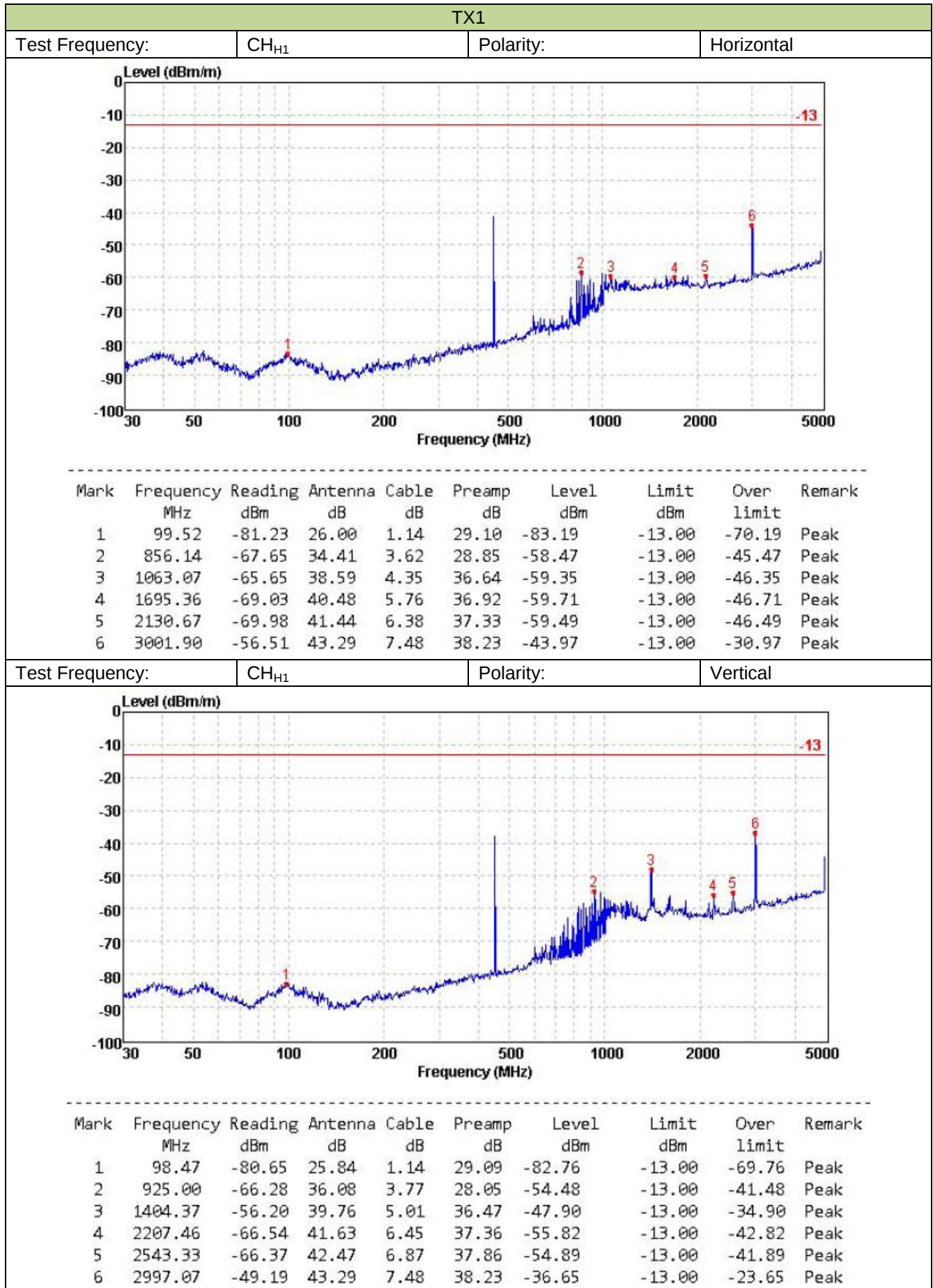
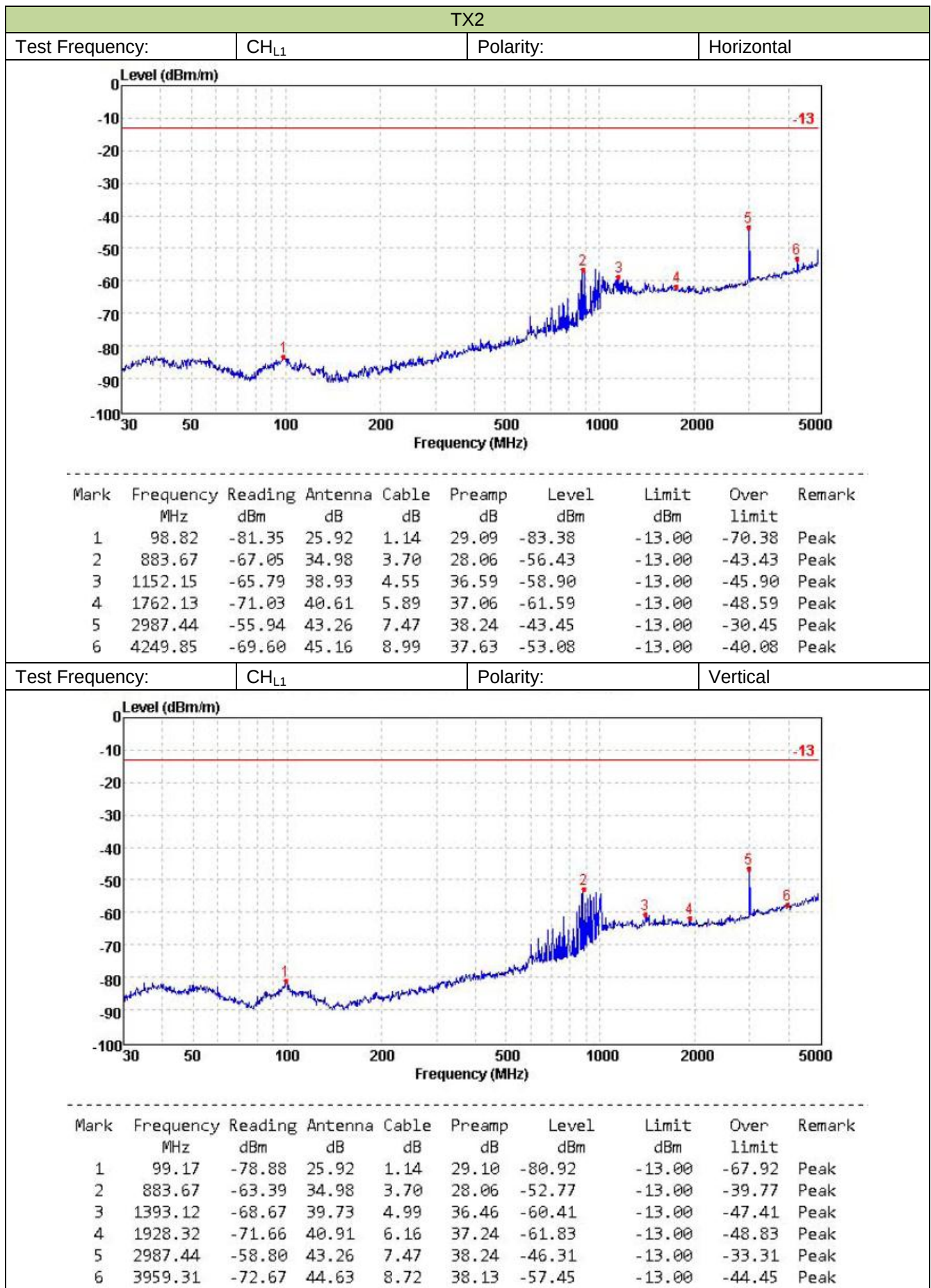
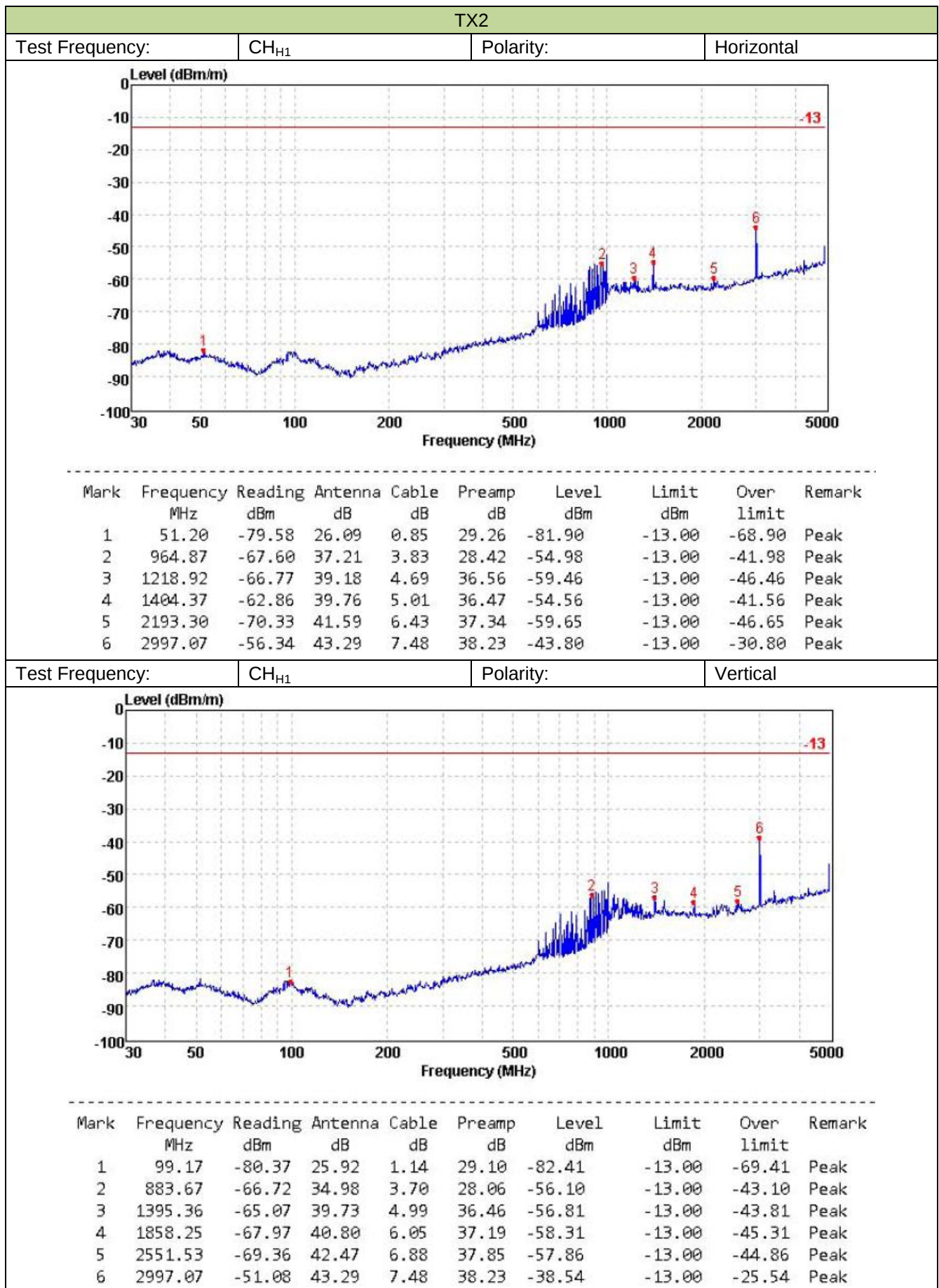
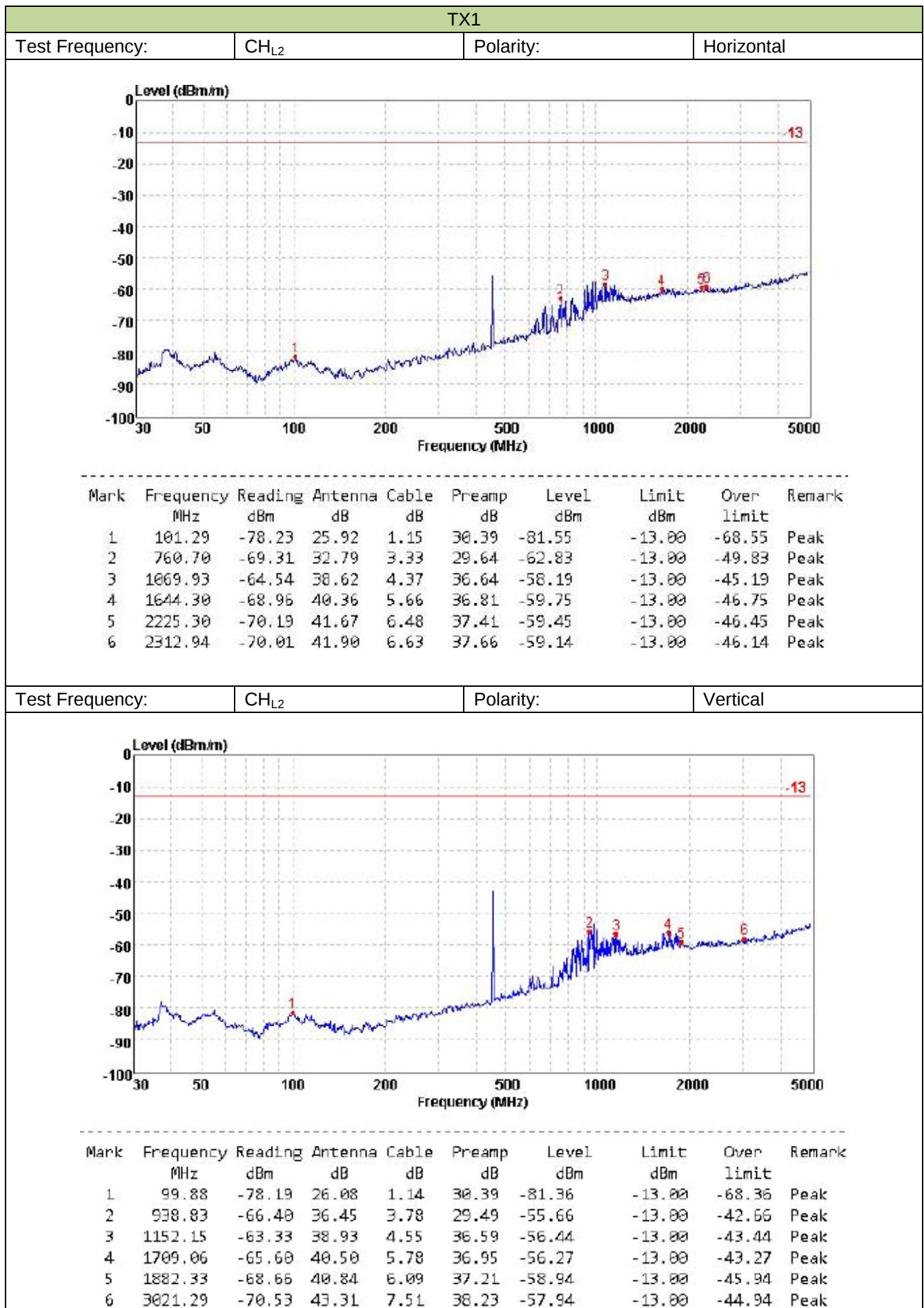
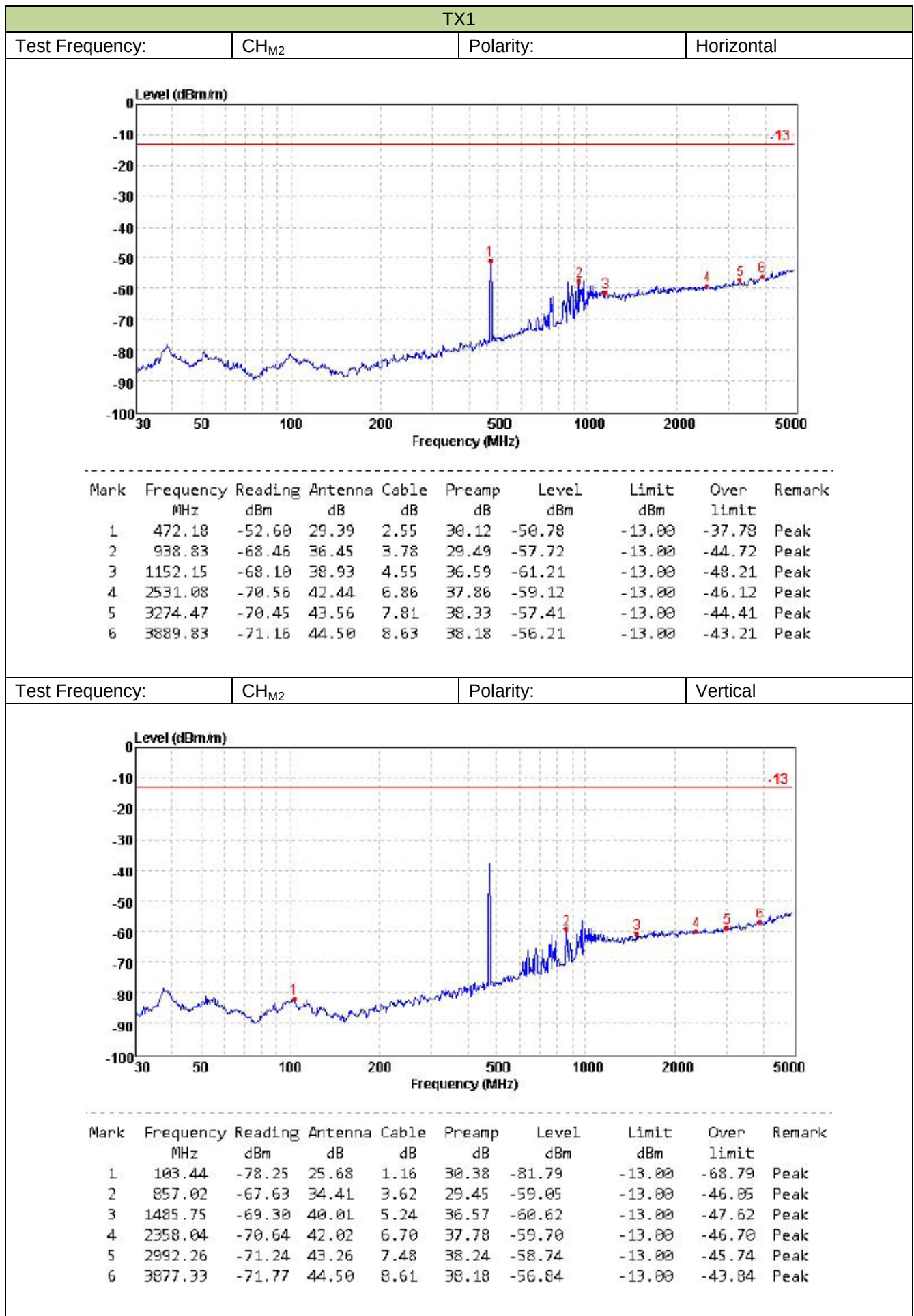


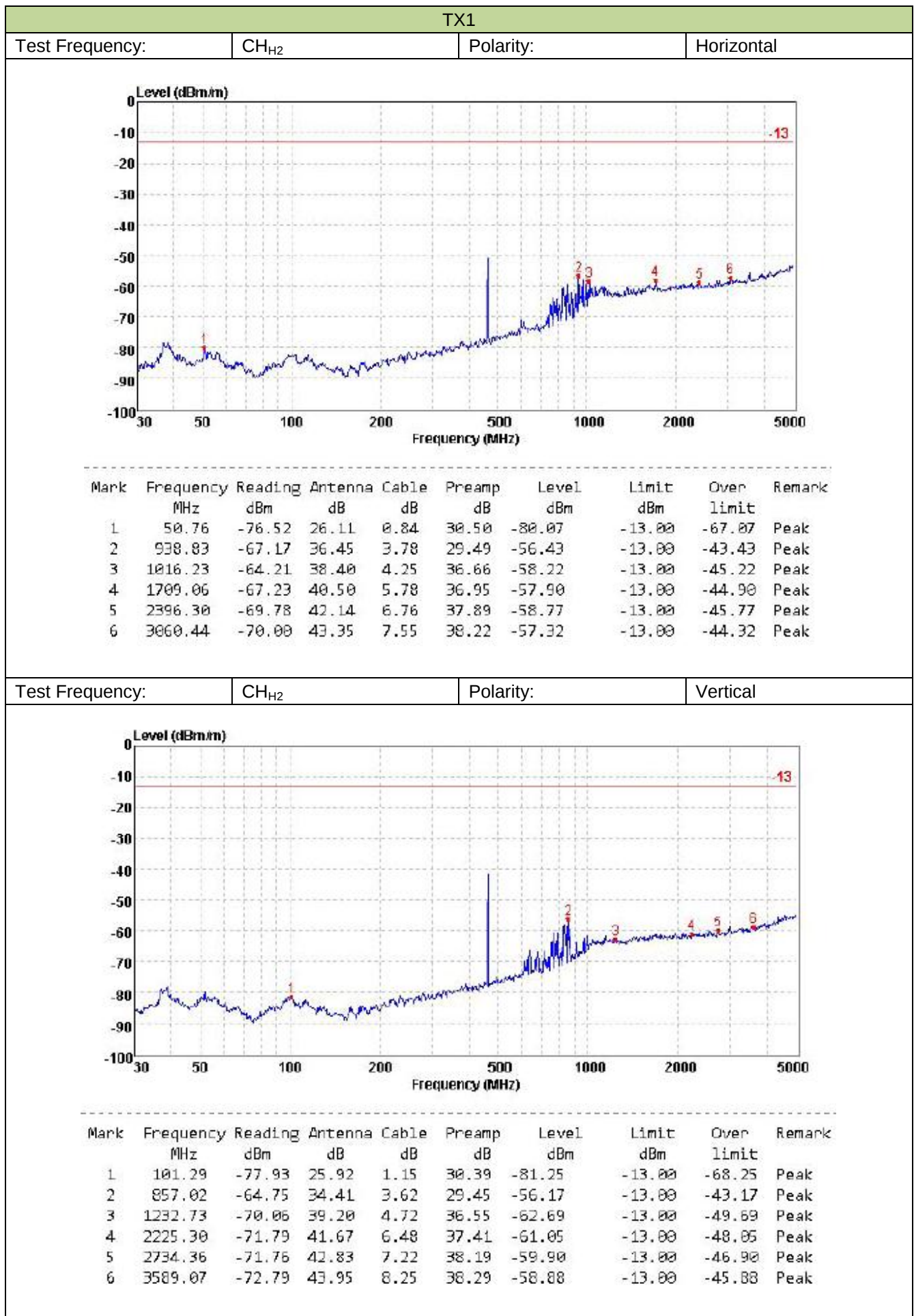


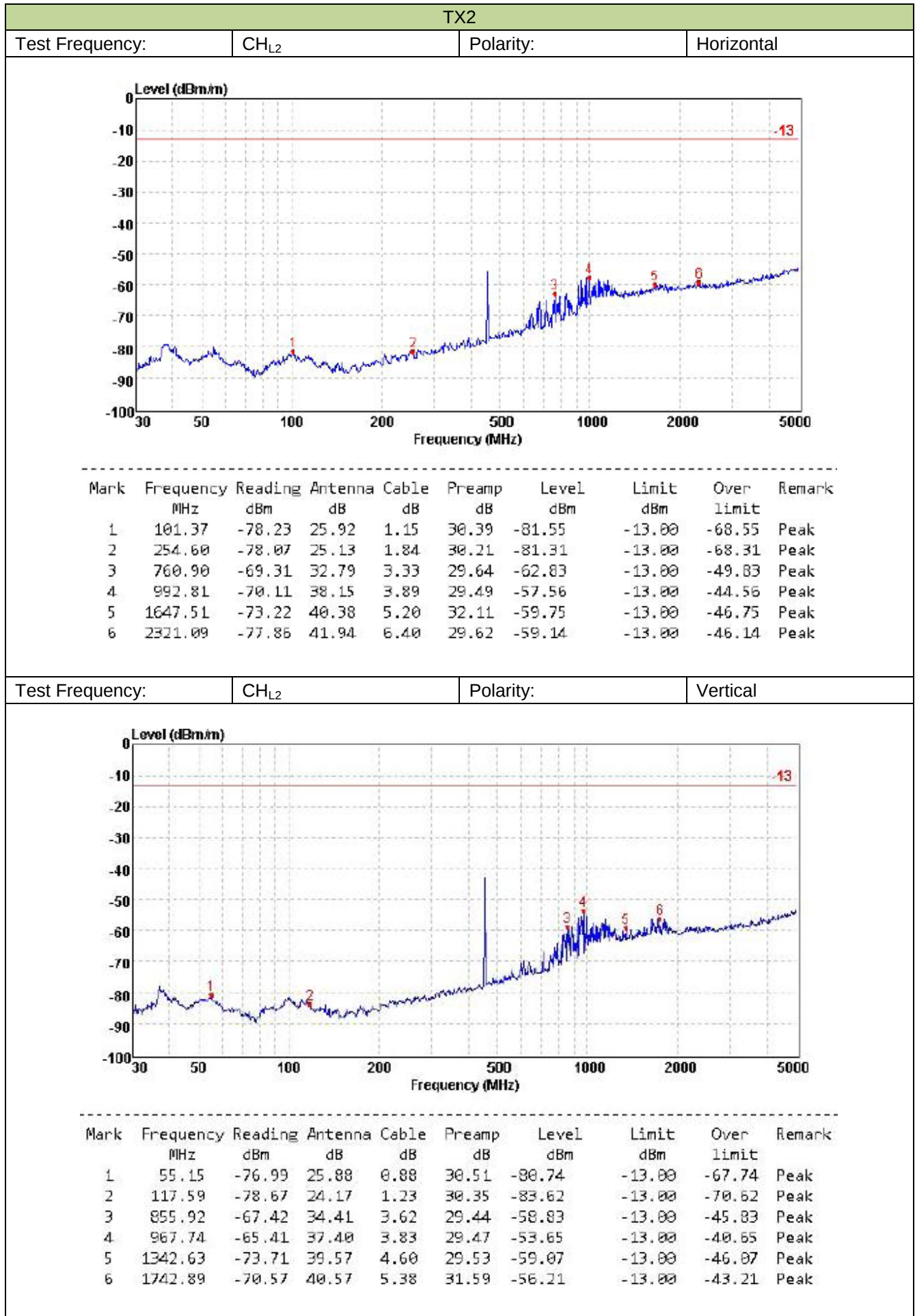


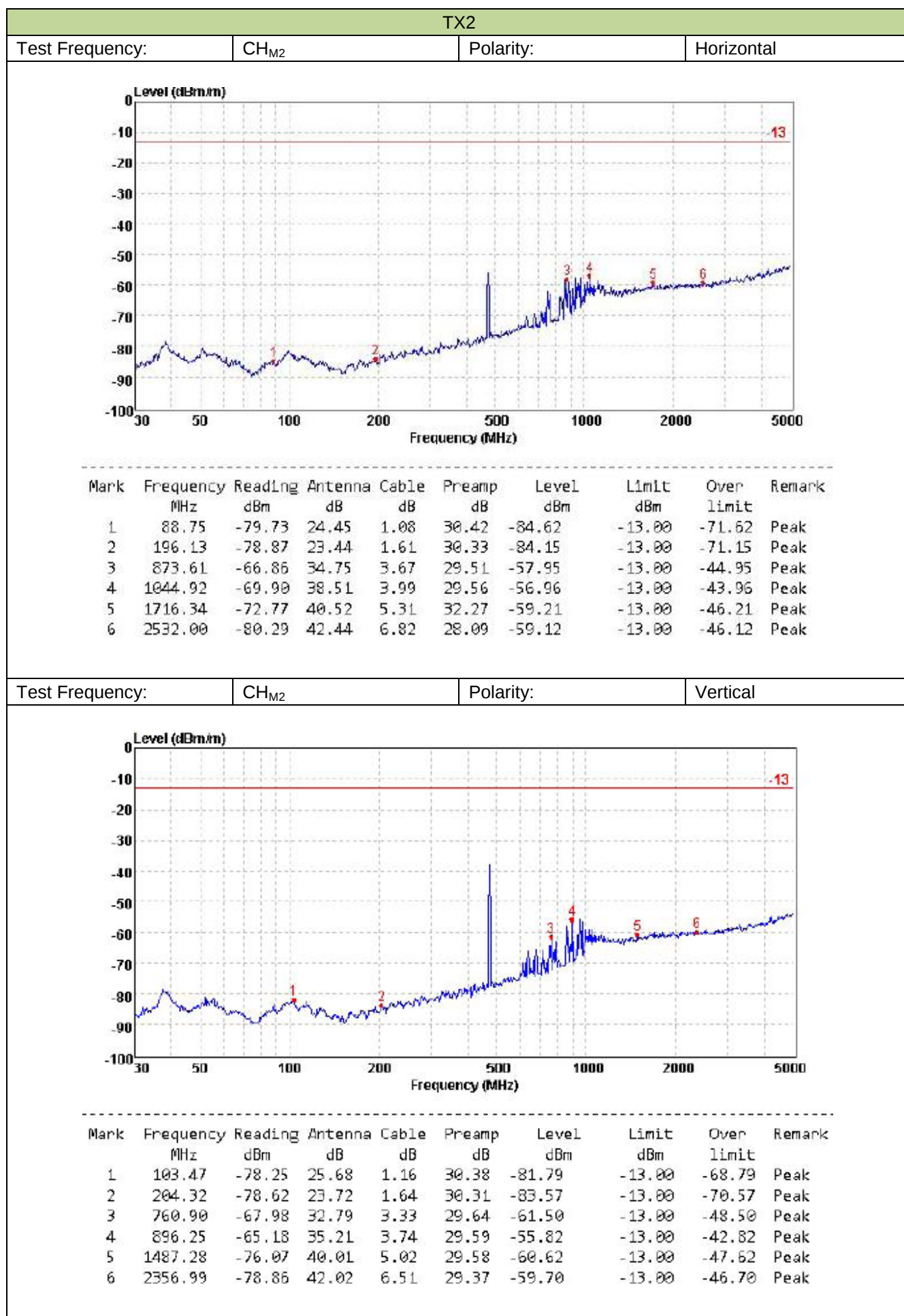


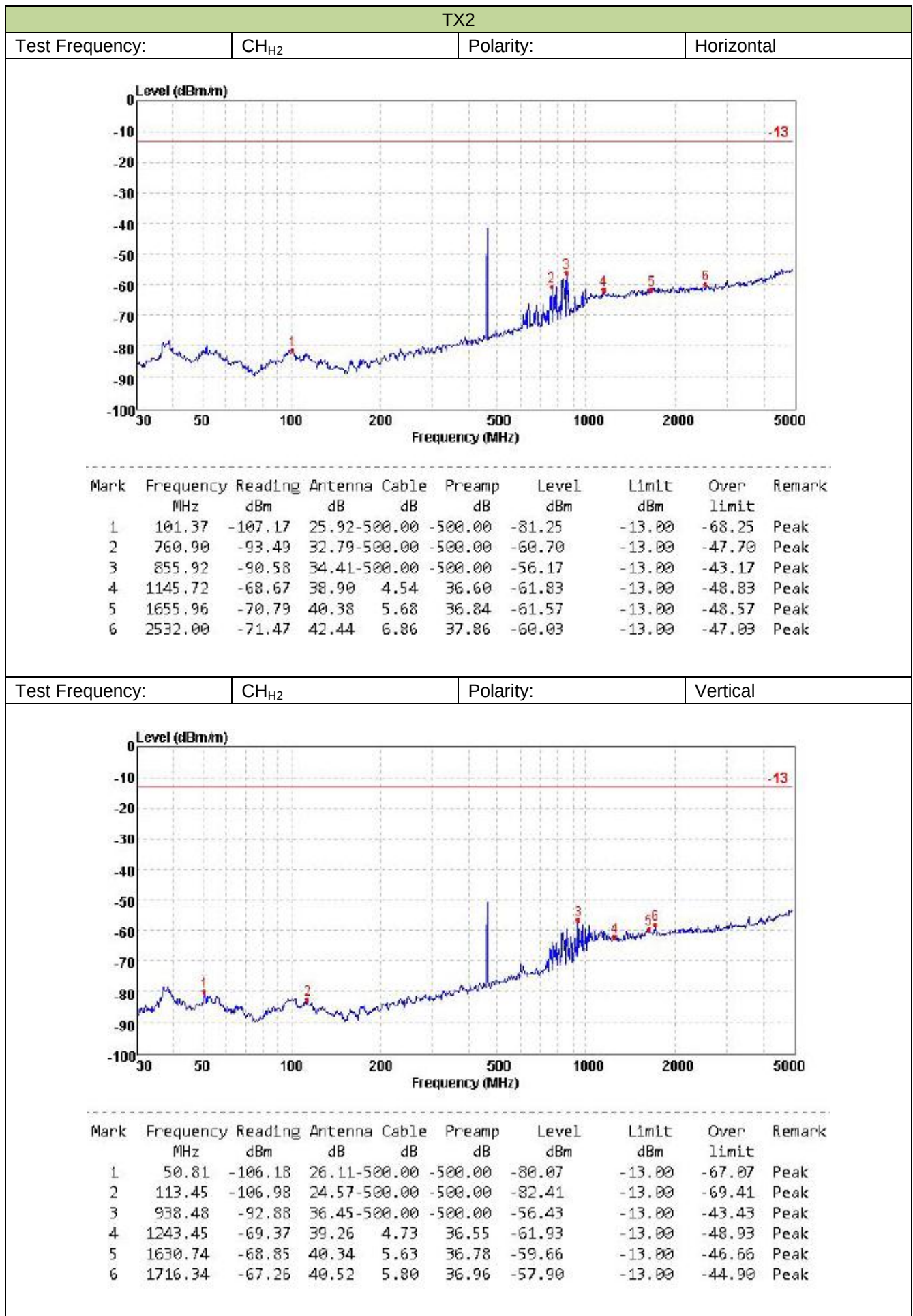












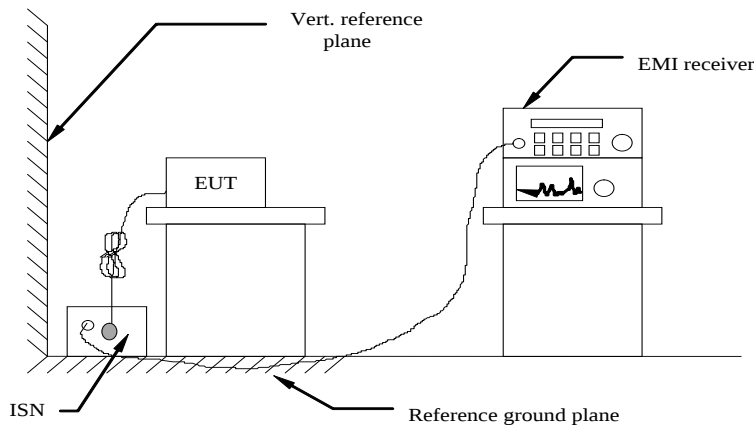
5.9. Conducted Emissions

Limit

FCC part 15.107(a)

Frequency of Emission (MHz)	Conducted Limit (dBμV)	
	Quasi-peak	Average
0.15-0.5	66 to 56 *	56 to 46 *
0.5-5	56	46
5-30	60	50

TEST CONFIGURATION



TEST PROCEDURE

- 1 The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. The EUT is a tabletop system; a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.4-2014.
- 2 Support equipment, if needed, was placed as per ANSI C63.4-2014.
- 3 All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4-2014.
- 4 If a EUT received AC120V/60Hz power through a Line Impedance Stabilization Network (LISN) which supplied power source and was grounded to the ground plane.
- 5 All support equipments received AC power from a second LISN, if any
- 6 The EUT test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
- 7 Analyzer / Receiver scanned from 150 kHz to 30MHz for emissions in each of the test modes.
- 8 During the above scans, the emissions were maximized by cable manipulation.

TEST MODE:

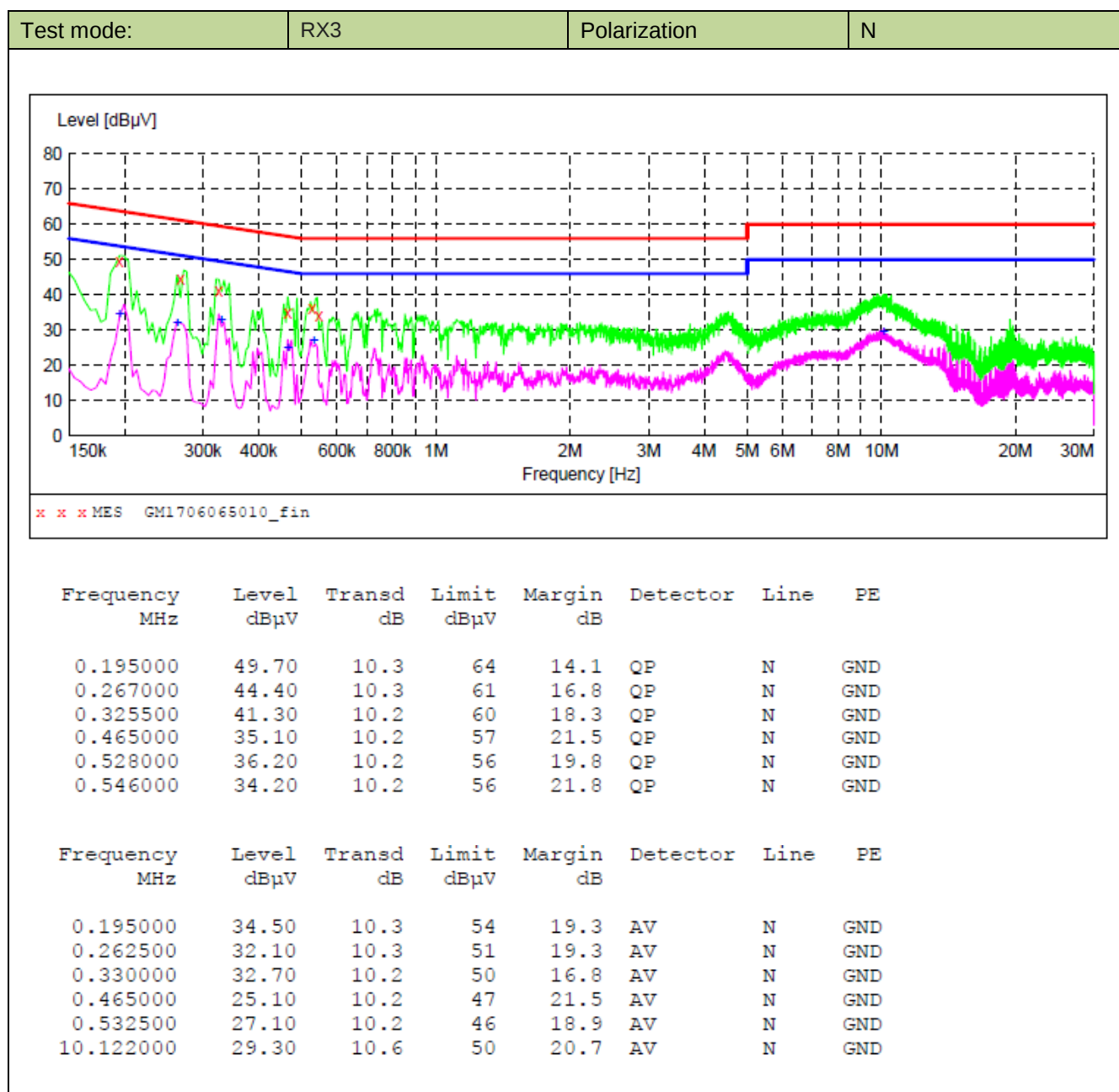
Please reference to the section 3.4

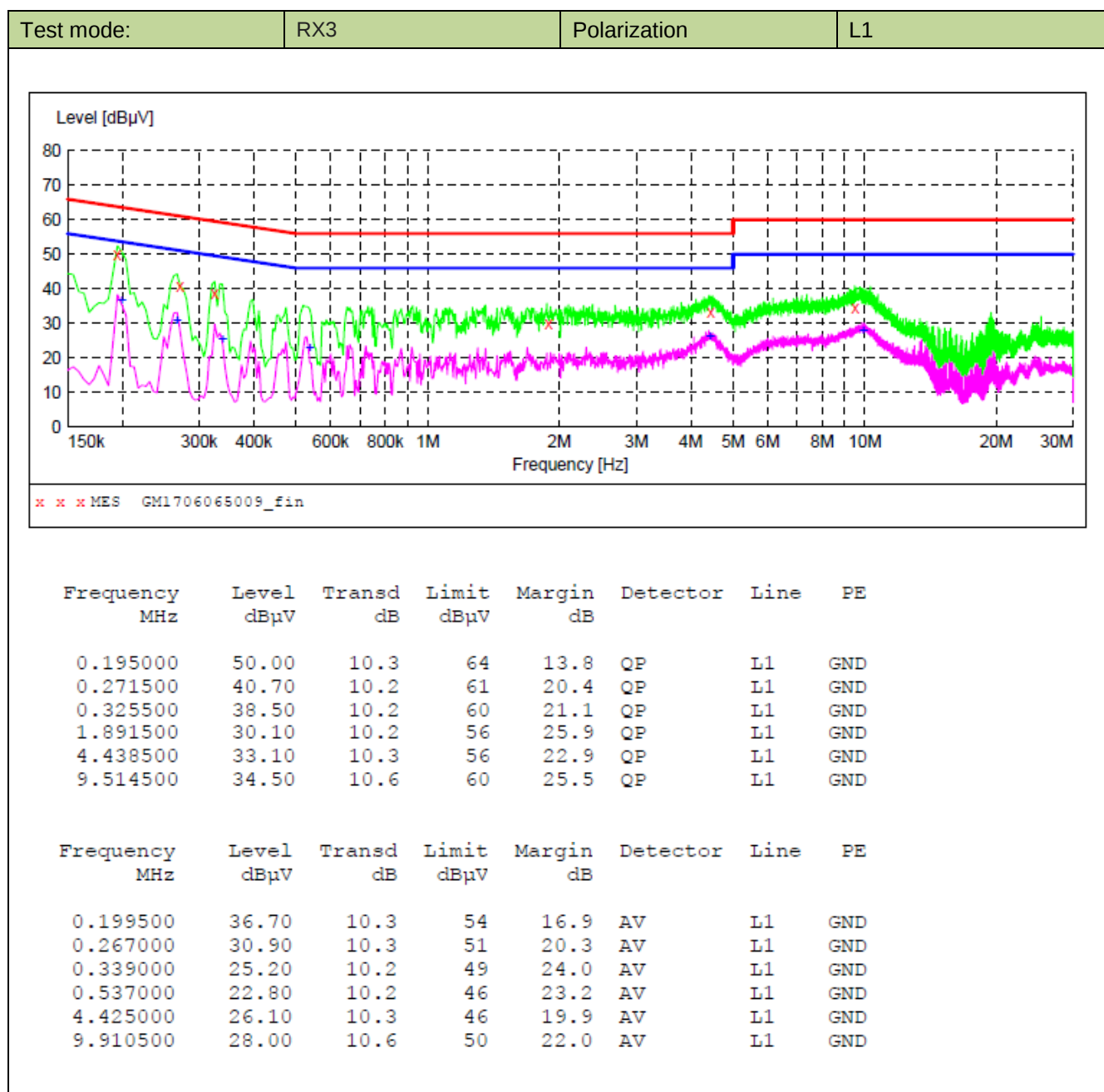
TEST RESULTS

☒ Passed ☐ Not Applicable

Note:

We tested all RX mode, recorded worst case for RX3.





5.10. Radiated Emission

LIMIT

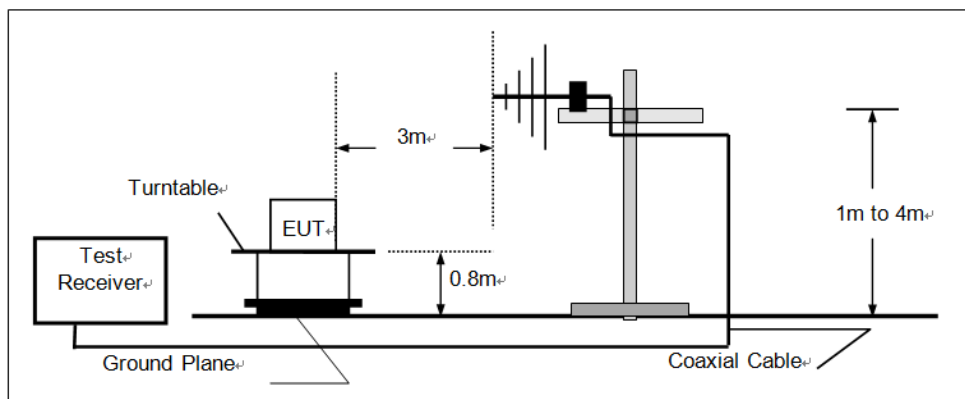
For unintentional device, according to § 15.109(a) except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency (MHz)	Distance (Meters)	Radiated (dBμV/m)	Radiated (μV/m)
30-88	3	40.0	100
88-216	3	43.5	150
216-960	3	46.0	200
Above 960	3	54.0	500

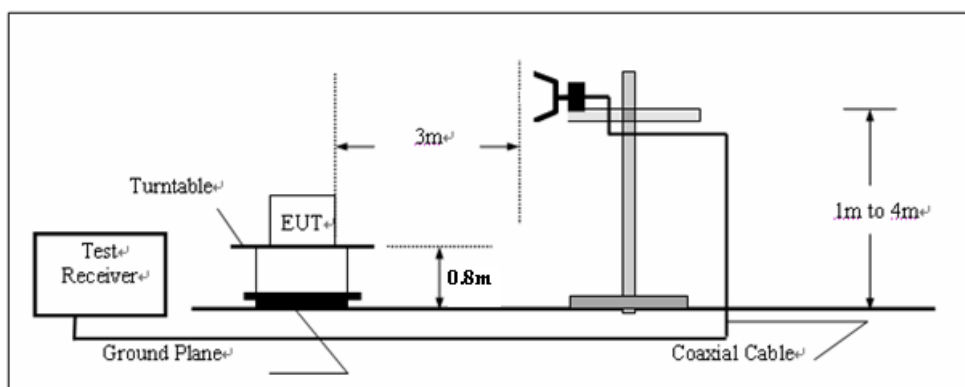
For intentional device, according to § 15.209(a), the general requirement of field strength of radiated emissions from intentional radiators at a distance of 3 meters shall not exceed the above table.

TEST CONFIGURATION

(A) Radiated Emission Test Set-Up, Frequency below 1000MHz



(B) Radiated Emission Test Set-Up, Frequency above 1000MHz



TEST PROCEDURE

- 1 The EUT was placed on a turn table which is 0.8m above ground plane.
- 2 Maximum procedure was performed by raising the receiving antenna from 1m to 4m and rotating the turn table from 0°C to 360°C to acquire the highest emissions from EUT
- 3 And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
- 4 Repeat above procedures until all frequency measurements have been completed.

TEST MODE:

Please reference to the section 3.4

TEST RESULTS

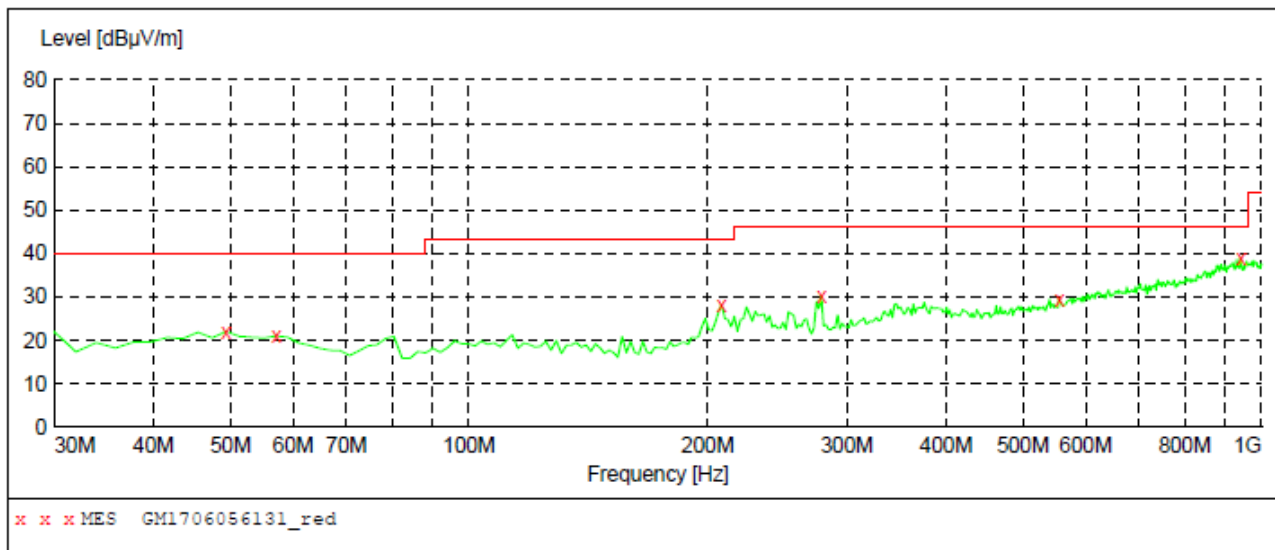
☒ **Passed** ☐ **Not Applicable**

Please refer to the below test data:

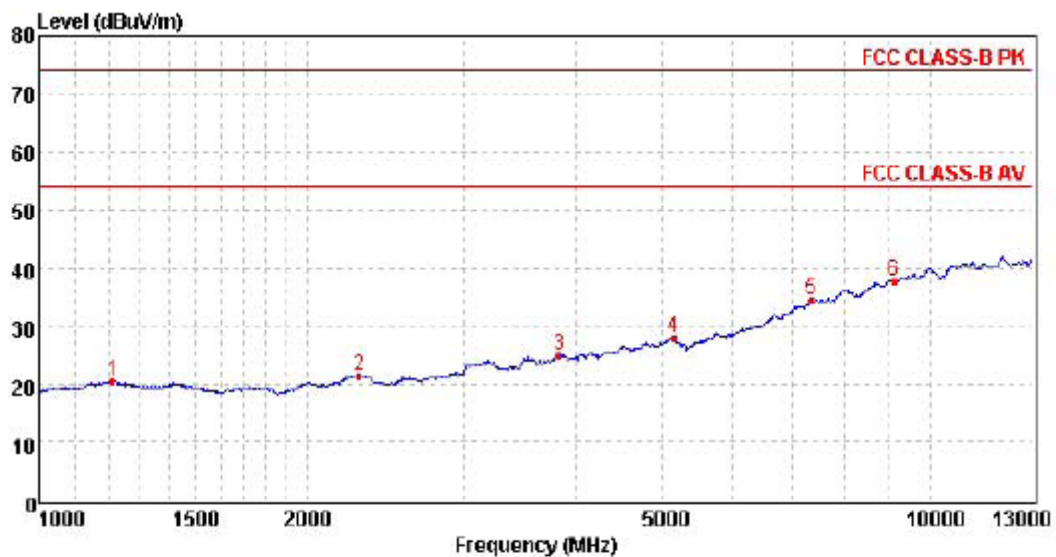
Note:

We tested all RX mode, recorded worst case for RX3.

Test mode:	RX3	Polarity:	Horizontal
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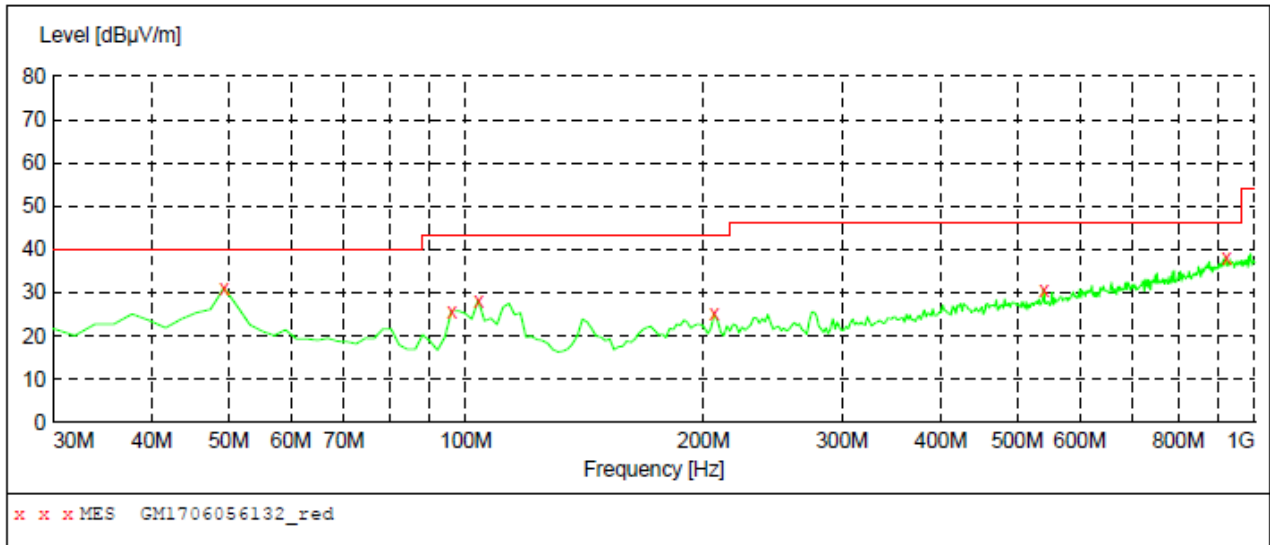


Frequency MHz	Level dBuV/m	Transd dB	Limit dBuV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
49.400000	22.10	-8.7	40.0	17.9	QP	300.0	71.00	HORIZONTAL
57.160000	21.10	-9.4	40.0	18.9	QP	300.0	359.00	HORIZONTAL
208.480000	28.10	-10.5	43.5	15.4	QP	100.0	250.00	HORIZONTAL
278.320000	30.20	-7.8	46.0	15.8	QP	100.0	278.00	HORIZONTAL
555.740000	29.60	-0.6	46.0	16.4	QP	300.0	152.00	HORIZONTAL
941.800000	38.90	7.2	46.0	7.1	QP	100.0	171.00	HORIZONTAL

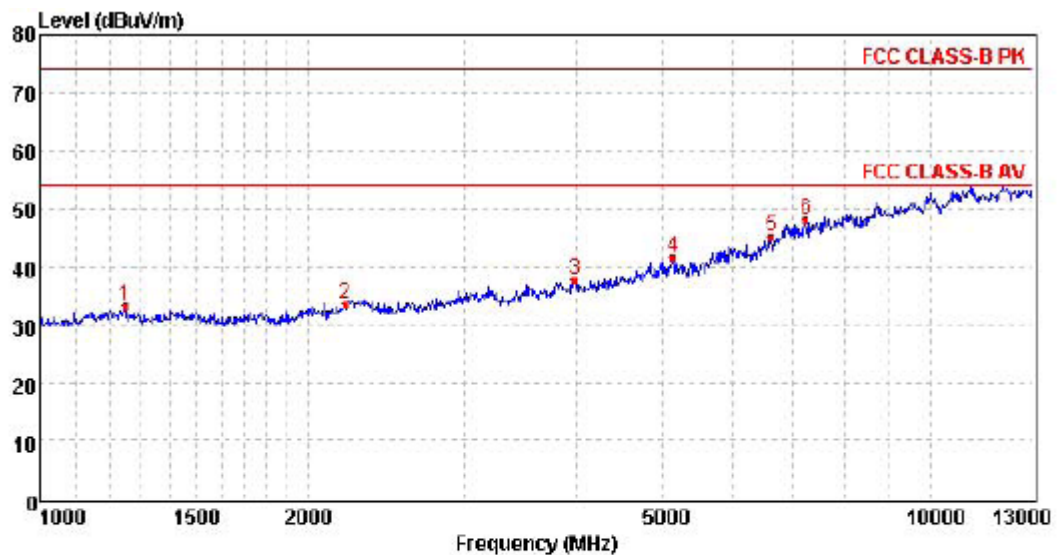


Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
1	1212.12	26.06	26.29	4.68	36.56	20.47	54.00	-33.53	Average
2	2289.83	24.52	28.04	6.59	37.59	21.56	54.00	-32.44	Average
3	3834.48	24.92	29.63	8.55	38.21	24.89	54.00	-29.11	Average
4	5150.03	22.70	31.70	9.79	36.25	27.94	54.00	-26.06	Average
5	7356.11	21.07	36.30	12.02	34.88	34.51	54.00	-19.49	Average
6	9101.34	21.30	38.21	13.41	35.14	37.78	54.00	-16.22	Average

Test mode:	RX3	Polarity:	Vertical
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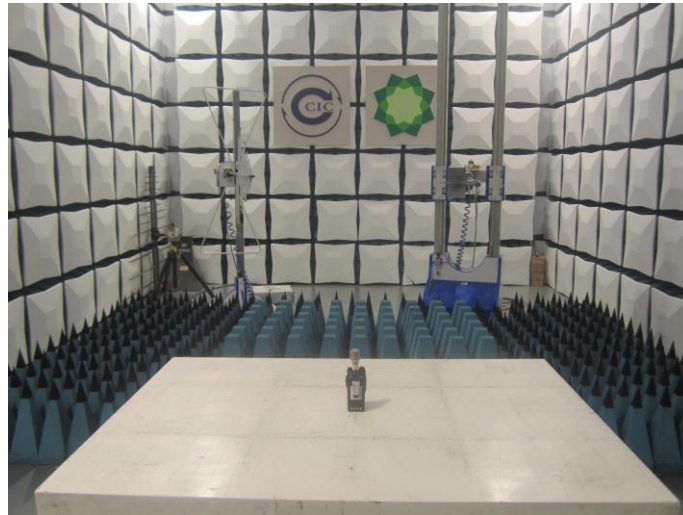
Frequency MHz	Level dBuV/m	Transd dB	Limit dBuV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
49.400000	31.20	-8.7	40.0	8.8	QP	100.0	14.00	VERTICAL
95.960000	25.80	-11.2	43.5	17.7	QP	100.0	119.00	VERTICAL
103.720000	28.30	-10.5	43.5	15.2	QP	100.0	41.00	VERTICAL
206.540000	25.10	-10.5	43.5	18.4	QP	100.0	53.00	VERTICAL
540.220000	30.80	-1.0	46.0	15.2	QP	100.0	161.00	VERTICAL
920.460000	38.10	7.0	46.0	7.9	QP	100.0	360.00	VERTICAL



Mark	Frequency MHz	Reading dBuV/m	Antenna dB	Cable dB	Preamp dB	Level dBuV/m	Limit dBuV/m	Over limit	Remark
1	1246.81	38.99	26.25	4.74	36.54	33.44	74.00	-40.56	Peak
2	2203.41	37.08	27.52	6.45	37.35	33.70	74.00	-40.30	Peak
3	3984.88	37.39	29.70	8.76	38.12	37.73	74.00	-36.27	Peak
4	5136.84	36.46	31.75	9.78	36.26	41.73	74.00	-32.27	Peak
5	6621.80	34.94	34.20	11.39	35.32	45.21	74.00	-28.79	Peak
6	7243.76	35.12	36.24	11.91	35.02	48.25	74.00	-25.75	Peak

6. Test Setup Photos of the EUT

Transmitter Radiated Spurious Emission:

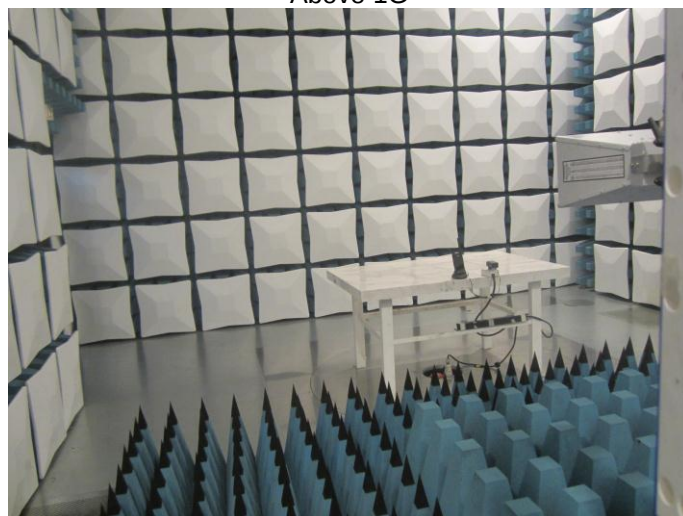


Radiated Emission:

30MHz-1GHz



Above 1G



Conducted Emission:



Frequency Stability:

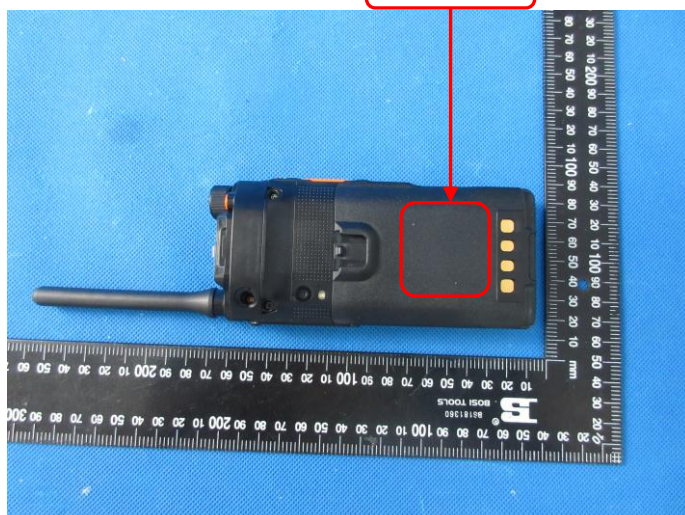


7. External and Internal Photos of the EUT

External photos of the EUT



NFC ANT



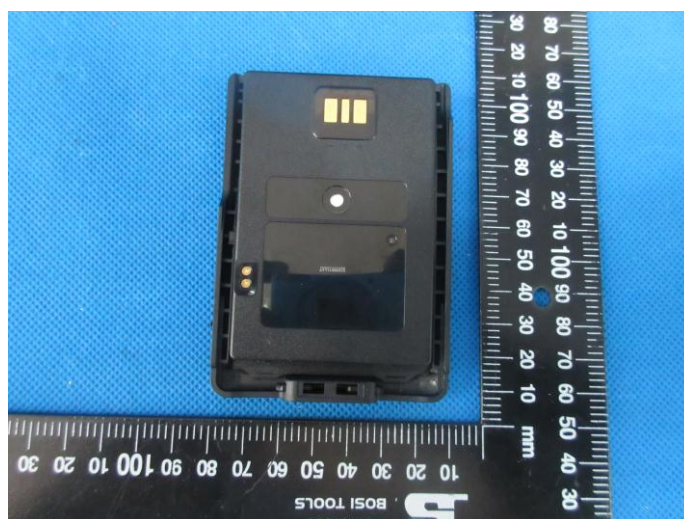


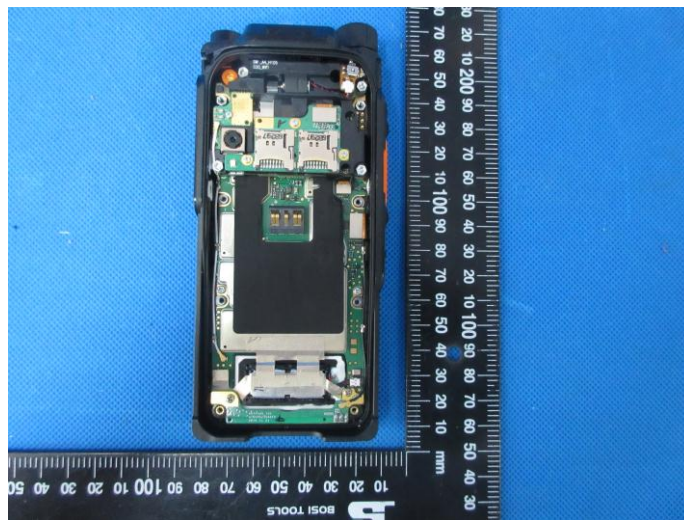
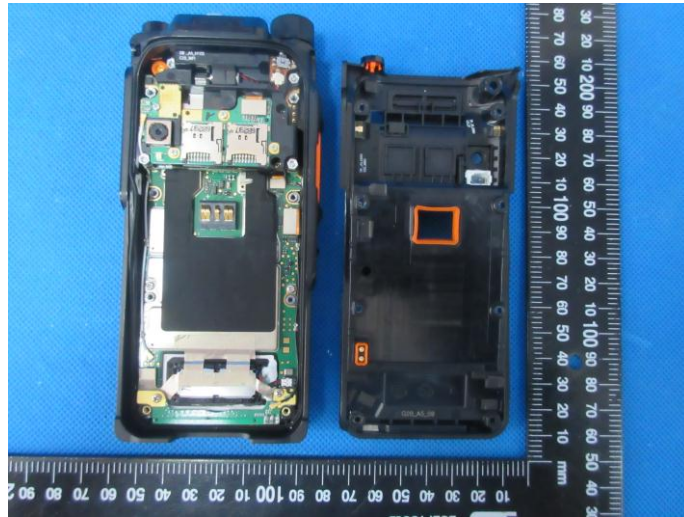
TETRA&GPS ANT



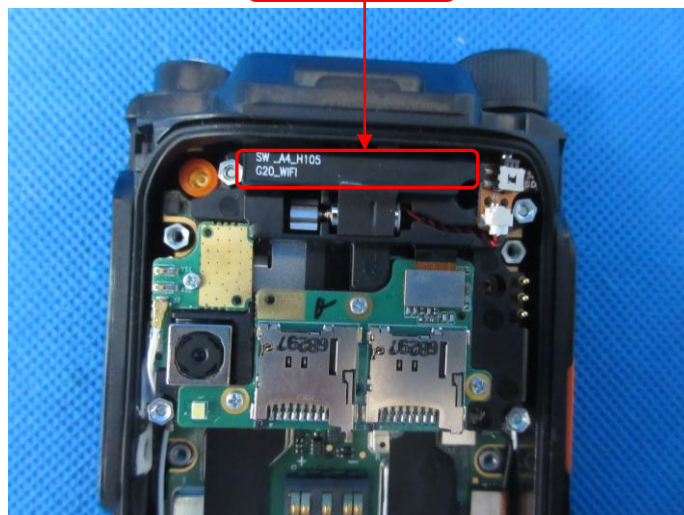


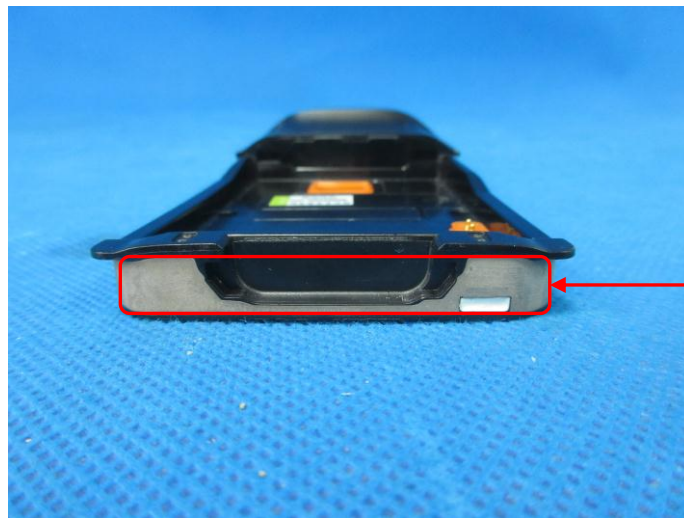
Internal photos of the EUT



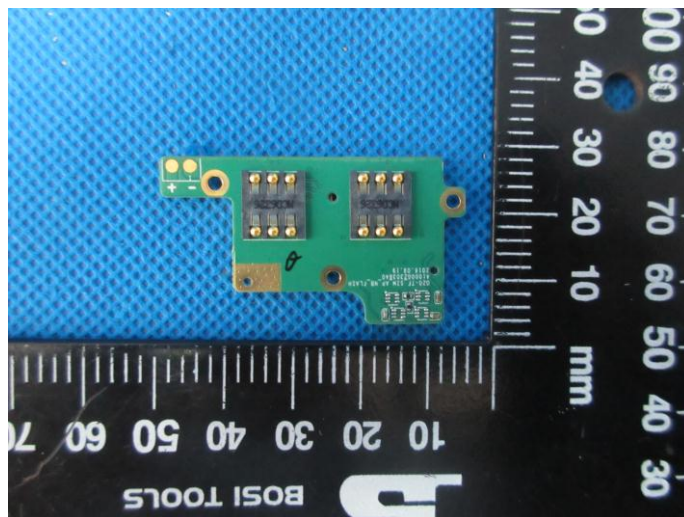
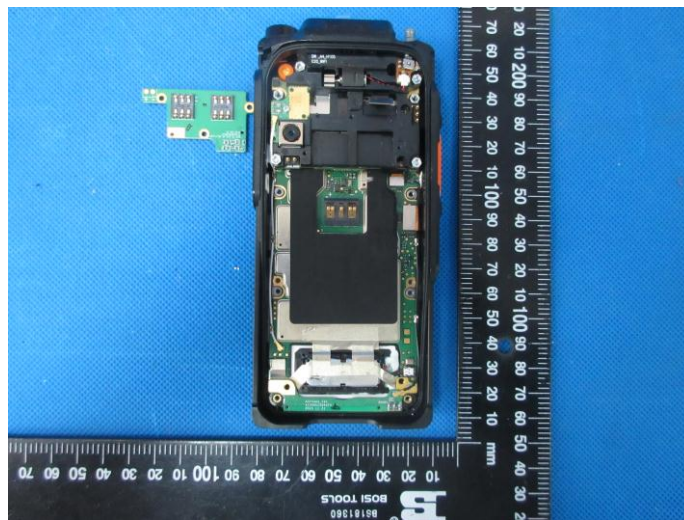


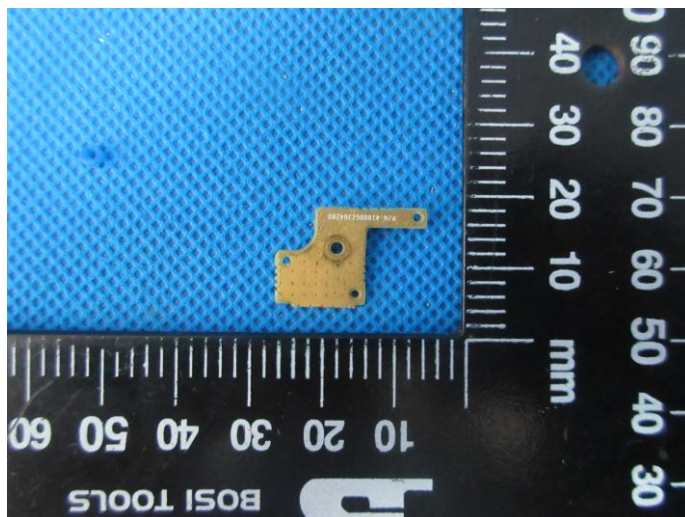
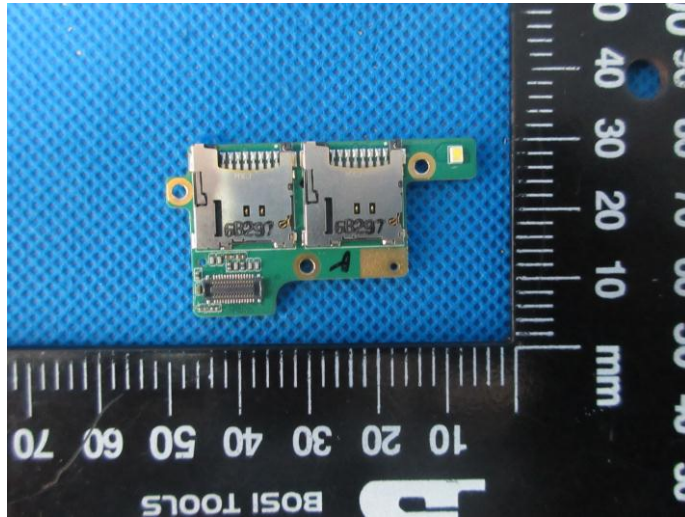
BT/WIFI ANT

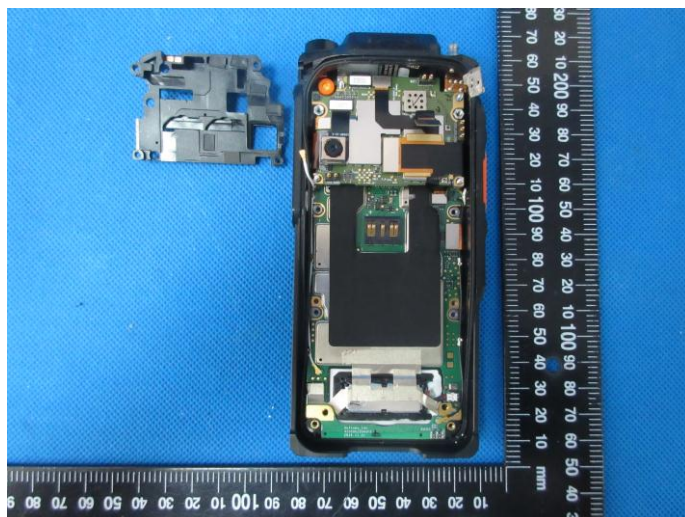
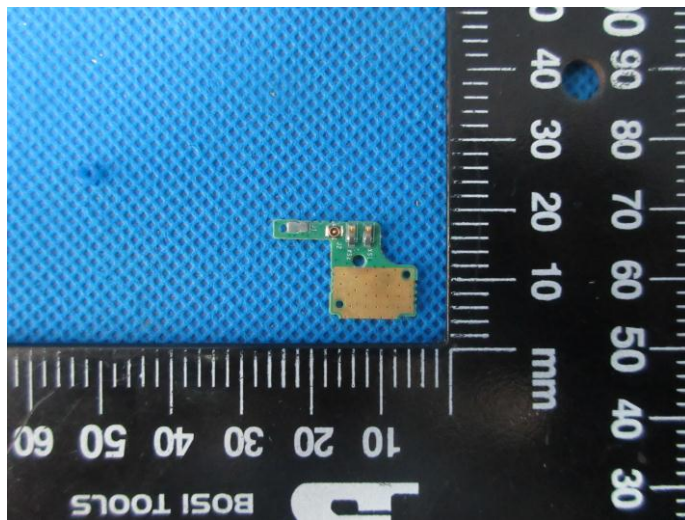
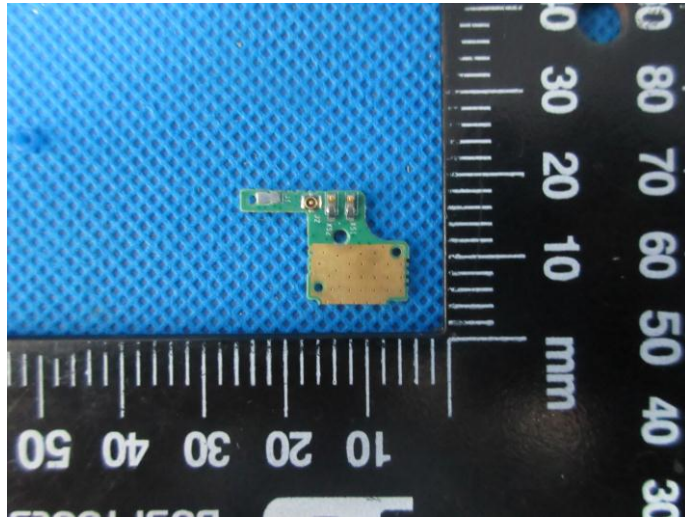


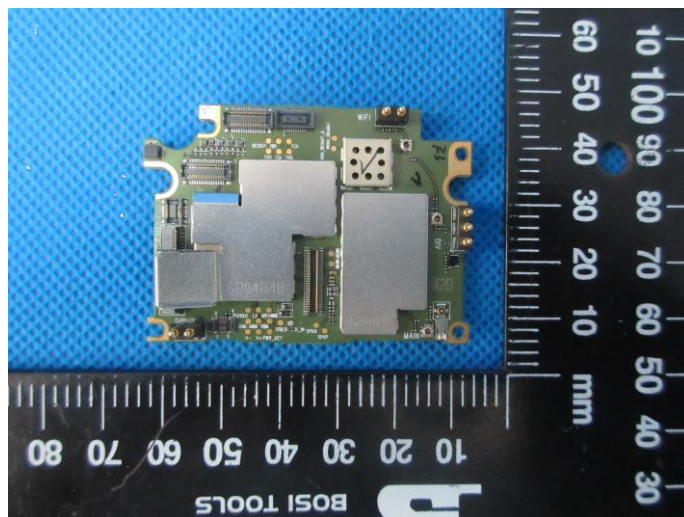
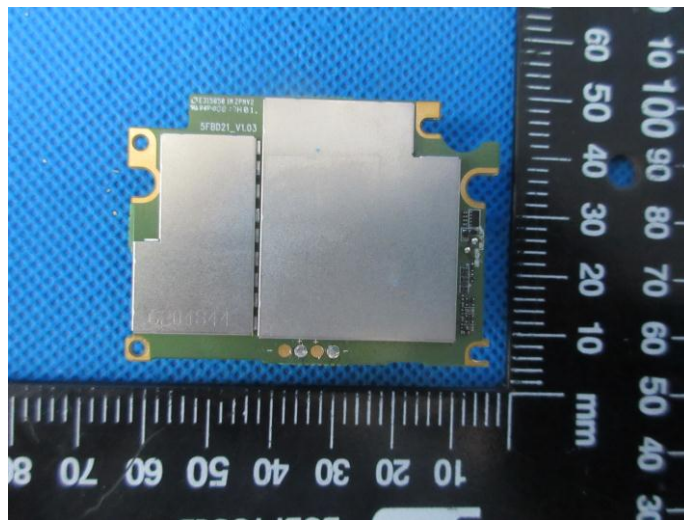
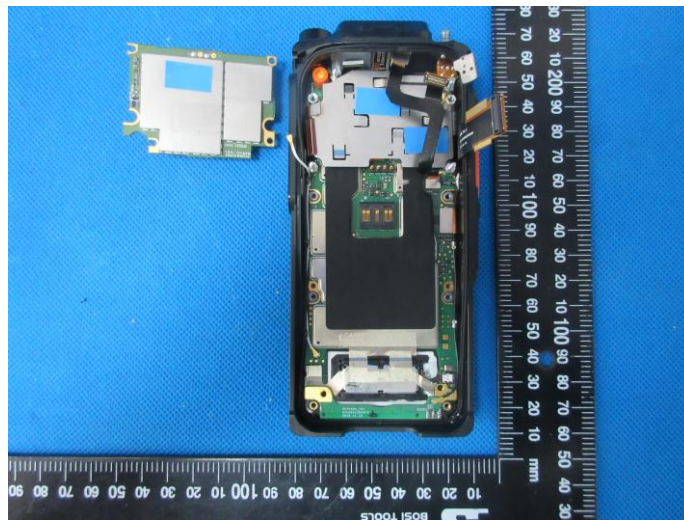


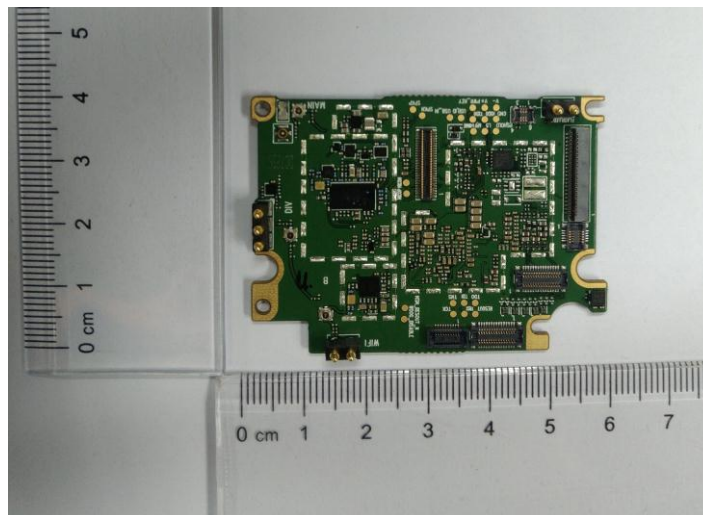
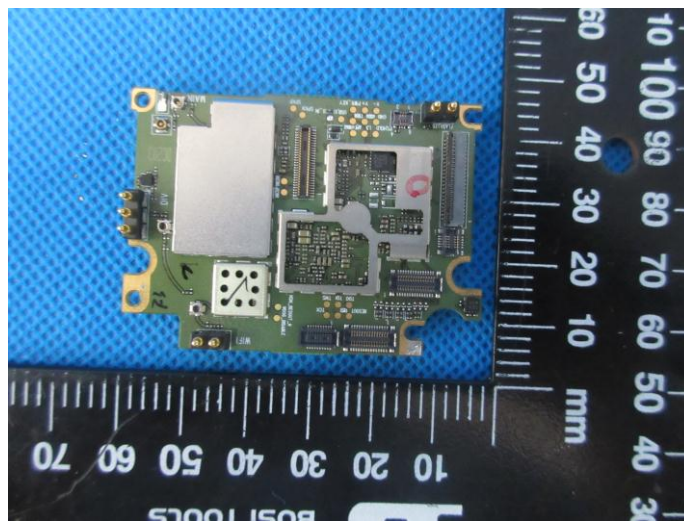
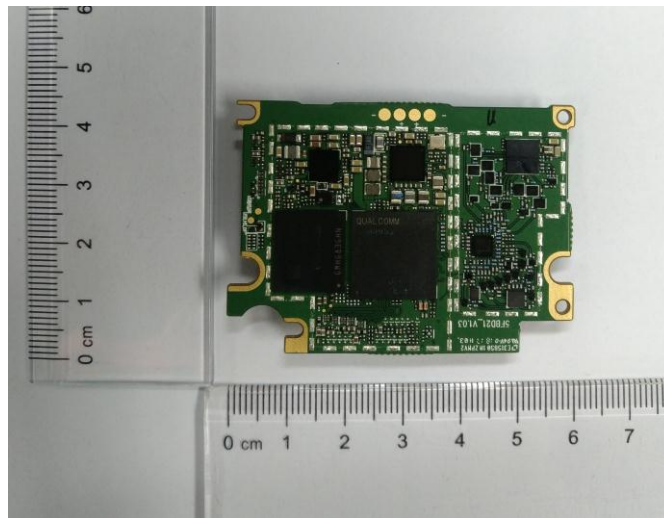
2G/3G/4G ANT

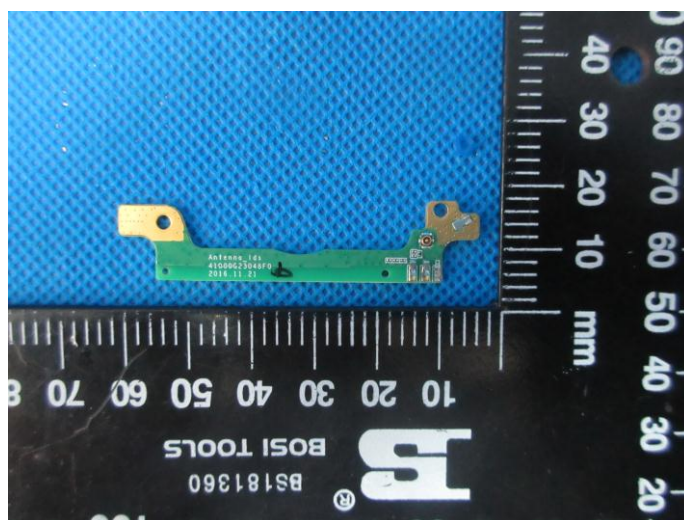
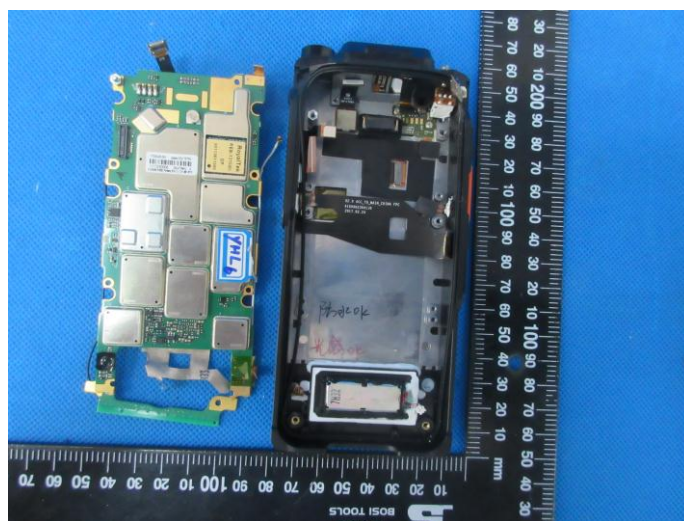
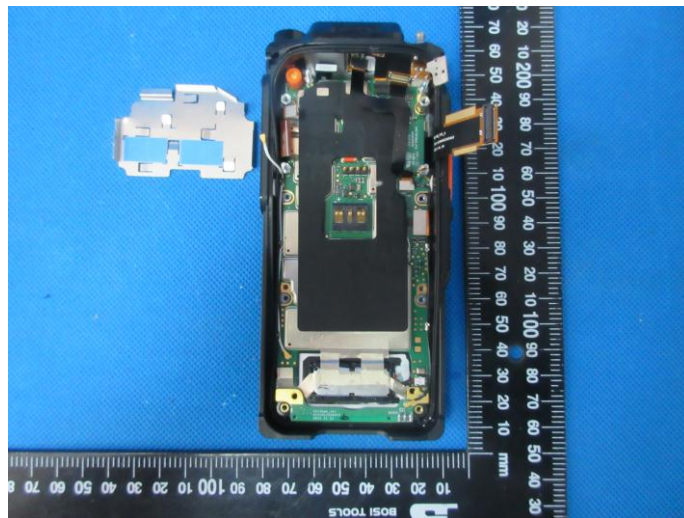


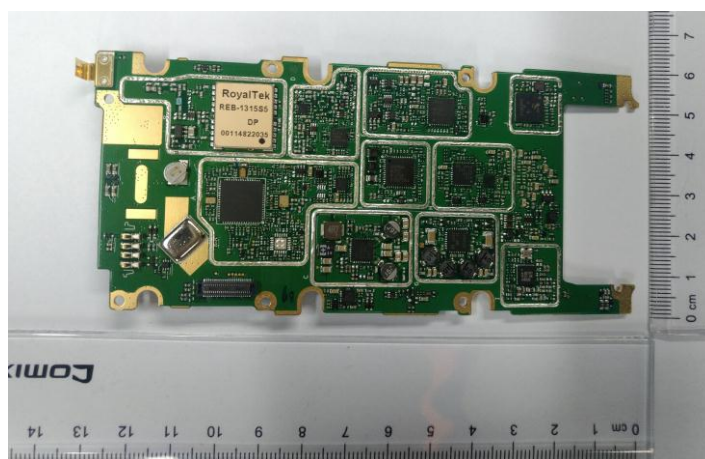
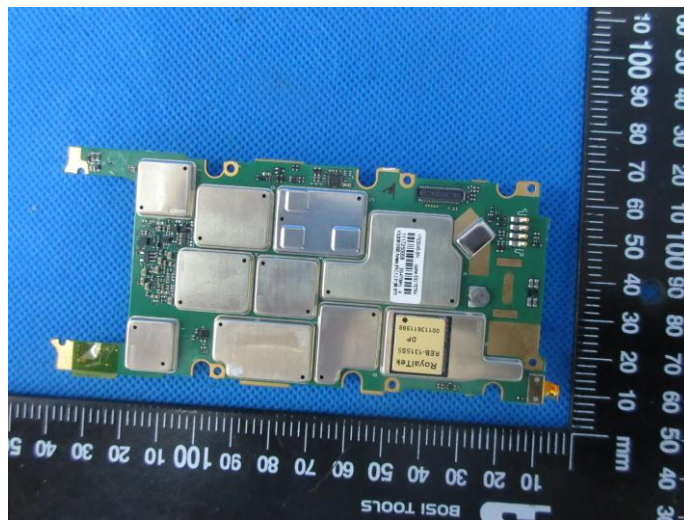
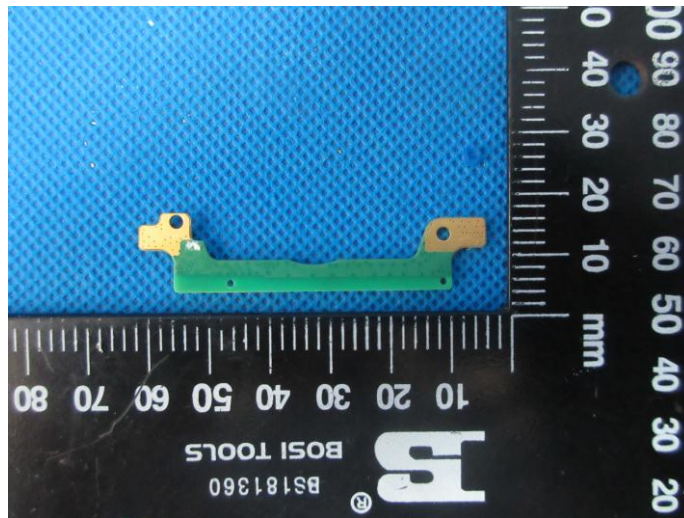


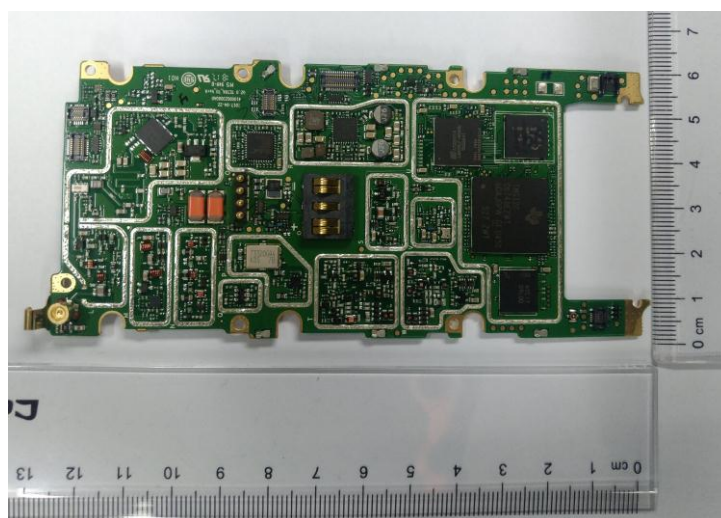
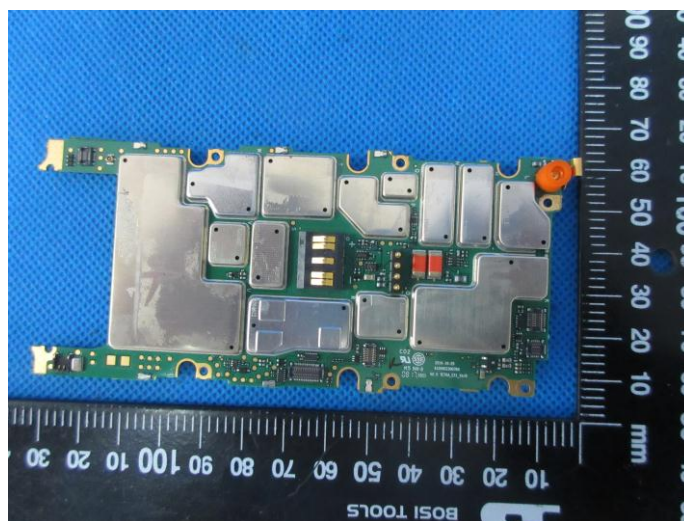
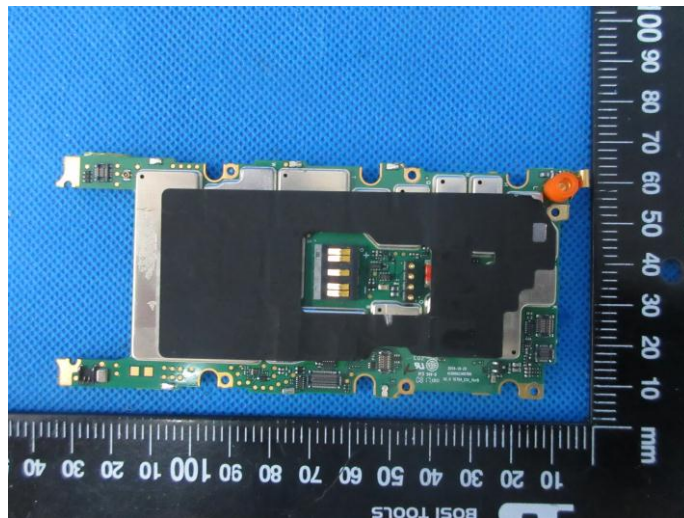












.....End of Report.....