

FCC PART 15 SUBPART B TEST REPORT
for
Megapixel Wireless Day & Night Network Camera
Model No.: A100WIRF-HNH-00

of

Applicant: Topview Optronics Corp.
Address: No.8, Wuquan Rd., New Taipei Industrial Park, Wugu District,
New Taipei City 24886, Taiwan, R.O.C.

Tested and Prepared

by

Worldwide Testing Services (Taiwan) Co., Ltd.

FCC Registration No.: 930600

Industry Canada filed test laboratory Reg. No. IC 5679A-1

A2LA Accredited No.: 2732.01



Report No.: W6M21212-12946-P-15B

6F, NO. 58, LANE 188, RUEY-KUANG RD., NEIHU TAIPEI 114, TAIWAN, R.O.C.
TEL: 886-2-66068877 FAX: 886-2-66068879 E-mail: wts@wts-lab.com

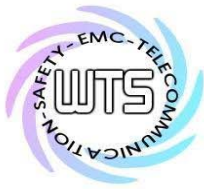
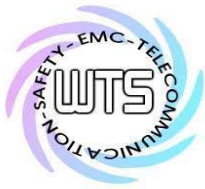


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1 General Information

1.1 Notes

The purpose of conformity testing is to increase the probability of adherence to the essential requirements or conformity specifications, as appropriate.

The tests were carried out and passed in accordance to the standards:

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The complexity of the technical specifications, however, means that full and thorough testing is impractical for both technical and economic reasons.

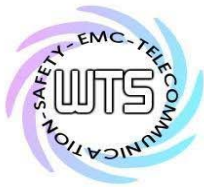
Furthermore, there is no guarantee that a test sample which has passed all the relevant tests conforms to a specification (only telecommunication products).

Neither is there any guarantee that such a test sample will interwork with other genuinely open systems. The existence of the tests nevertheless provides the confidence that the test sample possesses the qualities as maintained and that its performance generally conforms to representative cases of communications equipment.

The test results of this test report relate exclusively to the item tested as specified in 1.6.

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Reproduction or publication of extracts from the report requires the prior written approval of the Worldwide Testing Services(Taiwan) Co., Ltd.



Important Notes:

Proper labelling is required for each device. Devices shall be labelled in accordance with labelling requirements pursuant to section 15.19 and section 2.1074 of the FCC rules.

Devices subject to a Declaration of Conformity shall be uniquely identified by the responsible party.

This identification shall not be of a format which could be confused with the FCC Identifier required on certified, notified type accepted or type approved equipment.

The responsible party shall maintain adequate identification records to facilitate positive identification for each device.

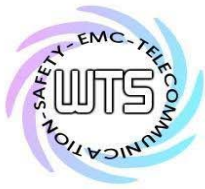
The user manual or instruction manual shall include also a warning statement that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Reference Section 15.21

Furthermore information to the user regarding to the interference potential of the device and about simple measures that can be taken to correct interference is required.

Reference Section 15.105

The responsible party must warrant that each unit of equipment marketed under a Declaration of Conformity is identical to the unit tested and found acceptable with the standards and that the records maintained by the responsible party continue to reflect the equipment being produced under the Declaration of Conformity within the variation that can be expected due to quantity production and testing on a statistical basis.



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1.2 Tester

February 20, 2013

Rick Chen

Rick Chen.

Date

WTS-Lab.

Test Engineer

Signature

Technical responsibility for area of testing:

February 20, 2013

Danny Sung

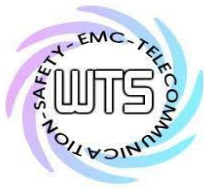
Danny Sung

Date

WTS

Name

Signature



Registration number: W6M21212-12946-P-15B

1.3 Testing laboratory

1.3.1 Location

OATS

No.5-1, Lishui, Shuang Sing Village,
Wanli Dist., New Taipei City 207,
Taiwan (R.O.C.)

3 meter semi-anechoic chamber

No.35, Aly. 21, Ln. 228, Ankang Rd., Neihu Dist., Taipei City 114, Taiwan (R.O.C.)

TEL:886-2-6613-0228

FAX:886-2-2791-5046

Company

Worldwide Testing Services(Taiwan) Co., Ltd.

6F, NO. 58, LANE 188, RUEY-KUANG RD.

NEIHU, TAIPEI 114, TAIWAN R.O.C.

Tel : 886-2-66068877

Fax : 886-2-66068875

1.3.2 Details of accreditation status

Accredited testing laboratory

A2LA accredited number: 2732.01

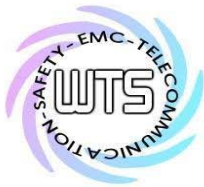
FCC filed test laboratory Reg. No. 930600

Industry Canada filed test laboratory Reg. No. IC 5679A-1



1.3.3 Test location, where different from Worldwide Testing Services (Taiwan) Co., Ltd.

Name:	./.
Accredited number:	./.
Street:	./.
Town:	./.
Country:	./.
Telephone:	./.
Fax:	./.
Teletex:	./.



Registration number: W6M21212-12946-P-15B

1.4 Details of applicant

Name:	Topview Optronics Corp.
Street:	No.8, Wuquan Rd., New Taipei Industrial Park, Wugu District,
City:	New Taipei City 24886
Country:	Taiwan, R.O.C
Telephone:	+ 886 2 2298-8528
Fax:	+ 886 2 2298-1784
Teletex:	./.

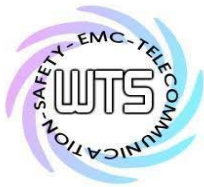
1.5 Application details

Date of receipt of test item:	December 28, 2012
Date of test:	from December 31, 2012 to February 20, 2013

1.6 Test item

1.6.1 Description of test item

Type of product:	Megapixel Wireless Day & Night Network Camera
Type identification:	A100WIRF-HNH-00
Multi-listing model number:	A1**WIRF-HNH-** (*=0~9), A1**CIRF-HNH-** (*=0~9)
Brand Name:	./.
Photos:	Please find in Appendix.



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1.6.2 Manufacturer (if different from applicant in point 1.4)

Name: ./.
Street: ./.
Town: ./.
Country: ./.
Contact: ./.
Phone: ./.

1.6.3 Frequency behavior

Highest frequency generated in the device or on which the device operates or tunes (MHz)		Upper frequency of measurement range (MHz)
<input type="checkbox"/>	Below 1.705	30
<input type="checkbox"/>	1.705 - 108	1000
<input type="checkbox"/>	108 - 500	2000
<input type="checkbox"/>	500 - 1000	5000
<input checked="" type="checkbox"/>	Above 1000	5th harmonic of the highest frequency or 40 GHz, whichever is lower

1.7 Test standards

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2 Technical test

2.1 Summary of test results

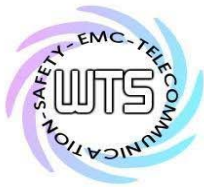
No deviations from the technical specification(s) were ascertained in the course of the tests performed. ☒

Or

The deviations as specified in 2.4 were ascertained in the course of the tests performed. ☐

2.2 Test environment

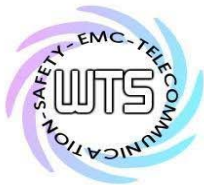
Temperature:	18 ... 25 °C
Relative humidity content	20 ... 75 %
Air pressure:	860 ... 1030 hPa
Details of power supply:	Adapter: (I/P: 100-240 V~ / 50-60 Hz / 0.3 A; O/P: 5 Vdc / 1.5 A / 7.5W)
Other parameters:	without



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2.3 Test equipment utilized

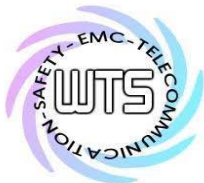
No.	Test equipment	Type	Serial No.	Manufacturer	Cal. Date	Next Cal. Date
ETSTW-CE 001	EMI TEST RECEIVER	ESHS10	842121/013	R&S	2012/9/5	2013/9/4
ETSTW-CE 003	AC POWER SOURCE	APS-9102	D161137	GW	Function Test	
ETSTW-CE 004	ZWEILEITER-V-NETZNACHBILDUNG TWO-LINE V-NETWORK	ESH3-Z5	840731/011	R&S	2012/12/21	2013/12/20
ETSTW-CE 005	Line-Impedance Stabilisation Network	NNBM 8126D	137	Schwarzbeck	2012/9/26	2013/9/25
ETSTW-CE 006	IMPULSBEGRENZER PULSE LIMITER	ESH3-Z2	100226	R&S	2012/3/5	2013/3/4
ETSTW-CE 007	SPECTRUM ANALYZER 5GHz	FSB	849670/001	R&S	Pre-test Use	
ETSTW-CE 008	HF-EICHLITUNG RF STEP ATTENUATOR 139dB DPSP	334.6010.02	844581/024	R&S	Function Test	
ETSTW-CE 009	TEMP.&HUMIDITY CHAMBER	GTH-225-40-1P-U	MAA0305-009	GIANT FORCE	2012/7/3	2013/7/2
ETSTW-CE 013	CISPR 22 TWO BALANCED TELECOM PAIRS IMPEDANCE STABILIZATION NETWORK	FCC-TLISN-T4-02	20242	FCC	2012/9/6	2013/9/5
ETSTW-CE 024	IMPEDANCE STABILIZATION NETWORK	ISN T800	29454	TESEQ	2013/1/7	2014/1/6
ETSTW-CS 004	COUPLING AND DECOUPLING NETWORK	CDN M016	20053	SCHAFFNER	2012/8/10	2013/8/09
ETSTW-CS 005	RF Power Amplifier	100A250A	306547	AR	Function Test	
ETSTW-CS 010	6 dB Attenuator	SA3N1007-06	None	AISI	Function test	
ETSTW-RE 003	EMI TEST RECEIVER	ESI 26	831438/001	R&S	2012/8/10	2013/8/09
ETSTW-RE 004	EMI TEST RECEIVER	ESI 40	832427/004	R&S	2012/9/5	2013/9/4
ETSTW-RE 005	EMI TEST RECEIVER	ESVS10	843207/020	R&S	2012/9/5	2013/9/4
ETSTW-RE 010	ABSORBING CLAMP	MDS 21	3469	Schwarzbeck	2012/9/5	2013/9/4
ETSTW-RE 012	TUNABLE BANDREJECT FILTER	D.C 0309	146	K&L	Function Test	
ETSTW-RE 013	TUNABLE BANDREJECT FILTER	D.C 0336	397	K&L	Function Test	
ETSTW-RE 018	MICROWAVE HORN ANTENNA	AT4560	27212	AR	2012/10/12	2013/10/11
ETSTW-RE 019	MICROWAVE HORN ANTENNA	22240-25	121074	FM	2012/4/03	2013/4/02
ETSTW-RE 020	MICROWAVE HORN ANTENNA	AT4002A	306915	AR	Function Test	
ETSTW-RE 027	Passive Loop Antenna	6512	00034563	ETS-Lindgren	2012/8/01	2013/7/31
ETSTW-RE 028	Log-Periodic Dipole Array Antenna	3148	34429	EMCO	Function Test	
ETSTW-RE 029	Biconical Antenna	3109	33524	EMCO	Function Test	
ETSTW-RE 030	Double-Ridged Guide Horn Antenna	3117	00035224	EMCO	2013/2/20	2014/2/19
ETSTW-RE 032	Millivoltmeter	URV 55	849086/013	R&S	2012/10/5	2013/10/4
ETSTW-RE 033	WaveRunner 6000A Serie Oscilloscope	WAVERUNNER 6100A	LCRY0604P14508	LeCroy	Function Test	
ETSTW-RE 034	Power Sensor	URV5-Z4	839313/006	R&S	2012/10/5	2013/10/4
ETSTW-RE 042	Biconical Antenna	HK116	100172	R&S	2013/1/21	2014/1/20
ETSTW-RE 043	Log-Periodic Dipole Antenna	HL223	100166	R&S	2012/4/13	2013/4/12



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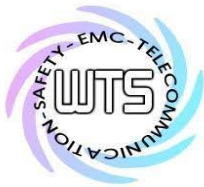
ETSTW-RE 044	Log-Periodic Antenna	HL050	100094	R&S	2012/4/06	2013/4/05
ETSTW-RE 045	ESA-E SERIES SPECTRUM ANALYZER	E4404B	MY45111242	Agilent	Pre-test Use	
ETSTW-RE 048	Triple Loop Antenna	HXYZ 9170	HXYZ 9170-134	Schwarzbeck	2012/8/28	2013/8/27
ETSTW-RE 049	TRILOG Super Broadband test Antenna	VULB 9160	9160-3185	Schwarzbeck	2012/3/23	2013/3/22
ETSTW-RE 050	Attenuator 10dB	50HF-010-1	None	JFW	2012/3/3	2013/3/2
ETSTW-RE 051	Attenuator 6dB	50HF-006-1	None	JFW	2012/3/3	2013/3/2
ETSTW-RE 053	Attenuator 3dB	50HF-003-1	None	JFW	2012/3/3	2013/3/2
ETSTW-RE 055	SPECTRUM ANALYZER	FSU 26	200074	R&S	2012/5/29	2013/5/28
ETSTW-RE 060	Attenuator 30dB	5015-30	F651012z-01	ATM	2012/3/3	2013/3/2
ETSTW-RE 061	Amplifier Module	CHC 1	None	ETS	2012/5/17	2013/5/16
ETSTW-RE 062	Amplifier Module	CHC 2	None	KMIC	2012/11/28	2013/11/27
ETSTW-RE 064	Bluetooth Test Set	MT8852B-042	6K00005709	Anritsu	Function Test	
ETSTW-RE 065	Amplifier	AMF-6F-18002650- 25-10P	941608	MITEQ	2012/4/6	2013/4/5
ETSTW-RE 069	Double-Ridged Guide Horn Antenna	3117	00069377	EMCO	Function Test	
ETSTW-RE 072	CELL SITE TEST SET	8921A	3339A00375	HP	2012/10/5	2013/10/4
ETSTW-RE 073	Power Meter	N1911A	MY45100769	Agilent	2013/1/7	2014/1/6
ETSTW-RE 074	Power Sensor	N1921A	MY45241198	Agilent	2013/1/7	2014/1/6
ETSTW-RE 088	SOLID STATE AMPLIFIER	KMA180265A01	99057	KMIC	2012/10/12	2013/10/11
ETSTW-RE 099	DC Block	50DB-007-1	None	JFW	2012/3/5	2013/3/4
ETSTW-RE 105	2.4GHz Notch Filter	NO124411	39555	MICROWAVE CIRCUITS, INC.	2012/3/5	2013/3/4
ETSTW-RE 106	Humidity Temperature Meter	TES-1366	091011113	TES	2012/12/4	2013/12/3
ETSTW-RE 111	TRILOG Super Broadband test Antenna	VULB 9160	9160-3309	Schwarz beck	2012/12/13	2013/12/12
ETSTW-RE 112	AC POWER SOURCE	TFC-1005	None	T-Power	Function test	
ETSTW-RE 115	2.4GHz Notch Filter	N0124411	473874	MICROWAVE CIRCUITS	2013/1/11	2014/1/10
ETSTW-RE 120	RF Player	MP9200	MP9210-111022	ADIVIC	Function test	
ETSTW-RE 122	SIGNAL GENERATOR	SMF100A	102149	R&S	2012/7/3	2013/7/2
ETSTW-RE 125	5GHz Notch filter	5NSL11- 5200/E221.3-O/O	1	K&L Microwave	2012/8/18	2013/8/17
ETSTW-RE 126	5GHz Notch filter	5NSL11- 5800/E221.3-O/O	1	K&L Microwave	2012/8/18	2013/8/17
ETSTW-RE 127	RF Switch Box	RFS-01	None	WTS	2012/3/3	2013/3/2
ETSTW-EMI 001	HARMONICS 1000	HAR1000-1P	093	EMC-PARTNER	2012/8/10	2013/8/09
ETSTW-EMS 001	BASELSTRASSE 160 CH- 4242 LAUFEN	CN-EFT1000	354	EMC-PARTNER	Function Test	
ETSTW-EMS 002	Frequency Converter	YF-6020	0308014	None	Function Test	
ETSTW-EMS 003	EMC Immunity Test System	TRA2000IN6	579	EMC-PARTNER	2012/11/6	2013/11/5
ETSTW-EMS 009	Magnetic Field Antenna	MF1000-1	104	EMC-PARTNER	Function Test	
ETSTW-EMS 010	Coupling De-coupling Network	CDN-UTP8	014	EMC-PARTNER	Function Test	
ETSTW-EMS 012	EM Injection Clamp	F-203I-23MM	476	FCC	2012/5/29	2013/5/28



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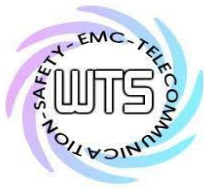
ETSTW-EMS 016	EMF Tester	1390	071208732	TES	2012/10/5	2013/10/4
ETSTW-EMS 017	Multimeter	DM-1220	518614	HOLA	2012/8/10	2013/8/09
ETSTW-EMS 019	Electrostatic Discharge Simulator	ESS-2002	ESS06Y6300	NoiseKen	2012/10/5	2013/10/4
ETSTW-EMS 020	Humidity Temperature Meter	TES-1366	091011116	TES	2012/12/24	2013/12/23
ETSTW-RS 003	RF Power Amplifier	30S1G3	306933	AR	Function Test	
ETSTW-RS 004	RF Power Amplifier	150W1000	307009	AR	Function Test	
ETSTW-RS 006	SIGNAL GENERATOR	SML03	101551	R&S	2012/2/29	2013/2/28
ETSTW-RS 007	14" COLOR VIDEO MONITOR	HS-CM145A	0512011548	None	Function Test	
ETSTW-RS 009	SIGNAL GENERATOR	8648C	3642U01656	HP	2013/2/01	2014/1/31
ETSTW-RS 010	Broadband Field Meter	NBM-520	C-0195	Narda	2012/9/24	2013/9/23
ETSTW-GSM 002	Universal Radio Communication Tester	CMU 200	109439	R&S	2012/10/5	2013/10/4
ETSTW-GSM 019	Band Reject Filter	WRCTF824/849-822/851-40 /12+9SS	3	WI	2013/1/11	2014/1/10
ETSTW-GSM 020	Band Reject Filter	WRCD1747/1748-1743/1752-32/5SS	1	WI	2013/1/11	2014/1/10
ETSTW-GSM 021	Band Reject Filter	WRCD1879.5/1880.5-1875.5/1884.5-32/5SS	3	WI	2013/1/11	2014/1/10
ETSTW-GSM 022	Band Reject Filter	WRCT901.9/903.1-904.25-50/8SS	1	WI	2013/1/11	2014/1/10
ETSTW-GSM 023	Power Divider	4901.19.A	None	SUHNER	2012/9/18	2013/9/17
ETSTW-Cable 002	Microwave Cable	SUCOFLEX 104 (S Cable 7)	238093	HUBER+SUHNER	2012/5/17	2013/5/16
ETSTW-Cable 003	Microwave Cable	SUCOFLEX 104 (S Cable 11)	209953	HUBER+SUHNER	2012/5/17	2013/5/16
ETSTW-Cable 010	BNC Cable	5 M BNC Cable	None	JYE BAO CO.,LTD.	2012/3/5	2013/3/4
ETSTW-Cable 011	BNC Cable	BNC Cable 1	None	JYE BAO CO.,LTD.	Pre-test Use NCR	
ETSTW-Cable 012	N TYPE To SMA Cable	Cable 012	None	JYE BAO CO.,LTD.	2012/3/5	2013/3/4
ETSTW-Cable 013	Microwave Cable	SUCOFLEX 104 (S Cable 5)	232345	HUBER+SUHNER	Function Test	
ETSTW-Cable 016	BNC Cable	Switch Box	B Cable 1	Schwarz beck	2012/3/3	2013/3/2
ETSTW-Cable 017	BNC Cable	X Cable	B Cable 2	Schwarz beck	2012/3/3	2013/3/2
ETSTW-Cable 018	BNC Cable	Y Cable	B Cable 3	Schwarz beck	2012/3/3	2013/3/2
ETSTW-Cable 019	BNC Cable	Z Cable	B Cable 4	Schwarz beck	2012/3/3	2013/3/2
ETSTW-Cable 022	N TYPE Cable	5006	0002	JYE BAO CO.,LTD.	2012/4/6	2013/4/5
ETSTW-Cable 026	Microwave Cable	SUCOFLEX 104	279075	HUBER+SUHNER	2012/3/5	2013/3/4
ETSTW-Cable 027	Microwave Cable	SUCOFLEX 104	279083	HUBER+SUHNER	2012/3/5	2013/3/4
ETSTW-Cable 028	Microwave Cable	FA147A0015M2020	30064-2	UTIFLEX	2012/10/12	2013/10/11
ETSTW-Cable 029	Microwave Cable	FA147A0015M2020	30064-3	UTIFLEX	2012/10/12	2013/10/11
ETSTW-Cable 030	Microwave Cable	SUCOFLEX 104 (S Cable 9)	279067	HUBER+SUHNER	2012/3/5	2013/3/4
ETSTW-Cable 031	Microwave Cable	SUCOFLEX 104 (S Cable 10)	238092	HUBER+SUHNER	2012/11/28	2013/11/27
ETSTW-Cable 032	Microwave Cable	SUCOFLEX 104 (S Cable 12)	237301	HUBER+SUHNER	Function Test	
ETSTW-Cable 039	Microwave Cable	SUCOFLEX 104 (S Cable 19)	316739	HUBER+SUHNER	2012/5/17	2013/5/16
ETSTW-Cable 040	Microwave Cable	SUCOFLEX 104 (S Cable 20)	316738	HUBER+SUHNER	Function Test	



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ETSTW-Cable 043	Microwave Cable	SUCOFLEX 104	317576	HUBER+SUHNER	2012/11/28	2013/11/27
ETSTW-Cable 047	Microwave Cable	SUCOFLEX 104	325518	HUBER+SUHNER	2012/11/28	2013/11/27
ETSTW-Cable 051	BNC Cable	BNC Cable 6	None	JYE BAO CO.,LTD.	2012/3/30	2013/3/29
ETSTW-Cable 052	BNC Cable	Clamp Cable	None	Schwarz beck	2012/3/30	2013/3/29
ETSTW-Cable 053	N TYPE To SMA Cable	RG142	None	JYE BAO CO.,LTD.	2012/4/6	2013/4/5
ETSTW-Cable 054	BNC To SMA Cable	RG142	None	JYE BAO CO.,LTD.	2012/4/6	2013/4/5
ETSTW-Cable 055	NTYPE Cable	N30N30-JBY240-80CM	20110621-1.1	JYE BAO CO.,LTD.	Function Test	
ETSTW-Cable 056	N TYPE Cable	N30N30-JBY240-80CM	20110621-1.0	JYE BAO CO.,LTD.	Function Test	
ETSTW-Cable 057	N TYPE Cable	N30N30-JBY240-80CM	20110621-1.1	JYE BAO CO.,LTD.	Function Test	
WTSTW-SW 001	EMI TEST SOFTWARE	Harmonics-1000	None	EMC PARTNER	HARCS Version 4.16 Firmware Version 2.18	
WTSTW-SW 002	EMI TEST SOFTWARE	EZ EMC	None	Farad	Version ETS-03A1	
WTSTW-SW 003	EMS TEST SOFTWARE	i2	None	AUDIX	Version 3.2007-8-17b	



Registration number: W6M21212-12946-P-15B

2.4 Test results

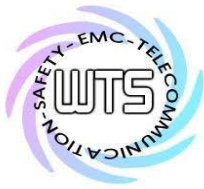
☒ 1st test

☐ test after modification

☐ production test

Test Emission / Immunity			Done	Test passed	Test failed
Emission	Radiated Emission	FCC part 15.109 Class B	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Emission	Conducted Emission	FCC part 15.107 Class B	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

(The following is intentionally left blank.)



Registration number: W6M21212-12946-P-15B

2.4.1 Radiated Emission

2.4.1.1 Test Equipment

a) EMI TEST RECEIVER (ESI-26)

For your reference please find it in our test equipment list at page 9 to 12 as number : ETSTW-RE 003

b) EMI TEST RECEIVER (ESI 40)

For your reference please find it in our test equipment list at page 9 to 12 as number : ETSTW-RE 004

c) Log-Periodic Antenna (HL050)

For your reference please find it in our test equipment list at page 9 to 12 as number : ETSTW-RE 044

d) Biconical Antenna (HK116)

For your reference please find it in our test equipment list at page 9 to 12 as number : ETSTW-RE 042

e) Log-Periodic Dipole Antenna (HL223)

For your reference please find it in our test equipment list at page 9 to 12 as number : ETSTW-RE 043

f) Double-Ridged Waveguide Horn Antenna (3117)

For your reference please find it in our test equipment list at page 9 to 12 as number : ETSTW-RE 030

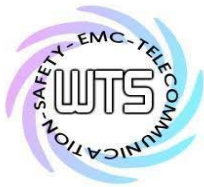
2.4.1.2 Test Procedures

- **Test configuration**

The test configuration corresponds to the standard ANSI C63.4. The equipment under test is placed on a non metallic table with 0.8m height. The power supply and the RF connection points are close to the equipment under test at the floor inside a connection box. The cables to this connection box are shielded and below the double floor. The receiving antenna is placed in a height at 1.0 to 4.0m, in a distance of 3m. The measurement receiver is placed in a special room. The observation of the equipment under test is realized by 3 video cameras and by a microphone.

- **Test parameters and marginal conditions**

The test is carried out with horizontal and vertical polarization of the antenna in a frequency range of 30 MHz to 12750 MHz (Digital Part)/ 26500MHz (Receiver part). Further information please find in the test protocol.



Registration number: W6M21212-12946-P-15B

2.4.2 Conducted Emission

2.4.2.1 Test Equipment

a) ZWEILEITER-V-NETZNACHBILDUNG TWO-LINE V-NETWORK (ESH3-Z5)

For your reference please find it in our test equipment list at page 9 to 12 as number : ETSTW-CE 004

b) IMPULS-BEGRENZER PULSE LIMITER (ESH3-Z2)

For your reference please find it in our test equipment list at page 9 to 12 as number : ETSTW-CE 006

c) EMI TEST RECEIVER (ESHS10)

For your reference please find it in our test equipment list at page 9 to 12 as number : ETSTW-CE 001

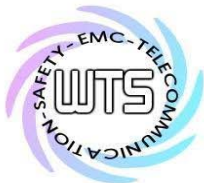
2.4.2.2 Test Procedures

- **Test configuration**

The test configuration is contained inside of a shielded chamber and corresponds to the standard ANSI C63.4. The equipment under test is placed in the facility on a wooden table 0.8m height. The equipment under test is connected with the artificial mains network (AMN) in a distance of 0.8m and also 0.8m from other subassembly and metallic area. The measurement receiver is placed in a special room adjacent to the chamber. The observation of the equipment under test is realized by 3 video cameras and by a microphone.

- **Test parameters and marginal conditions**

The tests are carried out with nominal impedance by 50Ω / $50\mu\text{H}$ of the AMN in a frequency range 150 kHz to 30 MHz. This measurement was transacted first with instrumentation using an average and peak detector and a 10 kHz bandwidth. If the peak detector achieves a calculated level, the measurement is repeated by an instrumentation using a quasi-peak detector, further information please find in test report.



Registration number: W6M21212-12946-P-15B

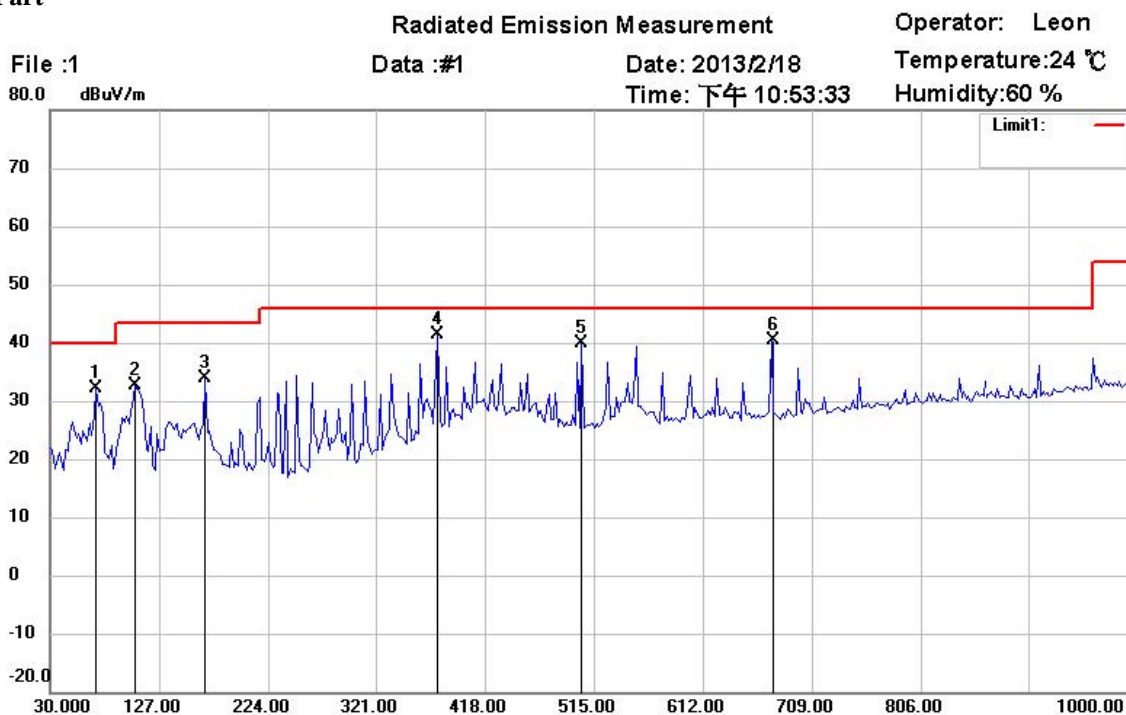
2.5 Test protocols

2.5.1 Radiated Emission

Radio Noise Field Strength

Emission

Digital Part



Site : 966 Chamber

Condition : FCC_part 15 RE-Class B_30-1000MHz

EUT : W6M21212-12946

M/N: A100WIRF-HNH-00

Test Mode :

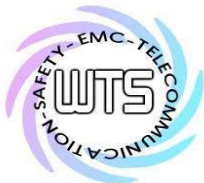
Note :

Polarization: *Horizontal*

Power : 110VAC

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	70.8215	20.54	QP	11.47	32.01	40.00	160	135	-7.99	
	105.8116	20.56	QP	12.01	32.57	43.50	130	220	-10.93	
	168.0160	18.98	QP	14.95	33.93	43.50	110	55	-9.57	
*	376.0120	23.63	QP	17.87	41.50	46.00	100	160	-4.50	
	504.3086	19.16	QP	20.73	39.89	46.00	100	110	-6.11	
	673.4270	16.40	QP	23.90	40.30	46.00	100	70	-5.70	



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21212-12946-P-15B

Radiated Emission Measurement

Operator: Leon

File :1

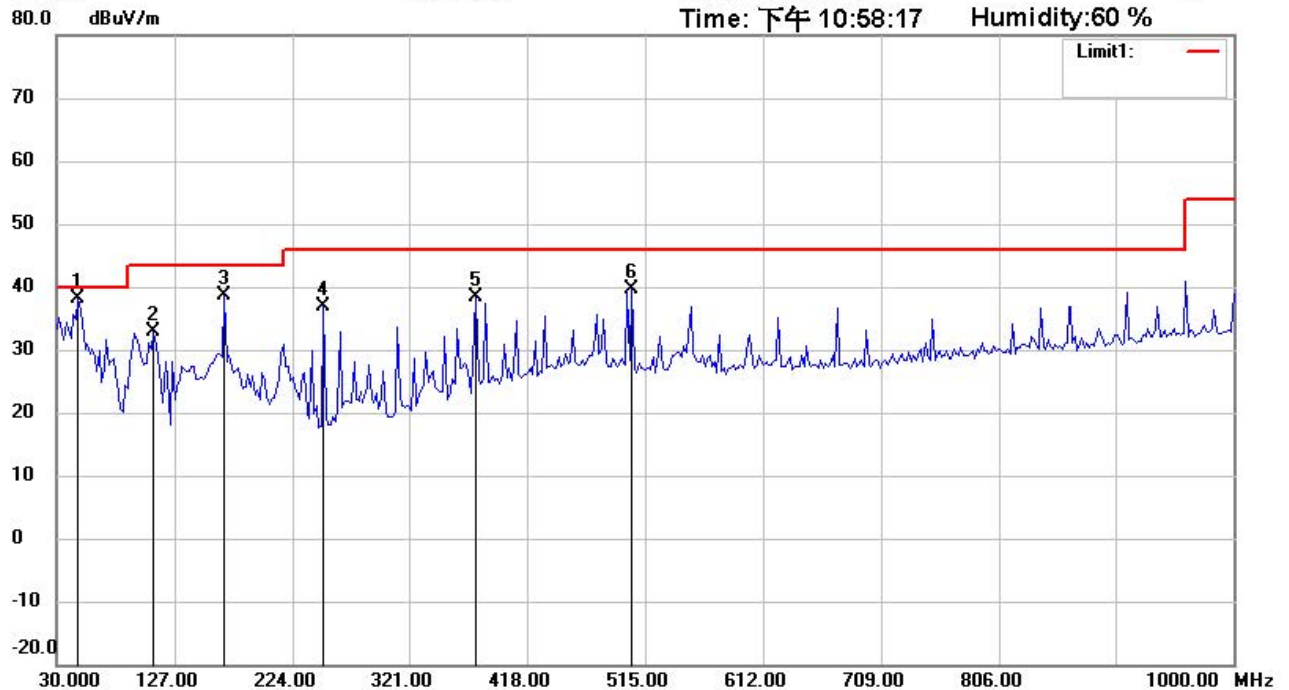
Data :#2

Date: 2013/2/18

Temperature: 24 °C

Time: 下午 10:58:17

Humidity: 60 %



Site : 966 Chamber

Condition : FCC_part 15 RE-Class B_30-1000MHz

Polarization: **Vertical**

EUT : W6M21212-12946

Power : 110VAC

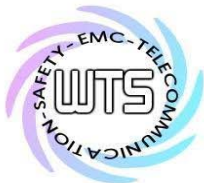
M/N: A100WRF-HNH-00

Distance: 3m

Test Mode :

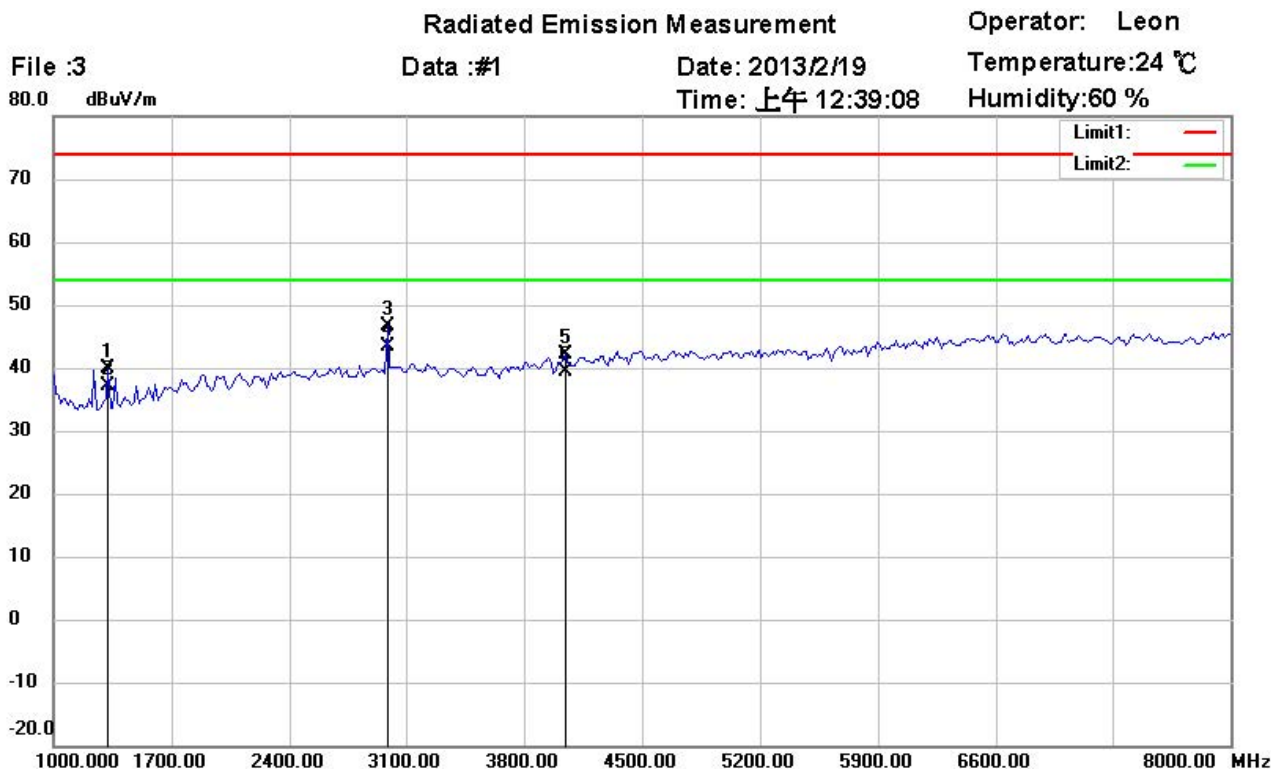
Note :

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	47.4950	23.84	QP	14.28	38.12	40.00	100	340	-1.88	
	109.6994	20.10	QP	12.73	32.83	43.50	110	125	-10.67	
	168.0160	23.75	QP	14.95	38.70	43.50	110	310	-4.80	
	249.6593	22.74	QP	14.14	36.88	46.00	100	90	-9.12	
	376.0120	20.55	QP	17.87	38.42	46.00	100	145	-7.58	
	504.3086	18.92	QP	20.73	39.65	46.00	100	130	-6.35	



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21212-12946-P-15B



Site : 966 Chamber

Condition : FCC_part 15 RE-Class B_Above 1GHz_PK

EUT : W6M21212-12946

M/N: A100WRF-HNH-00

Test Mode :

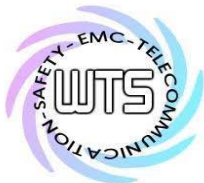
Note :

Polarization: *Horizontal*

Power : 110VAC

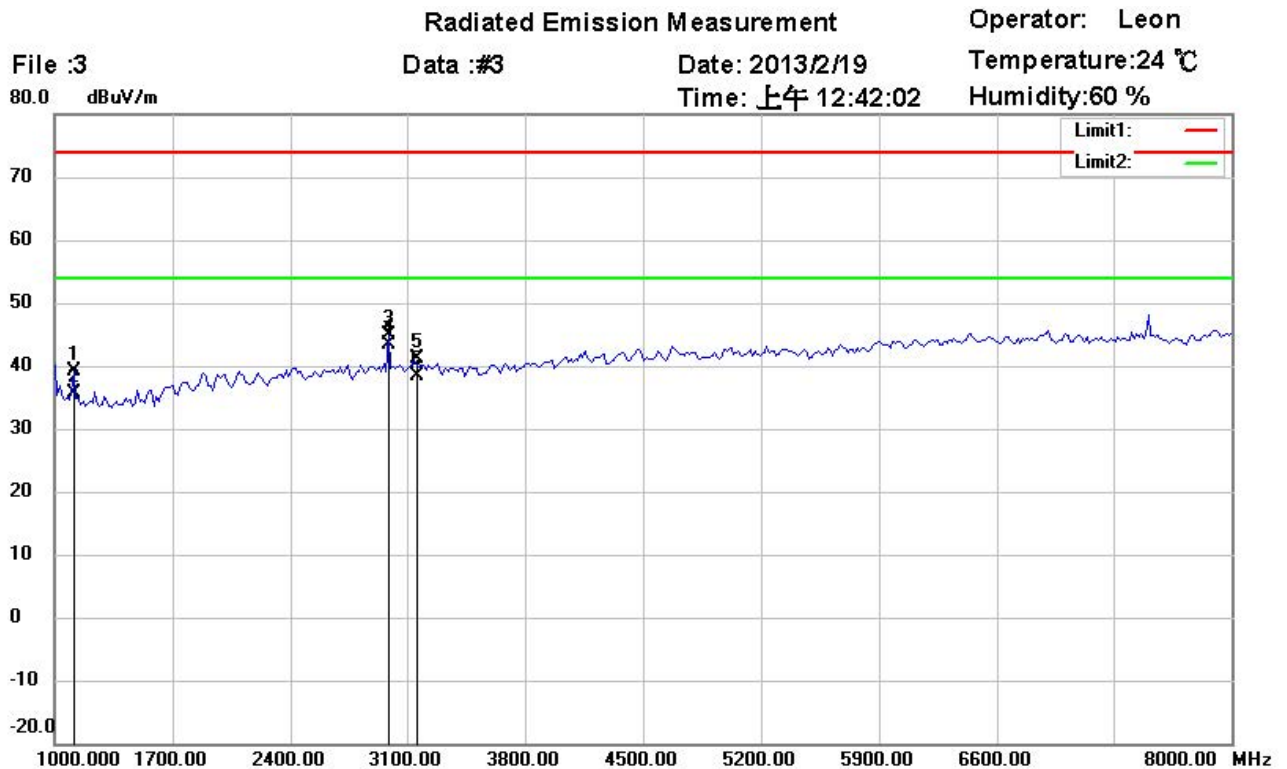
Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	1322.645	48.11	peak	-8.19	39.92	74.00	100	130	-34.08	
	1322.645	45.20	AVG	-8.19	37.01	54.00	100	130	-16.99	
	2991.984	48.98	peak	-2.29	46.69	74.00	100	155	-27.31	
*	2991.984	45.71	AVG	-2.29	43.42	54.00	100	155	-10.58	
	4044.088	42.65	peak	-0.58	42.07	74.00	100	120	-31.93	
	4044.088	39.93	AVG	-0.58	39.35	54.00	100	120	-14.65	



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21212-12946-P-15B



Site : 966 Chamber

Condition : FCC_part 15 RE-Class B_Above 1GHz_PK

EUT : W6M21212-12946

M/N: A100WRF-HNH-00

Test Mode :

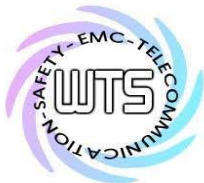
Note :

Polarization: **Vertical**

Power : 110VAC

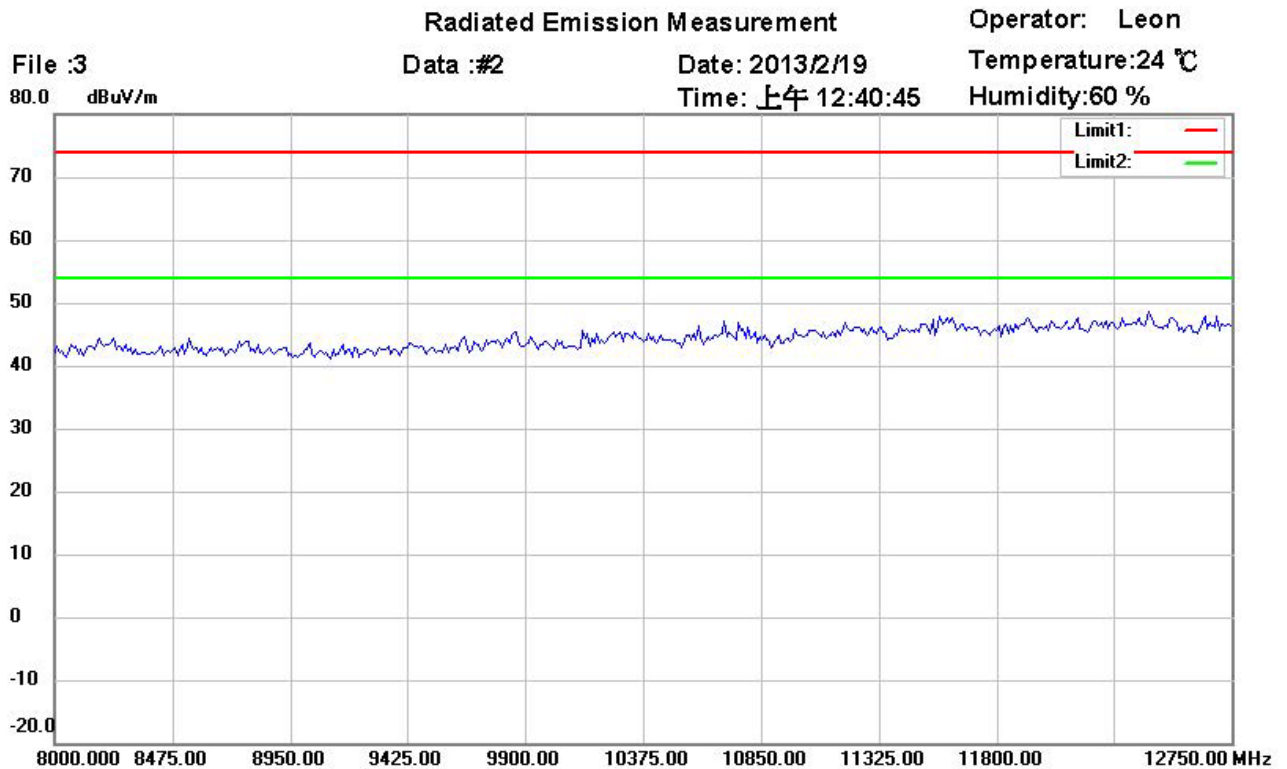
Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	1112.224	47.28	peak	-8.20	39.08	74.00	100	75	-34.92	
	1112.224	43.94	AVG	-8.20	35.74	54.00	100	75	-18.26	
	2991.984	47.19	peak	-2.29	44.90	74.00	100	230	-29.10	
*	2991.984	45.67	AVG	-2.29	43.38	54.00	100	230	-10.62	
	3146.293	42.88	peak	-1.83	41.05	74.00	100	310	-32.95	
	3146.293	40.10	AVG	-1.83	38.27	54.00	100	310	-15.73	



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21212-12946-P-15B



Site : 966 Chamber

Condition : FCC_part 15 RE-Class B_Above 1GHz_PK

EUT : W6M21212-12946

M/N: A100WRF-HNH-00

Test Mode :

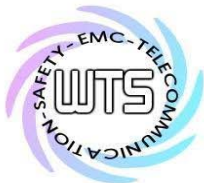
Note :

Polarization: *Horizontal*

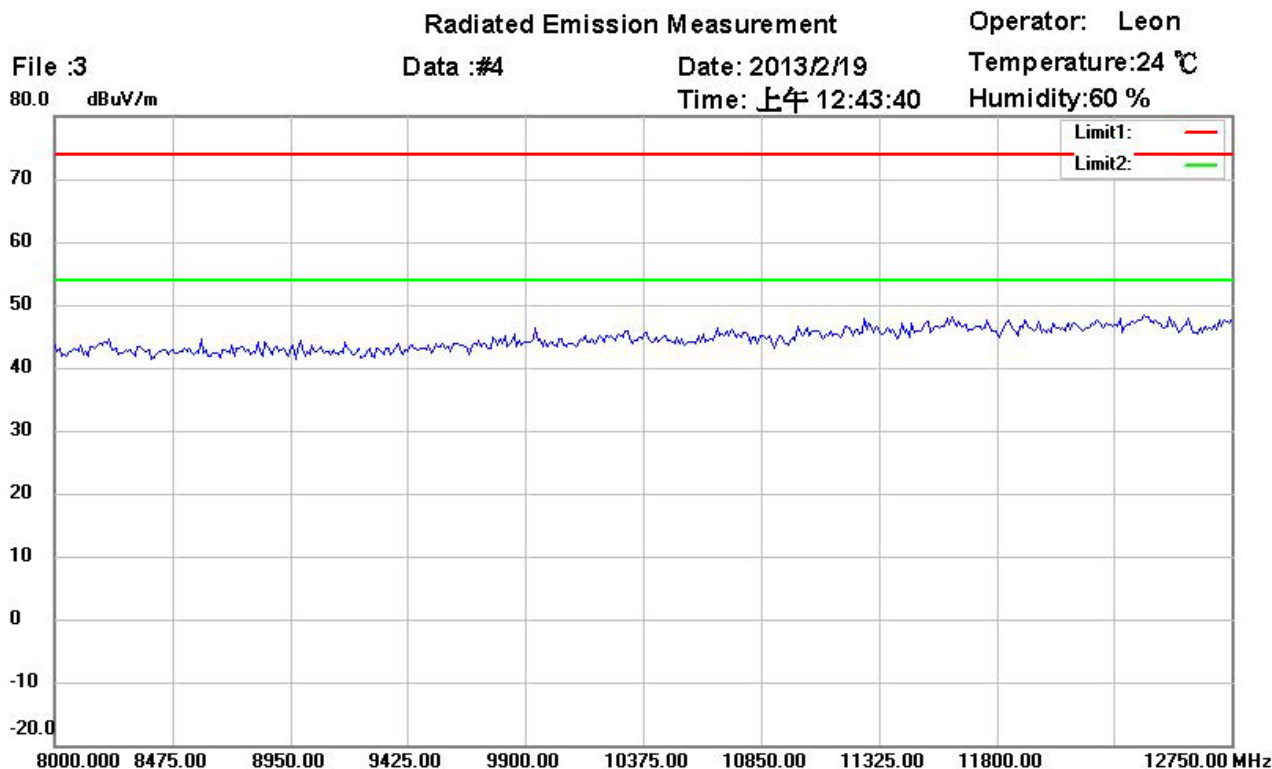
Power : 110VAC

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
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Registration number: W6M21212-12946-P-15B



Site : 966 Chamber

Condition : FCC_part 15 RE-Class B_Above 1GHz_PK

EUT : W6M21212-12946

M/N: A100WRF-HNH-00

Test Mode :

Note :

Polarization: **Vertical**

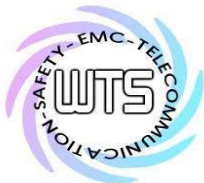
Power : 110VAC

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
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Note:

1. Correction Factor = Antenna factor + Cable loss - Preamplifier
2. The formula of measured value as: Test Result = Reading + Correction Factor
3. Detector function in the form : PK = Peak, QP = Quasi Peak, AV = Average
4. All not in the table noted test results are more than 20 dB below the relevant limits.
Measurement uncertainty for 3m measurement: 30-1000 MHz = ± 3.72 dB, 1-18 GHz = ± 5.33 dB, 18-40 GHz = ± 3.43 dB ; Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.
5. Up Line: PK Limit Line, Down Line: Ave Limit Line.



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21212-12946-P-15B

Receiver part

Model: A100WIRF-HNH-00 Date: 2013/2/7
Mode: 802.11b CH1 Temperature: 24 °C Engineer: Leon
Polarization: Horizontal Humidity: 60 %

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
166.0721	26.63	peak	14.79	41.42	43.50	-2.08	155	100
249.6593	22.76	peak	13.99	36.75	46.00	-9.25	130	100
376.0120	22.43	peak	17.60	40.03	46.00	-5.97	260	100
500.4207	18.03	peak	20.21	38.24	46.00	-7.76	270	100

Frequency (MHz)	Reading (dBuV) Peak Ave.		Factor (dB) Corr.	Result @3m (dBuV/m) Peak Ave.		Limit @3m (dBuV/m) Peak Ave.		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
4824.0000	42.41	---	0.50	42.91	---	74.00	54.00	-31.09	145	100
7236.0000	40.99	---	4.06	45.05	---	74.00	54.00	-28.95	250	100

Polarization: Vertical

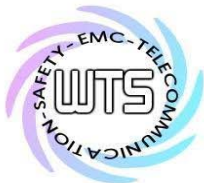
Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
103.8676	22.26	peak	11.55	33.81	43.50	-9.69	155	100
166.0721	25.26	peak	14.79	40.05	43.50	-3.45	160	100
376.0120	17.11	peak	17.60	34.71	46.00	-11.29	110	100
500.4207	22.68	peak	20.21	42.89	46.00	-3.11	340	100

Frequency (MHz)	Reading (dBuV) Peak Ave.		Factor (dB) Corr.	Result @3m (dBuV/m) Peak Ave.		Limit @3m (dBuV/m) Peak Ave.		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
4824.0000	41.39	---	0.50	41.89	---	74.00	54.00	-32.11	270	100
7236.0000	40.55	---	4.06	44.61	---	74.00	54.00	-29.39	155	100

Mode: 802.11b CH6

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
166.0721	26.91	peak	14.79	41.70	43.50	-1.80	140	100
249.6593	23.29	peak	13.99	37.28	46.00	-8.72	275	100
376.0120	20.92	peak	17.60	38.52	46.00	-7.48	165	100
500.4207	17.62	peak	20.21	37.83	46.00	-8.17	310	100



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21212-12946-P-15B

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4874.0000	41.65	---	0.61	42.26	---	74.00	54.00	-31.74	160	100
7311.0000	40.15	---	4.20	44.35	---	74.00	54.00	-29.65	180	100

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
119.4188	20.32	peak	13.20	33.52	43.50	-9.98	240	100
166.0721	25.43	peak	14.79	40.22	43.50	-3.28	215	100
376.0120	17.26	peak	17.60	34.86	46.00	-11.14	165	100
500.4207	21.20	peak	20.21	41.41	46.00	-4.59	110	100

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4874.0000	41.48	---	0.61	42.09	---	74.00	54.00	-31.91	355	100
7311.0000	40.48	---	4.20	44.68	---	74.00	54.00	-29.32	110	100

Mode: 802.11b CH11

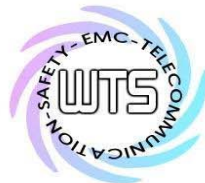
Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
166.0721	26.12	peak	14.79	40.91	43.50	-2.59	330	100
249.6593	22.88	peak	13.99	36.87	46.00	-9.13	165	100
342.9658	23.65	peak	16.73	40.38	46.00	-5.62	140	100
376.0120	22.32	peak	17.60	39.92	46.00	-6.08	120	100

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4924.0000	41.39	---	0.84	42.23	---	74.00	54.00	-31.77	315	100
7386.0000	39.92	---	4.43	44.35	---	74.00	54.00	-29.65	165	100

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
119.4188	20.41	peak	13.20	33.61	43.50	-9.89	170	100
166.0721	26.00	peak	14.79	40.79	43.50	-2.71	130	100
191.3427	25.41	peak	12.75	38.16	43.50	-5.34	215	100
500.4208	21.01	peak	20.21	41.22	46.00	-4.78	140	100



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21212-12946-P-15B

Frequency (MHz)	Reading (dBuV) Peak Ave.		Factor (dB) Corr.	Result @3m (dBuV/m) Peak Ave.		Limit @3m (dBuV/m) Peak Ave.		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
4924.0000	41.85	---	0.84	42.69	---	74.00	54.00	-31.31	175	100
7386.0000	40.25	---	4.43	44.68	---	74.00	54.00	-29.32	160	100

Mode: 802.11g CH1

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
166.0721	26.84	peak	14.79	41.63	43.50	-1.87	220	100
249.6593	23.34	peak	13.99	37.33	46.00	-8.67	160	100
335.1904	22.12	peak	16.52	38.64	46.00	-7.36	135	100
376.0120	21.98	peak	17.60	39.58	46.00	-6.42	120	100

Frequency (MHz)	Reading (dBuV) Peak Ave.		Factor (dB) Corr.	Result @3m (dBuV/m) Peak Ave.		Limit @3m (dBuV/m) Peak Ave.		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
4824.0000	41.44	---	0.50	41.94	---	74.00	54.00	-32.06	210	100
7236.0000	40.45	---	4.06	44.51	---	74.00	54.00	-29.49	160	100

Polarization: Vertical

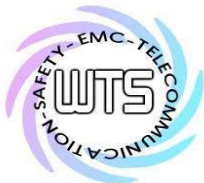
Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
109.6994	21.00	peak	12.63	33.63	43.50	-9.87	310	100
166.0721	25.41	peak	14.79	40.20	43.50	-3.30	120	100
376.0120	17.79	peak	17.60	35.39	46.00	-10.61	70	100
500.4208	22.52	peak	20.21	42.73	46.00	-3.27	190	100

Frequency (MHz)	Reading (dBuV) Peak Ave.		Factor (dB) Corr.	Result @3m (dBuV/m) Peak Ave.		Limit @3m (dBuV/m) Peak Ave.		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
4824.0000	41.38	---	0.50	41.88	---	74.00	54.00	-32.12	165	100
7236.0000	40.85	---	4.06	44.91	---	74.00	54.00	-29.09	140	100

Mode: 802.11g CH6

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
166.0721	26.75	peak	14.79	41.54	43.50	-1.96	215	100
249.6593	23.05	peak	13.99	37.04	46.00	-8.96	160	100
333.2465	23.00	peak	16.46	39.46	46.00	-6.54	270	100
376.0120	21.28	peak	17.60	38.88	46.00	-7.12	240	100



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21212-12946-P-15B

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4874.0000	41.74	---	0.61	42.35	---	74.00	54.00	-31.65	140	100
7311.0000	40.46	---	4.20	44.66	---	74.00	54.00	-29.34	150	100

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
166.0721	25.92	peak	14.79	40.71	43.50	-2.79	190	100
191.3427	24.31	peak	12.75	37.06	43.50	-6.44	145	100
376.0120	17.74	peak	17.60	35.34	46.00	-10.66	270	100
500.4208	21.41	peak	20.21	41.62	46.00	-4.38	130	100

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4874.0000	41.27	---	0.61	41.88	---	74.00	54.00	-32.12	240	100
7311.0000	40.36	---	4.20	44.56	---	74.00	54.00	-29.44	130	100

Mode: 802.11g CH11

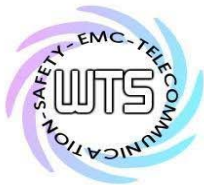
Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
166.0721	26.70	peak	14.79	41.49	43.50	-2.01	190	100
249.6593	22.92	peak	13.99	36.91	46.00	-9.09	255	100
376.0120	21.89	peak	17.60	39.49	46.00	-6.51	130	100
500.4207	17.94	peak	20.21	38.15	46.00	-7.85	140	100

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4924.0000	41.65	---	0.84	42.49	---	74.00	54.00	-31.51	230	100
7386.0000	40.06	---	4.43	44.49	---	74.00	54.00	-29.51	170	100

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
166.0721	25.89	peak	14.79	40.68	43.50	-2.82	140	100
376.0120	16.87	peak	17.60	34.47	46.00	-11.53	100	100
500.4208	21.35	peak	20.21	41.56	46.00	-4.44	265	100
673.4270	13.09	peak	23.41	36.50	46.00	-9.50	130	100



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Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4924.0000	42.18	---	0.84	43.02	---	74.00	54.00	-30.98	275	100
7386.0000	40.48	---	4.43	44.91	---	74.00	54.00	-29.09	140	100

Mode: 802.11n (20MHz) CH1

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
166.0721	26.39	peak	14.79	41.18	43.50	-2.32	340	100
249.6593	23.51	peak	13.99	37.50	46.00	-8.50	90	100
331.3025	25.09	peak	16.41	41.50	46.00	-4.50	160	100
376.0120	22.75	peak	17.60	40.35	46.00	-5.65	130	100

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4824.0000	41.43	---	0.50	41.93	---	74.00	54.00	-32.07	75	100
7236.0000	40.87	---	4.06	44.93	---	74.00	54.00	-29.07	190	100

Polarization: Vertical

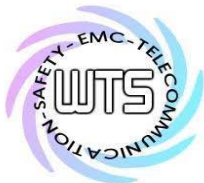
Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
166.0721	25.48	peak	14.79	40.27	43.50	-3.23	315	100
191.3427	23.56	peak	12.75	36.31	43.50	-7.19	260	100
500.4208	20.92	peak	20.21	41.13	46.00	-4.87	110	100
673.4270	13.53	peak	23.41	36.94	46.00	-9.06	140	100

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4824.0000	41.70	---	0.50	42.20	---	74.00	54.00	-31.80	255	100
7236.0000	40.91	---	4.06	44.97	---	74.00	54.00	-29.03	135	100

Mode: 802.11n (20MHz) CH6

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
166.0721	26.50	peak	14.79	41.29	43.50	-2.21	245	100
249.6593	22.97	peak	13.99	36.96	46.00	-9.04	160	100
376.0120	21.48	peak	17.60	39.08	46.00	-6.92	270	100
500.4207	17.57	peak	20.21	37.78	46.00	-8.22	130	100



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Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4874.0000	41.32	---	0.61	41.93	---	74.00	54.00	-32.07	275	100
7311.0000	40.62	---	4.20	44.82	---	74.00	54.00	-29.18	140	100

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
166.0721	24.82	peak	14.79	39.61	43.50	-3.89	70	100
376.0120	15.97	peak	17.60	33.57	46.00	-12.43	250	100
500.4208	21.06	peak	20.21	41.27	46.00	-4.73	160	100
673.4270	12.84	peak	23.41	36.25	46.00	-9.75	130	100

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4874.0000	41.30	---	0.61	41.91	---	74.00	54.00	-32.09	290	100
7311.0000	40.46	---	4.20	44.66	---	74.00	54.00	-29.34	265	100

Mode: 802.11n (20MHz) CH11

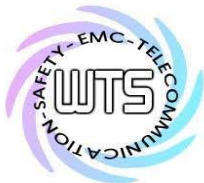
Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
166.0721	26.62	peak	14.79	41.41	43.50	-2.09	325	100
249.6593	22.38	peak	13.99	36.37	46.00	-9.63	80	100
335.1904	24.61	peak	16.52	41.13	46.00	-4.87	120	100
376.0120	21.93	peak	17.60	39.53	46.00	-6.47	135	100

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4924.0000	41.19	---	0.84	42.03	---	74.00	54.00	-31.97	95	100
7386.0000	40.14	---	4.43	44.57	---	74.00	54.00	-29.43	350	100

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
166.0721	24.49	peak	14.79	39.28	43.50	-4.22	220	100
191.3427	23.57	peak	12.75	36.32	43.50	-7.18	110	100
376.0120	17.31	peak	17.60	34.91	46.00	-11.09	325	100
500.4208	20.70	peak	20.21	40.91	46.00	-5.09	130	100



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21212-12946-P-15B

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4924.0000	41.47	---	0.84	42.31	---	74.00	54.00	-31.69	230	100
7386.0000	40.39	---	4.43	44.82	---	74.00	54.00	-29.18	265	100

Mode: 802.11n (40MHz) CH1

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
166.0721	26.59	peak	14.79	41.38	43.50	-2.12	240	100
333.2465	23.49	peak	16.46	39.95	46.00	-6.05	165	100
376.0120	23.03	peak	17.60	40.63	46.00	-5.37	110	100
500.4207	18.58	peak	20.21	38.79	46.00	-7.21	350	100

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4844.0000	40.75	---	0.54	41.29	---	74.00	54.00	-32.71	160	100
7266.0000	40.87	---	4.11	44.98	---	74.00	54.00	-29.02	140	100

Polarization: Vertical

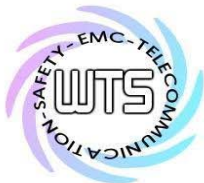
Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
166.0721	25.24	peak	14.79	40.03	43.50	-3.47	330	100
191.3427	23.49	peak	12.75	36.24	43.50	-7.26	100	100
500.4208	22.06	peak	20.21	42.27	46.00	-3.73	155	100
673.4270	12.41	peak	23.41	35.82	46.00	-10.18	120	100

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4844.0000	41.25	---	0.54	41.79	---	74.00	54.00	-32.21	260	100
7266.0000	40.16	---	4.11	44.27	---	74.00	54.00	-29.73	145	100

Mode: 802.11n (40MHz) CH4

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
166.0721	26.45	peak	14.79	41.24	43.50	-2.26	115	100
249.6593	23.99	peak	13.99	37.98	46.00	-8.02	260	100
376.0120	22.67	peak	17.60	40.27	46.00	-5.73	350	100
500.4207	17.87	peak	20.21	38.08	46.00	-7.92	170	100



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21212-12946-P-15B

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4874.0000	41.36	---	0.61	41.97	---	74.00	54.00	-32.03	55	100
7311.0000	40.03	---	4.20	44.23	---	74.00	54.00	-29.77	130	100

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
119.4188	20.16	peak	13.20	33.36	43.50	-10.14	160	100
166.0721	25.78	peak	14.79	40.57	43.50	-2.93	145	100
500.4208	21.38	peak	20.21	41.59	46.00	-4.41	320	100
673.4270	12.53	peak	23.41	35.94	46.00	-10.06	70	100

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4874.0000	41.51	---	0.61	42.12	---	74.00	54.00	-31.88	250	100
7311.0000	40.12	---	4.20	44.32	---	74.00	54.00	-29.68	160	100

Mode: 802.11n (40MHz) CH7

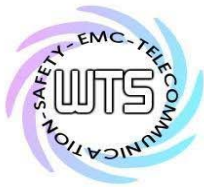
Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
166.0721	26.24	peak	14.79	41.03	43.50	-2.47	90	100
335.1904	23.84	peak	16.52	40.36	46.00	-5.64	275	100
376.0120	22.50	peak	17.60	40.10	46.00	-5.90	165	100
500.4207	18.08	peak	20.21	38.29	46.00	-7.71	300	100

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4904.0000	41.12	---	0.70	41.82	---	74.00	54.00	-32.18	175	100
7356.0000	40.48	---	4.34	44.82	---	74.00	54.00	-29.18	130	100

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
166.0721	25.05	peak	14.79	39.84	43.50	-3.66	275	100
191.3427	23.98	peak	12.75	36.73	43.50	-6.77	130	100
500.4208	21.50	peak	20.21	41.71	46.00	-4.29	255	100
673.4270	12.15	peak	23.41	35.56	46.00	-10.44	340	100



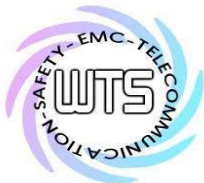
Worldwide Testing Services(Taiwan) Co., Ltd.

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Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4904.0000	41.53	---	0.70	42.23	---	74.00	54.00	-31.77	260	100
7356.0000	40.19	---	4.34	44.53	---	74.00	54.00	-29.47	210	100

Note:

1. **Correction Factor = Antenna factor + Cable loss - Preamplifier**
2. **The formula of measured value as: Test Result = Reading + Correction Factor**
3. **Detector function in the form : PK = Peak, QP = Quasi Peak, AV = Average**
4. **All not in the table noted test results are more than 20 dB below the relevant limits.**
Measurement uncertainty for 3m measurement: 30-1000 MHz = ± 3.72 dB, 1-18 GHz = ± 5.33 dB, 18-40 GHz = ± 3.43 dB ; Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.
5. **Up Line: PK Limit Line, Down Line: Ave Limit Line.**
6. **See attached diagrams in appendix.**

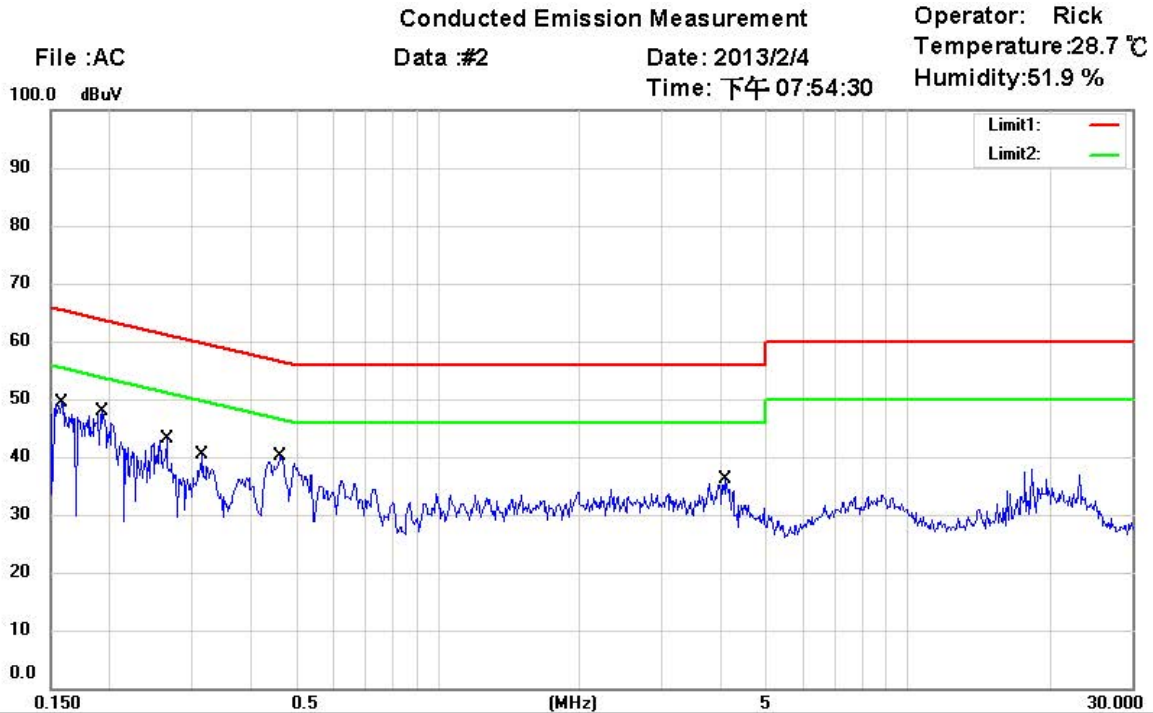


Registration number: W6M21212-12946-P-15B

2.5.2 Conducted Emission

Conducted Emission

Emission



Site : Chamber_03

Condition : FCC Part 15 Class B Conduction (QP)

Phase: N

EUT : W6M21212-12946

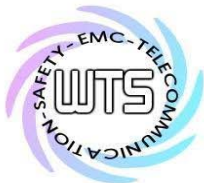
Power : 110VAC

M/N: A100WIRF-HNH-00

Test Mode :

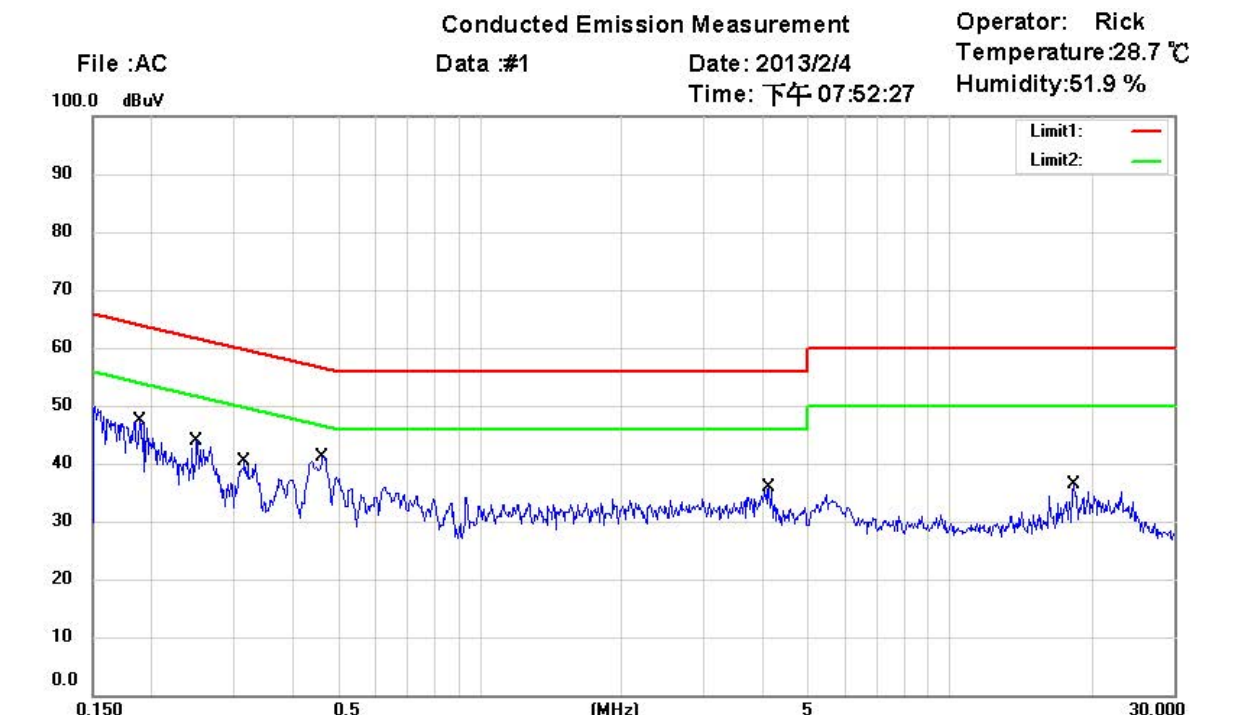
Note :

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Comment
	0.1582	27.38	QP	10.01	37.39	65.56	-28.17	
	0.1582	0.51	AVG	10.01	10.52	55.56	-45.04	
	0.1935	28.41	QP	10.02	38.43	63.88	-25.45	
	0.1935	17.20	AVG	10.02	27.22	53.88	-26.66	
	0.2657	23.74	QP	10.02	33.76	61.25	-27.49	
	0.2657	18.78	AVG	10.02	28.80	51.25	-22.45	
	0.3157	22.46	QP	10.02	32.48	59.82	-27.34	
	0.3157	20.09	AVG	10.02	30.11	49.82	-19.71	
	0.4630	25.12	QP	10.02	35.14	56.64	-21.50	
*	0.4630	22.37	AVG	10.02	32.39	46.64	-14.25	
	4.1023	18.60	QP	10.08	28.68	56.00	-27.32	
	4.1023	12.97	AVG	10.08	23.05	46.00	-22.95	



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21212-12946-P-15B



Site : Chamber_03

Condition : FCC Part 15 Class B Conduction (QP)

Phase: L1

EUT : W6M21212-12946

Power : 110VAC

M/N: A100WRF-HNH-00

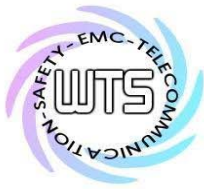
Test Mode :

Note :

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Comment
	0.1896	26.92	QP	10.01	36.93	64.05	-27.12	
	0.1896	19.13	AVG	10.01	29.14	54.05	-24.91	
	0.2508	24.44	QP	10.01	34.45	61.73	-27.28	
	0.2508	22.48	AVG	10.01	32.49	51.73	-19.24	
	0.3166	24.33	QP	10.02	34.35	59.80	-25.45	
	0.3166	20.30	AVG	10.02	30.32	49.80	-19.48	
	0.4631	26.42	QP	10.02	36.44	56.64	-20.20	
*	0.4631	23.56	AVG	10.02	33.58	46.64	-13.06	
	4.1180	20.24	QP	10.10	30.34	56.00	-25.66	
	4.1180	14.60	AVG	10.10	24.70	46.00	-21.30	
	18.3125	11.42	QP	10.67	22.09	60.00	-37.91	
	18.3125	5.65	AVG	10.67	16.32	50.00	-33.68	

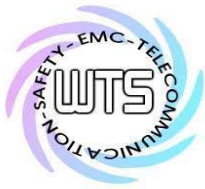
Note

1. The formula of measured value as: Test Result = Reading + Correction Factor
2. The Correction Factor = Cable Loss + LISN Insertion Loss + Pulse Limit Loss
3. Detector function in the form : PK = Peak, QP = Quasi Peak, AV = Average
4. All not in the table noted test results are more than 20 dB below the relevant limits.
5. Measurement uncertainty = ± 1.60 dB; Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.
6. Up Line: QP Limit Line, Down Line: Ave Limit Line.



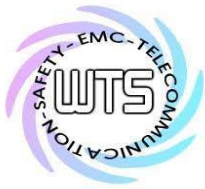
2.6 Equipment Modification

No modification was made to pass all tests.



3 Normative references

- /1/ FCC part 15
Radio Frequency Devices
- /2/ ANSI STANDARD C63.4-2009
American National Standard for Methods of Measurement of Radio Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz



Appendix

Measurement diagrams

Radiated Emission

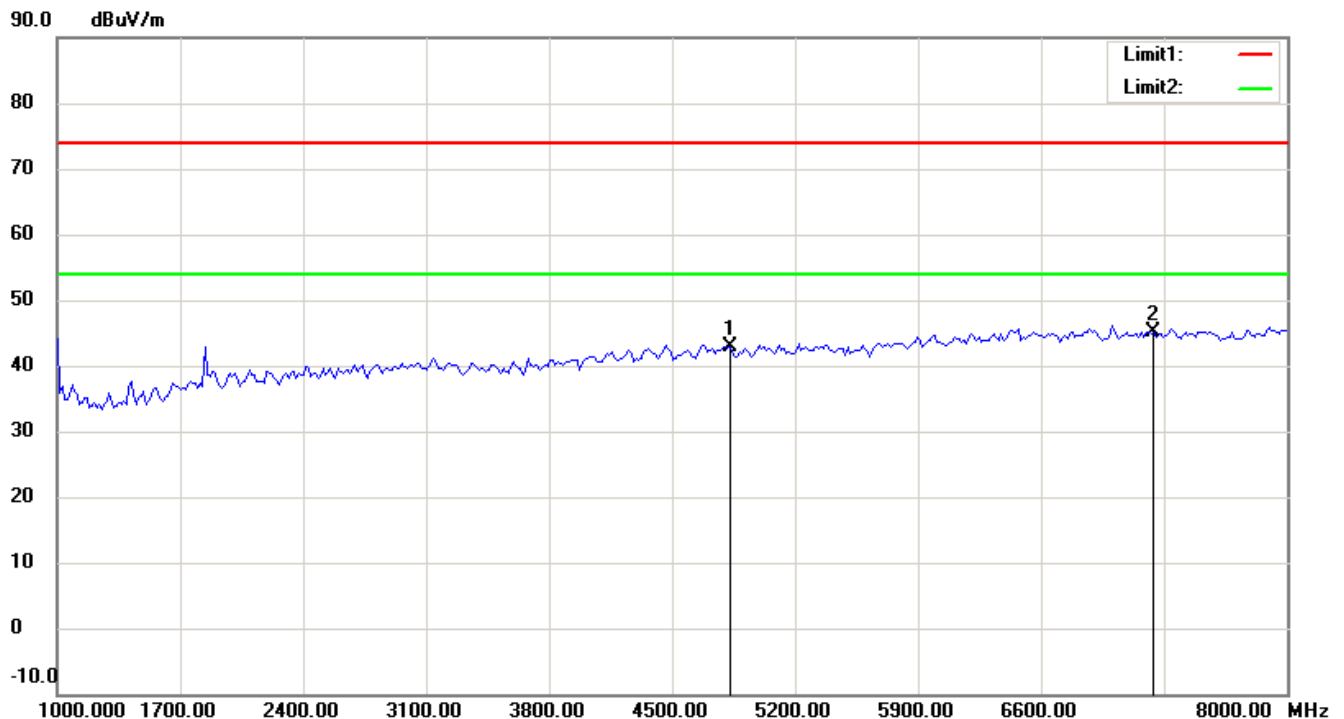
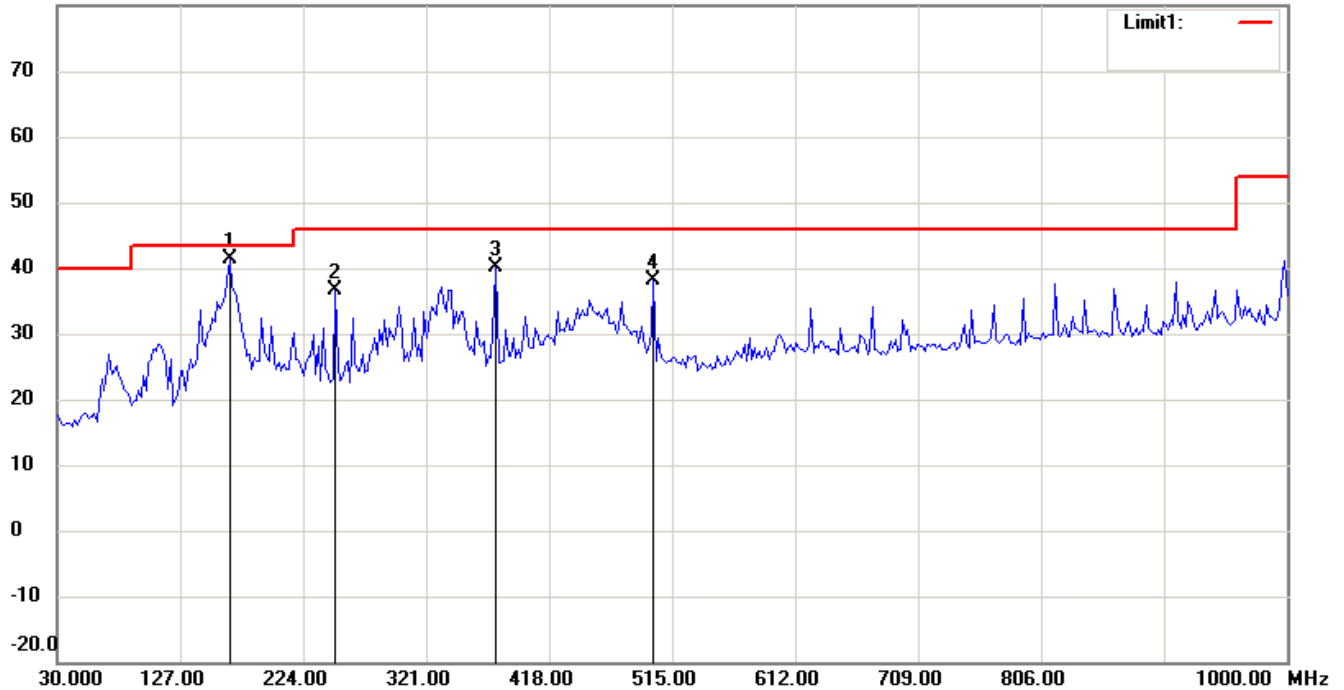
Registration number: W6M21212-12946-P-15B

Radiated Emission-Receiver part

802.11b CH1

Antenna Polarization H

80.0 dBuV/m



Up Line: Peak Limit Line

Down Line: Ave Limit Line

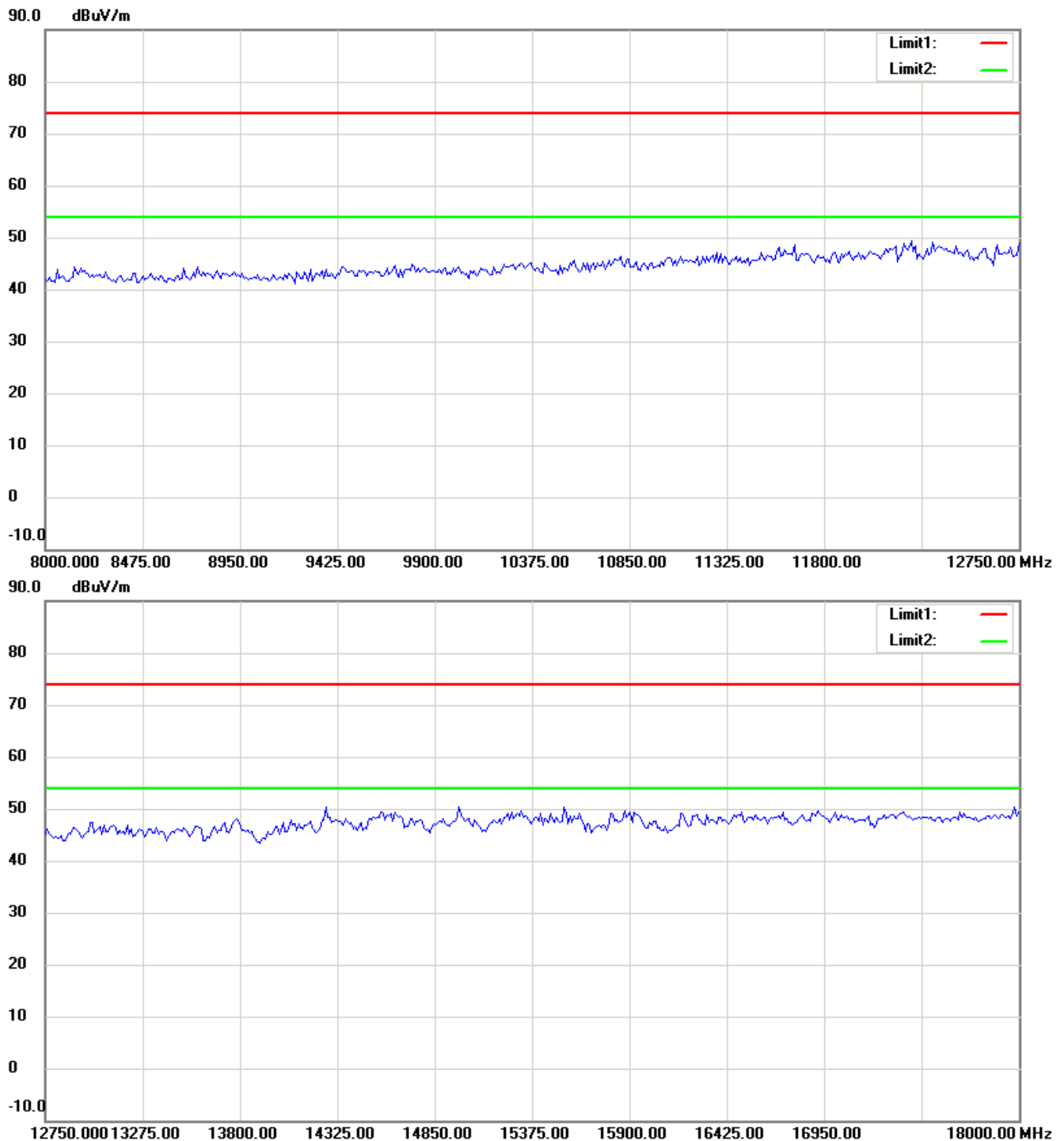
Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21212-12946-P-15B

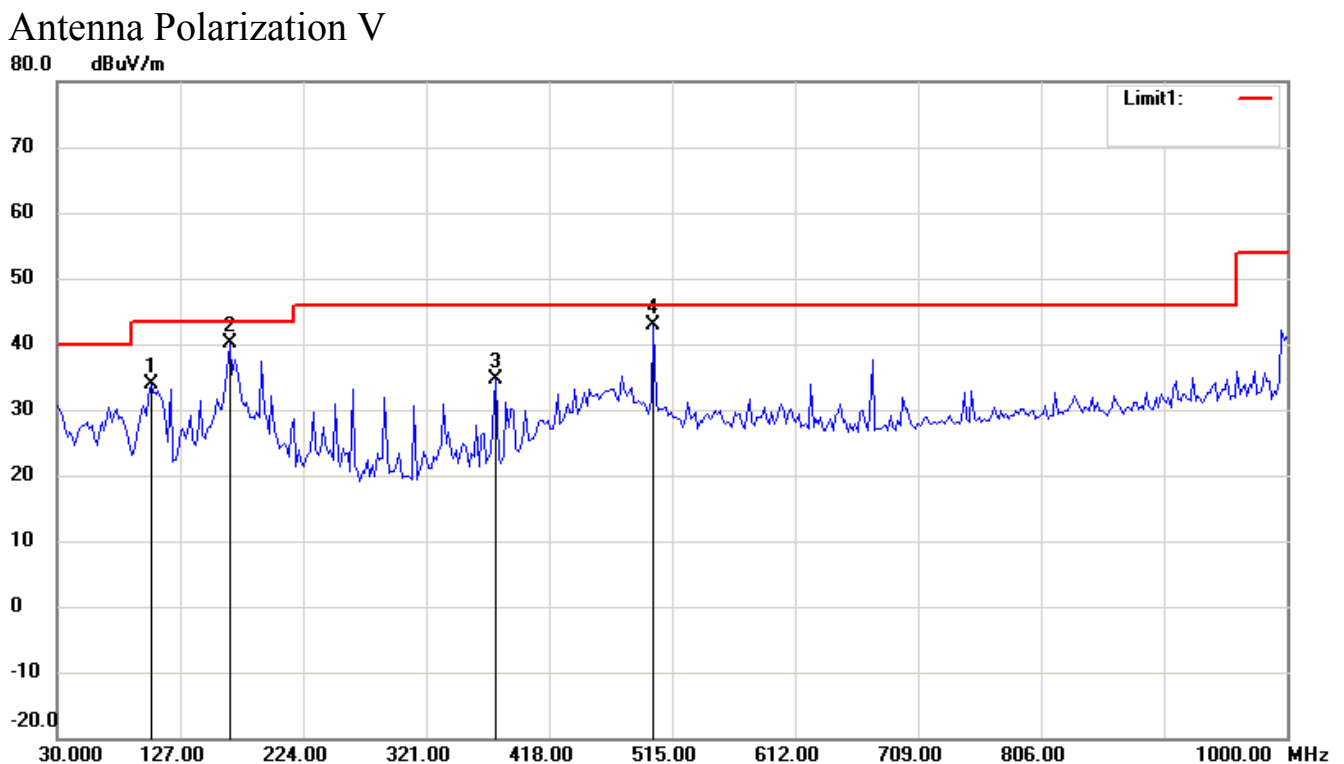
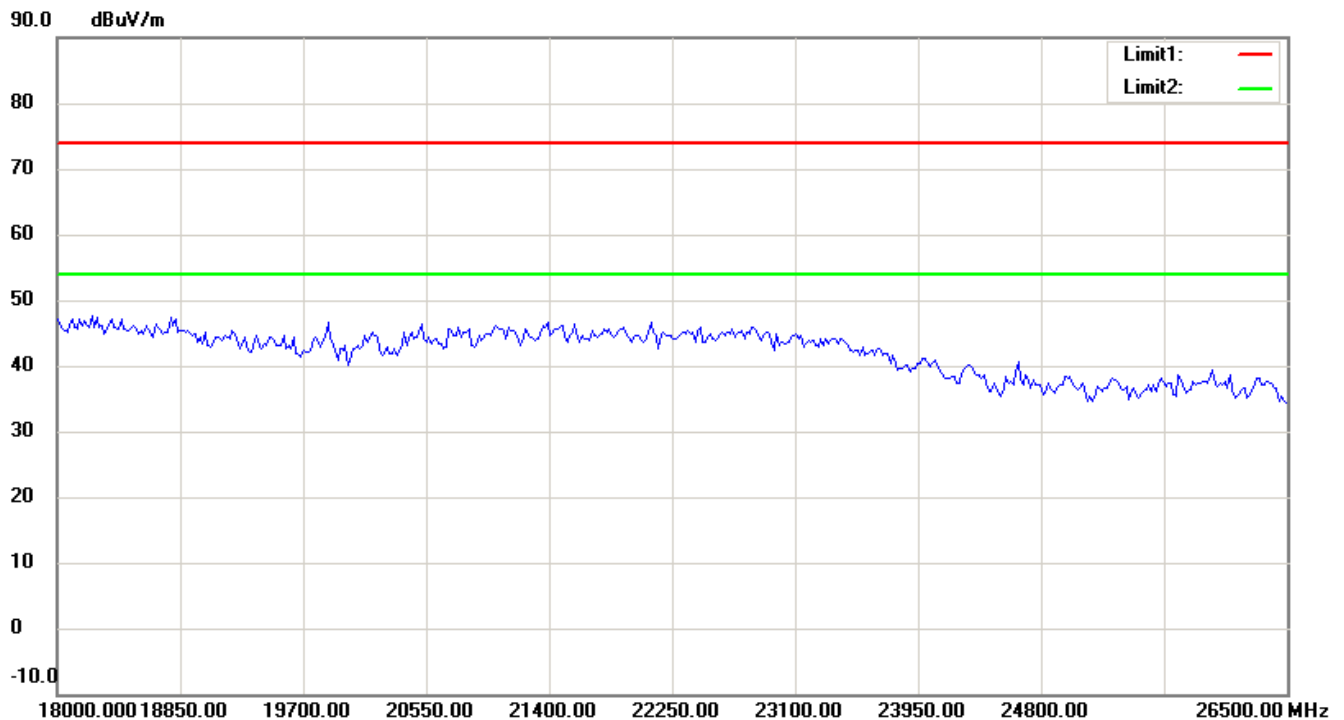


Up Line: Peak Limit Line
Down Line: Ave Limit Line

Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.

Registration number: W6M21212-12946-P-15B



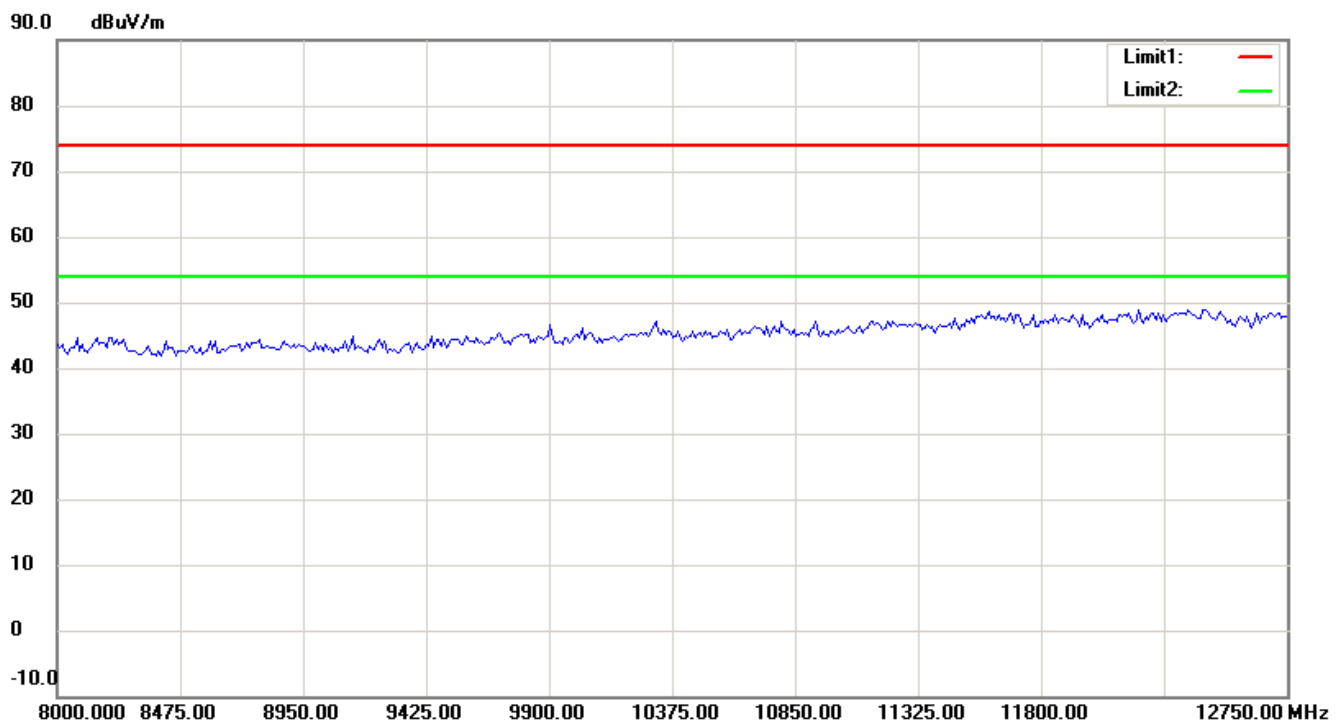
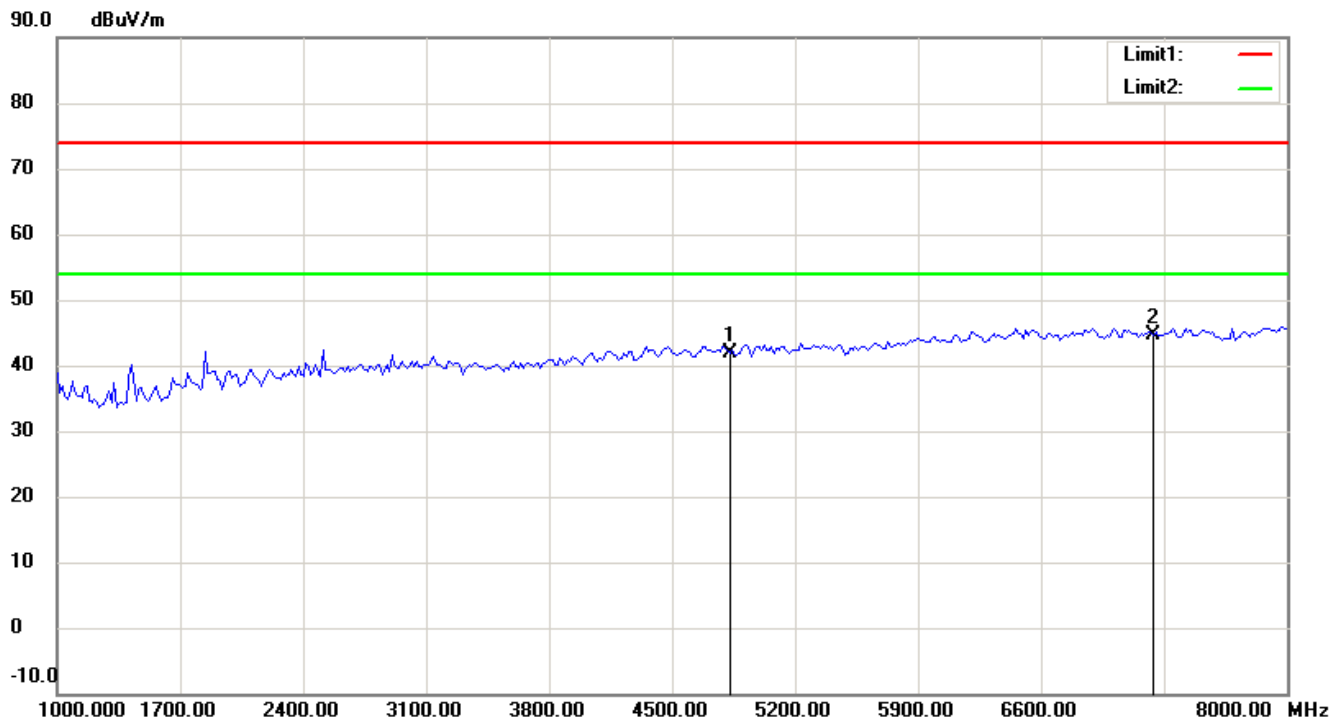
Up Line: Peak Limit Line
Down Line: Ave Limit Line

Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.



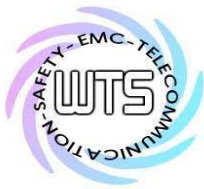
Registration number: W6M21212-12946-P-15B



Up Line: Peak Limit Line
Down Line: Ave Limit Line

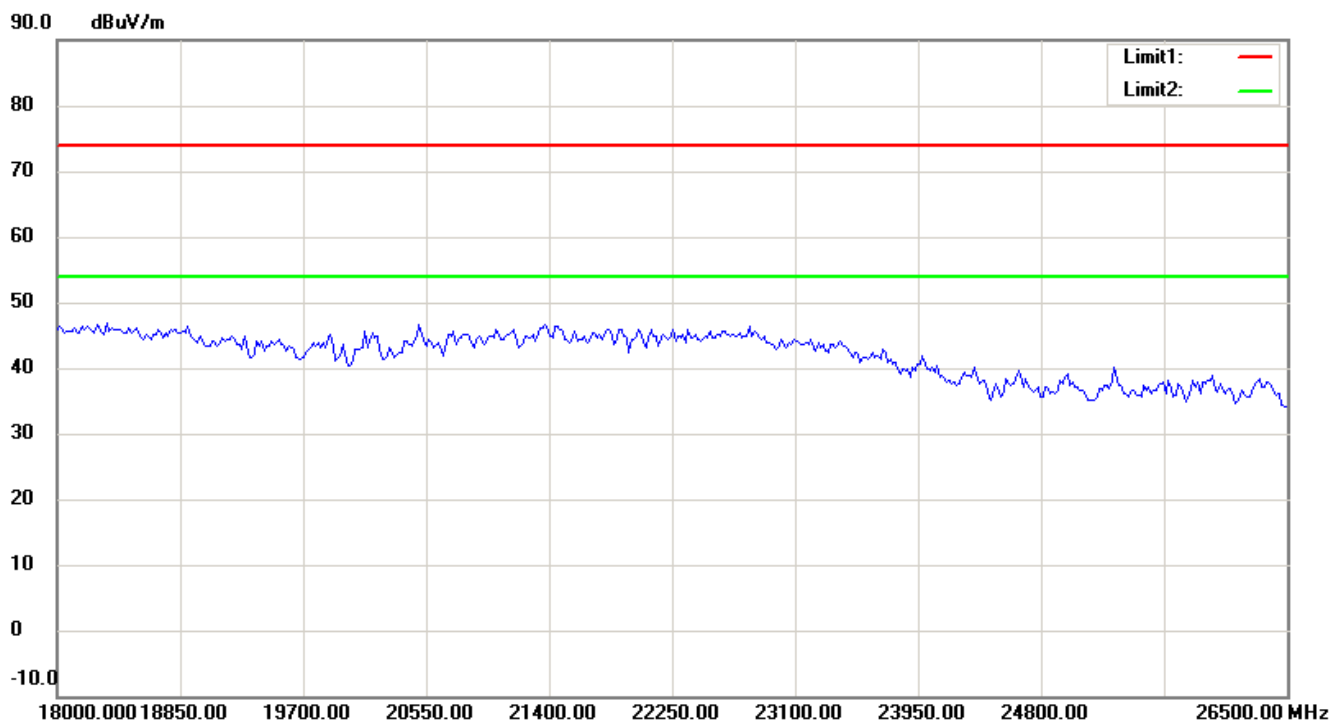
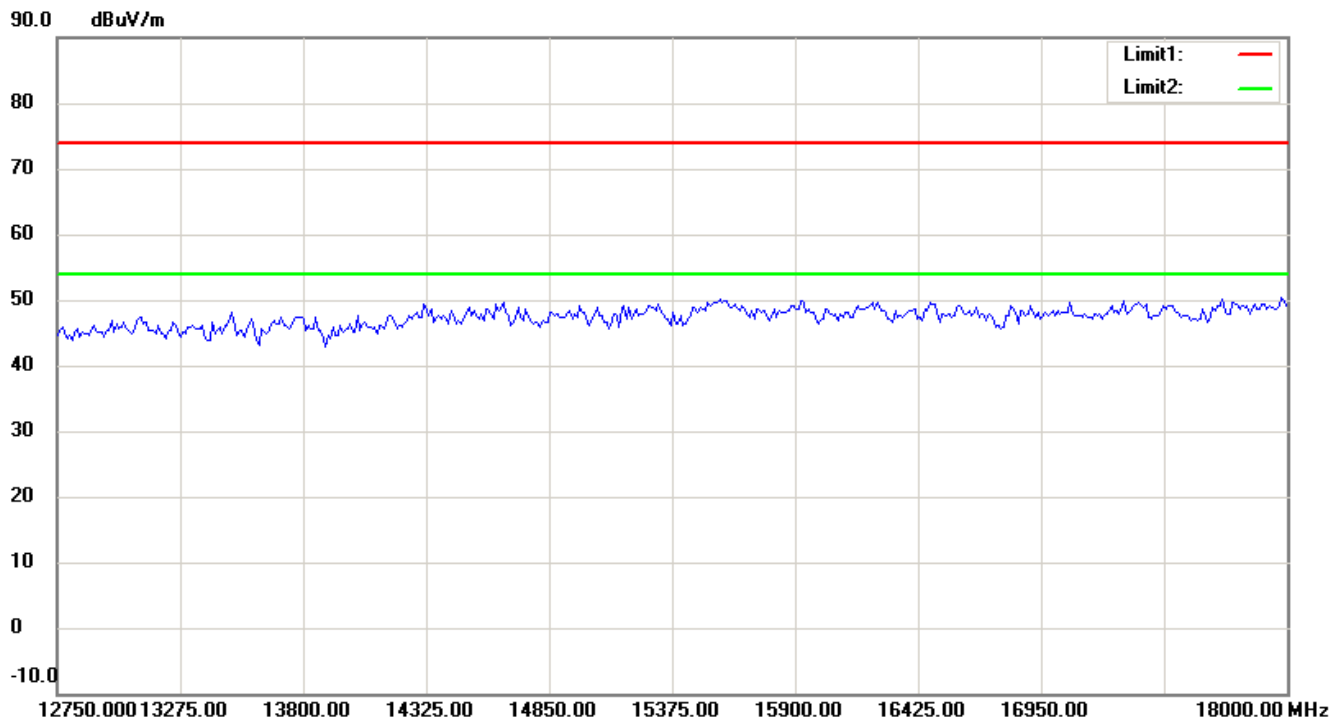
Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.



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Registration number: W6M21212-12946-P-15B



Up Line: Peak Limit Line
Down Line: Ave Limit Line

Note:

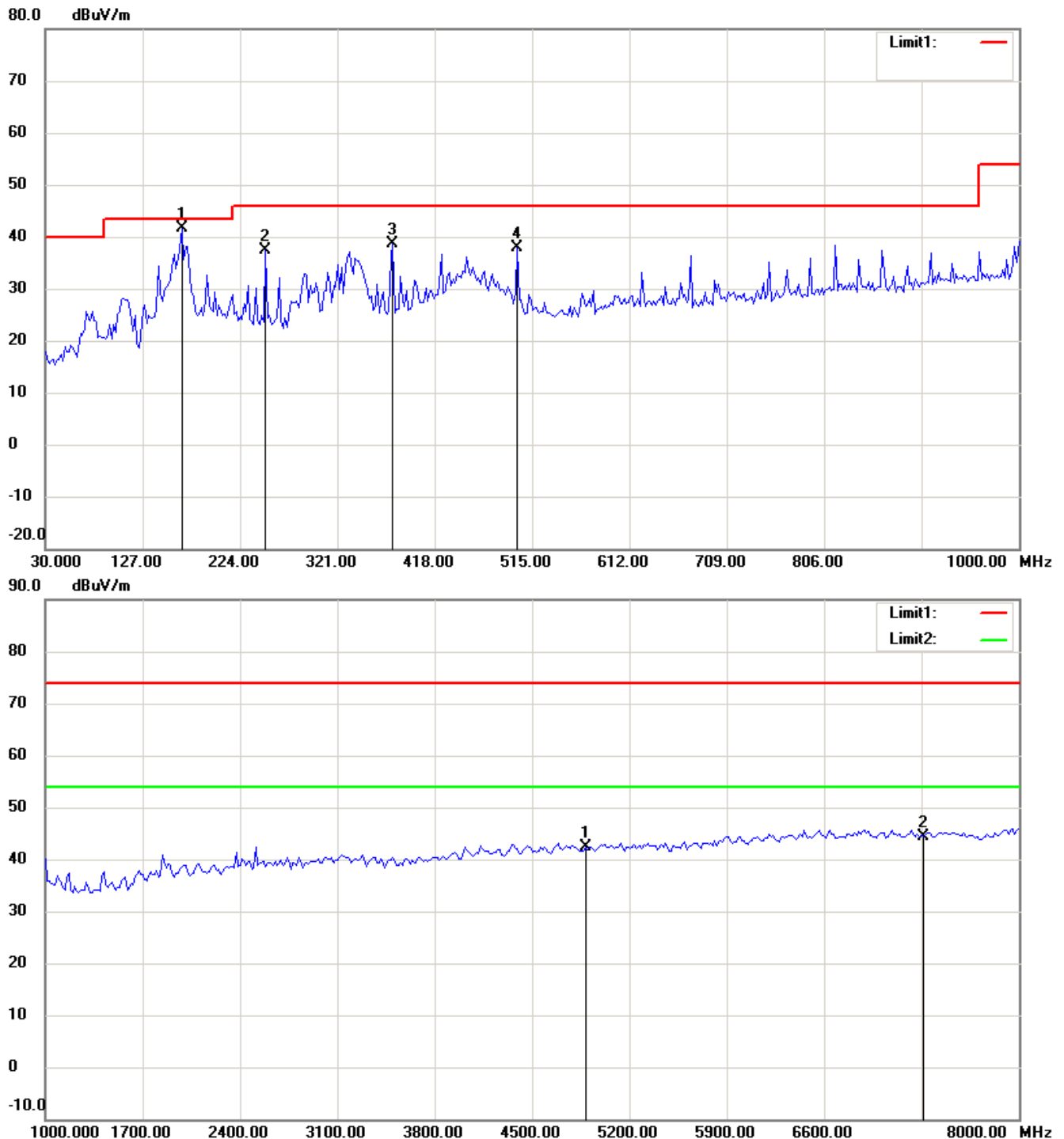
1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21212-12946-P-15B

802.11b CH6

Antenna Polarization H



Up Line: Peak Limit Line

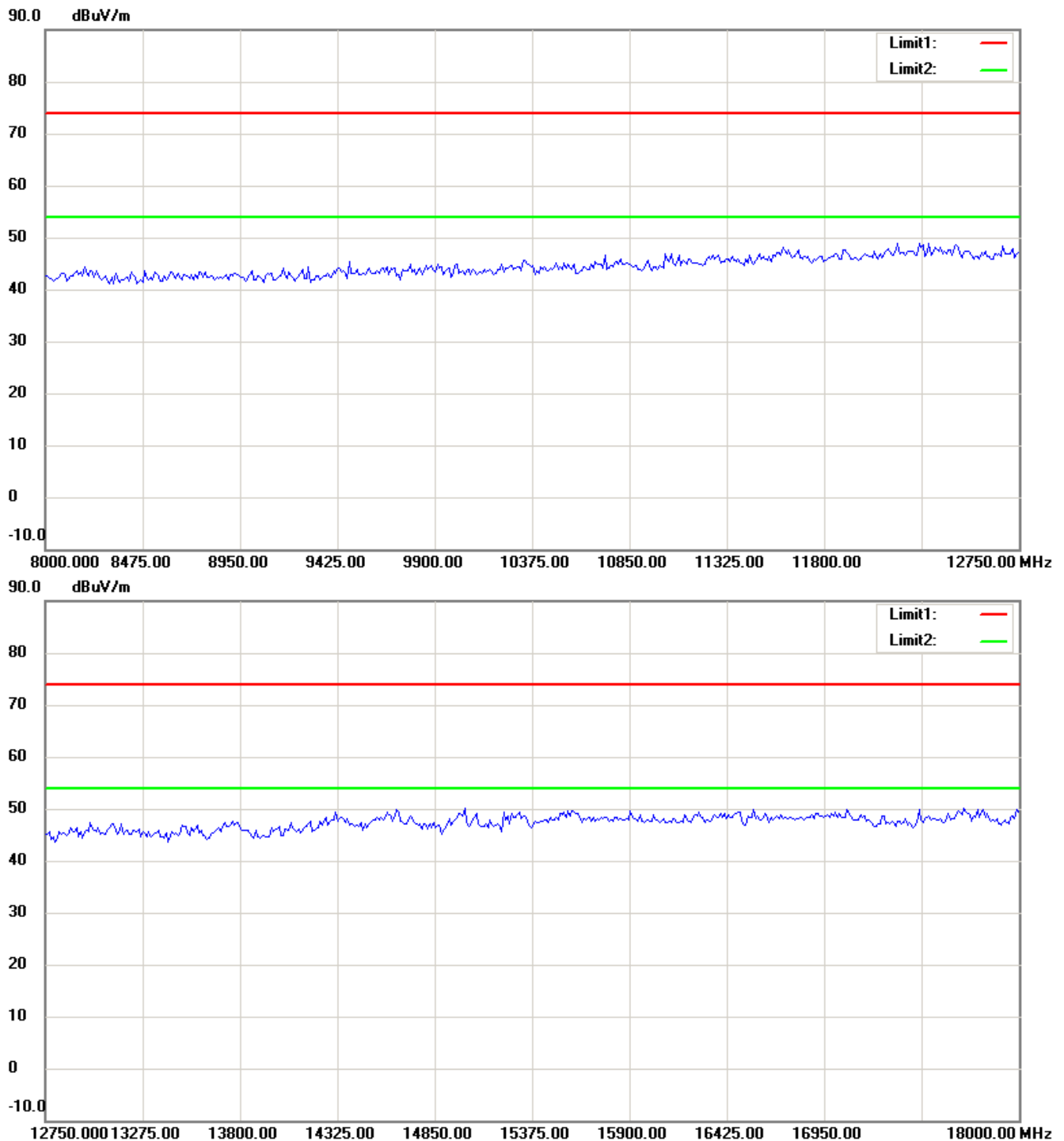
Down Line: Ave Limit Line

Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21212-12946-P-15B

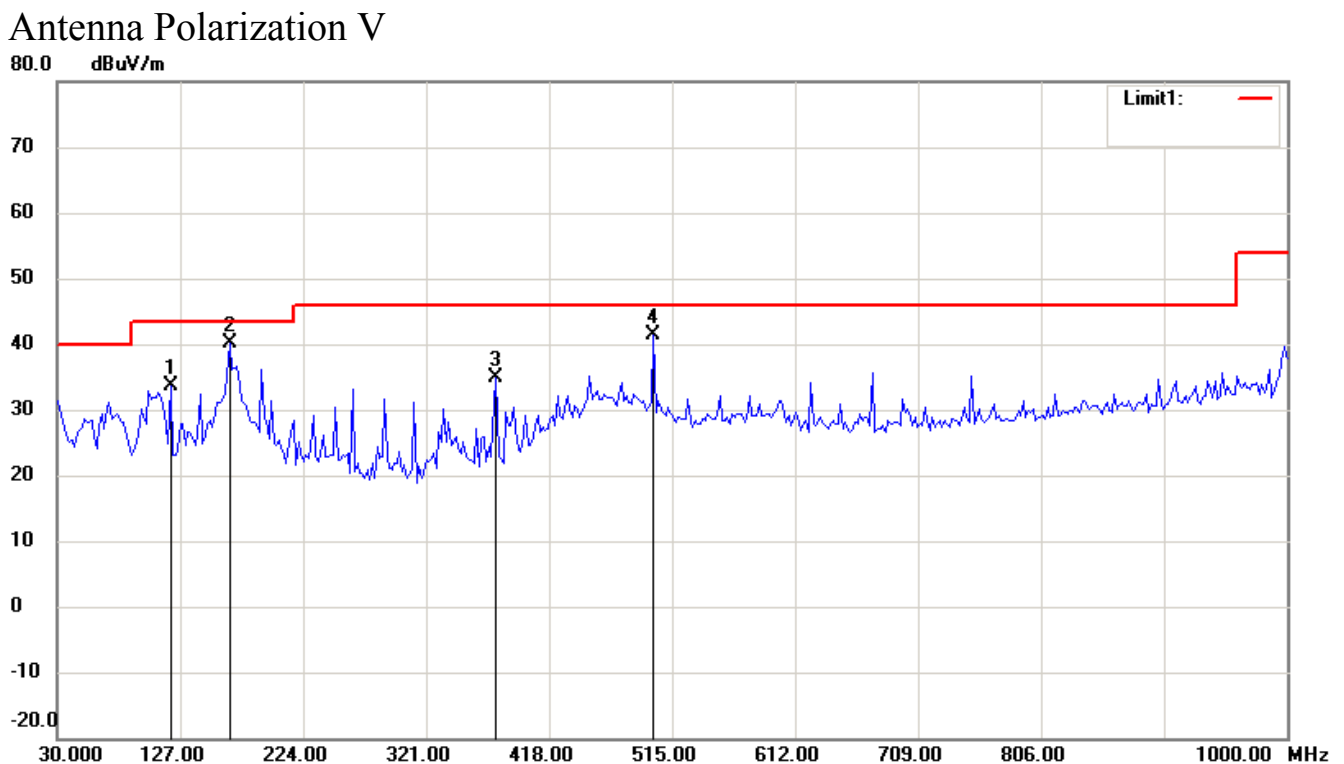
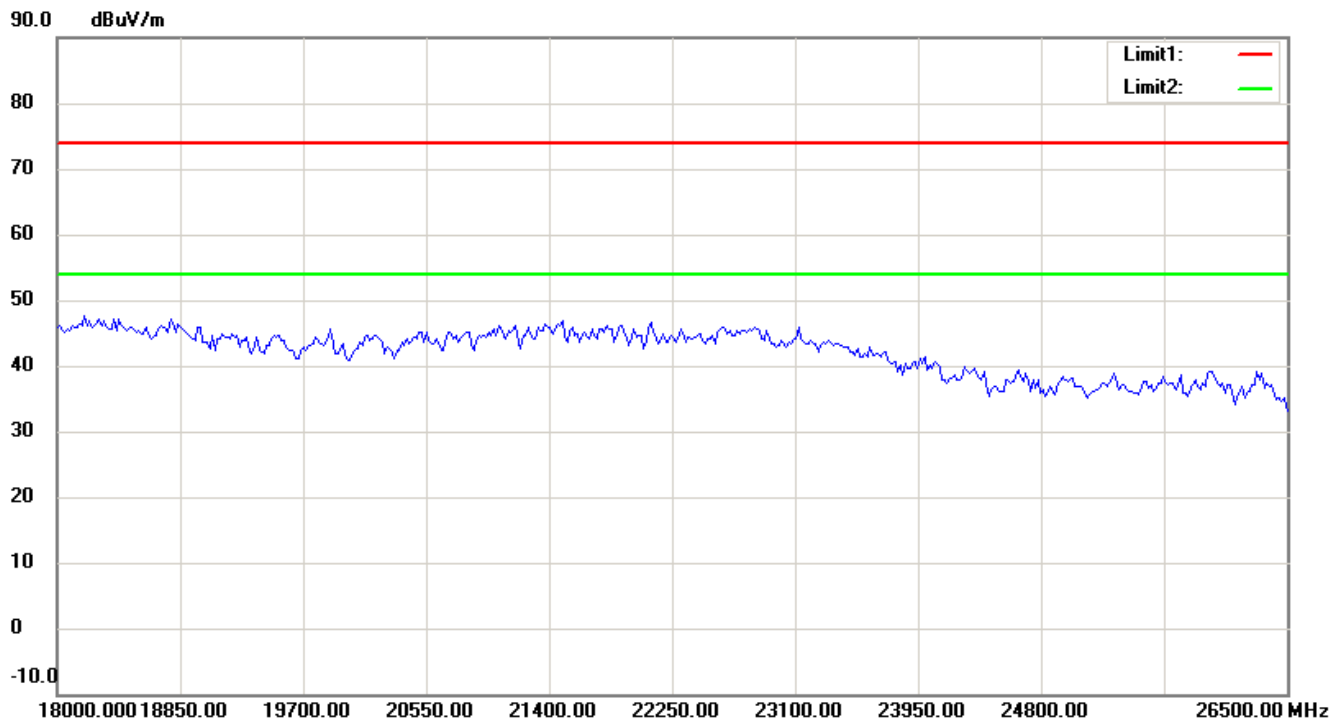


Up Line: Peak Limit Line
Down Line: Ave Limit Line

Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.

Registration number: W6M21212-12946-P-15B

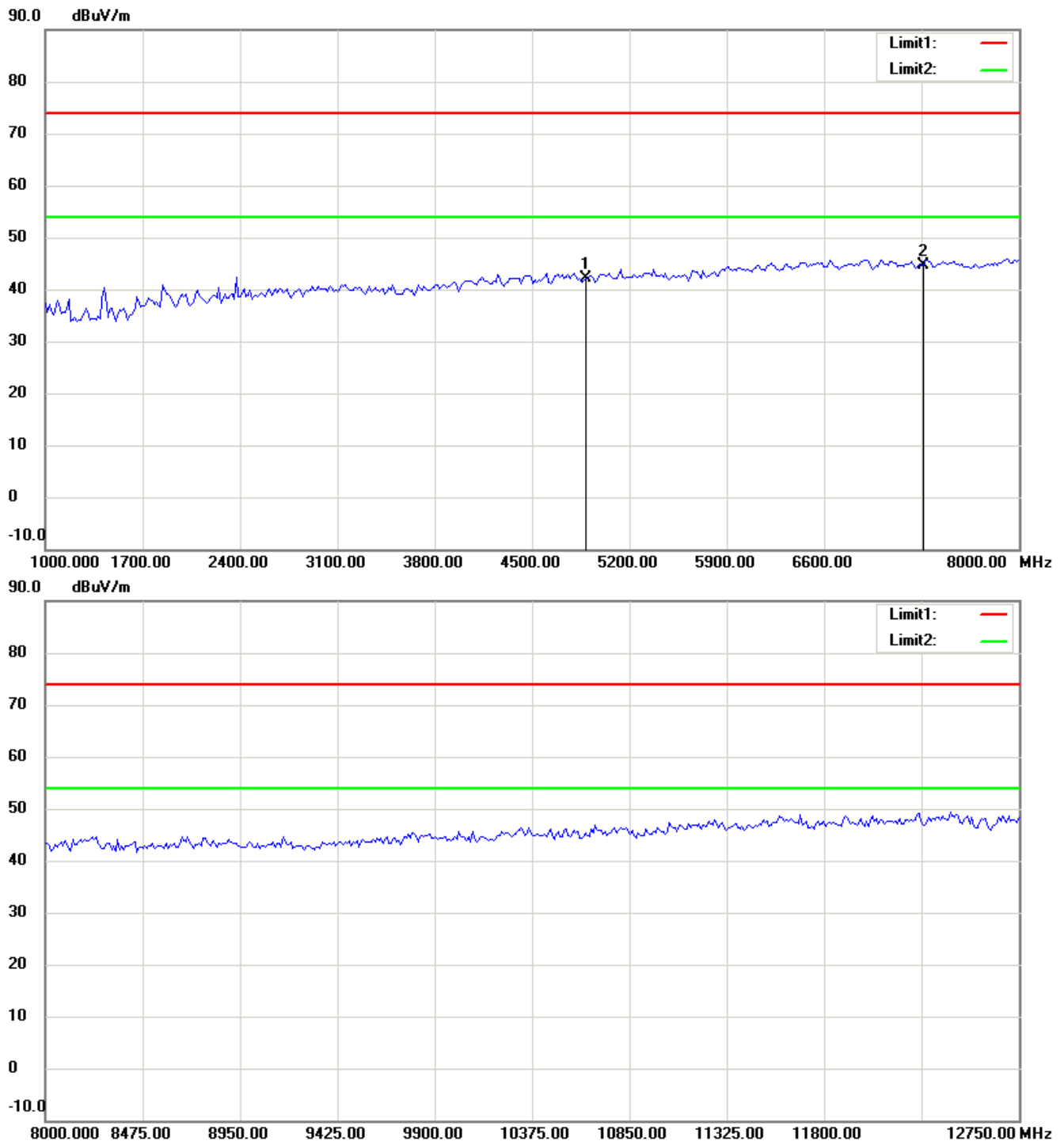


Up Line: Peak Limit Line
Down Line: Ave Limit Line

Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.

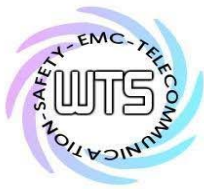
Registration number: W6M21212-12946-P-15B



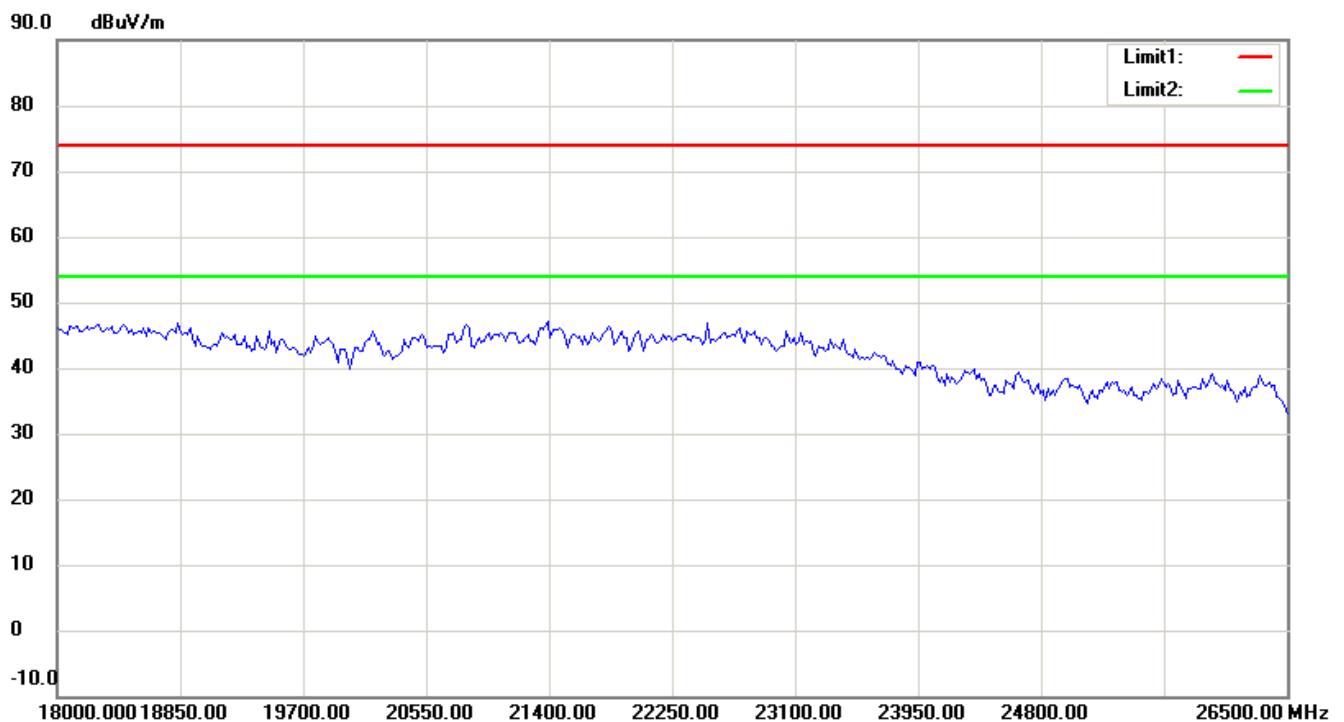
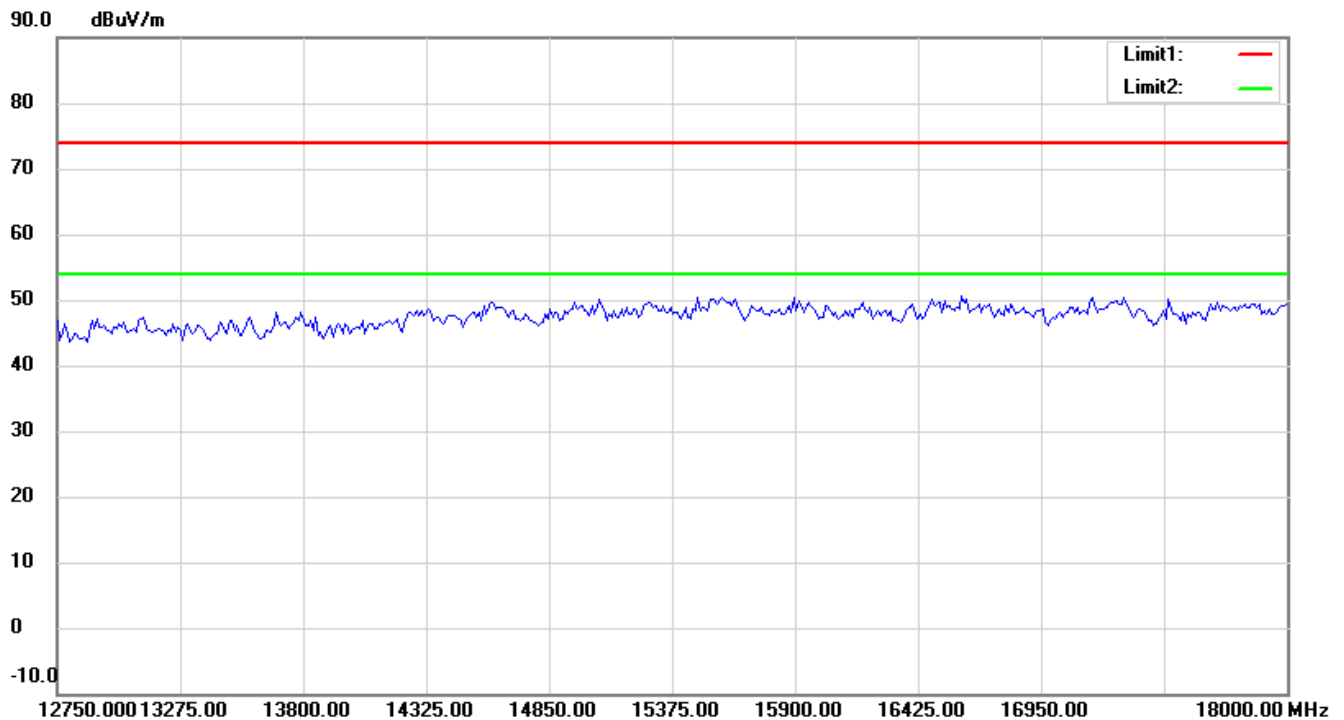
Up Line: Peak Limit Line
Down Line: Ave Limit Line

Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21212-12946-P-15B



Up Line: Peak Limit Line
Down Line: Ave Limit Line

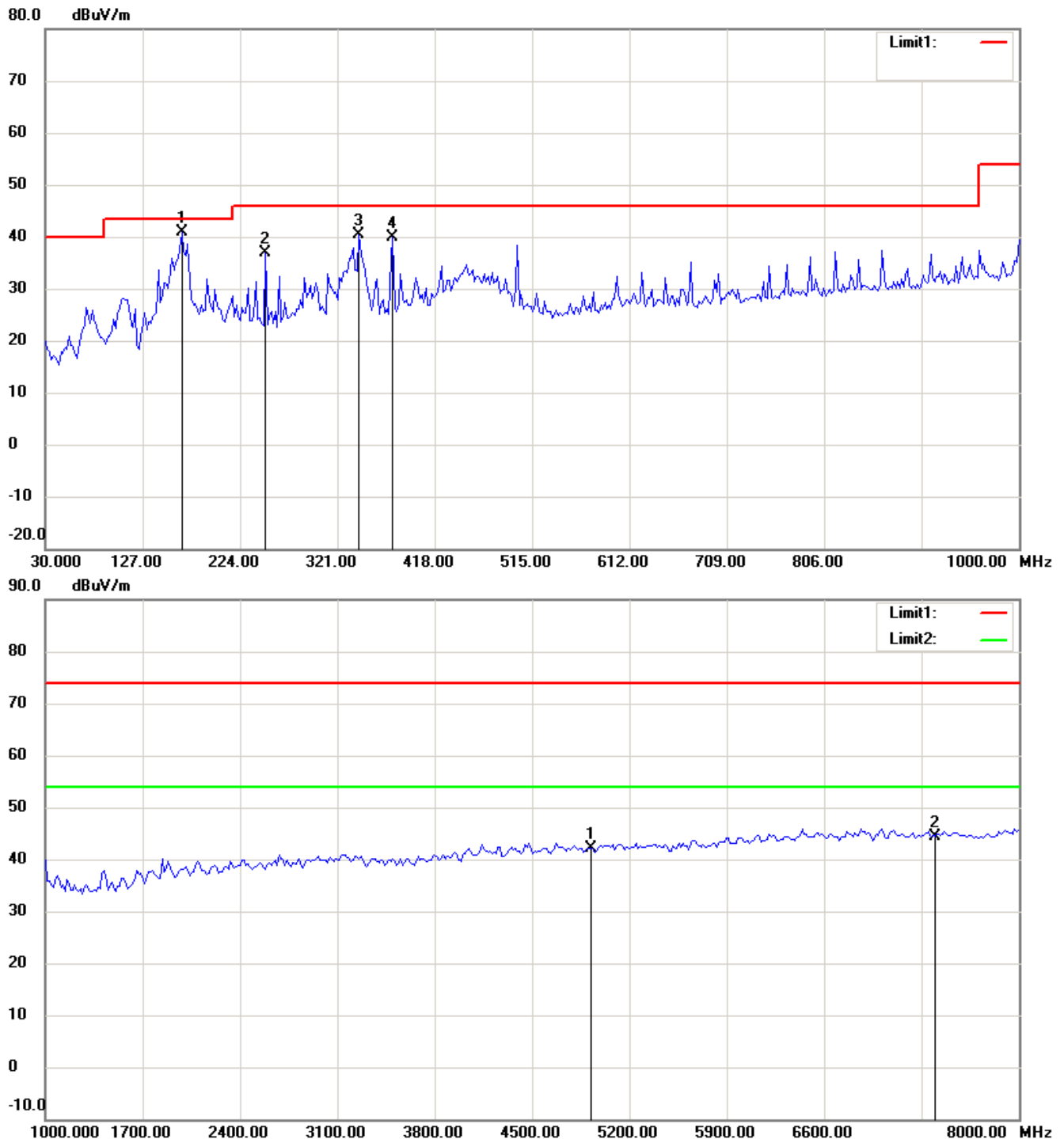
Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.

Registration number: W6M21212-12946-P-15B

802.11b CH11

Antenna Polarization H



Up Line: Peak Limit Line

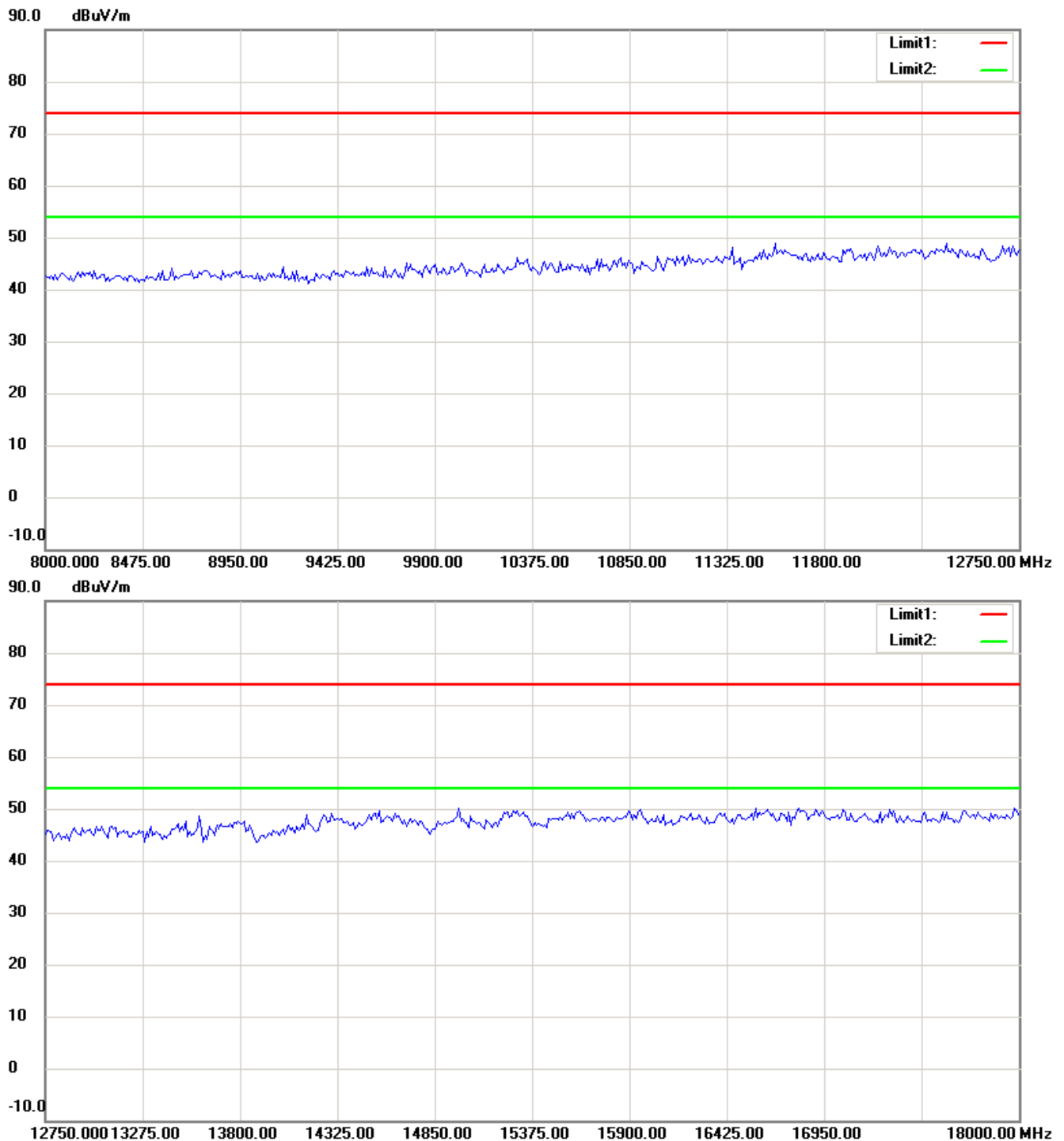
Down Line: Ave Limit Line

Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.



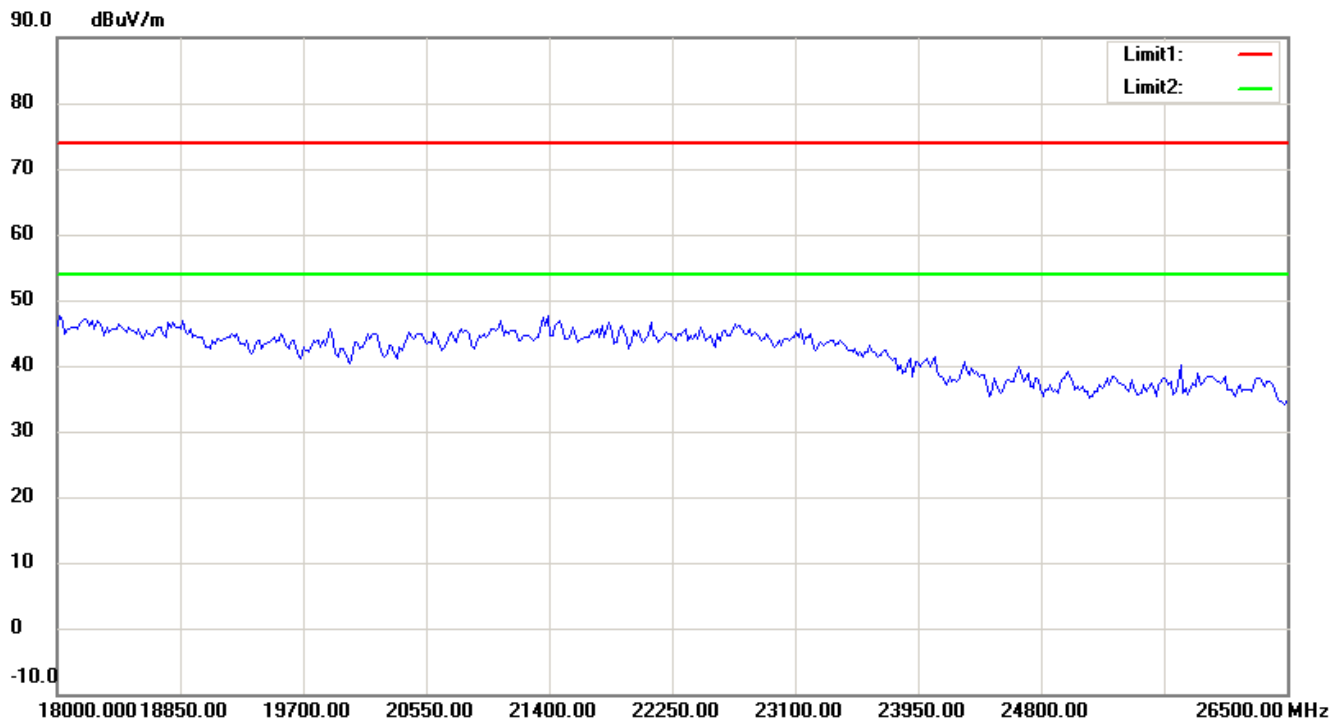
Registration number: W6M21212-12946-P-15B



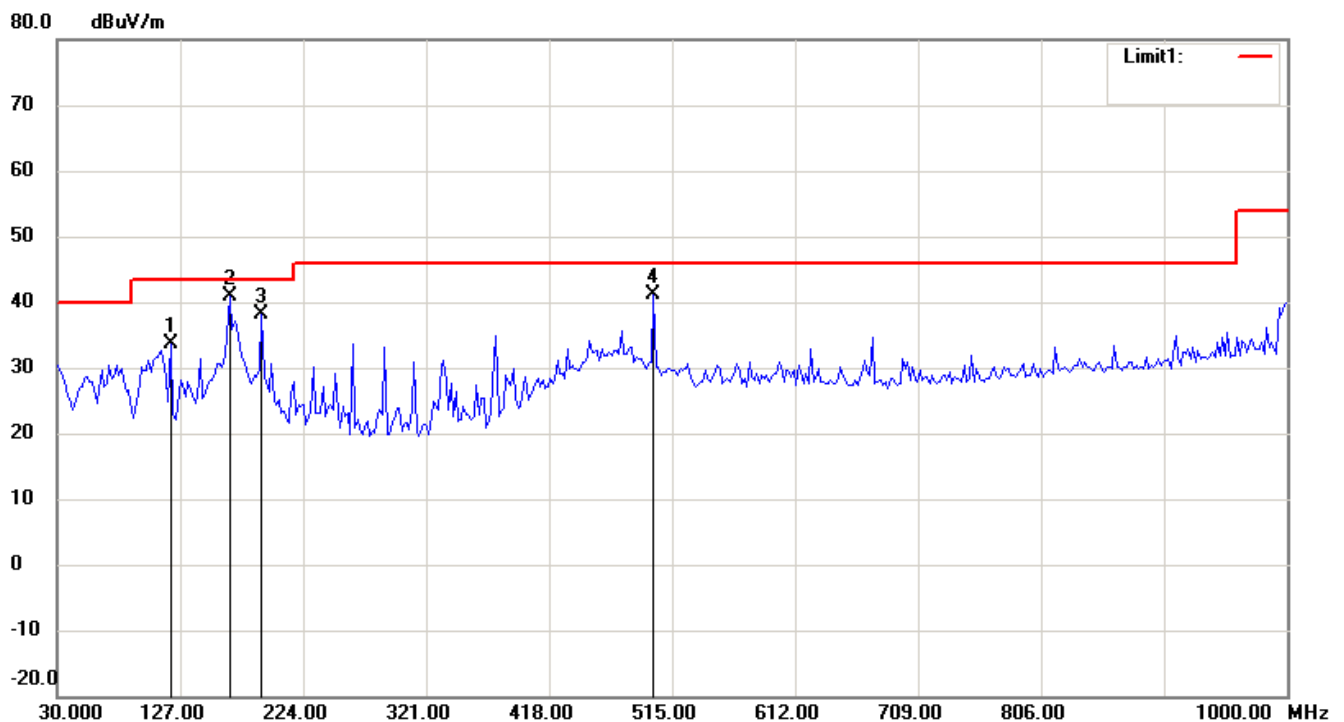
Up Line: Peak Limit Line
Down Line: Ave Limit Line
Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.

Registration number: W6M21212-12946-P-15B



Antenna Polarization V



Up Line: Peak Limit Line

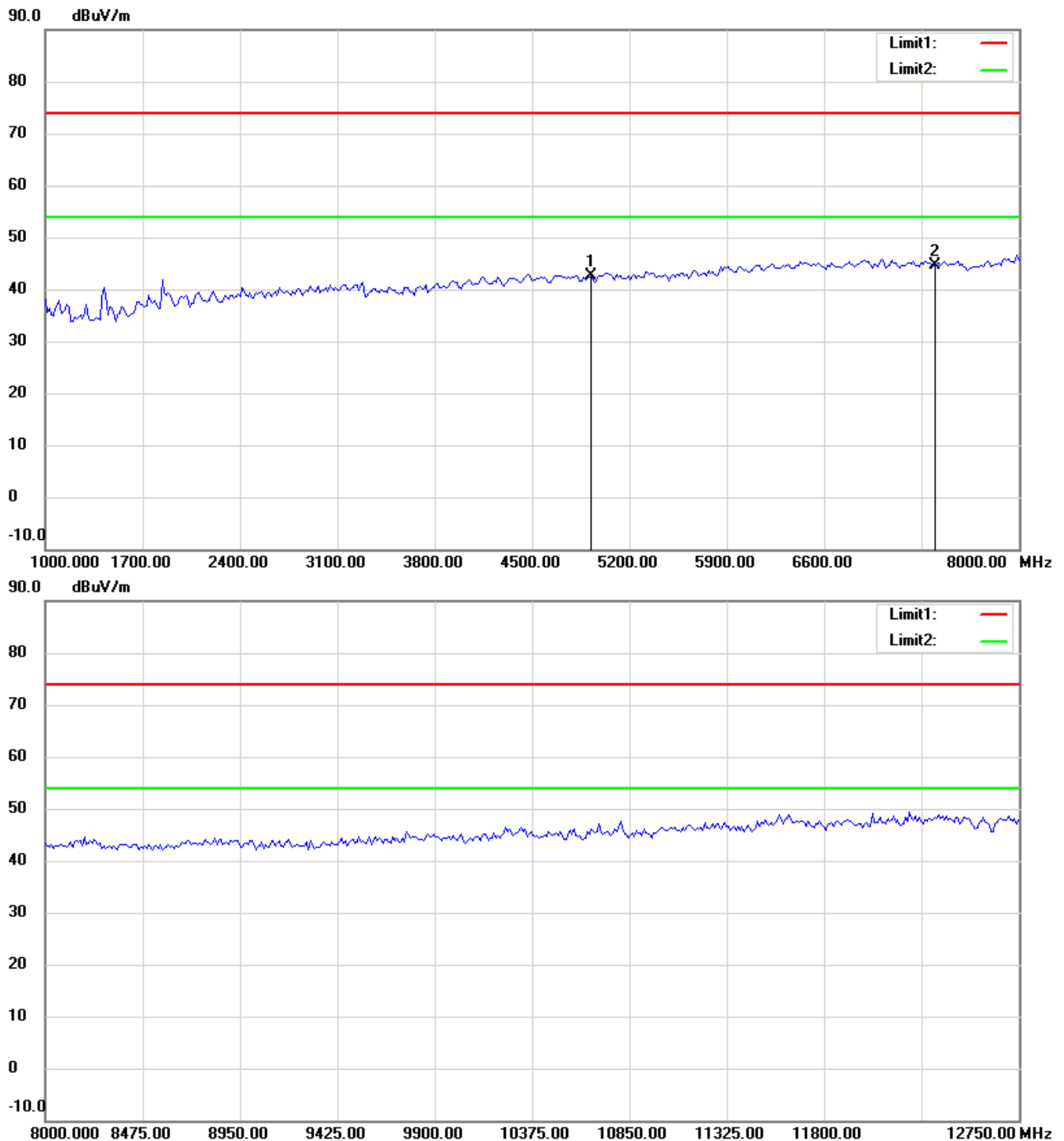
Down Line: Ave Limit Line

Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21212-12946-P-15B



Up Line: Peak Limit Line
Down Line: Ave Limit Line

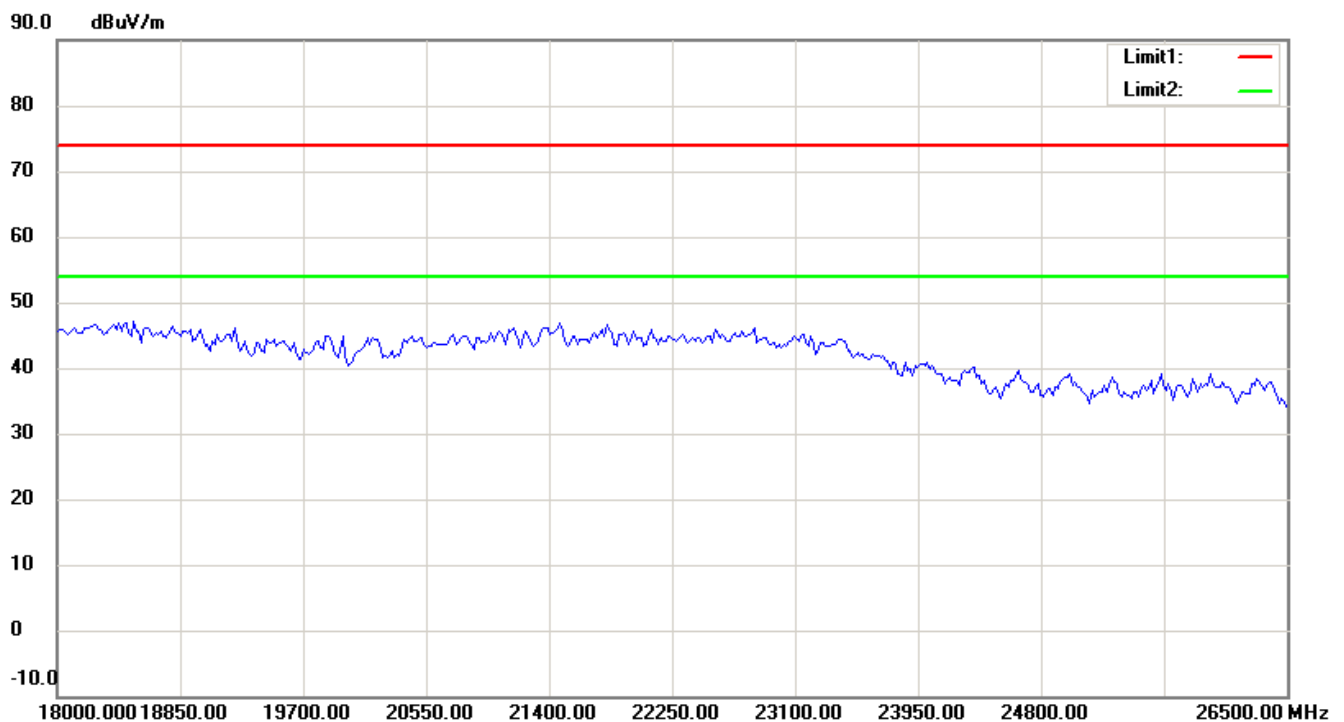
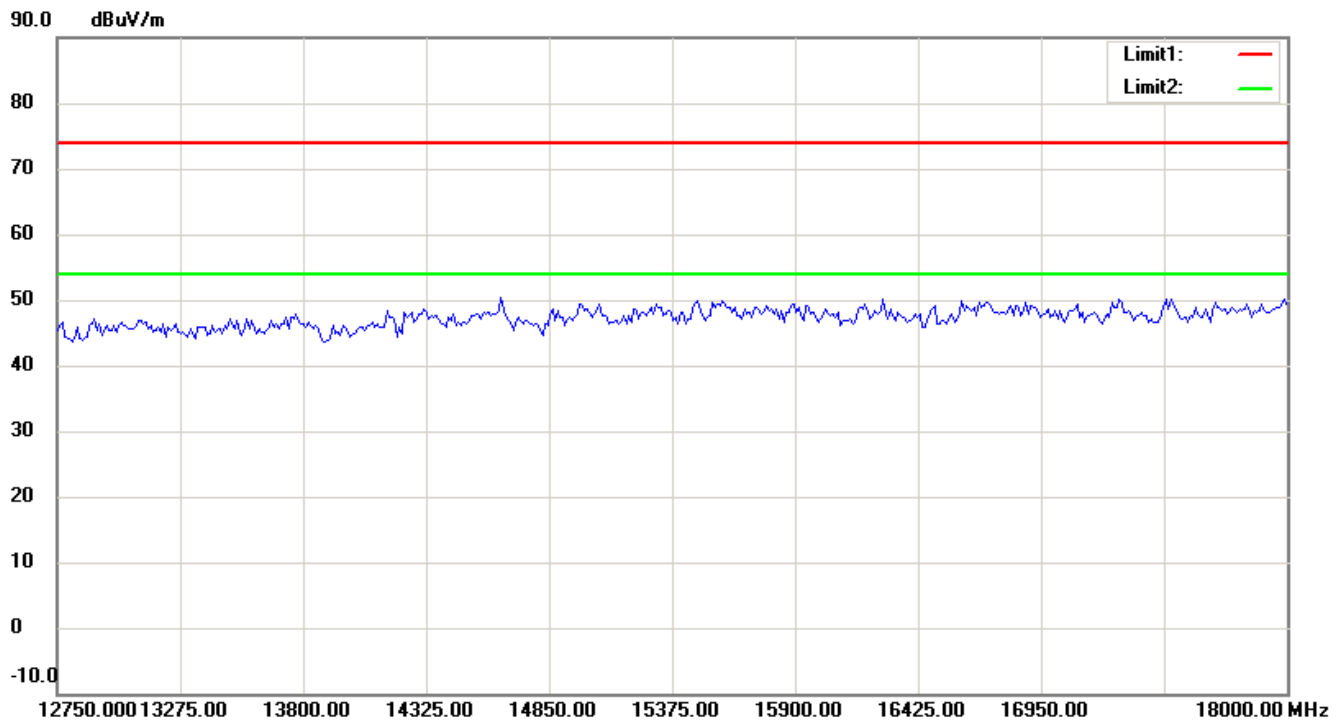
Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.



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Registration number: W6M21212-12946-P-15B



Up Line: Peak Limit Line
Down Line: Ave Limit Line

Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.

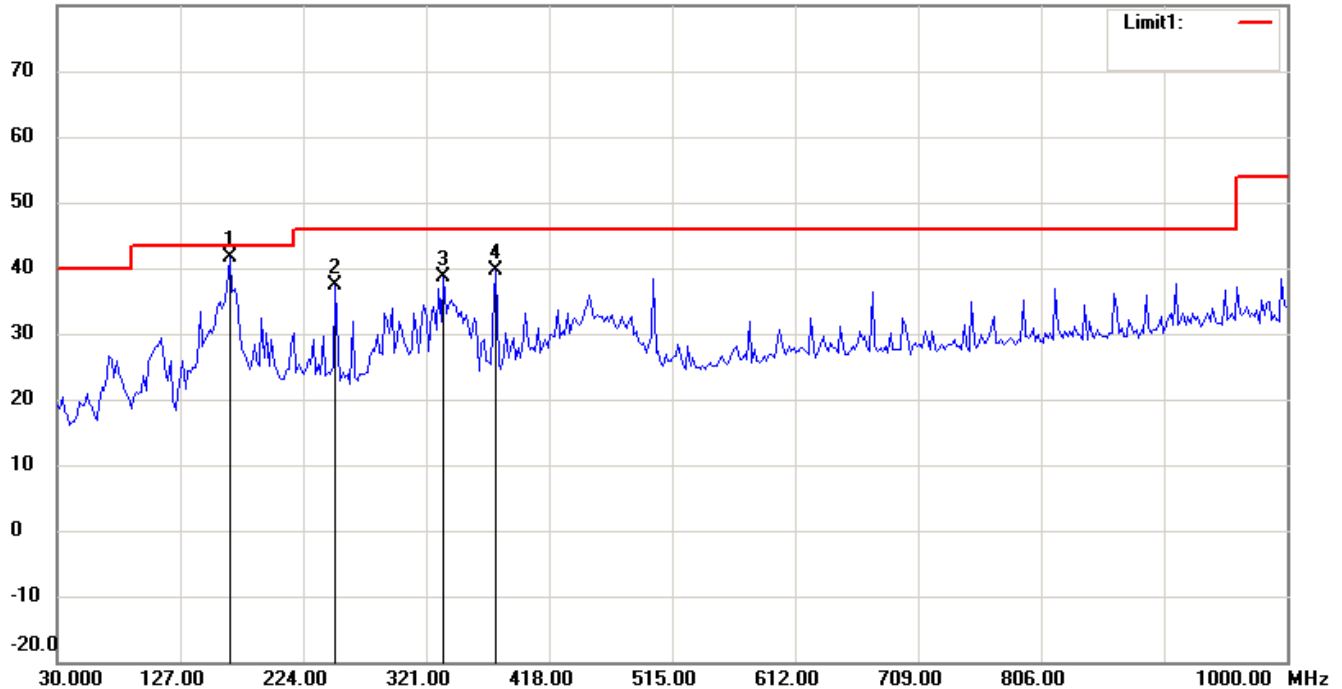


Registration number: W6M21212-12946-P-15B

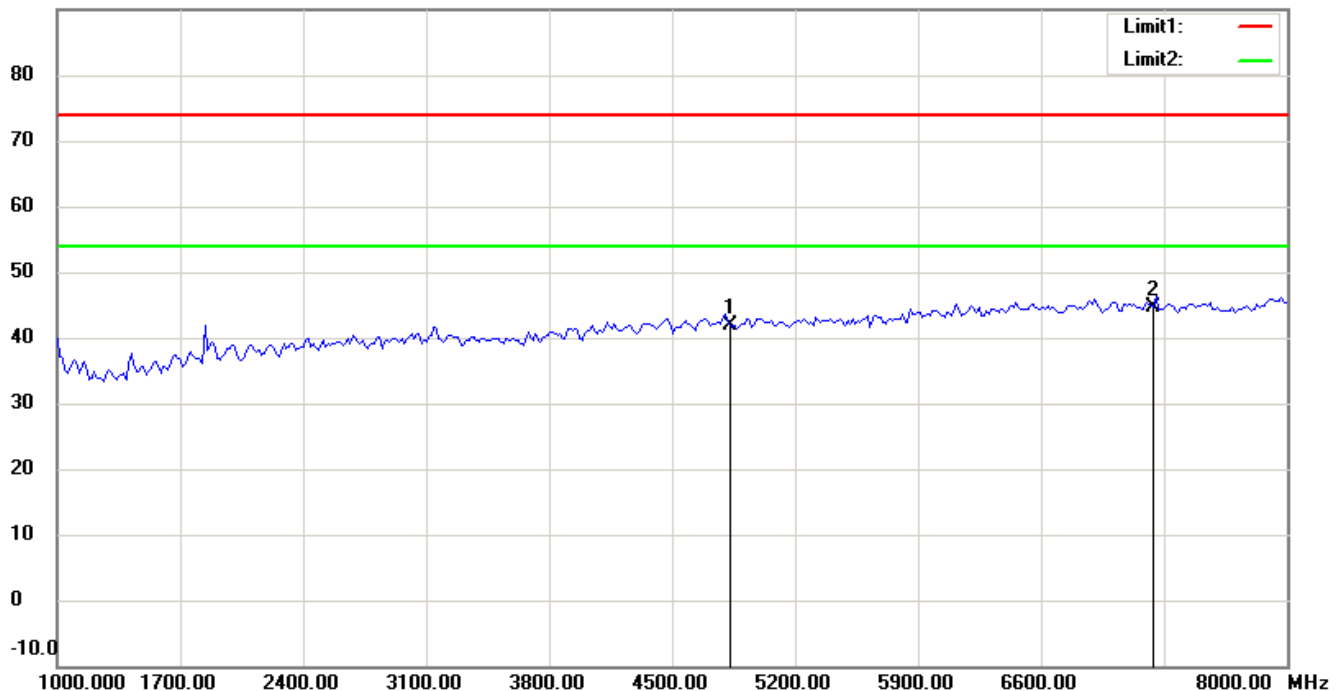
802.11g CH1

Antenna Polarization H

80.0 dBuV/m



90.0 dBuV/m



Up Line: Peak Limit Line

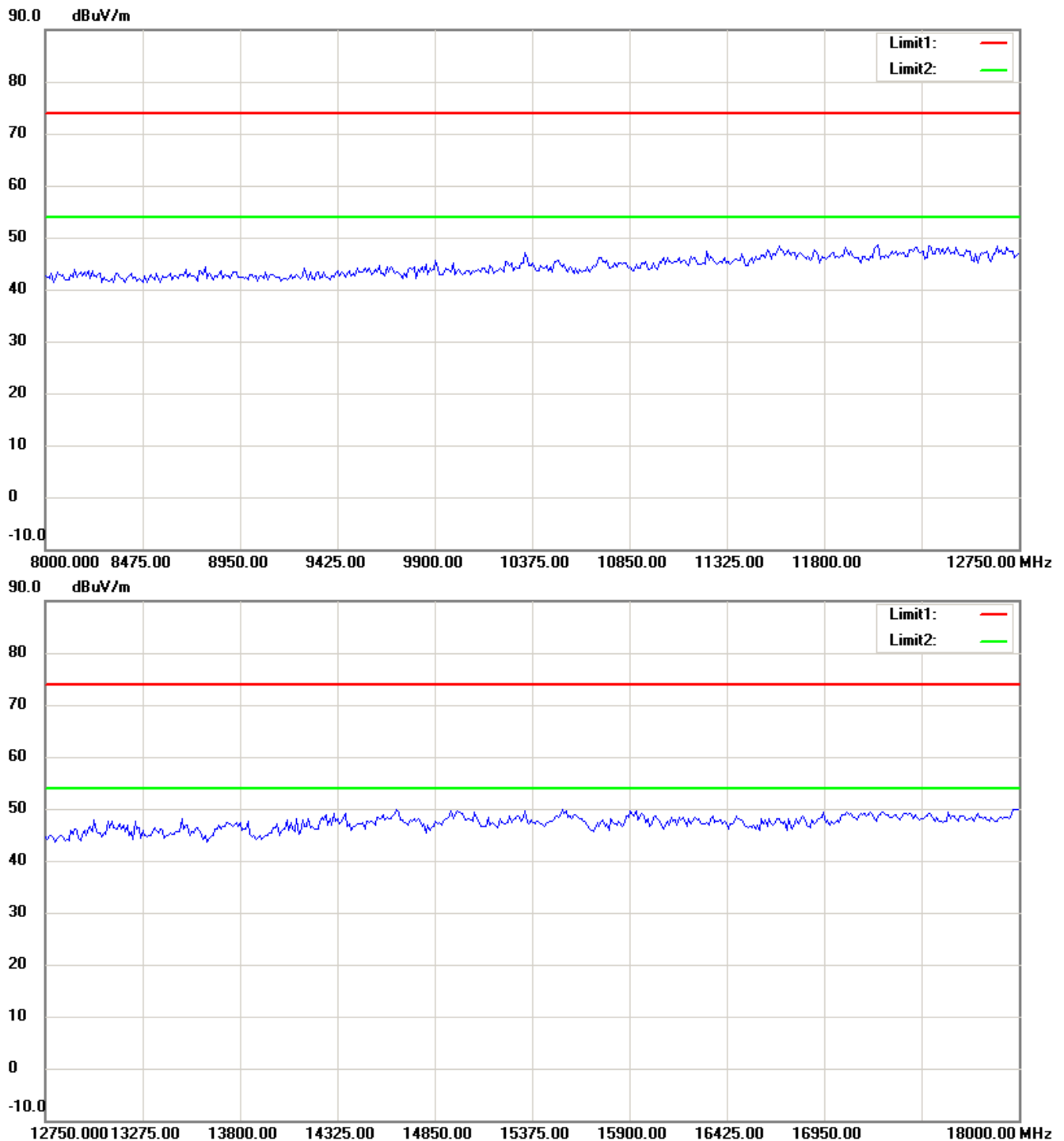
Down Line: Ave Limit Line

Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21212-12946-P-15B

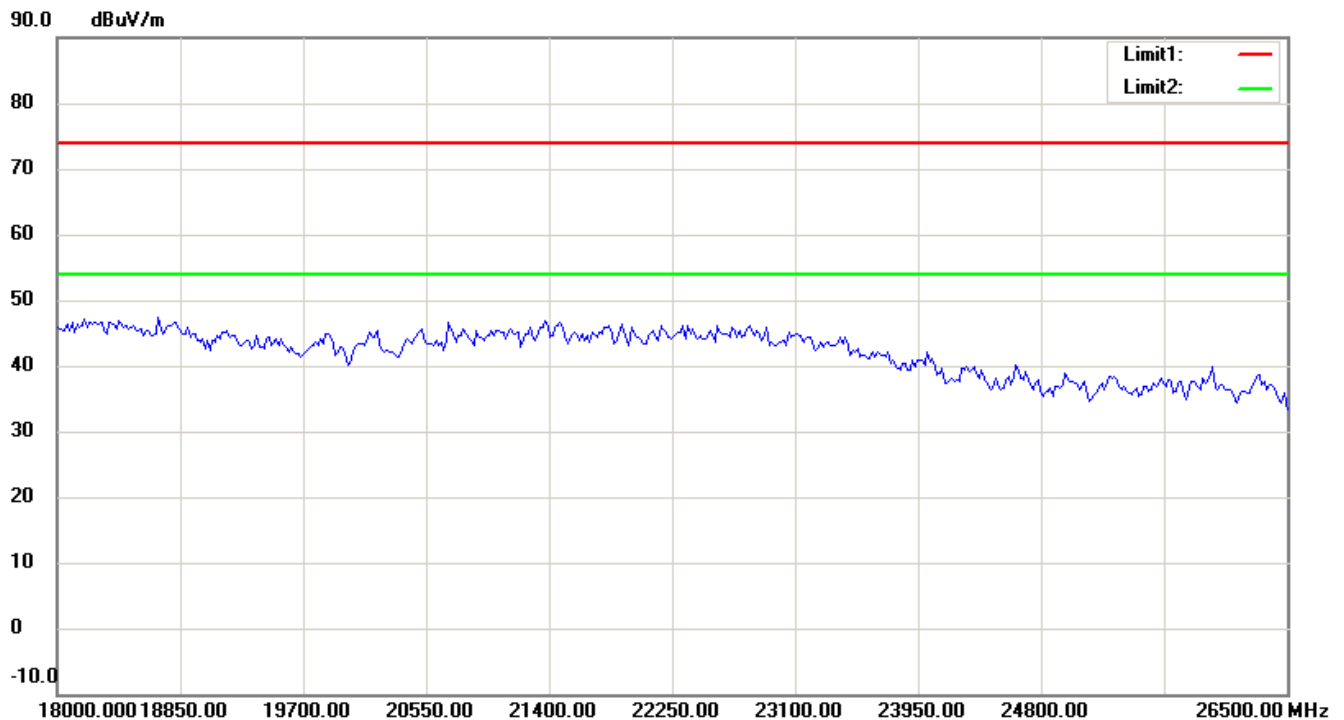


Up Line: Peak Limit Line
Down Line: Ave Limit Line

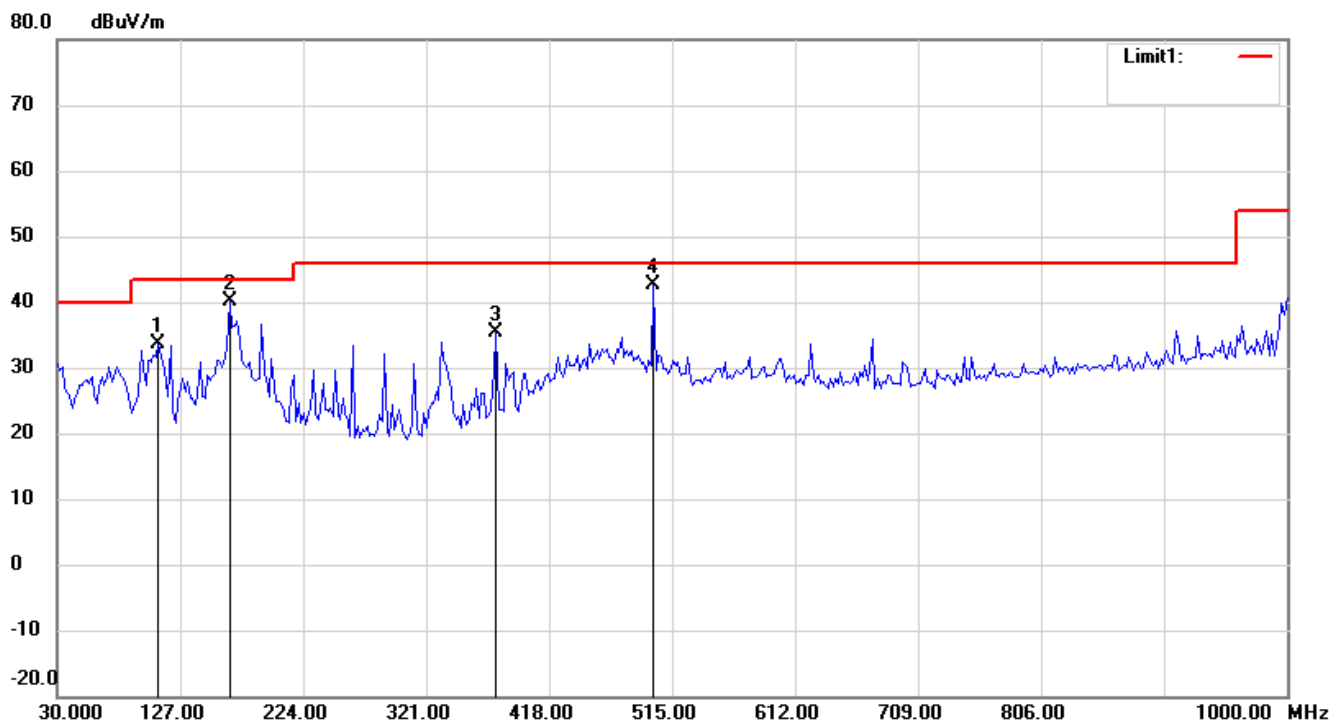
Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.

Registration number: W6M21212-12946-P-15B



Antenna Polarization V



Up Line: Peak Limit Line

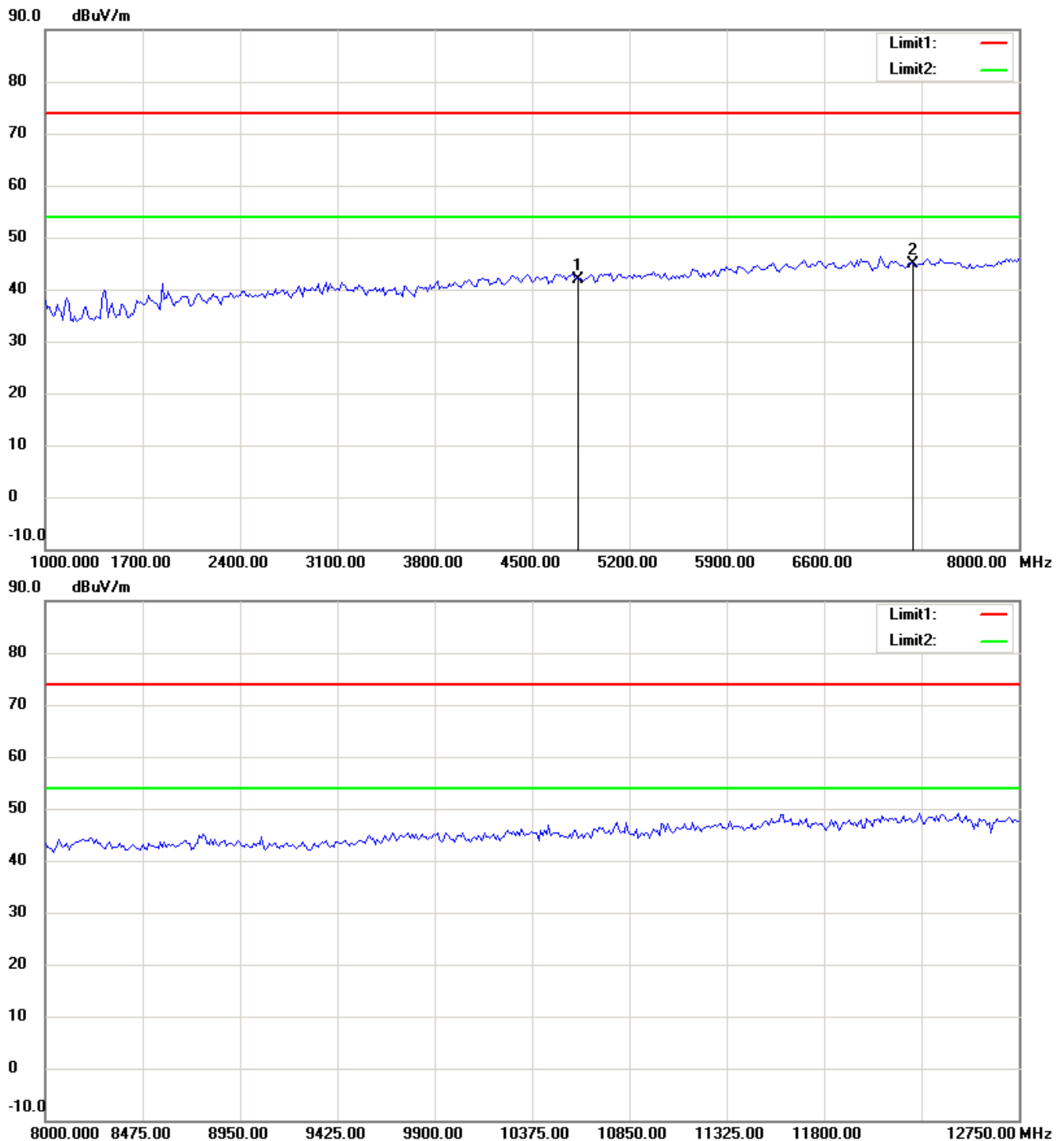
Down Line: Ave Limit Line

Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.



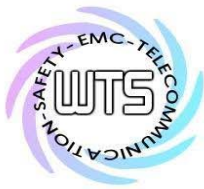
Registration number: W6M21212-12946-P-15B



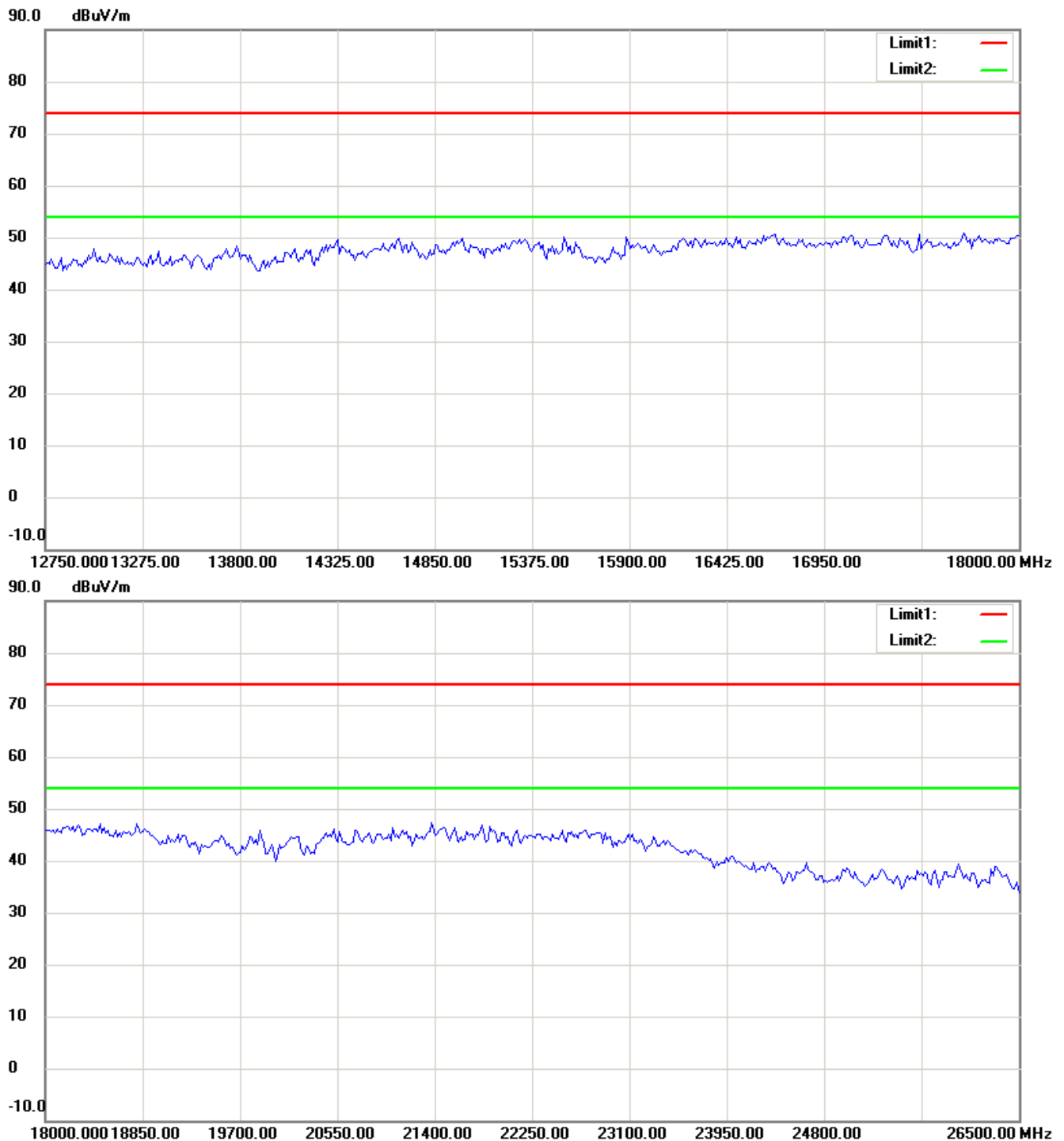
Up Line: Peak Limit Line
Down Line: Ave Limit Line

Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21212-12946-P-15B



Up Line: Peak Limit Line
Down Line: Ave Limit Line

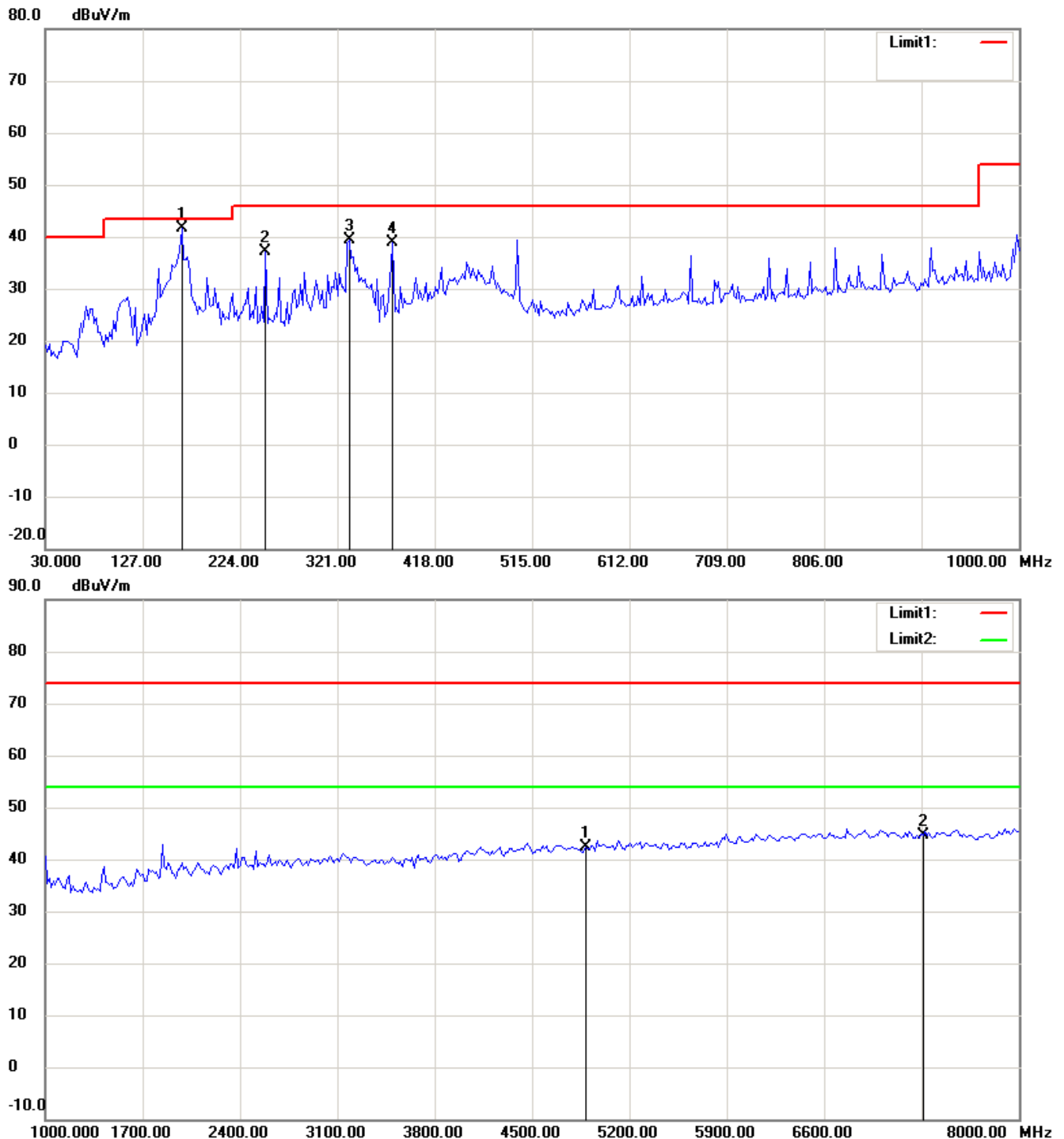
Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.

Registration number: W6M21212-12946-P-15B

802.11g CH6

Antenna Polarization H



Up Line: Peak Limit Line

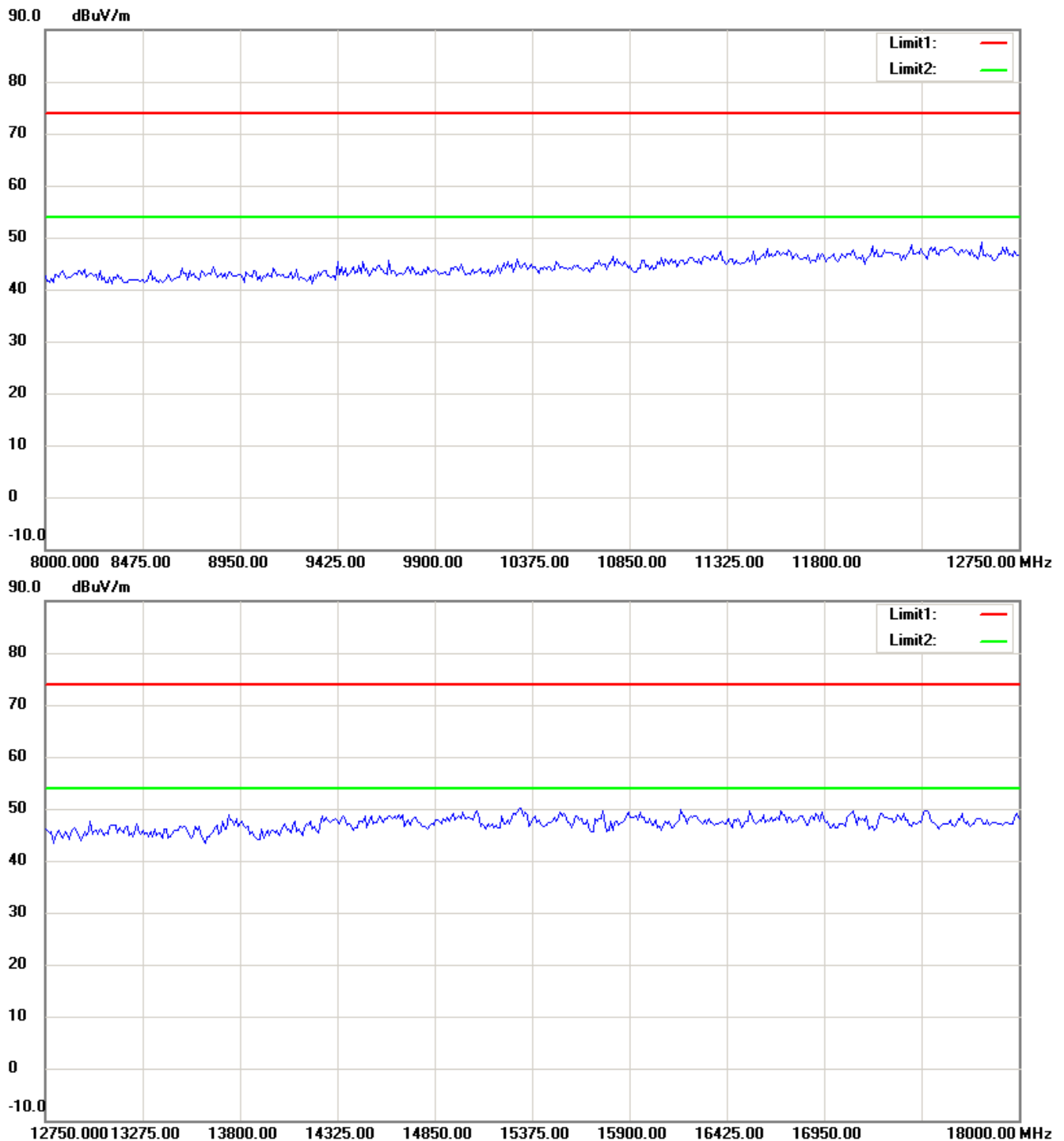
Down Line: Ave Limit Line

Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21212-12946-P-15B

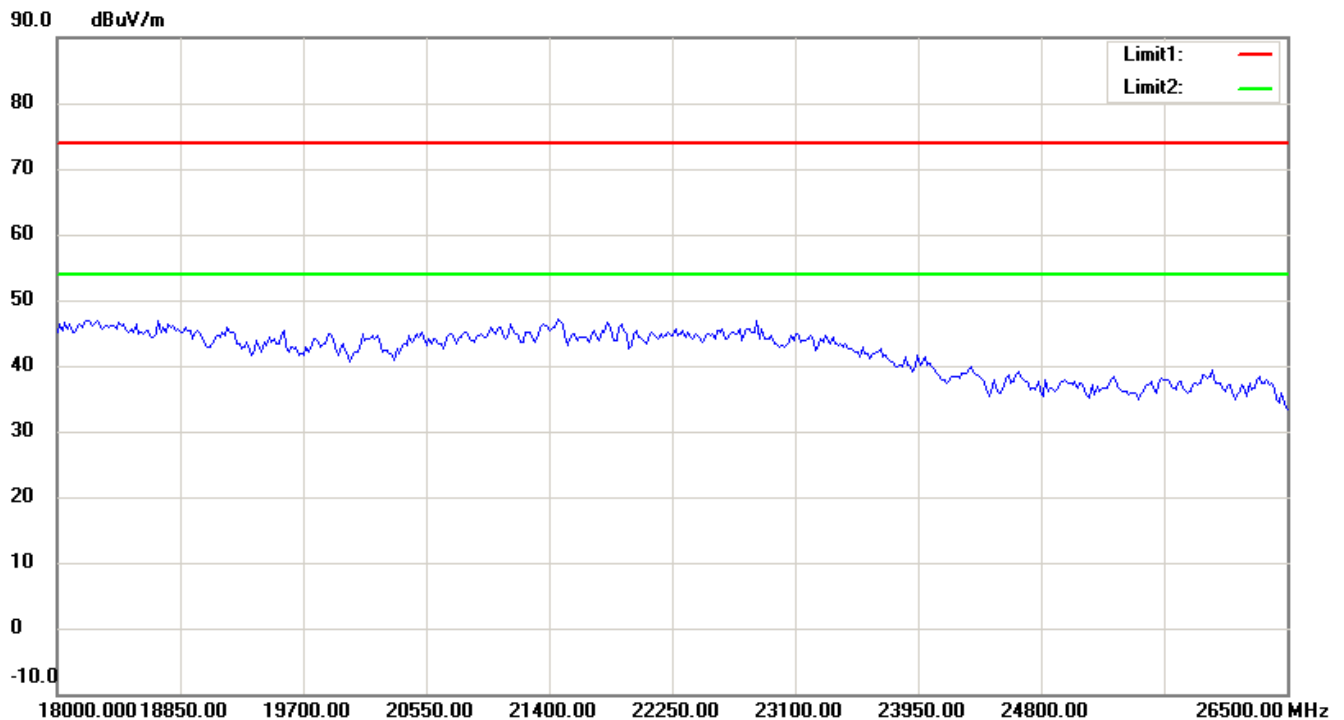


Up Line: Peak Limit Line
Down Line: Ave Limit Line

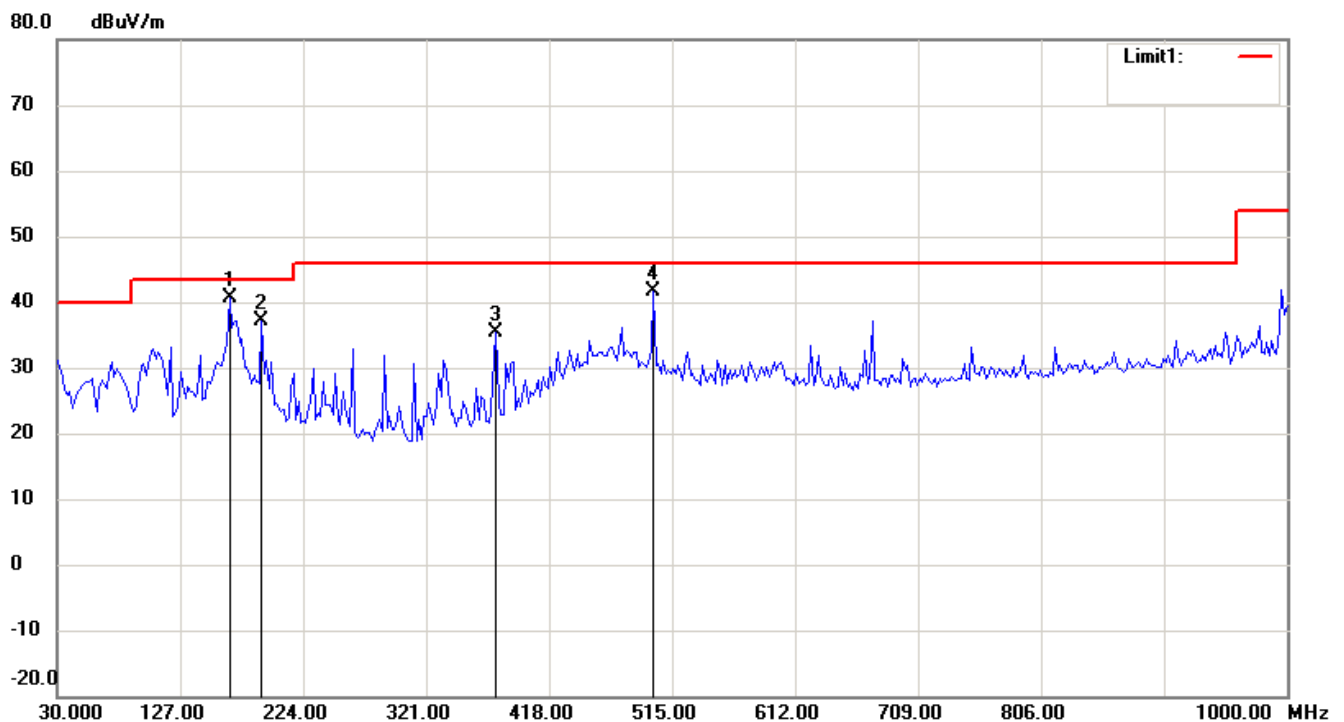
Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.

Registration number: W6M21212-12946-P-15B



Antenna Polarization V



Up Line: Peak Limit Line

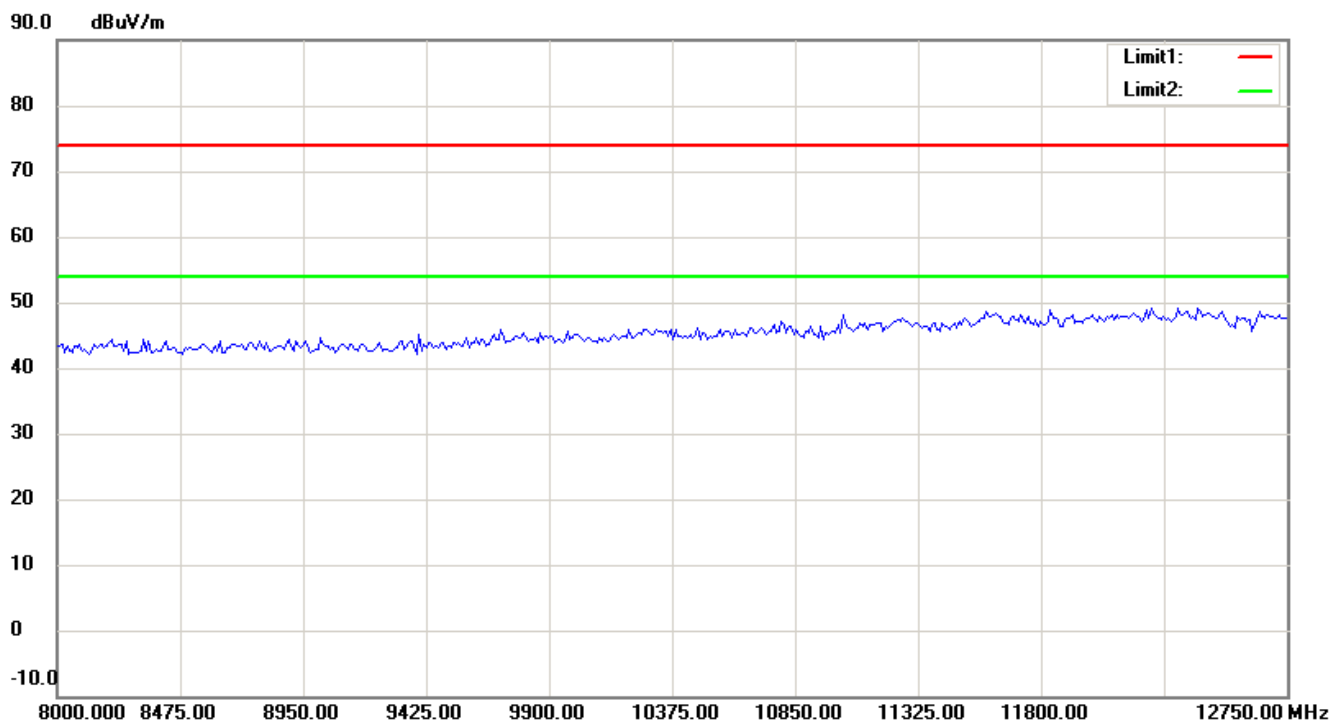
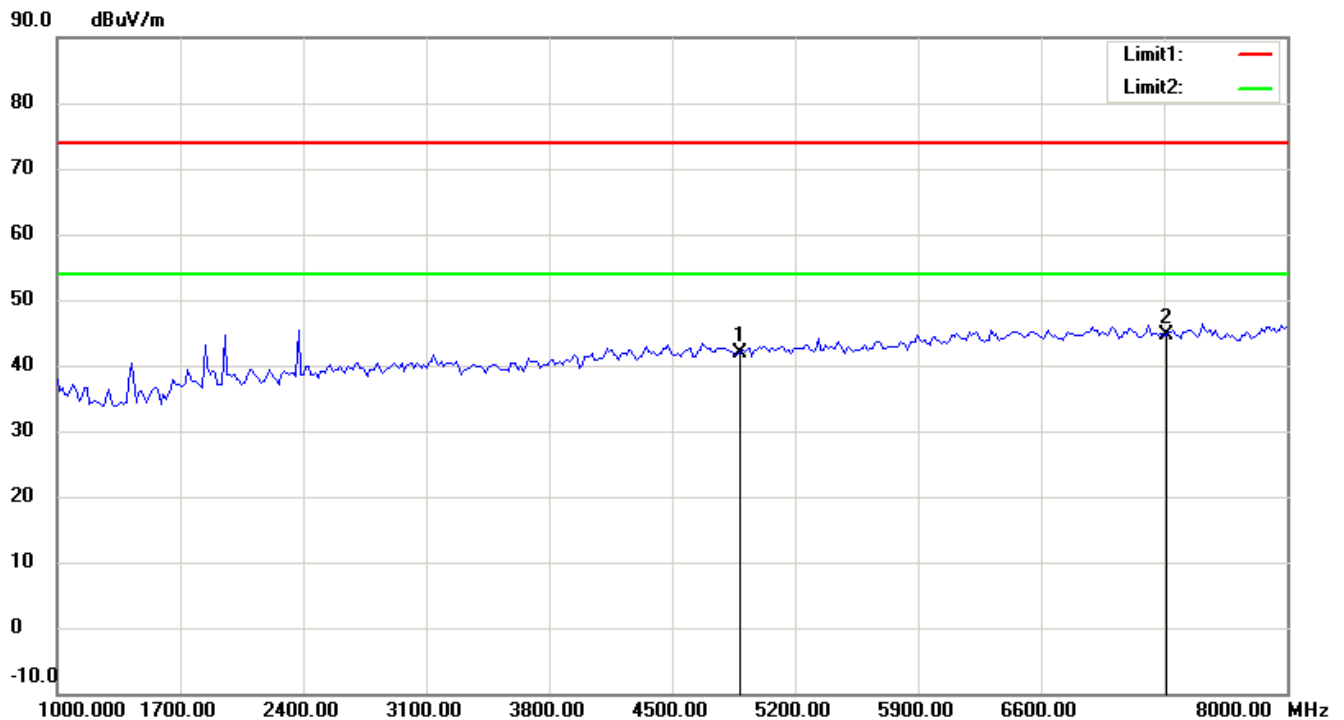
Down Line: Ave Limit Line

Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
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Registration number: W6M21212-12946-P-15B



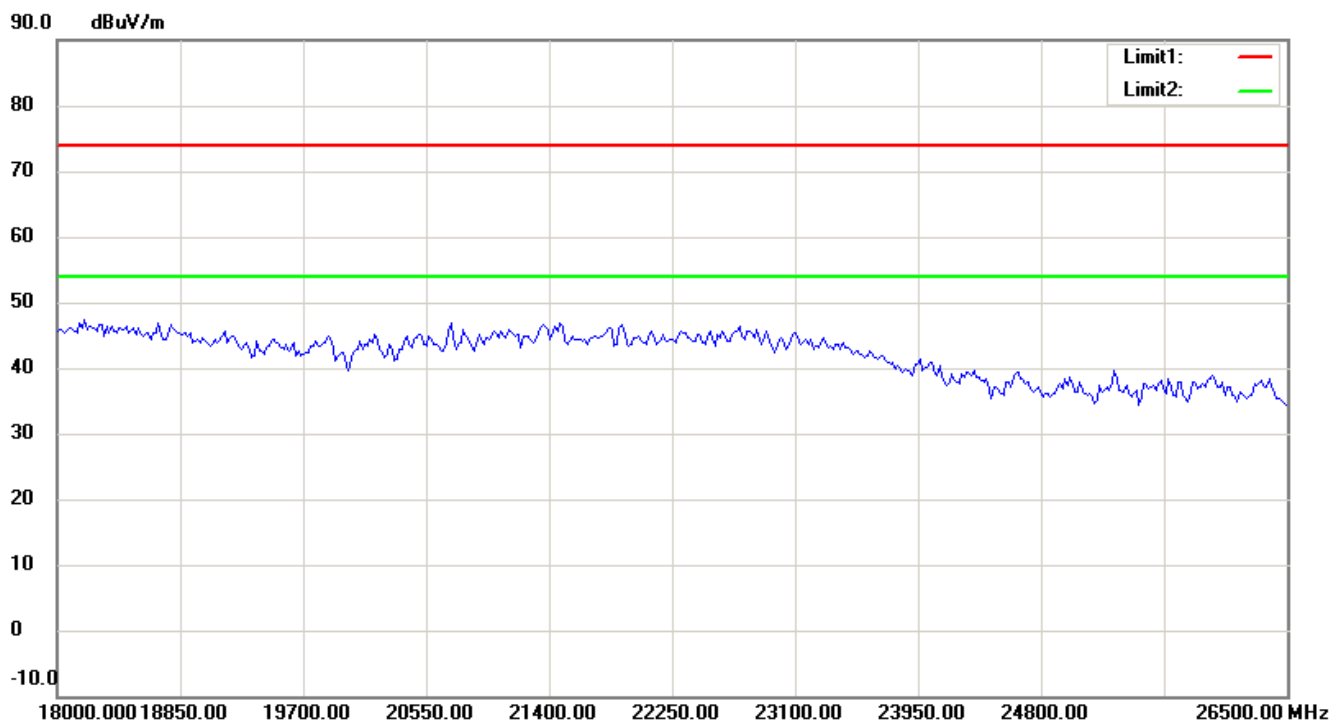
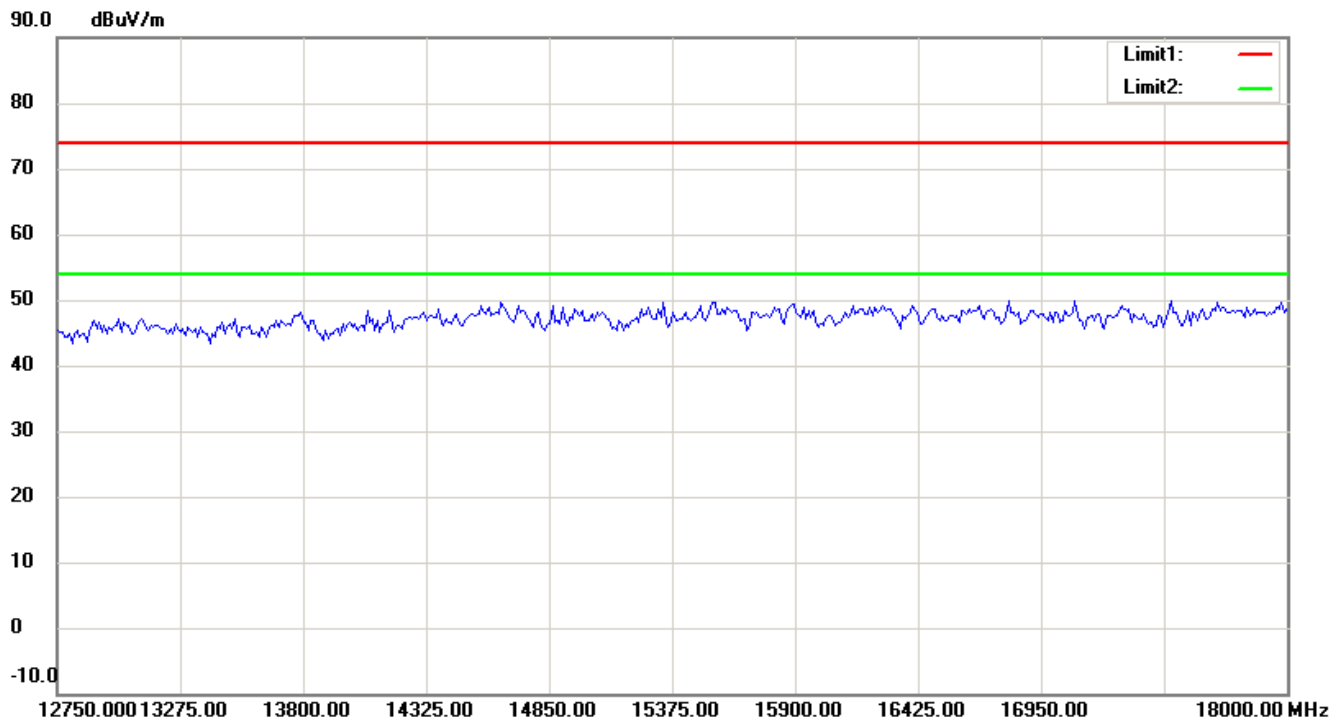
Up Line: Peak Limit Line
Down Line: Ave Limit Line

Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
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Registration number: W6M21212-12946-P-15B



Up Line: Peak Limit Line
Down Line: Ave Limit Line

Note:

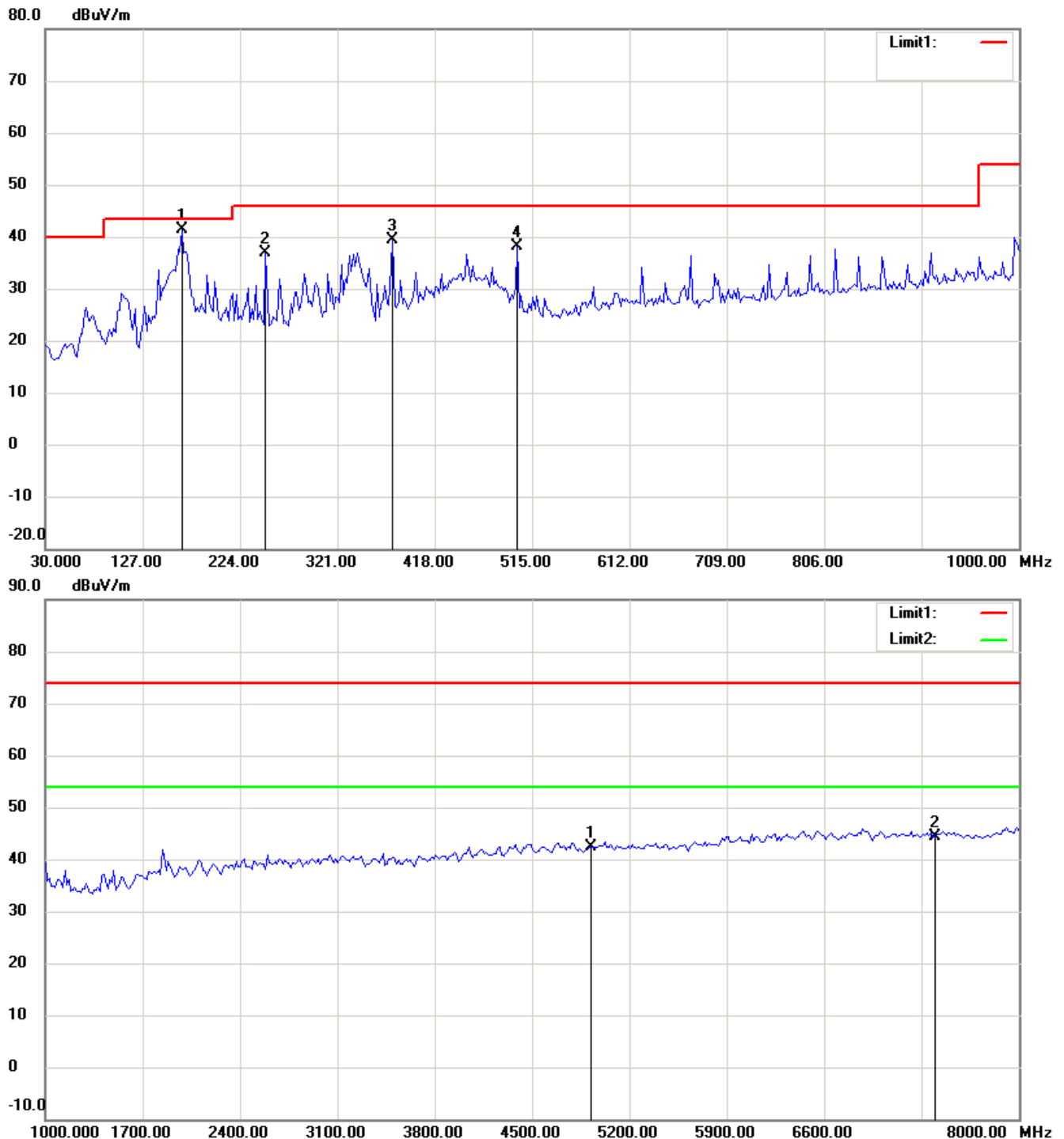
1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21212-12946-P-15B

802.11g CH11

Antenna Polarization H



Up Line: Peak Limit Line

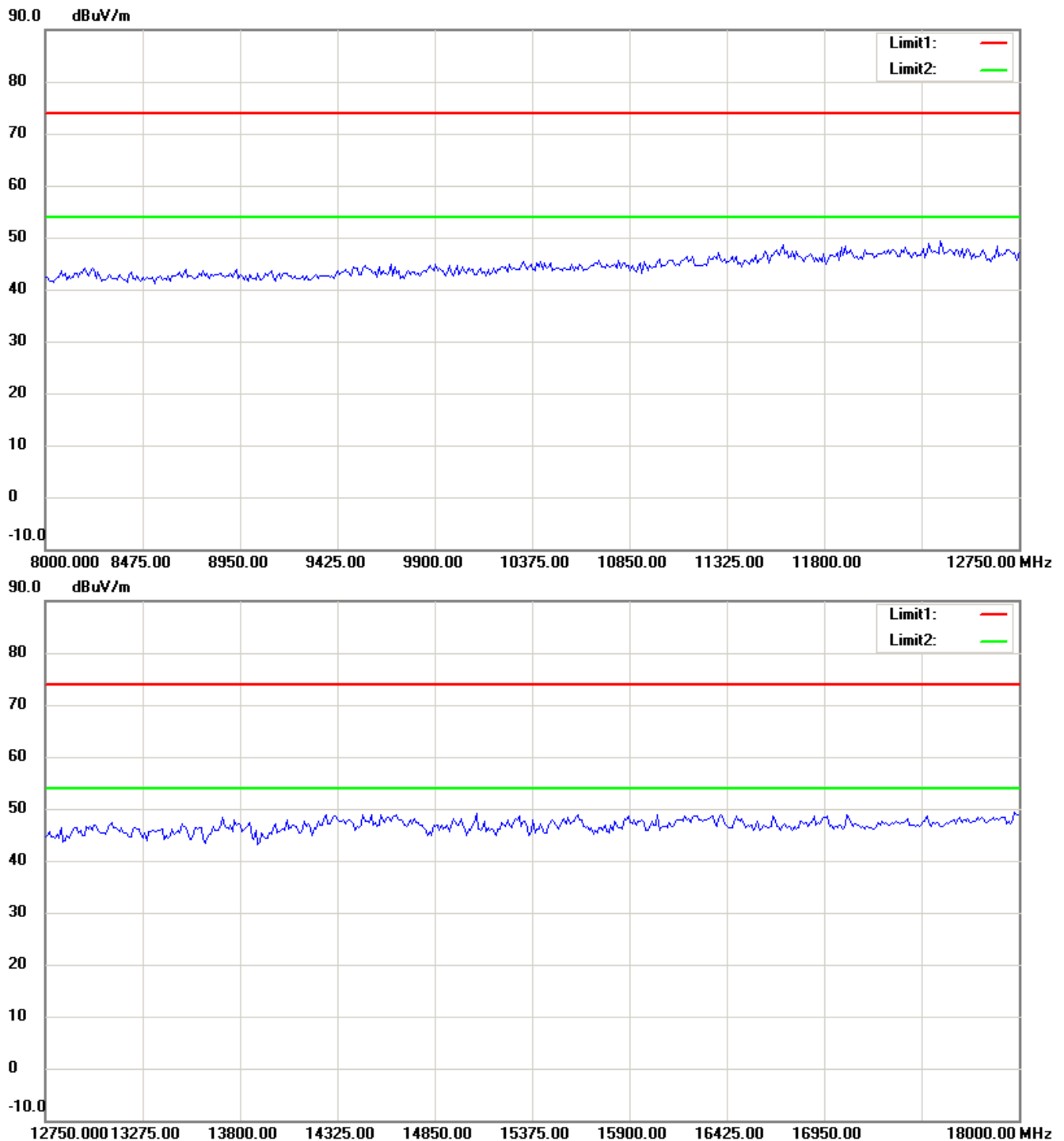
Down Line: Ave Limit Line

Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.



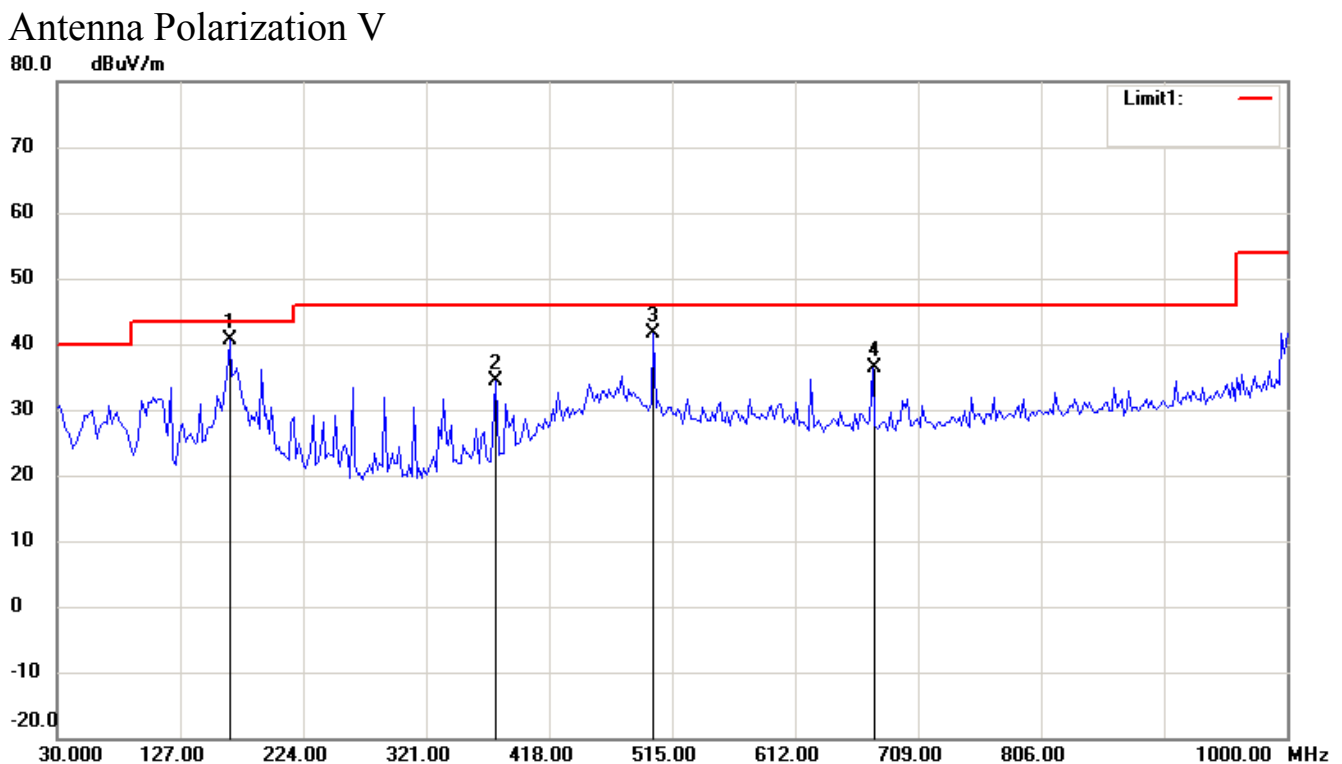
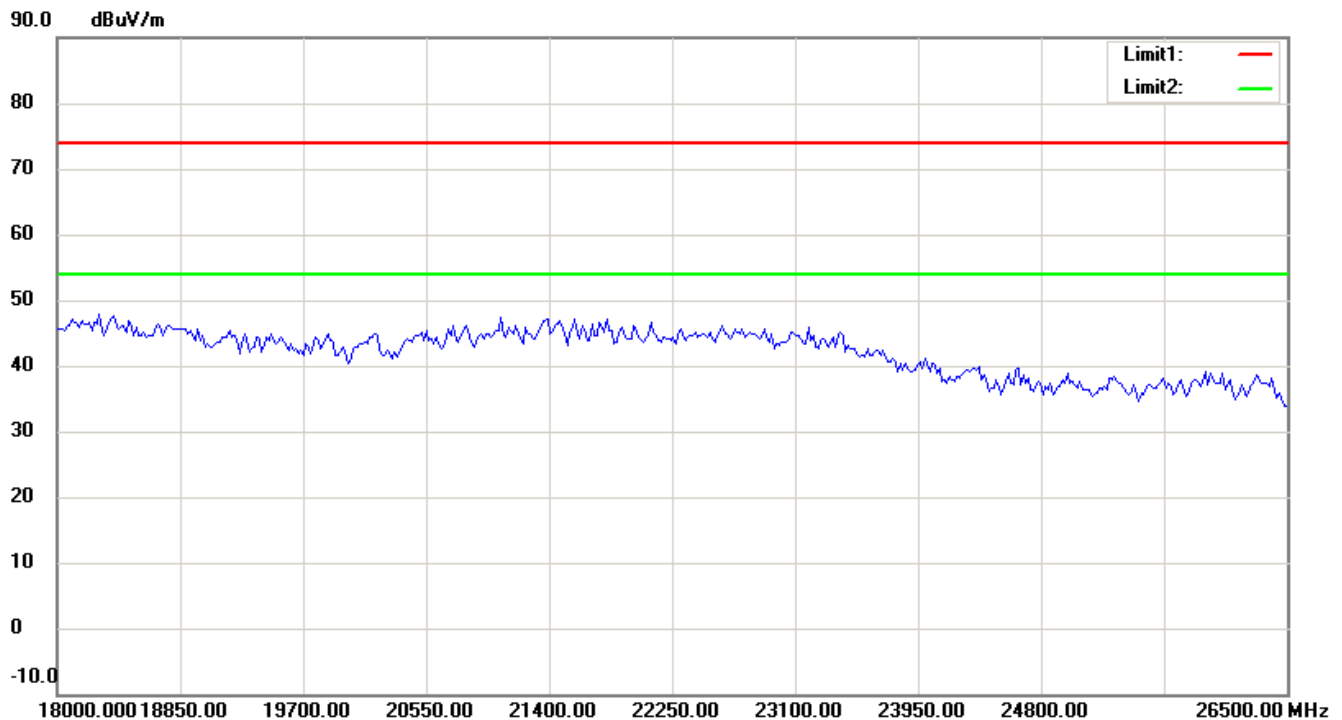
Registration number: W6M21212-12946-P-15B



Up Line: Peak Limit Line
Down Line: Ave Limit Line
Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.

Registration number: W6M21212-12946-P-15B



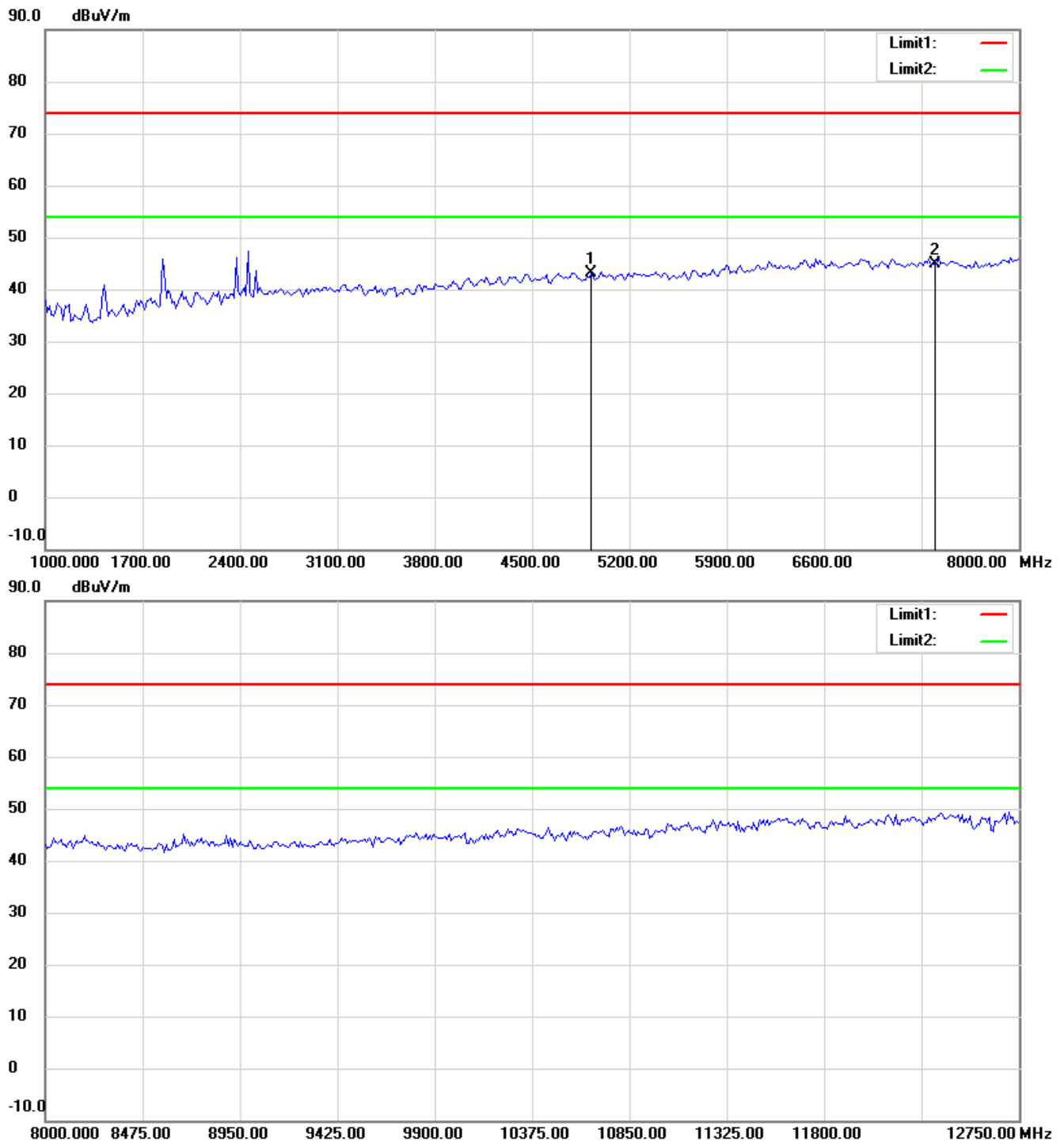
Up Line: Peak Limit Line
Down Line: Ave Limit Line

Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
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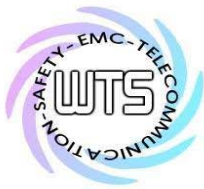
Registration number: W6M21212-12946-P-15B



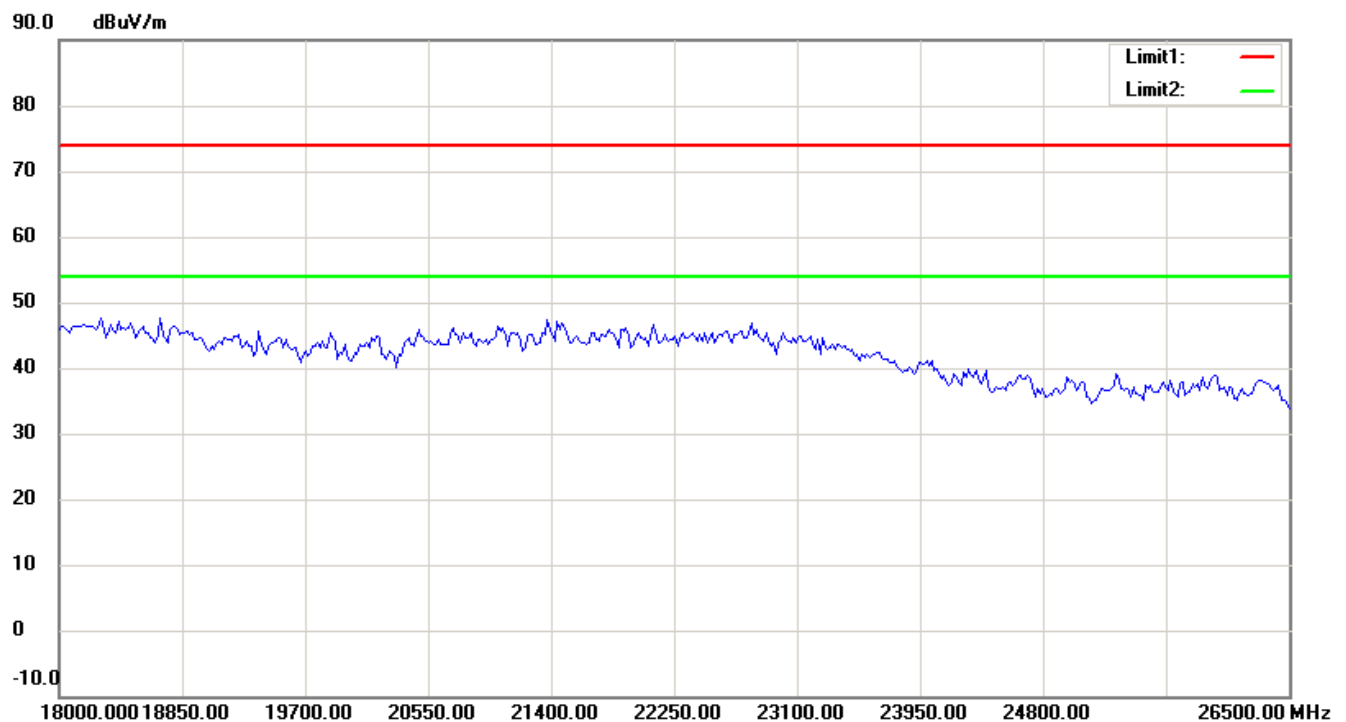
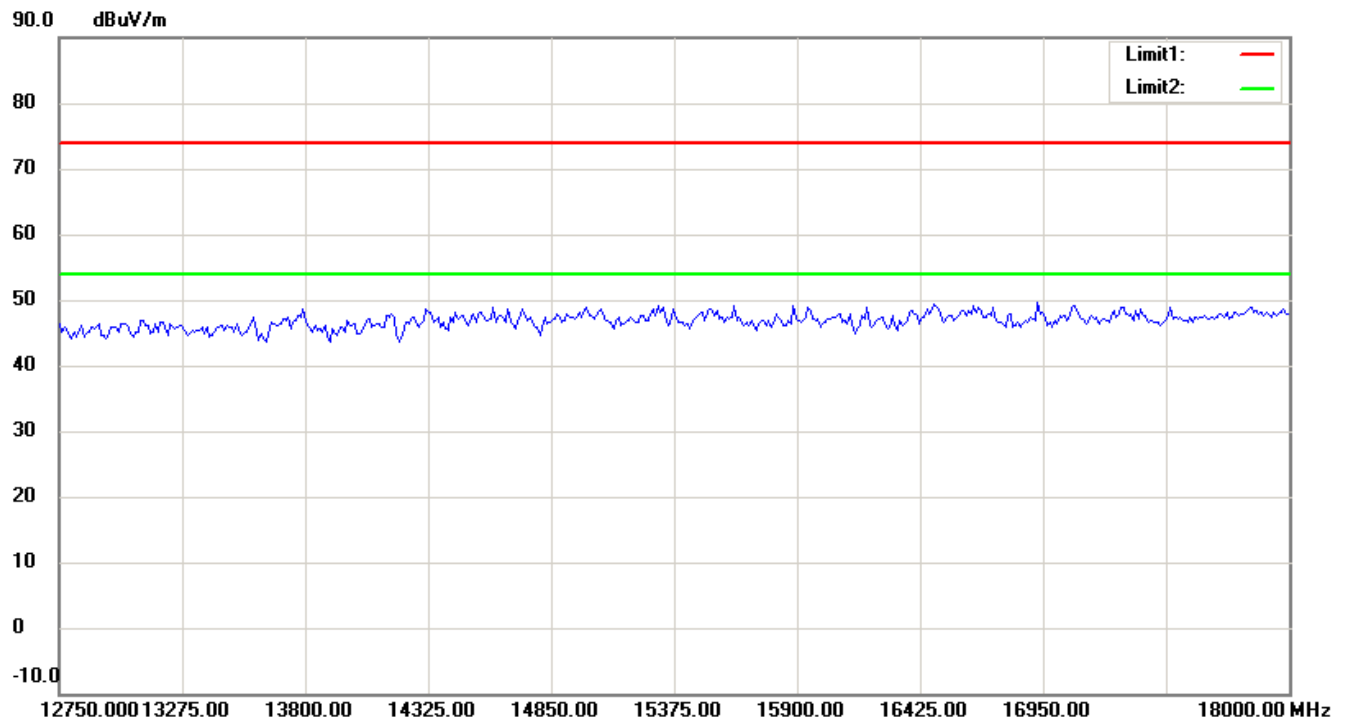
Up Line: Peak Limit Line
Down Line: Ave Limit Line

Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21212-12946-P-15B



Up Line: Peak Limit Line

Down Line: Ave Limit Line

Note:

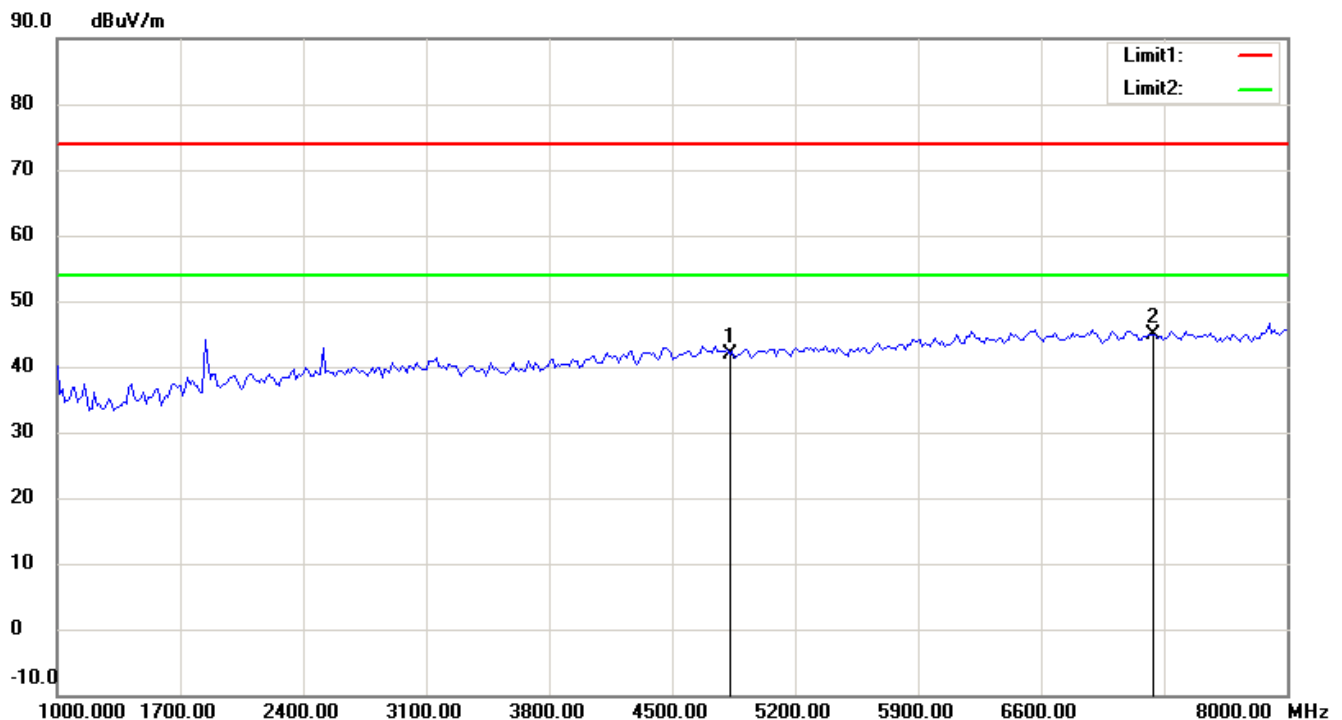
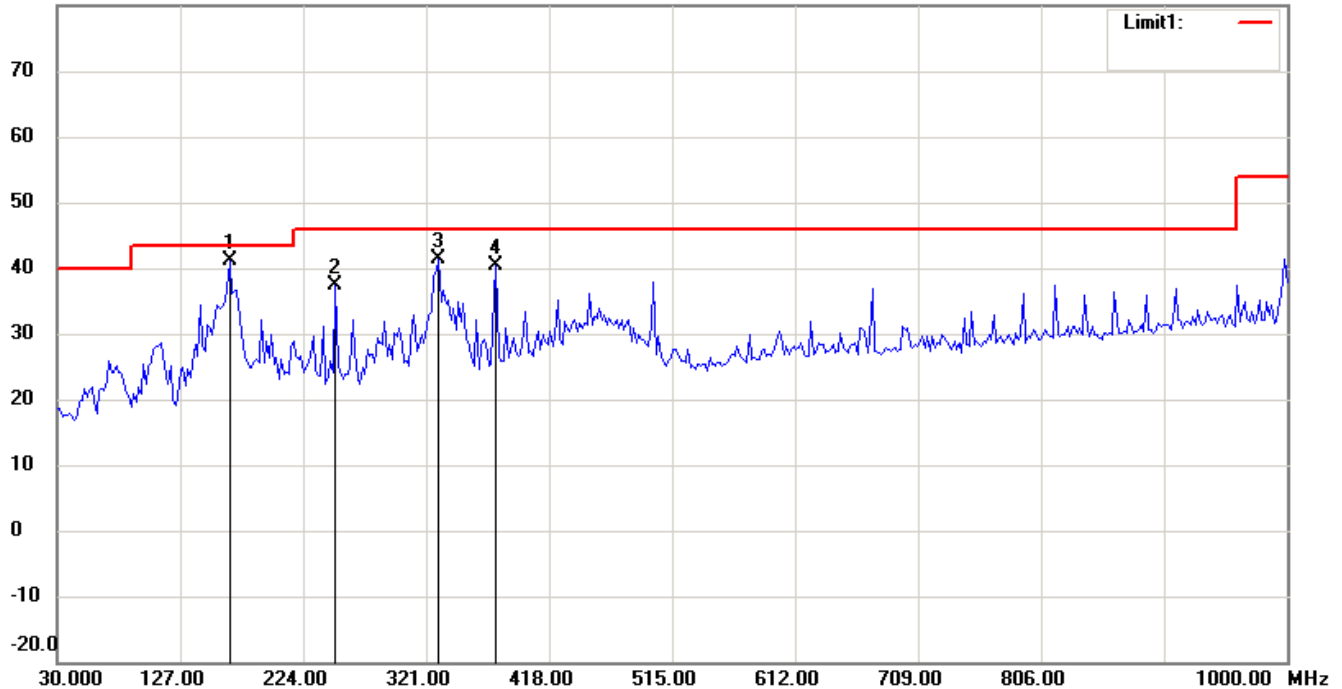
1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.

Registration number: W6M21212-12946-P-15B

802.11n (20MHz) CH1

Antenna Polarization H

80.0 dBuV/m



Up Line: Peak Limit Line

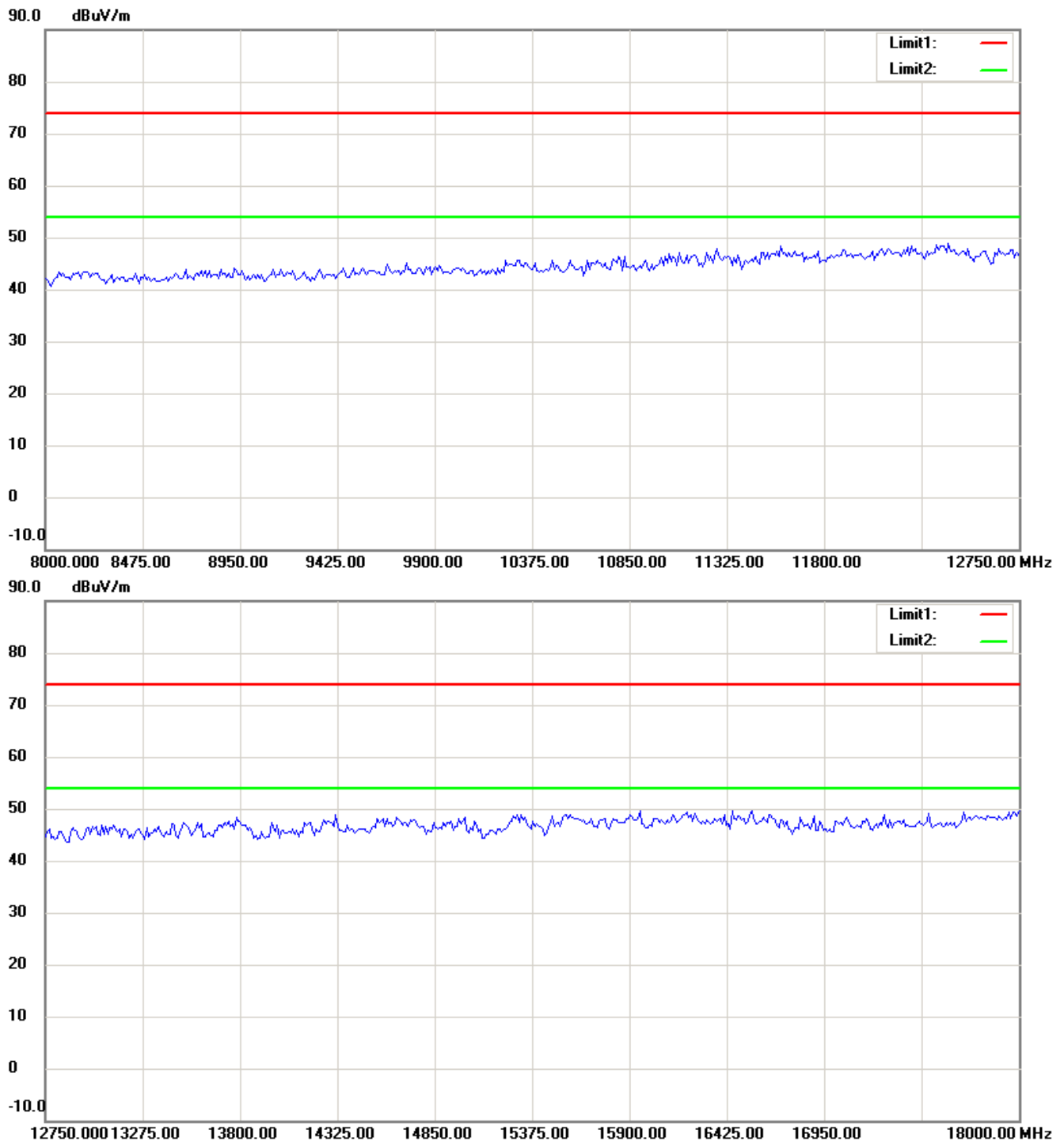
Down Line: Ave Limit Line

Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21212-12946-P-15B

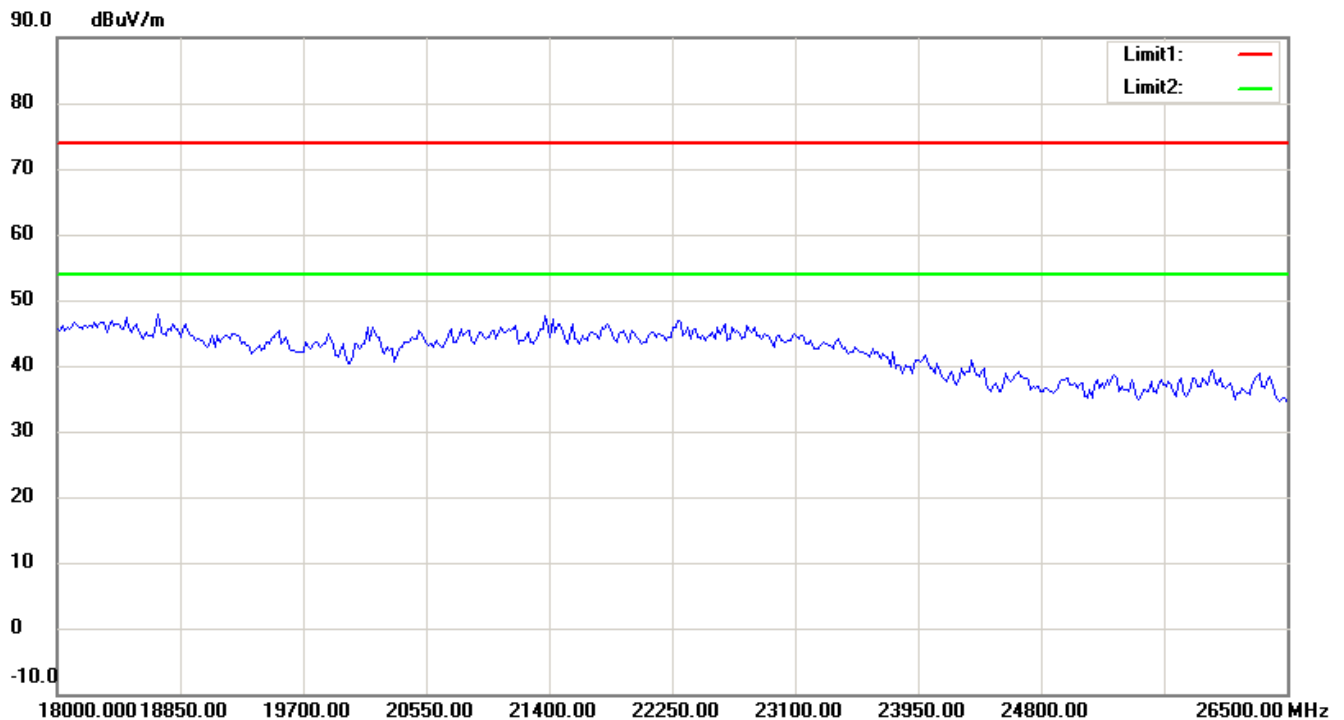


Up Line: Peak Limit Line
Down Line: Ave Limit Line

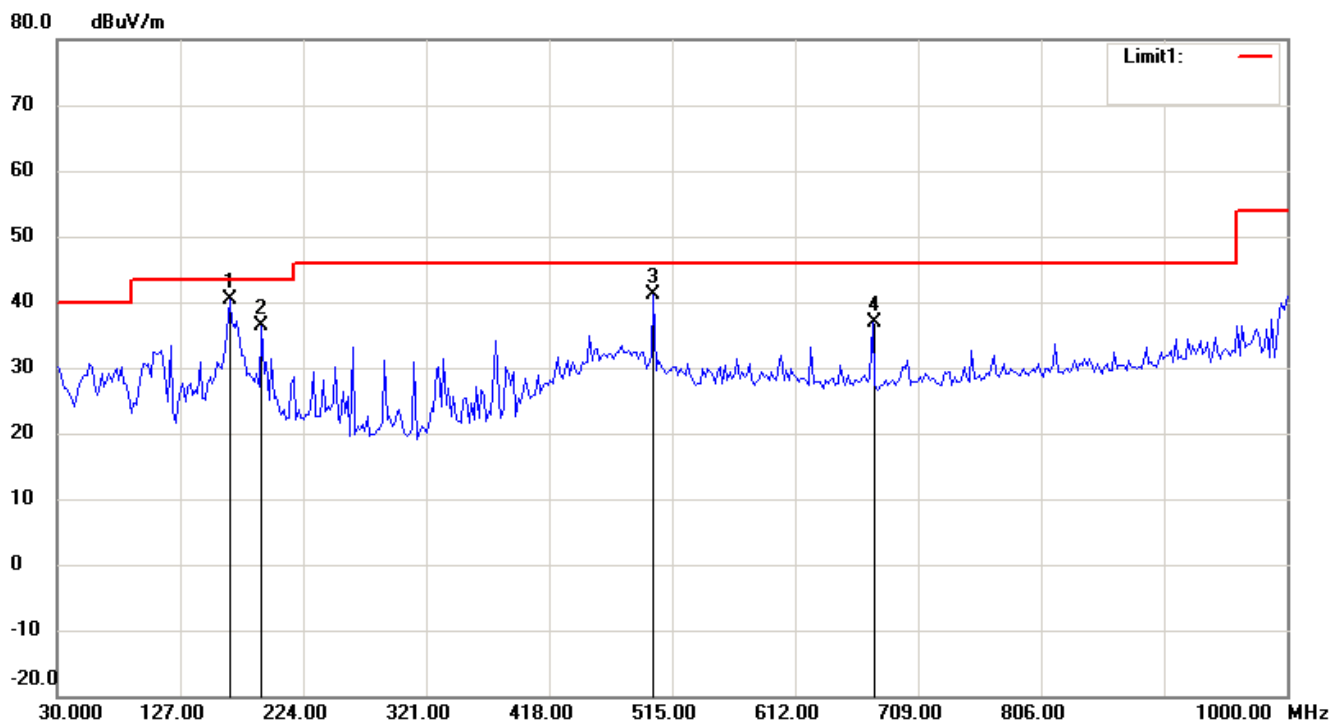
Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.

Registration number: W6M21212-12946-P-15B



Antenna Polarization V



Up Line: Peak Limit Line

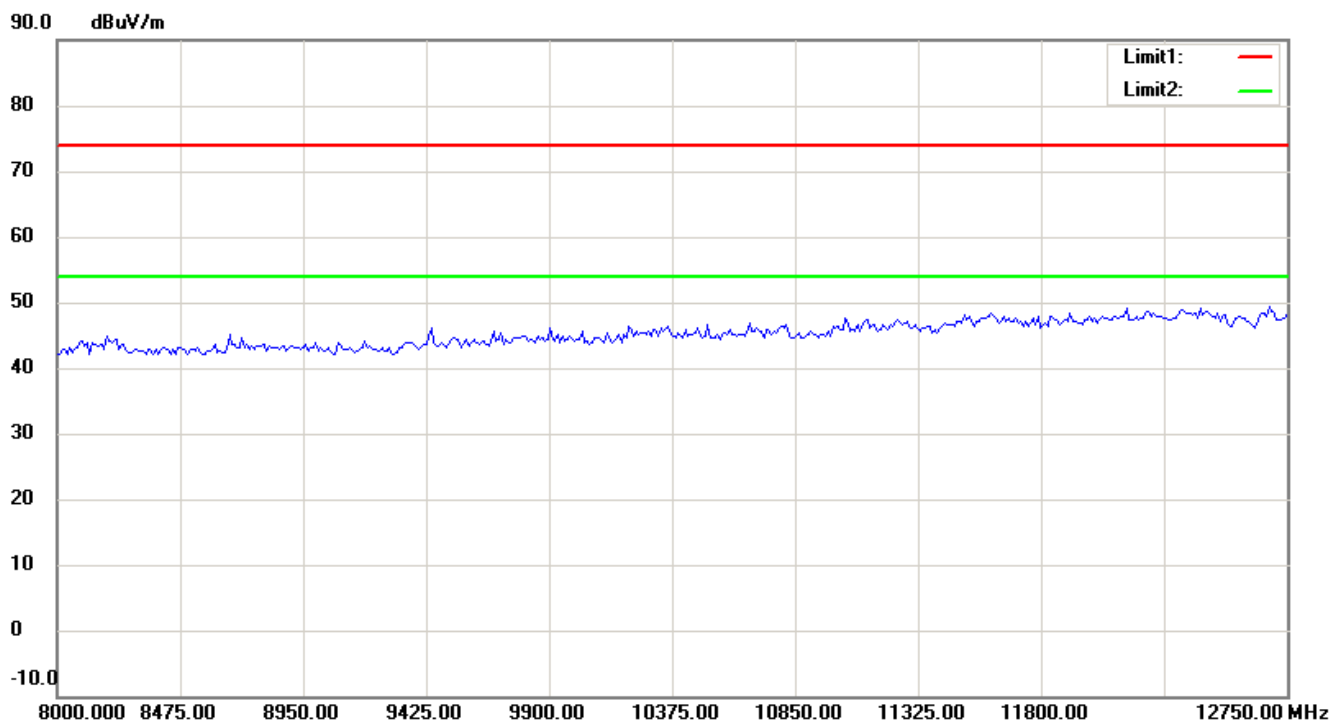
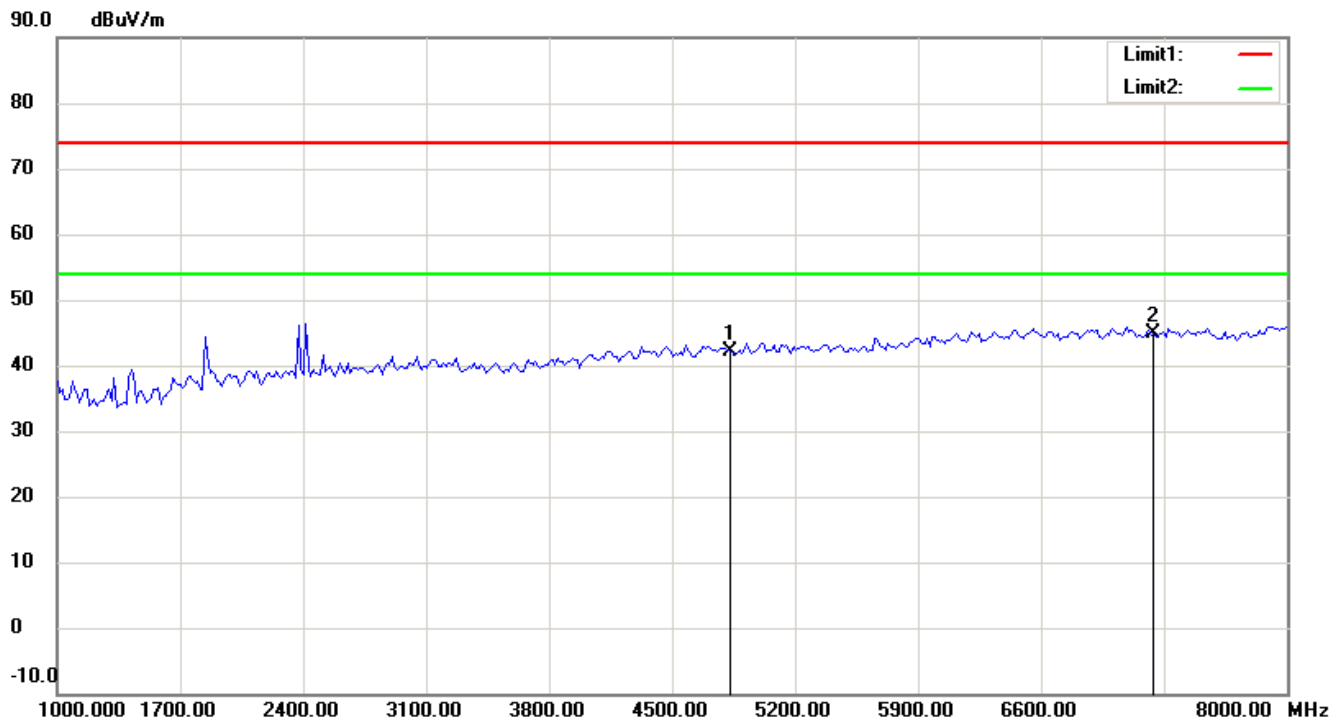
Down Line: Ave Limit Line

Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.



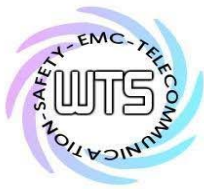
Registration number: W6M21212-12946-P-15B



Up Line: Peak Limit Line
Down Line: Ave Limit Line

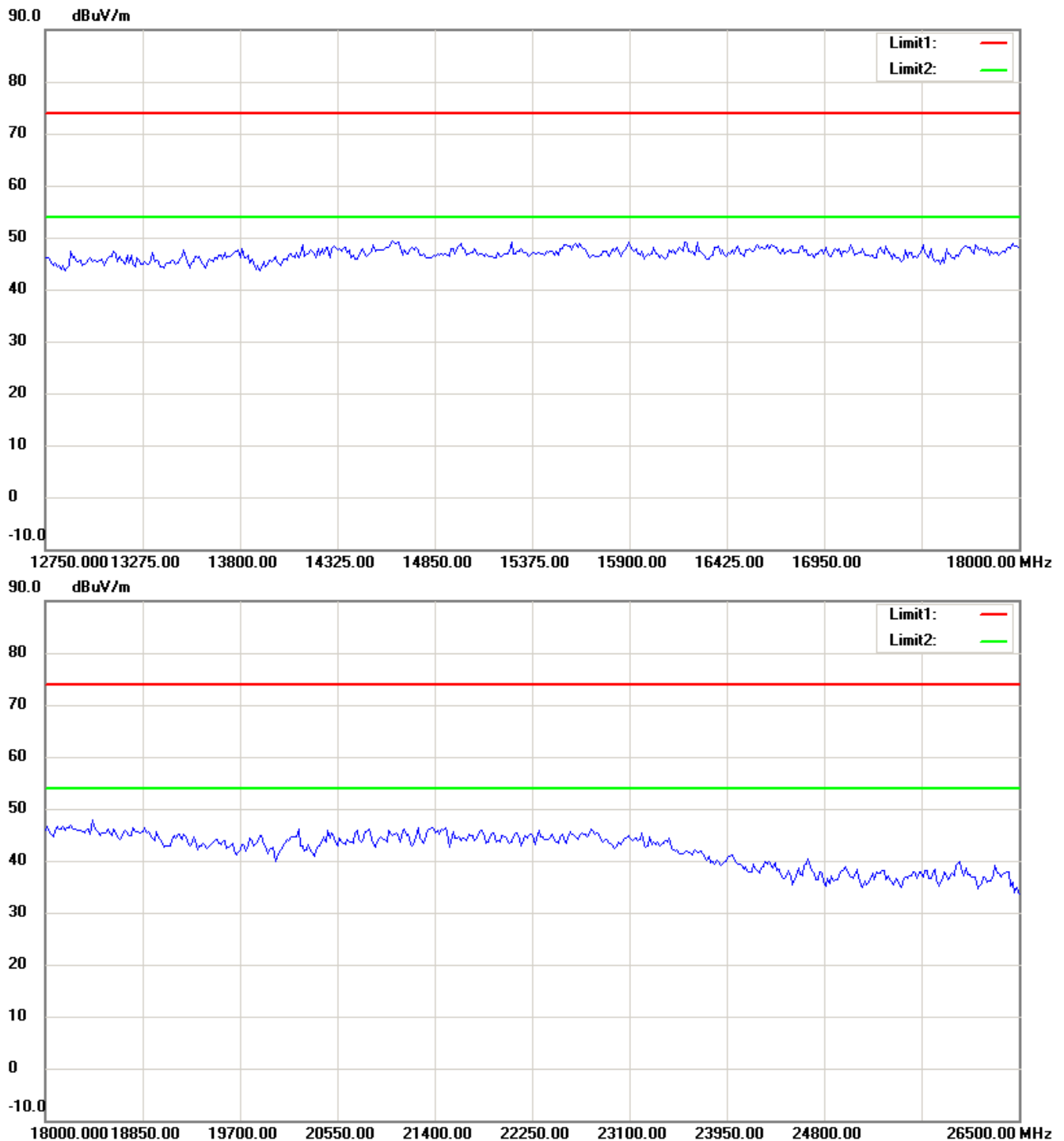
Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21212-12946-P-15B



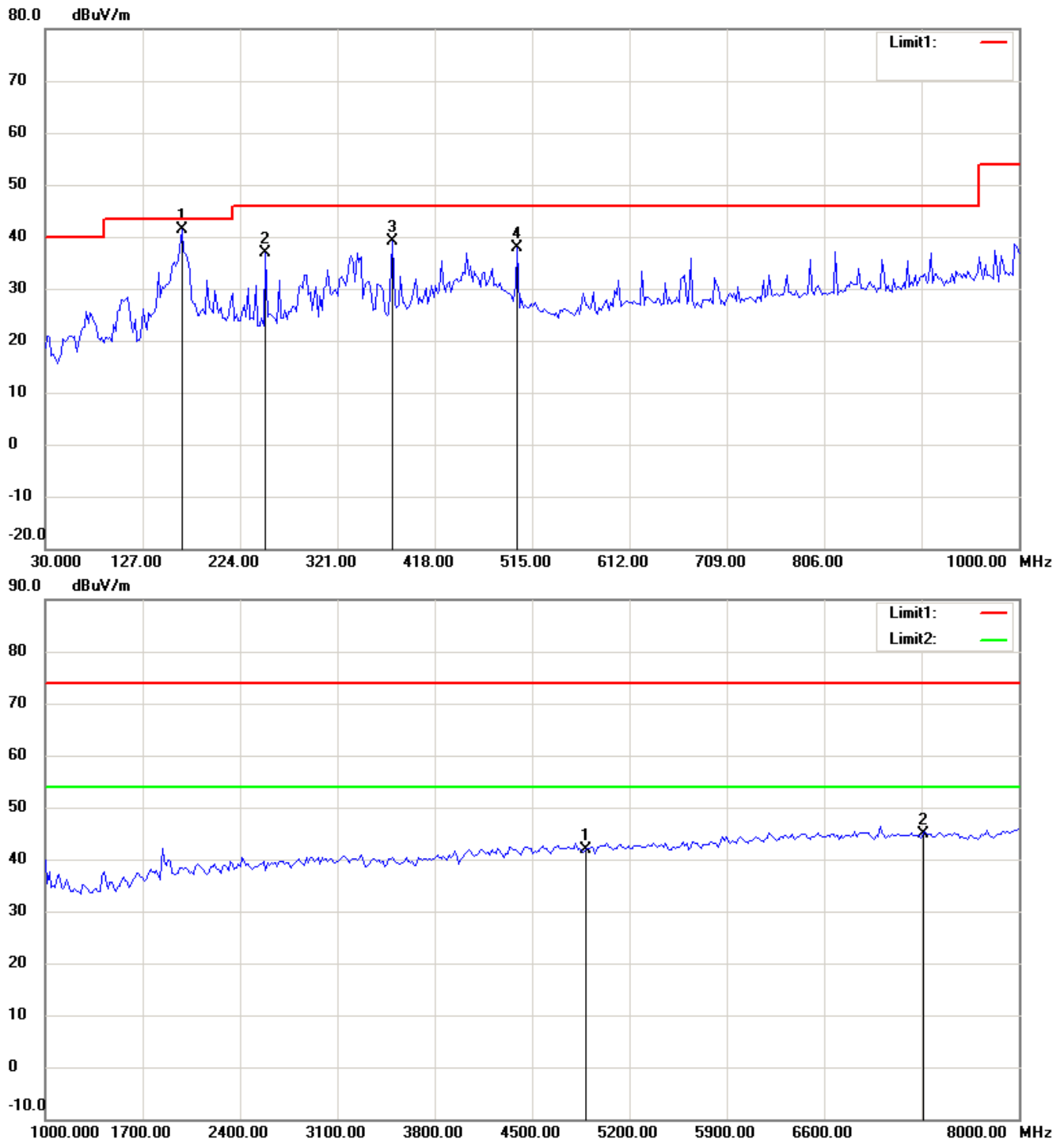
Up Line: Peak Limit Line
Down Line: Ave Limit Line
Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.

Registration number: W6M21212-12946-P-15B

802.11 n (20MHz) CH6

Antenna Polarization H



Up Line: Peak Limit Line

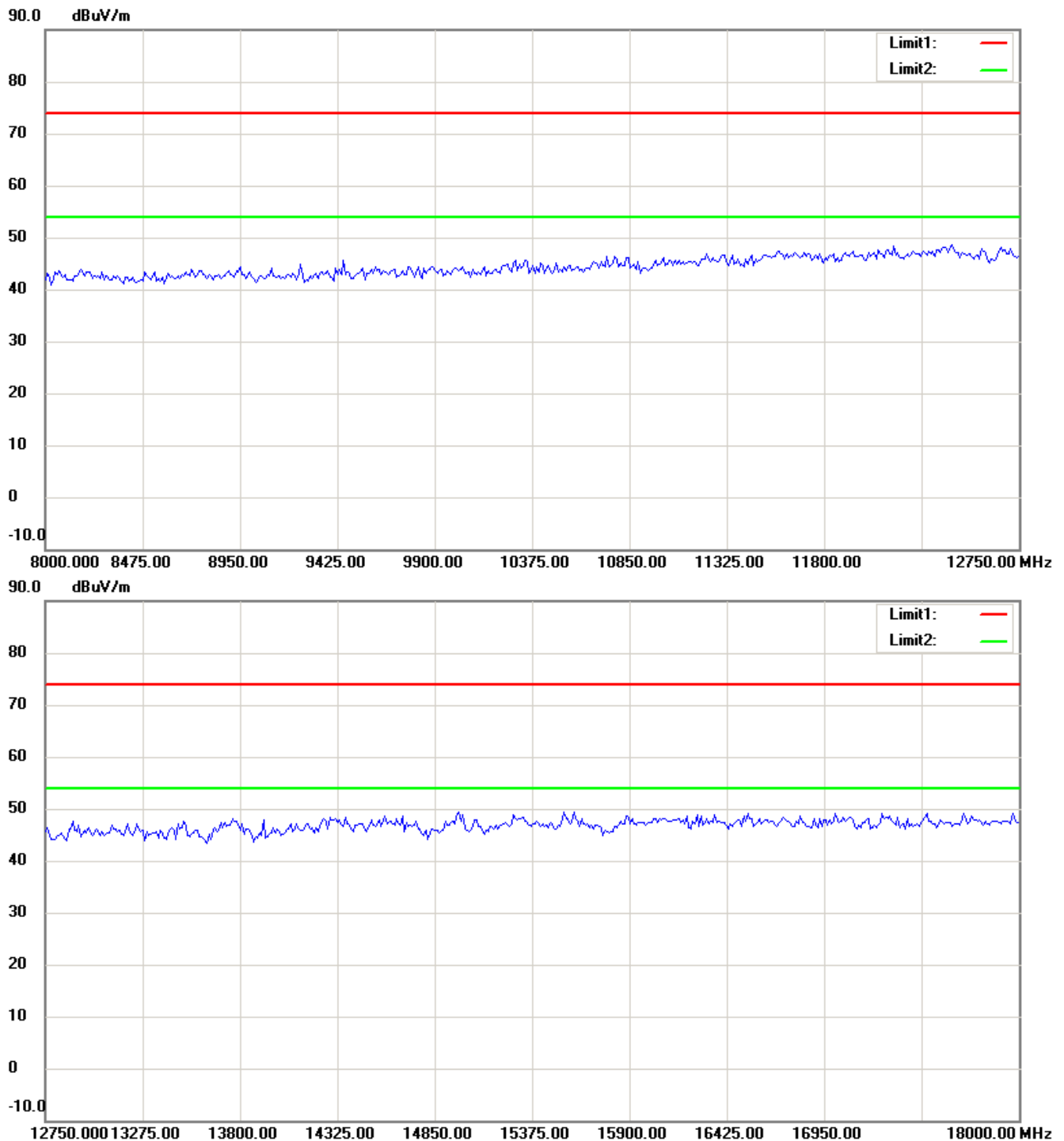
Down Line: Ave Limit Line

Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21212-12946-P-15B

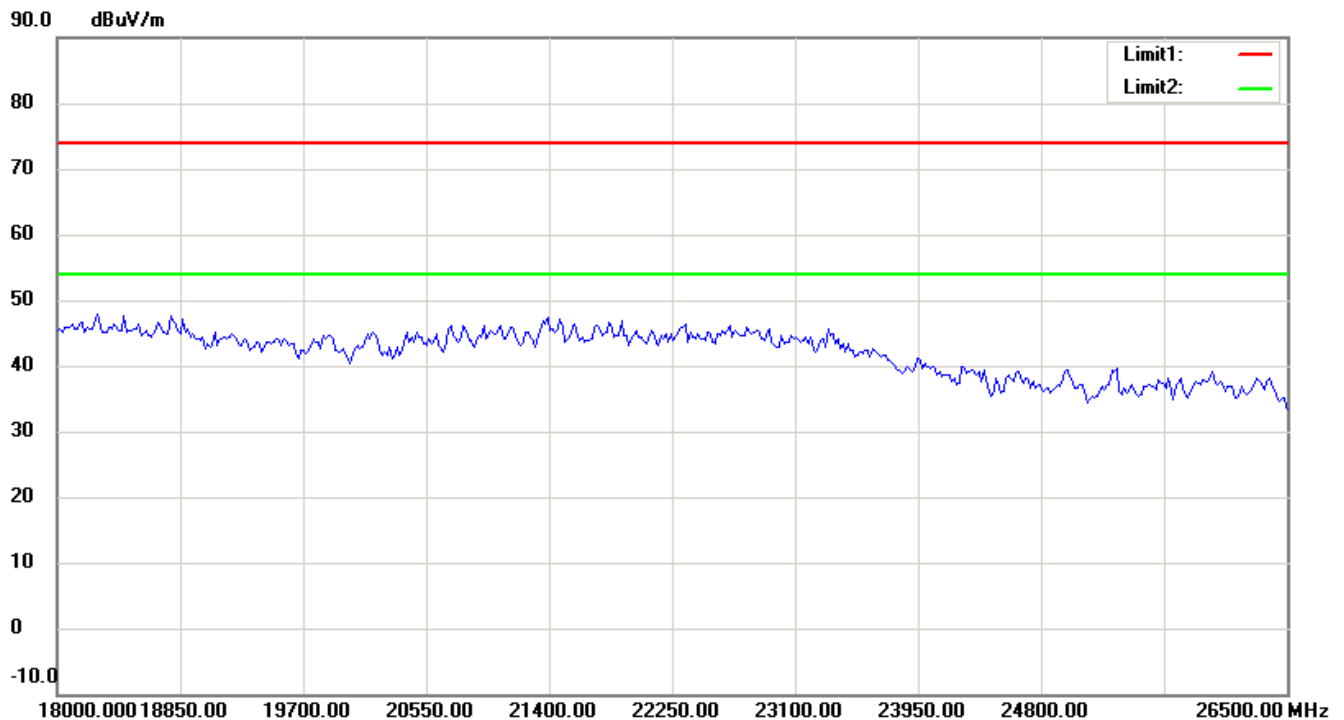


Up Line: Peak Limit Line
Down Line: Ave Limit Line

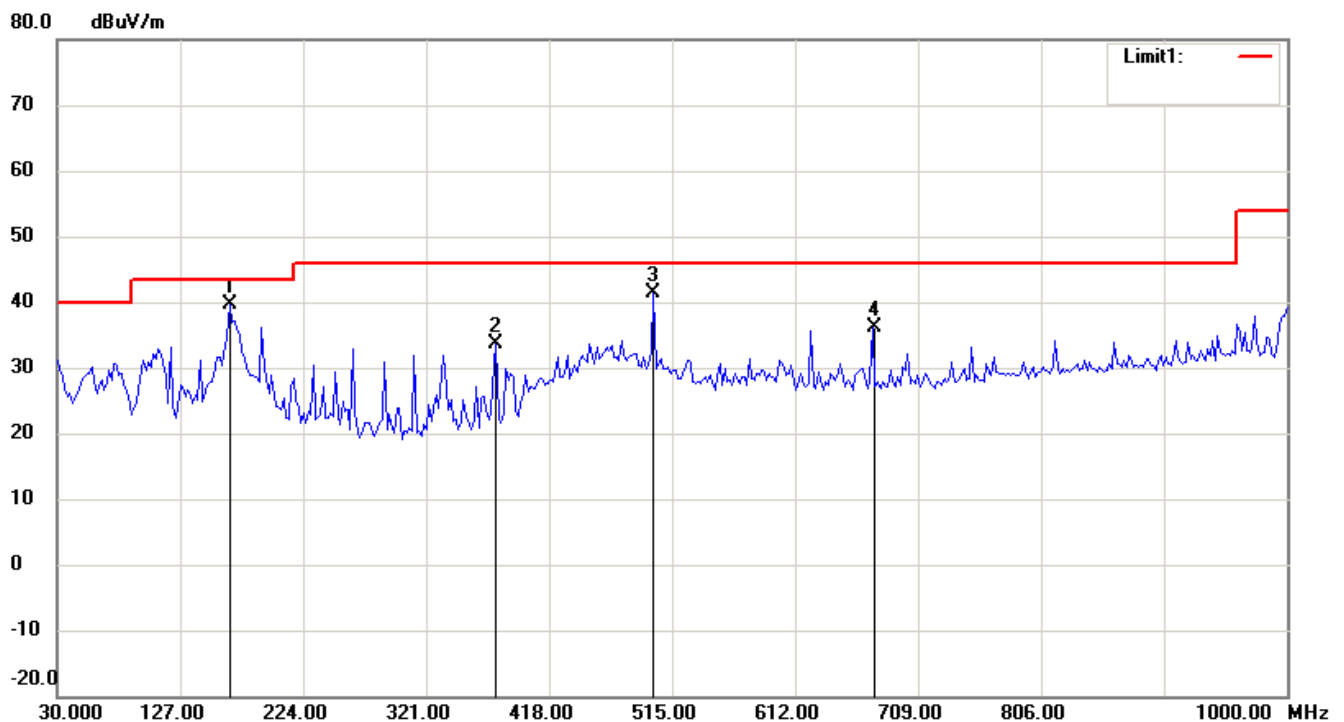
Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.

Registration number: W6M21212-12946-P-15B



Antenna Polarization V



Up Line: Peak Limit Line

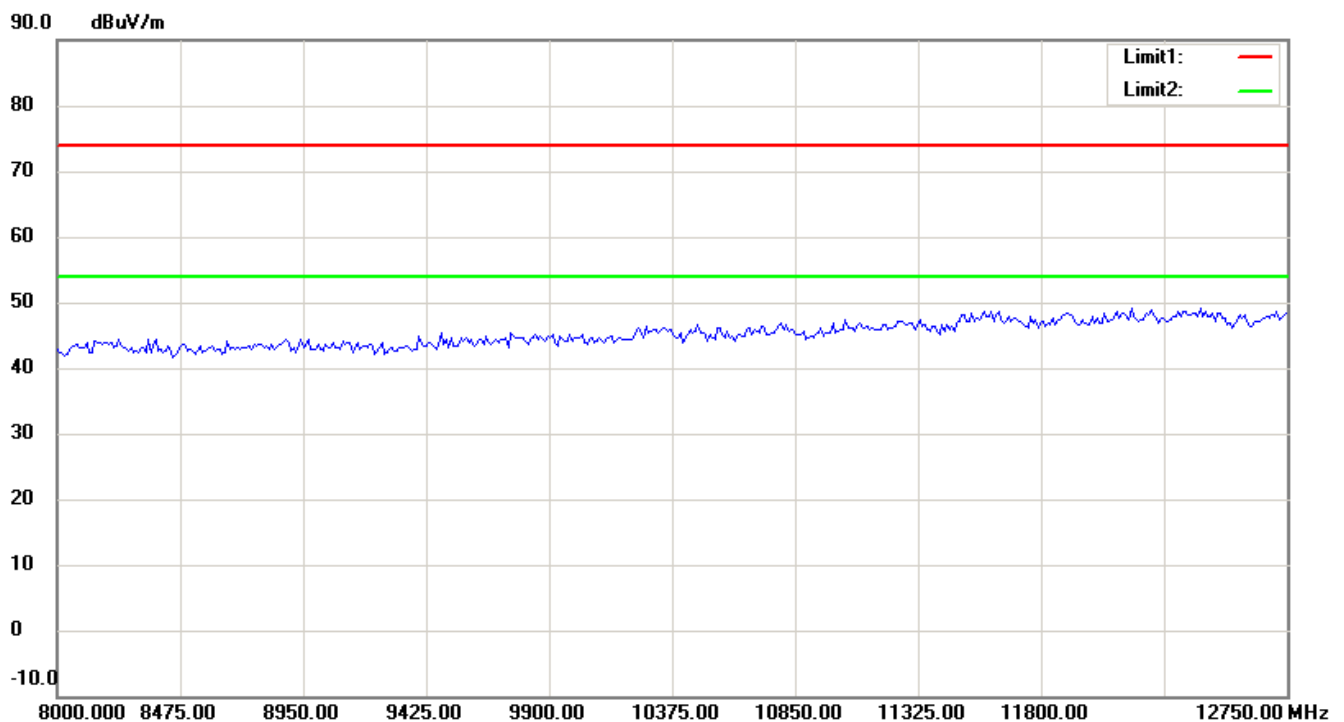
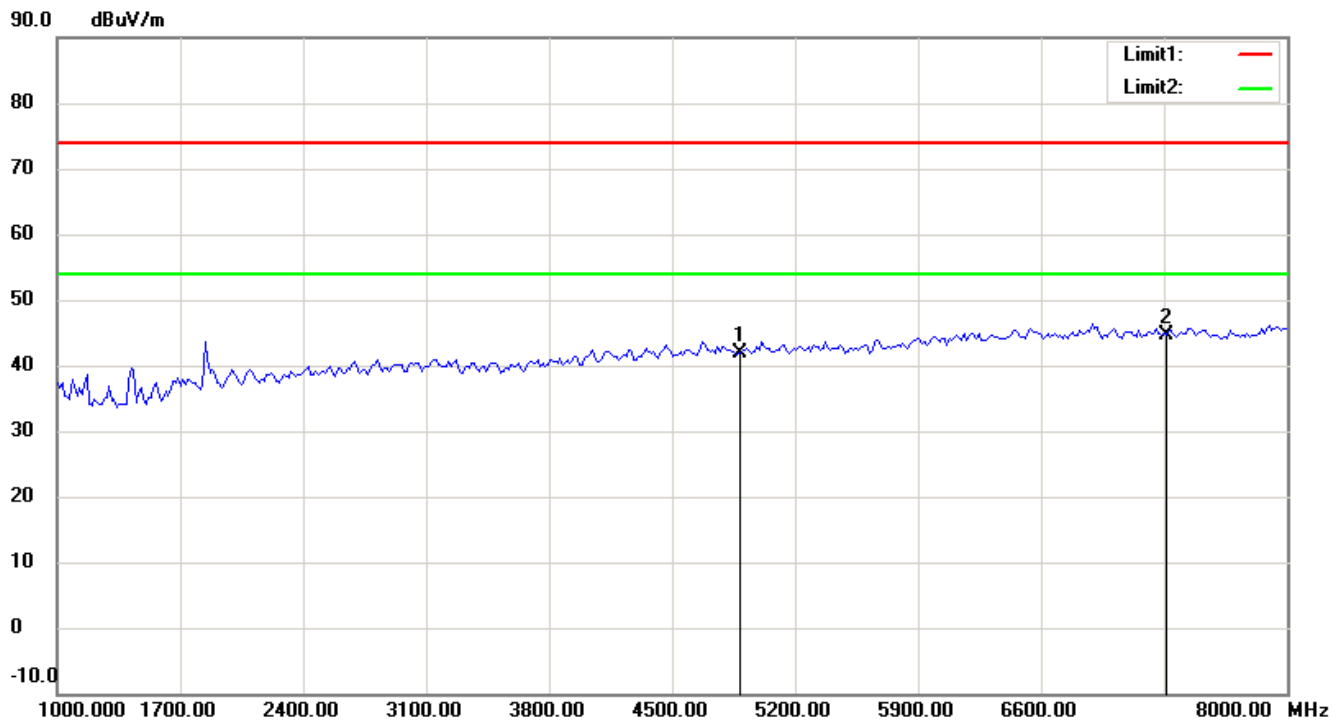
Down Line: Ave Limit Line

Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21212-12946-P-15B



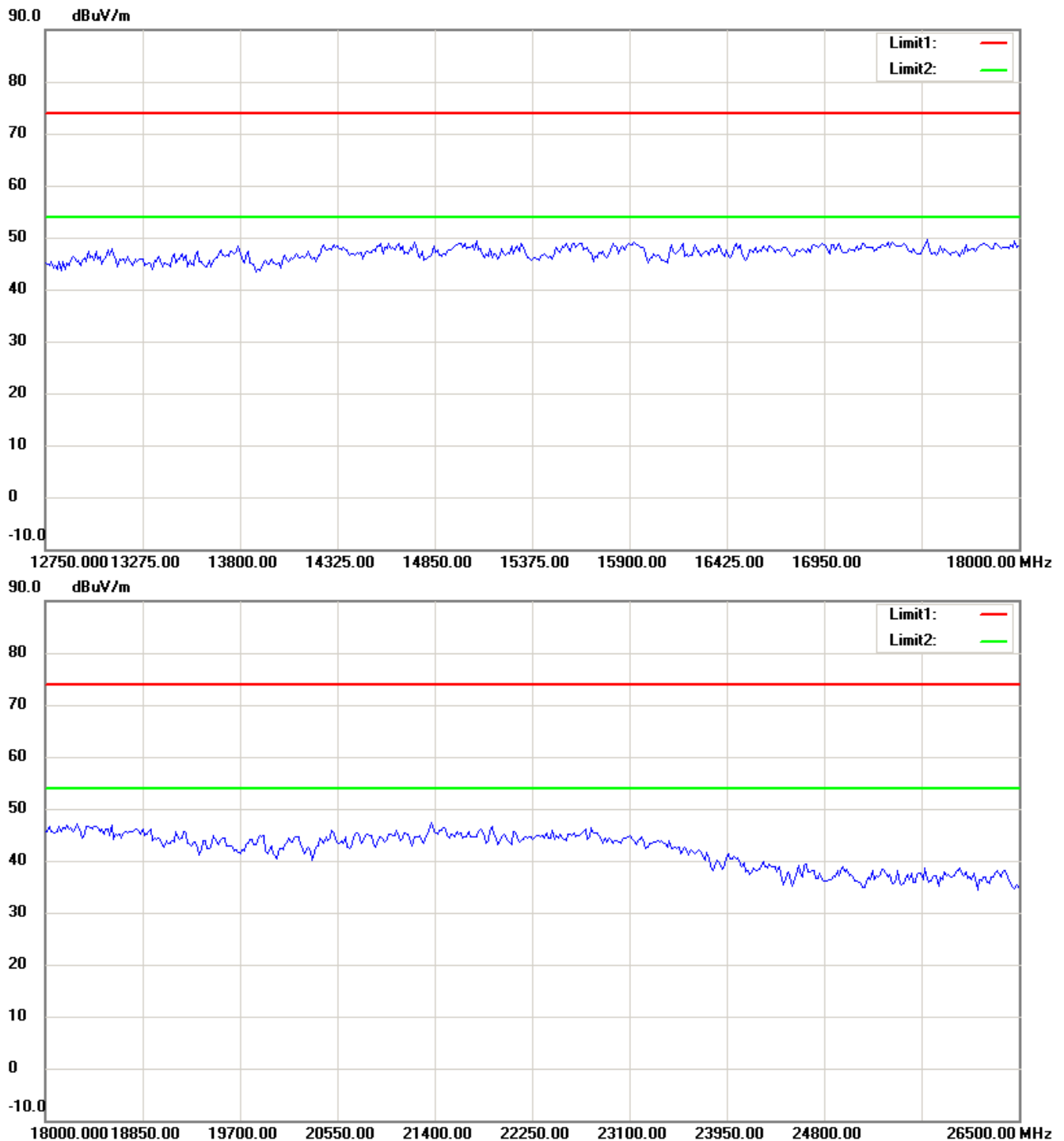
Up Line: Peak Limit Line
Down Line: Ave Limit Line

Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21212-12946-P-15B



Up Line: Peak Limit Line
Down Line: Ave Limit Line

Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.

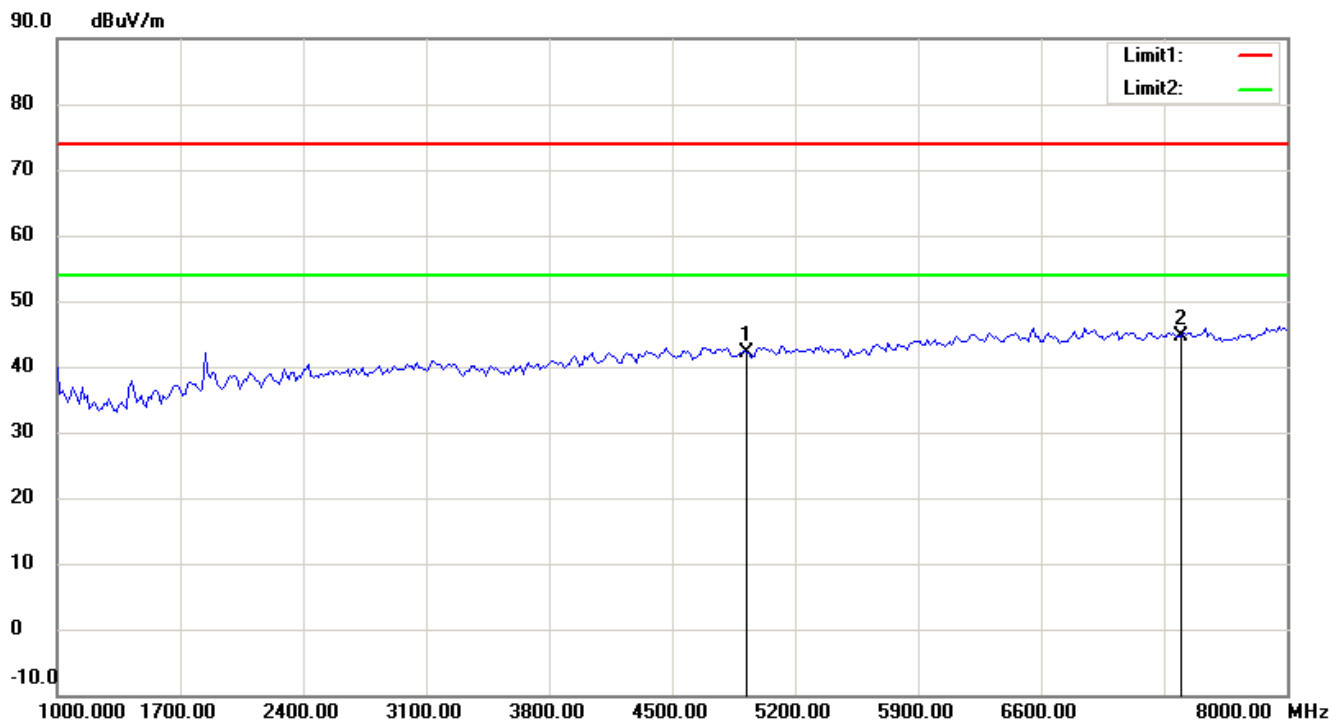
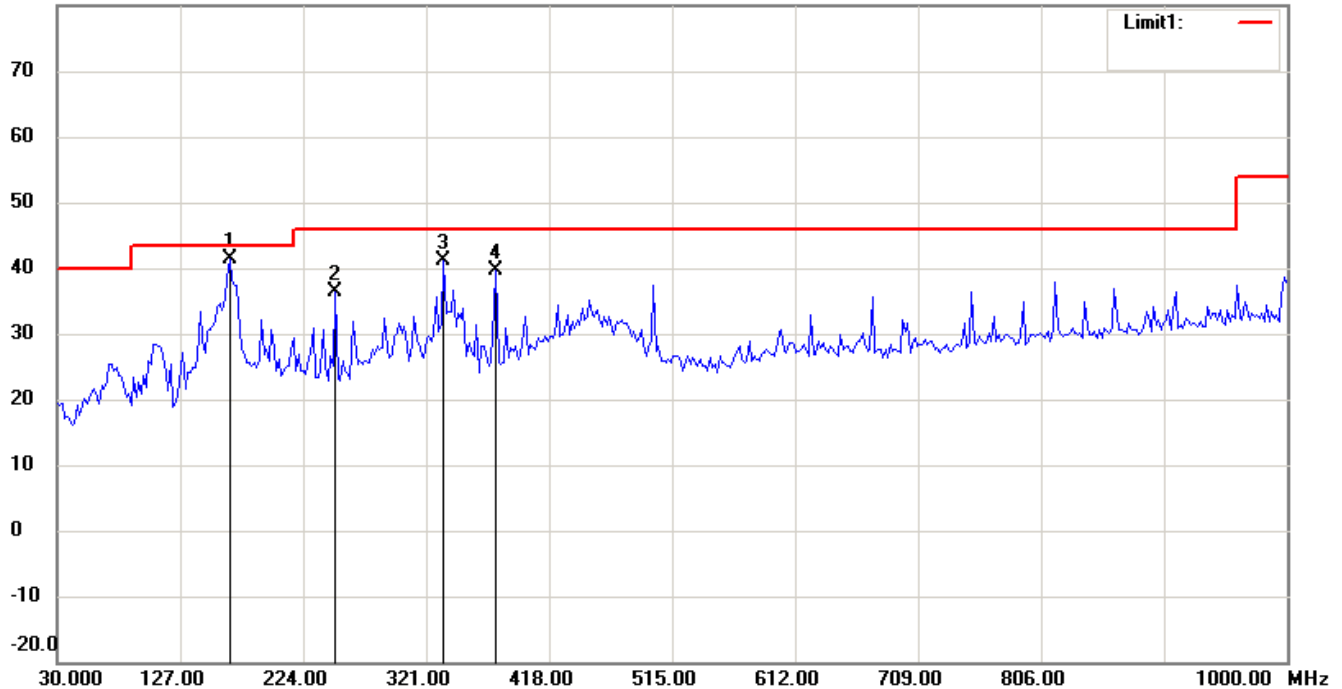


Registration number: W6M21212-12946-P-15B

802.11 n (20MHz) CH11

Antenna Polarization H

80.0 dBuV/m



Up Line: Peak Limit Line

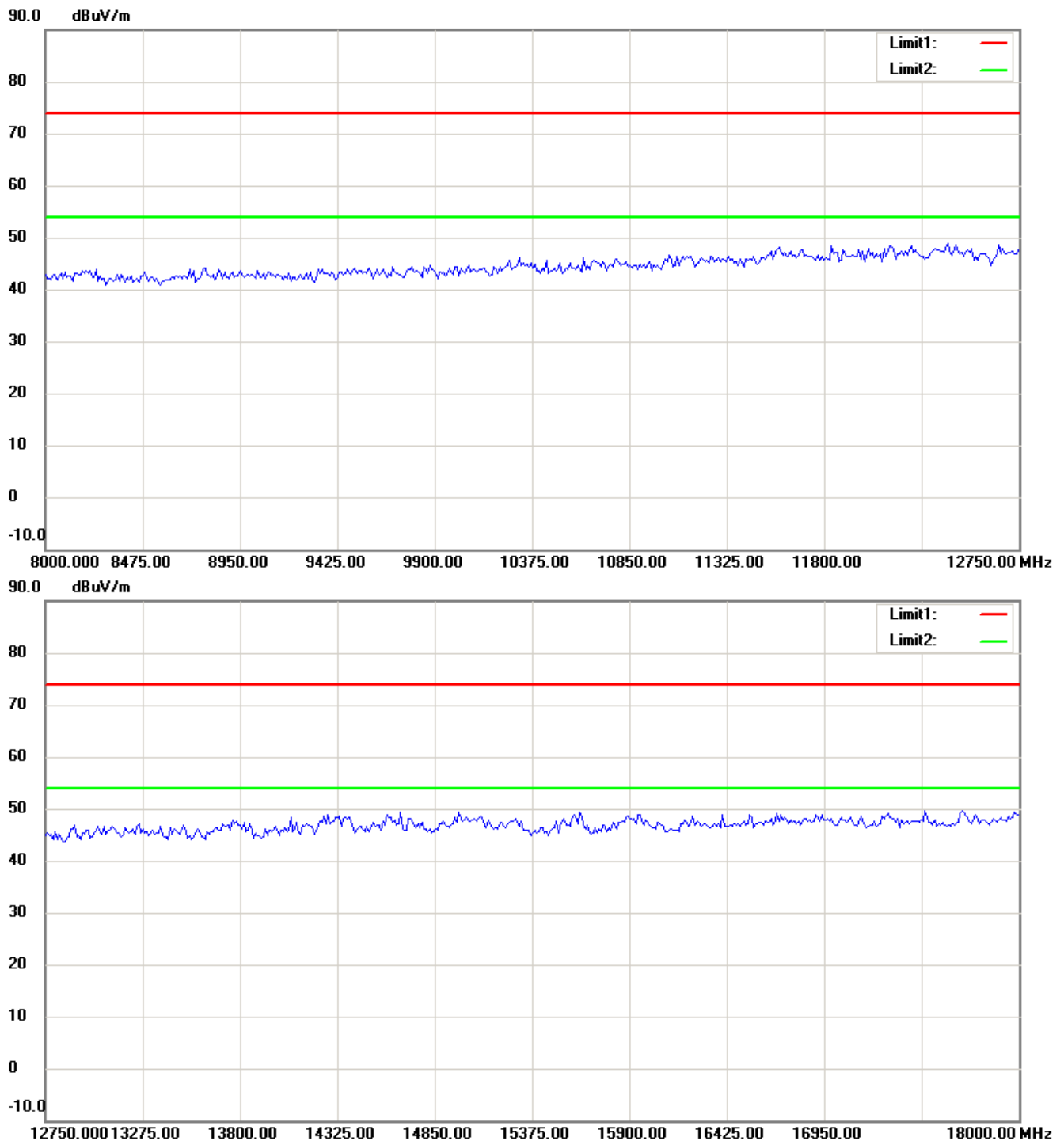
Down Line: Ave Limit Line

Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21212-12946-P-15B

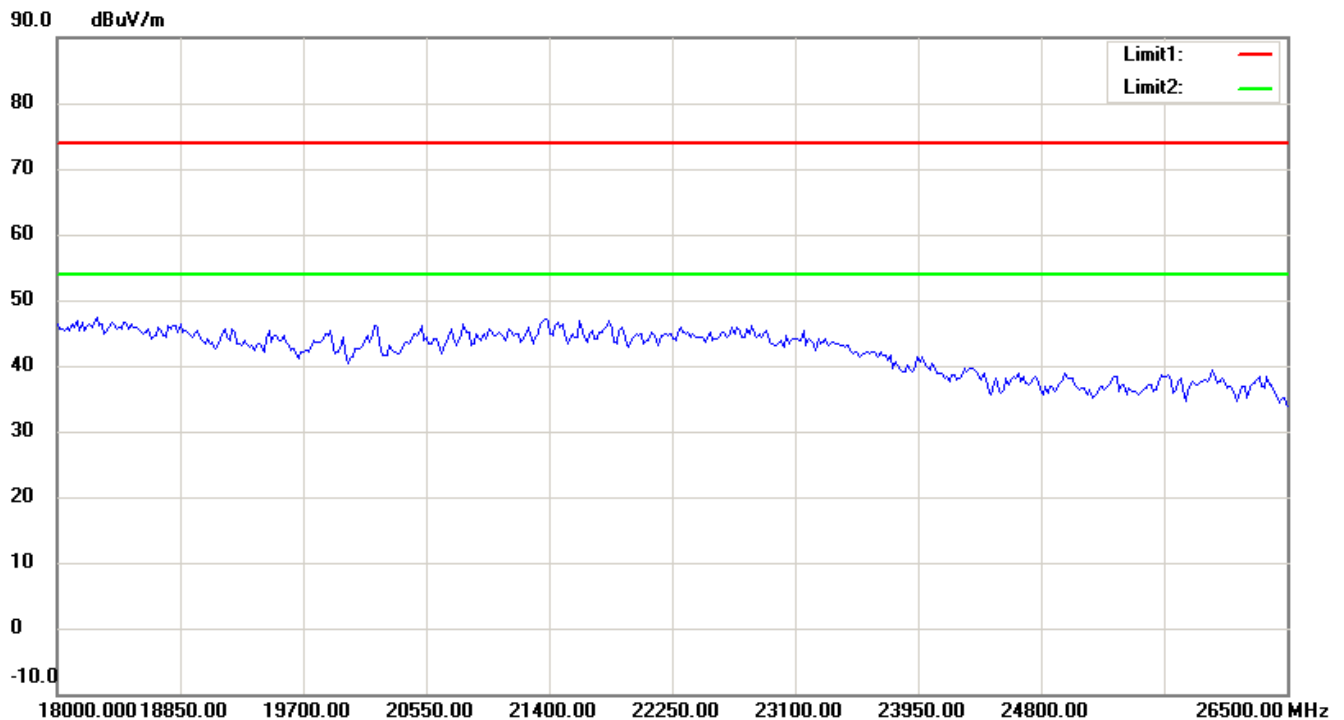


Up Line: Peak Limit Line
Down Line: Ave Limit Line

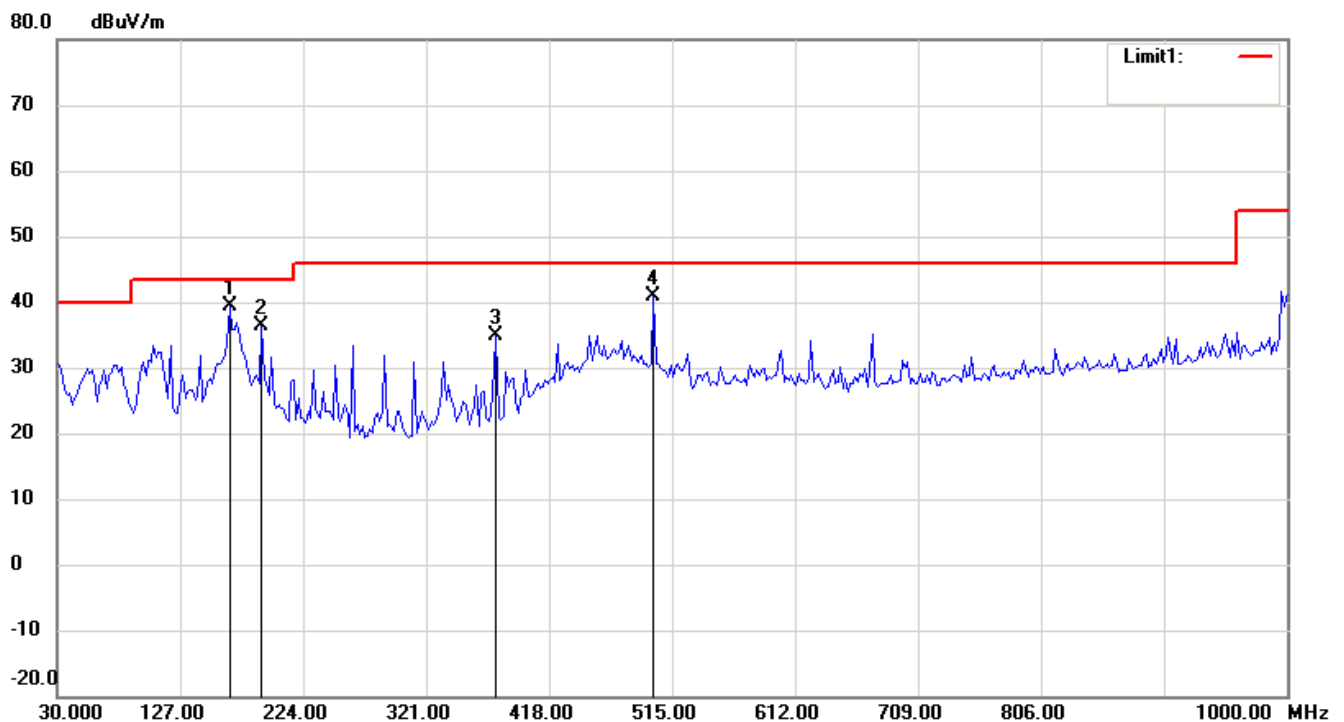
Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.

Registration number: W6M21212-12946-P-15B



Antenna Polarization V



Up Line: Peak Limit Line

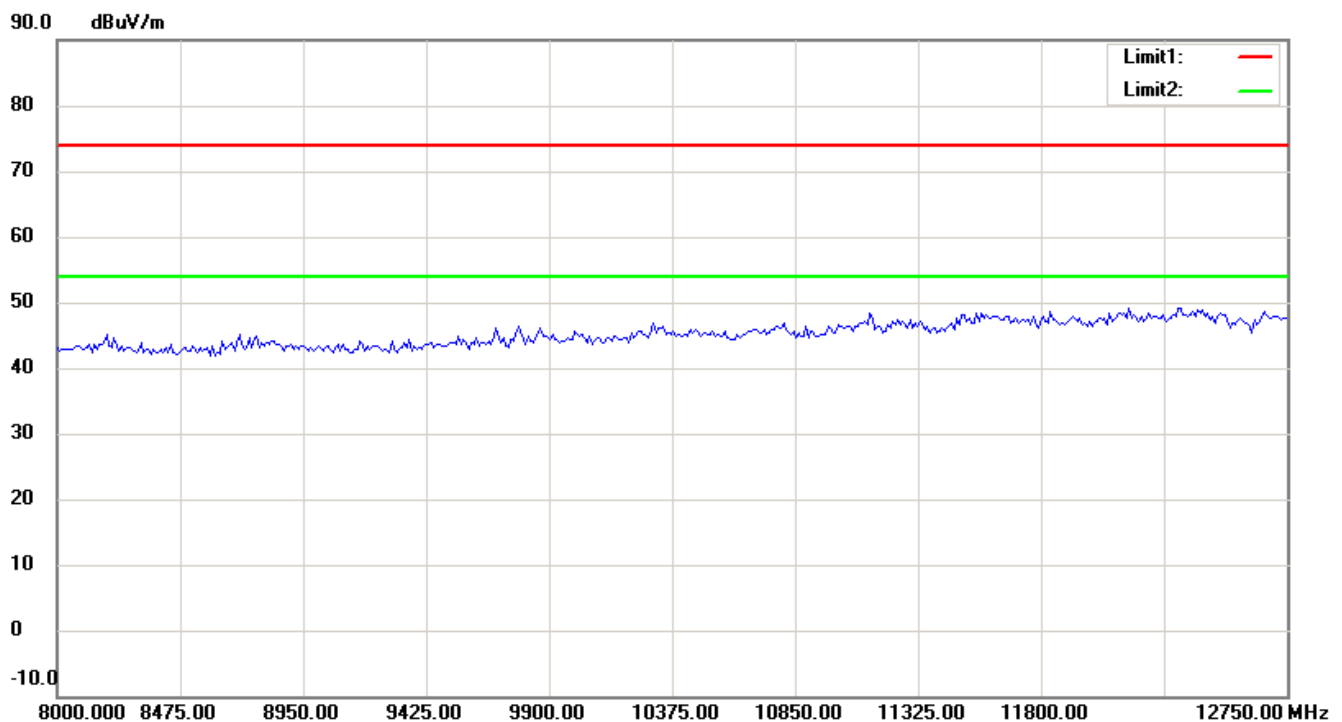
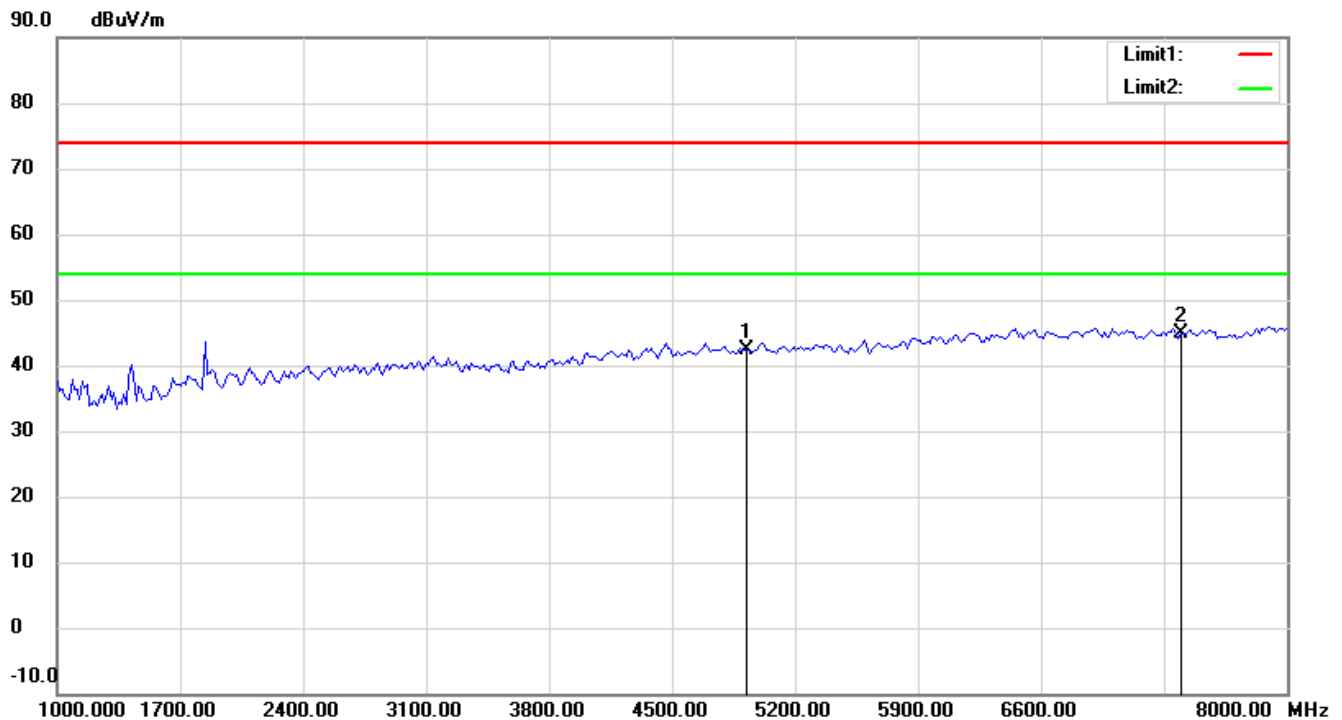
Down Line: Ave Limit Line

Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.



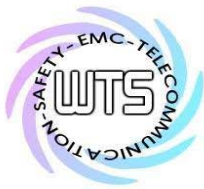
Registration number: W6M21212-12946-P-15B



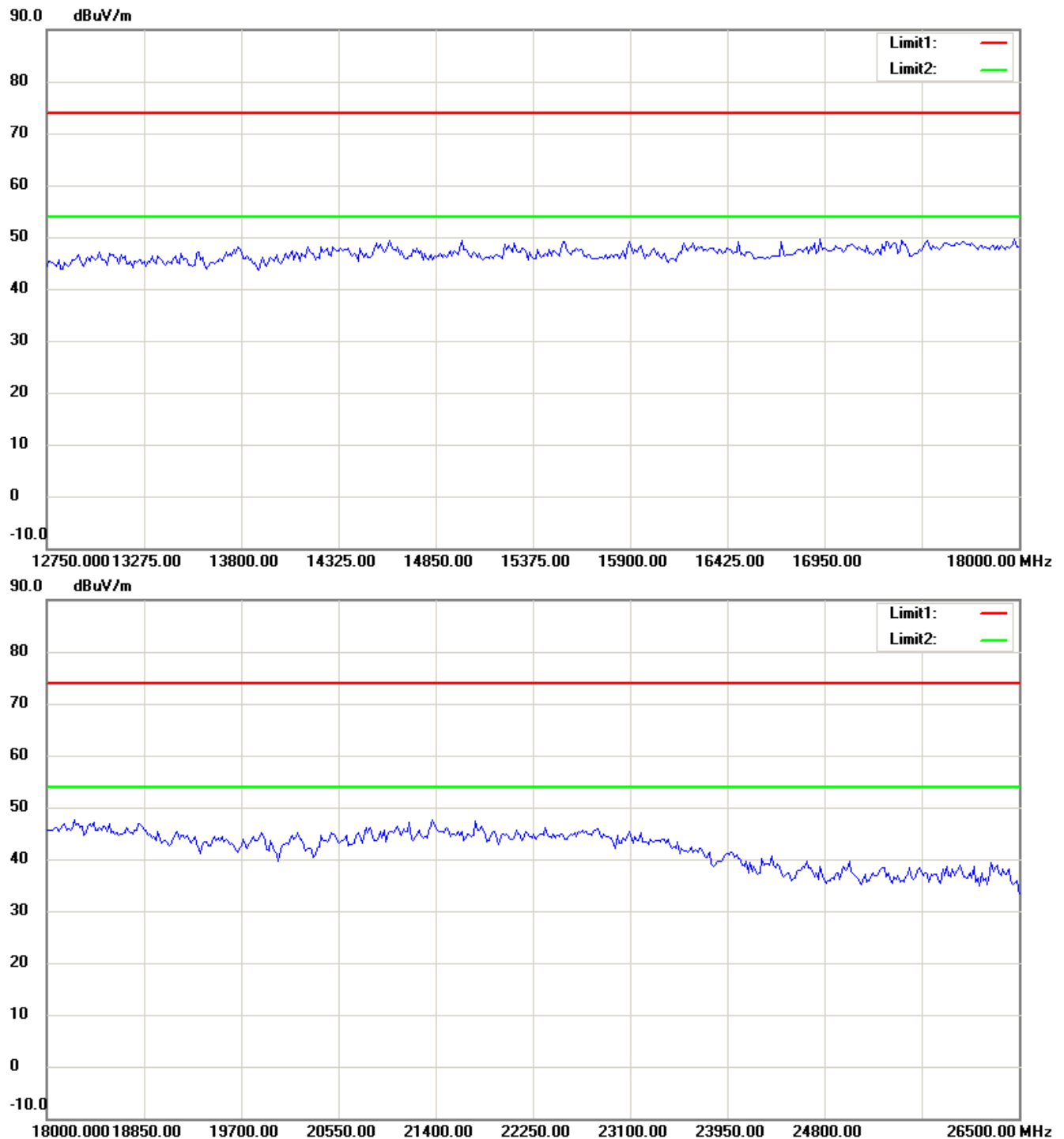
Up Line: Peak Limit Line
Down Line: Ave Limit Line

Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21212-12946-P-15B



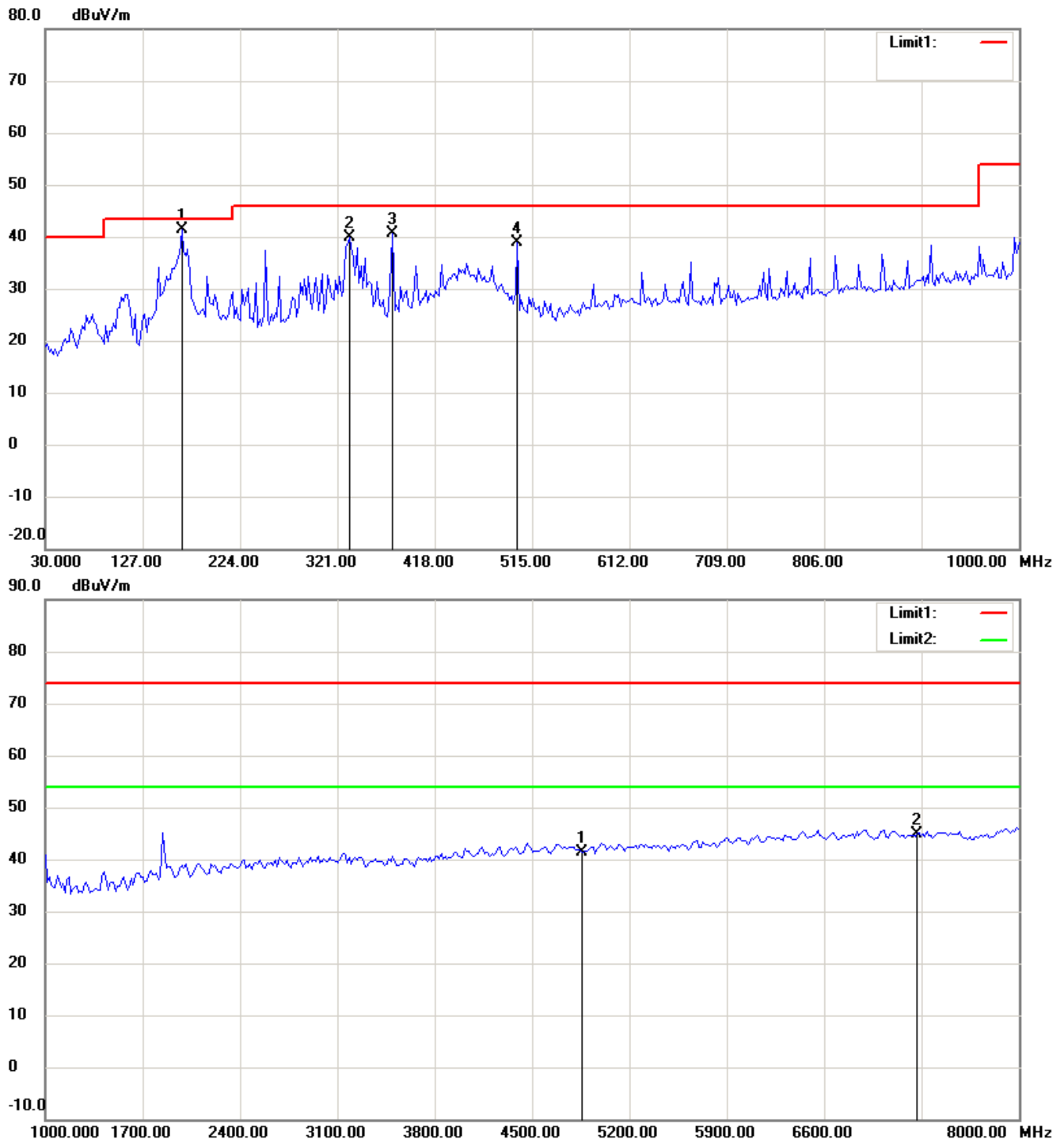
Up Line: Peak Limit Line
Down Line: Ave Limit Line
Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.

Registration number: W6M21212-12946-P-15B

802.11n (40MHz) CH1

Antenna Polarization H

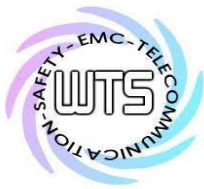


Up Line: Peak Limit Line

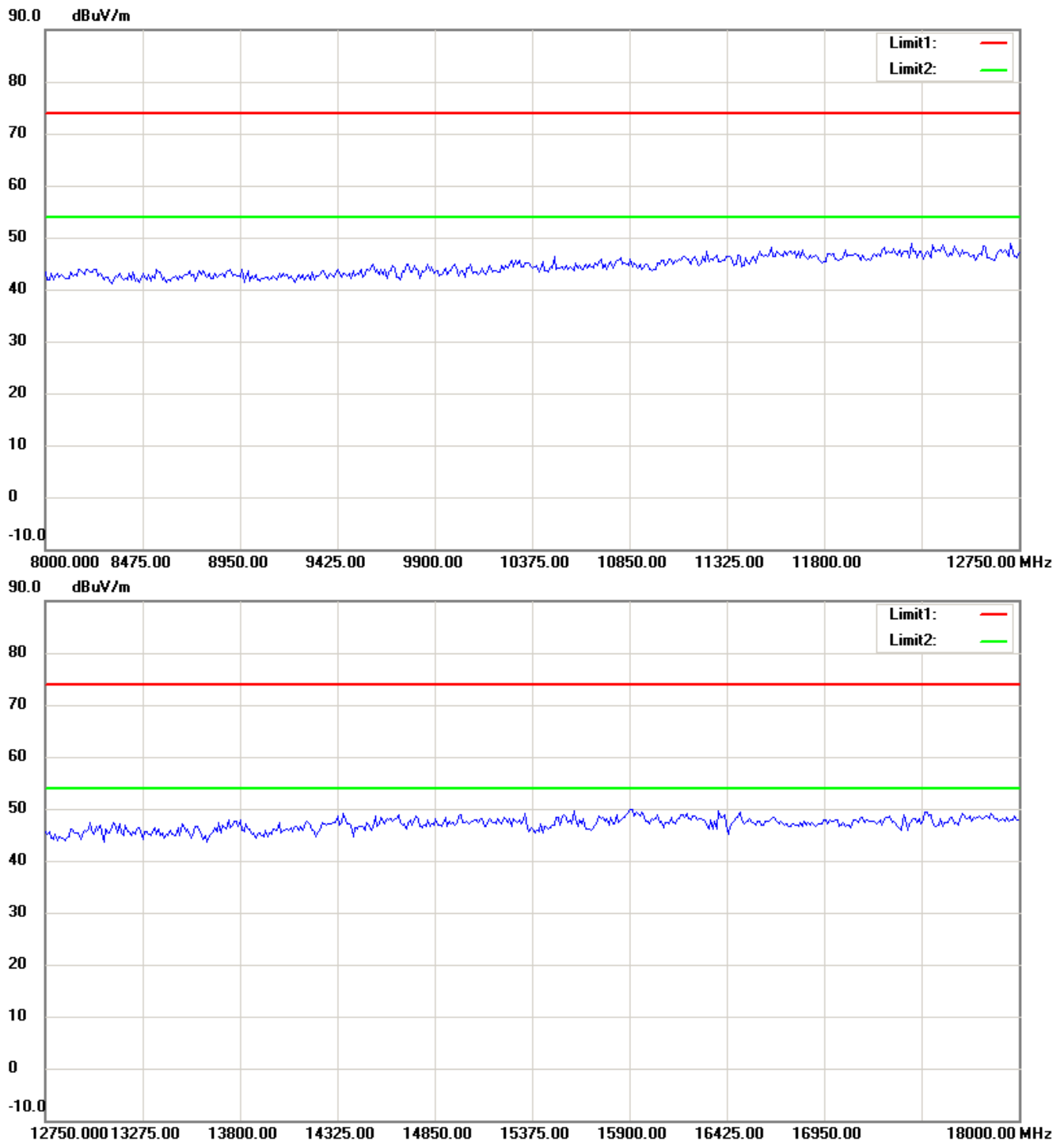
Down Line: Ave Limit Line

Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21212-12946-P-15B

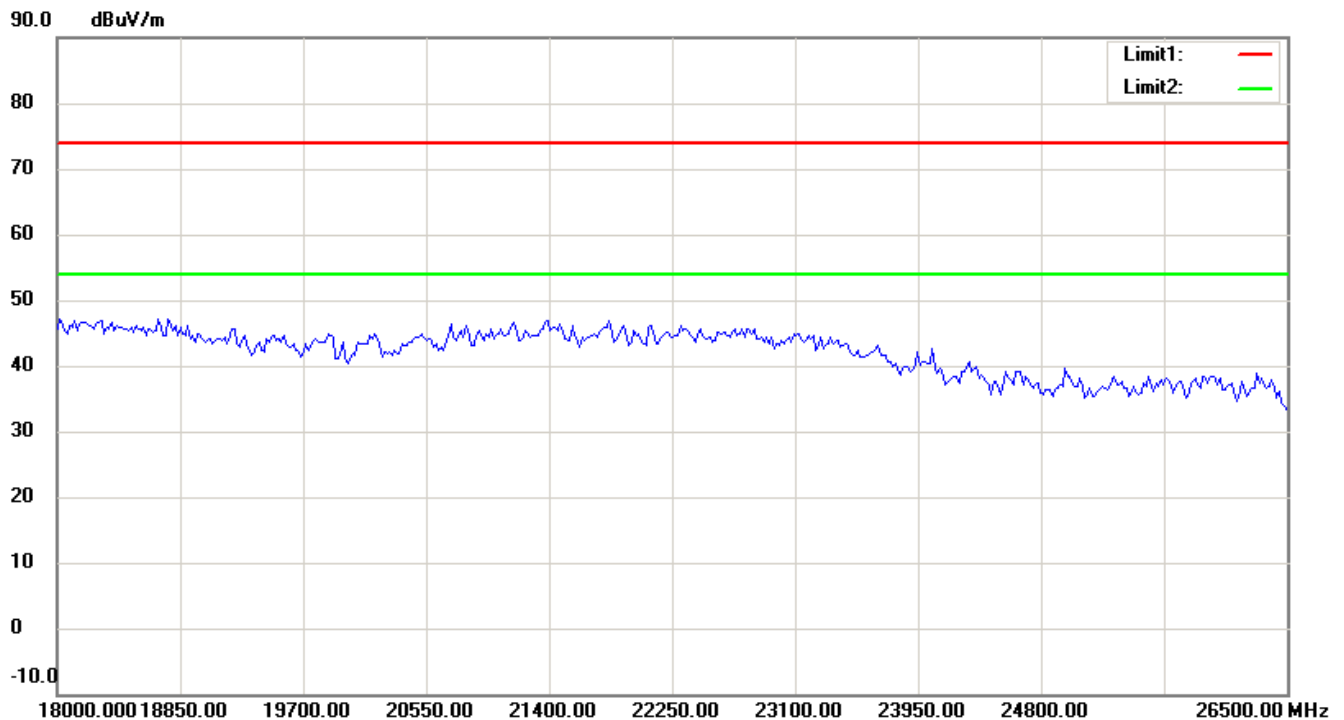


Up Line: Peak Limit Line
Down Line: Ave Limit Line

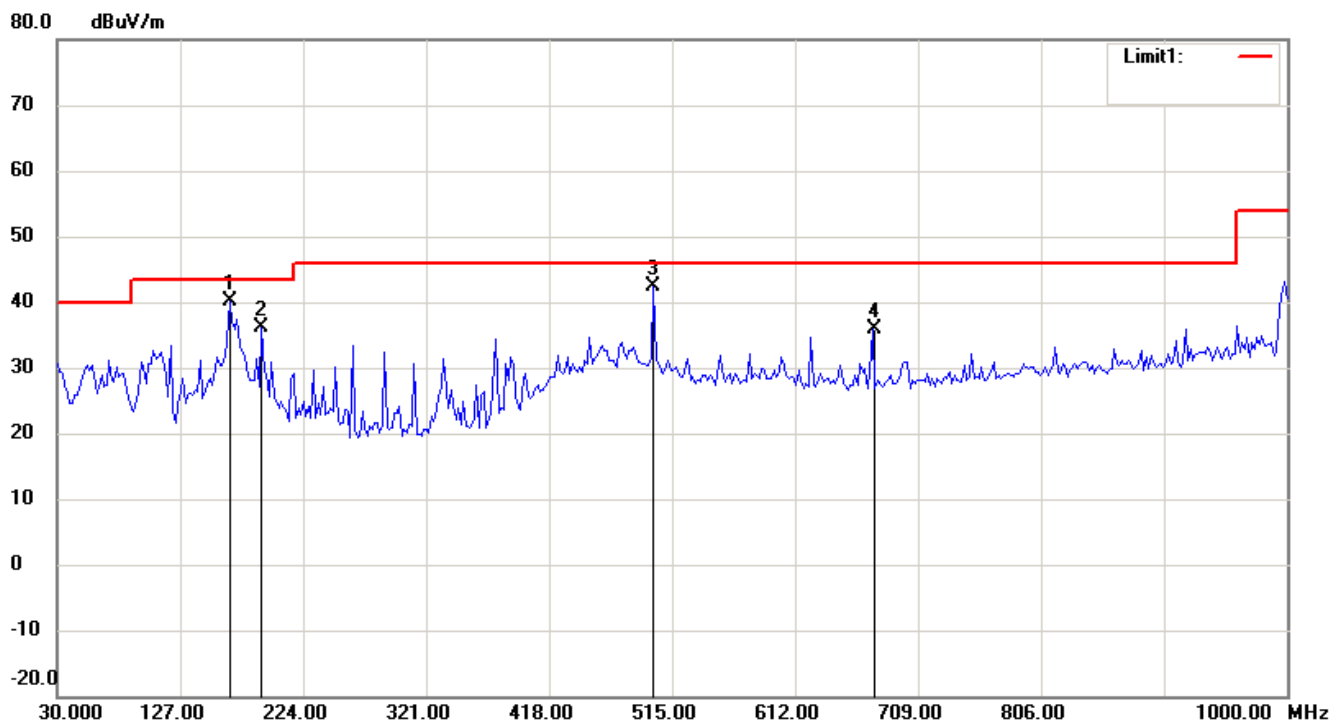
Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.

Registration number: W6M21212-12946-P-15B



Antenna Polarization V



Up Line: Peak Limit Line

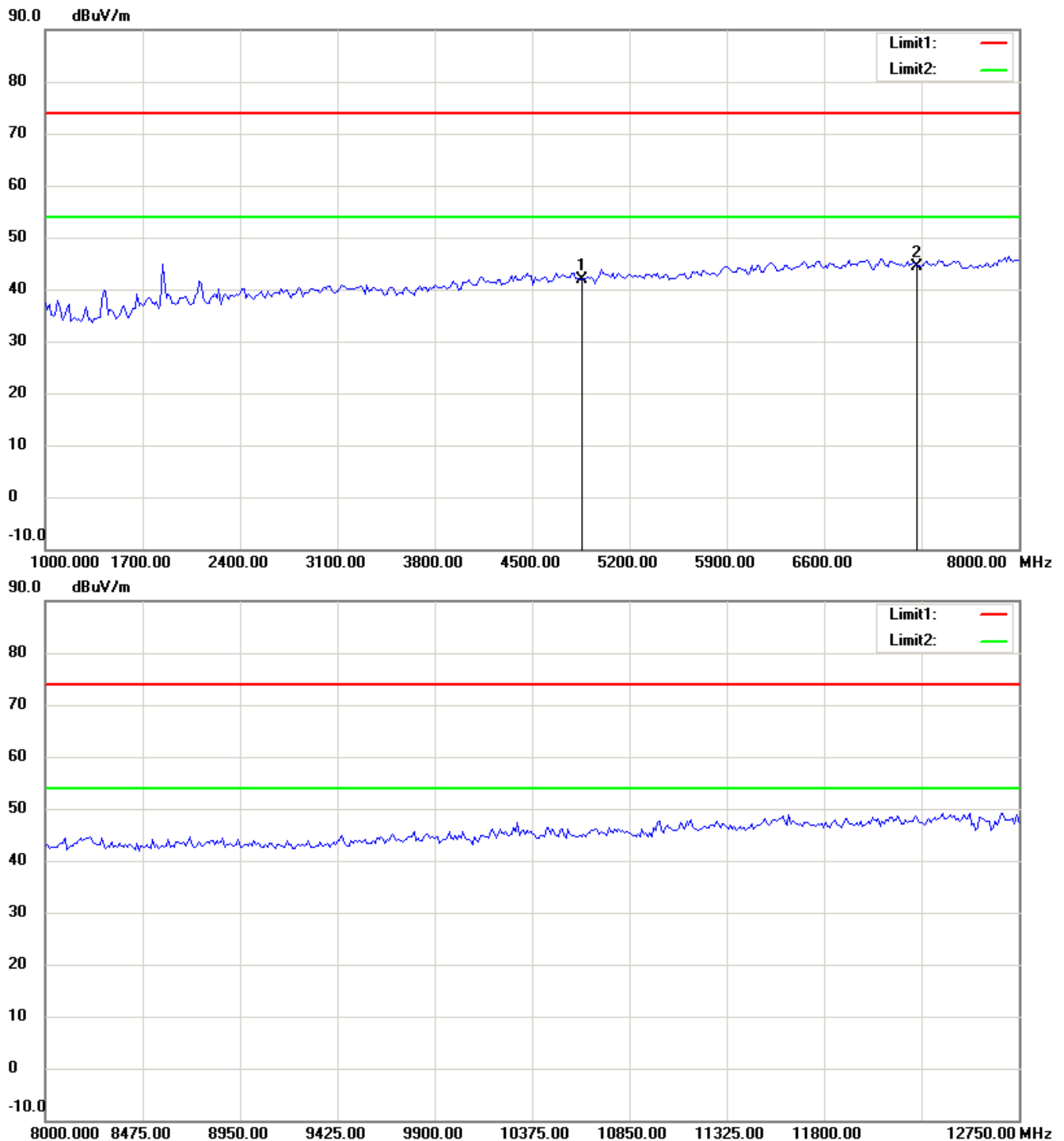
Down Line: Ave Limit Line

Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21212-12946-P-15B



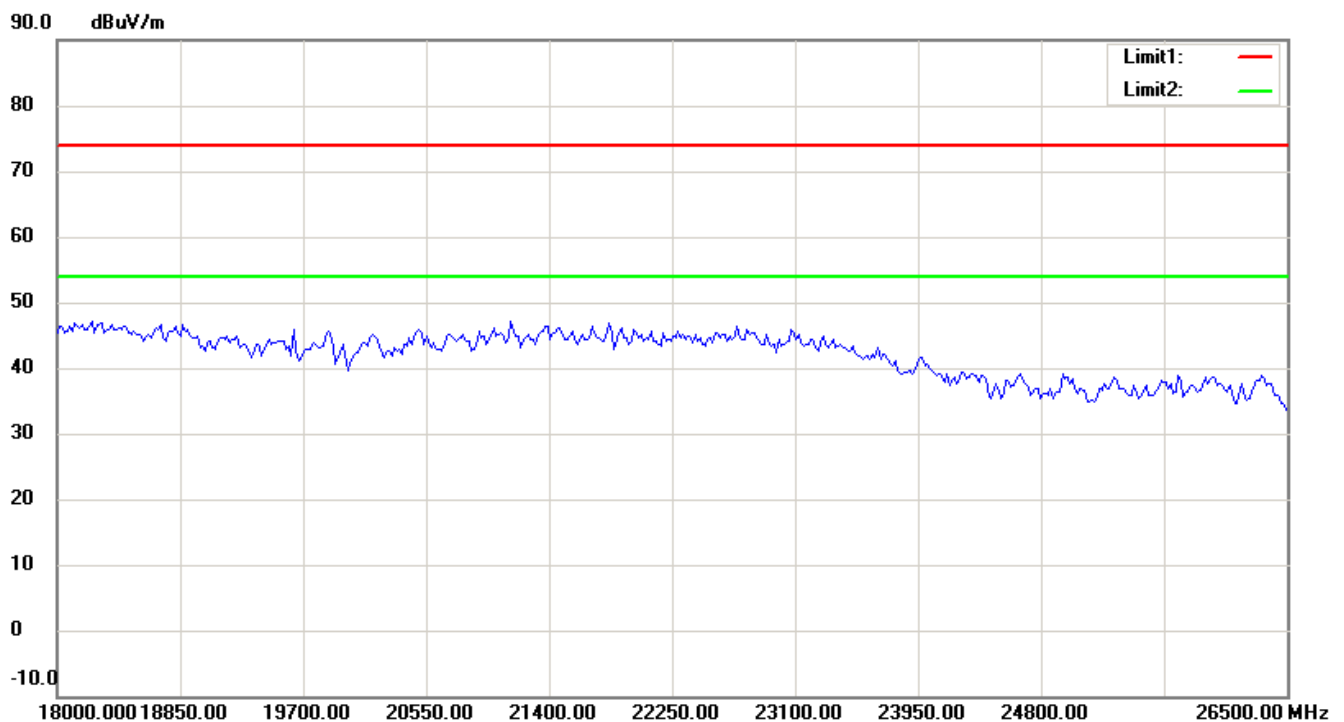
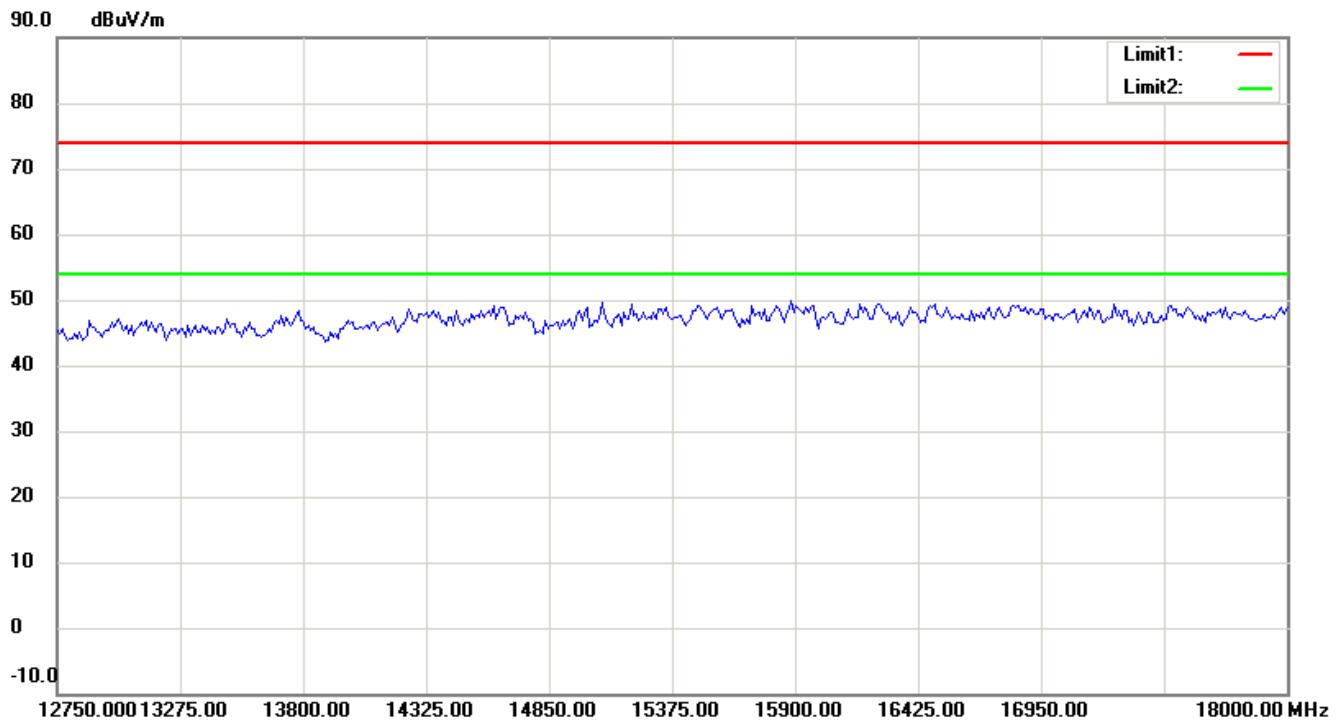
Up Line: Peak Limit Line
Down Line: Ave Limit Line

Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21212-12946-P-15B



Up Line: Peak Limit Line

Down Line: Ave Limit Line

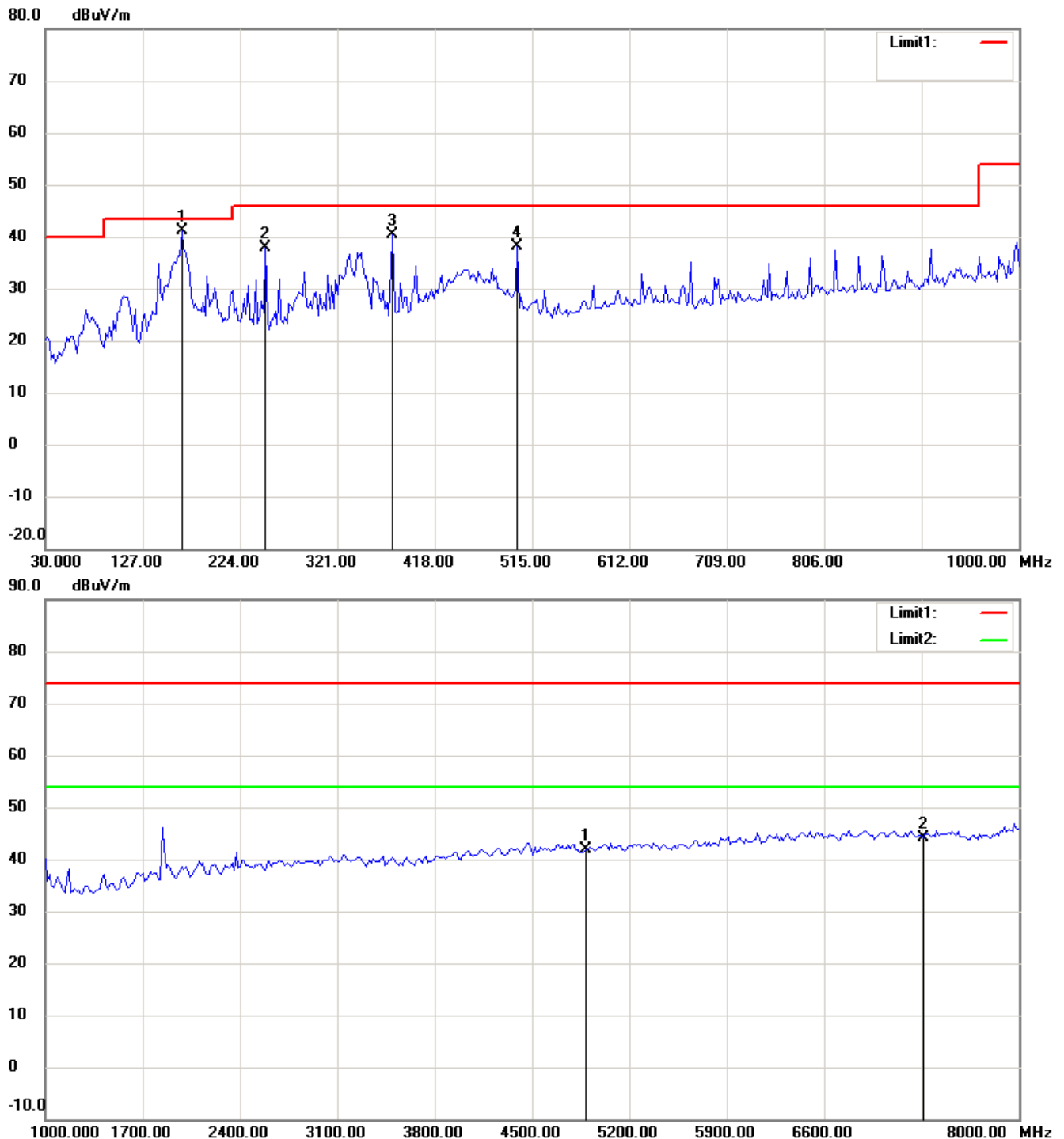
Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.

Registration number: W6M21212-12946-P-15B

802.11 n (40MHz) CH4

Antenna Polarization H

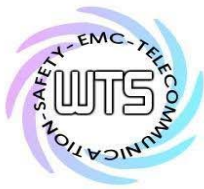


Up Line: Peak Limit Line

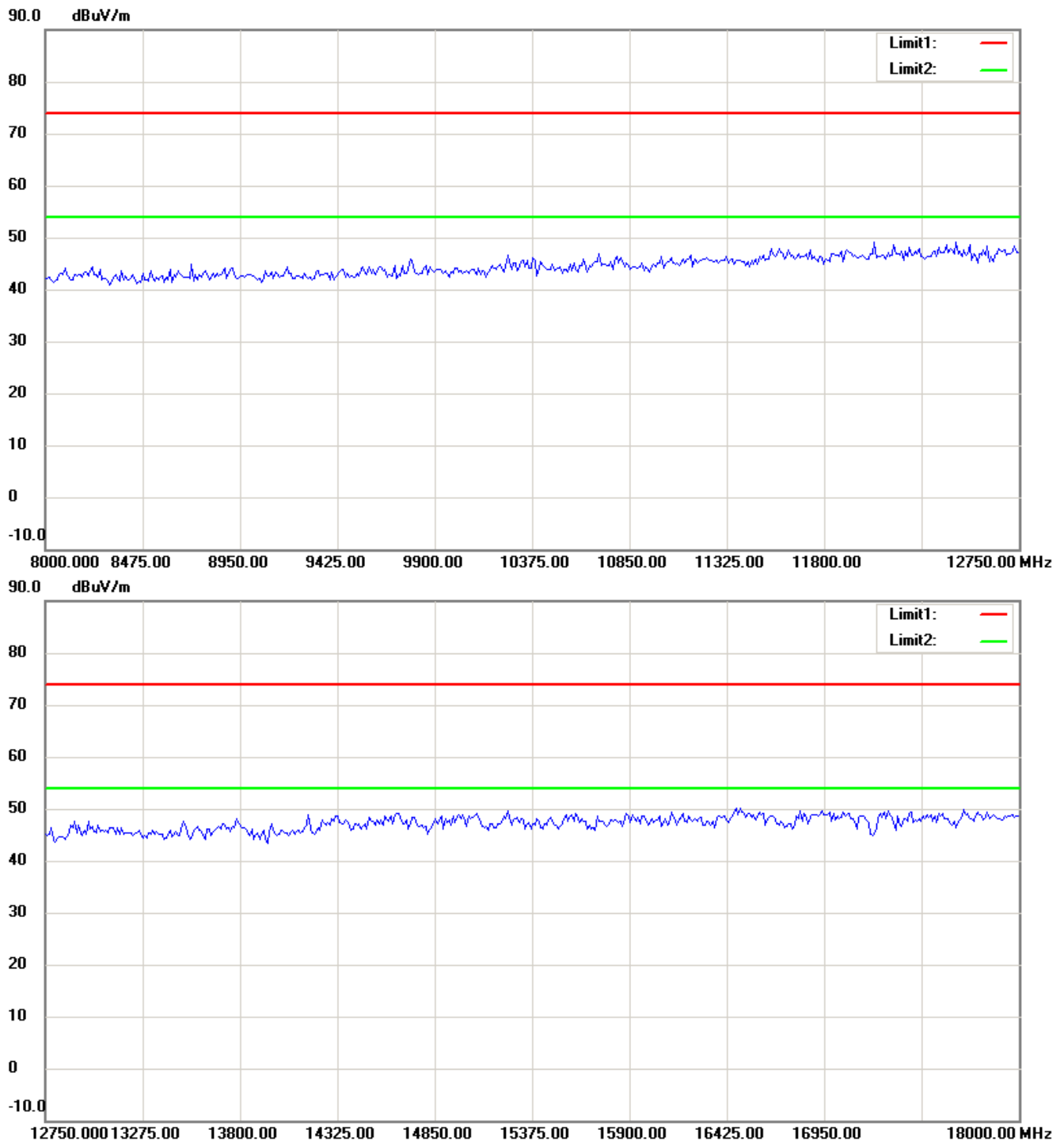
Down Line: Ave Limit Line

Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.



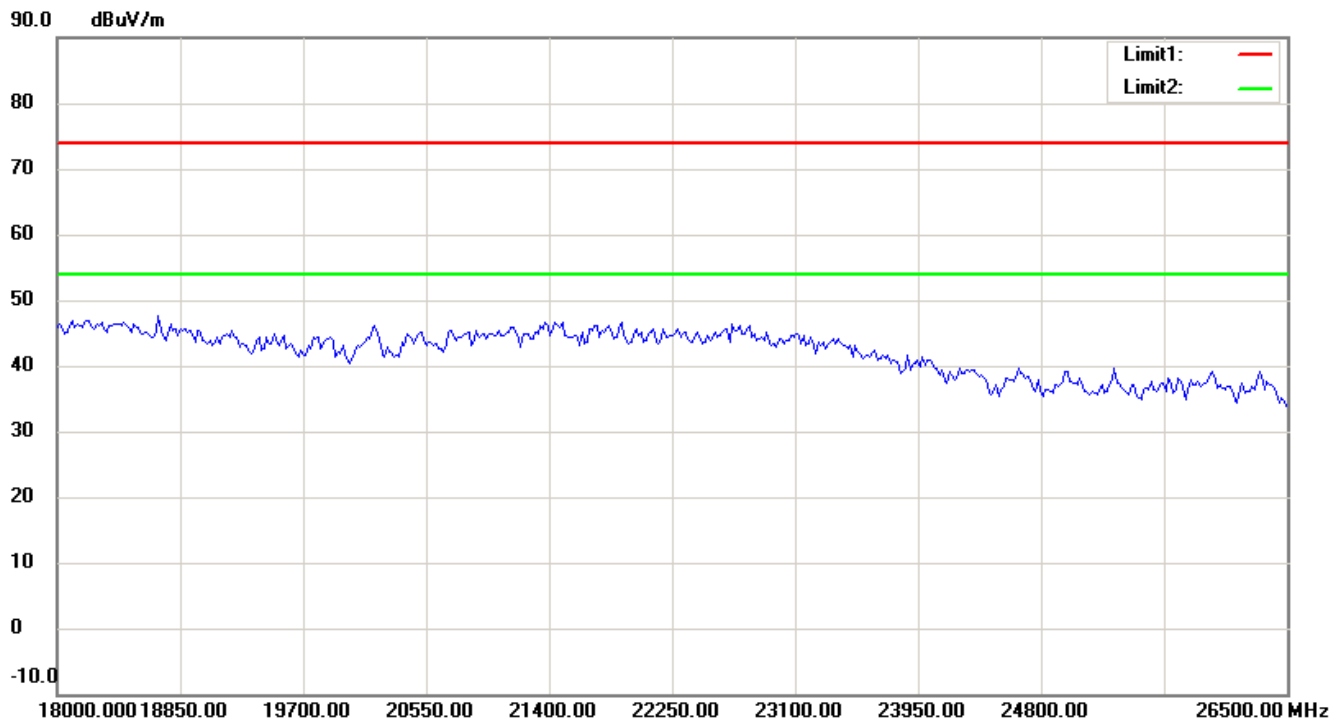
Registration number: W6M21212-12946-P-15B



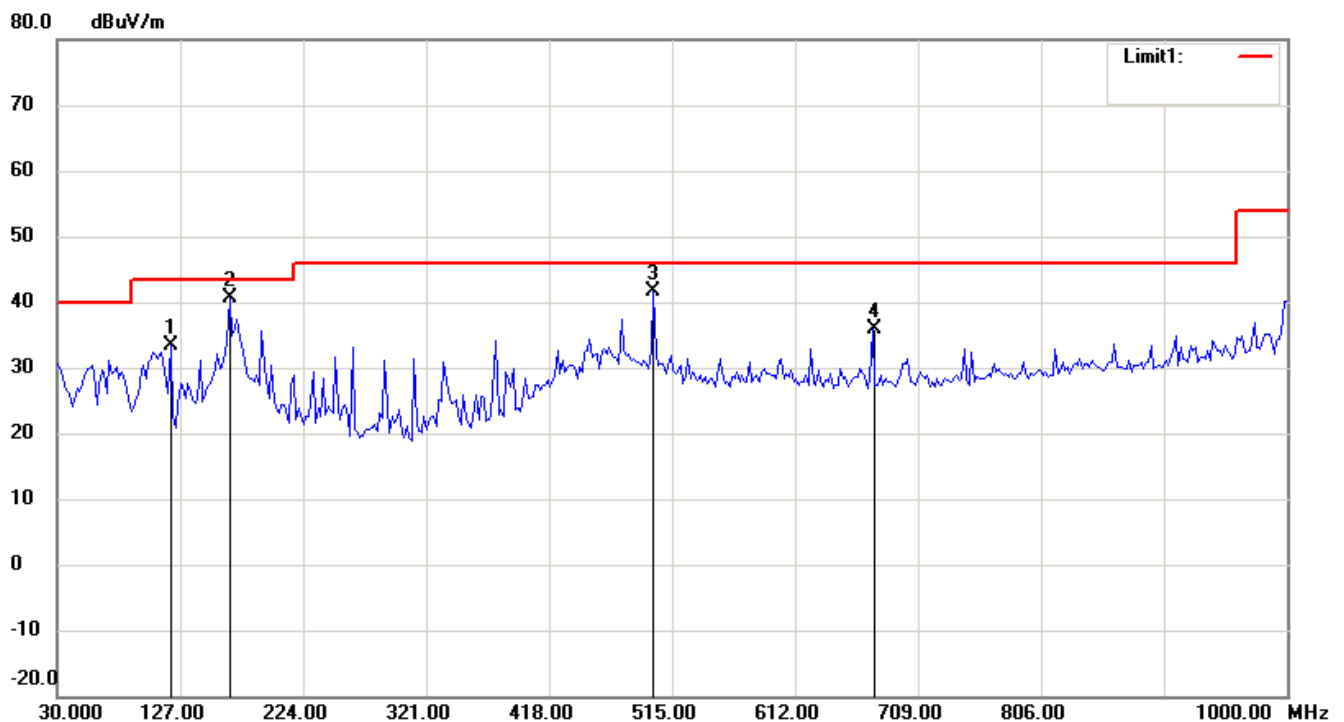
Up Line: Peak Limit Line
Down Line: Ave Limit Line
Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.

Registration number: W6M21212-12946-P-15B



Antenna Polarization V



Up Line: Peak Limit Line

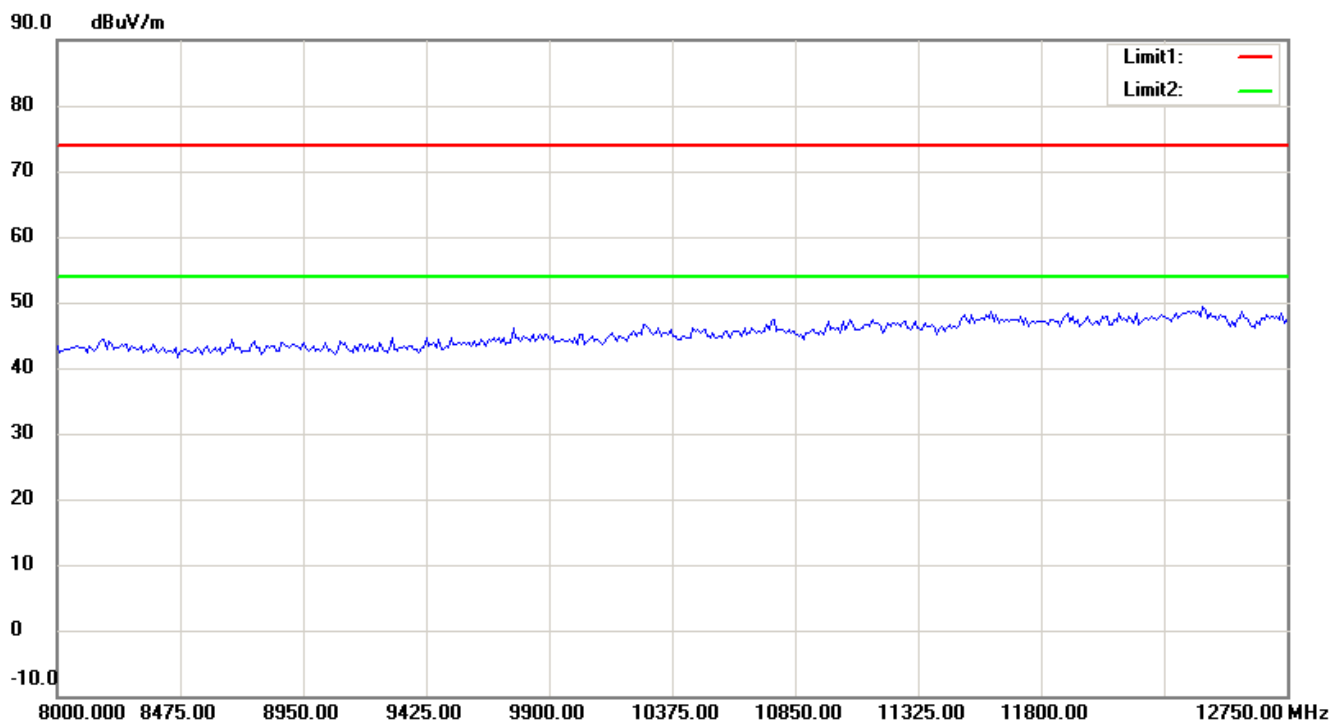
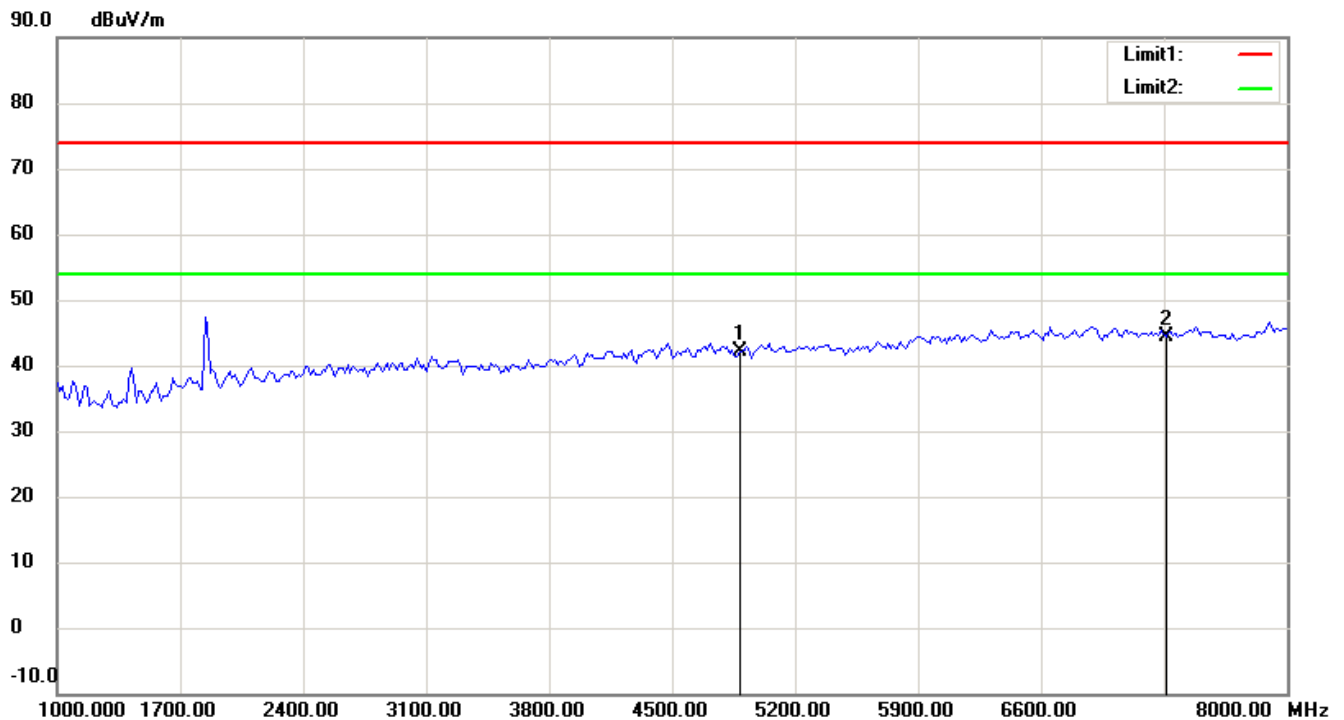
Down Line: Ave Limit Line

Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21212-12946-P-15B



Up Line: Peak Limit Line
Down Line: Ave Limit Line

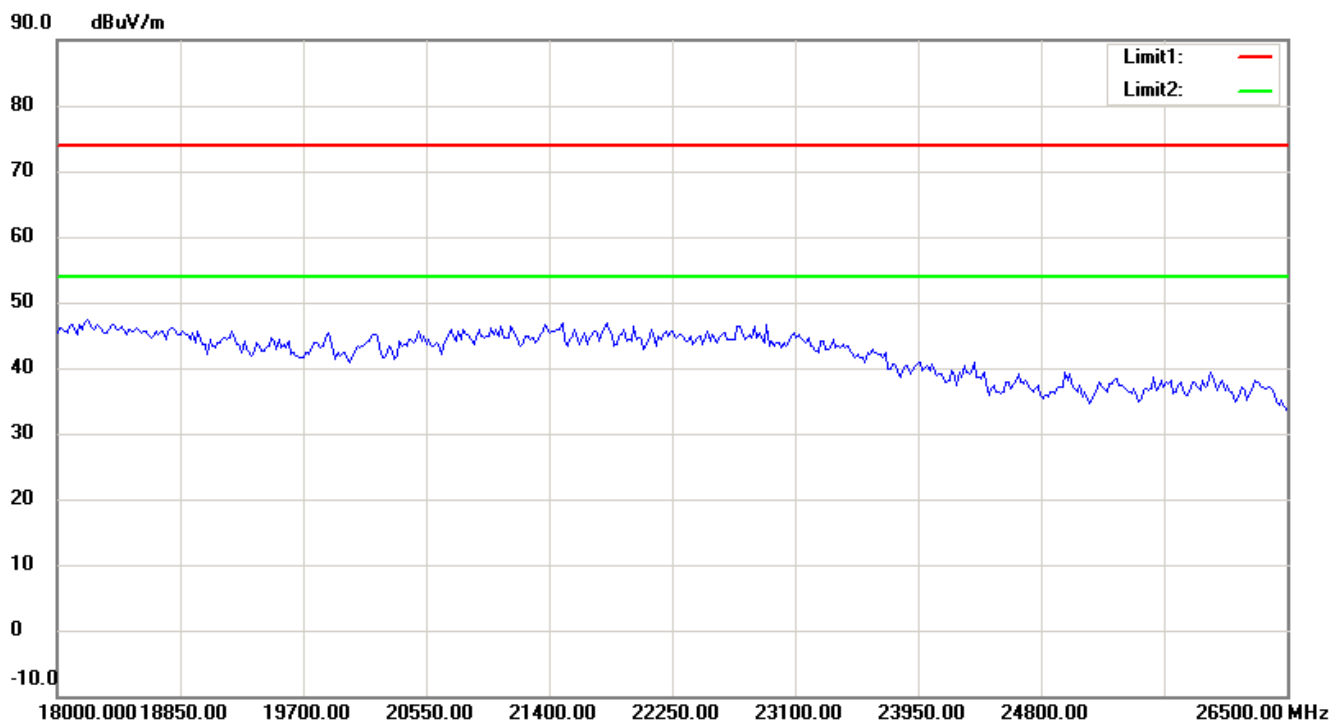
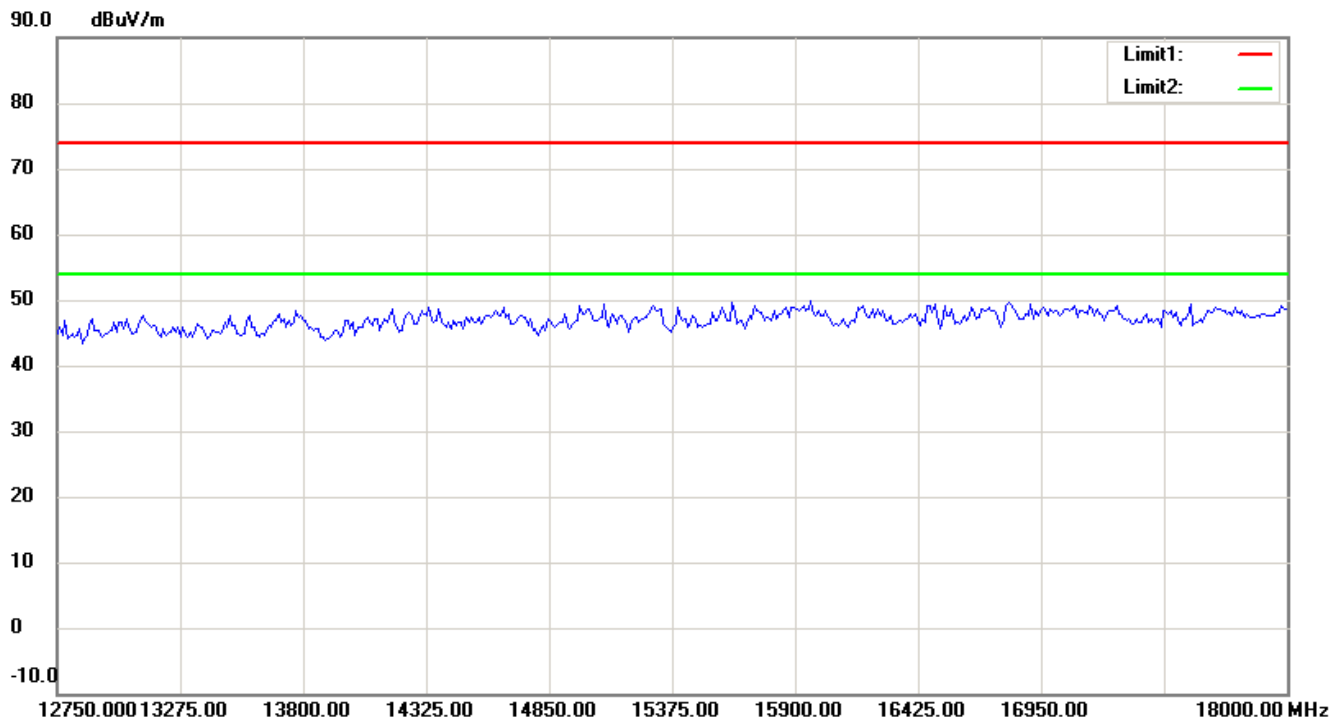
Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
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Worldwide Testing Services(Taiwan) Co., Ltd.

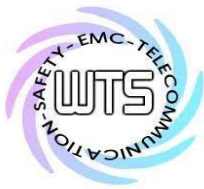
Registration number: W6M21212-12946-P-15B



Up Line: Peak Limit Line
Down Line: Ave Limit Line

Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.

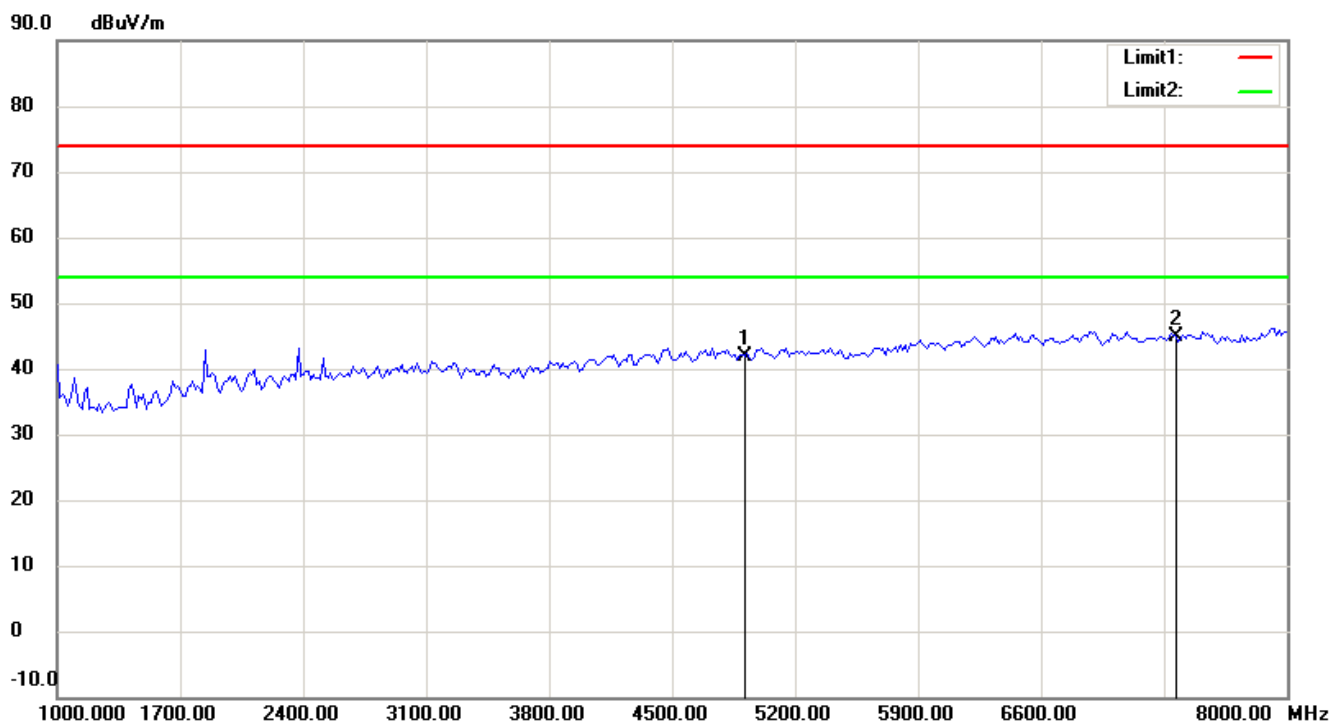
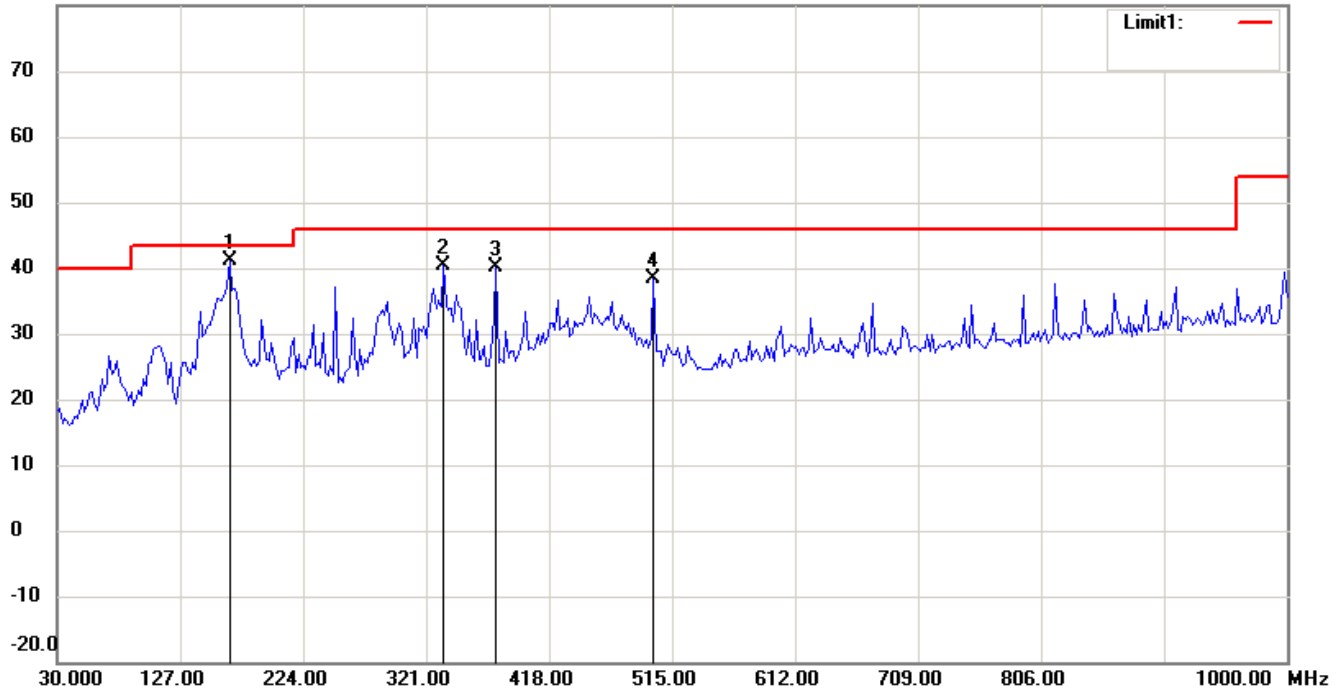


Registration number: W6M21212-12946-P-15B

802.11 n (40MHz) CH7

Antenna Polarization H

80.0 dBuV/m



Up Line: Peak Limit Line

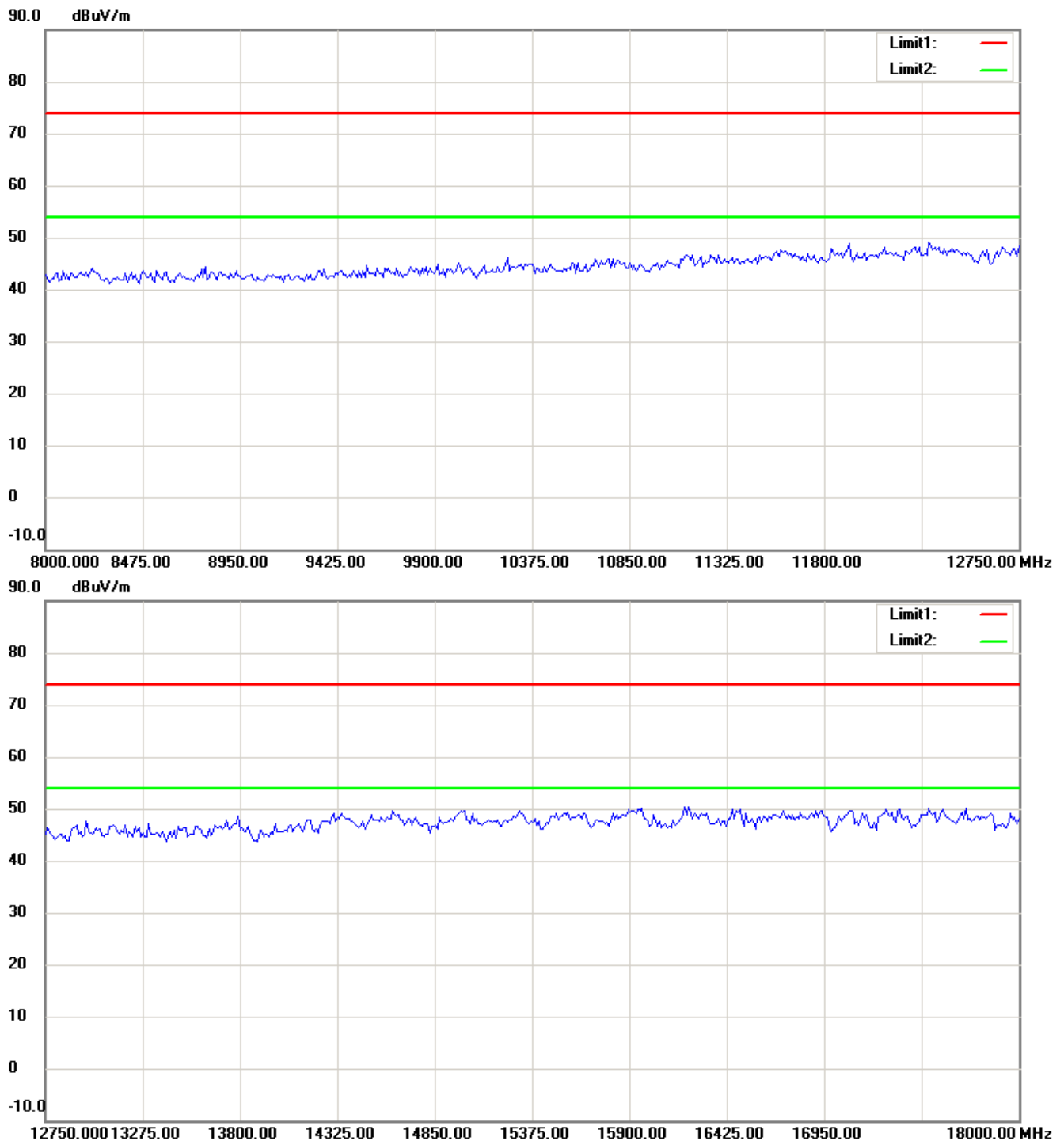
Down Line: Ave Limit Line

Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21212-12946-P-15B

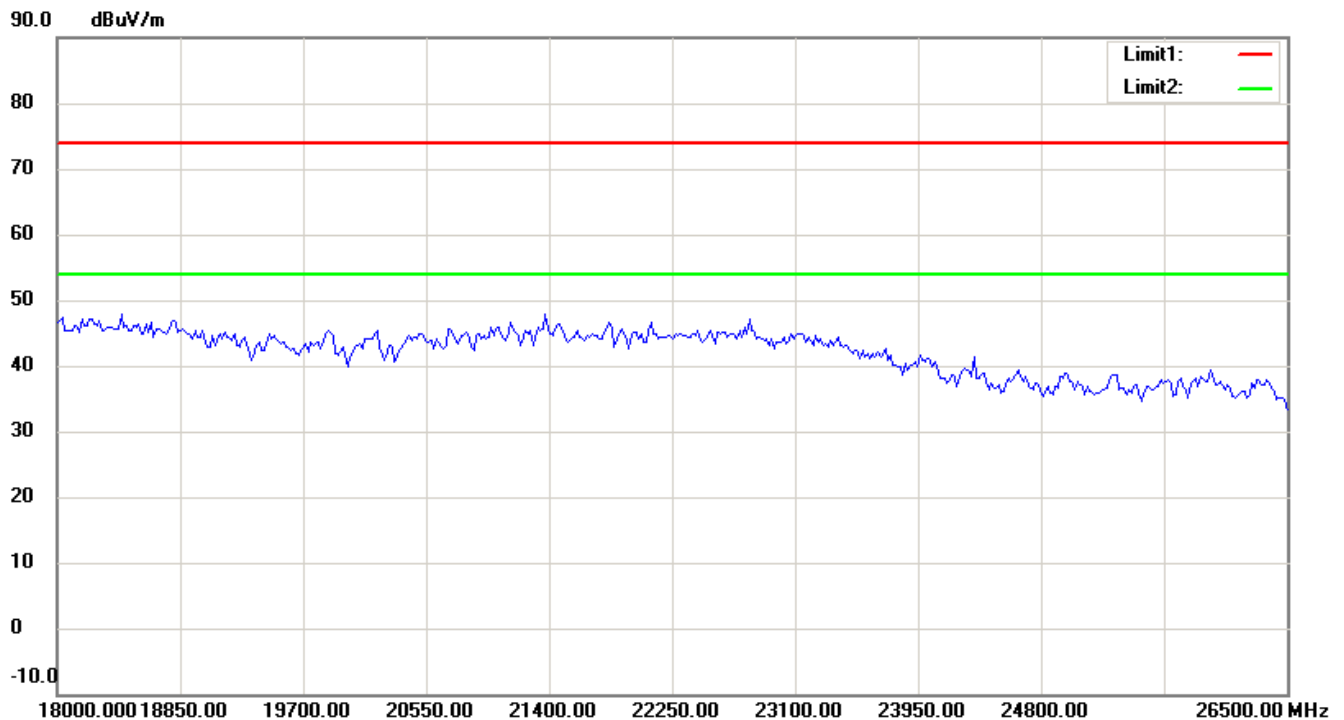


Up Line: Peak Limit Line
Down Line: Ave Limit Line

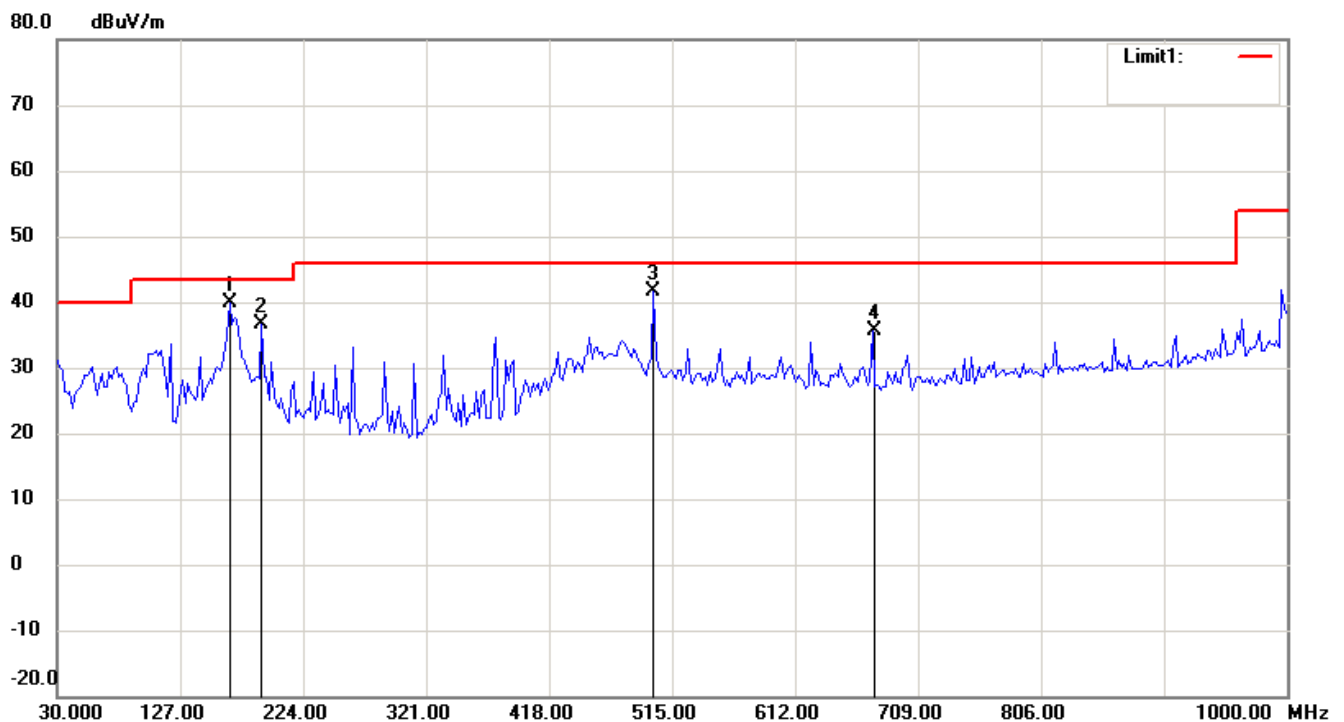
Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.

Registration number: W6M21212-12946-P-15B



Antenna Polarization V



Up Line: Peak Limit Line

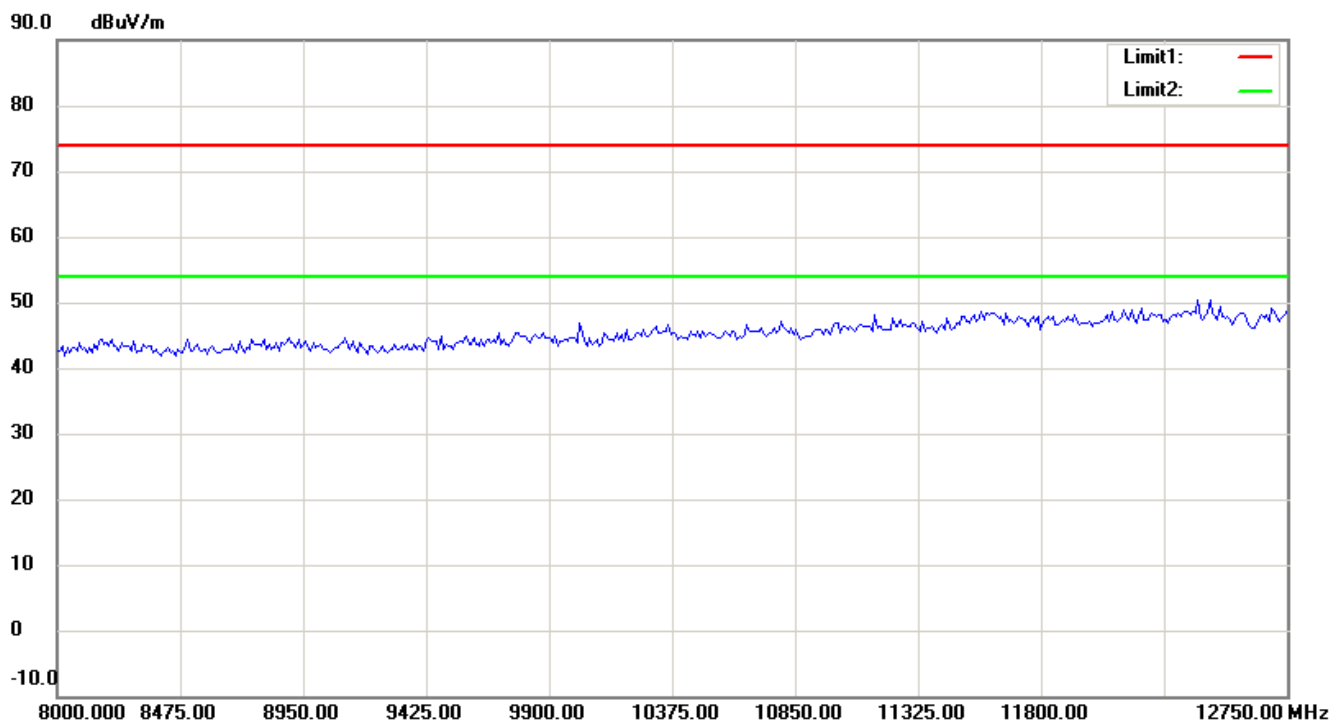
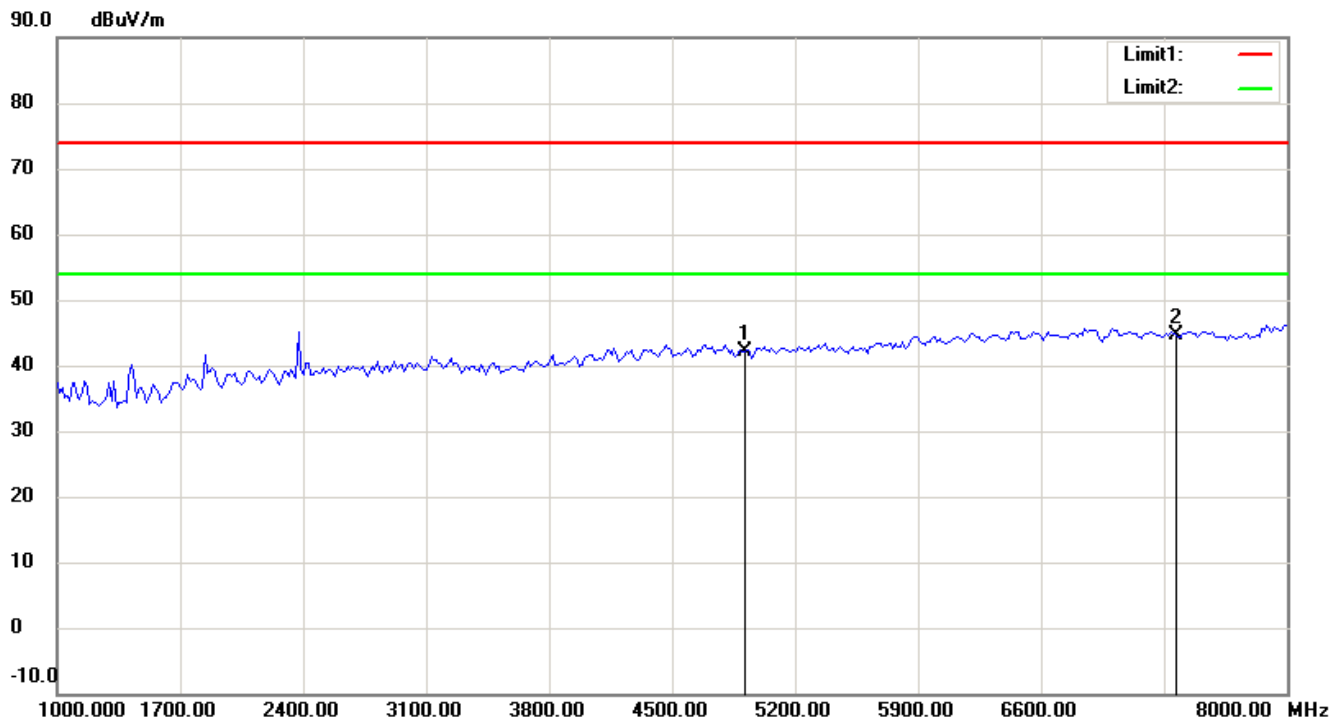
Down Line: Ave Limit Line

Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
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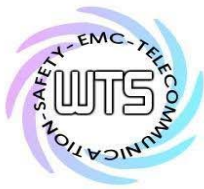
Registration number: W6M21212-12946-P-15B



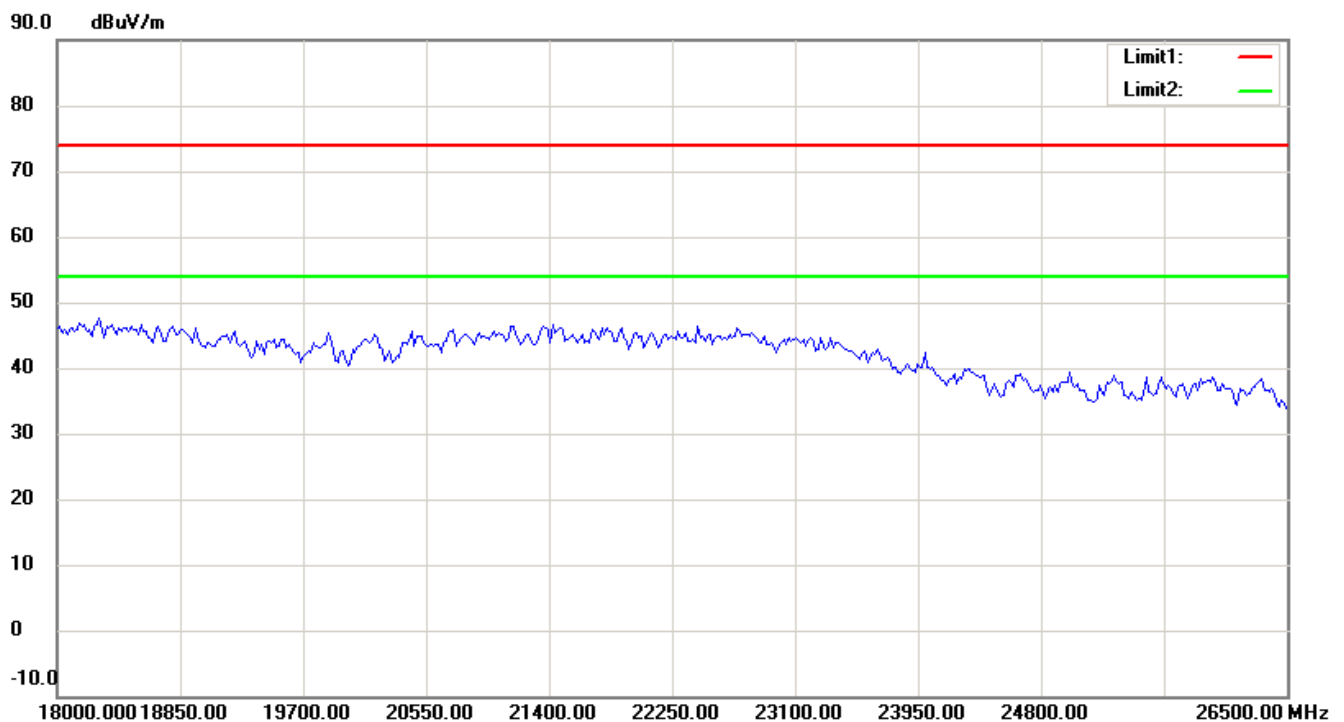
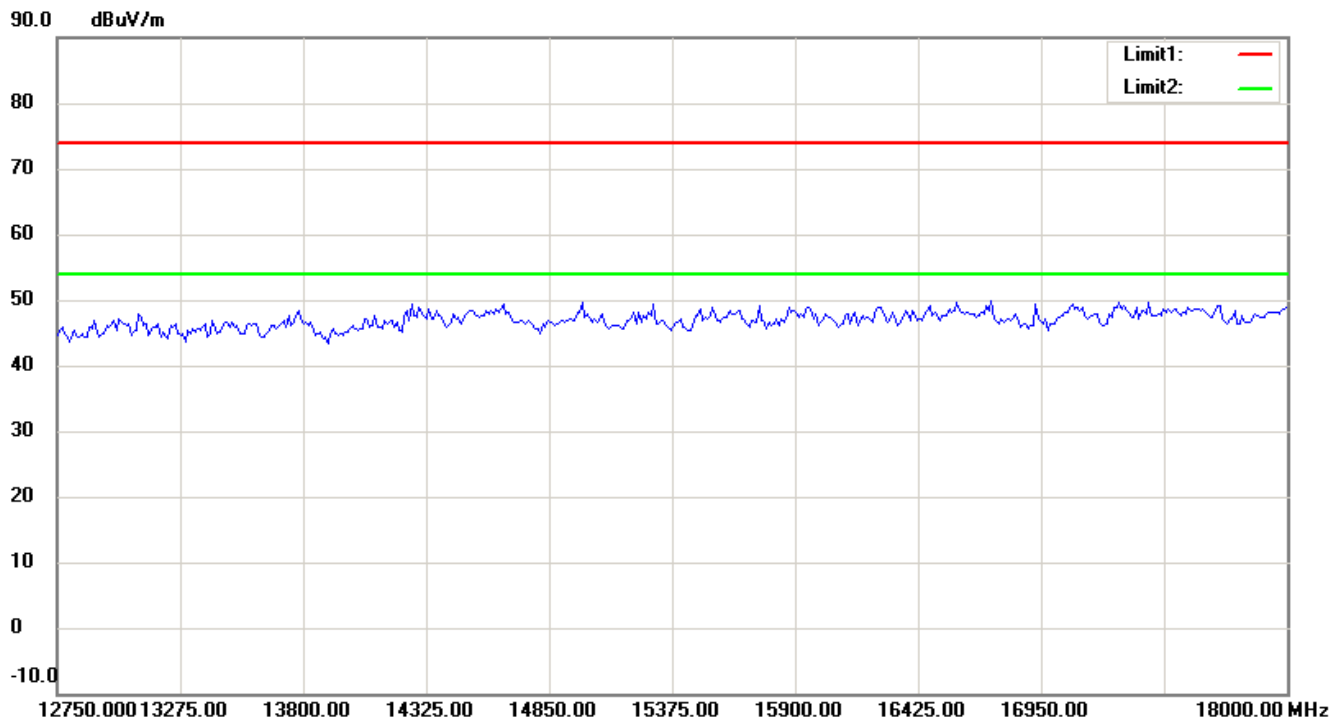
Up Line: Peak Limit Line
Down Line: Ave Limit Line

Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21212-12946-P-15B



Up Line: Peak Limit Line
Down Line: Ave Limit Line

Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
3. For corrected test results are listed in the relevant table of radiated test data of this test report.