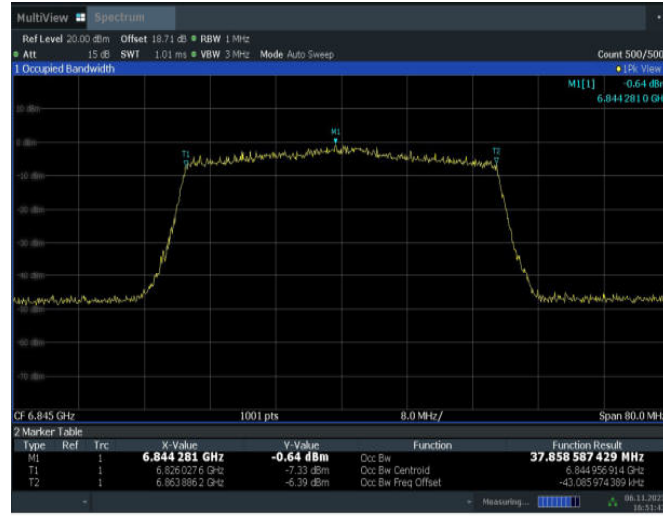




16:49:41 06.11.2023

11AX40MIMO_Ant2_6845



16:51:43 06.11.2023

11AX40MIMO_Ant3_6885



16:55:48 06.11.2023

11AX40MIMO_Ant2_6885



11AX40MIMO_Ant3_6925

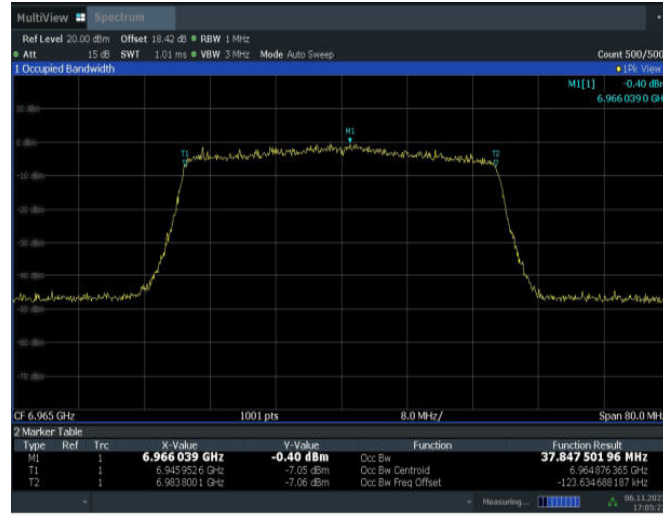


11AX40MIMO_Ant2_6925



17:02:56 06.11.2023

11AX40MIMO_Ant3_6965



17:05:23 06.11.2023

11AX40MIMO_Ant2_6965



17:07:25 06.11.2023

11AX40MIMO_Ant3_7085



11AX40MIMO_Ant2_7085



11AX80MIMO_Ant3_5985



17:17:22 06.11.2023

11AX80MIMO_Ant2_5985



17:19:24 06.11.2023

11AX80MIMO_Ant3_6145



10:23:36 07.11.2023

11AX80MIMO_Ant2_6145



11AX80MIMO_Ant3_6385



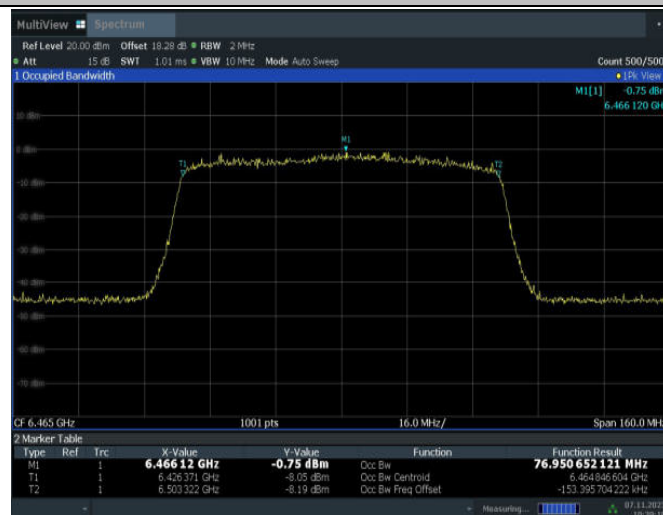
11AX80MIMO_Ant2_6385



11AX80MIMO_Ant3_6465



11AX80MIMO_Ant2_6465



11AX80MIMO_Ant3_6545



11AX80MIMO_Ant2_6545



11AX80MIMO_Ant3_6625



14:52:58 07.11.2023

11AX80MIMO_Ant2_6625



14:53:00 07.11.2023

11AX80MIMO_Ant3_6705



14:57:57 07.11.2023

11AX80MIMO_Ant2_6705



11AX80MIMO_Ant3_6785



11AX80MIMO_Ant2_6785



15:04:46 07.11.2023

11AX80MIMO_Ant3_6865



15:07:23 07.11.2023

11AX80MIMO_Ant2_6865



15:09:26 07.11.2023

11AX80MIMO_Ant3_6945



15:19:23 07.11.2023

11AX80MIMO_Ant2_6945



15:21:26 07.11.2023

11AX80MIMO_Ant3_7025



15:30:59 07.11.2023

11AX80MIMO_Ant2_7025



15:33:02 07.11.2023

11AX160MIMO_Ant3_6025



15:36:25 07.11.2023

11AX160MIMO_Ant2_6025



11AX160MIMO_Ant3_6185



11AX160MIMO_Ant2_6185



11AX160MIMO_Ant3_6345



11AX160MIMO_Ant2_6345



11AX160MIMO_Ant3_6505



11AX160MIMO_Ant2_6505



11AX160MIMO_Ant3_6665



16:11:30 07.11.2023

11AX160MIMO_Ant2_6665



16:13:33 07.11.2023

11AX160MIMO_Ant3_6825



16:25:17 07.11.2023

11AX160MIMO_Ant2_6825



11AX160MIMO_Ant3_6985



11AX160MIMO_Ant2_6985



A.6. Contention Based Protocol

Measurement Limit and Method:

Indoor access points, subordinate devices and client devices operating in the 5.925-7.125 GHz band must employ a contention-based protocol.

Unlicensed low-power indoor devices must detect co-channel radio frequency power that is at least -62dBm or lower. Upon detection of energy in the band, unlicensed low power indoor devices must vacate the channel (in which incumbent signal is transmitted) and stay off the incumbent channel as long as detected radio frequency power is equal to or greater than the threshold (-62 dBm)¹. The -62 dBm (or lower) threshold is referenced to a 0 dBi antenna gain.

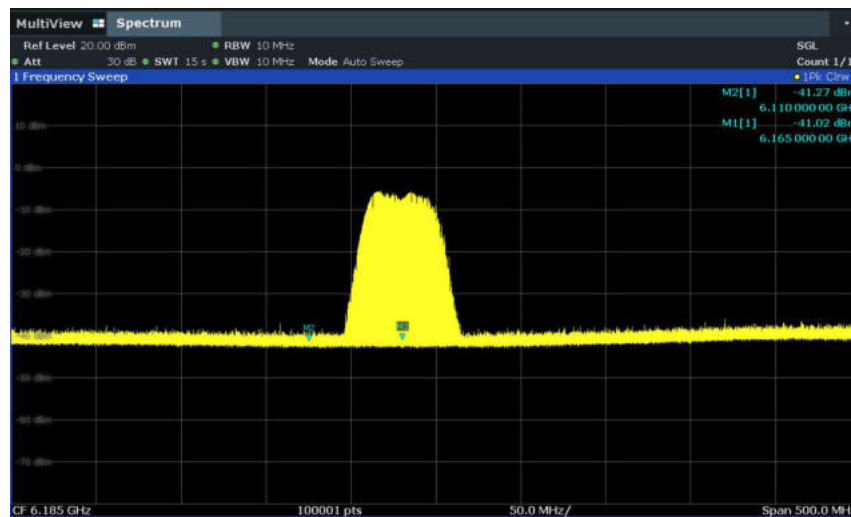
To ensure incumbent operations are reliably detected in the band, low power indoor devices must detect RF energy throughout their intended operating channel. For example, an 802.11 device that plans to transmit a 40 MHz- wide signal (on a primary 20 MHz channel and a secondary 20 MHz channel) must detect energy throughout the entire 40 MHz channel. Additionally, low-power indoor devices must detect co-channel energy with 90% or greater certainty.

The measurement is made according to KDB 987594.

EUT does not use channel puncturing for incumbent avoidance. The EUT use bandwidth reduction for incumbent avoidance. Following figure illustrates an example scenarios of an 160MHz channel centered at 6185 MHz.

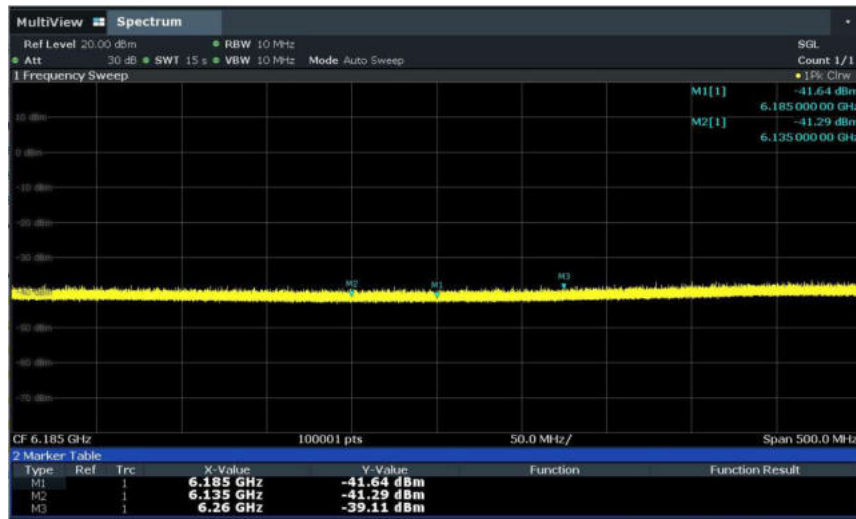
For the lower edge:

A 10 MHz AWGN signal (center frequency is 6110MHz) is injected, the signal reduces to 40 MHz centered around 6165MHz.



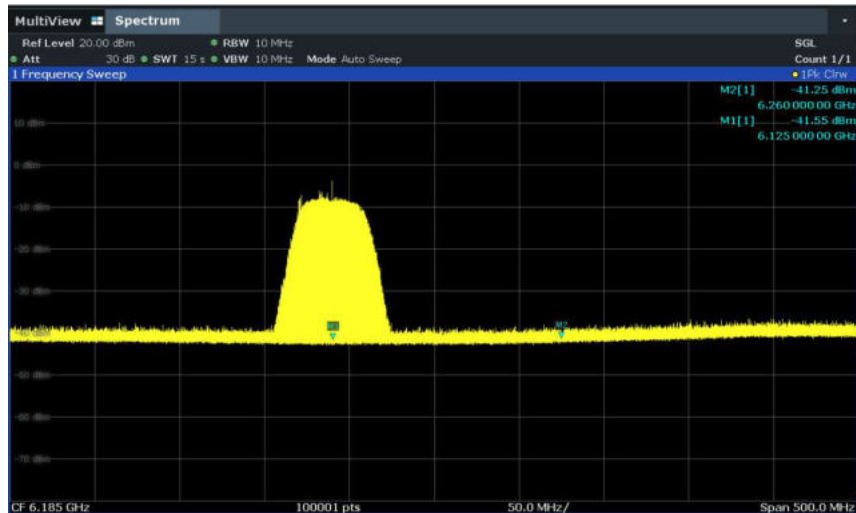
For the center frequency

A 10 MHz AWGN signal (center frequency is 6185MHz) is injected, the signal completely ceases operation.



For the upper edge:

A 10 MHz AWGN signal (center frequency is 6260MHz) is injected, the signal reduces to 40 MHz centered around 6125MHz.



Band	BW (MHz)	Fre. (MHz)	Incumbent Freq (MHz)	AWGN Signal Level (at Antenna Port) (dBm)	Incumbent Signal Level (Refer to 0dBi Antenna) (dBm)	Detection Rate(%)	Threshold Level(dB m)
UNII Band 5	20	6215	6175 fc1 = fc2	-72	-73.14	100	-62
					Cease transmission		
				-80	-81.14	<90	-62
					Minimal transmission		
				-90	-91.14	0	-62
					Normal transmission		
	160	6185	6110 Lower Edge	-64.5	-65.64	100	-62
					Cease transmission		
				-68.5	-69.64	<90	-62
					Minimal transmission		
				-90	-91.14	0	-62
					Normal transmission		
			6185 fc1 = fc2	-68	-69.14	100	-62
					Cease transmission		
				-71	-72.14	<90	-62
					Minimal transmission		
				-90	-91.14	0	-62
					Normal transmission		
			6260 Upper Edge	-65.5	-66.64	90	-62
					Cease transmission		
				-68	-69.14	<90	-62
					Minimal transmission		
				-90	-91.14	0	-62
					Normal transmission		

Band	BW (MHz)	Fre. (MHz)	Incumbent Freq (MHz)	AWGN Signal Level (at Antenna Port) (dBm)	Incumbent Signal Level (Refer to 0dBi Antenna) (dBm)	Detection Rate(%)	Threshold Level(dB m)
UNII Band 6	20	6455	6435 fc1 = fc2	-71	-72.14	100	-62
					Cease transmission		
				-80.5	-81.64	<90	-62
					Minimal transmission		
				-90	-91.14	0	-62
					Normal transmission		
160 UNII Band 6	160	6505	6430 Lower Edge	-64	-65.14	100	-62
					Cease transmission		
				-68	-69.14	<90	-62
					Minimal transmission		
				-90	-91.14	0	-62
					Normal transmission		
			6505 fc1 = fc2	-65	-66.14	100	-62
					Cease transmission		
				-70	-71.14	<90	-62
					Minimal transmission		
				-90	-91.14	0	-62
					Normal transmission		
			6580 Upper Edge	-64.5	-65.64	100	-62
					Cease transmission		
				-67.5	-68.64	<90	-62
					Minimal transmission		
				-90	-91.14	0	-62
					Normal transmission		

Band	BW (MHz)	Fre. (MHz)	Incumbent Freq (MHz)	AWGN Signal Level (at Antenna Port) (dBm)	Incumbent Signal Level (Refer to 0dBi Antenna) (dBm)	Detection Rate(%)	Threshold Level(dB m)
UNII Band 7	20	6855	6855 fc1 = fc2	-73	-74.14	100	-62
					Cease transmission		
				-80	-81.14	<90	-62
					Minimal transmission		
				-90	-91.14	0	-62
					Normal transmission		
160 UNII Band 7	160	6665	6590 Lower Edge	-66.5	-67.64	100	-62
					Cease transmission		
				-69	-70.14	<90	-62
					Minimal transmission		
				-90	-91.14	0	-62
					Normal transmission		
			6665 fc1 = fc2	-68	-69.14	100	-62
					Cease transmission		
				-70	-71.14	<90	-62
					Minimal transmission		
				-90	-91.14	0	-62
					Normal transmission		
			6740 Upper Edge	-66	-67.14	90	-62
					Cease transmission		
				-68.5	-69.64	<90	-62
					Minimal transmission		
				-90	-91.14	0	-62
					Normal transmission		

Band	BW (MHz)	Fre. (MHz)	Incumbent Freq (MHz)	AWGN Signal Level (at Antenna Port) (dBm)	Incumbent Signal Level (Refer to 0dBi Antenna) (dBm)	Detection Rate(%)	Threshold Level(dB m)
UNII Band 8	20	6995	7015 fc1 = fc2	-71	-72.14	90	-62
					Cease transmission		
				-77	-78.14	<90	-62
					Minimal transmission		
				-90	-91.14	0	-62
					Normal transmission		
160 UNII Band 8	160	6985	6910 Lower Edge	-65.5	-66.64	90	-62
					Cease transmission		
				-75.5	-76.64	<90	-62
					Minimal transmission		
				-90	-91.14	0	-62
					Normal transmission		
			6985 fc1 = fc2	-67	-68.14	100	-62
					Cease transmission		
				-69	-70.14	<90	-62
					Minimal transmission		
				-90	-91.14	0	-62
					Normal transmission		
			7060 Upper Edge	-61	-62.14	90	-62
					Cease transmission		
				-68	-69.14	<90	-62
					Minimal transmission		
				-90	-91.14	0	-62
					Normal transmission		

Note: Incumbent signal level (dBm) = AWGN Signal power Level (dBm)-Antenna Gain (dBi),

The EUT encounters the incumbent signal that its power level is less than or equal to the detection threshold (-62dBm) with reference to 0dBi antenna gain. Path loss is negligible (0dB).

Conclusion: PASS

Test graphs as below:

Mode	AWGN Signal Level	ceased transmission
802.11ax20	Fig.1	Fig.2
802.11ax160	Fig.3	Fig.4



Fig.1 Contention Based Protocol 802.11ax-HE20(ch6175MHz-AWGN Signal Level)

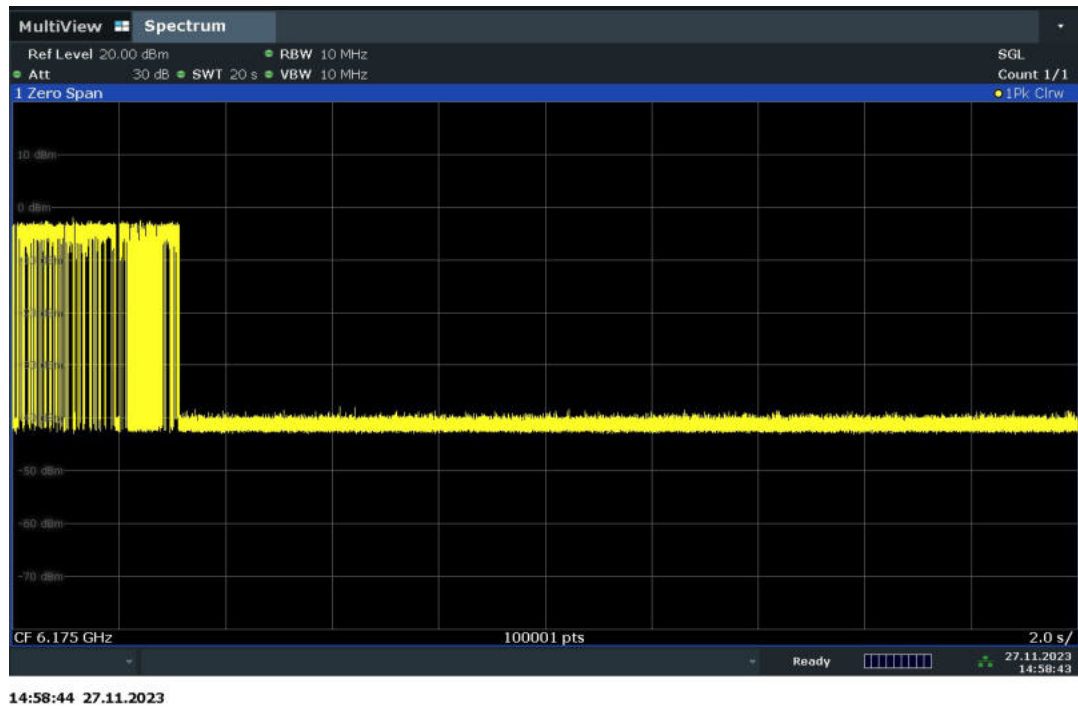


Fig.2 Contention Based Protocol 802.11ax-HE20 (ch6175MHz-ceased transmission)



Fig.3 Contention Based Protocol 802.11ax-HE160 (ch6185MHz-middle-AWGN Signal Level)

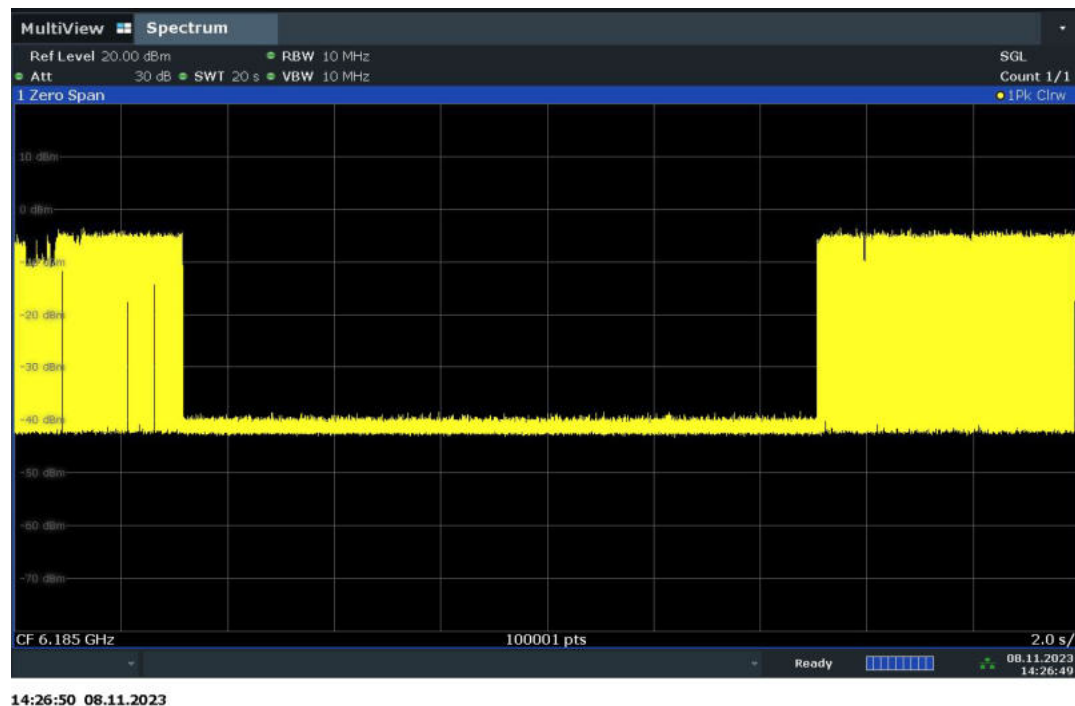


Fig.4 Contention Based Protocol 802.11ax-HE160 (ch6185MHz-middle-ceased transmission)

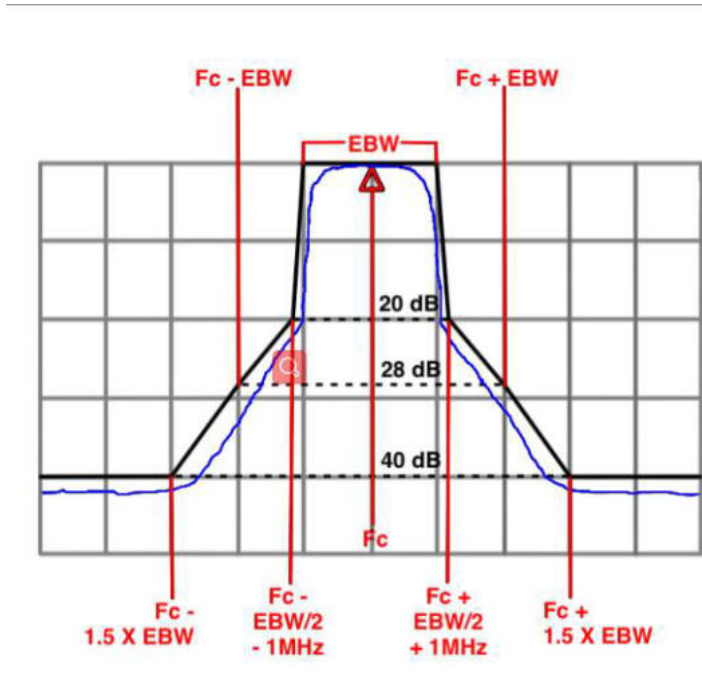
A.7. In-Band Emissions

Measurement Limit and Method:

1. Take nominal bandwidth as reference channel bandwidth provided that 26 dB emission bandwidth is always larger than nominal bandwidth
2. 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 $\geq [2 \times \text{span} / RBW]$.
 - e) Sweep time = auto.
 - f) Detector = RMS (i.e., power averaging)
 - 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.
3. 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.
4. Adjust the span to encompass the entire mask as necessary.
5. Clear trace.
6. Trace average at least 100 traces in power averaging (rms) mode.
7. Adjust the reference level as necessary so that the crest of the channel touches the top of the emission mask.



Generic Emission Mask

The measurement is made according to KDB 987594.

Test Result

TestMode	Antenna	Channel	Result	Limit	Verdict
11AX20MIMO	Ant3	5955	See test graph	See test graph	PASS
	Ant2	5955	See test graph	See test graph	PASS
	Ant3	6175	See test graph	See test graph	PASS

	Ant2	6175	See test graph	See test graph	PASS
	Ant3	6415	See test graph	See test graph	PASS
	Ant2	6415	See test graph	See test graph	PASS
	Ant3	6435	See test graph	See test graph	PASS
	Ant2	6435	See test graph	See test graph	PASS
	Ant3	6475	See test graph	See test graph	PASS
	Ant2	6475	See test graph	See test graph	PASS
	Ant3	6515	See test graph	See test graph	PASS
	Ant2	6515	See test graph	See test graph	PASS
	Ant3	6535	See test graph	See test graph	PASS
	Ant2	6535	See test graph	See test graph	PASS
	Ant3	6695	See test graph	See test graph	PASS
	Ant2	6695	See test graph	See test graph	PASS
	Ant3	6855	See test graph	See test graph	PASS
	Ant2	6855	See test graph	See test graph	PASS
	Ant3	6875	See test graph	See test graph	PASS
	Ant2	6875	See test graph	See test graph	PASS
	Ant3	6895	See test graph	See test graph	PASS
	Ant2	6895	See test graph	See test graph	PASS
	Ant3	6995	See test graph	See test graph	PASS
	Ant2	6995	See test graph	See test graph	PASS
	Ant3	7115	See test graph	See test graph	PASS

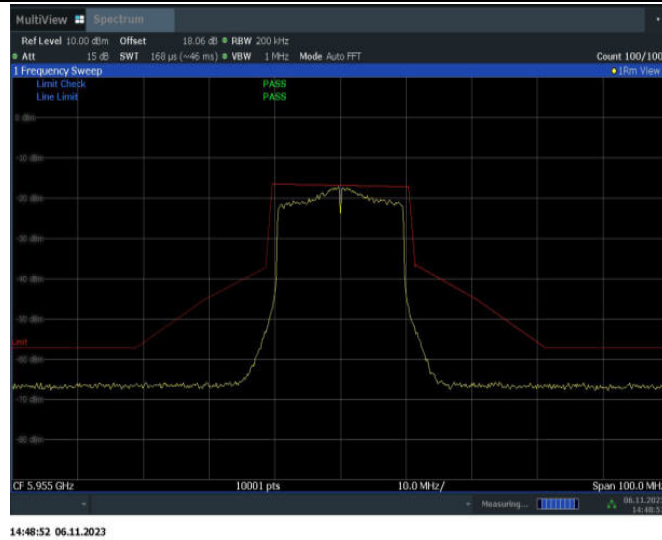
				graph	
	Ant2	7115	See test graph	See test graph	PASS
11AX40MIMO	Ant3	5965	See test graph	See test graph	PASS
	Ant2	5965	See test graph	See test graph	PASS
	Ant3	6165	See test graph	See test graph	PASS
	Ant2	6165	See test graph	See test graph	PASS
	Ant3	6405	See test graph	See test graph	PASS
	Ant2	6405	See test graph	See test graph	PASS
	Ant3	6445	See test graph	See test graph	PASS
	Ant2	6445	See test graph	See test graph	PASS
	Ant3	6485	See test graph	See test graph	PASS
	Ant2	6485	See test graph	See test graph	PASS
	Ant3	6525	See test graph	See test graph	PASS
	Ant2	6525	See test graph	See test graph	PASS
	Ant3	6565	See test graph	See test graph	PASS
	Ant2	6565	See test graph	See test graph	PASS
	Ant3	6685	See test graph	See test graph	PASS
	Ant2	6685	See test graph	See test graph	PASS
	Ant3	6845	See test graph	See test graph	PASS
	Ant2	6845	See test graph	See test graph	PASS
	Ant3	6885	See test graph	See test graph	PASS
	Ant2	6885	See test graph	See test graph	PASS

	Ant3	6925	See test graph	See test graph	PASS
	Ant2	6925	See test graph	See test graph	PASS
	Ant3	6965	See test graph	See test graph	PASS
	Ant2	6965	See test graph	See test graph	PASS
	Ant3	7085	See test graph	See test graph	PASS
	Ant2	7085	See test graph	See test graph	PASS
11AX80MIMO	Ant3	5985	See test graph	See test graph	PASS
	Ant2	5985	See test graph	See test graph	PASS
	Ant3	6145	See test graph	See test graph	PASS
	Ant2	6145	See test graph	See test graph	PASS
	Ant3	6385	See test graph	See test graph	PASS
	Ant2	6385	See test graph	See test graph	PASS
	Ant3	6465	See test graph	See test graph	PASS
	Ant2	6465	See test graph	See test graph	PASS
	Ant3	6545	See test graph	See test graph	PASS
	Ant2	6545	See test graph	See test graph	PASS
	Ant3	6625	See test graph	See test graph	PASS
	Ant2	6625	See test graph	See test graph	PASS
	Ant3	6705	See test graph	See test graph	PASS
	Ant2	6705	See test graph	See test graph	PASS
	Ant3	6785	See test graph	See test graph	PASS
	Ant2	6785	See test graph	See test graph	PASS

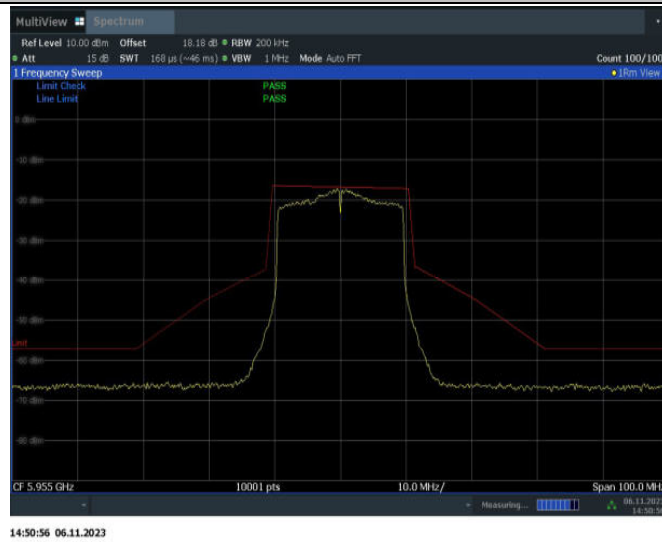
				graph	
	Ant3	6865	See test graph	See test graph	PASS
	Ant2	6865	See test graph	See test graph	PASS
	Ant3	6945	See test graph	See test graph	PASS
	Ant2	6945	See test graph	See test graph	PASS
	Ant3	7025	See test graph	See test graph	PASS
	Ant2	7025	See test graph	See test graph	PASS
11AX160MIMO	Ant3	6025	See test graph	See test graph	PASS
	Ant2	6025	See test graph	See test graph	PASS
	Ant3	6185	See test graph	See test graph	PASS
	Ant2	6185	See test graph	See test graph	PASS
	Ant3	6345	See test graph	See test graph	PASS
	Ant2	6345	See test graph	See test graph	PASS
	Ant3	6505	See test graph	See test graph	PASS
	Ant2	6505	See test graph	See test graph	PASS
	Ant3	6665	See test graph	See test graph	PASS
	Ant2	6665	See test graph	See test graph	PASS
	Ant3	6825	See test graph	See test graph	PASS
	Ant2	6825	See test graph	See test graph	PASS
	Ant3	6985	See test graph	See test graph	PASS
	Ant2	6985	See test graph	See test graph	PASS

Test Graphs

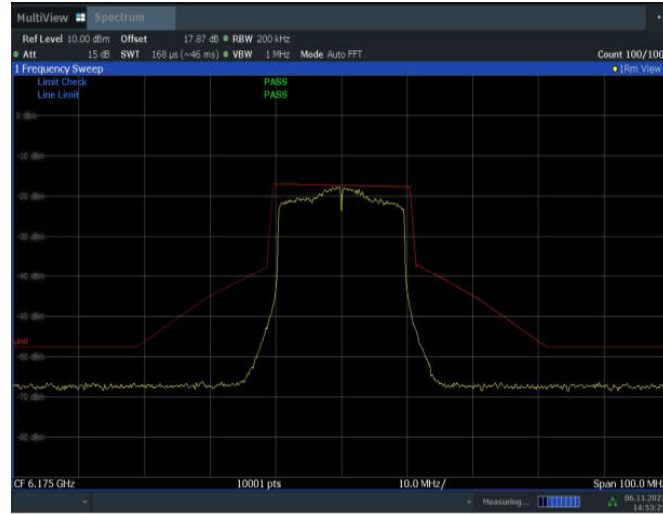
11AX20MIMO_Ant3_5955



11AX20MIMO_Ant2_5955

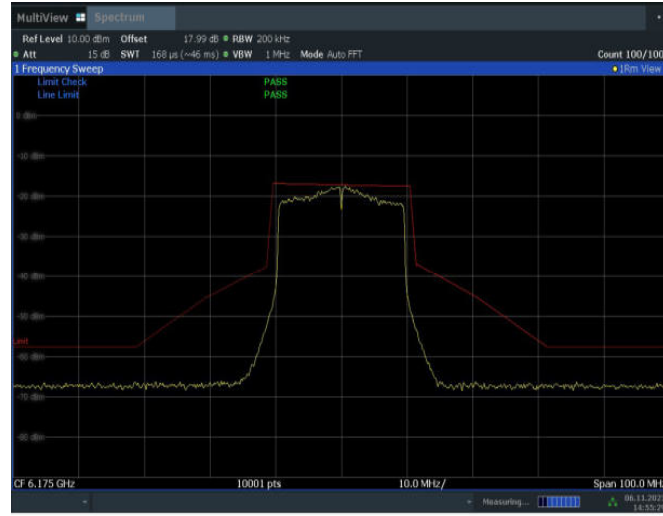


11AX20MIMO_Ant3_6175



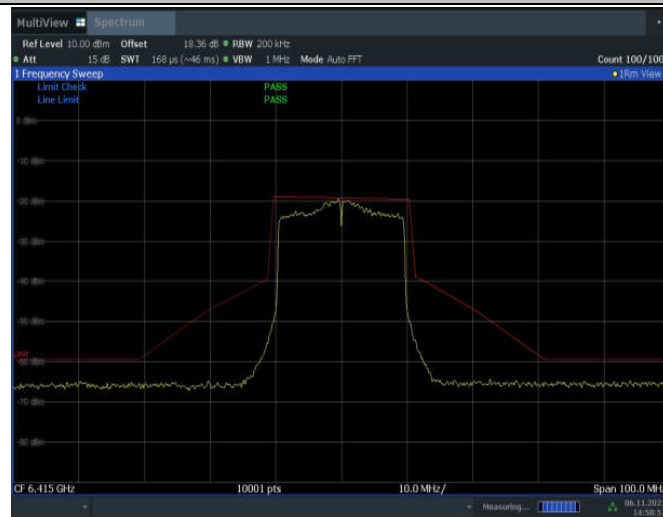
14:53:25 06.11.2023

11AX20MIMO_Ant2_6175



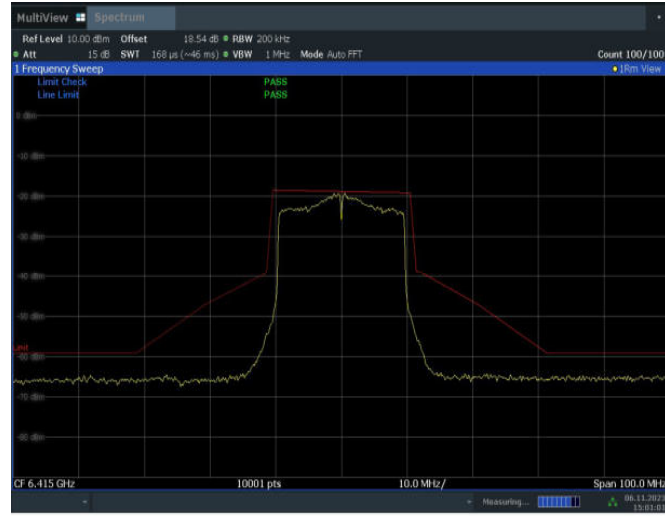
14:53:29 06.11.2023

11AX20MIMO_Ant3_6415

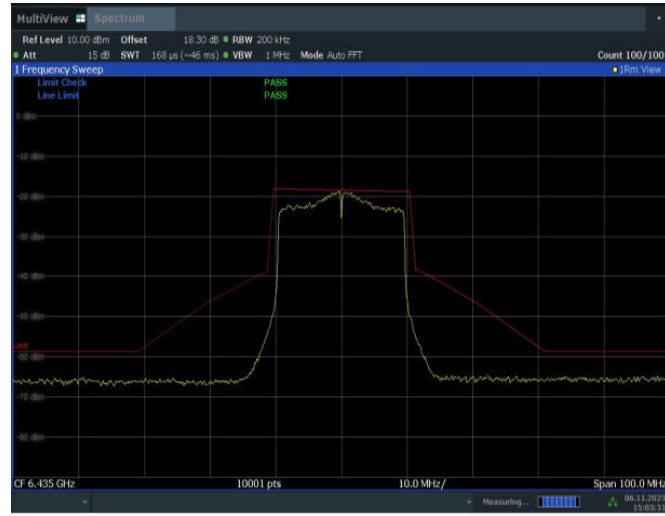


14:58:58 06.11.2023

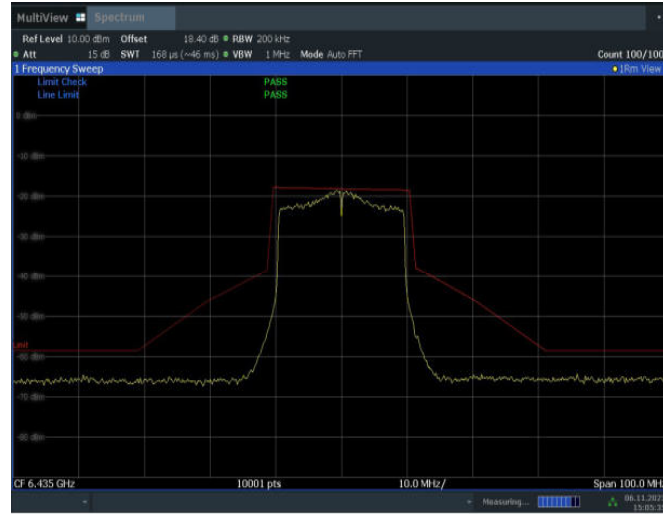
11AX20MIMO_Ant2_6415



11AX20MIMO_Ant3_6435

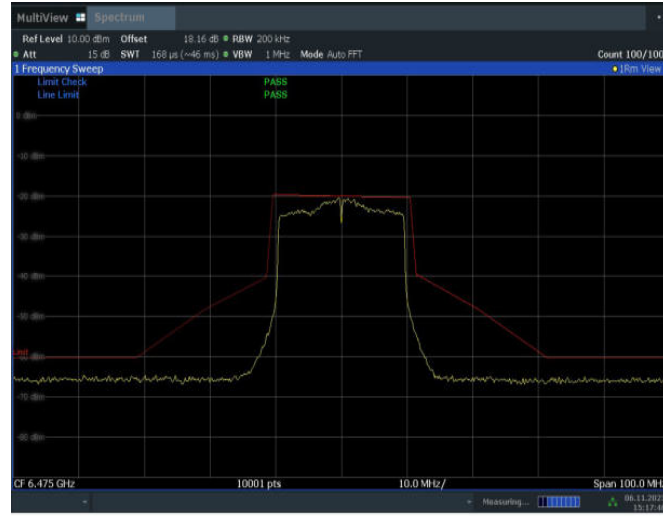


11AX20MIMO_Ant2_6435



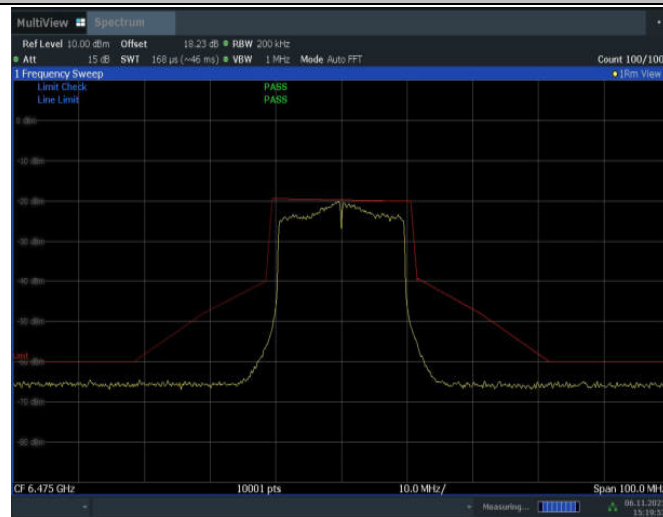
15:05:36 06.11.2023

11AX20MIMO_Ant3_6475



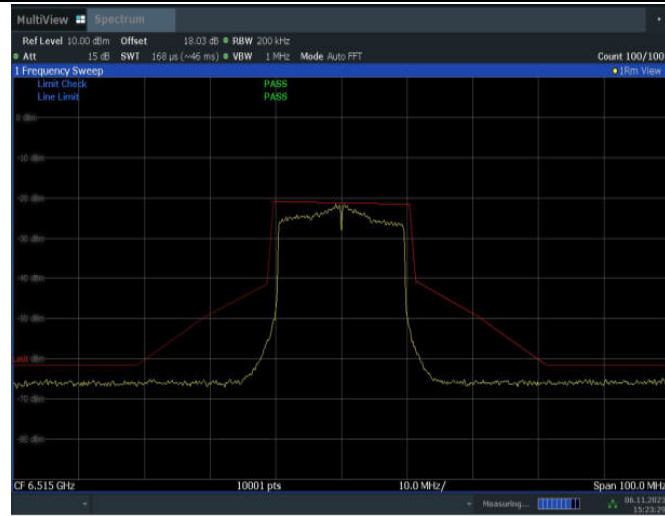
15:17:46 06.11.2023

11AX20MIMO_Ant2_6475

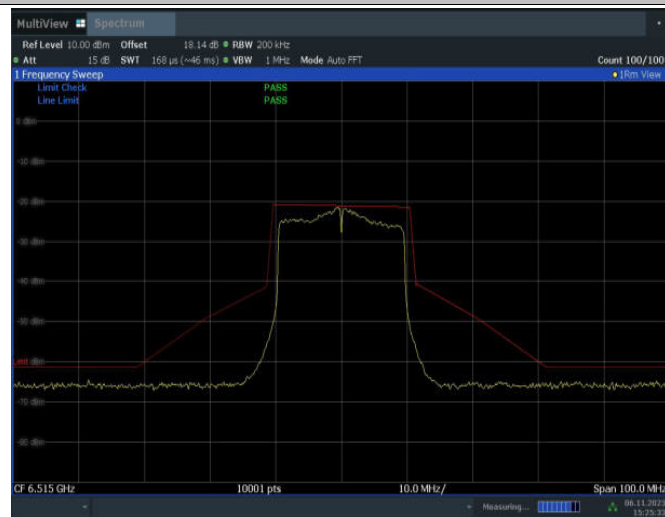


15:19:53 06.11.2023

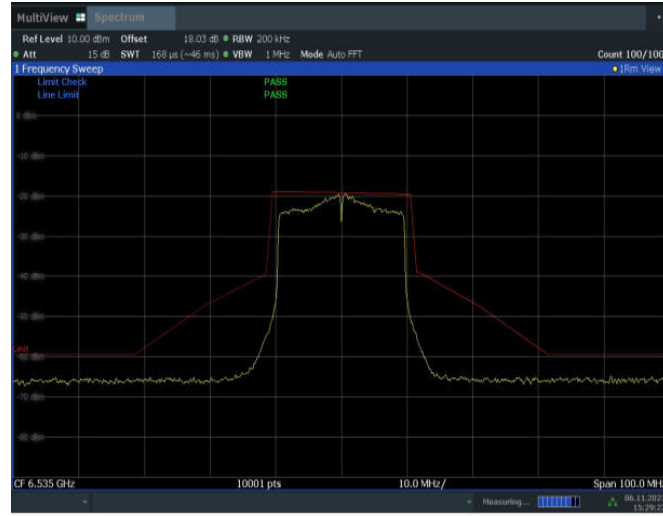
11AX20MIMO_Ant3_6515



11AX20MIMO_Ant2_6515

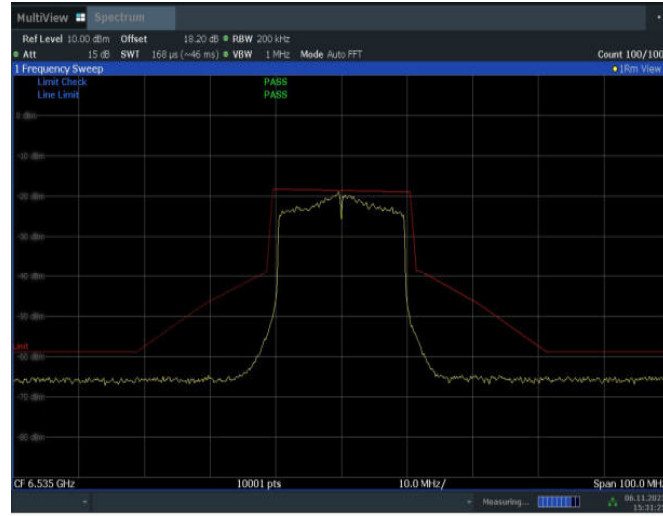


11AX20MIMO_Ant3_6535



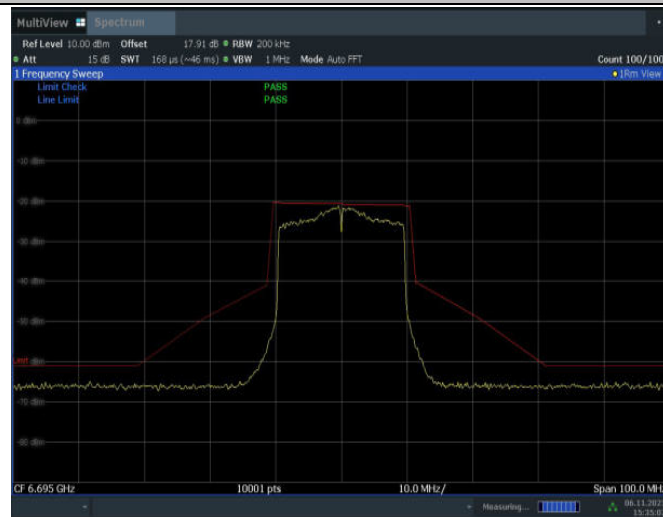
15:29:22 06.11.2023

11AX20MIMO_Ant2_6535



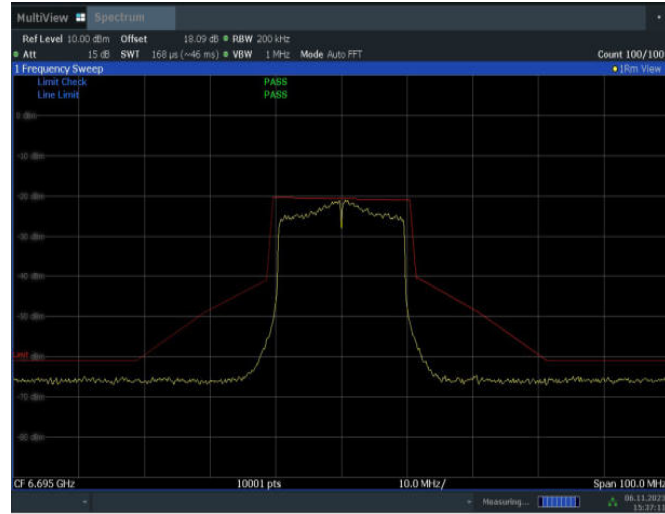
15:31:26 06.11.2023

11AX20MIMO_Ant3_6695

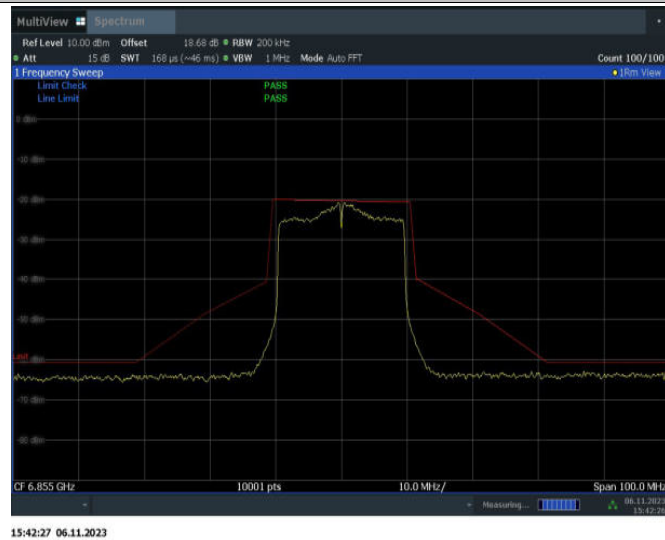


15:35:08 06.11.2023

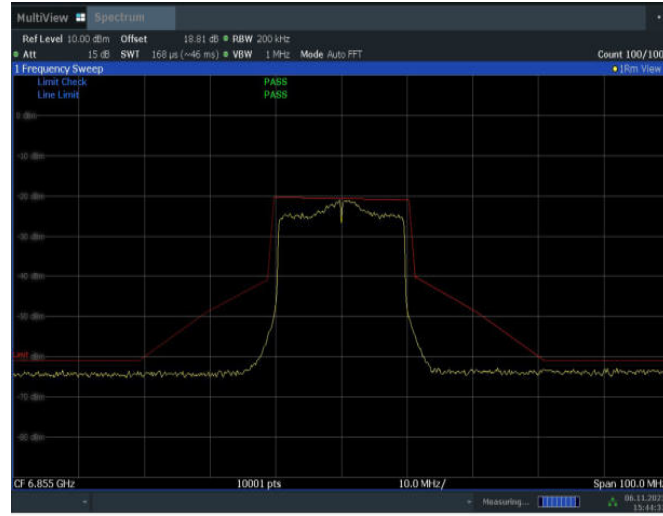
11AX20MIMO_Ant2_6695



11AX20MIMO_Ant3_6855

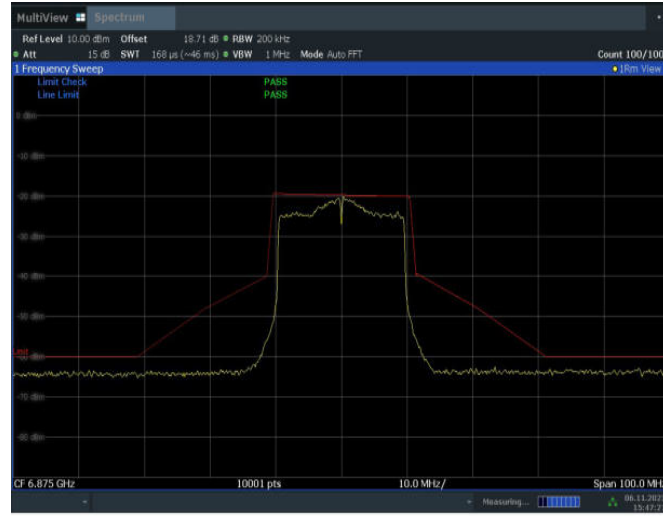


11AX20MIMO_Ant2_6855



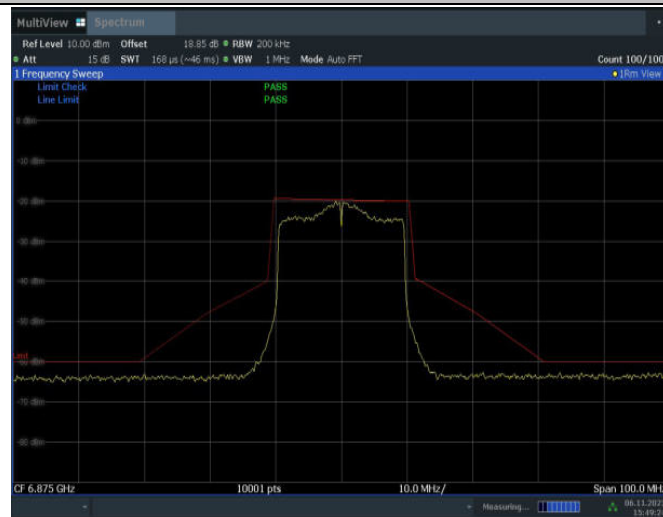
15:44:31 06.11.2023

11AX20MIMO_Ant3_6875



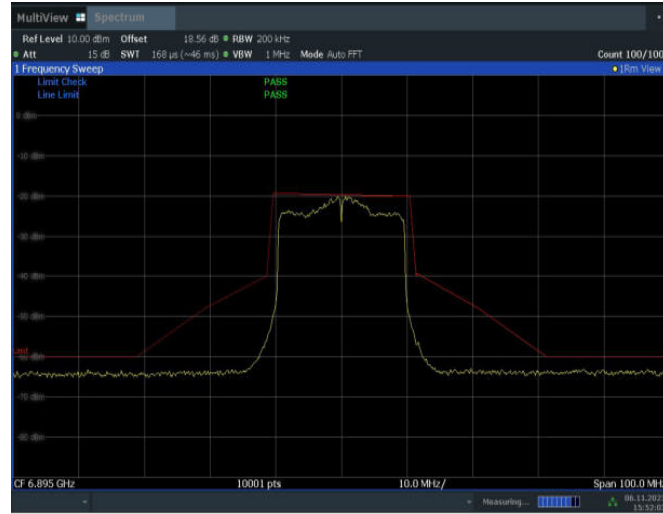
15:47:21 06.11.2023

11AX20MIMO_Ant2_6875

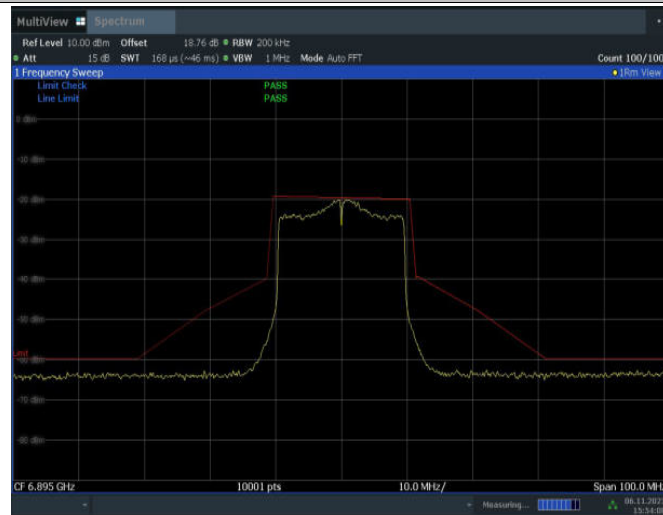


15:49:25 06.11.2023

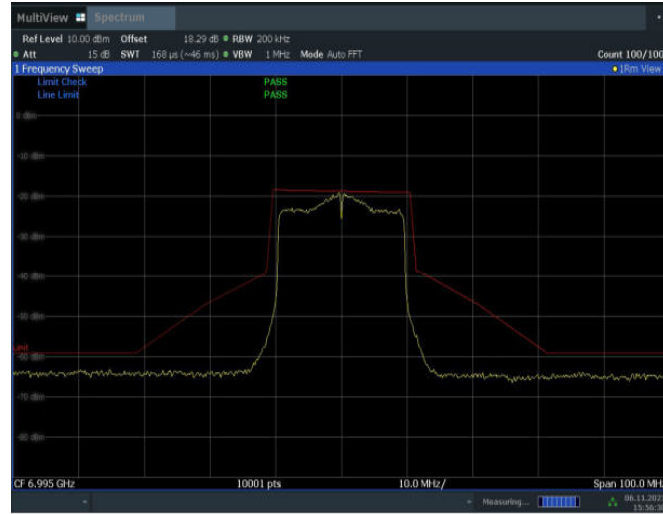
11AX20MIMO_Ant3_6895



11AX20MIMO_Ant2_6895

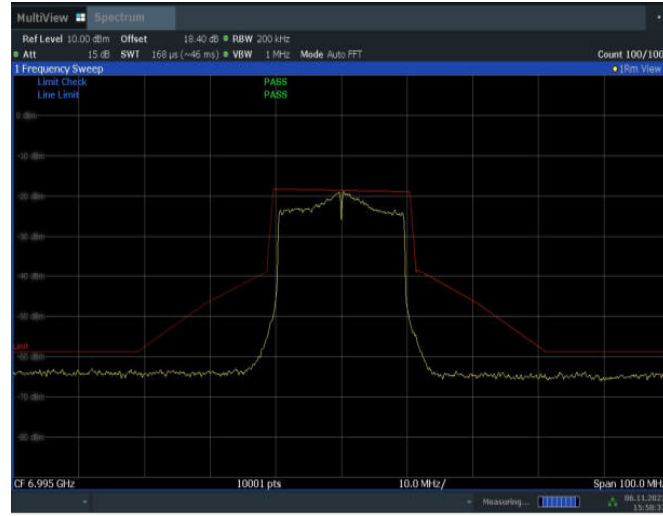


11AX20MIMO_Ant3_6995



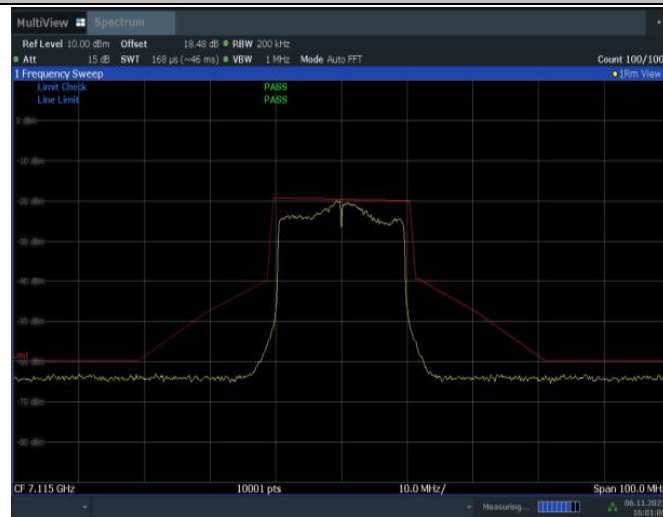
15:56:30 06.11.2023

11AX20MIMO_Ant2_6995



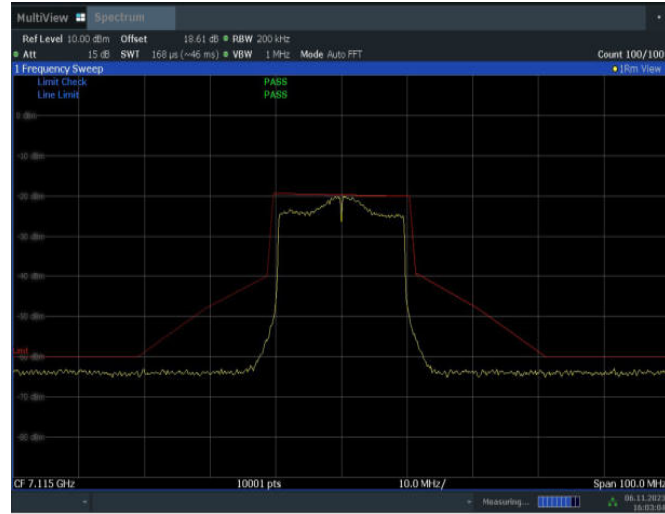
15:58:37 06.11.2023

11AX20MIMO_Ant3_7115

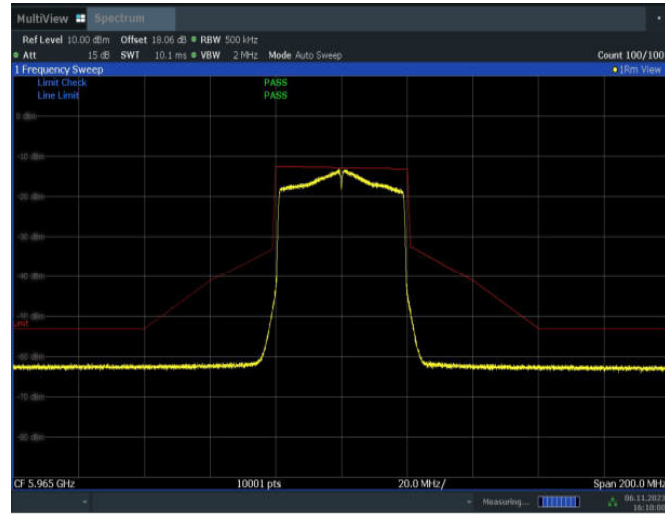


16:01:00 06.11.2023

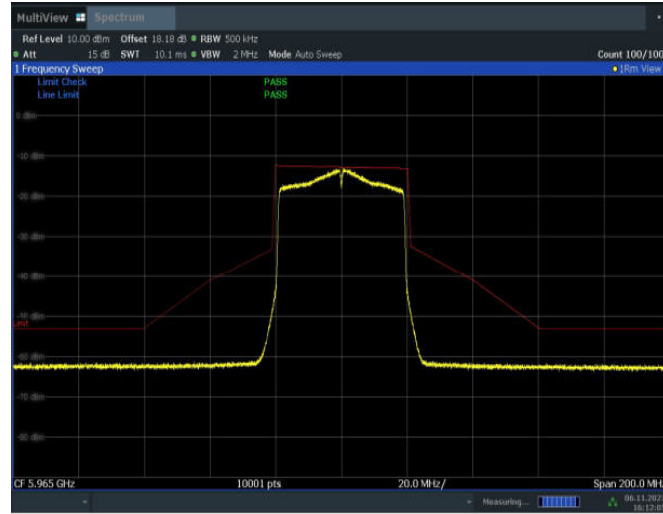
11AX20MIMO_Ant2_7115



11AX40MIMO_Ant3_5965

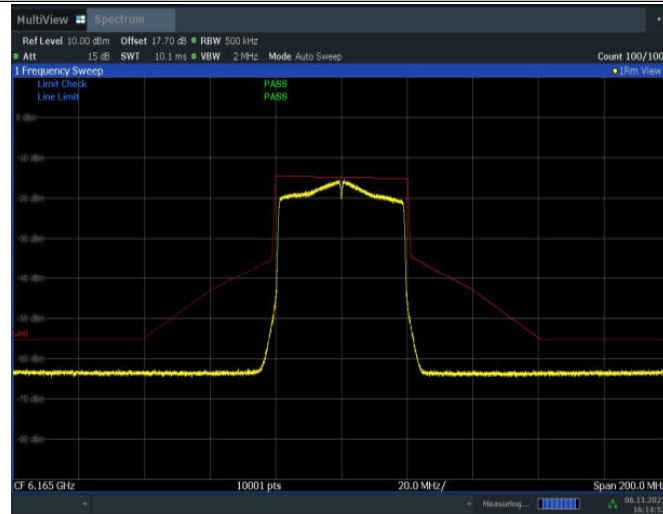


11AX40MIMO_Ant2_5965



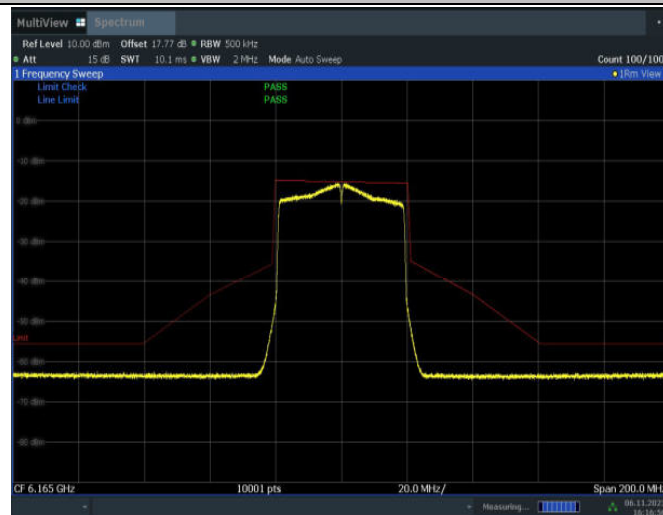
16:12:05 06.11.2023

11AX40MIMO_Ant3_6165



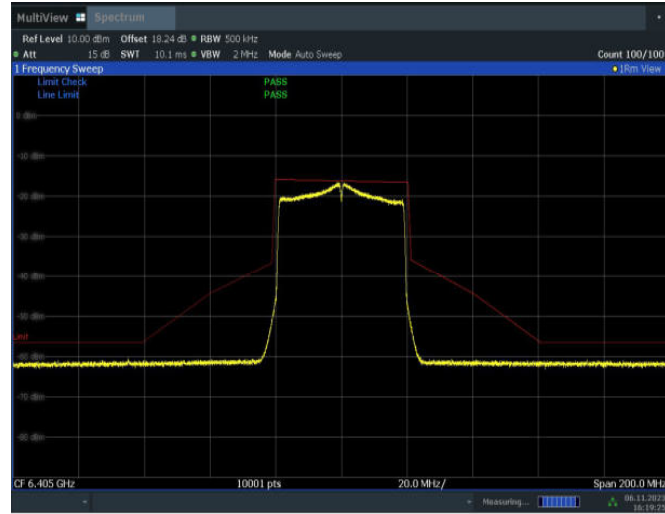
16:14:53 06.11.2023

11AX40MIMO_Ant2_6165



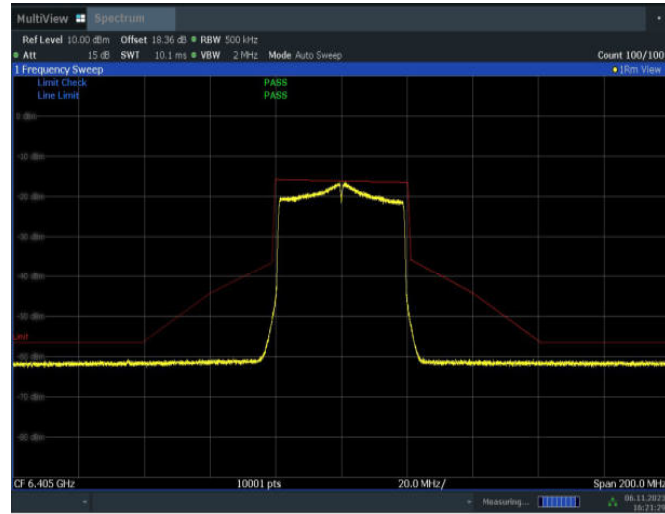
16:16:56 06.11.2023

11AX40MIMO_Ant3_6405



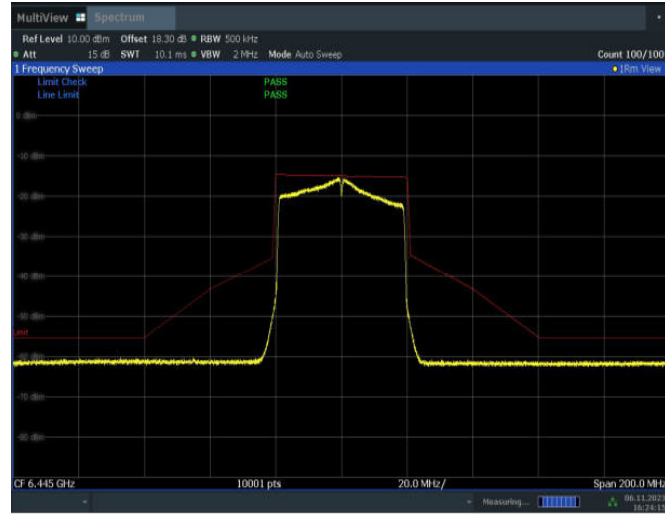
16:19:26 06.11.2023

11AX40MIMO_Ant2_6405



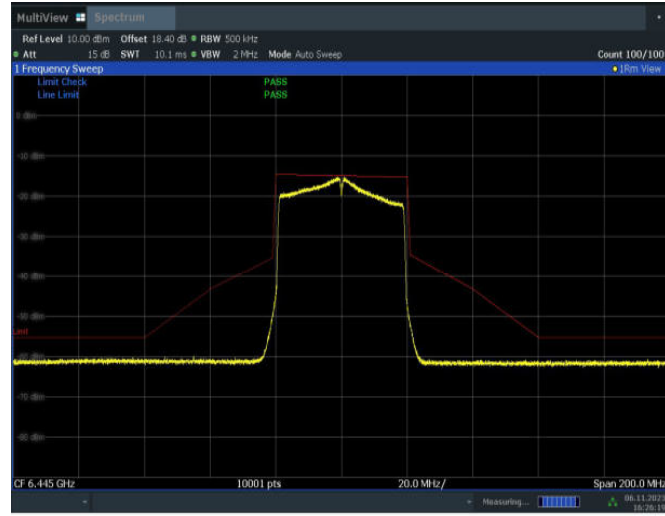
16:21:30 06.11.2023

11AX40MIMO_Ant3_6445



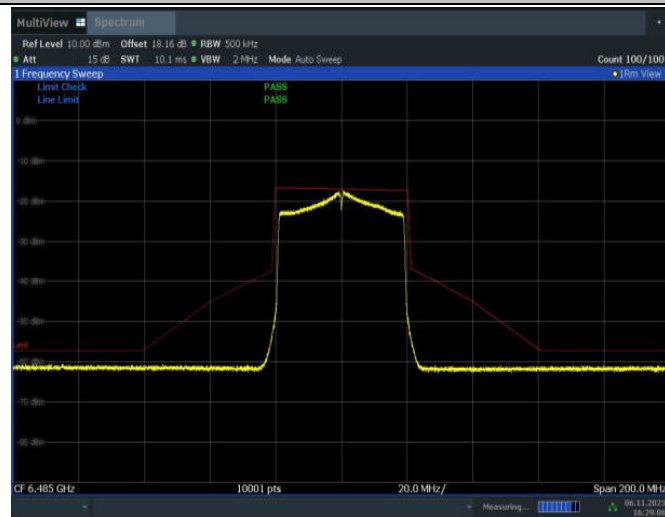
16:24:16 06.11.2023

11AX40MIMO_Ant2_6445



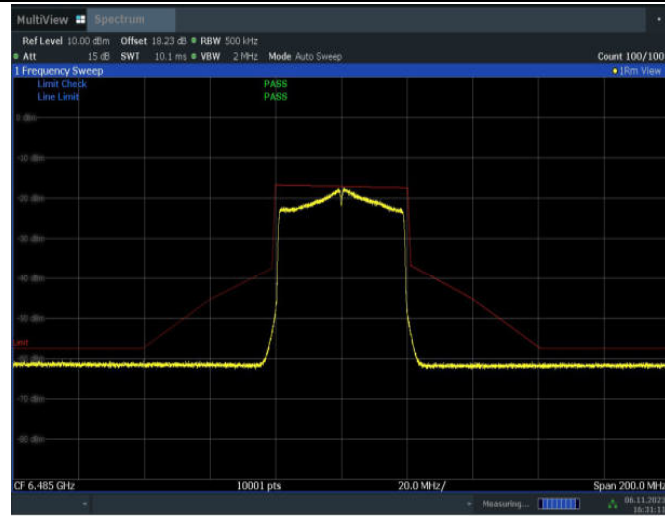
16:26:19 06.11.2023

11AX40MIMO_Ant3_6485



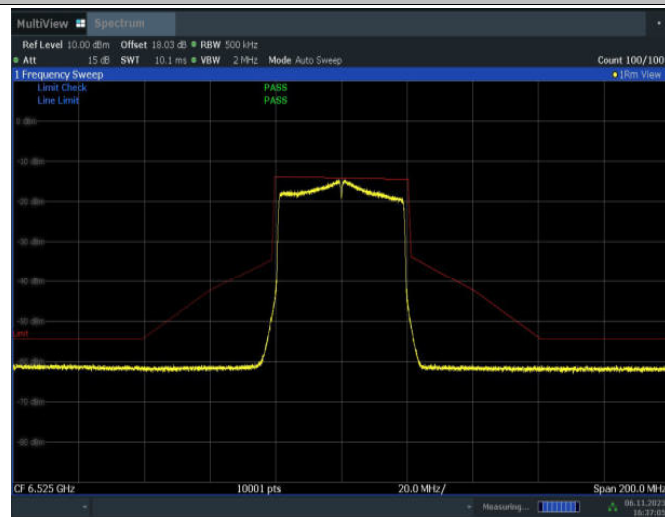
16:29:07 06.11.2023

11AX40MIMO_Ant2_6485



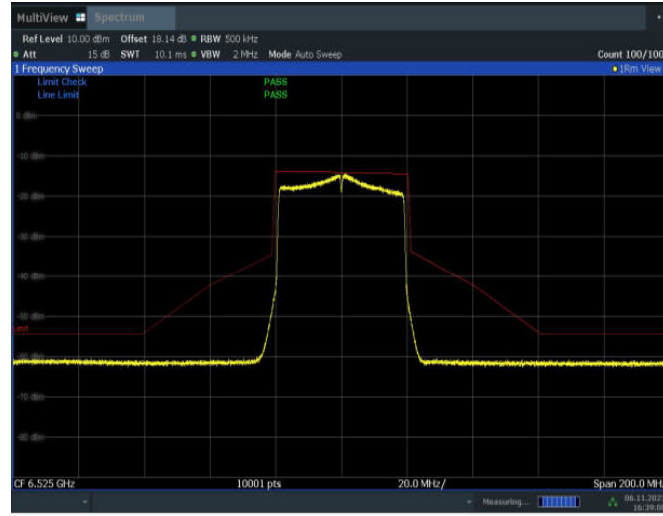
16:31:11 06.11.2023

11AX40MIMO_Ant3_6525



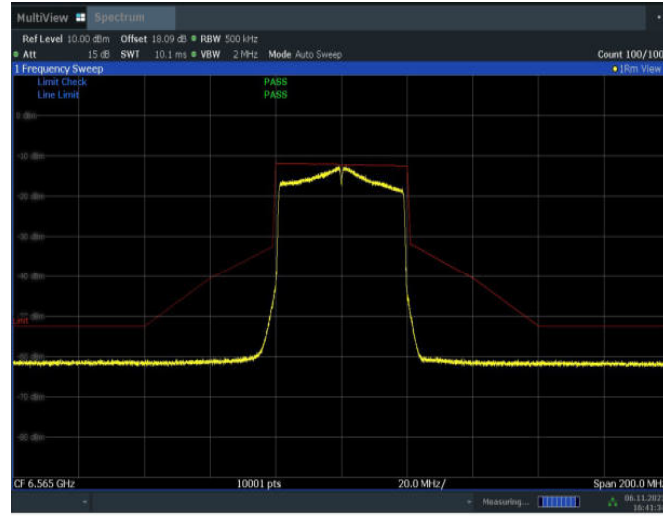
16:37:05 06.11.2023

11AX40MIMO_Ant2_6525



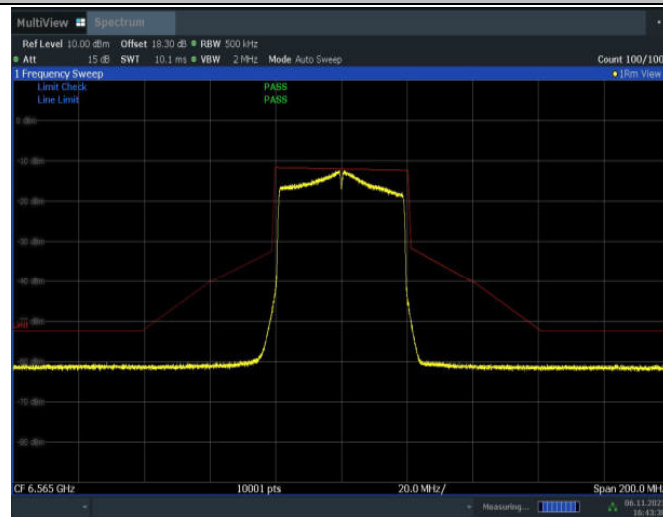
16:39:09 06.11.2023

11AX40MIMO_Ant3_6565



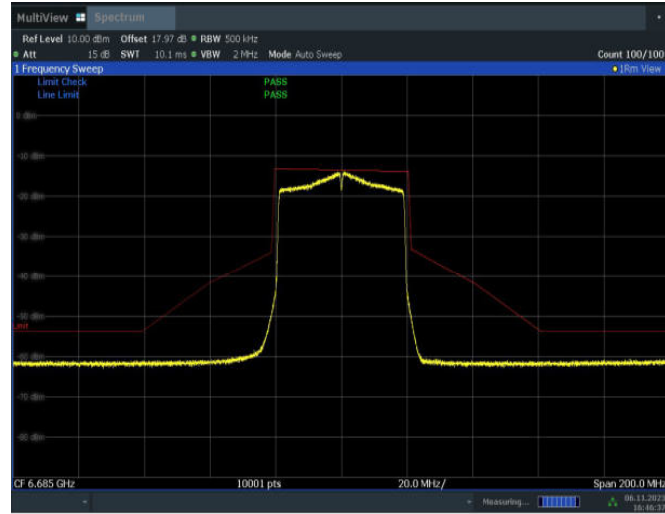
16:41:35 06.11.2023

11AX40MIMO_Ant2_6565

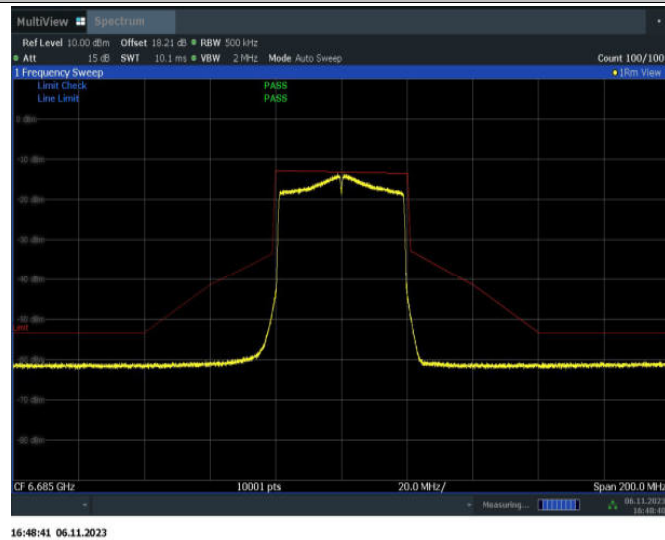


16:43:39 06.11.2023

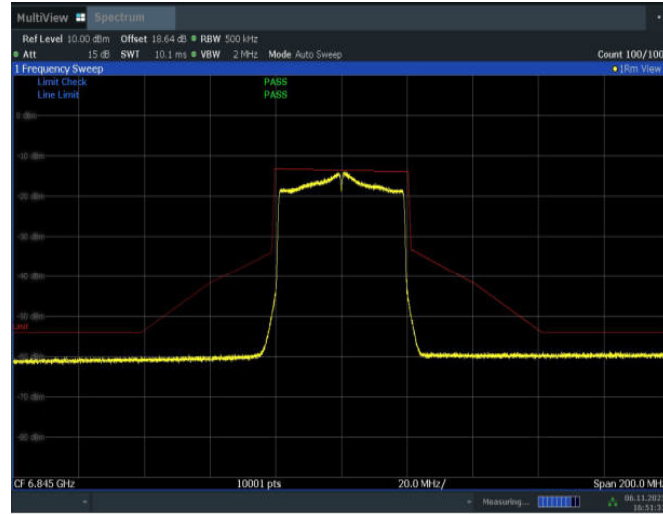
11AX40MIMO_Ant3_6685



11AX40MIMO_Ant2_6685

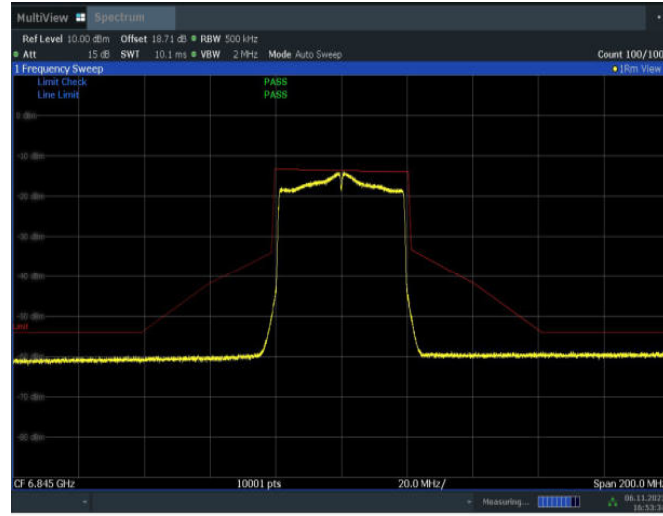


11AX40MIMO_Ant3_6845



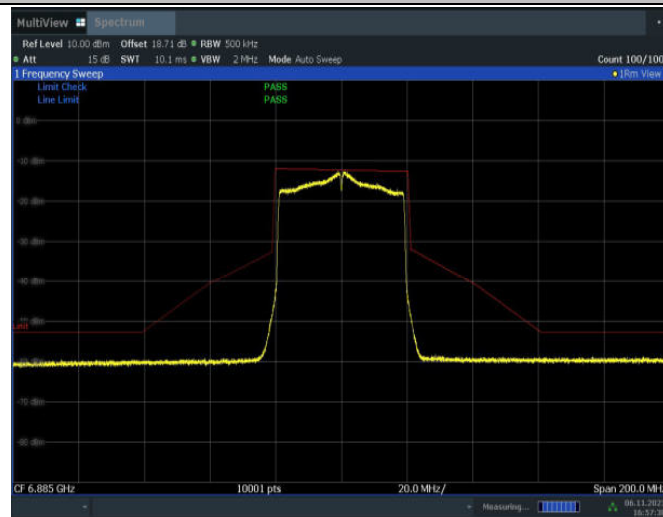
16:51:31 06.11.2023

11AX40MIMO_Ant2_6845



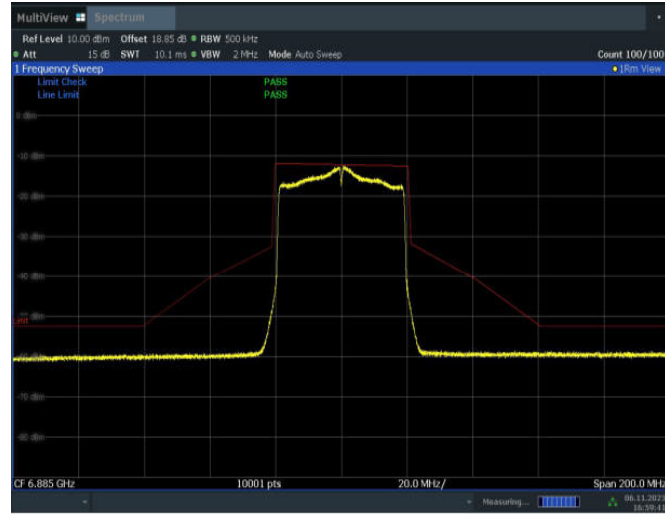
16:53:35 06.11.2023

11AX40MIMO_Ant3_6885

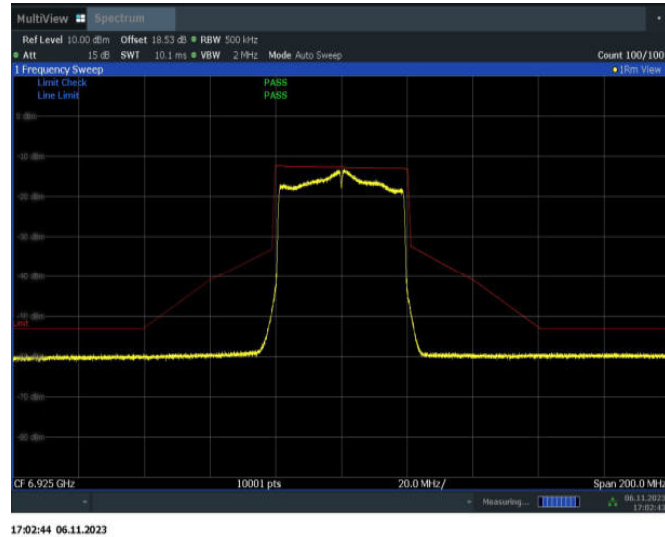


16:57:39 06.11.2023

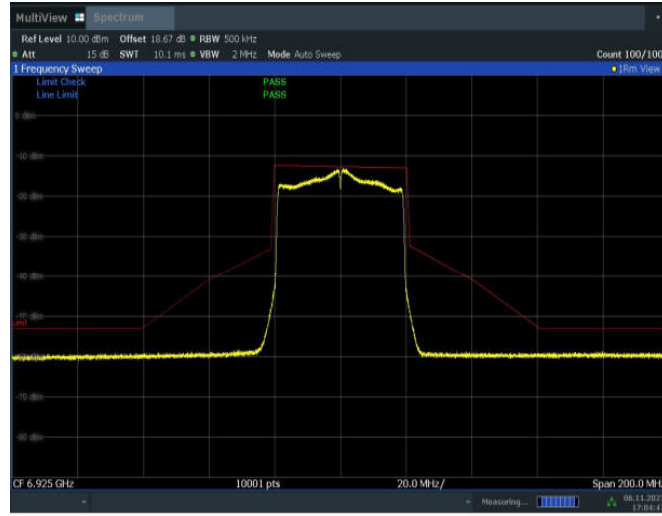
11AX40MIMO_Ant2_6885



11AX40MIMO_Ant3_6925

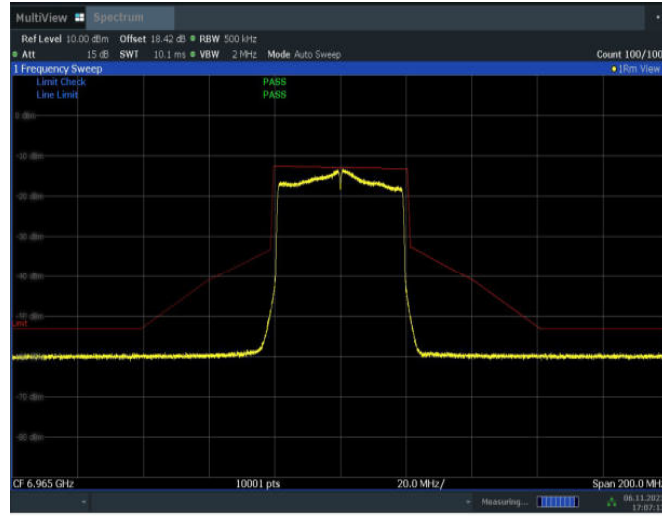


11AX40MIMO_Ant2_6925



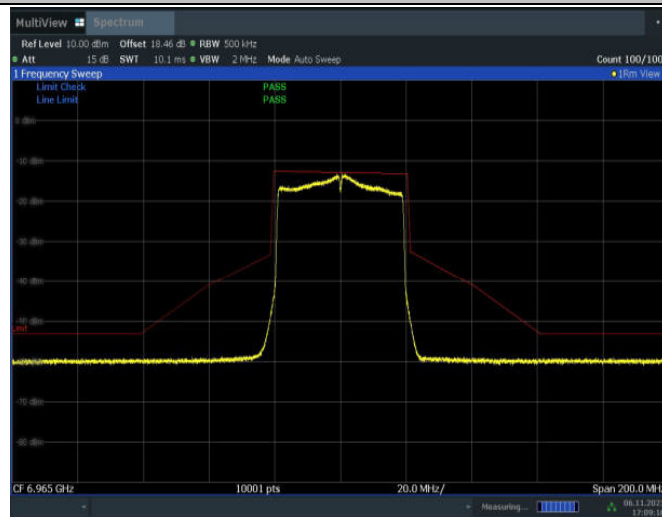
17:04:47 06.11.2023

11AX40MIMO_Ant3_6965



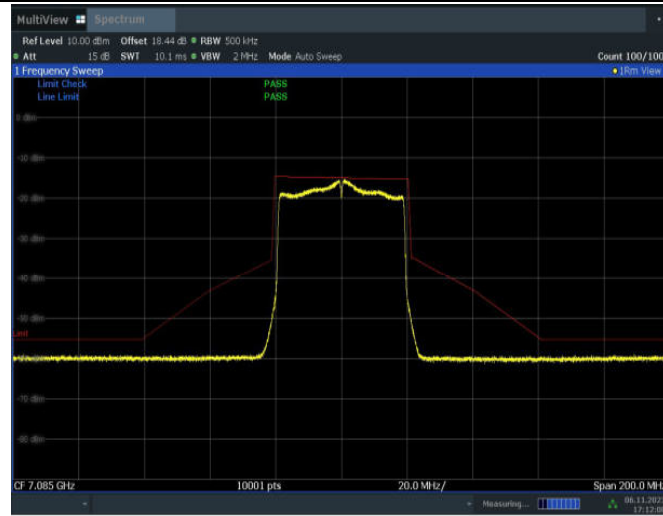
17:07:13 06.11.2023

11AX40MIMO_Ant2_6965

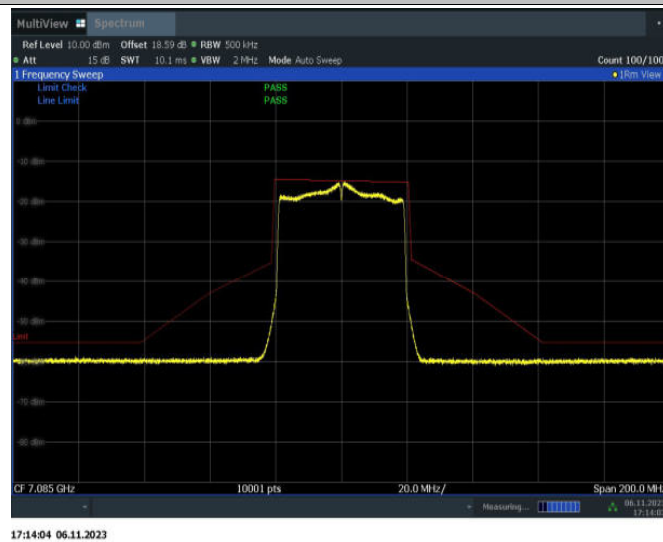


17:09:17 06.11.2023

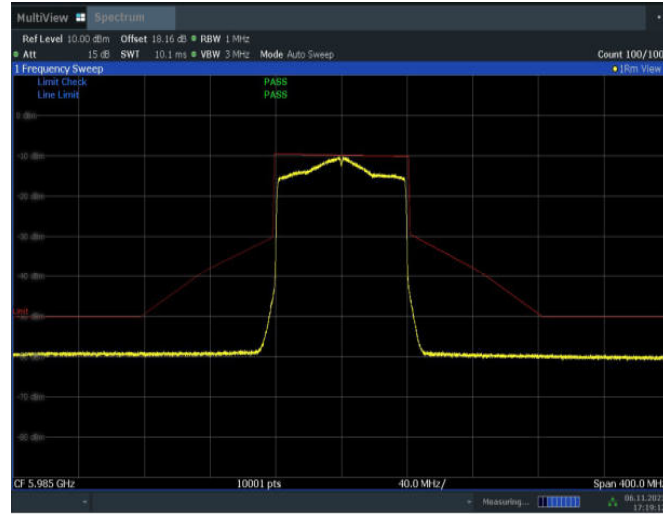
11AX40MIMO_Ant3_7085



11AX40MIMO_Ant2_7085

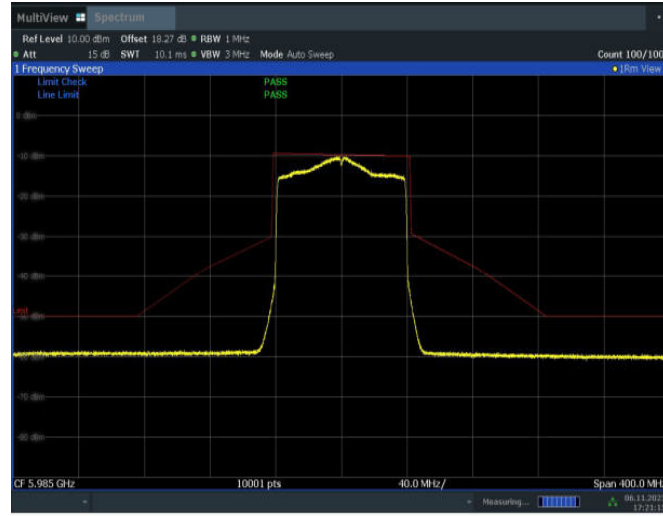


11AX80MIMO_Ant3_5985



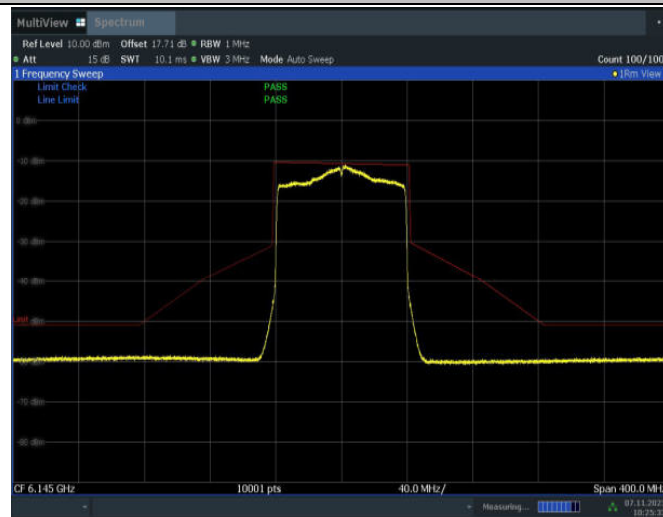
17:19:12 06.11.2023

11AX80MIMO_Ant2_5985



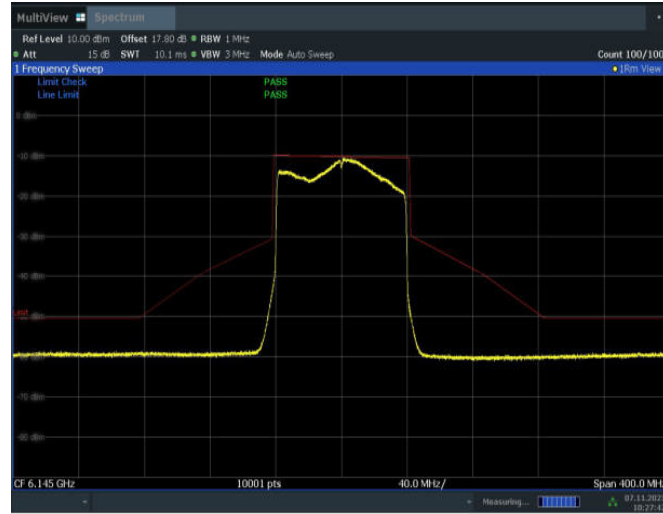
17:21:16 06.11.2023

11AX80MIMO_Ant3_6145

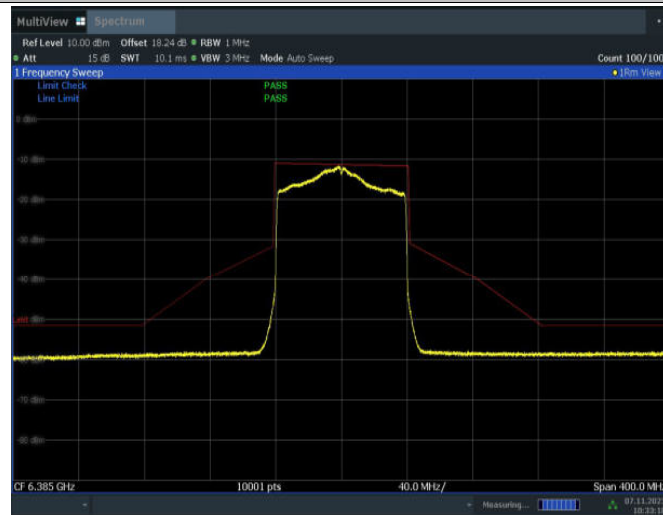


10:25:33 07.11.2023

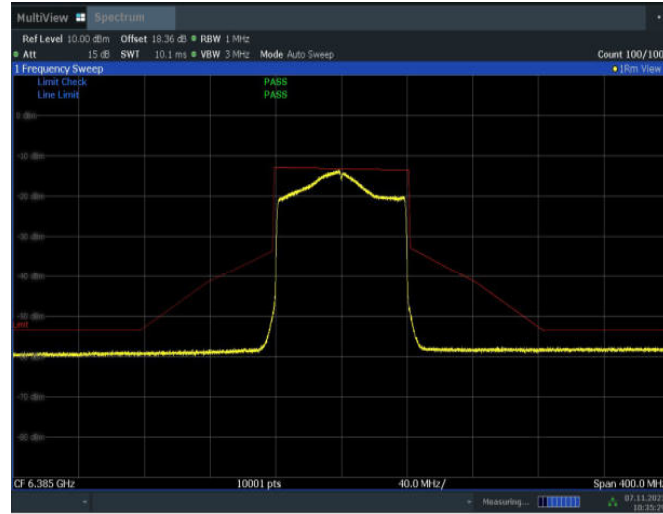
11AX80MIMO_Ant2_6145



11AX80MIMO_Ant3_6385

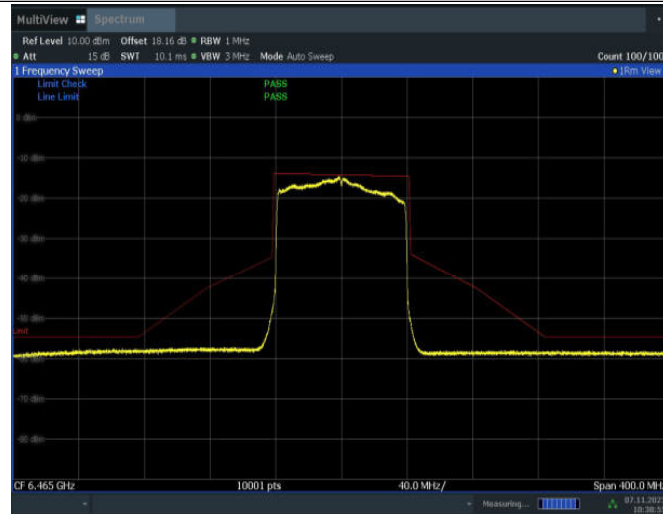


11AX80MIMO_Ant2_6385



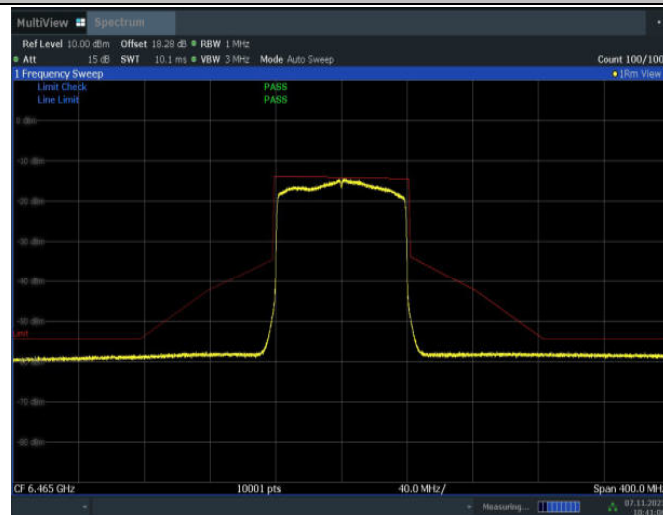
10:35:29 07.11.2023

11AX80MIMO_Ant3_6465



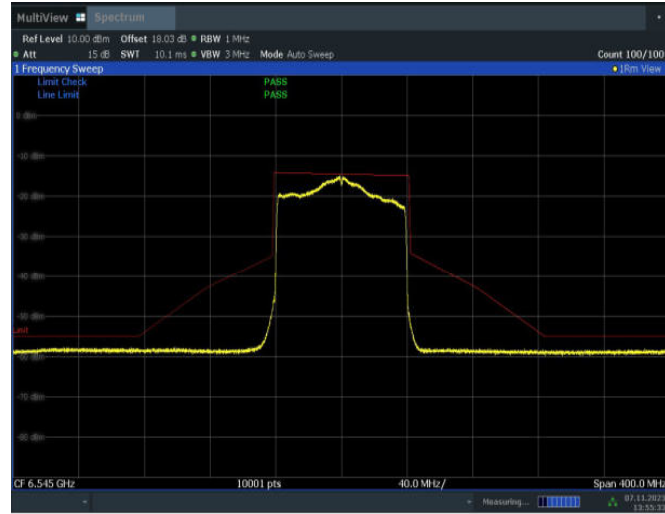
10:38:56 07.11.2023

11AX80MIMO_Ant2_6465



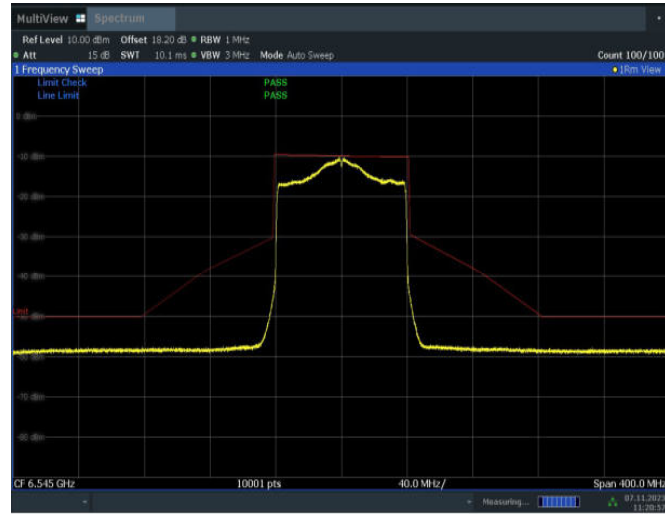
10:41:06 07.11.2023

11AX80MIMO_Ant3_6545



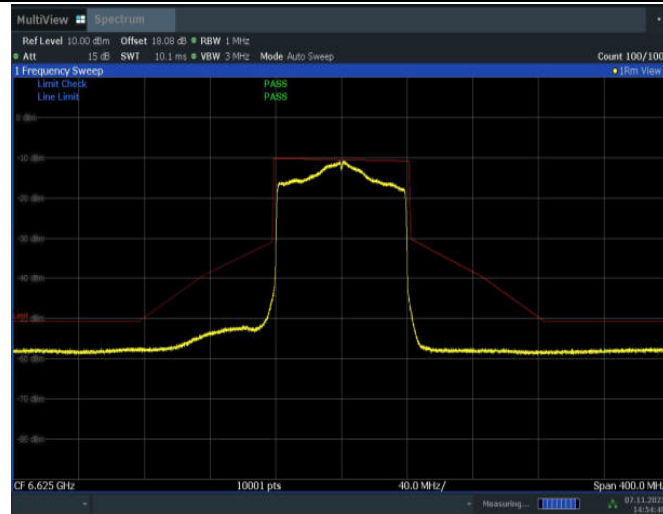
13:55:33 07.11.2023

11AX80MIMO_Ant2_6545



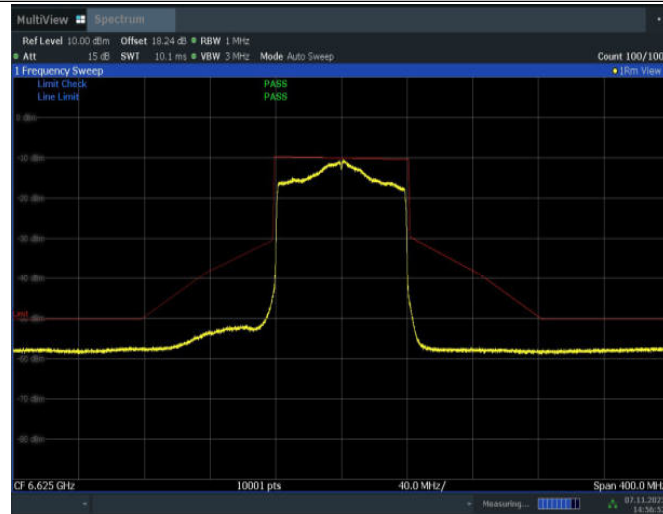
11:20:57 07.11.2023

11AX80MIMO_Ant3_6625



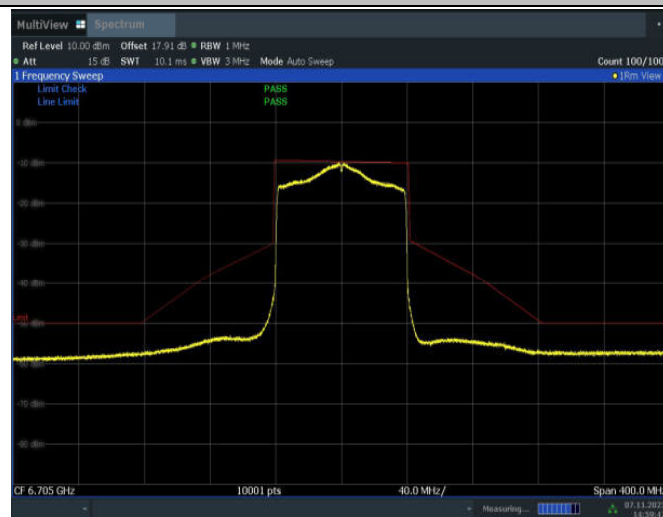
14:54:48 07.11.2023

11AX80MIMO_Ant2_6625



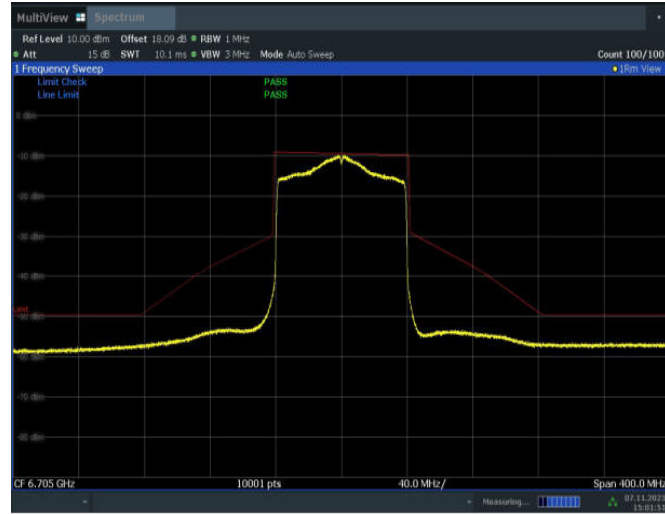
14:56:52 07.11.2023

11AX80MIMO_Ant3_6705

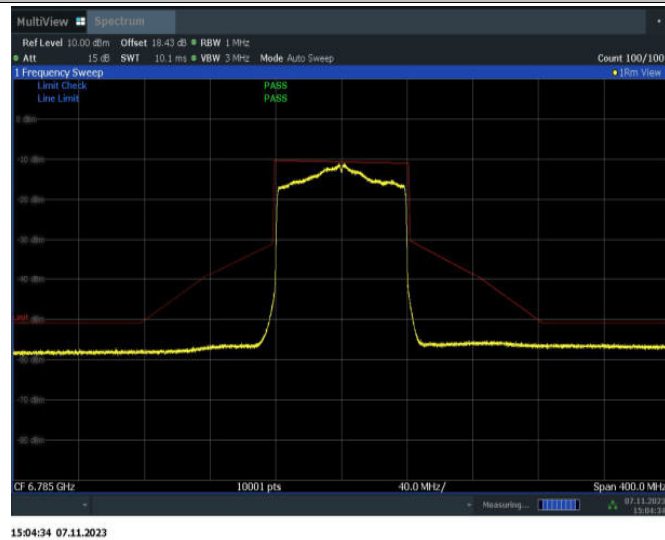


14:59:47 07.11.2023

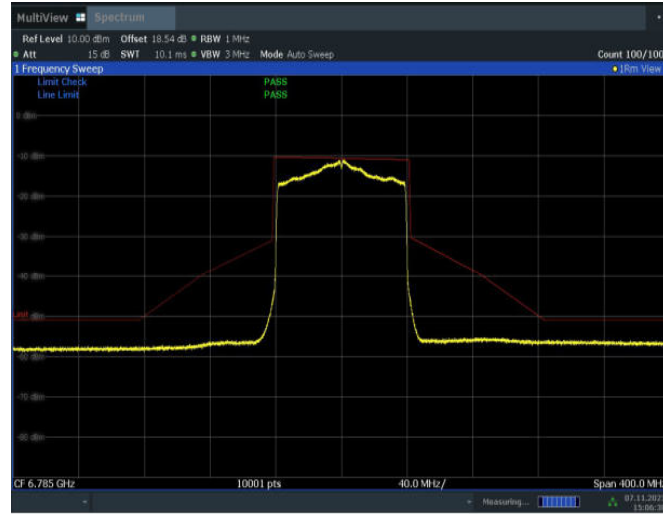
11AX80MIMO_Ant2_6705



11AX80MIMO_Ant3_6785

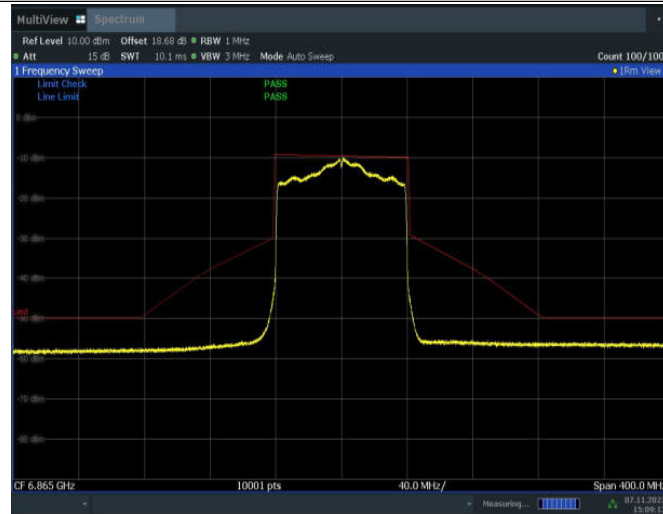


11AX80MIMO_Ant2_6785



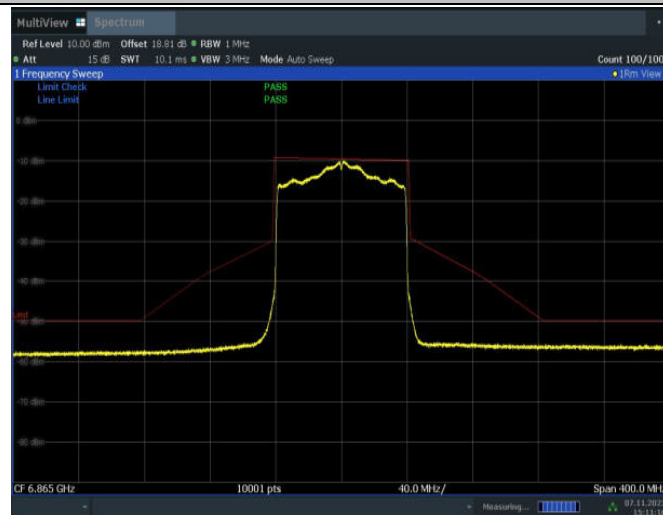
15:06:38 07.11.2023

11AX80MIMO_Ant3_6865



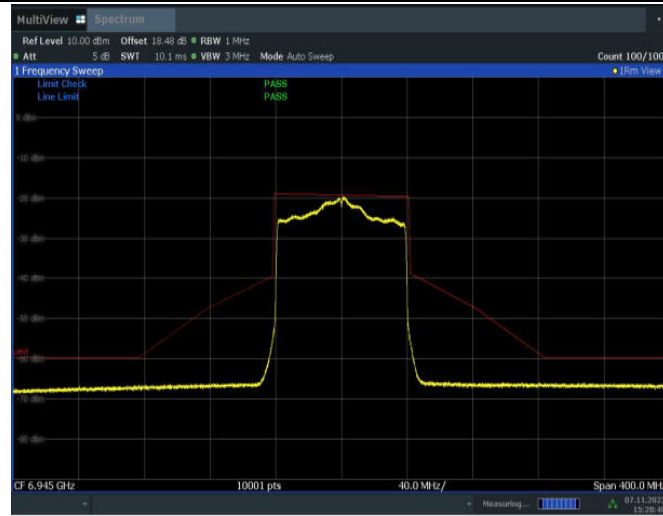
15:09:13 07.11.2023

11AX80MIMO_Ant2_6865

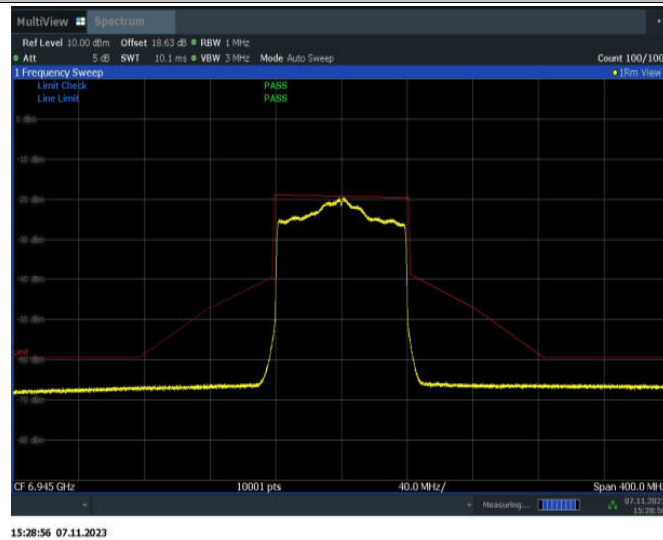


15:11:17 07.11.2023

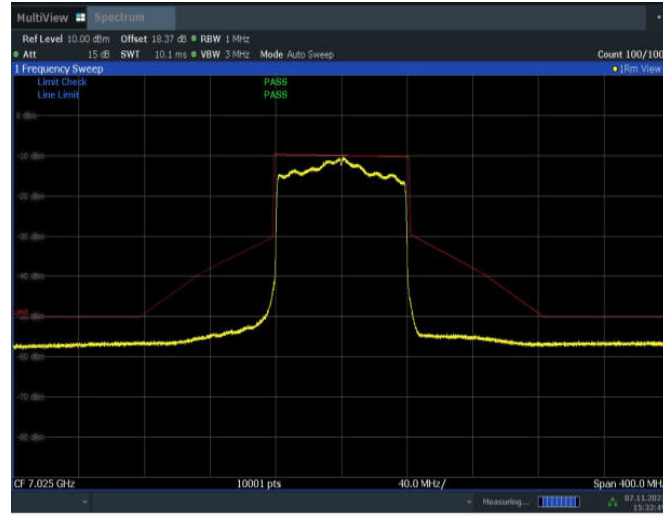
11AX80MIMO_Ant3_6945



11AX80MIMO_Ant2_6945

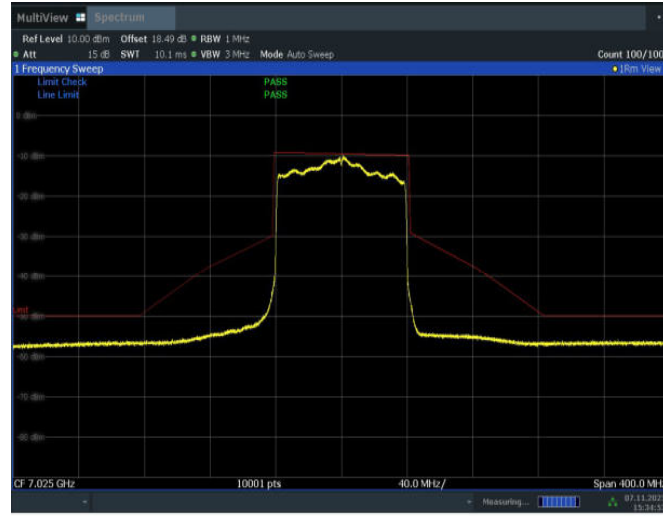


11AX80MIMO_Ant3_7025



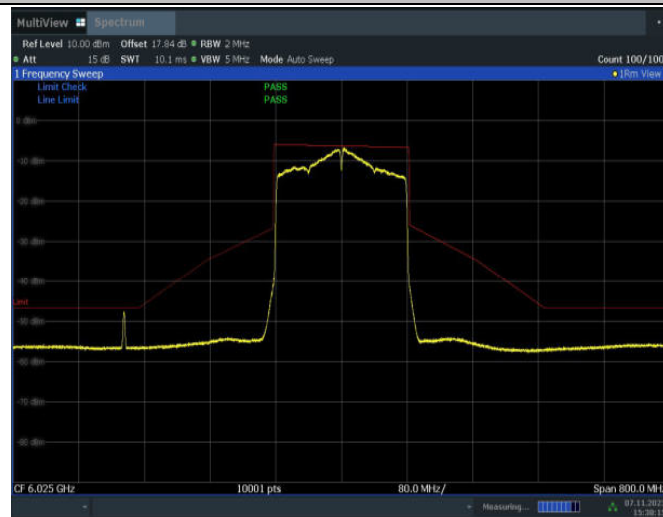
15:32:50 07.11.2023

11AX80MIMO_Ant2_7025



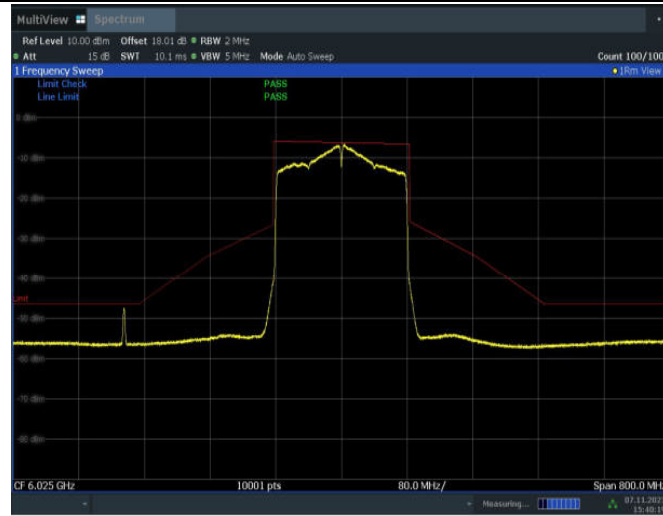
15:34:54 07.11.2023

11AX160MIMO_Ant3_6025

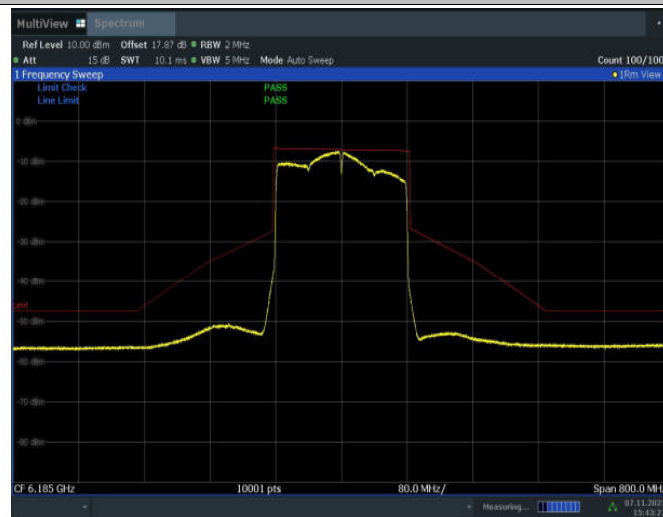


15:38:15 07.11.2023

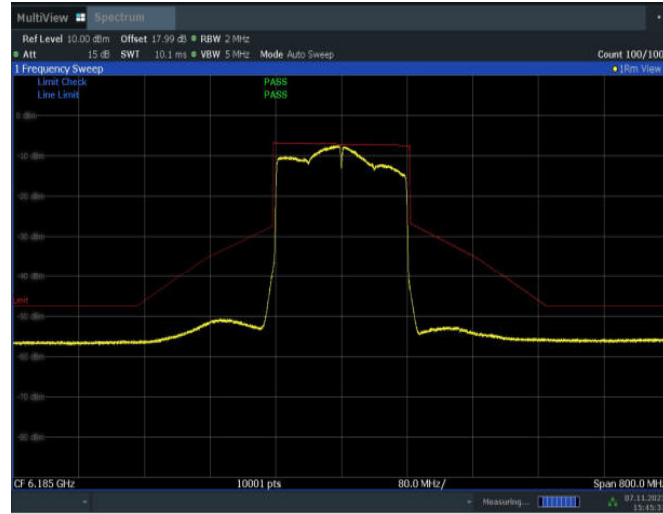
11AX160MIMO_Ant2_6025



11AX160MIMO_Ant3_6185

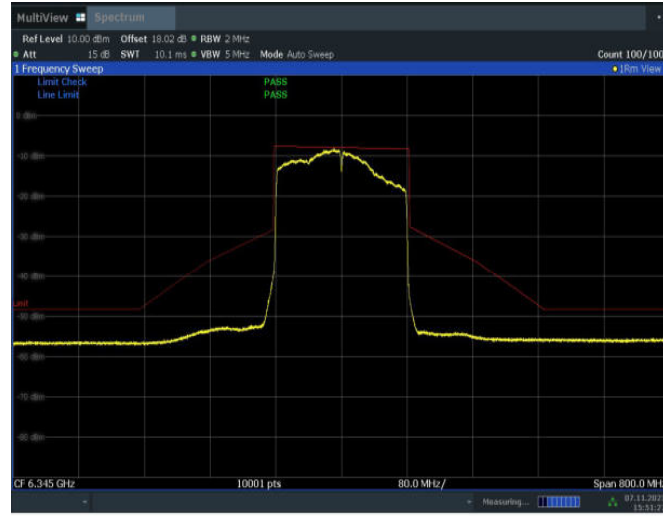


11AX160MIMO_Ant2_6185



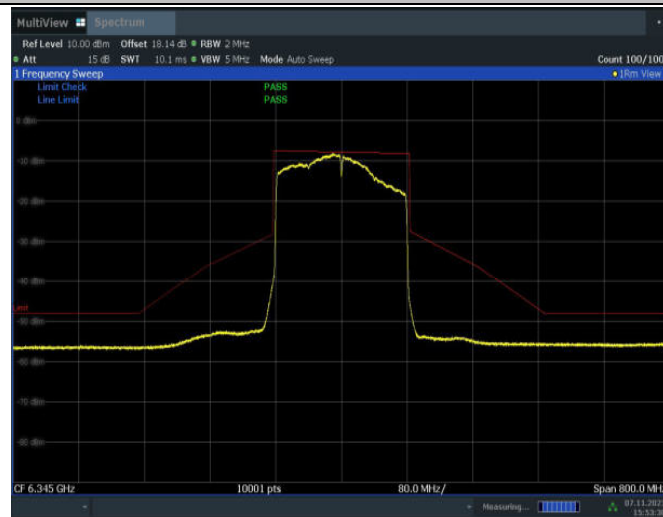
15:45:31 07.11.2023

11AX160MIMO_Ant3_6345



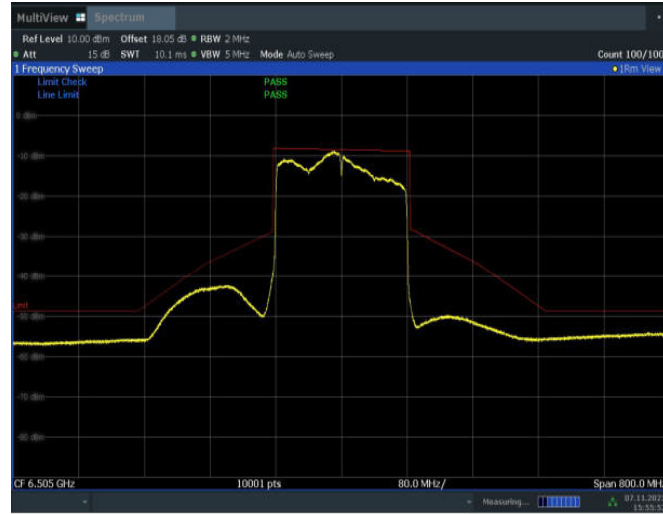
15:51:27 07.11.2023

11AX160MIMO_Ant2_6345

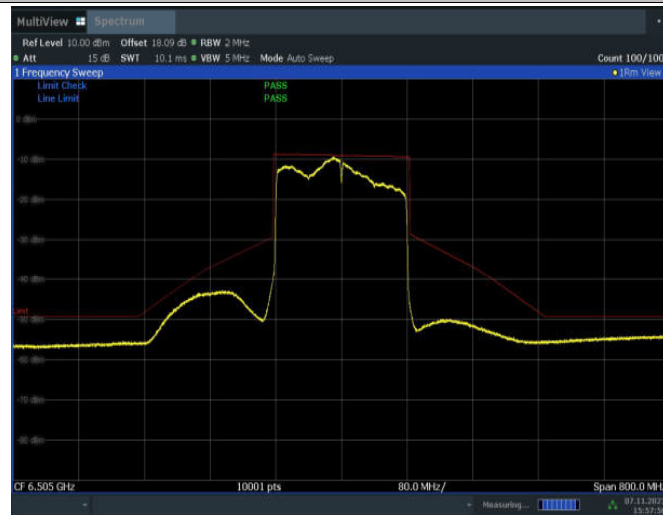


15:53:31 07.11.2023

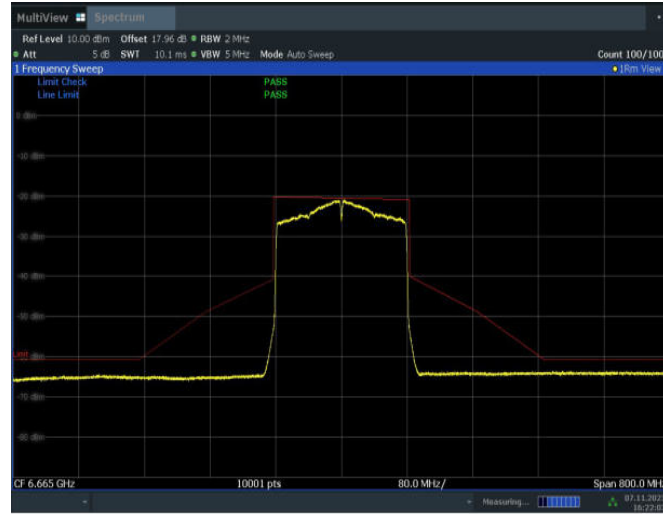
11AX160MIMO_Ant3_6505



11AX160MIMO_Ant2_6505

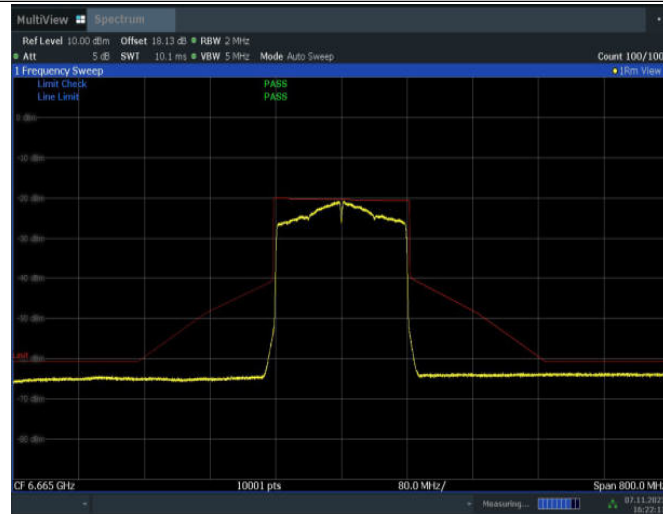


11AX160MIMO_Ant3_6665



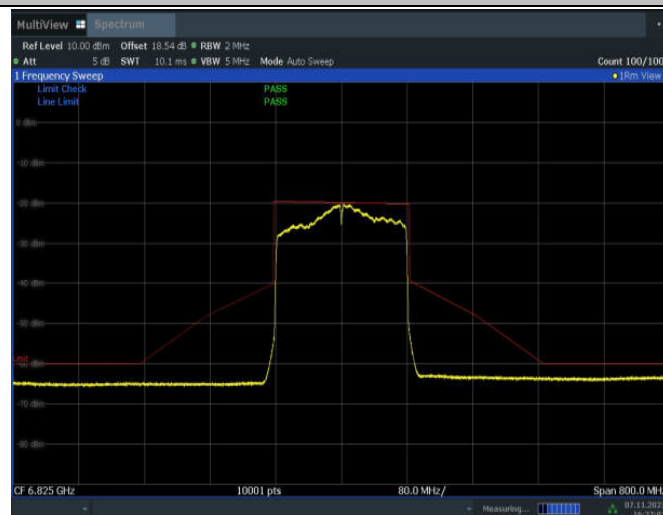
16:22:04 07.11.2023

11AX160MIMO_Ant2_6665



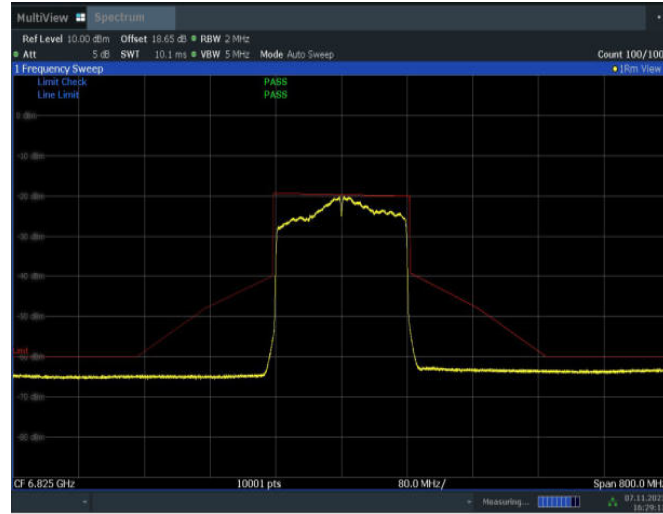
16:22:12 07.11.2023

11AX160MIMO_Ant3_6825

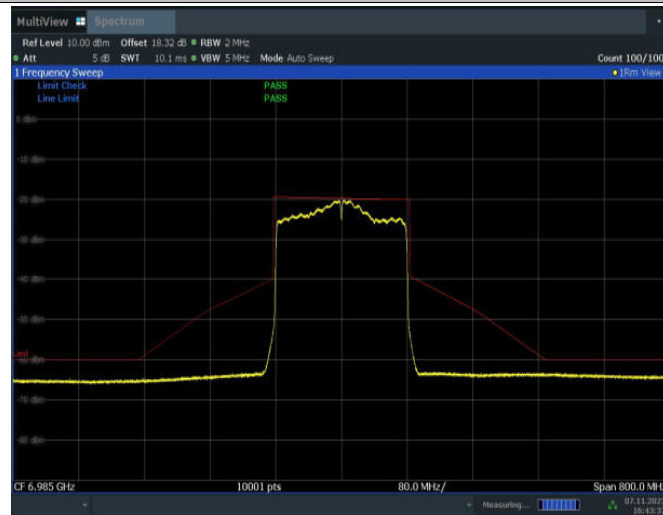


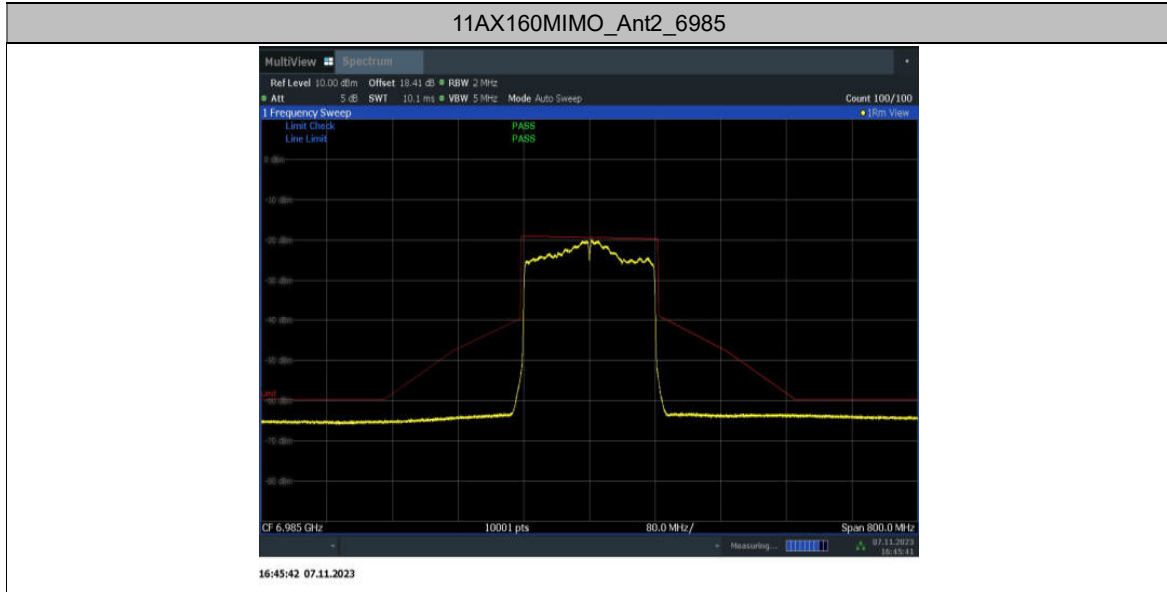
16:27:08 07.11.2023

11AX160MIMO_Ant2_6825



11AX160MIMO_Ant3_6985





A.8. Transmitter Spurious Emission

Measurement Limit:

Standard	Limit
FCC 47 CFR Part 15.407	-27 dBm/MHz

In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c)).

Limit in restricted band:

Frequency of emission (MHz)	Field strength(uV/m)	Field strength(dBuV/m)	Measurement distance(m)
30-88	100	40	3
88-216	150	43.5	3
216-960	200	46	3
Above 960	500	54	3

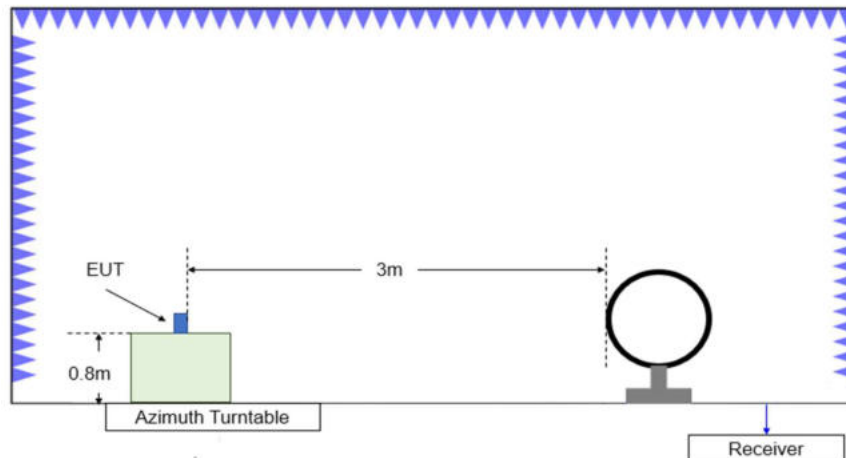
The measurement is made according to ANSI C63.10-2013 and KDB 789033.

Test Condition

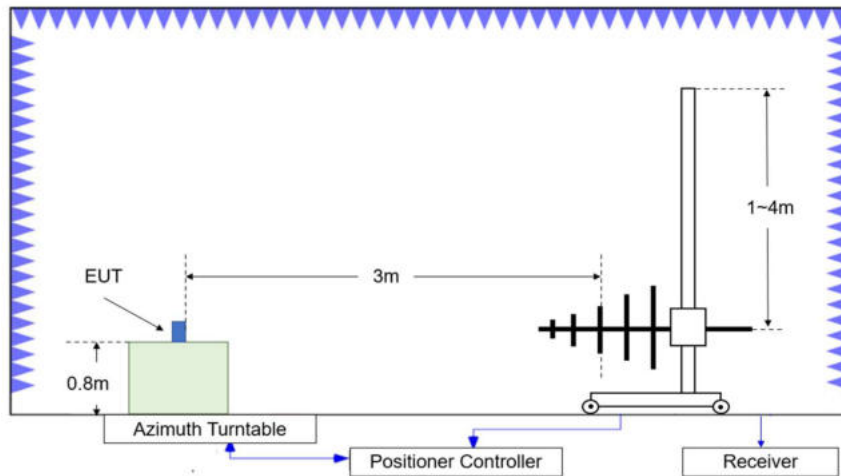
The EUT was placed on a non-conductive table. The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

Frequency of emission (MHz)	RBW/VBW	Sweep Time(s)
30-1000	100KHz/300KHz	5
1000-4000	1MHz/3MHz	15
4000-18000	1MHz/3MHz	40
18000-26500	1MHz/3MHz	20

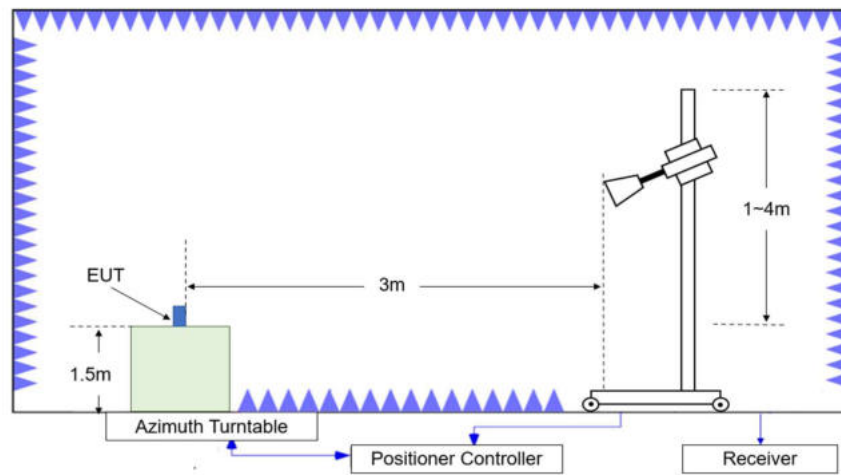
Test setup



Test Site Diagram (9kHz-30MHz)



Test Site Diagram (30MHz-1GHz)



Test Site Diagram (1GHz-40GHz)

Measurement Results:

Note:

A "reference path loss" is established and the A_{Rpl} is the attenuation of "reference path loss", and including the gain of receive antenna, the gain of the preamplifier, the cable loss.
 P_{Mea} is the field strength recorded from the instrument.

Test note

1. Investigation has been done on all modes and modulations/data rates. In total, three EUT elevation positions are measured (worst axis is X). Only the radiated emissions of the configuration that produced the worst case emissions are reported in this section.
2. Spurious emissions for all channels were investigated and almost the same below 1GHz. According to FCC 47 CFR §15.31, emission levels are not report much lower than the limit by over 20dB
3. Measurement frequencies were performed from 9 kHz to the 10th harmonic of highest fundamental frequency or 40GHz, whichever is lower.

Measurement Results:
AVERAGE Results:
802.11ax-20M full RU
Channel 1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17968.500	44.16	-29.55	45.95	27.76	54.00	9.84	H
17989.650	44.13	-29.55	45.95	27.73	54.00	9.87	H
14490.900	36.92	-30.35	41.90	25.37	54.00	17.08	V
14497.200	36.77	-30.35	41.90	25.22	54.00	17.23	H
5903.434	40.23	-27.15	34.30	33.08	68.20	27.97	H
5910.532	40.08	-27.15	34.30	32.93	68.20	28.12	V

Channel 45

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17981.100	44.16	-29.55	45.95	27.76	54.00	9.84	H
17964.900	43.81	-29.55	45.95	27.41	54.00	10.19	V
14499.450	37.14	-30.35	41.90	25.59	54.00	16.86	H
14485.050	37.03	-30.35	41.90	25.48	54.00	16.97	H
11776.500	34.84	-32.22	39.20	27.86	54.00	19.16	H
11784.150	34.79	-32.20	39.20	27.78	54.00	19.21	H

Channel 93

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17981.100	44.29	-29.55	45.95	27.89	54.00	9.71	H
17985.600	44.08	-29.55	45.95	27.68	54.00	9.92	V
14496.300	37.11	-30.35	41.90	25.56	54.00	16.89	H
14486.400	37.08	-30.35	41.90	25.53	54.00	16.92	V
11861.550	34.81	-32.13	39.15	27.79	54.00	19.19	V
11858.400	34.70	-32.13	39.15	27.68	54.00	19.30	V

Channel 97

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17979.300	44.02	-29.55	45.95	27.62	54.00	9.98	H
17994.150	43.88	-29.55	45.95	27.48	54.00	10.12	H
14482.350	37.13	-30.35	41.90	25.58	54.00	16.87	H
14499.000	36.78	-30.35	41.90	25.23	54.00	17.22	H
11866.950	34.47	-32.13	39.15	27.45	54.00	19.53	V
11851.200	34.42	-32.13	39.15	27.40	54.00	19.58	V

Channel 105

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17980.650	43.97	-29.55	45.95	27.57	54.00	10.03	V
17982.000	43.75	-29.55	45.95	27.35	54.00	10.25	V
14491.800	36.73	-30.35	41.90	25.18	54.00	17.27	V
14493.150	36.58	-30.35	41.90	25.03	54.00	17.42	V
11867.400	34.67	-32.13	39.15	27.65	54.00	19.33	H
11881.350	34.60	-32.63	39.10	28.13	54.00	19.40	V

Channel 113

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17989.650	43.76	-29.55	45.95	27.36	54.00	10.24	V
17964.450	43.75	-29.55	45.95	27.35	54.00	10.25	H
14496.750	36.96	-30.35	41.90	25.41	54.00	17.04	V
14497.650	36.78	-30.35	41.90	25.23	54.00	17.22	H
11767.500	34.57	-32.22	39.20	27.59	54.00	19.43	H
11862.450	34.45	-32.13	39.15	27.43	54.00	19.55	V

Channel 117

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17983.350	43.99	-29.55	45.95	27.59	54.00	10.01	H
17955.900	43.96	-29.55	45.95	27.56	54.00	10.04	V
14495.850	36.71	-30.35	41.90	25.16	54.00	17.29	V
14489.100	36.64	-30.35	41.90	25.09	54.00	17.36	H
11751.300	34.27	-32.22	39.20	27.29	54.00	19.73	H
11808.900	34.17	-32.20	39.20	27.16	54.00	19.83	V

Channel 149

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17980.200	43.87	-29.55	45.95	27.47	54.00	10.13	V
17997.750	43.79	-29.55	45.95	27.39	54.00	10.21	V
14485.950	36.55	-30.35	41.90	25.00	54.00	17.45	V
14483.700	36.53	-30.35	41.90	24.98	54.00	17.47	V
11860.650	34.43	-32.13	39.15	27.41	54.00	19.57	H
11853.900	34.19	-32.13	39.15	27.17	54.00	19.81	V

Channel 181

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17981.100	44.45	-29.55	45.95	28.05	54.00	9.55	H
17981.550	43.73	-29.55	45.95	27.33	54.00	10.27	V
14495.400	37.08	-30.35	41.90	25.53	54.00	16.92	H
14486.400	36.71	-30.35	41.90	25.16	54.00	17.29	V
11866.950	34.51	-32.13	39.15	27.49	54.00	19.49	V
11867.850	34.45	-32.13	39.15	27.43	54.00	19.55	V

Channel 185

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17971.200	44.51	-29.55	45.95	28.11	54.00	9.49	V
17946.900	44.09	-29.55	45.95	27.69	54.00	9.91	V
14484.600	37.27	-30.35	41.90	25.72	54.00	16.73	H
14487.300	37.19	-30.35	41.90	25.64	54.00	16.81	H
11851.650	35.24	-32.13	39.15	28.22	54.00	18.76	V
11849.400	35.22	-32.13	39.15	28.20	54.00	18.78	V

Channel 209

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17968.500	43.94	-29.55	45.95	27.54	54.00	10.06	V
17997.300	43.90	-29.55	45.95	27.50	54.00	10.10	H
14485.050	37.12	-30.35	41.90	25.57	54.00	16.88	V
14498.550	37.09	-30.35	41.90	25.54	54.00	16.91	V
11863.350	35.39	-32.13	39.15	28.37	54.00	18.61	H
11857.950	35.33	-32.13	39.15	28.31	54.00	18.67	V

Channel 233

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17997.300	44.14	-29.55	45.95	27.74	54.00	9.86	H
17972.550	43.95	-29.55	45.95	27.55	54.00	10.05	V
14488.650	37.30	-30.35	41.90	25.75	54.00	16.70	V
14499.000	37.18	-30.35	41.90	25.63	54.00	16.82	V
7125.027	65.99	-25.93	35.70	56.22	68.20	2.21	V
7125.060	65.14	-25.93	35.70	55.37	68.20	3.06	H

802.11ax-40M full RU

Channel 3

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17982.900	43.72	-29.55	45.95	27.32	54.00	10.28	H
17964.900	43.69	-29.55	45.95	27.29	54.00	10.31	H
14484.600	37.06	-30.35	41.90	25.51	54.00	16.94	H
14499.900	36.94	-30.35	41.90	25.39	54.00	17.06	V
5912.548	40.29	-27.15	34.30	33.14	68.20	27.91	H
5914.718	40.28	-27.15	34.30	33.13	68.20	27.92	H

Channel 43

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17977.500	43.94	-29.55	45.95	27.54	54.00	10.06	V
17981.550	43.84	-29.55	45.95	27.44	54.00	10.16	H
14496.300	37.02	-30.35	41.90	25.47	54.00	16.98	H
14488.650	36.95	-30.35	41.90	25.40	54.00	17.05	V
11867.850	35.15	-32.13	39.15	28.13	54.00	18.85	V
11787.750	34.89	-32.20	39.20	27.88	54.00	19.11	H

Channel 91

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17997.750	44.15	-29.55	45.95	27.75	54.00	9.85	V
17976.600	44.06	-29.55	45.95	27.66	54.00	9.94	V
14496.750	37.27	-30.35	41.90	25.72	54.00	16.73	H
14492.700	36.87	-30.35	41.90	25.32	54.00	17.13	V
11840.400	34.90	-32.13	39.15	27.88	54.00	19.10	H
11757.150	34.74	-32.22	39.20	27.76	54.00	19.26	V

Channel 99

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17978.400	43.98	-29.55	45.95	27.58	54.00	10.02	H
17976.600	43.87	-29.55	45.95	27.47	54.00	10.13	H
14492.700	36.76	-30.35	41.90	25.21	54.00	17.24	V
14481.000	36.65	-30.35	41.90	25.10	54.00	17.35	H
11856.600	34.52	-32.13	39.15	27.50	54.00	19.48	H
11830.050	34.41	-32.20	39.20	27.40	54.00	19.59	H

Channel 107

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17986.050	43.82	-29.55	45.95	27.42	54.00	10.18	V
17987.400	43.69	-29.55	45.95	27.29	54.00	10.31	H
14499.000	36.76	-30.35	41.90	25.21	54.00	17.24	H
14498.550	36.71	-30.35	41.90	25.16	54.00	17.29	H
11854.350	34.56	-32.13	39.15	27.54	54.00	19.44	H
11774.250	34.45	-32.22	39.20	27.47	54.00	19.55	H

Channel 115

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17977.950	44.14	-29.55	45.95	27.74	54.00	9.86	V
17994.600	44.04	-29.55	45.95	27.64	54.00	9.96	H
14489.550	36.77	-30.35	41.90	25.22	54.00	17.23	H
14494.050	36.69	-30.35	41.90	25.14	54.00	17.31	V
11858.850	34.36	-32.13	39.15	27.34	54.00	19.64	H
11871.000	34.32	-32.13	39.15	27.30	54.00	19.68	H

Channel 123

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17968.050	43.84	-29.55	45.95	27.44	54.00	10.16	H
17990.550	43.68	-29.55	45.95	27.28	54.00	10.32	H
14491.800	36.63	-30.35	41.90	25.08	54.00	17.37	H
14499.900	36.54	-30.35	41.90	24.99	54.00	17.46	V
11853.900	34.07	-32.13	39.15	27.05	54.00	19.93	V
11857.500	34.07	-32.13	39.15	27.05	54.00	19.93	H

Channel 155

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17973.900	44.24	-29.55	45.95	27.84	54.00	9.76	H
17996.400	43.85	-29.55	45.95	27.45	54.00	10.15	H
14493.150	36.70	-30.35	41.90	25.15	54.00	17.30	V
14487.750	36.56	-30.35	41.90	25.01	54.00	17.44	H
11768.400	34.36	-32.22	39.20	27.38	54.00	19.64	V
11854.350	34.22	-32.13	39.15	27.20	54.00	19.78	V

Channel 179

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17982.900	43.76	-29.55	45.95	27.36	54.00	10.24	H
17991.000	43.72	-29.55	45.95	27.32	54.00	10.28	H
14498.550	36.58	-30.35	41.90	25.03	54.00	17.42	V
14494.950	36.52	-30.35	41.90	24.97	54.00	17.48	V
11768.400	34.27	-32.22	39.20	27.29	54.00	19.73	V
11856.600	34.24	-32.13	39.15	27.22	54.00	19.76	H

Channel 187

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17985.600	43.88	-29.55	45.95	27.48	54.00	10.12	H
17976.150	43.87	-29.55	45.95	27.47	54.00	10.13	V
14480.100	37.29	-30.35	41.90	25.74	54.00	16.71	H
14480.550	37.15	-30.35	41.90	25.60	54.00	16.85	V
11854.350	35.27	-32.13	39.15	28.25	54.00	18.73	H
11748.150	35.21	-32.22	39.20	28.23	54.00	18.79	V

Channel 211

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17982.900	44.05	-29.55	45.95	27.65	54.00	9.95	H
17995.500	43.95	-29.55	45.95	27.55	54.00	10.05	V
14499.450	37.35	-30.35	41.90	25.80	54.00	16.65	V
14470.200	37.20	-30.35	41.90	25.65	54.00	16.80	V
11865.600	35.23	-32.13	39.15	28.21	54.00	18.77	V
11860.650	35.19	-32.13	39.15	28.17	54.00	18.81	V

Channel 227

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17994.150	43.99	-29.55	45.95	27.59	54.00	10.01	H
17993.250	43.91	-29.55	45.95	27.51	54.00	10.09	H
14490.000	37.16	-30.35	41.90	25.61	54.00	16.84	V
14493.150	37.16	-30.35	41.90	25.61	54.00	16.84	H
7225.644	44.11	-25.94	36.20	33.85	68.20	24.09	H
7227.063	44.04	-25.94	36.20	33.78	68.20	24.16	H

802.11ax-80M full RU
Channel 7

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17980.200	43.71	-29.55	45.95	27.31	54.00	10.29	V
17979.300	43.69	-29.55	45.95	27.29	54.00	10.31	H
14493.600	37.14	-30.35	41.90	25.59	54.00	16.86	H
14496.750	36.89	-30.35	41.90	25.34	54.00	17.11	V
5907.494	40.45	-27.15	34.30	33.30	68.20	27.75	H
5908.124	40.39	-27.15	34.30	33.24	68.20	27.81	V

Channel 39

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17977.500	44.00	-29.55	45.95	27.60	54.00	10.00	V
17963.100	43.94	-29.55	45.95	27.54	54.00	10.06	H
14499.900	37.06	-30.35	41.90	25.51	54.00	16.94	V
14498.100	36.99	-30.35	41.90	25.44	54.00	17.01	H
11870.550	34.68	-32.13	39.15	27.66	54.00	19.32	V
11855.250	34.59	-32.13	39.15	27.57	54.00	19.41	H

Channel 87

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17986.050	43.87	-29.55	45.95	27.47	54.00	10.13	H
17965.350	43.83	-29.55	45.95	27.43	54.00	10.17	V
14486.400	36.92	-30.35	41.90	25.37	54.00	17.08	V
14480.550	36.74	-30.35	41.90	25.19	54.00	17.26	V
11768.850	34.74	-32.22	39.20	27.76	54.00	19.26	H
11780.100	34.74	-32.22	39.20	27.76	54.00	19.26	V

Channel 103

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17980.200	43.65	-29.55	45.95	27.25	54.00	10.35	H
17988.300	43.64	-29.55	45.95	27.24	54.00	10.36	H
14494.500	36.85	-30.35	41.90	25.30	54.00	17.15	V
14498.550	36.67	-30.35	41.90	25.12	54.00	17.33	V
11856.150	34.73	-32.13	39.15	27.71	54.00	19.27	V
11869.650	34.42	-32.13	39.15	27.40	54.00	19.58	H

Channel 119

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17968.050	43.84	-29.55	45.95	27.44	54.00	10.16	H
17991.000	43.64	-29.55	45.95	27.24	54.00	10.36	V
14494.500	36.83	-30.35	41.90	25.28	54.00	17.17	H
14499.900	36.81	-30.35	41.90	25.26	54.00	17.19	V
11856.600	33.98	-32.13	39.15	26.96	54.00	20.02	H
11780.550	33.90	-32.22	39.20	26.92	54.00	20.10	H

Channel 151

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17968.950	43.64	-29.55	45.95	27.24	54.00	10.36	H
17989.650	43.62	-29.55	45.95	27.22	54.00	10.38	V
14498.100	36.72	-30.35	41.90	25.17	54.00	17.28	V
14494.050	36.69	-30.35	41.90	25.14	54.00	17.31	V
11779.200	34.04	-32.22	39.20	27.06	54.00	19.96	V
11782.350	34.03	-32.20	39.20	27.02	54.00	19.97	H

Channel 183

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17968.050	44.24	-29.55	45.95	27.84	54.00	9.76	H
17964.900	43.86	-29.55	45.95	27.46	54.00	10.14	H
14478.750	36.72	-30.35	41.90	25.17	54.00	17.28	H
14488.200	36.60	-30.35	41.90	25.05	54.00	17.40	H
11854.350	34.19	-32.13	39.15	27.17	54.00	19.81	V
11845.350	34.05	-32.13	39.15	27.03	54.00	19.95	H

Channel 199

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17980.650	44.07	-29.55	45.95	27.67	54.00	9.93	V
17976.150	44.05	-29.55	45.95	27.65	54.00	9.95	H
14489.100	37.08	-30.35	41.90	25.53	54.00	16.92	V
14496.750	37.05	-30.35	41.90	25.50	54.00	16.95	V
11862.900	35.05	-32.13	39.15	28.03	54.00	18.95	V
11869.650	35.00	-32.13	39.15	27.98	54.00	19.00	V

Channel 215

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17987.850	43.95	-29.55	45.95	27.55	54.00	10.05	H
17985.150	43.94	-29.55	45.95	27.54	54.00	10.06	H
14495.850	37.23	-30.35	41.90	25.68	54.00	16.77	H
14494.500	37.13	-30.35	41.90	25.58	54.00	16.87	H
7214.820	43.65	-25.94	36.20	33.39	68.20	24.55	V
7222.707	43.65	-25.94	36.20	33.39	68.20	24.55	V

802.11ax-160M full RU

Channel 15

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17998.650	43.74	-29.55	45.95	27.34	54.00	10.26	V
17984.250	43.68	-29.55	45.95	27.28	54.00	10.32	V
14494.050	37.10	-30.35	41.90	25.55	54.00	16.90	H
14483.700	37.03	-30.35	41.90	25.48	54.00	16.97	V
5868.672	57.41	-27.12	34.20	50.33	68.20	10.79	H
5873.782	57.10	-27.12	34.20	50.02	68.20	11.10	H

Channel 47

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17979.750	44.18	-29.55	45.95	27.78	54.00	9.82	H
17989.200	43.76	-29.55	45.95	27.36	54.00	10.24	V
14497.200	37.00	-30.35	41.90	25.45	54.00	17.00	H
14499.450	36.74	-30.35	41.90	25.19	54.00	17.26	V
11869.650	34.73	-32.13	39.15	27.71	54.00	19.27	V
11862.900	34.72	-32.13	39.15	27.70	54.00	19.28	H

Channel 79

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17961.300	43.74	-29.55	45.95	27.34	54.00	10.26	H
17983.350	43.71	-29.55	45.95	27.31	54.00	10.29	V
14481.900	36.80	-30.35	41.90	25.25	54.00	17.20	V
14499.450	36.74	-30.35	41.90	25.19	54.00	17.26	H
12187.350	34.63	-31.97	38.90	27.70	54.00	19.37	V
11856.600	34.51	-32.13	39.15	27.49	54.00	19.49	H

Channel 143

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17962.200	44.07	-29.55	45.95	27.67	54.00	9.93	V
17965.350	43.72	-29.55	45.95	27.32	54.00	10.28	H
14491.350	36.41	-30.35	41.90	24.86	54.00	17.59	H
14493.150	36.24	-30.35	41.90	24.69	54.00	17.76	H
11866.050	33.79	-32.13	39.15	26.77	54.00	20.21	H
12657.150	33.76	-31.89	39.40	26.25	54.00	20.24	V

Channel 207

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17964.000	44.13	-29.55	45.95	27.73	54.00	9.87	H
17992.800	43.84	-29.55	45.95	27.44	54.00	10.16	V
14485.050	36.60	-30.35	41.90	25.05	54.00	17.40	V
14495.400	36.58	-30.35	41.90	25.03	54.00	17.42	H
7227.888	43.89	-25.90	36.40	33.39	68.20	24.31	V
7202.709	43.80	-25.94	36.20	33.54	68.20	24.40	H

PEAK Results:
802.11ax-20M full RU
Channel 1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17990.550	55.13	-29.55	45.95	38.73	74.00	18.87	V
17957.250	54.89	-29.55	45.95	38.49	74.00	19.11	V
14257.800	49.20	-30.64	41.80	38.04	88.20	39.00	H
13671.450	49.19	-31.08	41.00	39.27	88.20	39.01	V
5924.728	51.99	-27.15	34.30	44.84	88.20	36.21	H
5907.858	51.58	-27.15	34.30	44.43	88.20	36.62	V

Channel 45

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17964.000	55.37	-29.55	45.95	38.97	74.00	18.63	H
17988.300	54.97	-29.55	45.95	38.57	74.00	19.03	V
14674.950	48.87	-30.35	41.50	37.72	88.20	39.33	H
14564.700	48.59	-29.81	41.90	36.50	88.20	39.61	H
13075.200	46.02	-31.67	40.20	37.49	88.20	42.18	H
11868.750	45.73	-32.13	39.15	38.71	74.00	28.27	H

Channel 93

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17904.600	54.95	-29.55	45.95	38.55	74.00	19.05	H
17972.100	54.49	-29.55	45.95	38.09	74.00	19.51	V
14567.400	49.24	-29.81	41.90	37.15	88.20	38.96	H
14199.750	48.80	-30.97	41.70	38.07	88.20	39.40	H
11752.650	45.85	-32.22	39.20	38.87	74.00	28.15	V
11844.450	45.77	-32.13	39.15	38.75	74.00	28.23	H

Channel 97

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17987.850	54.97	-29.55	45.95	38.57	74.00	19.03	V
17943.750	54.59	-29.55	45.95	38.19	74.00	19.41	V
14165.550	49.36	-30.97	41.70	38.63	88.20	38.84	V
14599.800	49.24	-29.81	41.90	37.15	88.20	38.96	H
12915.450	45.54	-31.37	40.00	36.91	88.20	42.66	H
13070.250	45.46	-31.67	40.20	36.93	88.20	42.74	H

Channel 105

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17956.350	54.47	-29.55	45.95	38.07	74.00	19.53	H
17993.250	54.35	-29.55	45.95	37.95	74.00	19.65	V
14701.950	49.06	-30.35	41.50	37.91	88.20	39.14	V
13729.950	48.76	-31.33	41.10	38.99	88.20	39.44	H
11845.350	45.89	-32.13	39.15	38.87	74.00	28.11	H
12204.000	45.65	-31.97	38.90	38.72	74.00	28.35	V

Channel 113

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17980.650	54.42	-29.55	45.95	38.02	74.00	19.58	V
17957.250	54.28	-29.55	45.95	37.88	74.00	19.72	H
14567.850	48.87	-29.81	41.90	36.78	88.20	39.33	V
14505.300	48.47	-30.71	41.90	37.28	88.20	39.73	V
13059.000	45.60	-30.95	40.15	36.40	88.20	42.60	H
11865.150	45.53	-32.13	39.15	38.51	74.00	28.47	H

Channel 117

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17998.200	55.45	-29.55	45.95	39.05	74.00	18.55	H
17968.950	54.79	-29.55	45.95	38.39	74.00	19.21	H
14554.800	48.59	-29.81	41.90	36.50	88.20	39.61	V
14200.650	48.52	-30.97	41.70	37.79	88.20	39.68	H
13032.450	46.02	-30.95	40.15	36.82	88.20	42.18	H
13031.550	45.98	-30.95	40.15	36.78	88.20	42.22	V

Channel 149

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17984.700	55.18	-29.55	45.95	38.78	74.00	18.82	V
17941.500	54.32	-29.55	45.95	37.92	74.00	19.68	H
14180.400	49.10	-30.97	41.70	38.37	88.20	39.10	H
14679.000	48.82	-30.35	41.50	37.67	88.20	39.38	V
12254.850	45.69	-32.39	38.95	39.13	74.00	28.31	H
12050.550	45.12	-31.75	38.95	37.92	74.00	28.88	V

Channel 181

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17985.600	54.83	-29.55	45.95	38.43	74.00	19.17	H
17963.550	54.76	-29.55	45.95	38.36	74.00	19.24	H
14123.250	48.79	-31.00	41.70	38.09	88.20	39.41	H
14698.350	48.47	-30.35	41.50	37.32	88.20	39.73	V
11923.200	45.32	-32.63	39.10	38.85	74.00	28.68	H
12699.000	45.28	-31.50	39.50	37.28	74.00	28.72	H

Channel 185

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17932.950	54.80	-29.55	45.95	38.40	74.00	19.20	H
17991.000	54.63	-29.55	45.95	38.23	74.00	19.37	V
14567.400	49.39	-29.81	41.90	37.30	88.20	38.81	H
14089.500	49.29	-30.70	41.70	38.29	88.20	38.91	V
12672.000	46.41	-31.89	39.40	38.90	74.00	27.59	H
11797.650	46.21	-32.20	39.20	39.20	74.00	27.79	V

Channel 209

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17995.500	55.58	-29.55	45.95	39.18	74.00	18.42	V
17949.600	55.24	-29.55	45.95	38.84	74.00	18.76	V
14586.300	49.41	-29.81	41.90	37.32	88.20	38.79	H
14512.950	49.13	-30.71	41.90	37.94	88.20	39.07	H
12801.150	47.55	-31.36	39.80	39.11	88.20	40.65	V
12799.350	46.37	-31.36	39.80	37.93	88.20	41.83	H

Channel 233

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17996.400	54.83	-29.55	45.95	38.43	74.00	19.17	H
17973.450	54.53	-29.55	45.95	38.13	74.00	19.47	H
15109.650	49.06	-30.31	39.90	39.47	88.20	39.14	H
14085.450	48.90	-30.70	41.70	37.90	88.20	39.30	V
7125.060	74.47	-25.93	35.70	64.70	88.20	13.73	H
7125.126	73.40	-25.93	35.70	63.63	88.20	14.80	H

802.11ax-40M full RU

Channel 3

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17959.500	54.91	-29.55	45.95	38.51	74.00	19.09	H
17999.100	54.65	-29.55	45.95	38.25	74.00	19.35	H
13704.300	49.02	-31.08	41.00	39.10	88.20	39.18	H
14348.700	48.50	-30.62	41.85	37.27	88.20	39.70	V
5909.426	52.15	-27.15	34.30	45.00	88.20	36.05	V
5904.624	52.11	-27.15	34.30	44.96	88.20	36.09	V