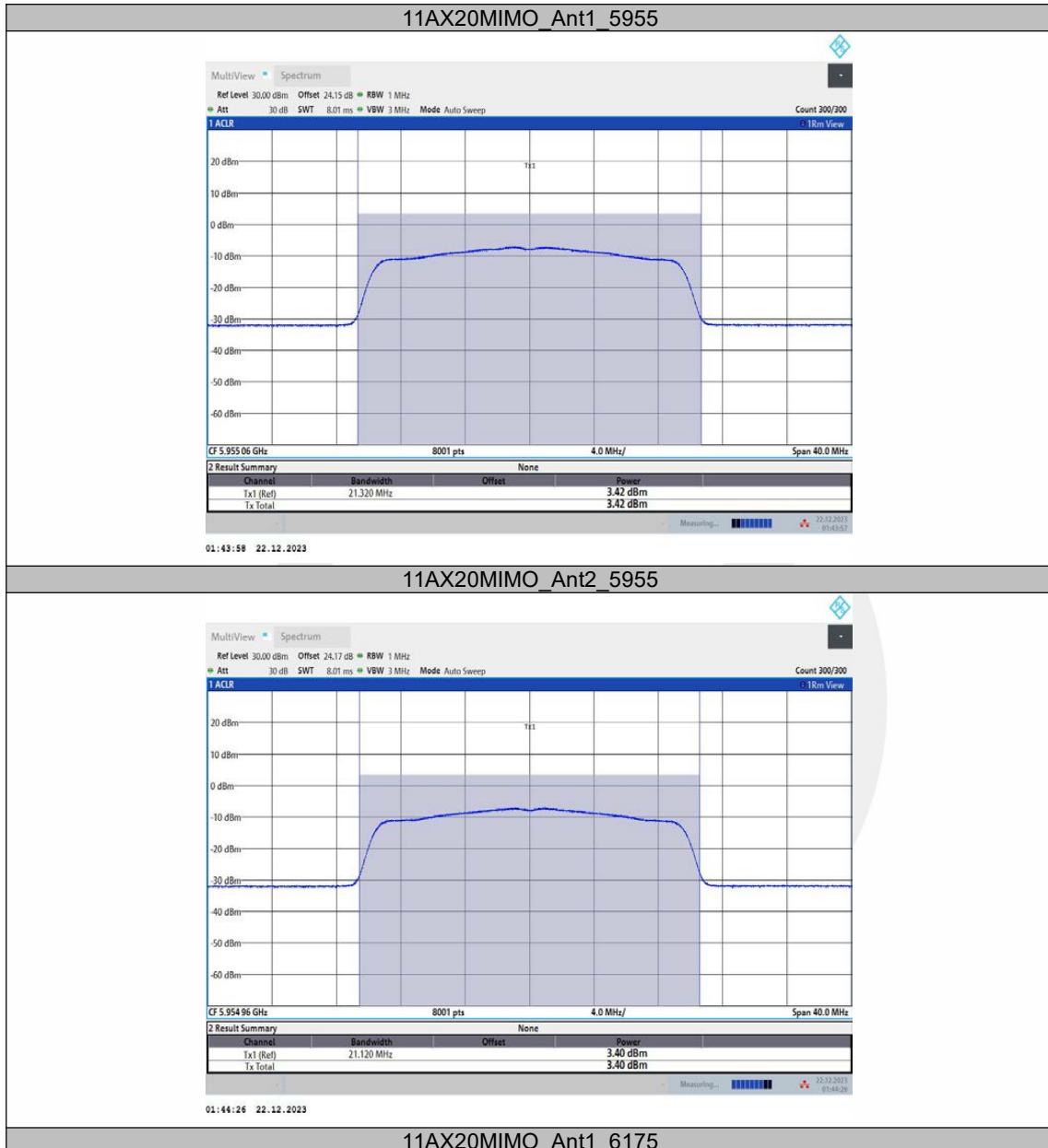
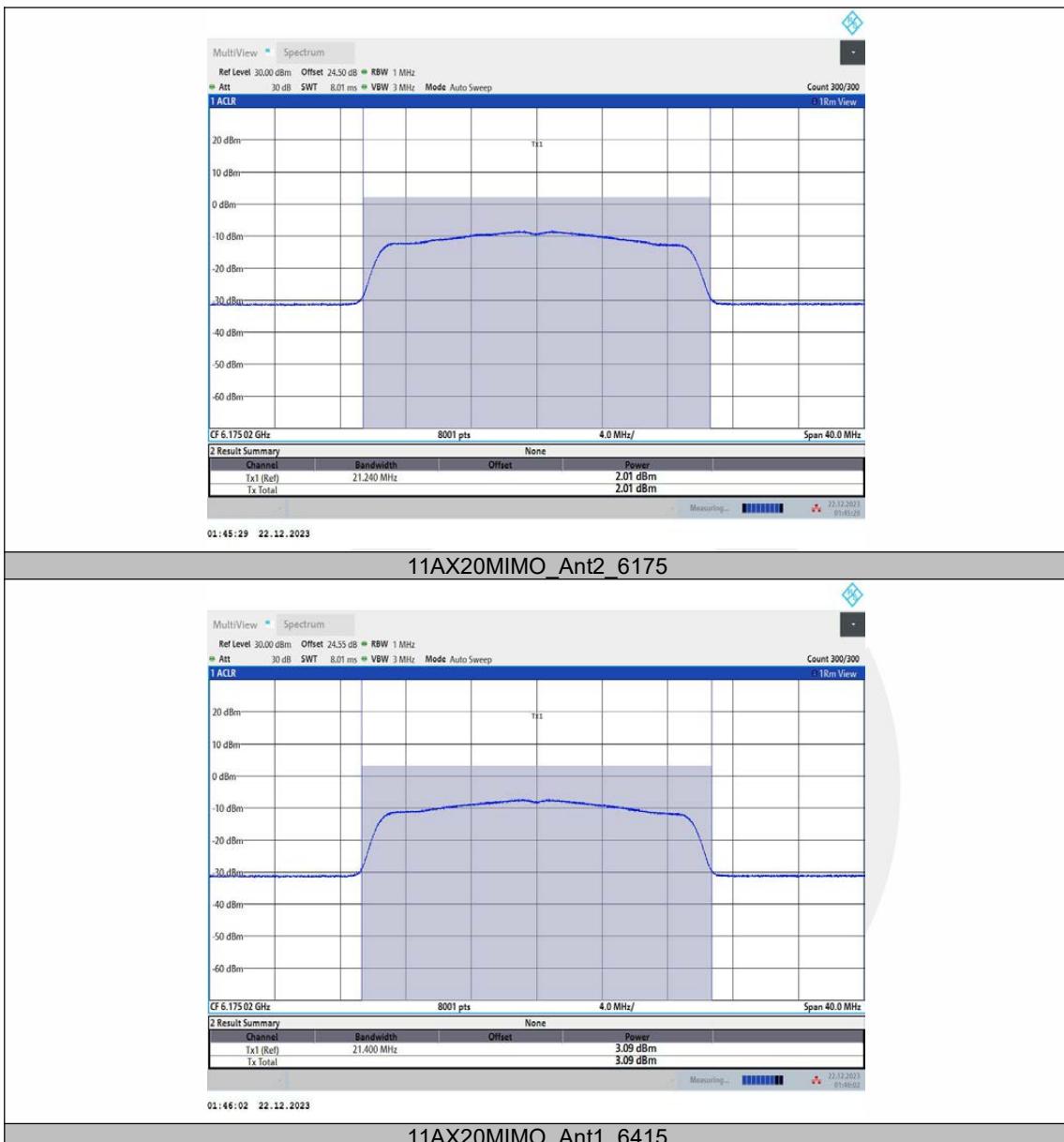
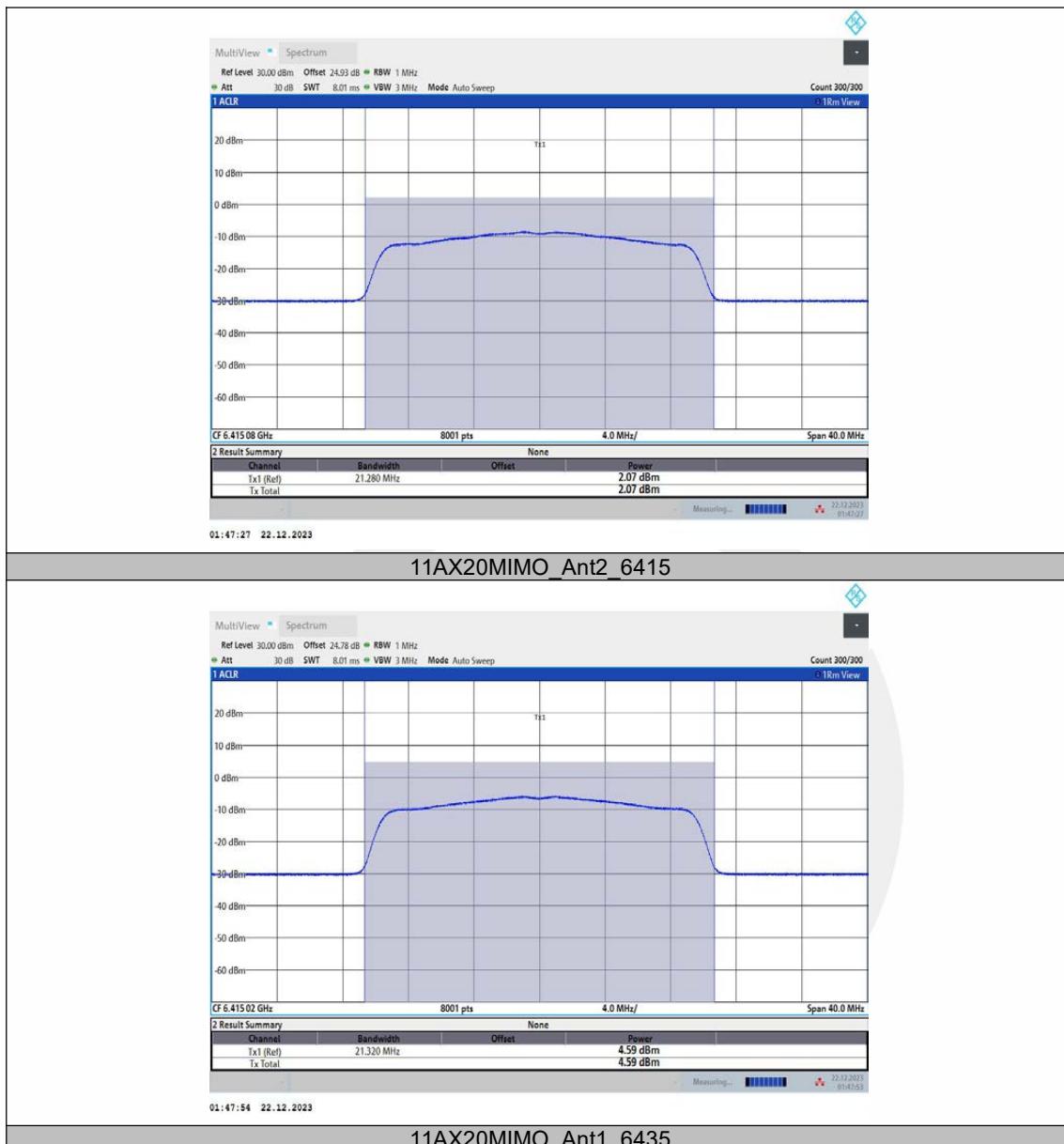
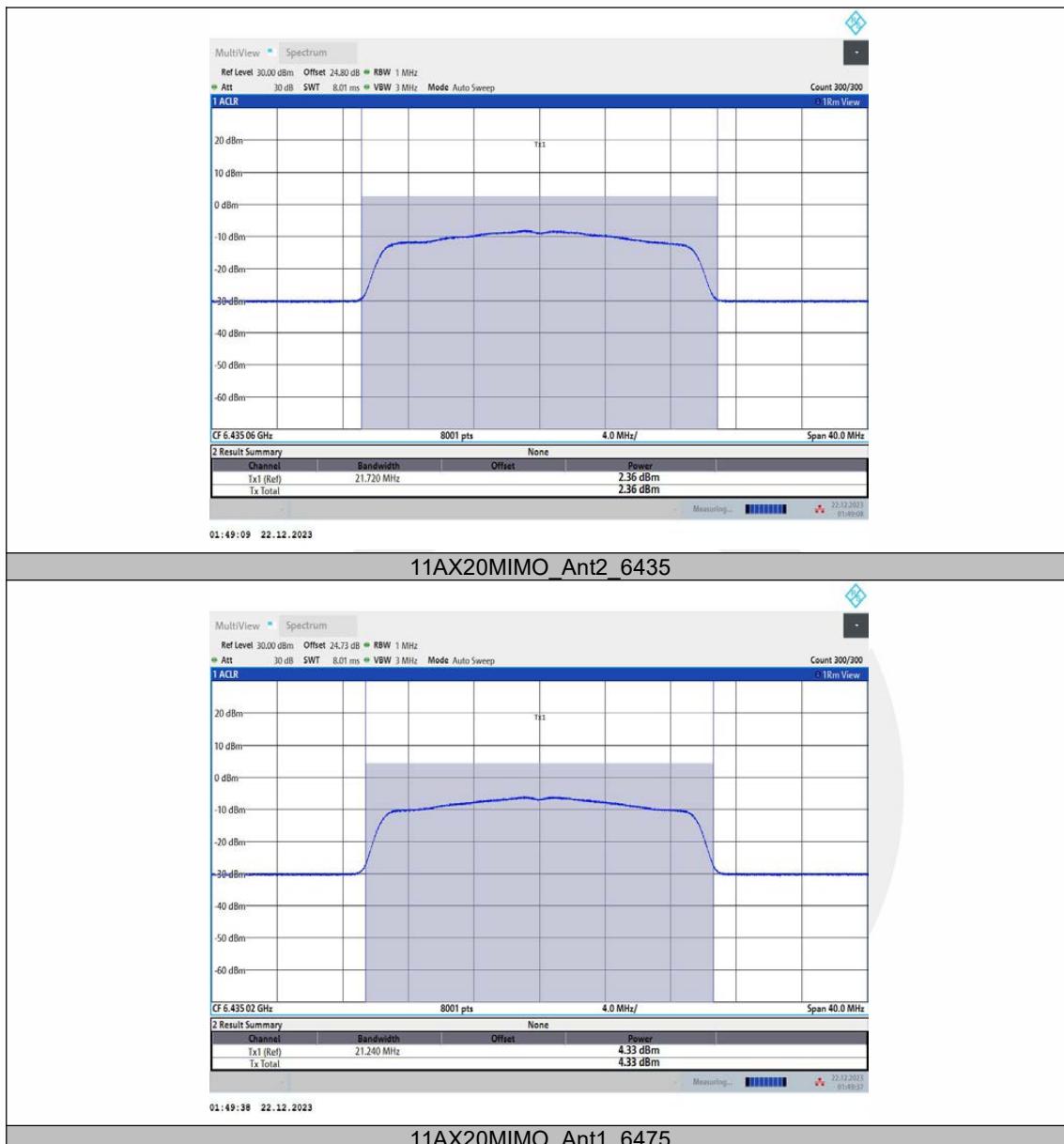


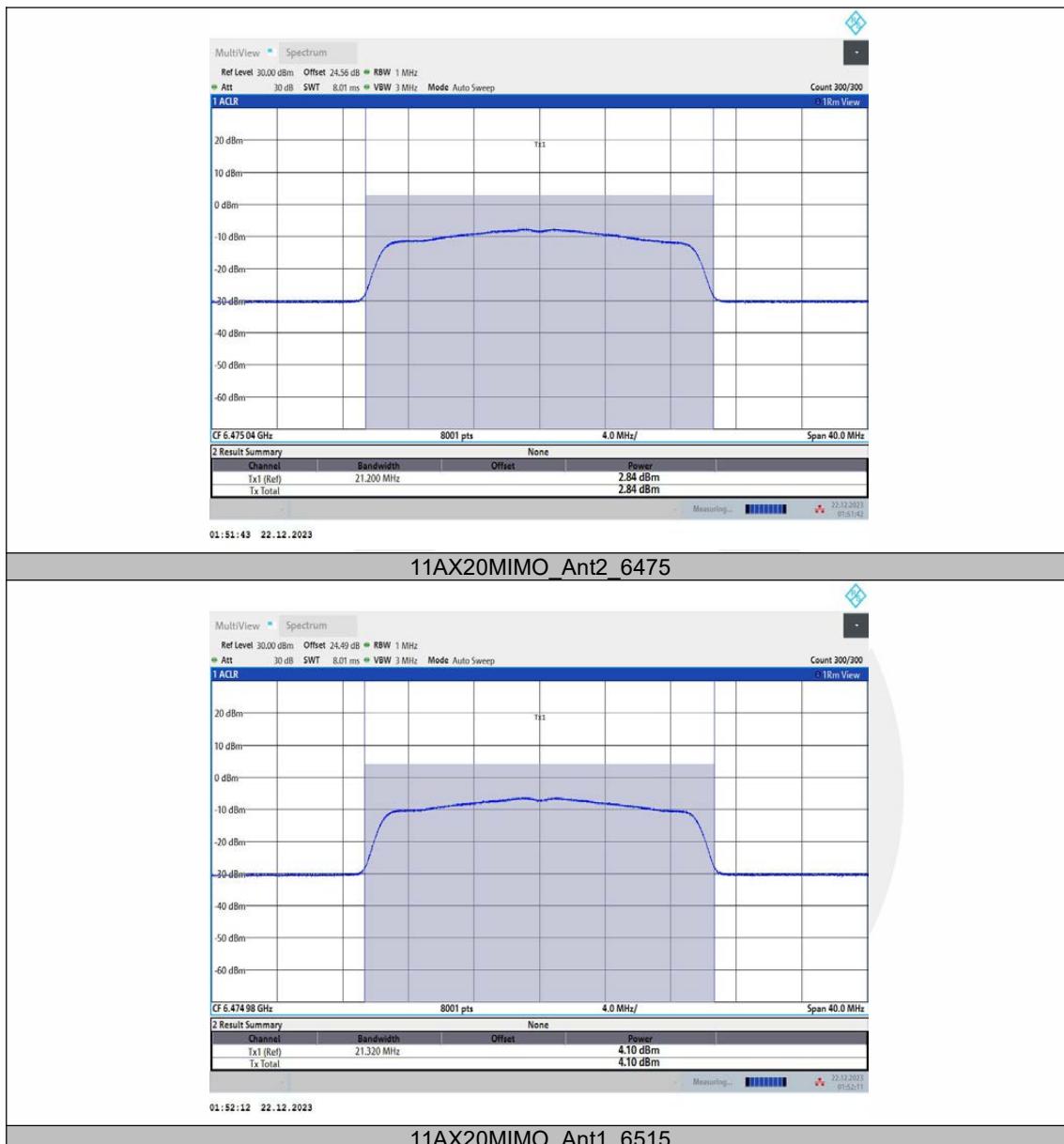
Full RU modes

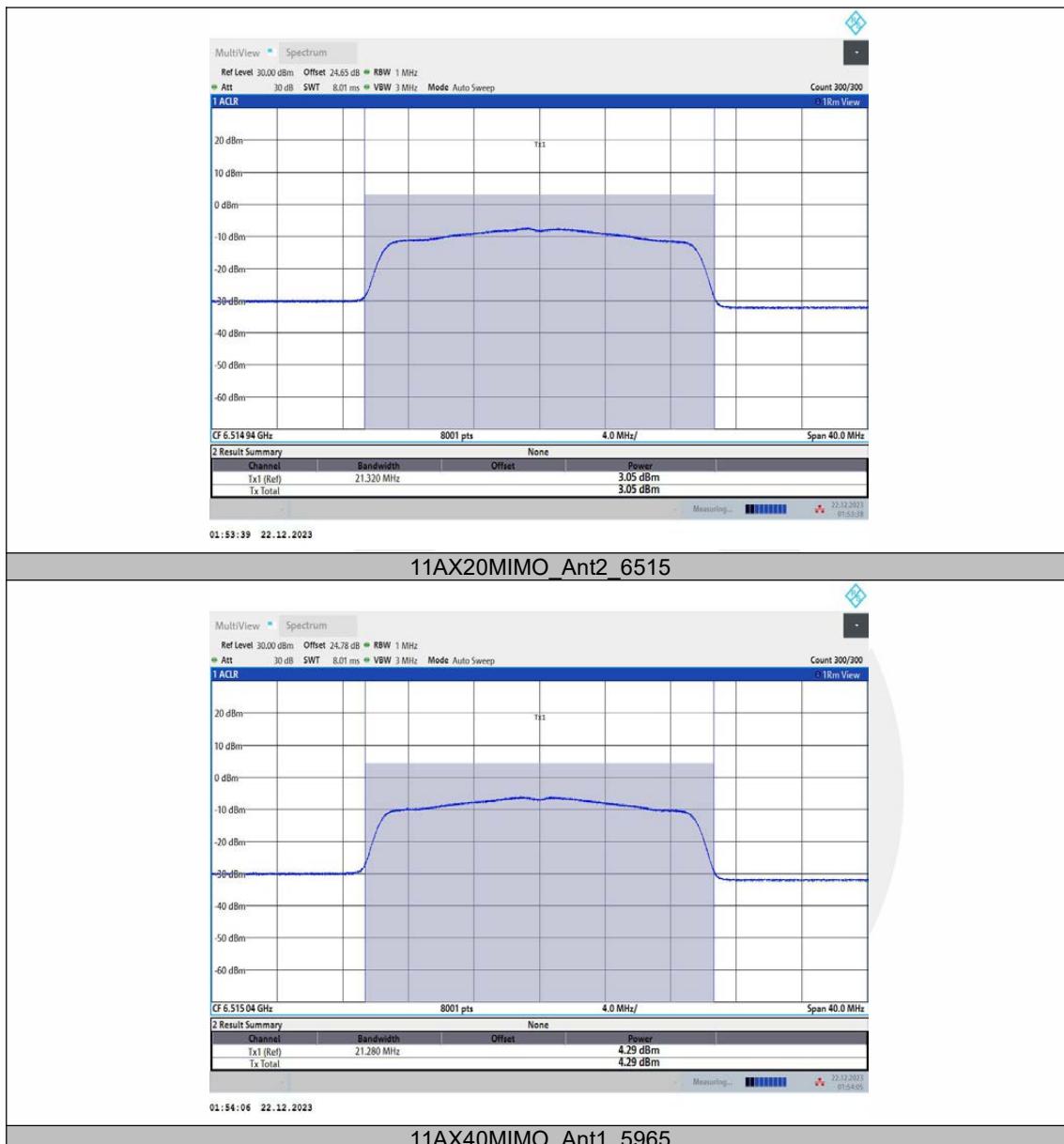


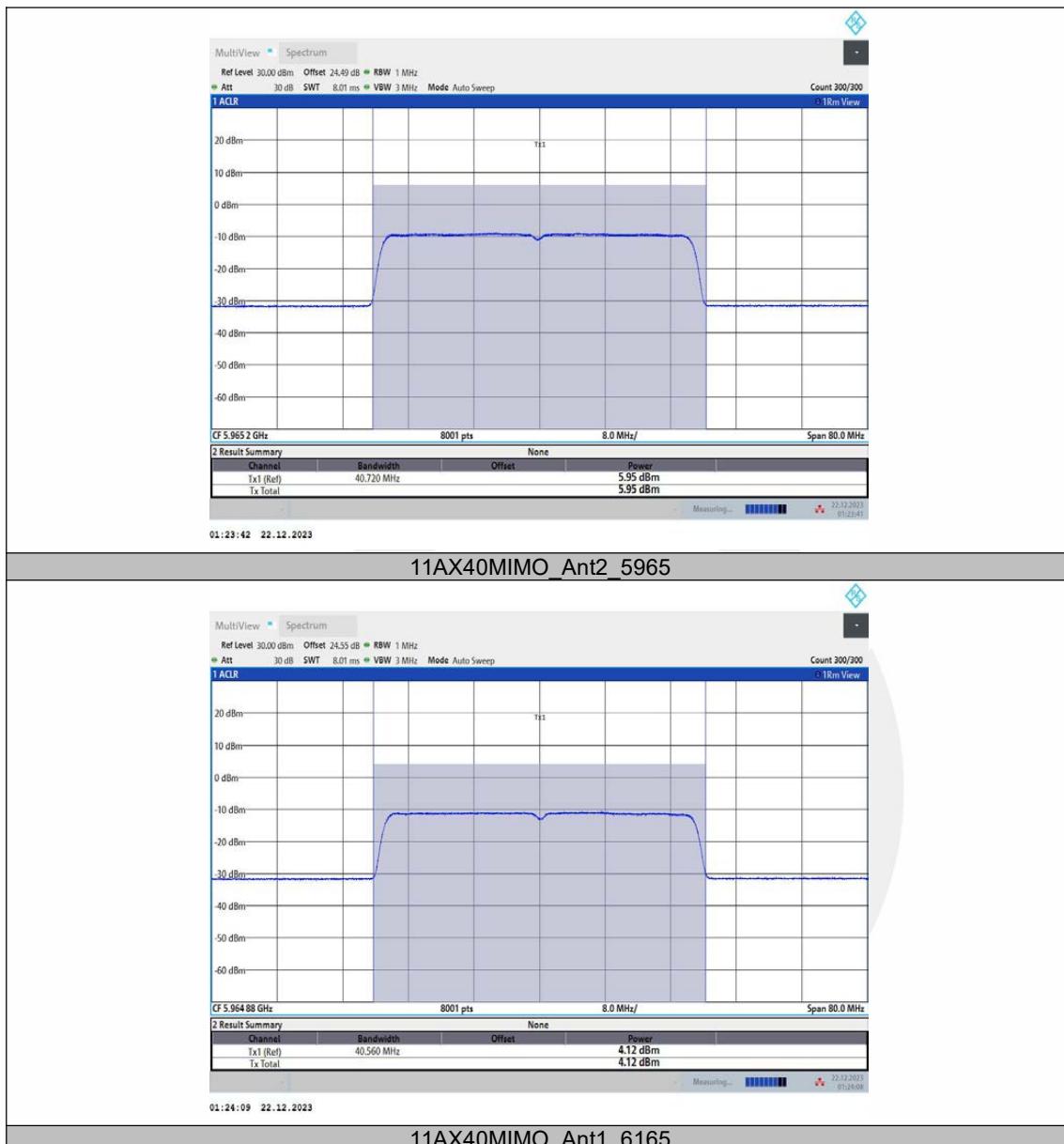


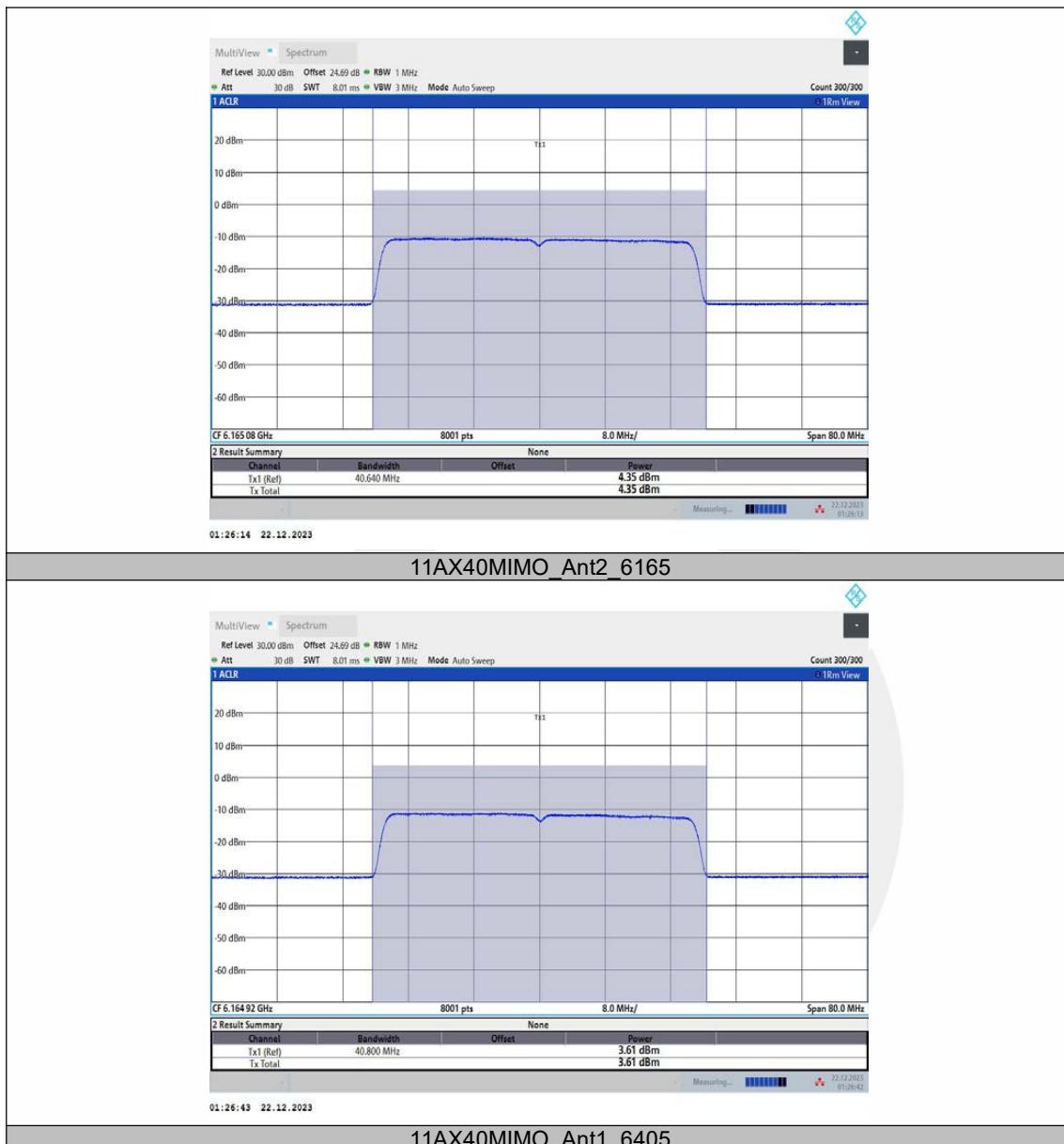


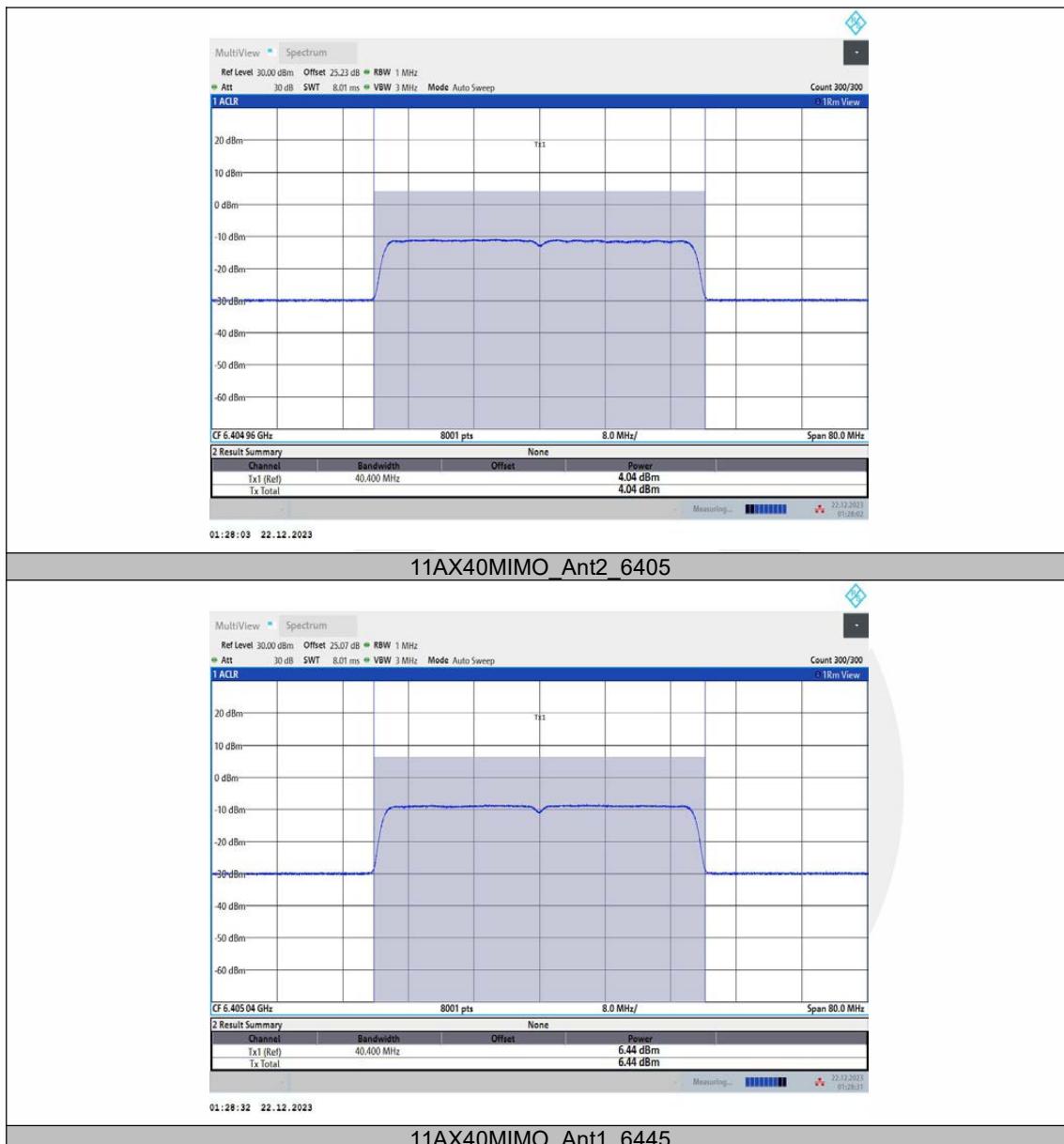


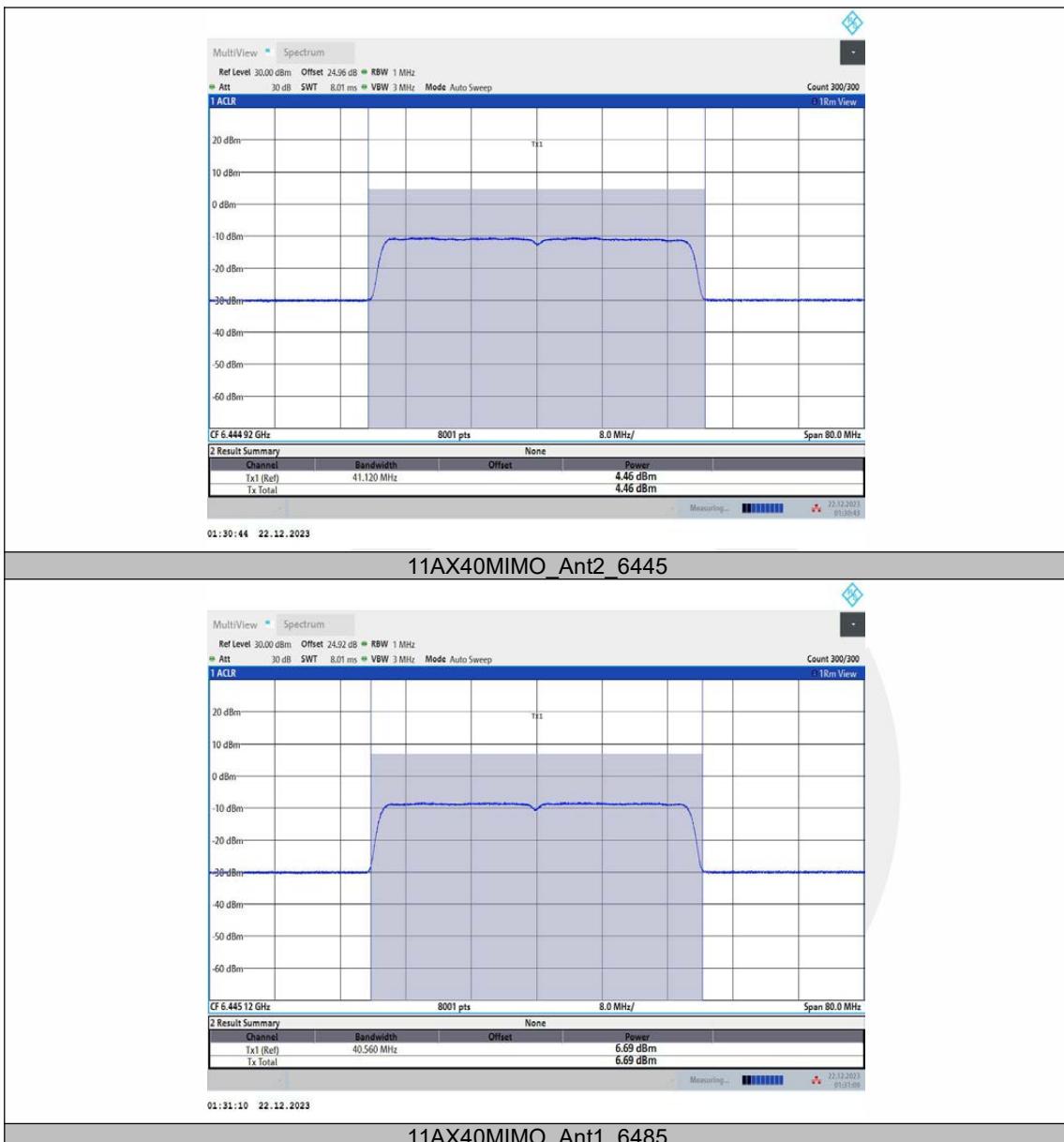


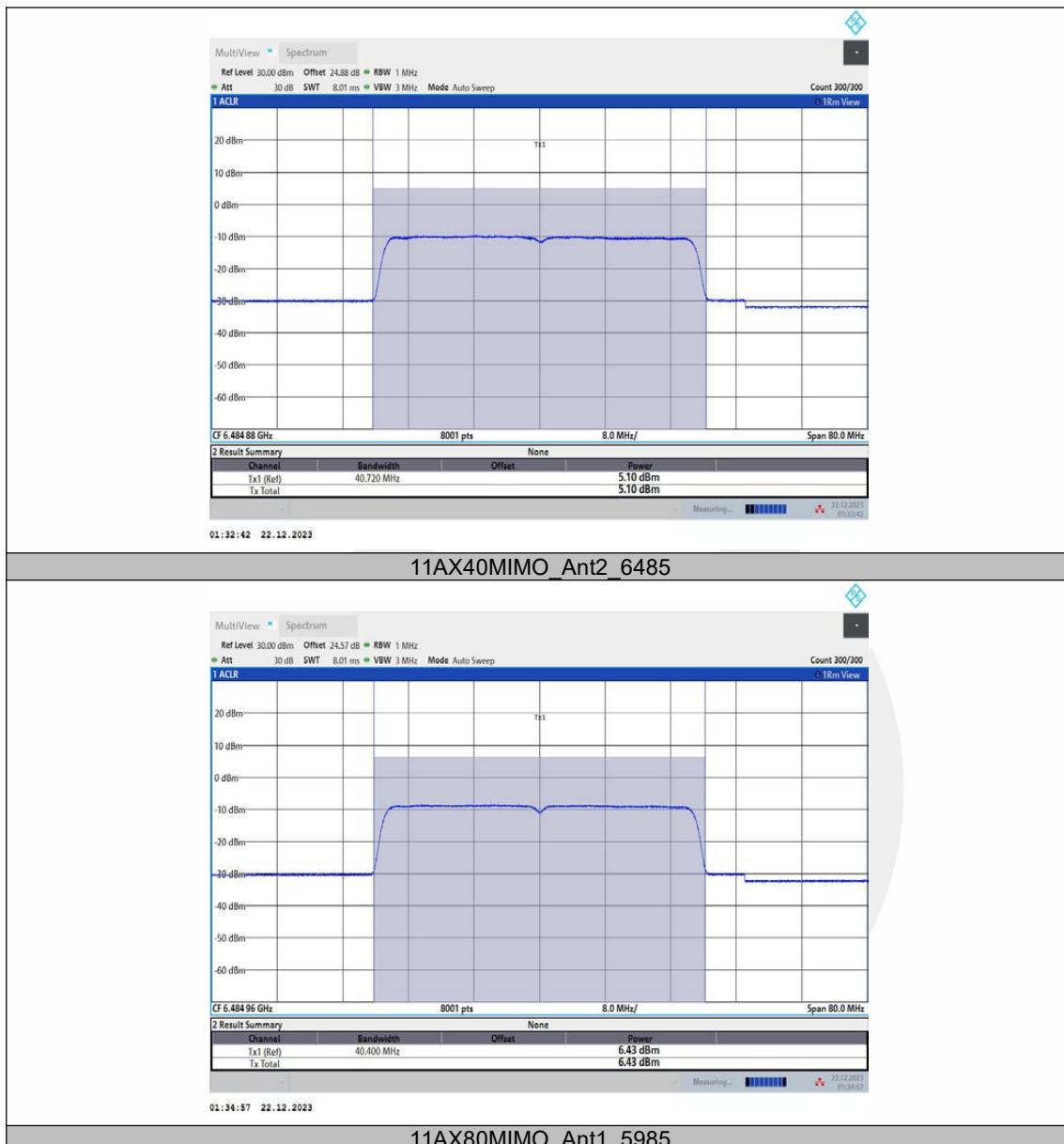


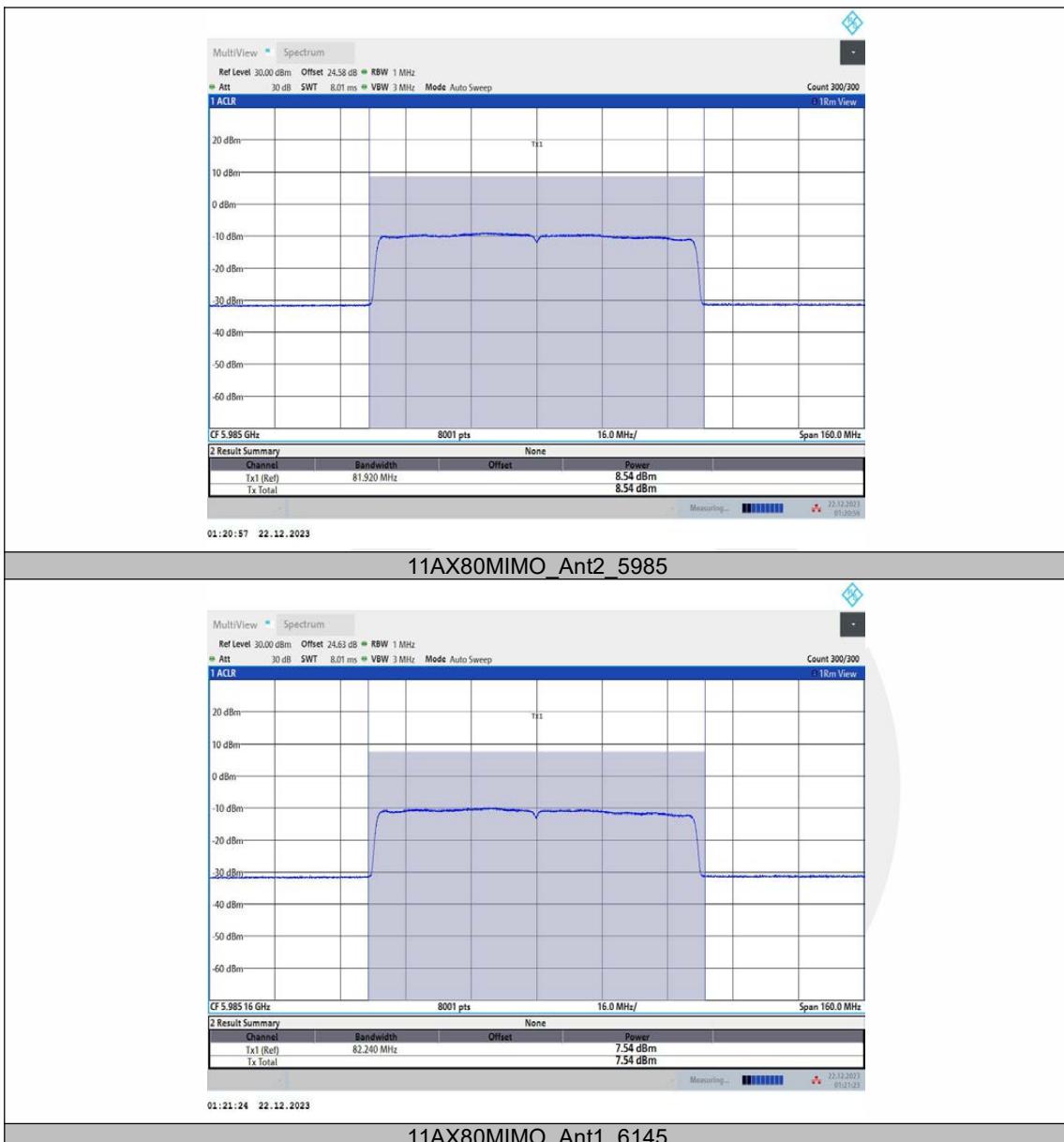


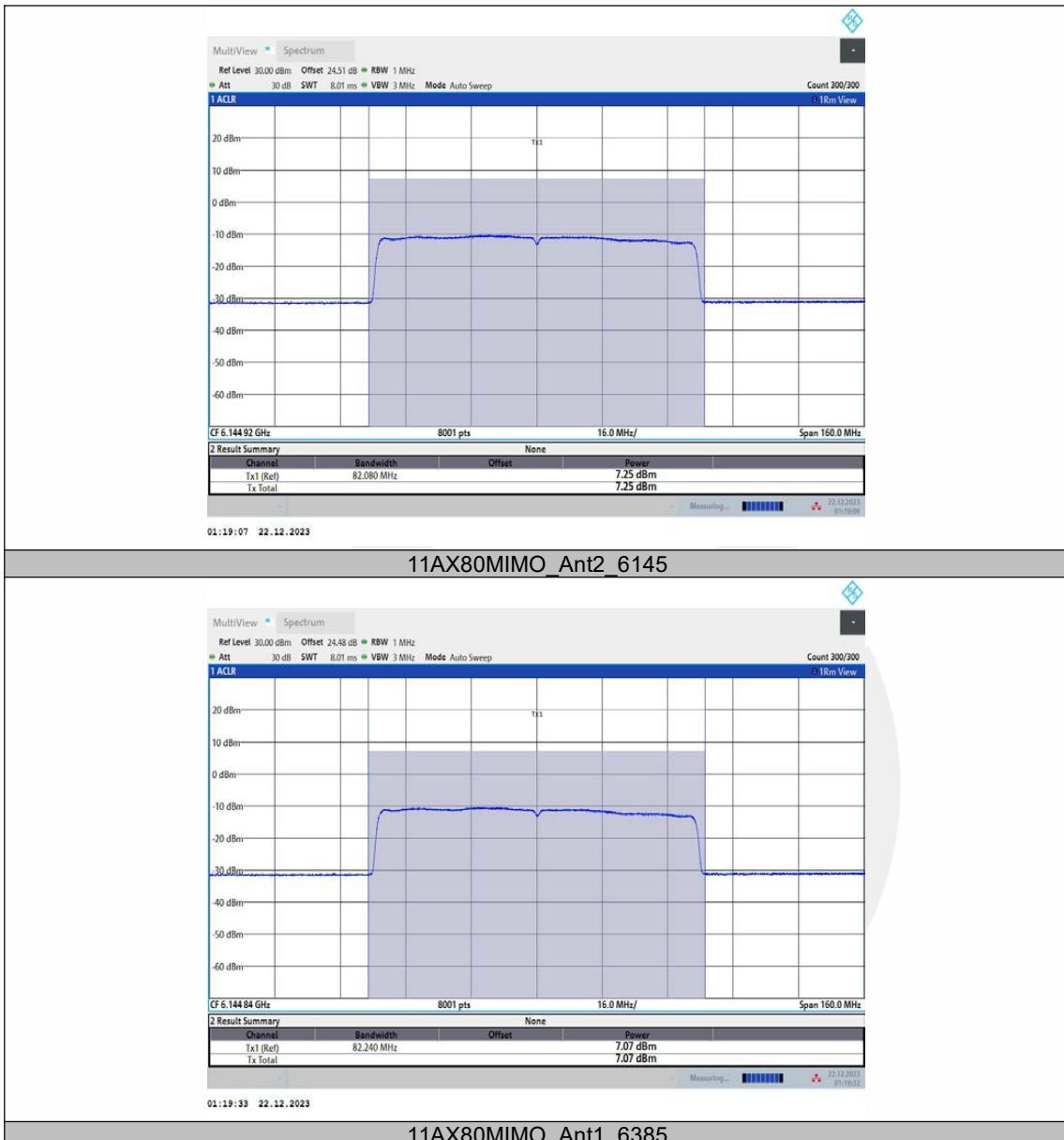


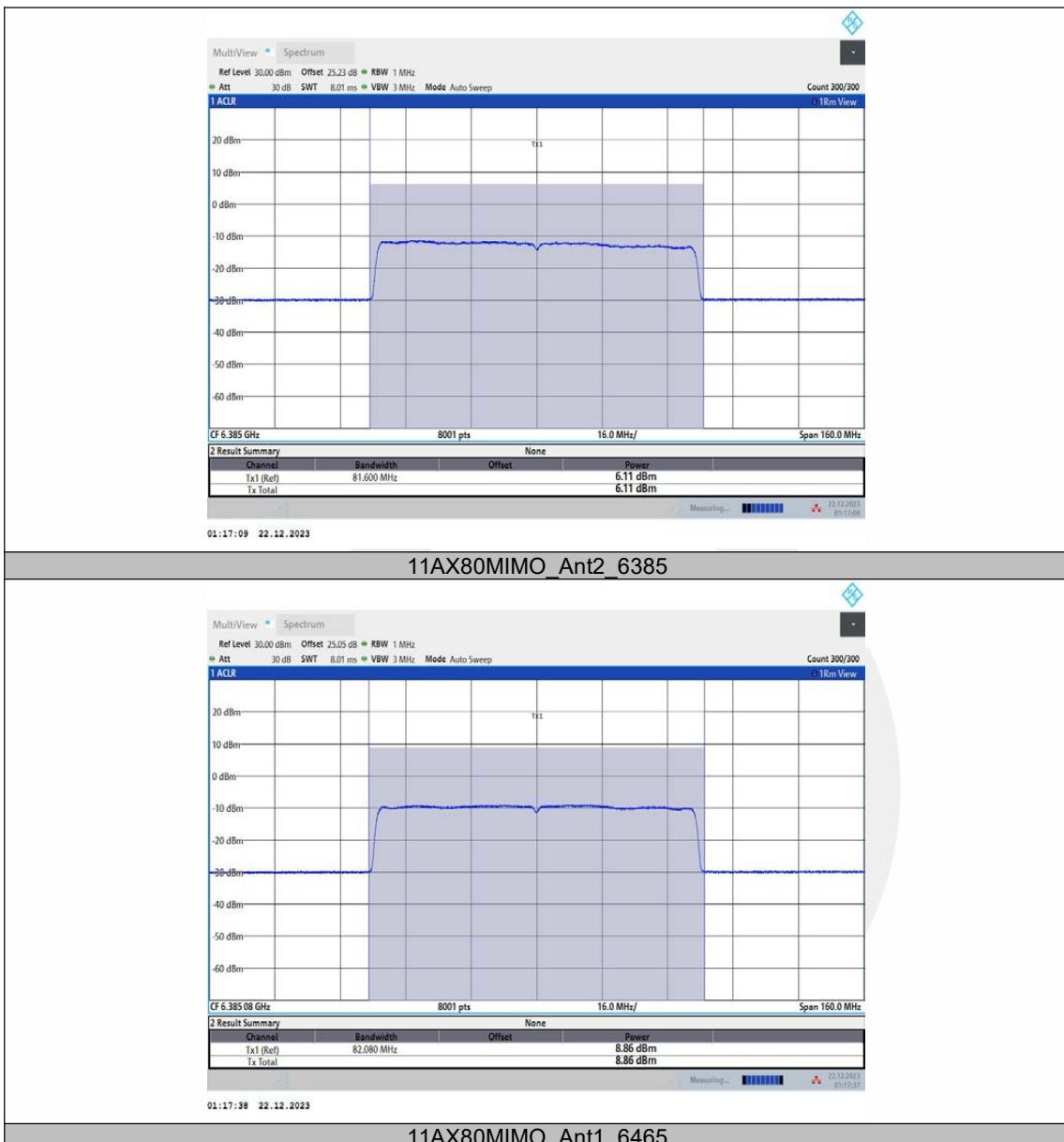


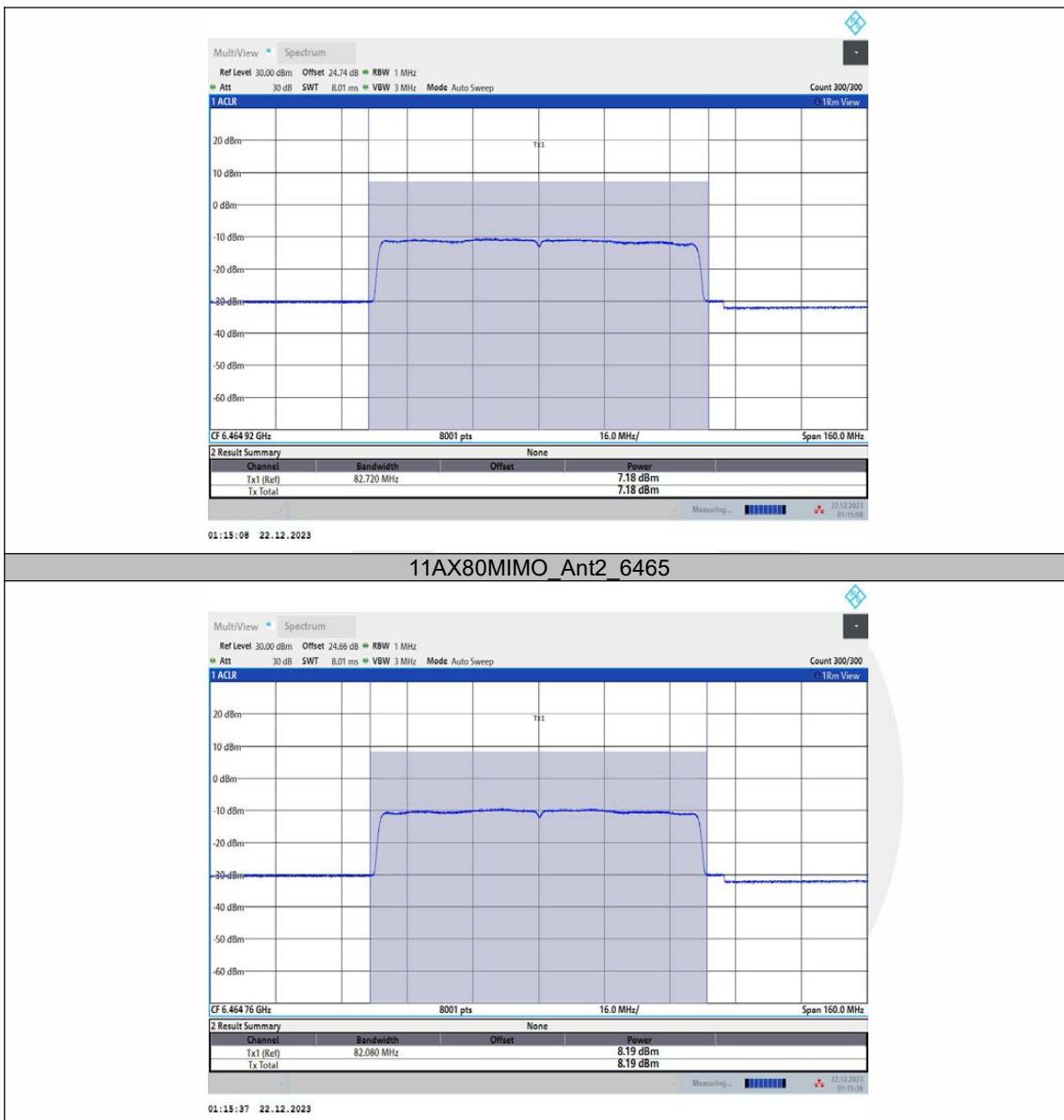












8.3 MAXIMUM POWER SPECTRAL DENSITY

8.3.1 Applicable Standard

According to FCC Part 15.407(a)

According to 789033 D02 Section II.F

According to 987594 D02 Section II.F

According to RSS-248 4.6

8.3.2 Conformance Limit

FCC Limit:

- For an **indoor access point(6ID)** operating in the 5.925-7.125 GHz band, the maximum power spectral density must not exceed 5 dBm e.i.r.p. in any 1-megahertz band.
- For a **subordinate device(6PP)** operating under the control of an indoor access point in the 5.925-7.125 GHz band, the maximum power spectral density must not exceed 5 dBm e.i.r.p in any 1-megahertz band.
- For an **indoor client device(6XD)** operating under the control of an indoor access point in the 5.925-7.125 GHz band, the maximum power spectral density must not exceed -1 dBm e.i.r.p in any 1-megahertz band.
- For a **Dual client device(6CD)** operating under the control of an indoor access point in the 5.925-7.125 GHz band, the maximum power spectral density must not exceed -1 dBm e.i.r.p in any 1-megahertz band.
- For a **Dual client device(6CD)** operating under the control of an standard access point in the 5.925-7.125 GHz band, the maximum power spectral density must not exceed 17 dBm & 6dB below AP e.i.r.p in any 1-megahertz band.

The limits are based upon the maximum antenna gain does not exceed 6 dBi.

If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

IC Limit:

- Other than client devices
The maximum e.i.r.p. spectral density shall not exceed 5 dBm/MHz.
- Client devices
The maximum e.i.r.p. spectral density shall not exceed -1 dBm/MHz.

The limits are based upon the maximum antenna gain does not exceed 6 dBi.

If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

8.3.3 Test Configuration

Test according to clause 7.1 radio frequency test setup

8.3.4 Test Procedure

Method SA-2 (trace averaging across on and off times of the EUT transmissions, followed by duty cycle correction).

- (i) Measure the duty cycle, x, of the transmitter output signal.
- (ii) Set span to encompass the EBW (or the entire 99% occupied bandwidth) of the signal.
- (iii) Set RBW = 1 MHz.
- (iv) Set VBW \geq 3 MHz.
- (v) Number of points in sweep $\geq 2 \times$ span / RBW. (This ensures that bin-to-bin spacing is \leq RBW/2, so that narrowband signals are not lost between frequency bins.)
- (vi) Sweep time = auto.
- (vii) Detector = power averaging (rms).
- (viii) Do not use sweep triggering. Allow the sweep to “free run.”
- (ix) Trace average at least 100 traces in power averaging (rms) mode; however, the number of traces to be averaged shall be increased above 100 as needed to ensure that the average accurately represents the true average over the on and off periods of the transmitter.
- (x) Use the peak search function on the instrument to find the peak of the spectrum and record its value.

(xi) Add $10 \log (1/x)$, where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times (because the measurement represents an average over both the on and off times of the transmission). For example, add $10 \log (1/0.25) = 6$ dB if the duty cycle is 25%.

8.3.5 Test Results

PASS

Temperature :

25°C

ATM Pressure:

1011 mbar

Humidity :

60 %

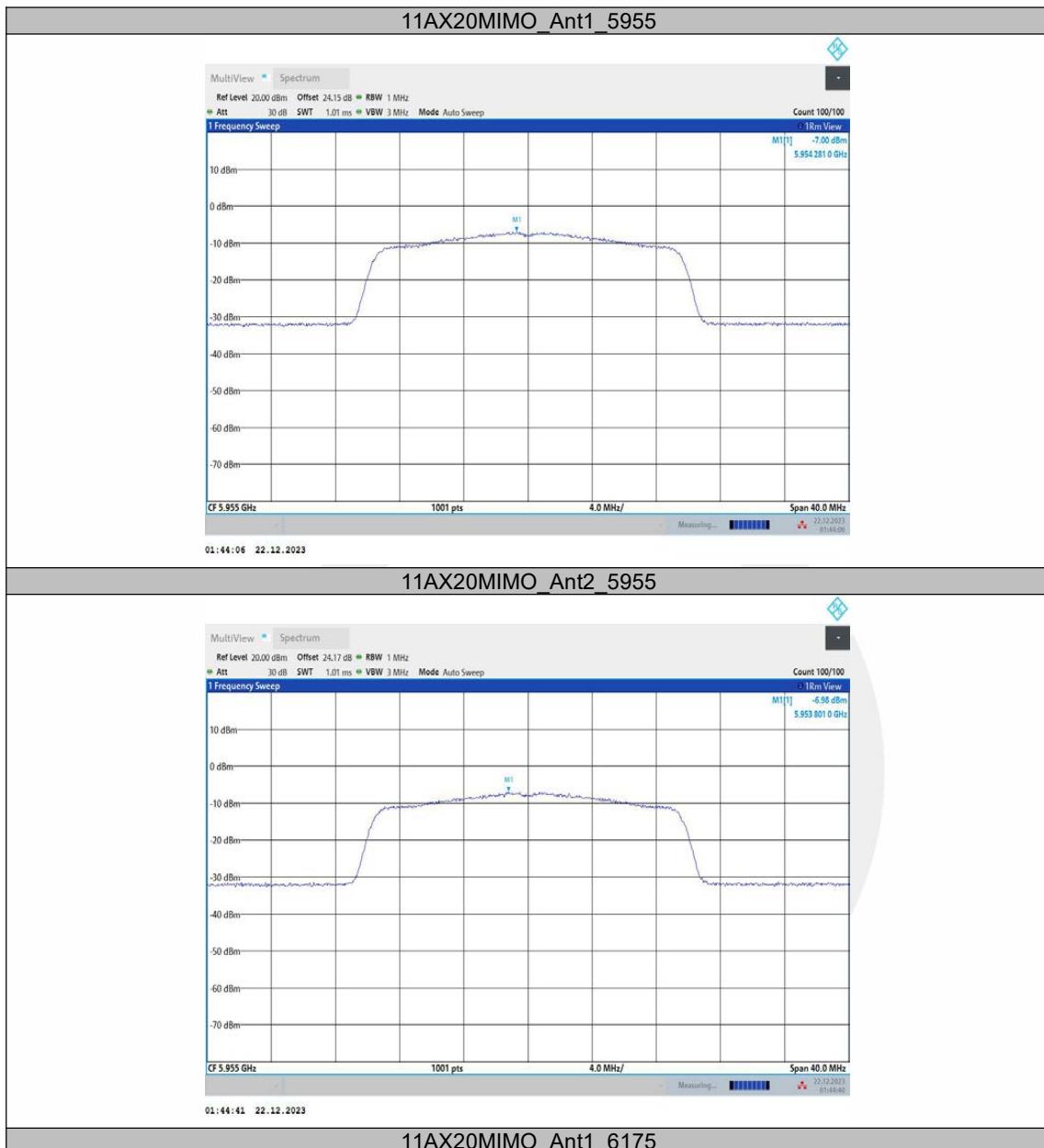
Test Engineer:

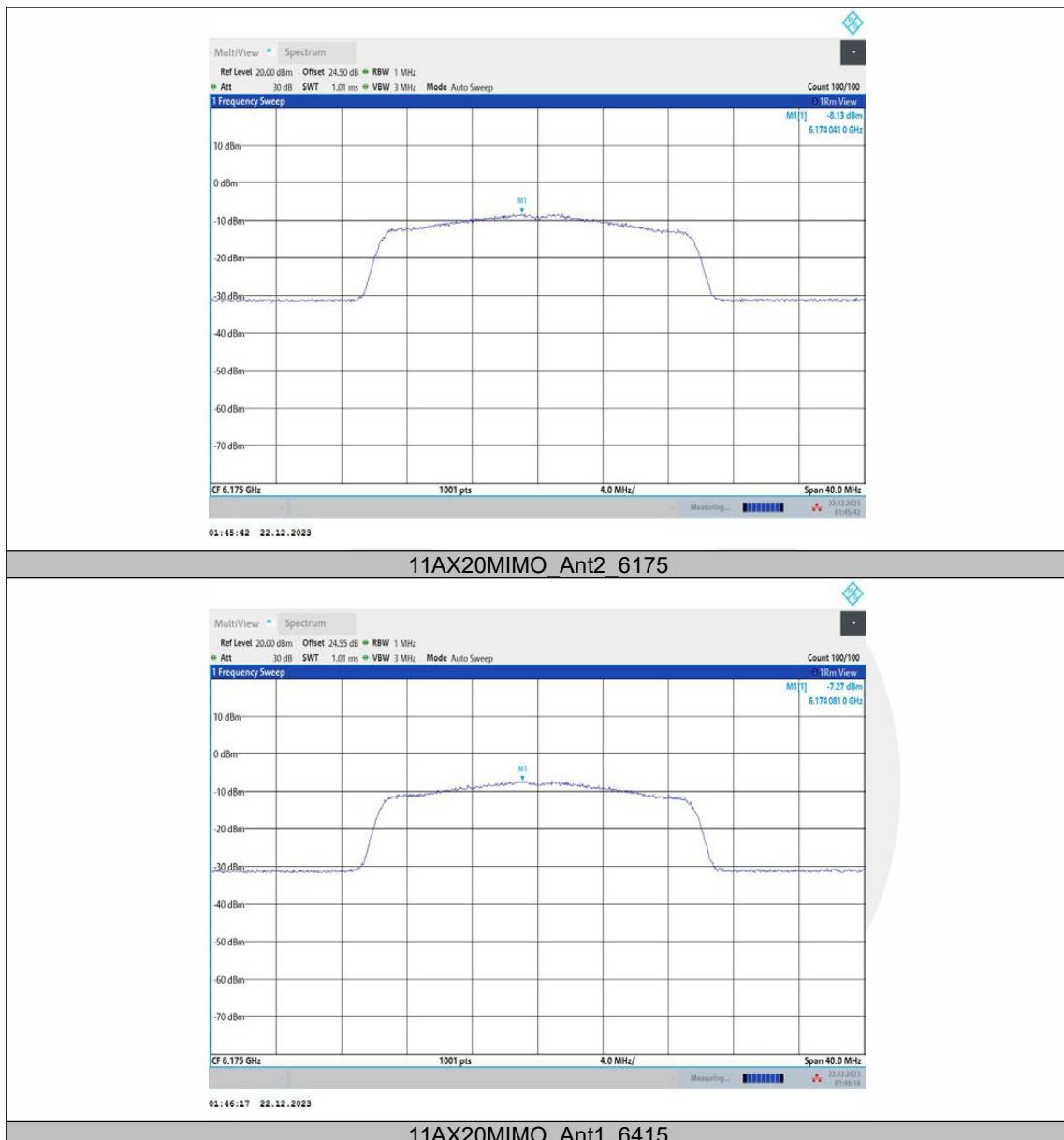
XXH

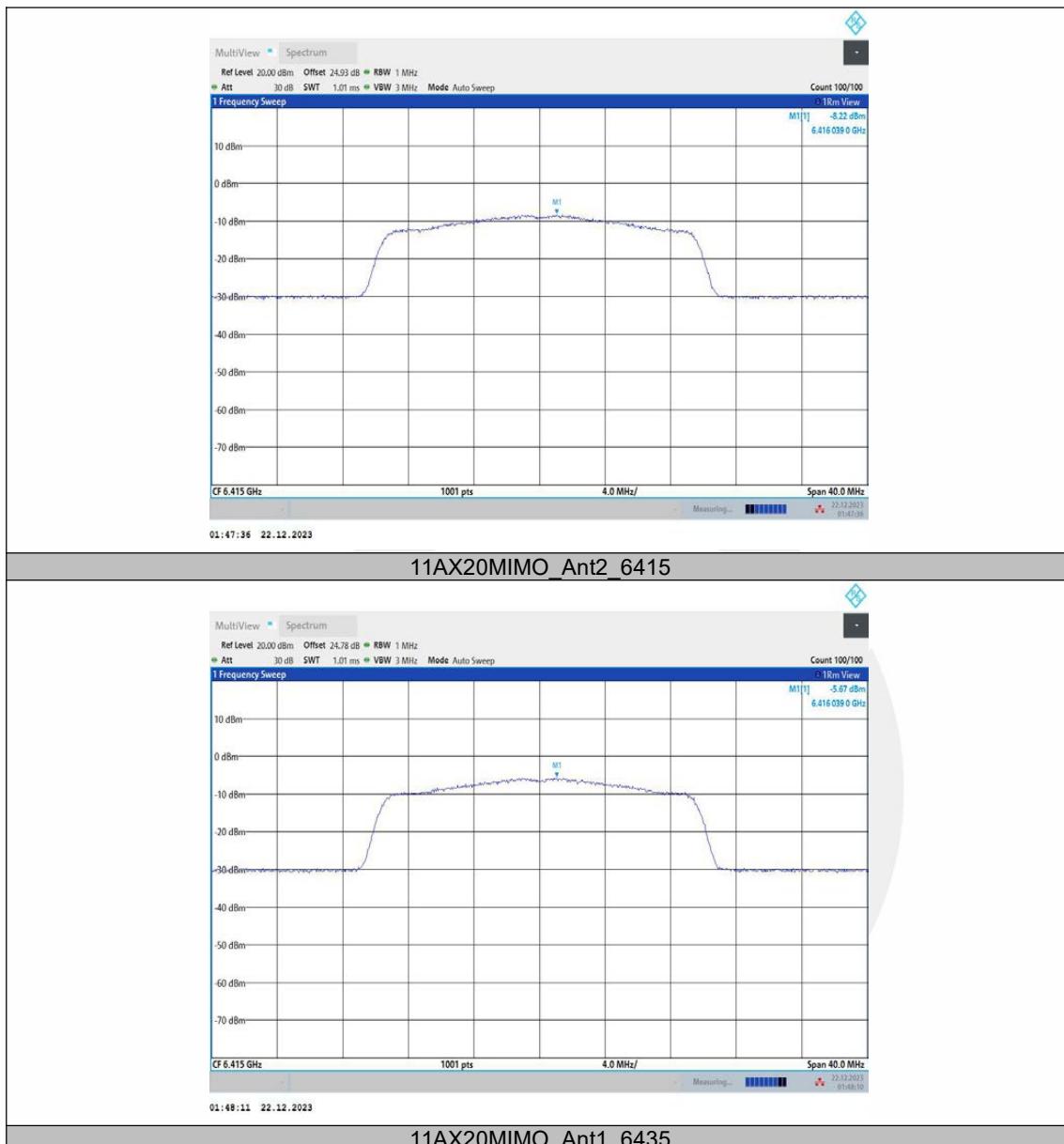


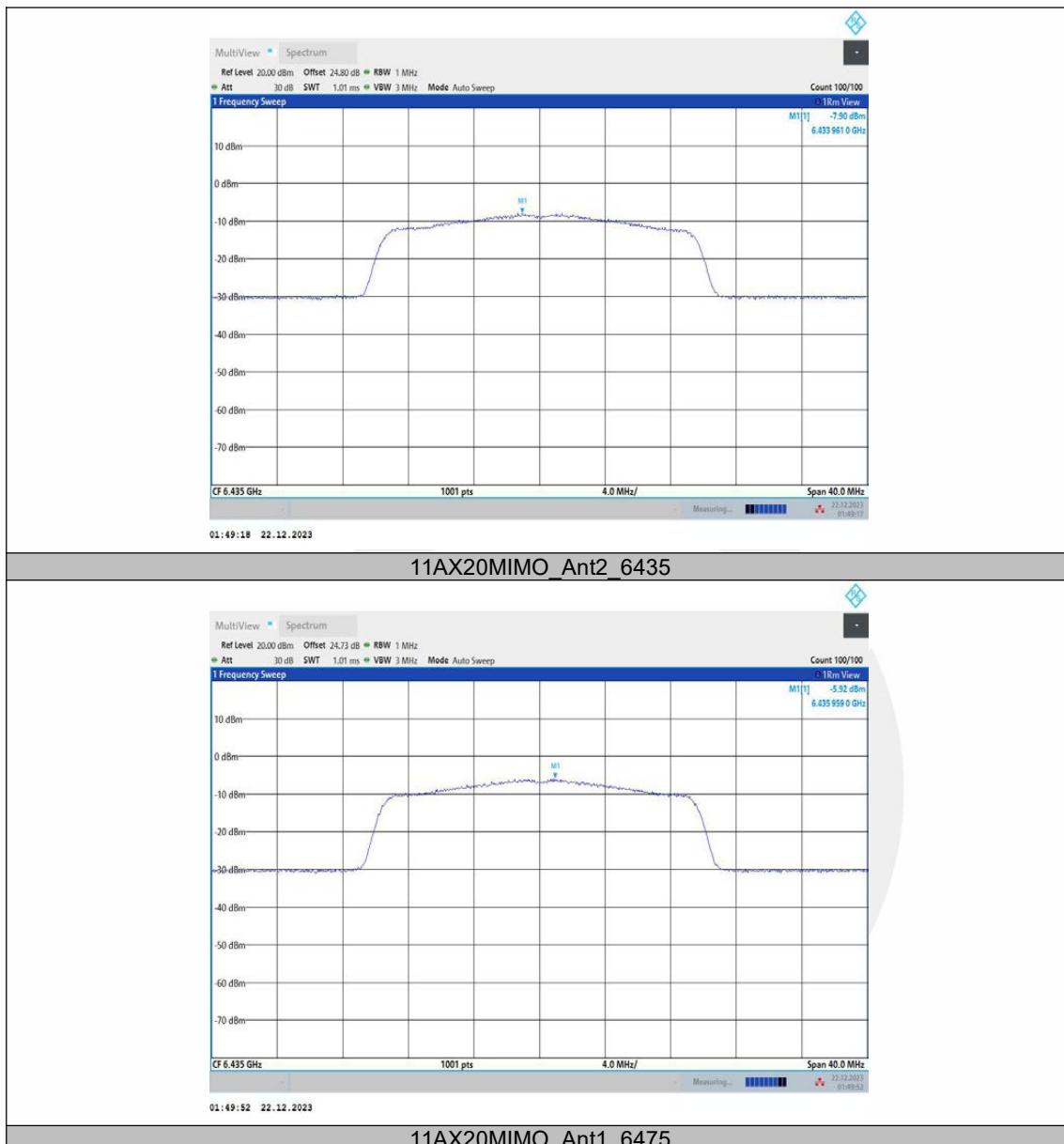
TestMode	Antenna	Frequency [MHz]	Gain [dBi]	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11AX20MIMO	Ant1	5955	1.54	-7.00	-1	PASS
	Ant2	5955	1.54	-6.98	-1	PASS
	total	5955	4.55	-3.98	-1	PASS
	Ant1	6175	1.54	-8.13	-1	PASS
	Ant2	6175	1.54	-7.27	-1	PASS
	total	6175	4.55	-4.67	-1	PASS
	Ant1	6415	1.54	-8.22	-1	PASS
	Ant2	6415	1.54	-5.67	-1	PASS
	total	6415	4.55	-3.75	-1	PASS
	Ant1	6435	1.54	-7.90	-1	PASS
	Ant2	6435	1.54	-5.92	-1	PASS
	total	6435	4.55	-3.79	-1	PASS
	Ant1	6475	1.54	-7.45	-1	PASS
	Ant2	6475	1.54	-6.27	-1	PASS
	total	6475	4.55	-3.81	-1	PASS
	Ant1	6515	1.54	-7.36	-1	PASS
	Ant2	6515	1.54	-5.89	-1	PASS
	total	6515	4.55	-3.55	-1	PASS
11AX40MIMO	Ant1	5965	1.54	-8.77	-1	PASS
	Ant2	5965	1.54	-10.61	-1	PASS
	total	5965	4.55	-6.58	-1	PASS
	Ant1	6165	1.54	-10.16	-1	PASS
	Ant2	6165	1.54	-10.89	-1	PASS
	total	6165	4.55	-7.50	-1	PASS
	Ant1	6405	1.54	-10.81	-1	PASS
	Ant2	6405	1.54	-8.29	-1	PASS
	total	6405	4.55	-6.36	-1	PASS
	Ant1	6445	1.54	-10.11	-1	PASS
	Ant2	6445	1.54	-8.07	-1	PASS
	total	6445	4.55	-5.96	-1	PASS
	Ant1	6485	1.54	-9.52	-1	PASS
	Ant2	6485	1.54	-8.22	-1	PASS
	total	6485	4.55	-5.81	-1	PASS
11AX80MIMO	Ant1	5985	1.54	-8.97	-1	PASS
	Ant2	5985	1.54	-9.89	-1	PASS
	total	5985	4.55	-6.40	-1	PASS
	Ant1	6145	1.54	-10.03	-1	PASS
	Ant2	6145	1.54	-10.21	-1	PASS
	total	6145	4.55	-7.11	-1	PASS
	Ant1	6385	1.54	-11.18	-1	PASS
	Ant2	6385	1.54	-8.72	-1	PASS
	total	6385	4.55	-6.77	-1	PASS
	Ant1	6465	1.54	-10.34	-1	PASS
	Ant2	6465	1.54	-9.40	-1	PASS
	total	6465	4.55	-6.83	-1	PASS

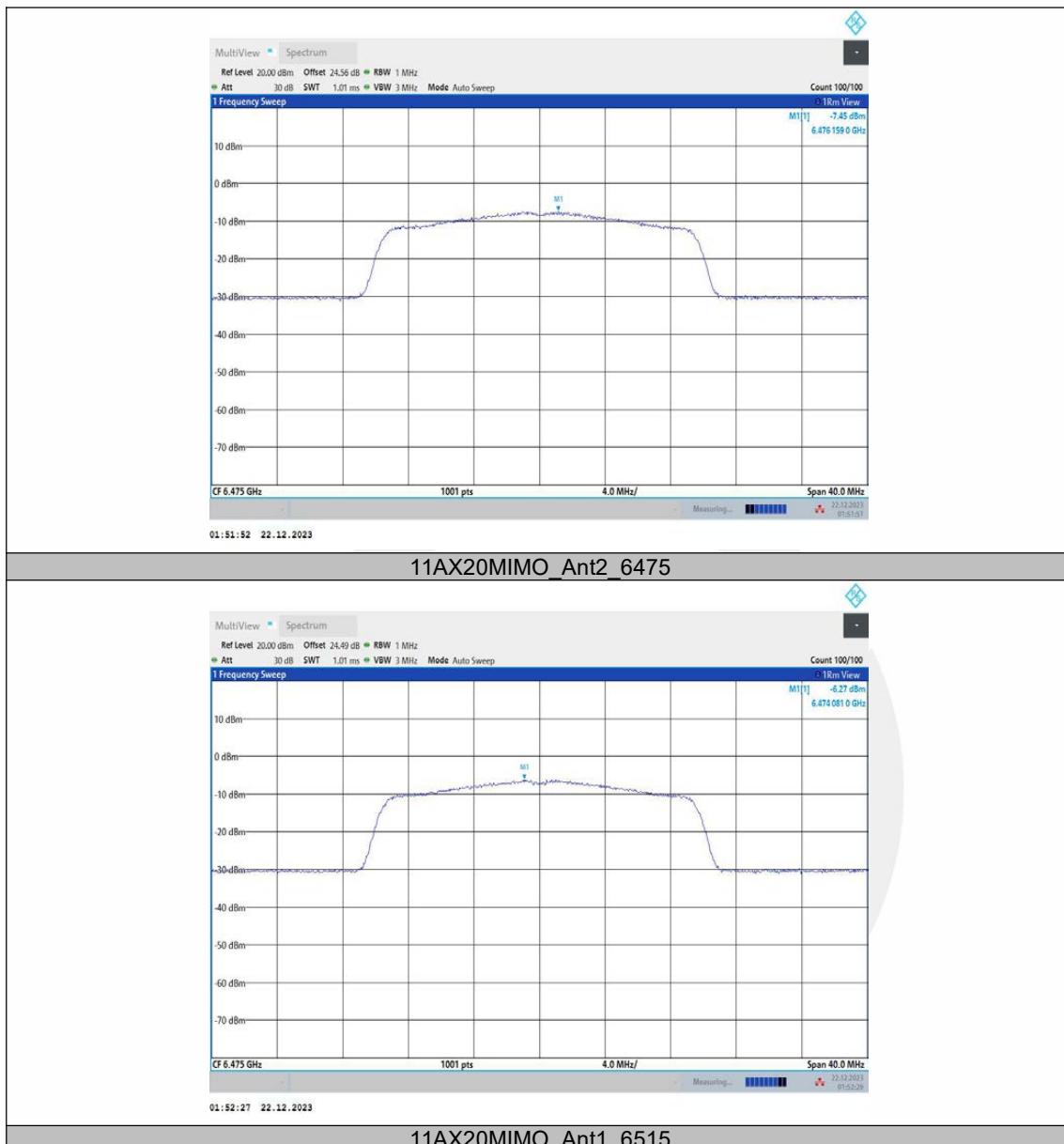
Note: The Duty Cycle Factor and RBW Factor is compensated in the graph.

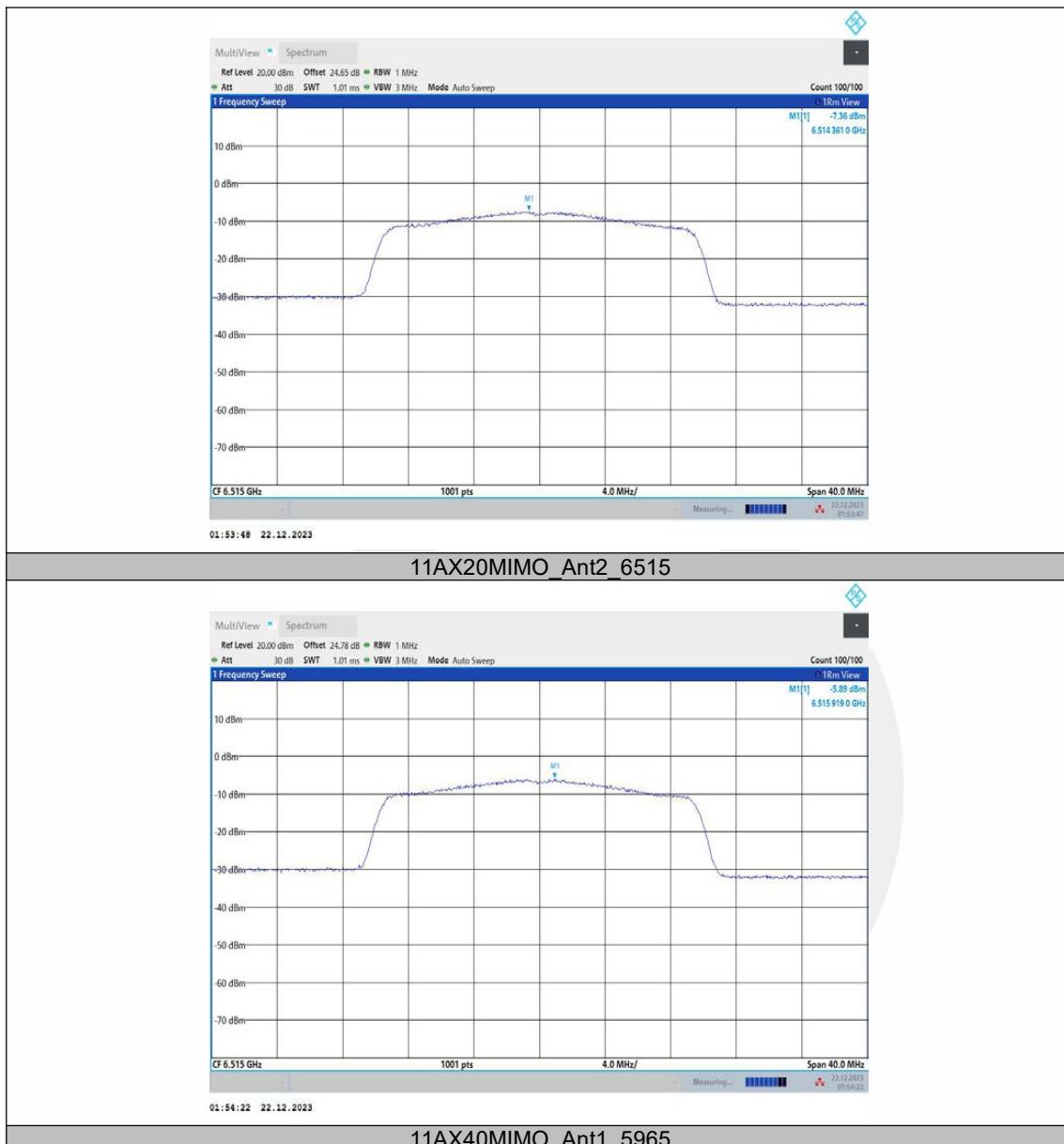


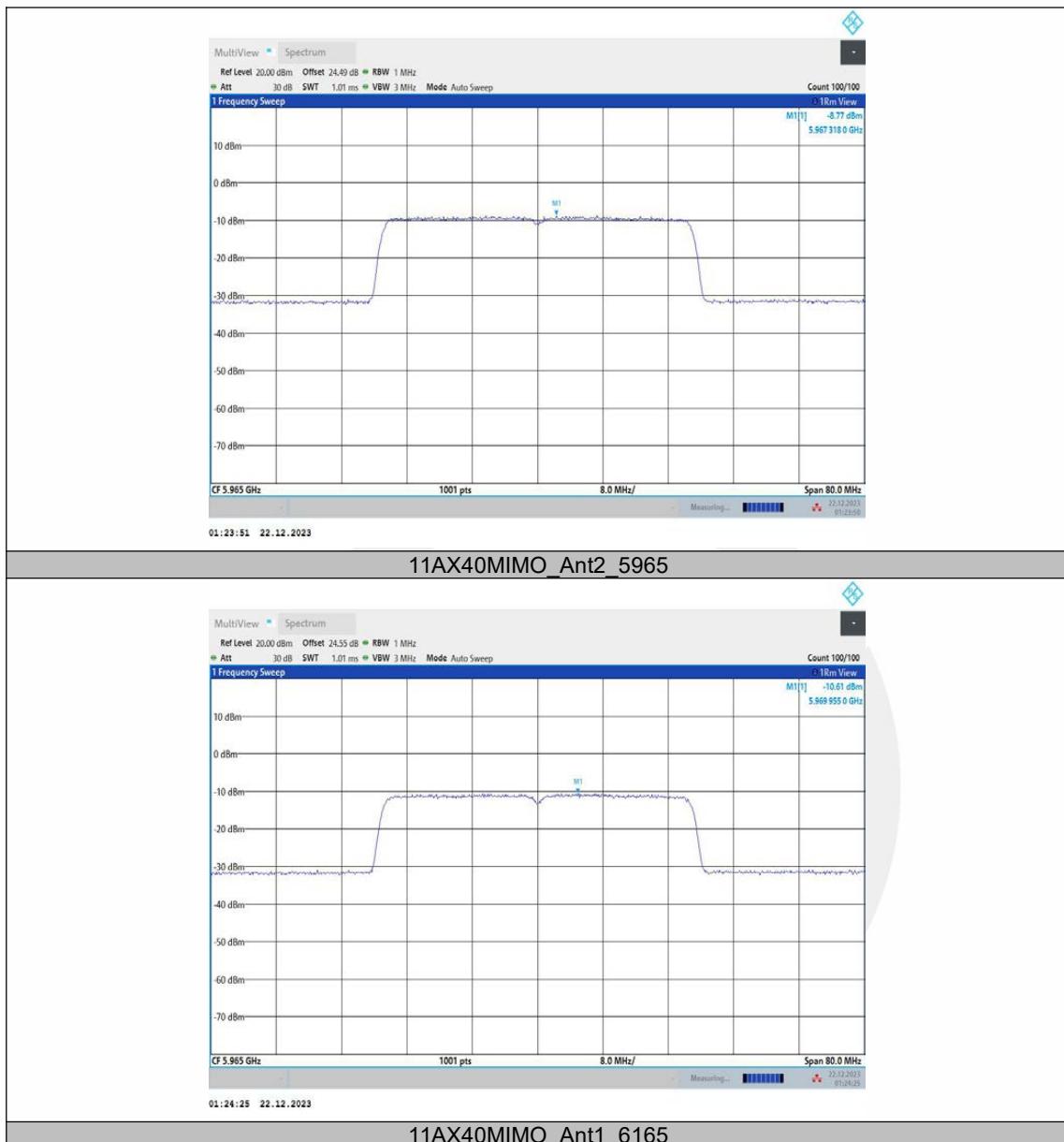


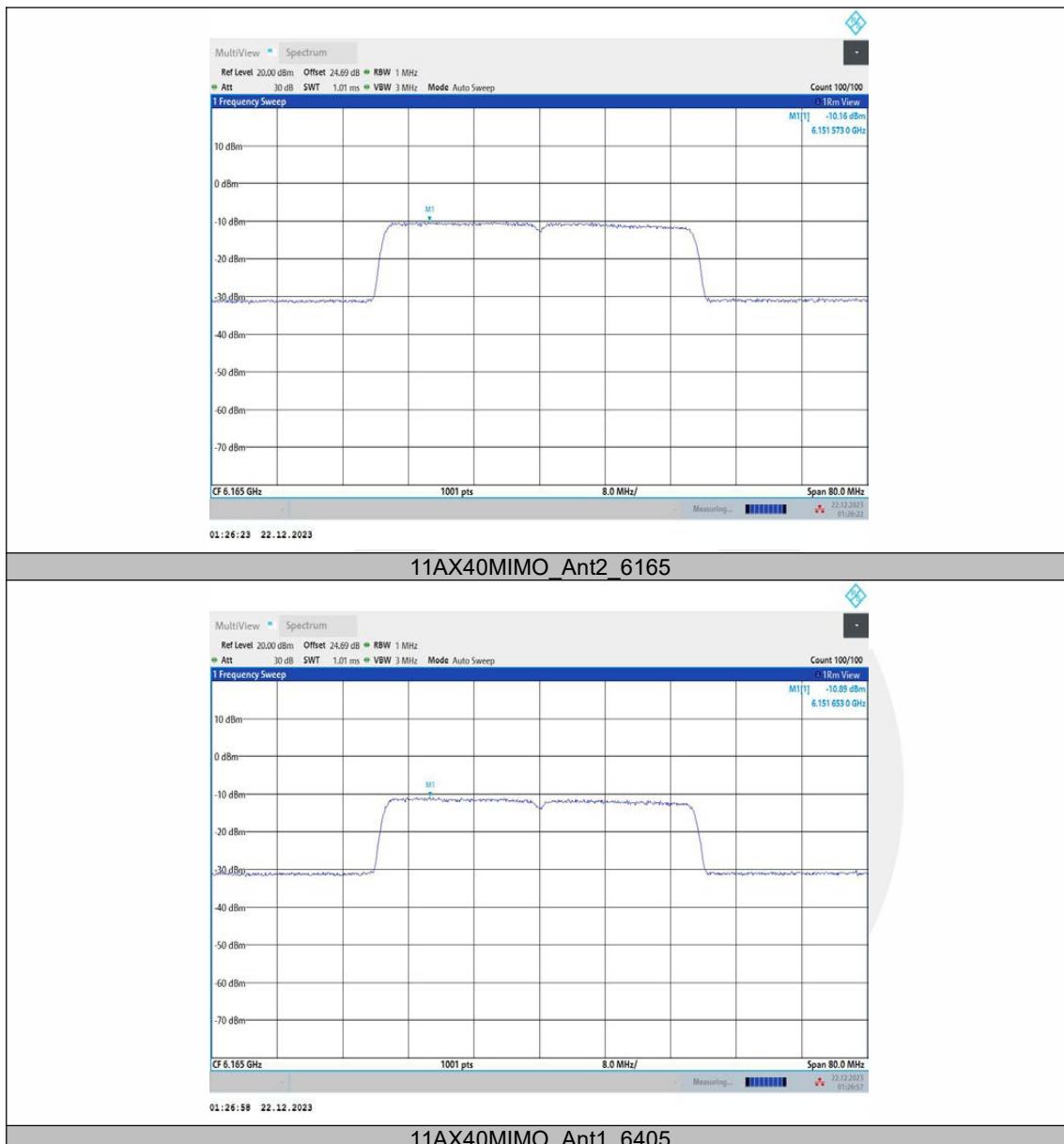


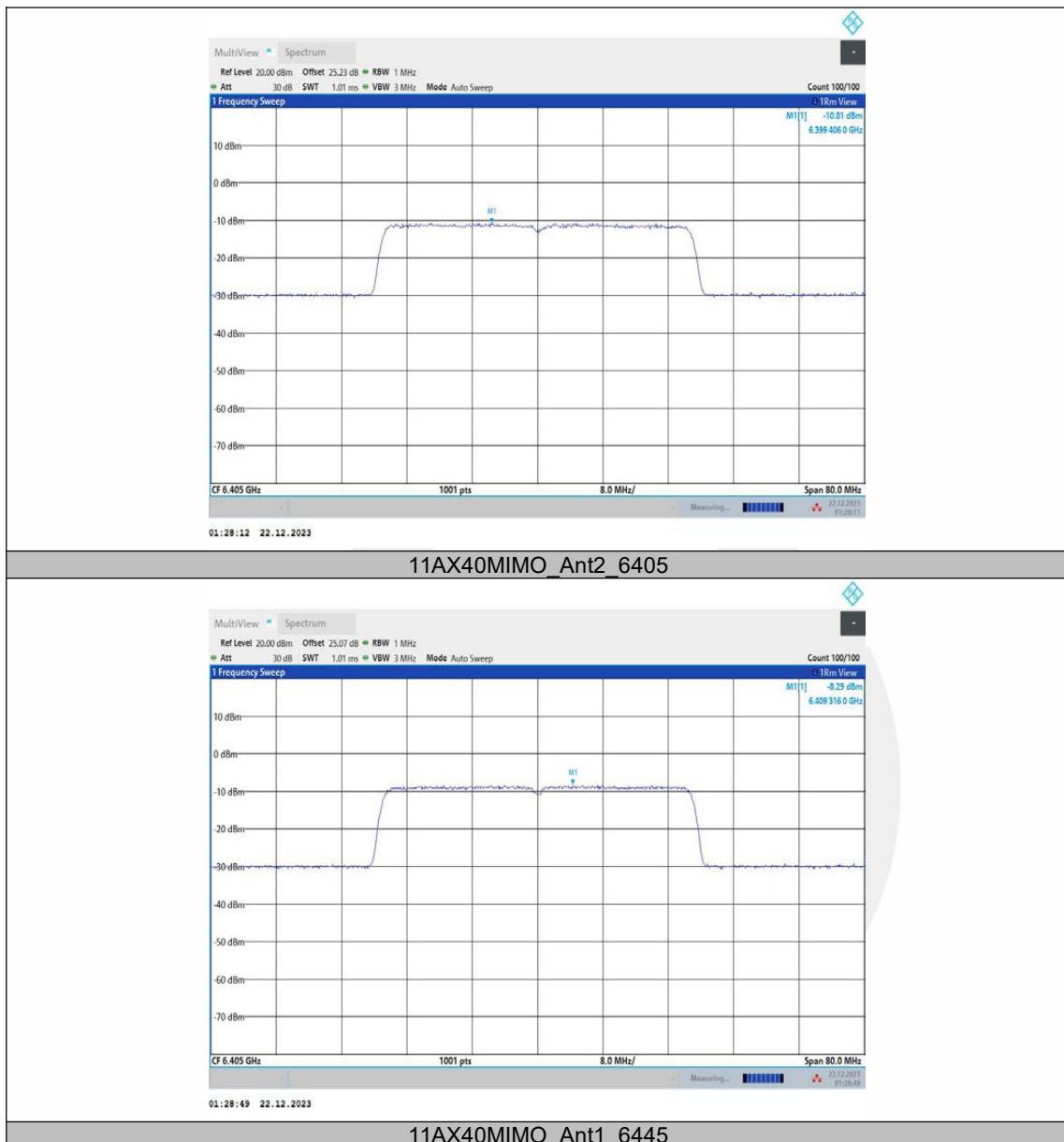


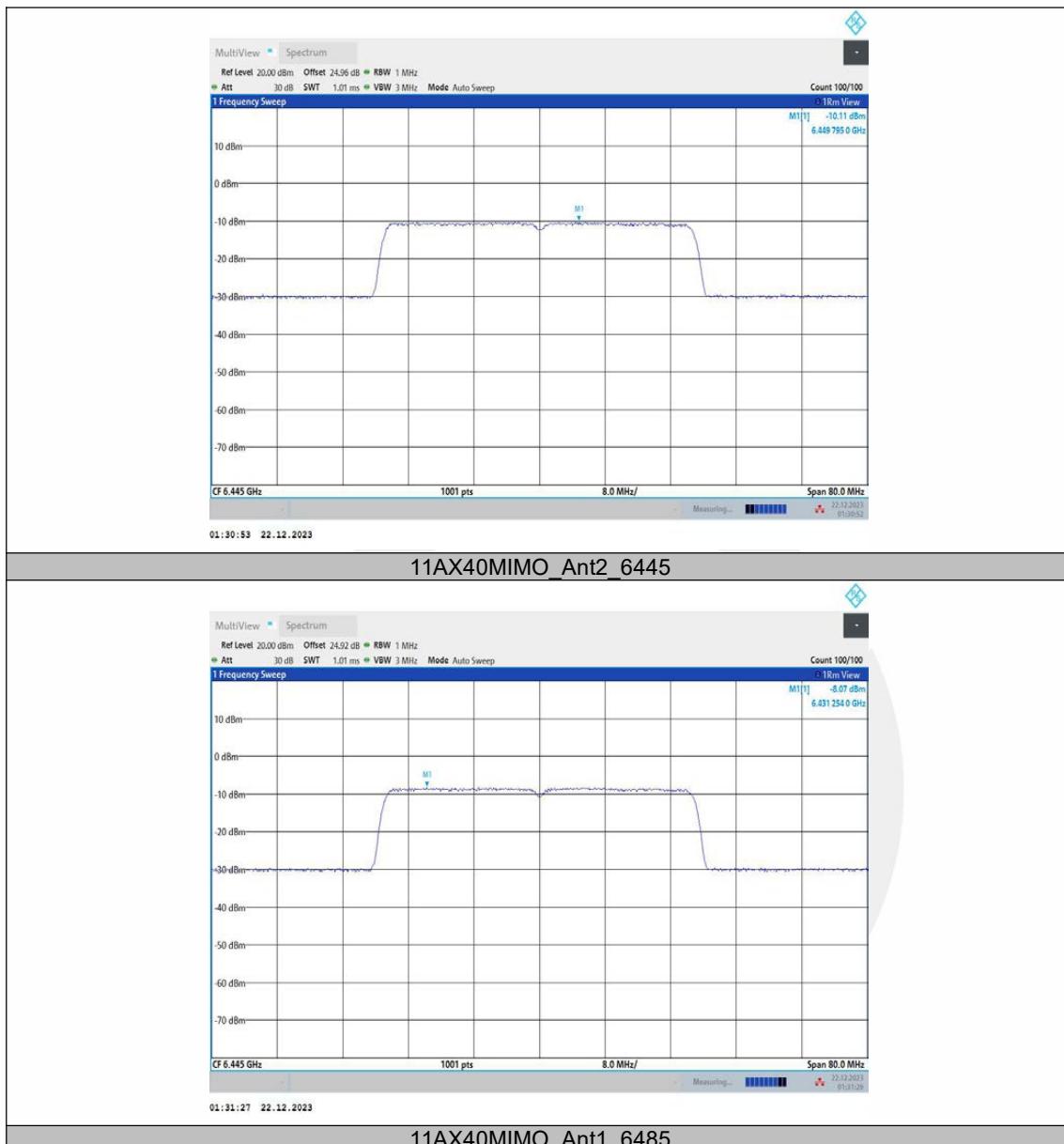


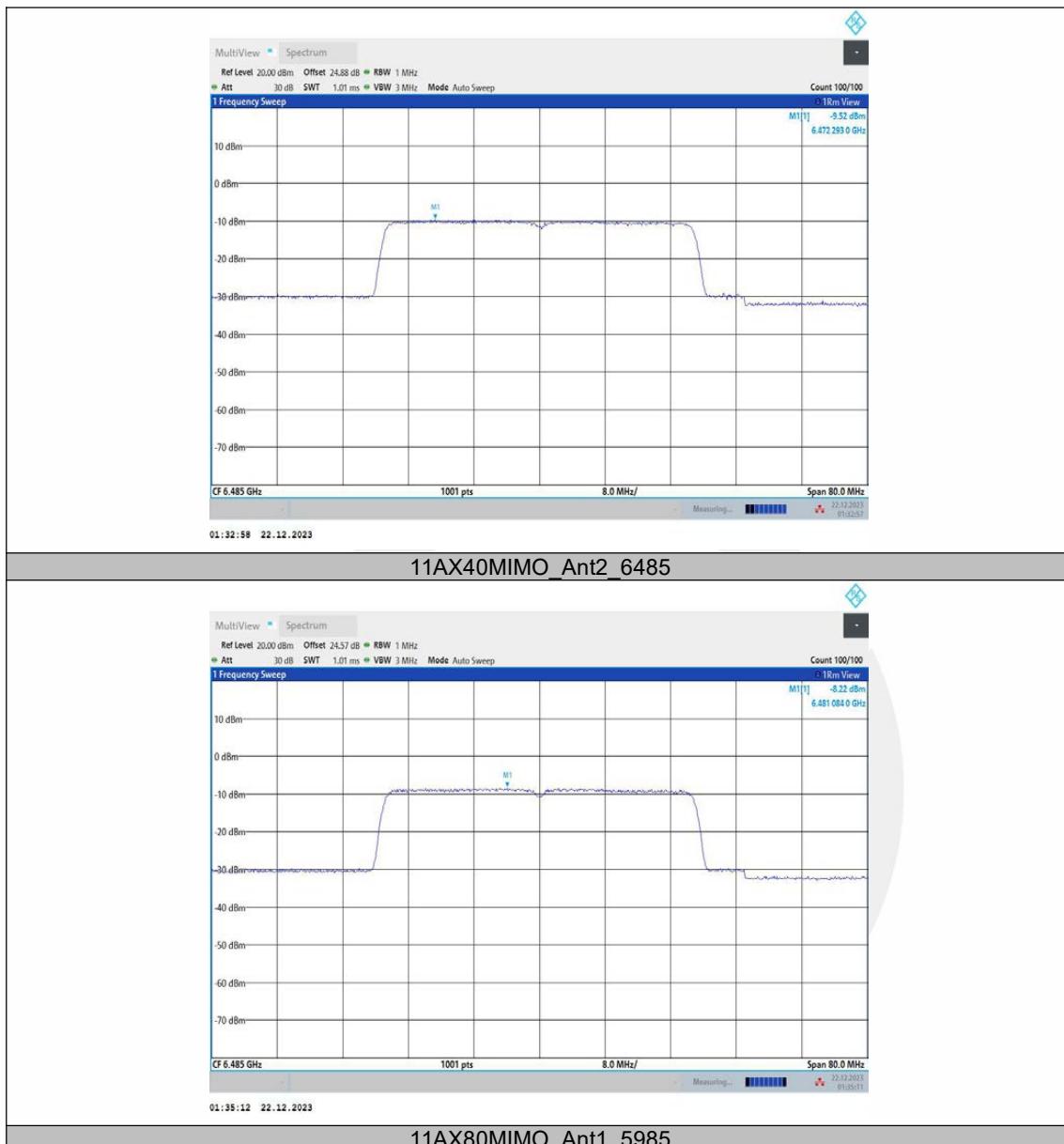


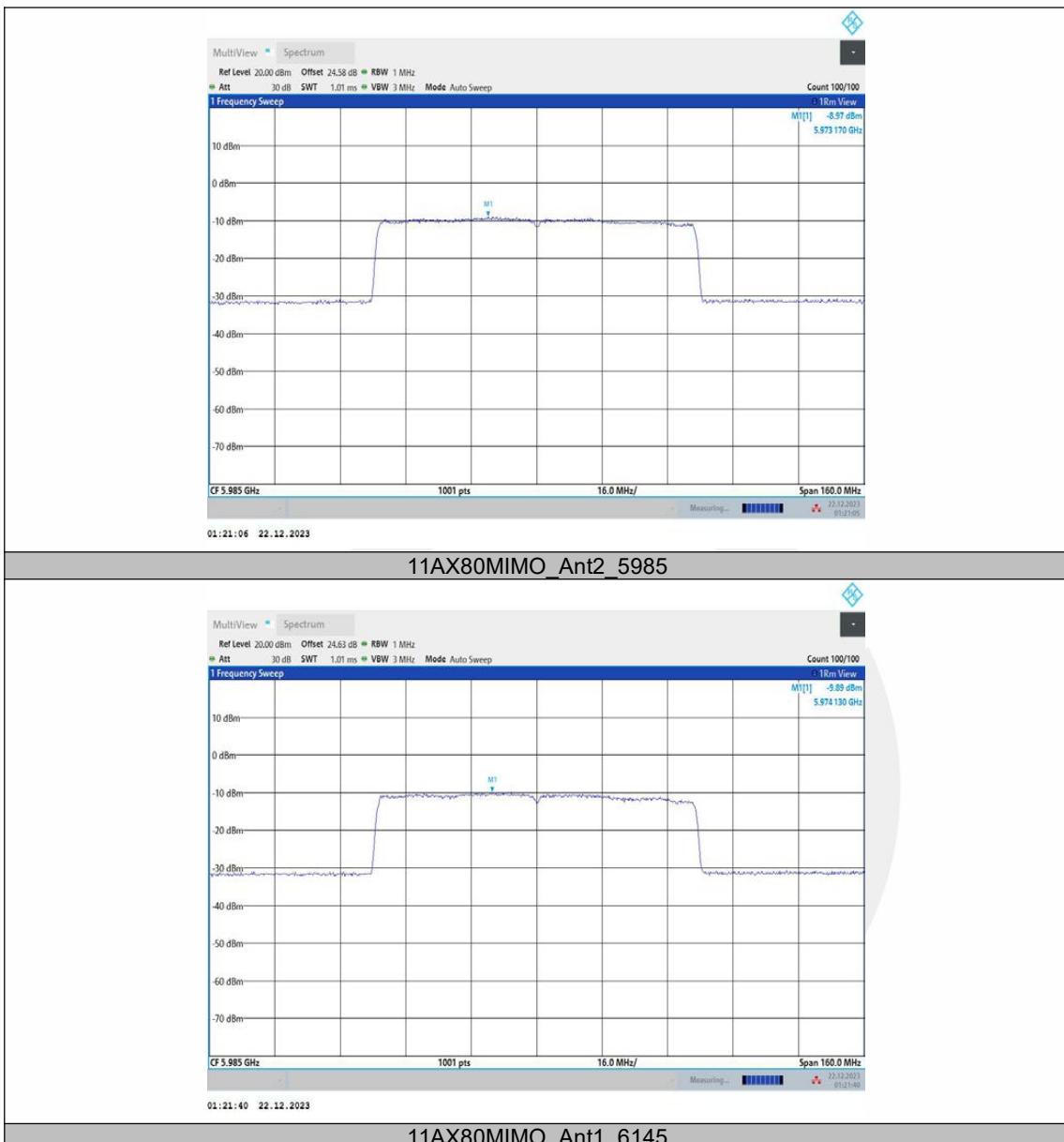


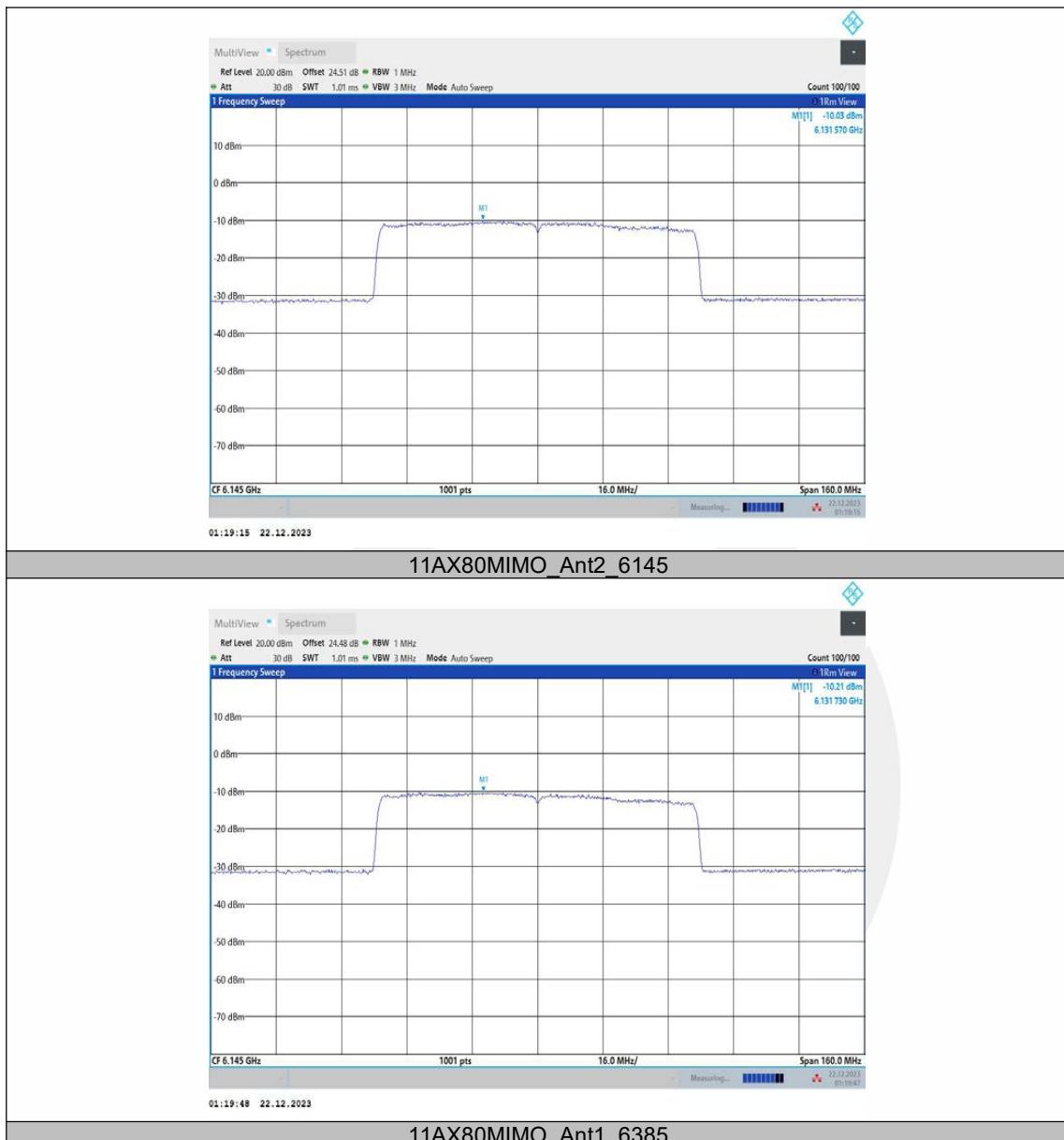


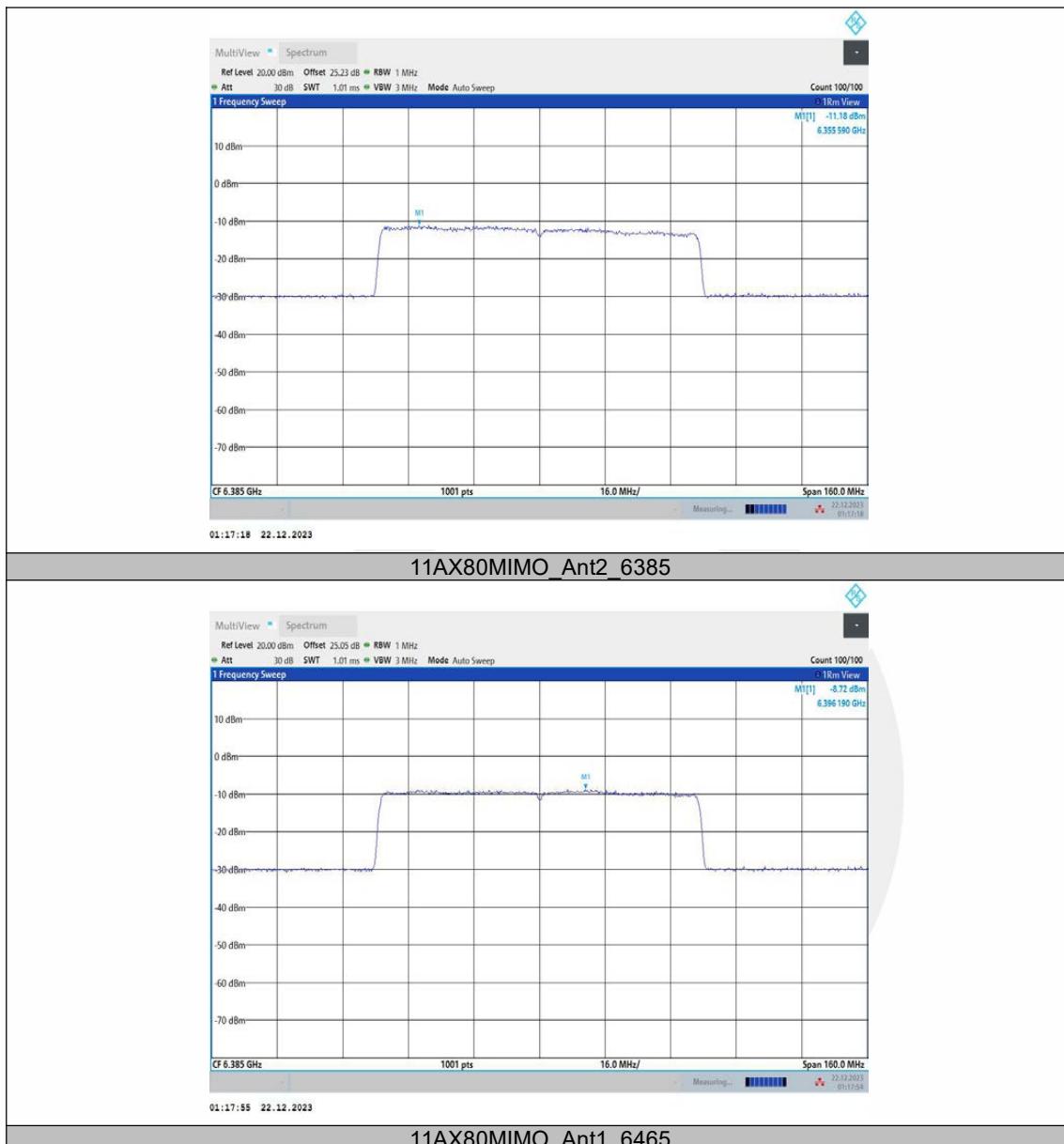


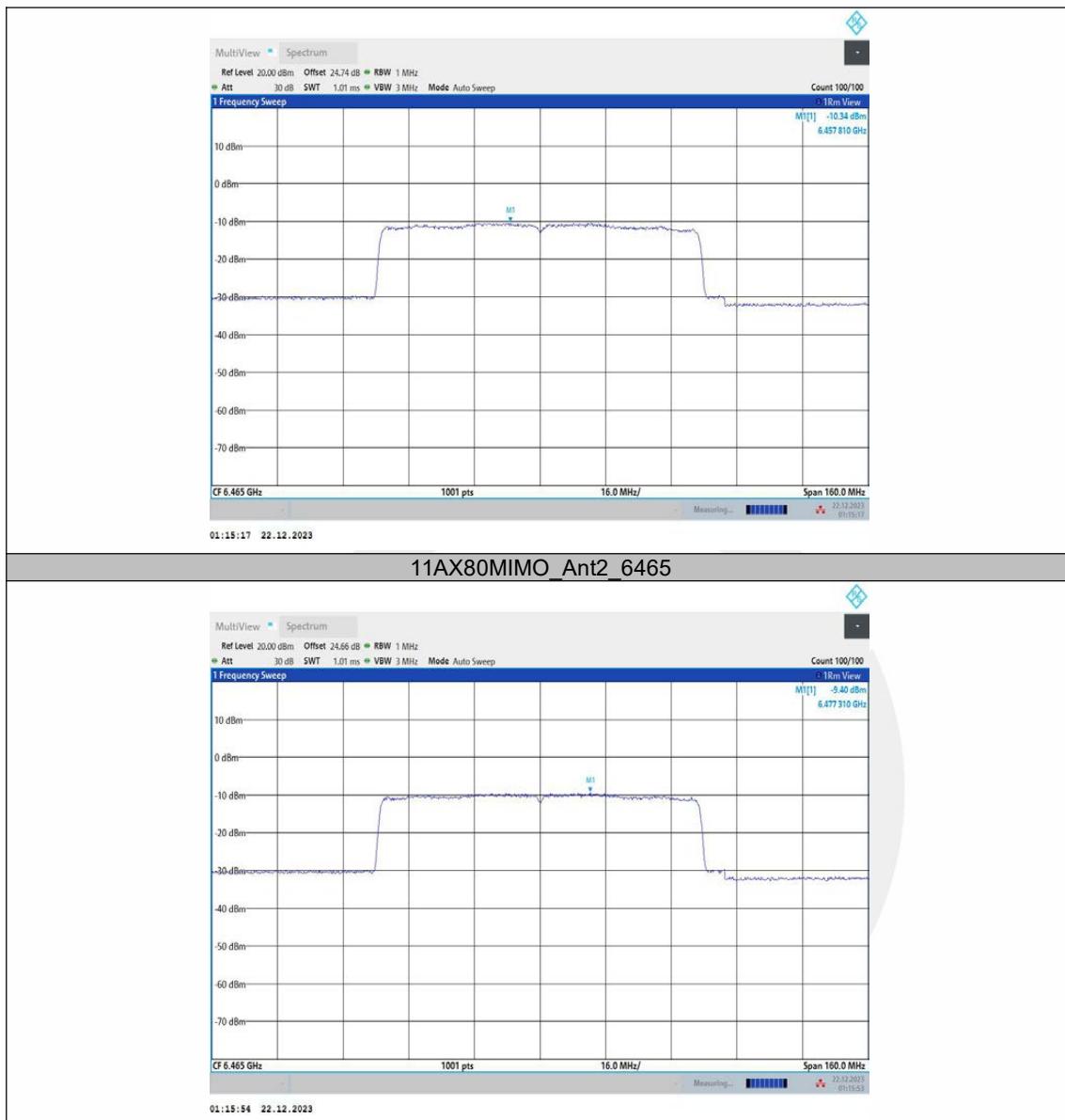












8.4 IN-BAND EMISSIONS (EMISSION MASK)

8.4.1 Applicable Standard

According to FCC Part 15.407(b)

According to 987594 D02 Section II.J

According to RSS-248 4.7

8.4.2 Conformance Limit

For transmitters operating within the 5.925-7.125 GHz bands: Power spectral density must be suppressed by 20 dB at 1 MHz outside of channel edge, by 28 dB at one channel bandwidth from the channel center, and by 40 dB at one- and one-half times the channel bandwidth away from channel center. At frequencies between one megahertz outside an unlicensed device's channel edge and one channel bandwidth from the center of the channel, the limits must be linearly interpolated between 20 dB and 28 dB suppression, and at frequencies between one and one- and one-half times an unlicensed device's channel bandwidth, the limits must be linearly interpolated between 28 dB and 40 dB suppression. Emissions removed from the channel center by more than one- and one-half times the channel bandwidth must be suppressed by at least 40 dB.

8.4.3 Test Configuration

Test according to clause 7.1 radio frequency test setup

8.4.4 Test Procedure

1. Connect output of the antenna port to a spectrum analyzer or EMI receiver, with appropriate attenuation, as to not damage the instrumentation.
2. Set the reference level of the measuring equipment in accordance with procedure 4.1.5.2 of ANSI C63.10-2013.
3. Measure the 26 dB EBW using the test procedure 12.4.1 of ANSI C63.10-2013. (This will be used to determine the channel edge.)
4. Measure the power spectral density (which will be used for emissions mask reference) using the following procedure:
 - a) Set the span to encompass the entire 26 dB EBW of the signal.
 - b) Set RBW = same RBW used for 26 dB EBW measurement.
 - c) Set VBW $\geq 3 \times$ RBW
 - d) Number of points in sweep $\geq [2 \times \text{span} / \text{RBW}]$.
 - e) Sweep time = auto.
 - f) Detector = RMS
 - g) Trace average at least 100 traces in power averaging (rms) mode.
 - h) Use the peak search function on the instrument to find the peak of the spectrum.
5. For the purposes of developing the emission mask, the channel bandwidth is defined as the 26 dB EBW.
6. Using the measuring equipment limit line function, develop the emissions mask based on the following requirements. The emissions power spectral density must be reduced below the peak power spectral density (in dB) as follows: a. Suppressed by 20 dB at 1 MHz outside of the channel edge. (The channel edge is defined as the 26-dB point on either side of the carrier center frequency.)
b. Suppressed by 28 dB at one channel bandwidth from the channel center.
c. Suppressed by 40 dB at one- and one-half times the channel bandwidth from the channel center.
7. Adjust the span to encompass the entire mask as necessary.
8. Clear trace.
9. Trace average at least 100 traces in power averaging (rms) mode.
10. Adjust the reference level as necessary so that the crest of the channel touches the top of the emission mask.

8.4.5 Test Results

PASS

Temperature : 25°C
Humidity : 60 %

ATM Pressure: 1011 mbar
Test Engineer: XXH



Partial RU modes:

All of the configurations or modes are tested, the data of the worst case is recorded in the report.

Test Mode	Antenn a	Frequency[MH z]	RU Size	RU Index	Result	Limit	Verdict
11AX20MIMO	Ant1	5955	26Tone	RU0	See test graph	See test graph	PASS
			52Tone	RU37	See test graph	See test graph	PASS
			106Tone	RU53	See test graph	See test graph	PASS
	Ant2	5955	26Tone	RU0	See test graph	See test graph	PASS
			52Tone	RU37	See test graph	See test graph	PASS
			106Tone	RU53	See test graph	See test graph	PASS
	Ant1	6175	26Tone	RU0	See test graph	See test graph	PASS
			52Tone	RU37	See test graph	See test graph	PASS
			106Tone	RU53	See test graph	See test graph	PASS
	Ant2	6175	26Tone	RU0	See test graph	See test graph	PASS
			52Tone	RU37	See test graph	See test graph	PASS
			106Tone	RU53	See test graph	See test graph	PASS
11AX40MIMO	Ant1	6415	26Tone	RU0	See test graph	See test graph	PASS
			52Tone	RU37	See test graph	See test graph	PASS
			106Tone	RU53	See test graph	See test graph	PASS
	Ant2	6415	26Tone	RU0	See test graph	See test graph	PASS
			52Tone	RU37	See test graph	See test graph	PASS
			106Tone	RU53	See test graph	See test graph	PASS
	Ant1	6435	26Tone	RU0	See test graph	See test graph	PASS
			52Tone	RU37	See test graph	See test graph	PASS
			106Tone	RU53	See test graph	See test graph	PASS
	Ant2	6435	26Tone	RU0	See test graph	See test graph	PASS
			52Tone	RU37	See test graph	See test graph	PASS
			106Tone	RU53	See test graph	See test graph	PASS
	Ant1	6475	26Tone	RU0	See test graph	See test graph	PASS
			52Tone	RU37	See test graph	See test graph	PASS
			106Tone	RU53	See test graph	See test graph	PASS
	Ant2	6475	26Tone	RU0	See test graph	See test graph	PASS
			52Tone	RU37	See test graph	See test graph	PASS
			106Tone	RU53	See test graph	See test graph	PASS
	Ant1	6515	26Tone	RU0	See test graph	See test graph	PASS
			52Tone	RU37	See test graph	See test graph	PASS
			106Tone	RU53	See test graph	See test graph	PASS
	Ant2	6515	26Tone	RU0	See test graph	See test graph	PASS
			52Tone	RU37	See test graph	See test graph	PASS
			106Tone	RU53	See test graph	See test graph	PASS
11AX40MIMO	Ant1	5965	26Tone	RU0	See test graph	See test graph	PASS
			52Tone	RU37	See test graph	See test graph	PASS
			106Tone	RU53	See test graph	See test graph	PASS
			242Tone	RU61	See test graph	See test graph	PASS
	Ant2	5965	26Tone	RU0	See test graph	See test graph	PASS
			52Tone	RU37	See test graph	See test graph	PASS
			106Tone	RU53	See test graph	See test graph	PASS
			242Tone	RU61	See test graph	See test graph	PASS
	Ant1	6165	26Tone	RU0	See test graph	See test graph	PASS
			52Tone	RU37	See test graph	See test graph	PASS
			106Tone	RU53	See test graph	See test graph	PASS
			242Tone	RU61	See test graph	See test graph	PASS
	Ant2	6165	26Tone	RU0	See test graph	See test graph	PASS
			52Tone	RU37	See test graph	See test graph	PASS
			106Tone	RU53	See test graph	See test graph	PASS
			242Tone	RU61	See test graph	See test graph	PASS
	Ant1	6405	26Tone	RU0	See test graph	See test graph	PASS
			52Tone	RU37	See test graph	See test graph	PASS
			106Tone	RU53	See test graph	See test graph	PASS
			242Tone	RU61	See test graph	See test graph	PASS
	Ant2	6405	26Tone	RU0	See test graph	See test graph	PASS
			52Tone	RU37	See test graph	See test graph	PASS
			106Tone	RU53	See test graph	See test graph	PASS
			242Tone	RU61	See test graph	See test graph	PASS
	Ant1	6445	26Tone	RU0	See test graph	See test graph	PASS
			52Tone	RU37	See test graph	See test graph	PASS

11AX80MIMO	Ant2	6445	106Tone	RU53	See test graph	See test graph	PASS
			242Tone	RU61	See test graph	See test graph	PASS
	Ant1	6485	26Tone	RU0	See test graph	See test graph	PASS
			52Tone	RU37	See test graph	See test graph	PASS
			106Tone	RU53	See test graph	See test graph	PASS
			242Tone	RU61	See test graph	See test graph	PASS
	Ant2	6485	26Tone	RU0	See test graph	See test graph	PASS
			52Tone	RU37	See test graph	See test graph	PASS
			106Tone	RU53	See test graph	See test graph	PASS
			242Tone	RU61	See test graph	See test graph	PASS
	Ant1	5985	26Tone	RU0	See test graph	See test graph	PASS
			52Tone	RU37	See test graph	See test graph	PASS
			106Tone	RU53	See test graph	See test graph	PASS
			242Tone	RU61	See test graph	See test graph	PASS
			484Tone	RU65	See test graph	See test graph	PASS
	Ant2	5985	26Tone	RU0	See test graph	See test graph	PASS
			52Tone	RU37	See test graph	See test graph	PASS
			106Tone	RU53	See test graph	See test graph	PASS
			242Tone	RU61	See test graph	See test graph	PASS
			484Tone	RU65	See test graph	See test graph	PASS
	Ant1	6145	26Tone	RU0	See test graph	See test graph	PASS
			52Tone	RU37	See test graph	See test graph	PASS
			106Tone	RU53	See test graph	See test graph	PASS
			242Tone	RU61	See test graph	See test graph	PASS
			484Tone	RU65	See test graph	See test graph	PASS
	Ant2	6145	26Tone	RU0	See test graph	See test graph	PASS
			52Tone	RU37	See test graph	See test graph	PASS
			106Tone	RU53	See test graph	See test graph	PASS
			242Tone	RU61	See test graph	See test graph	PASS
			484Tone	RU65	See test graph	See test graph	PASS
	Ant1	6385	26Tone	RU0	See test graph	See test graph	PASS
			52Tone	RU37	See test graph	See test graph	PASS
			106Tone	RU53	See test graph	See test graph	PASS
			242Tone	RU61	See test graph	See test graph	PASS
			484Tone	RU65	See test graph	See test graph	PASS
	Ant2	6385	26Tone	RU0	See test graph	See test graph	PASS
			52Tone	RU37	See test graph	See test graph	PASS
			106Tone	RU53	See test graph	See test graph	PASS
			242Tone	RU61	See test graph	See test graph	PASS
			484Tone	RU65	See test graph	See test graph	PASS
	Ant1	6465	26Tone	RU0	See test graph	See test graph	PASS
			52Tone	RU37	See test graph	See test graph	PASS
			106Tone	RU53	See test graph	See test graph	PASS
			242Tone	RU61	See test graph	See test graph	PASS
			484Tone	RU65	See test graph	See test graph	PASS
	Ant2	6465	26Tone	RU0	See test graph	See test graph	PASS
			52Tone	RU37	See test graph	See test graph	PASS
			106Tone	RU53	See test graph	See test graph	PASS
			242Tone	RU61	See test graph	See test graph	PASS
			484Tone	RU65	See test graph	See test graph	PASS

Full RU modes:

All of the configurations or modes are tested, the data of the worst case is recorded in the report.

Test Mode	Antenna	Frequency[MHz]	Result	Limit	Verdict
11AX20MIMO	Ant1	5955	See test graph	See test graph	PASS
	Ant2	5955	See test graph	See test graph	PASS
	Ant1	6175	See test graph	See test graph	PASS
	Ant2	6175	See test graph	See test graph	PASS
	Ant1	6415	See test graph	See test graph	PASS
	Ant2	6415	See test graph	See test graph	PASS
	Ant1	6435	See test graph	See test graph	PASS
	Ant2	6435	See test graph	See test graph	PASS
	Ant1	6475	See test graph	See test graph	PASS
	Ant2	6475	See test graph	See test graph	PASS
	Ant1	6515	See test graph	See test graph	PASS
	Ant2	6515	See test graph	See test graph	PASS
11AX40MIMO	Ant1	5965	See test graph	See test graph	PASS
	Ant2	5965	See test graph	See test graph	PASS
	Ant1	6165	See test graph	See test graph	PASS
	Ant2	6165	See test graph	See test graph	PASS
	Ant1	6405	See test graph	See test graph	PASS
	Ant2	6405	See test graph	See test graph	PASS
	Ant1	6445	See test graph	See test graph	PASS
	Ant2	6445	See test graph	See test graph	PASS
	Ant1	6485	See test graph	See test graph	PASS
	Ant2	6485	See test graph	See test graph	PASS
11AX80MIMO	Ant1	5985	See test graph	See test graph	PASS
	Ant2	5985	See test graph	See test graph	PASS
	Ant1	6145	See test graph	See test graph	PASS
	Ant2	6145	See test graph	See test graph	PASS
	Ant1	6385	See test graph	See test graph	PASS
	Ant2	6385	See test graph	See test graph	PASS
	Ant1	6465	See test graph	See test graph	PASS
	Ant2	6465	See test graph	See test graph	PASS