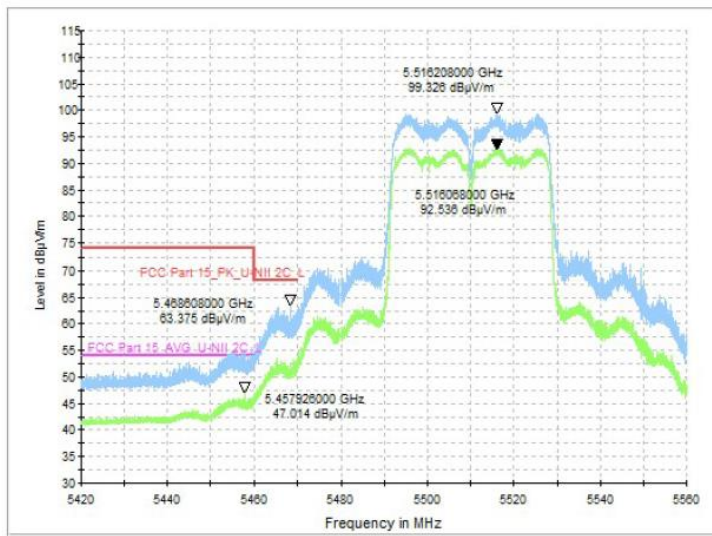


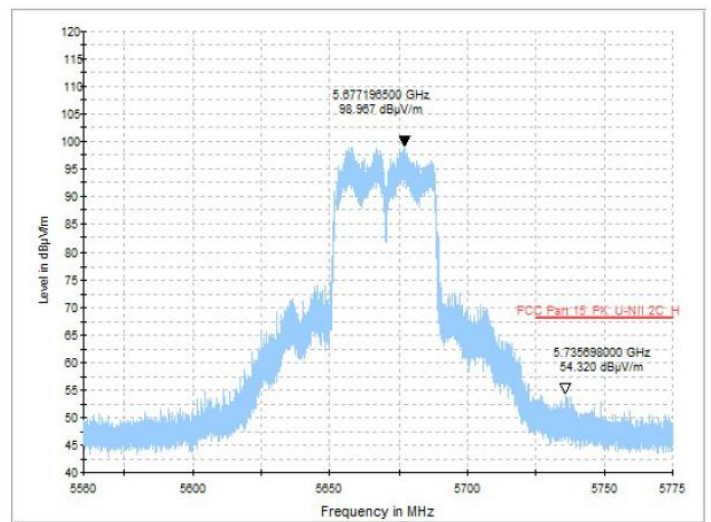
Mode: 802.11n(HT40)

Frequency: 5510MHz



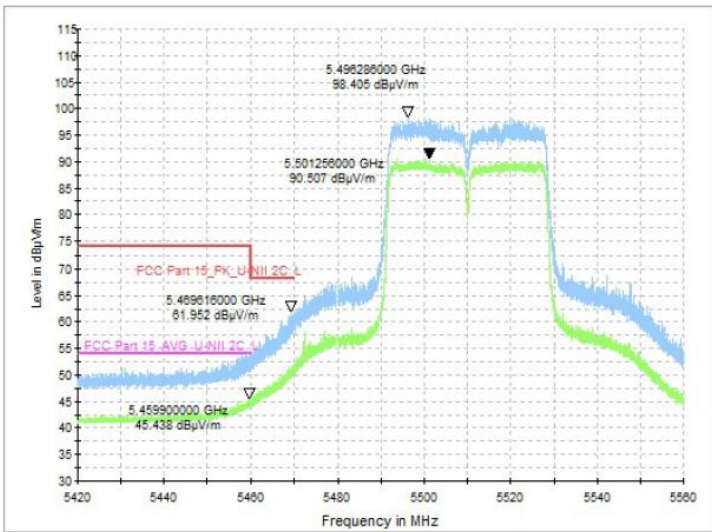
Mode: 802.11n(HT40)

Frequency: 5670MHz



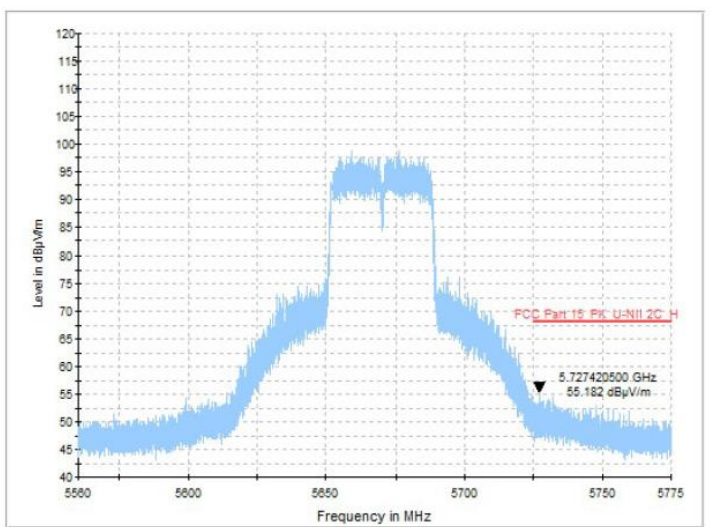
Mode: 802.11ac(HT40)

Frequency: 5510MHz



Mode: 802.11ac(HT40)

Frequency: 5670MHz

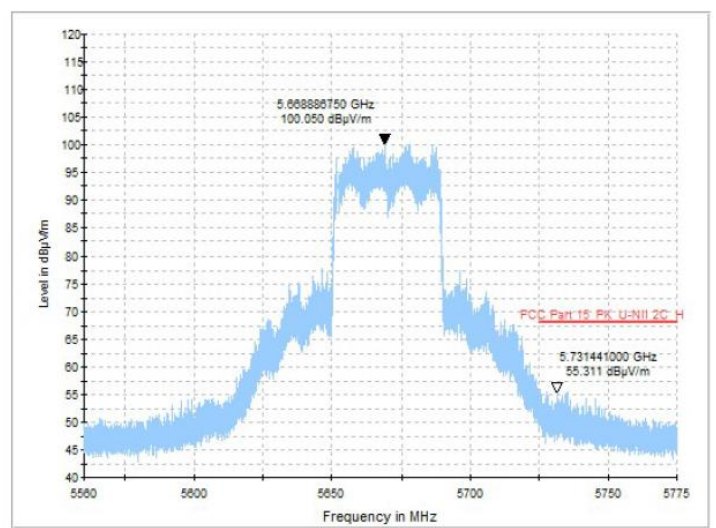
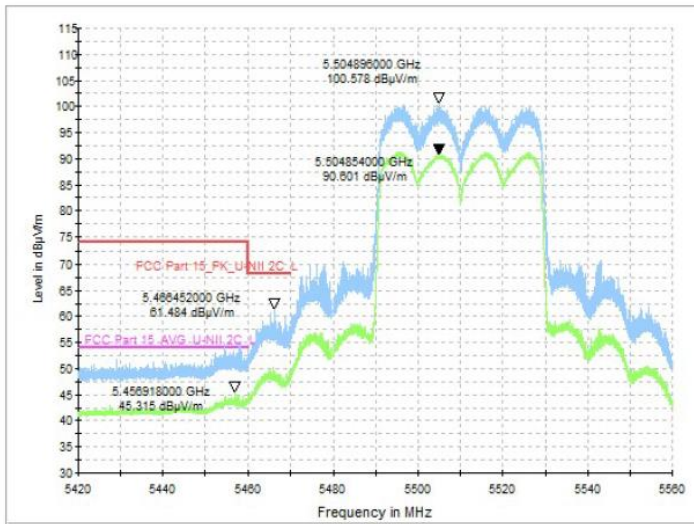


Mode: 802.11ax40

Frequency: 5510MHz

Mode: 802.11ax40

Frequency: 5670MHz

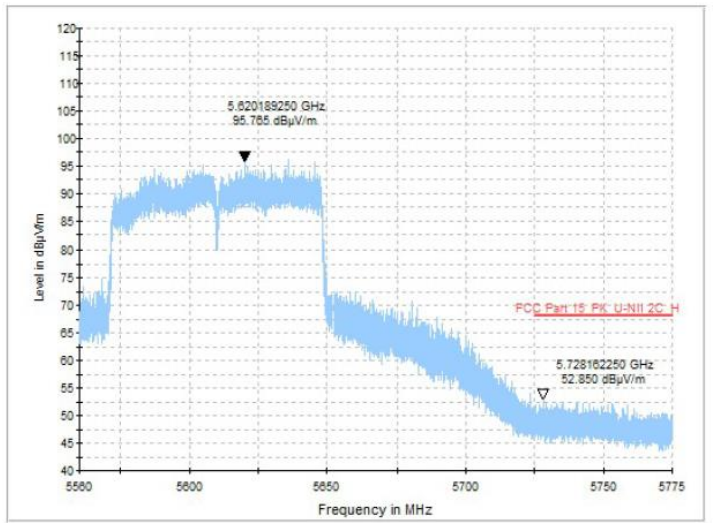
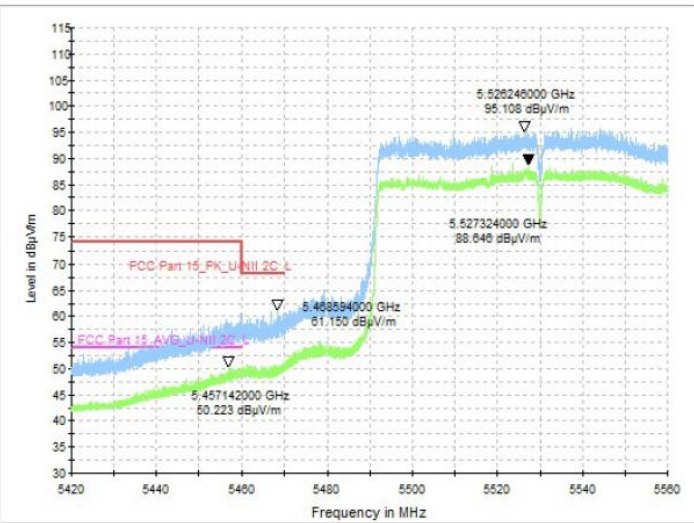


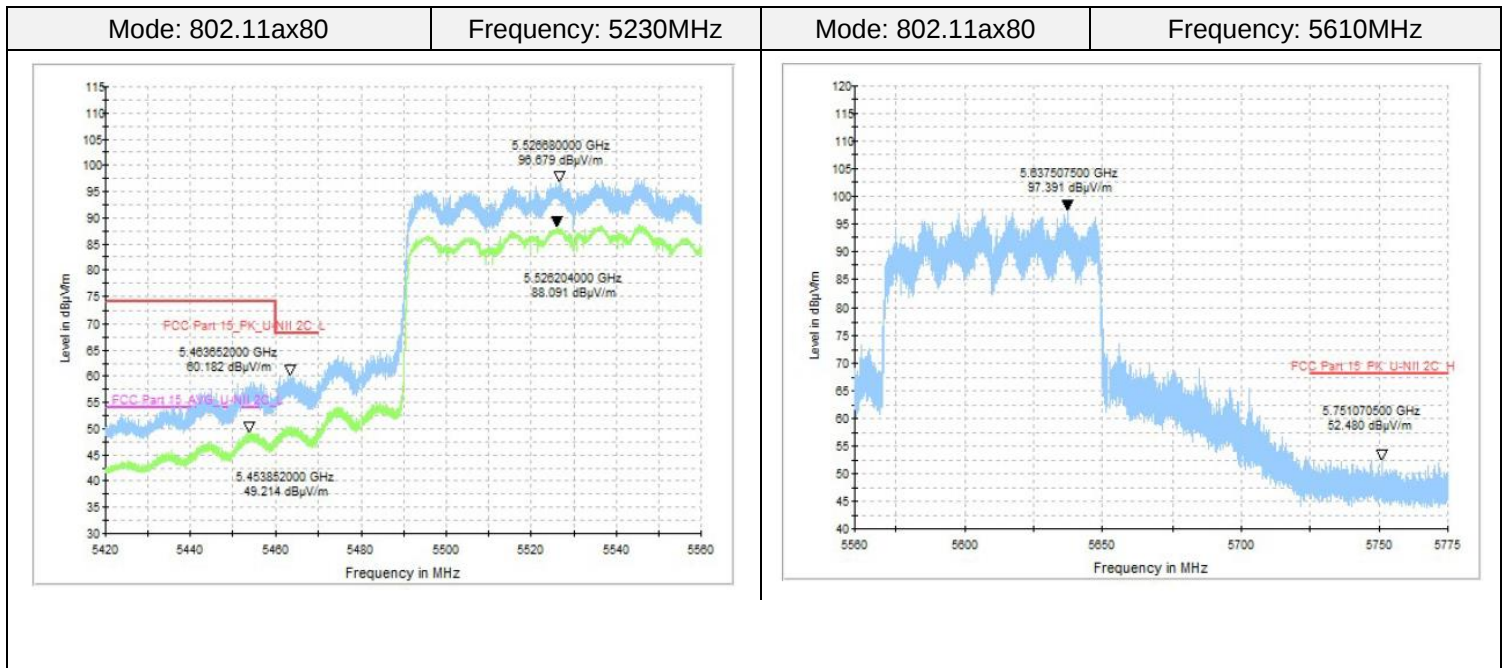
Mode: 802.11ac(HT80)

Frequency: 5230MHz

Mode: 802.11ac(HT80)

Frequency: 5610MHz



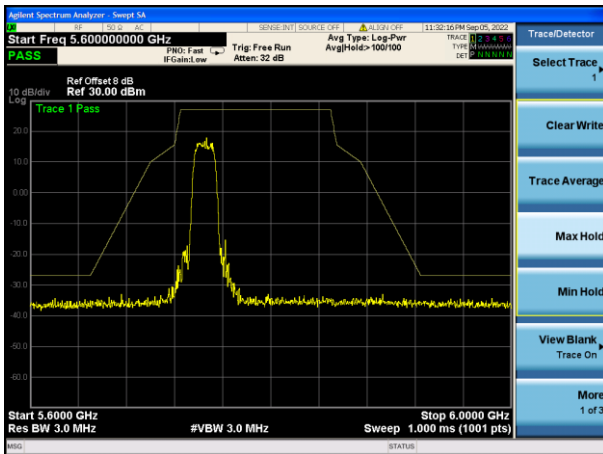


Note: 1. Except for mode a, other modes test the MIMO status.

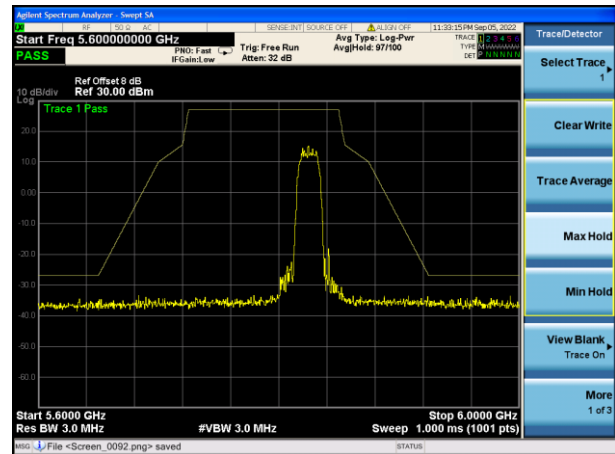
2. Mode a represents the worst data of antenna 1

Band4

802.11a

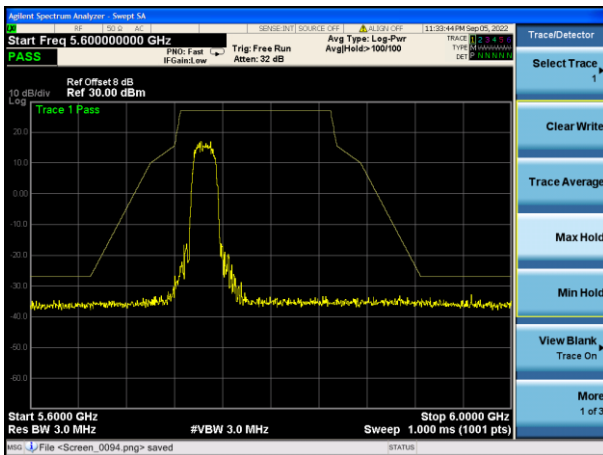


Low: 5745MHz

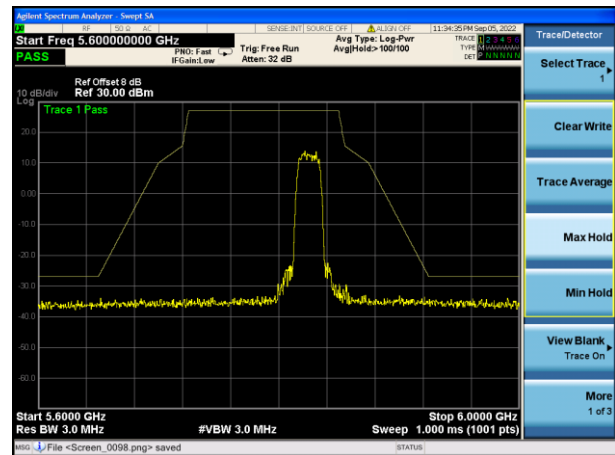


High: 5825MHz

802.11n(HT20)

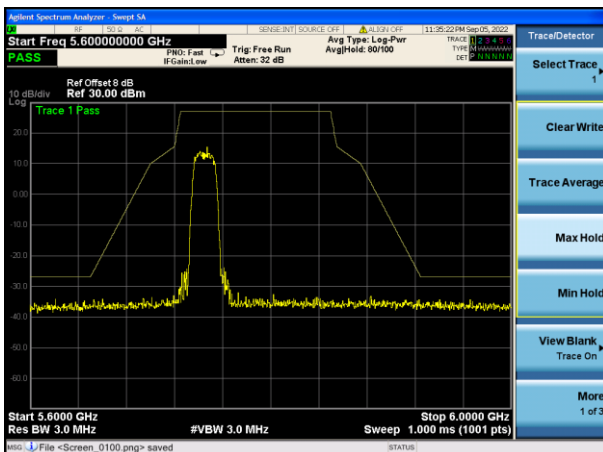


Low: 5745MHz

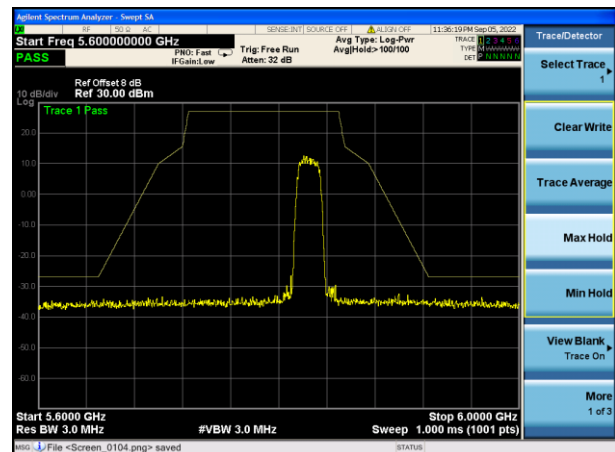


High: 5825MHz

802.11ac(HT20)

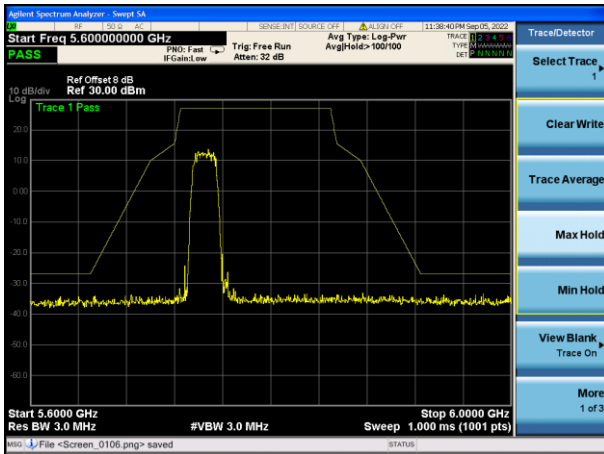


Low: 5745MHz

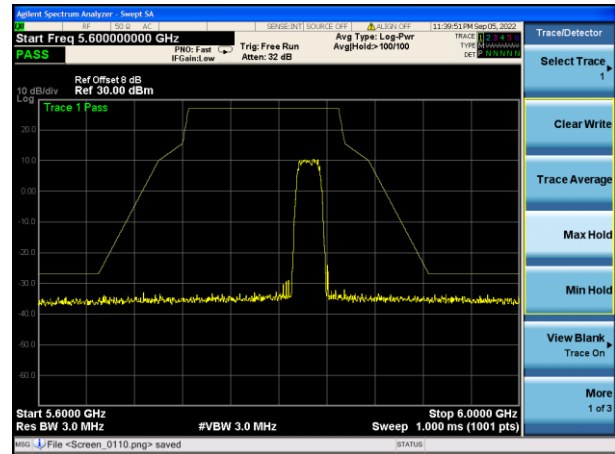


High: 5825MHz

802.11ax20

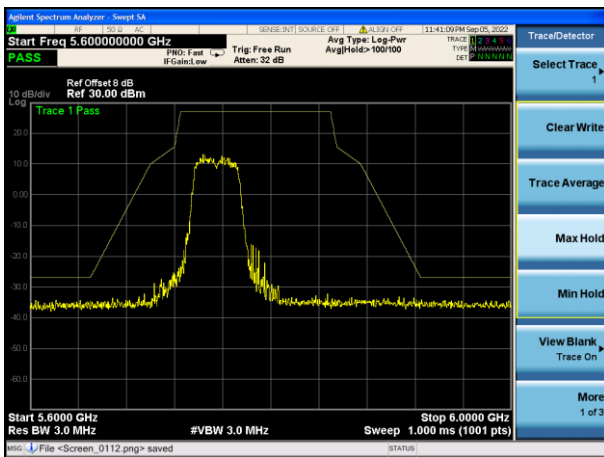


Low: 5745MHz

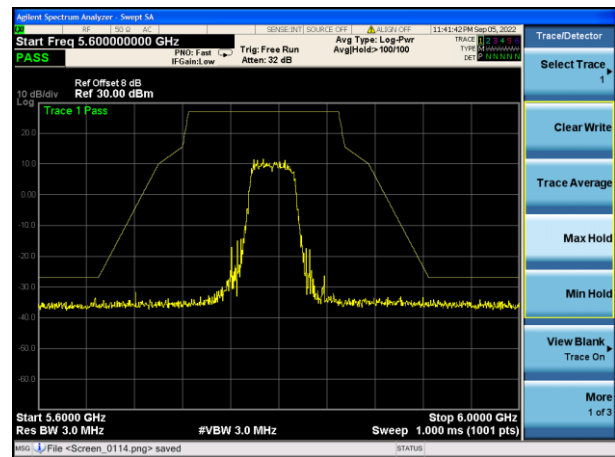


High: 5825MHz

802.11n(HT40)

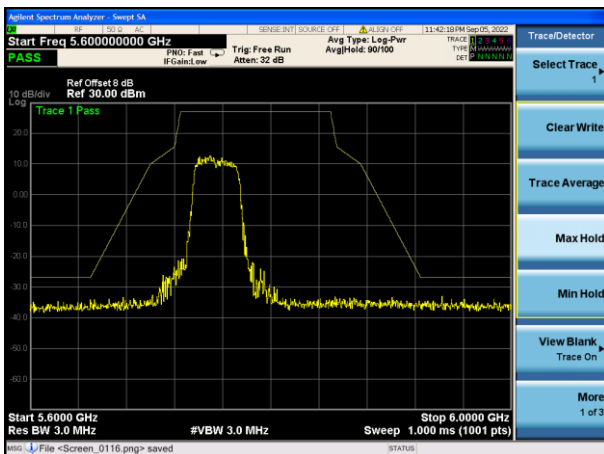


Low: 5755MHz

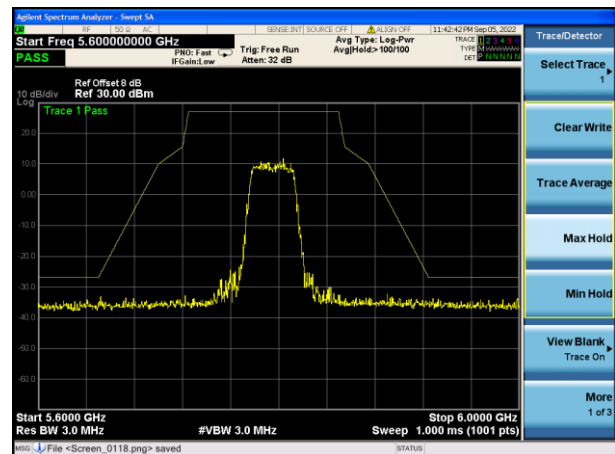


High: 5795MHz

802.11ac(HT40)

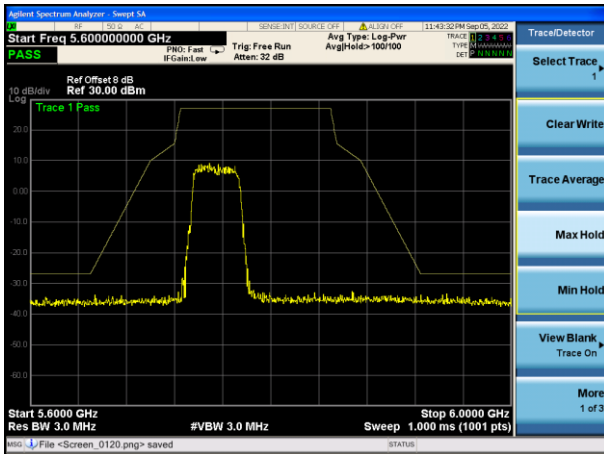


Low: 5755MHz

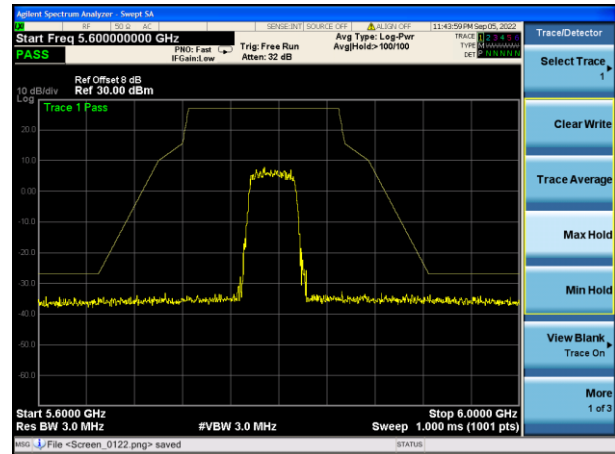


High: 5795MHz

802.11ax40

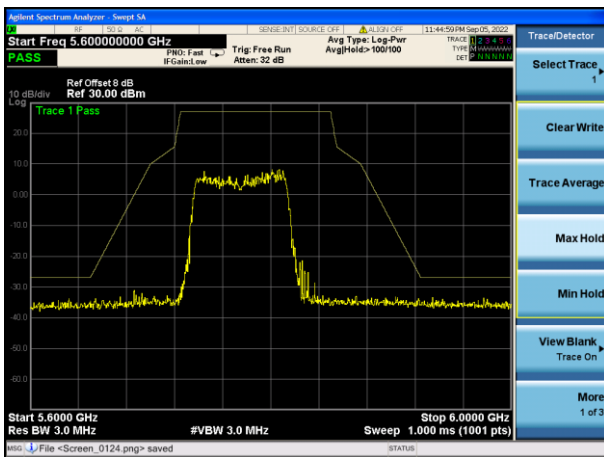


Low: 5755MHz

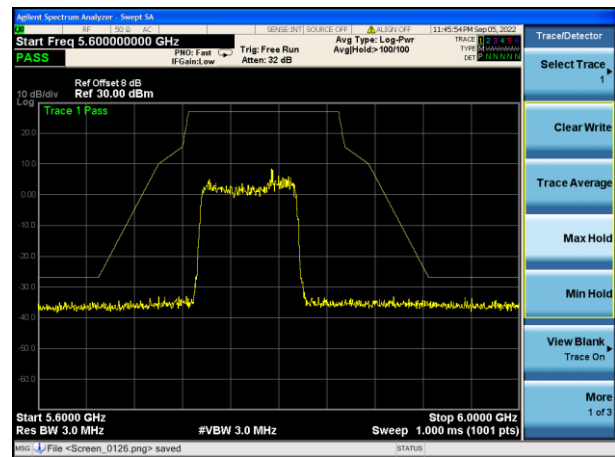


High: 5795MHz

802.11ac(HT80)



5775MHz



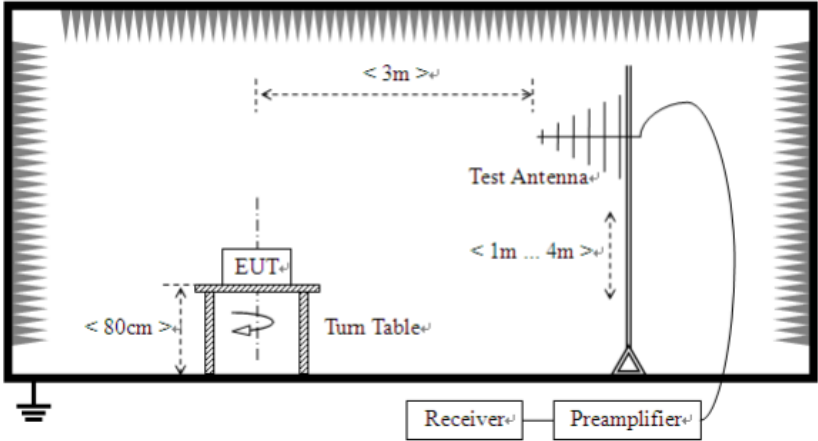
5775MHz

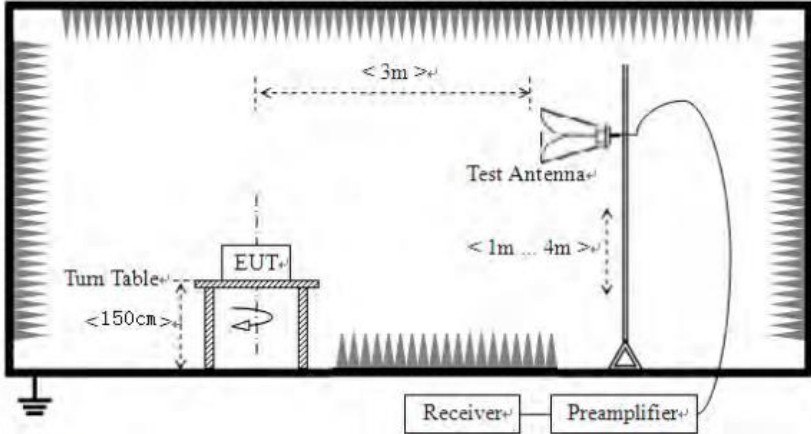
Note: 1. Except for mode a, other modes test the MIMO status.

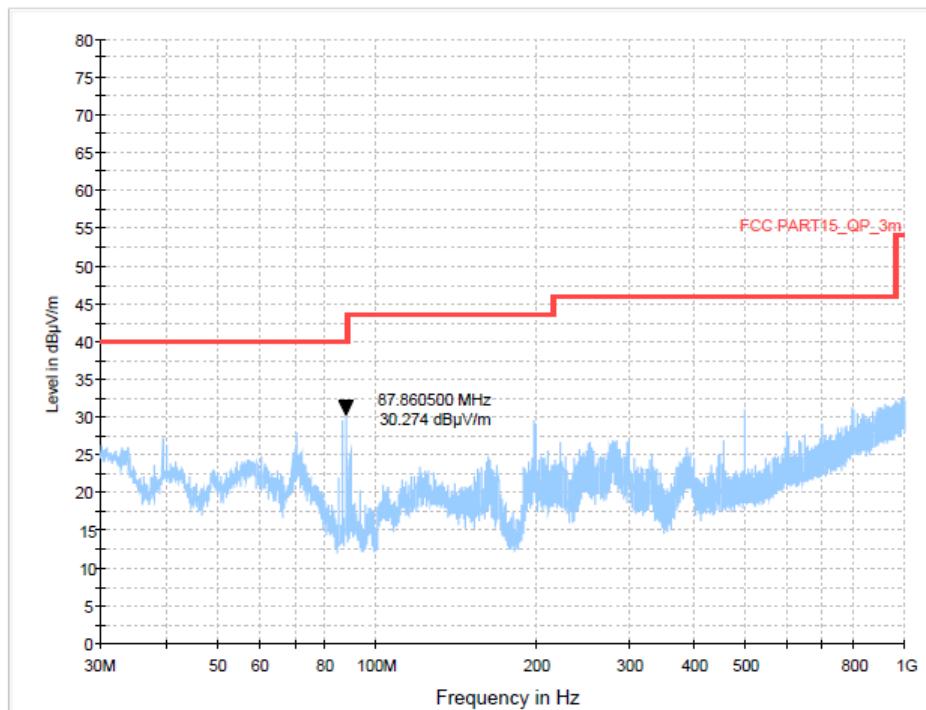
2. Mode a represents the worst data of antenna 1

4.7 Radiated Emission

Test Requirement:	FCC Part15 C Section 15.209 and 15.205				
Test Method:	ANSI C63.10:2013				
Test Frequency Range:	30MHz to 40GHz				
Test site:	Measurement Distance: 3m (Semi-Anechoic Chamber)				
Receiver setup:	Frequency	Detector	RBW	VBW	Value
	30MHz-1GHz	Quasi-peak	100KHz	300KHz	Quasi-peak Value
	Above 1GHz	Peak	1MHz	3MHz	Peak Value
		AV	1MHz	3MHz	Average Value
Limit:	Frequency		Limit (dBuV/m @3m)		Remark
	30MHz-88MHz		40.0		Quasi-peak Value
	88MHz-216MHz		43.5		Quasi-peak Value
	216MHz-960MHz		46.0		Quasi-peak Value
	960MHz-1GHz		54.0		Quasi-peak Value
	Above 1GHz		74.0		Peak Value
			54.0		Average Value
Test Procedure:	Substitution method was performed to determine the actual ERP emission levels of the EUT. The following test procedure as below: 1>.Below 1GHz test procedure: 1. The EUT was placed on the top of a rotating table (0.8m for below 1GHz and 1.5 meters for above 1GHz) above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation. 2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. 3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. 4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading. 5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet. 2>.Above 1GHz test procedure: 1. On the test site as test setup graph above,the EUT shall be placed at the 1.5m support on the turntable and in the position closest to normal use as declared by the provider. 2. The test antenna shall be oriented initially for vertical polarization and shall be chosen to correspond to the frequency of the transmitter.The output of the test antenna shall be connected to the measuring receiver. 3. The transmitter shall be switched on, if possible, without modulation and the measuring receiver shall be tuned to the frequency of the transmitter under test. 4. The test antenna shall be raised and lowered from 1m to 4m until a				

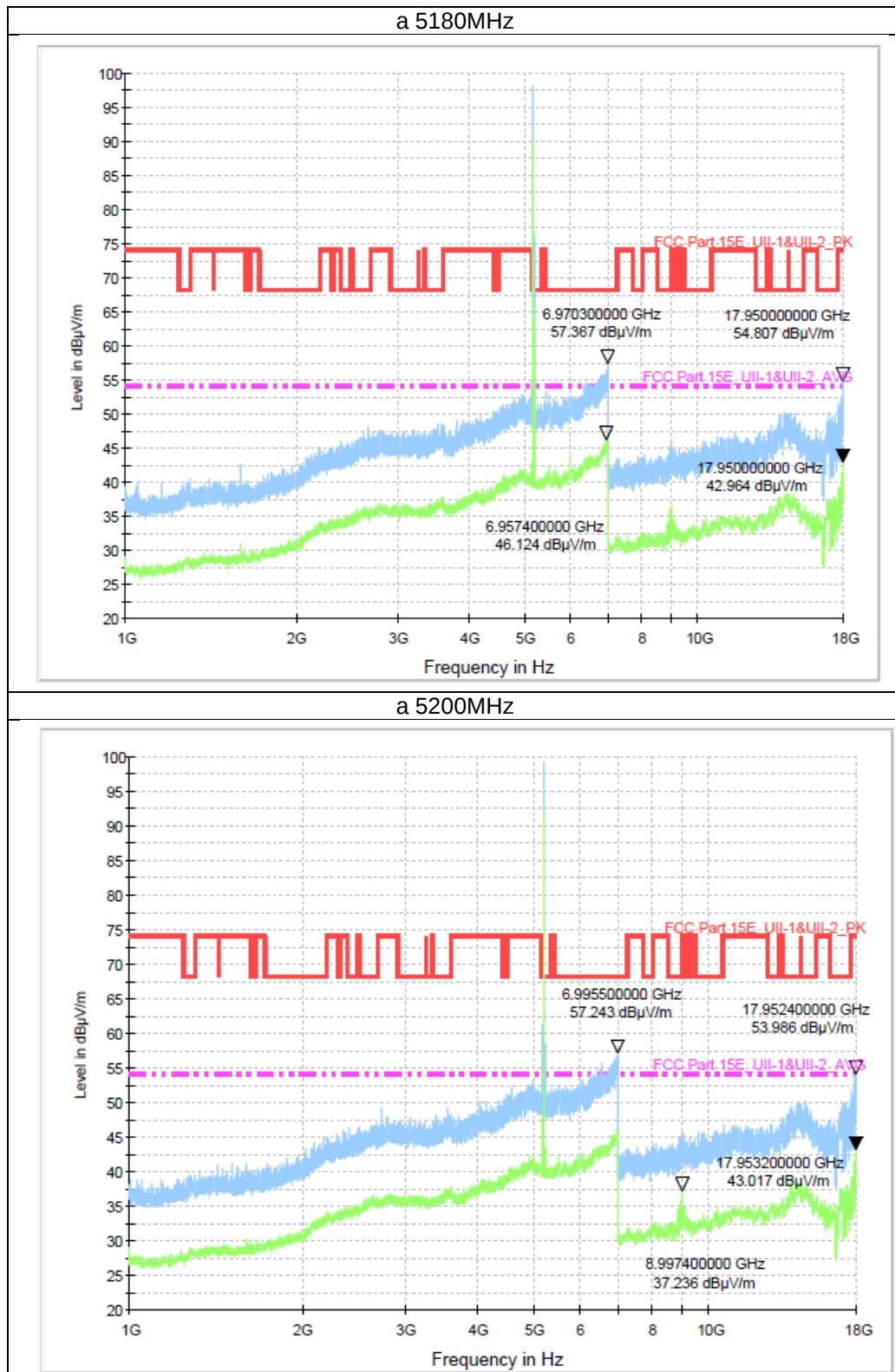
	maximum signal level is detected by the measuring receiver. Then the turntable should be rotated through 360° in the horizontal plane, until the maximum signal level is detected by the measuring receiver. - Repeat step 4 for test frequency with the test antenna polarized horizontally. - Remove the transmitter and replace it with a substitution antenna - Feed the substitution antenna at the transmitter end with a signal generator connected to the antenna by means of a nonradiating cable. With the antennas at both ends vertically polarized, and with the signal generator tuned to a particular test frequency, raise and lower the test antenna to obtain a maximum reading at the spectrum analyzer. Adjust the level of the signal generator output until the previously recorded maximum reading for this set of conditions is obtained. This should be done carefully repeating the adjustment of the test antenna and generator output. - Repeat step 7 with both antennas horizontally polarized for each test frequency. - Calculate power in dBm into a reference ideal half-wave dipole antenna by reducing the readings obtained in steps 7 and 8 by the power loss in the cable between the generator and the antenna, and further corrected for the gain of the substitution antenna used relative to an ideal half-wave dipole antenna by the following formula: $\text{EIRP(dBm)} = P_g(\text{dBm}) - \text{cable loss (dB)} + \text{antenna gain (dBi)}$ where: P_g is the generator output power into the substitution antenna.
Test setup:	Below 1GHz  Above 1GHz

	
Test Instruments:	Refer to section 5.10 for details
Test mode:	Refer to section 5.3 for details
Test results:	Pass

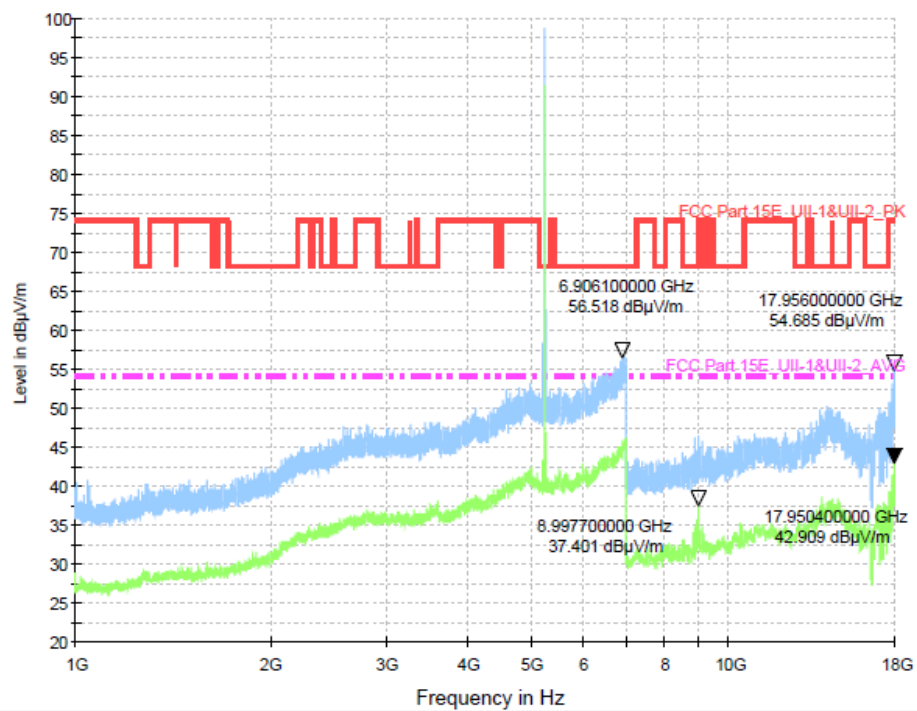
Measurement Data:**Below 1GHz**

Remark: All modes have been tested, and only worst data of ax20 mode, Channel 5200MHz was listed in this report.

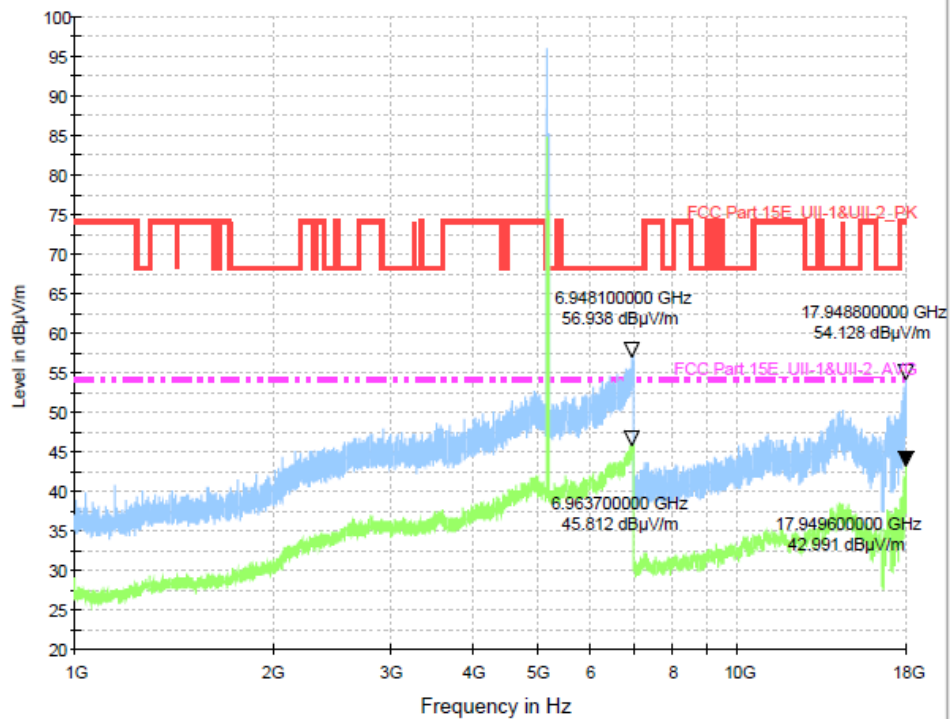
Above 1GHz:
Band 1

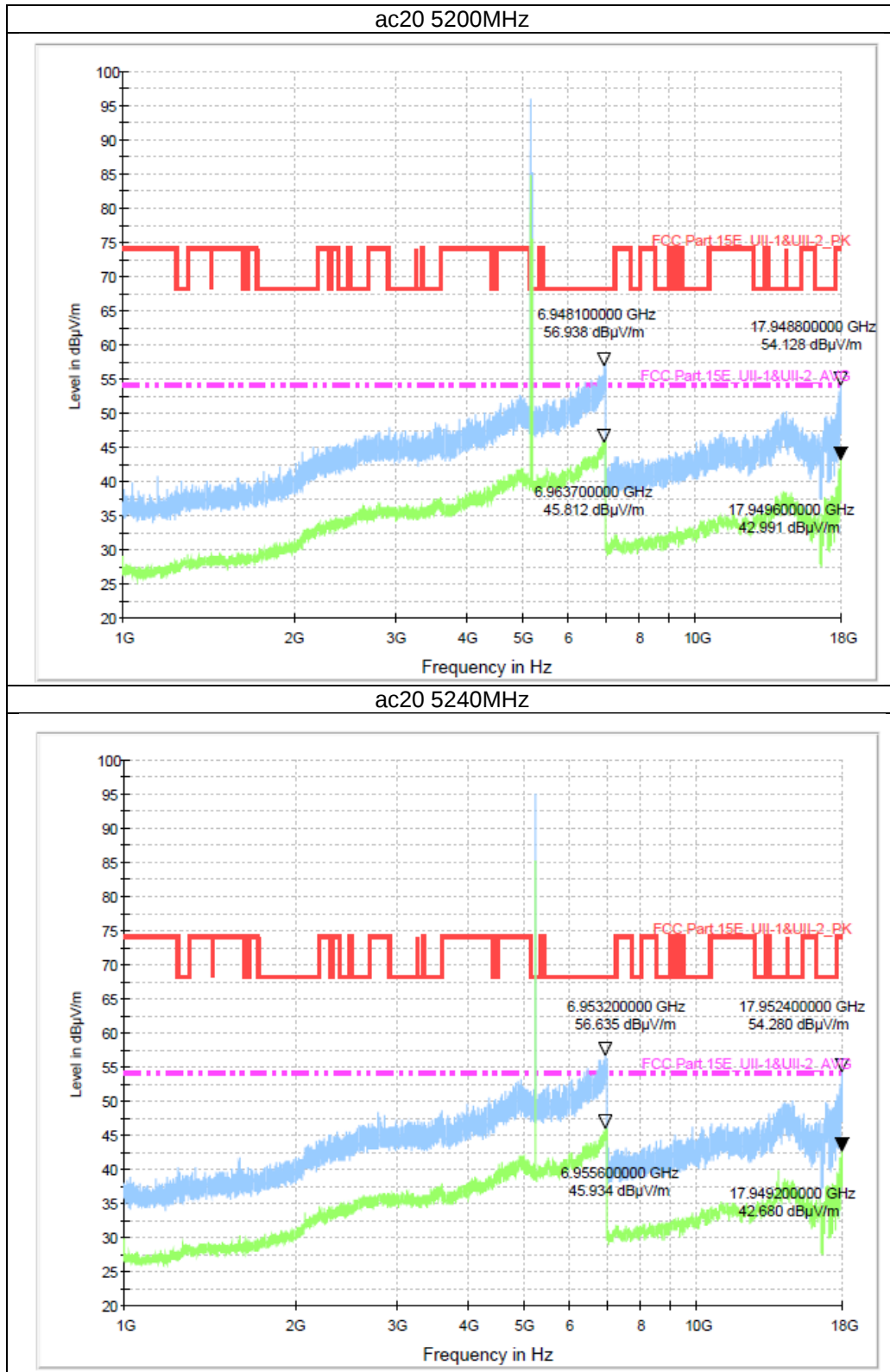


a 5240MHz

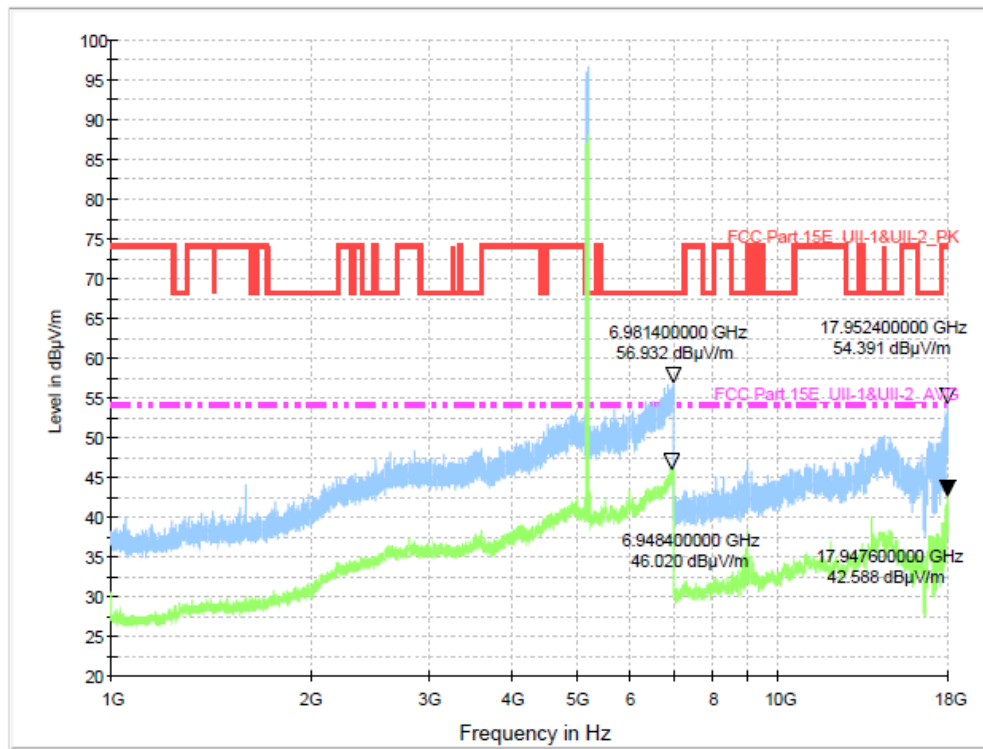


ac20 5180MHz

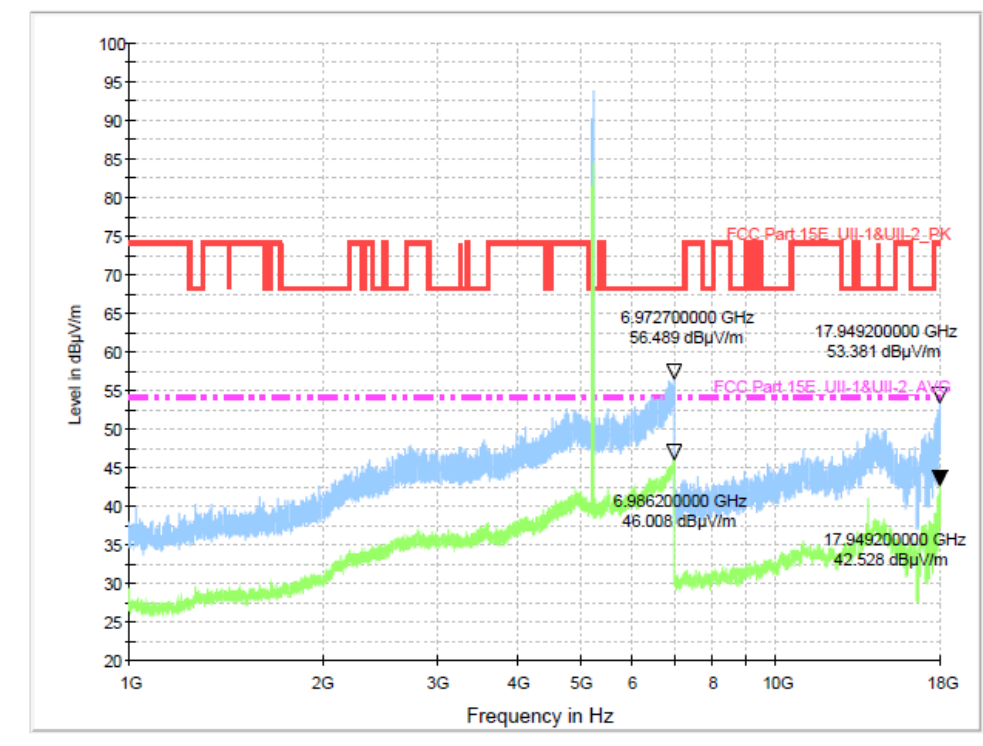




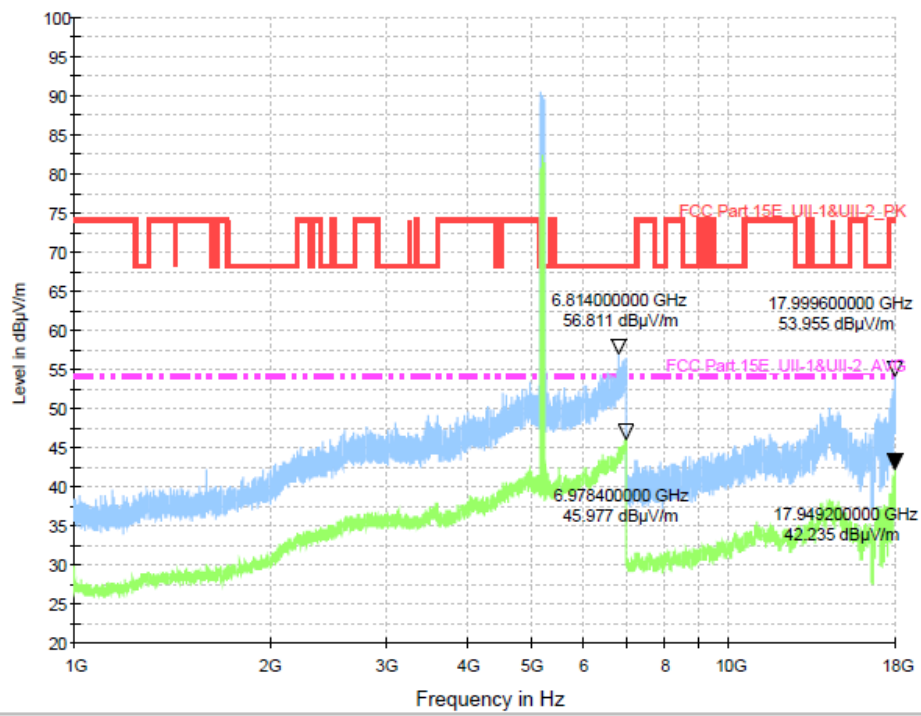
ac40 5190MHz



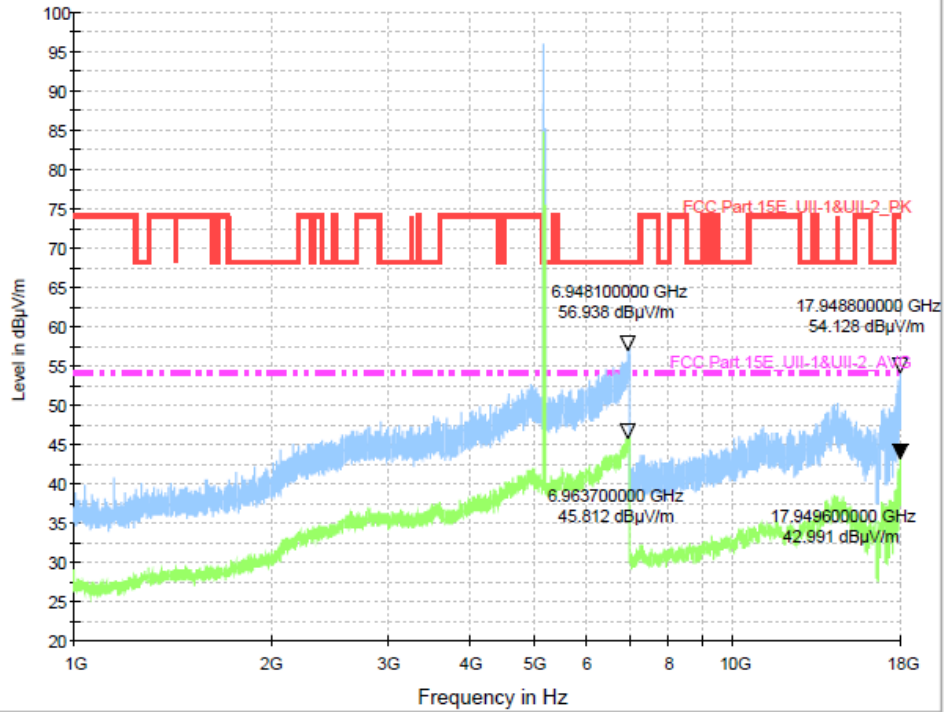
ac40 5230MHz



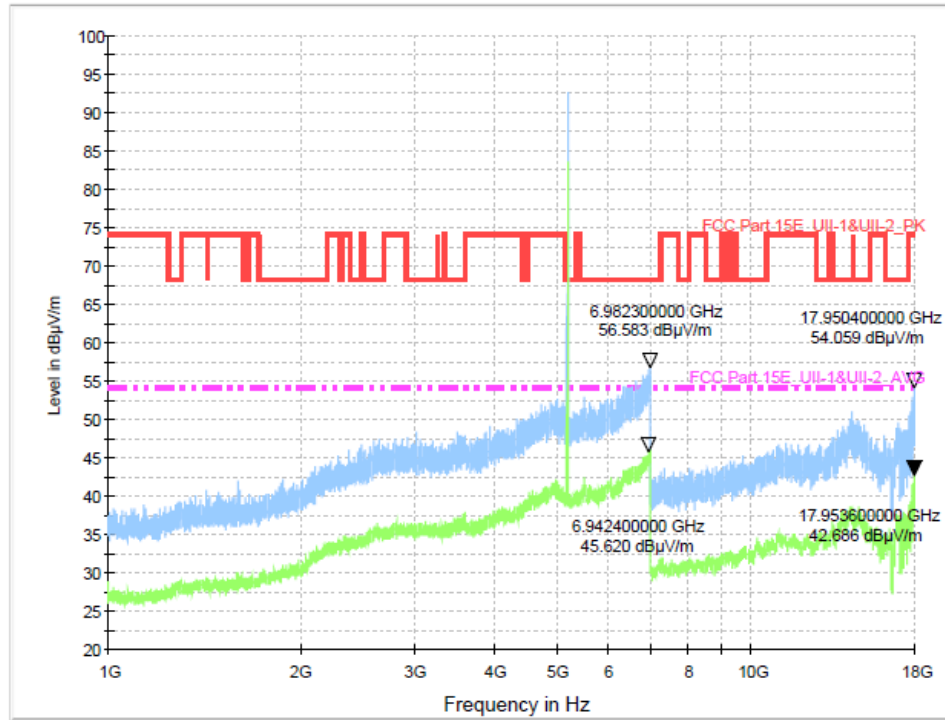
ac80 5210MHz



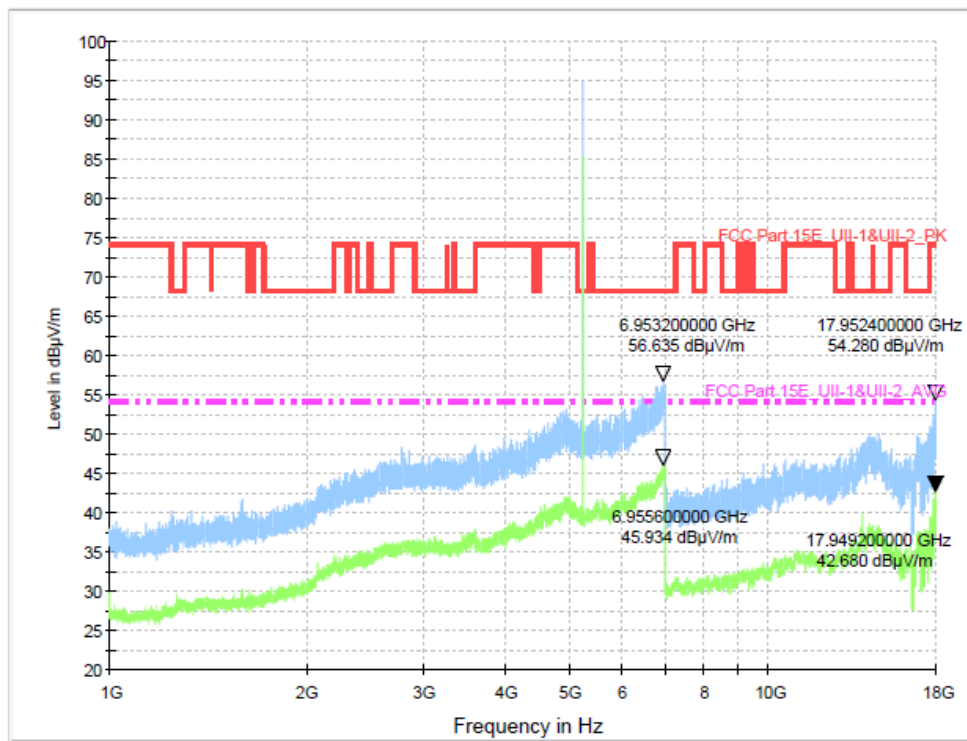
ax20 5180MHz



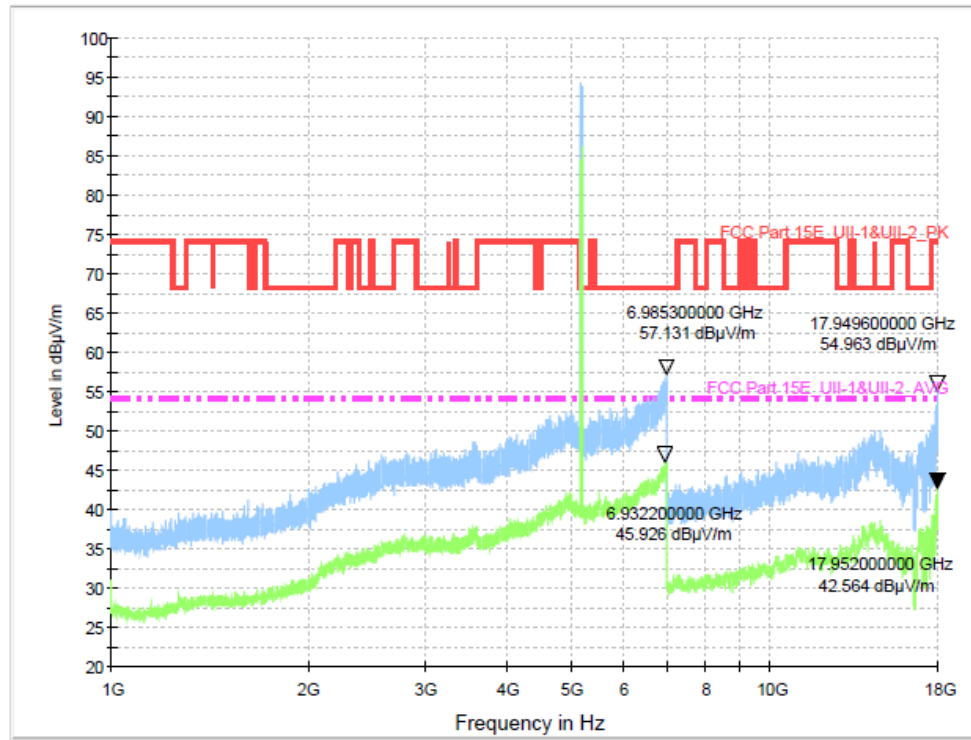
ax20 5200MHz



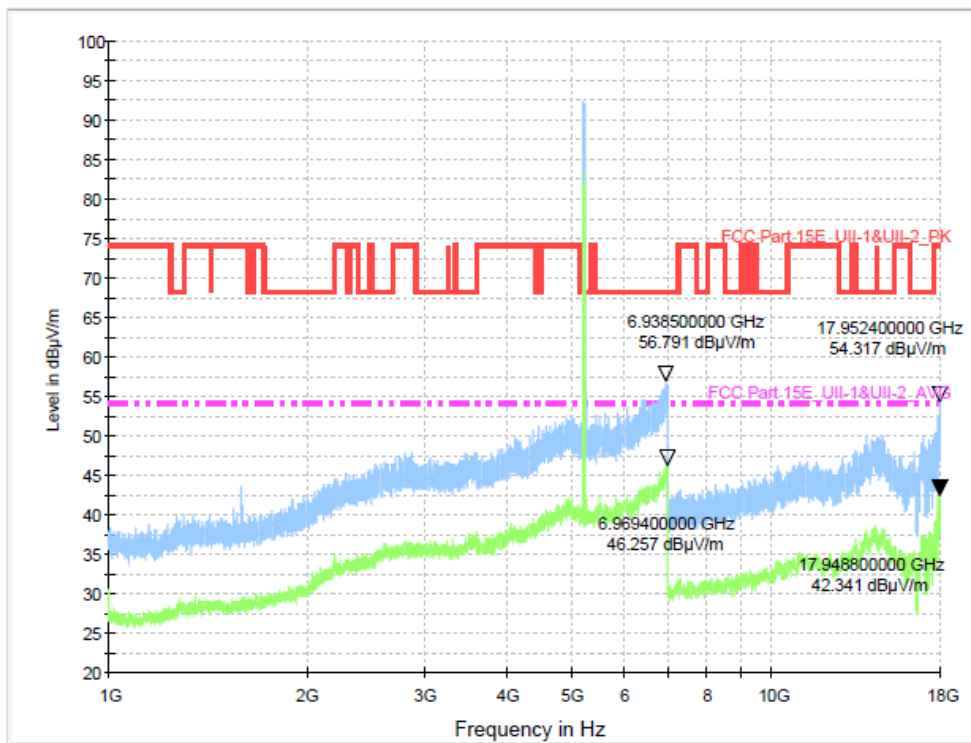
ax20 5240MHz



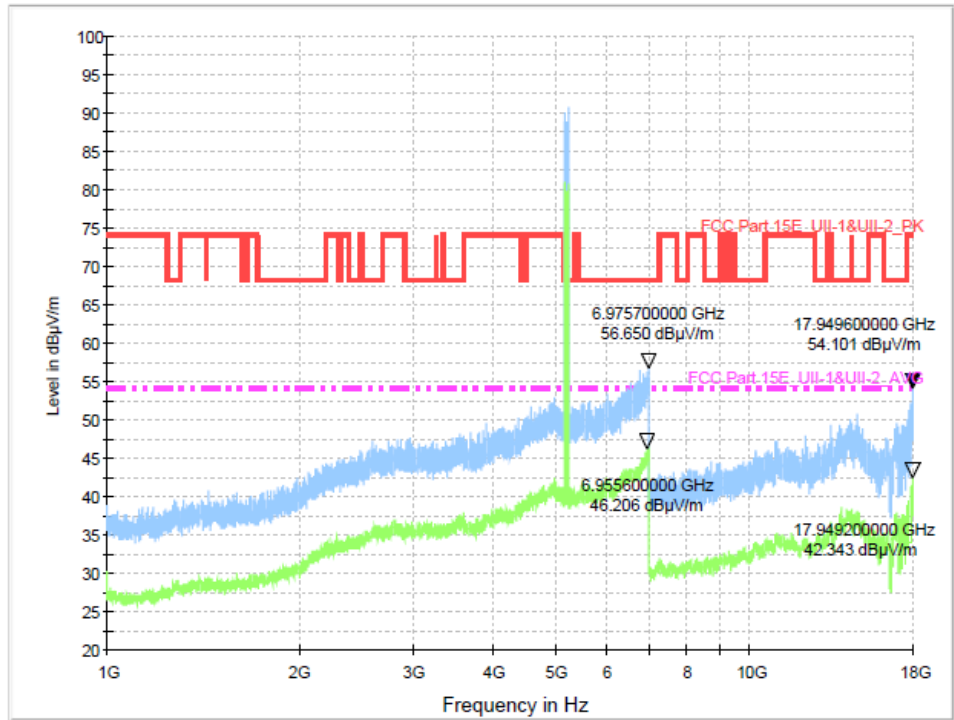
ax40 5190MHz



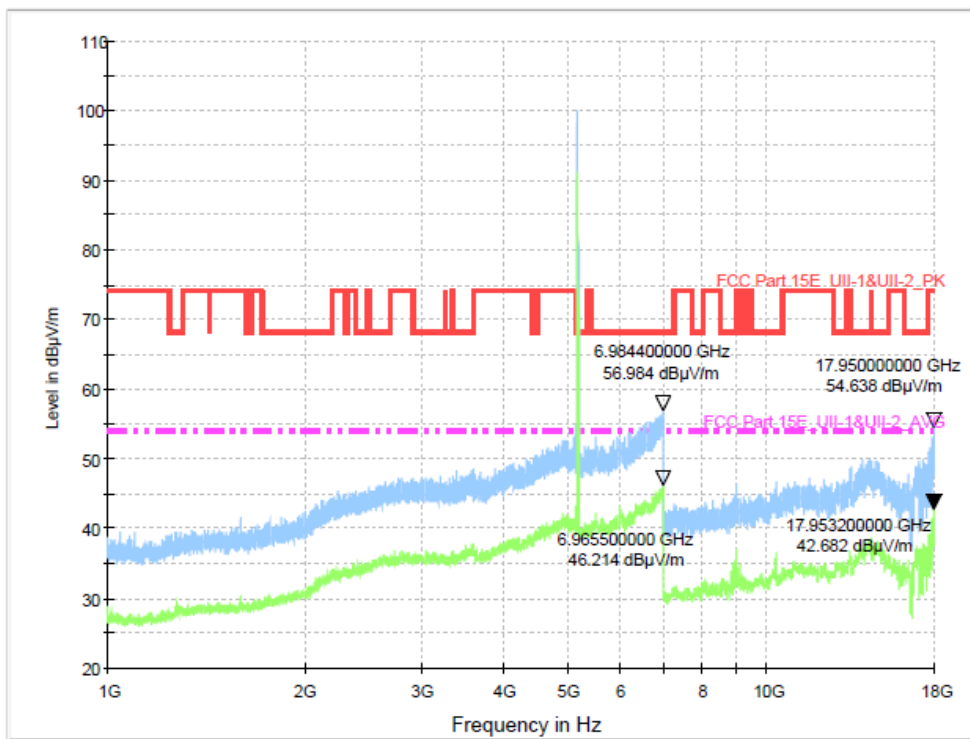
ax40 5230MHz

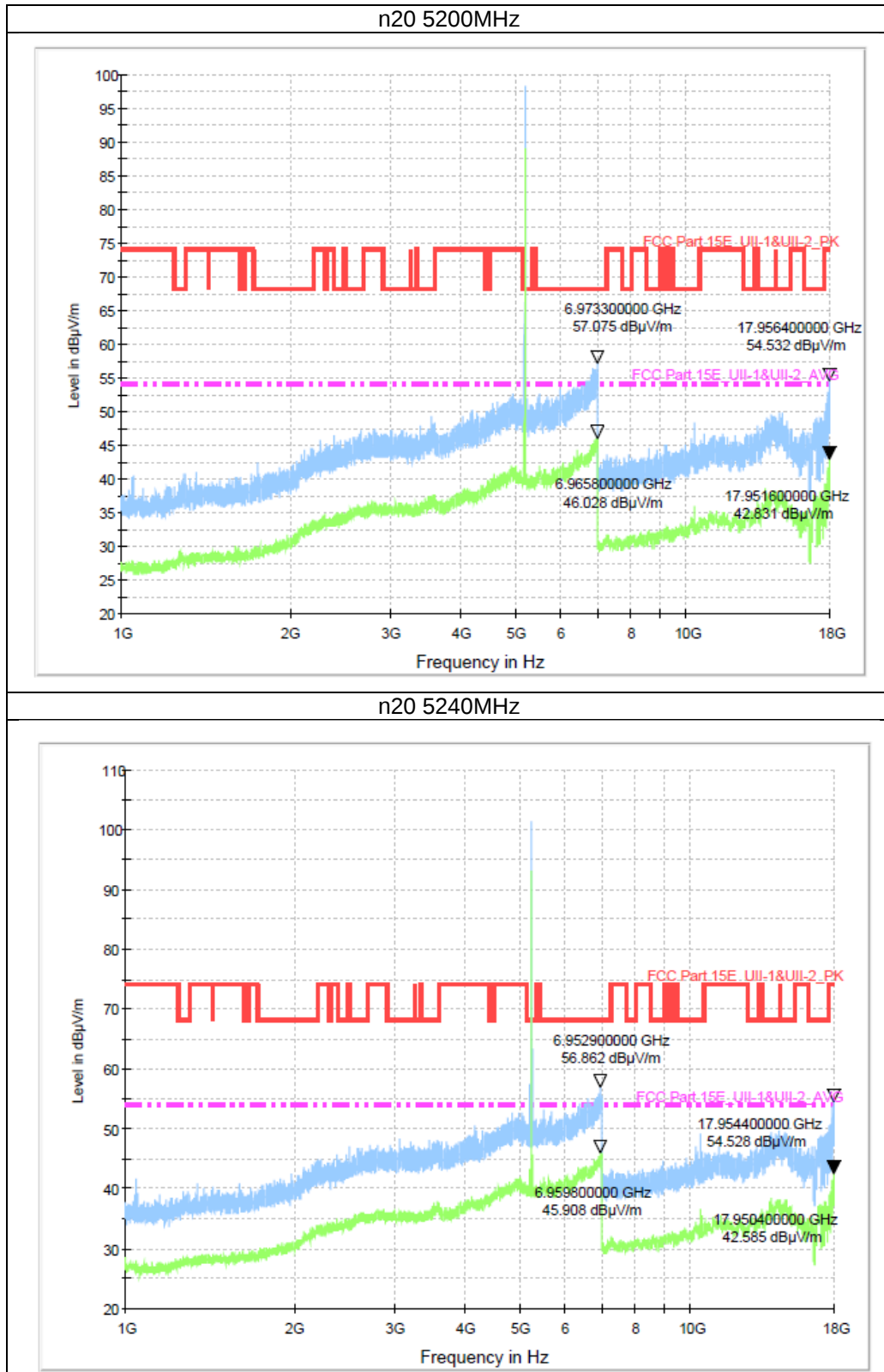


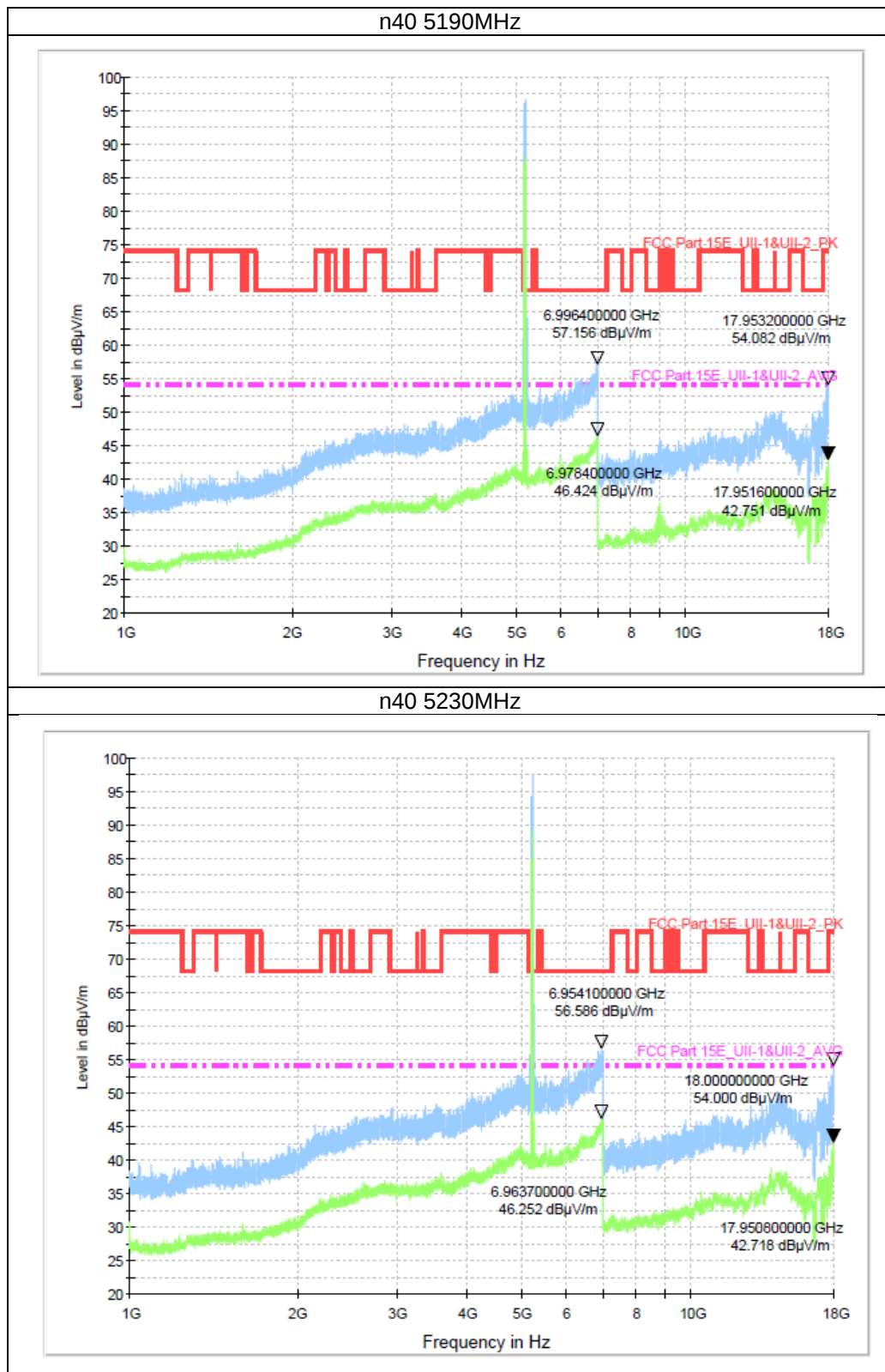
ax80 5210MHz



n20 5180MHz



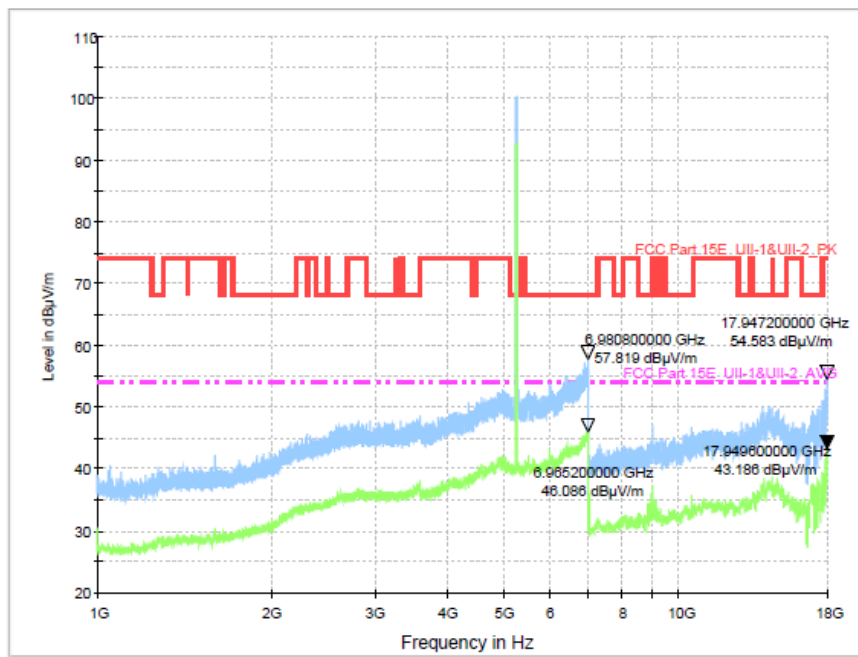




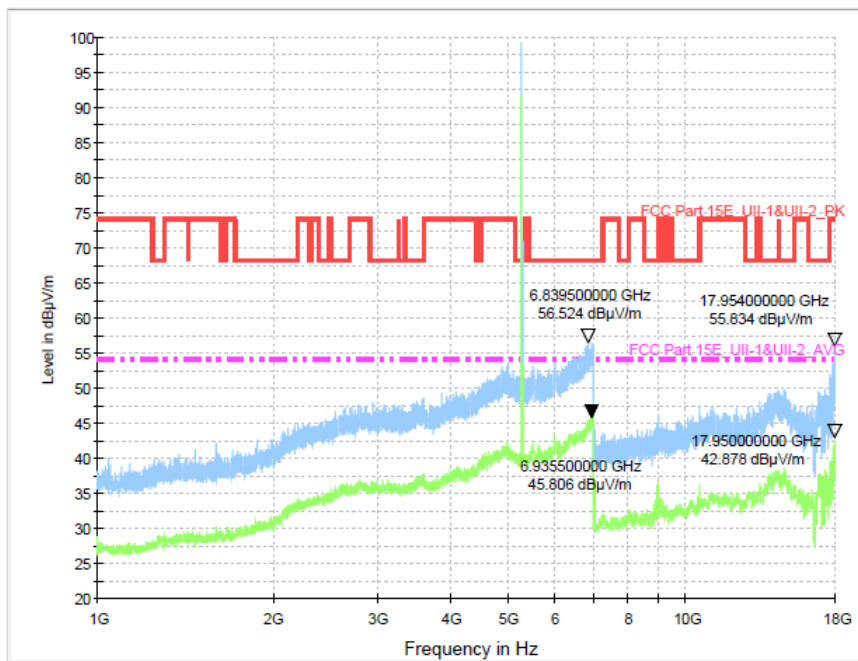
Note: 1. Except for mode a, other modes test the MIMO status.

Band2

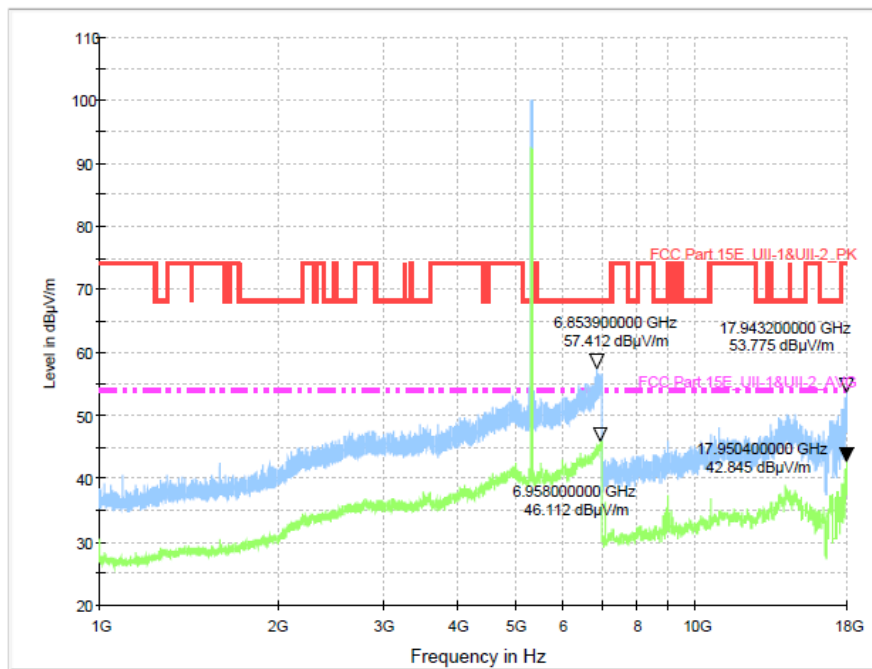
a 5260MHz



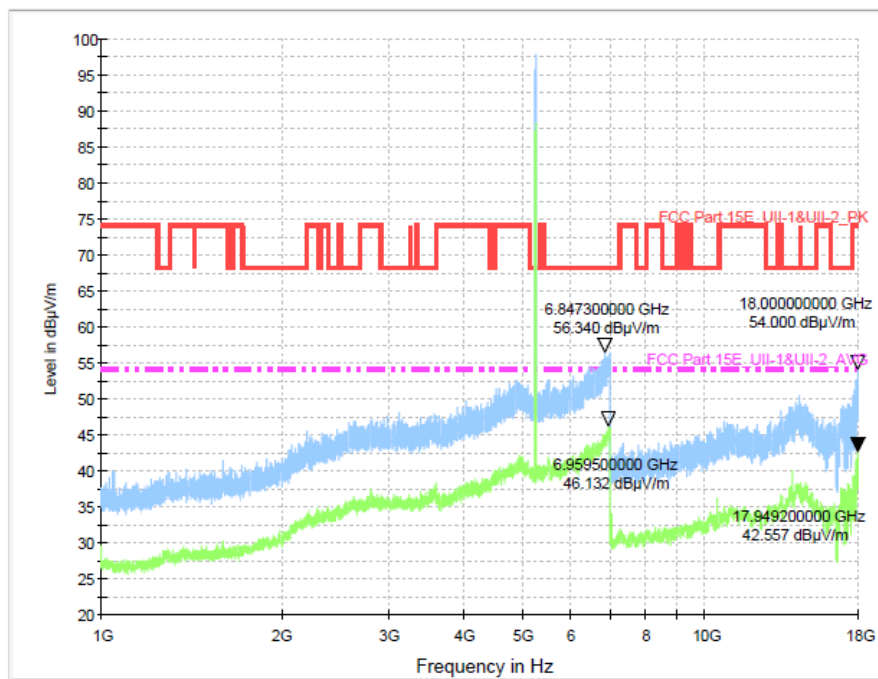
a 5280MHz



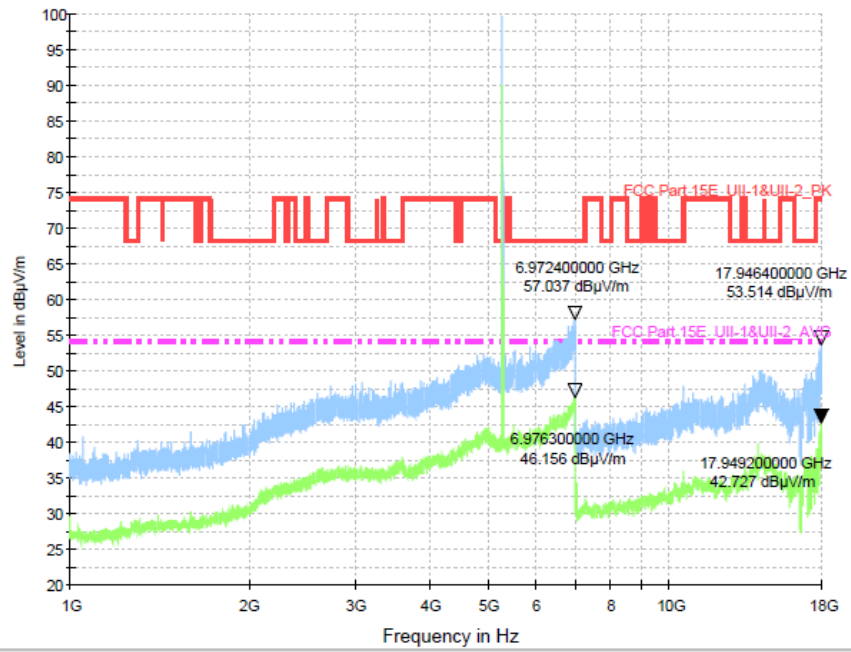
a 5320MHz



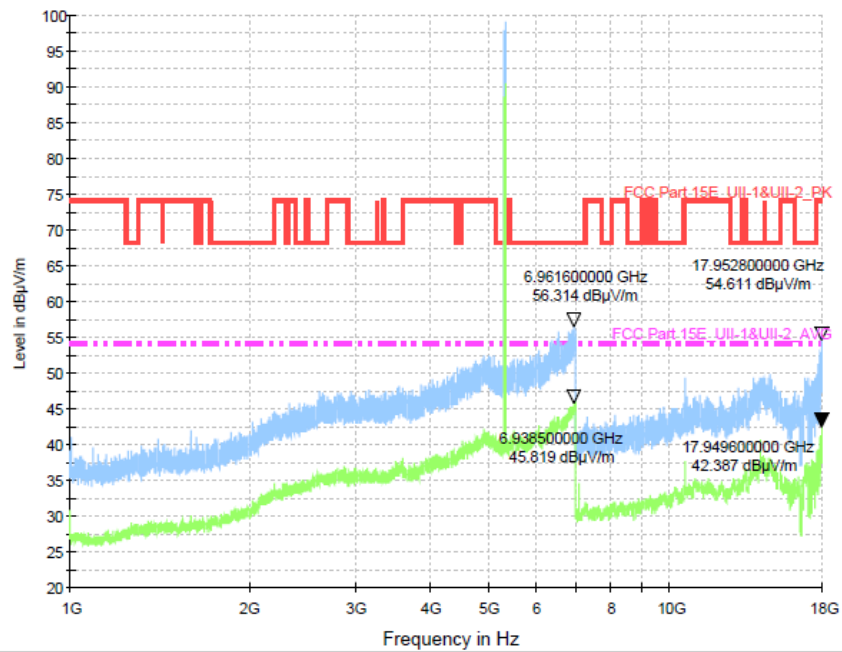
ac20 5260MHz



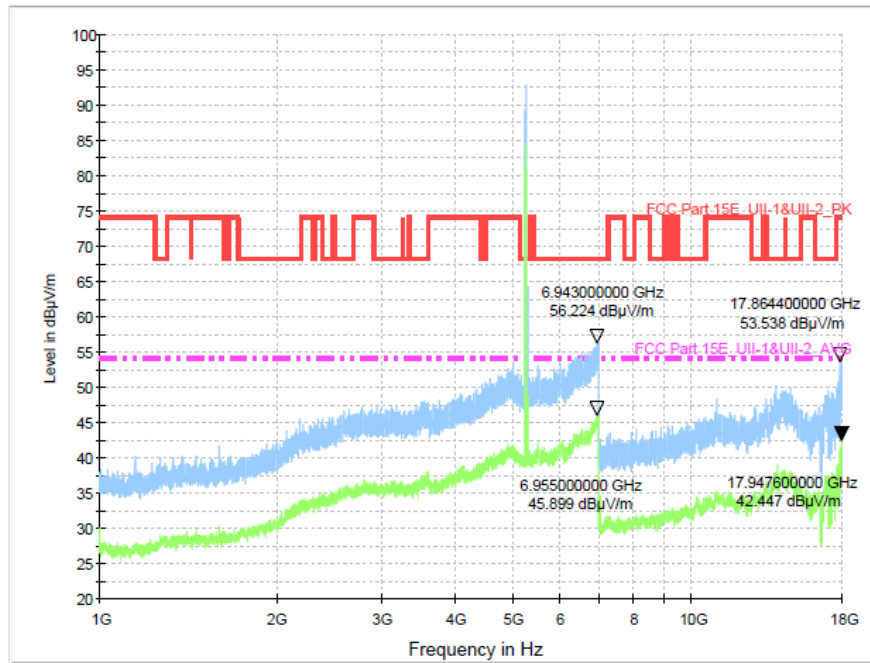
ac20 5280MHz



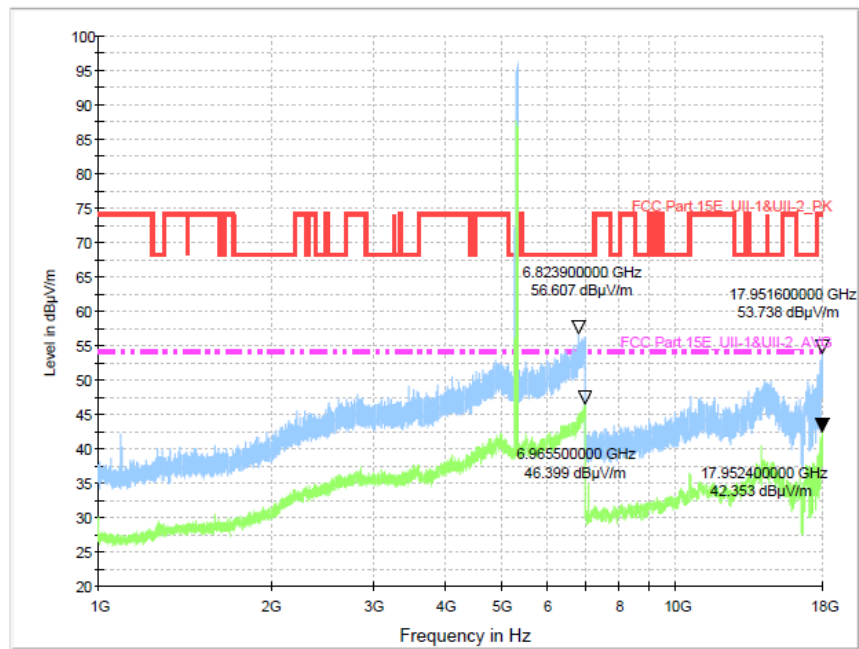
ac20 5320MHz



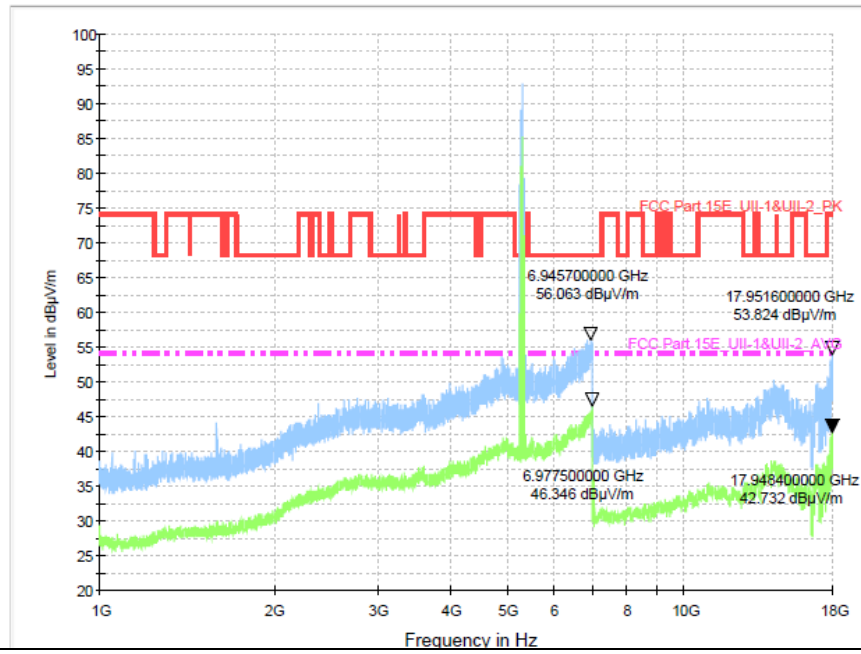
ac40 5270MHz



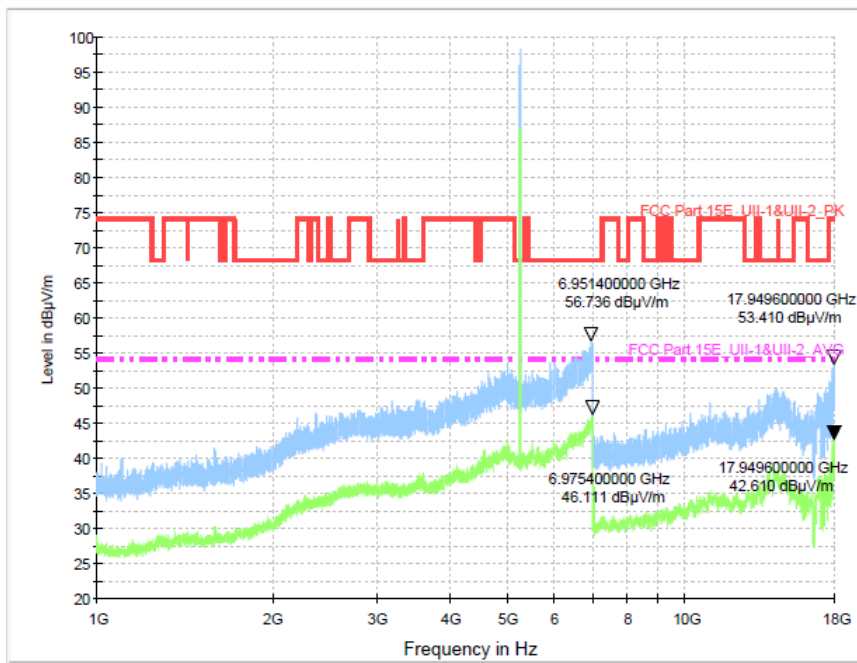
ac40 5310MHz



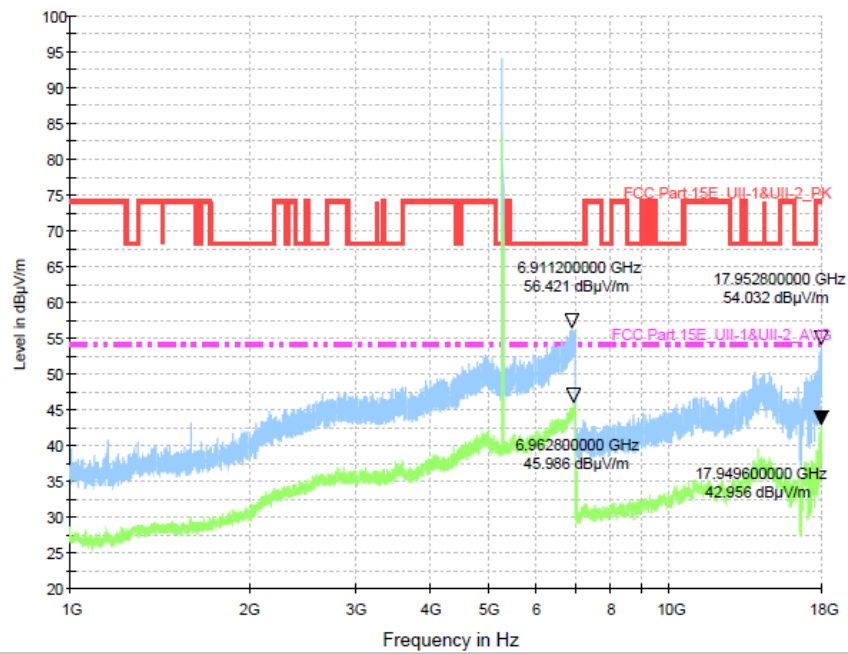
ac80 5290MHz



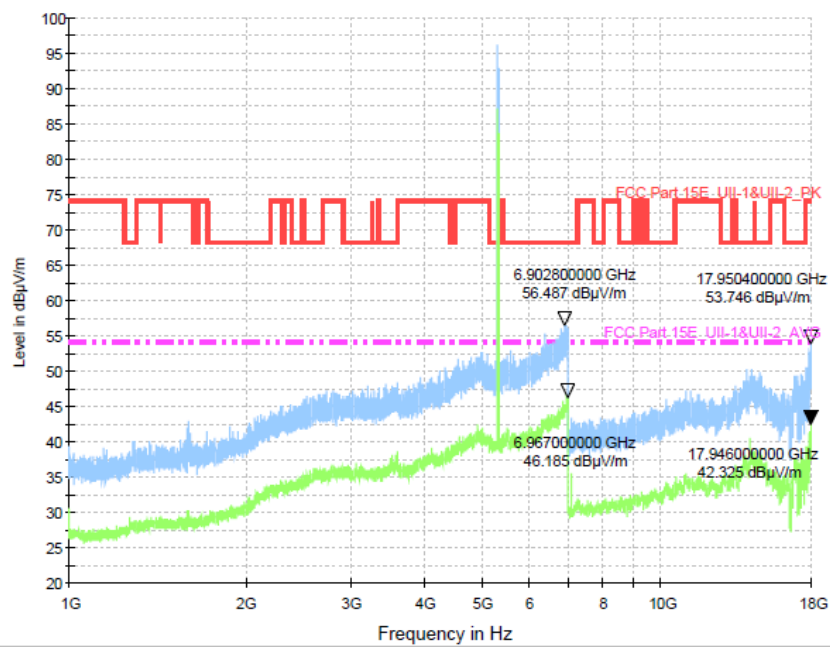
ax20 5260MHz



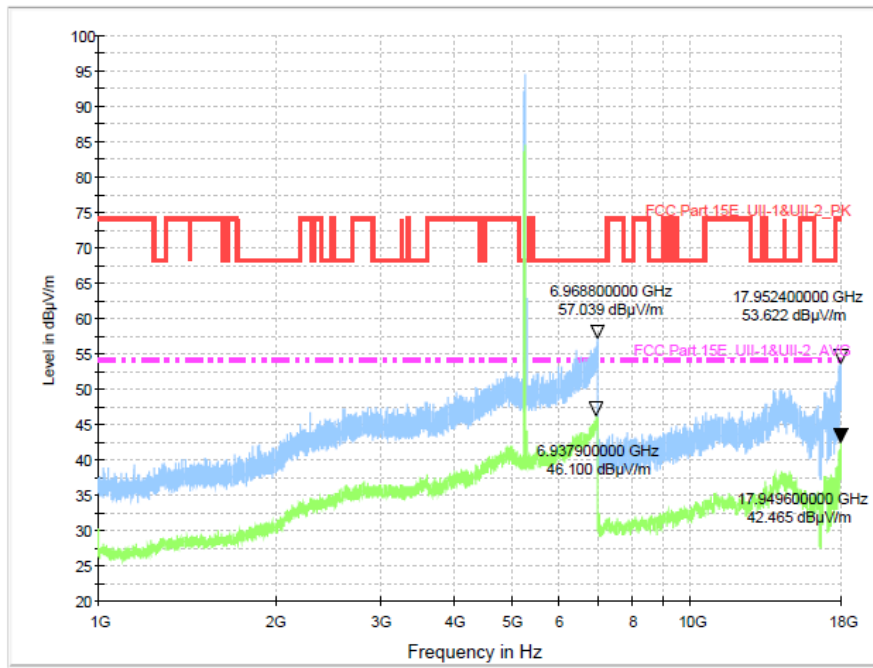
ax20 5280MHz



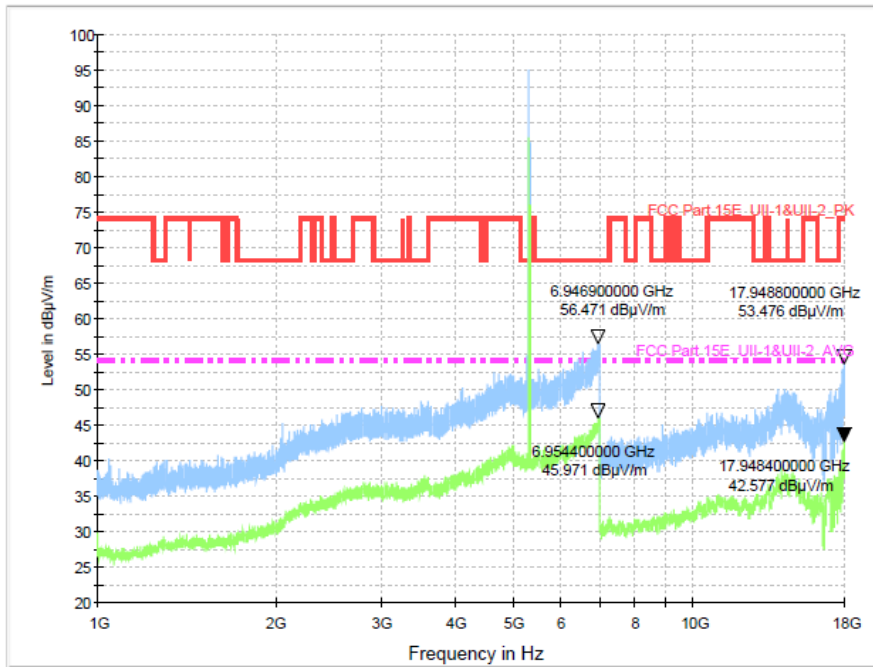
ax20 5320MHz



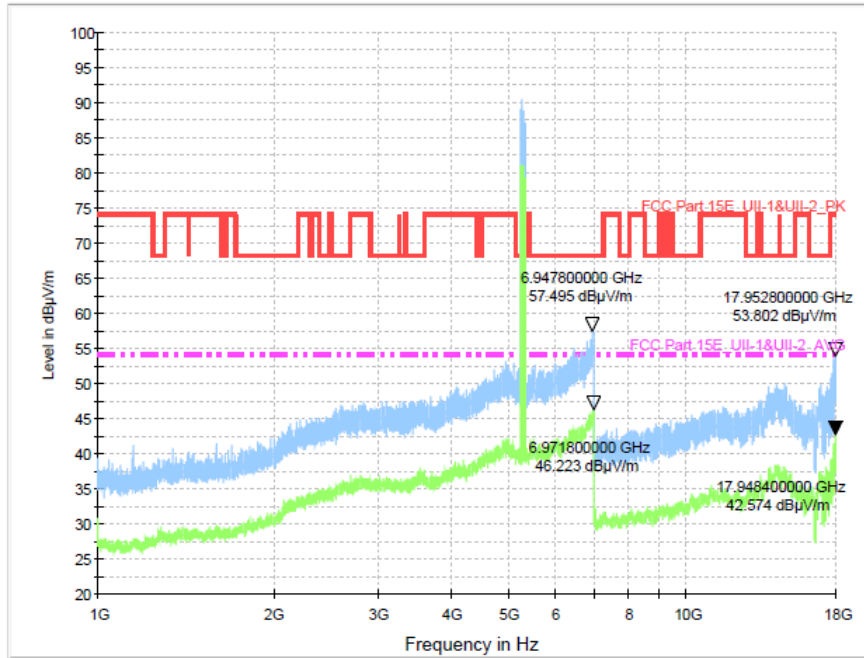
ax40 5270MHz



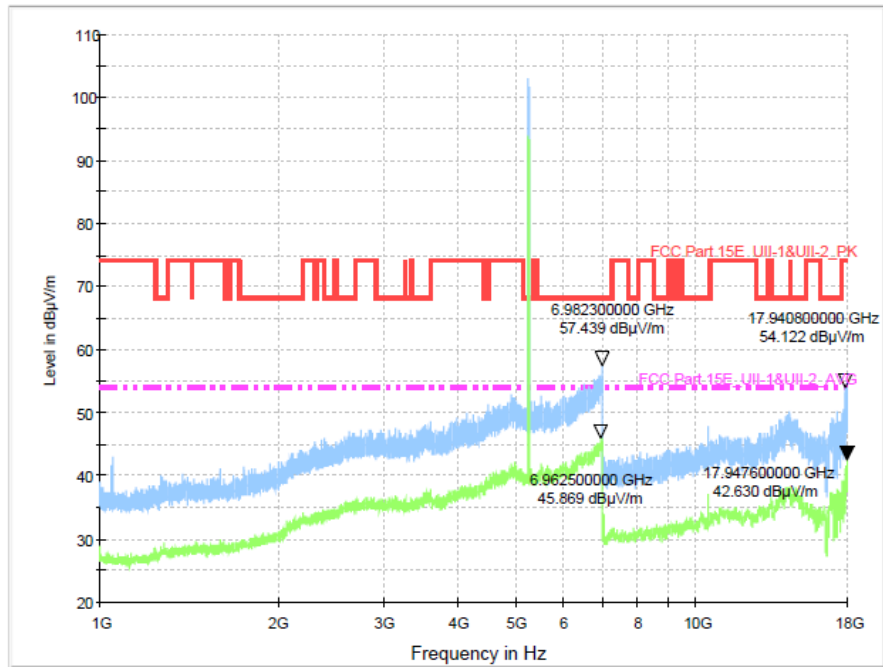
ax40 5310MHz



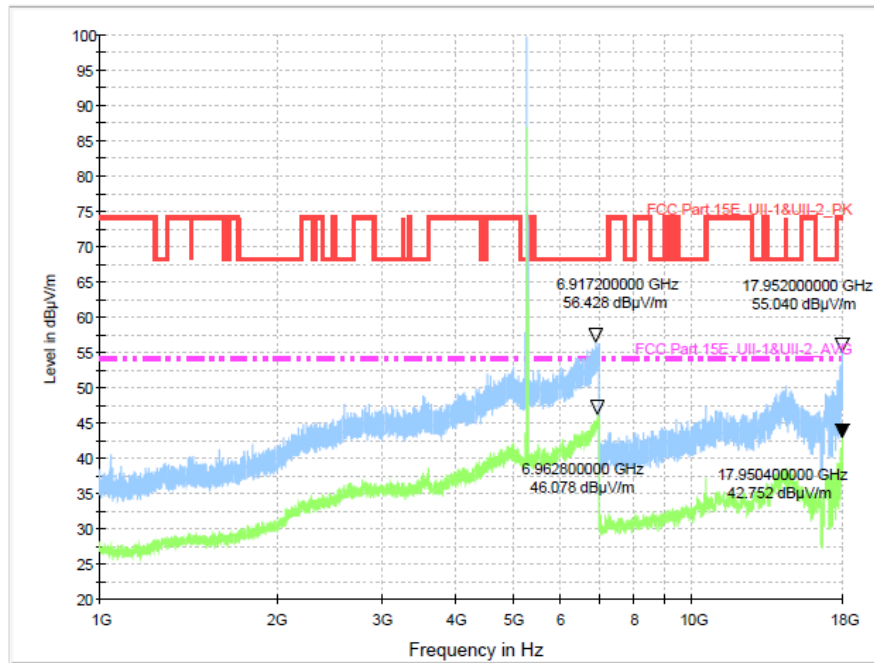
ax80 5290MHz



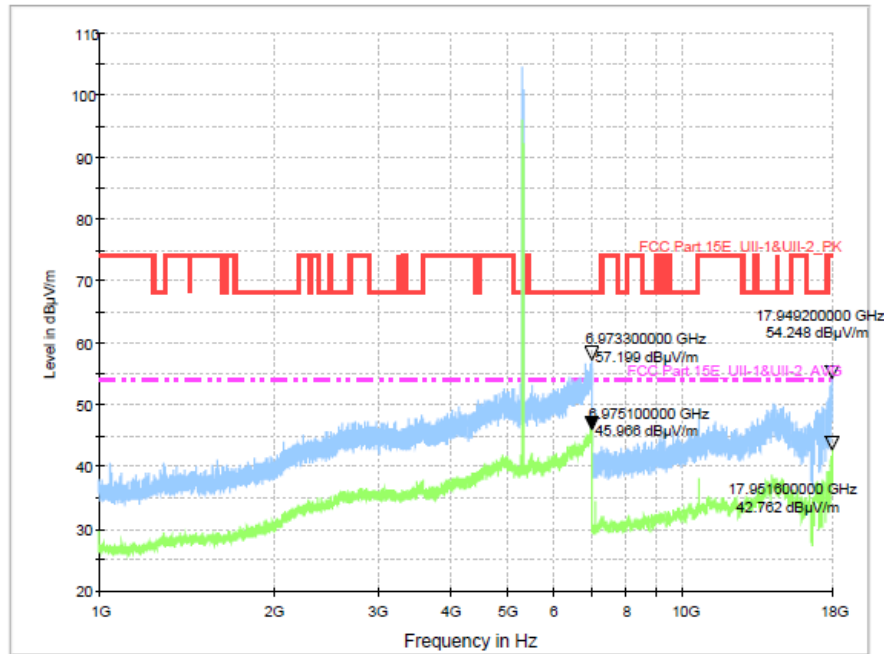
n20 5260MHz

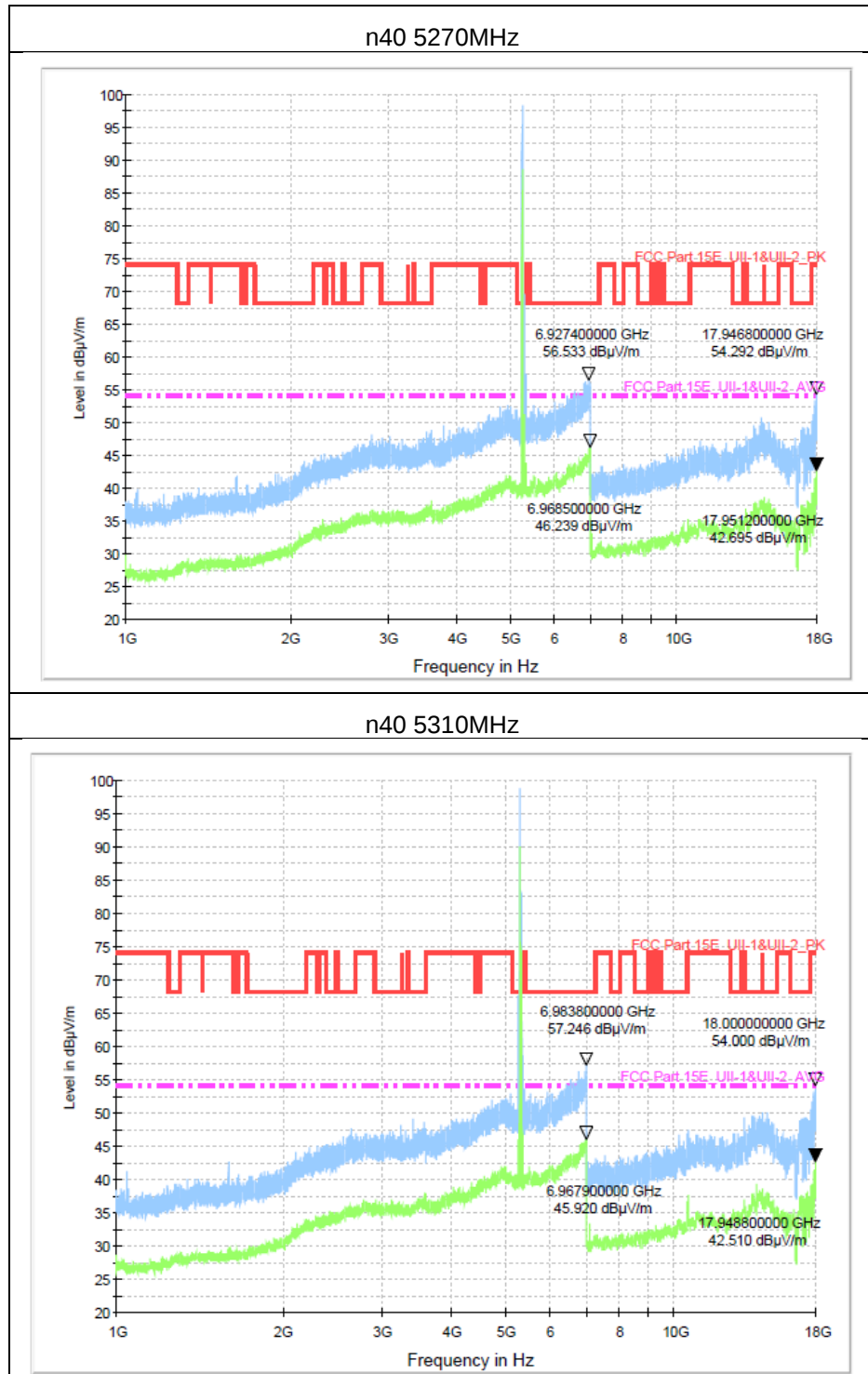


n20 5280MHz

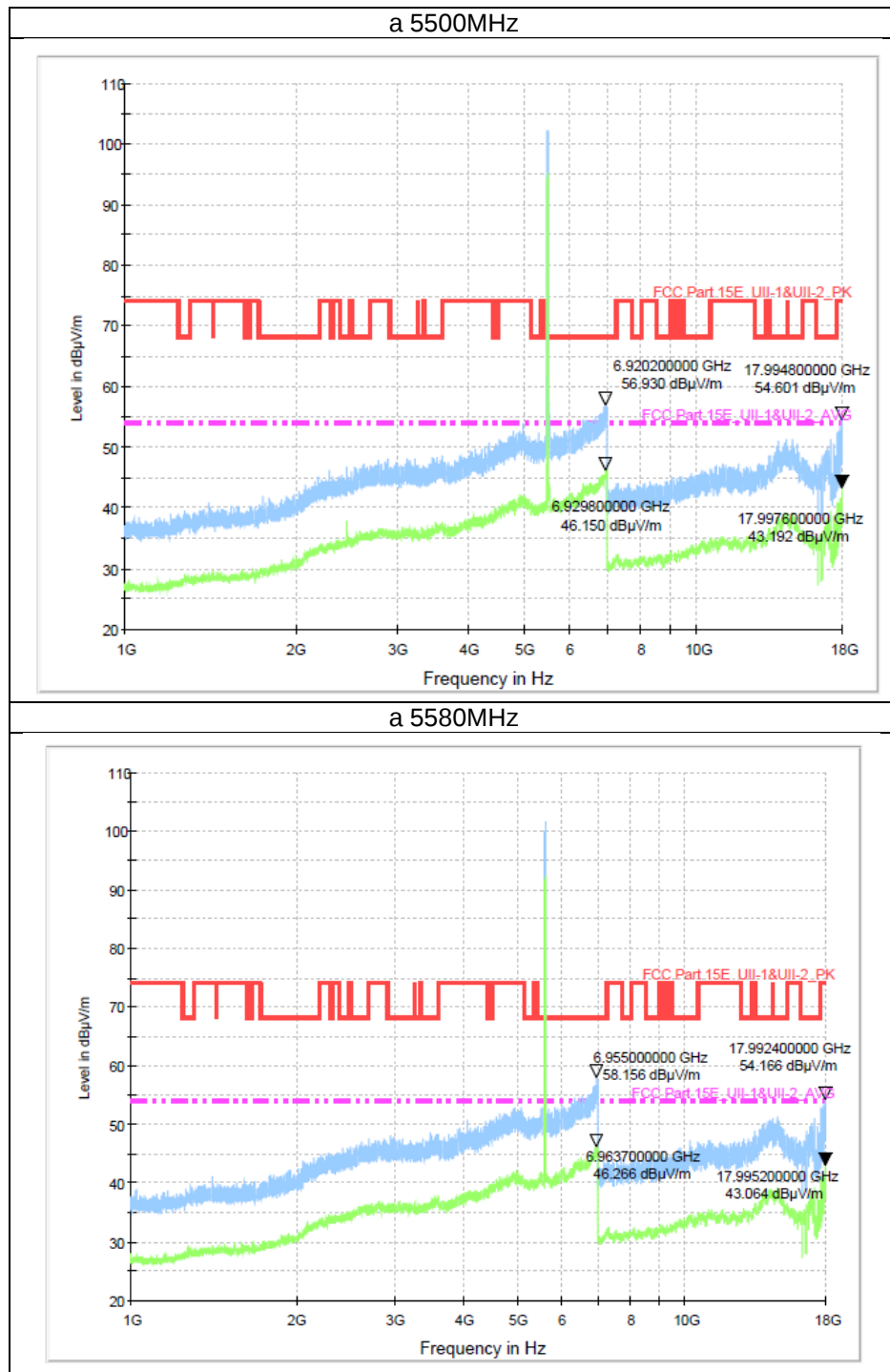


n20 5320MHz

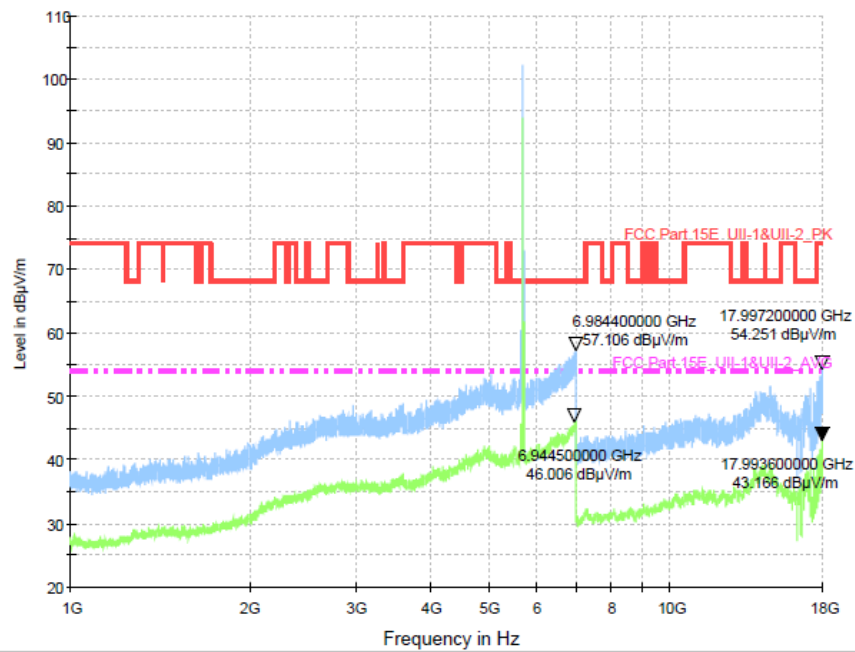




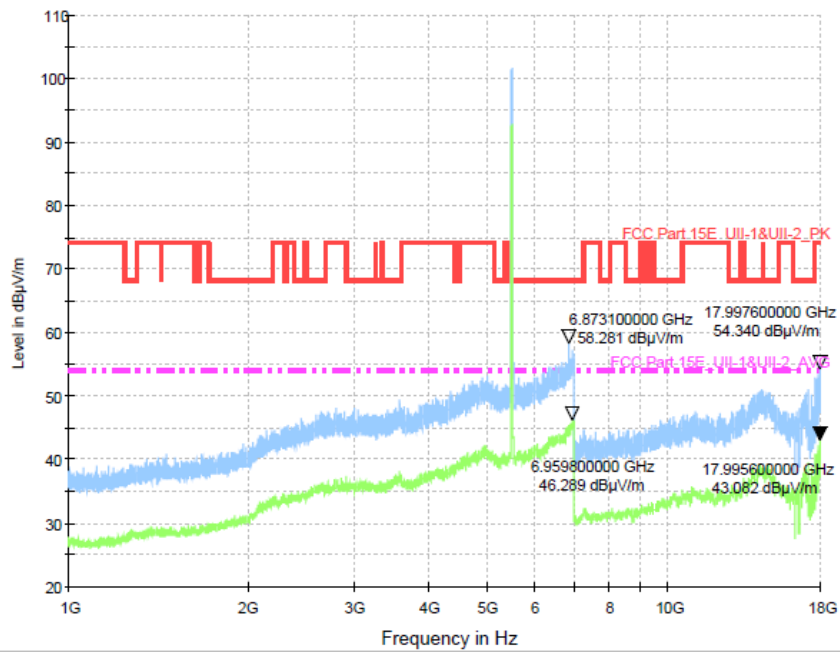
Note: 1. Except for mode a, other modes test the MIMO status.

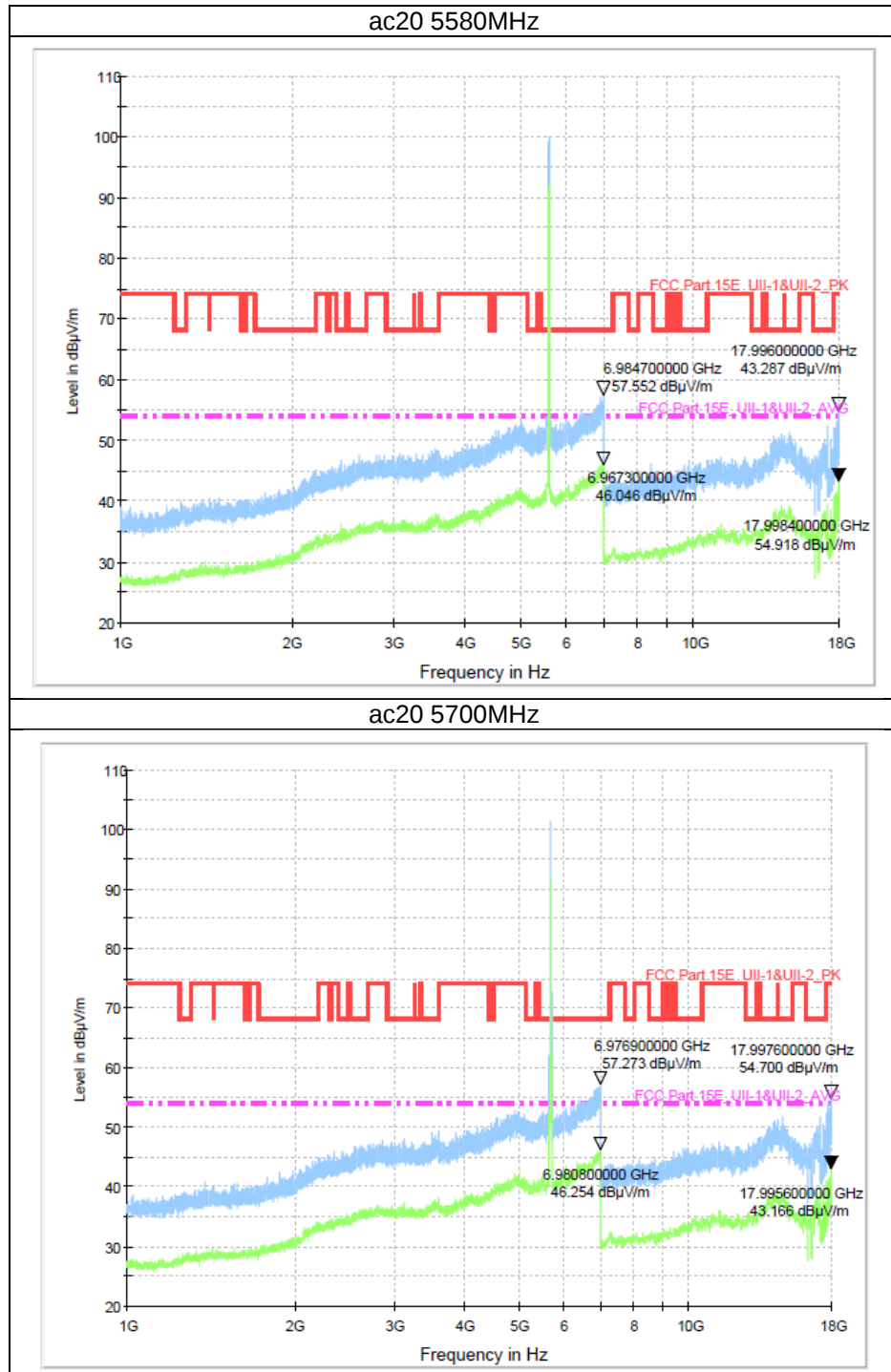
Band3

a 5700MHz

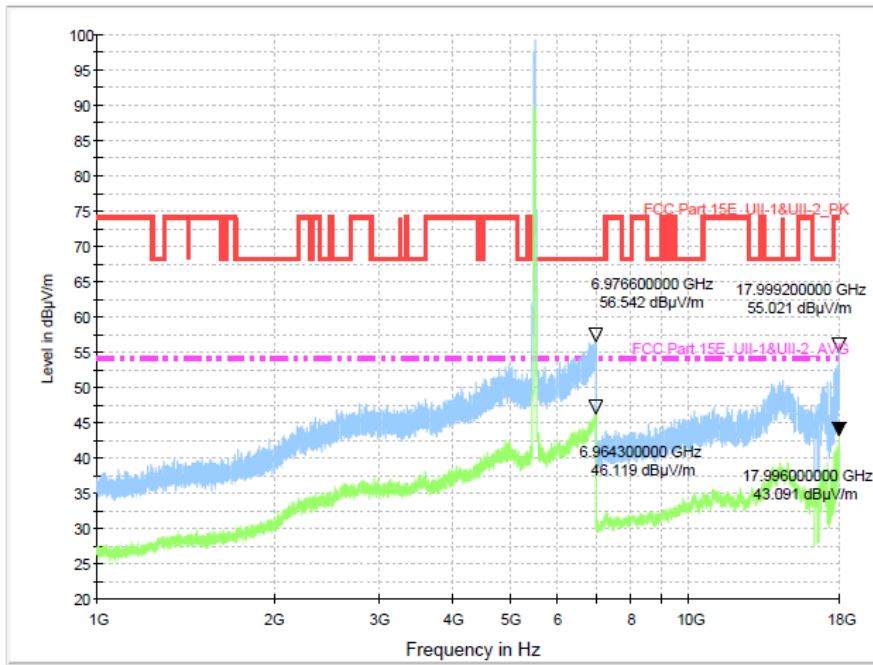


ac20 5500MHz

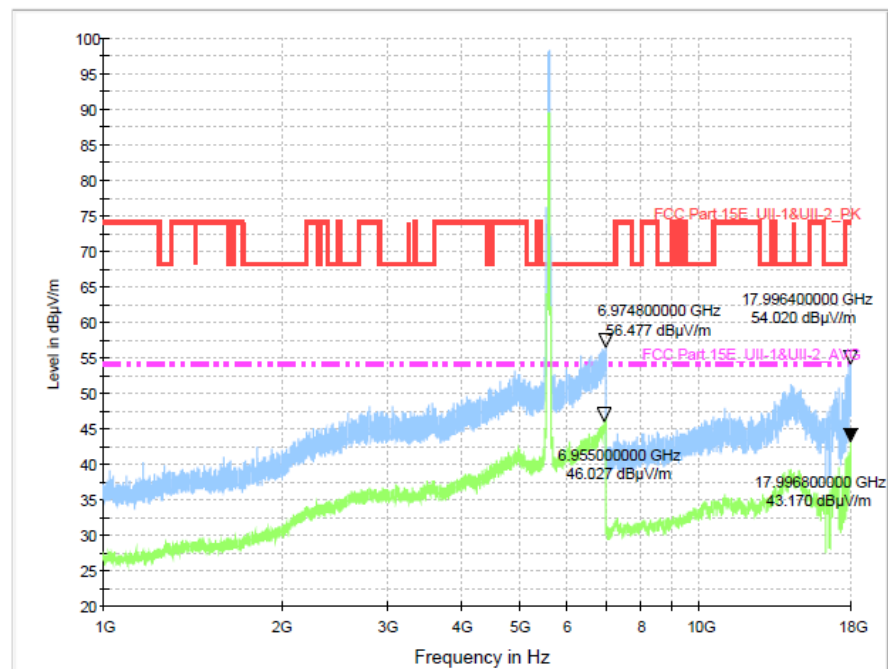




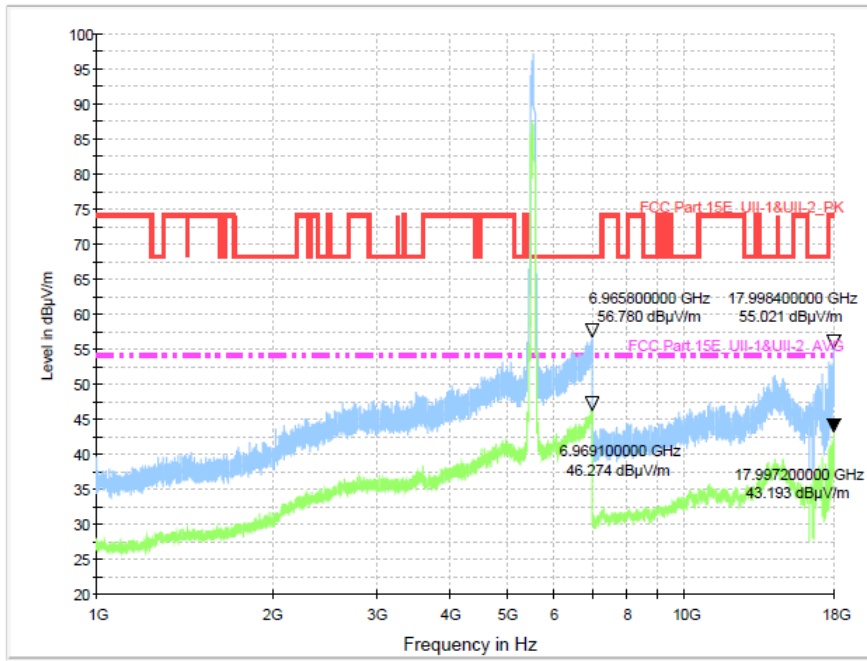
ac40 5510MHz



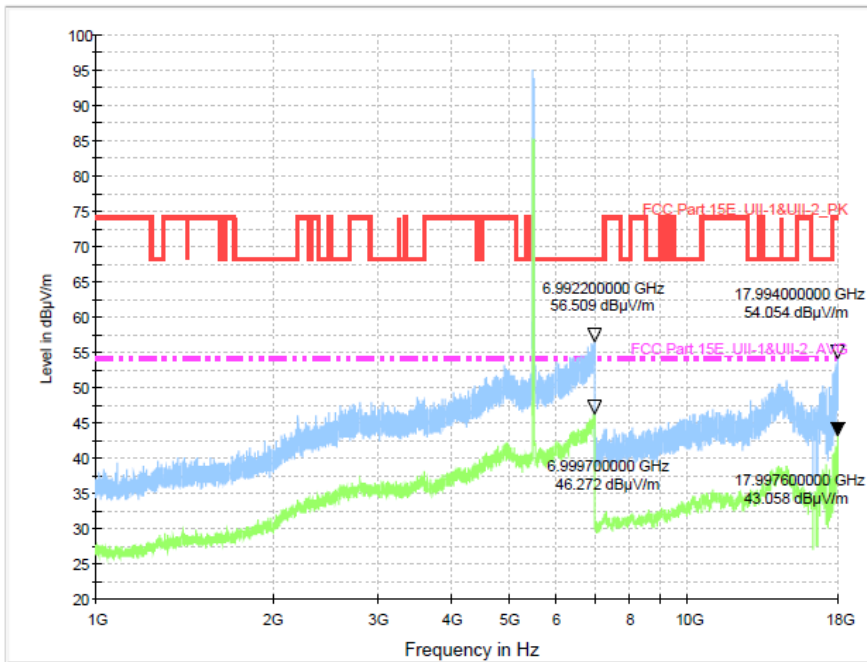
ac40 5670MHz

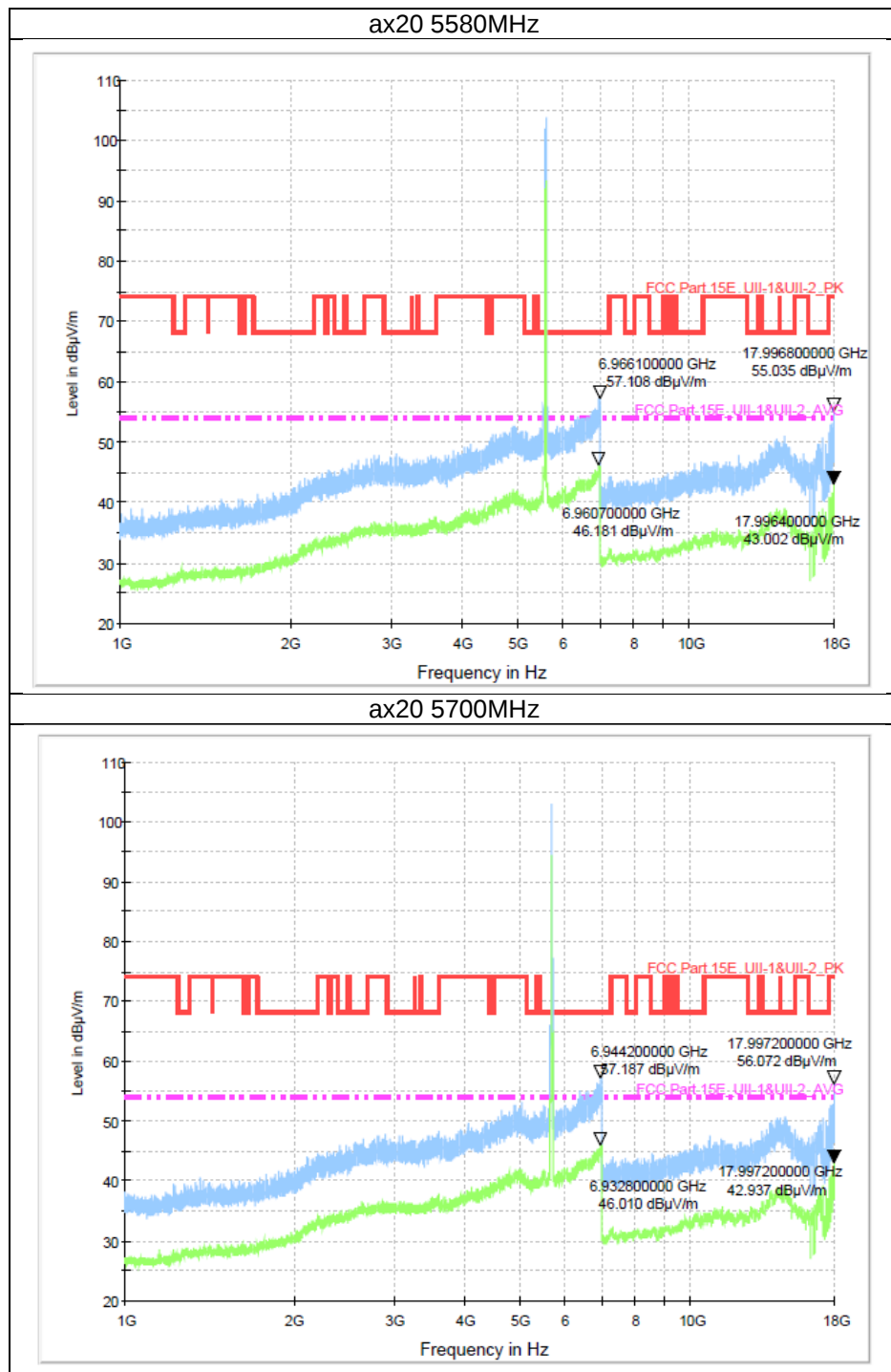


ac80 5530MHz

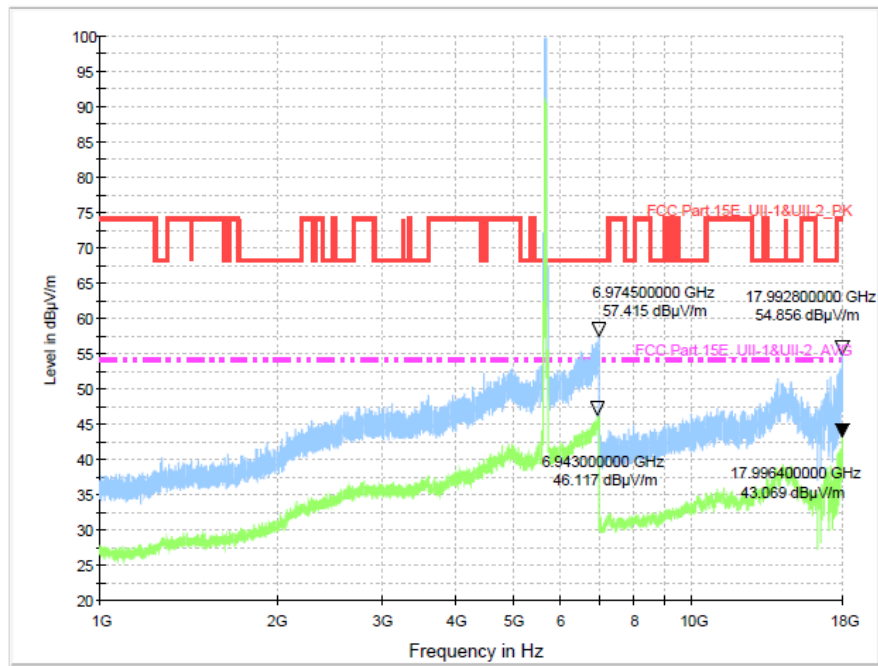


ax20 5500MHz

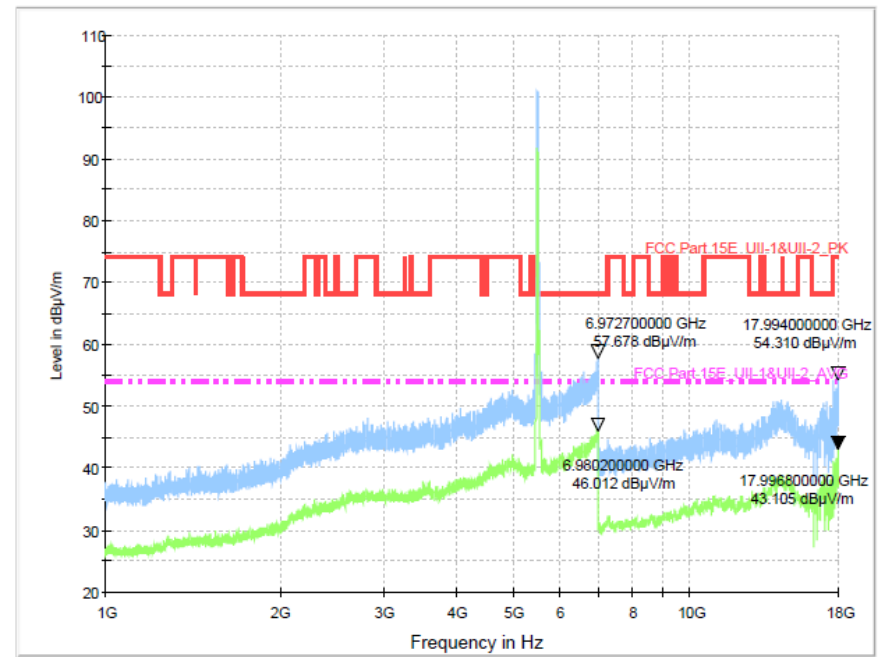


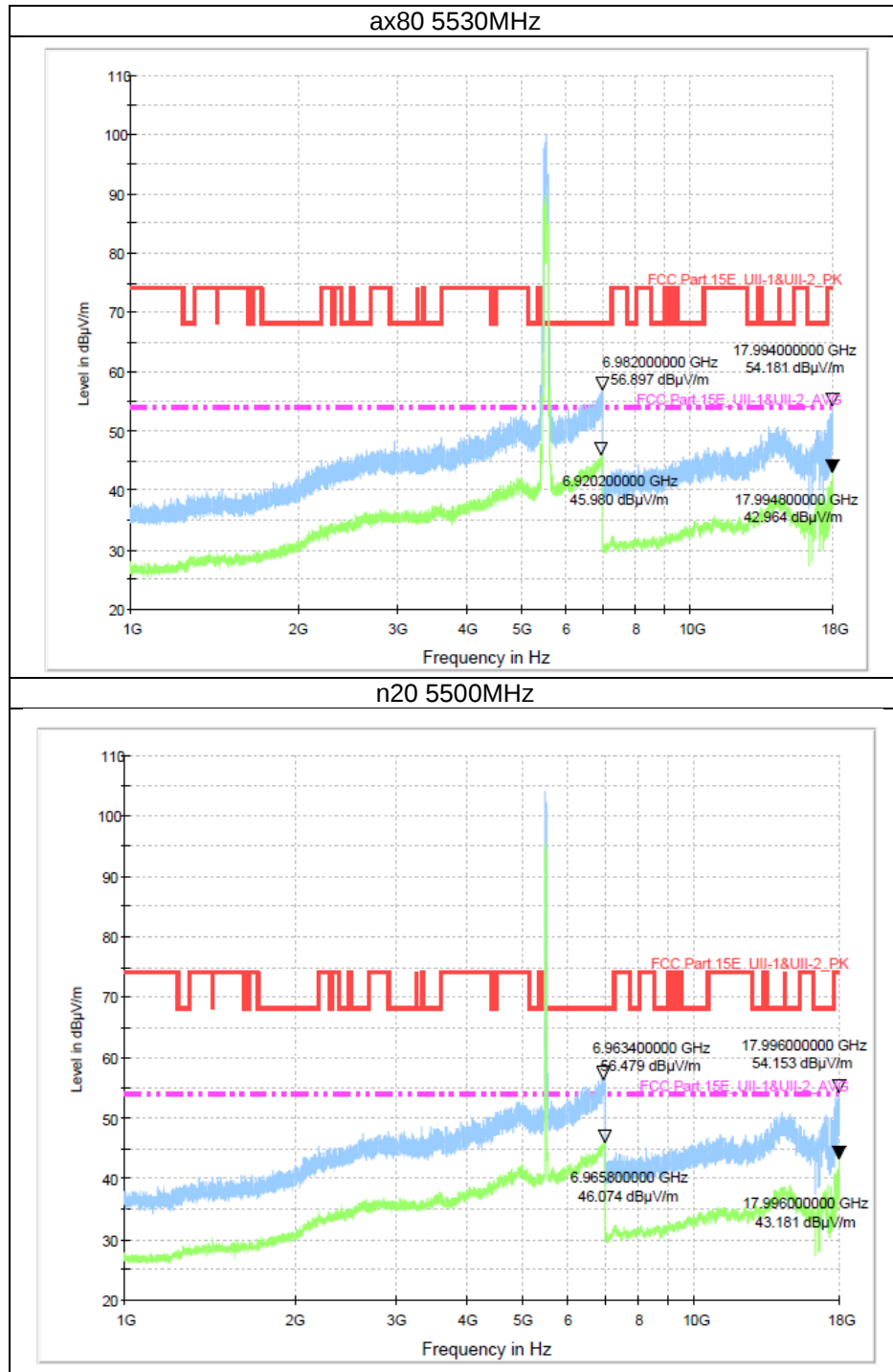


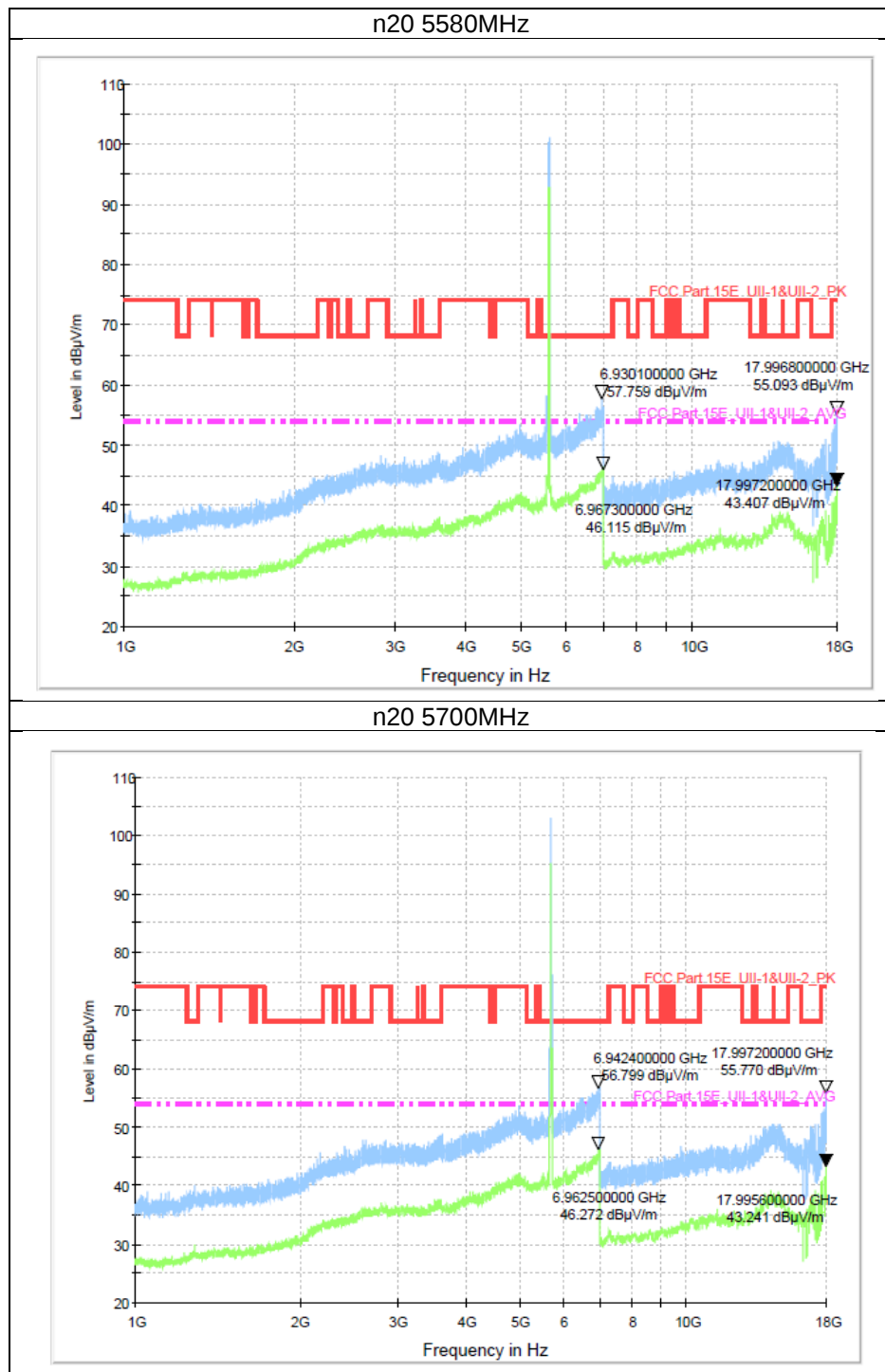
ax40 5510MHz

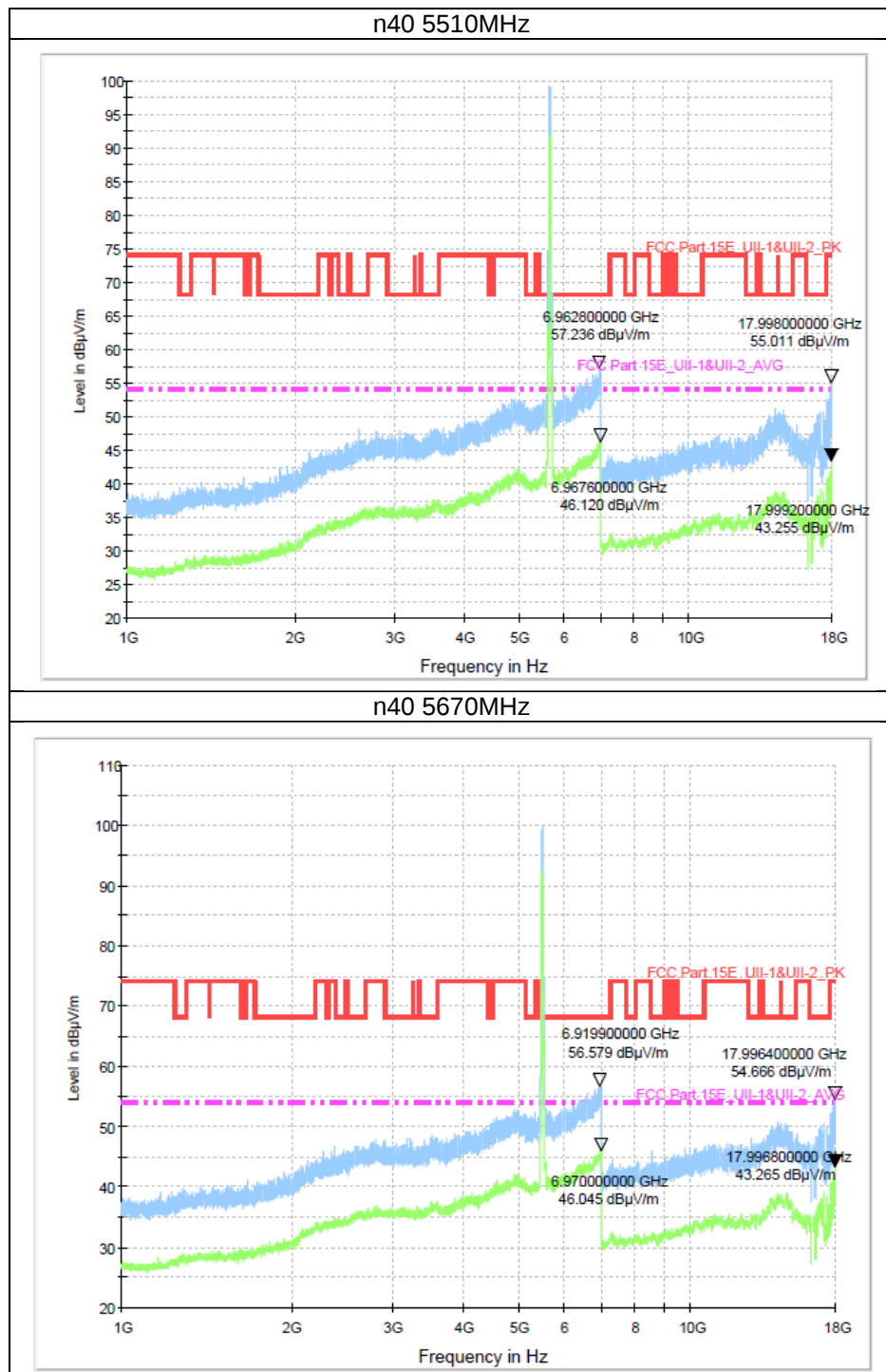


ax40 5670MHz

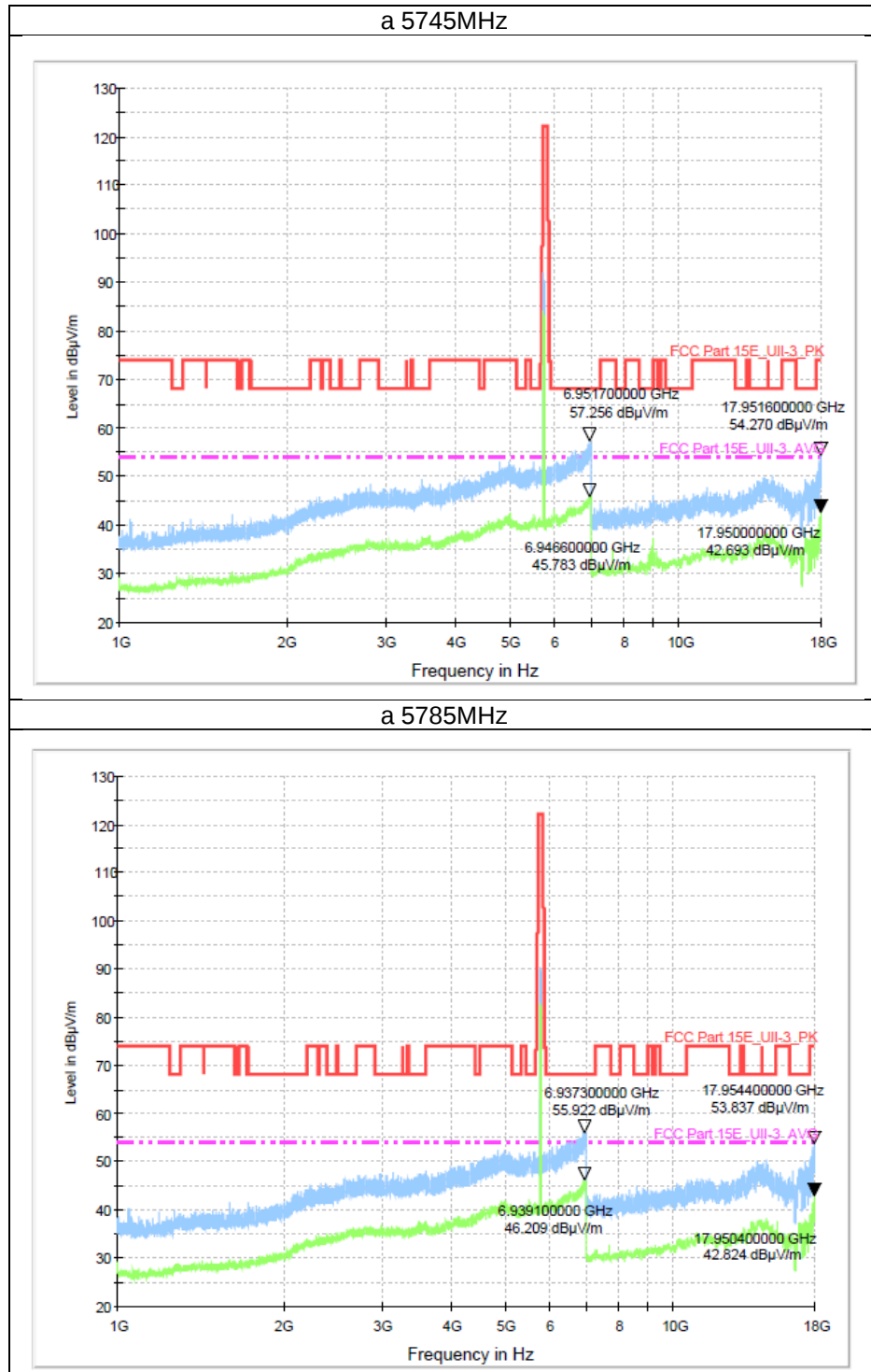




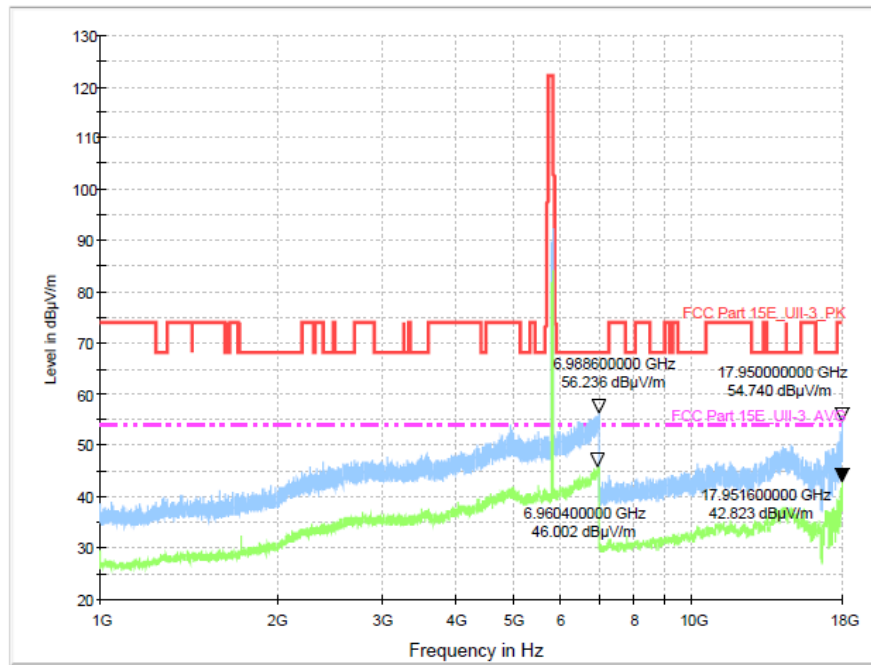




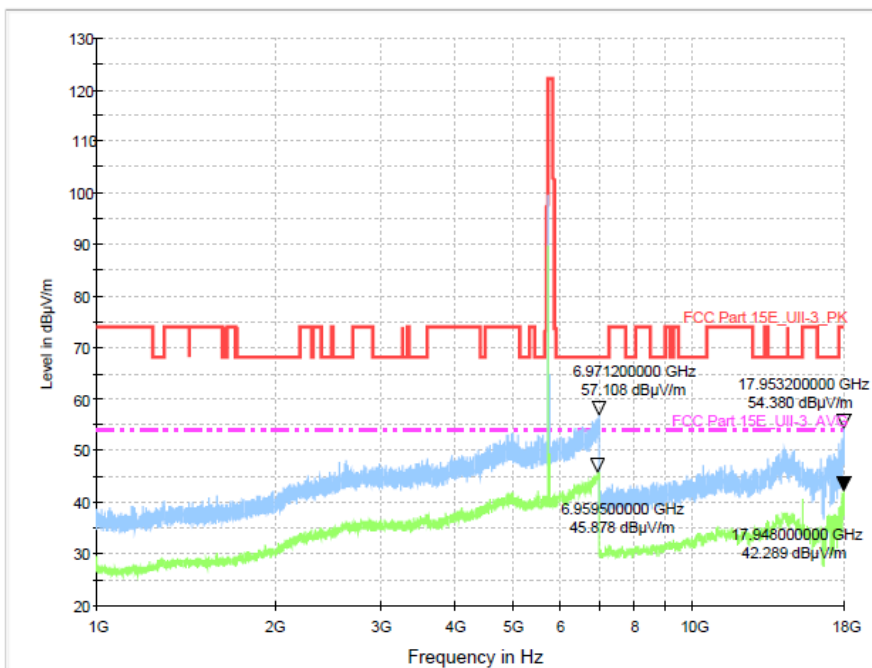
Note: 1. Except for mode a, other modes test the MIMO status.

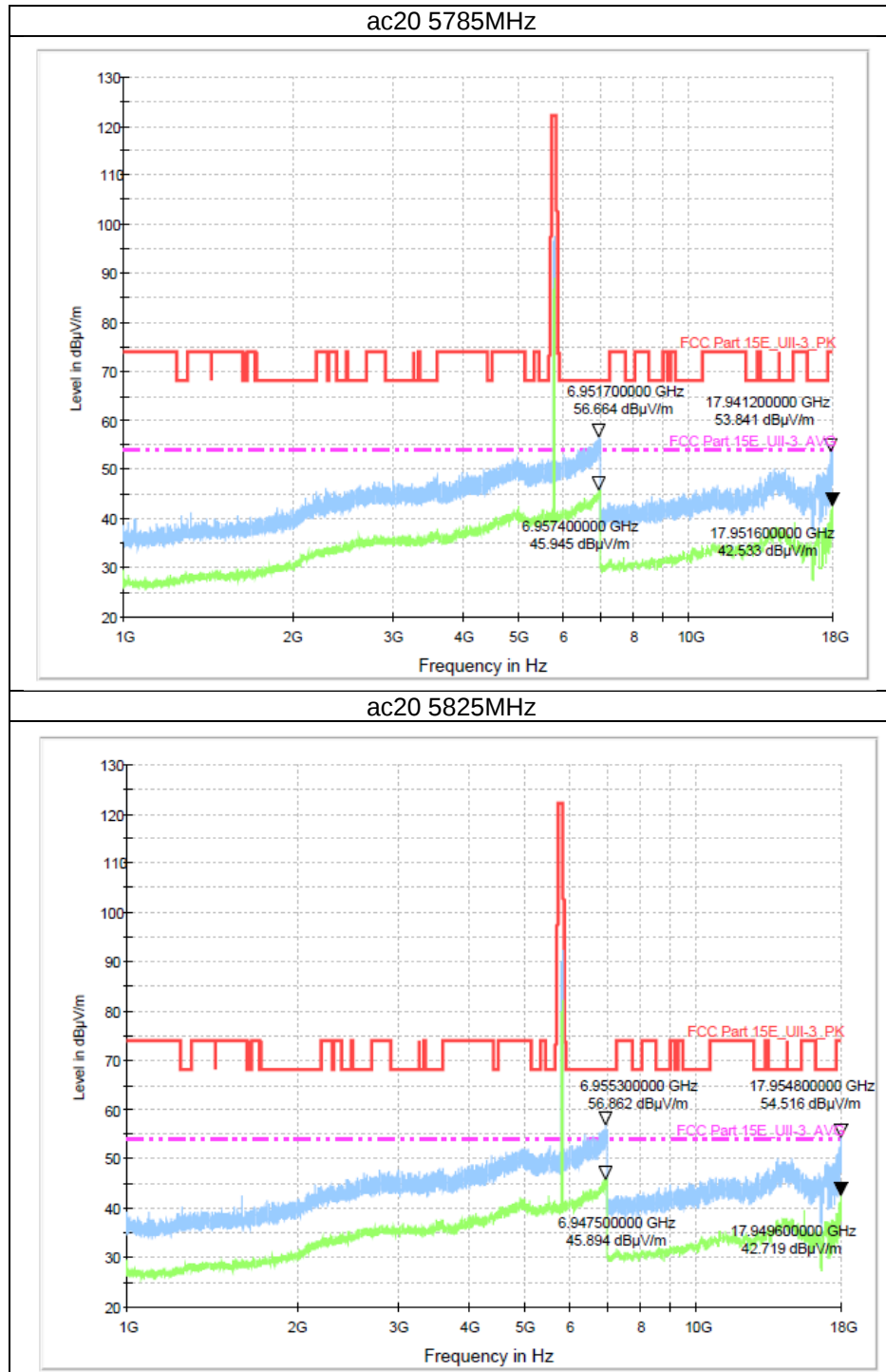
Band4

a 5825MHz

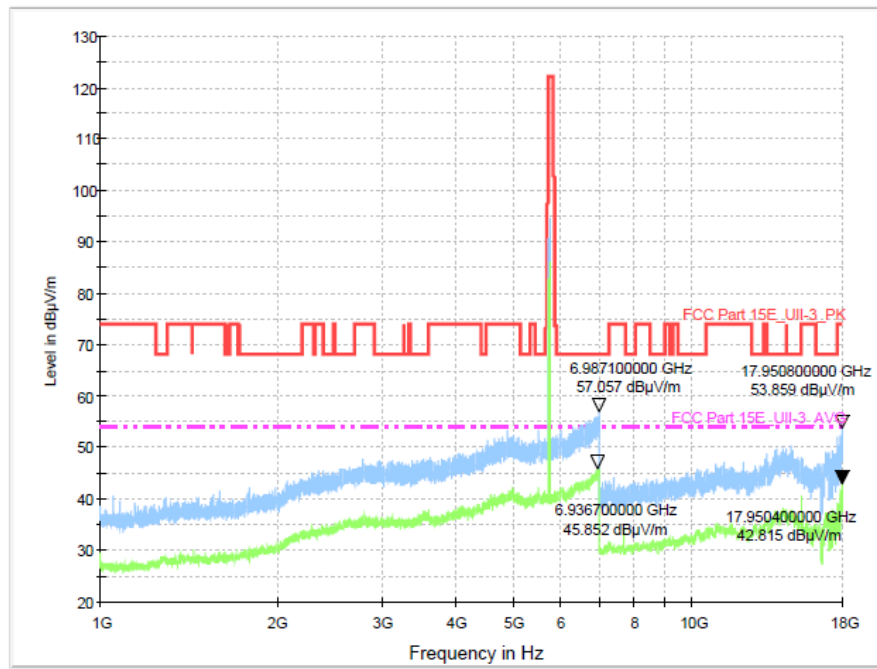


ac20 5745MHz

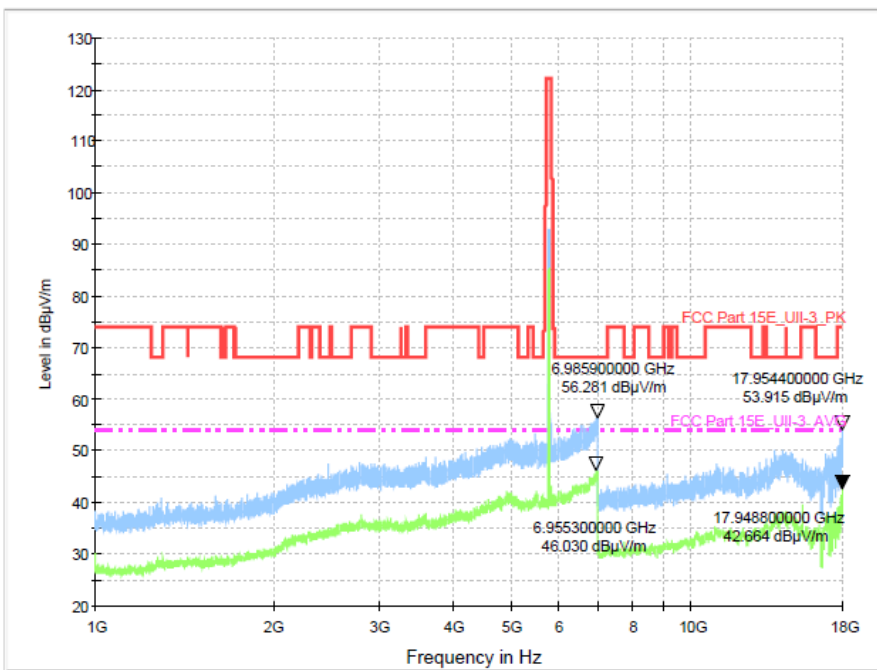




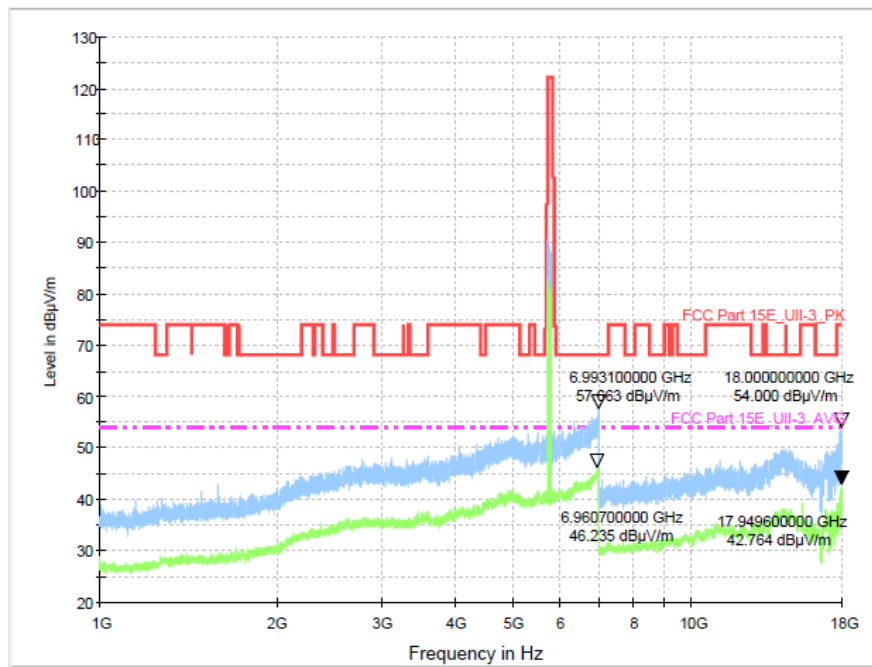
ac40 5755MHz



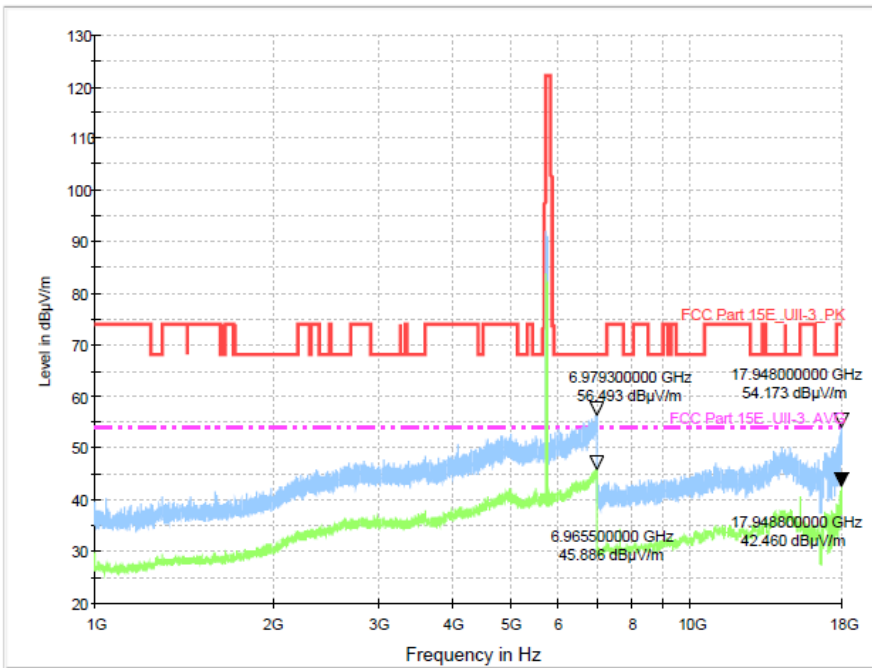
ac40 5795MHz

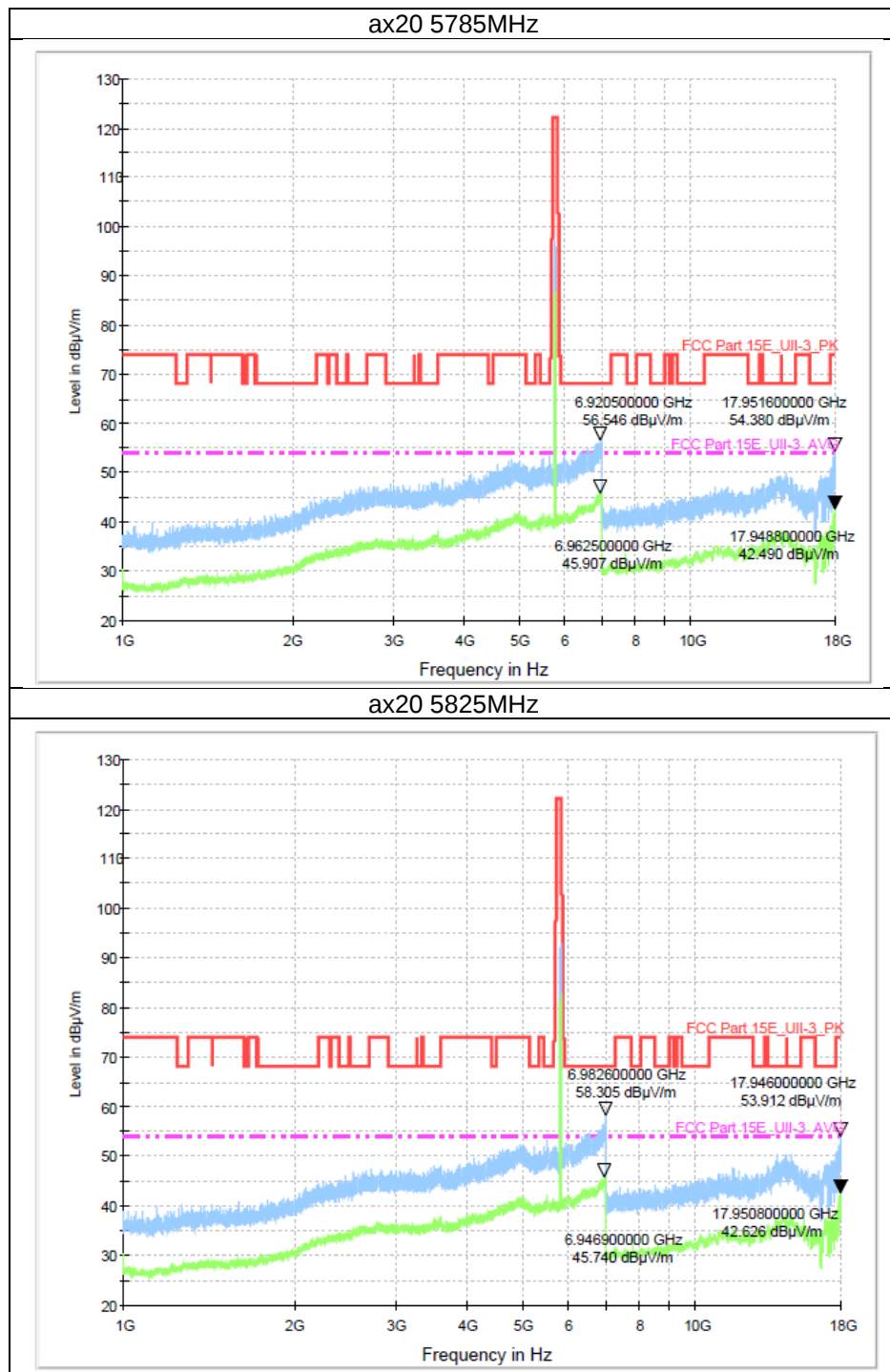


ac80 5775MHz

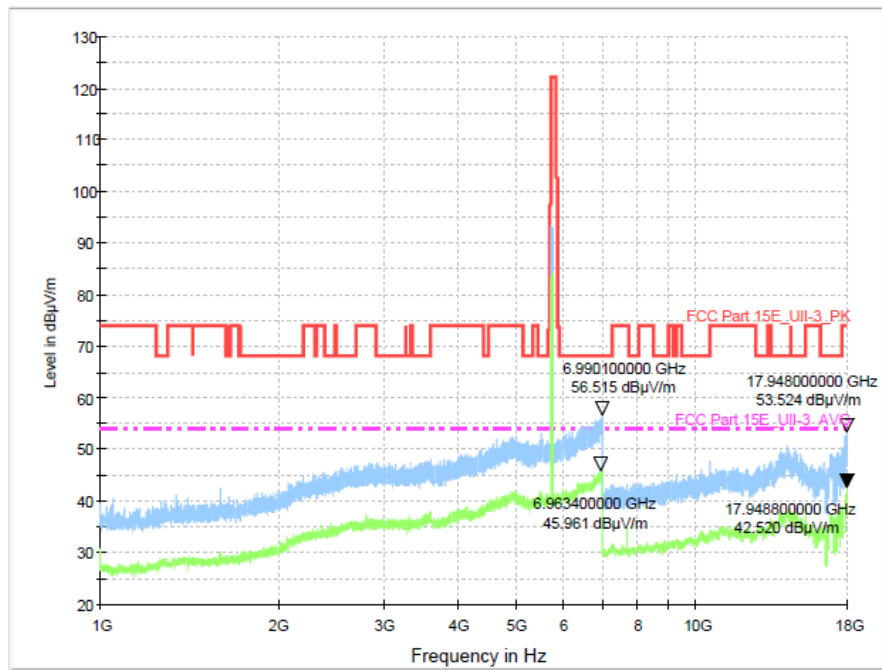


ax20 5745MHz

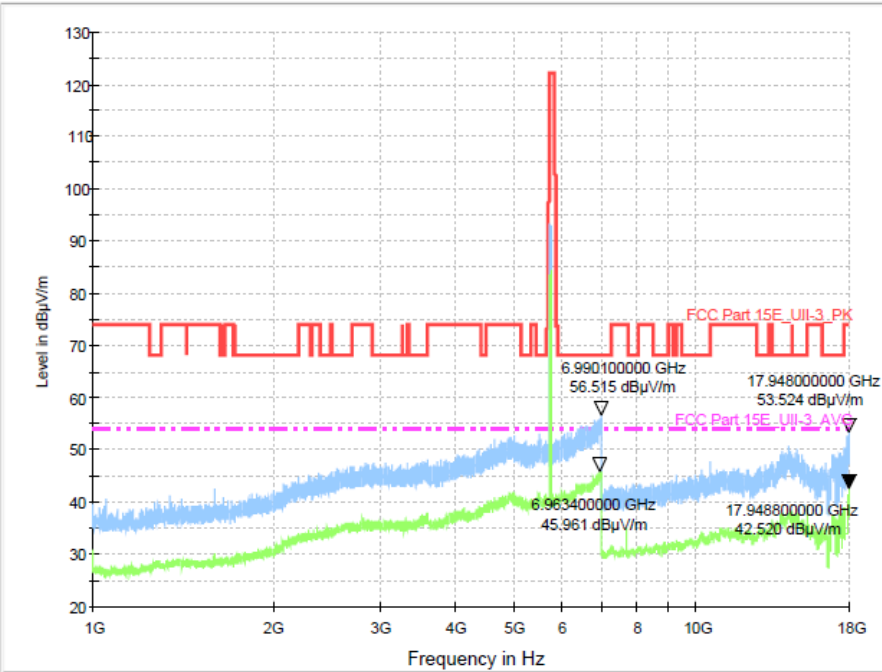




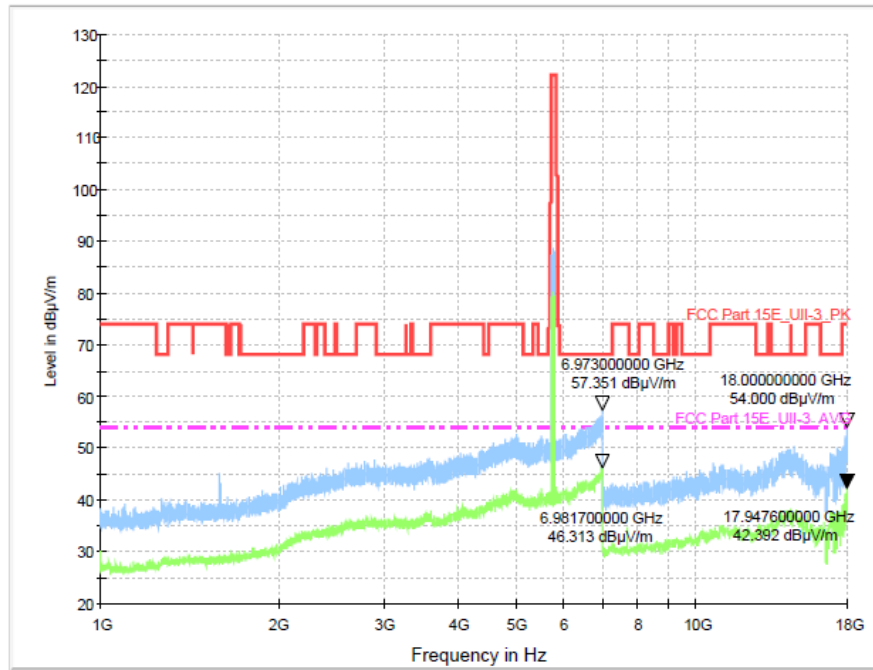
ax40 5755MHz



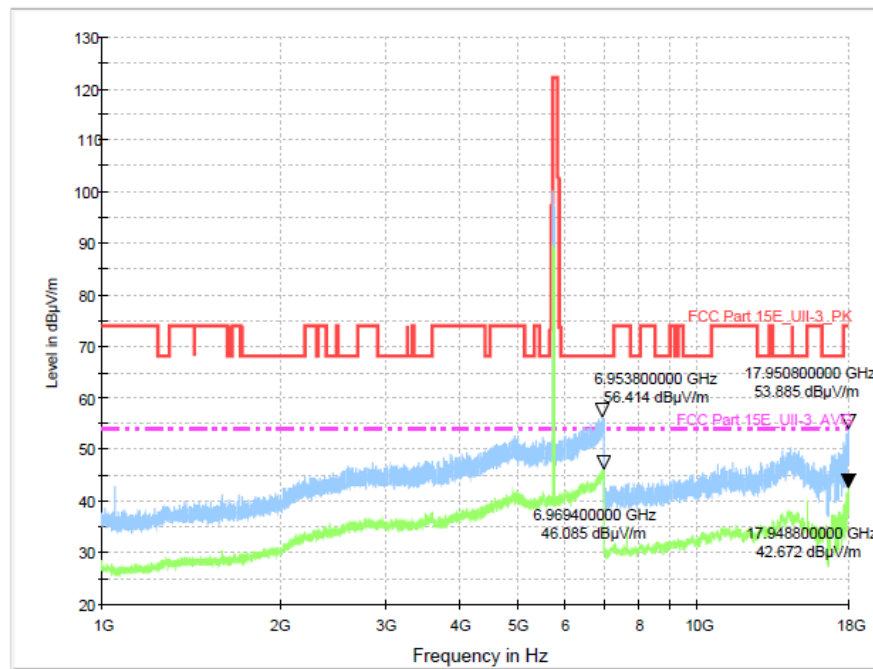
ax40 5795MHz



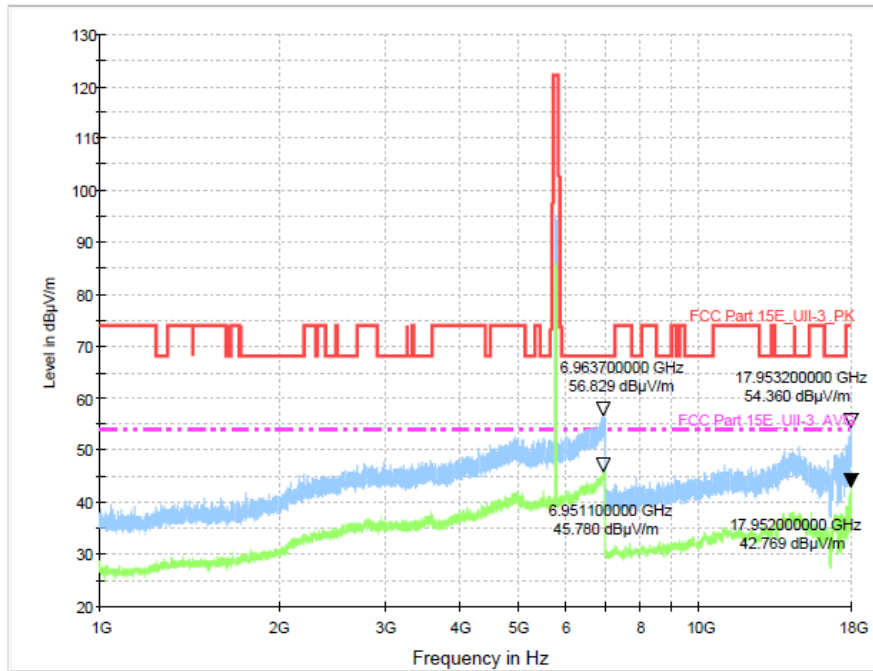
ax80 5775MHz



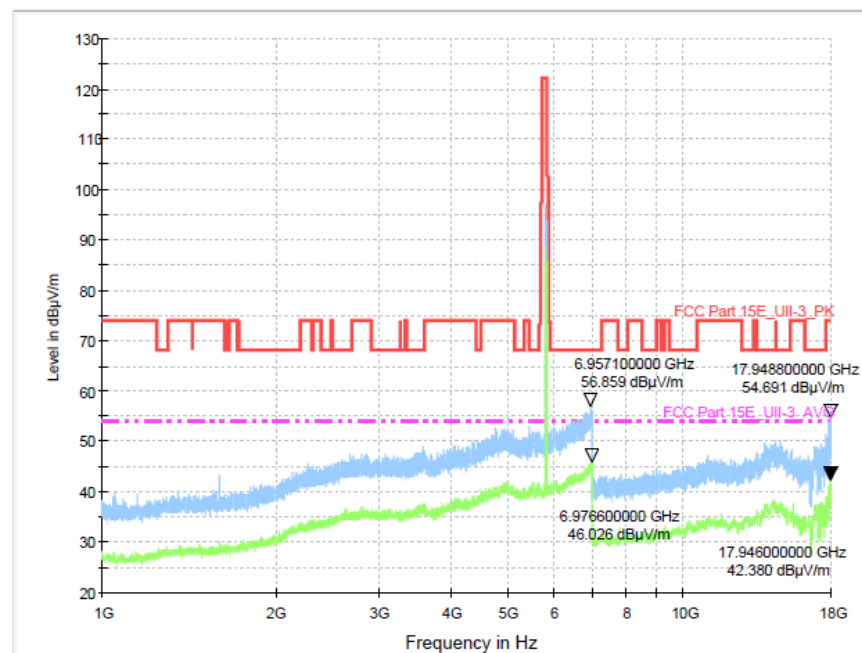
n20 5745MHz

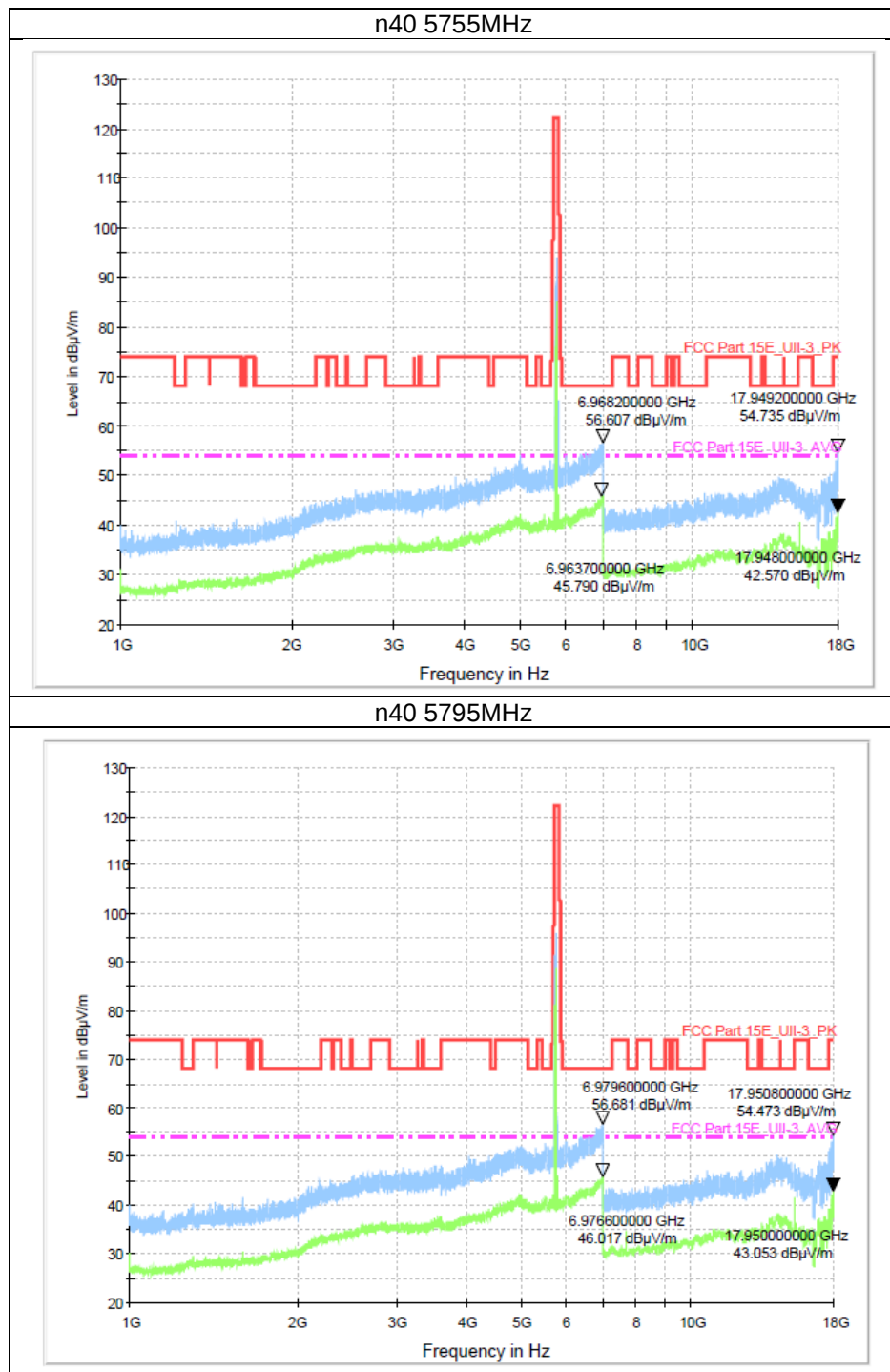


n20 5785MHz



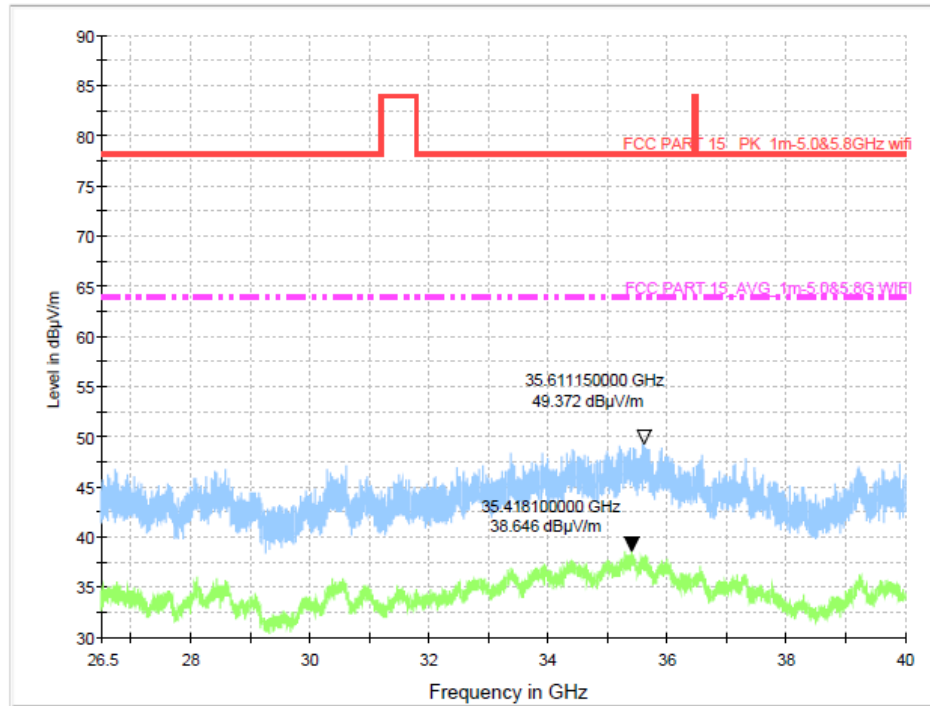
n20 5825MHz





Note: 1. Except for mode a, other modes test the MIMO status.
2. Mode a represents the worst data of antenna 1

From 18G to 40GHz Conclusion: PASS



Remark: 1. All modes have been tested, and only worst data of a mode, Channel 5200MHz was listed in this
2. Mode a represents the worst data of antenna 1

4.8 Frequency stability

Test limit	Manufacturers 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.
Test results:	Pass

Measurement Data:

Mode	Voltage (V)	FHL (5180MHz)	Deviation (KHz)	FHH (5240MHz)	Deviation (KHz)
Band 1 (5150-5250 MHz)	DC 3.0V	5179.996	4	5239.991	9
	DC 3.3V	5179.997	3	5239.995	5
	DC 3.6V	5179.997	3	5239.993	7
Mode	Voltage (V)	FHL (5260MHz)	Deviation (KHz)	FHH (5320MHz)	Deviation (KHz)
Band 2 (5250-5350 MHz)	DC 3.0V	5259.994	6	5229.998	2
	DC 3.3V	5259.994	6	5229.995	5
	DC 3.6V	5259.992	8	5229.998	2
Mode	Voltage (V)	FHL (5500MHz)	Deviation (KHz)	FHH (5700MHz)	Deviation (KHz)
Band 3 (5470-5725 MHz)	DC 3.0V	5499.991	9	5699.987	13
	DC 3.3V	5499.997	3	5699.986	14
	DC 3.6V	5499.992	8	5699.987	13
Mode	Voltage (V)	FHL (5745MHz)	Deviation (KHz)	FHH (5825MHz)	Deviation (KHz)
Band 4 (5725-5850 MHz)	DC 3.0V	5744.991	9	5824.989	11
	DC 3.3V	5744.991	9	5824.990	10
	DC 3.6V	5744.988	12	5824.990	10

Mode	Temperature (°C)	FHL (5180MHz)	Deviation (KHz)	FHH (5240MHz)	Deviation (KHz)
Band 1 (5150-5250 MHz)	0°C	5179.992	8	5239.993	7
	+10°C	5179.998	2	5239.993	7
	+20°C	5179.995	5	5239.997	3
	+30°C	5179.995	5	5239.995	5
	+40°C	5179.997	3	5239.995	5
	+50°C	5179.994	6	5239.998	2
	+60°C	5179.997	3	5239.994	6
	+70°C	5179.995	5	5239.998	2
Mode	Temperature (°C)	FHL (5260MHz)	Deviation (KHz)	FHH (5320MHz)	Deviation (KHz)
Band 2 (5250-5350 MHz)	0°C	5259.991	9	5229.994	6
	+10°C	5259.996	4	5229.997	3
	+20°C	5259.994	6	5229.991	9
	+30°C	5259.998	2	5229.998	2
	+40°C	5259.997	3	5229.997	3
	+50°C	5259.993	7	5229.993	7
	+60°C	5259.993	7	5229.997	3
	+70°C	5259.997	3	5229.994	6
Mode	Temperature (°C)	FHL (5500MHz)	Deviation (KHz)	FHH (5700MHz)	Deviation (KHz)
Band 3 (5470-5725 MHz)	0°C	5499.994	6	5699.998	2
	+10°C	5499.993	7	5699.994	6
	+20°C	5499.996	4	5699.997	3
	+30°C	5499.995	5	5699.997	3
	+40°C	5499.997	3	5699.997	3
	+50°C	5499.993	7	5699.997	3
	+60°C	5499.993	7	5699.997	3
	+70°C	5499.996	4	5699.996	4
Mode	Temperature (°C)	FHL (5745MHz)	Deviation (KHz)	FHH (5825MHz)	Deviation (KHz)
Band 4 (5725-5850 MHz)	0°C	5744.992	8	5824.993	7
	+10°C	5744.996	4	5824.995	5
	+20°C	5744.992	8	5824.993	7
	+30°C	5744.995	5	5824.993	7
	+40°C	5744.992	8	5824.994	6
	+50°C	5744.998	2	5824.996	4
	+60°C	5744.995	5	5824.997	3
	+70°C	5744.998	2	5824.997	3

-----END OF REPORT-----