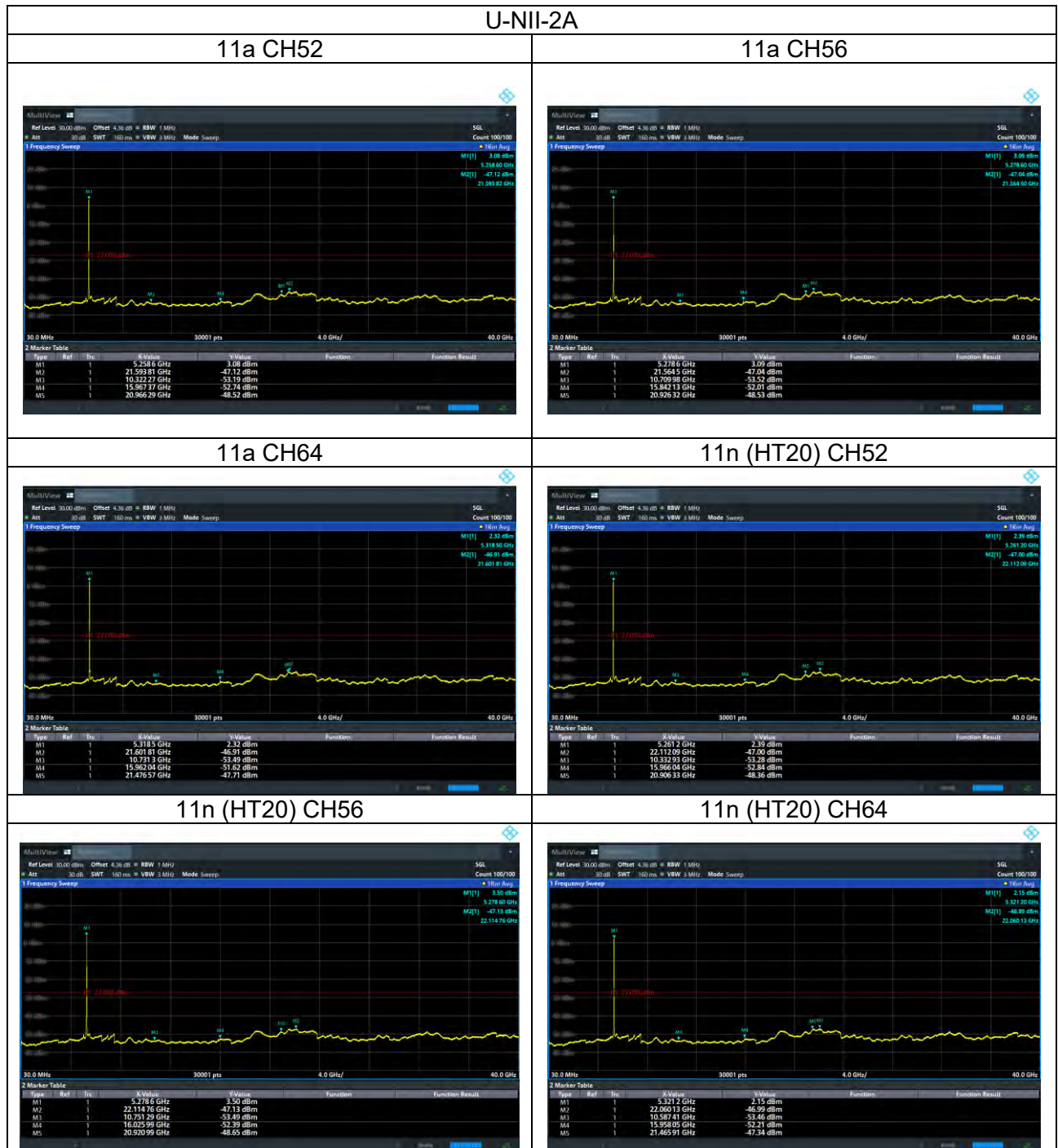
11ac (HT20) CH48



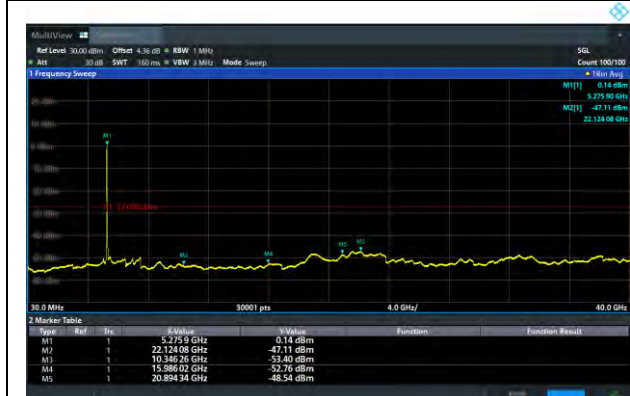
11ac (HT40) CH38



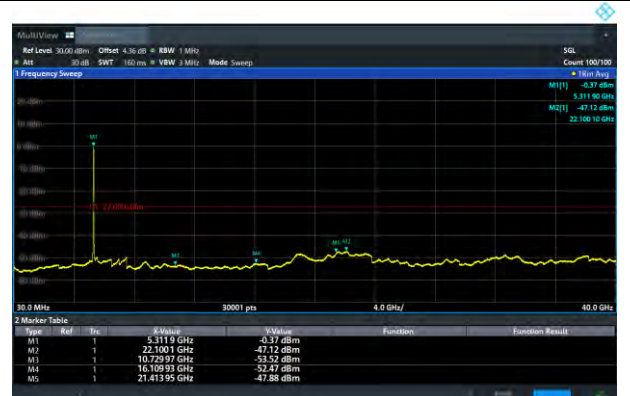




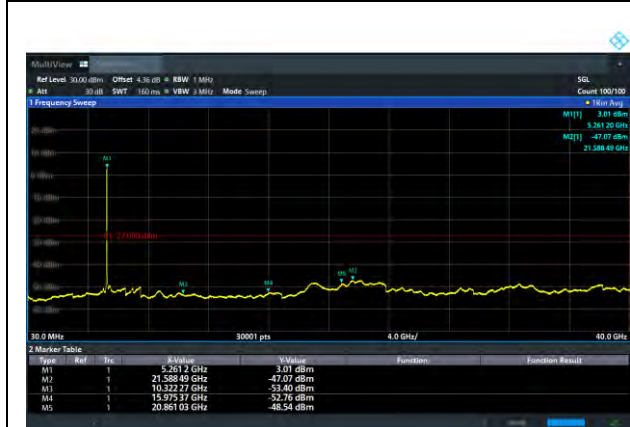
11n (HT40) CH54



11n (HT40) CH62



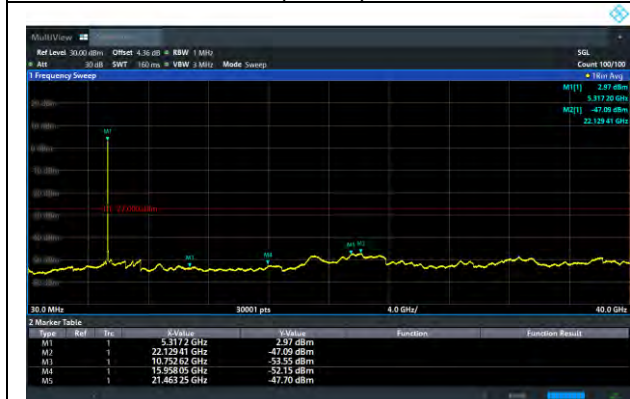
11ac (HT20) CH52



11ac (HT20) CH56

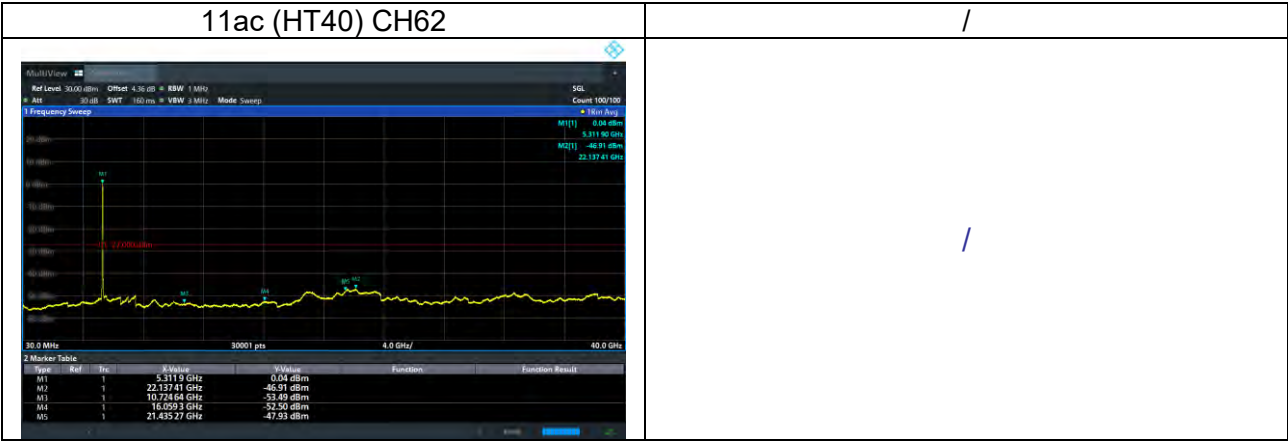


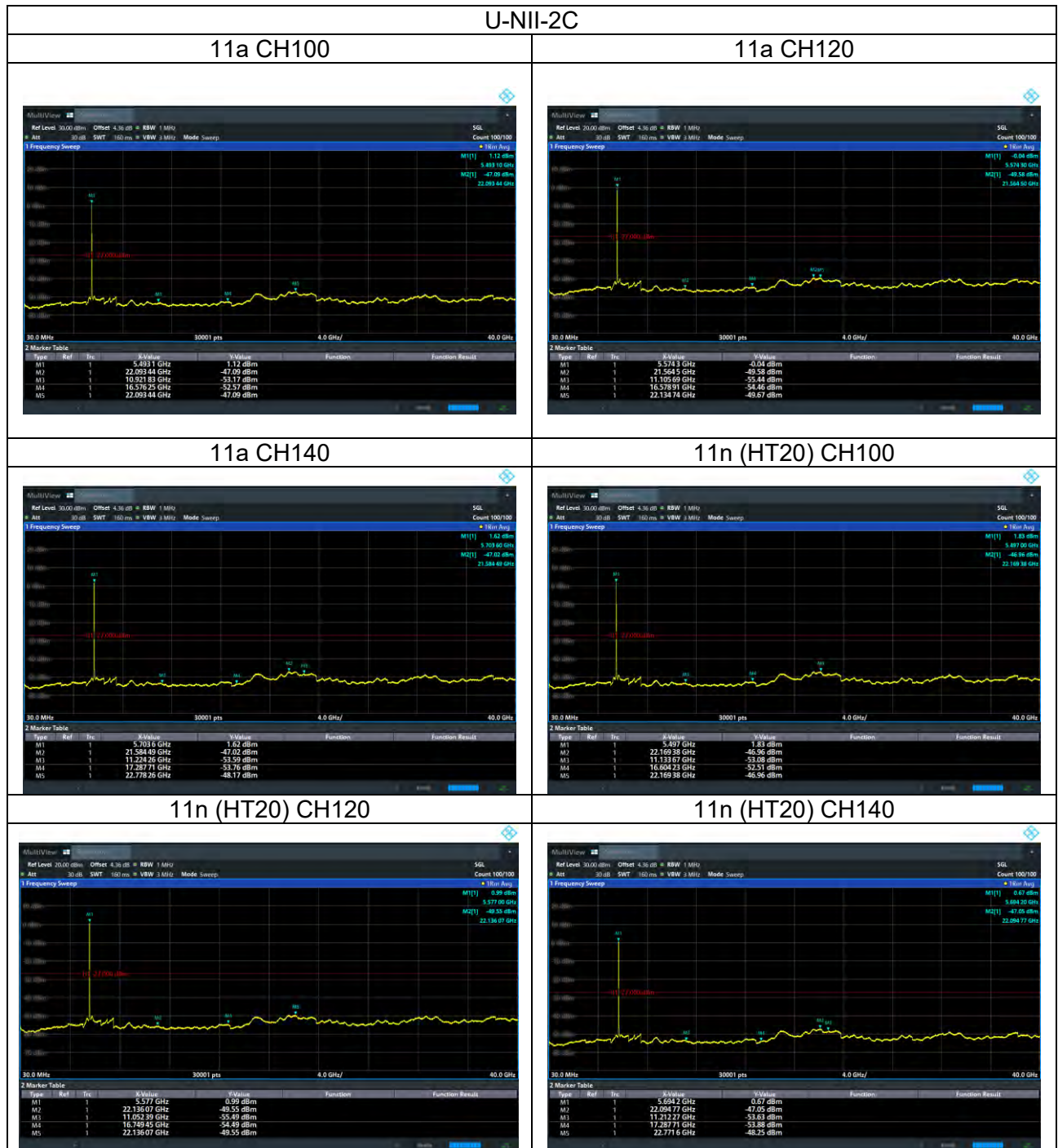
11ac (HT20) CH64



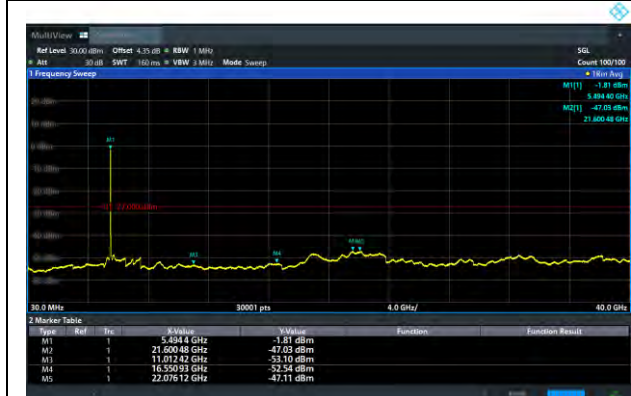
11ac (HT40) CH54







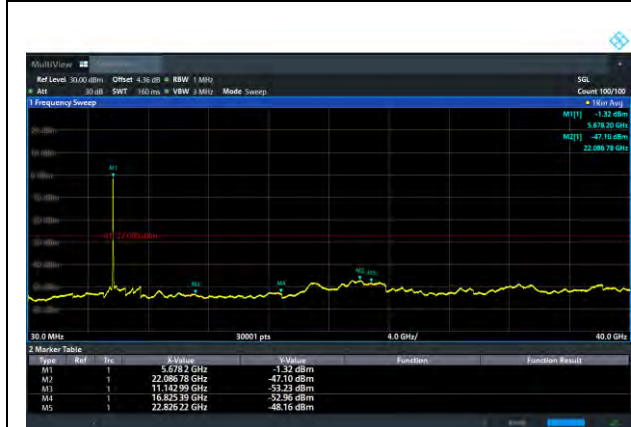
11n (HT40) CH102



11n (HT40) CH110



11n (HT40) CH134



11ac (HT20) CH100

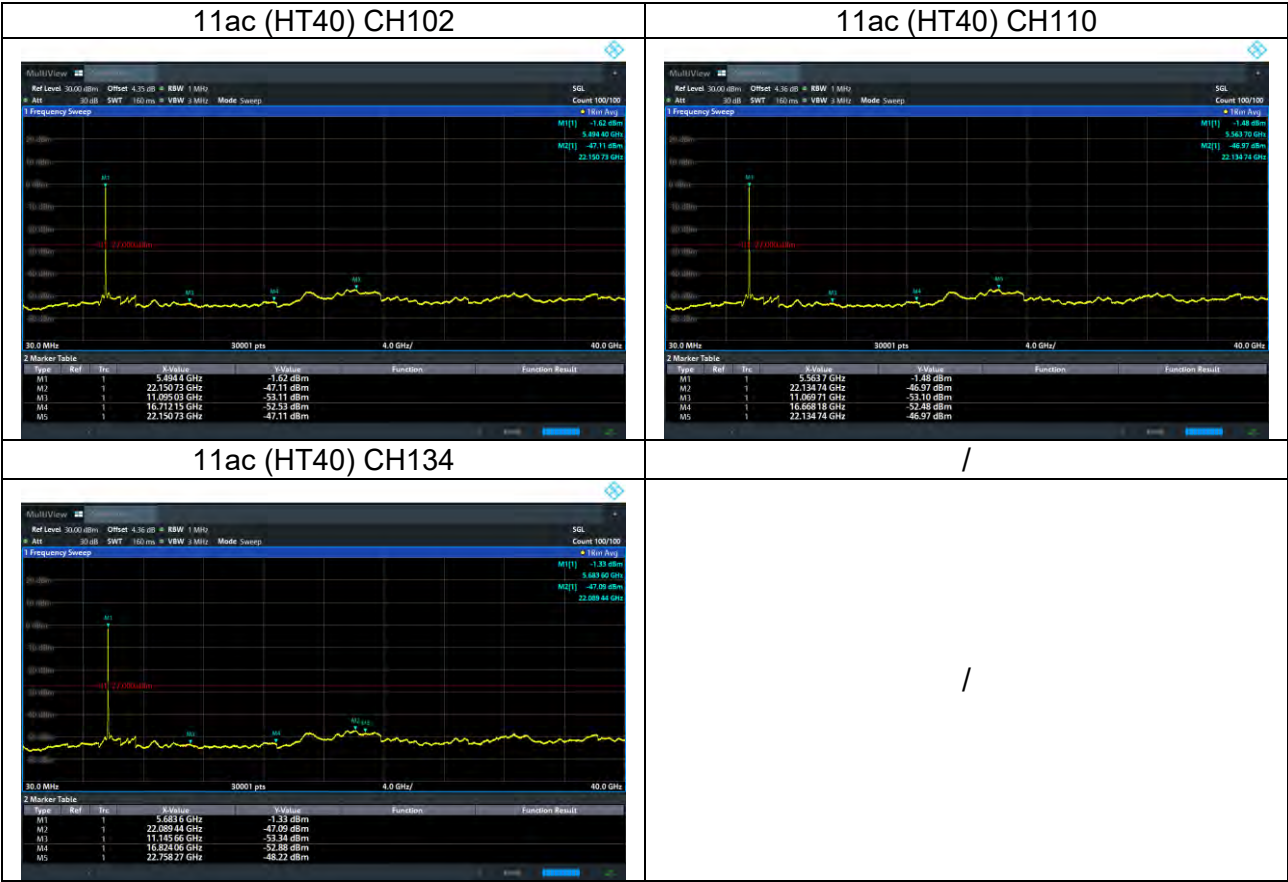


11ac (HT20) CH120



11ac (HT20) CH140



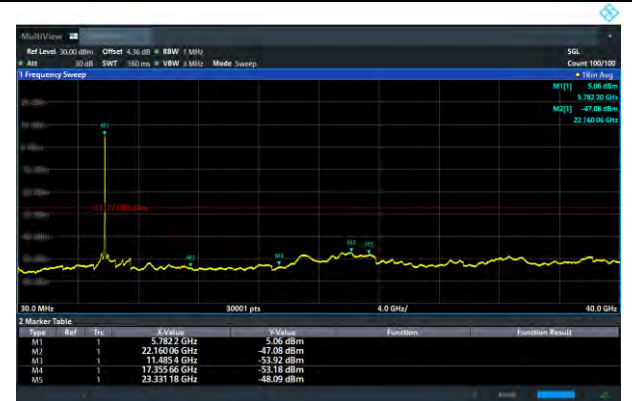


U-NII-3

11a CH149



11a CH157



11a CH165



11n(HT20) CH149



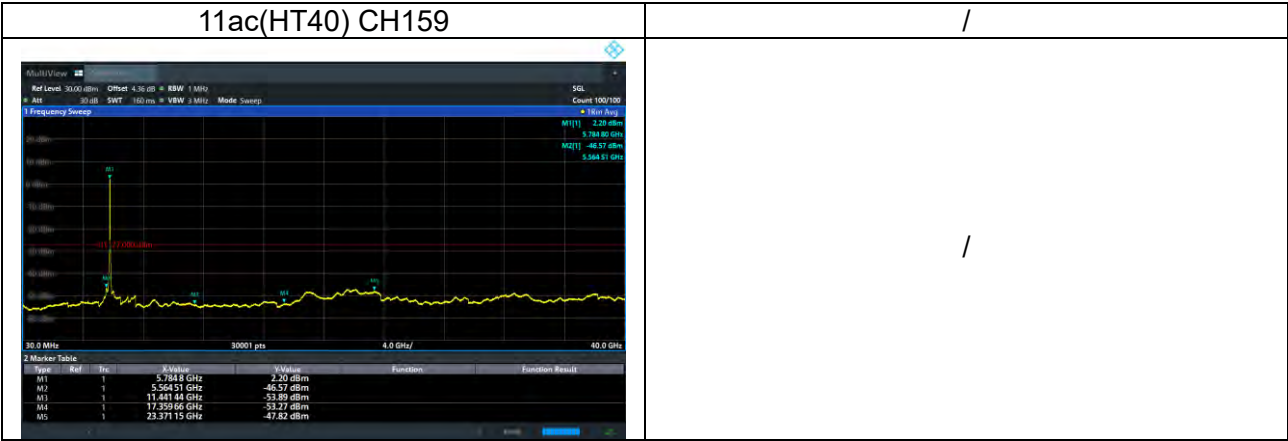
11n(HT20) CH157



11n(HT20) CH165

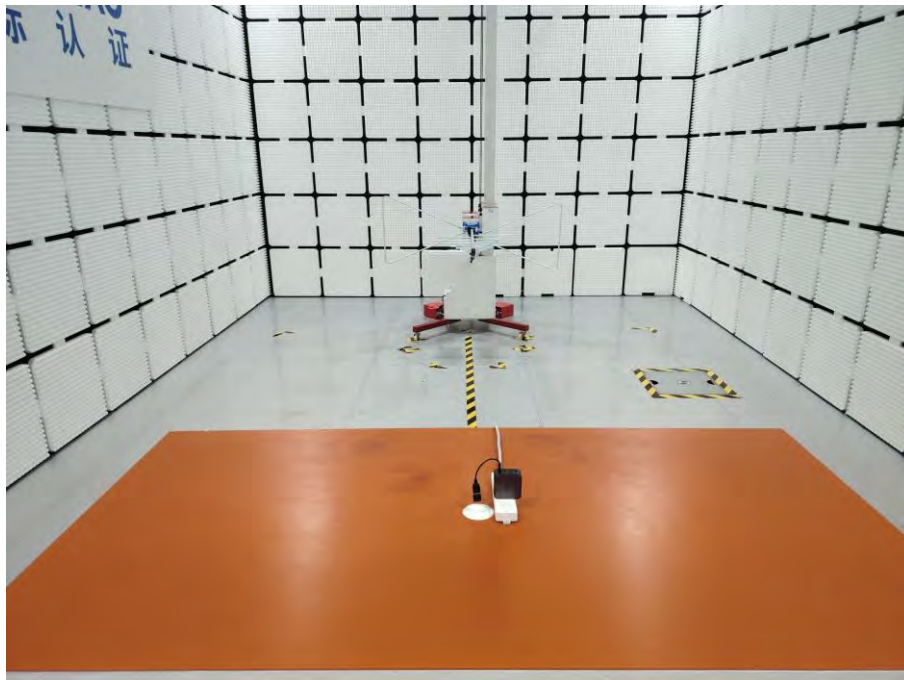






6 Photographs of the Test Setup

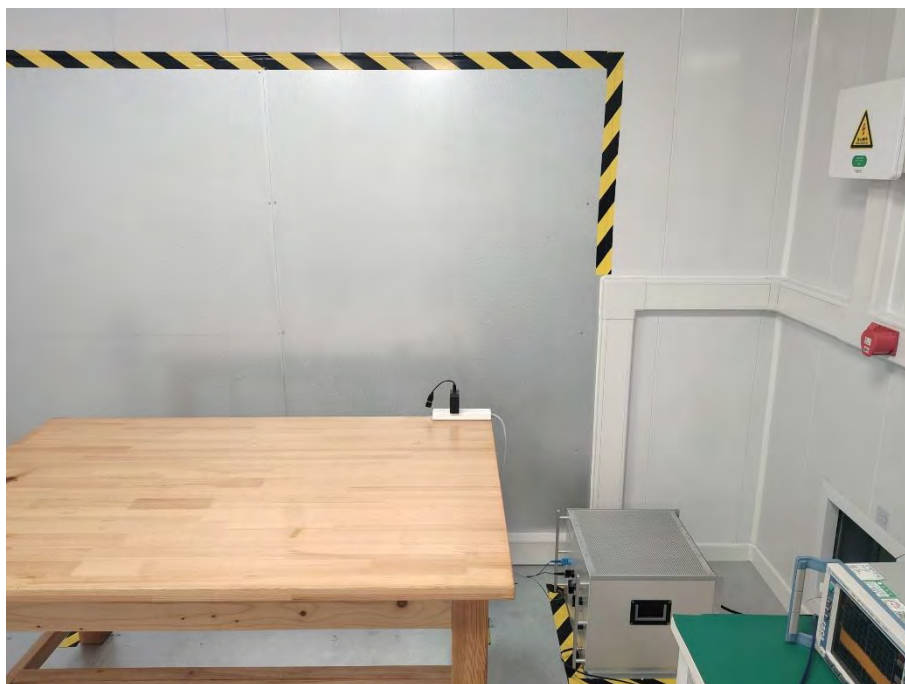
Radiated Emission Below 1GHz



Radiated Emission Above 1GHz



Conducted Emission



7 Photographs of the EUT

Please refer to report HB20250709025E-01 for product photos.

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