



FCC TEST REPORT

FCC ID:2A96I-GTW8103

Report Number..... : ZKT-260724L1709E-9

Date of Test..... June 09, 2026 ~ July 06, 2026

Date of issue..... : July 06, 2026

Total number of pages 16

Test Result : PASS

Testing Laboratory..... : **Shenzhen ZKT Technology Co., Ltd.**

Address 1/F, No. 101, Building B, No. 6, Tangwei Community Industrial Avenue, Fuhai Street, Bao'an District, Shenzhen, China

Applicant's name : Shanghai UniOne Science&Technology CO., Ltd.

Address Building 4, No. 651 Wanfang Road, Pujiang Town, Minhang District, Shanghai, China.

Manufacturer's name : Shanghai UniOne Science&Technology CO., Ltd.

Address Building 4, No. 651 Wanfang Road, Pujiang Town, Minhang District, Shanghai, China.

Test specification:

Standard..... : FCC Part 15 B
ANSI C63.4:2014

Test procedure : FCC

Non-standard test method : N/A

Test Report Form No. : TRF-EL-117_V0

Test Report Form(s) Originator : ZKT Testing

Master TRF : Dated: 2020-01-06

This device described above has been tested by ZKT, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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Product name..... : Rugged Windows Tablet

Trademark : N/A

Model/Type reference : GTW8103(Standard)

Ratings..... : Input: DC 19V 3.42A



Testing procedure and testing location:

Testing Laboratory.....: **Shenzhen ZKT Technology Co., Ltd.**

Address.....: 1/F, No. 101, Building B, No. 6, Tangwei Community
Industrial Avenue, Fuhai Street, Bao'an District,
Shenzhen, China

Tested by (name + signature): **Jim Liu**

Reviewer (name + signature).....: **Jackson Fang**

Approved (name + signature): **Lake Xie**





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1.VERSION

Report No.	Version	Description	Approved
STS2407338E03	Rev.01	Initial issue of report	Sep. 13, 2024
ZKT-260724L1709E-9	Rev.02	Add series model GTW8103	July 06, 2026

Remark: The differences in the additional models do not affect the RF performance, so there is no need to test the RF conduction items. The relevant data can be referred to in the original report STS2407338E03.



2. GENERAL INFORMATION

2.1 Description of Device (EUT)

EUT	: Rugged Windows Tablet
Trademark	: N/A
Model Number	: GTW8103(Standard)
Model Difference	GTW8103(Handle), GTW8103(RJ45A), GTW8103(RJ45AH) , GTW8103
Hardware Version:	E7255_MB_PCB_V20
Software Version:	R.NB.00.00.02
Power Supply	: Input: DC 19V 3.42A Model: BA6000 Rated Voltage:11.01V Charge Limit Voltage: 12.6V Capacity: 6000mAh
Battery Capacity:	Model: BA880 Rated Voltage:7.4V Charge Limit Voltage: 8.4V Capacity: 880mAh
The highest frequency of the internal sources of the EUT is (less than 108)MHz:	☒ less than 108 MHz, the measurement shall only be made up to 1 GHz. ☐ between 108 MHz and 500 MHz, the measurement shall only be made up to 2 GHz. ☐ between 500 MHz and 1 GHz, the measurement shall only be made up to 5 GHz. ☐ above 40 GHz, the measurement shall be made up to 5 times the highest frequency or 40 GHz, whichever is less.
Note:	N/A

2.2 Tested System Details

None.

2.3 Test Facility

Shenzhen ZKT Technology Co., Ltd.
Add. : 1/F, No. 101, Building B, No. 6, Tangwei Community Industrial Avenue, Fuhai Street, Bao'an District, Shenzhen, China

FCC Test Firm Registration Number: 692225
Designation Number: CN1299
IC Registered No.: 27033

2.4 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the Product as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.



Test item	Value (dB)
Conducted Emission (150K-30MHZ)	3.20
Radiated disturbance30MHz-1000MHz	4.80



2.5 Test Instrument Used

Radiation Emissions Test

Item	Equipment	Manufacturer	Type No.	Serial No.	Firmware Version	Last calibration	Calibrated until
1	Spectrum Analyzer (9kHz-26.5GHz)	KEYSIGHT	N9020A	MY55370835	A.17.05	Sep. 20, 2025	Sep. 19, 2026
2	Spectrum Analyzer (10kHz-39.9GHz)	R&S	FSV40-N	100363	1.71 SP2	Sep. 20, 2025	Sep. 19, 2026
3	EMI Test Receiver (9kHz-7GHz)	R&S	ESCI7	100969	4.32	Oct. 24, 2025	Oct. 23, 2026
4	Bilog Antenna (30MHz-1500MHz)	Schwarzbeck	VULB9168	00877	N/A	Sep. 20, 2025	Sep. 19, 2026
5	Horn Antenna (1GHz-18GHz)	Agilent	AH-118	071145	N/A	Sep. 20, 2025	Sep. 19, 2026
6	Horn Antenna (15GHz-40GHz)	A.H.System	SAS-574	588	N/A	Sep. 30, 2025	Sep. 29, 2026
7	Loop Antenna	TESEQ	HLA6121	58357	N/A	Sep. 20, 2025	Sep. 19, 2026
8	Amplifier (30-1000MHz)	EM Electronics	EM330 Amplifier	60747	N/A	Sep. 19, 2025	Sep. 18, 2026
9	Amplifier (1GHz-26.5GHz)	HuiPu	8449B	3008A00315	N/A	Sep. 19, 2025	Sep. 18, 2026
10	Amplifier (500MHz-40GHz)	QuanJuDa	DLE-161	097	N/A	Oct. 24, 2025	Oct. 23, 2026
11	Test Cable	N/A	R-01	N/A	N/A	May. 25, 2026	May. 24, 2027
12	Test Cable	N/A	R-02	N/A	N/A	May. 25, 2026	May. 24, 2027
13	Test Cable	N/A	R-03	N/A	N/A	May. 25, 2026	May. 24, 2027
14	D.C. Power Supply	LongWei	TPR-6405D	N/A	N/A	\	\
15	EMC Software	Frad	EZ-EMC	Ver.EMC-CO N 3A1.1	N/A	\	\
16	Turntable	MF	MF-7802BS	N/A	N/A	\	\
17	Antenna tower	MF	MF-7802BS	N/A	N/A	\	\

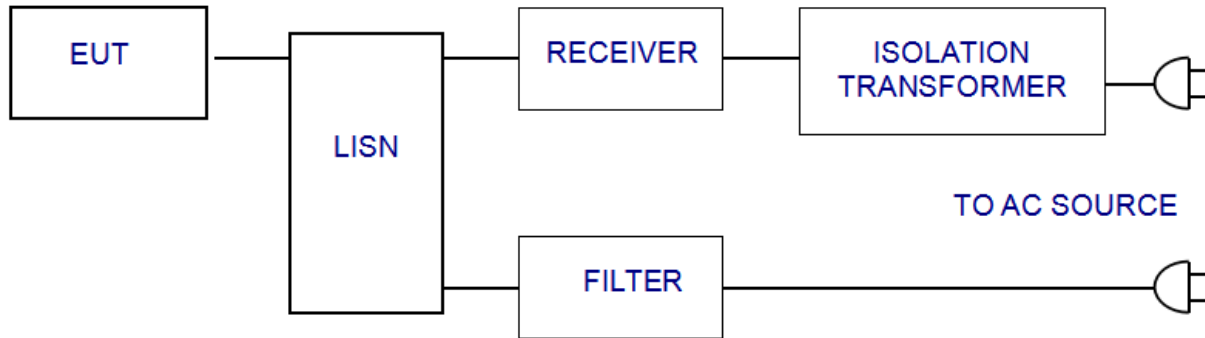
Conduction Emissions Test

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Firmware Version	Last calibration	Calibrated until
1	LISN	R&S	ENV216	101471	N/A	Sep. 23, 2025	Sep. 22, 2026
2	LISN	CYBERTEK	EM5040A	E1850400149	N/A	Sep. 19, 2025	Sep. 18, 2026
3	Test Cable	N/A	C-01	N/A	N/A	May. 25, 2026	May. 24, 2027
4	Test Cable	N/A	C-02	N/A	N/A	May. 25, 2026	May. 24, 2027
5	Test Cable	N/A	C-03	N/A	N/A	May. 25, 2026	May. 24, 2027
6	EMI Test Receiver	R&S	ESCI3	101393	4.42 SP3	Oct. 24, 2025	Oct. 23, 2026
7	Triple-Loop Antenna	N/A	RF300	9194	N/A	Sep. 19, 2025	Sep. 18, 2026
8	Absorbing Clamp	DZ	ZN23201	15034	N/A	Sep. 23, 2025	Sep. 22, 2026
9	EMC Software	Frad	EZ-EMC	Ver.EMC-CON 3A1.1	N/A	\	\



3.CONDUCTED EMISSION AT THE MAINS TERMINALS TEST

3.1 Block Diagram Of Test Setup



3.2 Test Standard

FCC PART 15 B

3.3 Power Line Conducted Emission Limit

Frequency MHz	Limits dB(μV)	
	Quasi-peak Level	Average Level
0.15 ~ 0.50	66 ~ 56*	56 ~ 46*
0.50 ~ 5.00	56	46
5.00 ~ 30.00	60	50

Notes: 1. *Decreasing linearly with logarithm of frequency.
2. The lower limit shall apply at the transition frequencies.

3.4 EUT Configuration on Test

The following equipments are installed on conducted emission test to meet FCC PART 15 B requirement and operating in a manner which tends to maximize its emission characteristics in a normal application.

3.5 Operating Condition of EUT

- 3.5.1 Setup the EUT and simulators as shown in Section 3.1.
- 3.5.2 Turn on the power of all equipments.
- 3.5.3 Let the EUT work in test modes and test it.

3.6 Test Procedure

The EUT is put on the ground and connected to the AC mains through a Artificial Mains Network (AMN). This provided a 50ohm coupling impedance for the tested equipments. Both sides of AC line are checked to find out the maximum conducted emission levels according to the **FCC PART 15 B** regulations during conducted emission test.

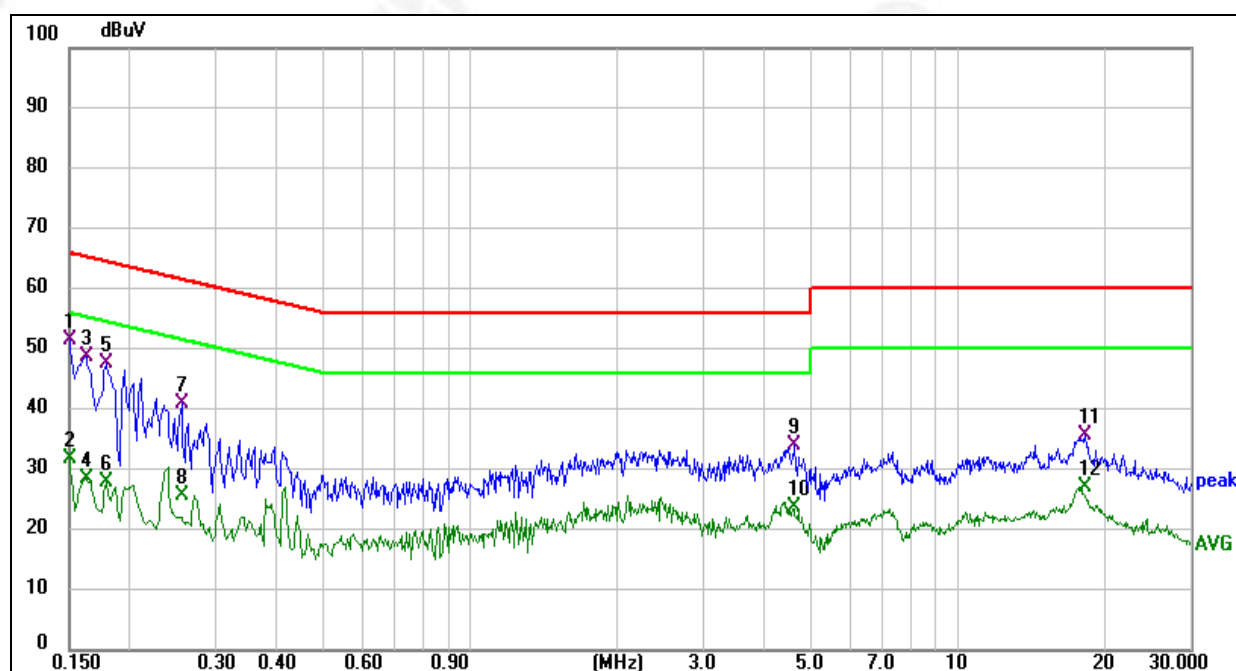
The bandwidth of the test receiver (R&S Test Receiver ESCI) is set at 10KHz.

The frequency range from 150 KHz to 30 MHz is investigated.



3.7 Test Result

Conducted Emission Test Data			
Temperature:	25.4℃	Relative Humidity:	61.6%
Pressure:	1009hPa	Phase :	L
Test Voltage :	AC 120V/60Hz	Test Mode:	Working
Describe:	GTW8103		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	0.1500	32.23	19.37	51.60	66.00	-14.40	QP
2	0.1500	12.57	19.37	31.94	56.00	-24.06	AVG
3	0.1620	29.45	19.37	48.82	65.36	-16.54	QP
4	0.1620	9.08	19.37	28.45	55.36	-26.91	AVG
5	0.1780	28.27	19.38	47.65	64.58	-16.93	QP
6	0.1780	8.54	19.38	27.92	54.58	-26.66	AVG
7	0.2540	21.71	19.37	41.08	61.63	-20.55	QP
8	0.2540	6.41	19.37	25.78	51.63	-25.85	AVG
9	4.5980	14.57	19.41	33.98	56.00	-22.02	QP
10	4.5980	4.45	19.41	23.86	46.00	-22.14	AVG
11	18.2139	16.06	19.77	35.83	60.00	-24.17	QP
12	18.2139	7.43	19.77	27.20	50.00	-22.80	AVG

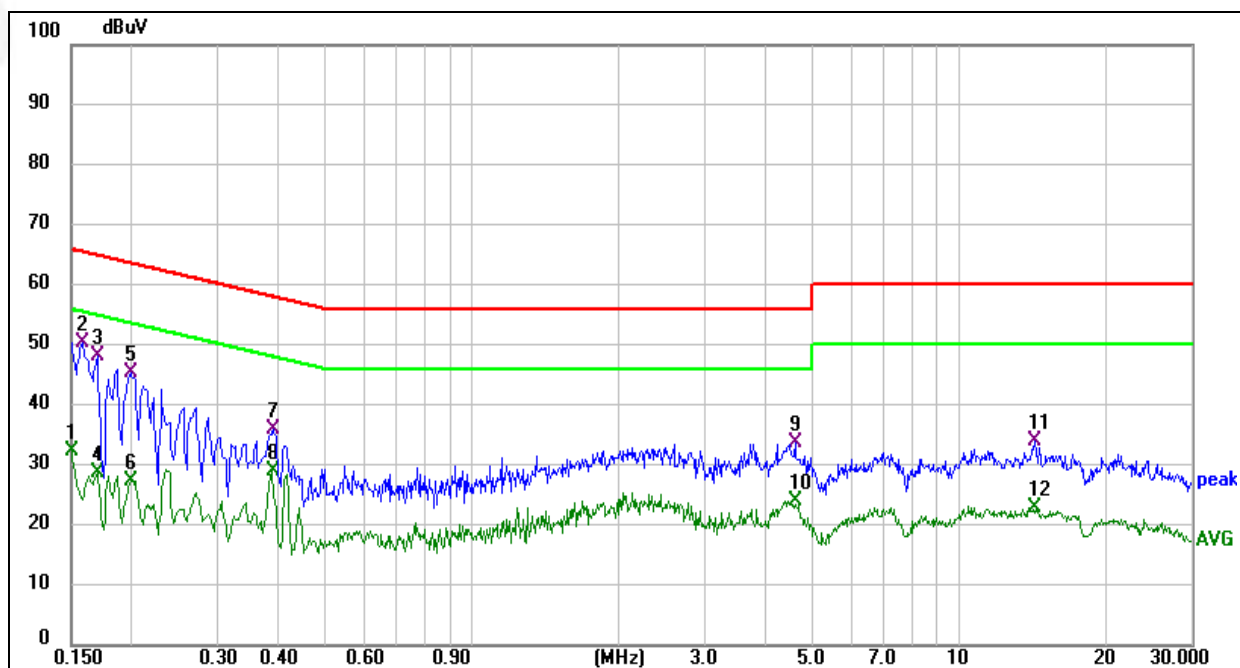
Notes:

1. An initial pre-scan was performed on the peak detector.
2. Quasi-Peak measurement were performed at the frequencies with maximized peak emission.
3. The emission levels of other frequencies are very lower than the limit and not show in test report.
4. Final Level = Reading level + Correct Factor
5. Correct Factor = Antenna factor + Cable loss factor - Amplifier factor
6. Margin = Measurement Level - Limit



Conducted Emission Test Data

Temperature:	25.4℃	Relative Humidity:	61.6%
Pressure:	1009hPa	Phase :	N
Test Voltage :	AC 120V/60Hz	Test Mode:	Working
Describe:	GTW8103		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	0.1500	12.99	19.41	32.40	56.00	-23.60	QP
2	0.1580	30.95	19.40	50.35	65.57	-15.22	AVG
3	0.1700	28.88	19.39	48.27	64.96	-16.69	QP
4	0.1700	9.47	19.39	28.86	54.96	-26.10	AVG
5	0.1980	26.02	19.37	45.39	63.69	-18.30	QP
6	0.1980	7.93	19.37	27.30	53.69	-26.39	AVG
7	0.3899	16.57	19.36	35.93	58.07	-22.14	QP
8	0.3899	9.58	19.36	28.94	48.07	-19.13	AVG
9	4.5780	14.16	19.46	33.62	56.00	-22.38	QP
10	4.5780	4.68	19.46	24.14	46.00	-21.86	AVG
11	14.2340	14.18	19.81	33.99	60.00	-26.01	QP
12	14.2340	2.98	19.81	22.79	50.00	-27.21	AVG

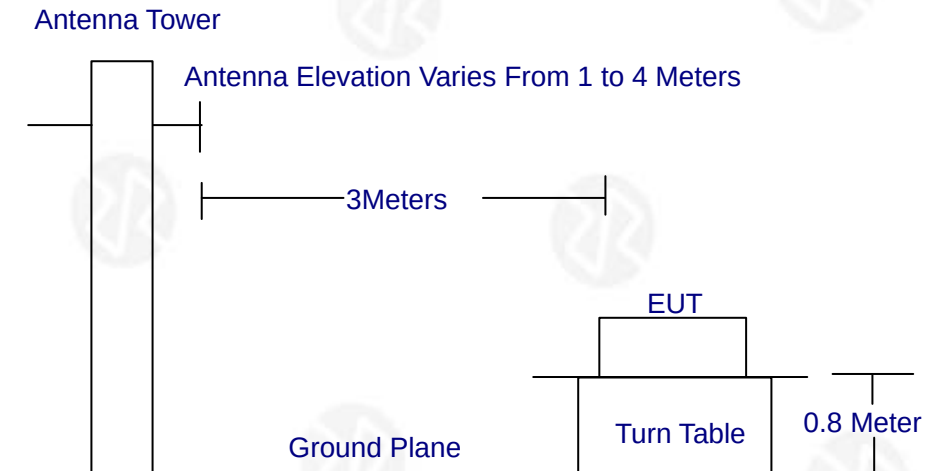
Notes:

1. An initial pre-scan was performed on the peak detector.
2. Quasi-Peak measurement were performed at the frequencies with maximized peak emission.
3. The emission levels of other frequencies are very lower than the limit and not show in test report.
4. Final Level = Reading level + Correct Factor
5. Correct Factor = Antenna factor + Cable loss factor - Amplifier factor
6. Margin = Measurement Level - Limit



4.RADIATION EMISSION TEST

4.1 Block Diagram of Test Setup



4.2 Test Standard

FCC PART 15 B

4.3 Radiation Limit

FREQUENCY (MHz)	DISTANCE (Meters)	FIELD STRENGTHS LIMITS (dB μ V/m)
30 ~ 88	3	40.0
88 ~ 216	3	43.5
216 ~ 960	3	46.0
960 ~ 1000	3	54.0

4.4 EUT Configuration on Test

The FCC PART 15 B regulations test method must be used to find the maximum emission during radiated emission test. The configuration of EUT is the same as used in conducted emission test. Please refer to Section 2.2.

4.5 Operating Condition of EUT

Same as conducted emission test, which is listed in Section 2.2 except the test set up replaced as Section 4.1.

4.6 Test Procedure

The EUT and its simulators are placed on a turned table that is 0.8 meter above the ground. The turned table can rotate 360 degrees to determine the position of the maximum emission level. The EUT is set 3 meters away from the receiving antenna that is mounted on the antenna tower. The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated biconical and log periodical antenna) is used as receiving antenna. Both horizontal and vertical polarization of the antenna is set on test. In order to find the maximum emission levels, the interface cable must be manipulated according to FCC PART 15 B on radiated emission test.

The bandwidth setting on the field strength meter (R&S Test Receiver ESCI) is set at 120KHz below 1GHz, set at 1MHz above 1GHz. The frequency range from 30MHz to 1000MHz is checked. The highest frequency of the internal sources of the EUT was below 108MHz, so the measurement was only made up to 1GHz.

4.7 Test Result

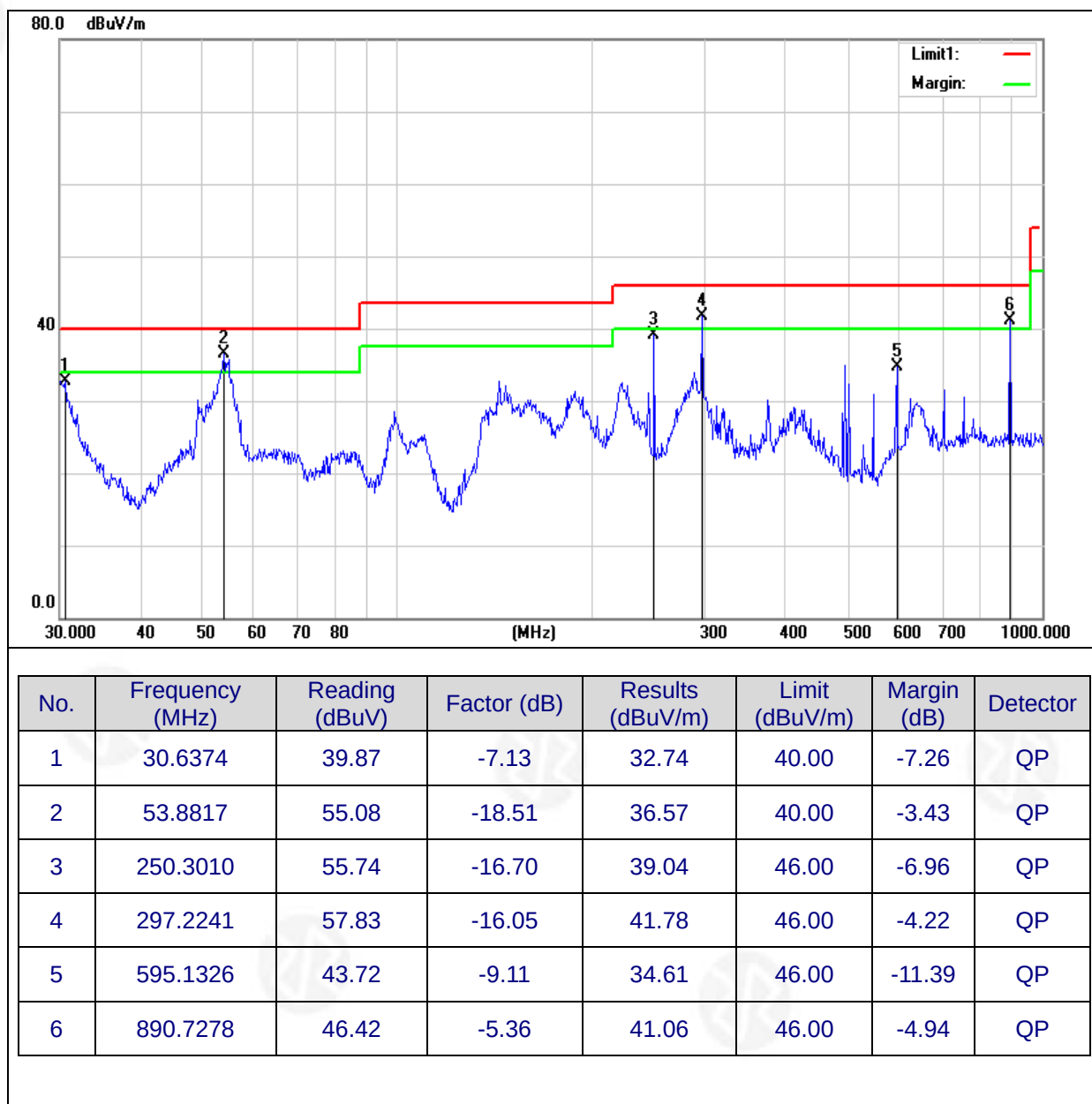
PASS

Please refer to the following page.



Radiation Emission Test Data (30MHz - 1000MHz)

Temperature:	23.3℃	Relative Humidity:	51%
Pressure:	1009hPa	Phase :	Horizontal
Test Voltage :	AC 120V/60Hz	Test Mode:	Working
Describe:	GTW8103		

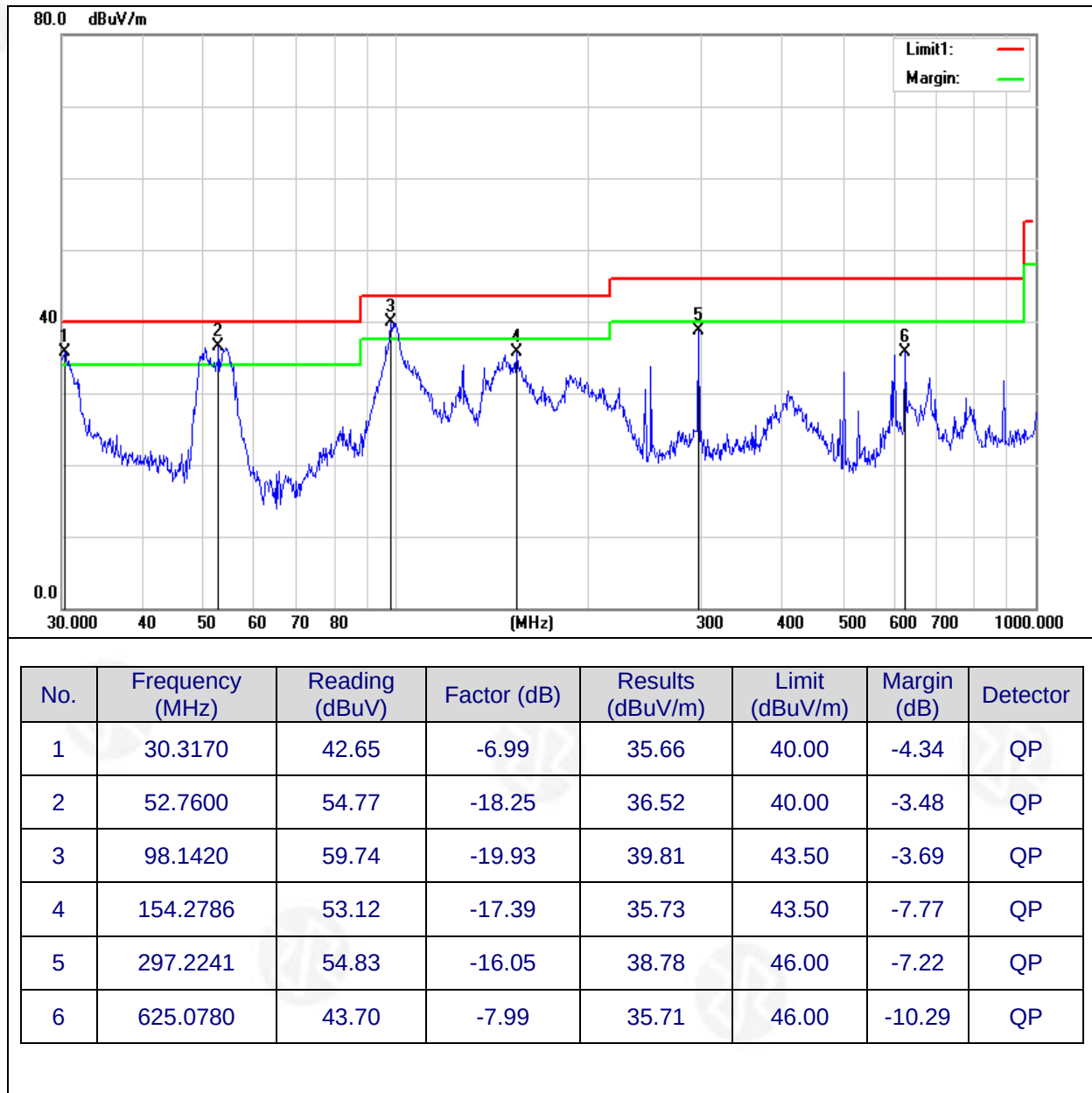


Notes:

1. An initial pre-scan was performed on the peak detector.
2. Quasi-Peak measurements were performed at the frequencies with maximized peak emission.
3. The emission levels of other frequencies are very lower than the limit and not shown in the test report.
4. Final Level = Reading level + Correct Factor
5. Correct Factor = Antenna factor + Cable loss factor - Amplifier factor
6. Margin = Measurement Level - Limit



Radiation Emission Test Data (30MHz - 1000MHz)			
Temperature:	23.3℃	Relative Humidity:	51%
Pressure:	1009hPa	Phase :	Vertical
Test Voltage :	AC 120V/60Hz	Test Mode:	Working
Describe:	GTW8103		



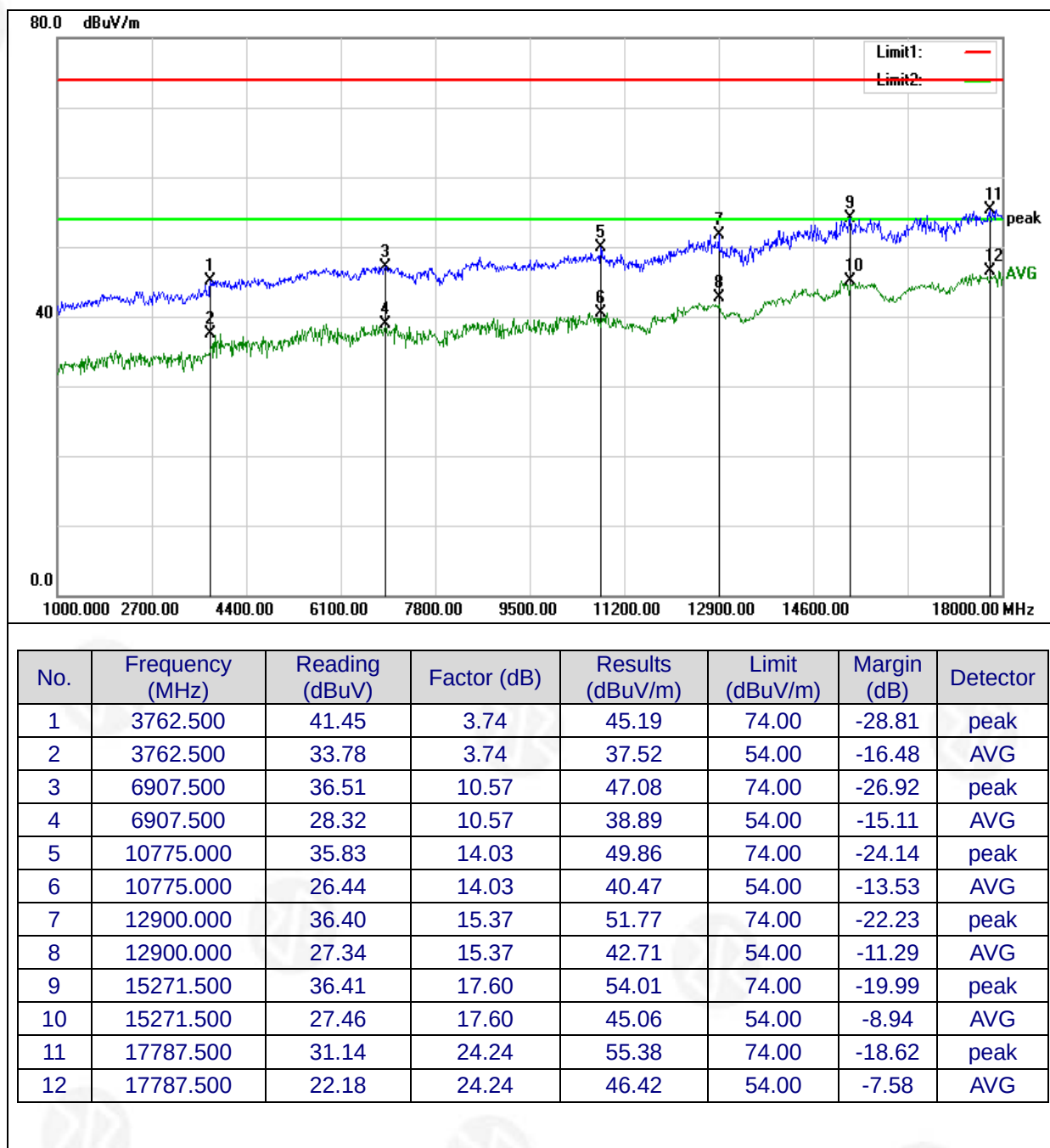
Notes:

1. An initial pre-scan was performed on the peak detector.
2. Quasi-Peak measurement were performed at the frequencies with maximized peak emission.
3. The emission levels of other frequencies are very lower than the limit and not show in test report.
4. Final Level = Reading level + Correct Factor
5. Correct Factor = Antenna factor + Cable loss factor - Amplifier factor
6. Margin = Measurement Level - Limit



Radiation Emission Test Data (1 GHz - 18GHz)

Temperature:	25.3℃	Relative Humidity:	53%
Pressure:	1009hPa	Phase :	Horizontal
Test Voltage :	AC 120V/60Hz	Test Mode:	Working
Describe:	GTW8103		



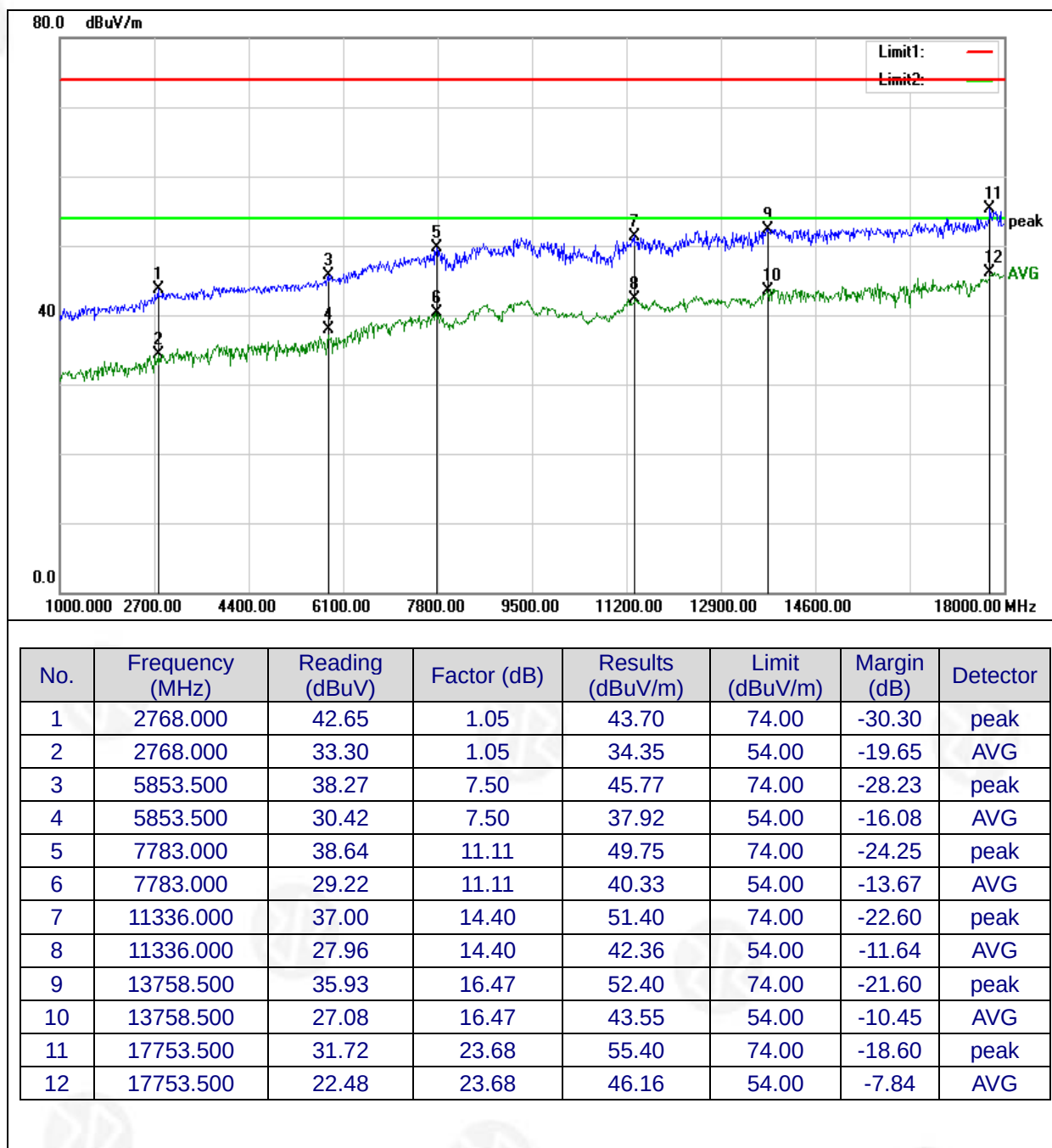
Notes:

1. An initial pre-scan was performed on the peak detector.
2. Quasi-Peak measurements were performed at the frequencies with maximized peak emission.
3. The emission levels of other frequencies are very lower than the limit and not shown in the test report.
4. Final Level = Reading level + Correct Factor
5. Correct Factor = Antenna factor + Cable loss factor - Amplifier factor
6. Margin = Measurement Level - Limit



Radiation Emission Test Data (1 GHz - 18GHz)

Temperature:	25.3°C	Relative Humidity:	53%
Pressure:	1009hPa	Phase :	Vertical
Test Voltage :	AC 120V/60Hz	Test Mode:	Working
Describe:	GTW8103		



Notes:

1. An initial pre-scan was performed on the peak detector.
2. Quasi-Peak measurements were performed at the frequencies with maximized peak emission.
3. The emission levels of other frequencies are very lower than the limit and not shown in the test report.
4. Final Level = Reading level + Correct Factor
5. Correct Factor = Antenna factor + Cable loss factor - Amplifier factor
6. Margin = Measurement Level - Limit



5.EUT PHOTOGRAPHS

Reference to the appendix II for details.

6.EUT TEST PHOTOGRAPHS

Reference to the appendix III for details.

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