

FCC PART 15 SUBPART B TEST REPORT

for

Bluetooth(class II)

Model No.: BU-2086-1

of

Applicant: J-THREE INTERNATIONAL HOLDING CO., LTD.
Address: No. 23-7, Dungshyh 12 Lirn, Dungshyh Lii Pingchien City
Taoyuan Hsien 324, Taiwan

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.: W6D20804-9062-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

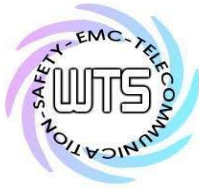


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Appendix : Pictures and diagrams



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:

FCC part 15 : October 2007

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

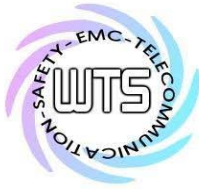
Furthermore, there is no guarantee that a test sample which has passed all the relevant tests conforms to a specification (only telecommunication products).

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.

The test report may only be reproduced or published in full.

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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.



Registration number: W6D20804-9062-P-15B

1.2 Tester

May 12, 2008

Jay Chaing

Jay Chaing

Date

WTS-Lab.

Test Engineer

Signature

Technical responsibility for area of testing:

May 12, 2008

Steven Chuang

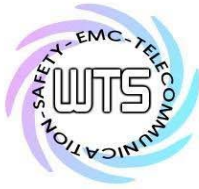
Steven Chuang

Date

WTS

Name

Signature



Registration number: W6D20804-9062-P-15B

1.3 Testing laboratory

1.3.1 Location

OATS

No.5-1, Shuang Sing Village,
LiShuei Rd., Wanli Township,
Taipei County 207, Taiwan (R.O.C.)

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

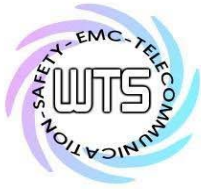
A2LA accredited number: 2732.01

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:	./.
Street:	./.
Town:	./.
Country:	./.
Telephone:	./.
Fax:	./.
Teletex:	./.



Registration number: W6D20804-9062-P-15B

1.4 Details of applicant

Name:	J-THREE INTERNATIONAL HOLDING CO., LTD.
Street:	No. 23-7, Dungshyh 12 Lirn, Dungshyh Lii Pingchien City
City:	Taoyuan Hsien, 324
Country:	Taiwan
Telephone:	+886-2-8227-5069
Fax:	+886-2-3234-4064
Teletex:	./.

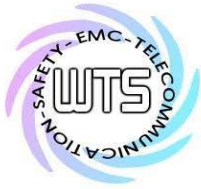
1.5 Application details

Date of receipt of test item:	May 5, 2008
Date of test:	from May 6, 2008 to May 9, 2008

1.6 Test item

1.6.1 Description of test item

Type of product:	Bluetooth(class II)
Type identification:	BU-2086-1
Multi-listing model number:	./.
Brand Name:	./.
Photos:	Please find in Appendix.
Additional information:	



Registration number: W6D20804-9062-P-15B

1.6.2 Manufacturer (if different from applicant in point 1.4)

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

1.6.3 Frequency behavior

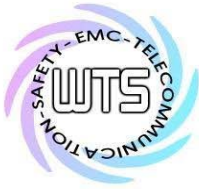
Highest frequency generated in the device or on which the device operates or tunes (MHz)		Upper frequency of measurement range (MHz)
<input type="checkbox"/>	Below 1.705	30
<input checked="" type="checkbox"/>	1.705 - 108	1000
<input type="checkbox"/>	108 - 500	2000
<input type="checkbox"/>	500 - 1000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

1.7 Test standards

FCC part 15 : October 2007

Special Statement:

This test report is based on the test reports no. W6M20804-9057-P-15B (Model no.: F8T016). The relevant circuitry, PCB Layout, inner element, and function of this device is exactly the same as the original model no. F8T016, only appearance is different. Therefore the test result is also base on the original test reports number W6M20804-9057-P-15B without re-testing.



2 Technical test

2.1 Summary of test results

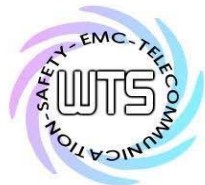
No deviations from the technical specification(s) were ascertained in the course of the tests performed. ☒

Or

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

2.2 Test environment

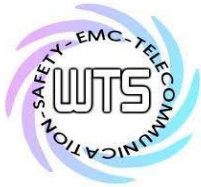
Temperature:	18 ... 25 °C
Relative humidity content	20 ... 75 %
Air pressure:	860 ... 1030 hPa
Details of power supply:	5 Vdc (Power from PC)
Other parameters:	without



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2.3 Test equipment utilized

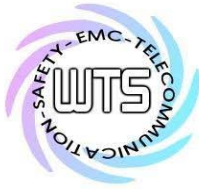
No.	Test equipment	Type	Serial No.	Manufacturer	Cal. Date	Next Cal. Date
ETSTW-CE 001	EMI TEST RECEIVER	ESHS10	842121/013	R&S	2007/10/15	2008/10/14
ETSTW-CE 002	PREREGULATOR MODE DC POWER SUPPLY	None	None		Function Test	
ETSTW-CE 003	AC POWER SOURCE	APS-9102	D161137	GW	Function Test	
ETSTW-CE 004	ZWEILEITER-V-NETZNACHBILDUNG TWO-LINE V-NETWORK	ESH3-Z5	840731/011	R&S	2007/10/15	2008/10/14
ETSTW-CE 005	Line-Impedance Stabilisation Network	NNBM 8126D	137	Schwarzbeck	2007/10/15	2008/10/14
ETSTW-CE 006	IMPULSBEGRENZER PULSE LIMITER	ESH3-Z2	100226	R&S	2007/5/11	2008/5/10
ETSTW-CE 008	ABSORBING CLAMP	MDS 21	3469	Schwarzbeck	2007/10/23	2009/10/22
ETSTW-CE 009	TEMP.&HUMIDITY CHAMBER	GTH-225-40-1P-U	MAA0305-009	GIANT FORCE	2007/8/2	2008/8/1
ETSTW-CE 013	CISPR 22 TWO BALANCED TELECOM PAIRS IMPEDANCE STABILIZATION NETWORK	FCC-TLISN-T4-02	20242	FCC	2007/11/2	2009/11/1
ETSTW-CE 014	CISPR 22 TWO BALANCED TELECOM PAIRS IMPEDANCE STABILIZATION NETWORK	FCC-TLISN-T2-02	20241	FCC	2005/12/7	2008/12/6
ETSTW-CE 015	CISPR 22 TWO BALANCED TELECOM PAIRS IMPEDANCE STABILIZATION NETWORK	FCC-TLISN-T8-02	20307	FCC	2006/11/7	2008/11/6
ETSTW-CE 016	TWO-LINE V-NETWORK	ENV216	100050	R&S	2007/10/29	2008/10/28
ETSTW-RE 002	Function Generator	33220A	MY43004982	Agilent	2007/10/12	2009/10/11
ETSTW-RE 003	EMI TEST RECEIVER	ESI 26	831438/001	R&S	2007/12/3	2008/12/2
ETSTW-RE 004	EMI TEST RECEIVER	ESI 40	832427/004	R&S	2007/10/29	2008/10/28
ETSTW-RE 005	EMI TEST RECEIVER	ESVS10	843207/020	R&S	2007/10/11	2008/10/12
ETSTW-RE 010	PROGRAMMABLE LINEAR POWER SUPPLY	LPS-305	30503070181	MOTECH	Function Test	
ETSTW-RE 011	PROGRAMMABLE LINEAR POWER SUPPLY	LPS-305	30503070165	MOTECH	Function Test	
ETSTW-RE 017	Log-Periodic Antenna	HL025	352886/001	R&S	2008/5/3	2010/5/2
ETSTW-RE 018	MICROWAVE HORN ANTENNA	AT4560	27212	AR	2007/11/7	2010/11/6
ETSTW-RE 020	MICROWAVE HORN ANTENNA	AT4002A	306915	AR	Function Test	
ETSTW-RE 021	SWEEP GENERATOR	SWM05	835130/010	R&S	2007/10/9	2008/10/8
ETSTW-RE 027	Passive Loop Antenna	6512	00034563	EMCO	2007/6/29	2008/6/28
ETSTW-RE 028	Log-Periodic Dipole Array Antenna	3148	34429	EMCO	2008/4/23	2010/4/22
ETSTW-RE 029	Biconical Antenna	3109	33524	EMCO	2008/4/23	2010/4/22
ETSTW-RE 030	Double-Ridged Guide Horn Antenna	3117	00035224	EMCO	2008/3/26	2010/3/25
ETSTW-RE 032	Millivoltmeter	URV 55	849086/013	R&S	2007/10/9	2008/10/8
ETSTW-RE 033	WaveRunner 6000A Serie Oscilloscope	WAVERUNNER 6100A	LCRY0604P14508	LeCroy	2007/7/9	2008/7/8
ETSTW-RE 034	Power Sensor	URV5-Z4	839313/006	R&S	2007/10/16	2009/10/15
ETSTW-RE 042	Biconical Antenna	HK116	100172	R&S	2007/1/11	2009/1/10
ETSTW-RE 043	Log-Periodic Dipole Antenna	HL223	100166	R&S	2008/5/7	2010/5/6
ETSTW-RE 044	Log-Periodic Antenna	HL050	100094	R&S	2006/5/29	2008/5/28



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ETSTW-RE 047	ESA-E SERIES SPECTRUM ANALYZER	E4445A	MY46181369	Agilent	2007/7/19	2008/7/18
ETSTW-RE 048	Triple Loop Antenna	HXYZ 9170	HXYZ 9170-134	Schwarzbeck	2005/3/22	2009/3/21
ETSTW-RE 049	TRILOG Super Broadband test Antenna	VULB 9160	9160-3185	Schwarzbeck	2007/5/2	2009/5/1
ETSTW-RE 055	SPECTRUM ANALYZER	FSU-26	200074	R&S	2007/7/16	2008/7/15
ETSTW-RE 064	Bluetooth Test Set	MT8852B-042	6K00005709	Anritsu	Function Test	
ETSTW-RE 072	CELL SITE TEST SET	8921A	3339A00375	HP	2007/7/2	2009/7/1



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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"/>

Note: According to FCC part 15.109 (g), digital devices may be shown to comply with the standards contained in Third Edition of the International Special Committee on Radio Interference (CISPR), Pub. 22, "Information Technology Equipment - Radio Disturbance Characteristics - Limits and Methods of Measurement".

(The follows intended to leave blank.)



Registration number: W6D20804-9062-P-15B

2.4.1 Radiated Emission

2.4.1.1 Test Equipment

a) Biconical Antenna (HK116)

For your reference please find it in our test equipment list at page 9 to 10 as number : ETSTW-RE 042

b) Log-Periodic Dipole Antenna (HL223)

For your reference please find it in our test equipment list at page 9 to 10 as number : ETSTW-RE 043

c) EMI TEST RECEIVER (ESI-26)

For your reference please find it in our test equipment list at page 9 to 10 as number : ETSTW-RE 003

d) EMI TEST RECEIVER (ESI 40)

For your reference please find it in our test equipment list at page 9 to 10 as number : ETSTW-RE 004

e) Log-Periodic Antenna (HL025)

For your reference please find it in our test equipment list at page 9 to 10 as number : ETSTW-RE 017

f) Log-Periodic DipoleArray Antenna (3148)

For your reference please find it in our test equipment list at page 9 to 10 as number : ETSTW-RE 028

g) Biconical Antenna (3109)

For your reference please find it in our test equipment list at page 9 to 10 as number : ETSTW-RE 029

h) Double-Ridged Waveguide Horn Antenna (3117)

For your reference please find it in our test equipment list at page 9 to 10 as number : ETSTW-RE 030

i) Log-Periodic Antenna (HL050)

For your reference please find it in our test equipment list at page 9 to 10 as number : ETSTW-RE 044

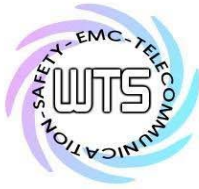
2.4.1.2 Test Procedures

- Test configuration

The test configuration corresponds to the standard CISPR 22 and 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 10m and 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 tests are carried out with horizontal and vertical polarization of the antenna in a frequency range of 30 MHz to 12750 MHz. Further information please find in the test protocol.



Registration number: W6D20804-9062-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 10 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 10 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 10 as number : ETSTW-CE 001

d) AC Power Source (APS-9102)

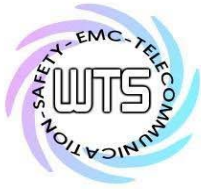
For your reference please find it in our test equipment list at page 9 to 10 as number : ETSTW-CE 003

- 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 test is 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.



2.5 Test protocols

2.5.1 Radiated Emission

Radio Noise Field Strength

Emission

Model: BU-2086-1 Date: 2008/5/8
Mode: Digital Temperature: 26 °C Engineer: Brian
Polarization: Horizontal Humidity: 60 %

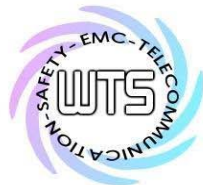
Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
157.695	6.69	peak	15.44	22.13	30.00	-7.87	290	330
200.441	12.35	peak	12.15	24.50	30.00	-5.50	170	355
275.110	7.36	peak	14.65	22.01	37.00	-14.99	100	370
500.601	5.12	peak	19.82	24.94	37.00	-12.06	195	150
666.132	4.48	peak	22.89	27.37	37.00	-9.63	310	130
699.800	4.21	peak	23.43	27.64	37.00	-9.36	80	195

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
112.786	9.98	peak	12.66	22.64	30.00	-7.36	220	110
192.866	12.19	peak	12.58	24.77	30.00	-5.23	160	190
262.124	7.63	peak	14.16	21.79	37.00	-15.21	90	165
405.210	3.52	peak	17.90	21.42	37.00	-15.58	240	360
673.146	3.65	peak	22.94	26.59	37.00	-10.41	230	310
816.233	-0.82	peak	25.39	24.57	37.00	-12.43	190	350

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.
5. See the attached diagram as appendix.



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Registration number: W6D20804-9062-P-15B

Mode: RX CH0 Temperature: 26 °C Engineer: Brian
Polarization: Horizontal Humidity: 60 %

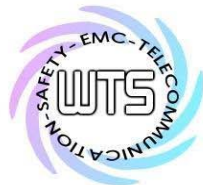
Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
200.441	25.39	peak	12.15	37.54	43.5	-5.96	160	150
235.611	20.91	peak	13.34	34.25	46.0	-11.75	120	150
674.549	17.78	peak	22.95	40.73	46.0	-5.27	160	150
762.926	11.31	peak	24.72	36.03	46.0	-9.97	130	150

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.			
2406.814	54.75	---	-7.52	47.23	---	74	54	-26.77	130	150
2959.920	49.48	---	-6.20	43.28	---	74	54	-30.72	210	150

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
84.108	20.40	peak	9.90	30.30	40.0	-9.70	330	150
196.653	26.17	peak	12.35	38.52	43.5	-4.98	210	150
431.864	12.58	peak	18.52	31.10	46.0	-14.90	250	150
670.341	11.89	peak	22.92	34.81	46.0	-11.19	100	150

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.			
2400.802	52.20	---	-7.54	44.66	---	74	54	-29.34	230	150
3056.112	49.01	---	-6.01	43.00	---	74	54	-31.00	200	150



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D20804-9062-P-15B

Mode: RX CH39

Polarization: Horizontal

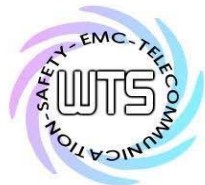
Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
200.441	26.08	peak	12.15	38.23	43.5	-5.27	240	150
262.124	20.80	peak	14.16	34.96	46.0	-11.04	190	150
450.100	10.37	peak	18.93	29.30	46.0	-16.70	100	150
667.535	18.80	peak	22.90	41.70	46.0	-4.30	145	150

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.			
2400.802	55.79	---	-7.54	48.25	---	74	54	-25.75	110	150
3002.004	49.07	---	-6.10	42.97	---	74	54	-31.03	165	150

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
83.026	20.35	peak	9.92	30.27	40.0	-9.73	130	150
192.866	27.61	peak	12.58	40.19	43.5	-3.31	190	150
431.864	11.83	peak	18.52	30.35	46.0	-15.65	150	150
673.146	9.96	peak	22.94	32.90	46.0	-13.10	200	150

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.			
2406.814	53.13	---	-7.52	45.61	---	74	54	-28.39	140	150
3014.028	49.34	---	-6.08	43.26	---	74	54	-30.74	145	150



Registration number: W6D20804-9062-P-15B

Mode: RX CH78

Polarization: Horizontal

Frequency (MHz)	Reading (dBUV)	Detector	Factor (dB)	Result (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
83.026	17.69	peak	9.92	27.61	40.0	-12.39	175	150
204.229	21.98	peak	12.22	34.20	43.5	-9.30	255	150
671.744	17.72	peak	22.93	40.65	46.0	-5.35	120	150
768.537	12.37	peak	24.74	37.11	46.0	-8.89	125	150

Frequency (MHz)	Reading (dBuV)		Factor (dB)	Result @3m (dBuV/m)		Limit @3m (dBuV/m) Peak		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.	Corr.	Peak	Ave.	Ave.				
2400.802	54.89	---	-7.54	47.35	---	74	54	-26.65	235	150
3050.100	48.98	---	-6.02	42.96	---	74	54	-31.04	130	150

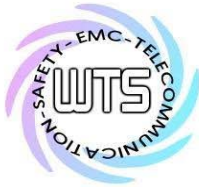
Polarization: Vertical

Frequency (MHz)	Reading (dBUV)	Detector	Factor (dB)	Result (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
83.026	21.15	peak	9.92	31.07	40.0	-8.93	165	150
193.948	27.02	peak	12.52	39.54	43.5	-3.96	195	150
431.864	12.72	peak	18.52	31.24	46.0	-14.76	250	150
671.744	11.09	peak	22.93	34.02	46.0	-11.98	230	150

Frequency (MHz)	Reading (dBuV)		Factor (dB)	Result @3m (dBuV/m)		Limit @3m (dBuV/m) Peak		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.	Corr.	Peak	Ave.	Ave.				
2400.802	52.60	---	-7.54	45.06	---	74	54	-28.94	150	150
3116.233	48.84	---	-5.91	42.93	---	74	54	-31.07	135	150

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.**
5. **See the attached diagram as appendix.**



Registration number: W6D20804-9062-P-15B

2.5.2 Conducted Emission

Conducted Emission

Emission

Model: BU-2086-1 Date: 2008/5/8
Mode: Temperature: 26 °C Engineer: Brian
Polarization: N Humidity: 60 %

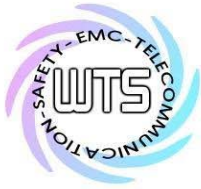
Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV)		Limit (dBuV)		Margin (dB)
	QP	Ave.		QP	Ave.	QP	Ave.	
0.1519	31.36	3.26	10.10	41.46	13.36	65.90	55.90	-24.44
0.2009	39.70	28.90	10.10	49.80	39.00	63.57	53.57	-13.77
0.2709	30.24	21.38	10.10	40.34	31.48	61.09	51.09	-19.61
0.3339	26.84	17.56	10.10	36.94	27.66	59.35	49.35	-21.69
4.6900	12.28	9.16	10.10	22.38	19.26	56.00	46.00	-26.74
14.8042	19.07	10.29	10.10	29.17	20.39	60.00	50.00	-29.61

Polarization: L1

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV)		Limit (dBuV)		Margin (dB)
	QP	Ave.		QP	Ave.	QP	Ave.	
0.1508	30.84	4.53	10.10	40.94	14.63	65.96	55.96	-25.02
0.2021	39.20	28.02	10.10	49.30	38.12	63.52	53.52	-14.22
0.2709	31.50	20.66	10.10	41.60	30.76	61.09	51.09	-19.49
0.3351	26.62	16.32	10.10	36.72	26.42	59.32	49.32	-22.60
4.8950	7.30	16.26	10.10	17.40	26.36	56.00	46.00	-19.64
15.0693	22.81	18.55	10.10	32.91	28.65	60.00	50.00	-21.35

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. See attached diagrams as appendix.



Registration number: W6D20804-9062-P-15B

2.6 Equipment Modification

No modification was made to pass all tests.



3 Normative references

- /1/ FCC part 15
Radio Frequency Devices
- /2/ CISPR 22
Limits and Methods of Measurement of Radio Interference Characteristics of Information Technology Equipment
- /3/ ANSI STANDARD C63.4-2003
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

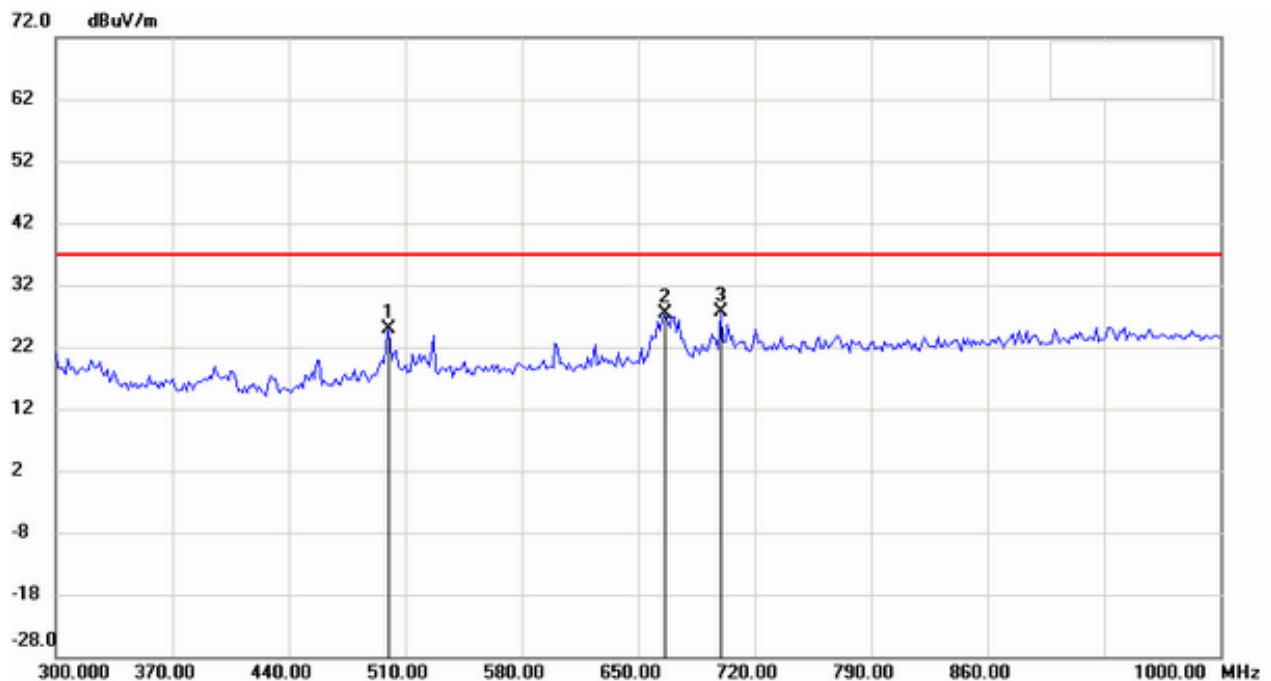
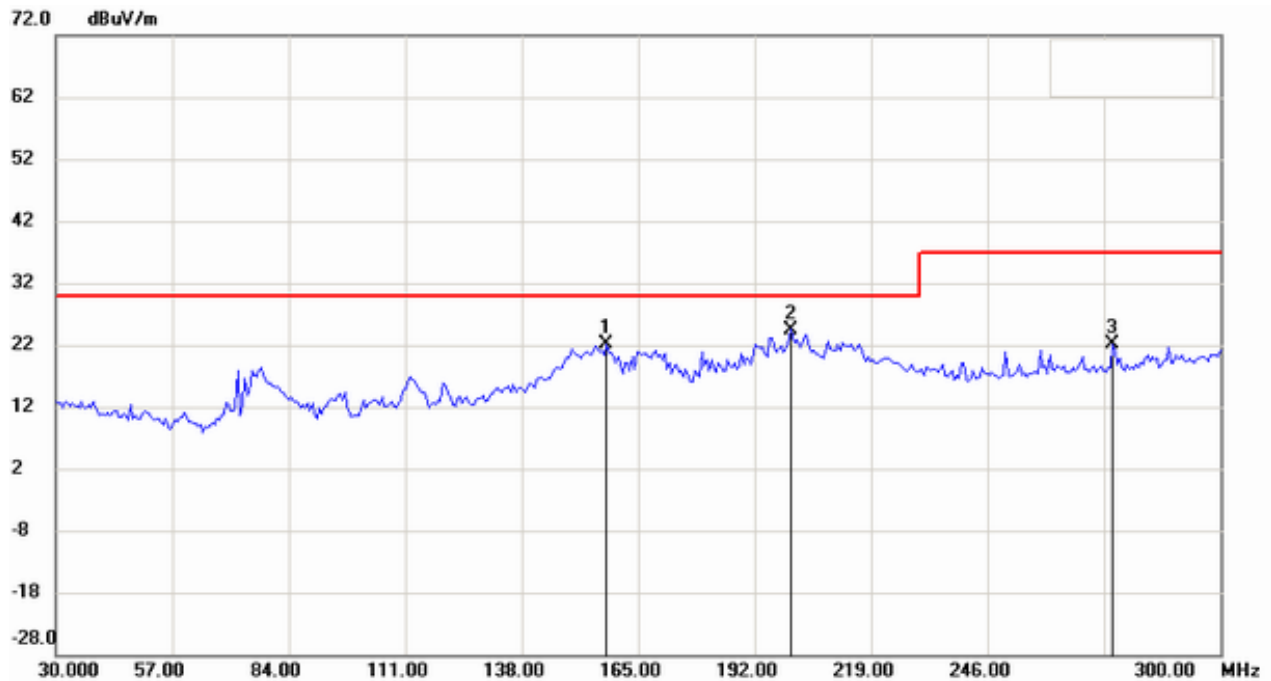
1. Radiated Emission
2. Conducted Emission

Registration number: W6D20804-9062-P-15B

Radiated Emission

Digital mode

Antenna Polarization H

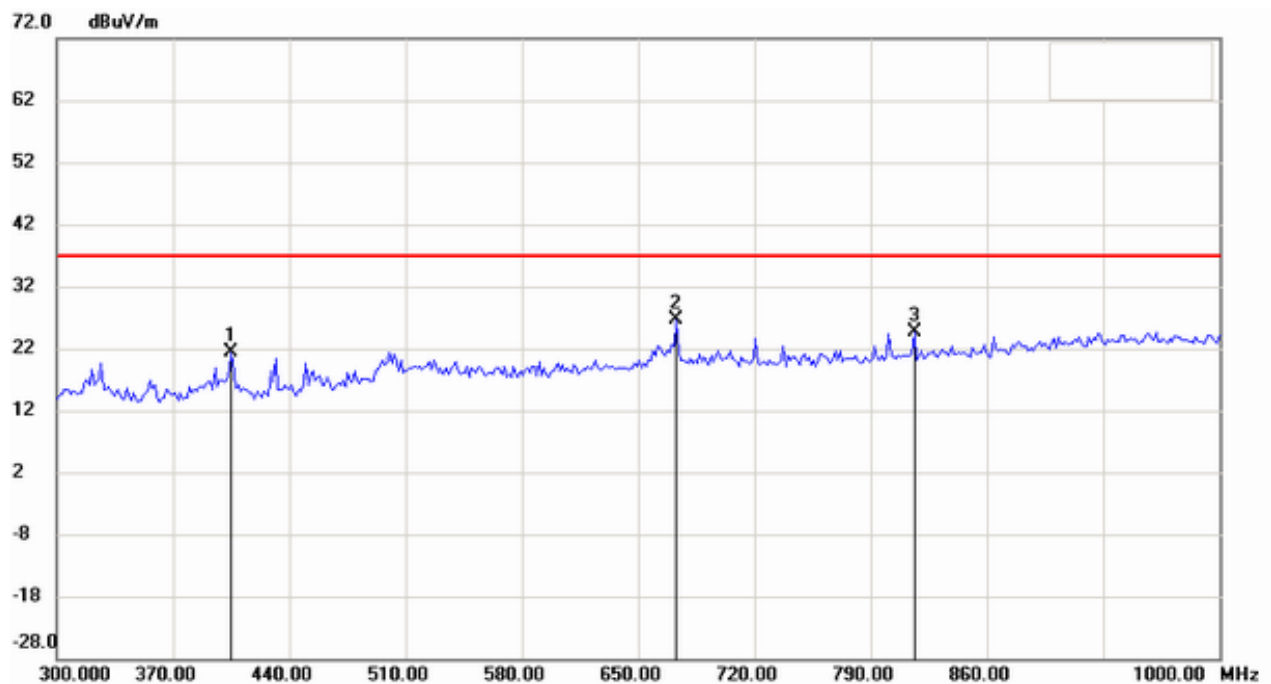
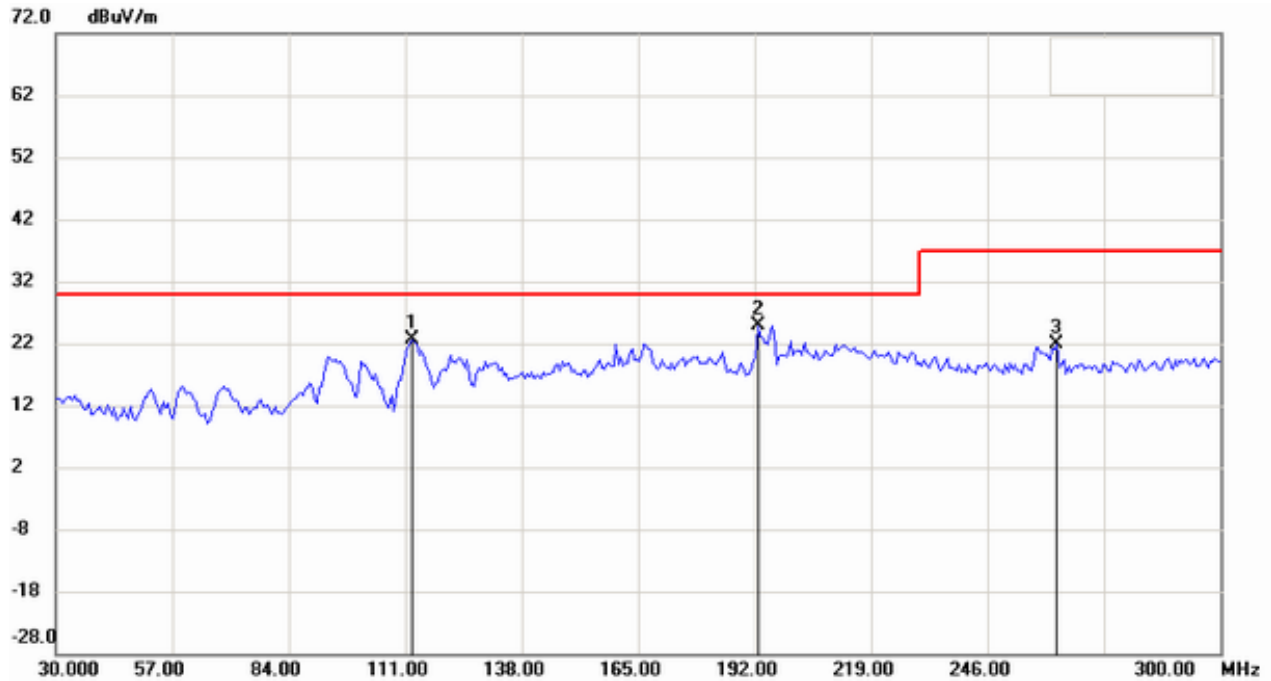


Note:

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.

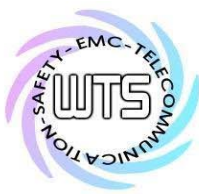
Registration number: W6D20804-9062-P-15B

Antenna Polarization V



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.



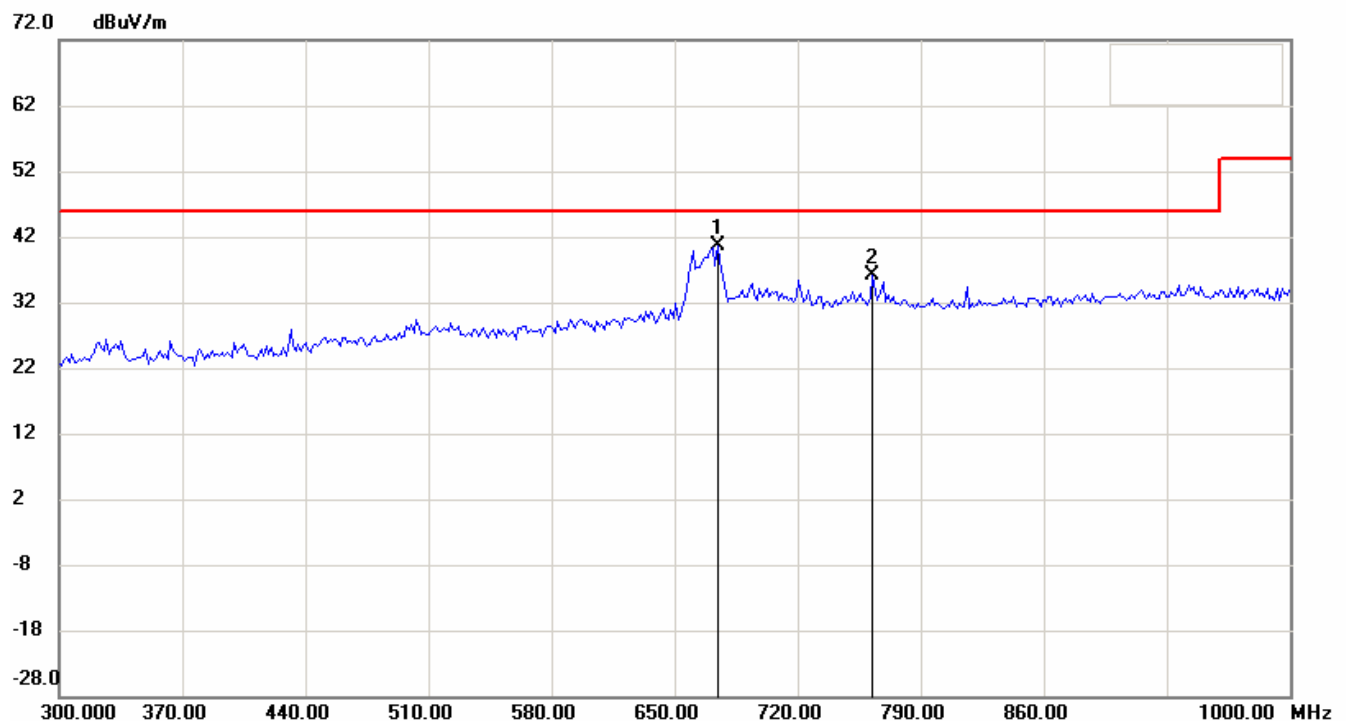
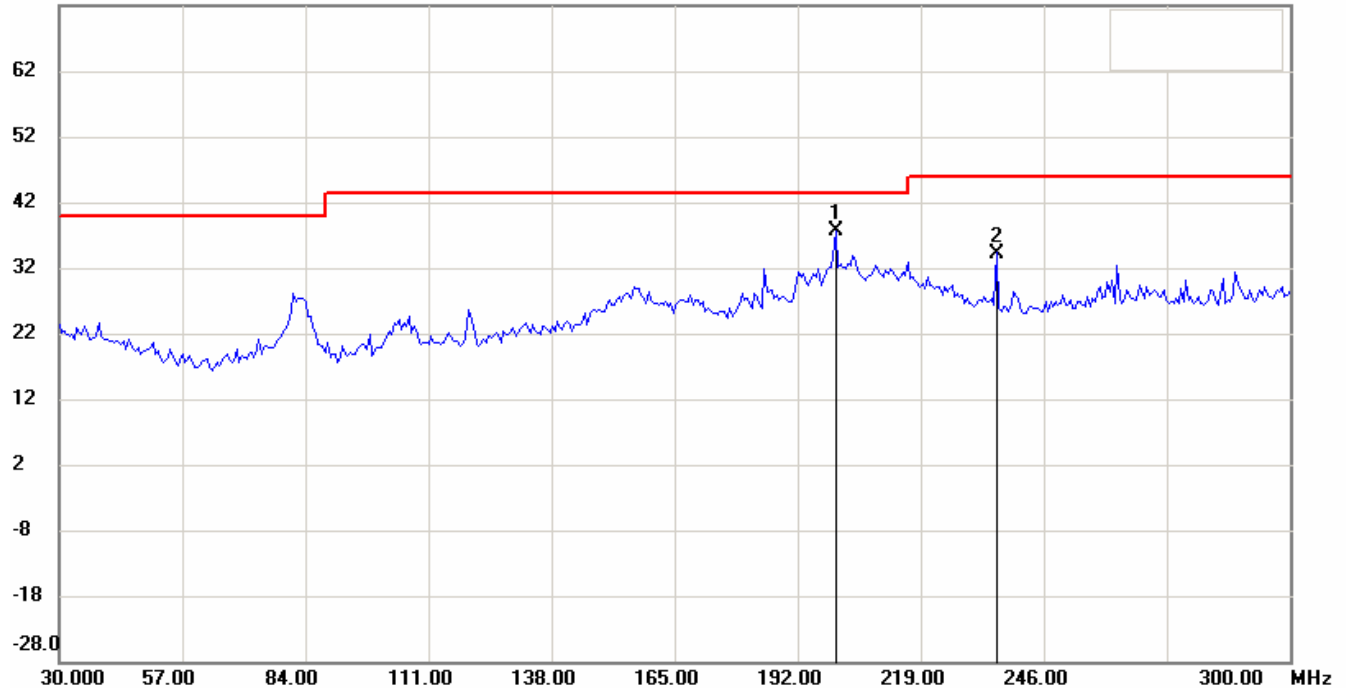
Registration number: W6D20804-9062-P-15B

RX mode

CH 0

Antenna Polarization H

72.0 dBuV/m



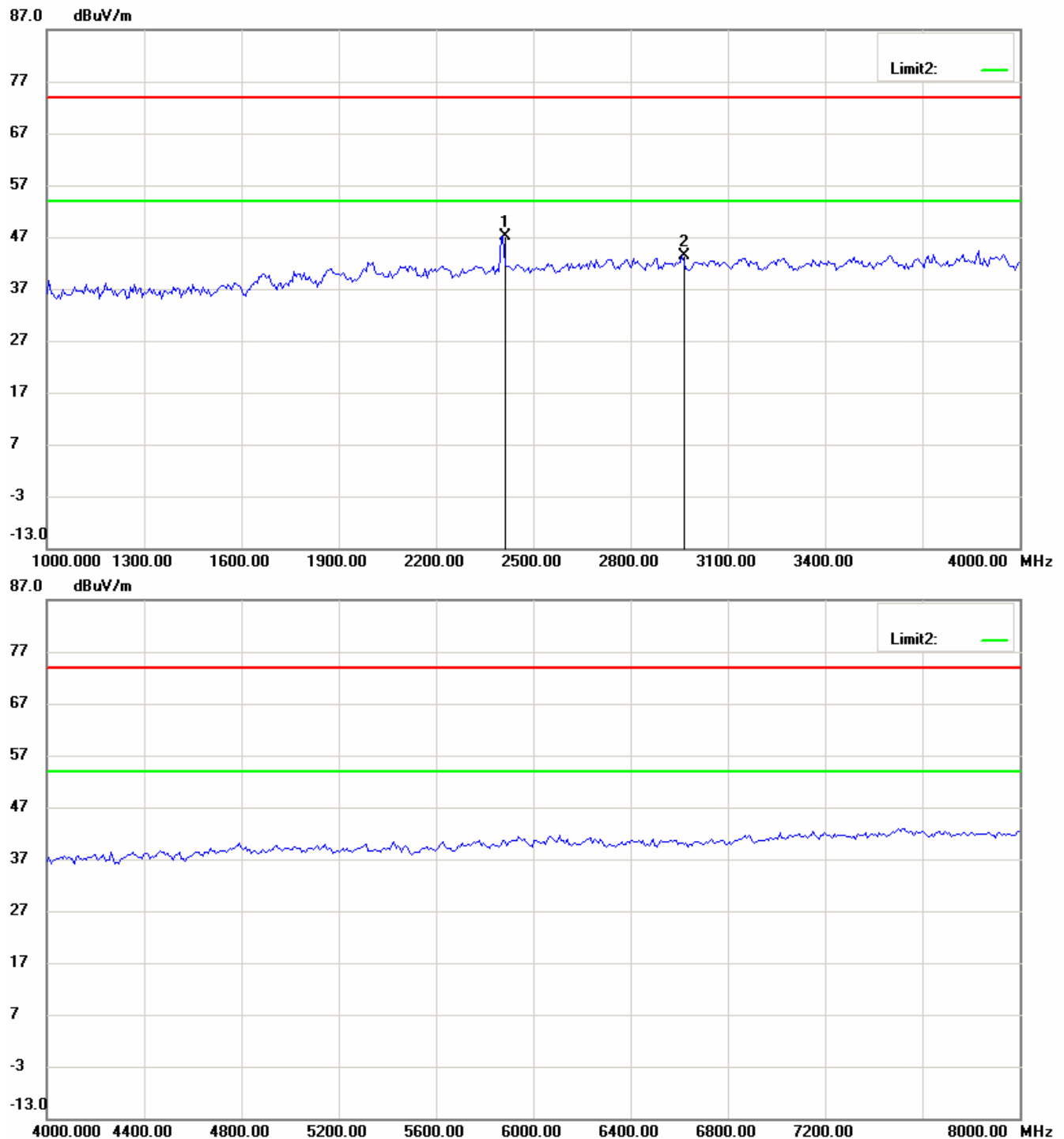
Up Line: Peak Limit Line

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: W6D20804-9062-P-15B

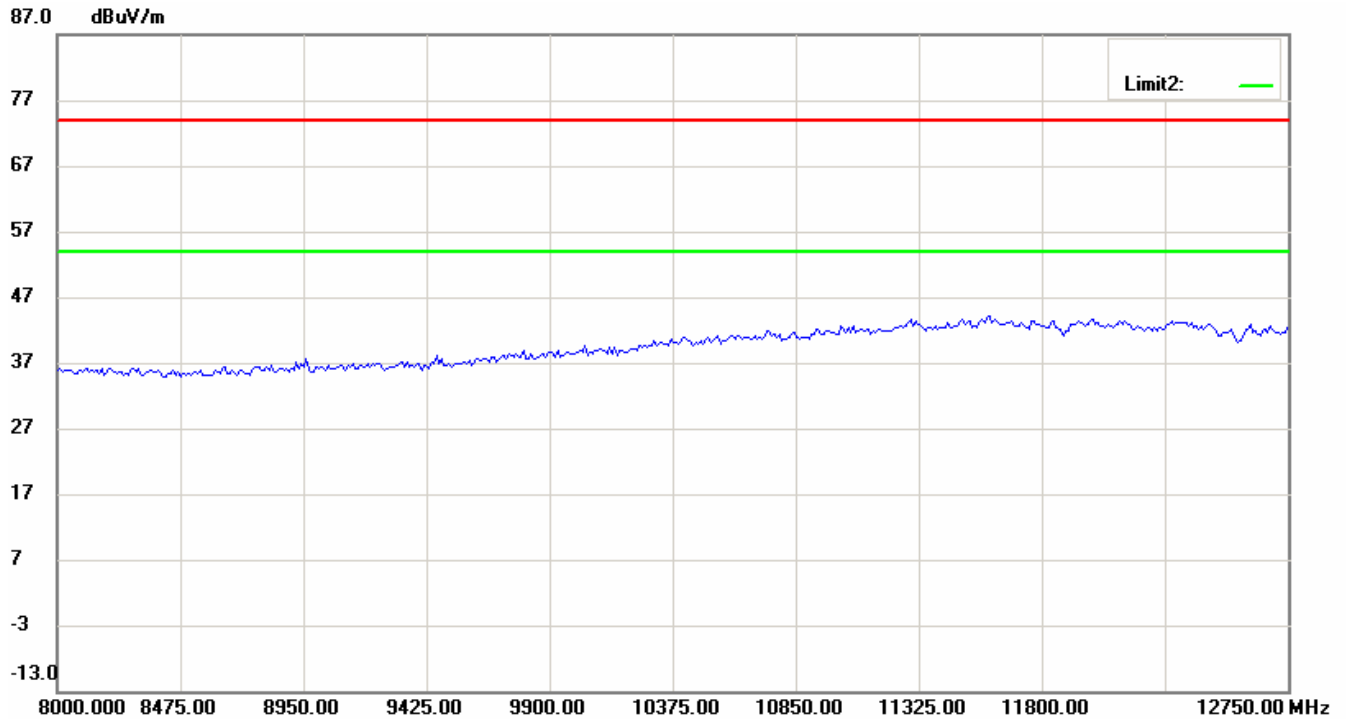


Up Line: Peak Limit Line
Down Line: Ave Limit Line

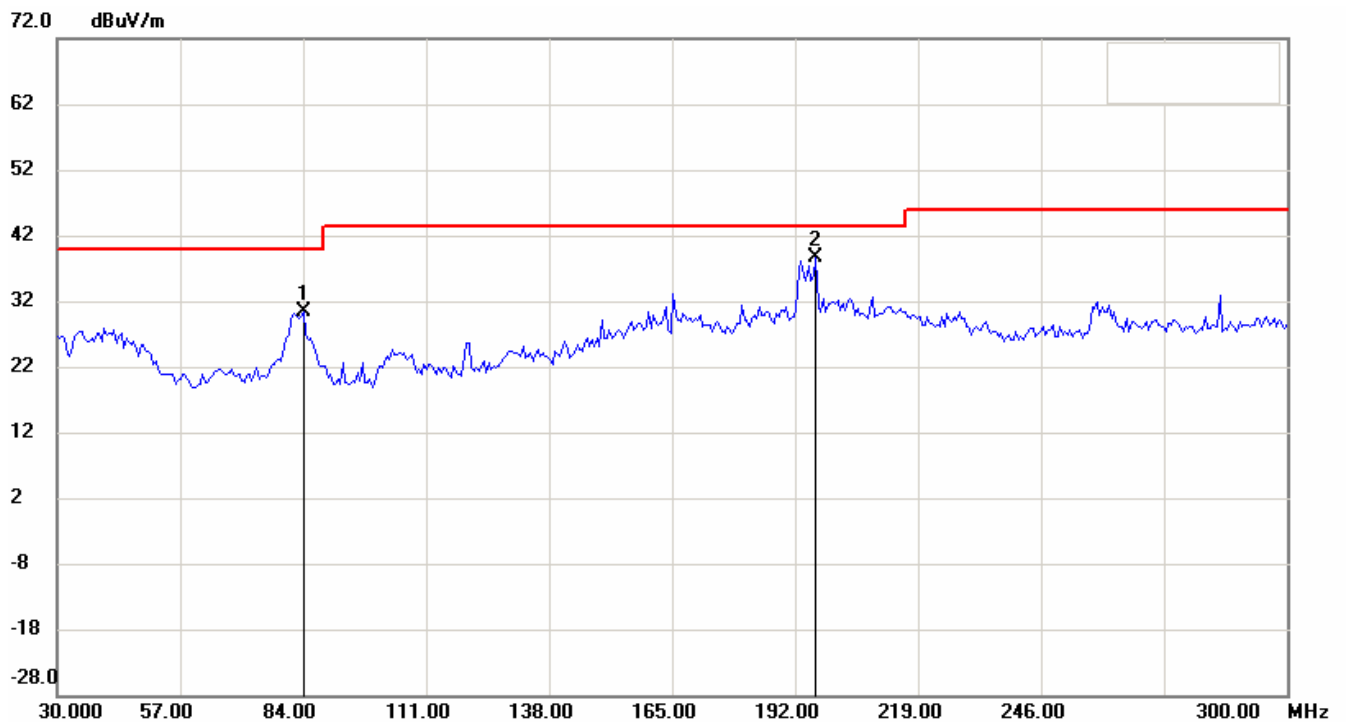
Note:

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: W6D20804-9062-P-15B



Antenna Polarization V



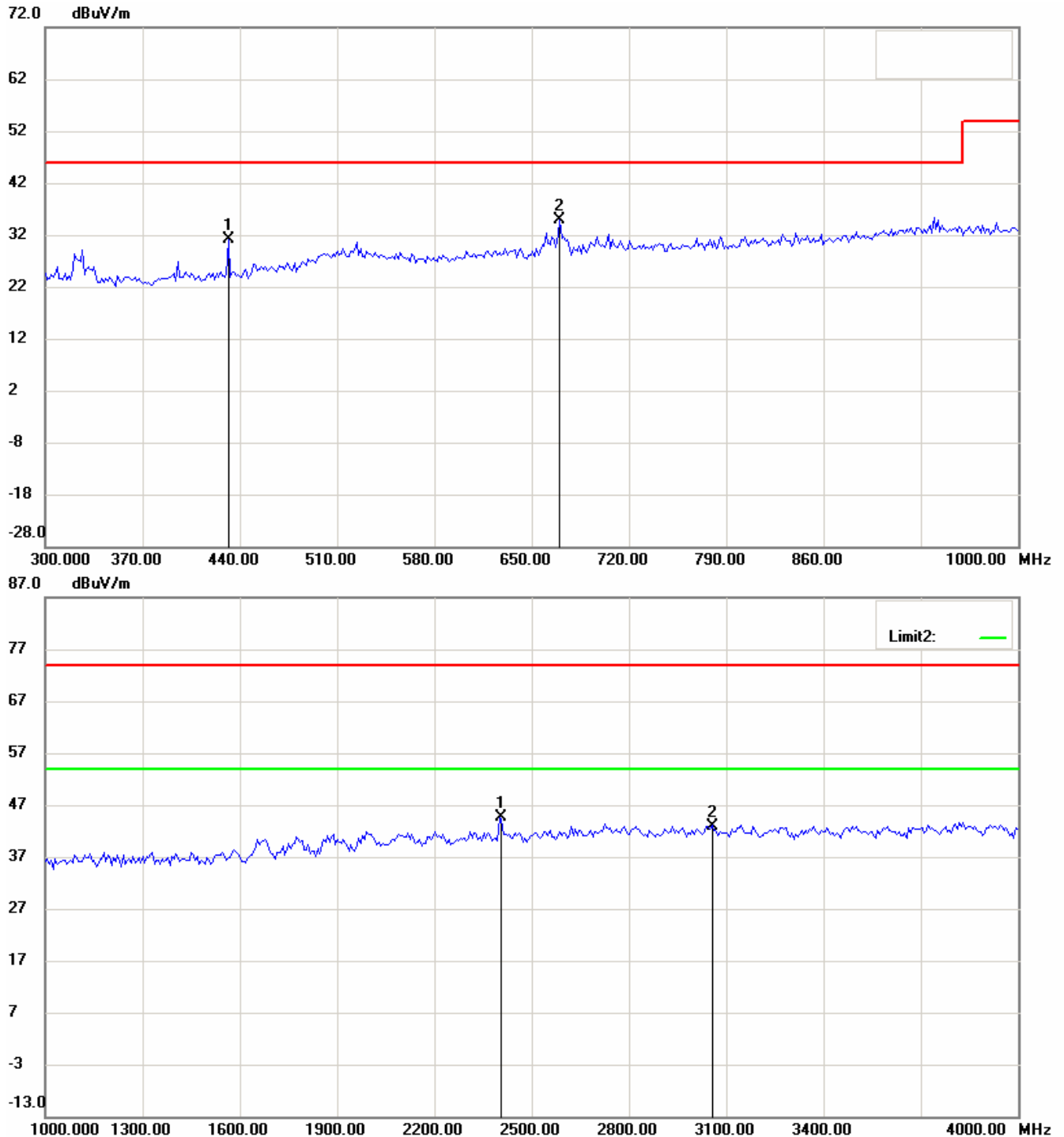
Up Line: Peak Limit Line

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.

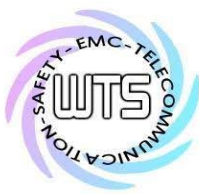
Registration number: W6D20804-9062-P-15B



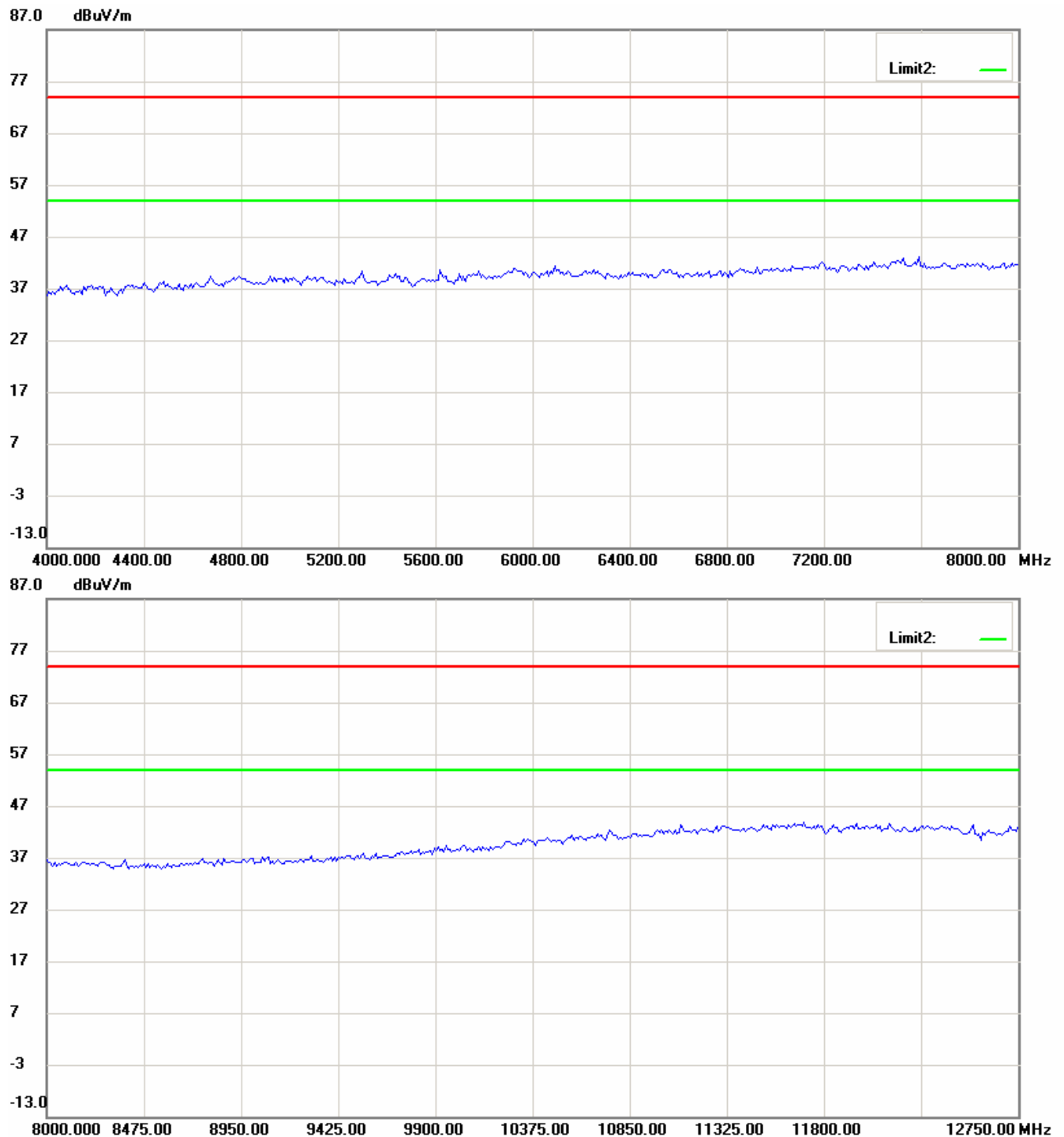
Up Line: Peak Limit Line
Down Line: Ave Limit Line

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: W6D20804-9062-P-15B



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

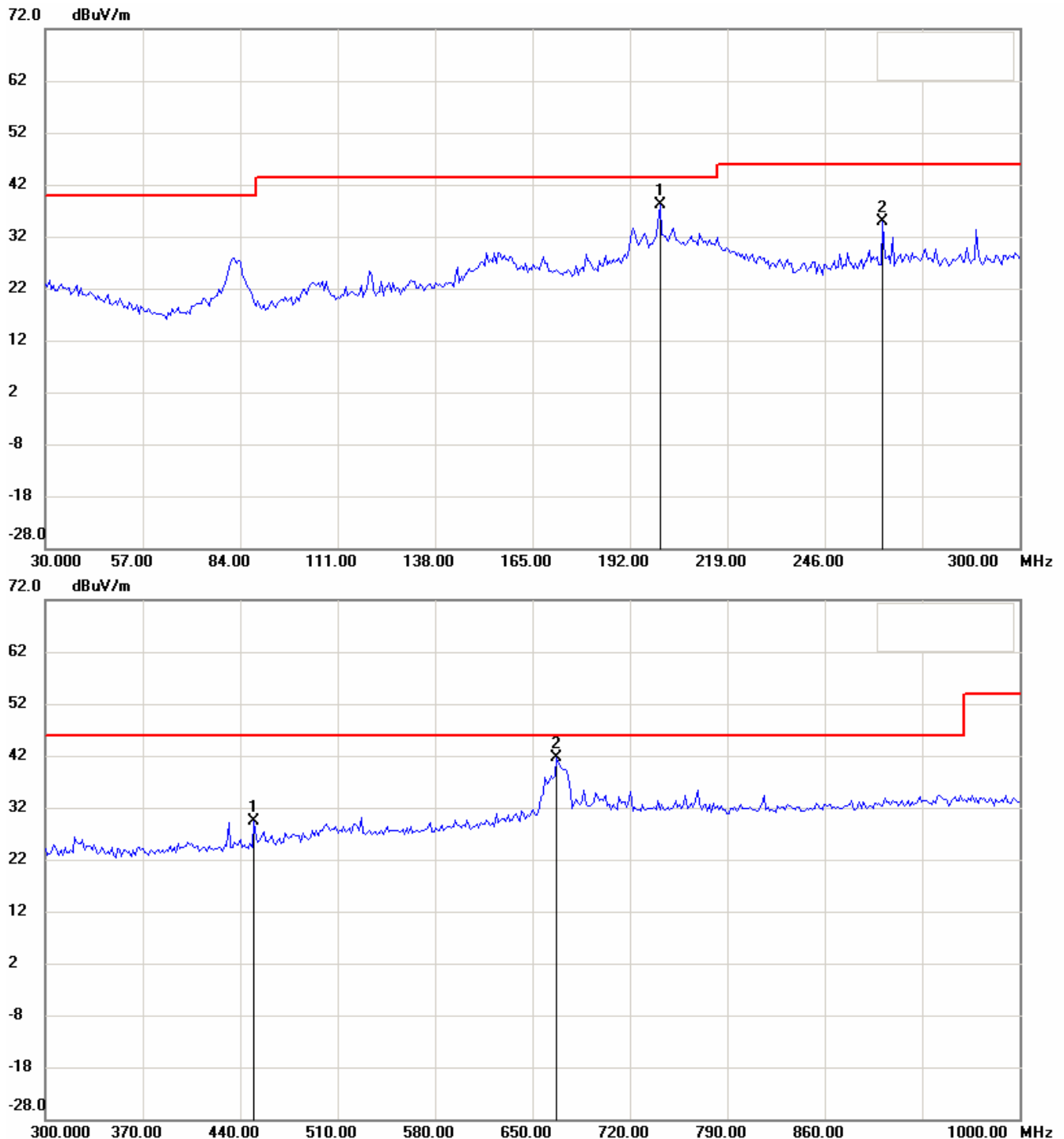
Note:

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: W6D20804-9062-P-15B

CH 39

Antenna Polarization H

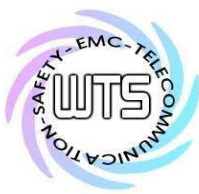


Up Line: Peak Limit Line

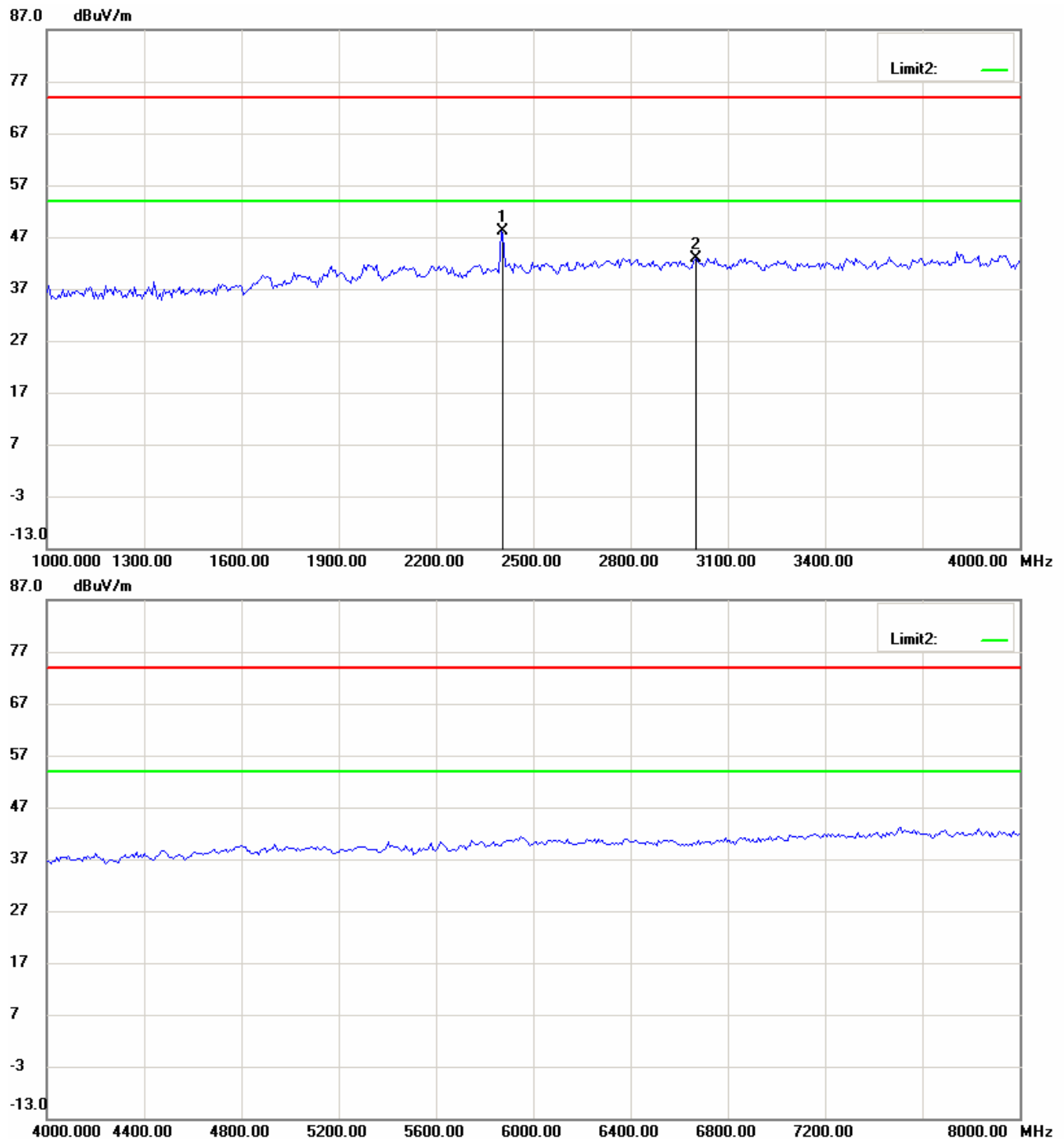
Down Line: Ave Limit Line

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: W6D20804-9062-P-15B

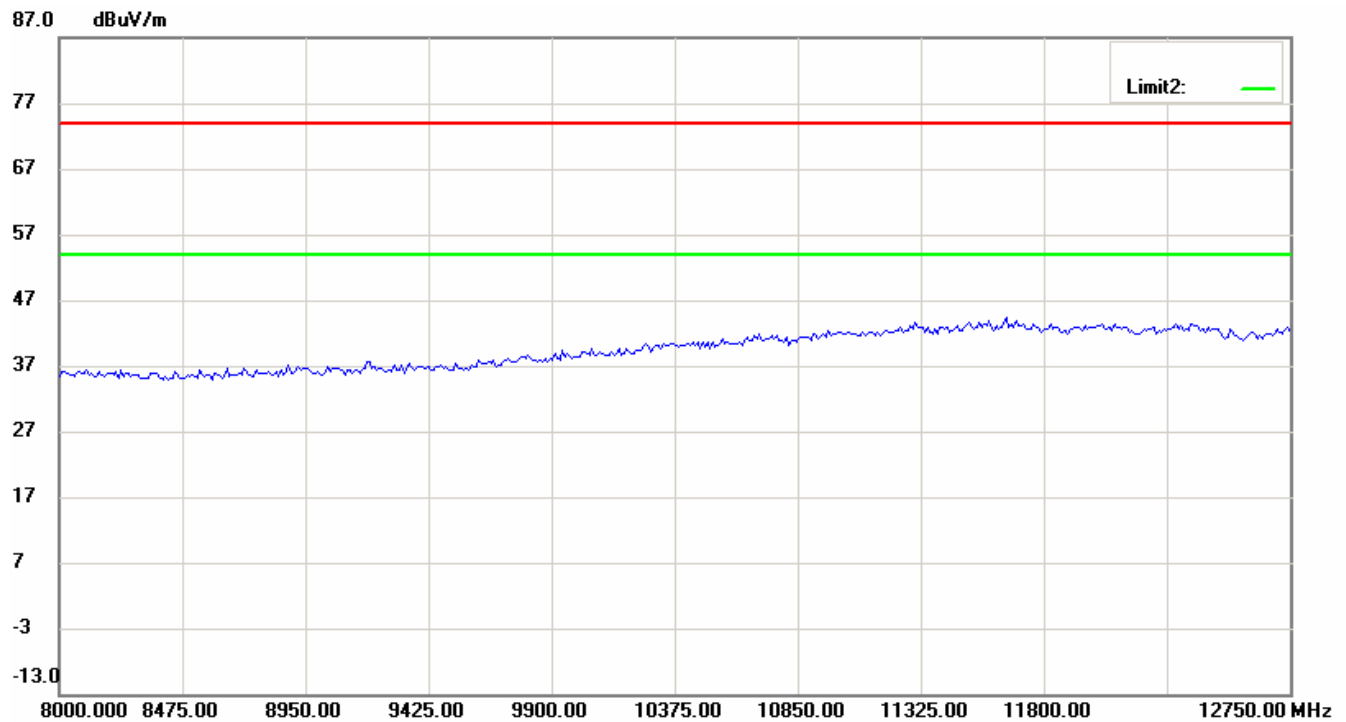


Up Line: Peak Limit Line
Down Line: Ave Limit Line

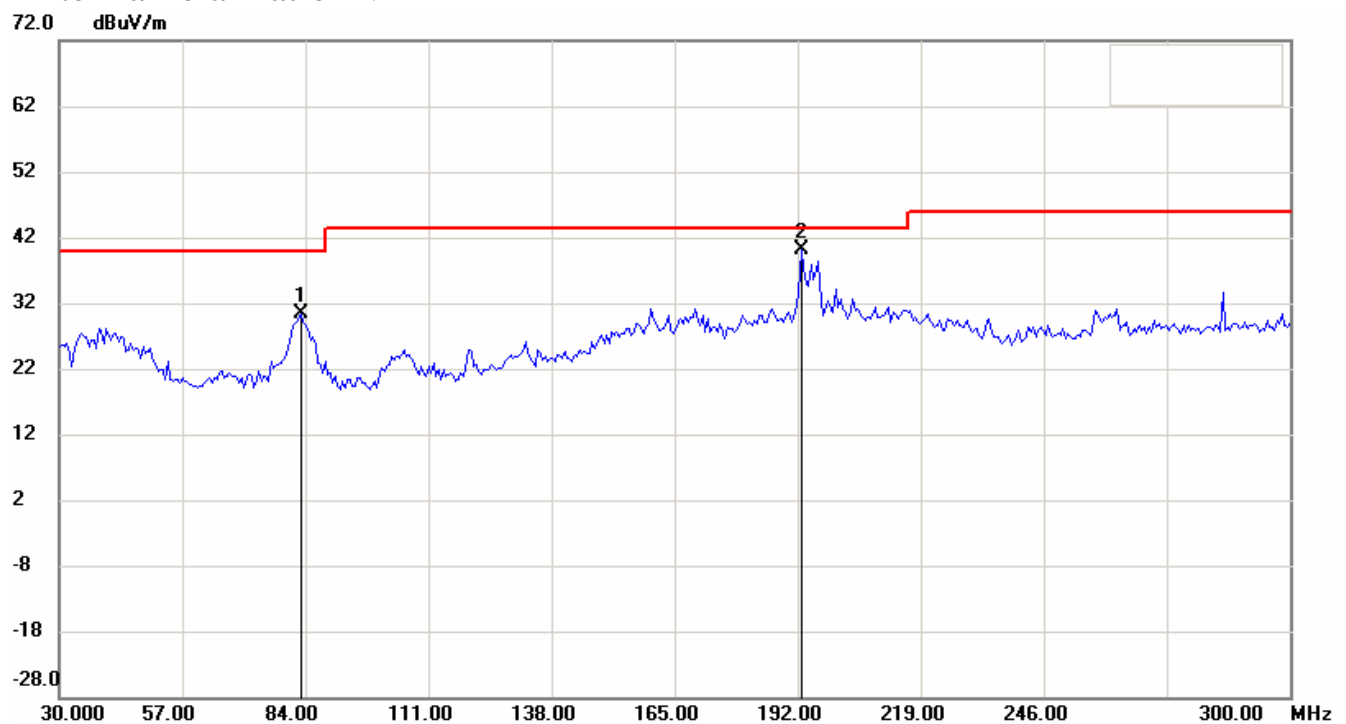
Note:

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: W6D20804-9062-P-15B



Antenna Polarization V



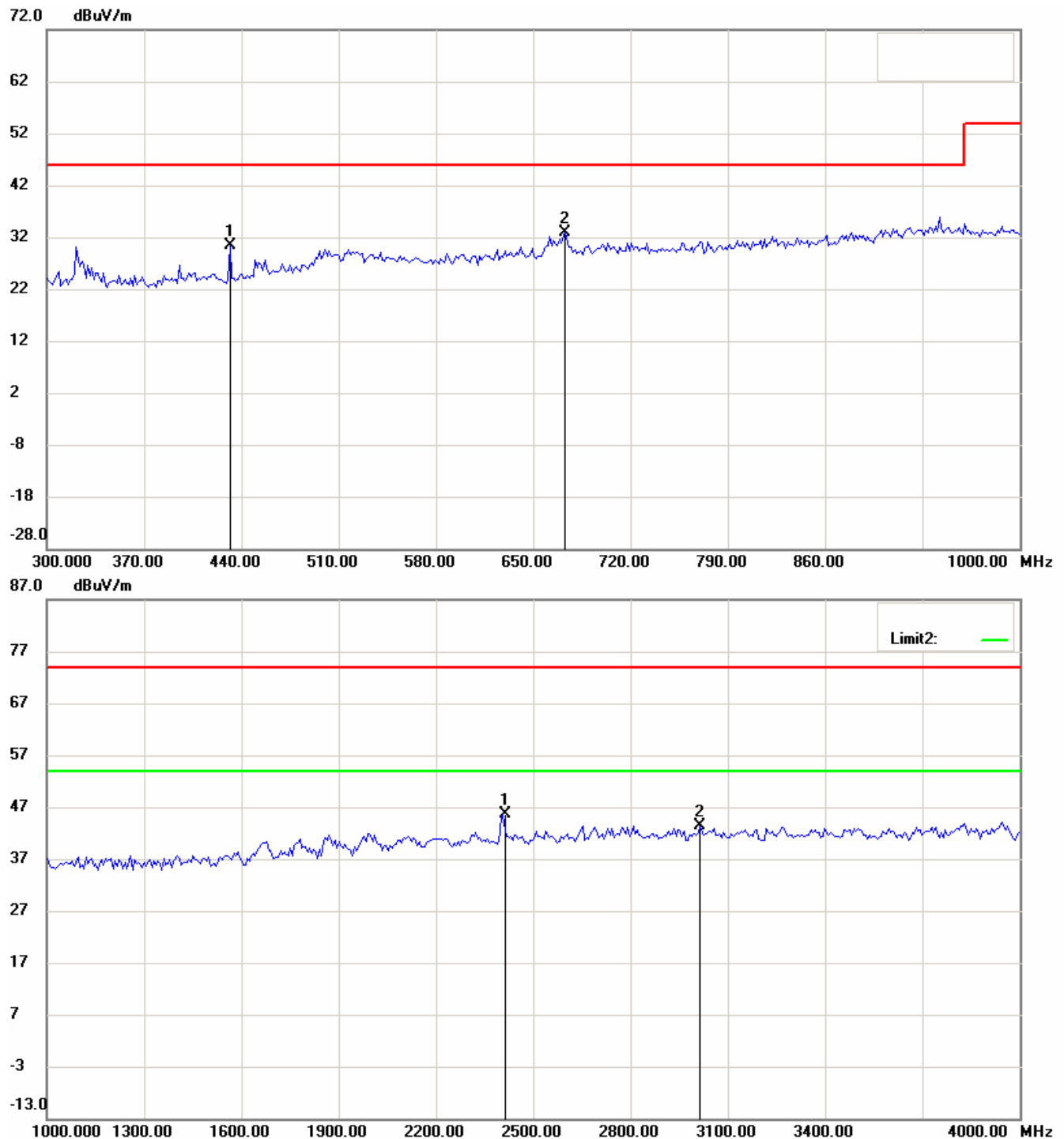
Up Line: Peak Limit Line

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.

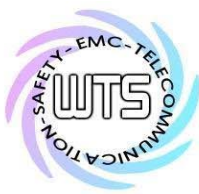
Registration number: W6D20804-9062-P-15B



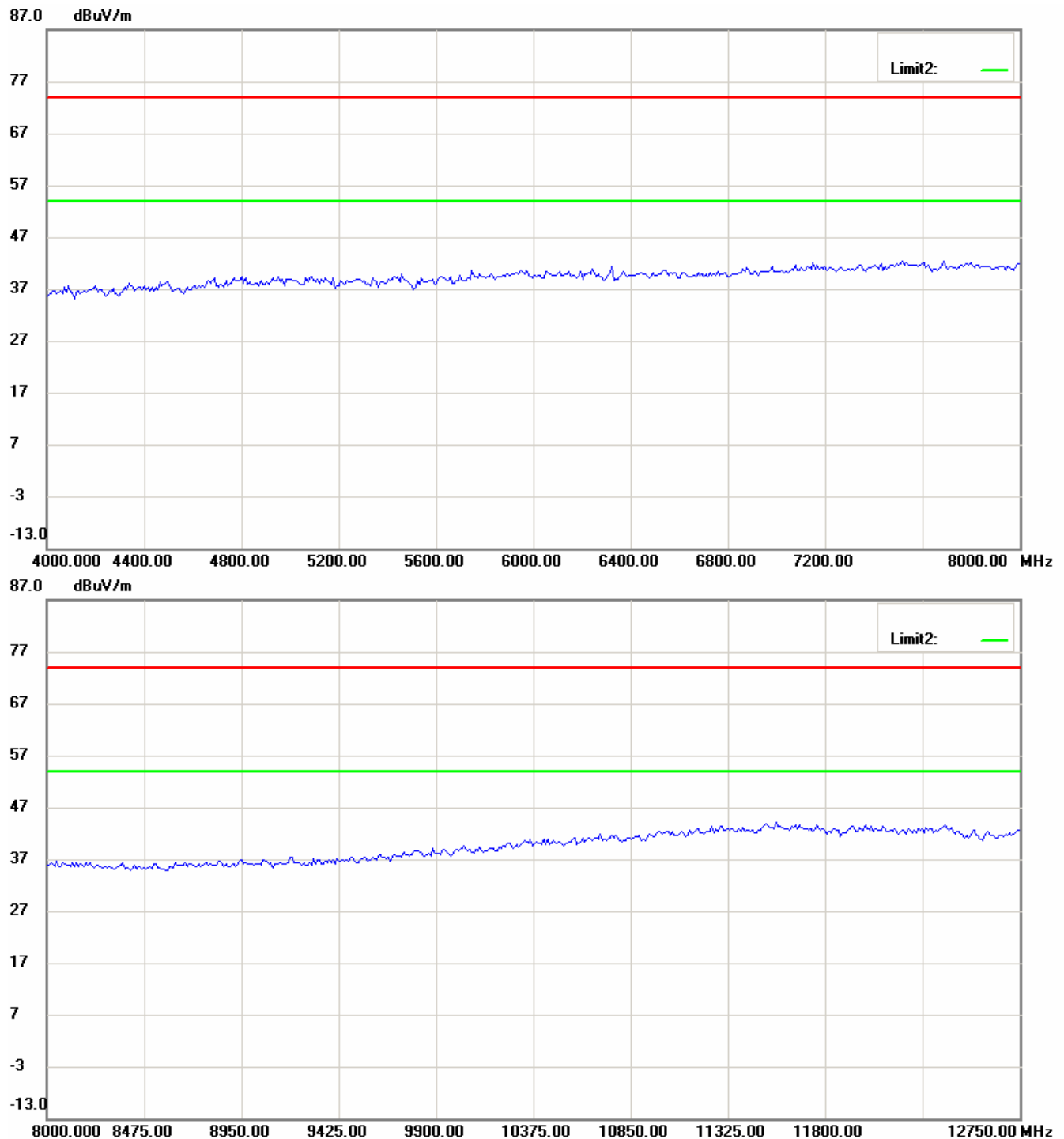
Up Line: Peak Limit Line
Down Line: Ave Limit Line

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: W6D20804-9062-P-15B



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

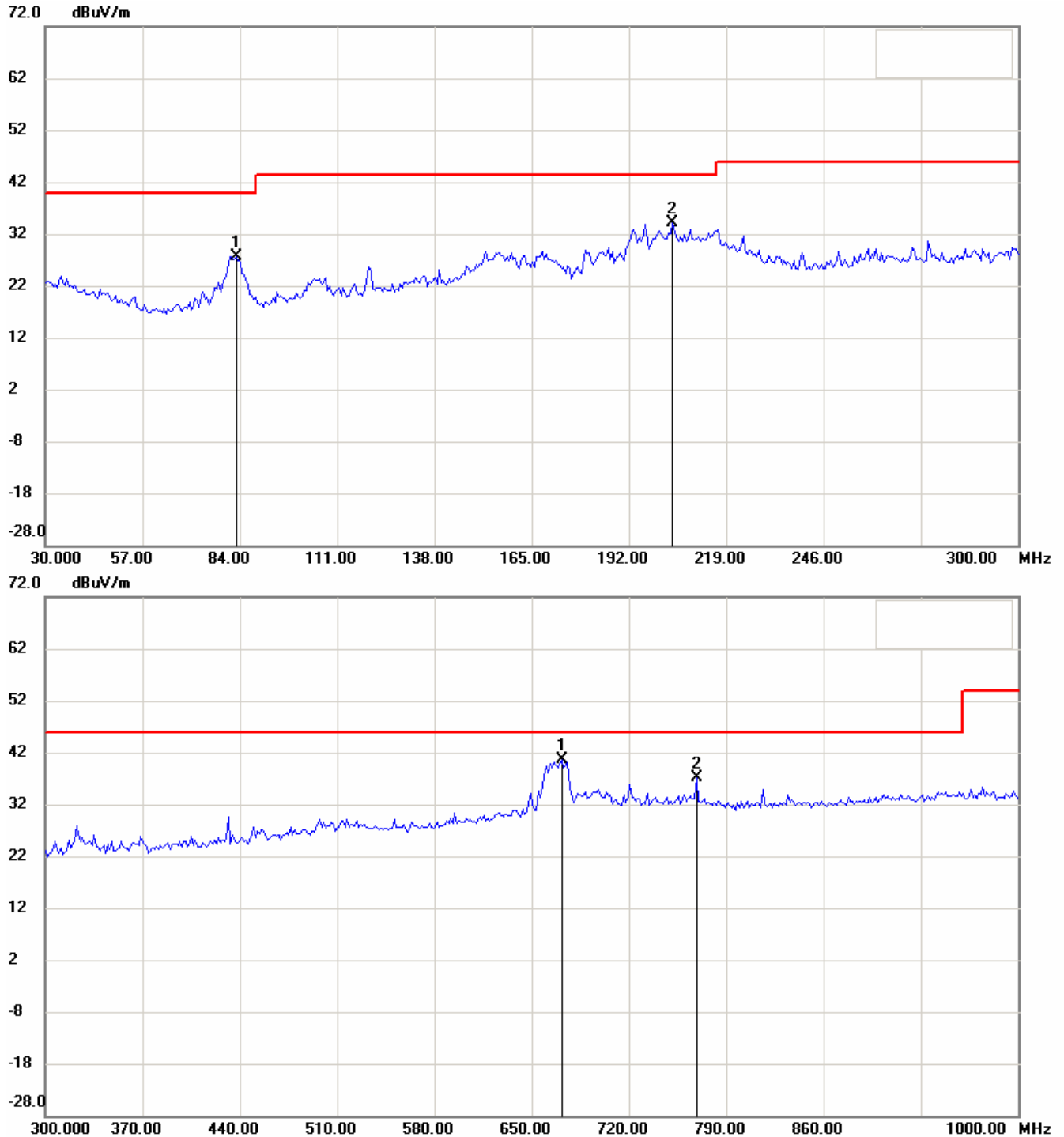
Note:

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: W6D20804-9062-P-15B

CH 078

Antenna Polarization H



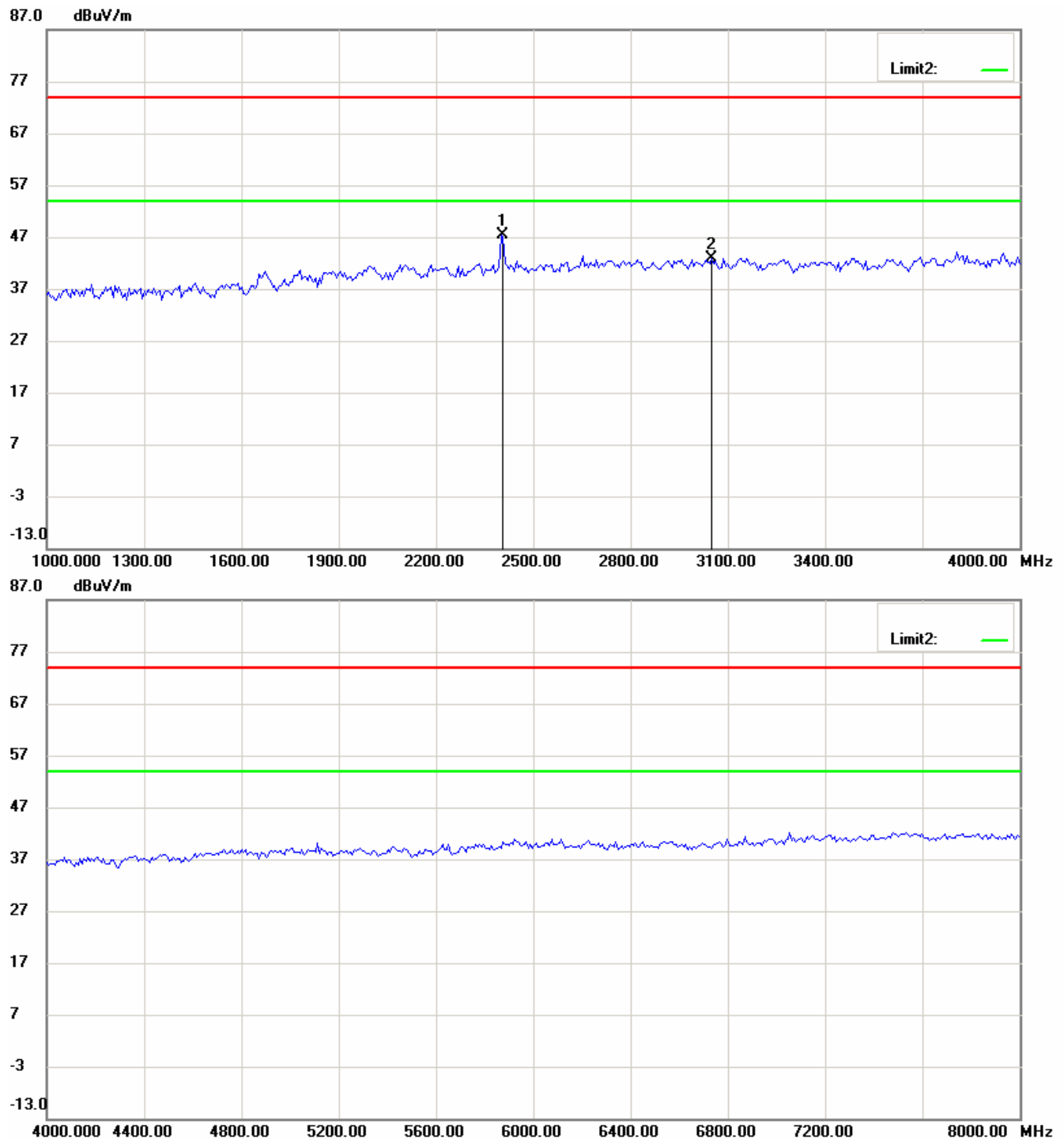
Up Line: Peak Limit Line

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: W6D20804-9062-P-15B

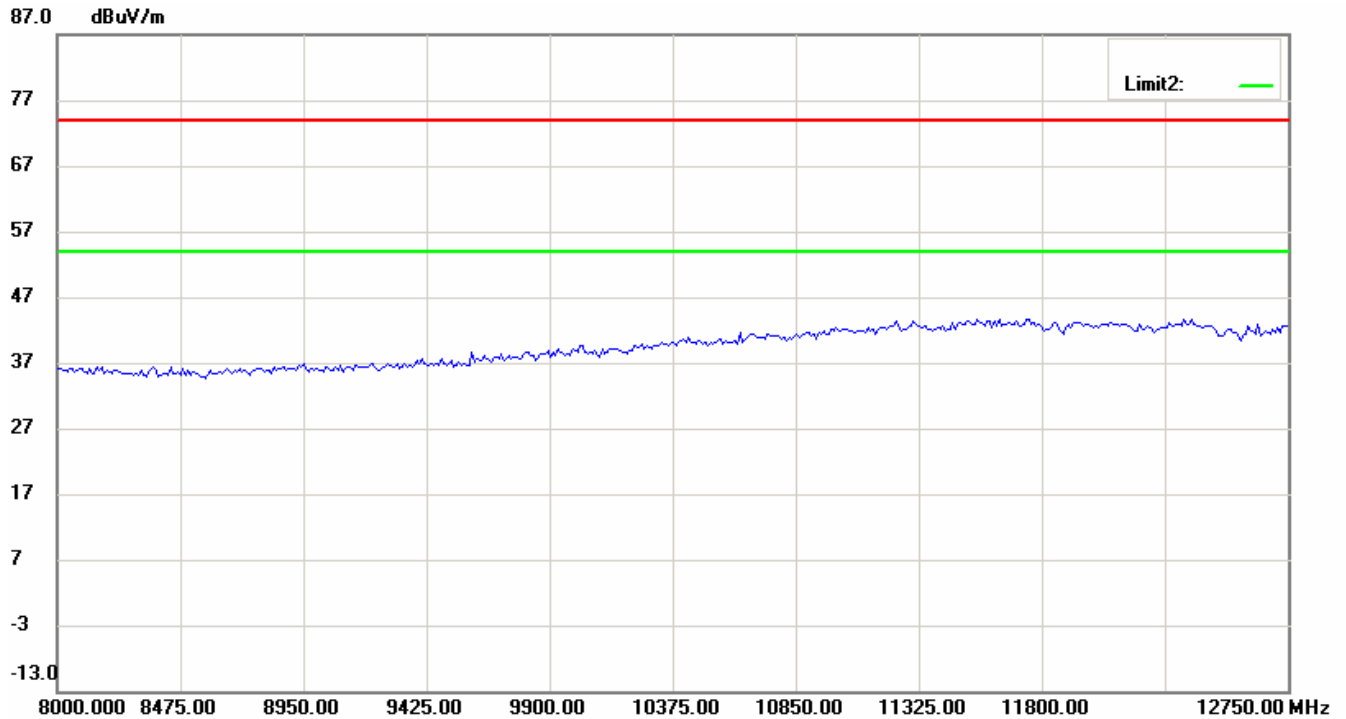


Up Line: Peak Limit Line
Down Line: Ave Limit Line

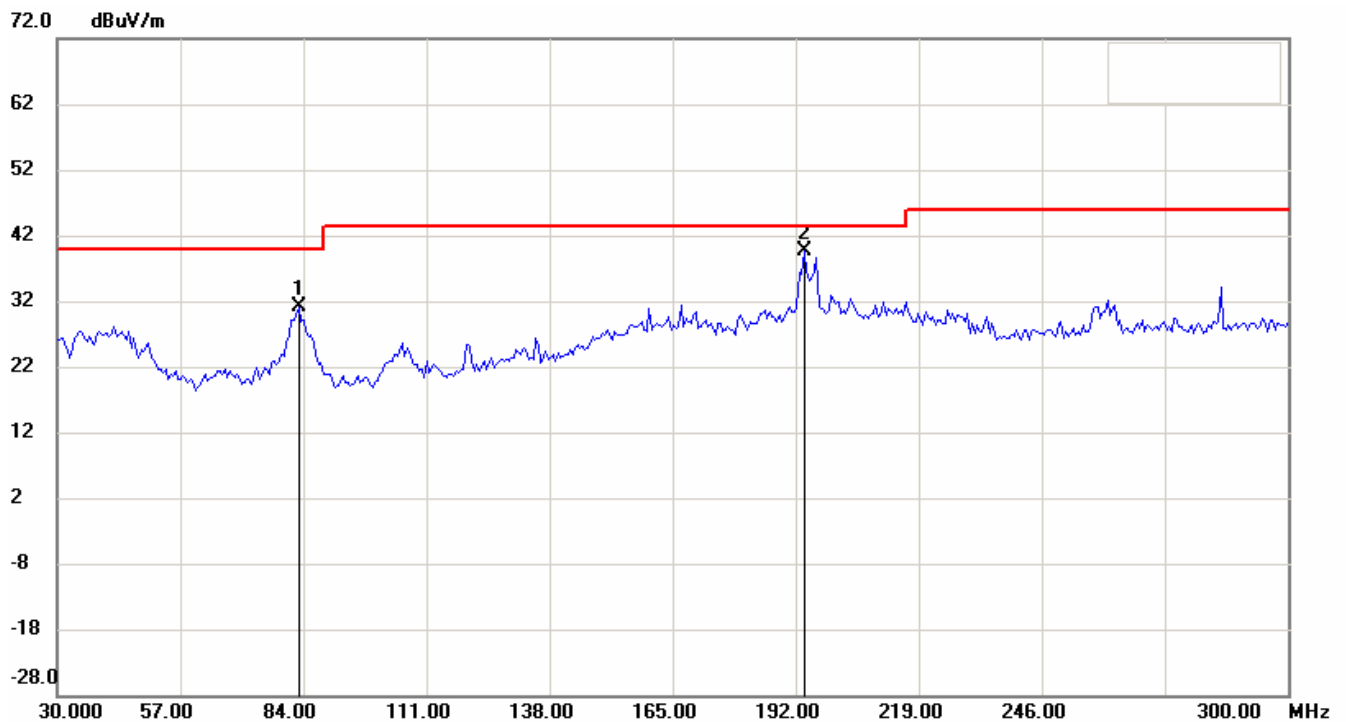
Note:

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: W6D20804-9062-P-15B



Antenna Polarization V



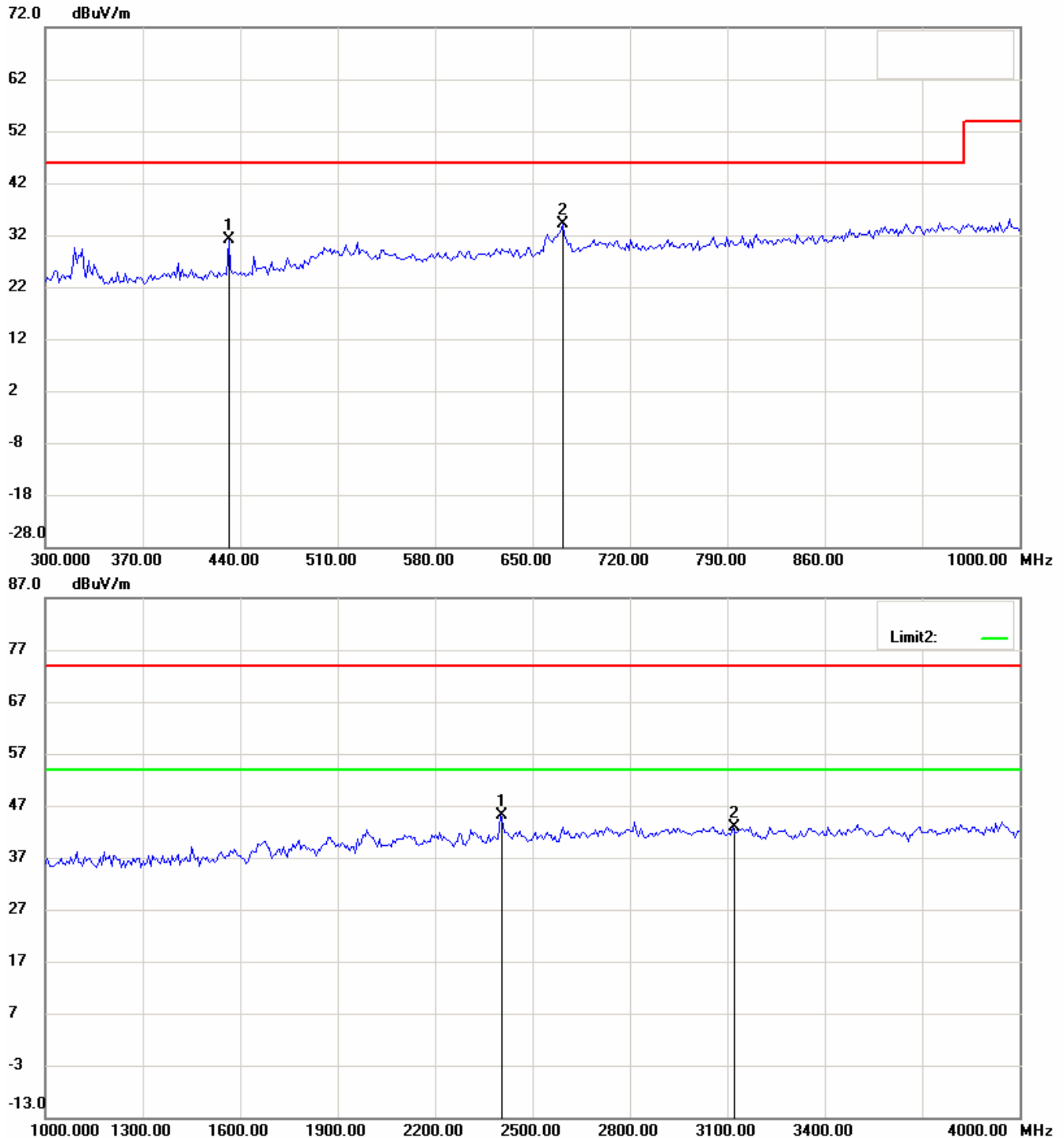
Up Line: Peak Limit Line

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.

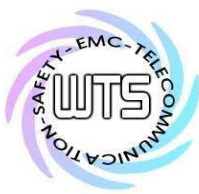
Registration number: W6D20804-9062-P-15B



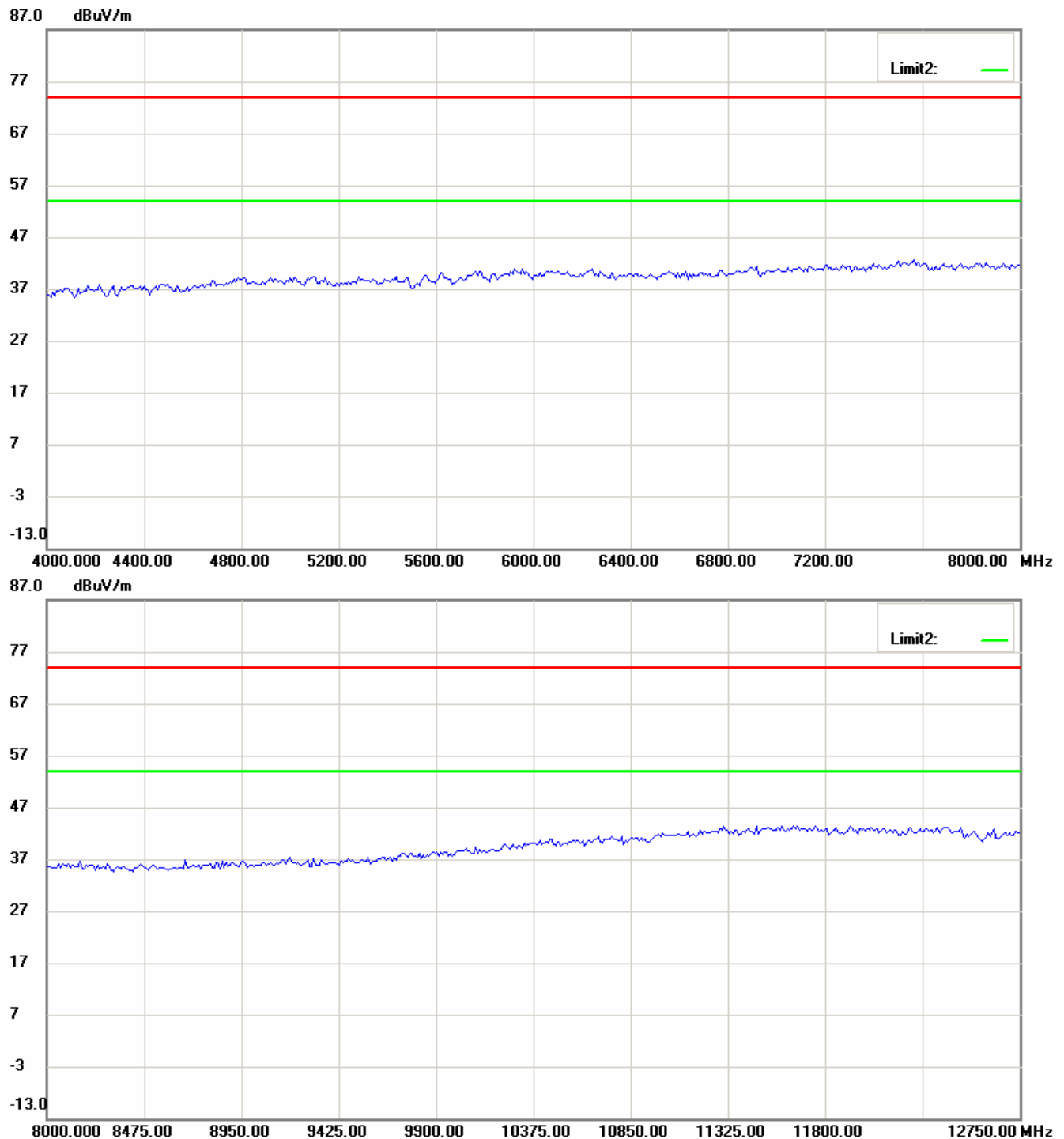
Up Line: Peak Limit Line
Down Line: Ave Limit Line

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: W6D20804-9062-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.

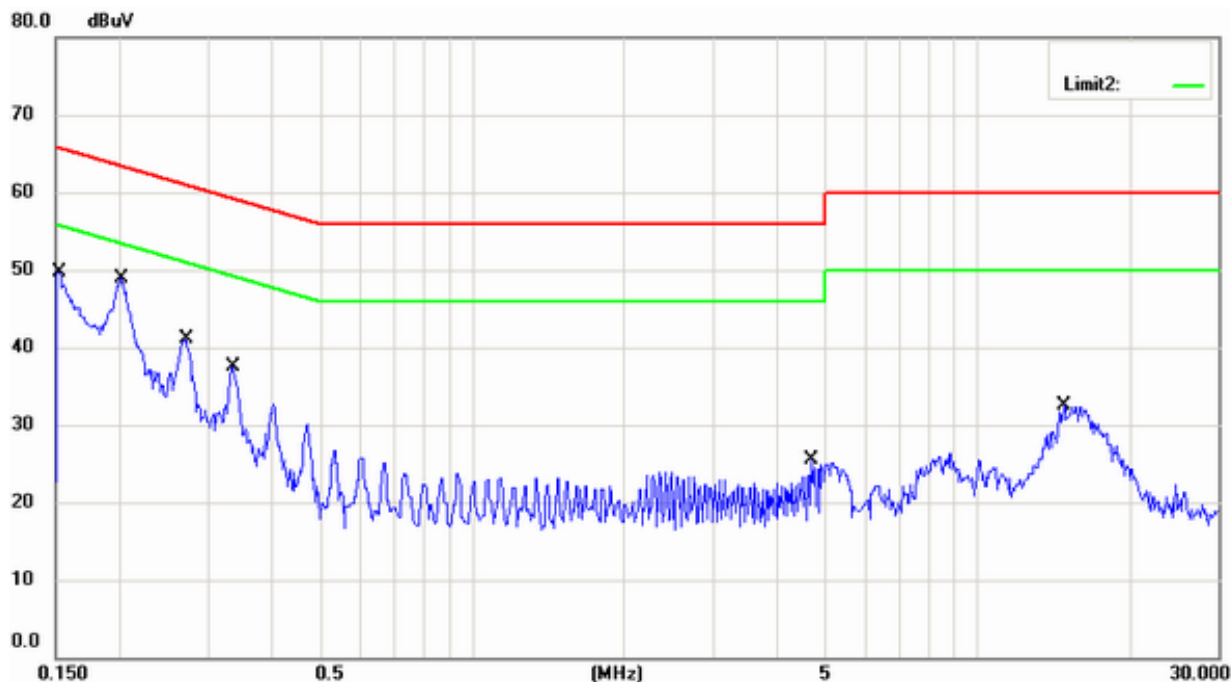


Worldwide Testing Services(Taiwan) Co., Ltd.

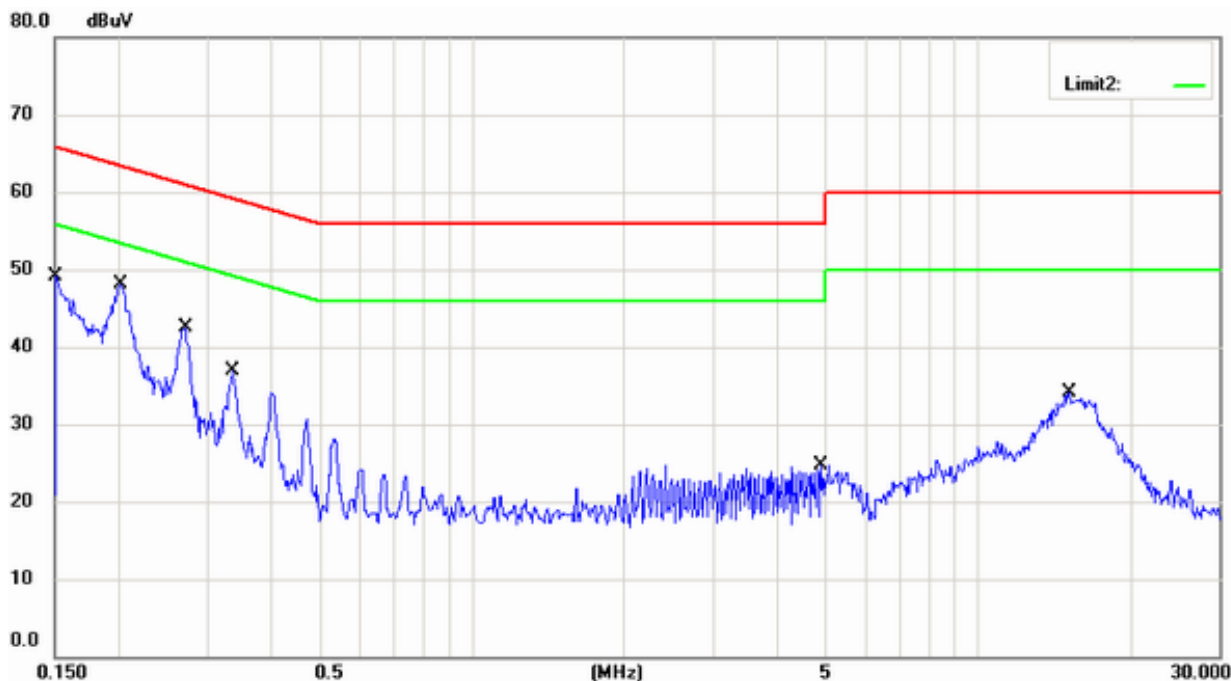
Registration number: W6D20804-9062-P-15B

Conducted Emission

LISN N



LISN L1



Up Line: QP 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 AC conducted test data of this test report.