

FCC PART 15 SUBPART C TEST REPORT

for

Wireless Station for USB Document Cam

Model No.: WS-01

FCC ID: WKP-CSAW-02IP

of

Applicant: IPEVO corp.

**Address: 3F, No.53, Bo-ai Road, Taipei City 100,
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.: W6D21301-12971-C-1

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: wtls@wtls-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 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.

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 1.5.

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Specific Conditions:

Usage of the hereunder tested device in combination with other integrated or external antennas requires at least additional output power measurements, spurious emission measurements, conducted emission measurements (AC supply lines) and radio frequency exposure evaluations for each individual configuration performed, for certification by FCC.

The test sample is able to work according IEEE 802.11 b/g/n.

This report is related to FCC Part 15 C (DSSS and OFDM device).

Tester:

January 25, 2013

Robert Ren

Date

WTS-Lab.

Name

Signature

Technical responsibility for area of testing:

January 25, 2013

Danny Sung

Date

WTS

Name

Signature



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1.2 Testing laboratory

1.2.1 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 : 886-2-66068879

1.2.2 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



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

Name: ./.

Accredited number: ./.

Street: ./.

Town: ./.

Country: ./.

Telephone: ./.

Fax: ./.

1.3 Details of approval holder

Name: IPEVO corp.

Street: 3F, No.53, Bo-ai Road,

Town: Taipei City 100,

Country: Taiwan (R.O.C.)

Telephone: +886-2-5550-8686

Fax: +886-2-2382-0420



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1.4 Application details

Date of receipt of test item: January 23, 2013
Date of test: from November 26, 2012 to January 15, 2013

1.5 General information of Test item

Type of test item: Wireless Station for USB Document Cam
Model Number: WS-01
Brand Name: ./.
Multi-listing model number: ./.
Photos: see Appendix

Technical data

Frequency band: 2.4 GHz – 2.4835 GHz

802.11b, g, n 20MHz

Frequency (ch 1 or A): 2.412 GHz
Frequency (ch 6 or B): 2.437 GHz
Frequency (ch 11 or C): 2.462 GHz

802.11n 40MHz

Frequency (ch 1 or A): 2.422 GHz
Frequency (ch 4 or B): 2.437 GHz
Frequency (ch 7 or C): 2.452 GHz

Number of Channels: 802.11b, g, n 20MHz: 11
802.11n 40MHz: 7

Operation modes: duplex
Modulation Type: DSSS / OFDM
Fixed point-to-point operation: ☐ Yes / ☒ No

Type of Antenna: Chip Antenna
Antenna gain: ANT 1: 2.8 dBi / ANT 2: 0.5 dBi
Directional gain: 4.74 dBi

According to KDB 662911, Unequal antenna gains, with equal transmit powers. For antenna gains given by G_1, G_2, \dots, G_N dBi. If transmit signals are correlated, then Directional gain
$$= 10 \log[(10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_N/20})^2 / N] \text{ dBi}$$
 [Note the “20”s in the denominator of each exponent and the square of the sum of terms; the object is to combine the signal levels coherently.]



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Classification:

Fixed Device	<input type="checkbox"/>
Mobile Device (Human Body distance > 20cm)	<input checked="" type="checkbox"/>
Portable Device (Human Body distance < 20cm)	<input type="checkbox"/>
Modular Radio Device	<input type="checkbox"/>

Unom

Mode A (DSSS)

Mode B (OFDM)

Mode C (OFDM)

Mode D (OFDM)

Power (ch 1 or A):	Conducted: 19.03 dBm
Power (ch 4 or B):	Conducted: 18.07 dBm
Power (ch 7 or C):	Conducted: 17.21 dBm



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ANT 2

Mode A (DSSS)

Power (ch 1 or A): Conducted: 20.23 dBm

Power (ch 6 or B): Conducted: 18.53 dBm

Power (ch 11 or C): Conducted: 17.58 dBm

Mode B (OFDM)

Power (ch 1 or A): Conducted: 17.46 dBm

Power (ch 6 or B): Conducted: 16.10 dBm

Power (ch 11 or C): Conducted: 15.12 dBm

Mode C (OFDM)

Power (ch 1 or A): Conducted: 16.62 dBm

Power (ch 6 or B): Conducted: 15.98 dBm

Power (ch 11 or C): Conducted: 15.11 dBm

Mode D (OFDM)

Power (ch 1 or A): Conducted: 16.62 dBm

Power (ch 4 or B): Conducted: 15.92 dBm

Power (ch 7 or C): Conducted: 15.49 dBm

Combine	mW			dBm		
	Ch Low	Ch Mid	Ch High	Ch Low	Ch Mid	Ch High
802.11b	294.67	190.14	148.9	24.69	22.79	21.73
802.11g	148.19	108.50	81.26	21.71	20.35	19.10
802.11n 20MHz	132.19	102	78.03	21.21	20.09	18.92
802.11n 40MHz	125.90	103.20	88	21	20.14	19.44

Manufacturer: (if applicable)

Name: EDSLAB Technologies INC.
Street: 4F, No.150, Sec 2., Nanking E. Rd.,
Town: Taipei City, 10489
Country: Taiwan

1.6 Test standards

Technical standard : FCC RULES PART 15 SUBPART C § 15.247 (2011-10)

Special statement:

1. This test report is based on the original model no. WiDGET (FCC ID: WYRWIDGET).
2. The relevant Circuitry, PCB Layout, Inner element, Function and Appearance of this model number is exactly the same as the original model no. WiDGET. The differences are the approval holder, the model number, the product name, the logo of product and firmware version. Therefore the test result is also based on the original test report no. W6M21211-12880-C-1 without re-testing.



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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 2.5 were ascertained in the course of the tests performed.



2.2 Test environment

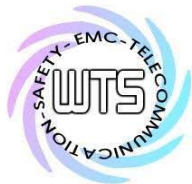
Temperature: 23 °C

Relative humidity content: 20 ... 75 %

Air pressure: 86 ... 103 kPa

Power supply: Adaptor1(AD-050200-US): (I/P:100-240V~/ 50/60Hz/ 0.4A;
O/P: 5 VDC/ 2.0A)
Adaptor2(ZXT136CA-2.0): (I/P:100-240V~/ 50/60Hz/ 0.3A;
O/P: 5 VDC/ 2000mA)
Battery(3.7Vdc/ 3300mAh)

Extreme conditions parameters: ./.



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2.3 Test Equipment List

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	2012/2/21	2013/2/20
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	LCRY0604P1450 8	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	2013/1/7	2014/1/6
ETSTW-RE 043	Log-Periodic Dipole Antenna	HL223	100166	R&S	2012/4/13	2013/4/12

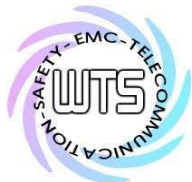


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ETSTW-RE 044	Log-Periodic Antenna	HL050	100094	R&S	2012/4/06	2013/4/05
ETSTW-RE 045	ESA-E SERIES SPECTRUM ANALYZER	E4404B	MY45111242	Agilent	Pre-test Use	
ETSTW-RE 048	Triple Loop Antenna	HXYZ 9170	HXYZ 9170-134	Schwarzbeck	2012/8/28	2013/8/27
ETSTW-RE 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	2012/2/20	2013/2/19
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	N TYPE 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: W6D21301-12971-C-1
FCC ID: WKP-CSAW-02IP

2.4 General Test Procedure

POWER LINE CONDUCTED INTERFERENCE: The procedure used was ANSI STANDARD C63.4-2009 5.2 using a 50 μ H LISN (if necessary). Both lines were observed. The bandwidth of the spectrum analyzer was 10 kHz with an appropriate sweep speed.

RADIATION INTERFERENCE: The test procedure used was according to ANSI STANDARD C63.4-2009 6.4 employing a spectrum analyzer. For investigated frequency is equal to or below 1GHz, the RBW and VBW of the spectrum analyzer was 100 kHz and 100kHz respectively with an appropriate sweep speed. For investigated frequency is above 1GHz, both of RBW and VBW of the spectrum analyzer were 1 MHz with an appropriate sweep speed. The analyzer was calibrated in dB above a microvolt at the output of the antenna.

FORMULA OF CONVERSION FACTORS: The Field Strength at 3m was established by adding the meter reading of the spectrum analyzer (which is set to read in units of dB μ V) to the antenna correction factor supplied by the antenna manufacturer. The antenna correction factors are stated in terms of dB.

Example:

Freq (MHz)	METER READING + ACF + CABLE LOSS (to the receiver) = FS
33	20 dB μ V + 10.36 dB + 6 dB = 36.36 dB μ V/m @3m

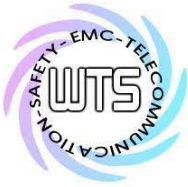
The EUT was placed on a table 80 cm high and with dimensions of 1m by 1.5m (non metallic table) and arranged according to ANSI C63.4-2009 6.3.1. The table used for radiated measurements is capable of continuous rotation. The spectrum was scanned from 30 MHz to the frequency specified as follows:

- (1) If the intentional radiator operates below 10 GHz: to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower.
- (2) If the intentional radiator operates at or above 10 GHz and below 30 GHz: to the fifth harmonic of the highest fundamental frequency or to 100 GHz, whichever is lower.
- (3) If the intentional radiator operates at or above 30 GHz: to the fifth harmonic of the highest fundamental frequency or to 200 GHz, whichever is lower, unless specified otherwise elsewhere in the rules.
- (4) If the intentional radiator contains a digital device, regardless of whether this digital device controls the functions of the intentional radiator or the digital device is used for additional control or function purposes other than to enable the operation of the intentional radiator, the frequency range shall be investigated up to the range specified in paragraphs (a)(1)-(a)(3) of this section or the range applicable to the digital device, as shown in paragraph (b)(1) of this Section, whichever is the higher frequency range of investigation.

For hand-held devices, a exploratory test was performed with three (3) orthogonal planes to determine the highest emissions.

Measurements were made by Worldwide Testing Services(Taiwan) Co., Ltd. at the registered open field test site located at No.5-1, Lishui, Shuang Sing Village, Wanli Dist., New Taipei City 207, Taiwan (R.O.C.). The Registration Number: 930600.

When an emission was found, the table was rotated to produce the maximum signal strength. At this point, the antenna was raised and lowered from 1m to 4m. The antenna was placed in both the horizontal and vertical planes.



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When the radiated emission limits are expressed in terms of the average value of the emission, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum value.

The formula is as follows:

Average = Peak + Duty Factor

Duty Factor = $20 \log (\text{dwell time}/T)$

T = 100ms when the pulse train period is over 100 ms or the period of the pulse train.

Modified Limits for peak according to 15.35 (b) = Max Permitted average Limits + 20dB

ANSI STANDARD C63.4-2009 10.2.7: Any measurements that utilize special test software shall be indicated and referenced in the test report. During testing, test software 'EZ EMC' was used for setting up different operation modes.



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FCC ID: WKP-CSAW-02IP

3 Test results (enclosure)

TEST CASE	Para. Number	Required	Test passed	Test failed
Peak Output Power	15.247(b)(3)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Equivalent isotropically radiated Power	15.247(b)(3)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Spurious Emissions radiated – Transmitter operating	15.247(c): 15.209	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Band Edge Measurement	15.247(c)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Minimum 6 dB Bandwidth	15.247(a)(2)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Peak Power Spectral Density	15.247(d)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Radiated Emission from Digital Part	15.109	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Power Line Conducted Emission	15.207	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Note:

1. This EUT incorporates a MIMO function with IEEE 802.11b, 802.11g, and 802.11n. Physically, this EUT includes two transmitters and two receivers with two incoherent streams. This device uses multiplexing and also employ cyclic delay diversity to improve range and throughput, and this device simultaneously operates on two adjacent channels.
2. This EUT is 2*2 spatial MIMO (2Tx&2Rx) without beam forming function. That operates dual chain configuration. The Pre-test was performed to determine the worst case mode from all possible combinations between all available modulations, data rates, bandwidths, and spatial stream modes.
3. The detail of chosen mode for full testing are as below:

Mode	Available channel	Chosen Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11b	1 to 11	1,6,11	DSSS	DBPSK	1
802.11g	1 to 11	1,6,11	OFDM	BPSK	6
802.11n (20MHz)	1 to 11	1,6,11	OFDM	BPSK	6.5
802.11n (40MHz)	1 to 7	1,4,7	OFDM	BPSK	13.5



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3.1 Peak Output Power (transmitter)

FCC Rule: 15.247(b)(3)

This measurement applies to equipment with an integral antenna and to equipment with an antenna connector and equipped with an antenna as declared by the applicant.

The power was measured with modulation (declared by the applicant).

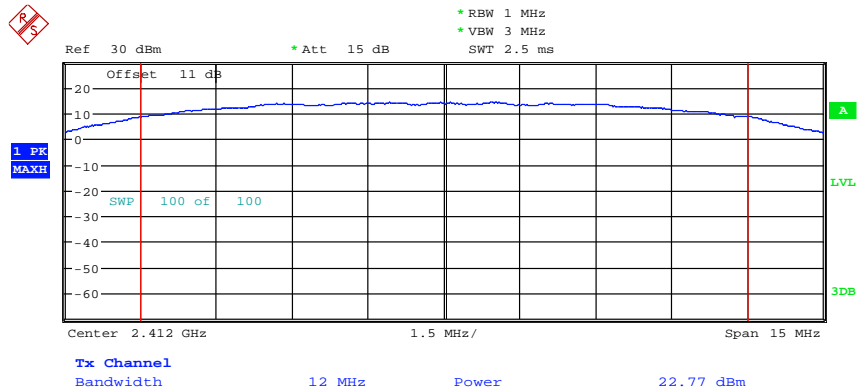
ANT 1	mW			dBm		
	Ch Low	Ch Mid	Ch High	Ch Low	Ch Mid	Ch High
802.11b	189.23	118.85	91.62	22.77	20.75	19.62
802.11g	92.47	67.76	48.75	19.66	18.31	16.88
802.11n 20MHz	82.99	62.37	45.6	19.19	17.95	16.59
802.11n 40MHz	79.98	64.12	52.6	19.03	18.07	17.21
ANT 2	mW			dBm		
	Ch Low	Ch Mid	Ch High	Ch Low	Ch Mid	Ch High
802.11b	105.44	71.29	57.28	20.23	18.53	17.58
802.11g	55.72	40.74	32.51	17.46	16.10	15.12
802.11n 20MHz	49.20	39.63	32.43	16.92	15.98	15.11
802.11n 40MHz	45.92	39.08	35.40	16.62	15.92	15.49
Combine	mW			dBm		
	Ch Low	Ch Mid	Ch High	Ch Low	Ch Mid	Ch High
802.11b	294.67	190.14	148.9	24.69	22.79	21.73
802.11g	148.19	108.50	81.26	21.71	20.35	19.10
802.11n 20MHz	132.19	102	78.03	21.21	20.09	18.92
802.11n 40MHz	125.90	103.20	88	21	20.14	19.44



Registration number: W6D21301-12971-C-1

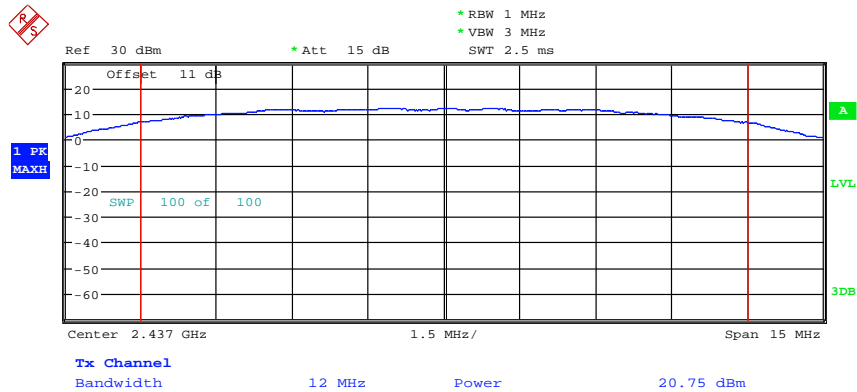
FCC ID: WKP-CSAW-02IP

ANT 1



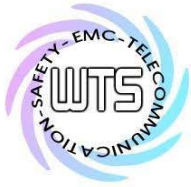
MAX OUTPUT POWER 802.11B CH01

Date: 4.DEC.2012 11:45:42

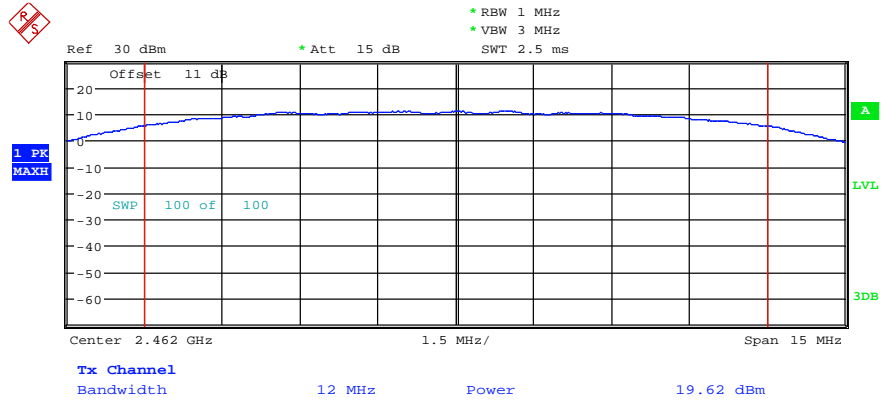


MAX OUTPUT POWER 802.11B CH06

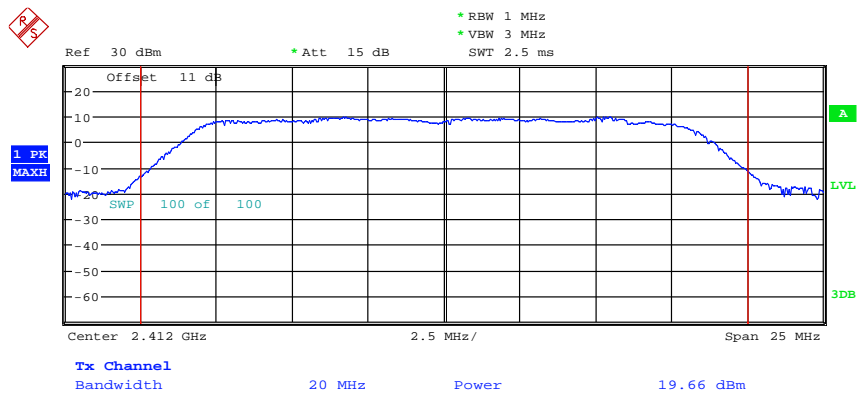
Date: 4.DEC.2012 11:46:44



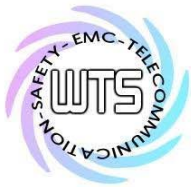
Registration number: W6D21301-12971-C-1
FCC ID: WKP-CSAW-02IP



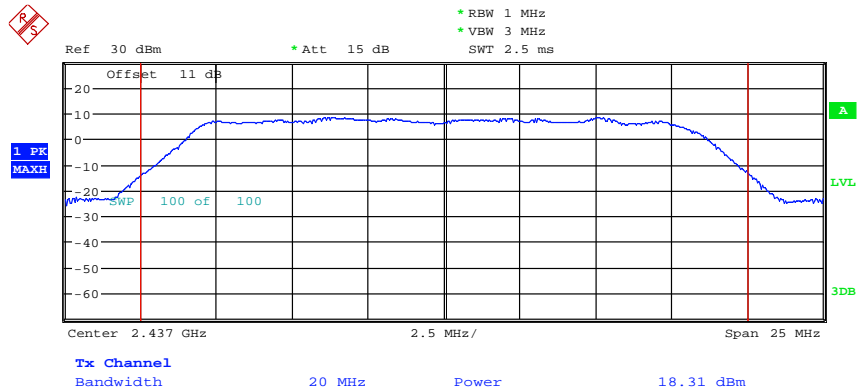
MAX OUTPUT POWER 802.11B CH11
Date: 4.DEC.2012 11:47:18



MAX OUTPUT POWER 802.11G CH01
Date: 4.DEC.2012 11:48:11

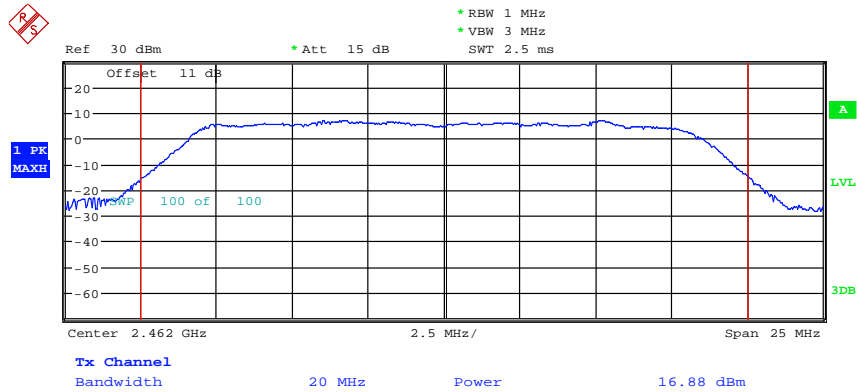


Registration number: W6D21301-12971-C-1
FCC ID: WKP-CSAW-02IP



MAX OUTPUT POWER 802.11G CH06

Date: 4.DEC.2012 11:49:13



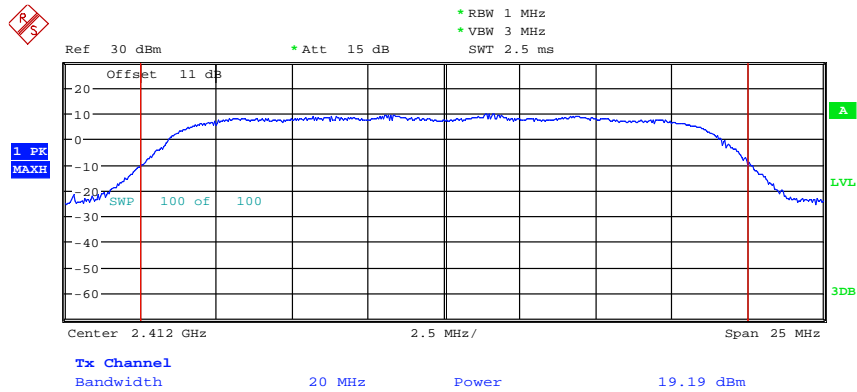
MAX OUTPUT POWER 802.11G CH11

Date: 4.DEC.2012 11:49:59



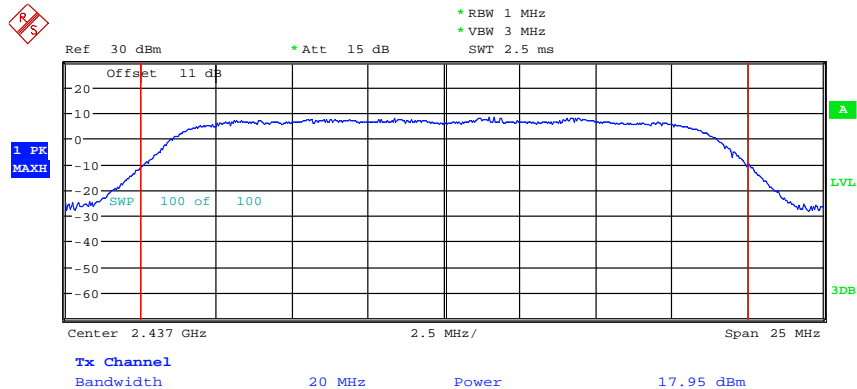
Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1
FCC ID: WKP-CSAW-02IP



MAX OUTPUT POWER 802.11N 20MHZ CH01

Date: 4.DEC.2012 11:50:48

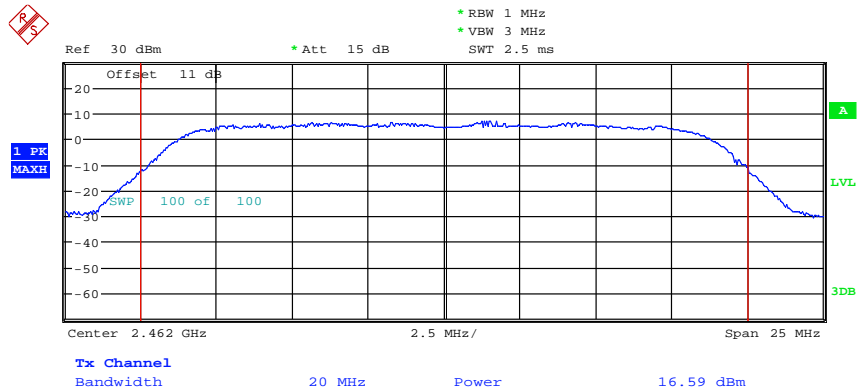


MAX OUTPUT POWER 802.11N 20MHZ CH06

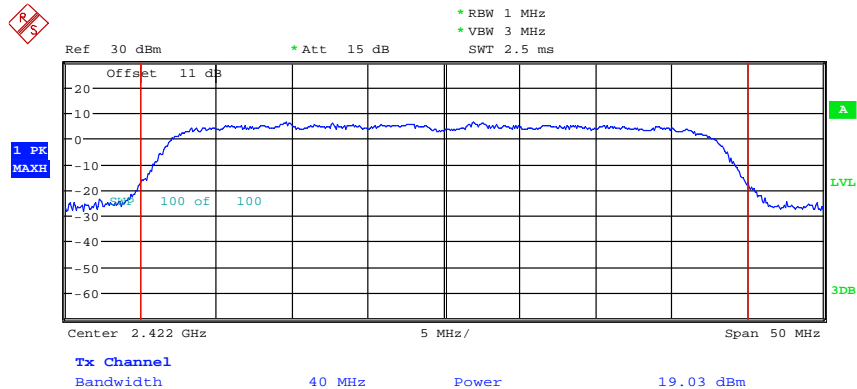
Date: 4.DEC.2012 11:51:33



Registration number: W6D21301-12971-C-1
FCC ID: WKP-CSAW-02IP



MAX OUTPUT POWER 802.11N 20MHZ CH11
Date: 4.DEC.2012 11:52:18

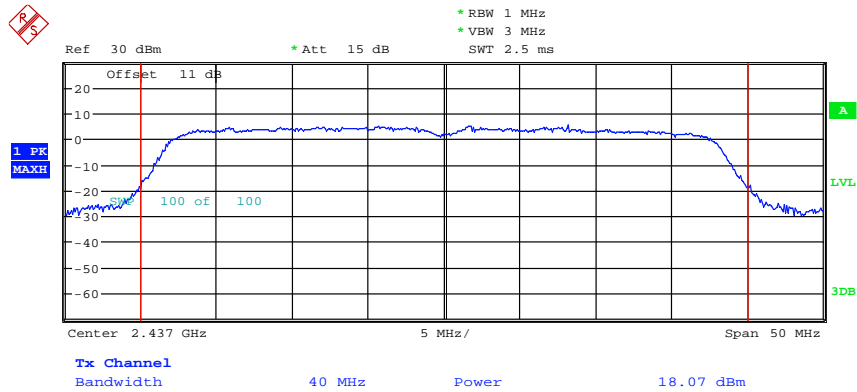


MAX OUTPUT POWER 802.11N 40MHZ CH01
Date: 4.DEC.2012 11:53:26



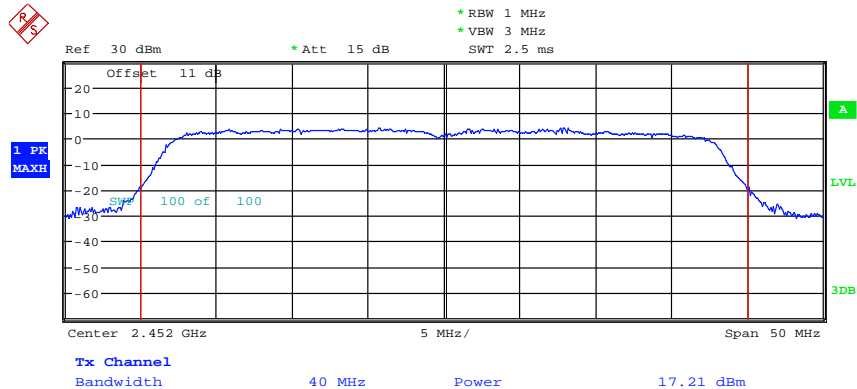
Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1
FCC ID: WKP-CSAW-02IP



MAX OUTPUT POWER 802.11N 40MHZ CH04

Date: 4.DEC.2012 11:54:16



MAX OUTPUT POWER 802.11N 40MHZ CH07

Date: 4.DEC.2012 11:56:00

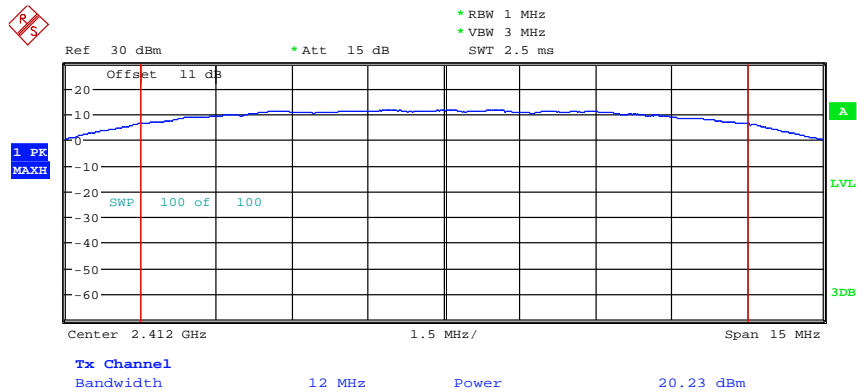


Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

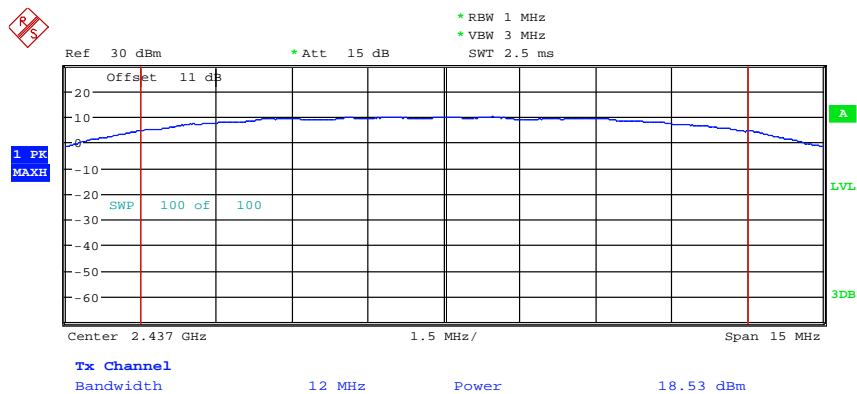
FCC ID: WKP-CSAW-02IP

ANT 2



MAX OUTPUT POWER 802.11B CH01

Date: 4.DEC.2012 11:26:44

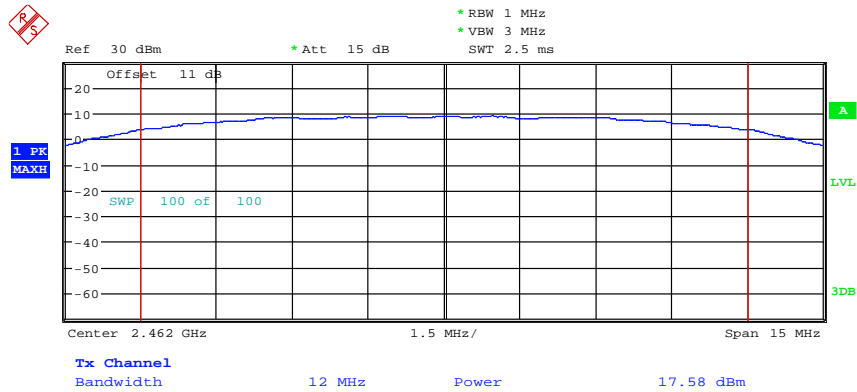


MAX OUTPUT POWER 802.11B CH06

Date: 4.DEC.2012 11:30:03

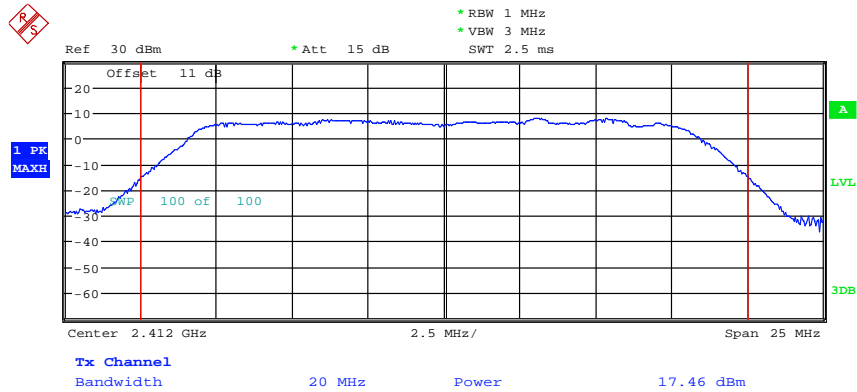


Registration number: W6D21301-12971-C-1
FCC ID: WKP-CSAW-02IP



MAX OUTPUT POWER 802.11B CH11

Date: 4.DEC.2012 11:31:13

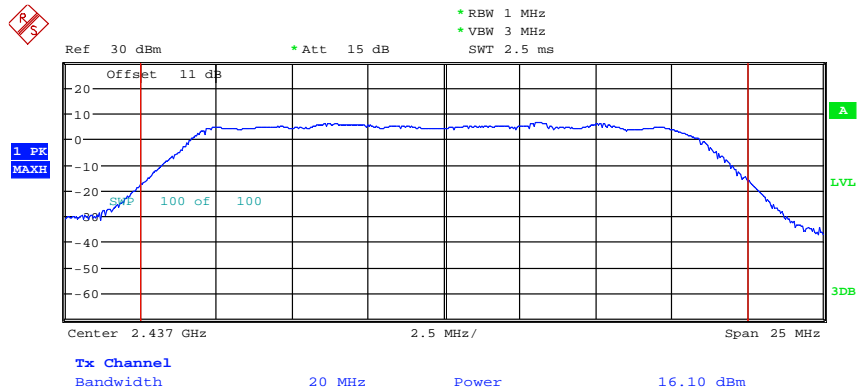


MAX OUTPUT POWER 802.11G CH01

Date: 4.DEC.2012 11:32:11

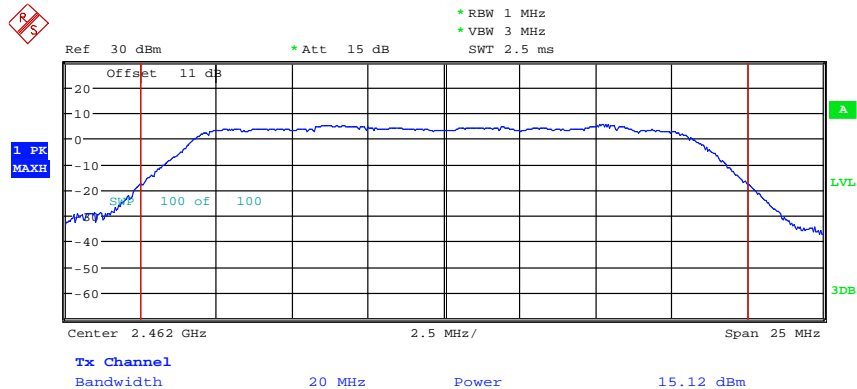


Registration number: W6D21301-12971-C-1
FCC ID: WKP-CSAW-02IP



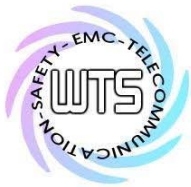
MAX OUTPUT POWER 802.11G CH06

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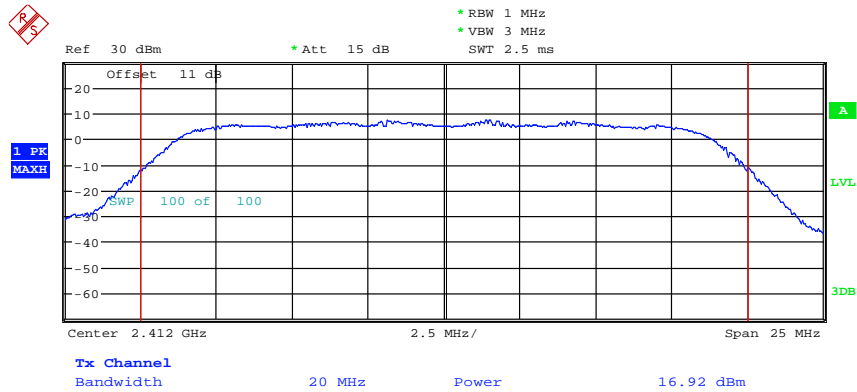


MAX OUTPUT POWER 802.11G CH11

Date: 4.DEC.2012 11:34:04

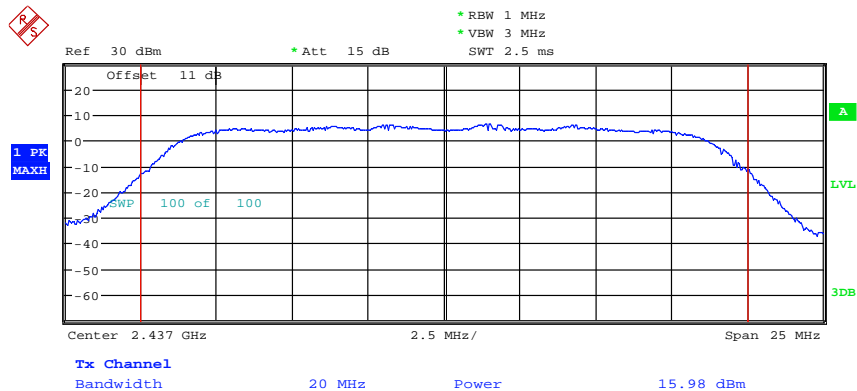


Registration number: W6D21301-12971-C-1
FCC ID: WKP-CSAW-02IP



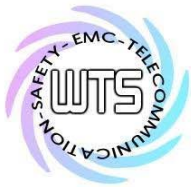
MAX OUTPUT POWER 802.11N 20MHZ CH01

Date: 4.DEC.2012 11:35:01



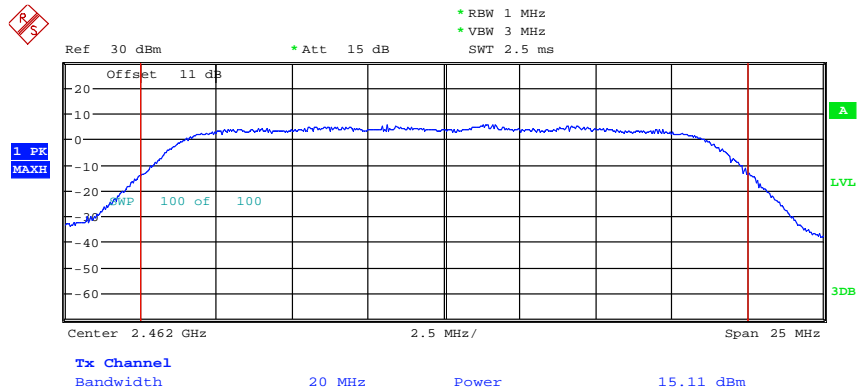
MAX OUTPUT POWER 802.11N 20MHZ CH06

Date: 4.DEC.2012 11:35:58



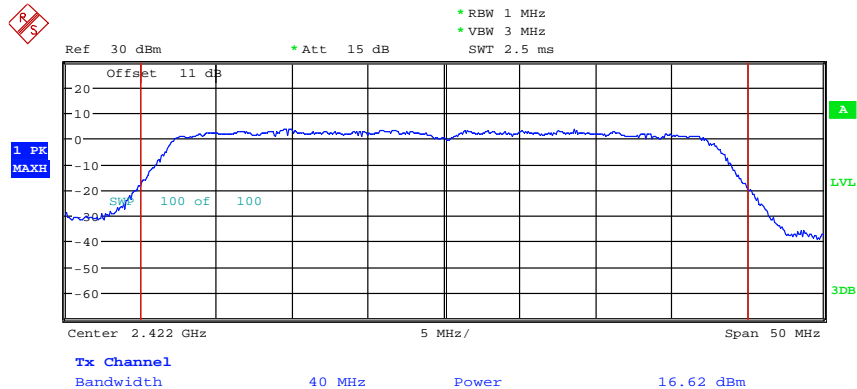
Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1
FCC ID: WKP-CSAW-02IP



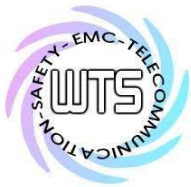
MAX OUTPUT POWER 802.11N 20MHZ CH11

Date: 4.DEC.2012 11:36:55

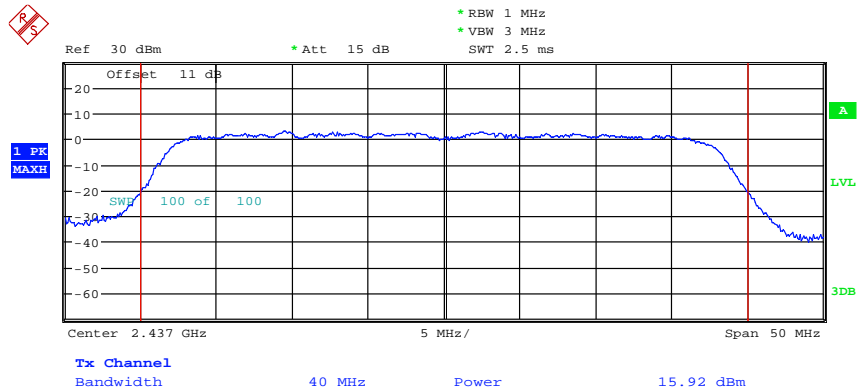


MAX OUTPUT POWER 802.11N 40MHZ CH01

Date: 4.DEC.2012 11:39:02

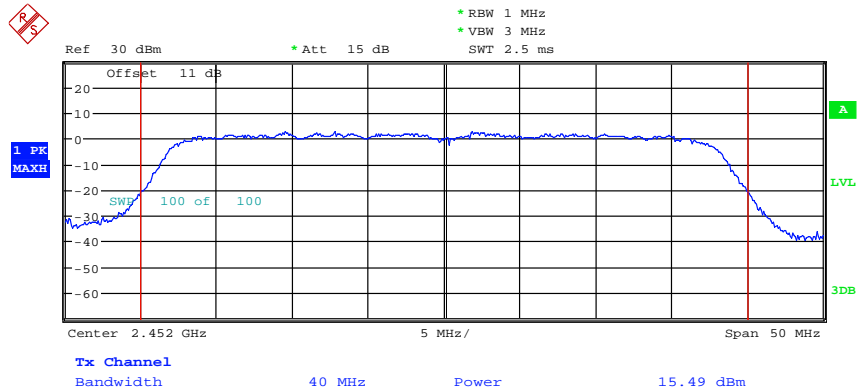


Registration number: W6D21301-12971-C-1
FCC ID: WKP-CSAW-02IP



MAX OUTPUT POWER 802.11N 40MHZ CH04

Date: 4.DEC.2012 11:39:45



MAX OUTPUT POWER 802.11N 40MHZ CH07

Date: 4.DEC.2012 11:41:17



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

Limits:

Frequency MHz	Power dBm
902 - 928	30
2400 – 2483.5	30
5725 – 5850	30

In case of employing transmitter antennas having antenna gain > 6 dBi and using fixed point-to point operation consider §15.247 (b)(4)

Test equipment used: ETSTW-RE 055, ETSTW-RE 050, ETSTW-RE 073, ETSTW-RE 074



Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

3.2 Equivalent isotropic radiated power

FCC Rule: 15.247(b)(3)

EIRP = max. conducted output power + antenna gain

EIRP = 22.77 dBm + 4.74 dBi

= 27.51 dBm

Limit: EIRP = +36 dBm for Antenna gain <6dBi

Test equipment used: ETSTW-RE 055

3.3 RF Exposure Compliance Requirements

FCC OET Bulletin 65 Edition 97.01 determines the equations for predicting RF fields and applicable limits.

The prediction for power density in the far-field but will over-predict power density in the near field, where it could be used for walking a “worst case” or conservative prediction.

$$S = \frac{PG}{4\pi R^2}$$

S – Power Density

P – Output power ERP

R – Distance

D – Cable Loss

AG – Antenna Gain

Item	Unit	Value	Remarks
P	mW	189.2344	Peak value
D	dB		
AG	dBi	4.74	
G		2.9785	Calculated Value
R	cm	20	Assumed value
S	mW/cm ²	0.1121	Calculated value

Limits:

Limit for General Population / Uncontrolled Exposure	
Frequency (MHz)	Power Density (mW/cm ²)
1500 – 100.000	1.0



Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

3.4 Transmitter Radiated Emissions in Restricted Bands

FCC Rules: 15.247 (c), 15.205, 15.209, 15.35

Radiated emission measurements were performed from 30 MHz to 26500 MHz.

For radiated emission tests, the analyzer setting was as followings:

Frequency \leq 1 GHz, RBW:100 kHz, VBW: 100 kHz (Peak measurements)

Frequency $>$ 1 GHz, RBW: 1 MHz, VBW: 1 MHz (Peak measurements)

Frequency $>$ 1 GHz , RBW:1 MHz , VBW: 10 Hz (Average measurements)

Limits.

For frequencies below 1GHz:

Frequency of Emission (MHz)	Field strength (microvolts/meter)	Field Strength (dB microvolts/meter)
30 - 88	100	40.0
88 - 216	150	43.5
216 - 960	200	46.0
Above	500	54.0

For frequencies above 1GHz (Average measurements).

Guidance on Measurement of Digit Transmission Systems:

“If the emission is pulsed, modify the unit for continuous operation, use the setting shown above, then correct the reading by subtracting the peak-average correction factor, derived from the appropriate duty cycle calculation.”

The correction factor, based on the total channel dwell time in a 100 ms period, may be mathematically applied to a measurement made with an average detector, to further reduce the value.

Duty cycle correction = $20 \log (\text{dwell time} / 100\text{ms})$

Note: No duty cycle correction was added to the reading of this EUT.

Explanation: See attached diagrams in Appendix.



Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

3.5 Spurious Emissions (tx)

Spurious emission was measured with modulation (declared by manufacturer).

In any 100 kHz bandwidth outside the frequency band in which the intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in § 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c))

FCC Rule: 15.247(c), 15.35

For out of band emissions that are close to or that exceed the 20 dB attenuation requirement described in the specification, radiated measurements were performed at a 3 m separation distance to determine whether these emissions complied with the general radiated emission requirement.

Limits:

For frequencies above 1GHz (Peak measurements).

Modified Limit for peak according to 15.35 (b) = Max Permitted average Limits + 20dB

For frequencies above 1GHz (Average measurements).

Max. reading – 20dB

Max. reading – 20 dB

Guidance on Measurement of Digit Transmission Systems:

“If the emission is pulsed, modify the unit for continuous operation, use the settings shown above, then correct the reading by subtracting the peak-average correction factor, derived from the appropriate duty cycle calculation.”

The correction factor, based on the total channel dwell time in a 100 ms period, may be mathematically applied to a measurement made with an average detector, to further reduce the value.

Duty Cycle correction = $20 \log (\text{dwell time}/100\text{ms})$

Note: No duty cycle correction was added to the reading of EUT.



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

SAMPLE CALCULATION OF LIMIT. All results will be updated by an automatic measuring system in accordance with point 2.3.

Calculation of test results:

Such factors like antenna correction, cable loss, external attenuation etc. are already included in the provided measurement results. This is done by using validated test software and calibrated test system according the accreditation requirements.

The peak and average spurious emission plots was measured with the average limits.

In the Table being listed the critical peak and average value and exhibit the compliance with the above calculated Limits.

If in the column's correction factor states a value then the max. Field strength in the same row is corrected by a value gained from the "Correction Factor".

Summary table with radiated data of the test plots

ANT 1

Mode: 802.11b CH1 Date: 2012/12/1~2012/12/3
 Polarization: Horizontal Temperature: 24 °C Engineer: Vic
 Humidity: 60 %

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
801.7233	16.51	peak	25.40	41.91	46.00	-4.09	80	100
961.1222	18.35	peak	27.55	45.90	54.00	-8.10	325	100

Frequency (MHz)	Reading (dBuV)		Factor (dB)	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.			
4824.0000	42.34	---	-1.31	41.03	---	74.00	54.00	-32.97	295	100
7236.0000	40.27	---	4.20	44.47	---	74.00	54.00	-29.53	55	100
9648.0000	35.25	---	6.56	41.81	---	74.00	54.00	-32.19	350	100
12060.0000	33.08	---	11.56	44.64	---	74.00	54.00	-29.36	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)
203.0060	27.89	peak	12.32	40.21	43.50	-3.29	345	100
961.1222	18.18	peak	27.55	45.73	54.00	-8.27	110	100

Frequency (MHz)	Reading (dBuV)		Factor (dB)	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.			
4825.6510	44.82	---	-1.31	43.51	---	74.00	54.00	-30.49	205	100
7236.0000	40.27	---	4.20	44.47	---	74.00	54.00	-29.53	285	100
9648.0000	34.99	---	6.56	41.55	---	74.00	54.00	-32.45	240	100
12060.0000	33.61	---	11.56	45.17	---	74.00	54.00	-28.83	215	100



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

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)
801.7233	16.73	peak	25.40	42.13	46.00	-3.87	315	100
961.1222	18.54	peak	27.55	46.09	54.00	-7.91	80	100

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4874.0000	41.65	---	-1.15	40.50	---	74.00	54.00	-33.50	185	100
7311.0000	40.25	---	4.33	44.58	---	74.00	54.00	-29.42	345	100
9748.0000	35.50	---	6.81	42.31	---	74.00	54.00	-31.69	285	100
12185.0000	34.09	---	12.36	46.45	---	74.00	54.00	-27.55	50	100

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
249.6593	26.45	peak	13.99	40.44	46.00	-5.56	145	100
961.1222	17.48	peak	27.55	45.03	54.00	-8.97	330	100

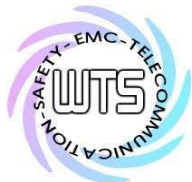
Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4874.0000	41.49	---	-1.15	40.34	---	74.00	54.00	-33.66	135	100
7311.0000	40.22	---	4.33	44.55	---	74.00	54.00	-29.45	255	100
9748.0000	34.46	---	6.81	41.27	---	74.00	54.00	-32.73	165	100
12185.0000	33.62	---	12.36	45.98	---	74.00	54.00	-28.02	285	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)
801.7233	16.35	peak	25.40	41.75	46.00	-4.25	295	100
961.1222	18.67	peak	27.55	46.22	54.00	-7.78	315	100

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4924.0000	40.58	---	-0.98	39.60	---	74.00	54.00	-34.40	275	100
7386.0000	39.89	---	4.63	44.52	---	74.00	54.00	-29.48	145	100
9848.0000	35.70	---	7.08	42.78	---	74.00	54.00	-31.22	80	100
12310.0000	33.27	---	12.38	45.65	---	74.00	54.00	-28.35	225	100



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
249.6593	25.39	peak	13.99	39.38	46.00	-6.62	150	100
961.1222	18.15	peak	27.55	45.70	54.00	-8.30	280	100

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4924.0000	41.50	---	-0.98	40.52	---	74.00	54.00	-33.48	295	100
7386.0000	39.52	---	4.63	44.15	---	74.00	54.00	-29.85	175	100
9848.0000	35.72	---	7.08	42.80	---	74.00	54.00	-31.20	200	100
12310.0000	33.31	---	12.38	45.69	---	74.00	54.00	-28.31	145	100

Mode: 802.11g CH1

Polarization: Horizontal

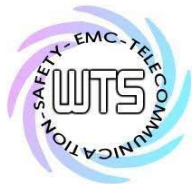
Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
801.7233	16.44	peak	25.40	41.84	46.00	-4.16	345	100
961.1222	18.47	peak	27.55	46.02	54.00	-7.98	10	100

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4824.0000	42.38	---	-1.31	41.07	---	74.00	54.00	-32.93	170	100
7236.0000	40.48	---	4.20	44.68	---	74.00	54.00	-29.32	55	100
9648.0000	35.92	---	6.56	42.48	---	74.00	54.00	-31.52	325	100
12060.0000	32.64	---	11.56	44.20	---	74.00	54.00	-29.80	175	100

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
249.6593	25.39	peak	13.99	39.38	46.00	-6.62	255	100
961.1222	17.95	peak	27.55	45.50	54.00	-8.50	80	100

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4824.0000	44.65	---	-1.31	43.34	---	74.00	54.00	-30.66	325	100
7236.0000	40.45	---	4.20	44.65	---	74.00	54.00	-29.35	185	100
9648.0000	34.82	---	6.56	41.38	---	74.00	54.00	-32.62	185	100
12060.0000	32.97	---	11.56	44.53	---	74.00	54.00	-29.47	55	100



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

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)
801.7233	16.67	peak	25.40	42.07	46.00	-3.93	330	100
961.1222	19.07	peak	27.55	46.62	54.00	-7.38	145	100

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4874.0000	41.65	---	-1.15	40.50	---	74.00	54.00	-33.50	155	100
7311.0000	40.04	---	4.33	44.37	---	74.00	54.00	-29.63	245	100
9748.0000	34.81	---	6.81	41.62	---	74.00	54.00	-32.38	265	100
12185.0000	33.19	---	12.36	45.55	---	74.00	54.00	-28.45	135	100

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
249.6593	24.43	peak	13.99	38.42	46.00	-7.58	265	100
961.1222	17.65	peak	27.55	45.20	54.00	-8.80	315	100

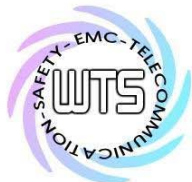
Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4874.0000	41.23	---	-1.15	40.08	---	74.00	54.00	-33.92	285	100
7311.0000	40.26	---	4.33	44.59	---	74.00	54.00	-29.41	50	100
9748.0000	34.90	---	6.81	41.71	---	74.00	54.00	-32.29	200	100
12185.0000	32.83	---	12.36	45.19	---	74.00	54.00	-28.81	145	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)
801.7233	16.98	peak	25.40	42.38	46.00	-3.62	55	100
961.1222	17.92	peak	27.55	45.47	54.00	-8.53	190	100

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4924.0000	41.72	---	-0.98	40.74	---	74.00	54.00	-33.26	80	100
7386.0000	40.08	---	4.63	44.71	---	74.00	54.00	-29.29	325	100
9848.0000	35.48	---	7.08	42.56	---	74.00	54.00	-31.44	165	100
12310.0000	33.25	---	12.38	45.63	---	74.00	54.00	-28.37	280	100



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
249.6593	26.12	peak	13.99	40.11	46.00	-5.89	245	100
961.1222	17.72	peak	27.55	45.27	54.00	-8.73	330	100

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4924.0000	40.77	---	-0.98	39.79	---	74.00	54.00	-34.21	80	100
7386.0000	40.33	---	4.63	44.96	---	74.00	54.00	-29.04	220	100
9848.0000	35.16	---	7.08	42.24	---	74.00	54.00	-31.76	305	100
12310.0000	32.98	---	12.38	45.36	---	74.00	54.00	-28.64	165	100

Mode: 802.11n 20MHz CH1

Polarization: Horizontal

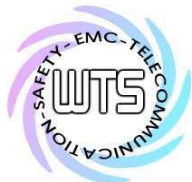
Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
801.7233	16.45	peak	25.40	41.85	46.00	-4.15	355	100
961.1222	18.93	peak	27.55	46.48	54.00	-7.52	270	100

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4824.0000	52.19	---	-1.31	50.88	---	74.00	54.00	-23.12	70	100
7236.0000	40.39	---	4.20	44.59	---	74.00	54.00	-29.41	325	100
9648.0000	35.03	---	6.56	41.59	---	74.00	54.00	-32.41	315	100
12060.0000	33.23	---	11.56	44.79	---	74.00	54.00	-29.21	285	100

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
249.6593	26.40	peak	13.99	40.39	46.00	-5.61	245	100
961.1222	17.97	peak	27.55	45.52	54.00	-8.48	190	100

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4817.6350	53.28	---	-1.33	51.95	---	74.00	54.00	-22.05	215	100
7236.0000	40.83	---	4.20	45.03	---	74.00	54.00	-28.97	75	100
9648.0000	34.91	---	6.56	41.47	---	74.00	54.00	-32.53	165	100
12060.0000	33.30	---	11.56	44.86	---	74.00	54.00	-29.14	285	100



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

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)
801.7233	16.54	peak	25.40	41.94	46.00	-4.06	325	100
961.1222	18.60	peak	27.55	46.15	54.00	-7.85	65	100

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4874.0000	41.79	---	-1.15	40.64	---	74.00	54.00	-33.36	280	100
7311.0000	40.60	---	4.33	44.93	---	74.00	54.00	-29.07	55	100
9748.0000	34.78	---	6.81	41.59	---	74.00	54.00	-32.41	190	100
12185.0000	32.78	---	12.36	45.14	---	74.00	54.00	-28.86	275	100

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
249.6593	26.18	peak	13.99	40.17	46.00	-5.83	285	100
961.1222	17.44	peak	27.55	44.99	54.00	-9.01	110	100

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4874.0000	41.76	---	-1.15	40.61	---	74.00	54.00	-33.39	325	100
7311.0000	40.68	---	4.33	45.01	---	74.00	54.00	-28.99	80	100
9748.0000	34.05	---	6.81	40.86	---	74.00	54.00	-33.14	315	100
12185.0000	32.86	---	12.36	45.22	---	74.00	54.00	-28.78	225	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)
801.7233	16.45	peak	25.40	41.85	46.00	-4.15	325	100
961.1222	19.18	peak	27.55	46.73	54.00	-7.27	85	100

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4924.0000	41.39	---	-0.98	40.41	---	74.00	54.00	-33.59	210	100
7386.0000	39.33	---	4.63	43.96	---	74.00	54.00	-30.04	55	100
9848.0000	35.50	---	7.08	42.58	---	74.00	54.00	-31.42	305	100
12310.0000	34.13	---	12.38	46.51	---	74.00	54.00	-27.49	165	100



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
249.6593	26.38	peak	13.99	40.37	46.00	-5.63	285	100
961.1222	18.38	peak	27.55	45.93	54.00	-8.07	165	100

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4924.0000	41.33	---	-0.98	40.35	---	74.00	54.00	-33.65	200	100
7386.0000	39.95	---	4.63	44.58	---	74.00	54.00	-29.42	145	100
9848.0000	35.91	---	7.08	42.99	---	74.00	54.00	-31.01	300	100
12310.0000	33.42	---	12.38	45.80	---	74.00	54.00	-28.20	195	100

ANT 2

Mode: 802.11b CH1

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
801.7233	15.83	peak	25.40	41.23	46.00	-4.77	215	100
961.1222	17.46	peak	27.55	45.01	54.00	-8.99	305	100

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4825.6510	53.20	---	-1.31	51.89	---	74.00	54.00	-22.11	225	100
7236.0000	40.71	---	4.20	44.91	---	74.00	54.00	-29.09	80	100
9648.0000	35.65	---	6.56	42.21	---	74.00	54.00	-31.79	50	100
12060.0000	33.48	---	11.56	45.04	---	74.00	54.00	-28.96	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)
201.0621	25.29	peak	12.37	37.66	43.50	-5.84	255	100
961.1222	16.47	peak	27.55	44.02	54.00	-9.98	135	100

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4817.6350	52.72	---	-1.33	51.39	---	74.00	54.00	-22.61	170	100
7236.0000	40.62	---	4.20	44.82	---	74.00	54.00	-29.18	295	100
9648.0000	34.76	---	6.56	41.32	---	74.00	54.00	-32.68	175	100
12060.0000	33.39	---	11.56	44.95	---	74.00	54.00	-29.05	215	100



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

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)
801.7233	15.54	peak	25.40	40.94	46.00	-5.06	55	100
961.1222	17.20	peak	27.55	44.75	54.00	-9.25	80	100

Frequency (MHz)	Reading (dBuV)		Factor (dB)	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.			
4873.7480	52.63	---	-1.15	51.48	---	74.00	54.00	-22.52	195	100
7311.0000	40.20	---	4.33	44.53	---	74.00	54.00	-29.47	305	100
9748.0000	34.58	---	6.81	41.39	---	74.00	54.00	-32.61	300	100
12185.0000	32.48	---	12.36	44.84	---	74.00	54.00	-29.16	210	100

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
197.1743	26.99	peak	12.52	39.51	43.50	-3.99	245	100
961.1222	16.81	peak	27.55	44.36	54.00	-9.64	315	100

Frequency (MHz)	Reading (dBuV)		Factor (dB)	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.			
4873.7480	52.80	---	-1.15	51.65	---	74.00	54.00	-22.35	175	100
7311.0000	40.36	---	4.33	44.69	---	74.00	54.00	-29.31	350	100
9748.0000	35.94	---	6.81	42.75	---	74.00	54.00	-31.25	275	100
12185.0000	32.85	---	12.36	45.21	---	74.00	54.00	-28.79	50	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)
801.7233	15.29	peak	25.40	40.69	46.00	-5.31	325	100
961.1222	17.88	peak	27.55	45.43	54.00	-8.57	80	100

Frequency (MHz)	Reading (dBuV)		Factor (dB)	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.			
4921.8440	51.74	---	-0.98	50.76	---	74.00	54.00	-23.24	65	100
7386.0000	40.14	---	4.63	44.77	---	74.00	54.00	-29.23	215	100
9848.0000	35.45	---	7.08	42.53	---	74.00	54.00	-31.47	280	100
12310.0000	33.54	---	12.38	45.92	---	74.00	54.00	-28.08	55	100



Worldwide Testing Services(Taiwan) Co., Ltd.

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Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
195.2305	24.81	peak	12.60	37.41	43.50	-6.09	245	100
961.1222	17.00	peak	27.55	44.55	54.00	-9.45	185	100

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4921.8440	52.41	---	-0.98	51.43	---	74.00	54.00	-22.57	145	100
7386.0000	39.60	---	4.63	44.23	---	74.00	54.00	-29.77	90	100
9789.5790	38.03	---	6.87	44.90	---	74.00	54.00	-29.10	245	100
12310.0000	32.71	---	12.38	45.09	---	74.00	54.00	-28.91	195	100

Mode: 802.11g CH1

Polarization: Horizontal

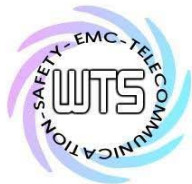
Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
801.7233	15.58	peak	25.40	40.98	46.00	-5.02	265	100
961.1222	17.86	peak	27.55	45.41	54.00	-8.59	320	100

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4824.0000	52.72	---	-1.31	51.41	---	74.00	54.00	-22.59	165	100
7236.0000	40.19	---	4.20	44.39	---	74.00	54.00	-29.61	280	100
9648.0000	34.71	---	6.56	41.27	---	74.00	54.00	-32.73	200	100
12060.0000	32.72	---	11.56	44.28	---	74.00	54.00	-29.72	315	100

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
201.0621	26.07	peak	12.37	38.44	43.50	-5.06	255	100
961.1222	16.93	peak	27.55	44.48	54.00	-9.52	100	100

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4825.6510	53.05	---	-1.31	51.74	---	74.00	54.00	-22.26	285	100
7236.0000	40.26	---	4.20	44.46	---	74.00	54.00	-29.54	165	100
9648.0000	34.92	---	6.56	41.48	---	74.00	54.00	-32.52	325	100
12060.0000	34.55	---	11.56	46.11	---	74.00	54.00	-27.89	175	100



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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)
801.7233	15.41	peak	25.40	40.81	46.00	-5.19	325	100
961.1222	17.59	peak	27.55	45.14	54.00	-8.86	85	100

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4873.7480	52.54	---	-1.15	51.39	---	74.00	54.00	-22.61	280	100
7311.0000	39.90	---	4.33	44.23	---	74.00	54.00	-29.77	165	100
9748.0000	34.45	---	6.81	41.26	---	74.00	54.00	-32.74	320	100
12185.0000	33.00	---	12.36	45.36	---	74.00	54.00	-28.64	285	100

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
203.0060	23.95	peak	12.32	36.27	43.50	-7.23	245	100
961.1222	16.43	peak	27.55	43.98	54.00	-10.02	165	100

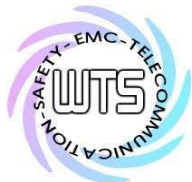
Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4873.7480	52.70	---	-1.15	51.55	---	74.00	54.00	-22.45	285	100
7311.0000	40.26	---	4.33	44.59	---	74.00	54.00	-29.41	165	100
9748.0000	34.89	---	6.81	41.70	---	74.00	54.00	-32.30	200	100
12185.0000	32.44	---	12.36	44.80	---	74.00	54.00	-29.20	145	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)
801.7233	15.36	peak	25.40	40.76	46.00	-5.24	225	100
961.1222	17.77	peak	27.55	45.32	54.00	-8.68	80	100

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4921.8440	51.76	---	-0.98	50.78	---	74.00	54.00	-23.22	195	100
7386.0000	39.69	---	4.63	44.32	---	74.00	54.00	-29.68	340	100
9848.0000	35.42	---	7.08	42.50	---	74.00	54.00	-31.50	245	100
12310.0000	33.25	---	12.38	45.63	---	74.00	54.00	-28.37	55	100



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Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
201.0621	23.54	peak	12.37	35.91	43.50	-7.59	265	100
961.1222	16.81	peak	27.55	44.36	54.00	-9.64	315	100

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4921.8440	52.83	---	-0.98	51.85	---	74.00	54.00	-22.15	175	100
7386.0000	39.60	---	4.63	44.23	---	74.00	54.00	-29.77	280	100
9848.0000	36.64	---	7.08	43.72	---	74.00	54.00	-30.28	85	100
12310.0000	33.32	---	12.38	45.70	---	74.00	54.00	-28.30	325	100

Mode: 802.11n 20MHz CH1

Polarization: Horizontal

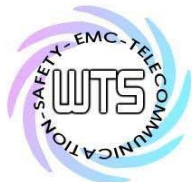
Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
801.7233	15.56	peak	25.40	40.96	46.00	-5.04	315	100
961.1222	17.91	peak	27.55	45.46	54.00	-8.54	75	100

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4824.0000	52.81	---	-1.31	51.50	---	74.00	54.00	-22.50	340	100
7236.0000	40.74	---	4.20	44.94	---	74.00	54.00	-29.06	265	100
9648.0000	35.29	---	6.56	41.85	---	74.00	54.00	-32.15	150	100
12060.0000	33.36	---	11.56	44.92	---	74.00	54.00	-29.08	285	100

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
201.0621	24.34	peak	12.37	36.71	43.50	-6.79	255	100
961.1222	16.90	peak	27.55	44.45	54.00	-9.55	315	100

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4825.6510	53.26	---	-1.31	51.95	---	74.00	54.00	-22.05	75	100
7236.0000	40.31	---	4.20	44.51	---	74.00	54.00	-29.49	145	100
9648.0000	35.02	---	6.56	41.58	---	74.00	54.00	-32.42	245	100
12060.0000	33.39	---	11.56	44.95	---	74.00	54.00	-29.05	155	100



Worldwide Testing Services(Taiwan) Co., Ltd.

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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)
801.7233	16.08	peak	25.40	41.48	46.00	-4.52	55	100
961.1222	17.27	peak	27.55	44.82	54.00	-9.18	285	100

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4873.7480	53.63	---	-1.15	52.48	---	74.00	54.00	-21.52	255	100
7311.0000	39.94	---	4.33	44.27	---	74.00	54.00	-29.73	150	100
9748.0000	34.59	---	6.81	41.40	---	74.00	54.00	-32.60	355	100
12185.0000	32.96	---	12.36	45.32	---	74.00	54.00	-28.68	295	100

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
201.0621	27.34	peak	12.37	39.71	43.50	-3.79	165	100
961.1222	16.74	peak	27.55	44.29	54.00	-9.71	305	100

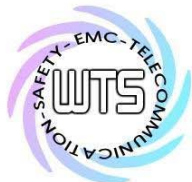
Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4873.7480	52.90	---	-1.15	51.75	---	74.00	54.00	-22.25	215	100
7311.0000	40.14	---	4.33	44.47	---	74.00	54.00	-29.53	75	100
9748.0000	34.40	---	6.81	41.21	---	74.00	54.00	-32.79	135	100
12185.0000	33.50	---	12.36	45.86	---	74.00	54.00	-28.14	255	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)
801.7233	15.65	peak	25.40	41.05	46.00	-4.95	265	100
961.1222	17.53	peak	27.55	45.08	54.00	-8.92	325	100

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4921.8440	51.72	---	-0.98	50.74	---	74.00	54.00	-23.26	135	100
7386.0000	40.77	---	4.63	45.40	---	74.00	54.00	-28.60	60	100
9848.0000	35.43	---	7.08	42.51	---	74.00	54.00	-31.49	315	100
12310.0000	33.36	---	12.38	45.74	---	74.00	54.00	-28.26	265	100



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Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
201.0621	27.37	peak	12.37	39.74	43.50	-3.76	245	100
961.1222	16.65	peak	27.55	44.20	54.00	-9.80	165	100

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4921.8440	52.42	---	-0.98	51.44	---	74.00	54.00	-22.56	55	100
7386.0000	39.32	---	4.63	43.95	---	74.00	54.00	-30.05	285	100
9848.0000	34.85	---	7.08	41.93	---	74.00	54.00	-32.07	275	100
12310.0000	32.38	---	12.38	44.76	---	74.00	54.00	-29.24	135	100

ANT 1+ANT 2

Mode: 802.11n 40MHz CH1

Polarization: Horizontal

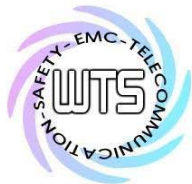
Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
801.7233	16.53	peak	25.40	41.93	46.00	-4.07	145	100
961.1222	19.14	peak	27.55	46.69	54.00	-7.31	330	100

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4825.6510	52.95	---	-1.31	51.64	---	74.00	54.00	-22.36	105	100
7266.0000	41.06	---	4.24	45.30	---	74.00	54.00	-28.70	90	100
9688.0000	36.60	---	6.69	43.29	---	74.00	54.00	-30.71	310	100
12110.0000	34.16	---	11.89	46.05	---	74.00	54.00	-27.95	215	100

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
249.6593	26.86	peak	13.99	40.85	46.00	-5.15	215	100
961.1222	17.98	peak	27.55	45.53	54.00	-8.47	300	100

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4825.6510	53.81	---	-1.31	52.50	---	74.00	54.00	-21.50	285	100
7266.0000	40.81	---	4.24	45.05	---	74.00	54.00	-28.95	145	100
9688.0000	35.69	---	6.69	42.38	---	74.00	54.00	-31.62	305	100
12110.0000	33.96	---	11.89	45.85	---	74.00	54.00	-28.15	165	100



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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)
801.7233	16.27	peak	25.40	41.67	46.00	-4.33	225	100
961.1222	18.16	peak	27.55	45.71	54.00	-8.29	145	100

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4849.6990	53.63	---	-1.23	52.40	---	74.00	54.00	-21.60	200	100
7311.0000	40.11	---	4.33	44.44	---	74.00	54.00	-29.56	310	100
9748.0000	35.47	---	6.81	42.28	---	74.00	54.00	-31.72	285	100
12185.0000	33.69	---	12.36	46.05	---	74.00	54.00	-27.95	50	100

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
249.6593	26.28	peak	13.99	40.27	46.00	-5.73	145	100
961.1222	17.84	peak	27.55	45.39	54.00	-8.61	275	100

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4849.6990	53.06	---	-1.23	51.83	---	74.00	54.00	-22.17	305	100
7311.0000	40.27	---	4.33	44.60	---	74.00	54.00	-29.40	145	100
9748.0000	34.29	---	6.81	41.10	---	74.00	54.00	-32.90	90	100
12185.0000	33.00	---	12.36	45.36	---	74.00	54.00	-28.64	215	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)
801.7233	16.33	peak	25.40	41.73	46.00	-4.27	80	100
961.1222	18.56	peak	27.55	46.11	54.00	-7.89	20	100

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4881.7640	52.18	---	-1.13	51.05	---	74.00	54.00	-22.95	245	100
7356.0000	40.99	---	4.51	45.50	---	74.00	54.00	-28.50	195	100
9808.0000	34.63	---	6.92	41.55	---	74.00	54.00	-32.45	300	100
12260.0000	34.14	---	12.38	46.52	---	74.00	54.00	-27.48	265	100



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Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
249.6593	26.28	peak	13.99	40.27	46.00	-5.73	315	100
961.1222	17.76	peak	27.55	45.31	54.00	-8.69	115	100

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
4881.7640	52.47	---	-1.13	51.34	---	74.00	54.00	-22.66	285	100
7356.0000	40.55	---	4.51	45.06	---	74.00	54.00	-28.94	315	100
9808.0000	35.16	---	6.92	42.08	---	74.00	54.00	-31.92	80	100
12260.0000	34.09	---	12.38	46.47	---	74.00	54.00	-27.53	250	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.**
5. **Measurement uncertainty for 3m measurement: 30-1000 MHz = ± 3.72 dB, 1-18 GHz = ± 5.56 dB, 18-40 GHz = ± 3.46 dB ; Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.**
6. **See attached diagrams in appendix.**

TEST RESULT (Transmitter): The unit DOES meet the FCC requirements.

Test equipment used: ETSTW-RE 003, ETSTW-RE 004, ETSTW-RE 030, ETSTW-RE 111, ETSTW-RE 088, ETSTW-RE 018



Registration number: W6D21301-12971-C-1

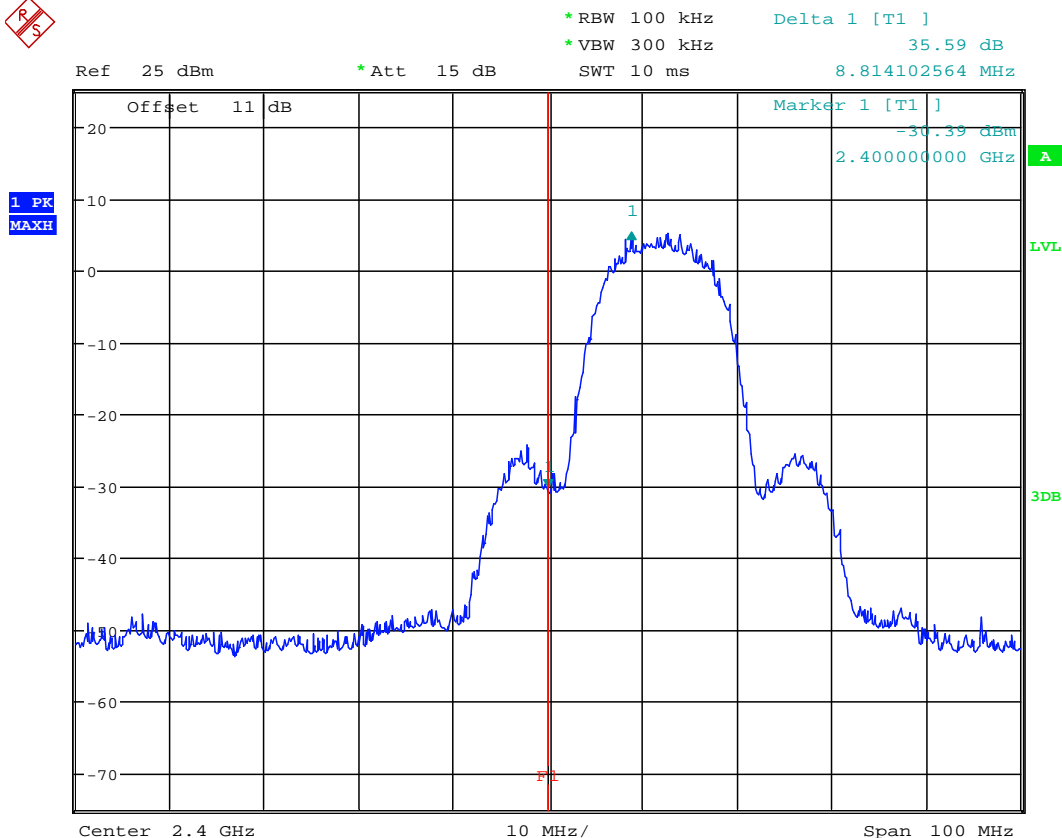
FCC ID: WKP-CSAW-02IP

3.6 Radiated Emission on the band edge

According to FCC rules part 15 subpart C §15.247(c) in any 100 kHz bandwidth outside the frequency band in which the intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in § 15.209(a) is not required.

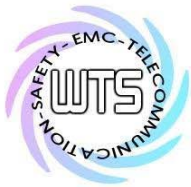
In addition radiated emission which fall in the restricted bands, as defined in section 15.205(a), must also with the radiated emission limits.

ANT 1

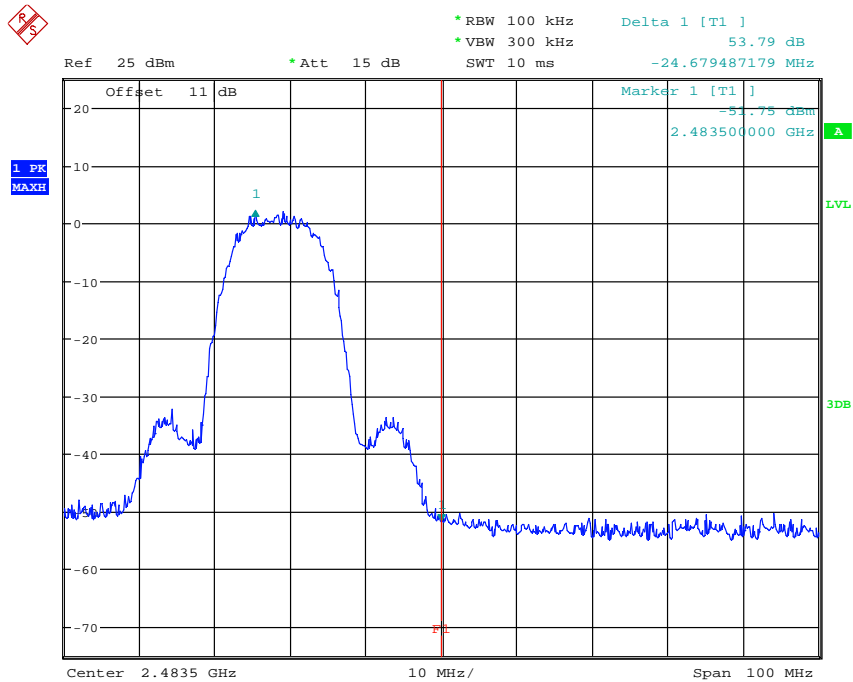


BANDEDGE 802.11B CH01

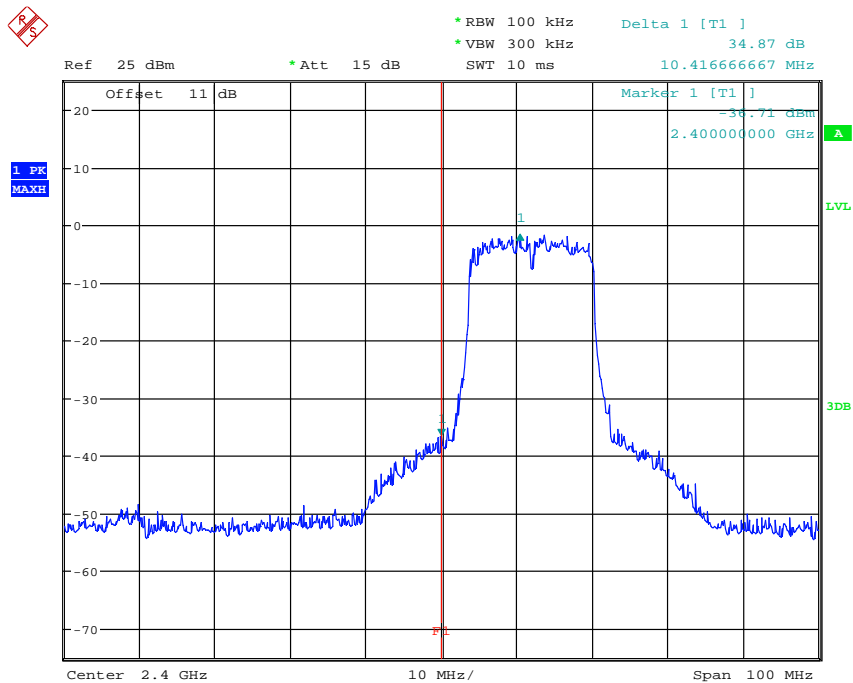
Date: 4.DEC.2012 11:46:02



Registration number: W6D21301-12971-C-1
FCC ID: WKP-CSAW-02IP



BANDEDGE 802.11B CH11
Date: 4.DEC.2012 11:47:38



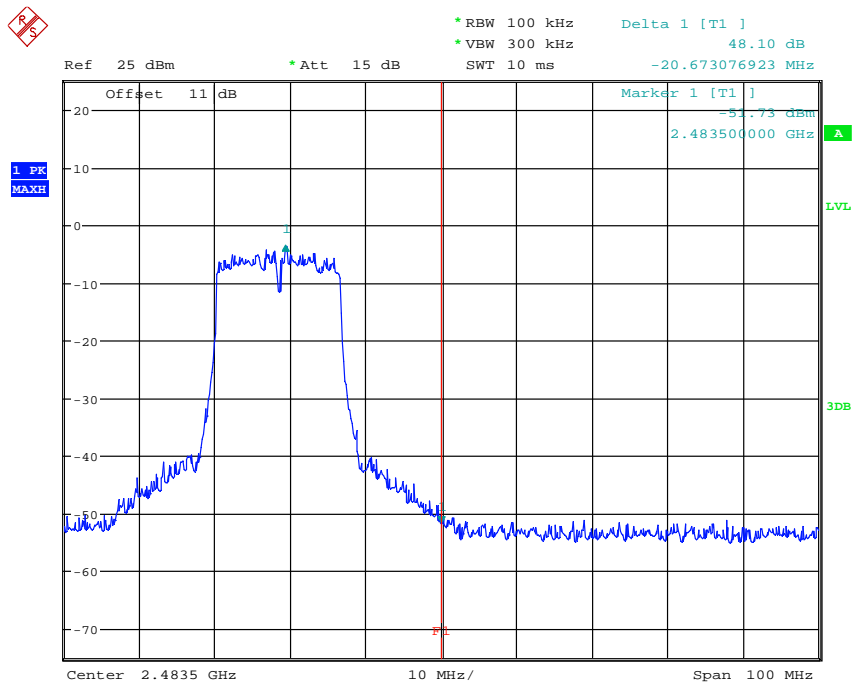
BANDEDGE 802.11G CH01
Date: 4.DEC.2012 11:48:34



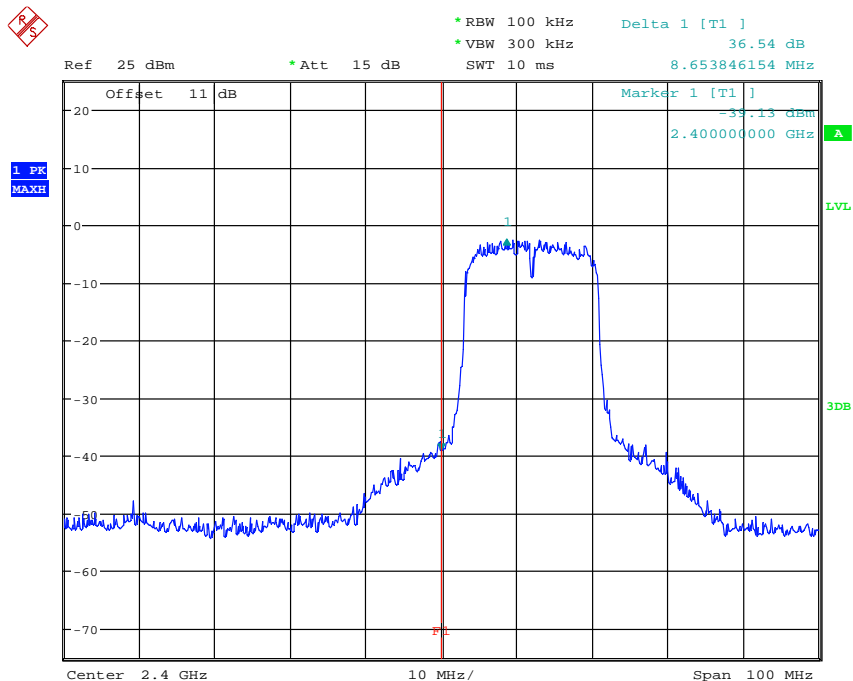
Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



BANDEDGE 802.11G CH11
Date: 4.DEC.2012 11:50:19

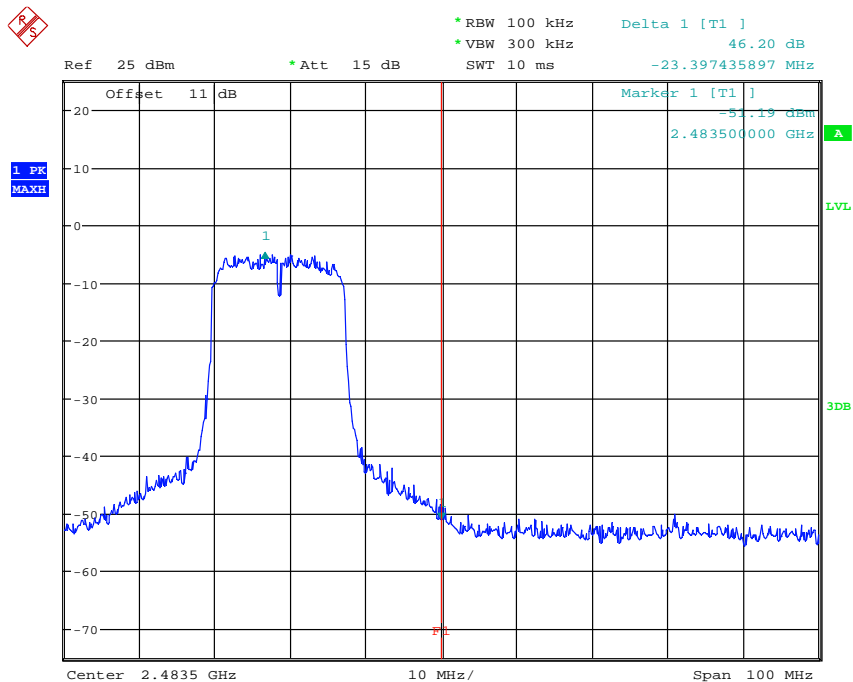


BANDEDGE 802.11N 20MHZ CH01
Date: 4.DEC.2012 11:51:08



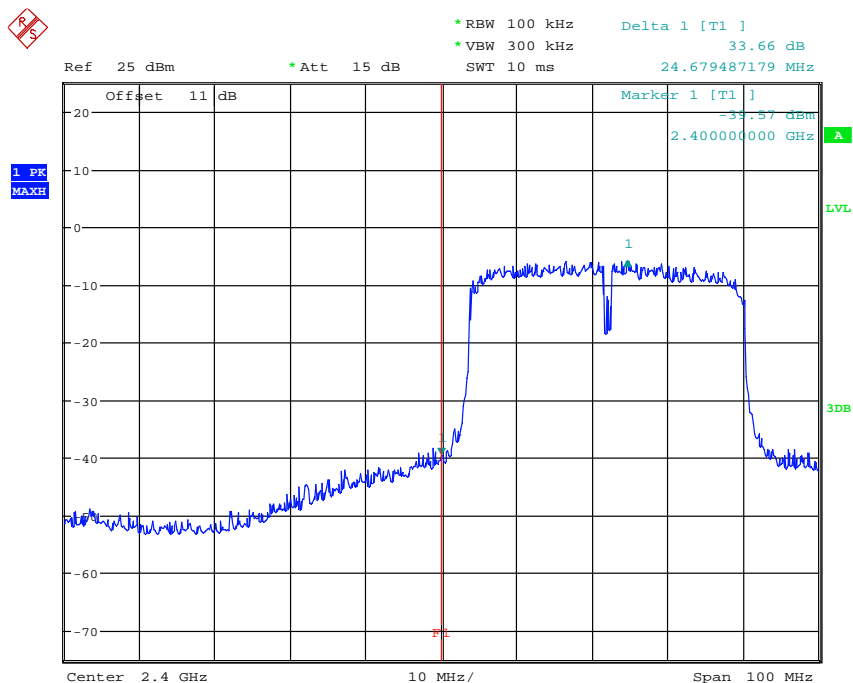
Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



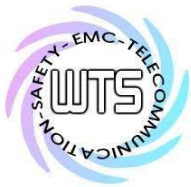
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Date: 4.DEC.2012 11:52:39

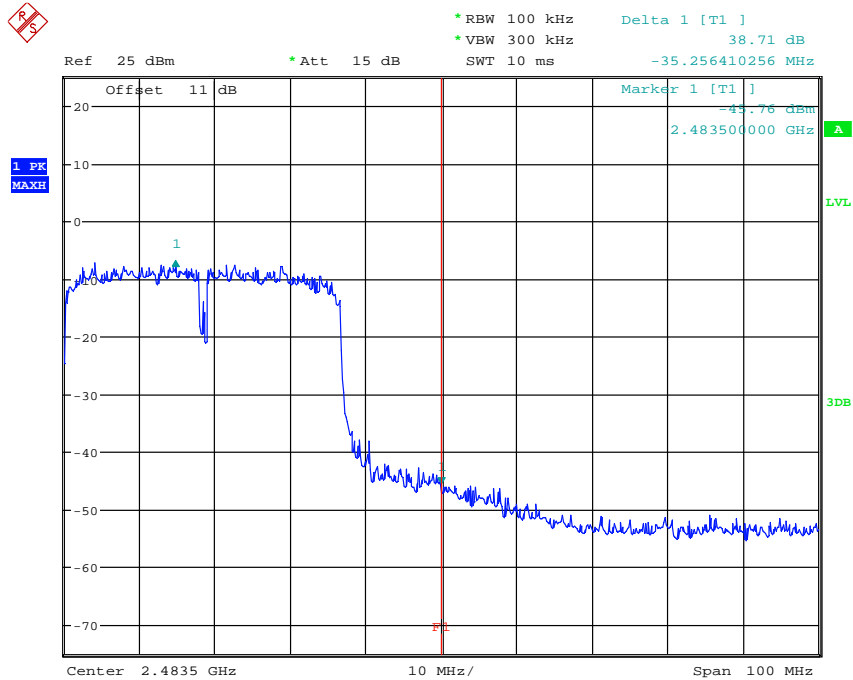


BANDEDGE 802.11N 40MHZ CH01

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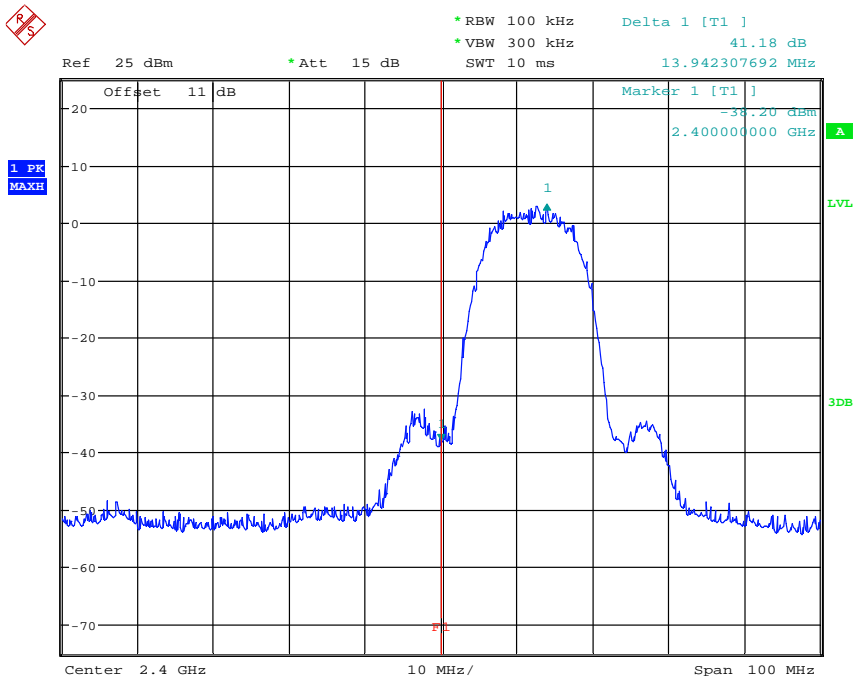


Registration number: W6D21301-12971-C-1
FCC ID: WKP-CSAW-02IP



BANDEDGE 802.11N 40MHZ CH07
Date: 4.DEC.2012 11:56:22

ANT 2

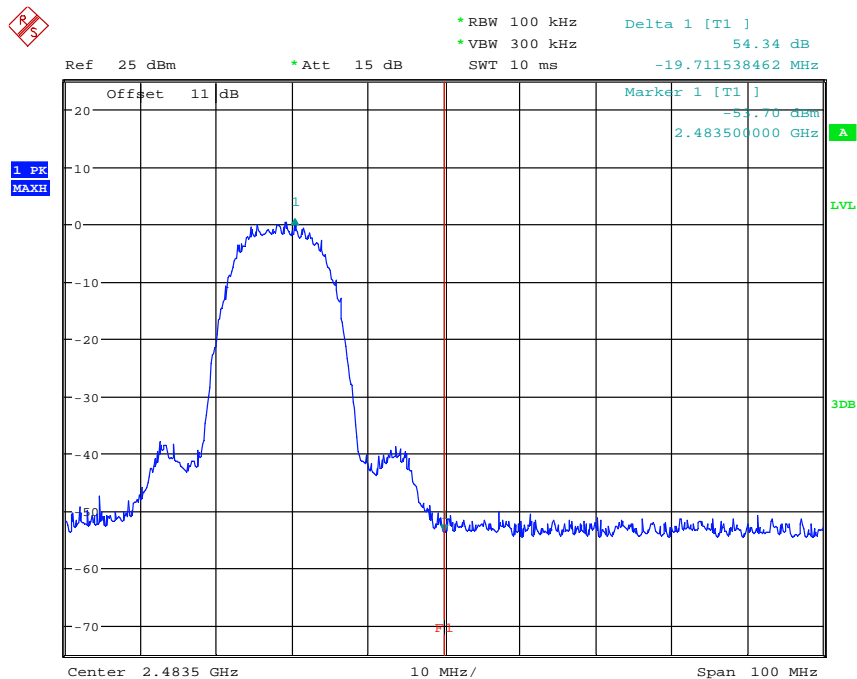


BANDEDGE 802.11B CH01
Date: 4.DEC.2012 11:27:05

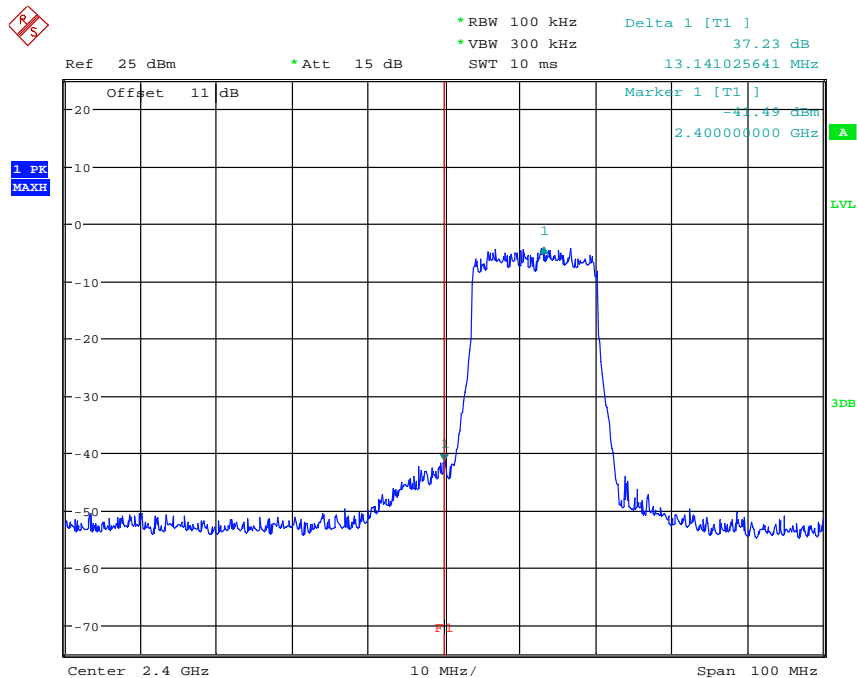


Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



BANDEDGE 802.11B CH11
Date: 4.DEC.2012 11:31:32

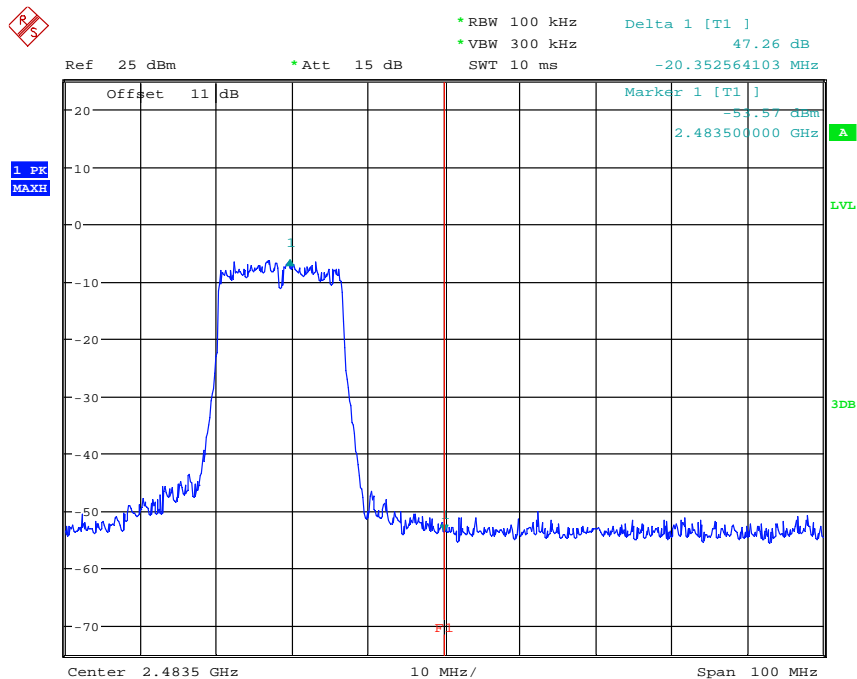


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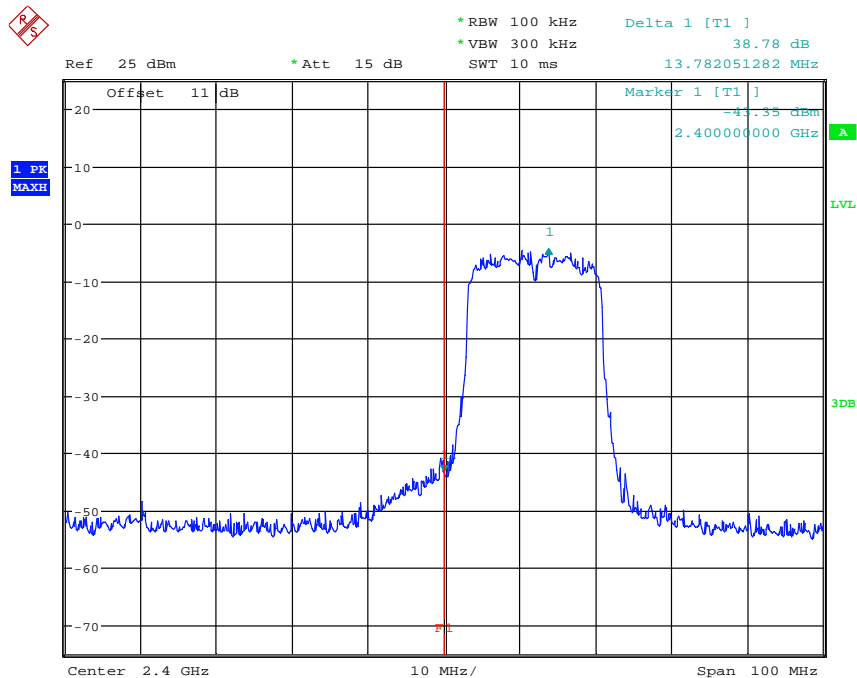


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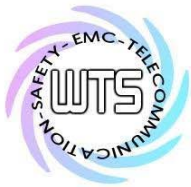
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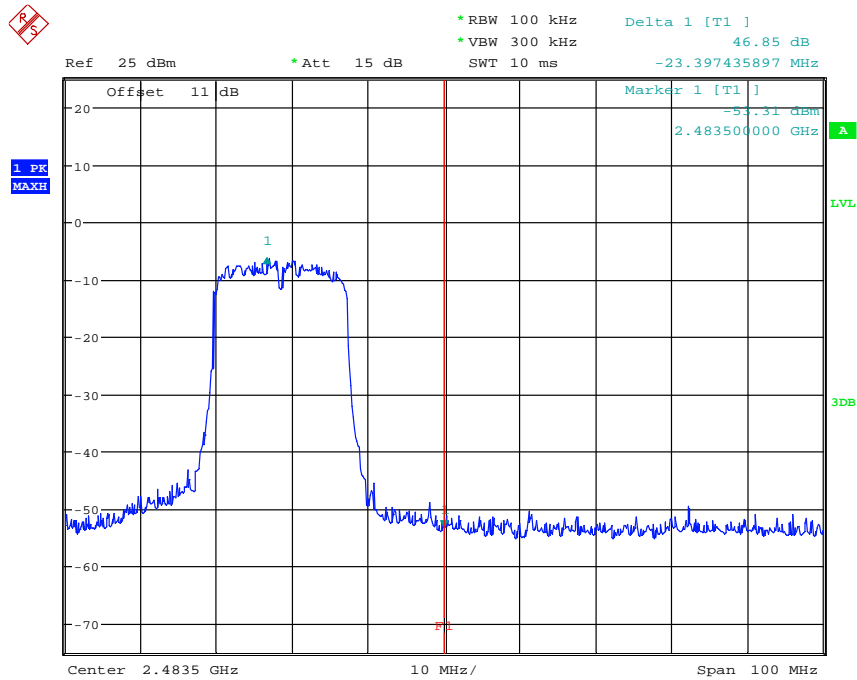
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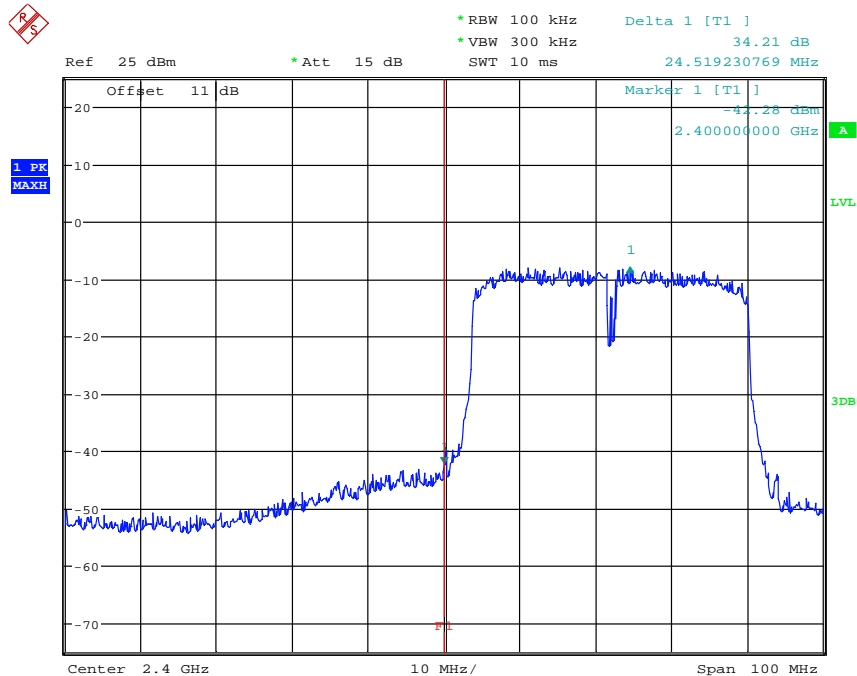
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Date: 4.DEC.2012 11:35:20



Registration number: W6D21301-12971-C-1
FCC ID: WKP-CSAW-02IP



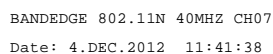
BANDEDGE 802.11N 20MHZ CH11
Date: 4.DEC.2012 11:37:14



BANDEDGE 802.11N 40MHZ CH01
Date: 4.DEC.2012 11:39:21



FCC ID: WKP-CSAW-02IP



Frequency Range / MHz	Limit
902 – 928	- 20 dB
2400 – 2483.5	
5725 - 5850	

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FCC ID: WKP-CSAW-02IP

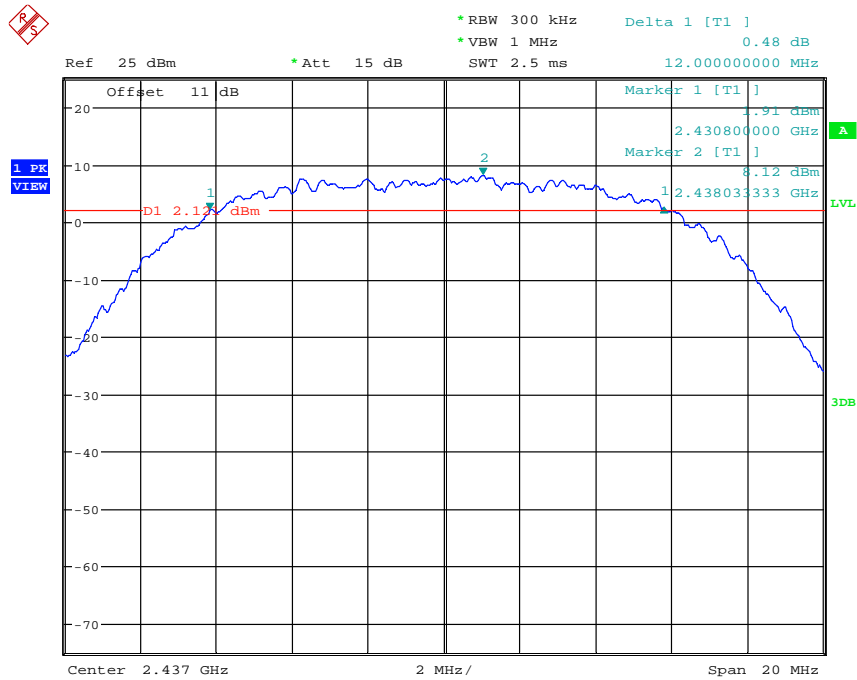
The analyzer ResBW was set to 100 kHz. For each RF output channel investigated, the spectrum analyzer center frequency was set to the channel carrier. A PEAK reading was taken, two markers were set 6 dB below the maximum level on the right and the left side of the emission. The 6 dB bandwidth is the frequency difference between the two markers.



Date: 4.DEC.2012 11:45:51

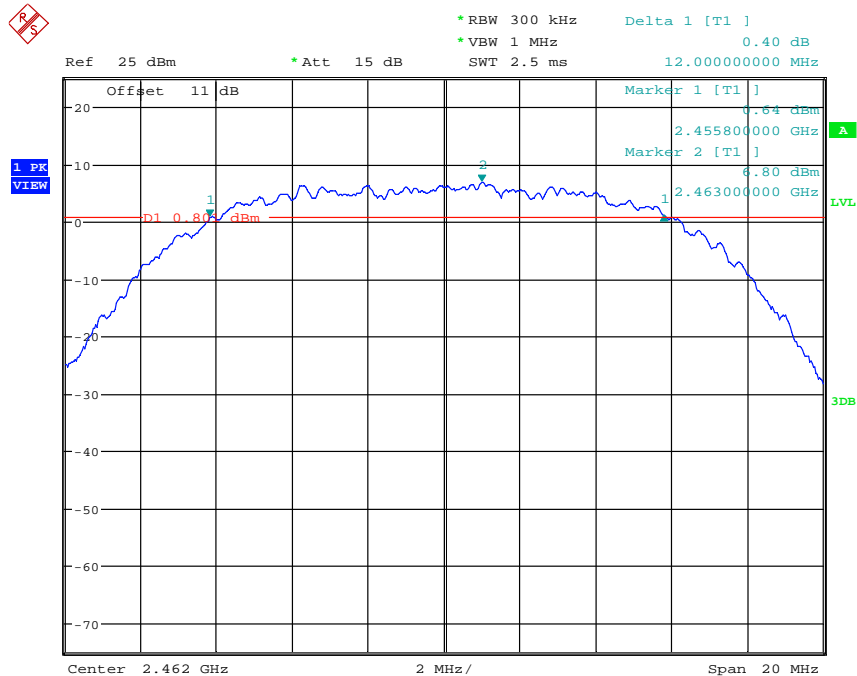


Registration number: W6D21301-12971-C-1
FCC ID: WKP-CSAW-02IP



6DB BANDWIDTH 802.11B CH06

Date: 4.DEC.2012 11:46:52

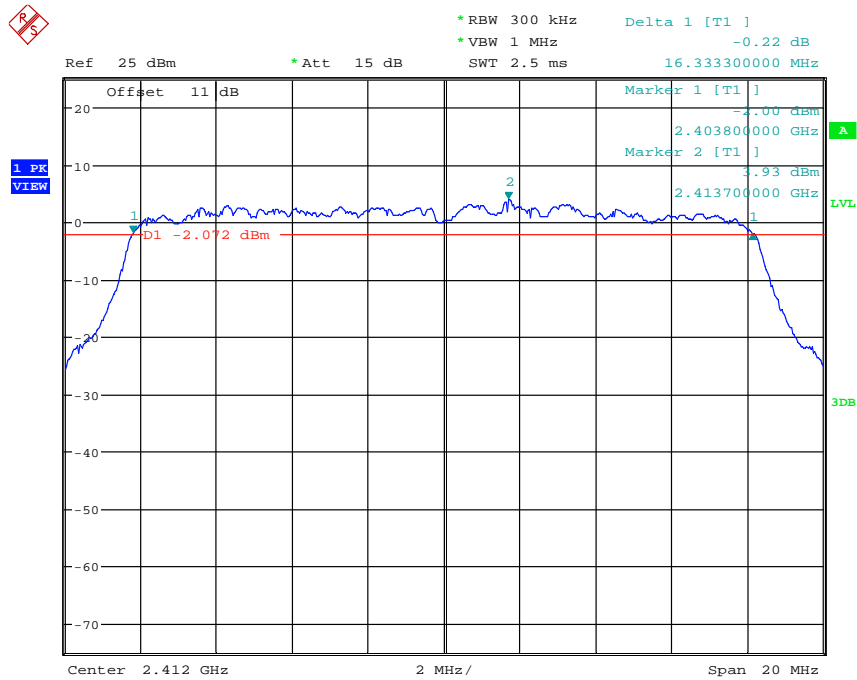


6DB BANDWIDTH 802.11B CH11

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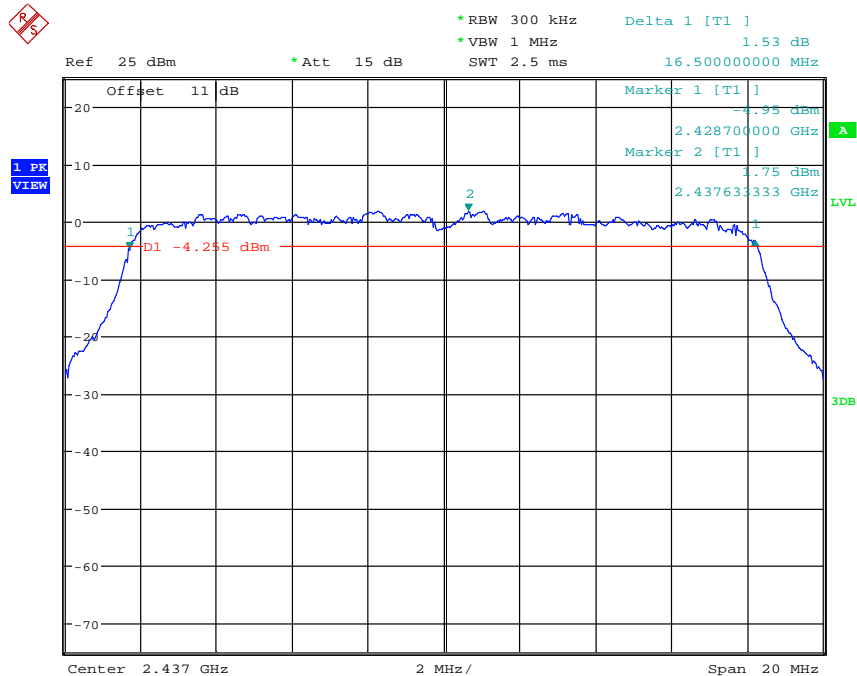


Registration number: W6D21301-12971-C-1
FCC ID: WKP-CSAW-02IP



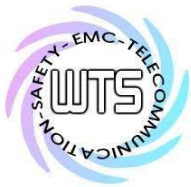
6DB BANDWIDTH 802.11G CH01

Date: 4.DEC.2012 11:48:22

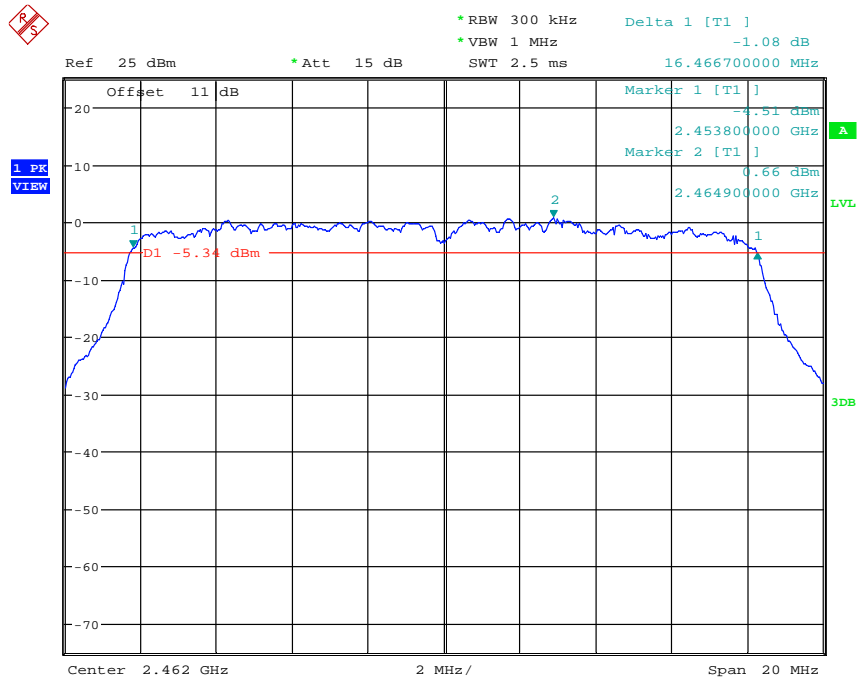


6DB BANDWIDTH 802.11G CH06

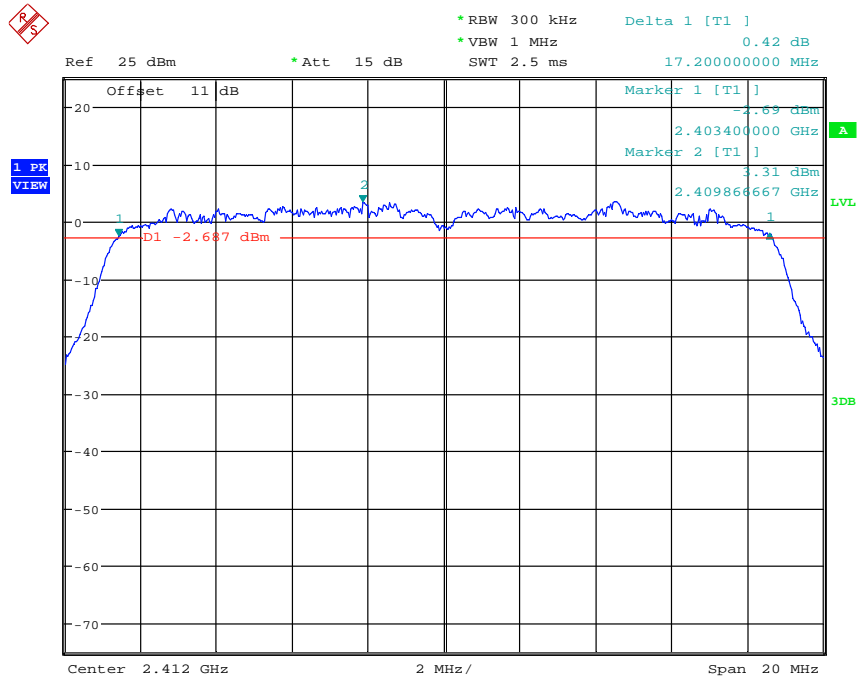
Date: 4.DEC.2012 11:49:21



Registration number: W6D21301-12971-C-1
FCC ID: WKP-CSAW-02IP



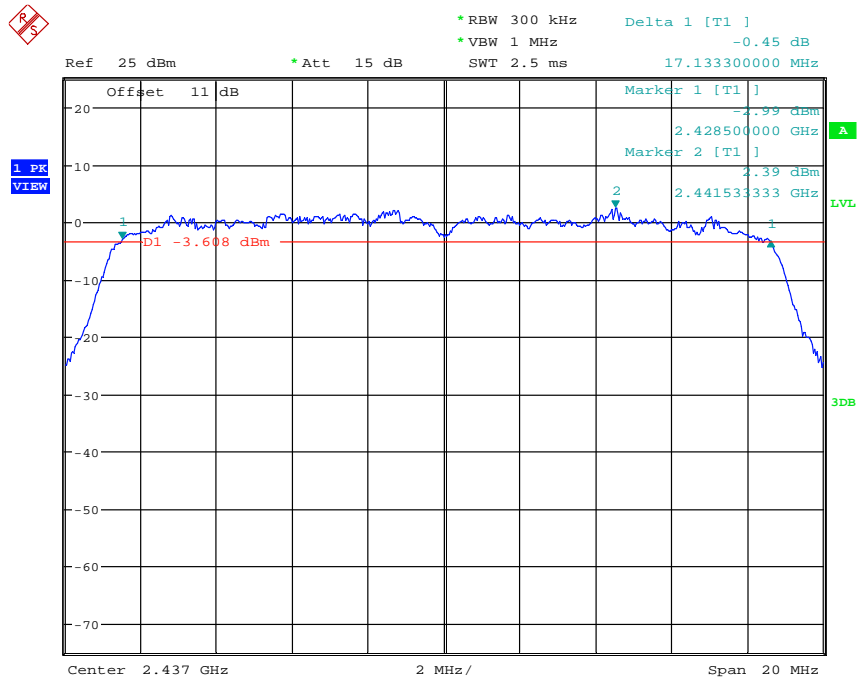
6DB BANDWIDTH 802.11G CH11
Date: 4.DEC.2012 11:50:08



6DB BANDWIDTH 802.11N 20MHZ CH01
Date: 4.DEC.2012 11:50:57

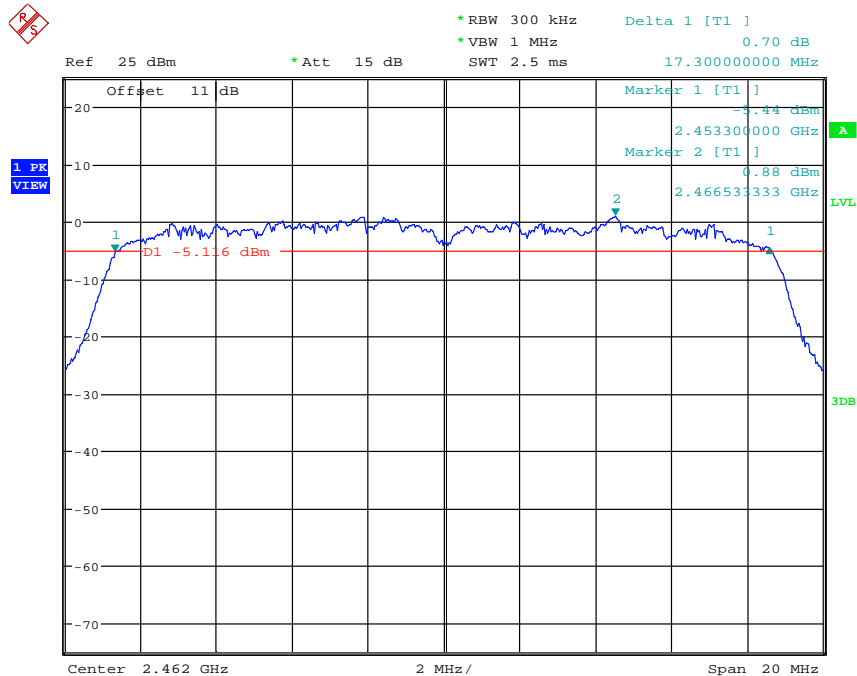


Registration number: W6D21301-12971-C-1
FCC ID: WKP-CSAW-02IP



6DB BANDWIDTH 802.11N 20MHZ CH06

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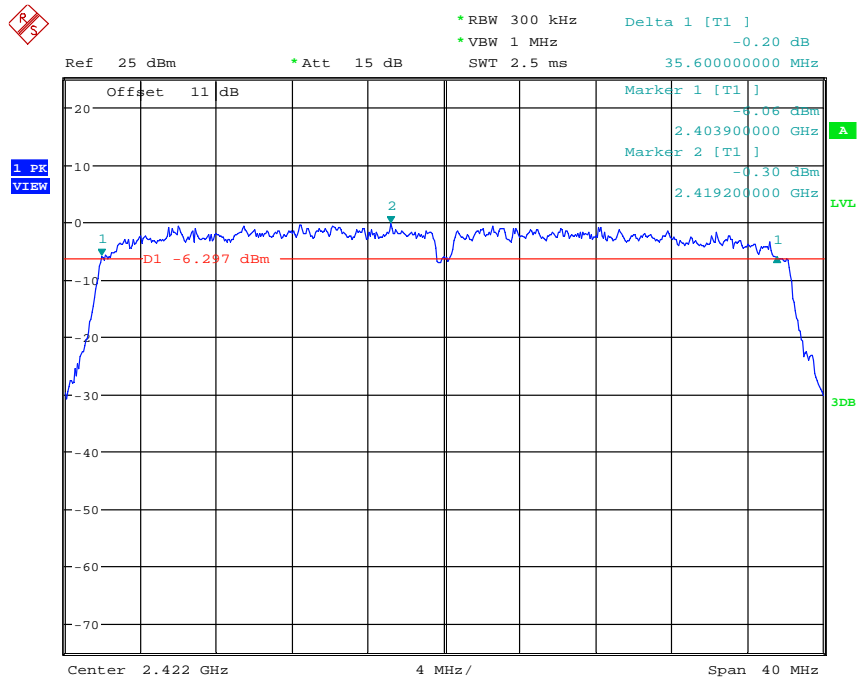


6DB BANDWIDTH 802.11N 20MHZ CH11

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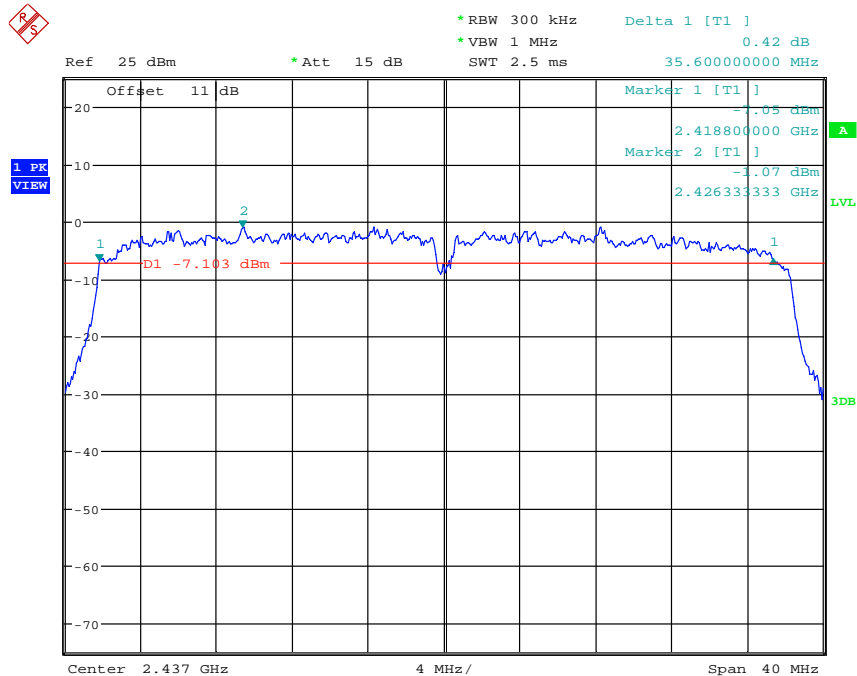


Registration number: W6D21301-12971-C-1
FCC ID: WKP-CSAW-02IP



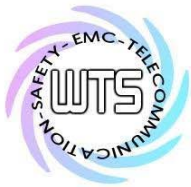
6DB BANDWIDTH 802.11N 40MHZ CH01

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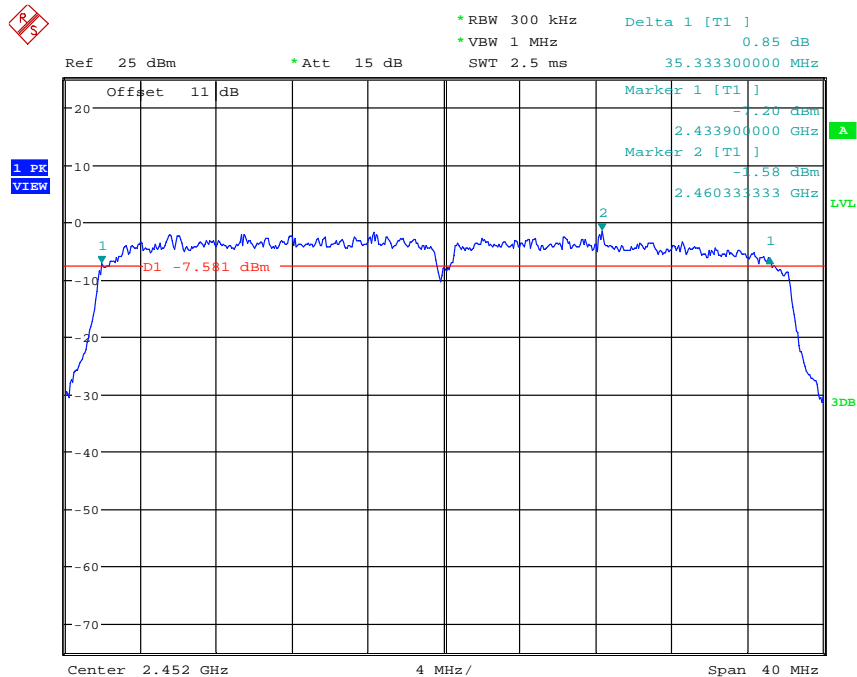


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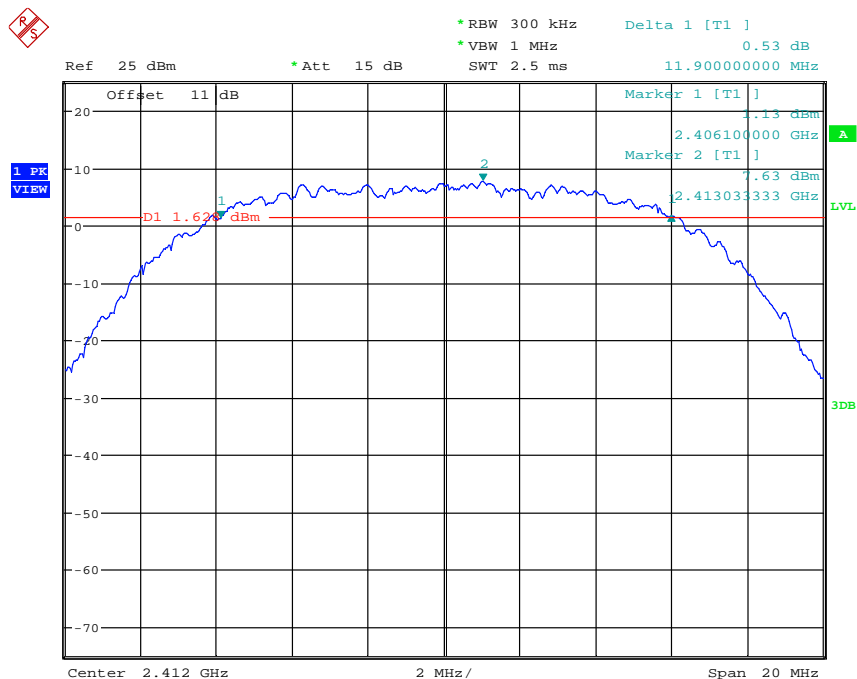


Registration number: W6D21301-12971-C-1
FCC ID: WKP-CSAW-02IP



6DB BANDWIDTH 802.11N 40MHZ CH07
Date: 4.DEC.2012 11:56:10

ANT 2

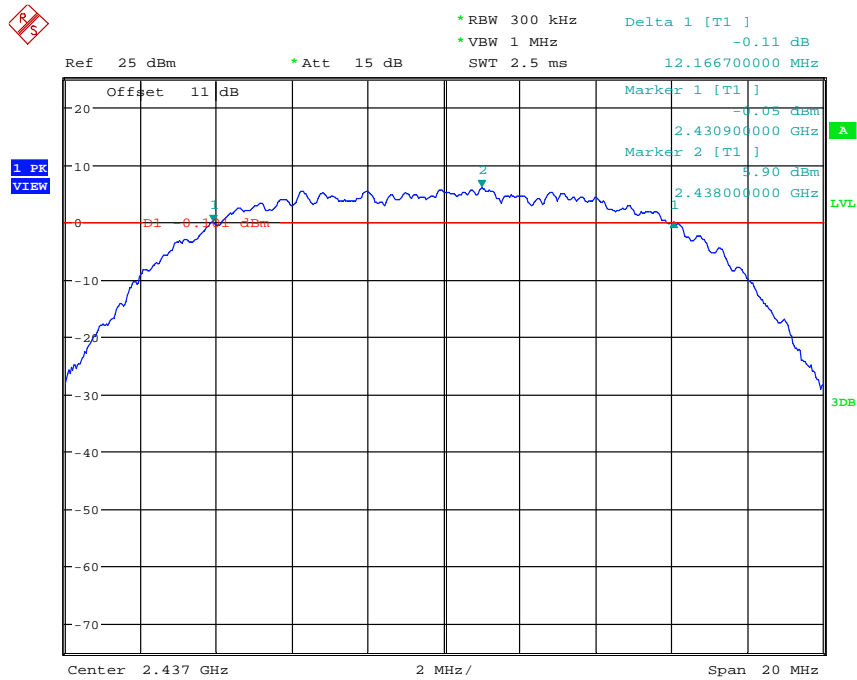


6DB BANDWIDTH 802.11B CH01
Date: 4.DEC.2012 11:26:54



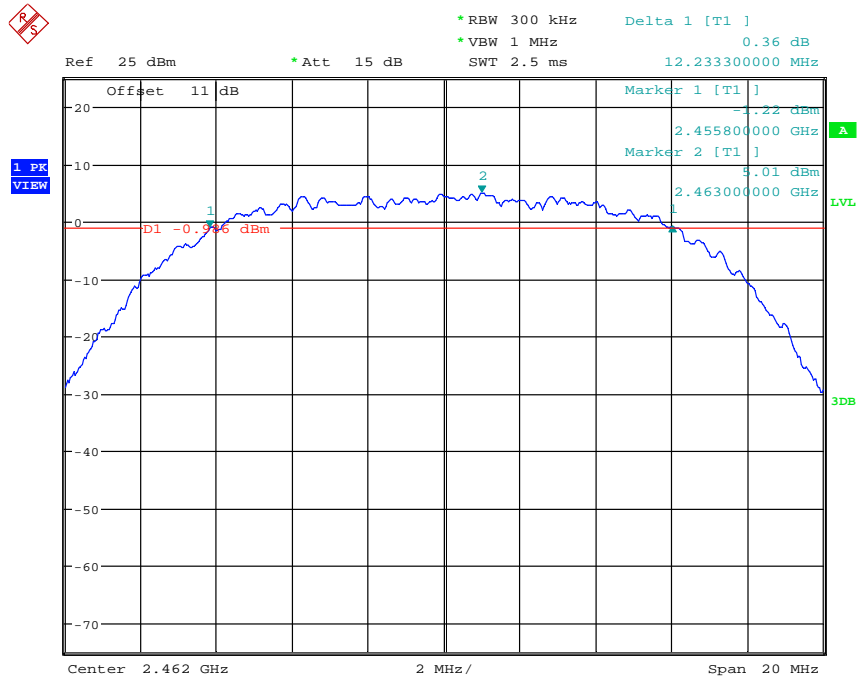
Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1
FCC ID: WKP-CSAW-02IP



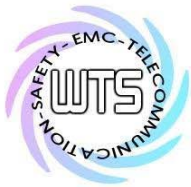
6DB BANDWIDTH 802.11B CH06

Date: 4.DEC.2012 11:30:11

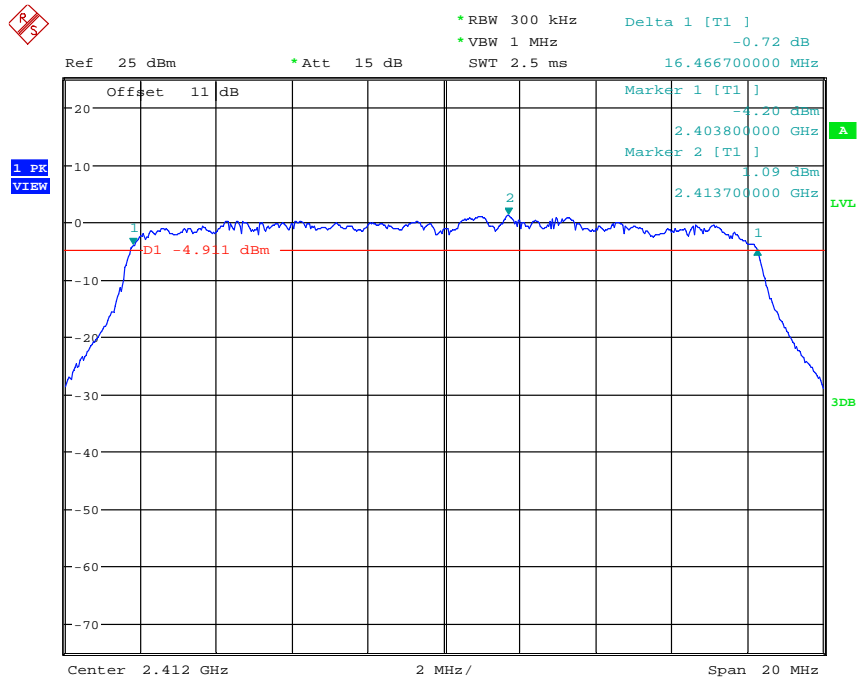


6DB BANDWIDTH 802.11B CH11

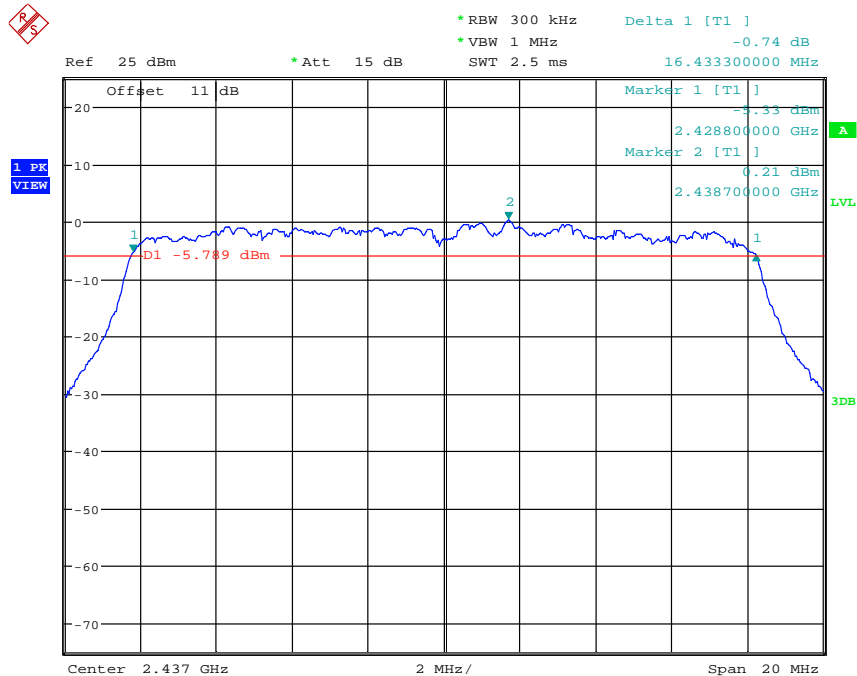
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Registration number: W6D21301-12971-C-1
FCC ID: WKP-CSAW-02IP



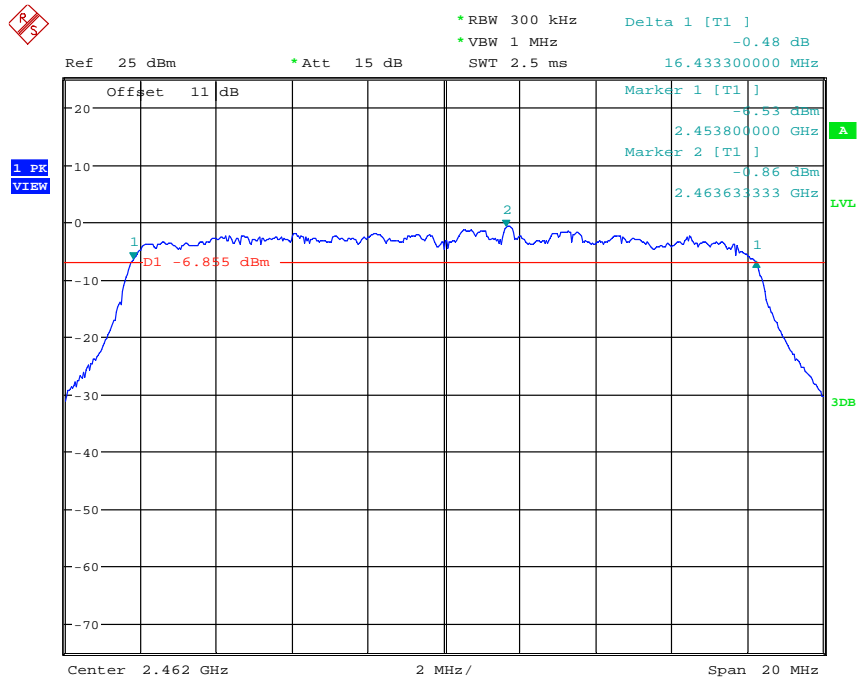
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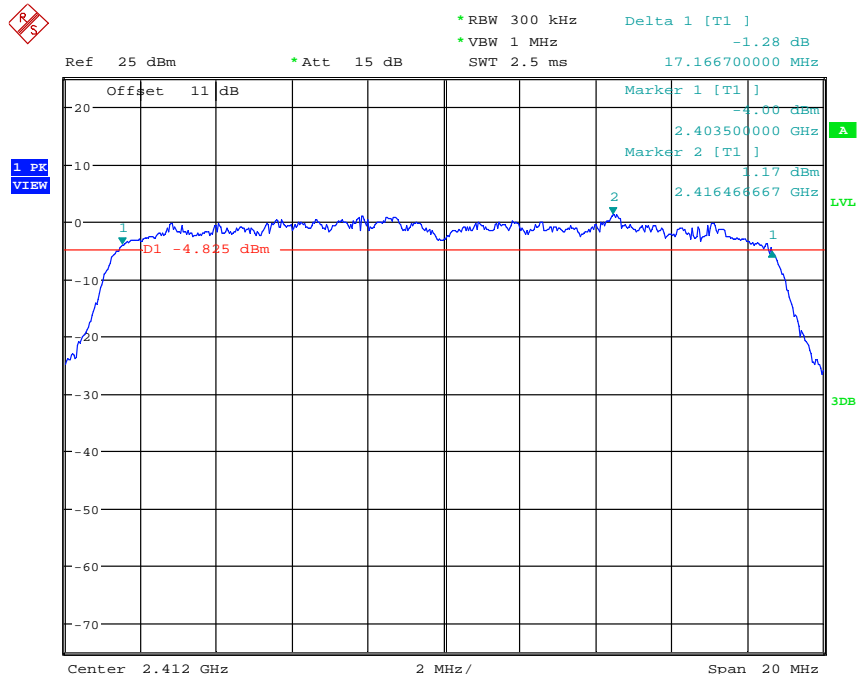
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Registration number: W6D21301-12971-C-1
FCC ID: WKP-CSAW-02IP



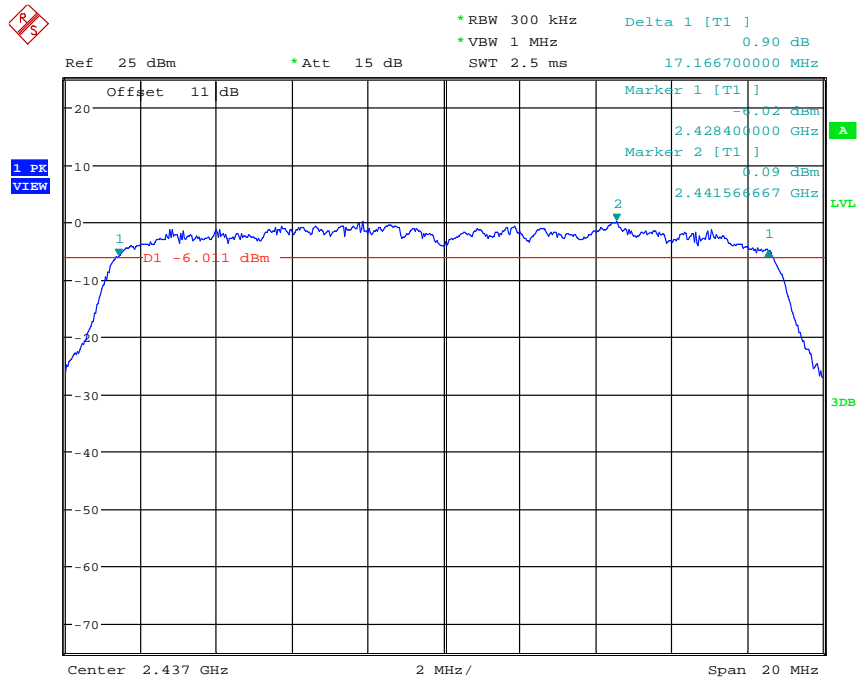
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6DB BANDWIDTH 802.11N 20MHZ CH01
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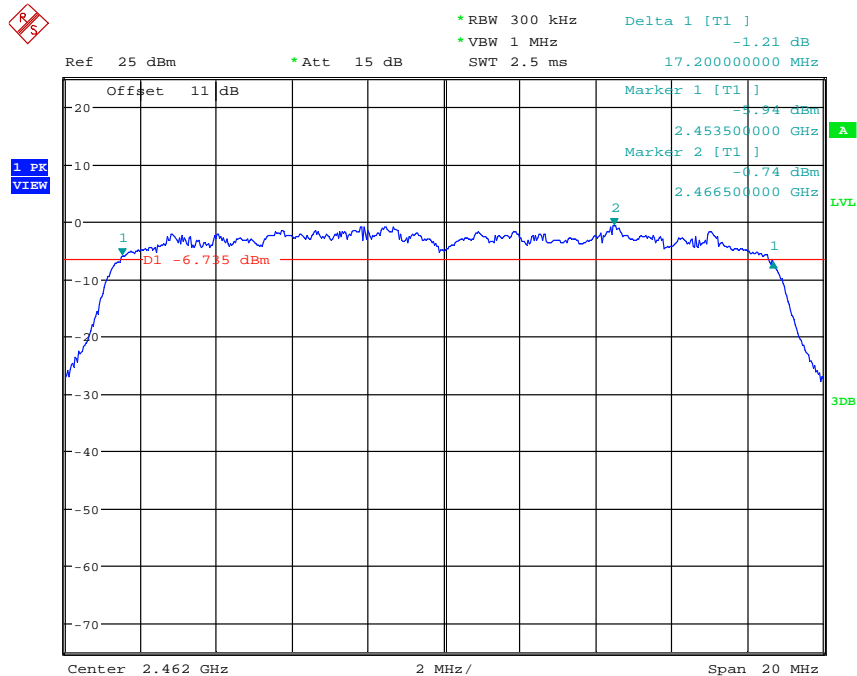


Registration number: W6D21301-12971-C-1
FCC ID: WKP-CSAW-02IP



6DB BANDWIDTH 802.11N 20MHZ CH06

Date: 4.DEC.2012 11:36:06



6DB BANDWIDTH 802.11N 20MHZ CH11

Date: 4.DEC.2012 11:37:03



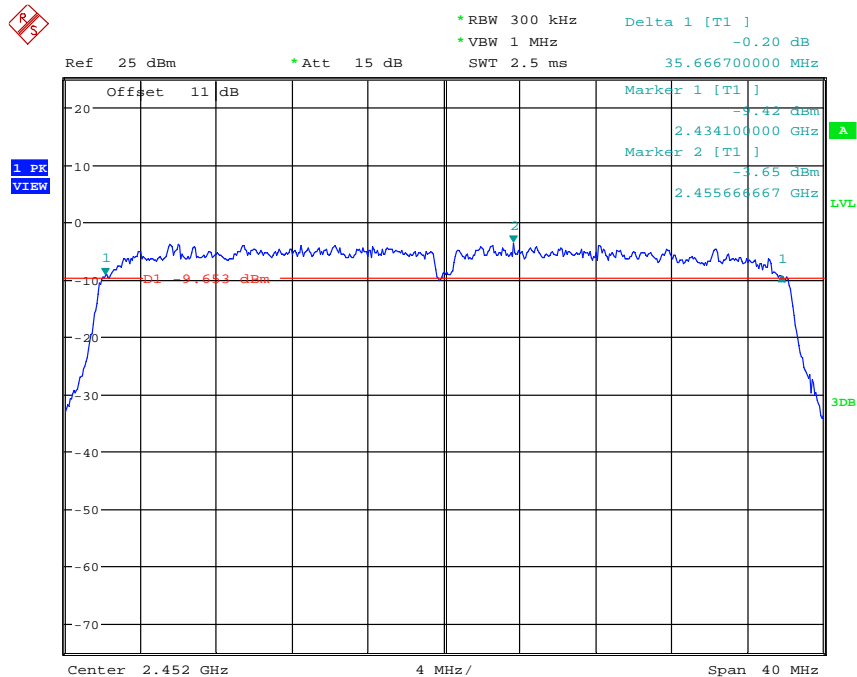
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Date: 4.DEC.2012 11:39:53



Registration number: W6D21301-12971-C-1
FCC ID: WKP-CSAW-02IP

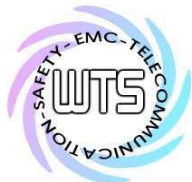


6DB BANDWIDTH 802.11N 40MHZ CH07
Date: 4.DEC.2012 11:41:26

Limits:

Frequency Range MHz	Limits
902-928	min 500 kHz
2400-2483.5	min 500 kHz
5725-5850	min 500 kHz

Test equipment used: ETSTW-RE 055, ETSTW-RE 050.



Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

3.8 Peak Power Spectral Density

Peak Power Spectral density is a measured at low, middle and high channel.

The peak output power is measured with a measurement bandwidth of 10 MHz and displayed on diagram together with Peak Power Spectral Density result which was measured with a bandwidth of 3 kHz, appreciate frequency span and sweep time.

ANT 1	mW			dBm		
	Ch Low	Ch Mid	Ch High	Ch Low	Ch Mid	Ch High
802.11b	0.10	0.07	0.05	-9.91	-11.59	-13.03
802.11g	0.02	0.02	0.01	-16.97	-17.89	-19.41
802.11n 20MHz	0.02	0.02	0.01	-17.52	-18.10	-19.50
802.11n 40MHz	0.01	0.01	0.01	-20.64	-21.28	-22.23
ANT 2	mW			dBm		
	Ch Low	Ch Mid	Ch High	Ch Low	Ch Mid	Ch High
802.11b	0.06	0.04	0.03	-12.05	-13.80	-14.65
802.11g	0.01	0.01	0.01	-18.86	-19.94	-21.30
802.11n 20MHz	0.01	0.01	0.01	-19.49	-20.33	-21.12
802.11n 40MHz	0.01	0	0	-22.36	-23.82	-23.85
Combine	mW			dBm		
	Ch Low	Ch Mid	Ch High	Ch Low	Ch Mid	Ch High
802.11b	0.16	0.11	0.08	-7.96	-9.59	-10.97
802.11g	0.03	0.03	0.02	-15.23	-15.23	-16.99
802.11n 20MHz	0.03	0.03	0.02	-15.23	-15.23	-16.99
802.11n 40MHz	0.02	0.01	0.01	-16.99	-20	-20

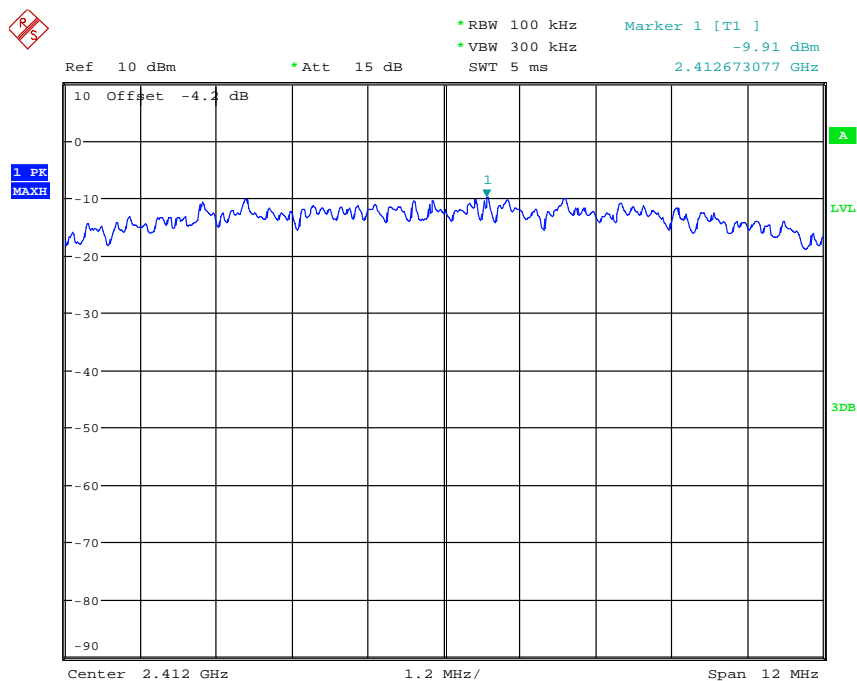


Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

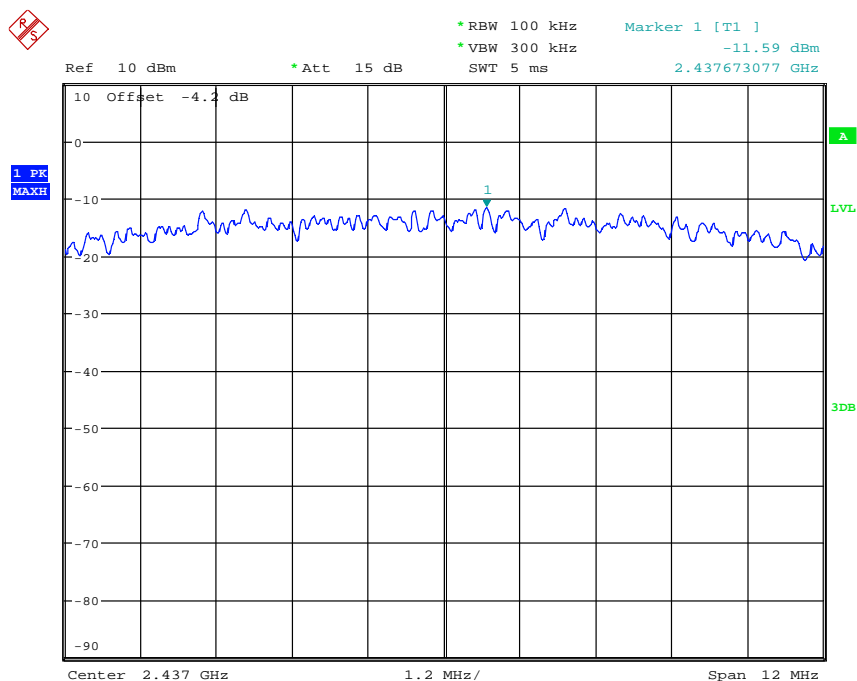
FCC ID: WKP-CSAW-02IP

ANT 1



POWER DENSITY 802.11B CH01

Date: 4.DEC.2012 11:45:57



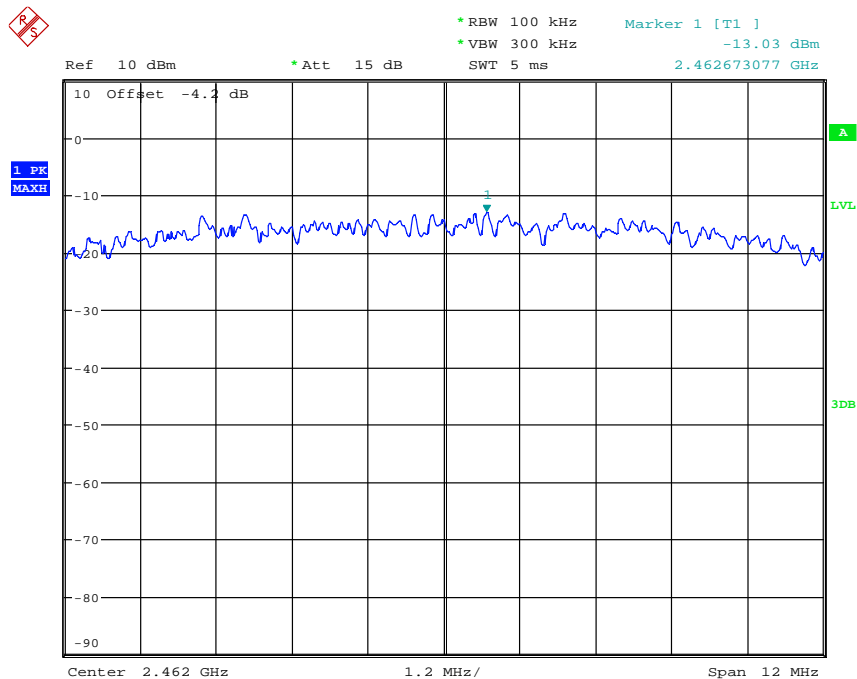
POWER DENSITY 802.11B CH06

Date: 4.DEC.2012 11:46:58



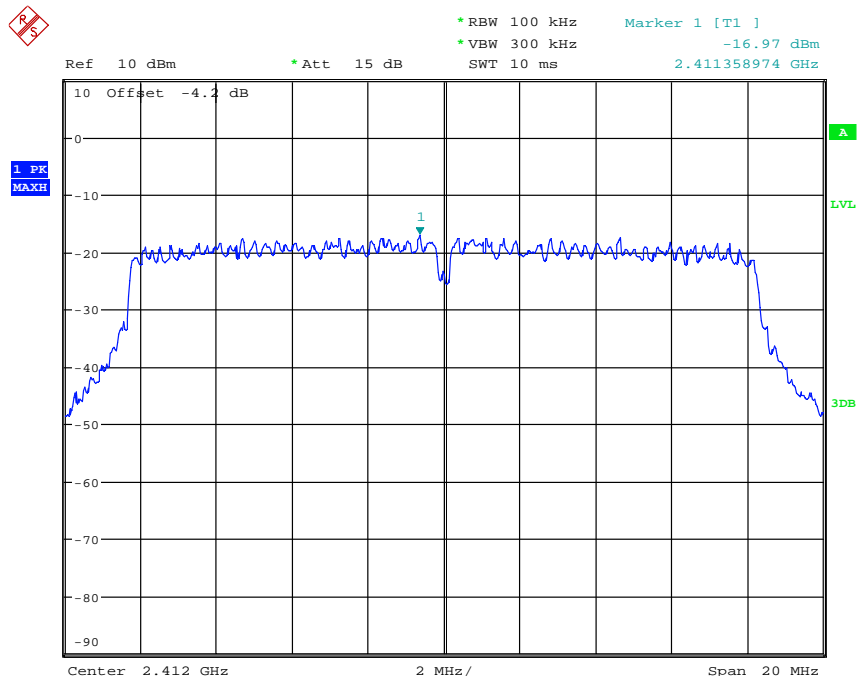
Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



POWER DENSITY 802.11B CH11

Date: 4.DEC.2012 11:47:33

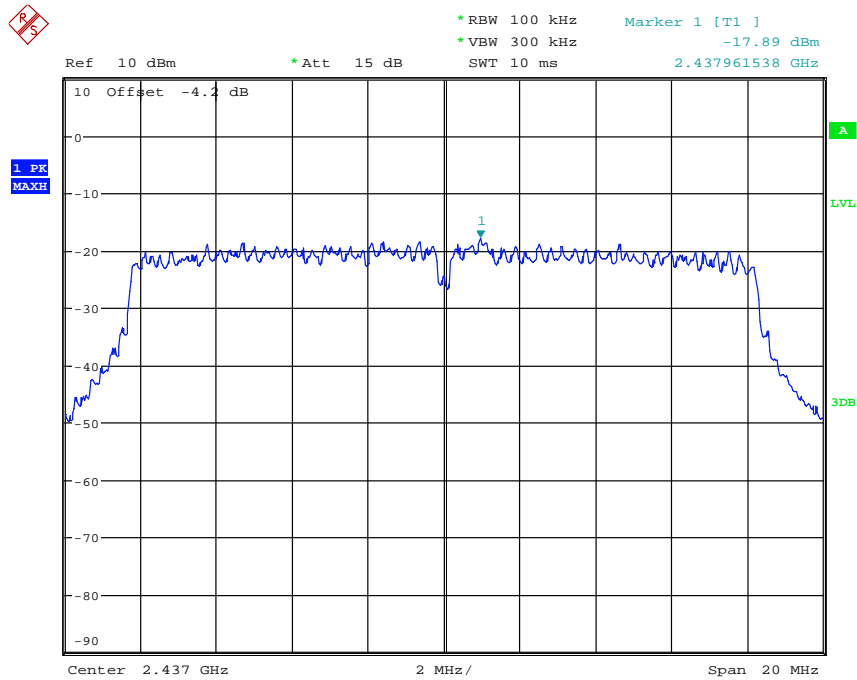


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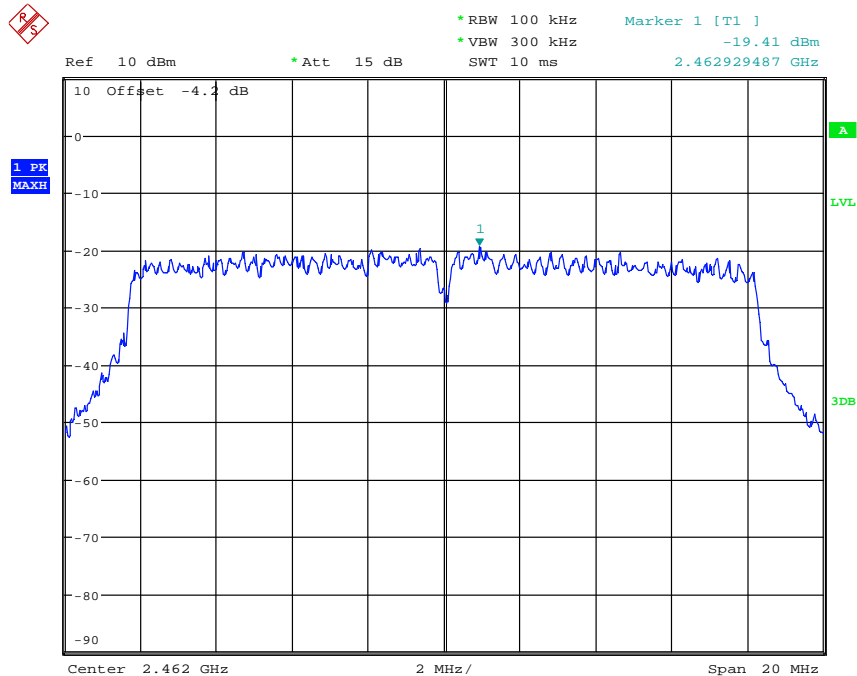
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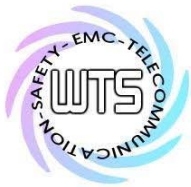
Registration number: W6D21301-12971-C-1
FCC ID: WKP-CSAW-02IP



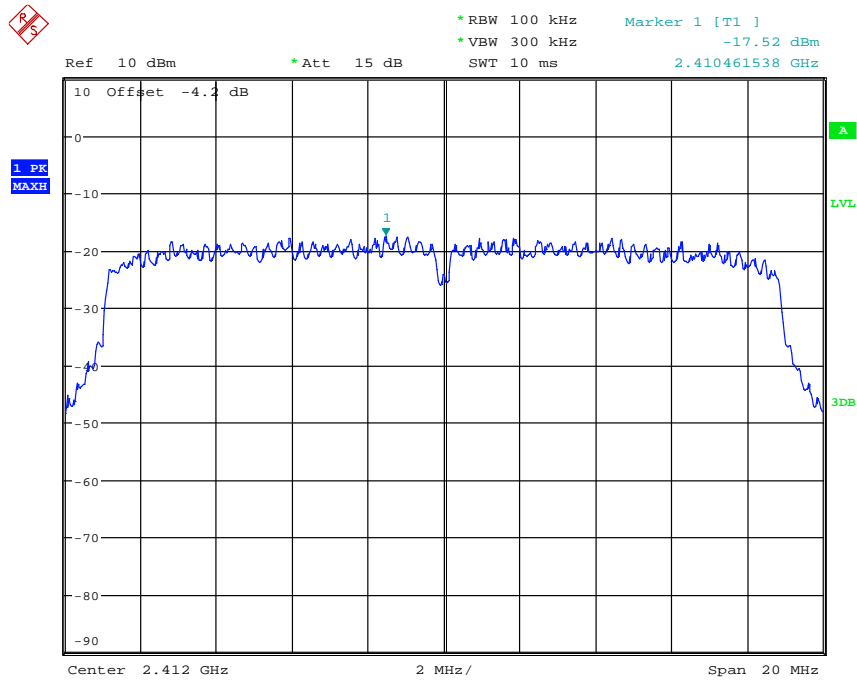
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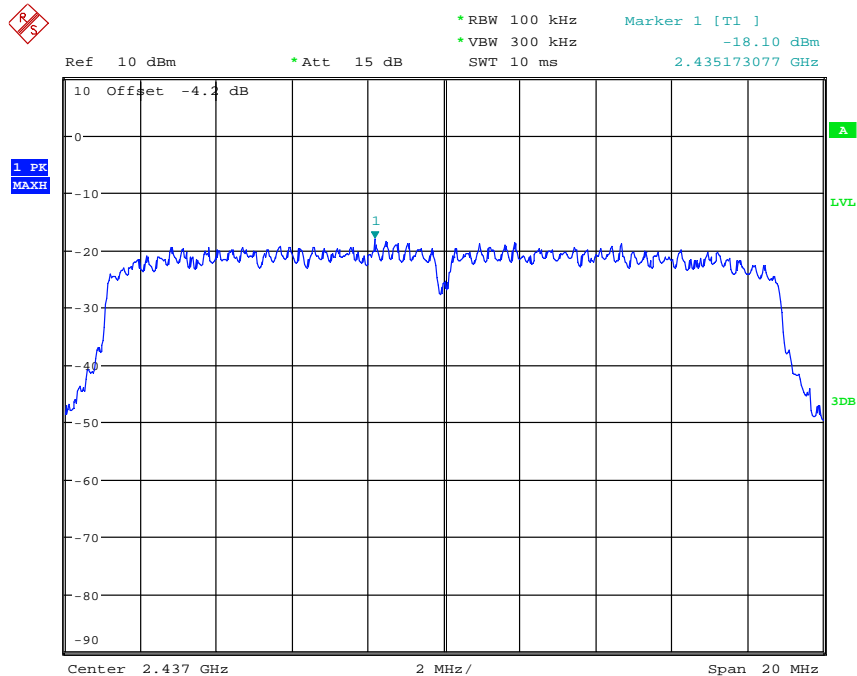
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Registration number: W6D21301-12971-C-1
FCC ID: WKP-CSAW-02IP



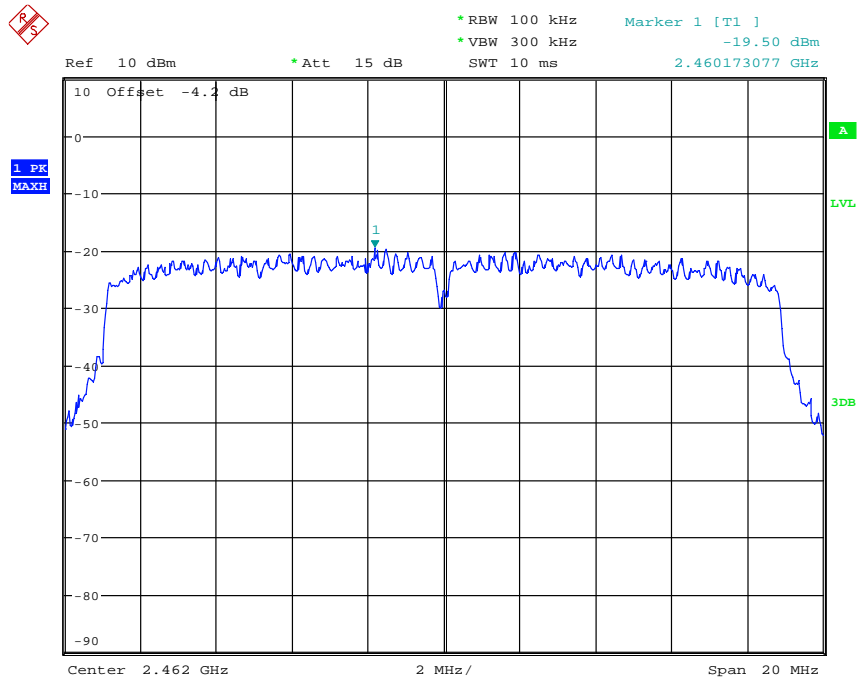
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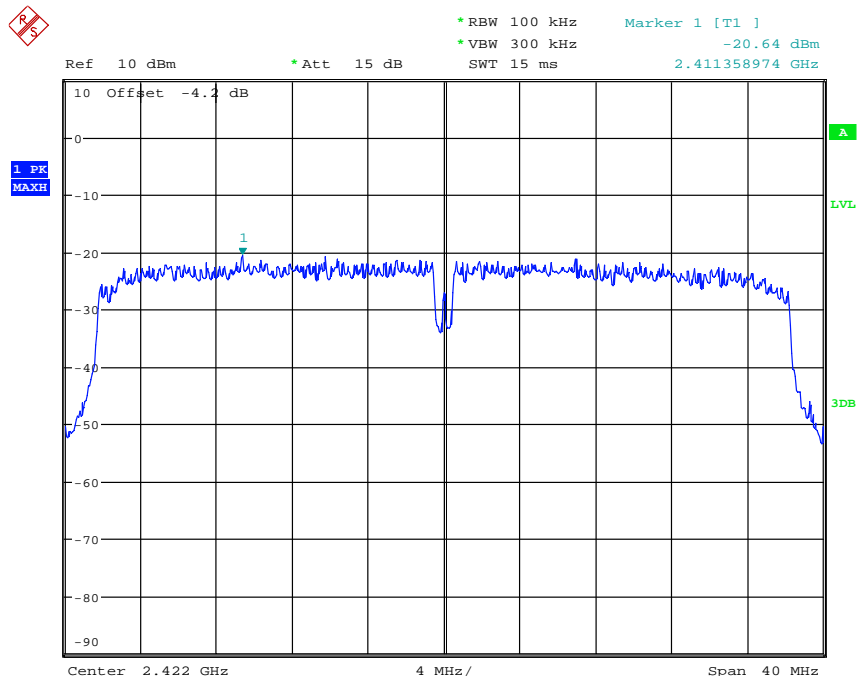
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Registration number: W6D21301-12971-C-1
FCC ID: WKP-CSAW-02IP



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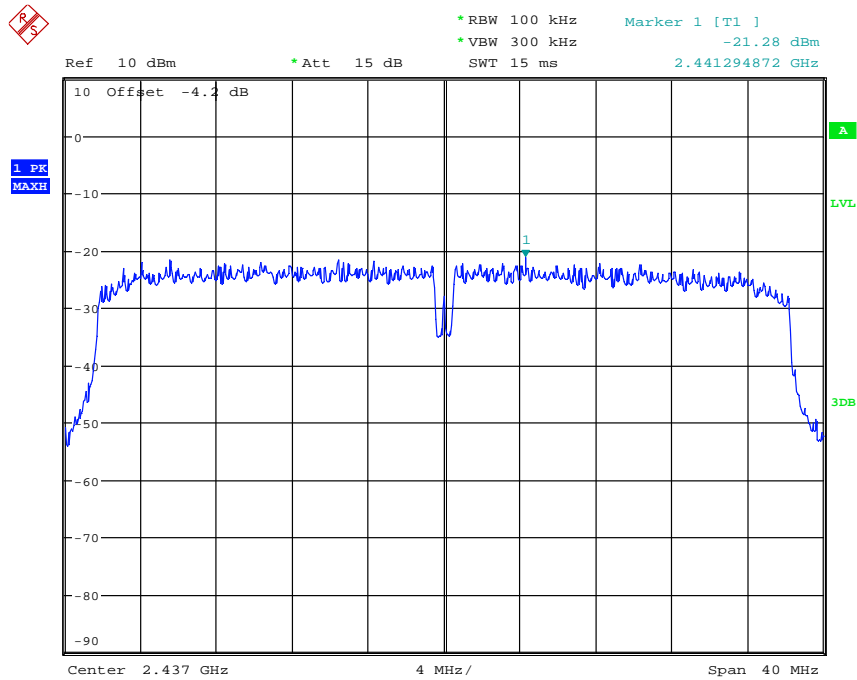


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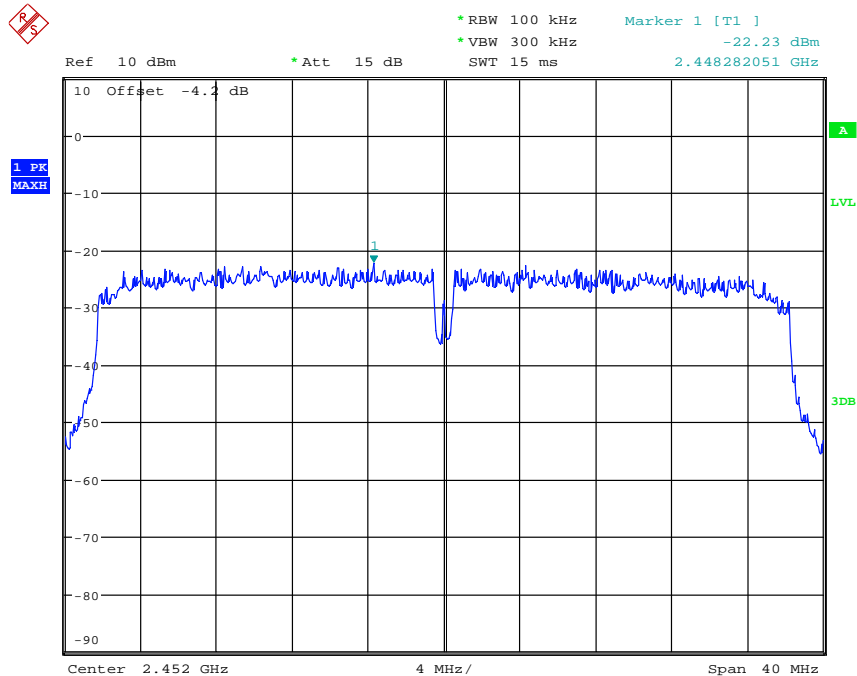
Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1
FCC ID: WKP-CSAW-02IP



POWER DENSITY 802.11N 40MHZ CH04

Date: 4.DEC.2012 11:54:31



POWER DENSITY 802.11N 40MHZ CH07

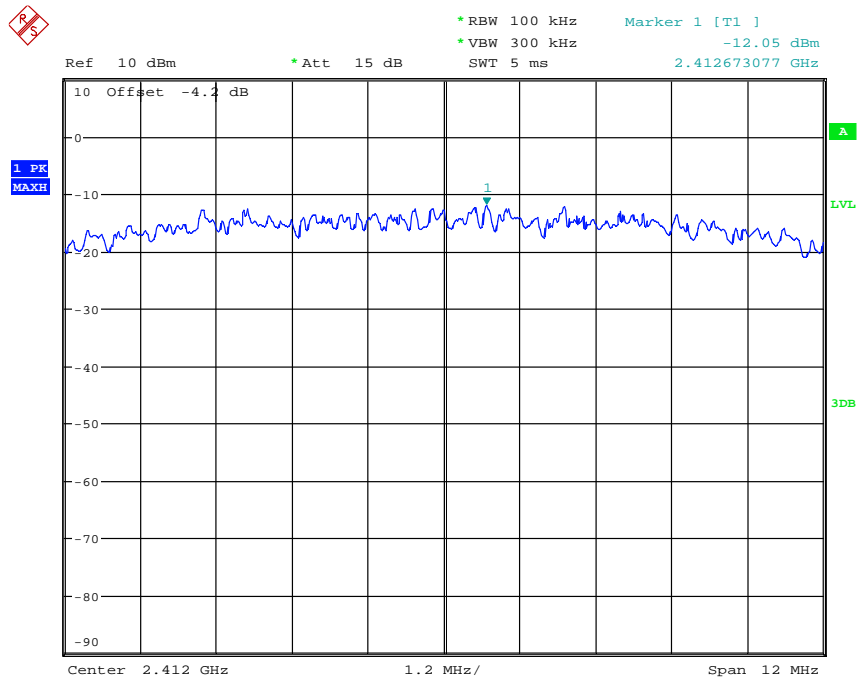
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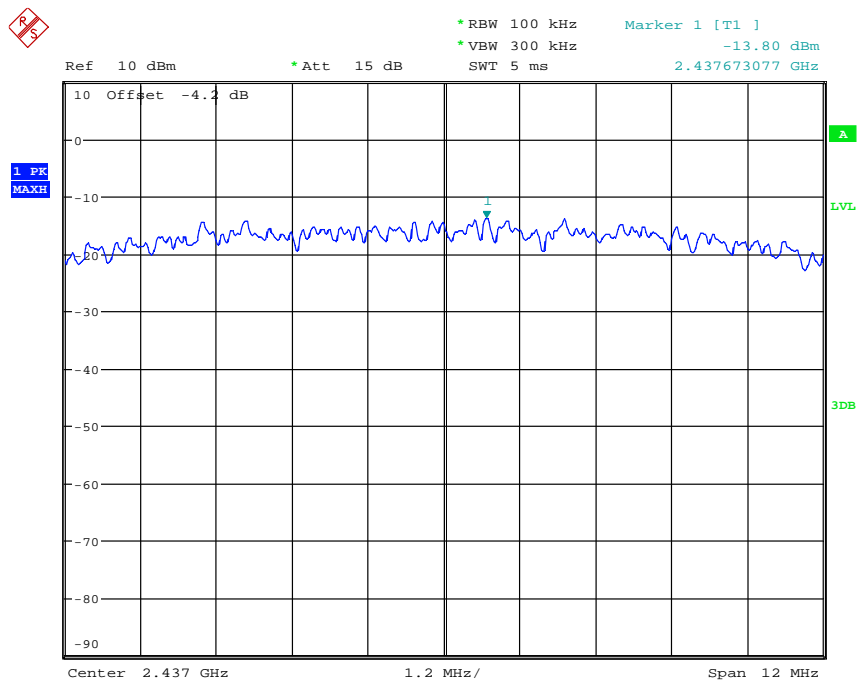
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FCC ID: WKP-CSAW-02IP

ANT 2



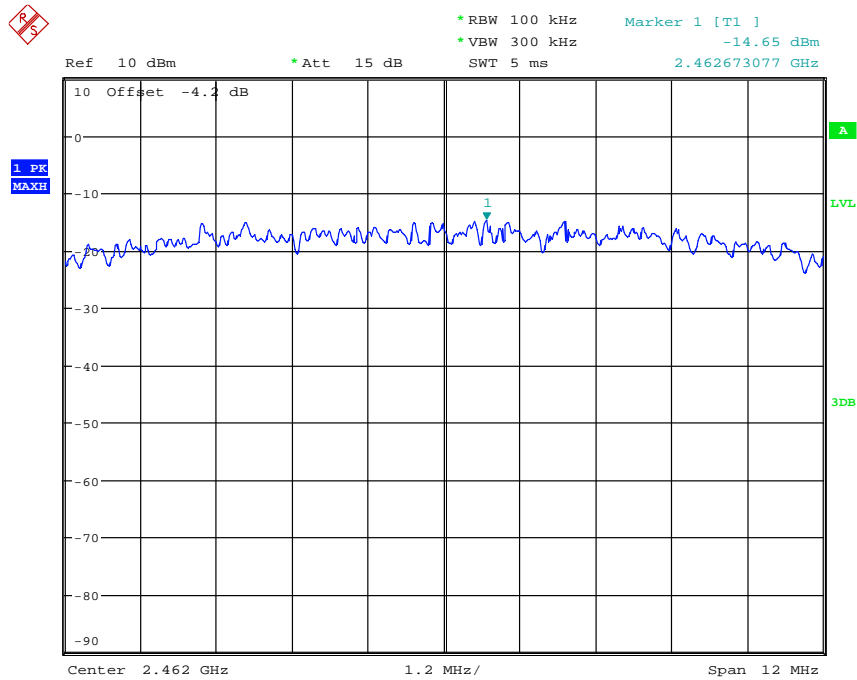
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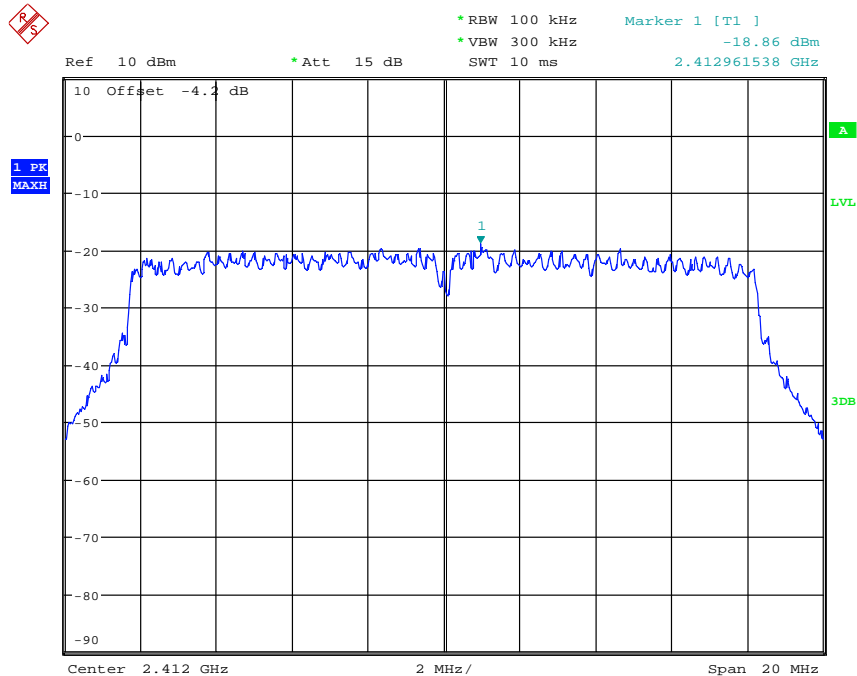
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Registration number: W6D21301-12971-C-1
FCC ID: WKP-CSAW-02IP



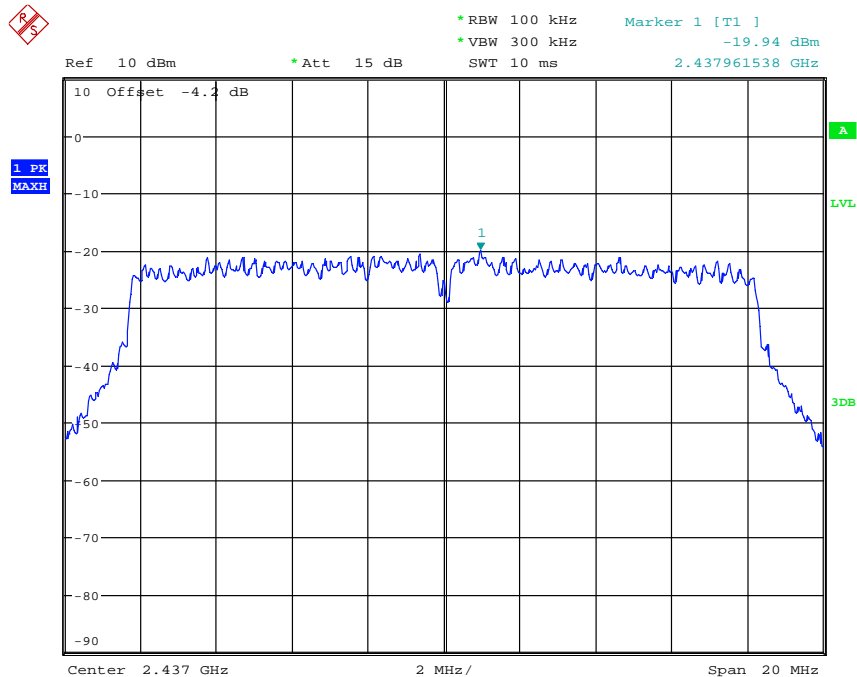
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Date: 4.DEC.2012 11:31:27



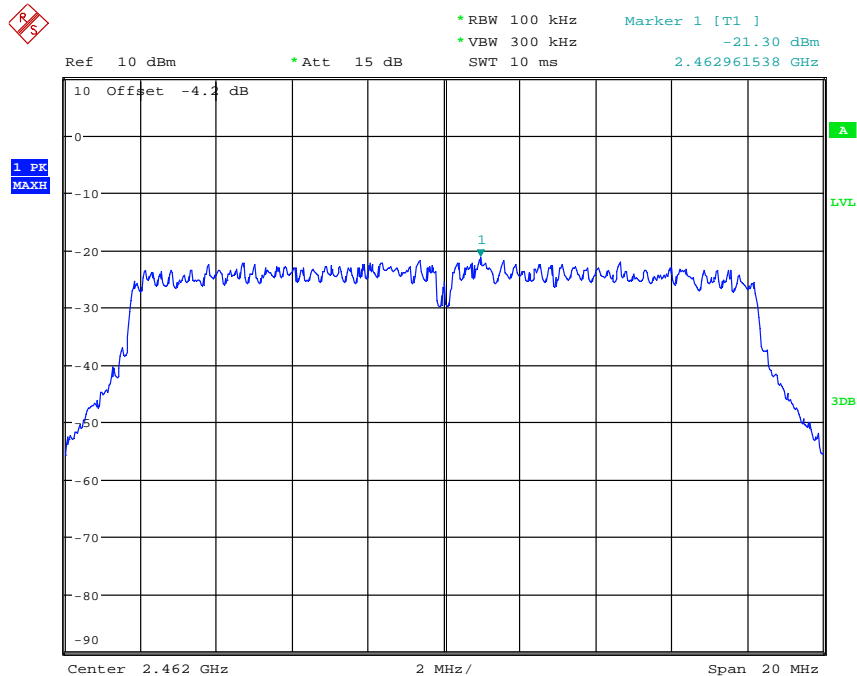
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Registration number: W6D21301-12971-C-1
FCC ID: WKP-CSAW-02IP



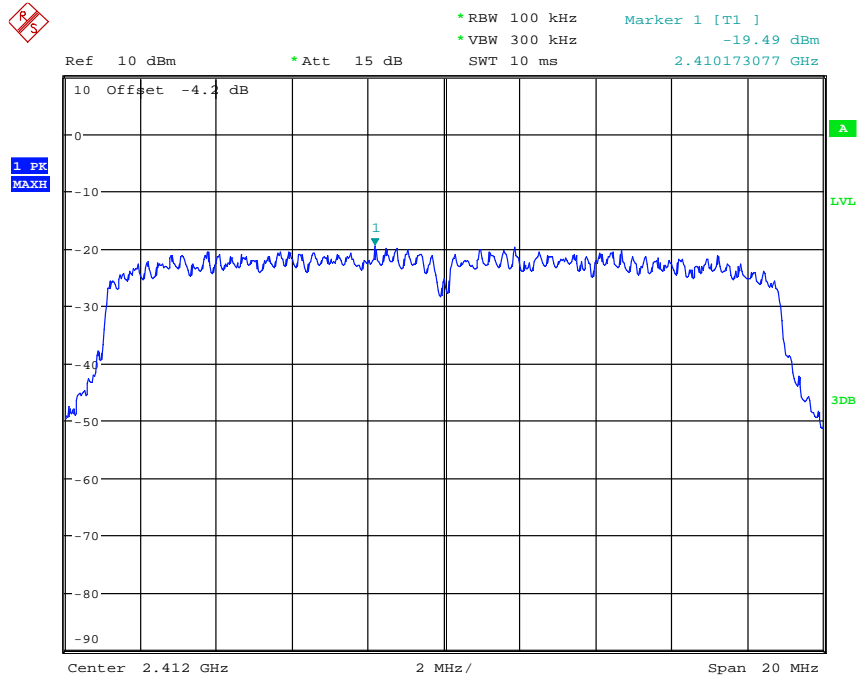
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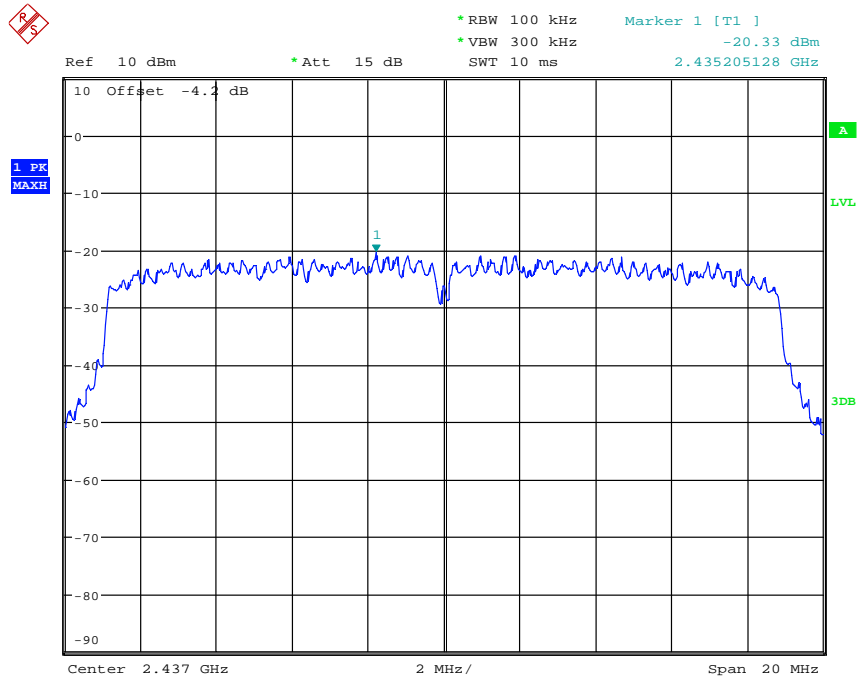
POWER DENSITY 802.11G CH11
Date: 4.DEC.2012 11:34:18



Registration number: W6D21301-12971-C-1
FCC ID: WKP-CSAW-02IP



POWER DENSITY 802.11N 20MHZ CH01
Date: 4.DEC.2012 11:35:15

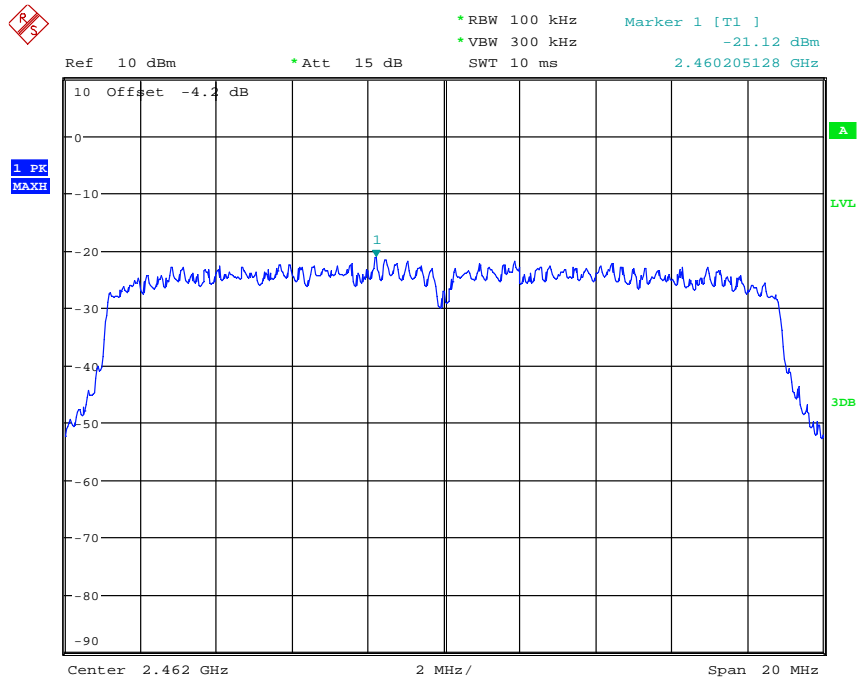


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Date: 4.DEC.2012 11:36:12

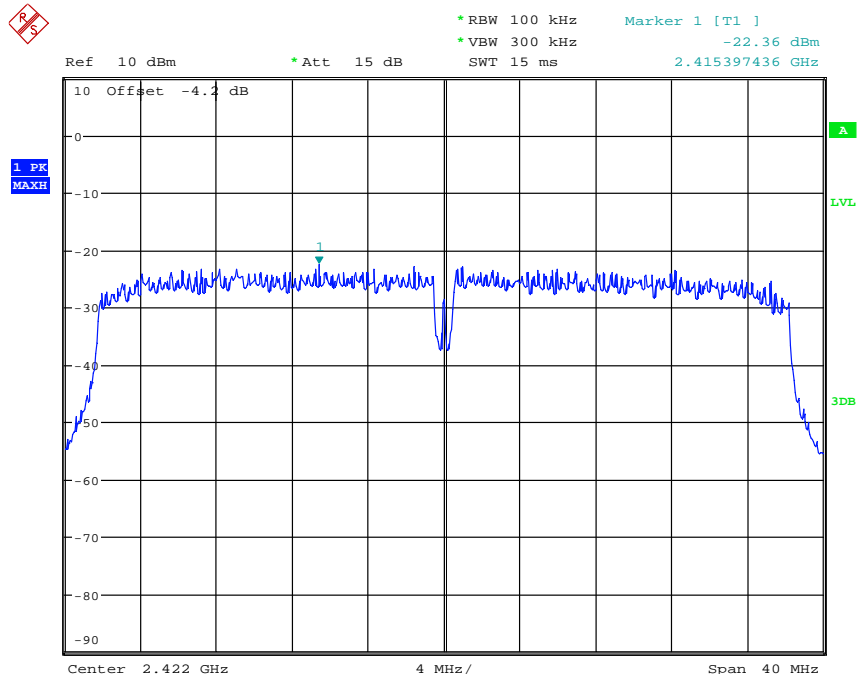


Worldwide Testing Services(Taiwan) Co., Ltd.

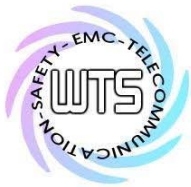
Registration number: W6D21301-12971-C-1
FCC ID: WKP-CSAW-02IP



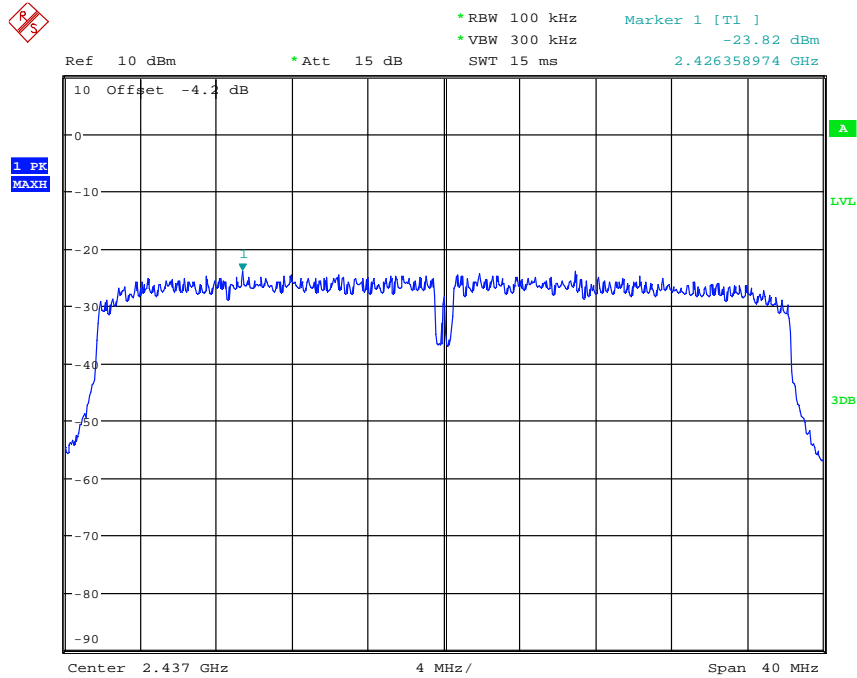
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Date: 4.DEC.2012 11:37:09



POWER DENSITY 802.11N 40MHZ CH01
Date: 4.DEC.2012 11:39:16

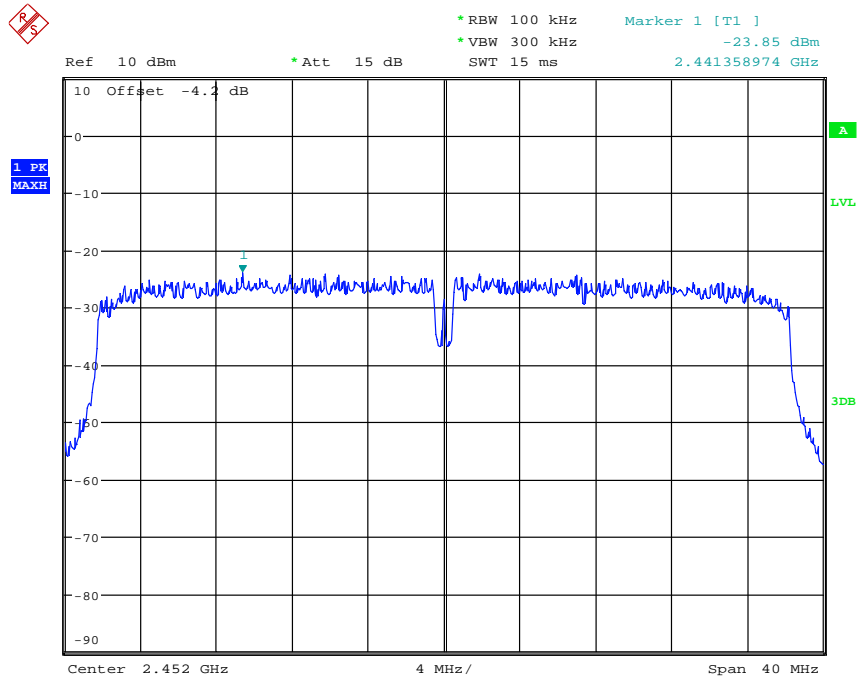


Registration number: W6D21301-12971-C-1
FCC ID: WKP-CSAW-02IP



POWER DENSITY 802.11N 40MHZ CH04

Date: 4.DEC.2012 11:39:59



POWER DENSITY 802.11N 40MHZ CH07

Date: 4.DEC.2012 11:41:32



Worldwide Testing Services(Taiwan) Co., Ltd.

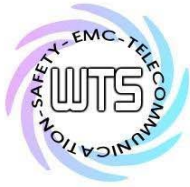
Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

Limits:

Frequency Range MHz	dBm
902-928	8
2400-2483.5	8
5725-5850	8

Test equipment used: ETSTW-RE 055, ETSTW-RE 050



Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

3.9 Radiated Emission from Digital Part

FCC Rule: 15.109

Except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency of Emission (MHz)	Field Strength (microvolts/meter)	Field Strength (dBmicrovolts/meter)
30 – 88	100	40.0
88 – 216	150	43.5
216 – 960	200	46.0
Above 960	500	54.0

Test equipment used: ETSTW-RE 055, ETSTW-RE 064, ETSTW-RE 003, ETSTW-RE 004, ETSTW-RE 030
ETSTW-RE 111

Explanation: The test results are listed in the separated test report no.: W6D21301-12971-P-15B.

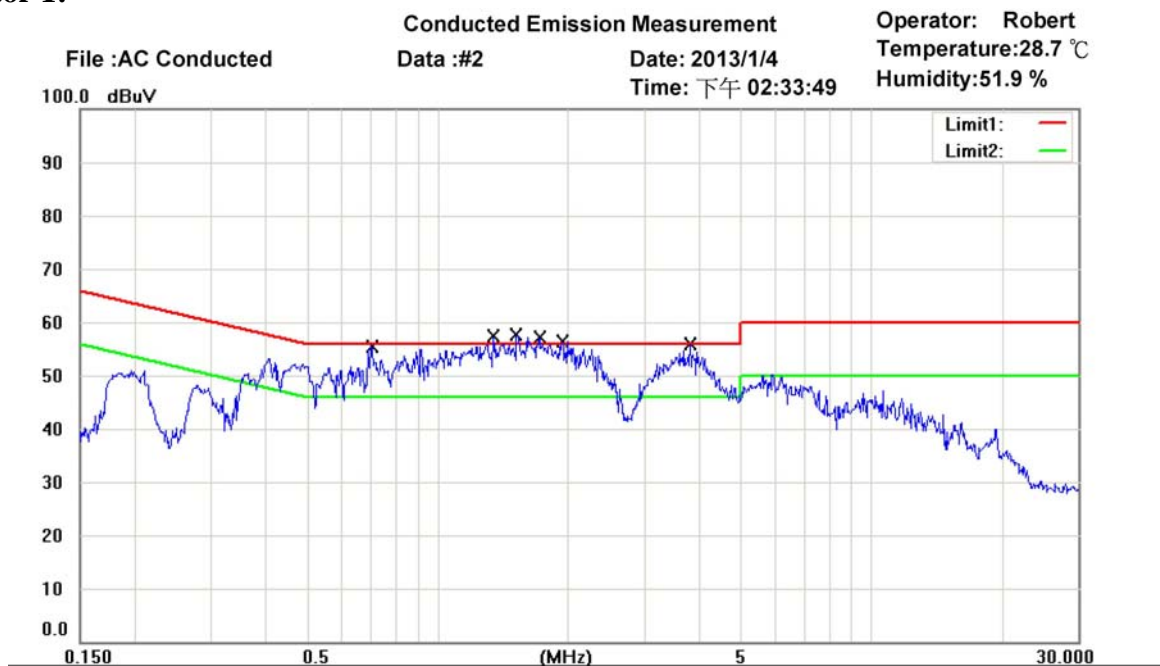
Registration number: W6D21301-12971-C-1
FCC ID: WKP-CSAW-02IP

3.10 Power Line Conducted Emission

For an intentional radiator which is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the table bellows with this provision shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminals.

This measurement was transact 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.

Adaptor 1:



Site : Chamber_03

Condition : FCC Part 15 Class B Conduction (QP)

EUT : W6M21211-12880

M/N: WiDEGT

Test Mode :

Note :

Phase: **N**

Power : 110VAC

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Comment
	0.7025	36.80	QP	9.98	46.78	56.00	-9.22	
	0.7025	21.63	AVG	9.98	31.61	46.00	-14.39	
*	1.3438	38.62	QP	9.97	48.59	56.00	-7.41	
	1.3438	26.21	AVG	9.97	36.18	46.00	-9.82	
	1.5148	37.52	QP	9.98	47.50	56.00	-8.50	
	1.5148	25.67	AVG	9.98	35.65	46.00	-10.35	
	1.7150	38.06	QP	9.98	48.04	56.00	-7.96	
	1.7150	25.83	AVG	9.98	35.81	46.00	-10.19	
	1.9332	37.98	QP	9.99	47.97	56.00	-8.03	
	1.9332	26.16	AVG	9.99	36.15	46.00	-9.85	
	3.8188	35.07	QP	10.04	45.11	56.00	-10.89	
	3.8188	24.80	AVG	10.04	34.84	46.00	-11.16	



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1
FCC ID: WKP-CSAW-02IP

Conducted Emission Measurement

Operator: Robert
Temperature: 28.7 °C
Humidity: 51.9 %

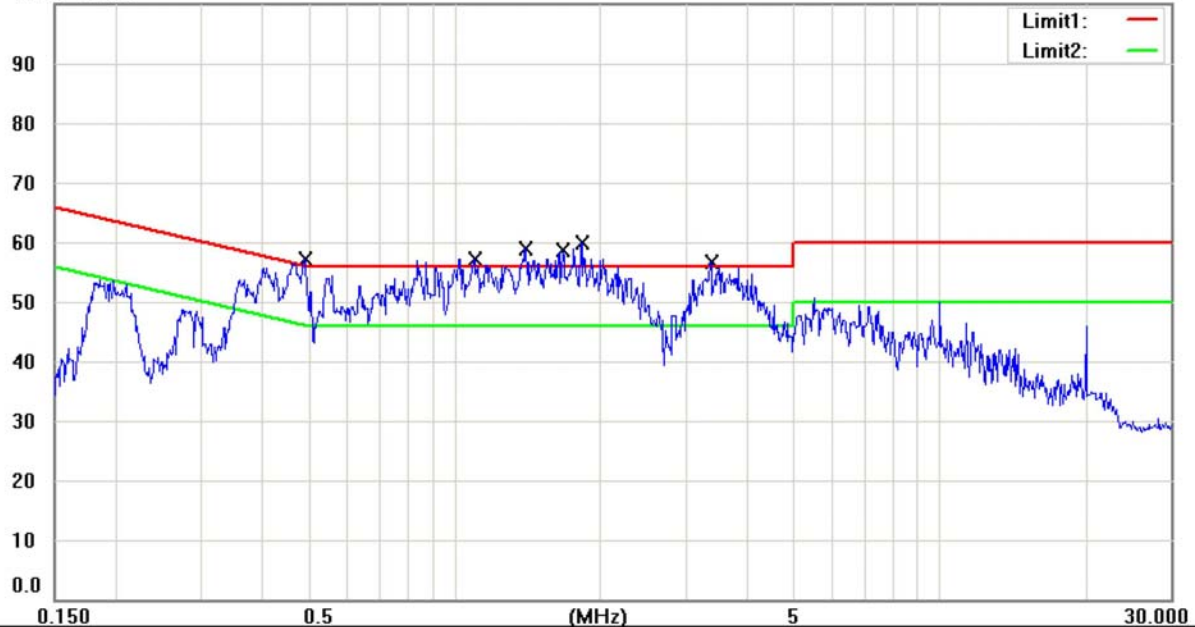
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Data : #1

Date: 2013/1/4

Time: 下午 02:31:47

100.0 dBuV



Site : Chamber_03

Condition : FCC Part 15 Class B Conduction (QP)

Phase: L1

EUT : W6M21211-12880

Power : 110VAC

M/N: WiDEGT

Test Mode :

Note :

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Comment
	0.4890	37.58	QP	10.13	47.71	56.18	-8.47	
	0.4890	22.55	AVG	10.13	32.68	46.18	-13.50	
	1.0940	40.32	QP	10.14	50.46	56.00	-5.54	
	1.0940	28.35	AVG	10.14	38.49	46.00	-7.51	
	1.3977	40.27	QP	10.16	50.43	56.00	-5.57	
	1.3977	29.31	AVG	10.16	39.47	46.00	-6.53	
	1.6655	40.50	QP	10.18	50.68	56.00	-5.32	
	1.6655	29.75	AVG	10.18	39.93	46.00	-6.07	
*	1.8208	40.64	QP	10.19	50.83	56.00	-5.17	
	1.8208	28.95	AVG	10.19	39.14	46.00	-6.86	
	3.3643	36.74	QP	10.27	47.01	56.00	-8.99	
	3.3643	27.02	AVG	10.27	37.29	46.00	-8.71	



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1
FCC ID: WKP-CSAW-02IP

Adaptor 2:

Conducted Emission Measurement

Operator: Robert
Temperature: 28.7 °C
Humidity: 51.9 %

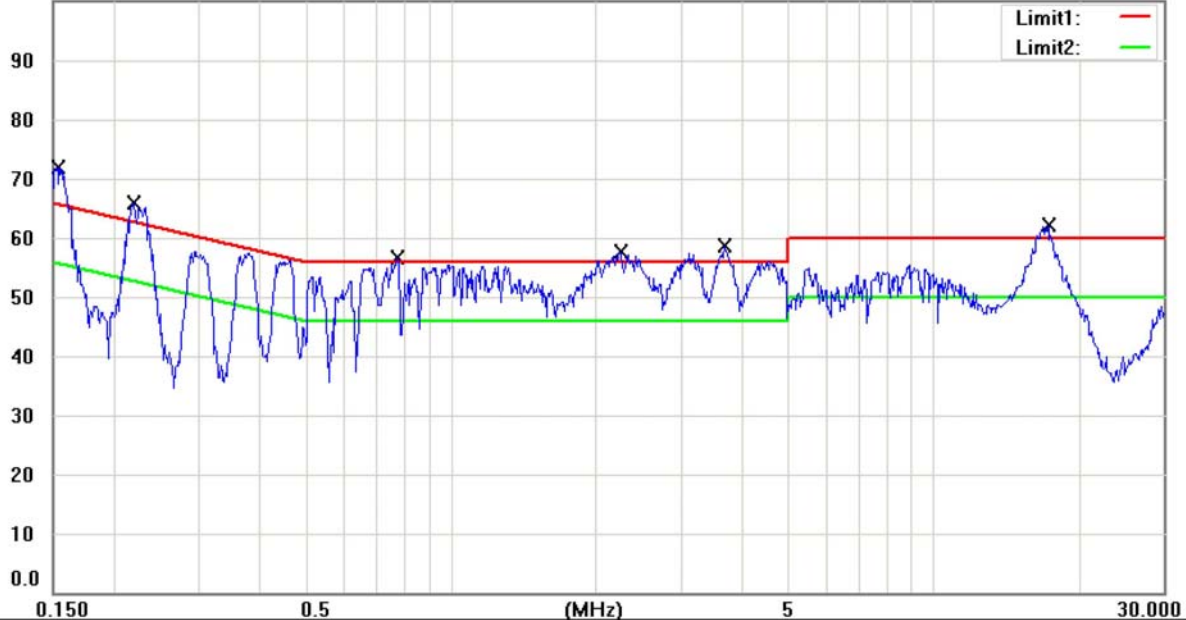
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Data : #1

Date: 2013/1/4

Time: 下午 02:36:09

100.0 dBuV



Site : Chamber_03

Condition : FCC Part 15 Class B Conduction (QP)

EUT : W6M21211-12880

M/N: WiDEGT

Test Mode :

Note :

Phase: N

Power : 110VAC

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Comment
*	0.1530	54.35	QP	9.98	64.33	65.84	-1.51	
	0.1530	35.72	AVG	9.98	45.70	55.84	-10.14	
	0.2188	48.40	QP	9.98	58.38	62.86	-4.48	
	0.2188	26.98	AVG	9.98	36.96	52.86	-15.90	
	0.7745	40.66	QP	9.98	50.64	56.00	-5.36	
	0.7745	20.08	AVG	9.98	30.06	46.00	-15.94	
	2.2415	41.47	QP	10.00	51.47	56.00	-4.53	
	2.2415	22.39	AVG	10.00	32.39	46.00	-13.61	
	3.6680	39.23	QP	10.03	49.26	56.00	-6.74	
	3.6680	22.00	AVG	10.03	32.03	46.00	-13.97	
	17.2125	44.58	QP	10.43	55.01	60.00	-4.99	
	17.2125	35.39	AVG	10.43	45.82	50.00	-4.18	



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1
FCC ID: WKP-CSAW-02IP

Conducted Emission Measurement

Operator: Robert
Temperature: 28.7 °C
Humidity: 51.9 %

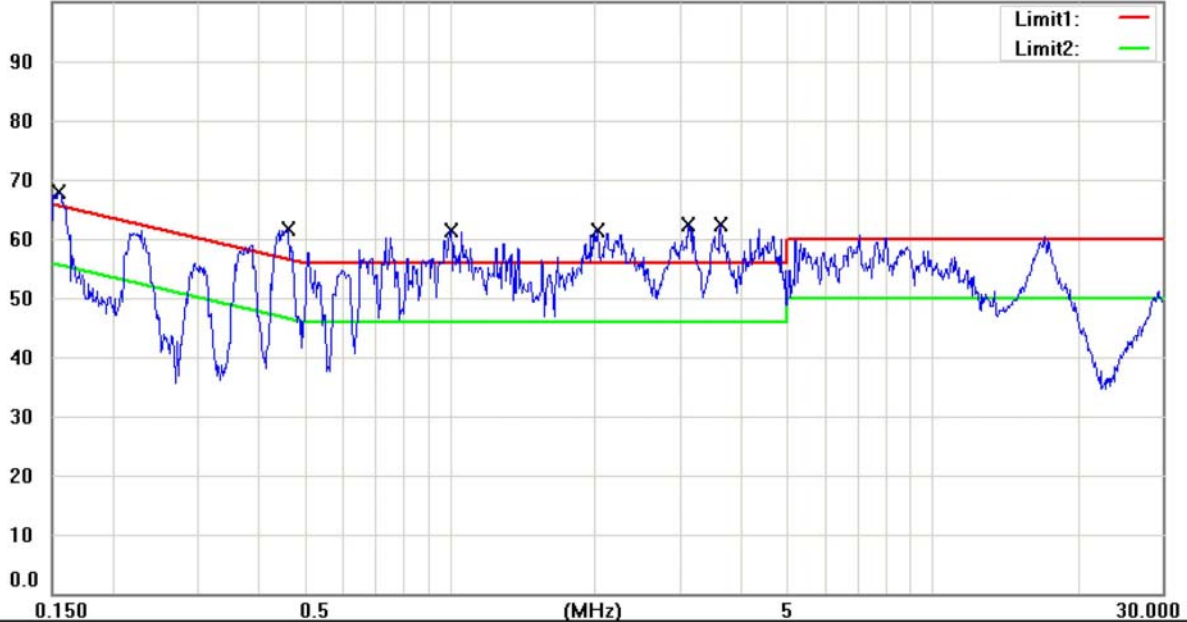
File : AC Conducted

Data : #2

Date: 2013/1/4

Time: 下午 02:38:41

100.0 dBuV



Site : Chamber_03

Condition : FCC Part 15 Class B Conduction (QP)

Phase: L1

EUT : W6M21211-12880

Power : 110VAC

M/N: WiDEGT

Test Mode :

Note :

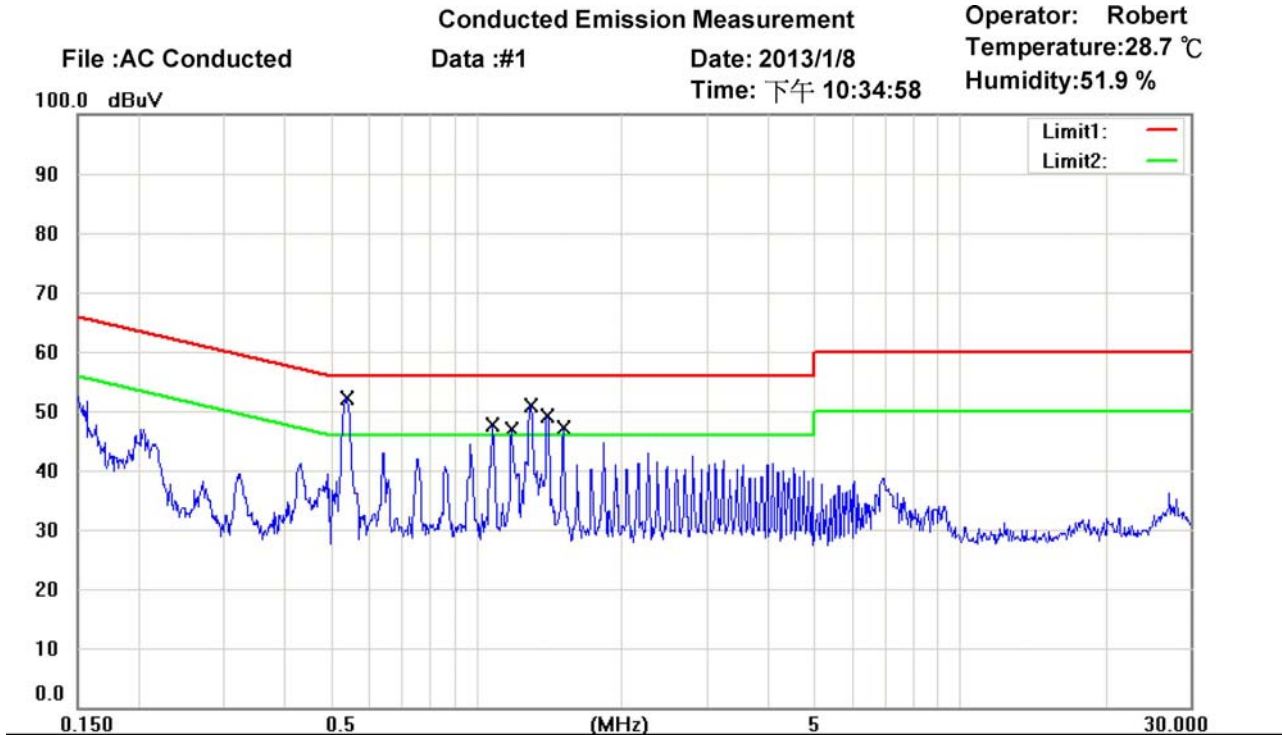
Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Comment
	0.1542	50.56	QP	10.08	60.64	65.77	-5.13	
	0.1542	31.61	AVG	10.08	41.69	55.77	-14.08	
	0.4622	43.79	QP	10.12	53.91	56.65	-2.74	
	0.4622	26.95	AVG	10.12	37.07	46.65	-9.58	
	1.0017	42.26	QP	10.13	52.39	56.00	-3.61	
	1.0017	23.10	AVG	10.13	33.23	46.00	-12.77	
	2.0143	43.52	QP	10.20	53.72	56.00	-2.28	
	2.0143	22.98	AVG	10.20	33.18	46.00	-12.82	
	3.1032	41.70	QP	10.26	51.96	56.00	-4.04	
	3.1032	22.95	AVG	10.26	33.21	46.00	-12.79	
*	3.6388	43.79	QP	10.28	54.07	56.00	-1.93	
	3.6388	25.23	AVG	10.28	35.51	46.00	-10.49	



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1
FCC ID: WKP-CSAW-02IP

USB:



Site : Chamber_03

Condition : FCC Part 15 Class B Conduction (QP)

Phase: N

EUT : W6M21211-12880

Power : 110VAC

M/N: WiDEGT

Test Mode :

Note :

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Comment
*	0.5404	39.63	QP	10.03	49.66	56.00	-6.34	
	0.5404	21.96	AVG	10.03	31.99	46.00	-14.01	
	1.0782	34.36	QP	10.00	44.36	56.00	-11.64	
	1.0782	21.26	AVG	10.00	31.26	46.00	-14.74	
	1.1818	31.46	QP	10.00	41.46	56.00	-14.54	
	1.1818	16.92	AVG	10.00	26.92	46.00	-19.08	
	1.2920	36.82	QP	10.01	46.83	56.00	-9.17	
	1.2920	18.14	AVG	10.01	28.15	46.00	-17.85	
	1.4023	35.64	QP	10.01	45.65	56.00	-10.35	
	1.4023	20.47	AVG	10.01	30.48	46.00	-15.52	
	1.5103	33.05	QP	10.01	43.06	56.00	-12.94	
	1.5103	18.89	AVG	10.01	28.90	46.00	-17.10	

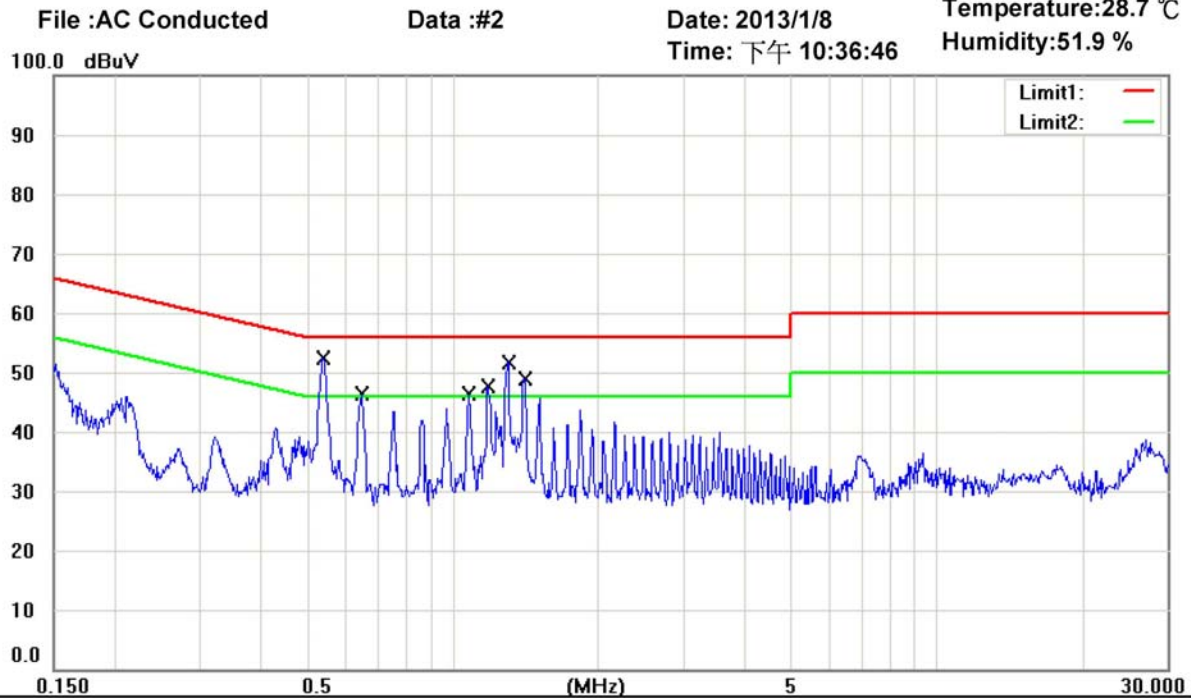


Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1
FCC ID: WKP-CSAW-02IP

Conducted Emission Measurement

Operator: Robert
Temperature: 28.7 °C
Humidity: 51.9 %



Site : Chamber_03

Condition : FCC Part 15 Class B Conduction (QP)

Phase: L1

EUT : W6M21211-12880

Power : 110VAC

M/N: WiDEGT

Test Mode :

Note :

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Comment
*	0.5383	40.22	QP	10.03	50.25	56.00	-5.75	
	0.5383	22.24	AVG	10.03	32.27	46.00	-13.73	
	0.6485	33.04	QP	10.02	43.06	56.00	-12.94	
	0.6485	15.58	AVG	10.02	25.60	46.00	-20.40	
	1.0782	33.44	QP	10.00	43.44	56.00	-12.56	
	1.0782	17.24	AVG	10.00	27.24	46.00	-18.76	
	1.1840	32.90	QP	10.01	42.91	56.00	-13.09	
	1.1840	16.59	AVG	10.01	26.60	46.00	-19.40	
	1.2965	33.70	QP	10.01	43.71	56.00	-12.29	
	1.2965	13.54	AVG	10.01	23.55	46.00	-22.45	
	1.4045	30.76	QP	10.01	40.77	56.00	-15.23	
	1.4045	13.31	AVG	10.01	23.32	46.00	-22.68	

Note: 1. The formula of measured value as: Test Result = Reading + Correction Factor

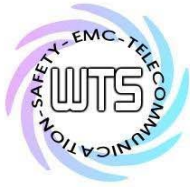
2. The Correction Factor = Cable Loss + LISN Insertion Loss + Pulse Limit Loss

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 = ± 1.10 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.



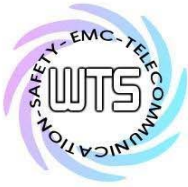
Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1
FCC ID: WKP-CSAW-02IP

Limits:

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

Test equipment used:ETSTW-CE 001, ETSTW-CE 004, ETSTW-CE 006, ETSTW-RE 045



Registration number: W6D21301-12971-C-1
FCC ID: WKP-CSAW-02IP

Appendix

Measurement diagrams

Spurious Emissions radiated



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

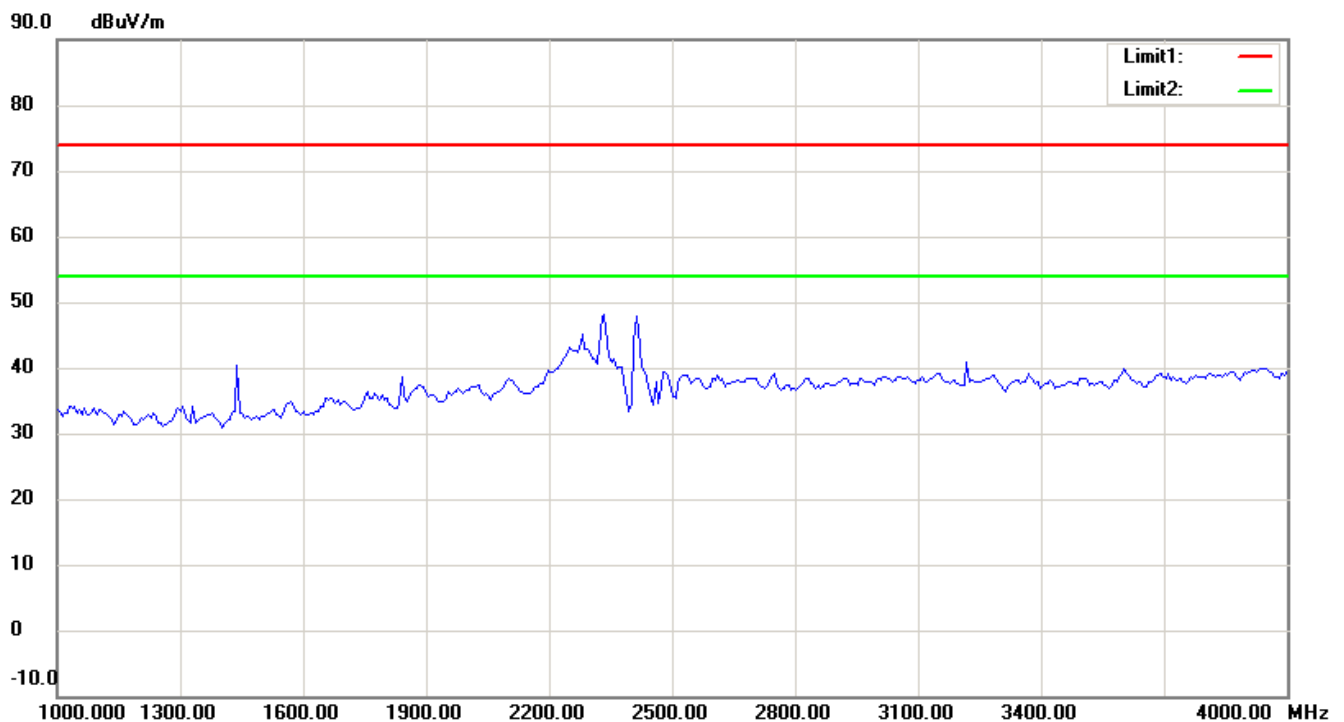
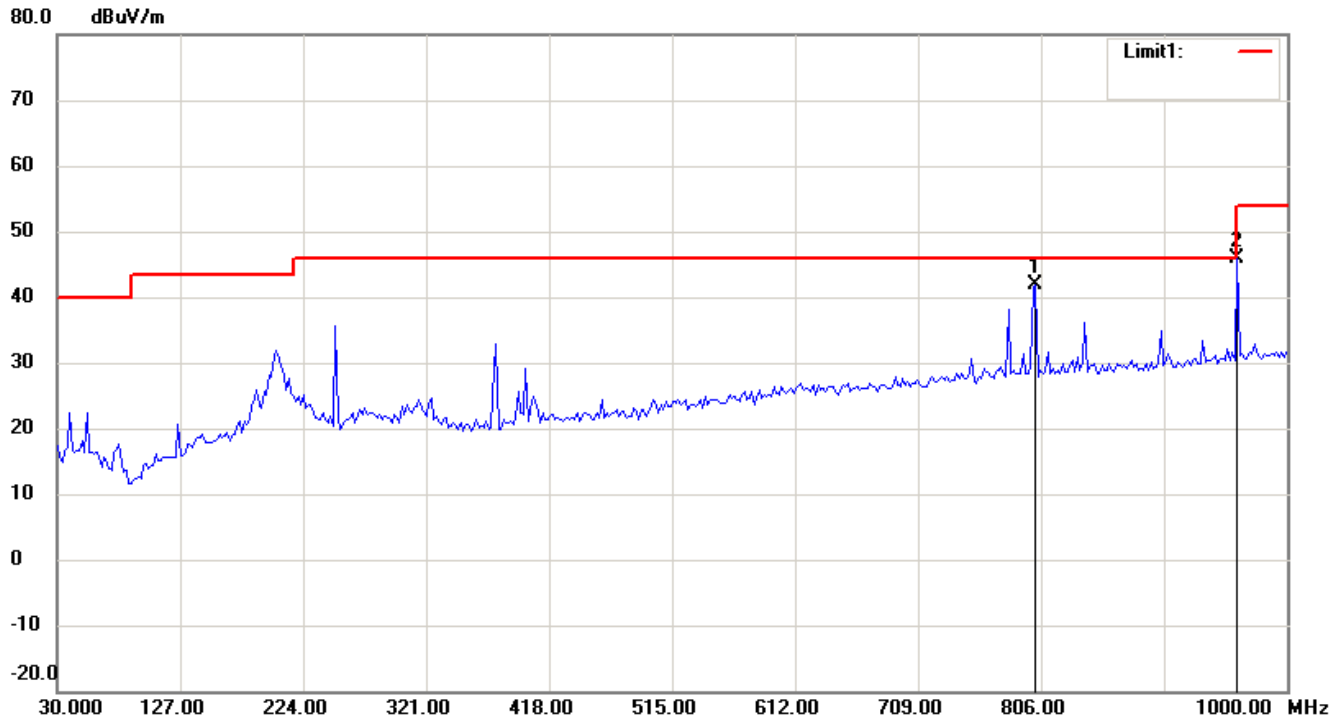
FCC ID: WKP-CSAW-02IP

Spurious Emissions radiated

ANT 1

802.11b_CH1

Antenna Polarization H



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

Note:

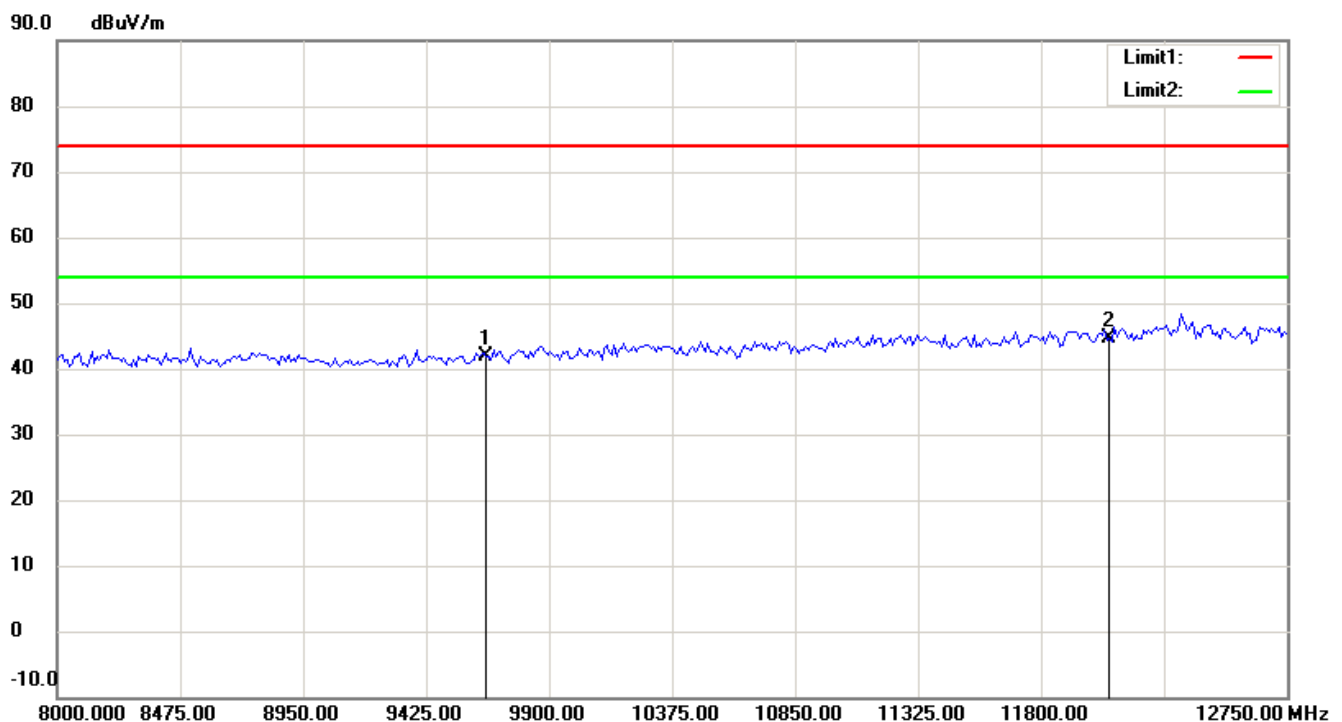
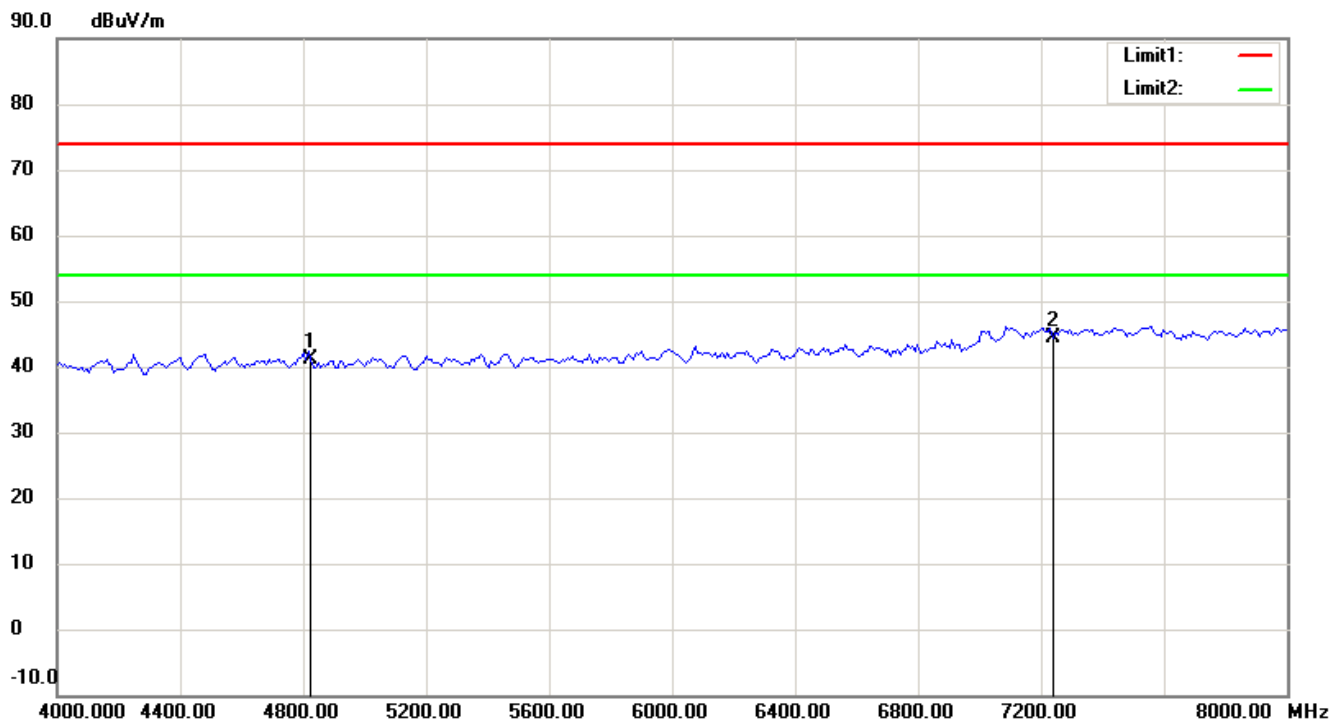
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2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
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Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

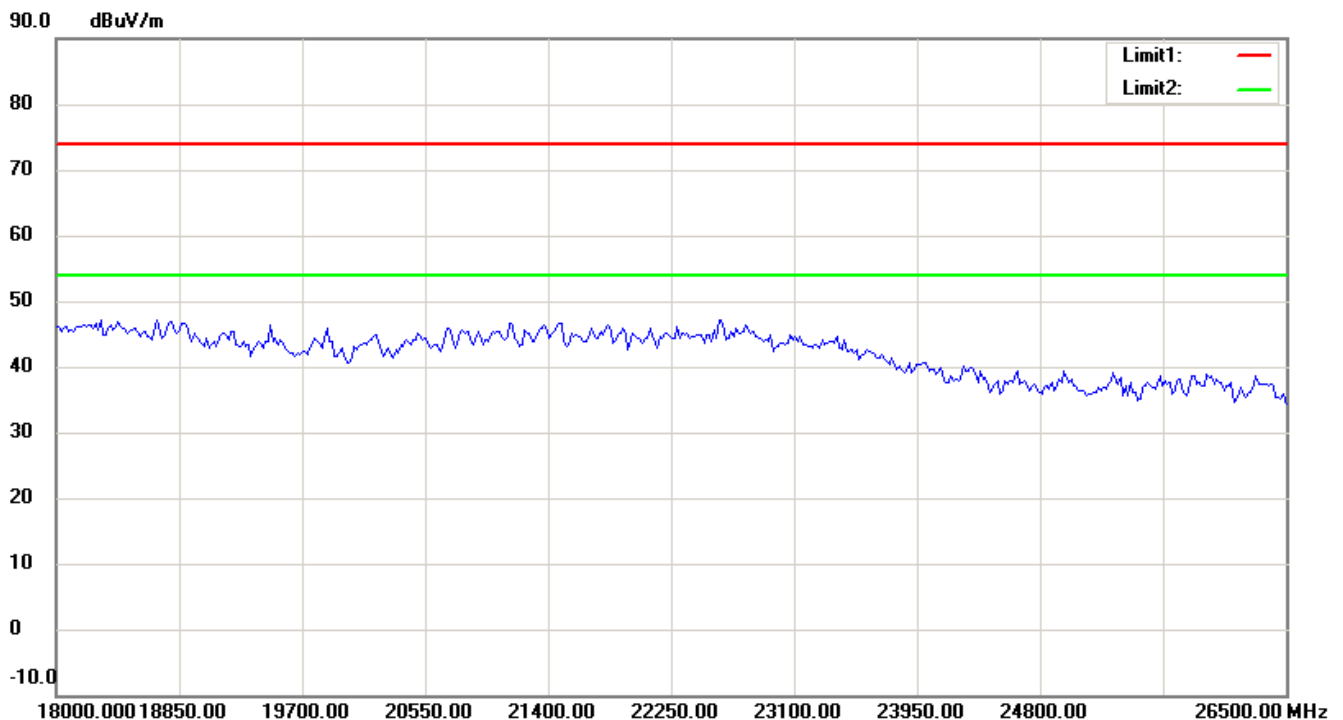
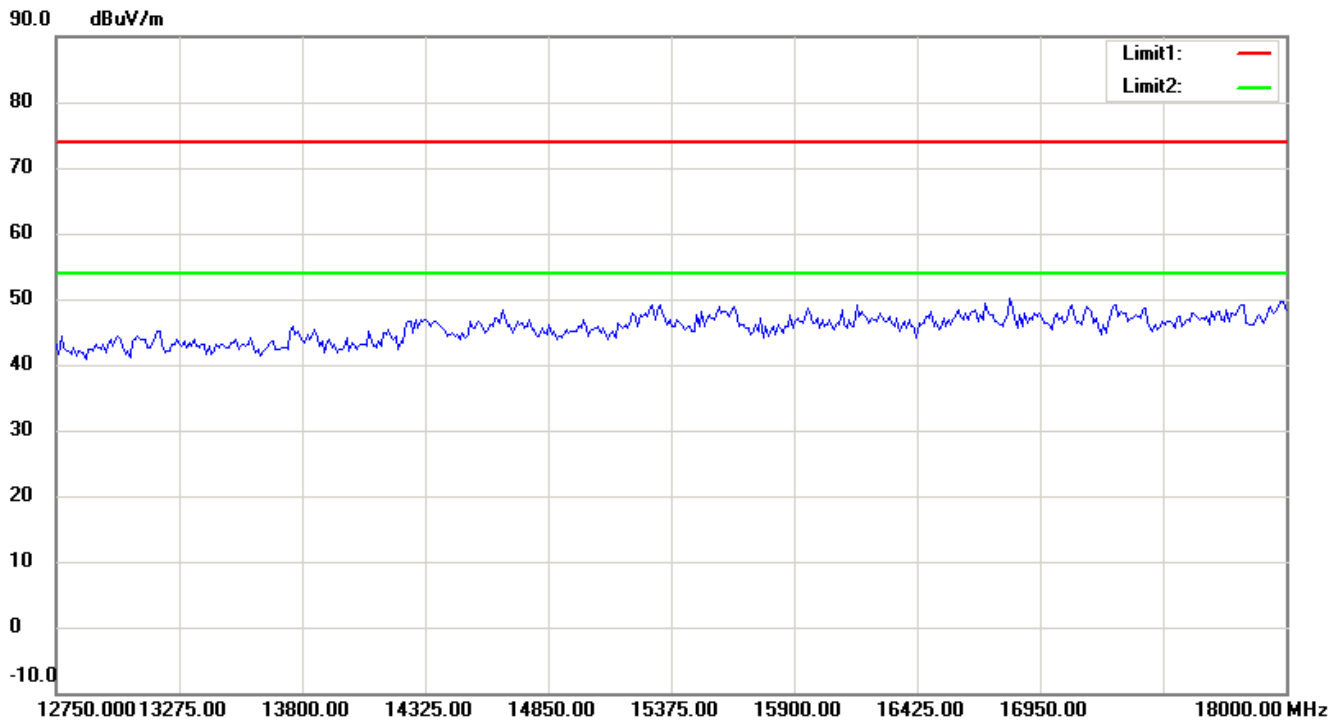
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Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

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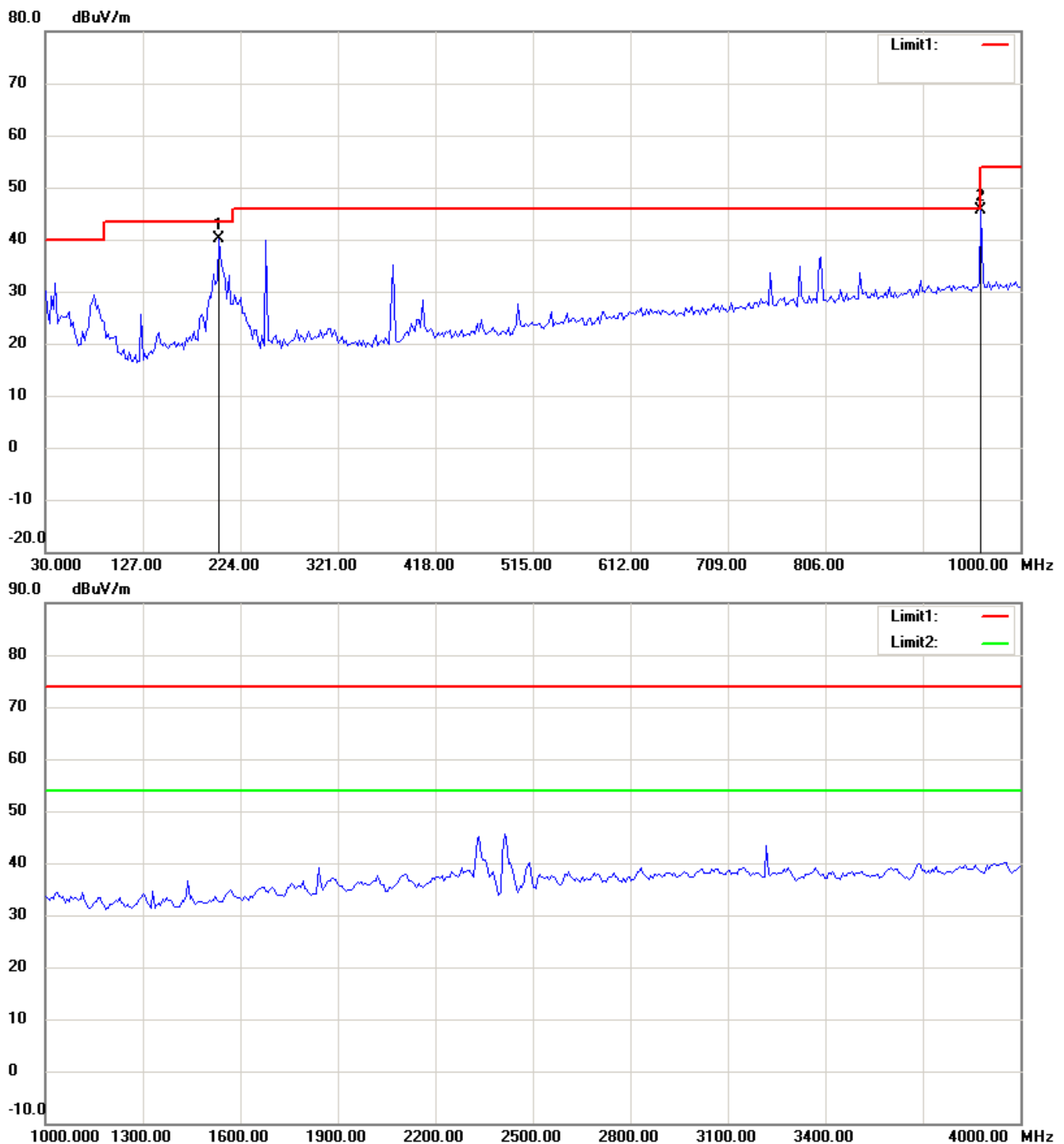


Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

Antenna Polarization V



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

Note:

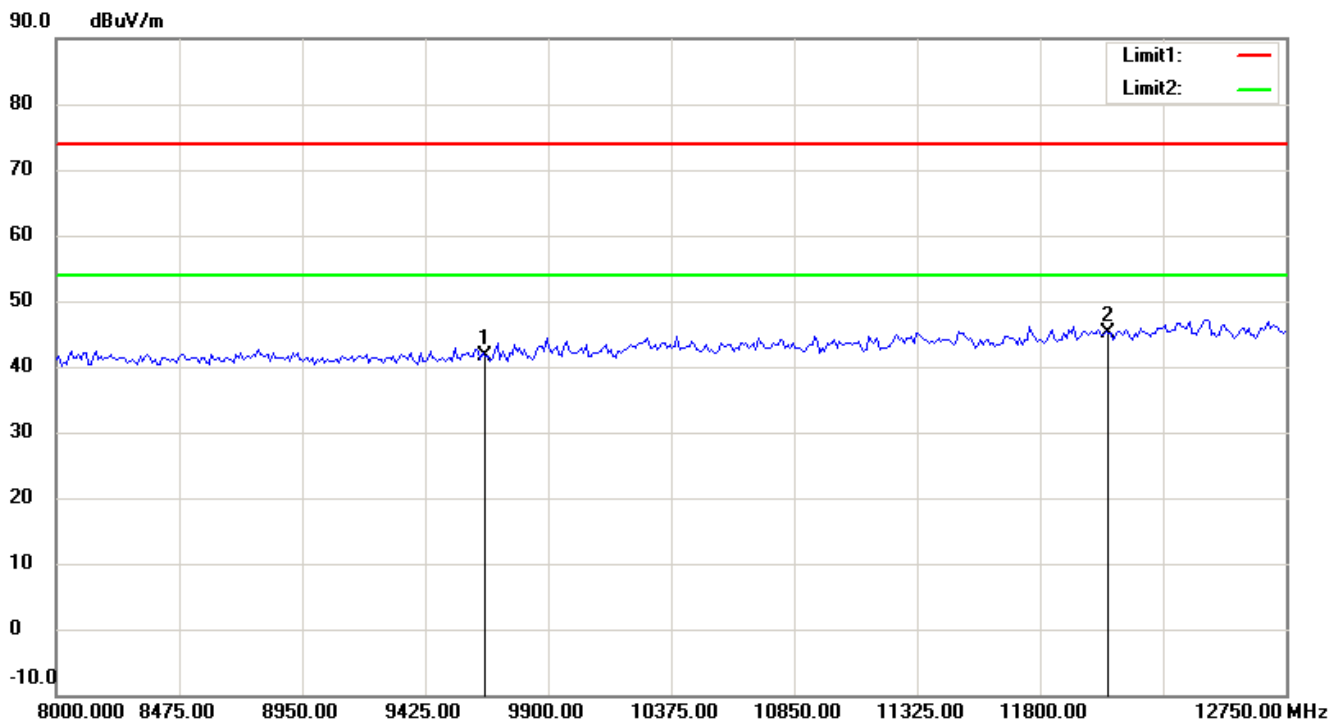
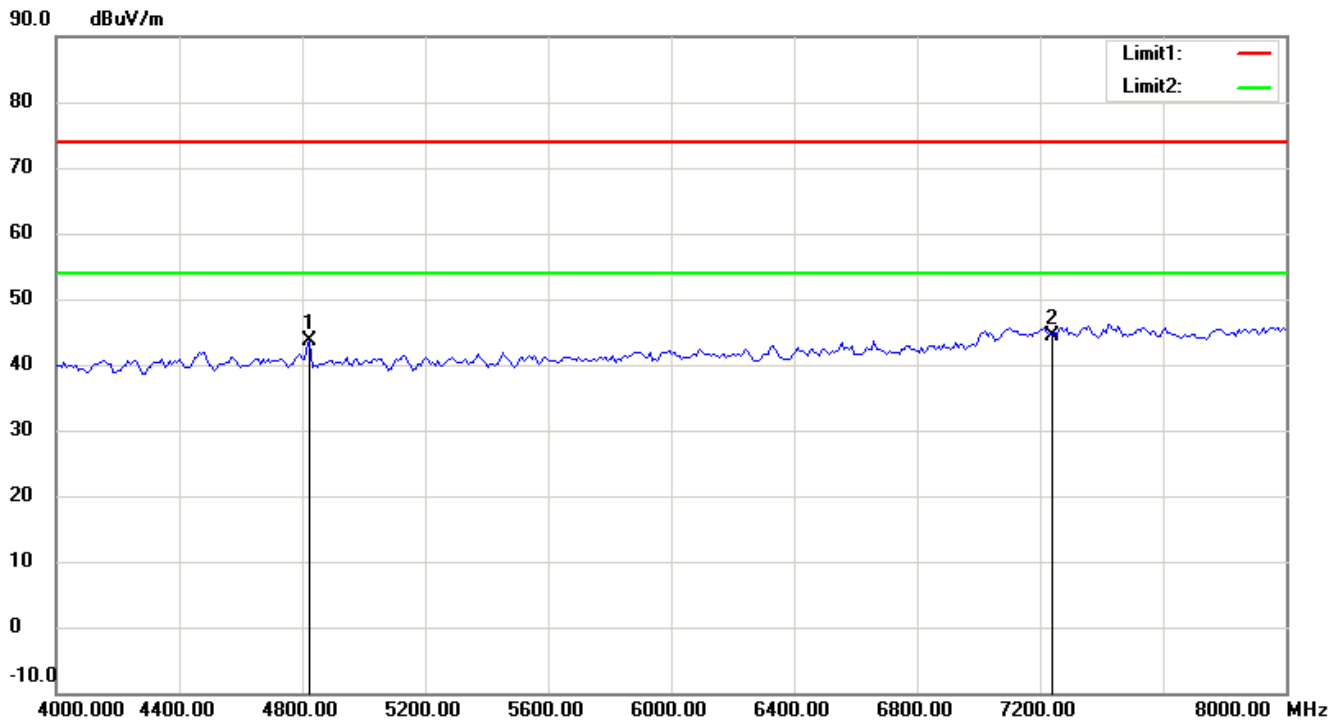
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Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

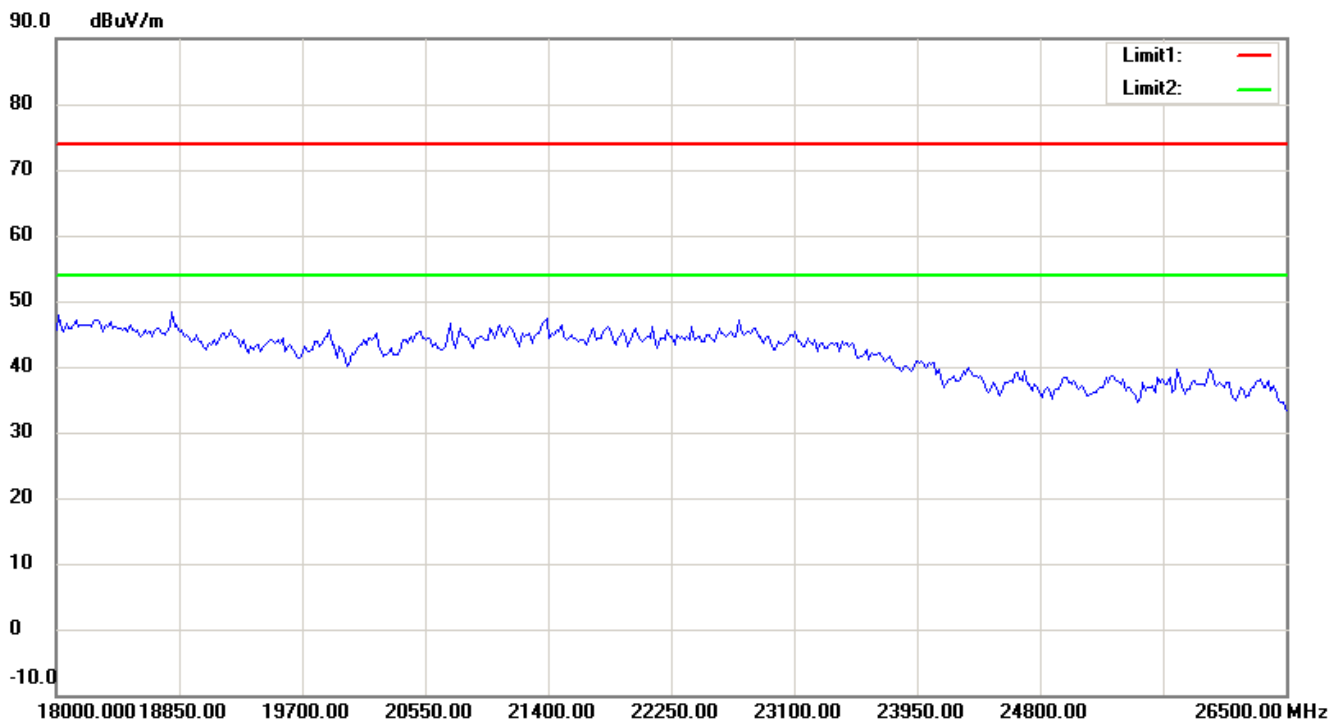
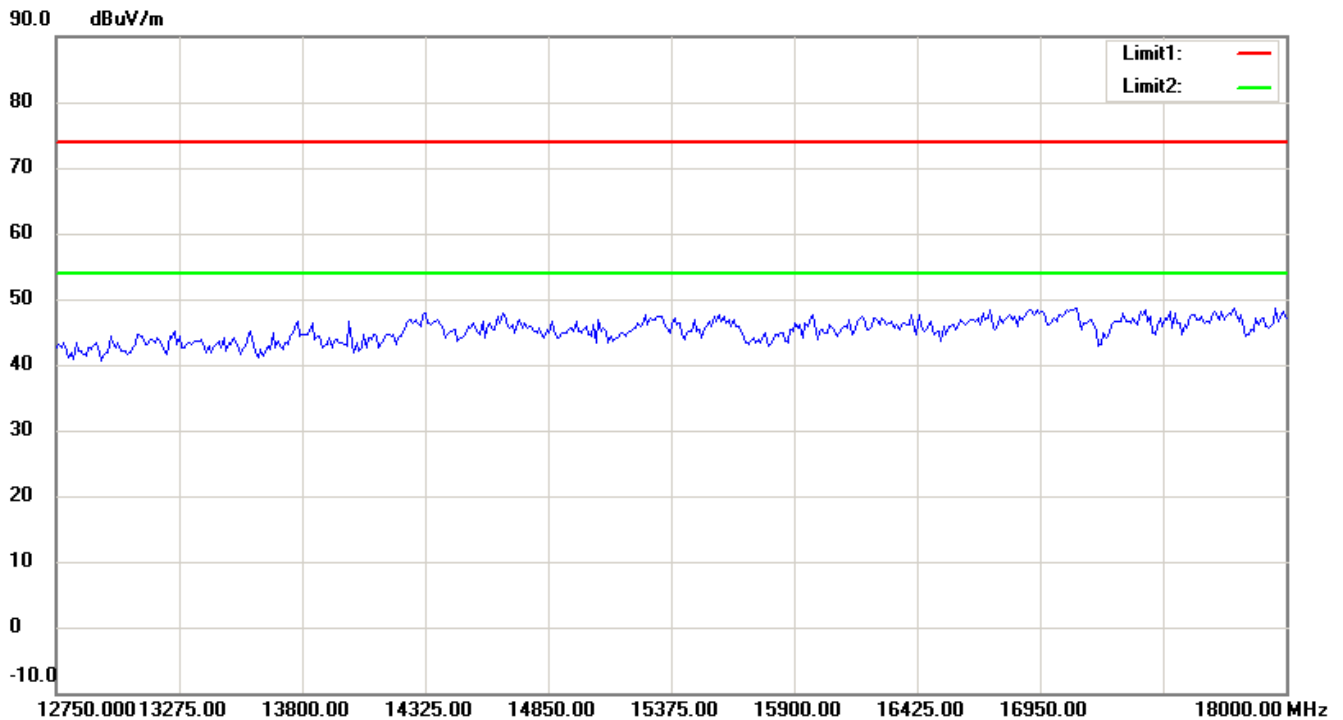
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Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

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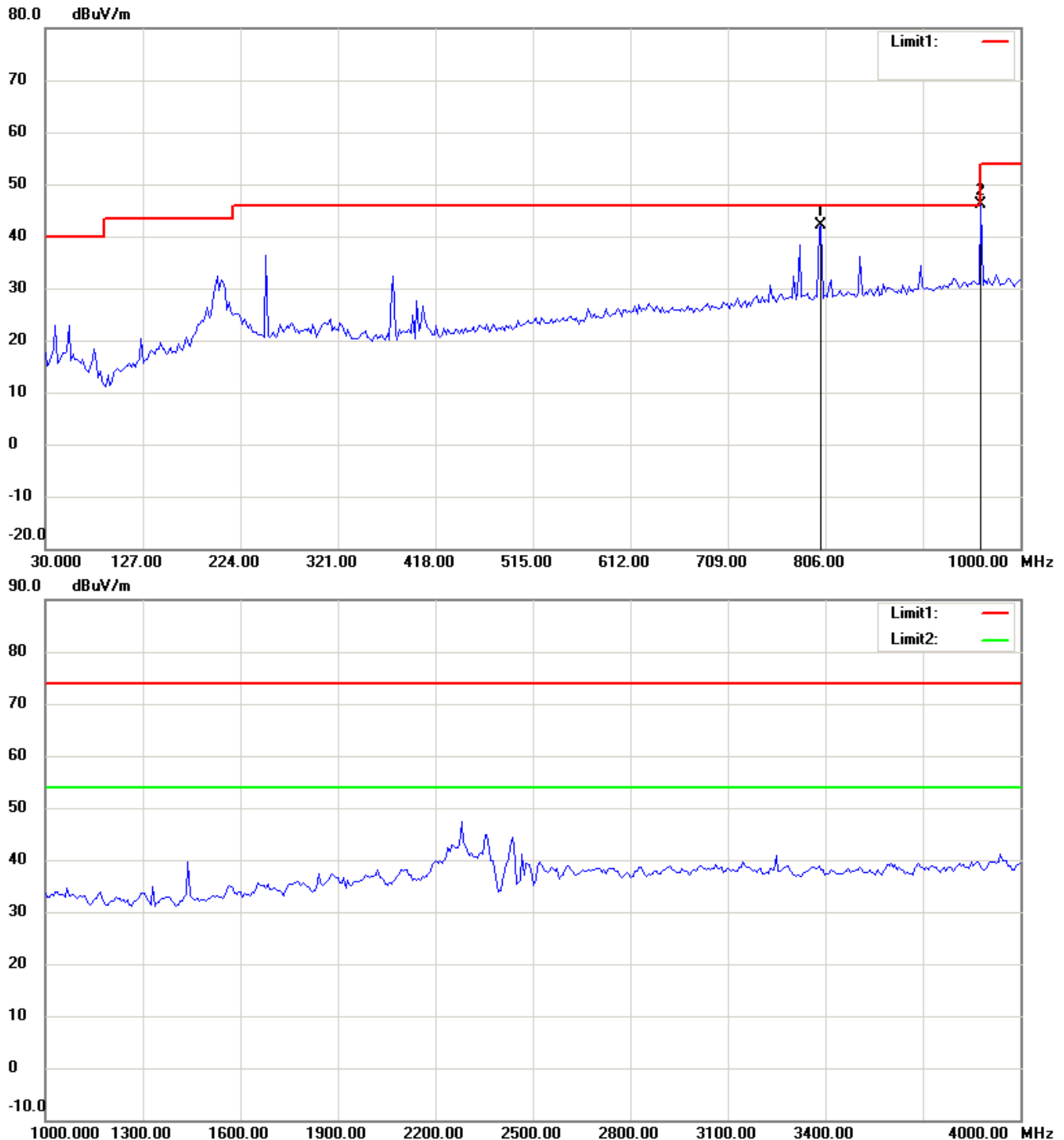


Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

CH6

Antenna Polarization H



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

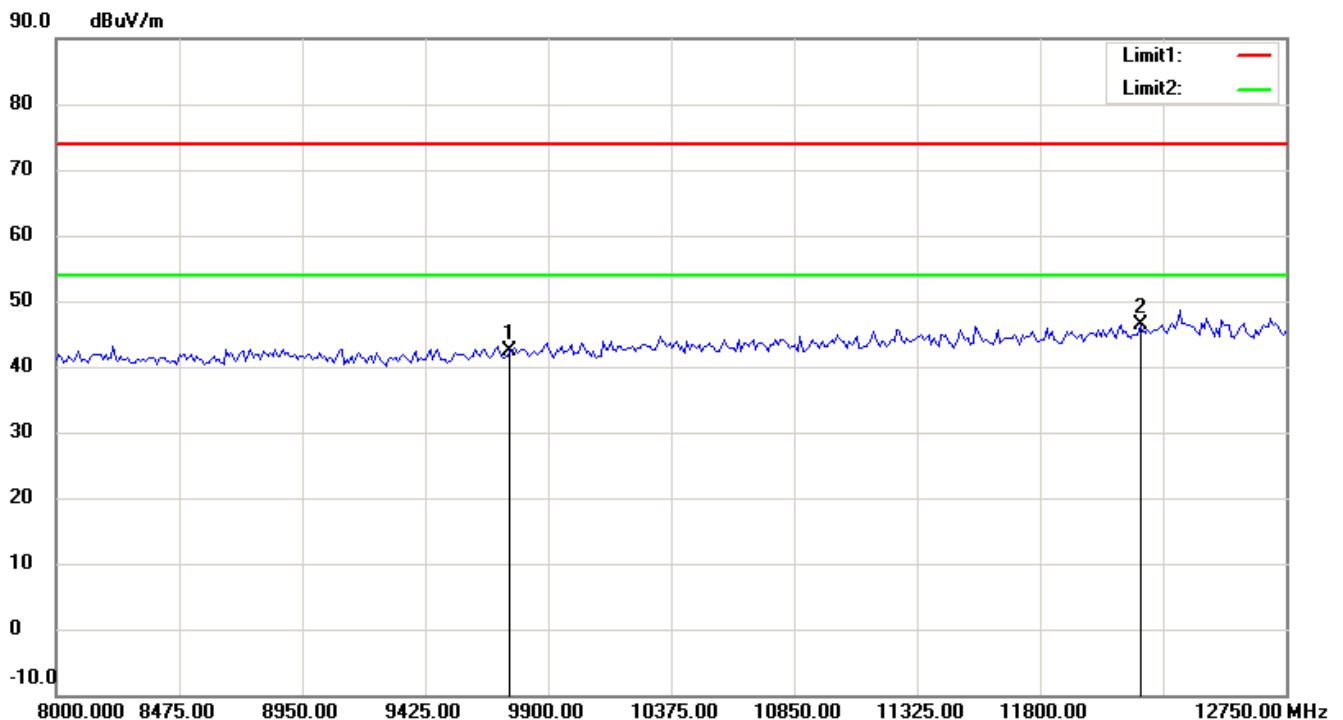
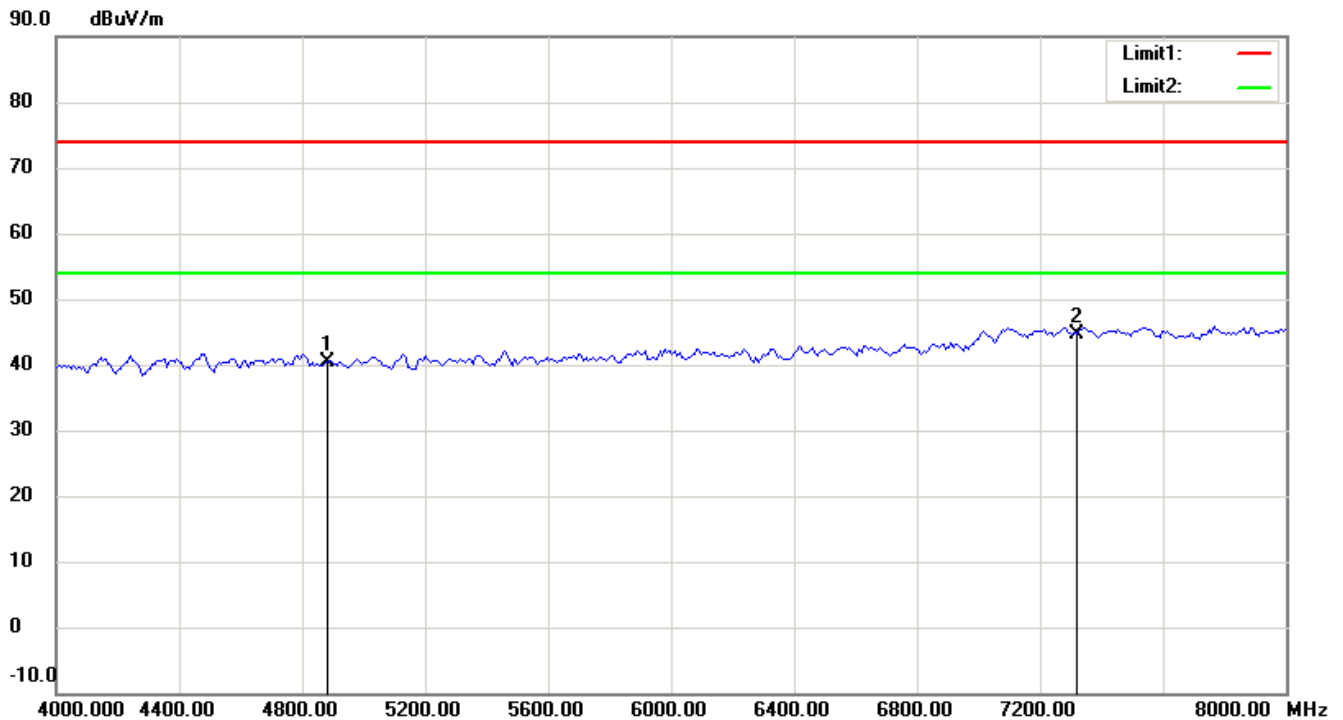
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Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

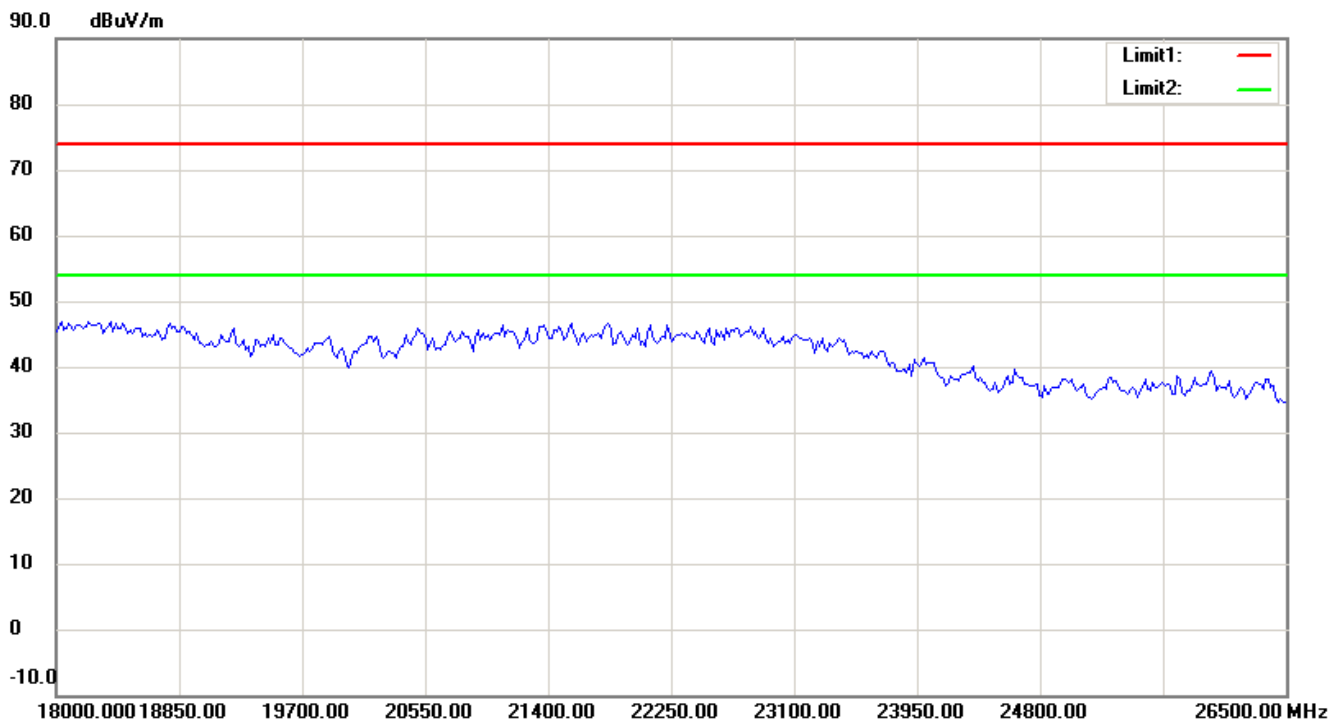
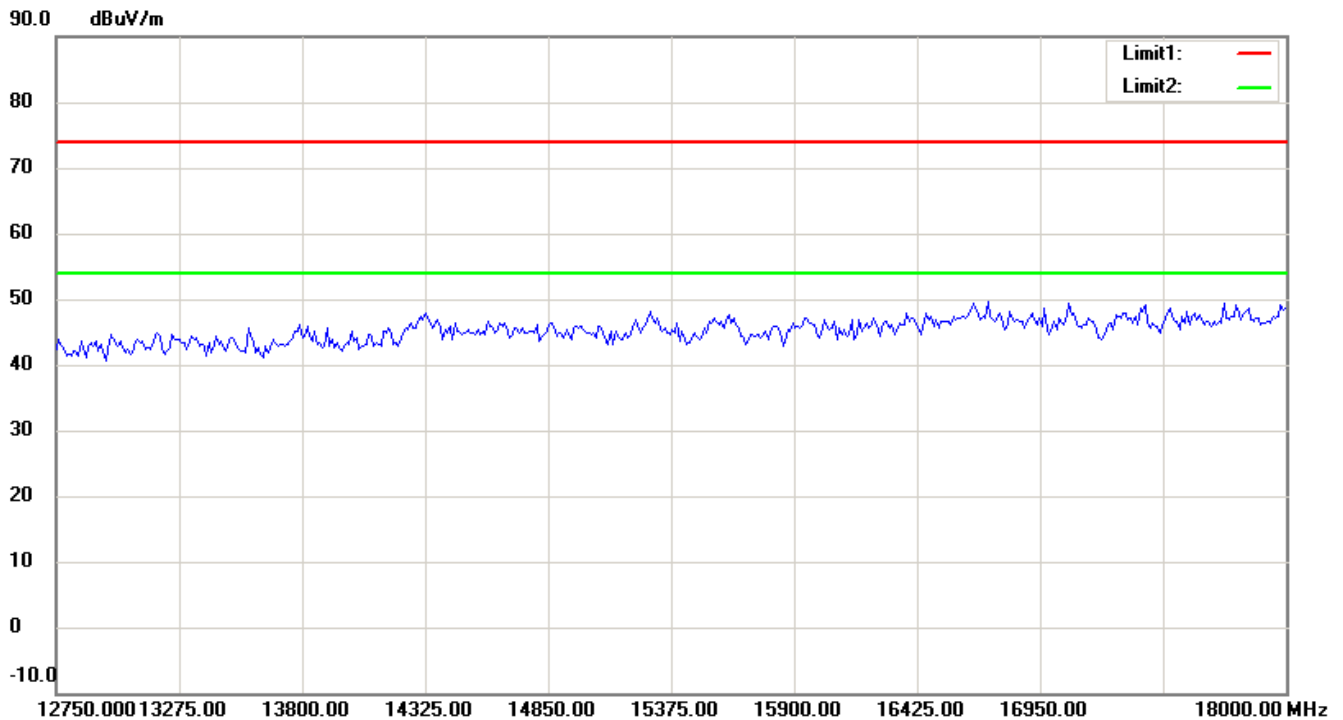
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FCC ID: WKP-CSAW-02IP



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

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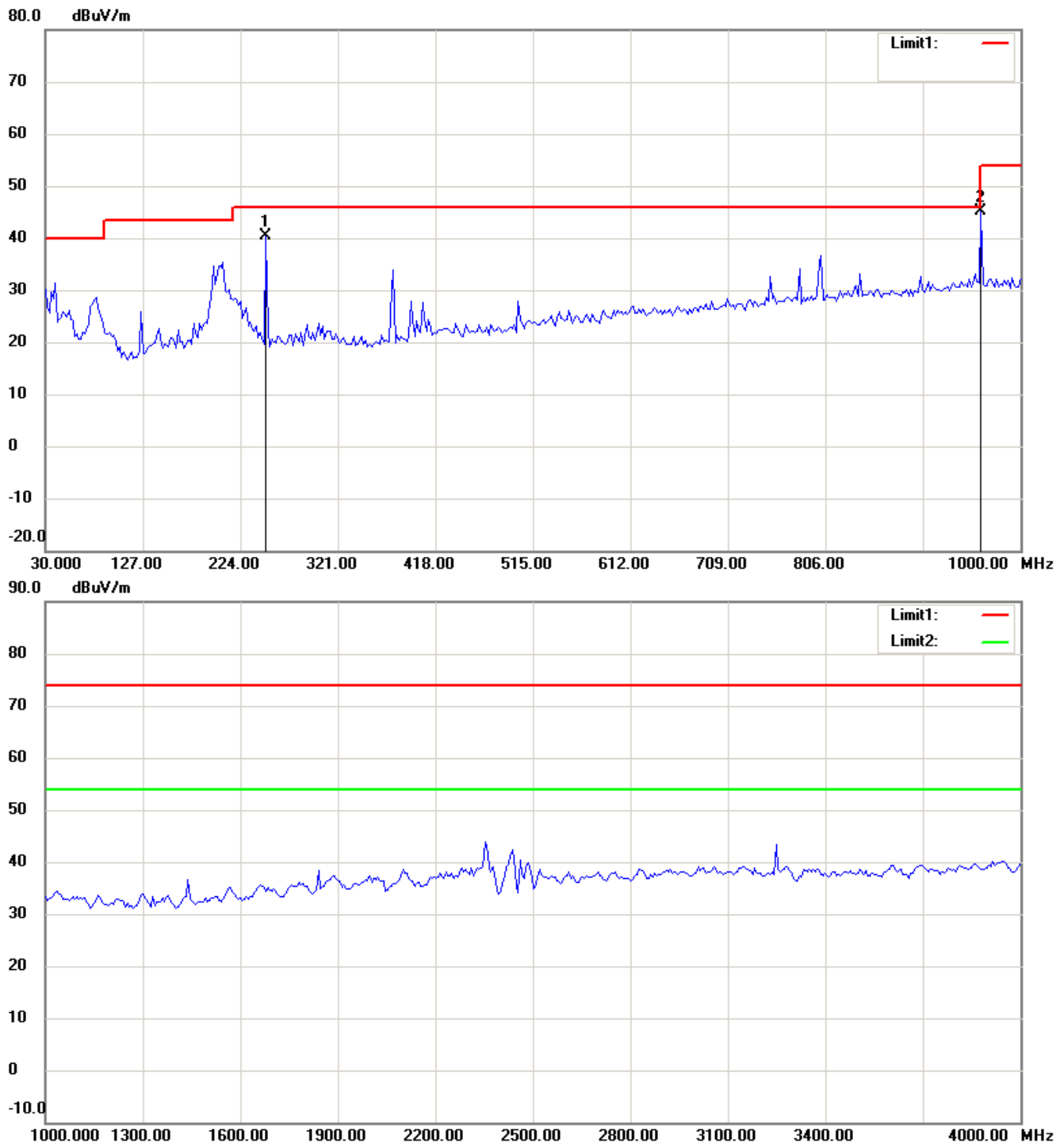


Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

Antenna Polarization V



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

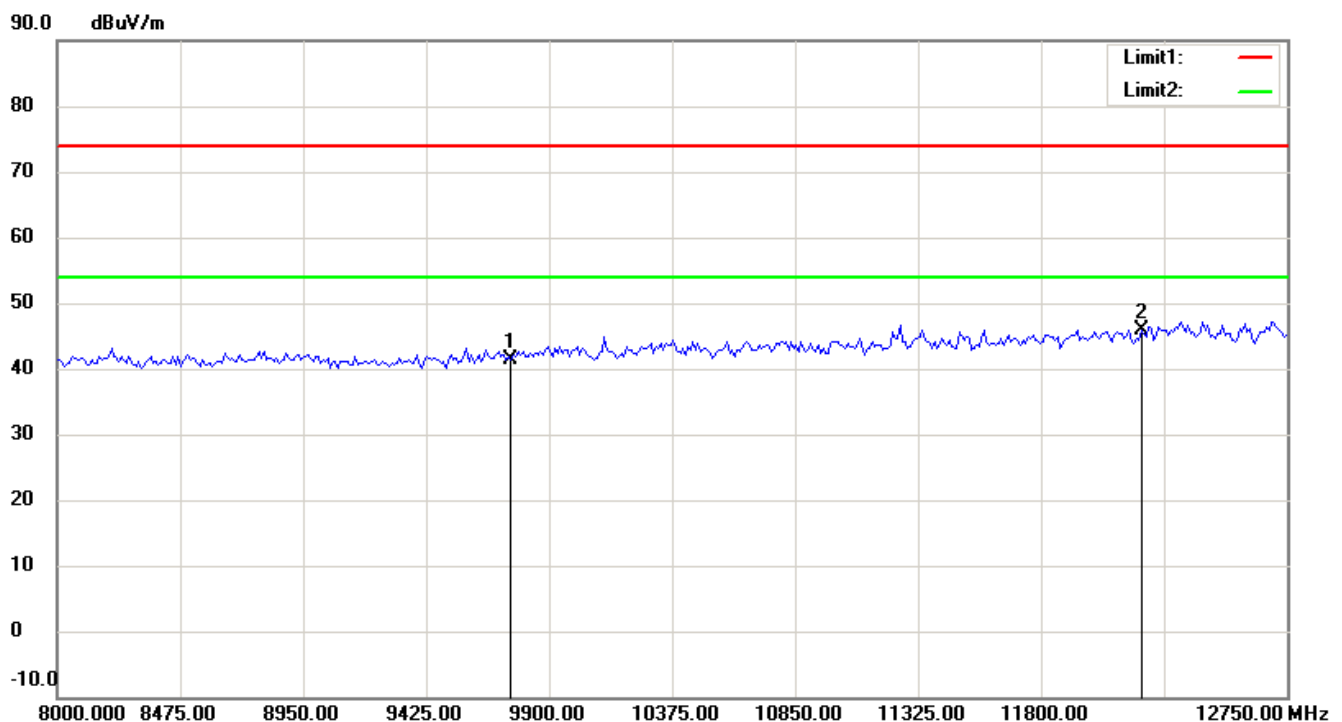
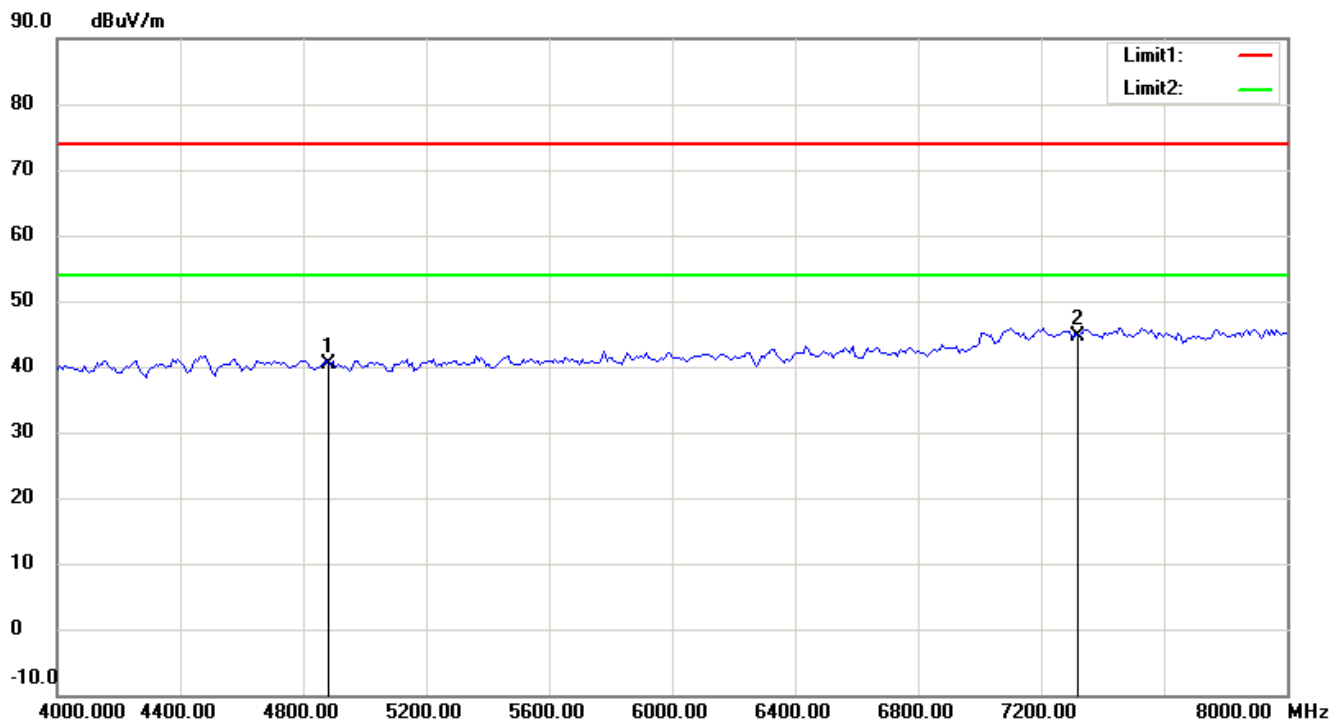
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Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

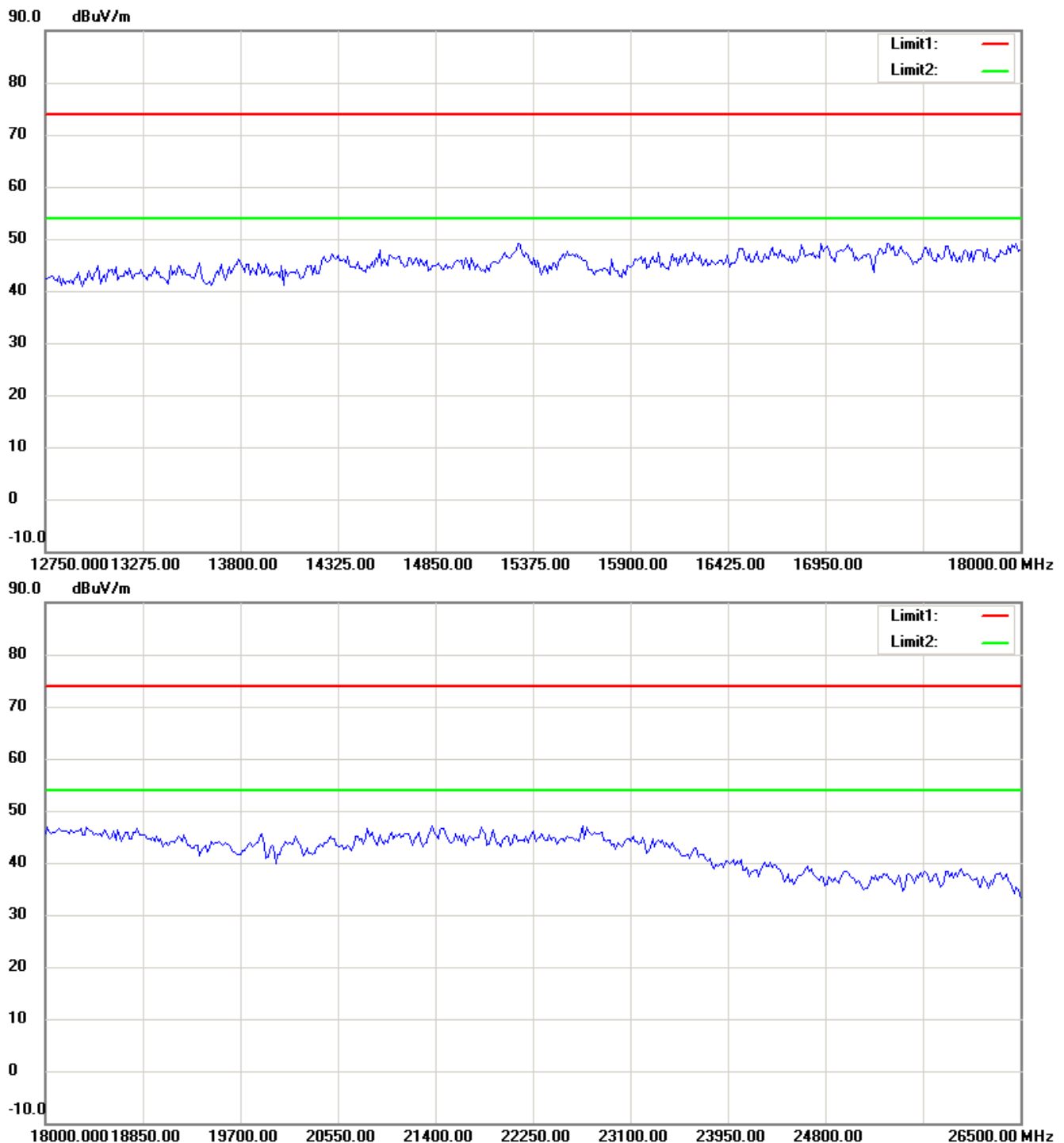
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FCC ID: WKP-CSAW-02IP



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

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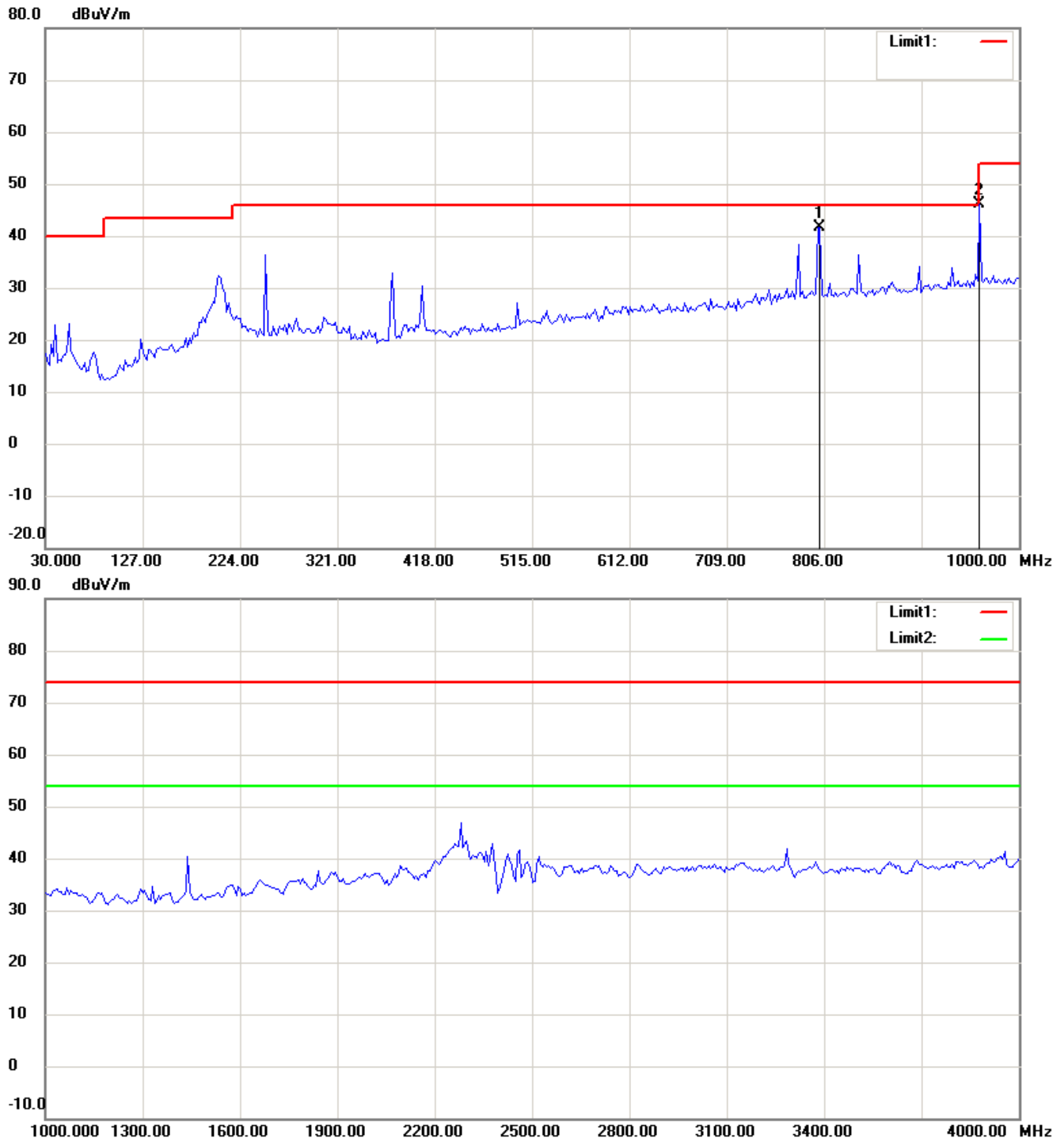


Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

CH11

Antenna Polarization H



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

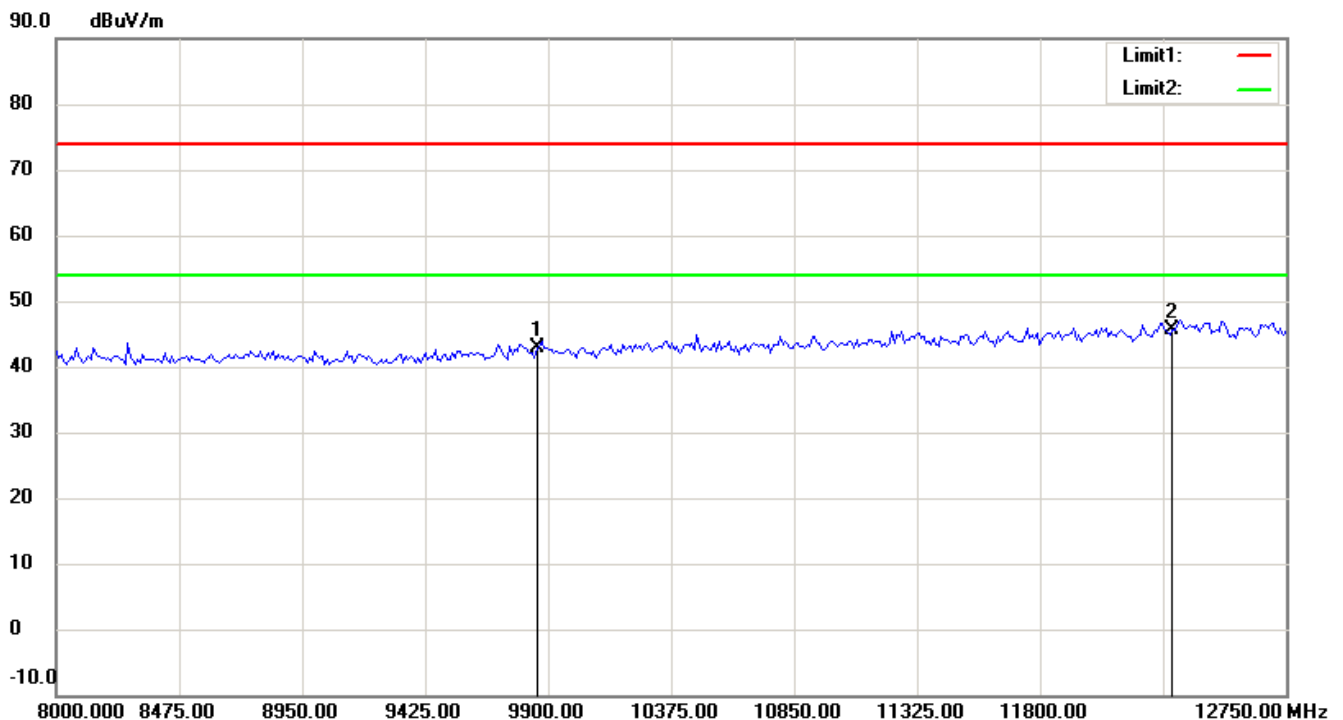
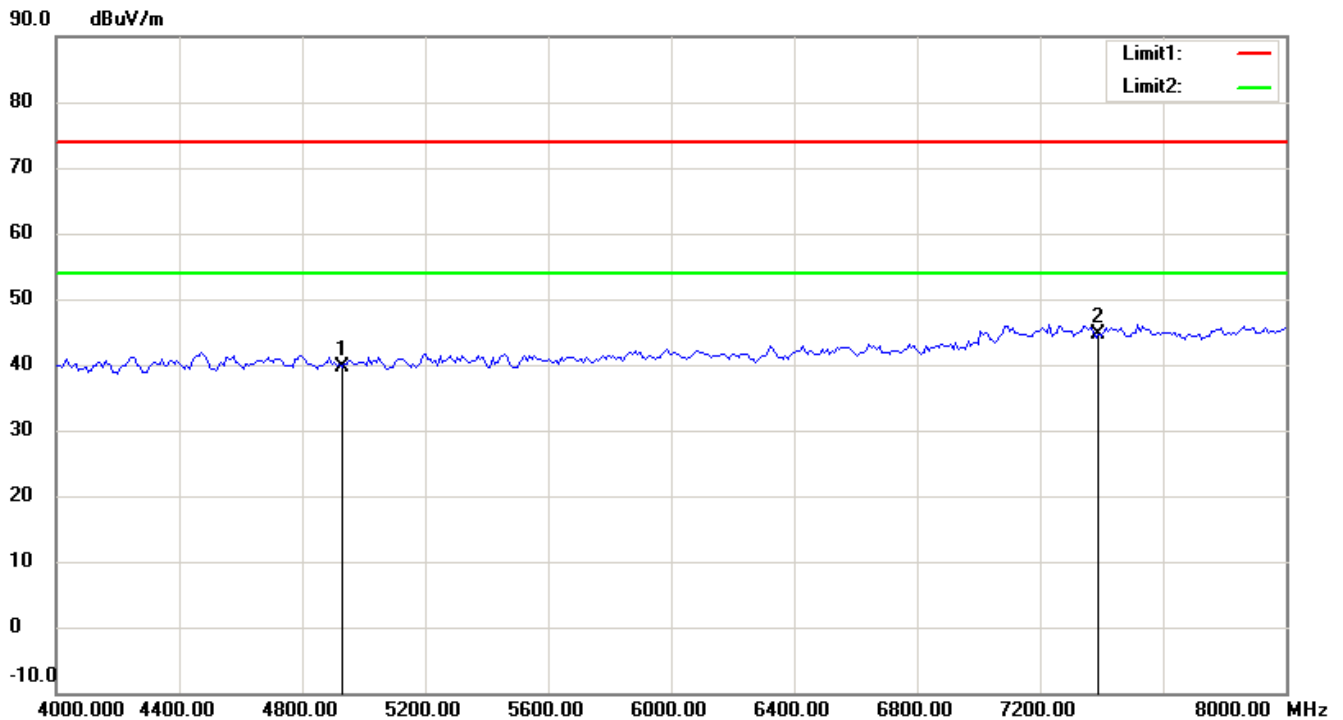
Note:

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Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

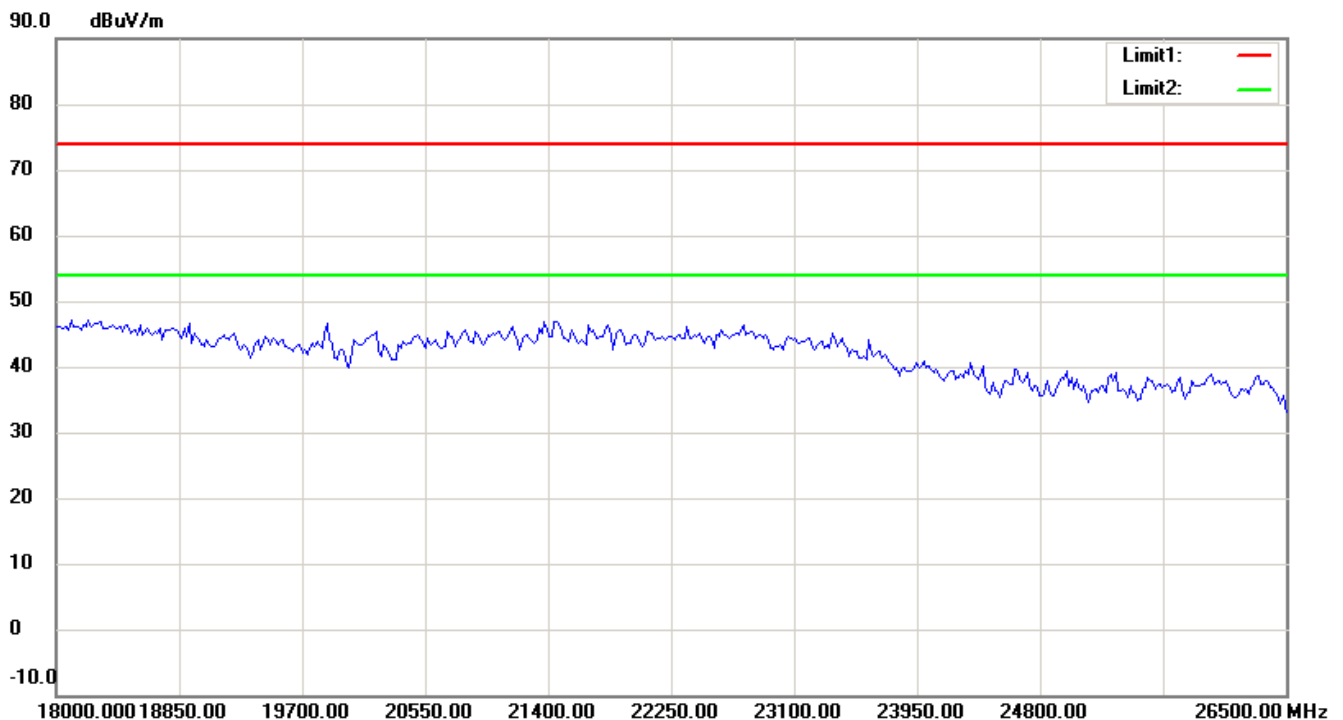
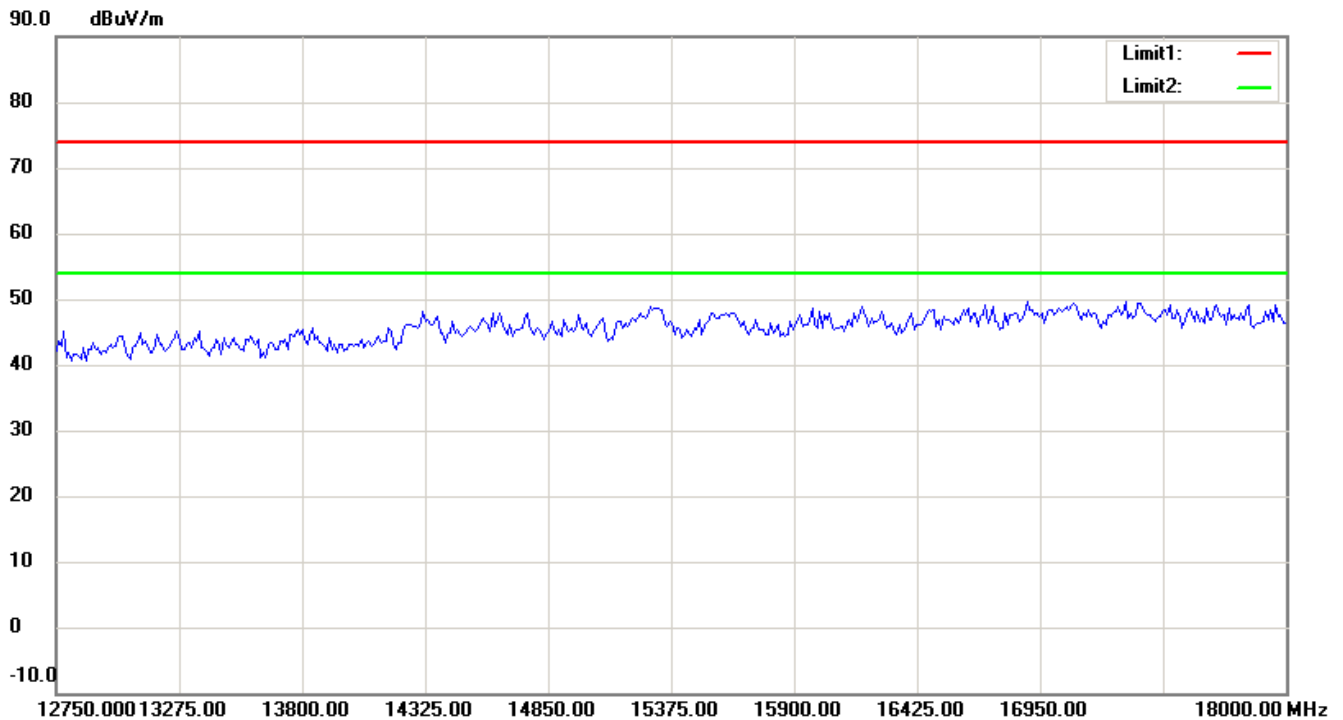
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Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

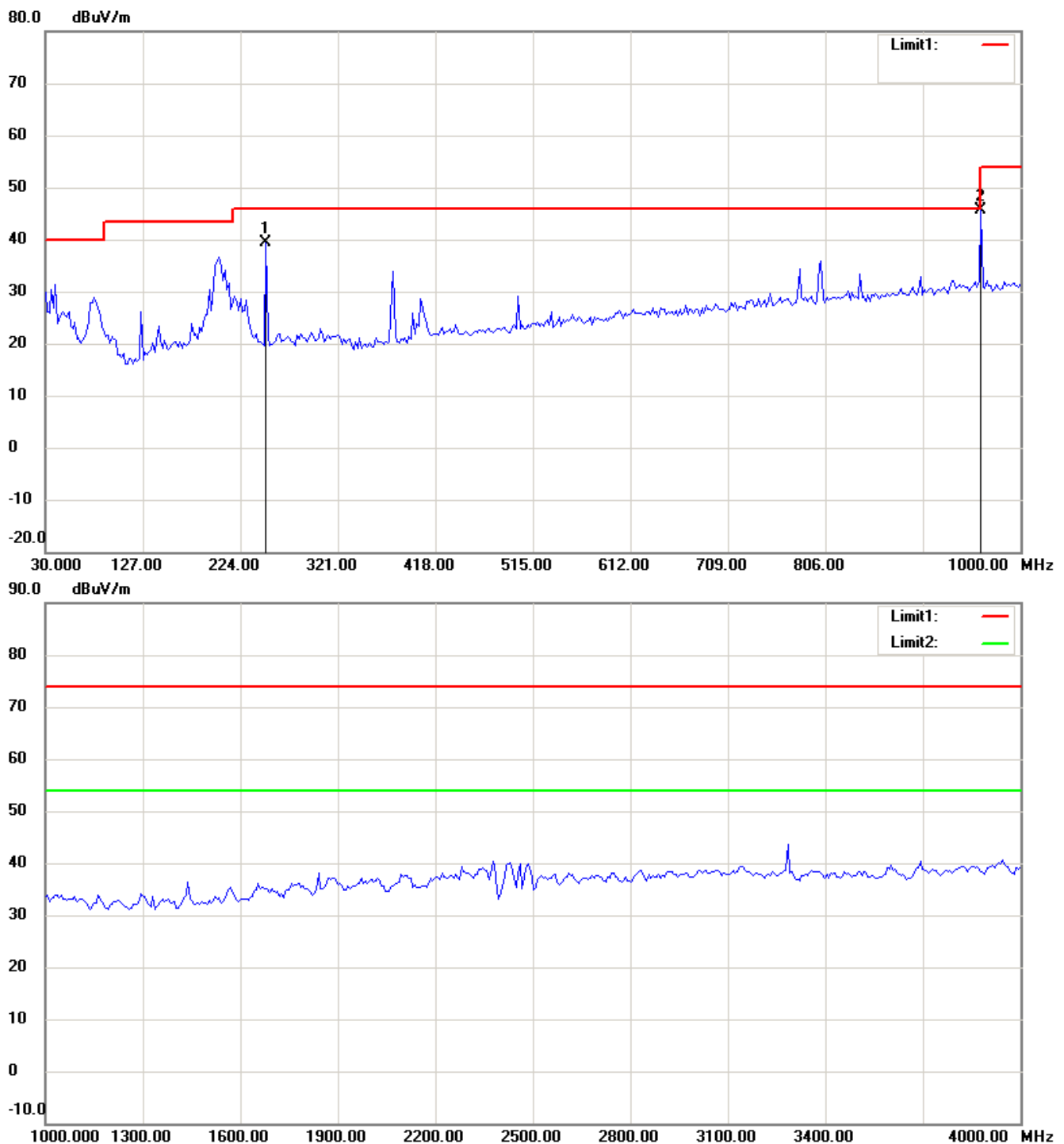
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Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

Antenna Polarization V



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

Note:

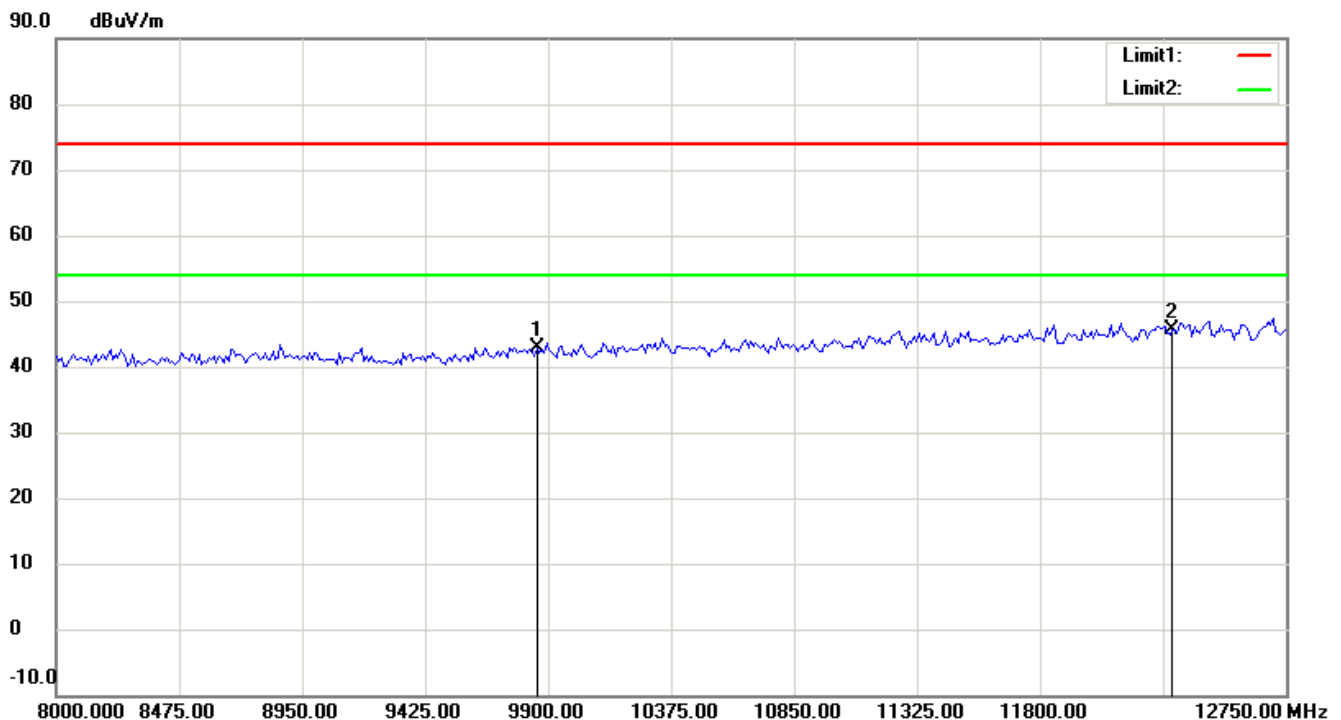
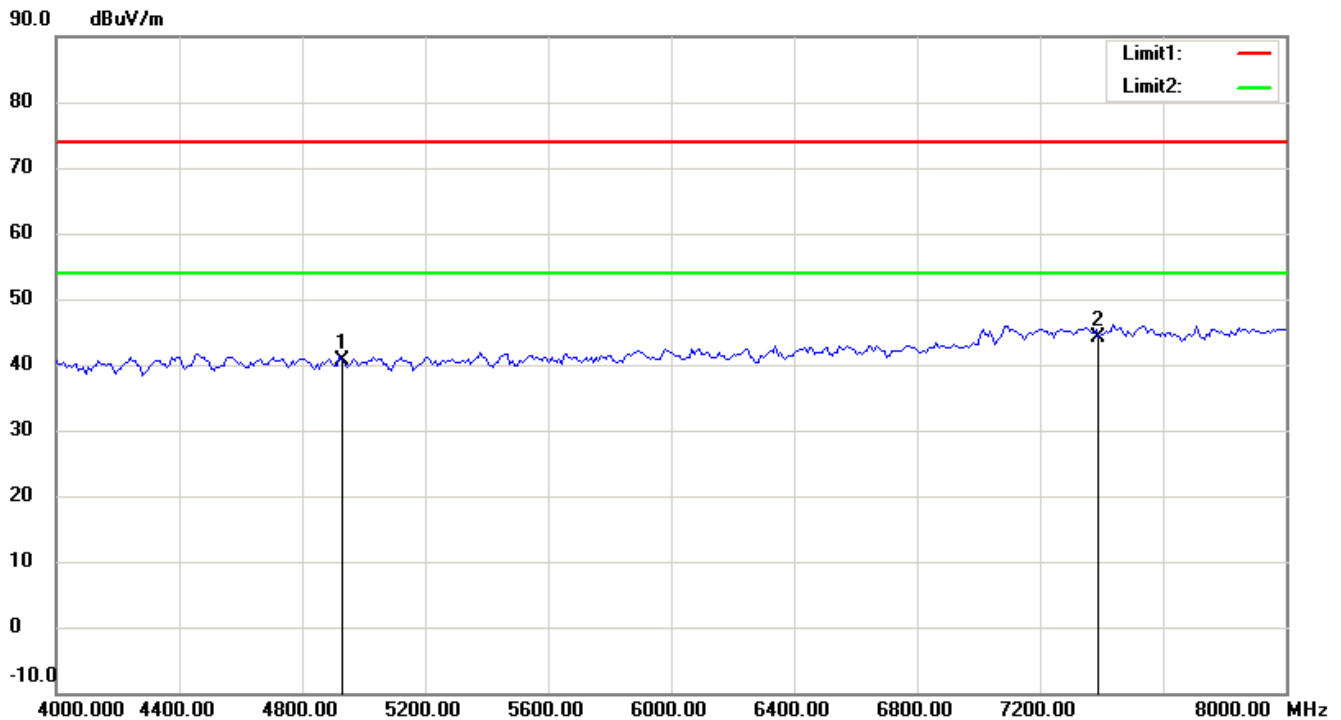
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Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

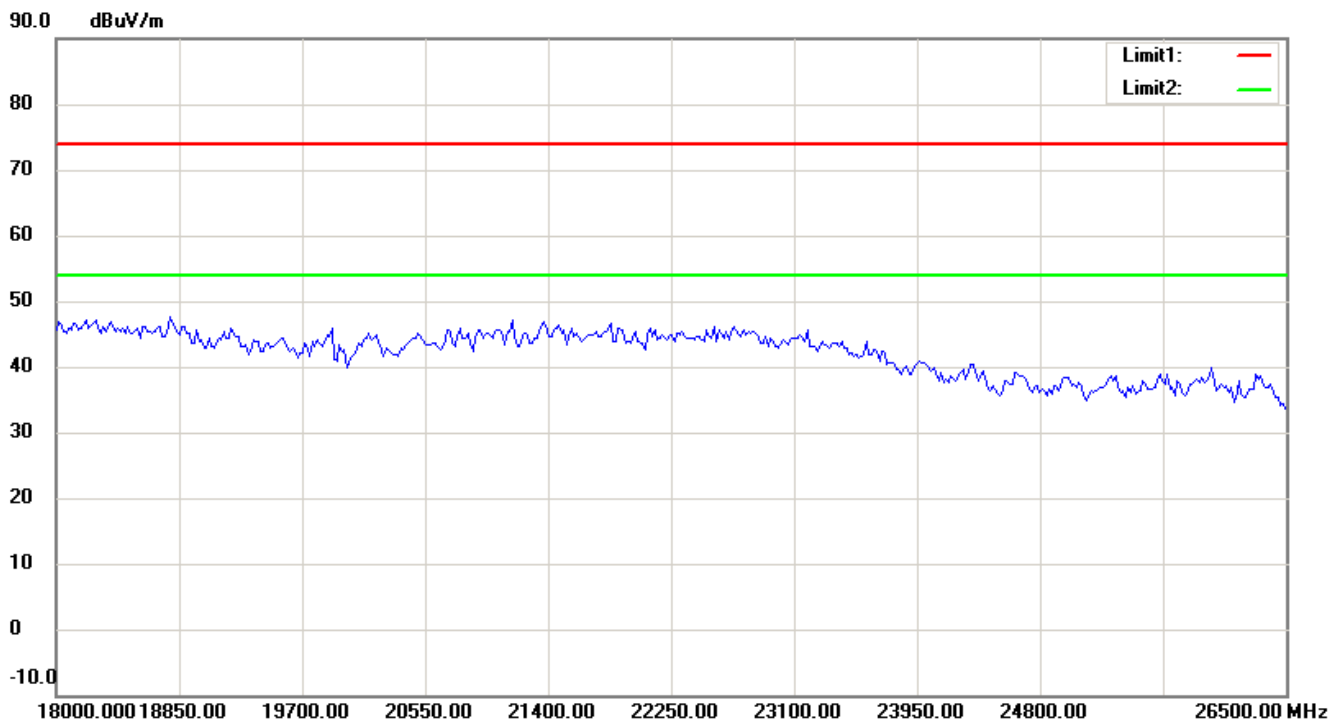
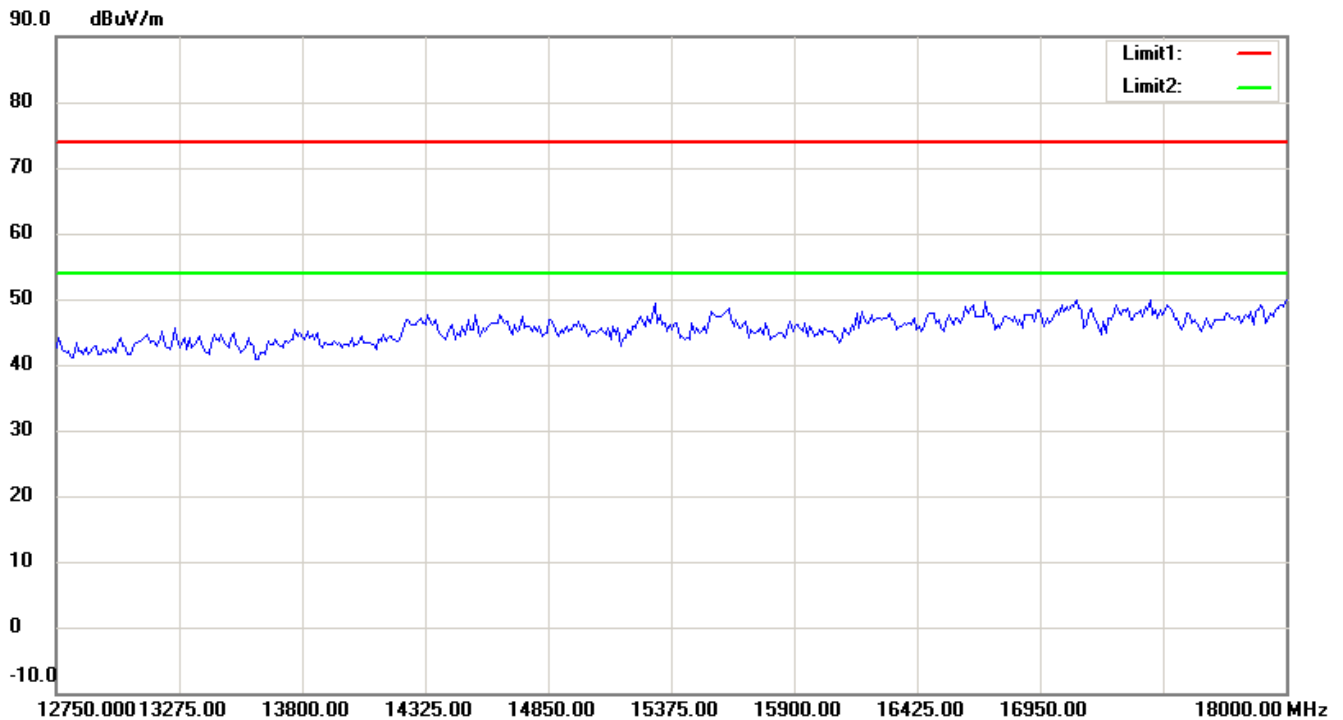
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FCC ID: WKP-CSAW-02IP



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

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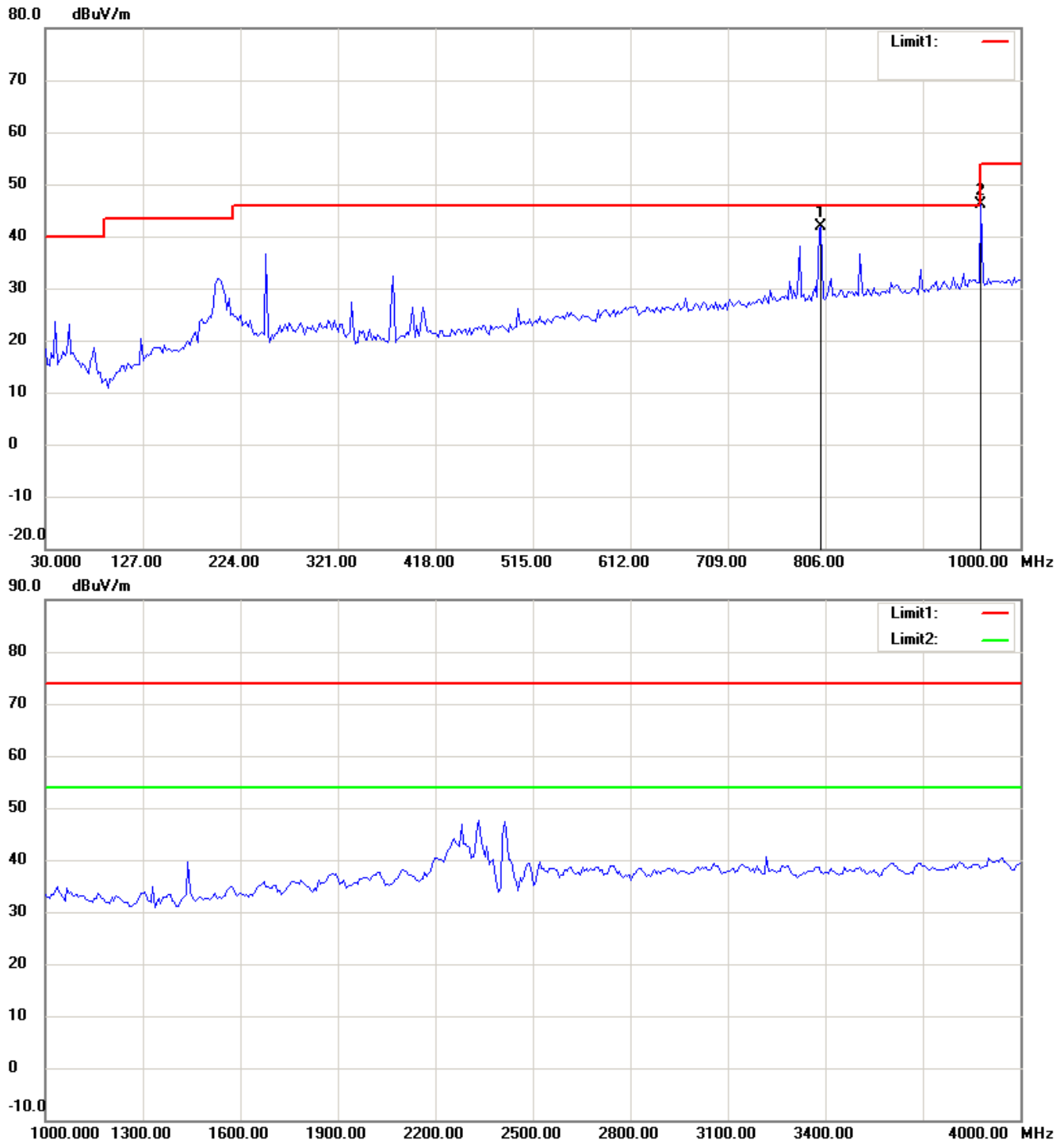
Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

802.11g_CH1

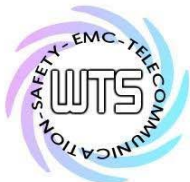
Antenna Polarization H



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

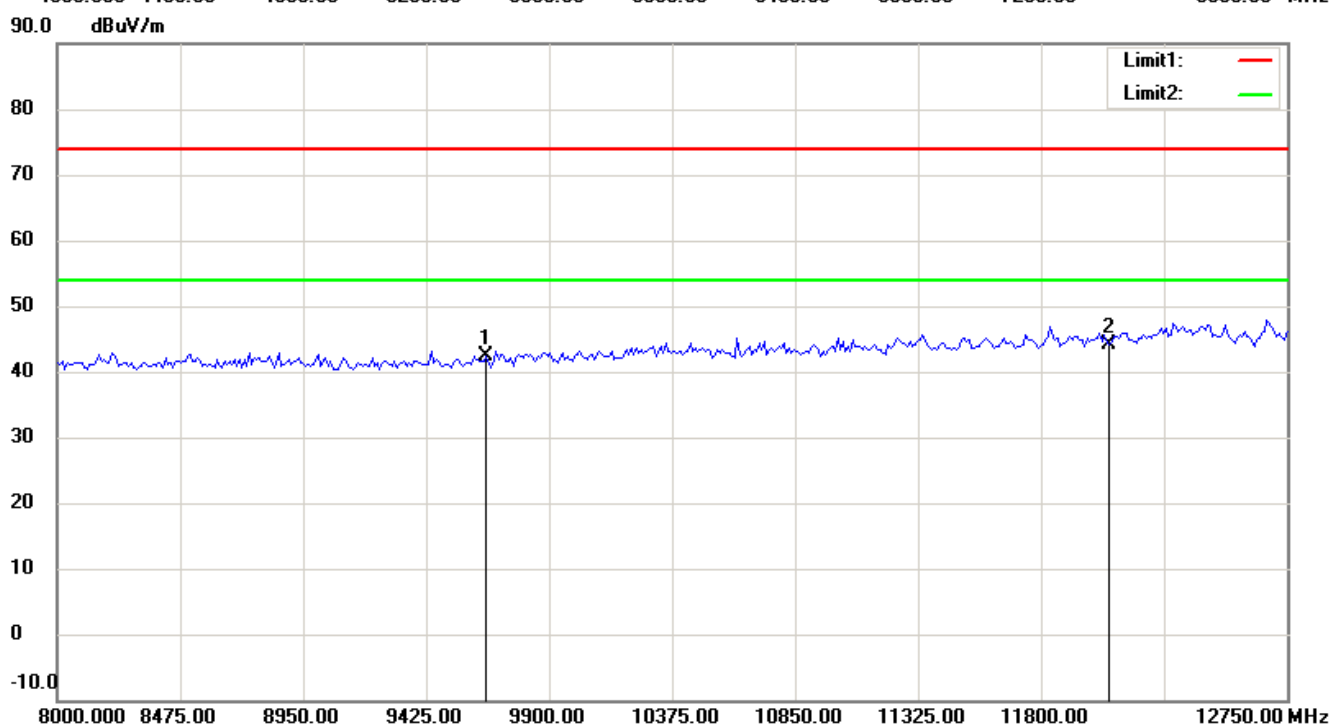
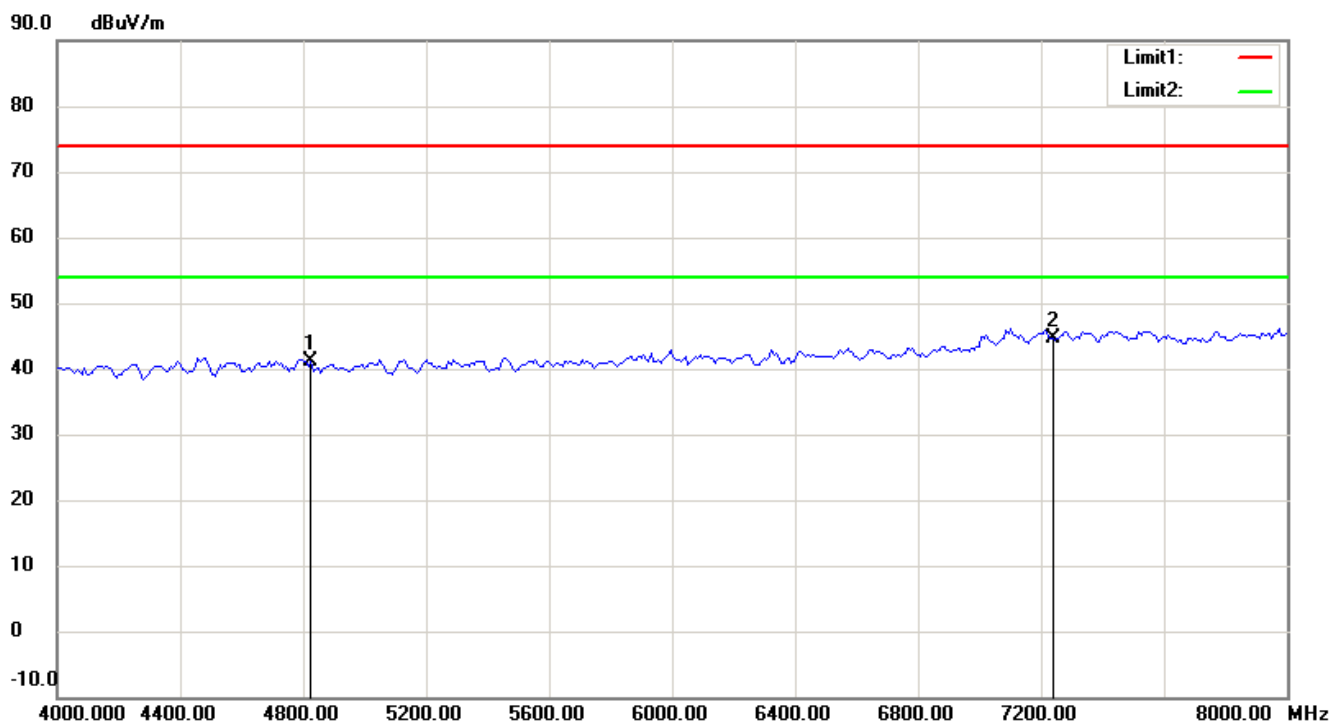
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Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

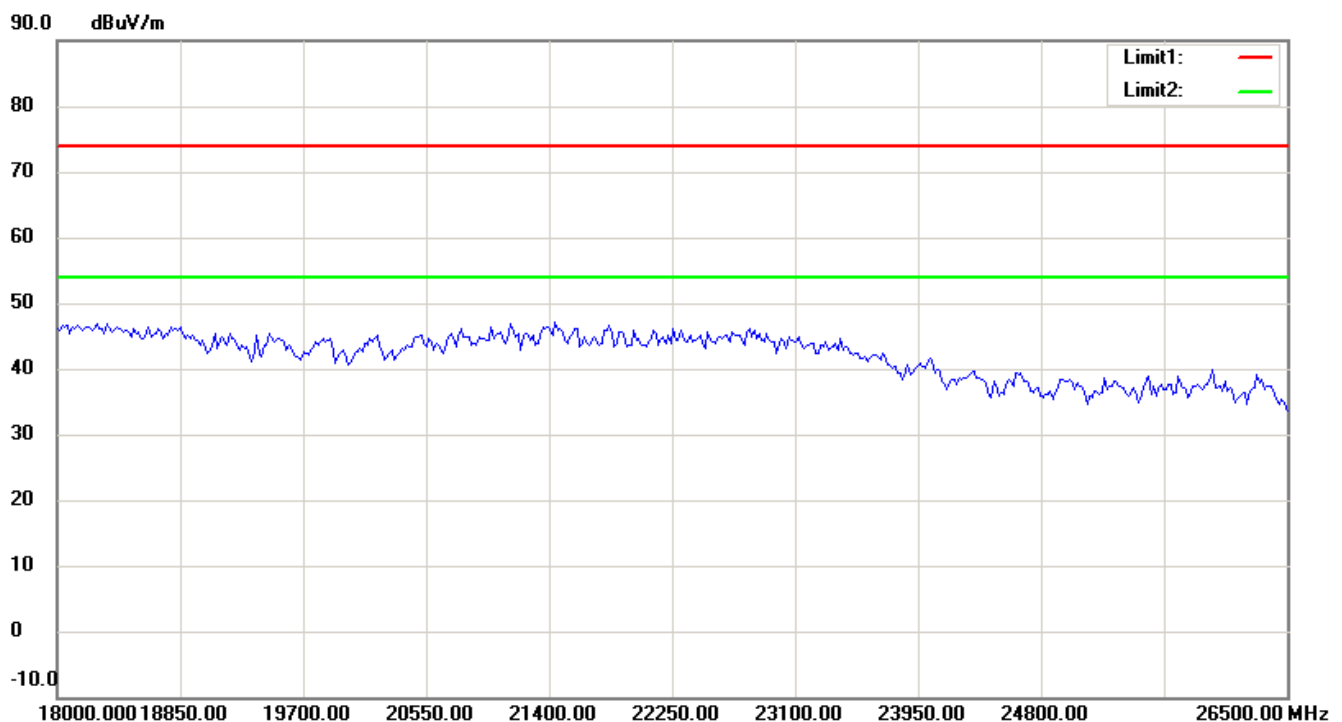
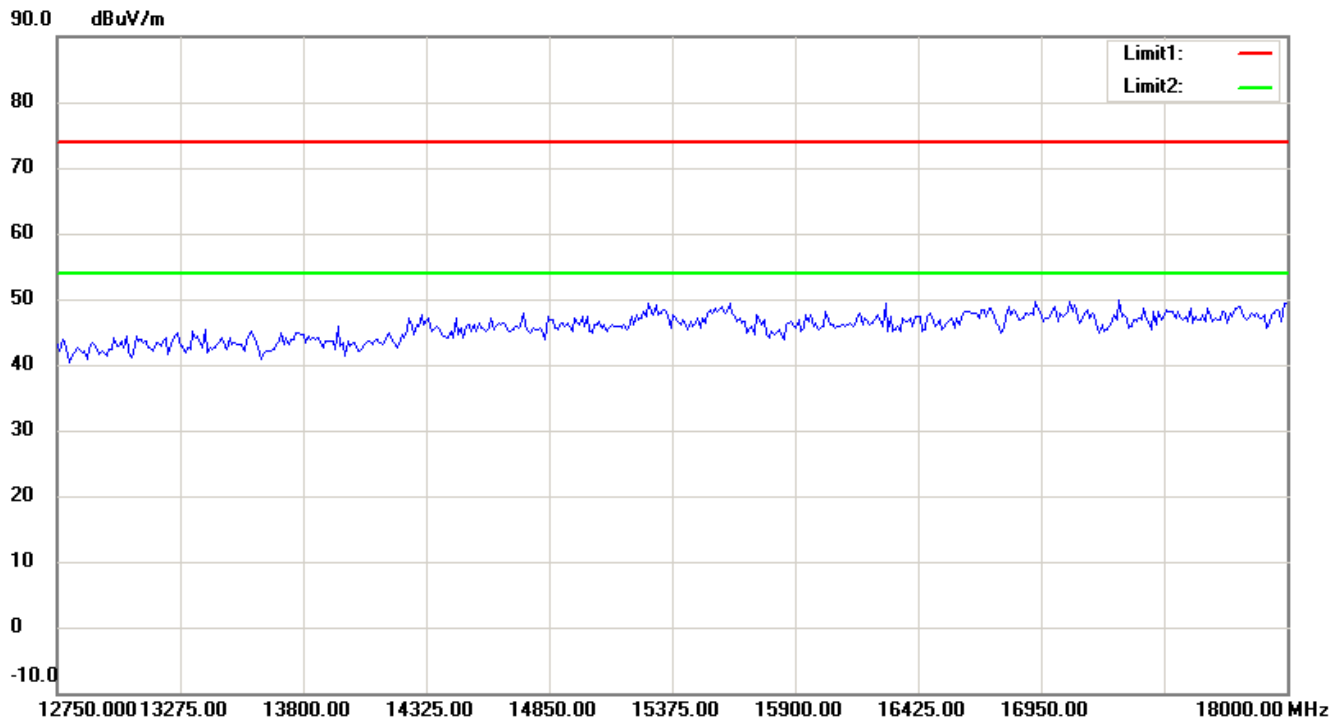
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FCC ID: WKP-CSAW-02IP



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

Note:

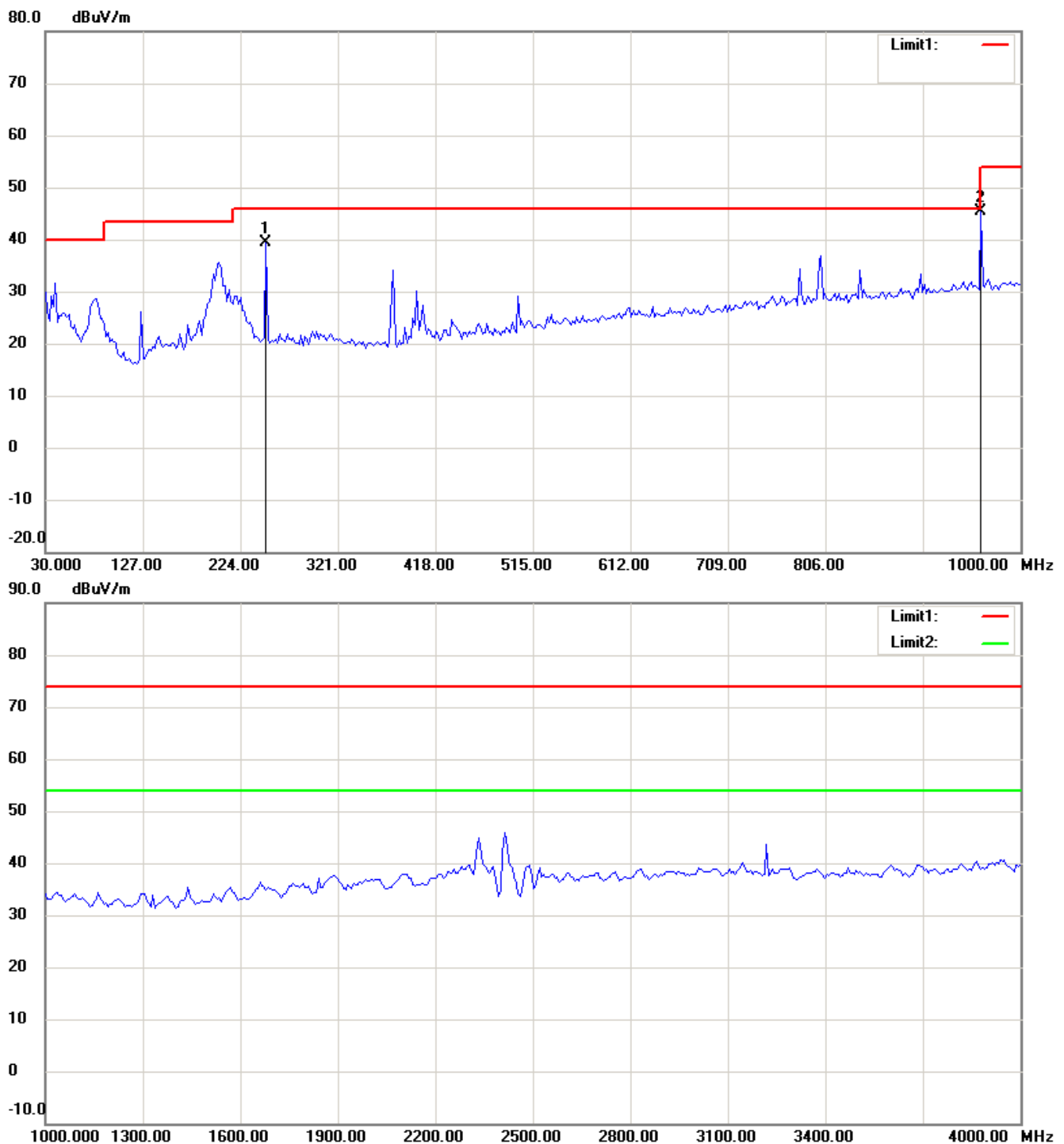
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Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

Antenna Polarization V



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

Note:

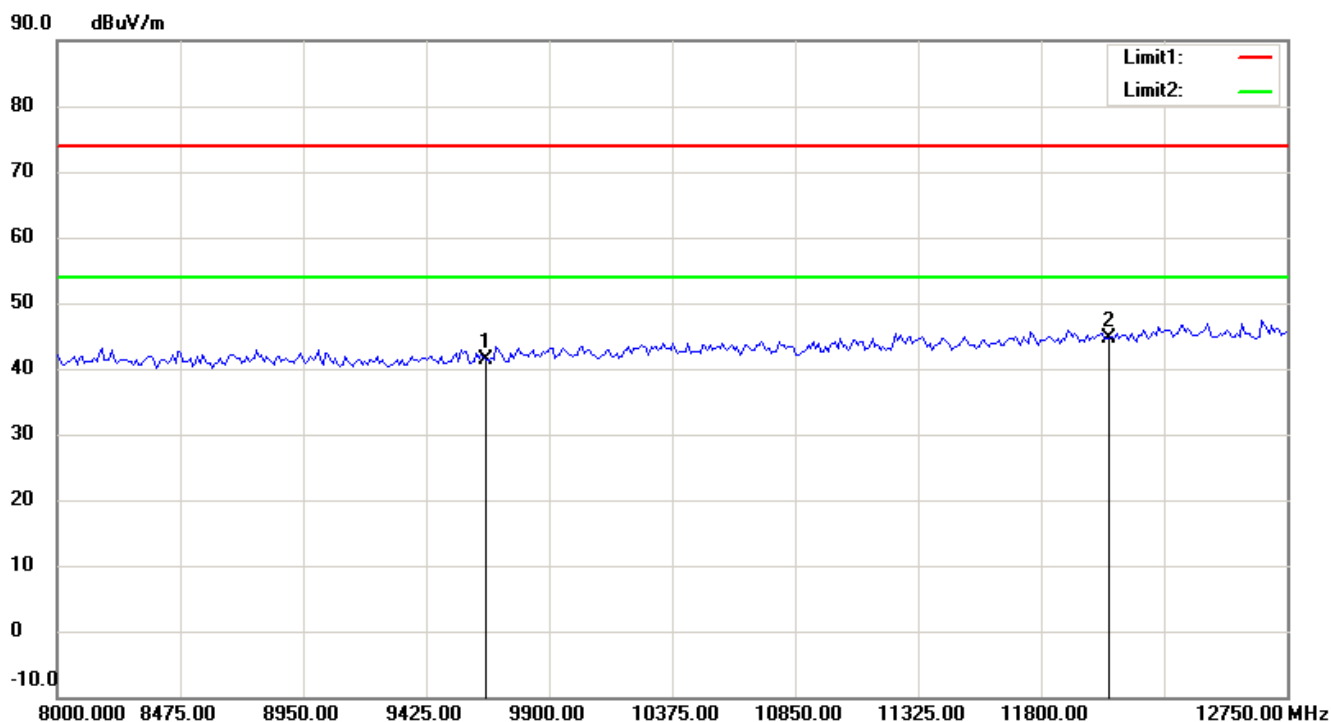
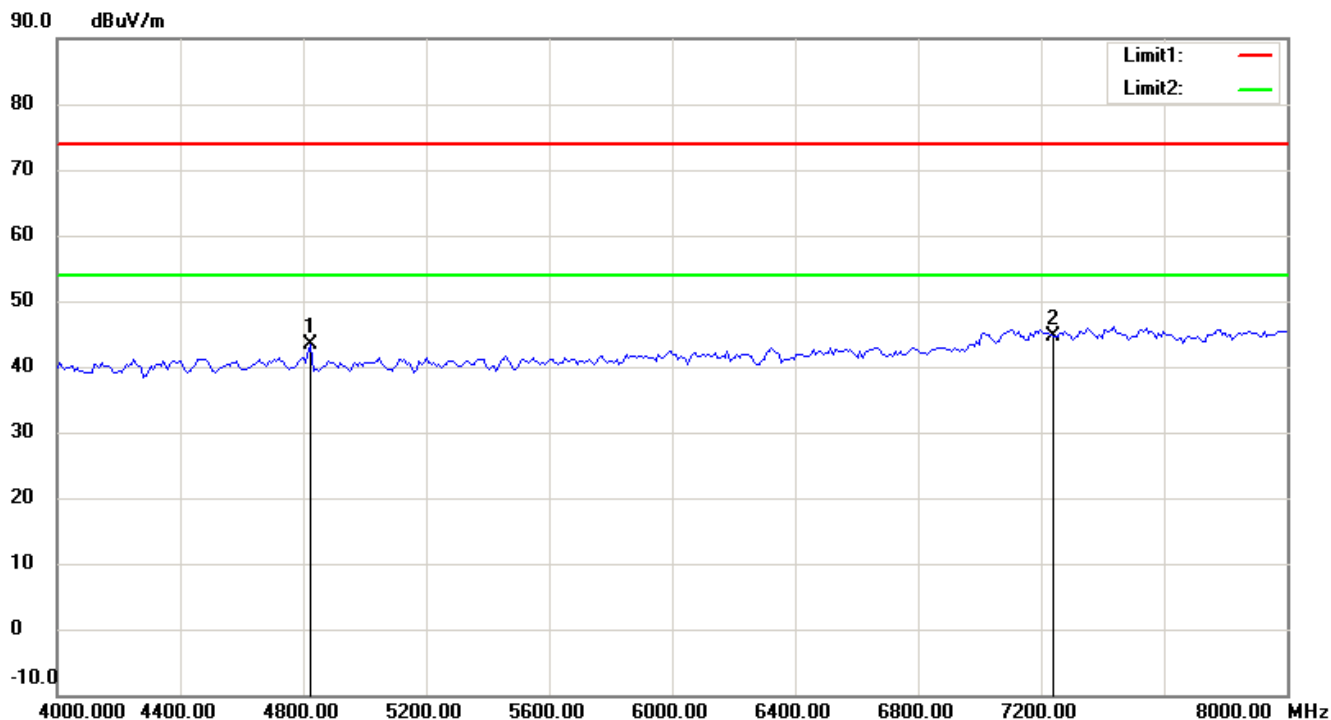
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Up Line: Peak Limit Line Down Line: Ave Limit Line

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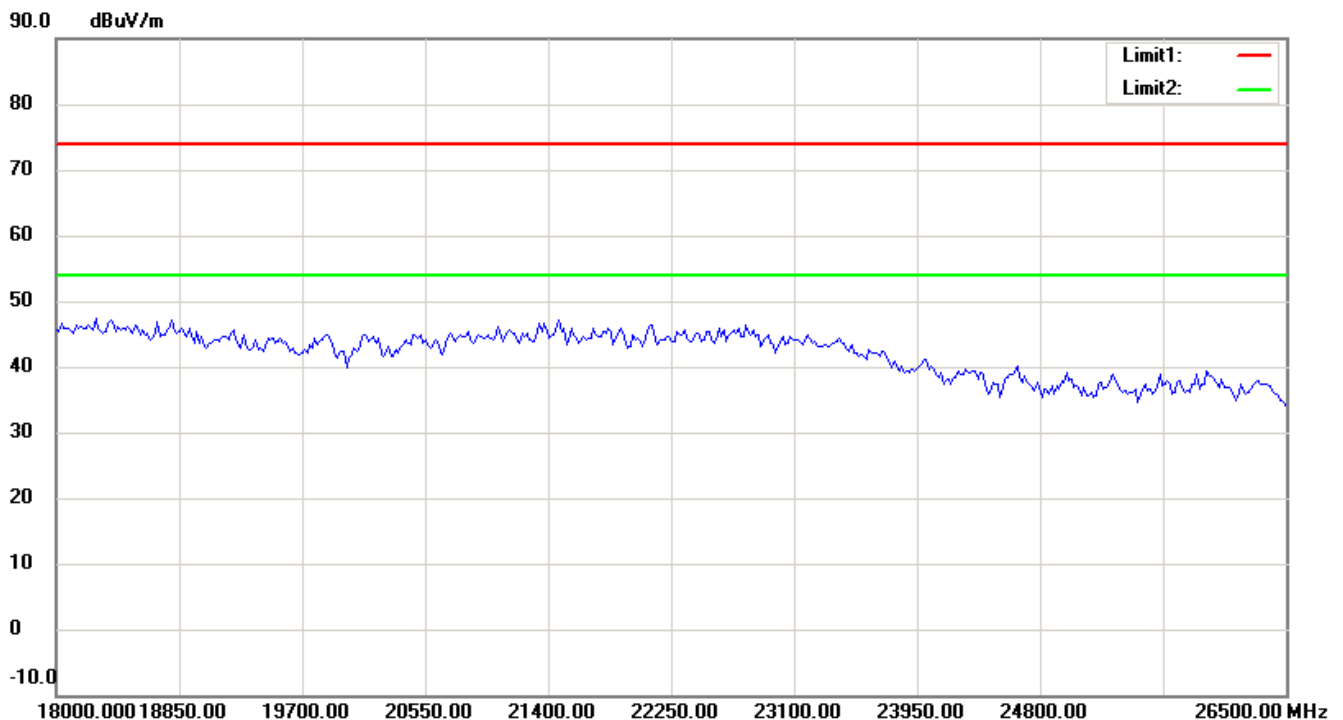
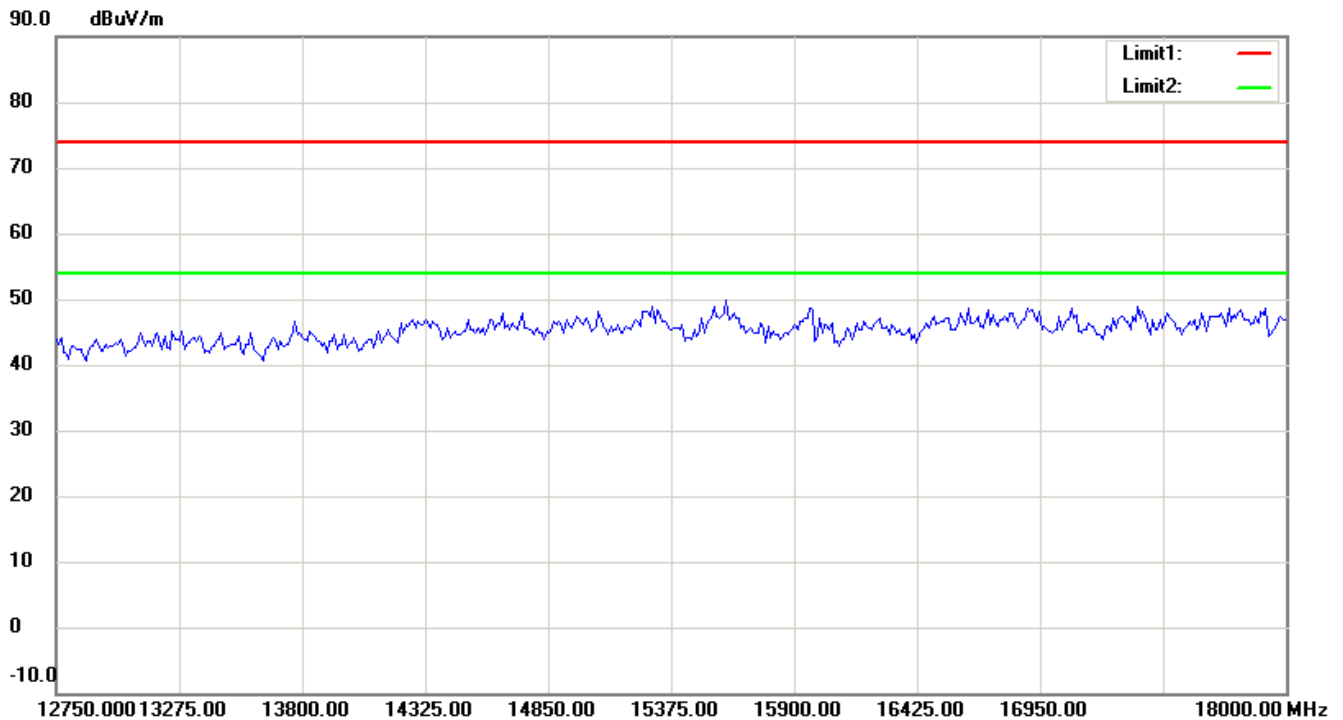
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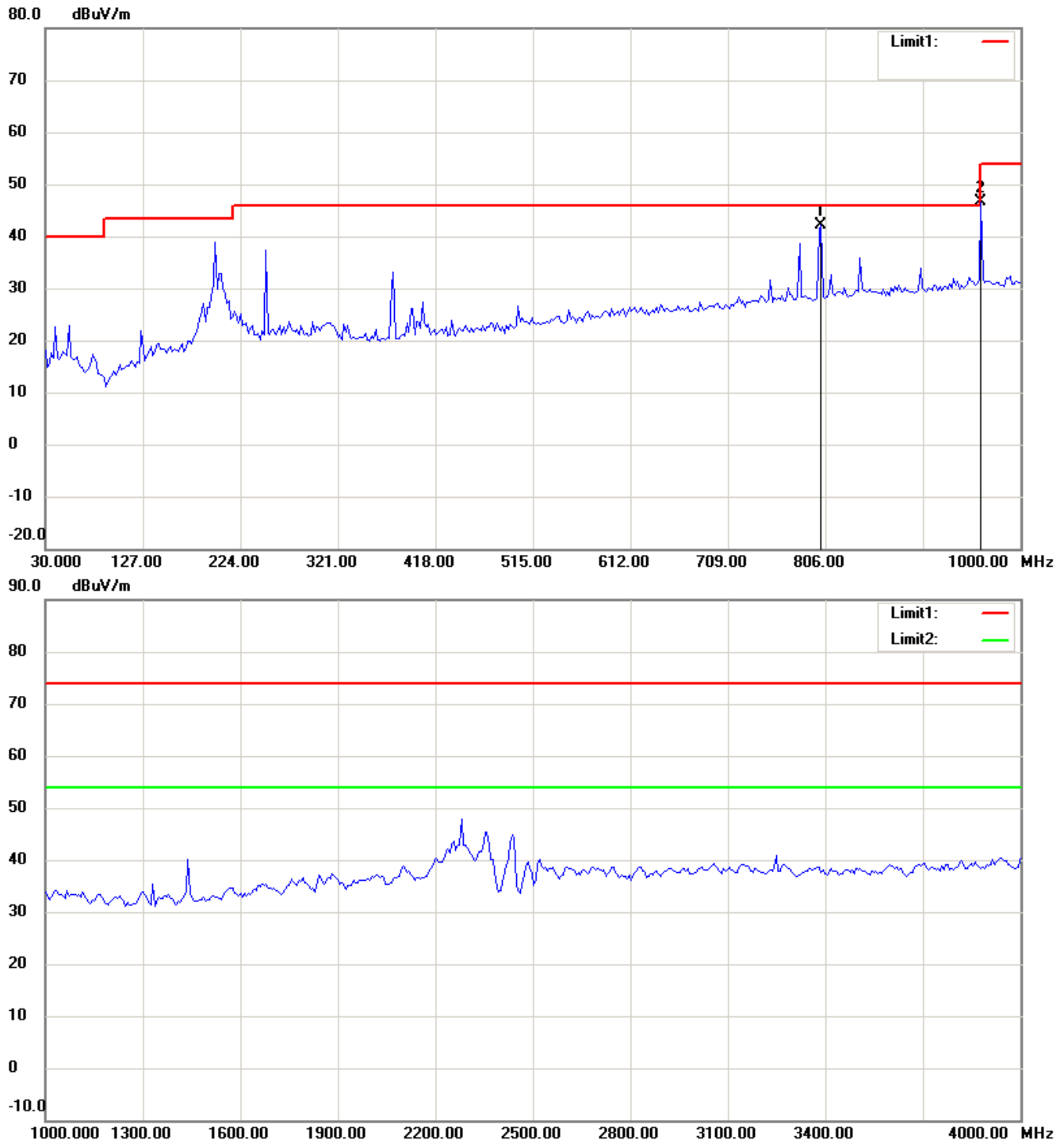


Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

CH6

Antenna Polarization H



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

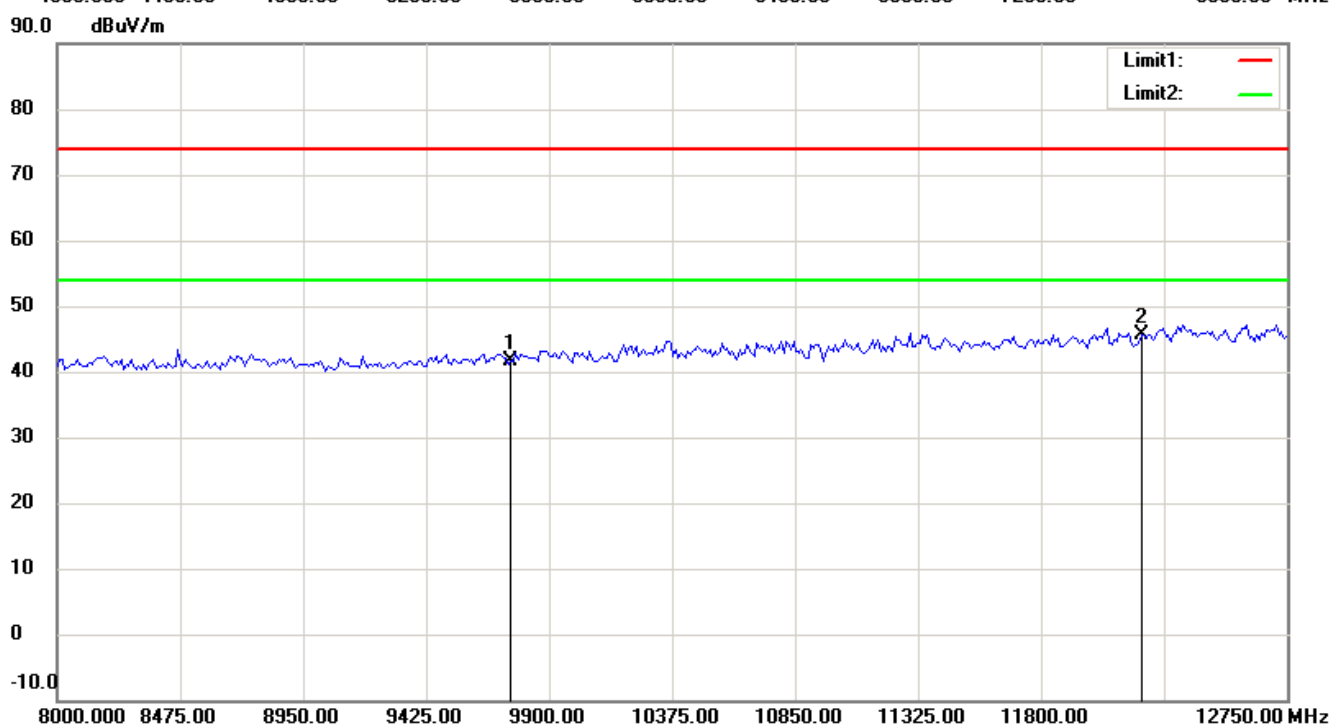
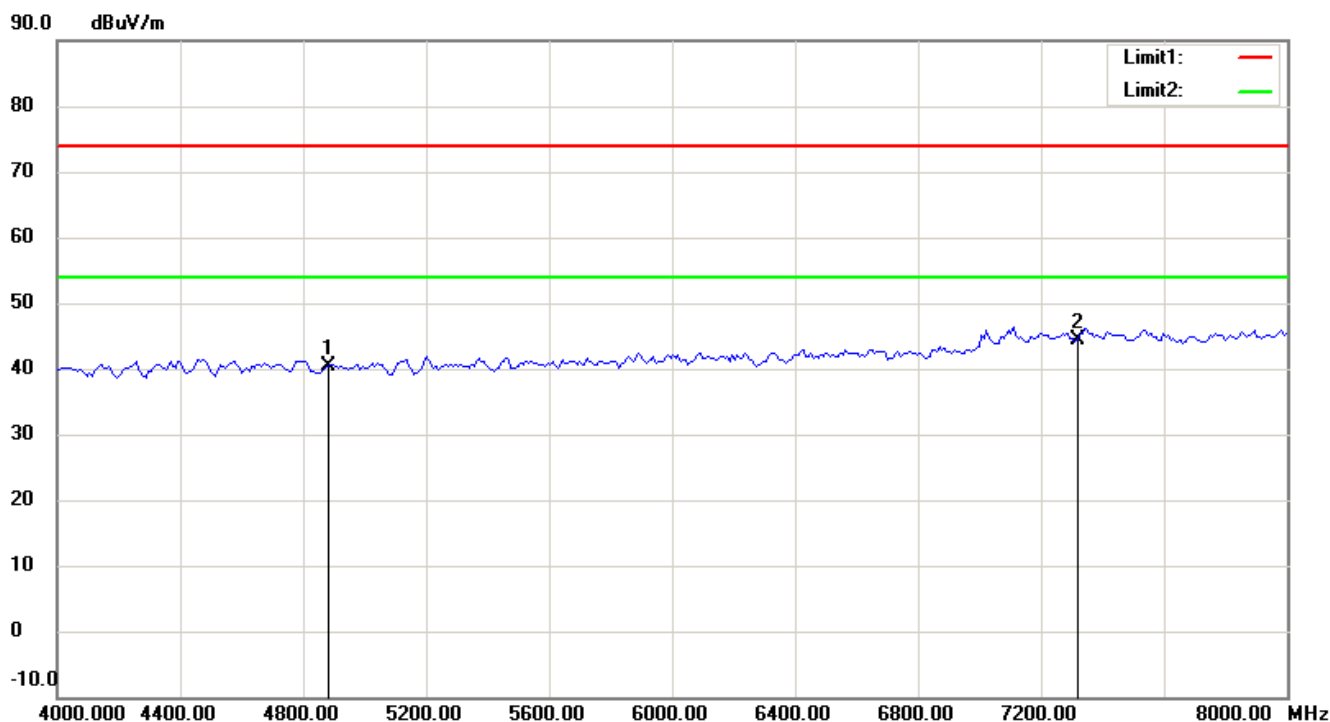
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Up Line: Peak Limit Line Down Line: Ave Limit Line

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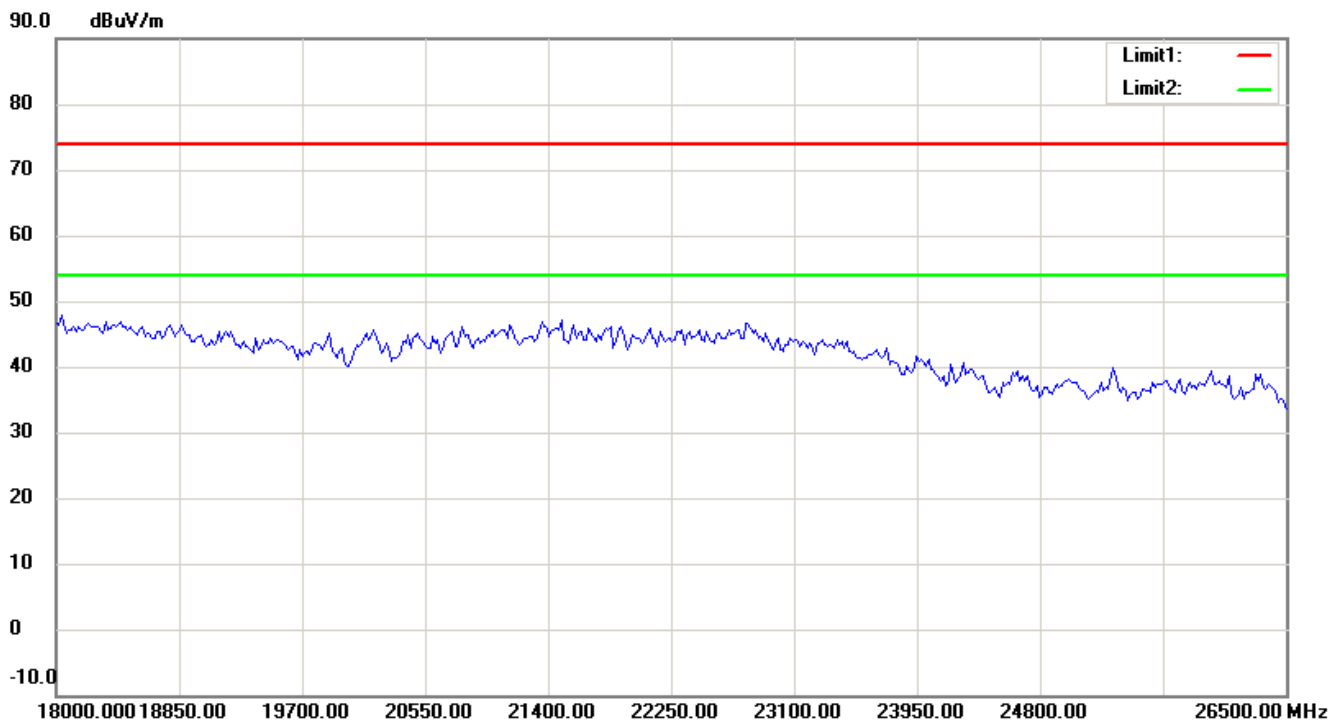
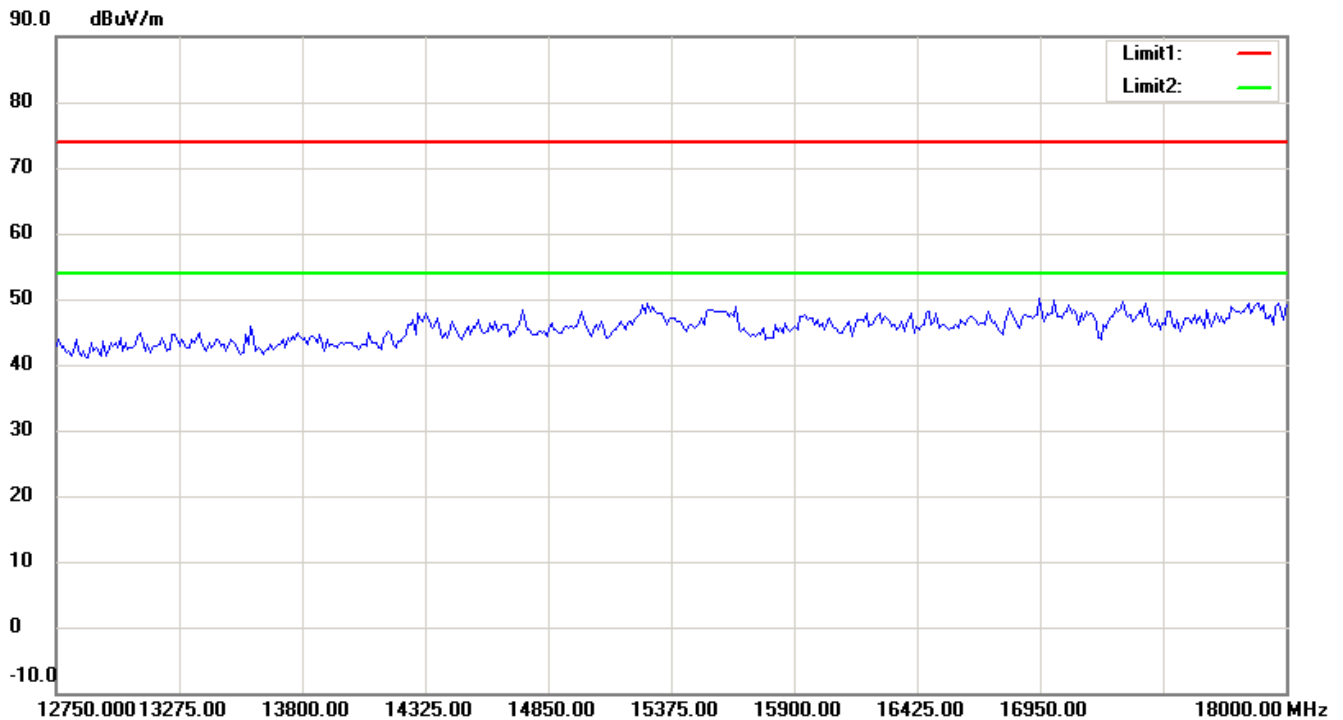
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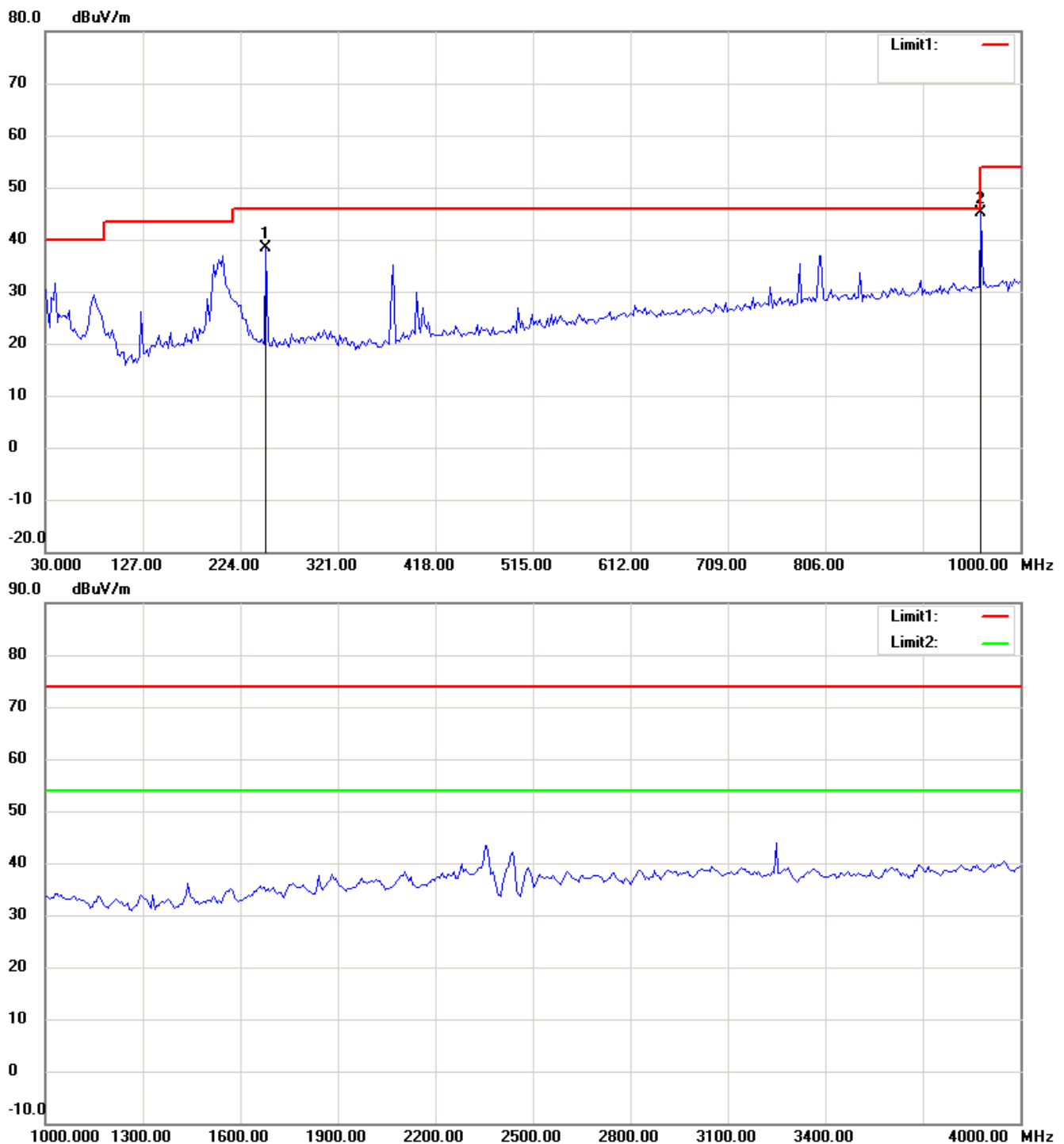
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Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

Antenna Polarization V



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

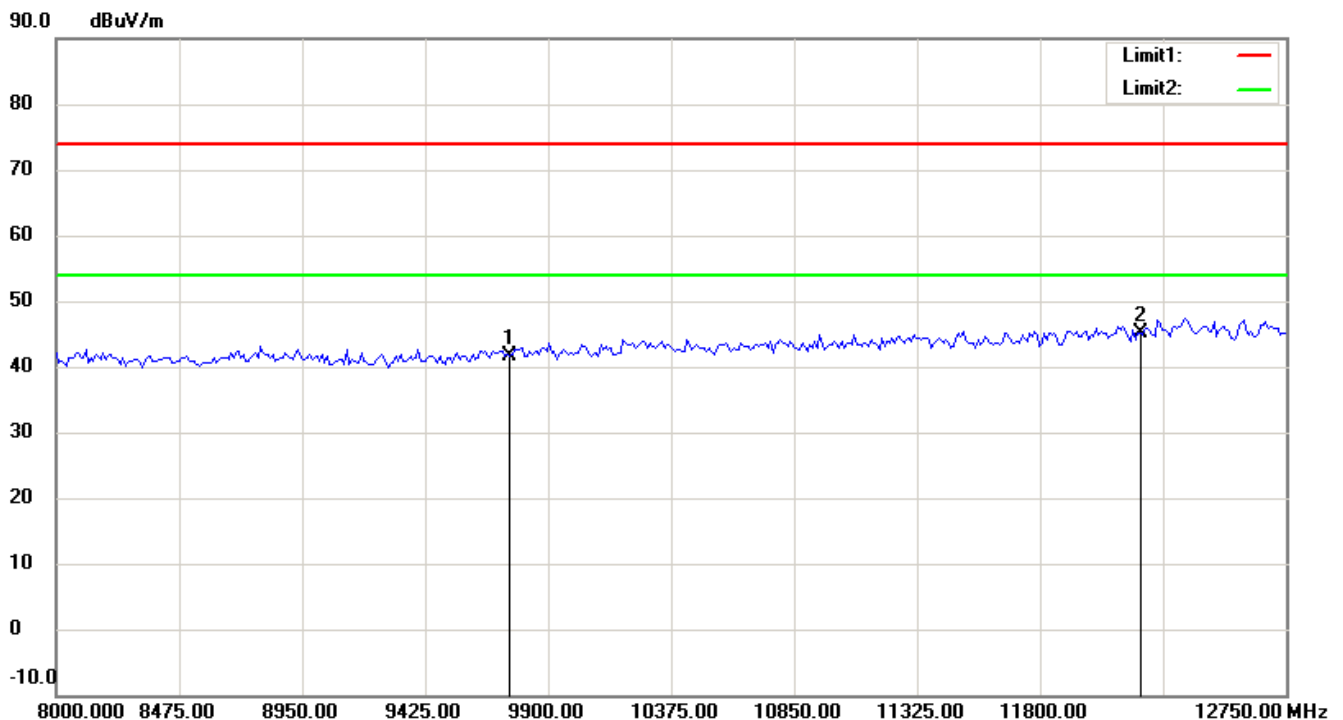
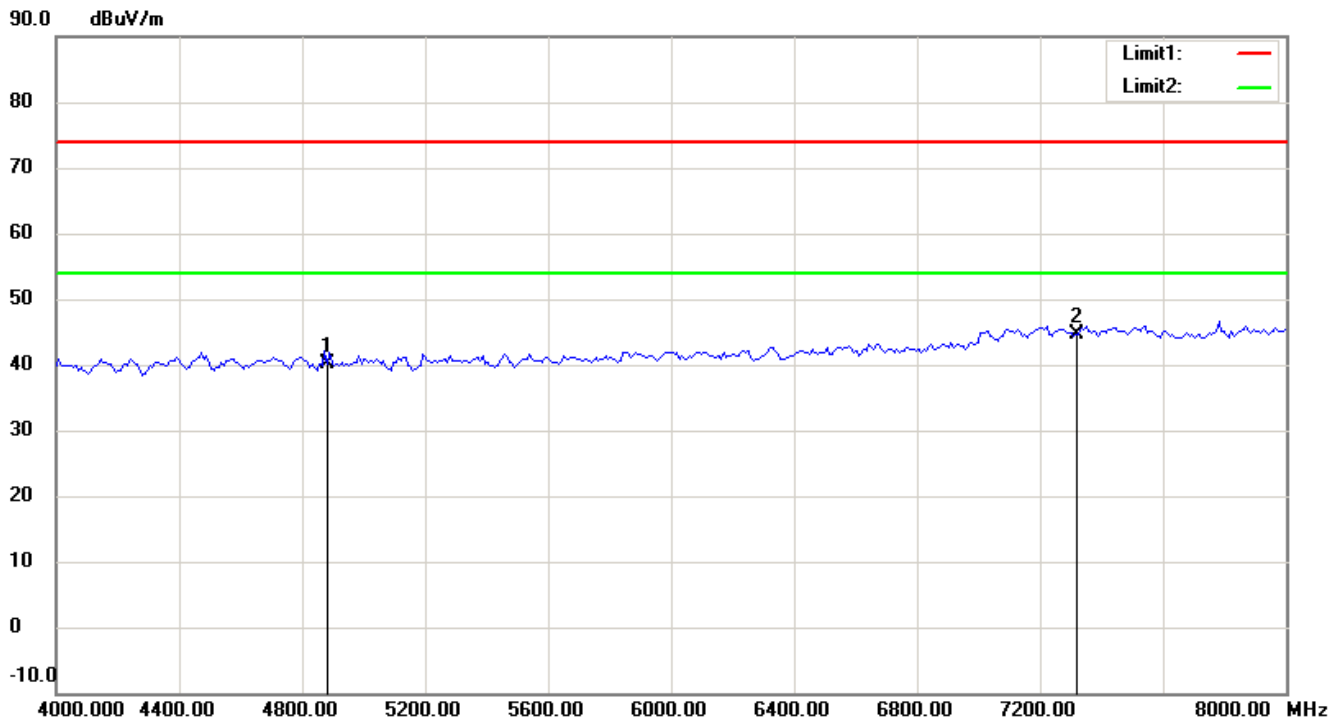
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Up Line: Peak Limit Line Down Line: Ave Limit Line

Note:

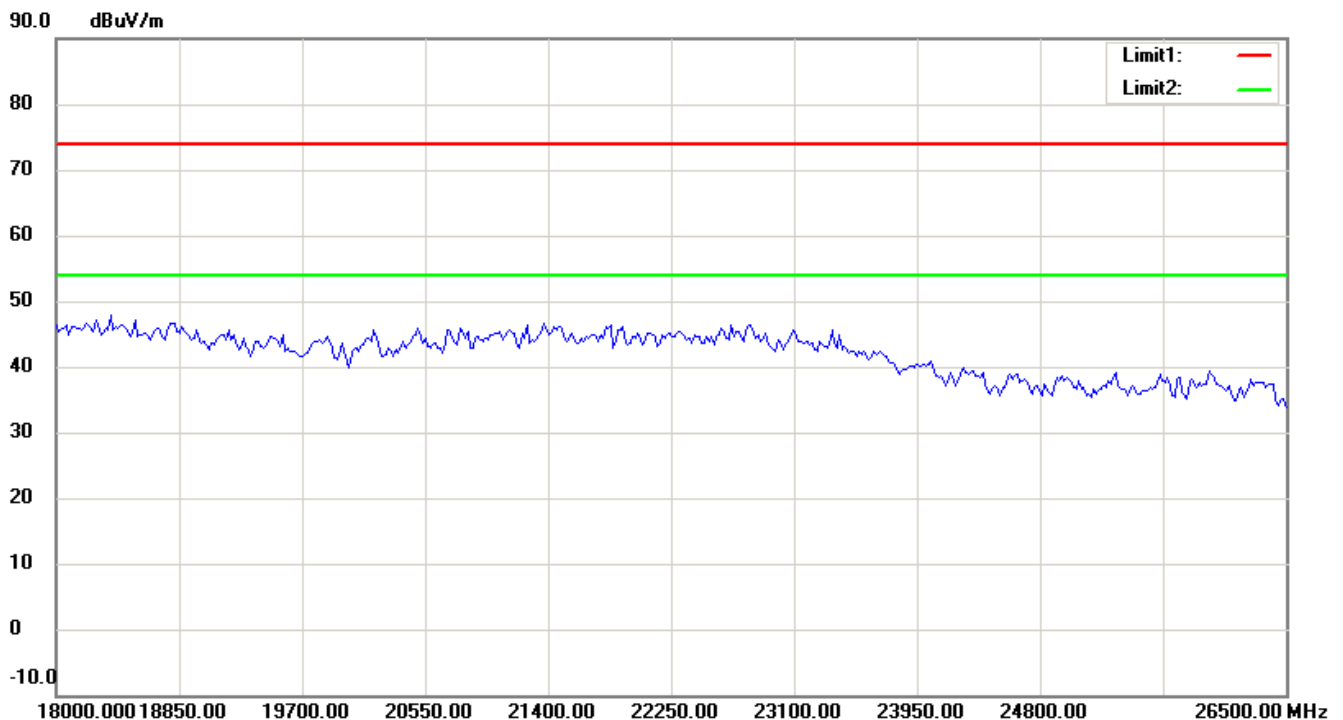
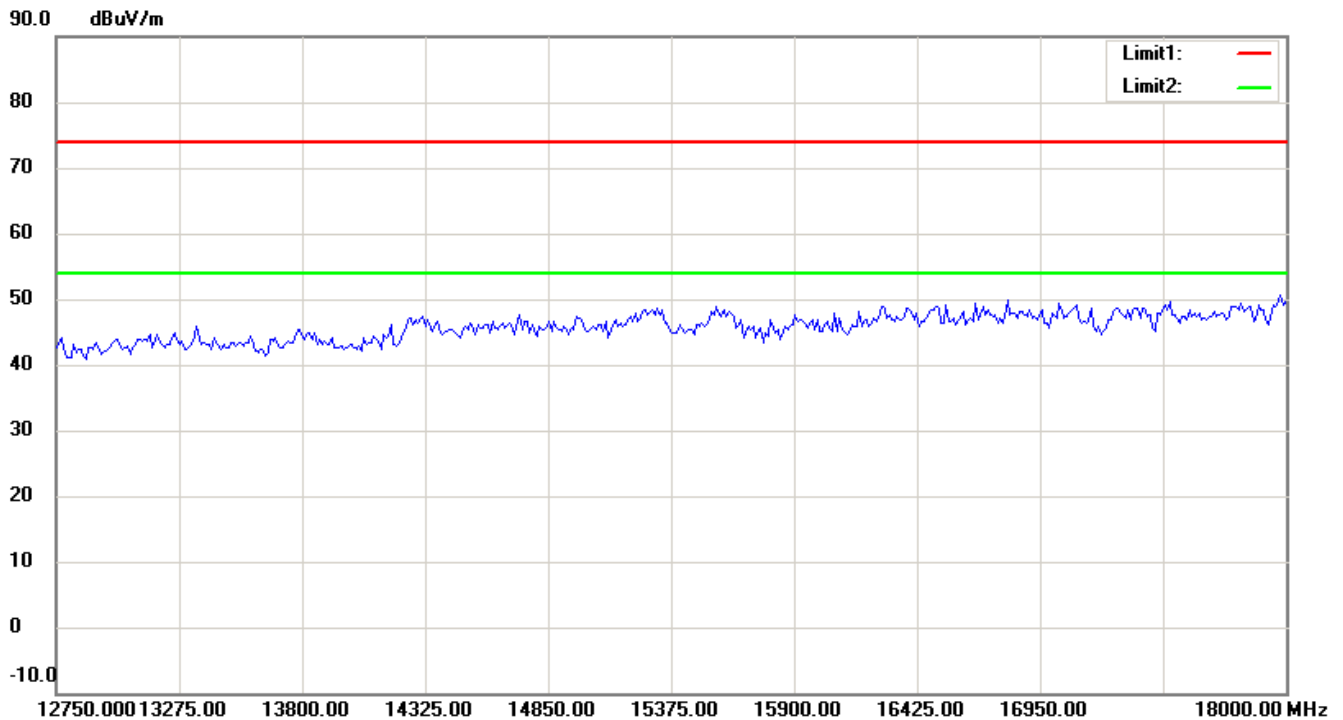
1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification 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: W6D21301-12971-C-1

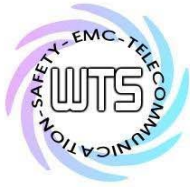
FCC ID: WKP-CSAW-02IP



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.
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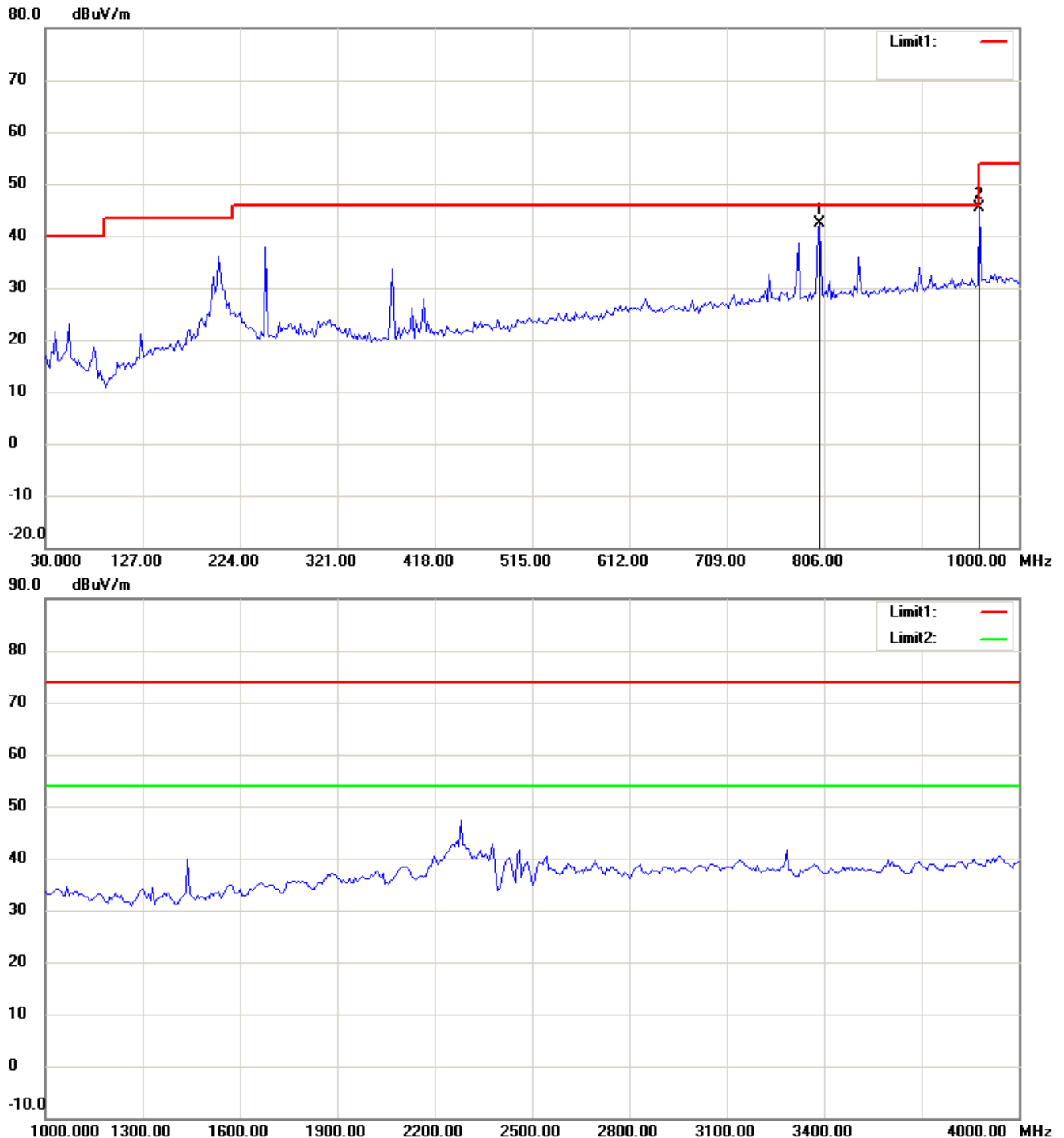


Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

CH11

Antenna Polarization H



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

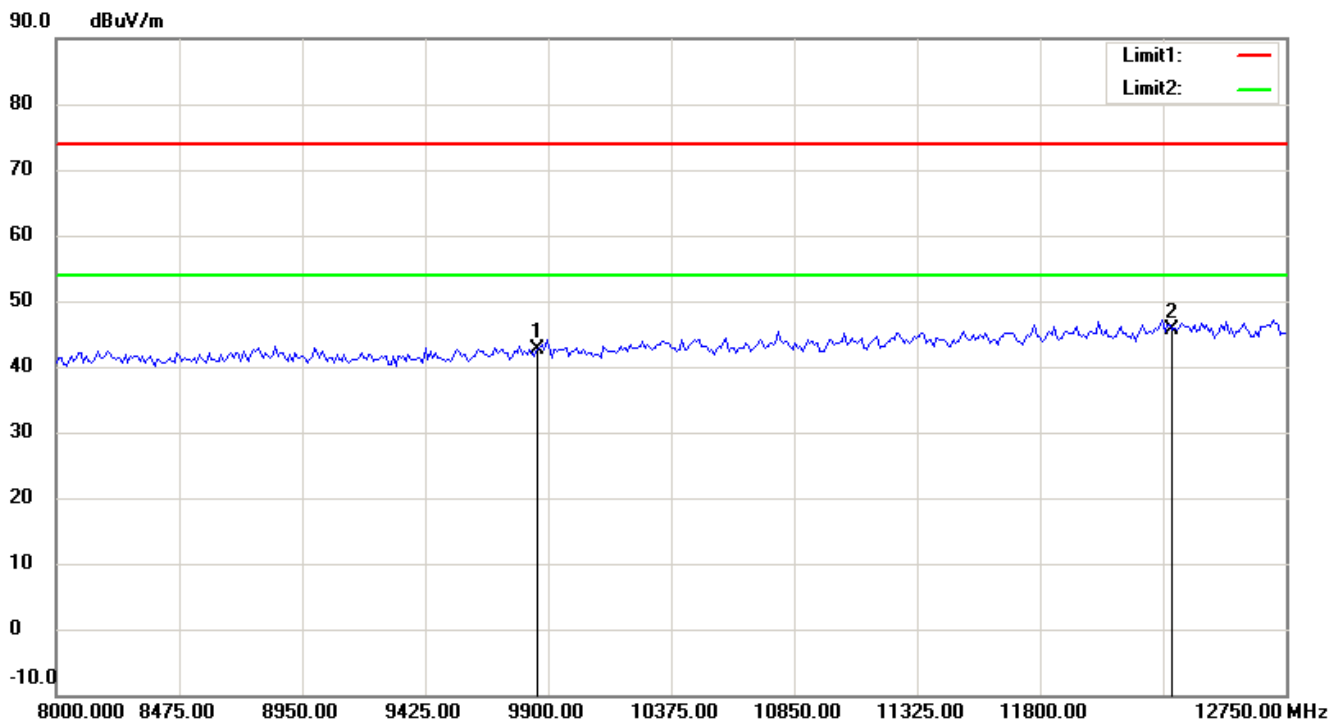
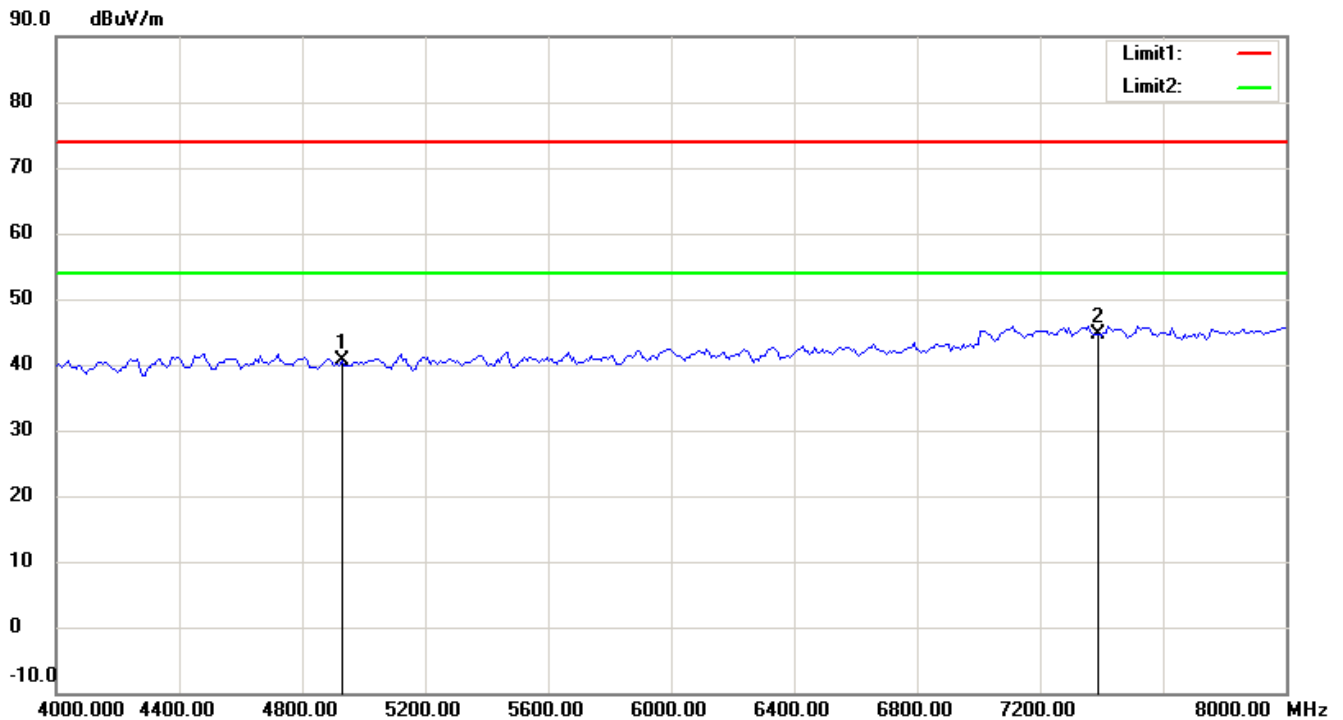
Note:

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Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

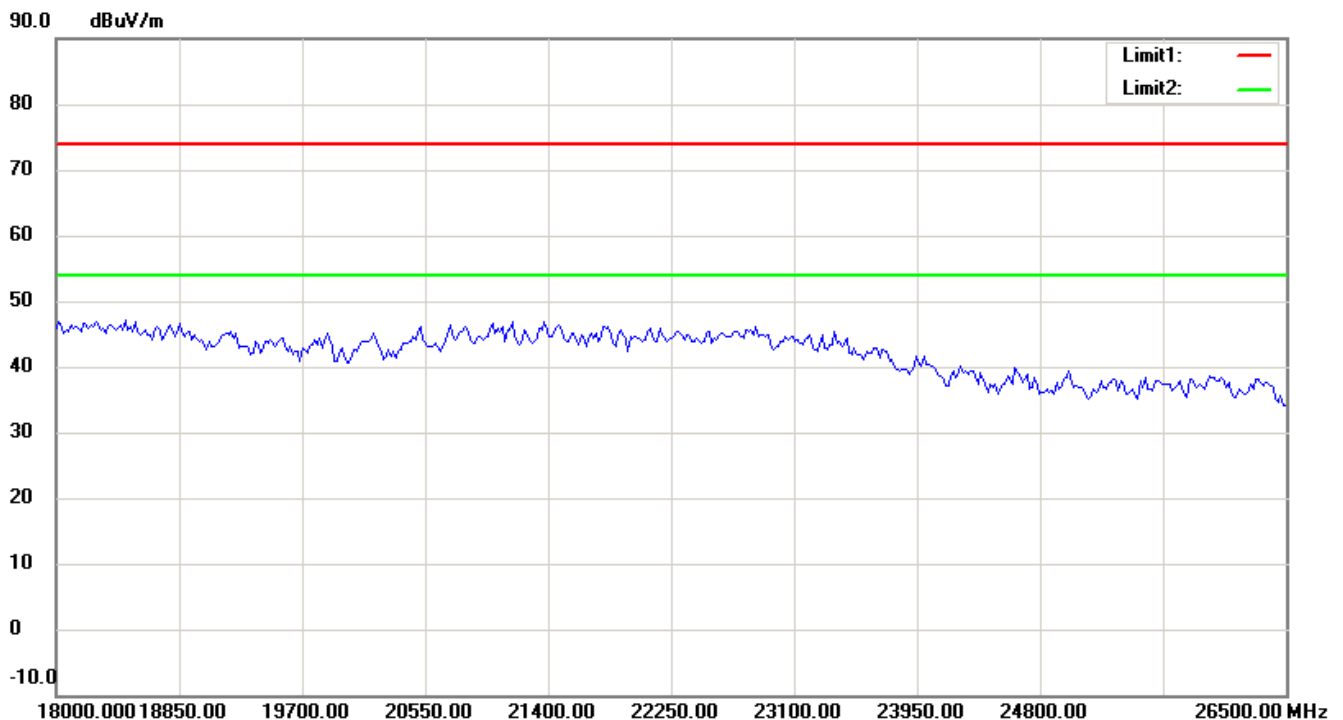
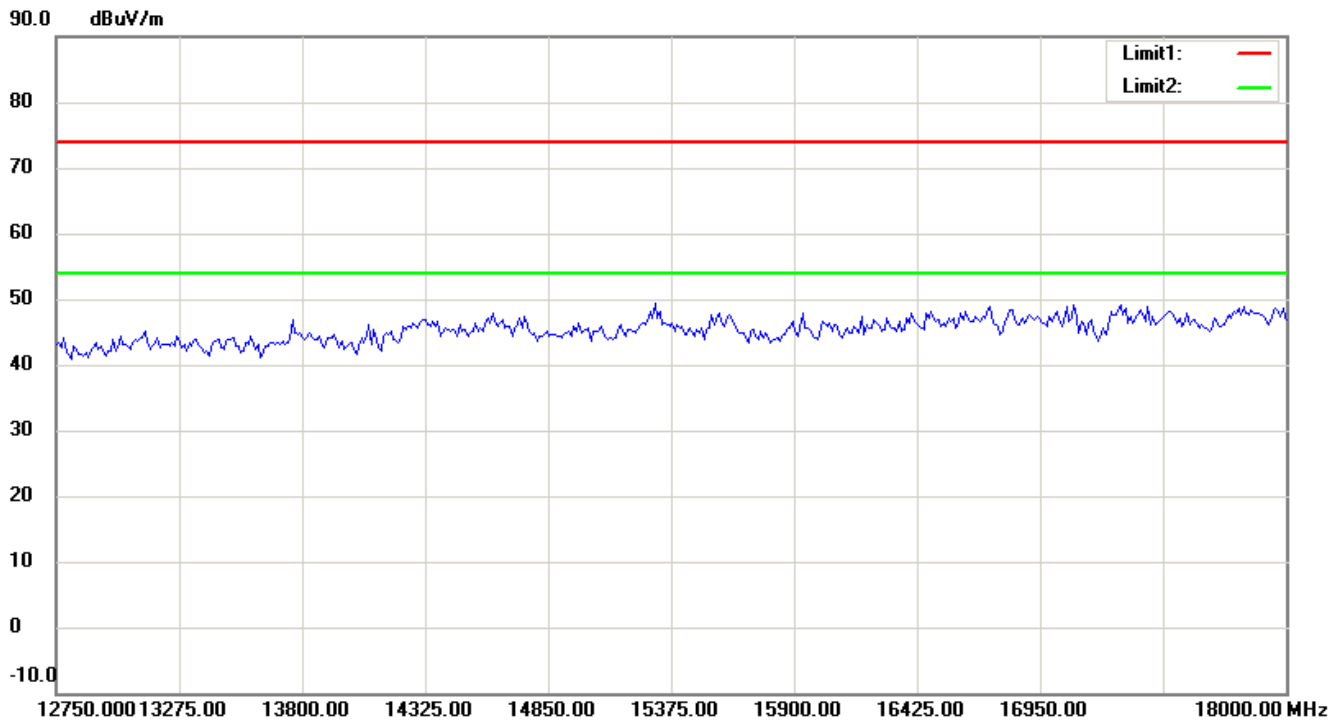
1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
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Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

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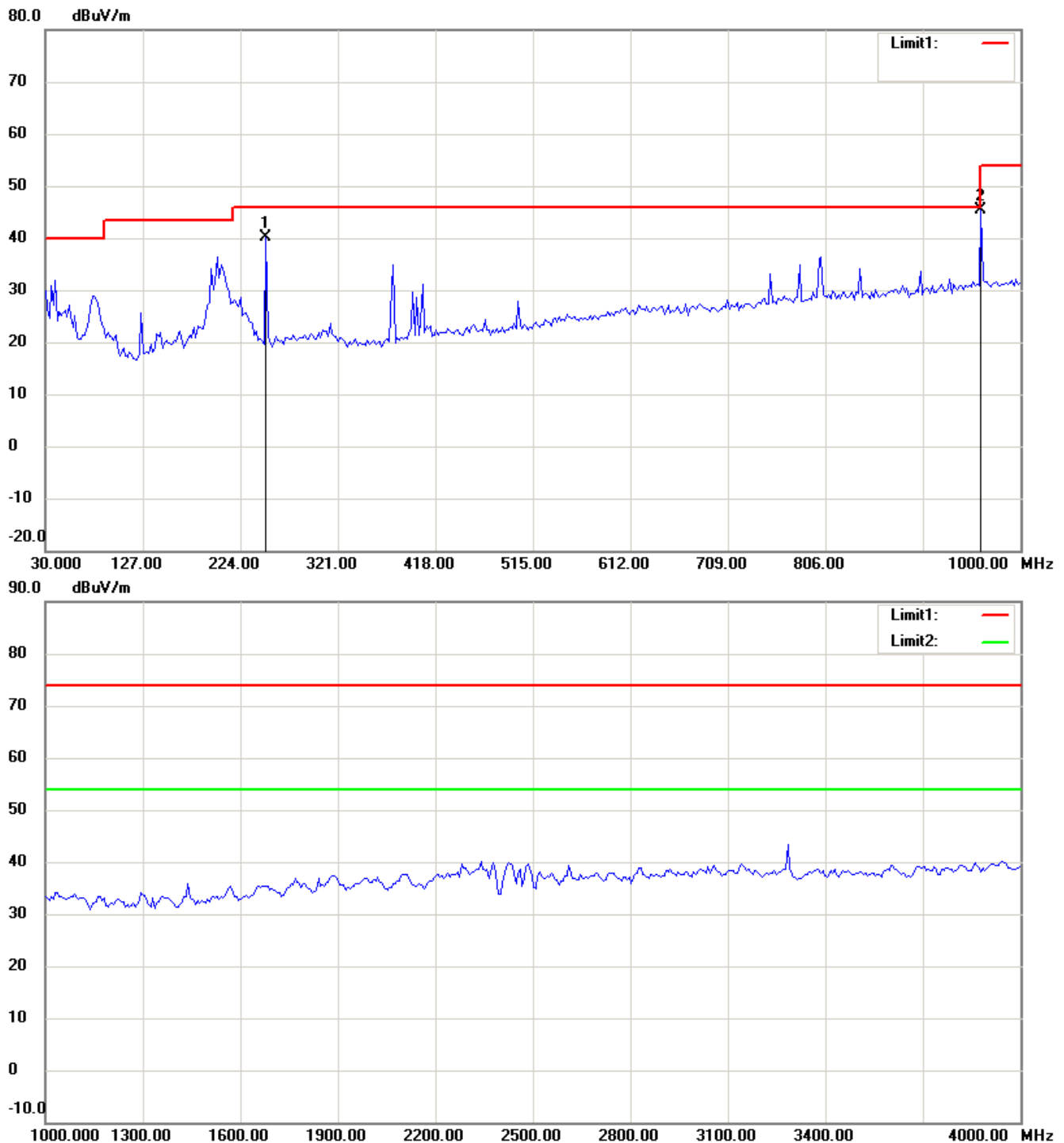


Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

Antenna Polarization V



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

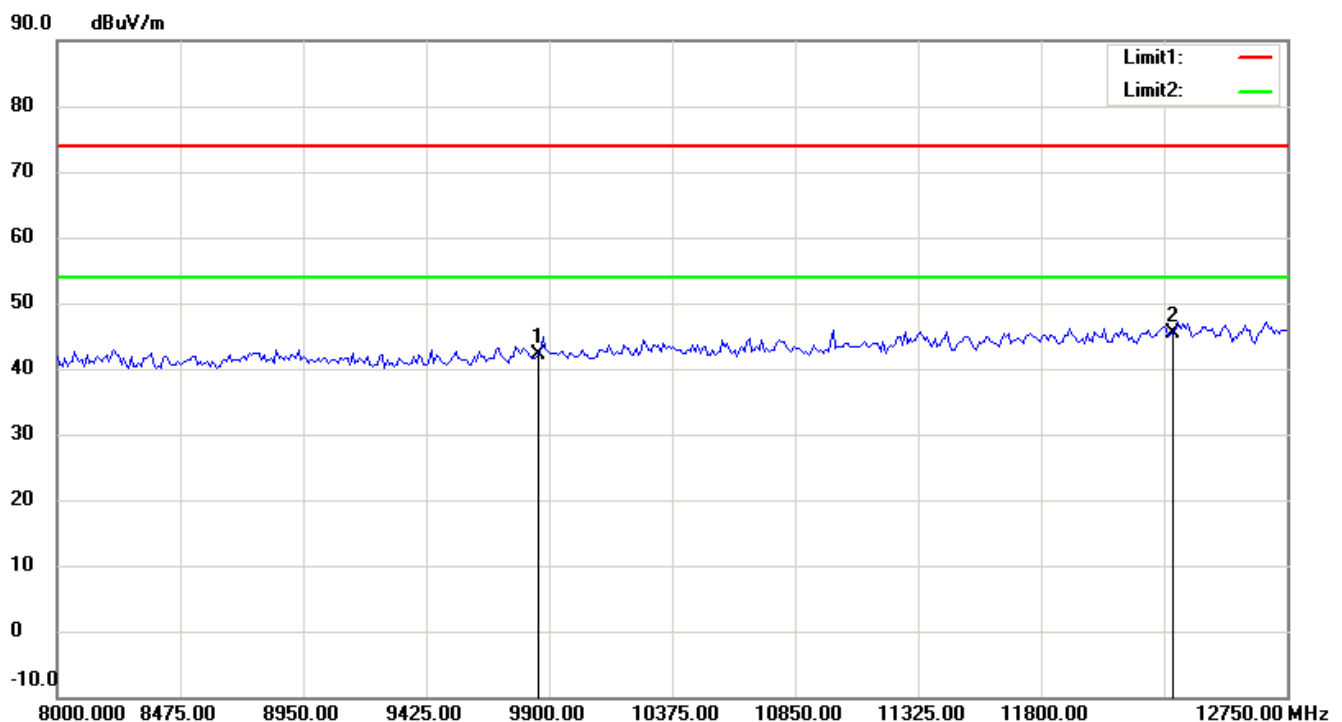
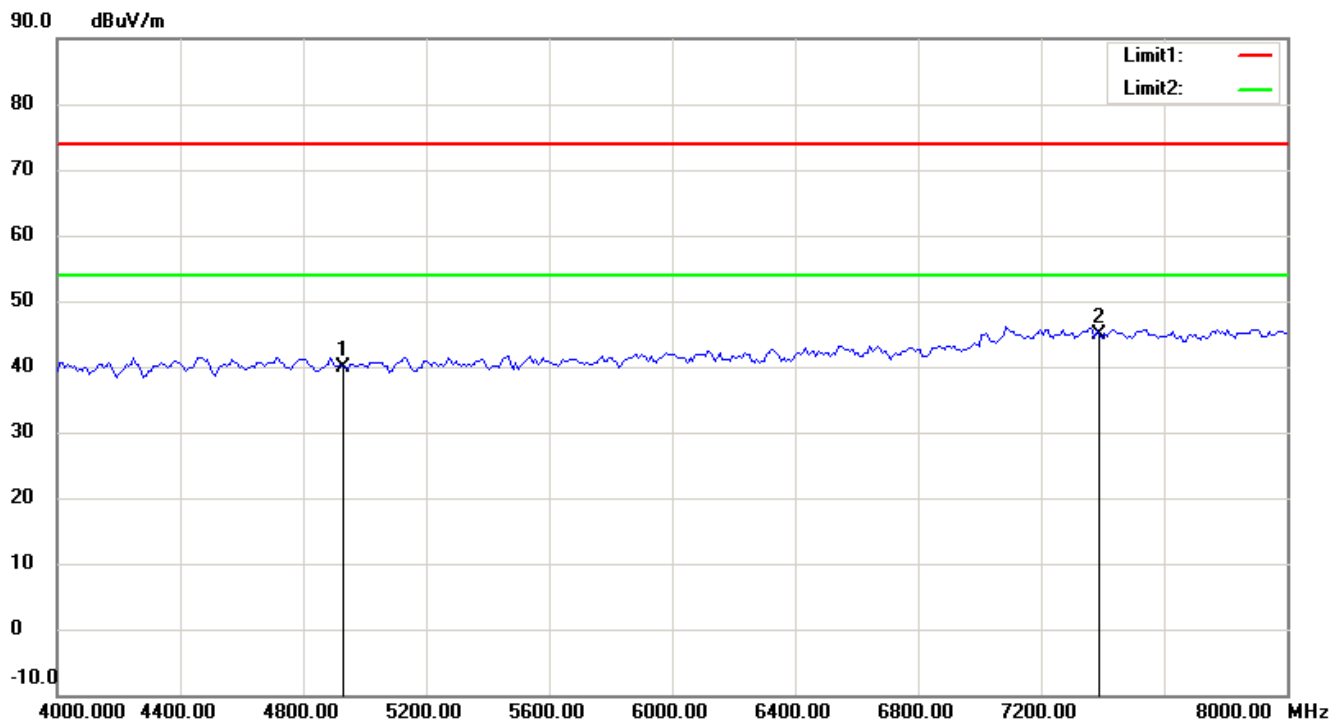
Note:

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Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

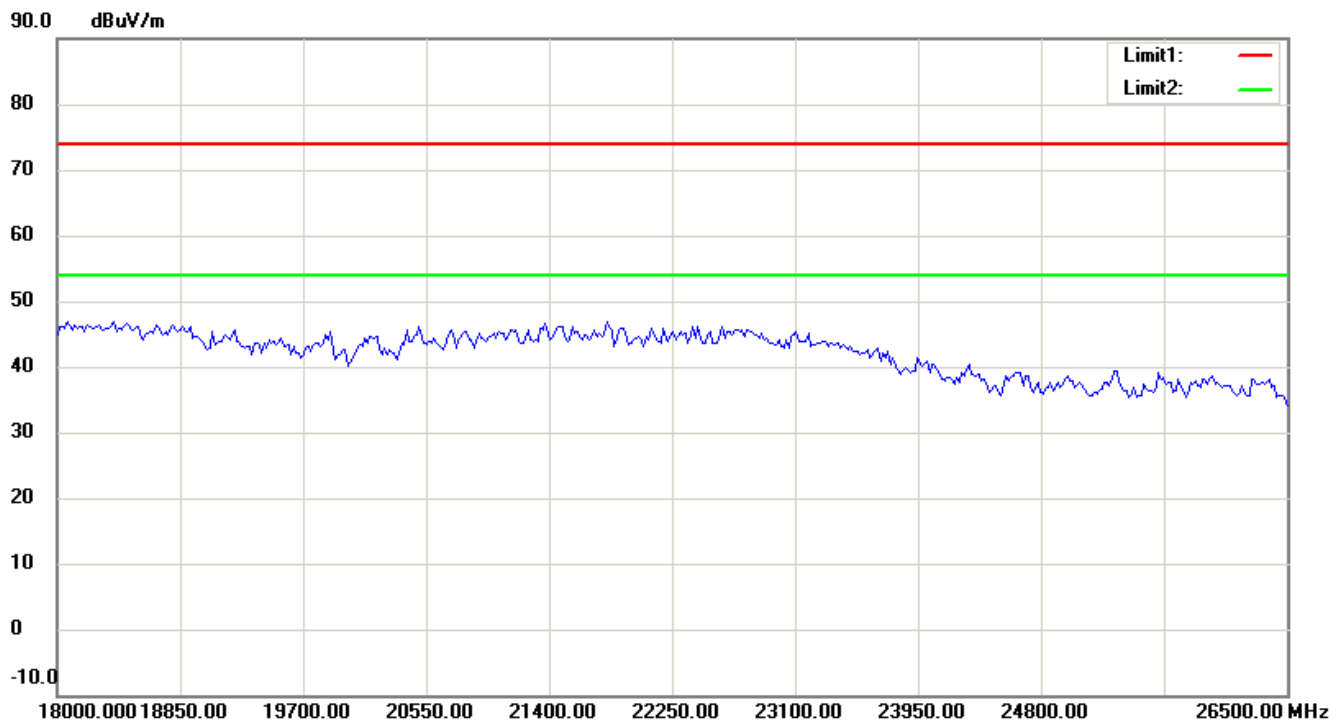
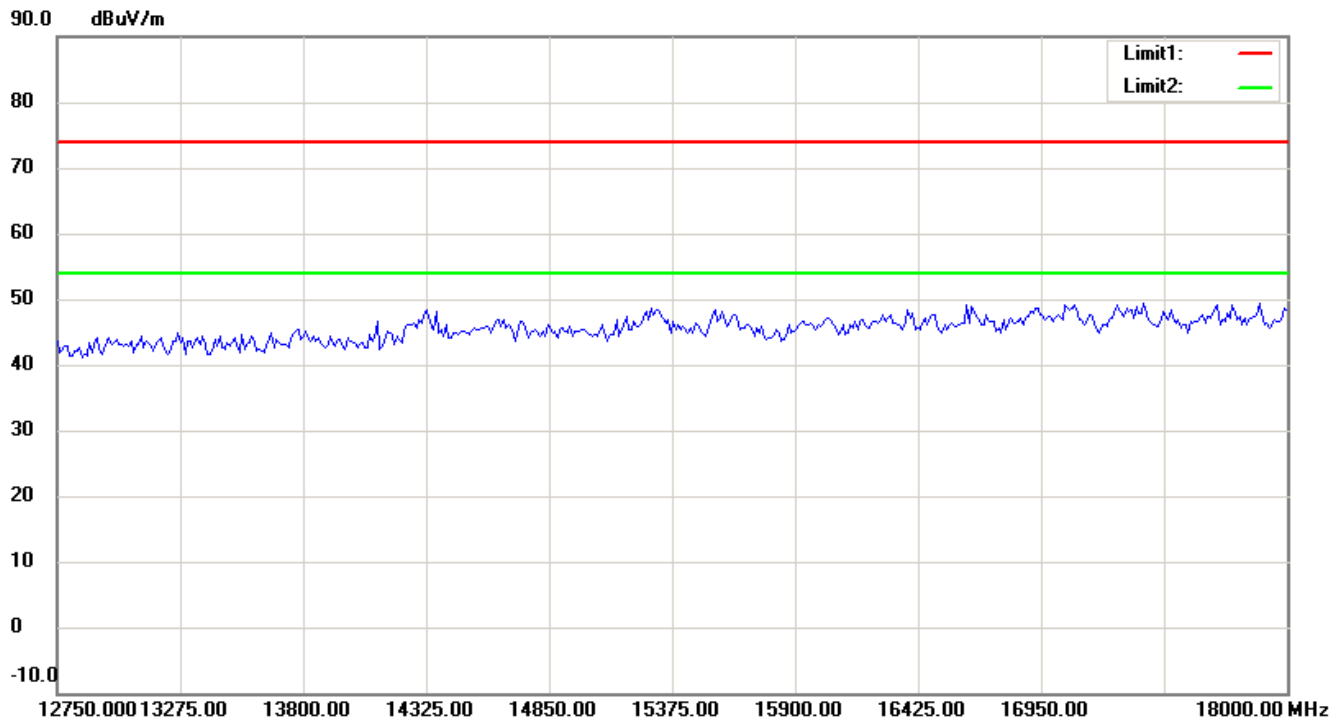
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Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

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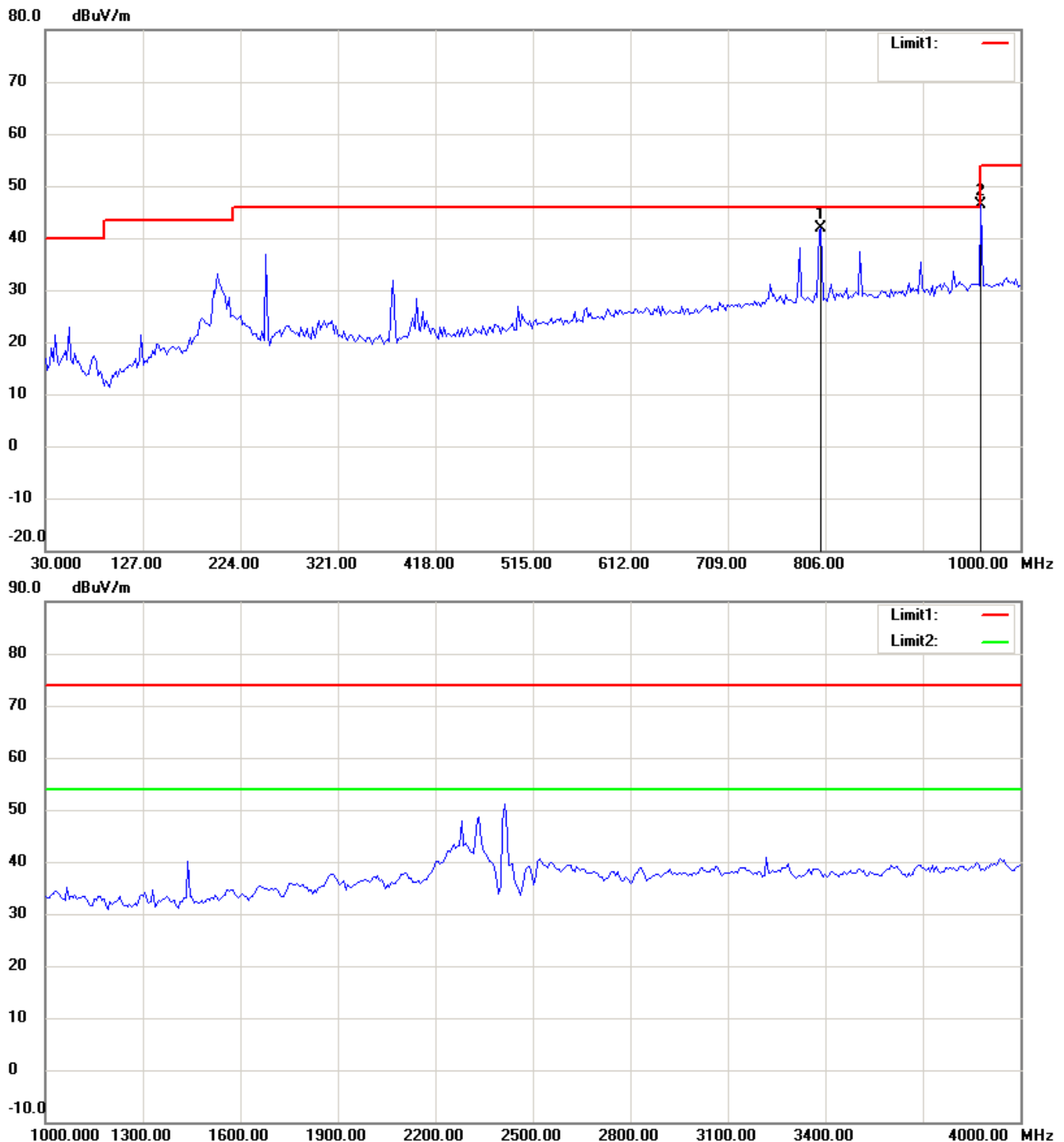
Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

802.11n 20MHz_CH1

Antenna Polarization H



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

Note:

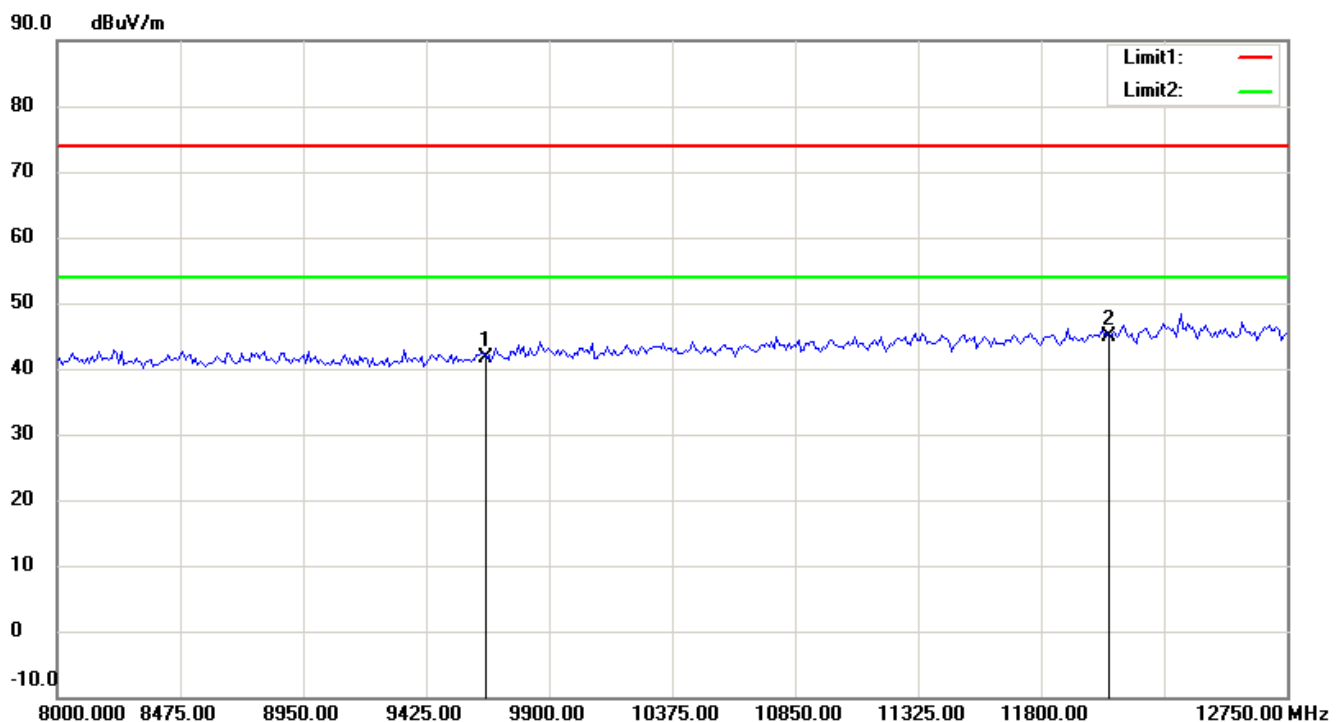
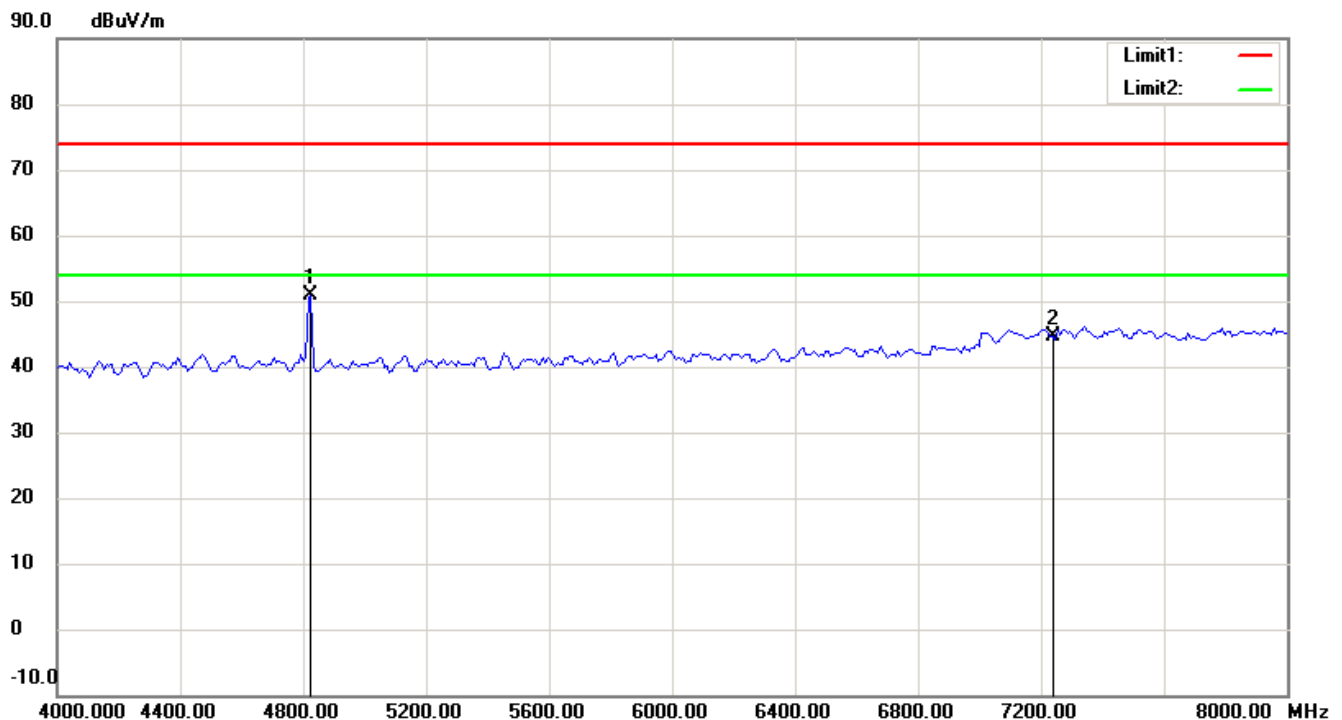
1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification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

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

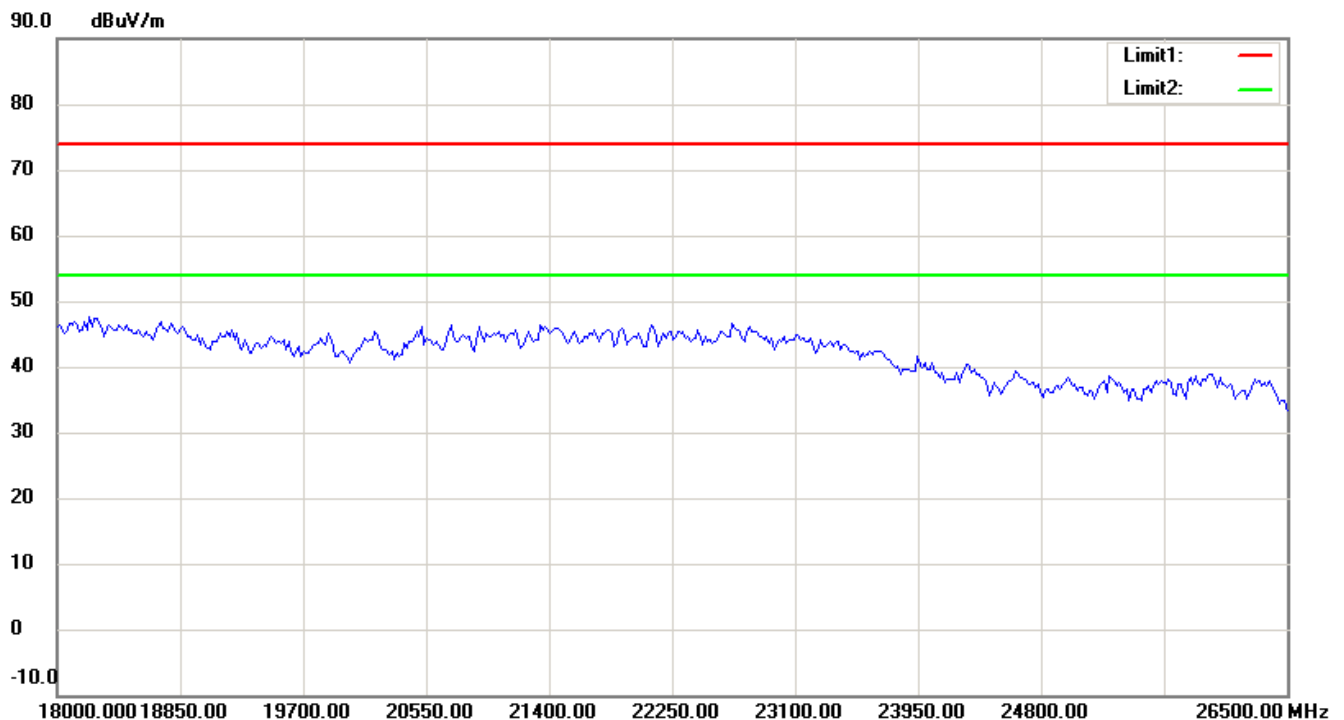
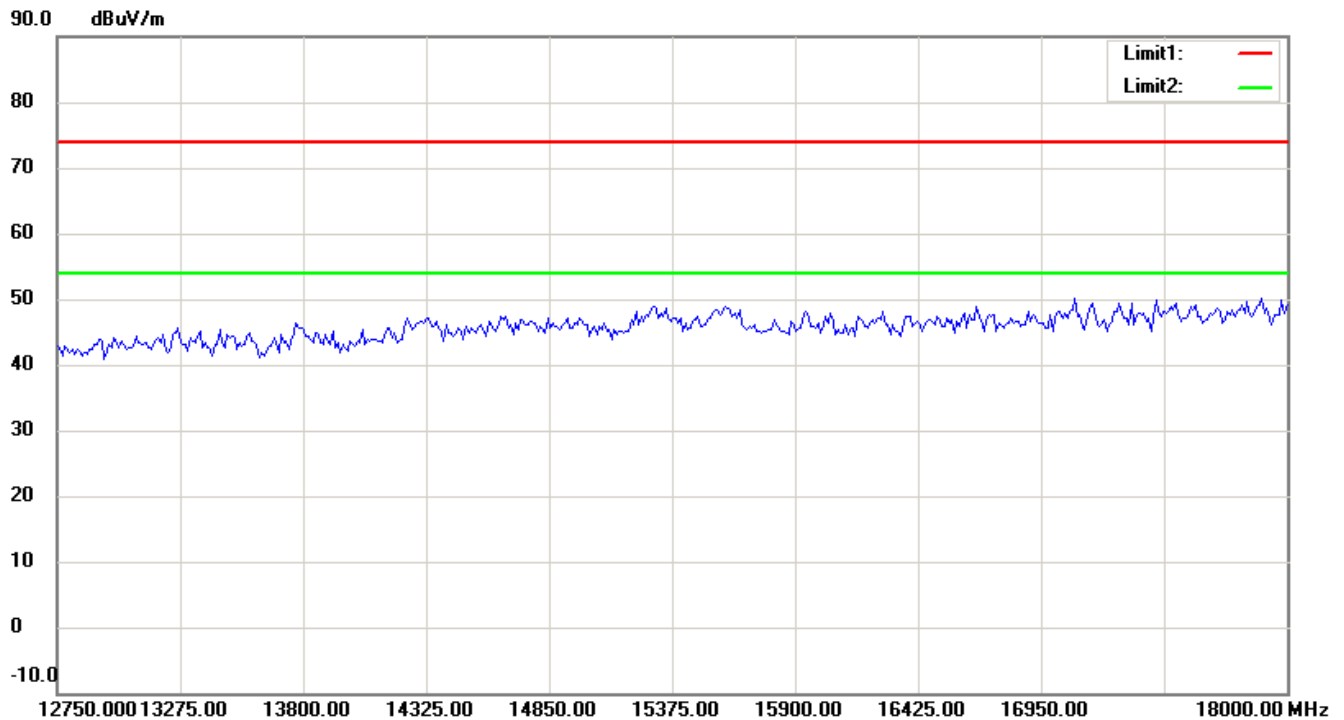
1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
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Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

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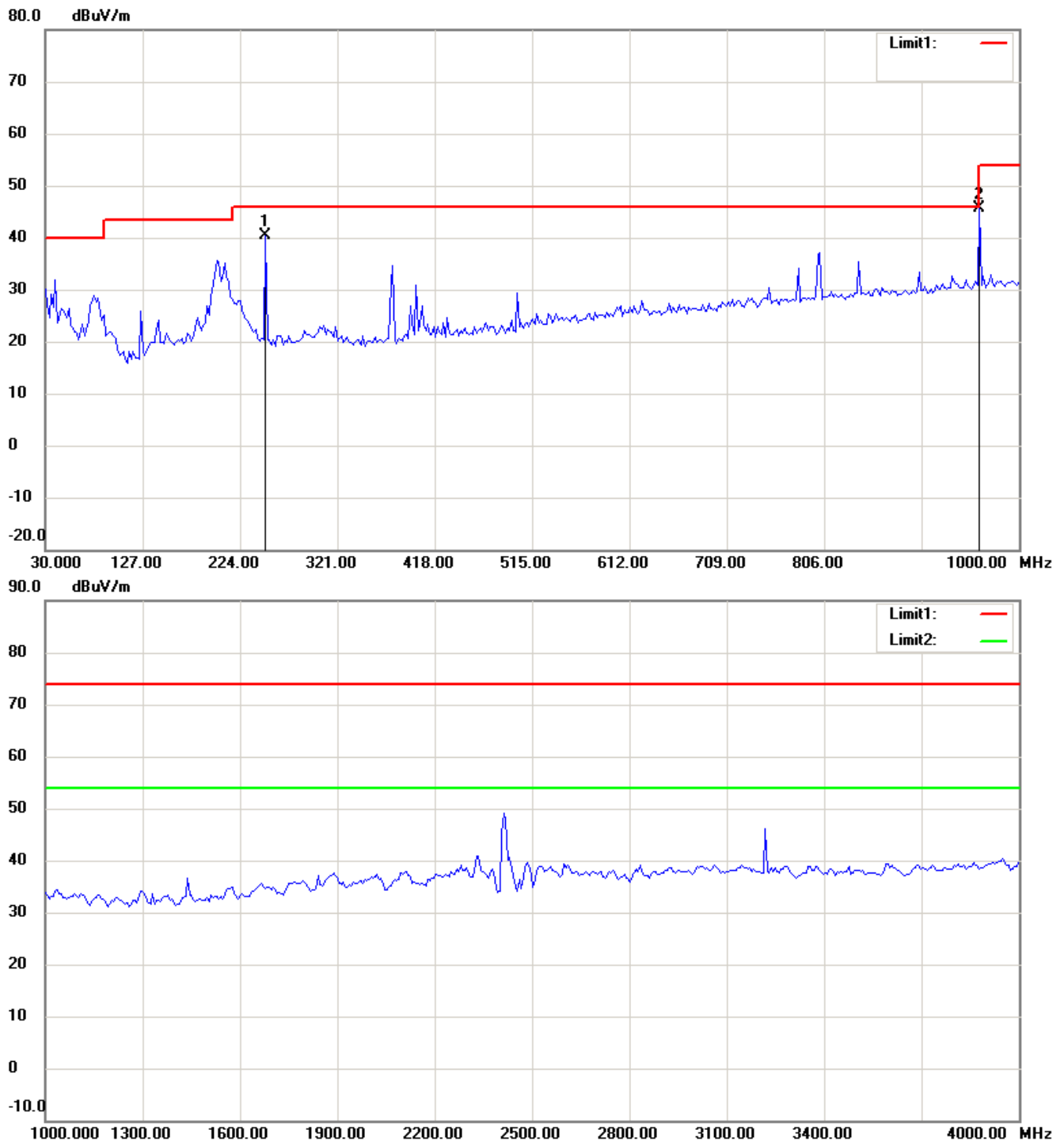


Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

Antenna Polarization V



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

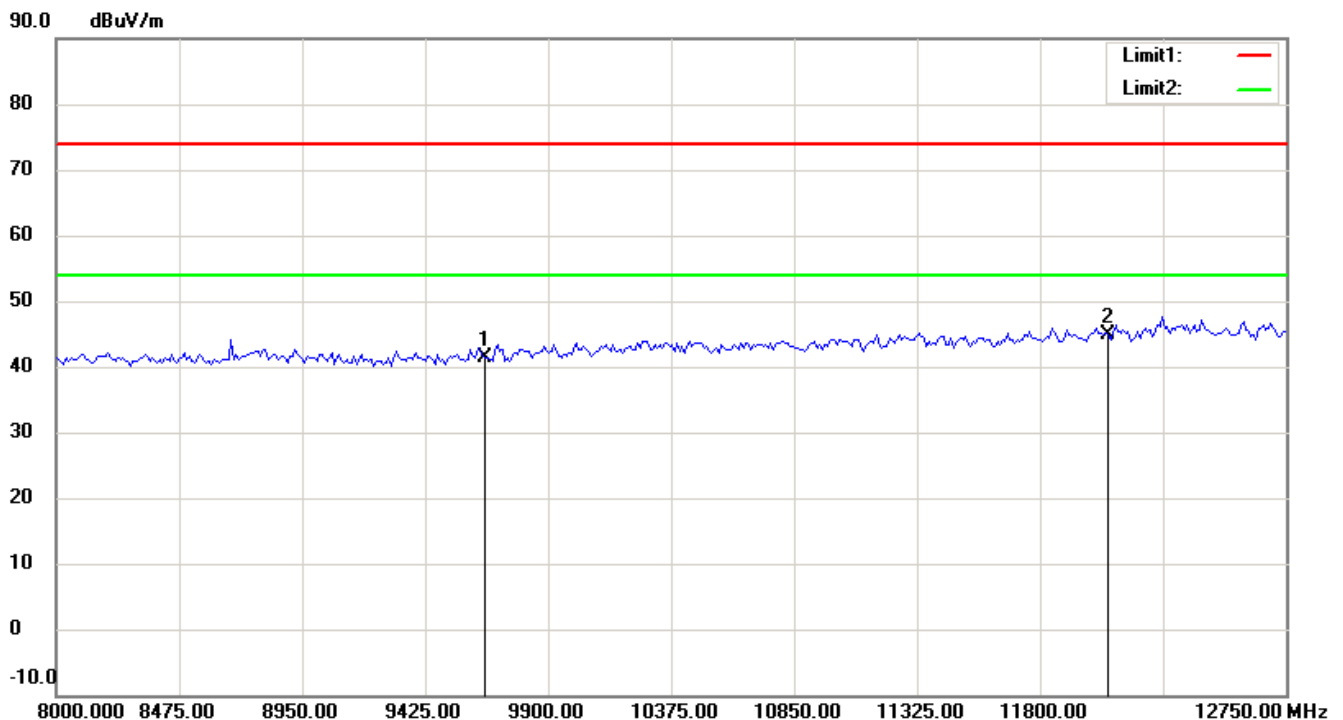
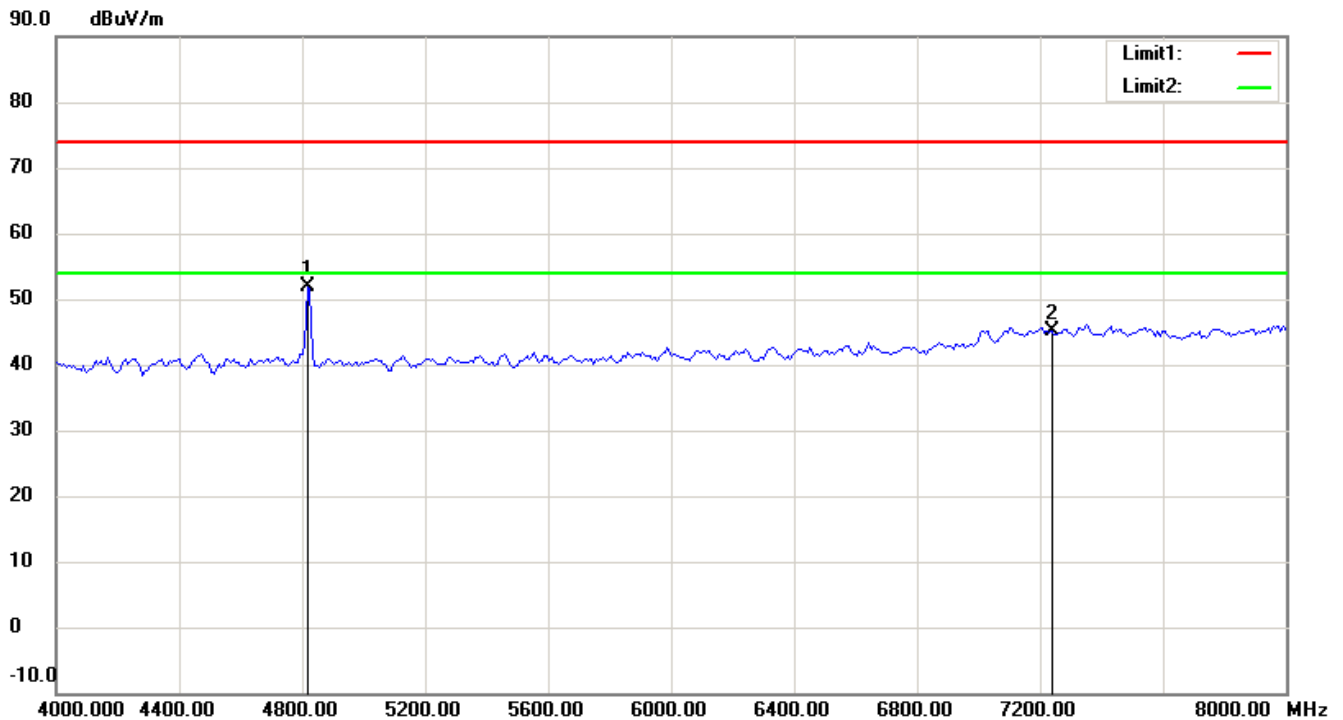
Note:

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Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

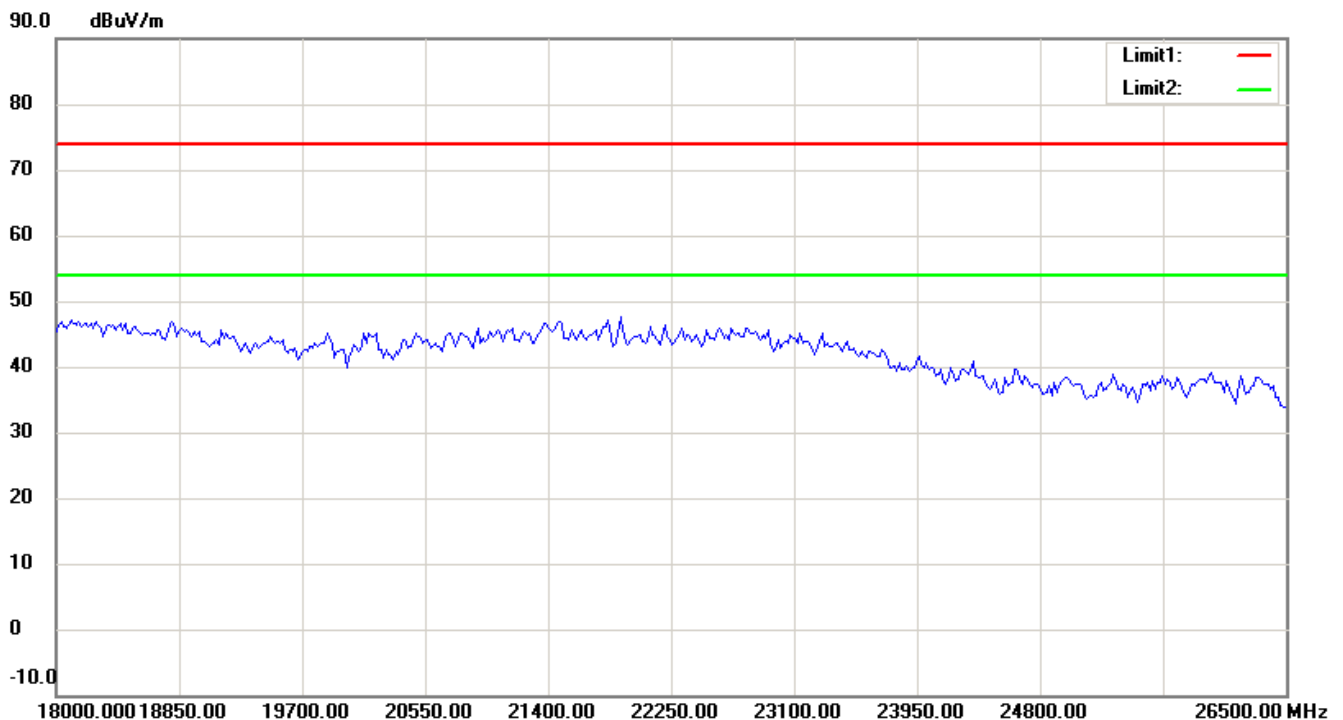
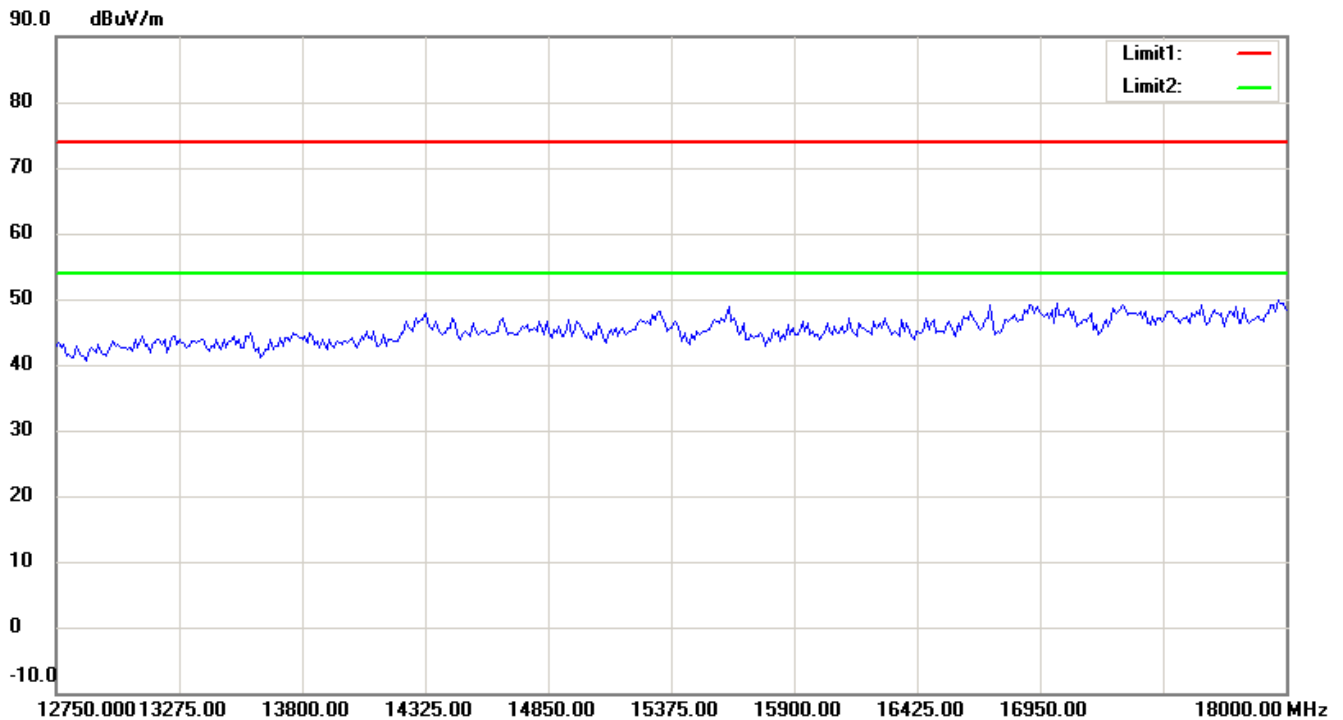
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Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

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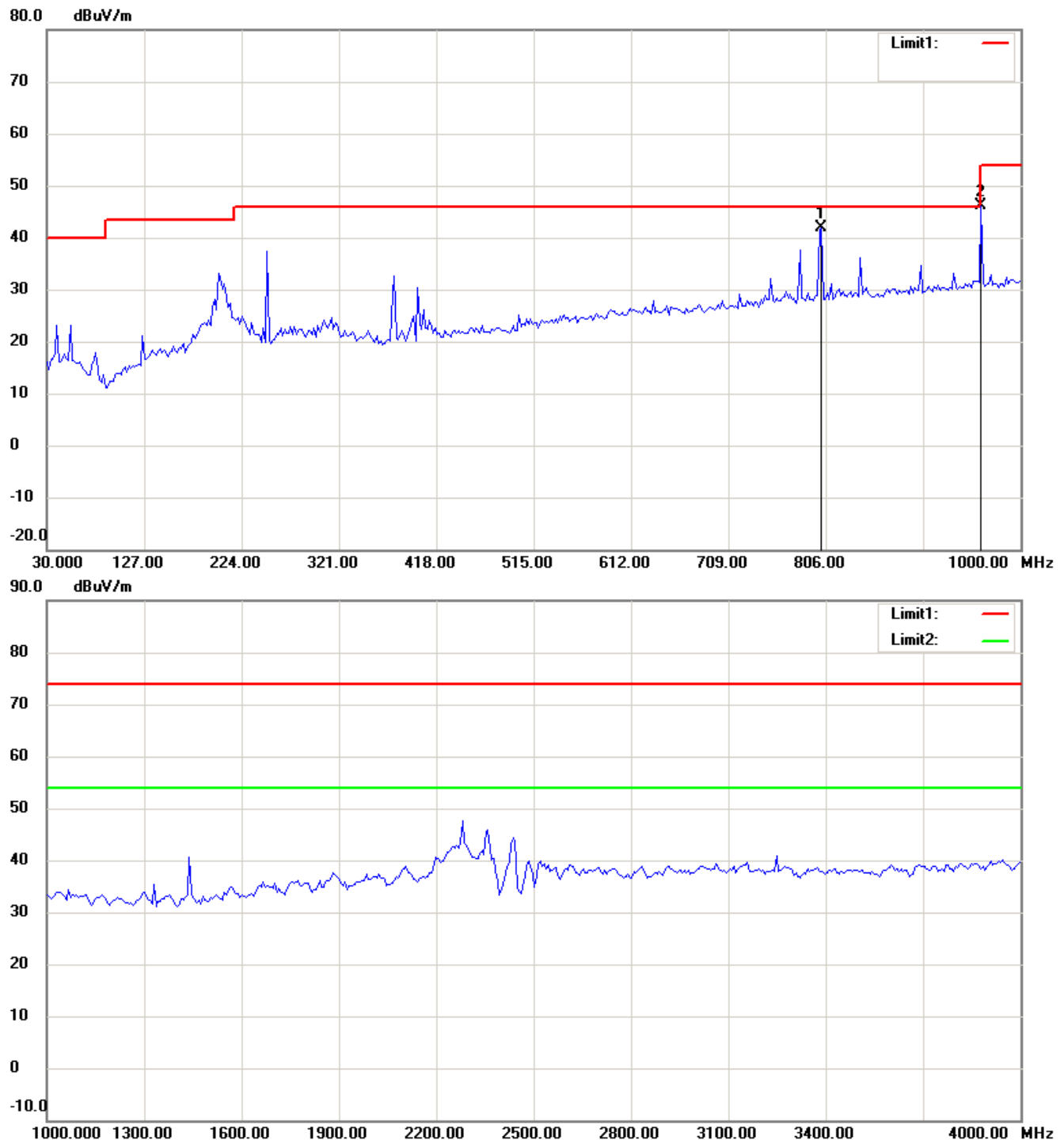


Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

CH6

Antenna Polarization H



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

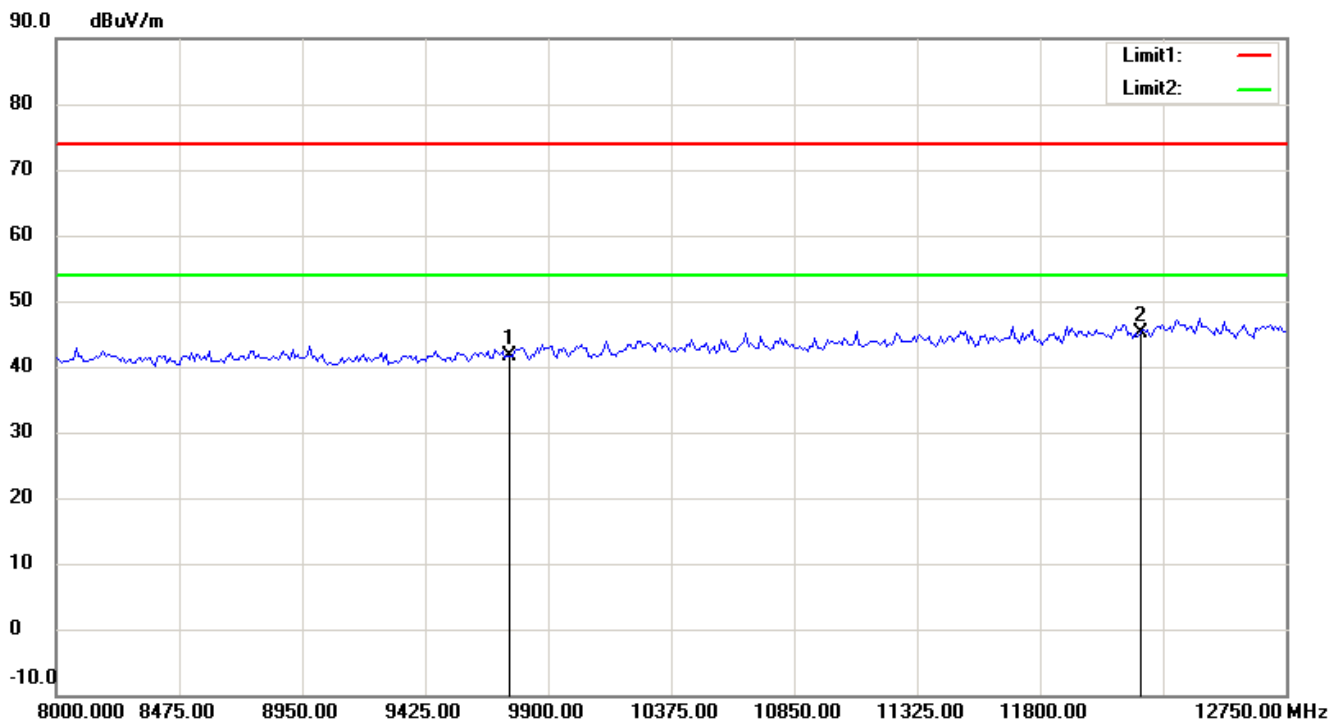
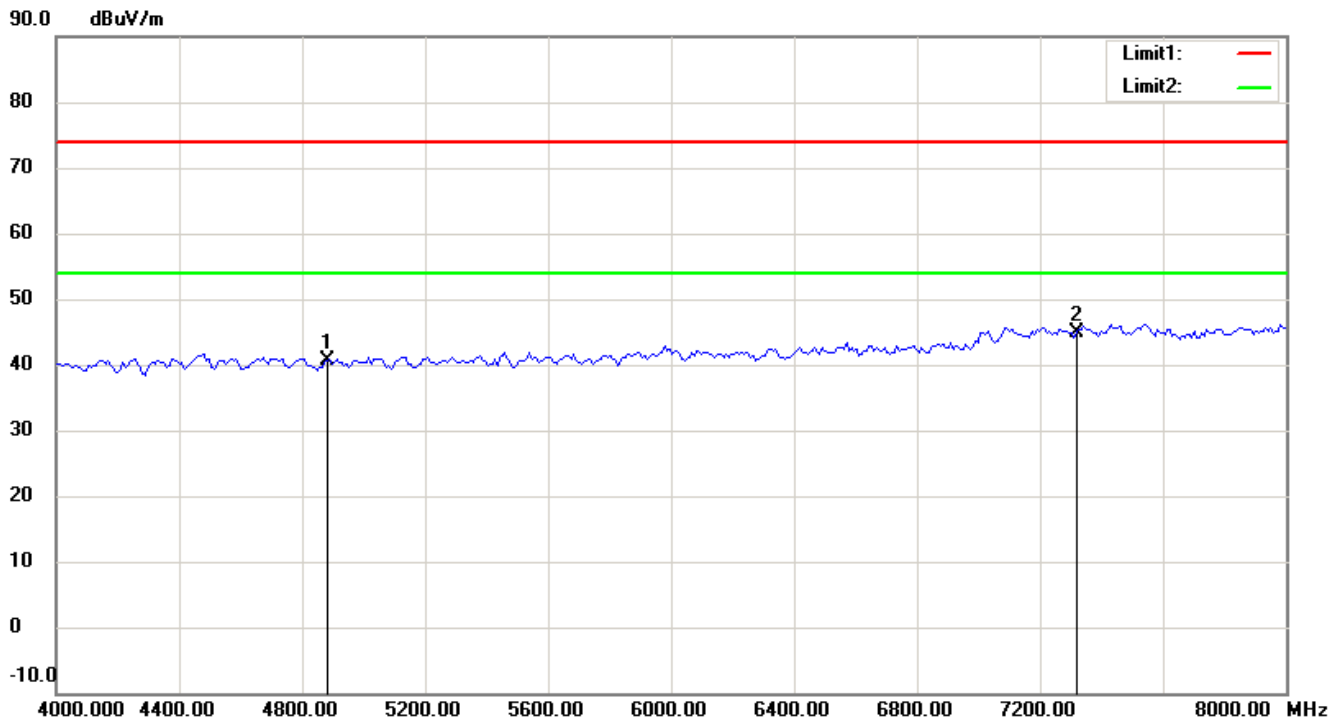
Note:

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Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

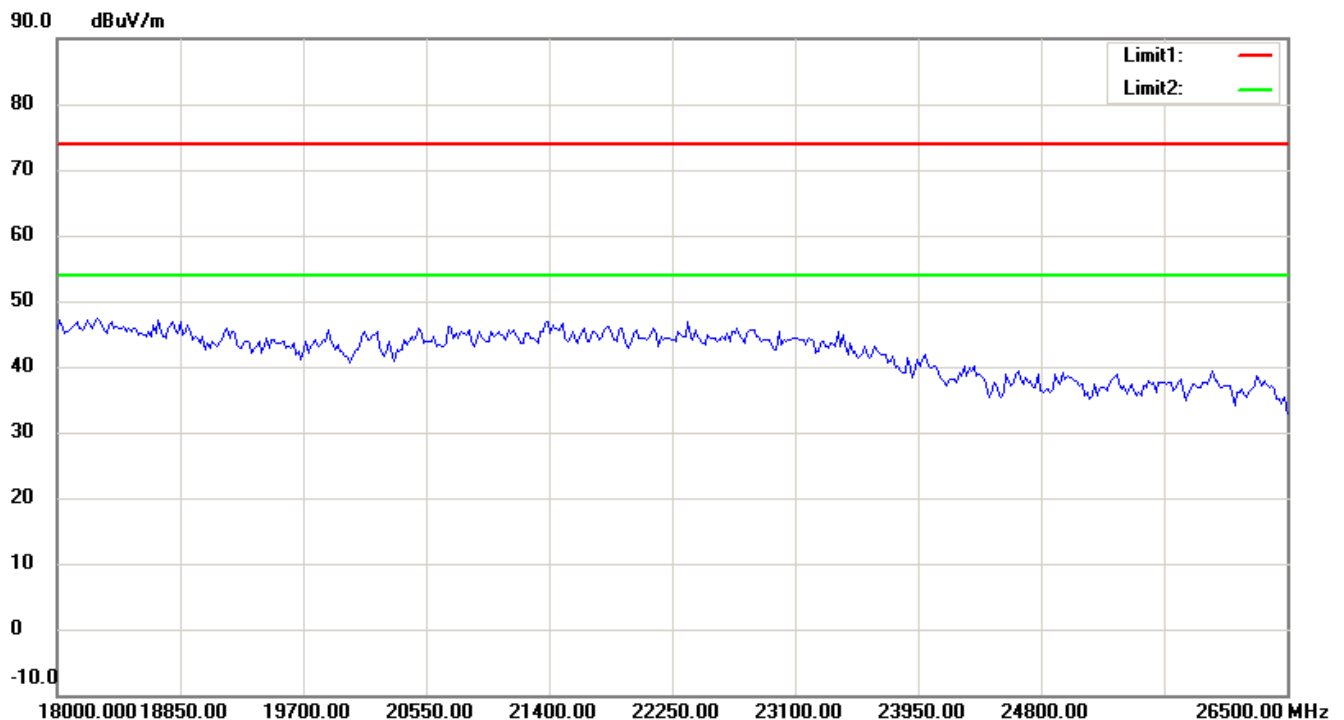
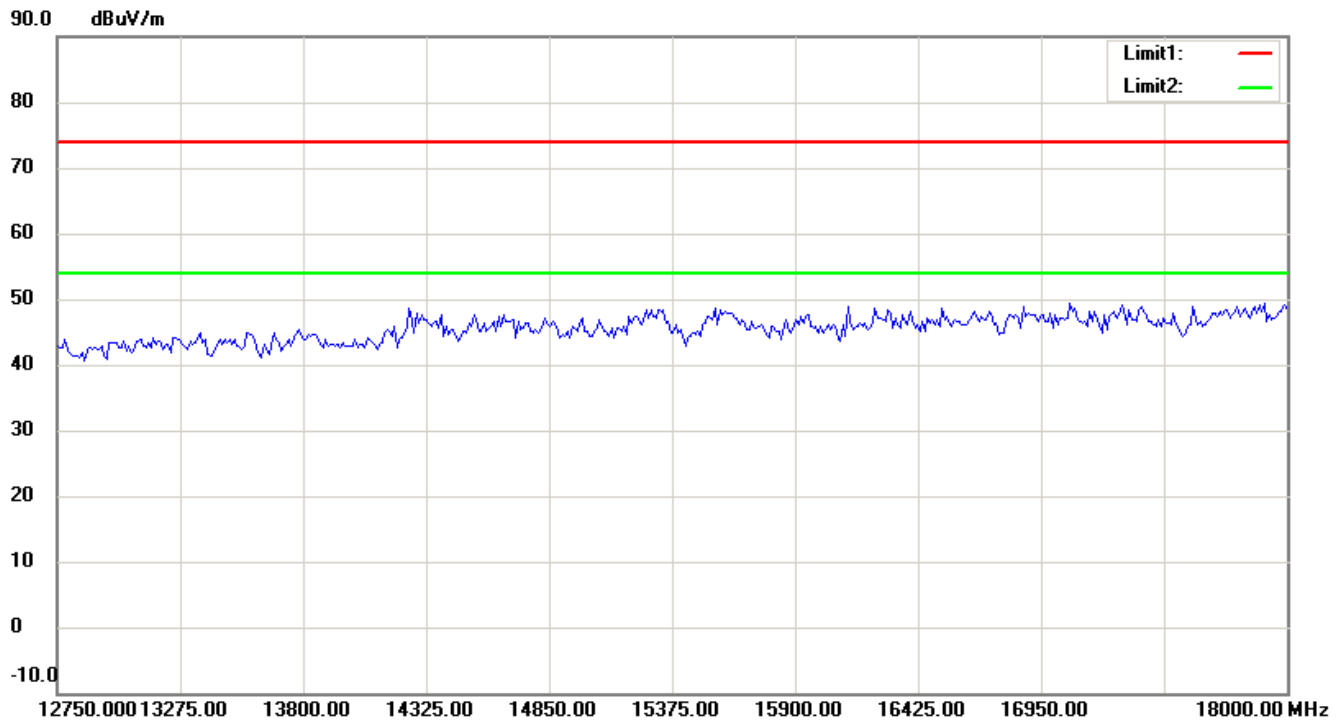
1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
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Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

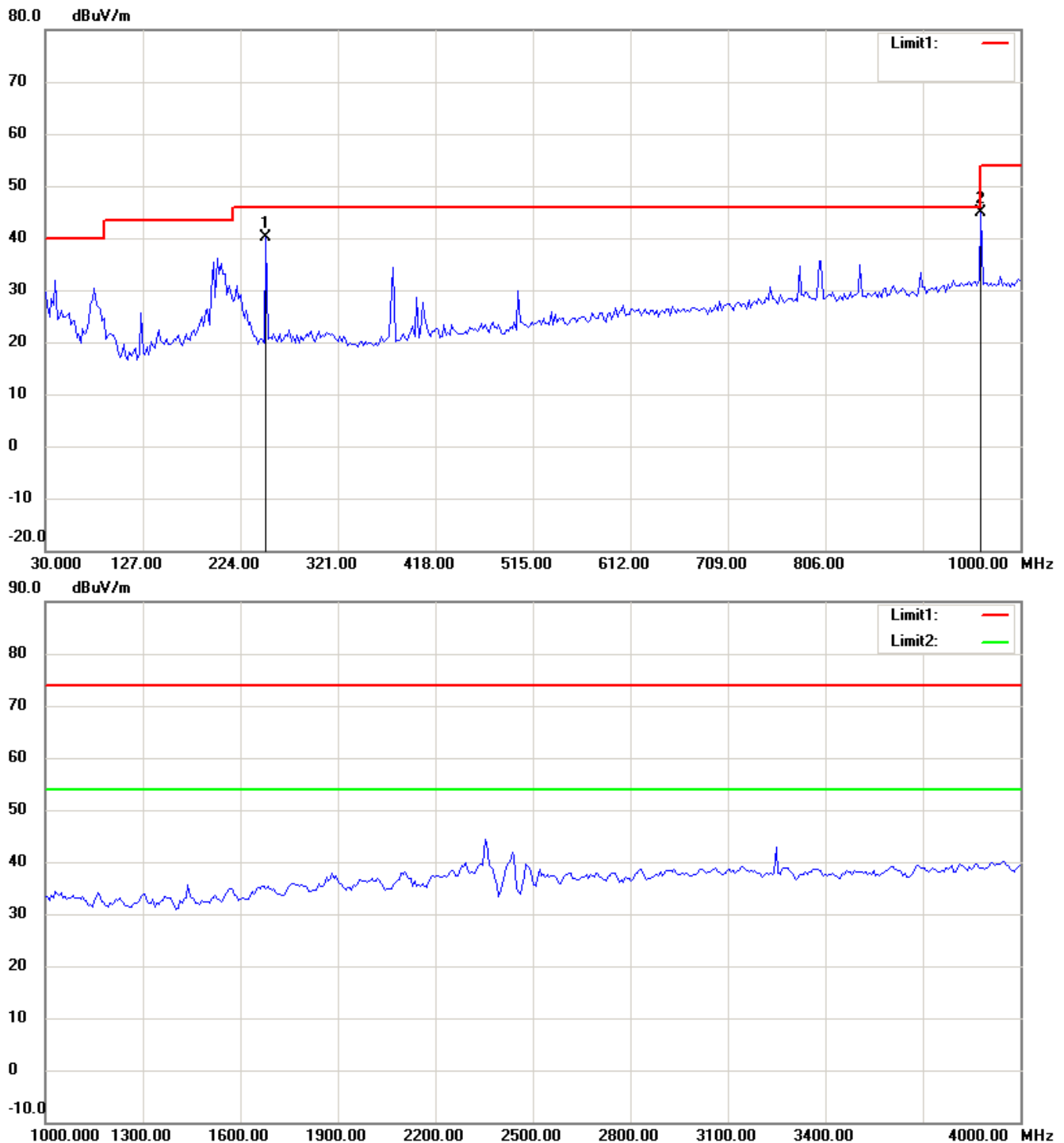
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Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

Antenna Polarization V



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

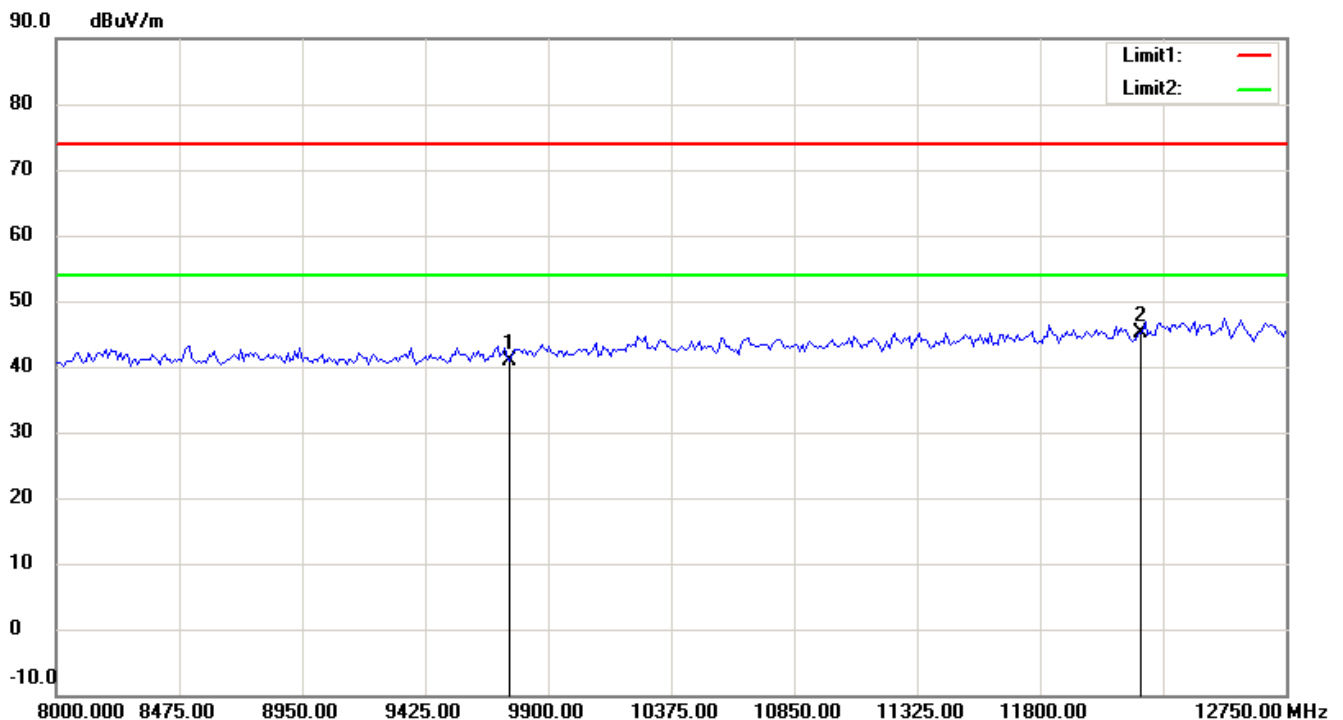
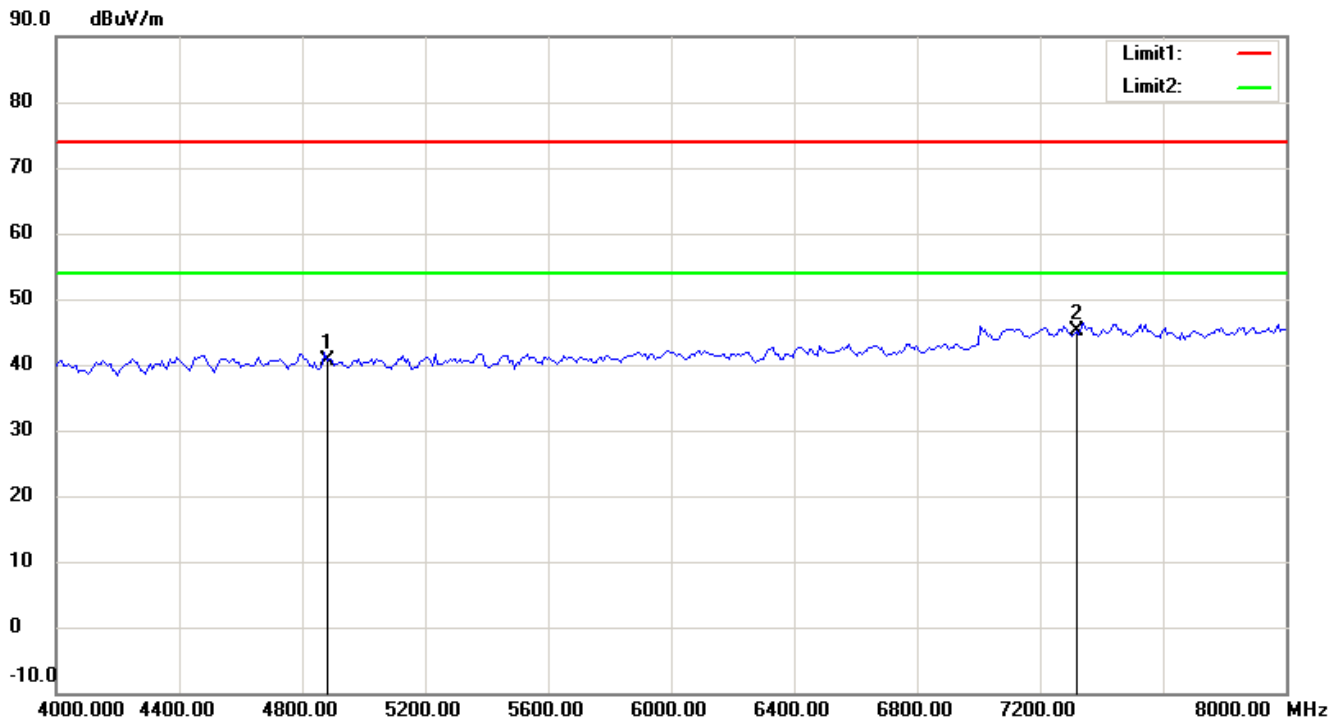
Note:

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Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

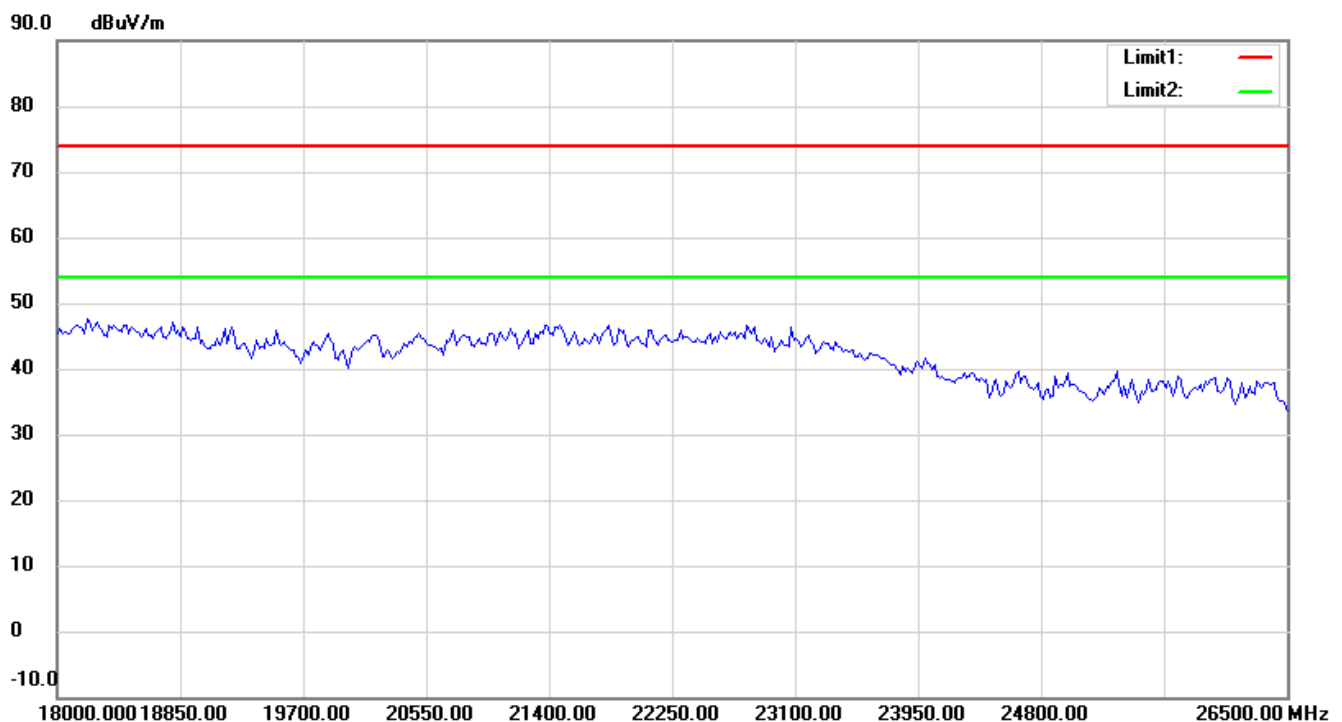
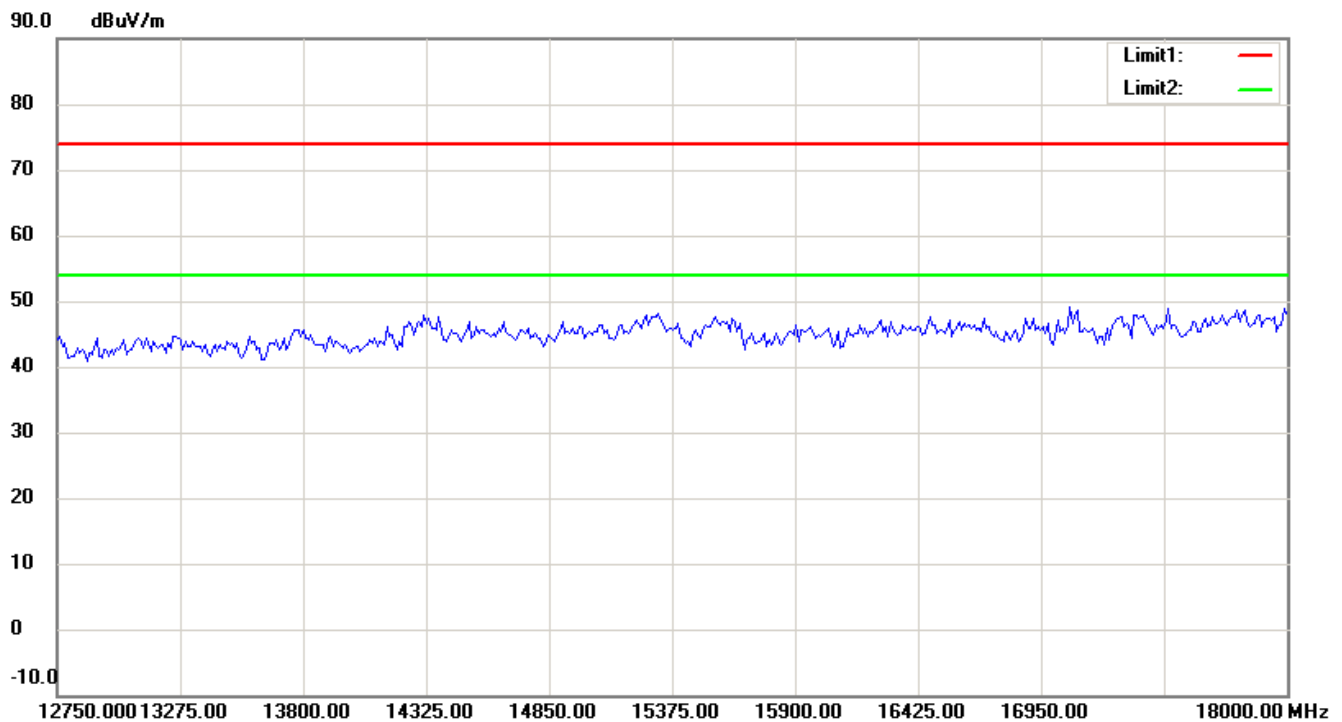
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Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

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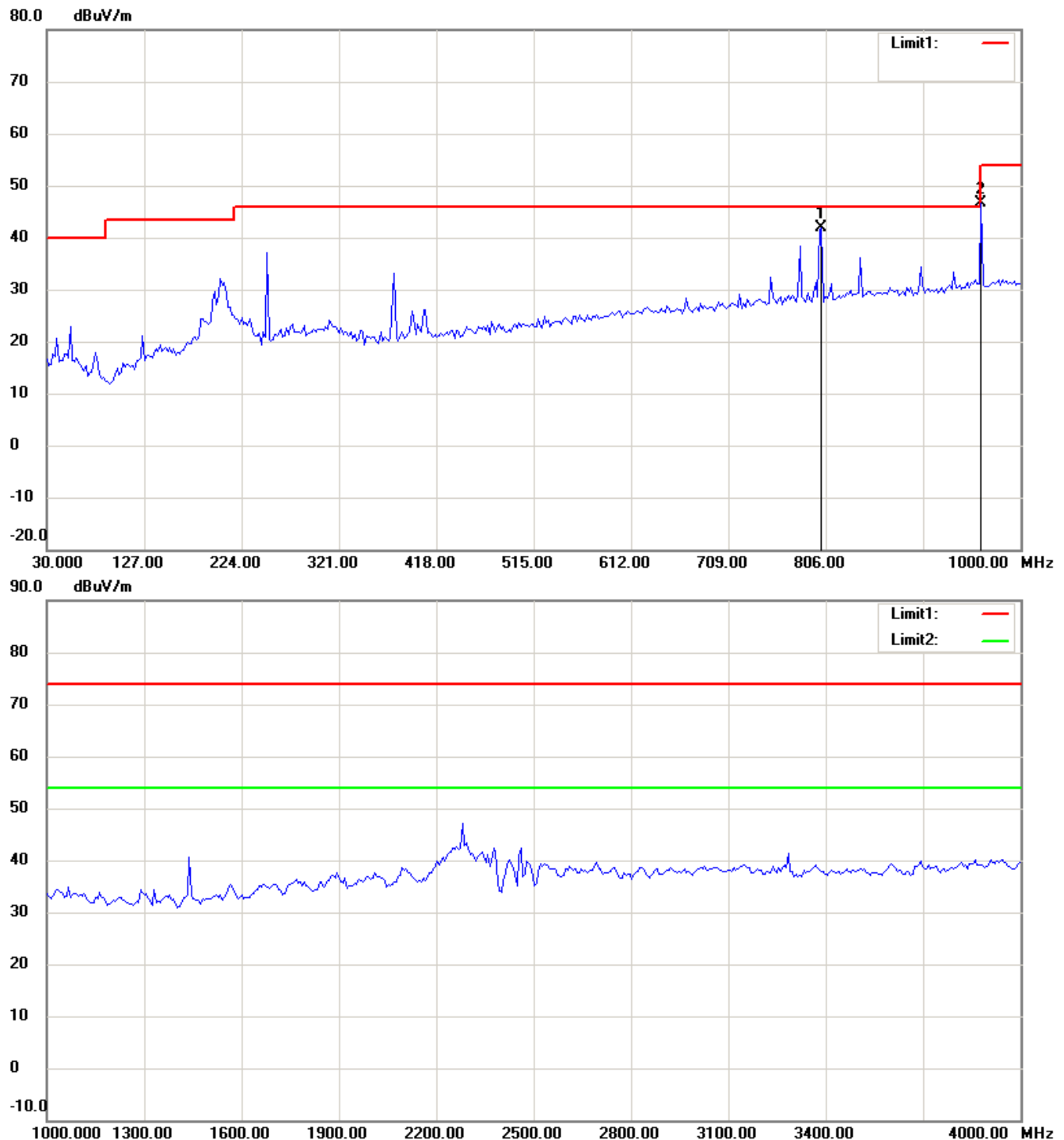


Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

CH11

Antenna Polarization H



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

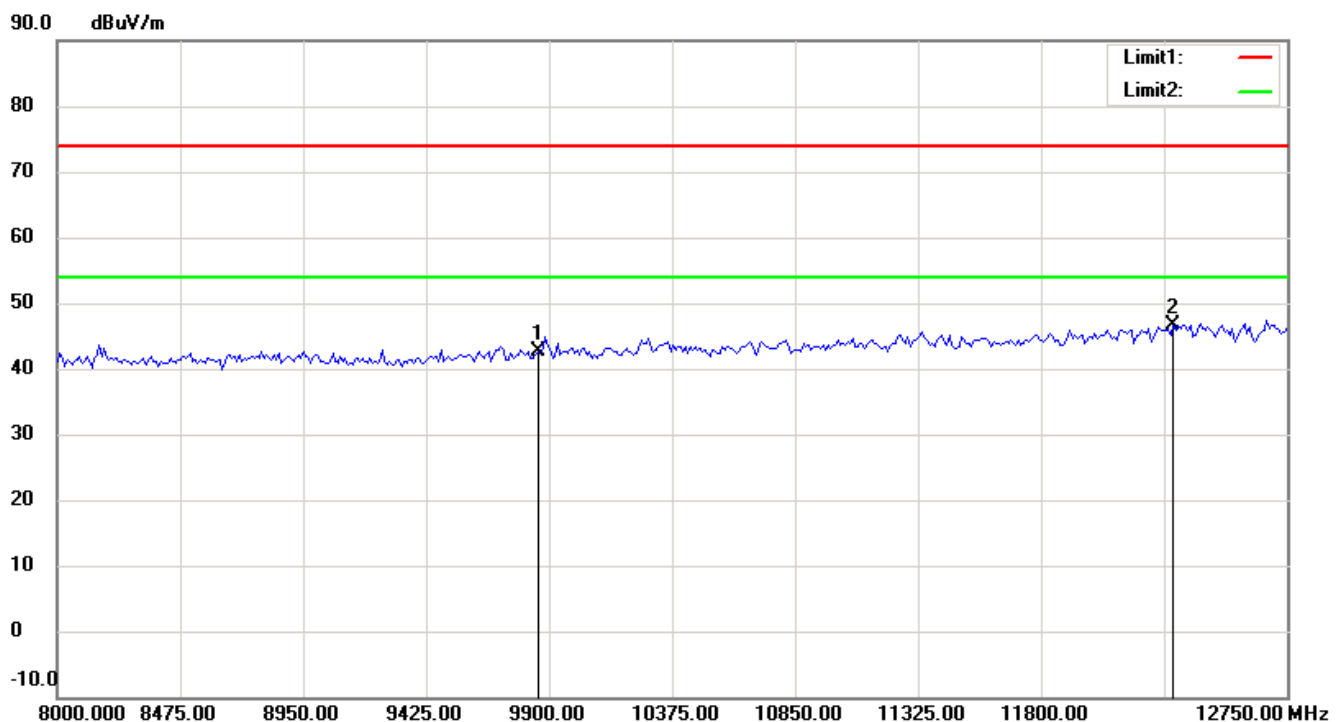
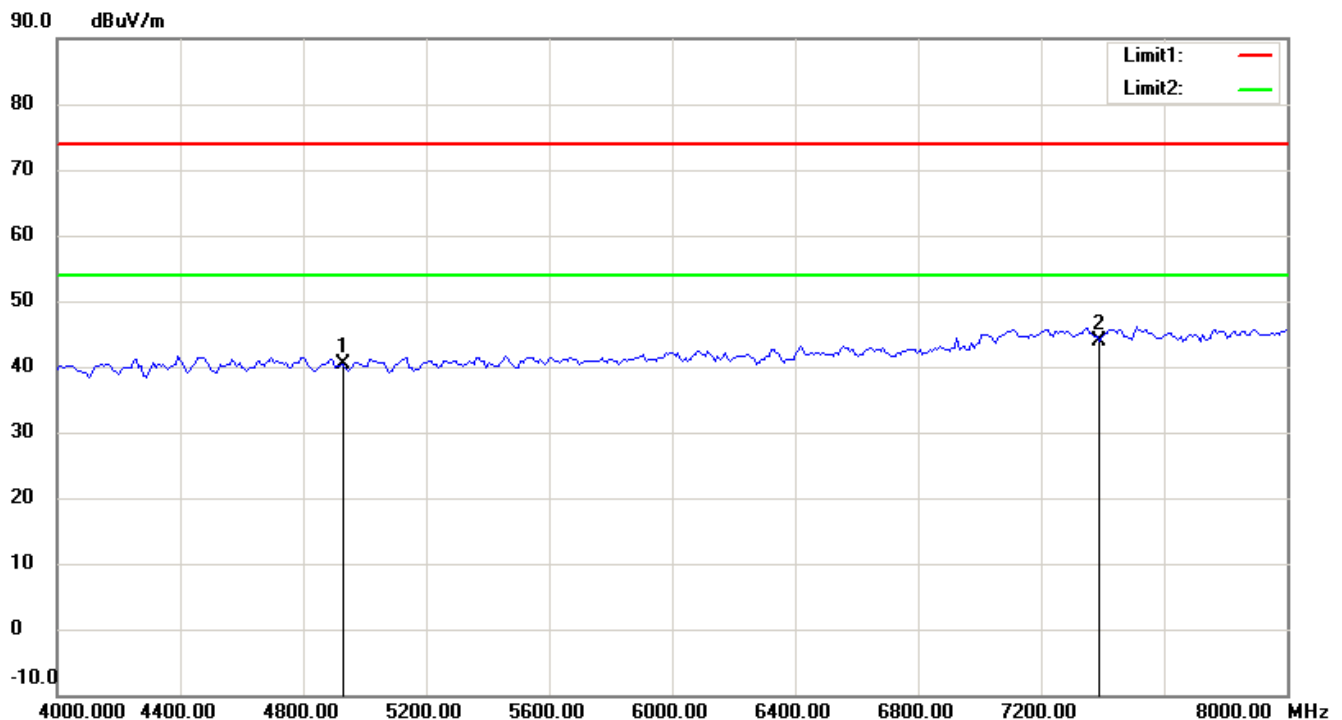
Note:

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Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

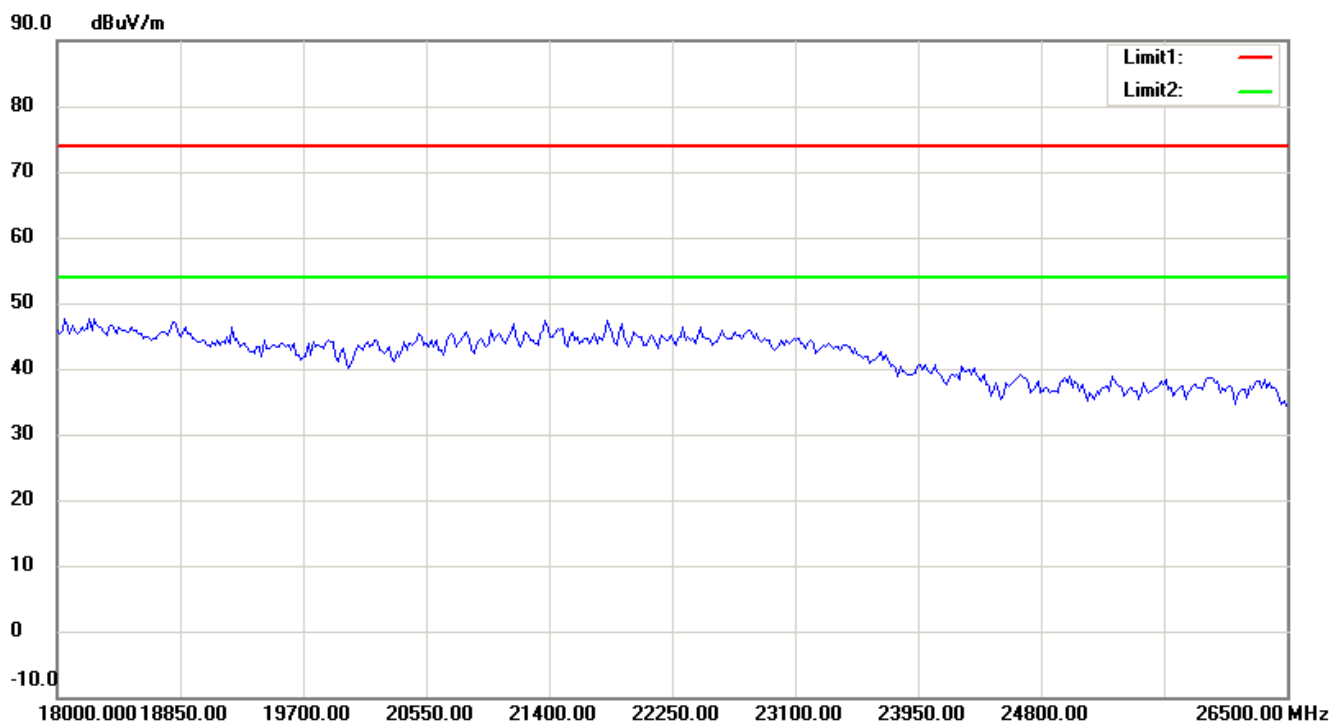
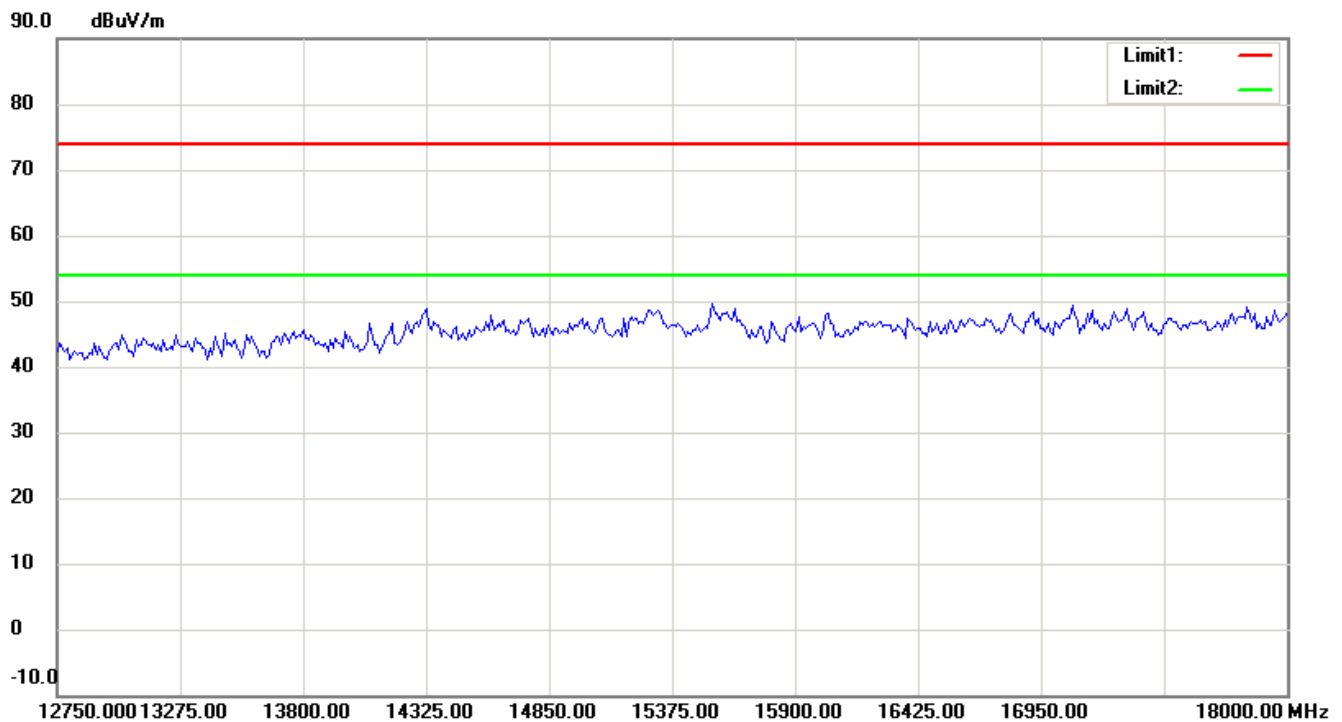
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Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

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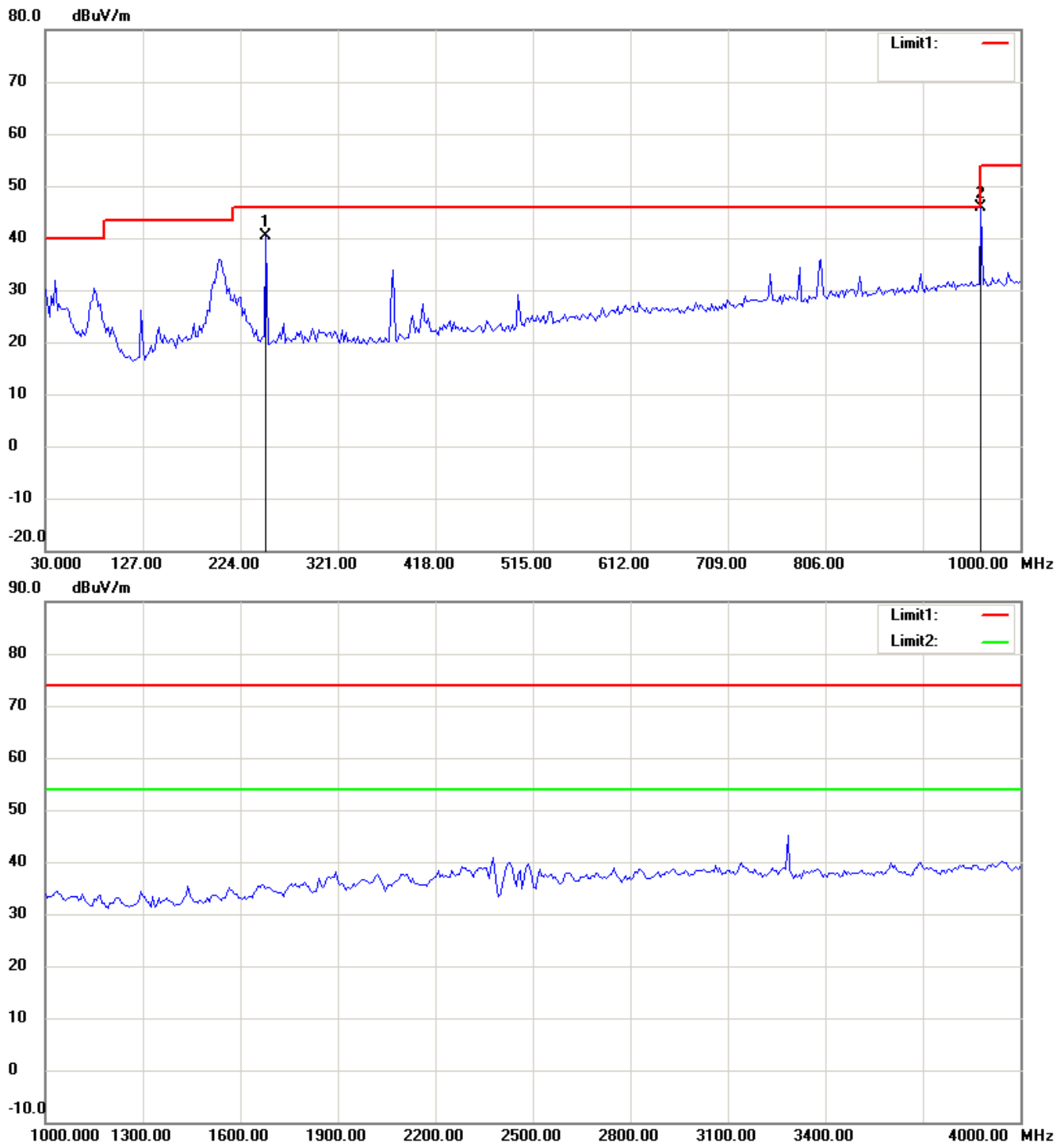


Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

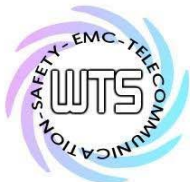
Antenna Polarization V



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

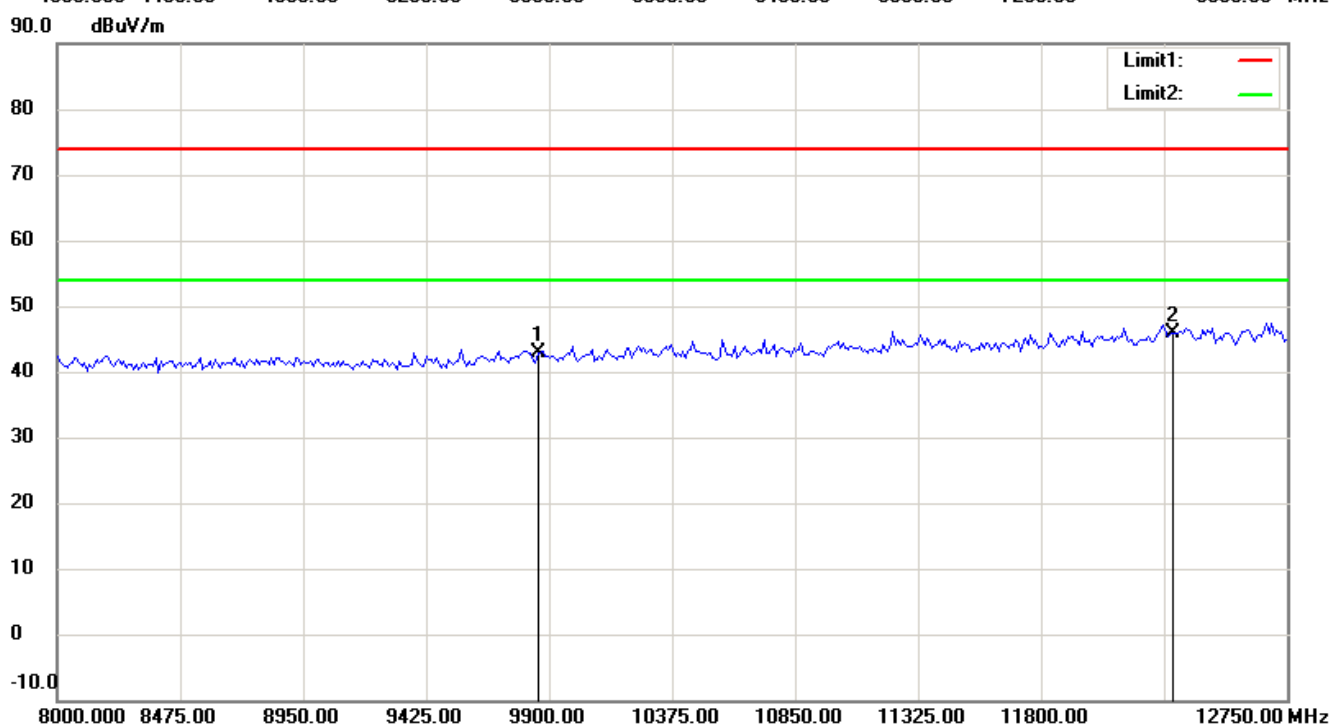
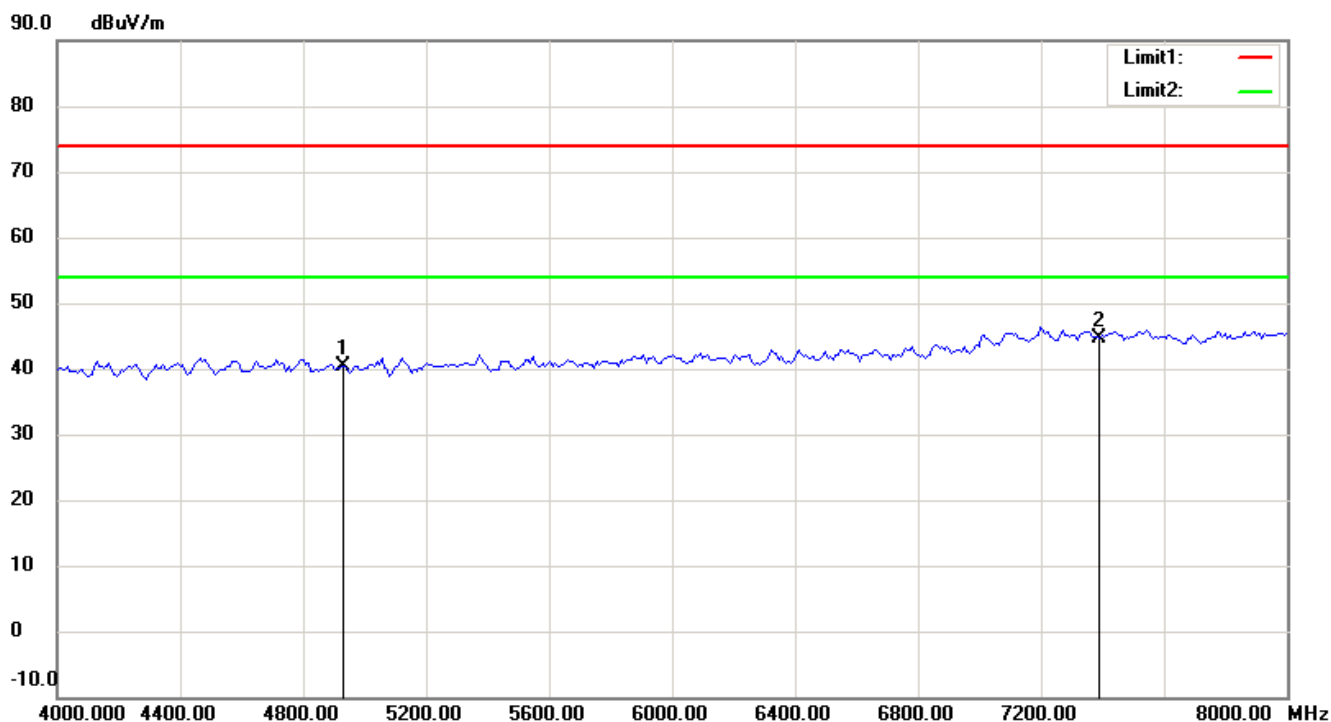
Note:

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Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

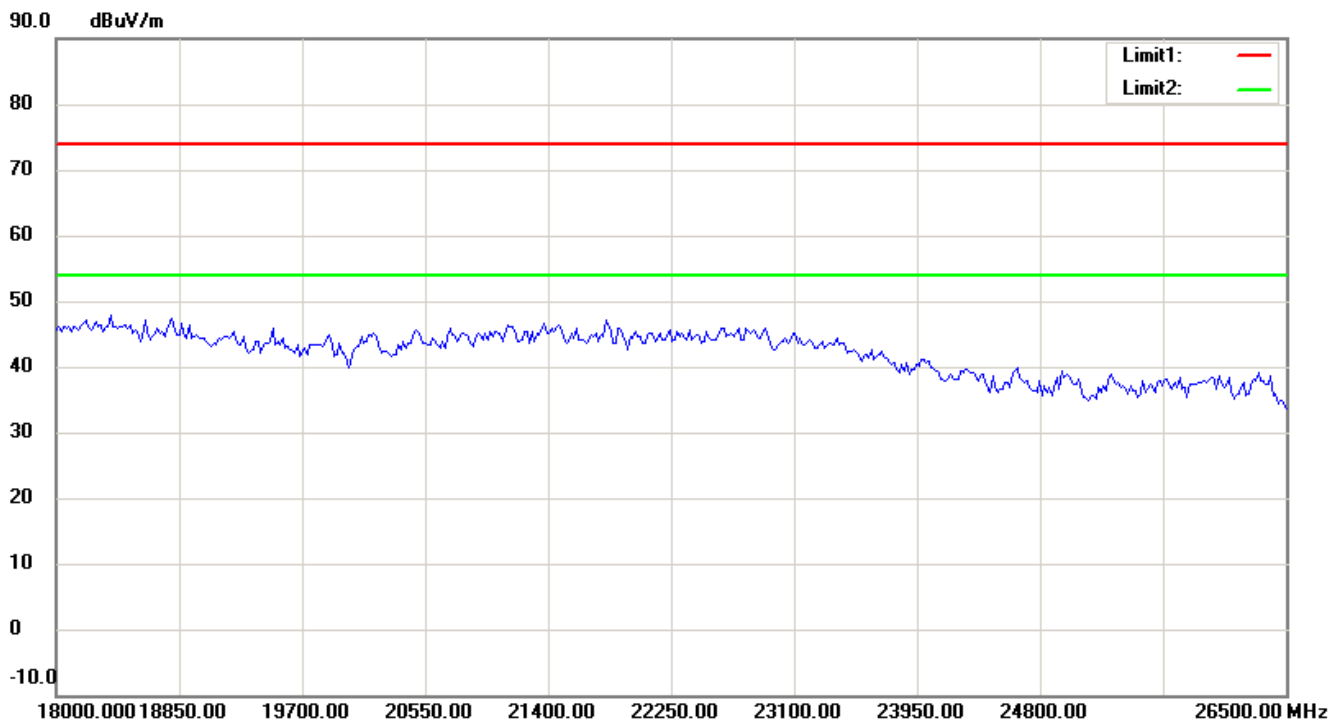
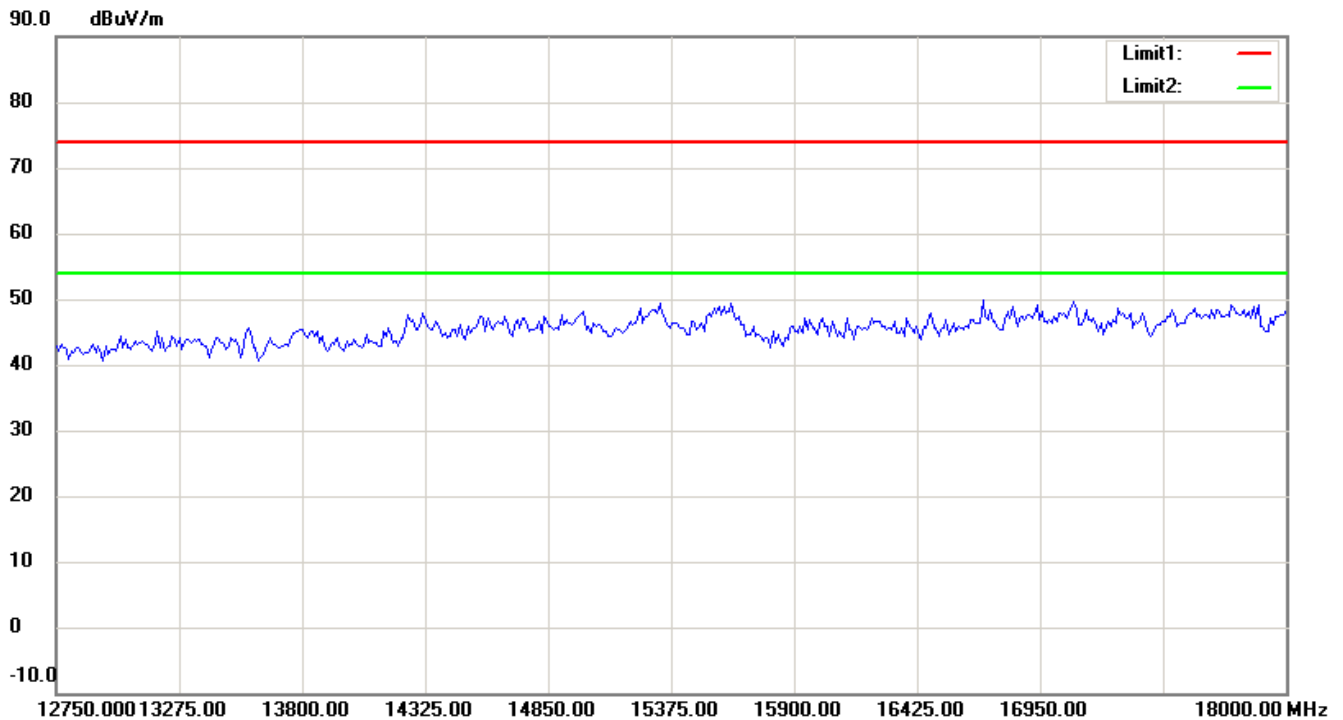
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Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

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Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

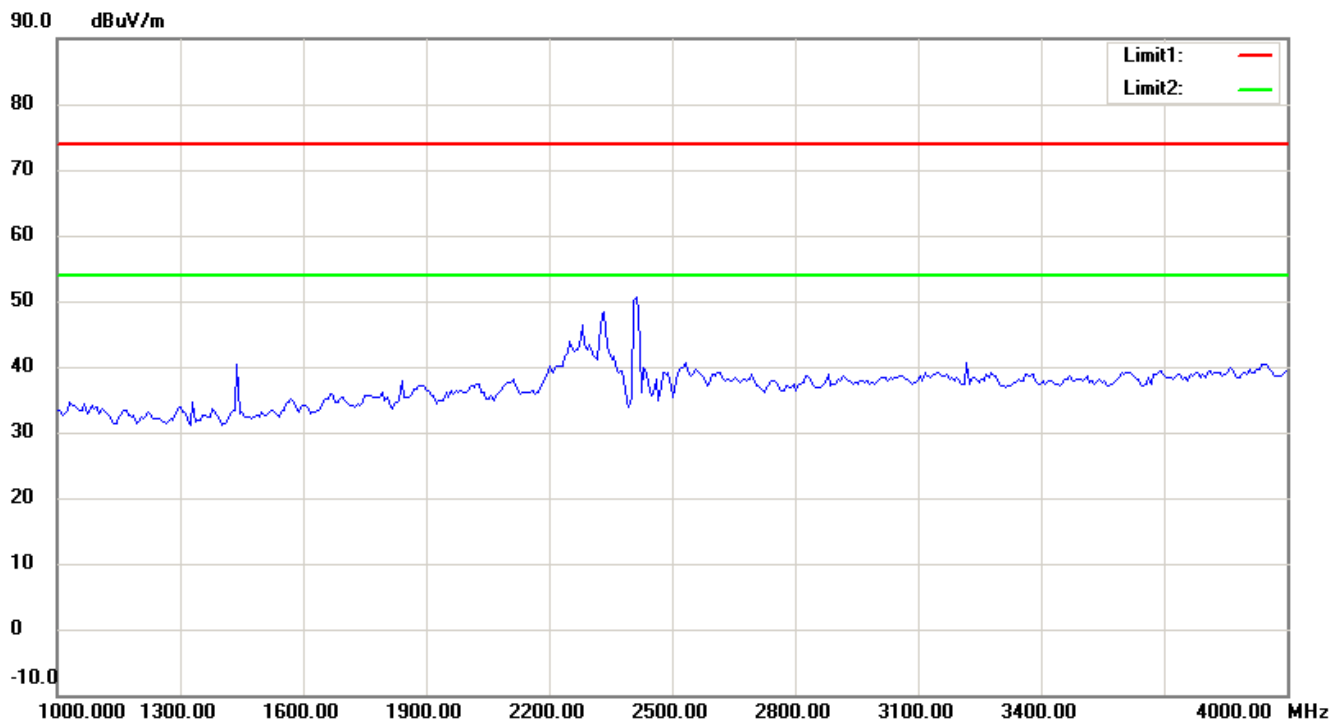
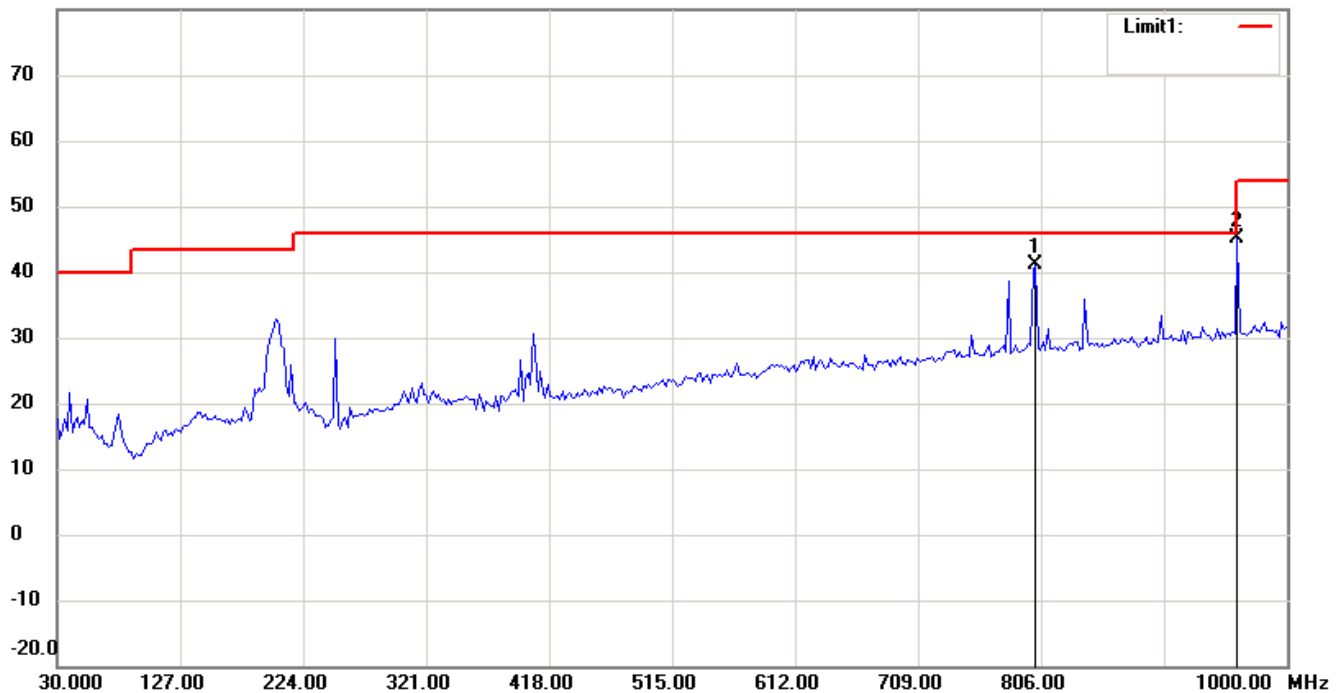
FCC ID: WKP-CSAW-02IP

ANT 2

802.11b_CH1

Antenna Polarization H

80.0 dBuV/m



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

Note:

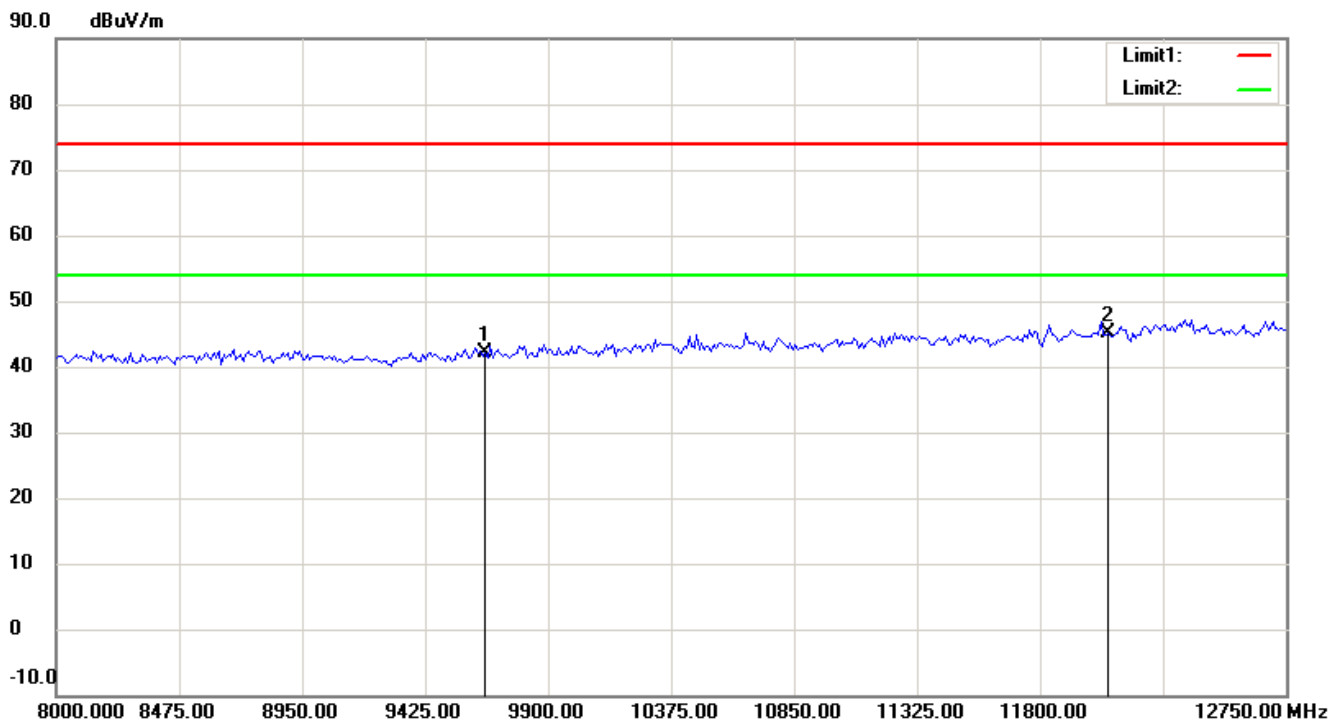
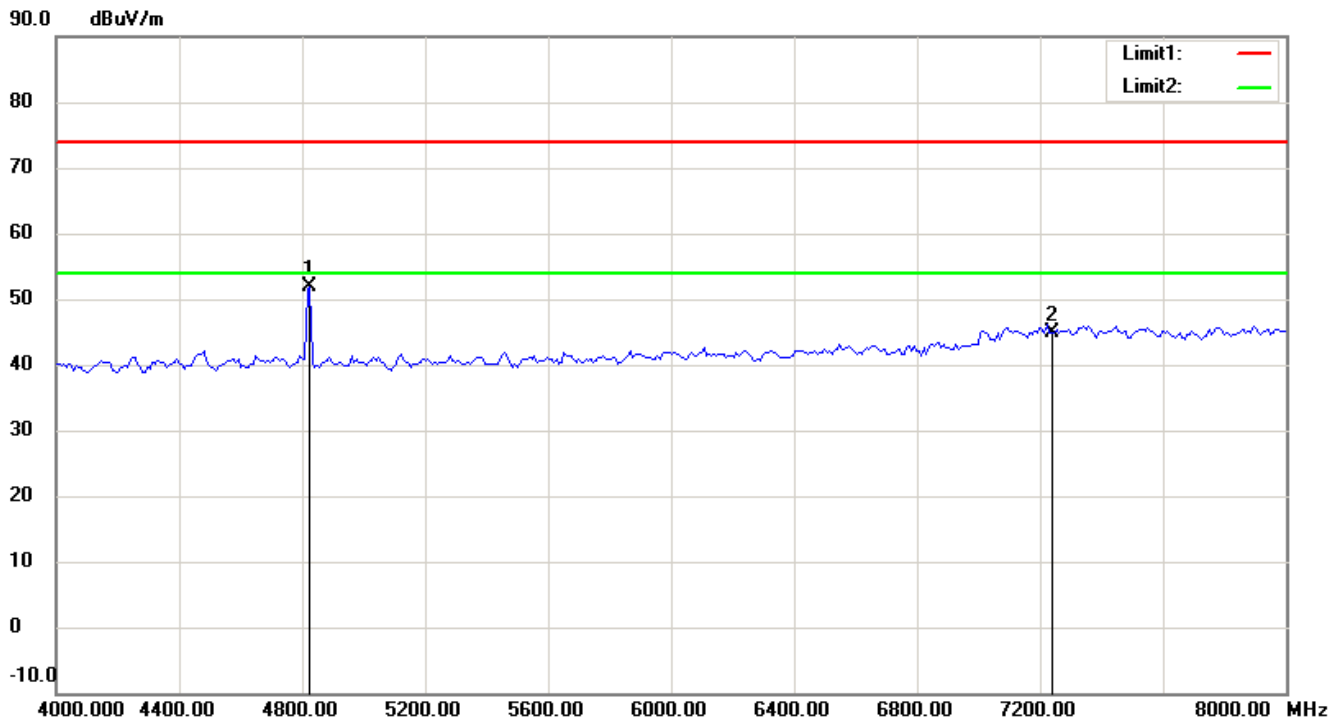
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Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

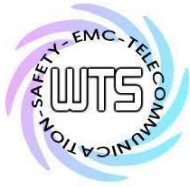
FCC ID: WKP-CSAW-02IP



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

Note:

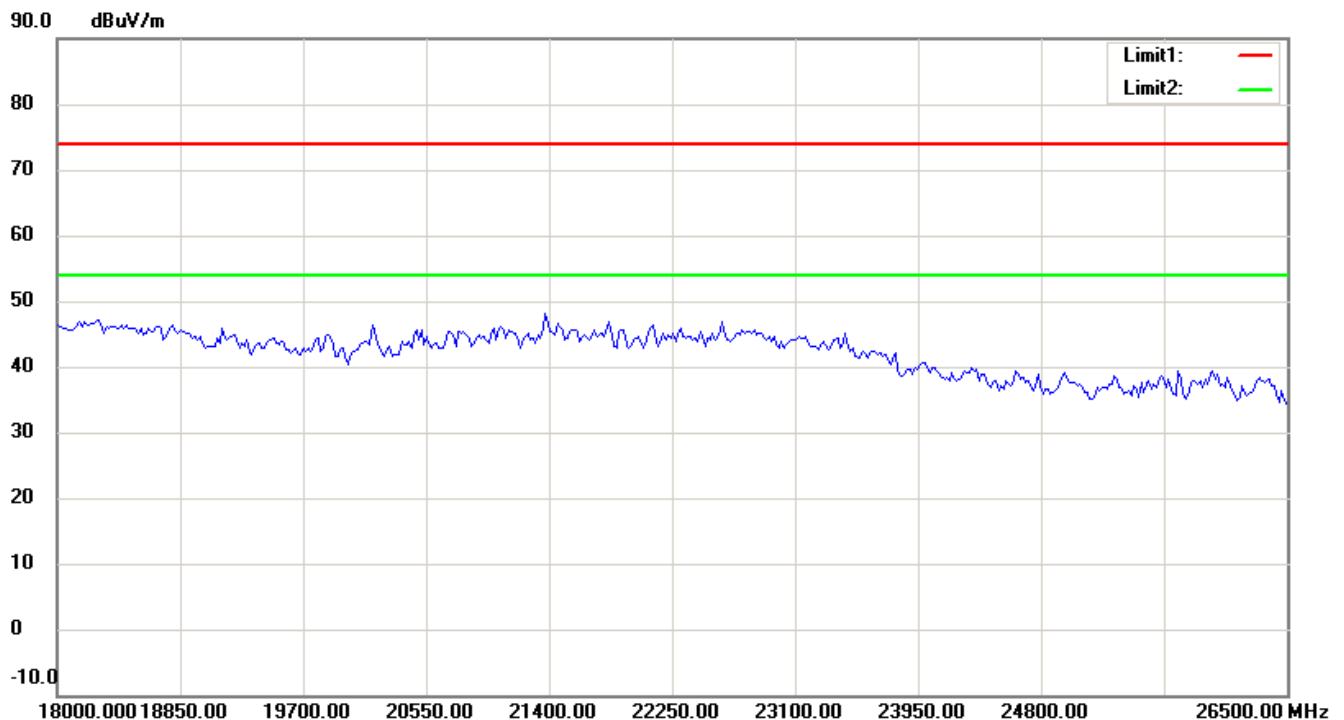
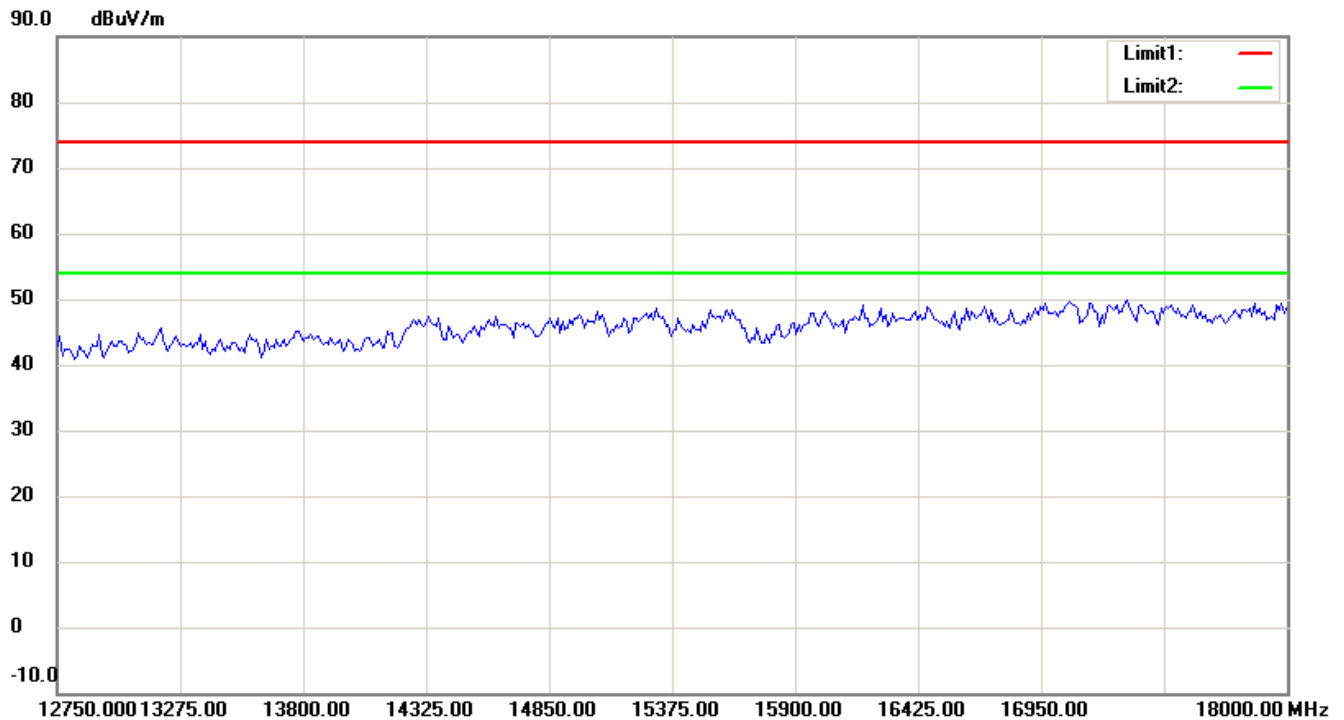
1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification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

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

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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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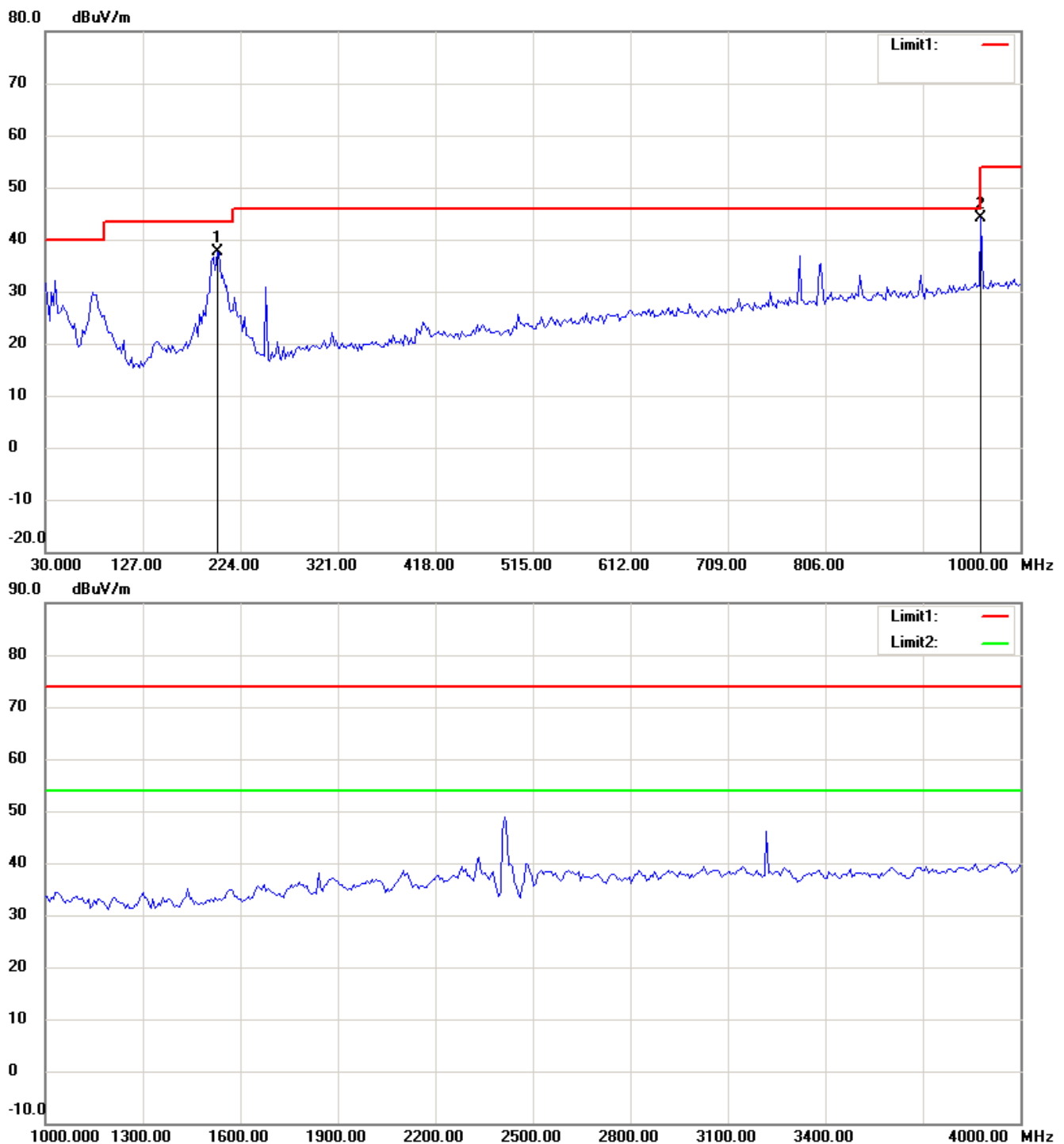


Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

Antenna Polarization V



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

Note:

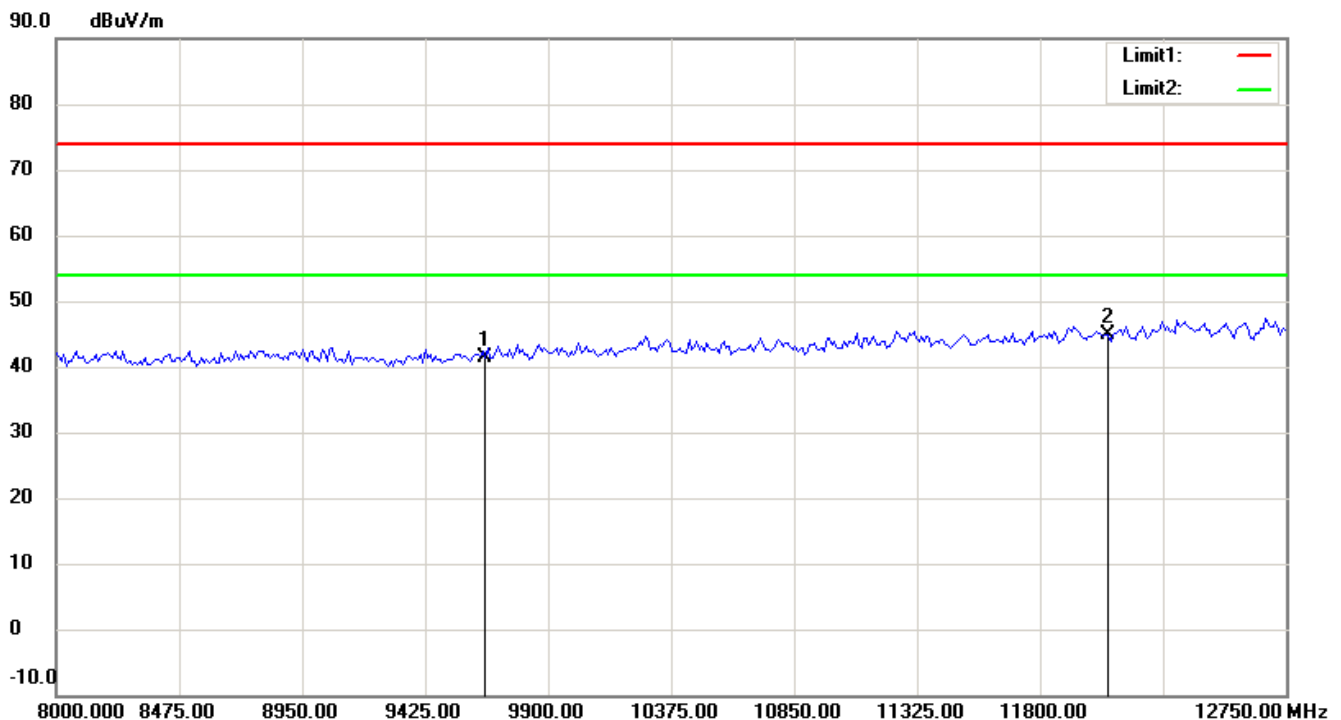
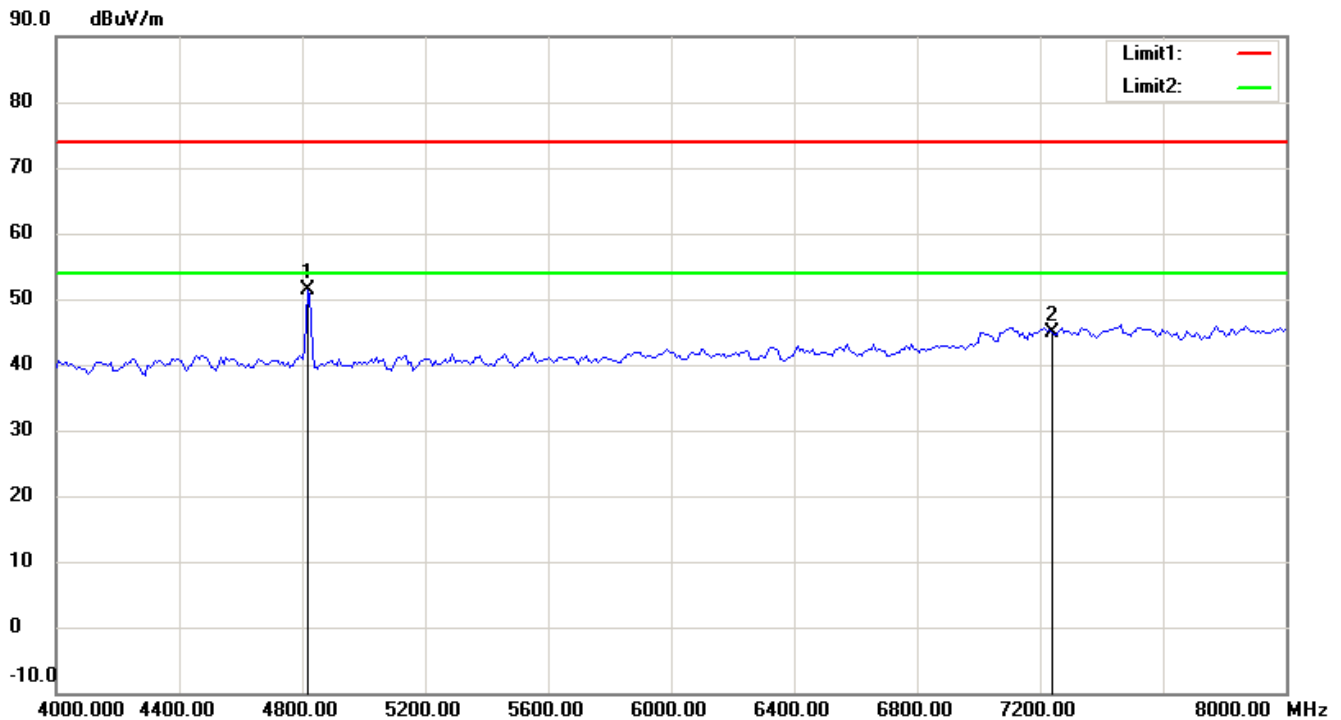
1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
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Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

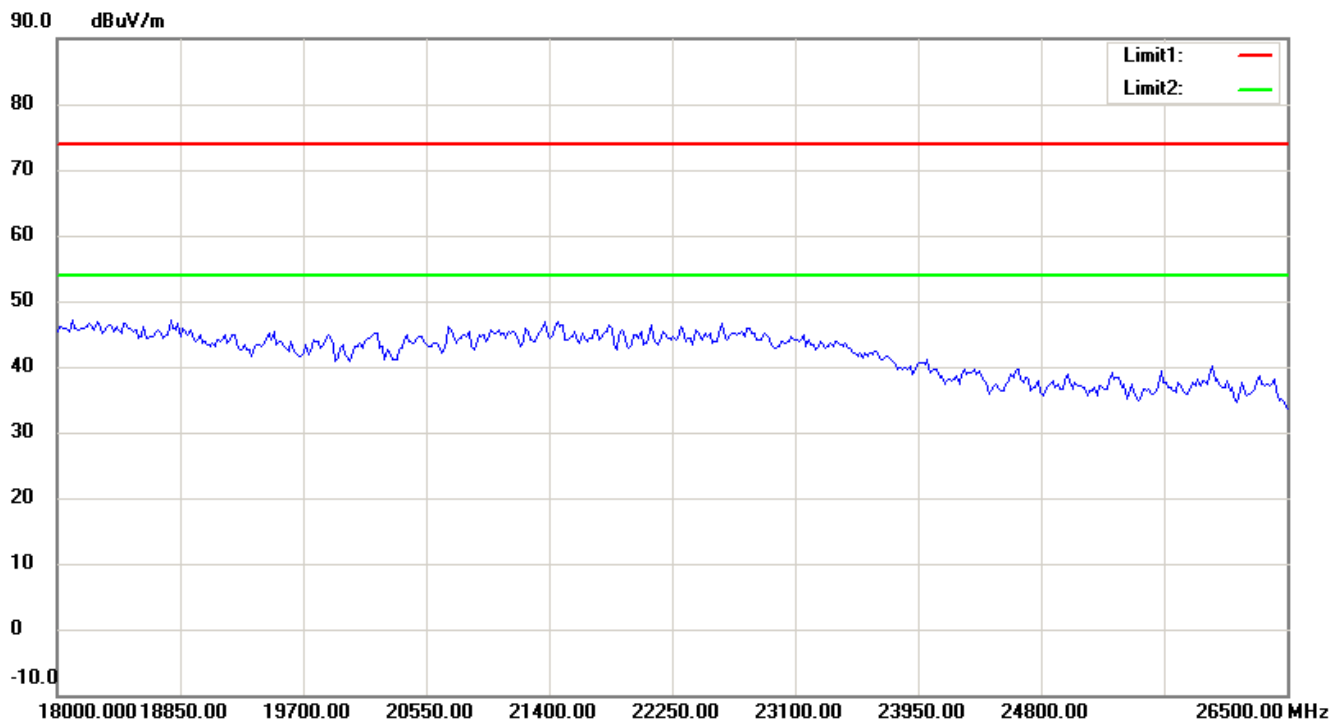
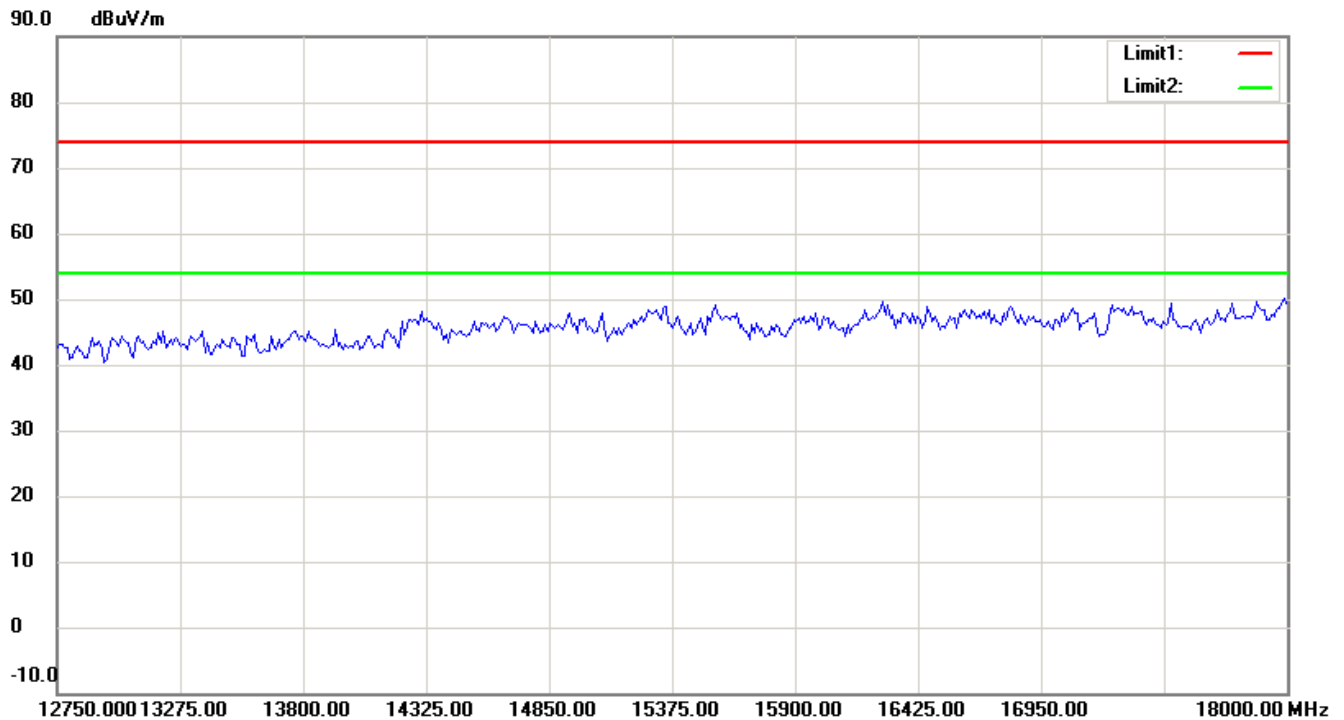
1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
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Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

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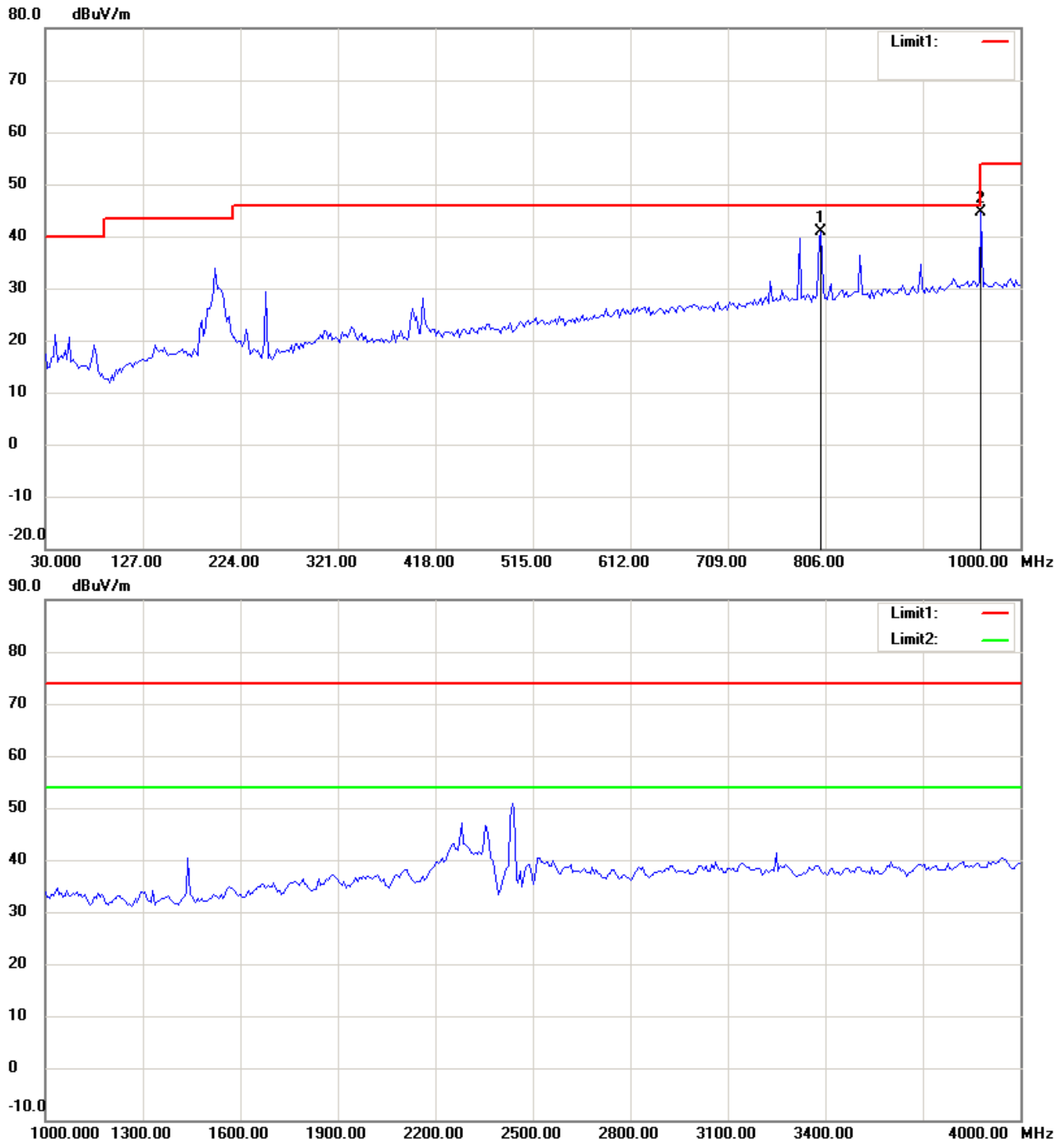


Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

CH6

Antenna Polarization H



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

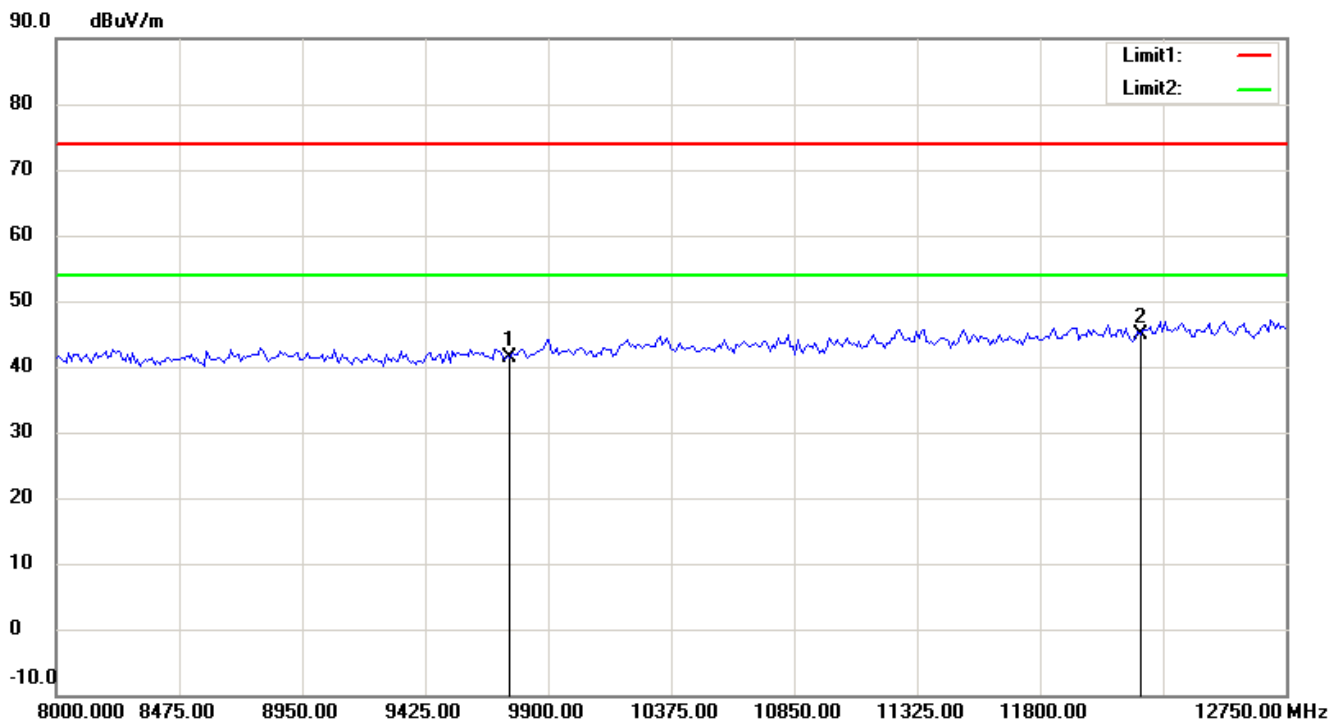
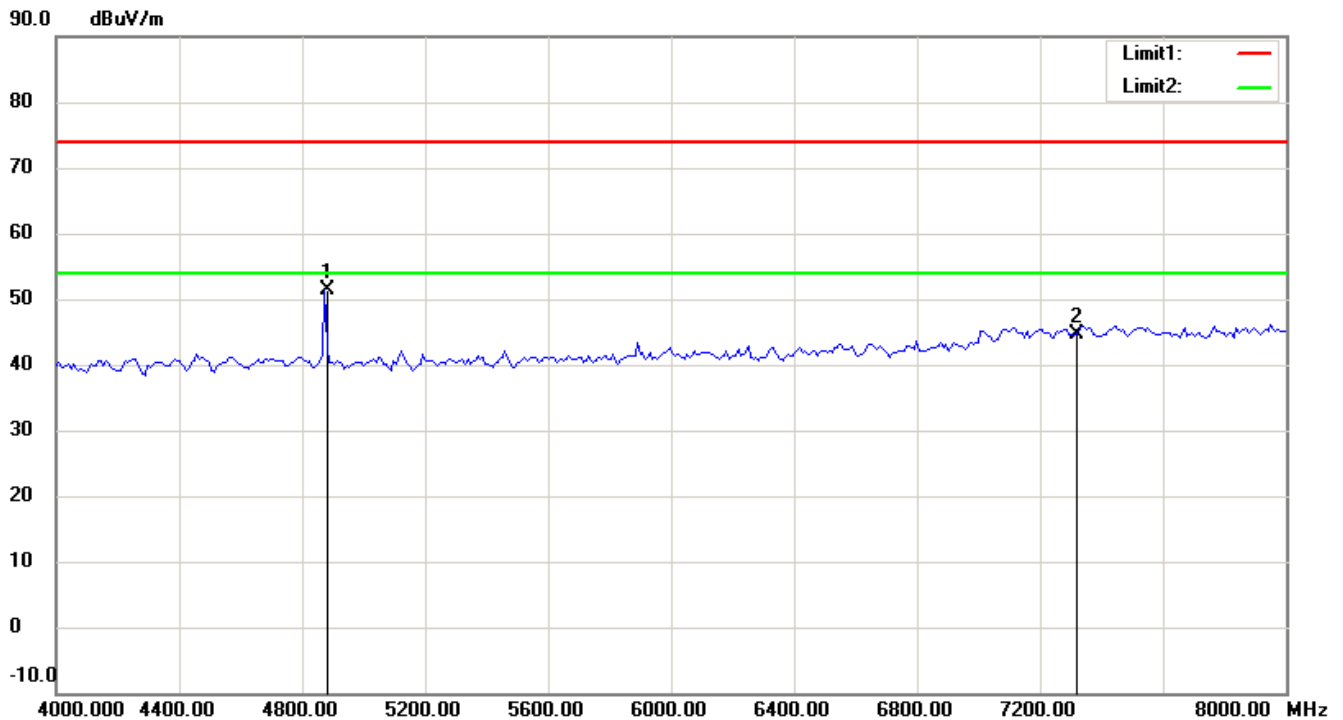
Note:

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Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

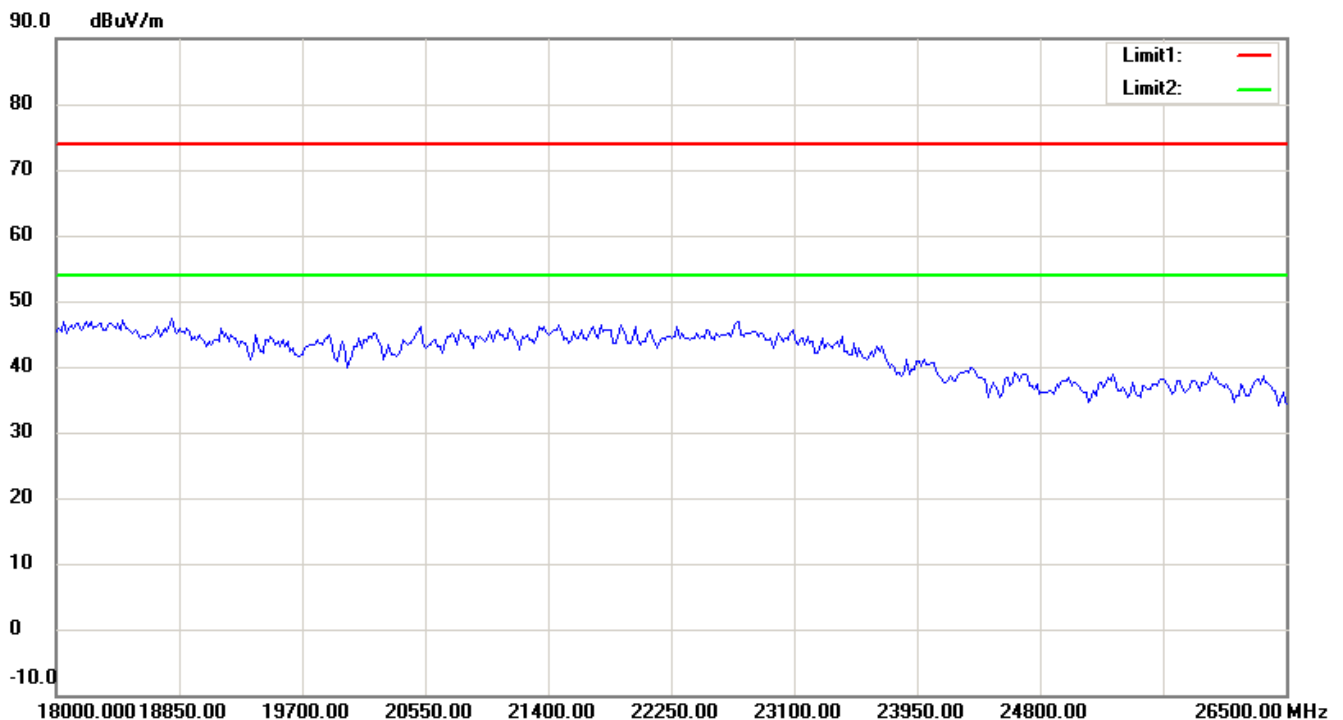
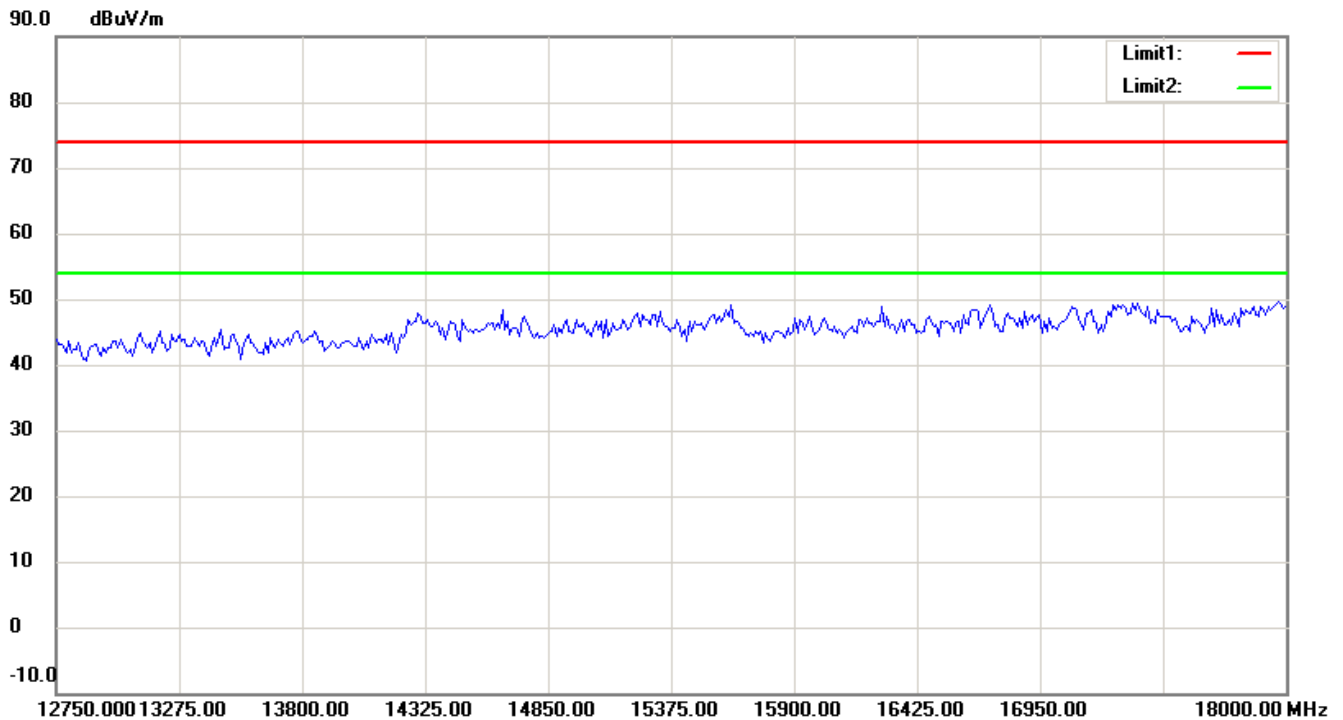
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Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

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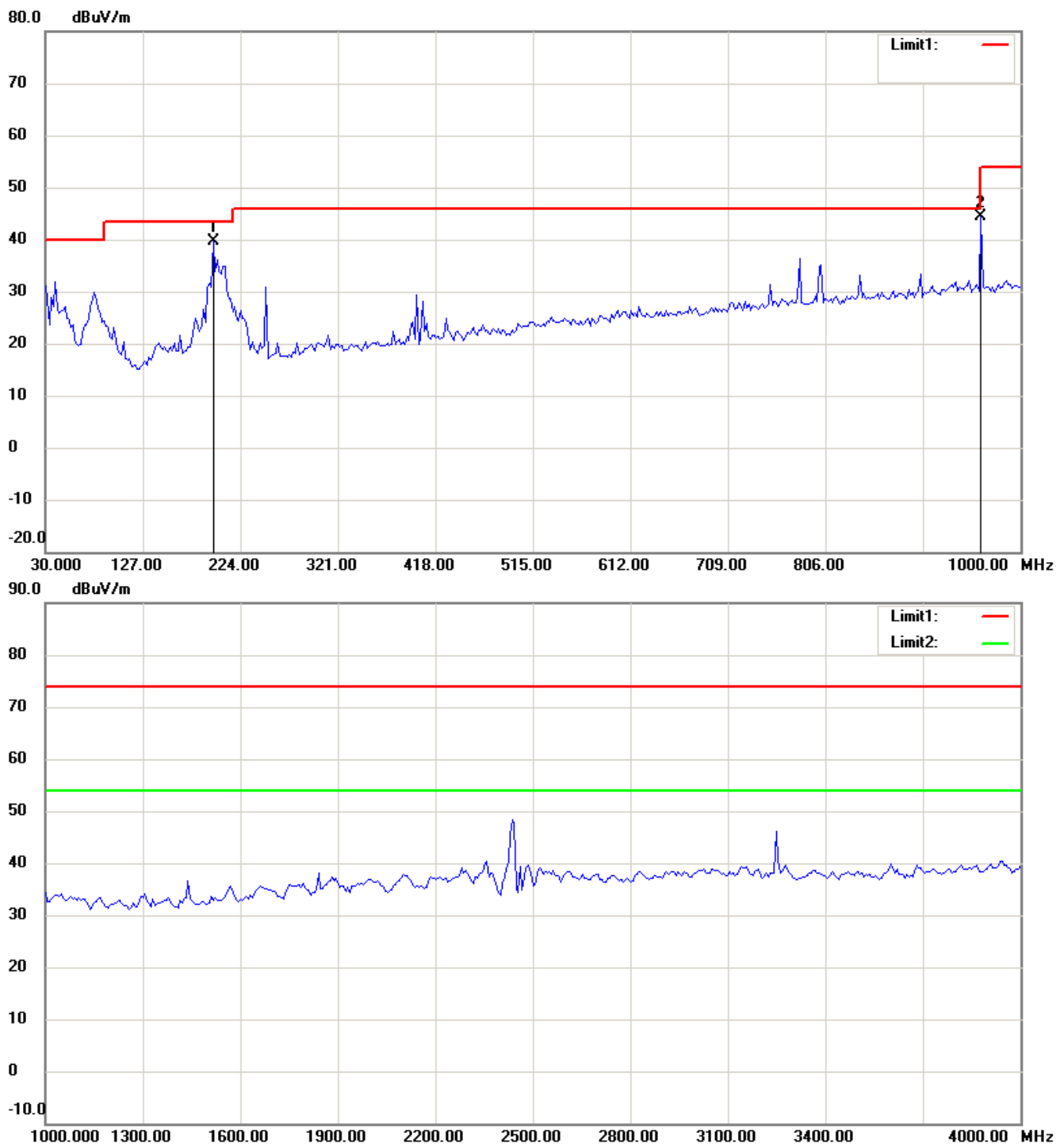


Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

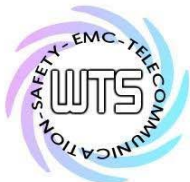
Antenna Polarization V



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

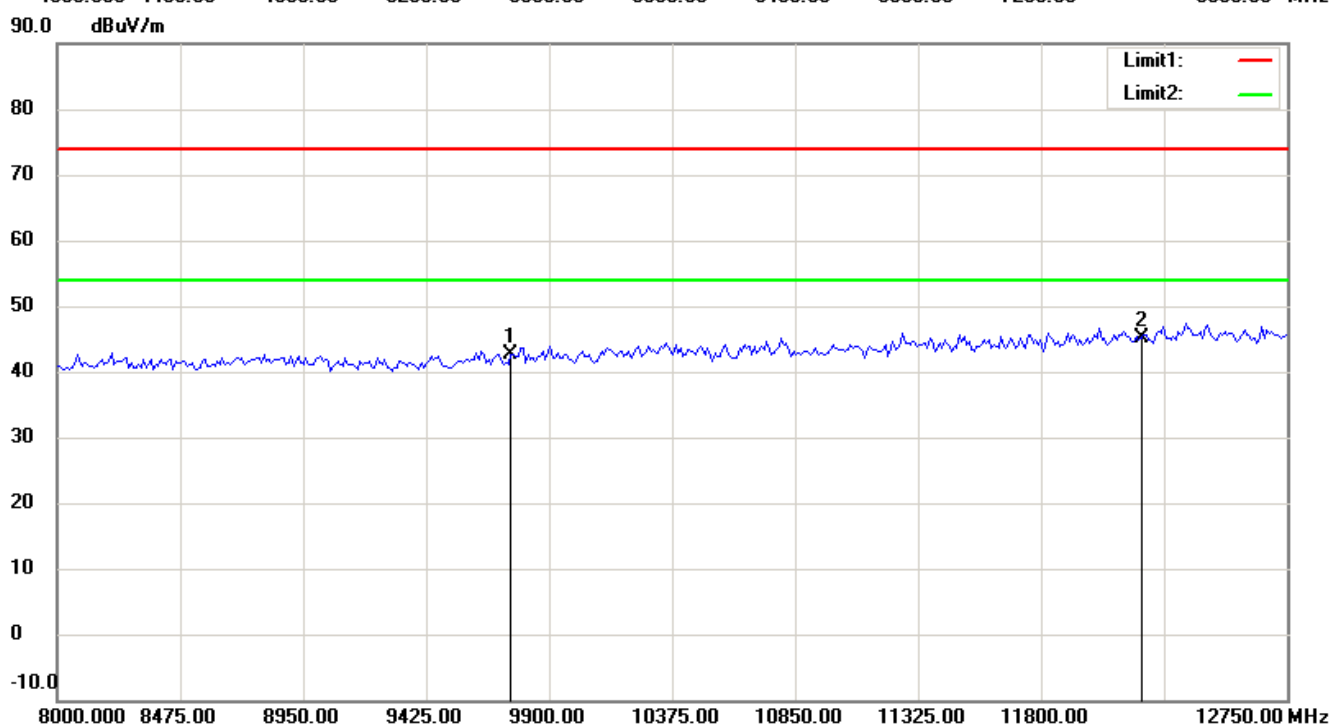
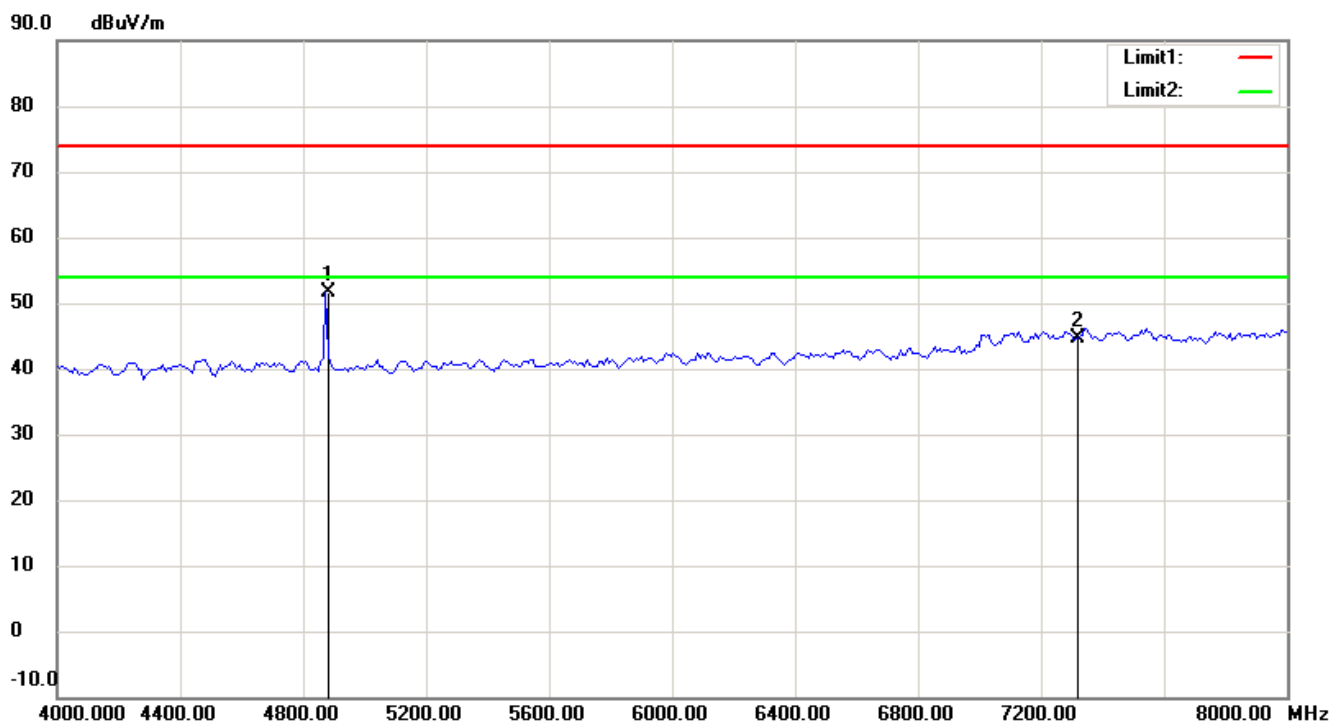
Note:

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Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

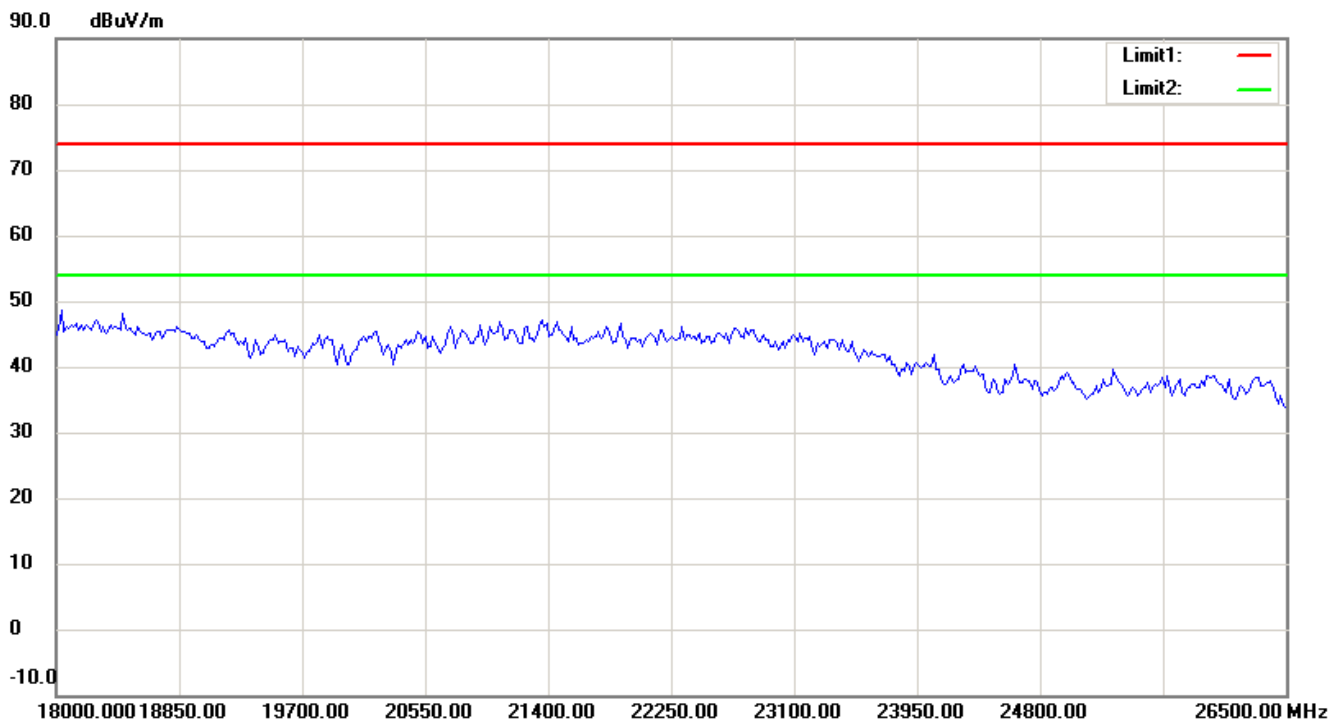
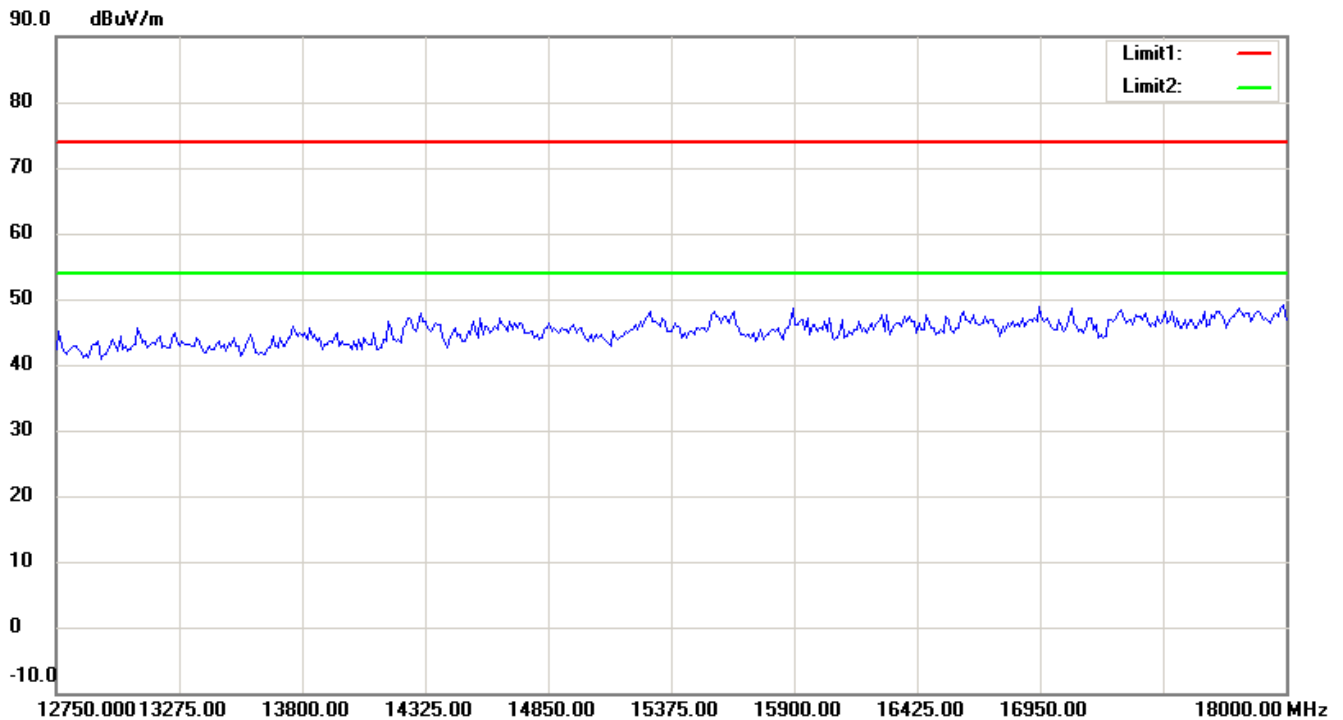
1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
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Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

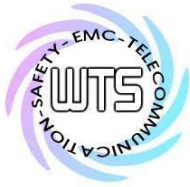
FCC ID: WKP-CSAW-02IP



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

Note:

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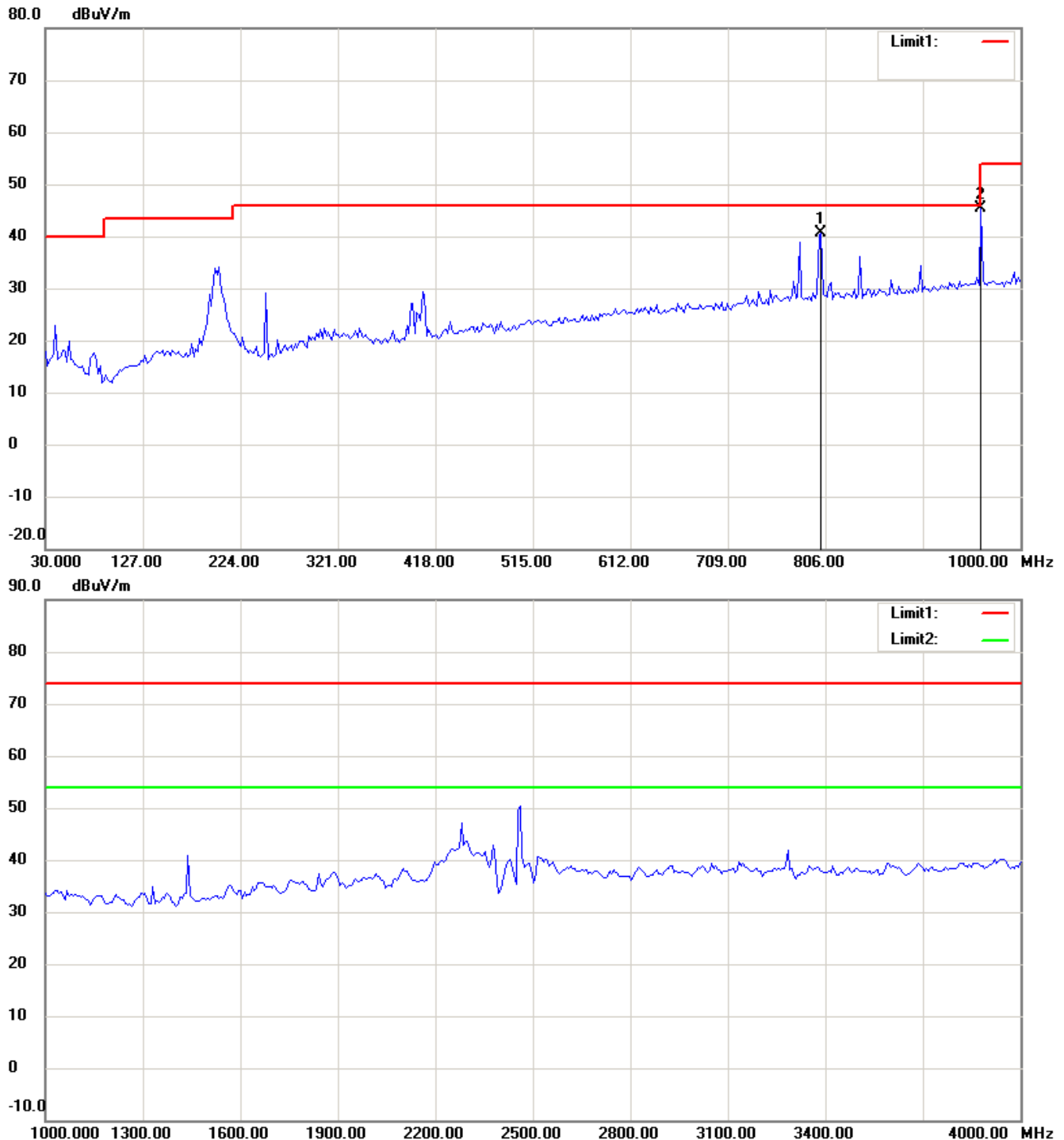


Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

CH11

Antenna Polarization H



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

Note:

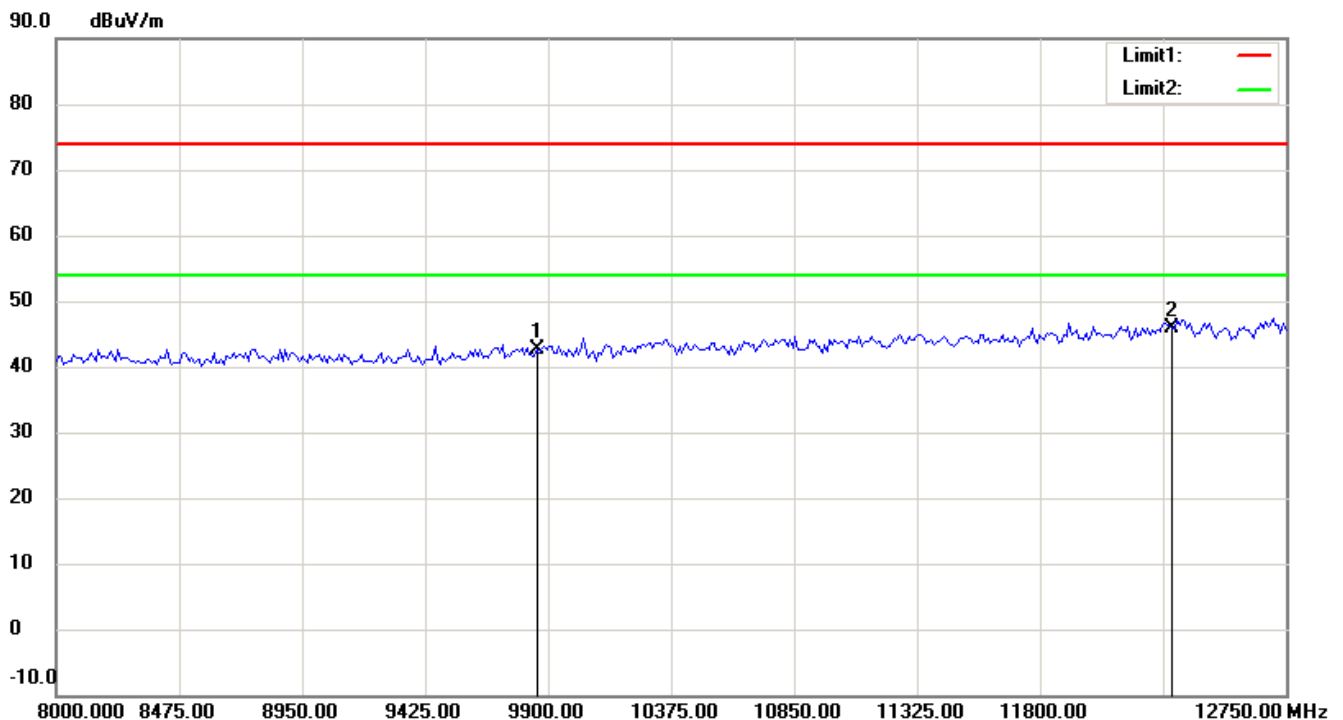
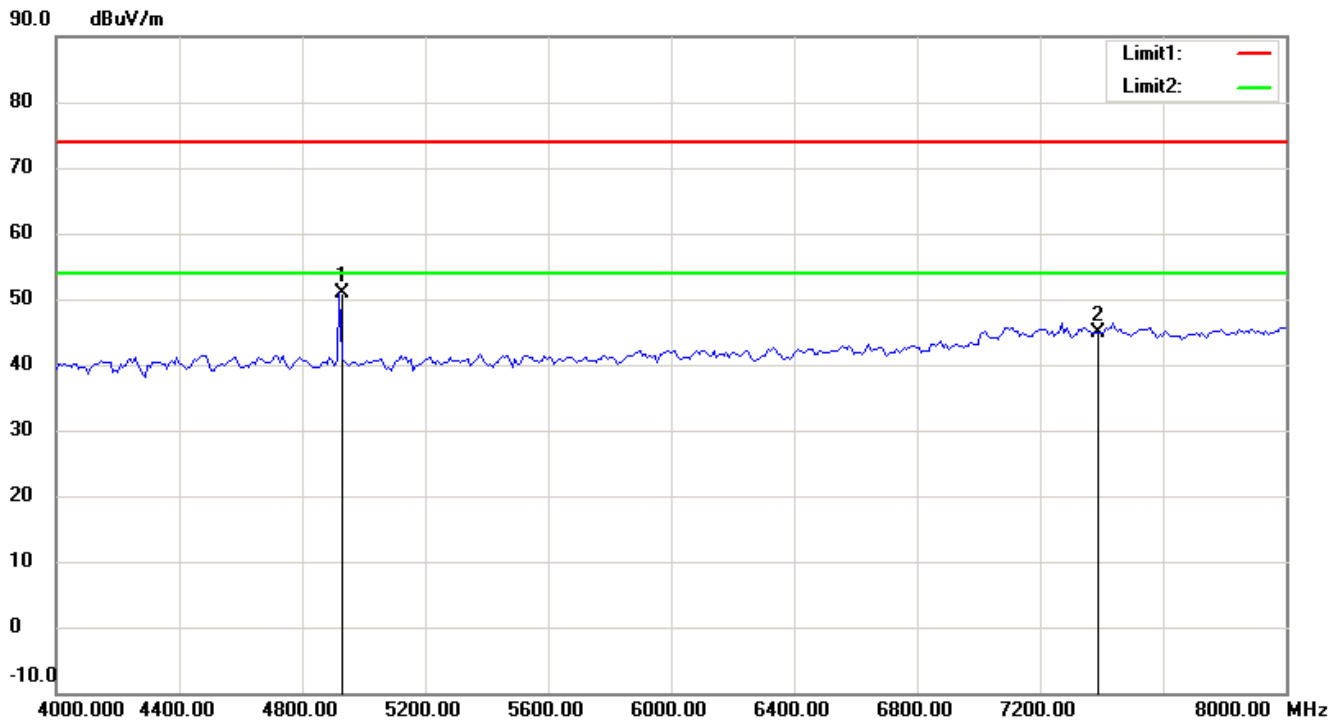
1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
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Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

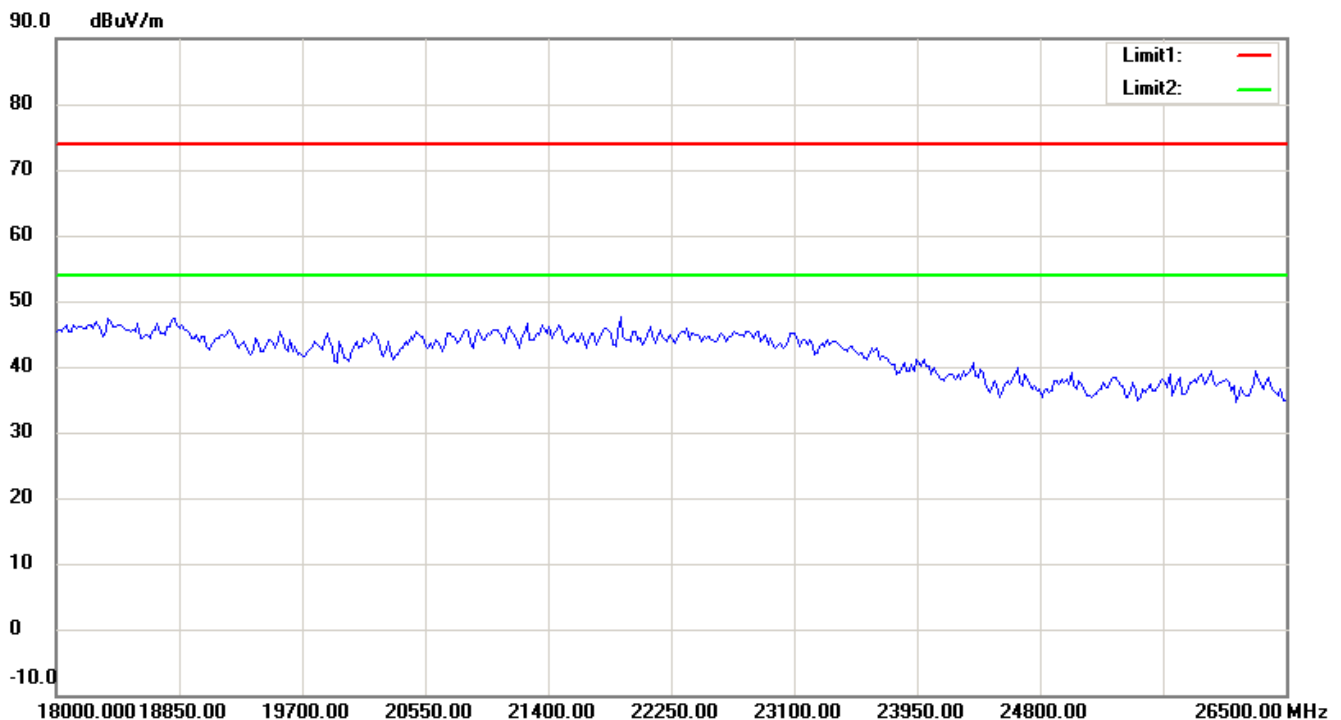
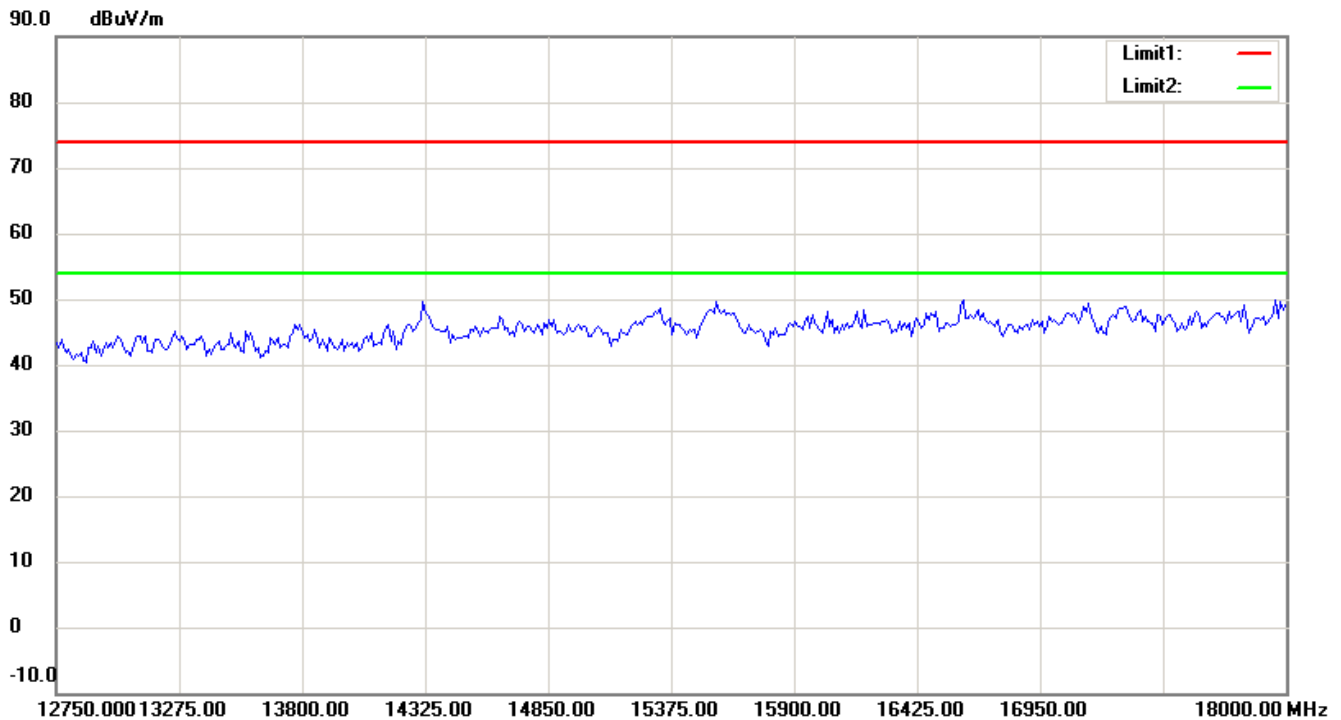
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Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

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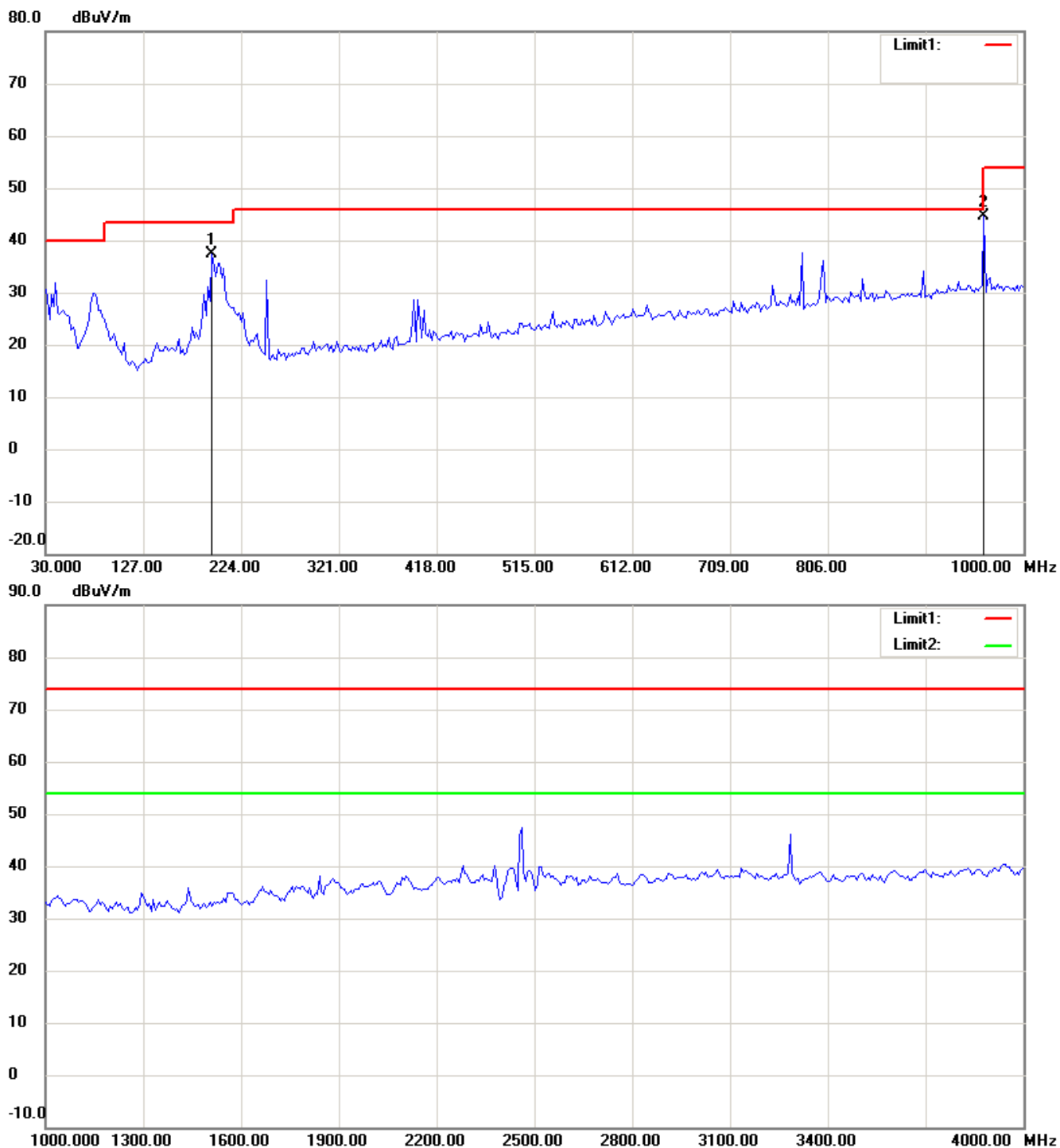


Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

Antenna Polarization V



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

Note:

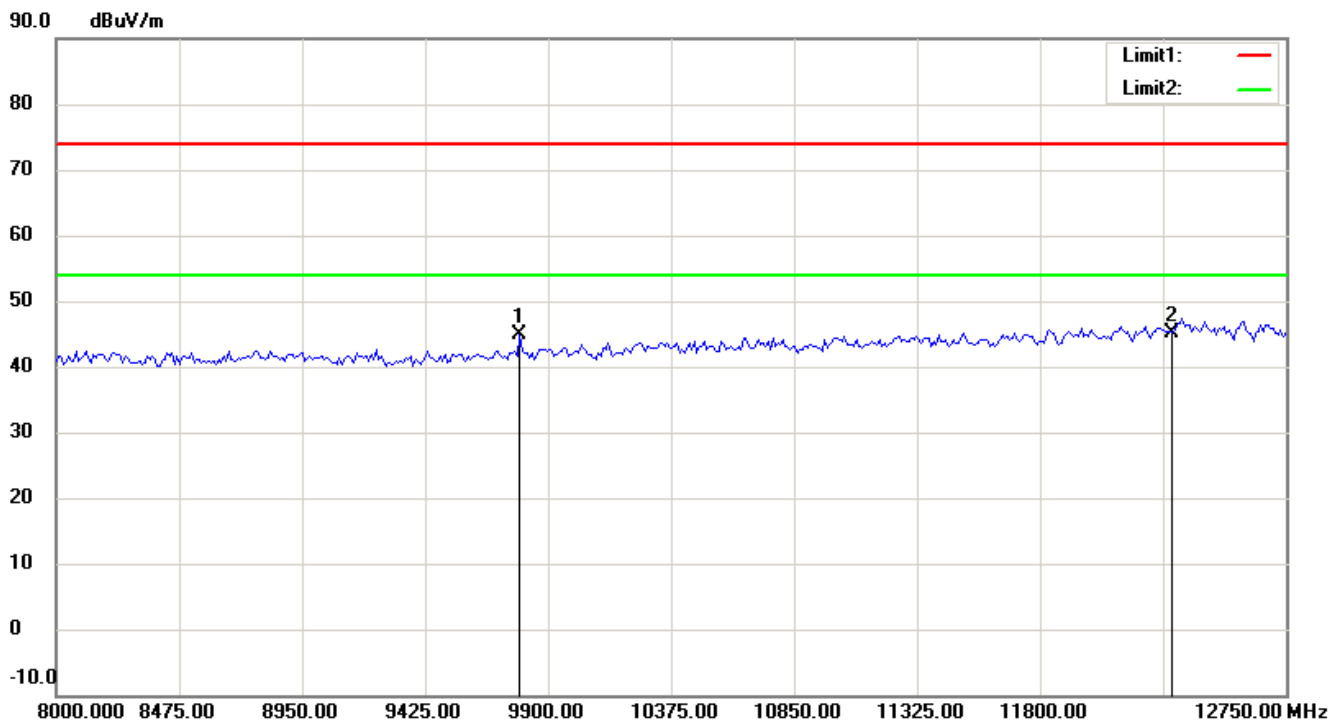
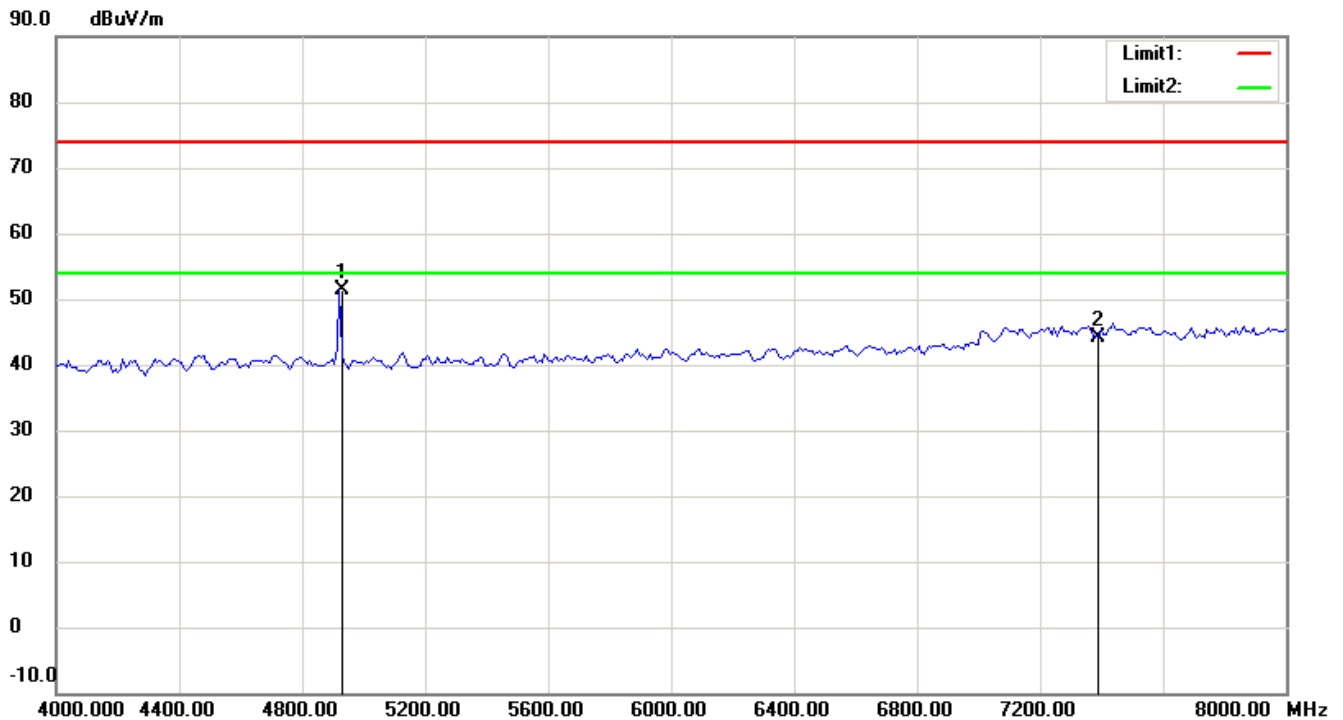
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Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

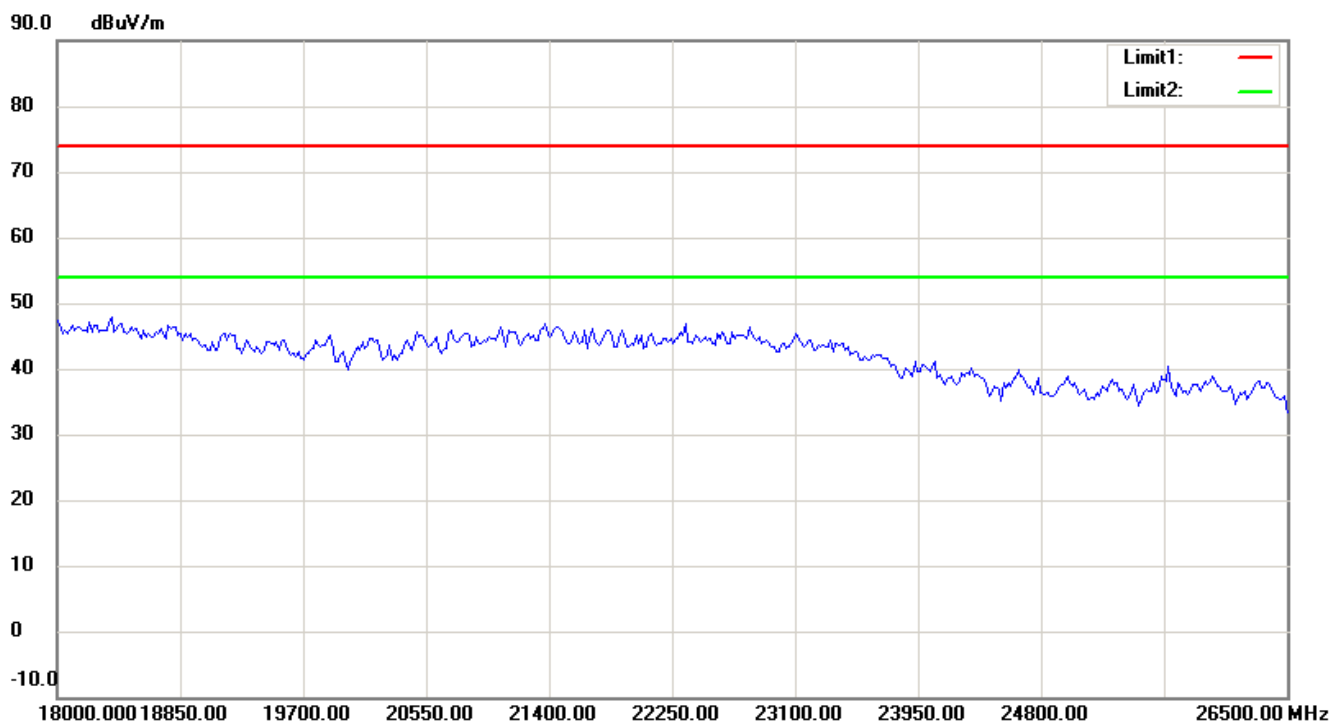
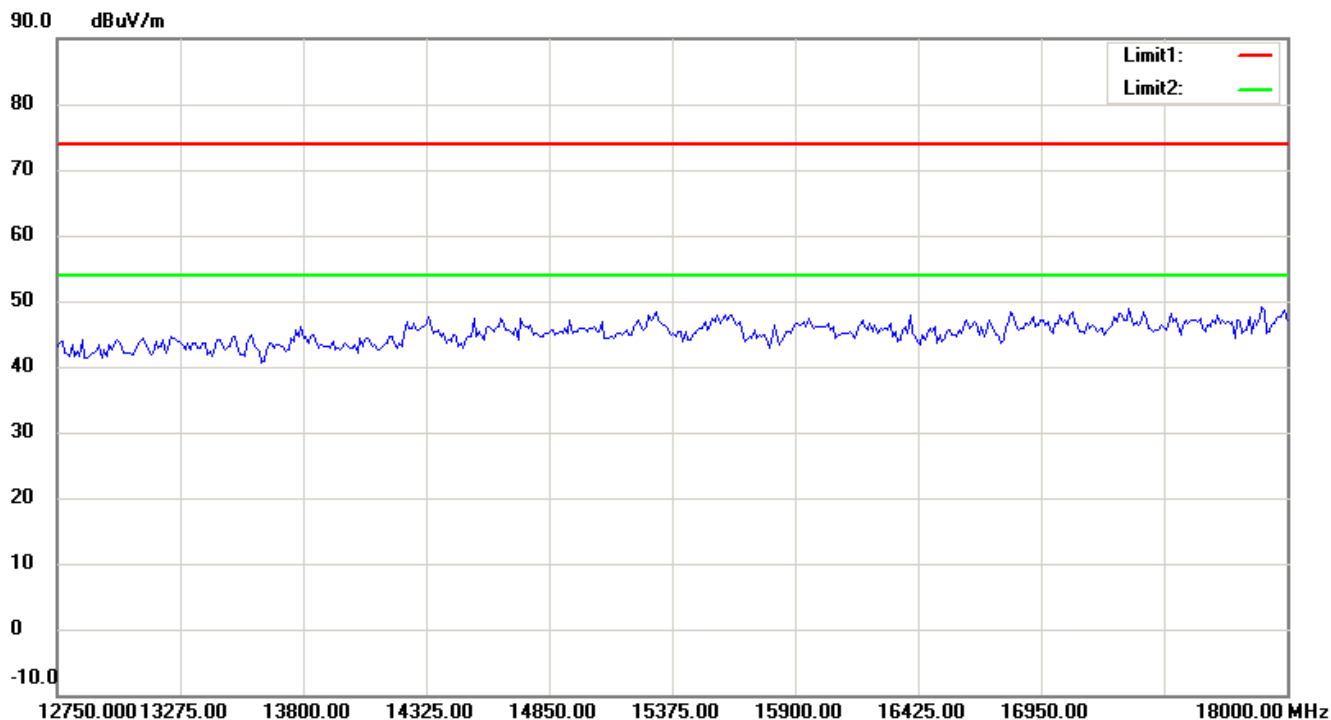
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Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

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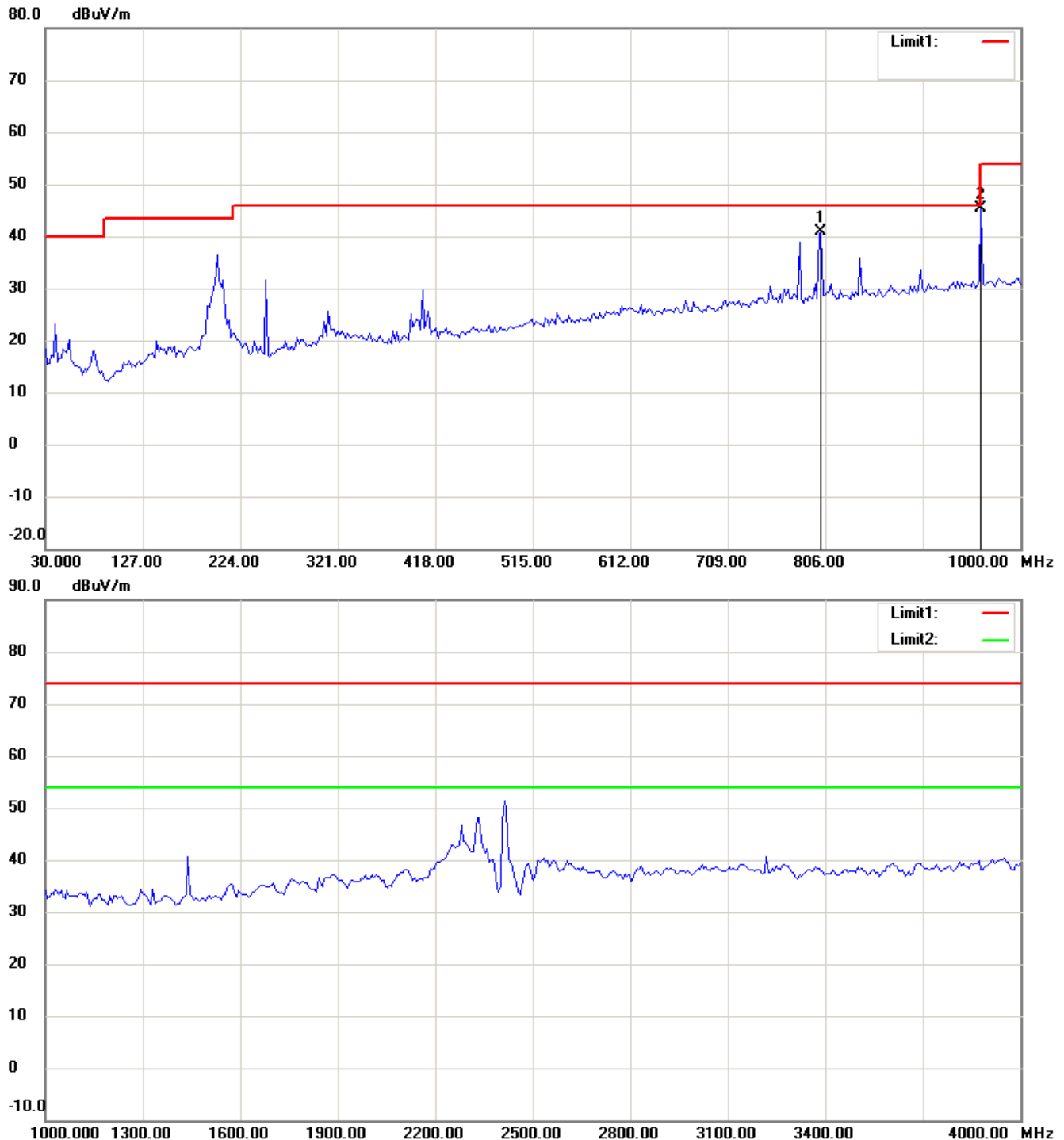
Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

802.11g_CH1

Antenna Polarization H



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

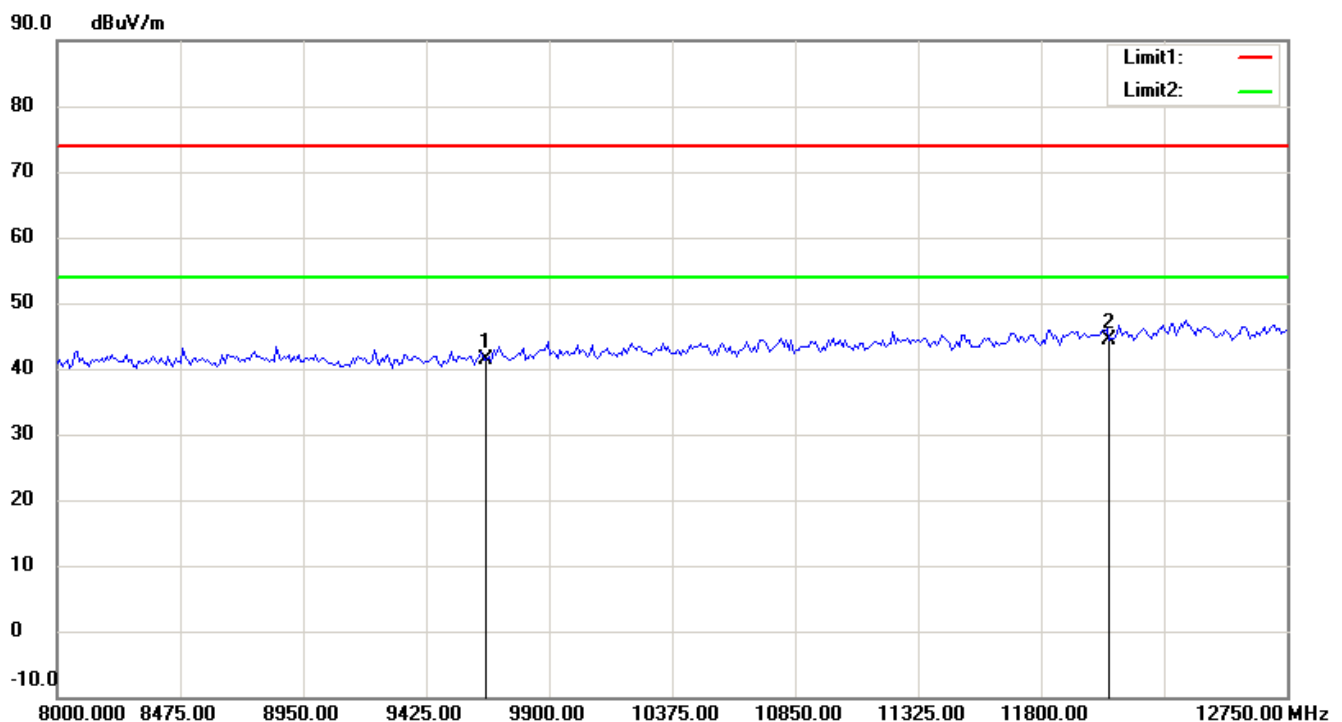
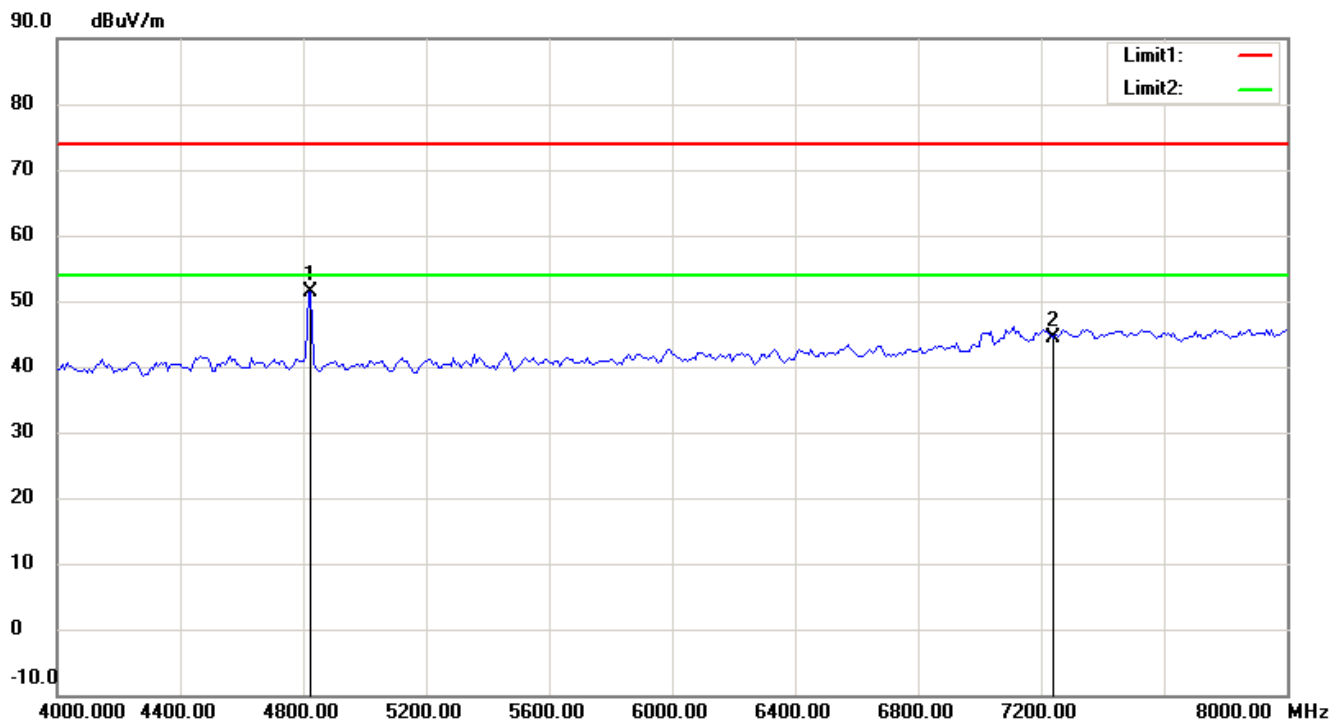
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Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

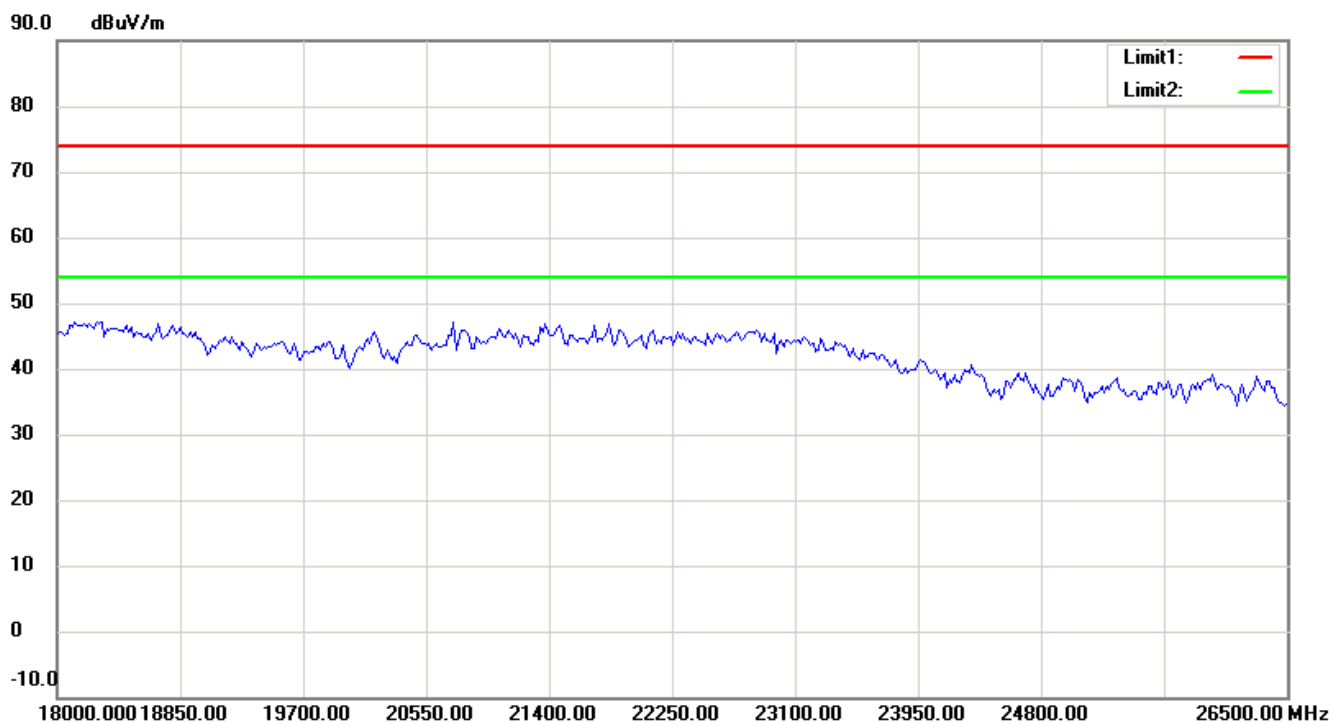
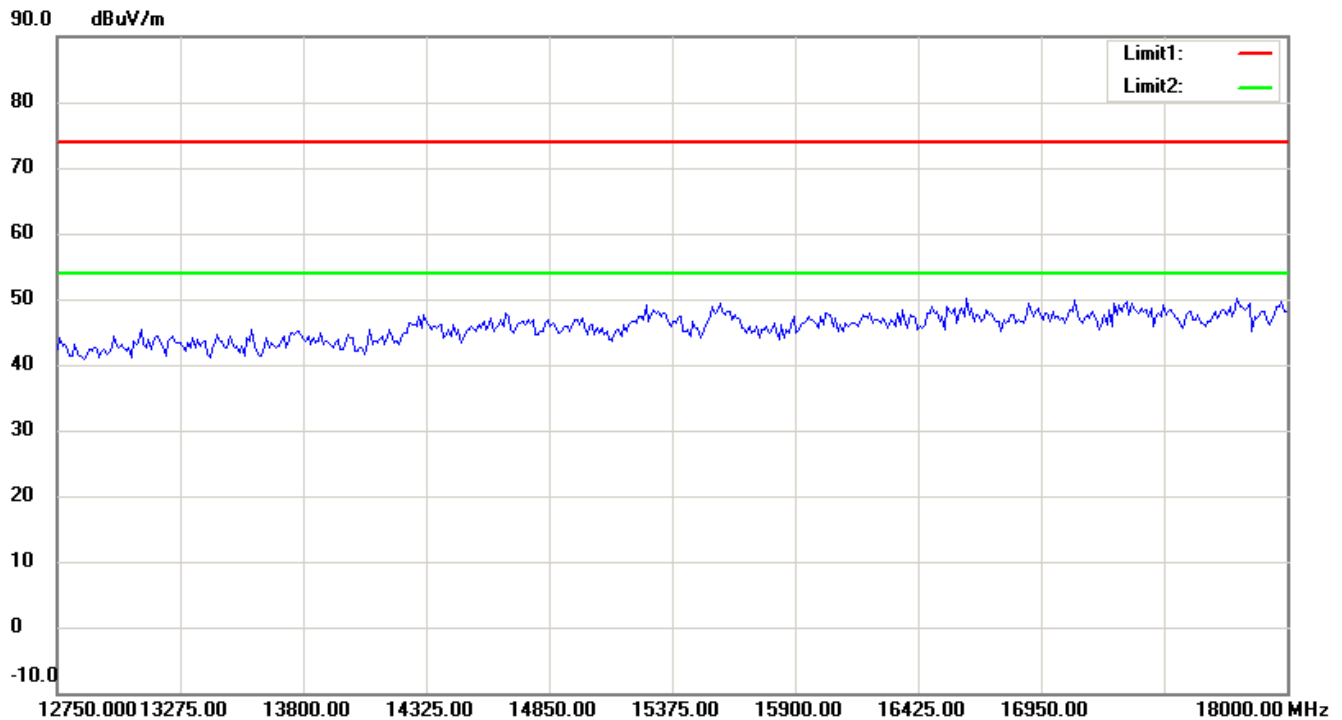
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Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

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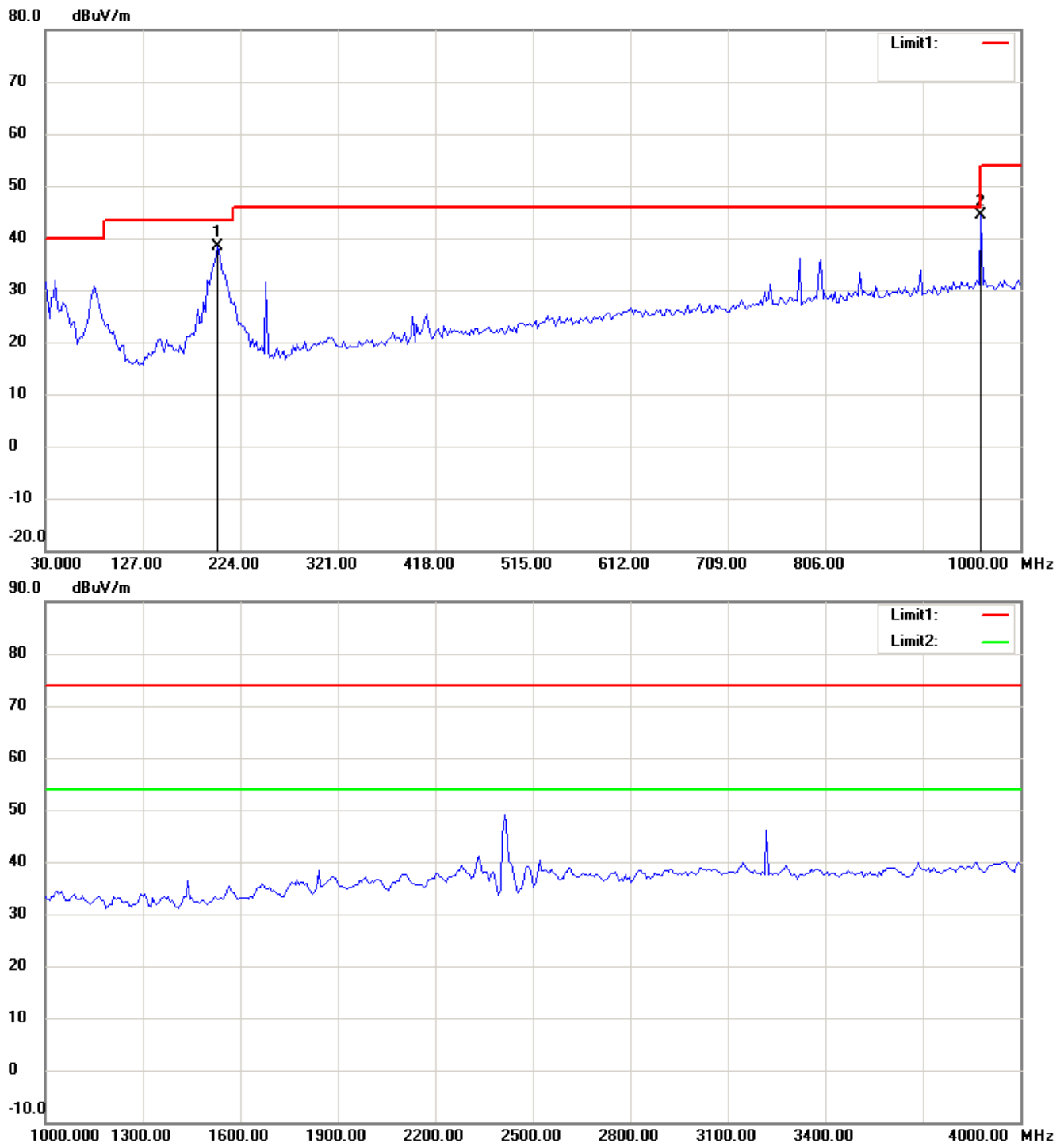


Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

Antenna Polarization V



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

Note:

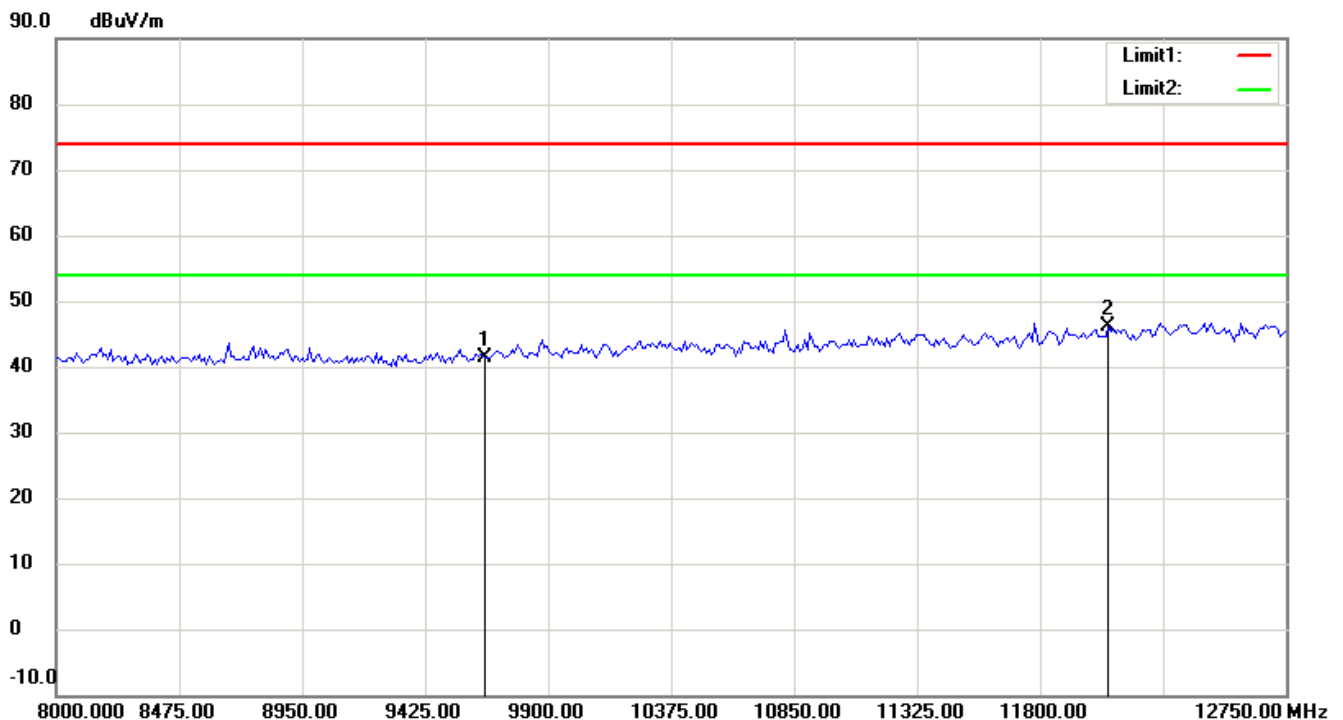
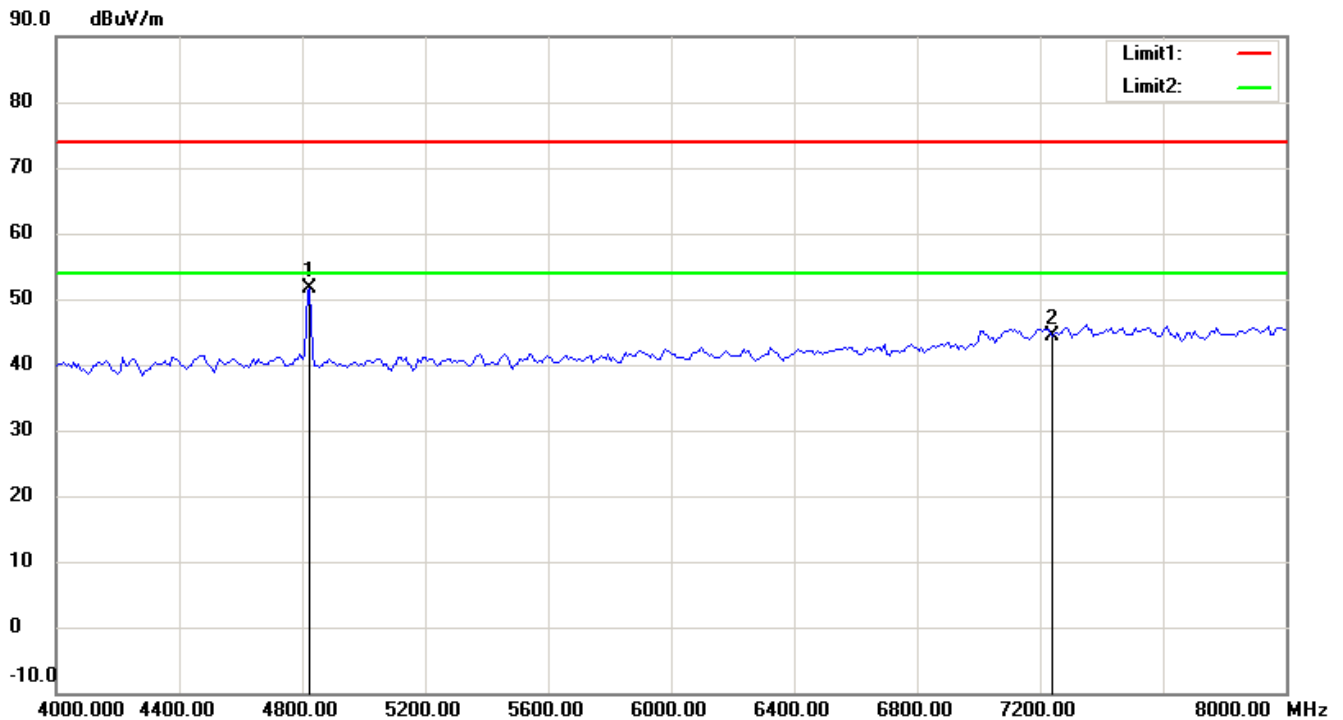
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Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

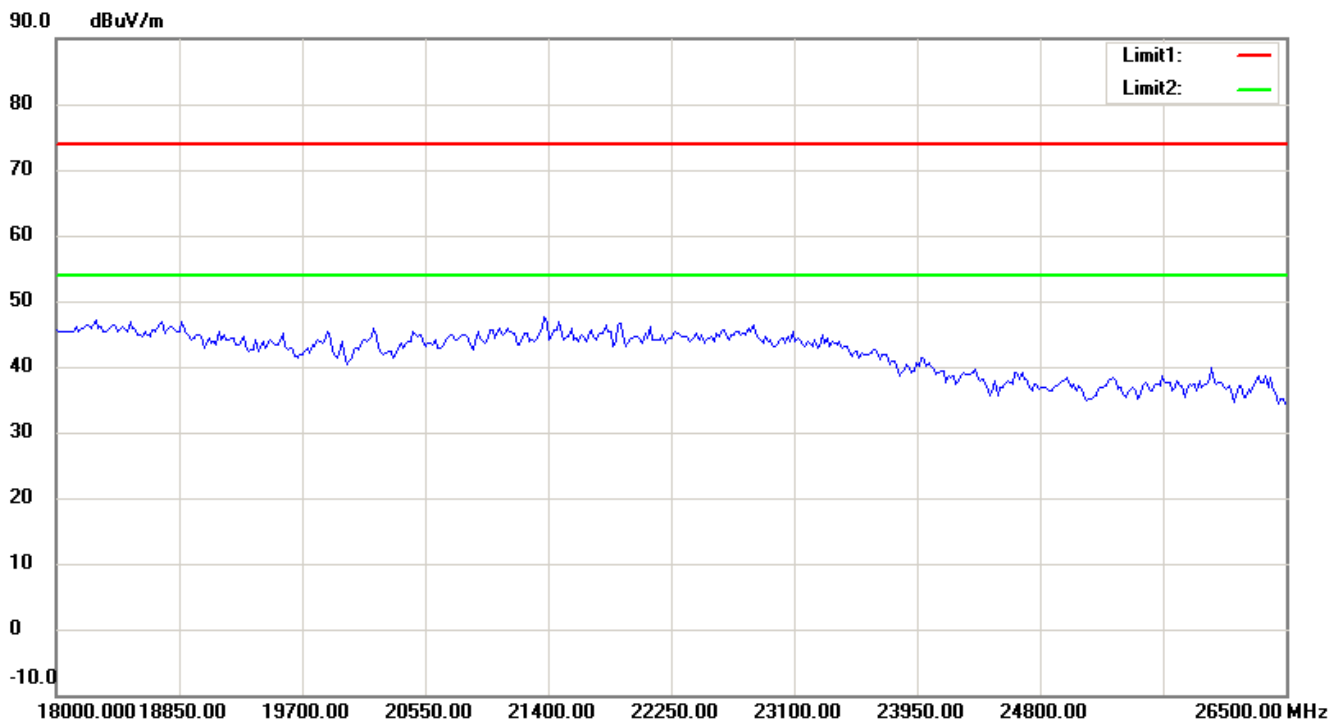
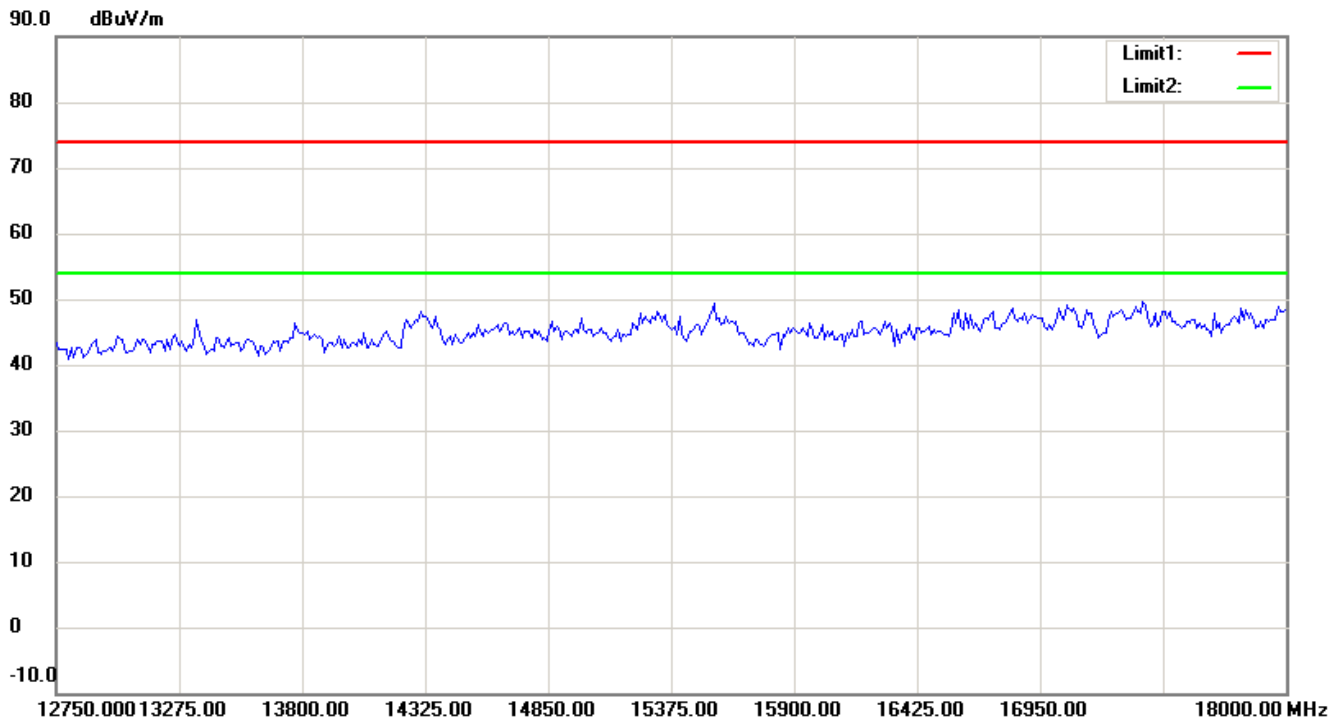
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Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

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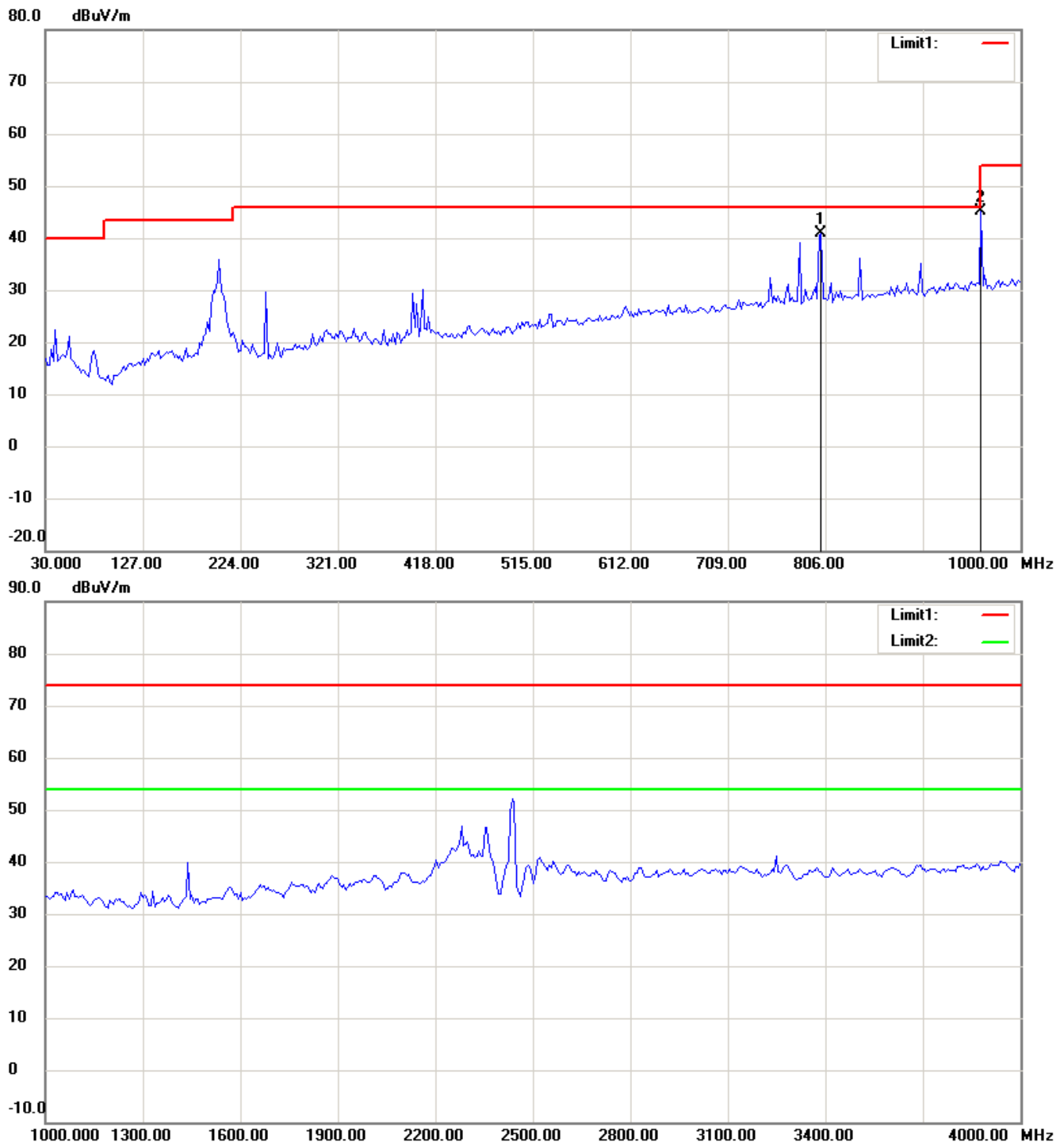


Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

CH6

Antenna Polarization H



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

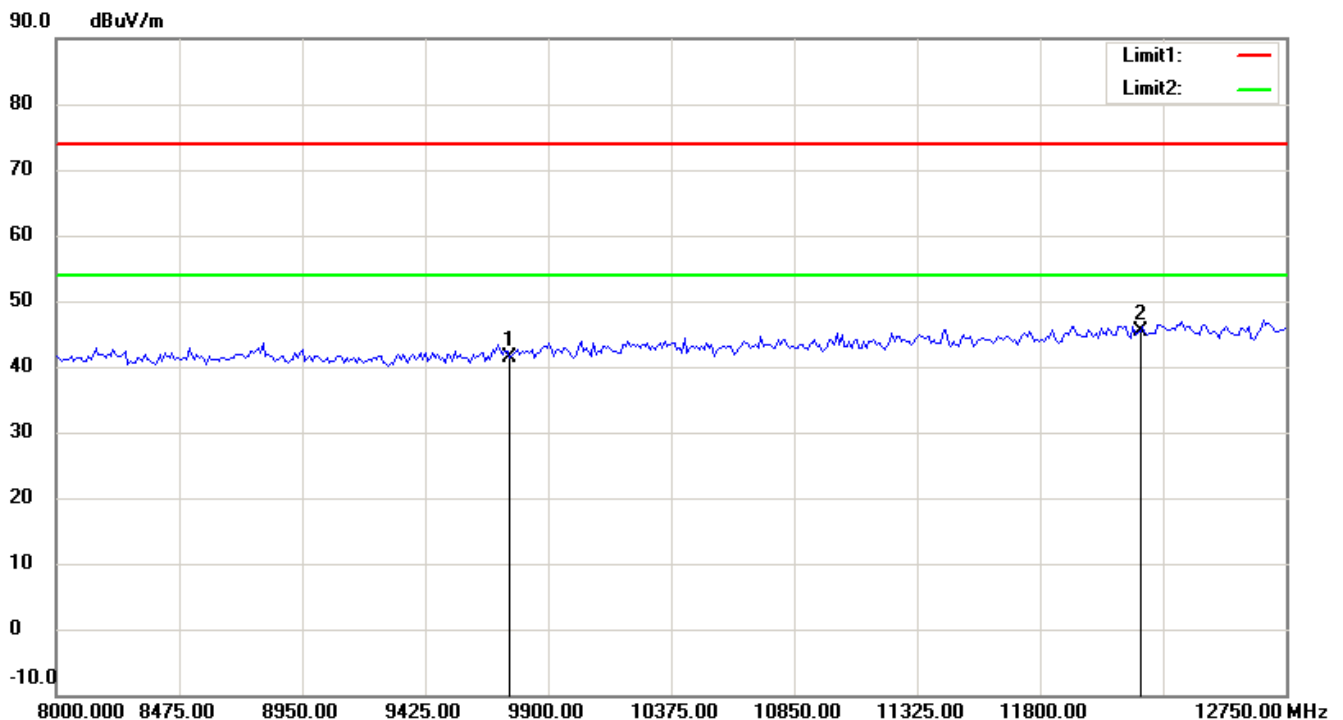
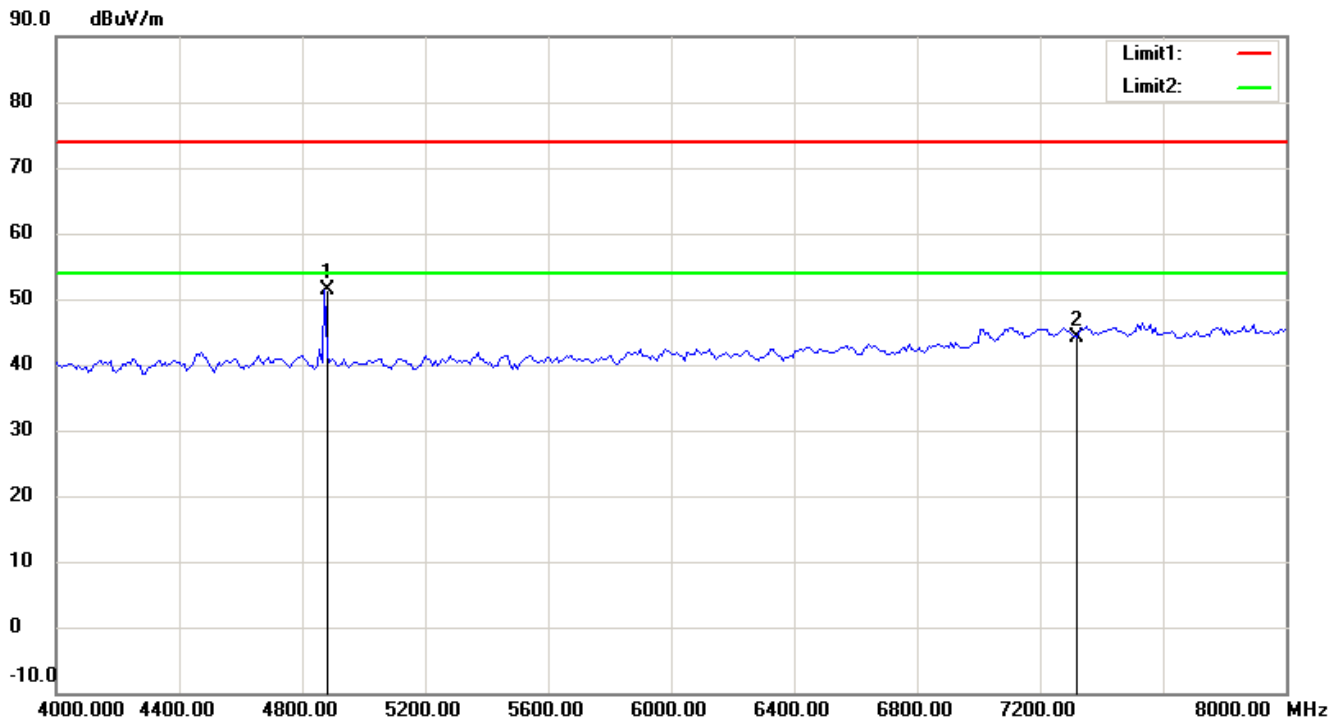
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Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

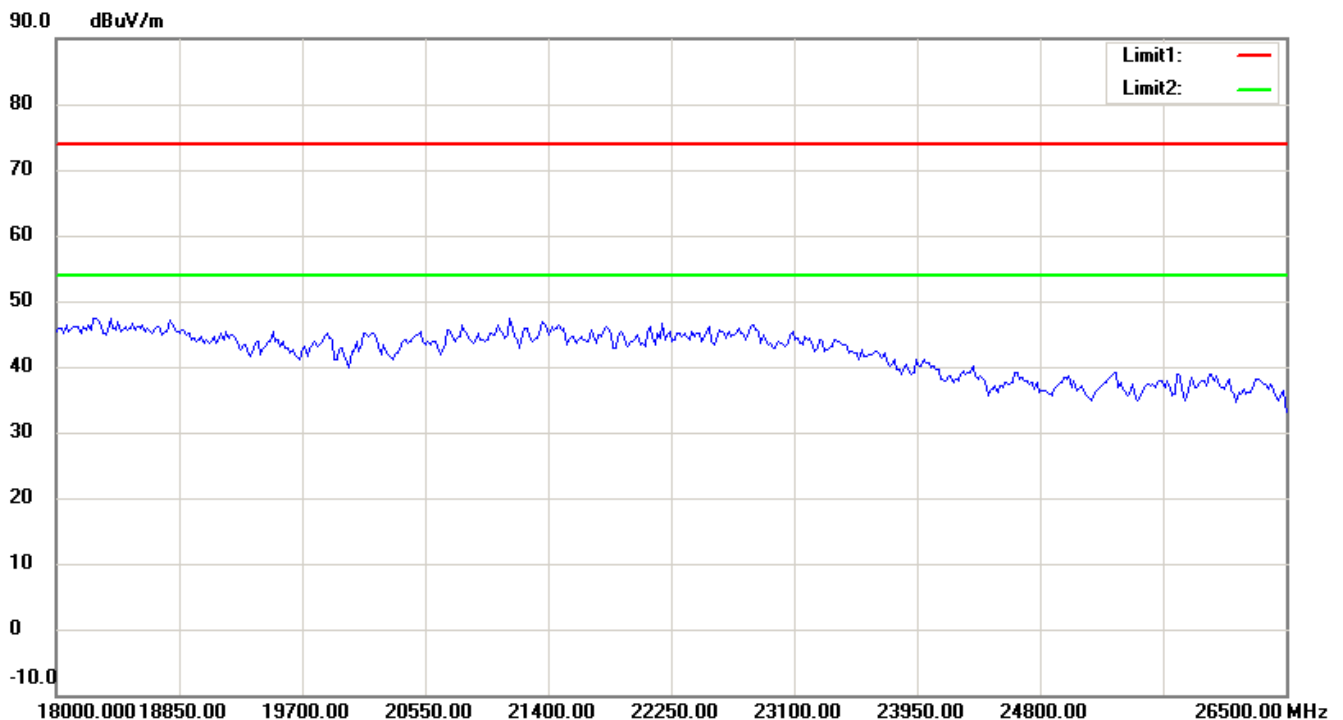
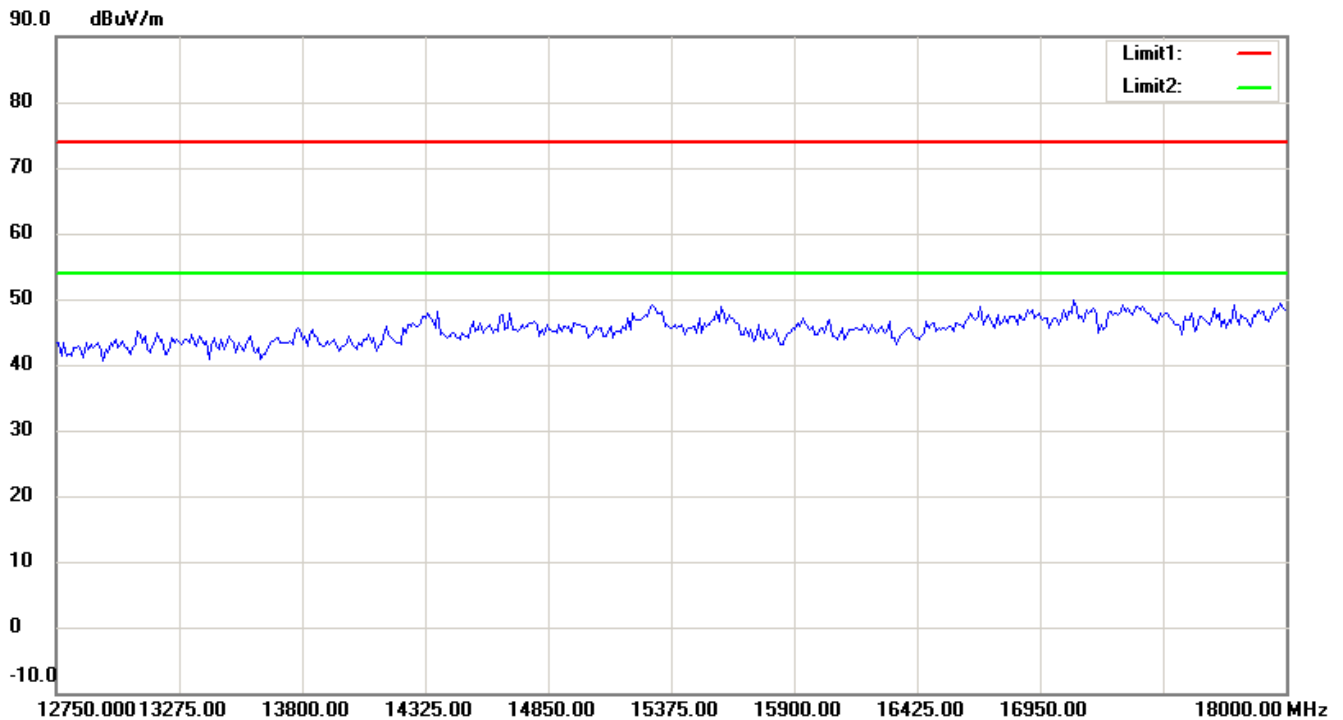
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Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

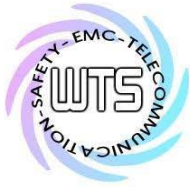
FCC ID: WKP-CSAW-02IP



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

Note:

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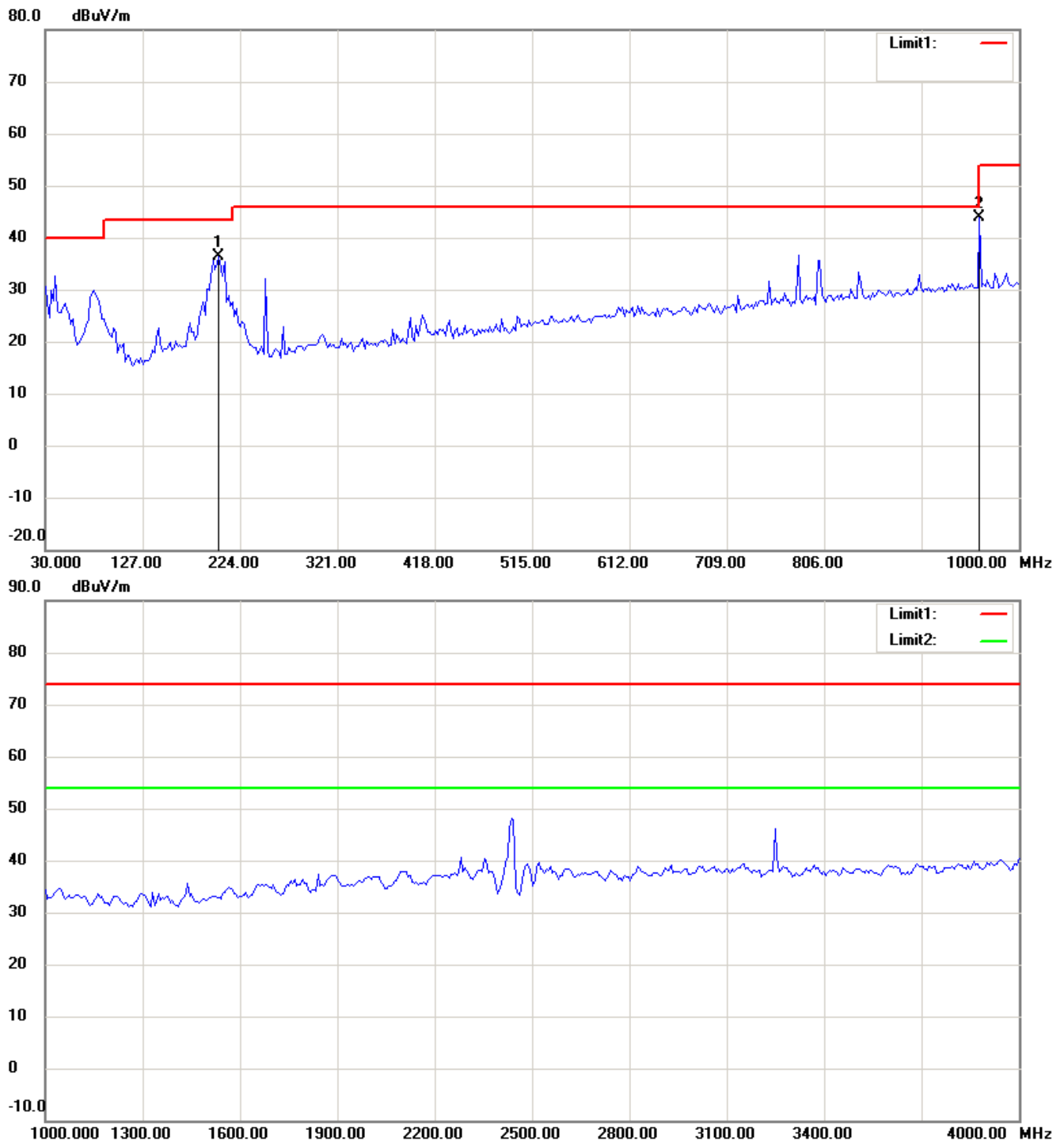


Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

Antenna Polarization V



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

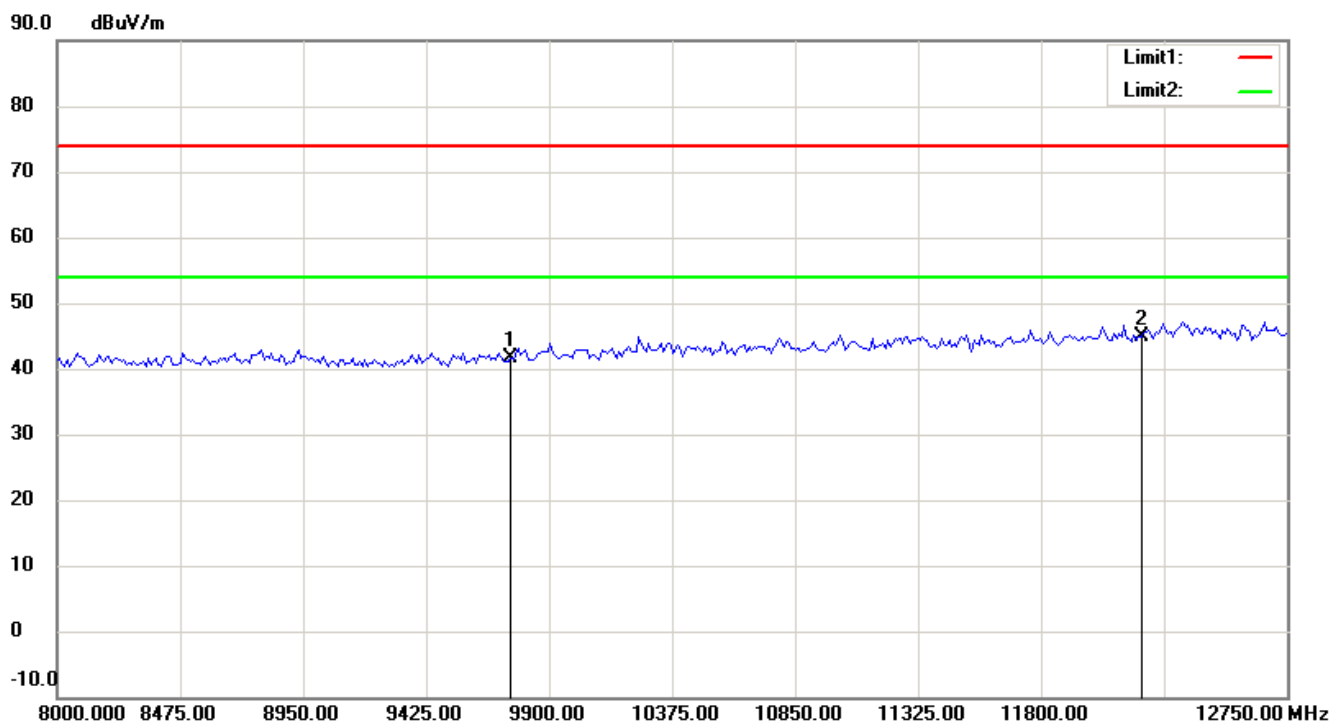
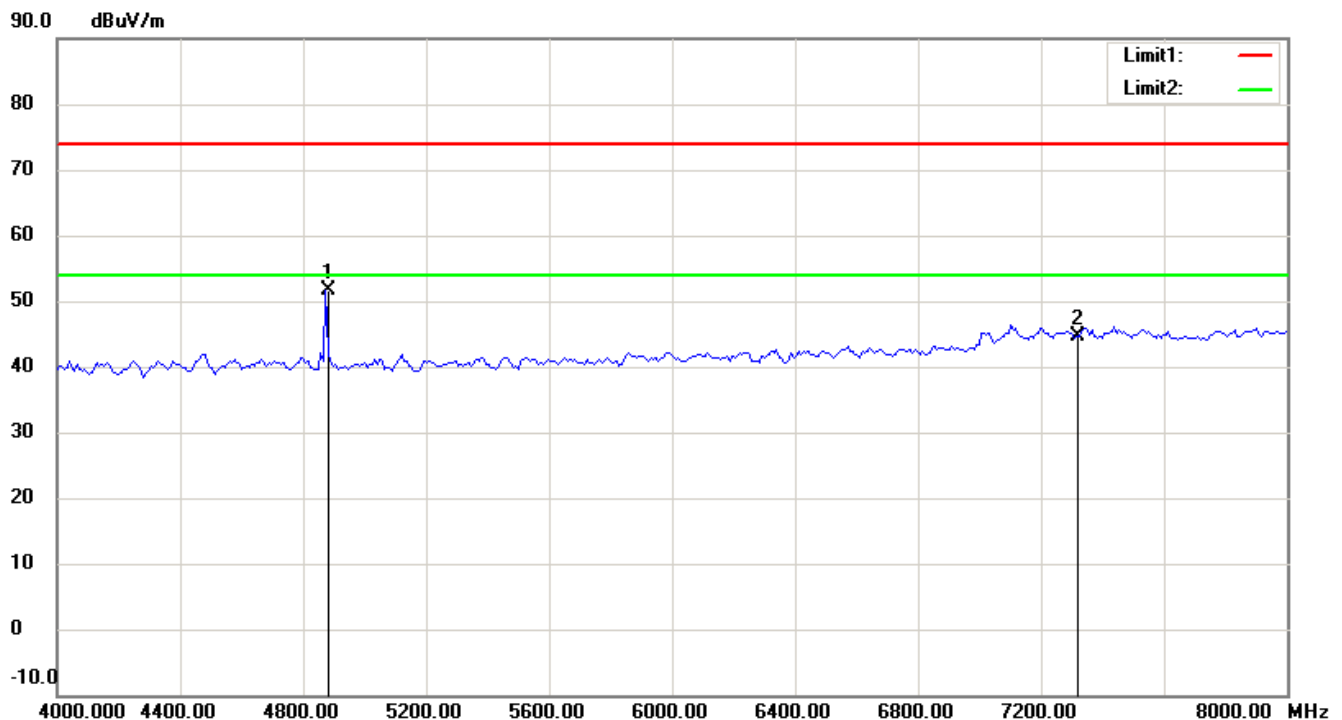
Note:

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Registration number: W6D21301-12971-C-1

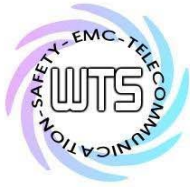
FCC ID: WKP-CSAW-02IP



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

Note:

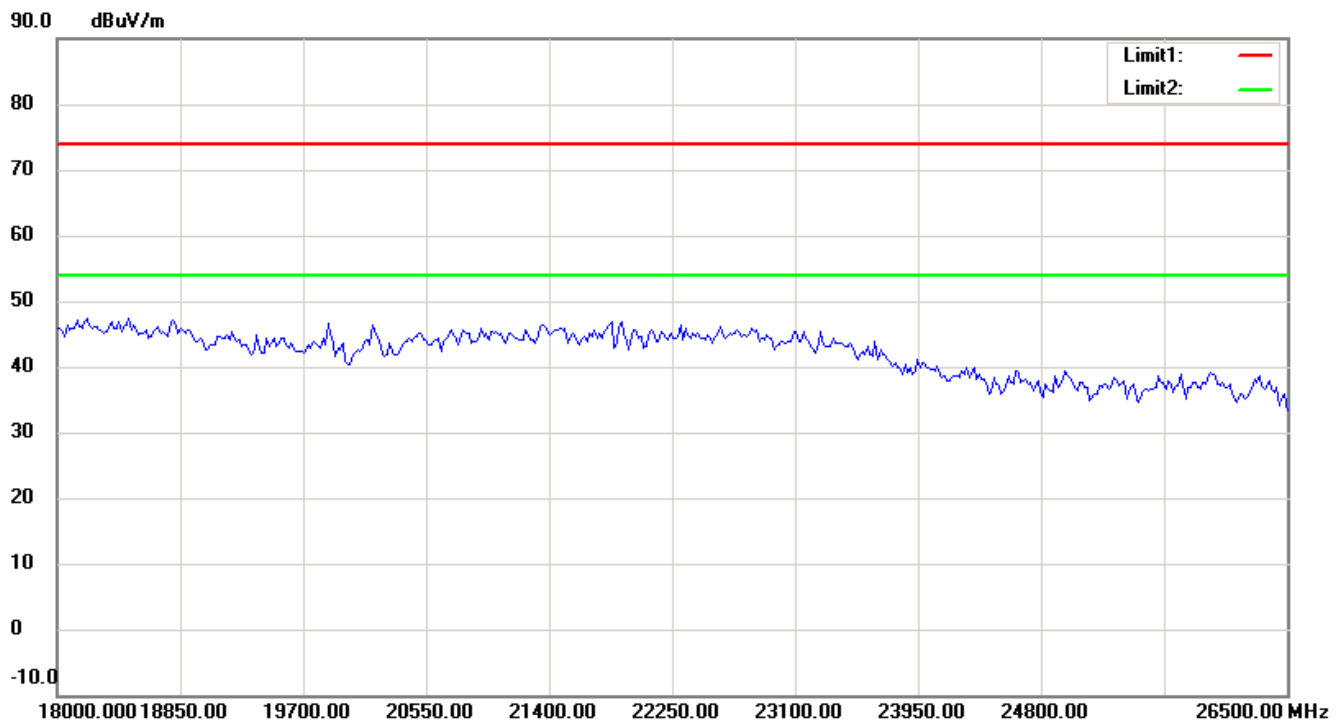
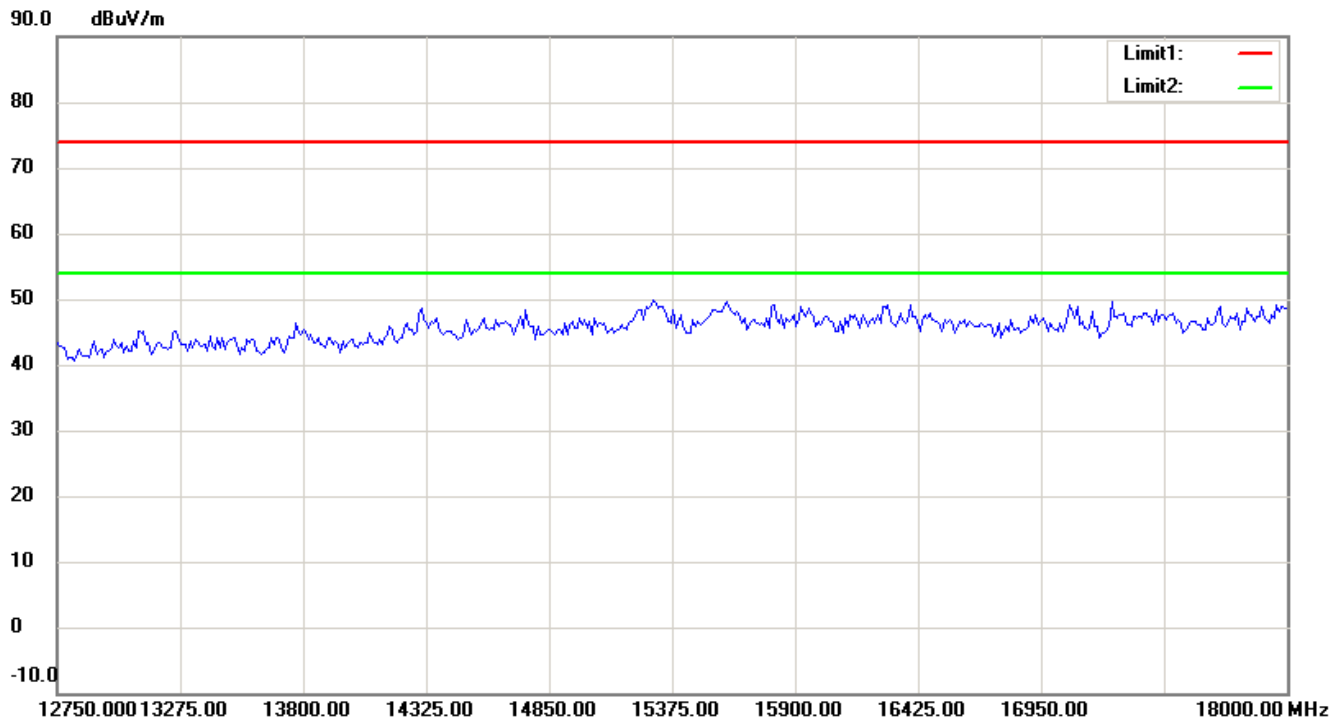
1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification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

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

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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.

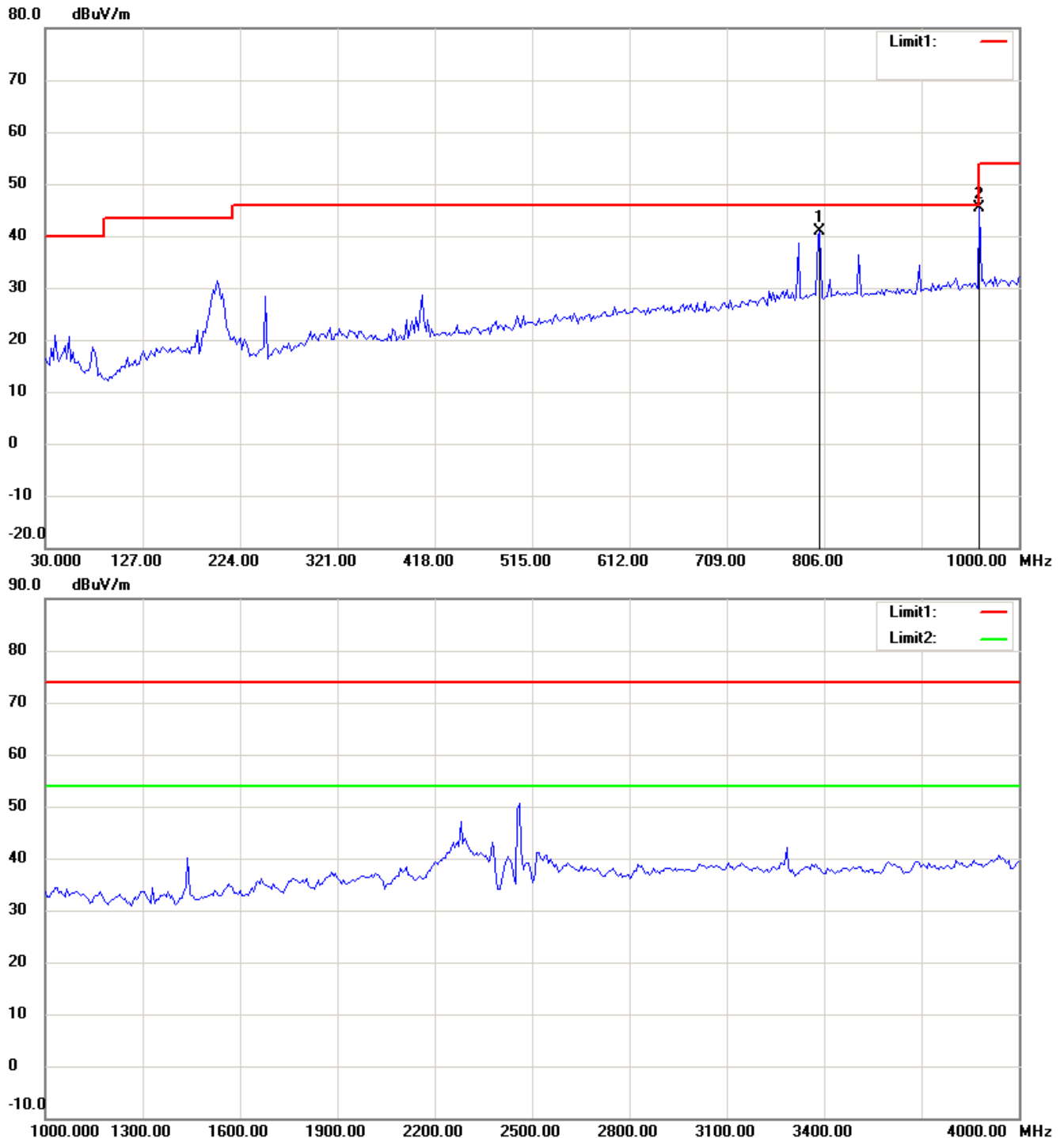


Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

CH11

Antenna Polarization H



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

Note:

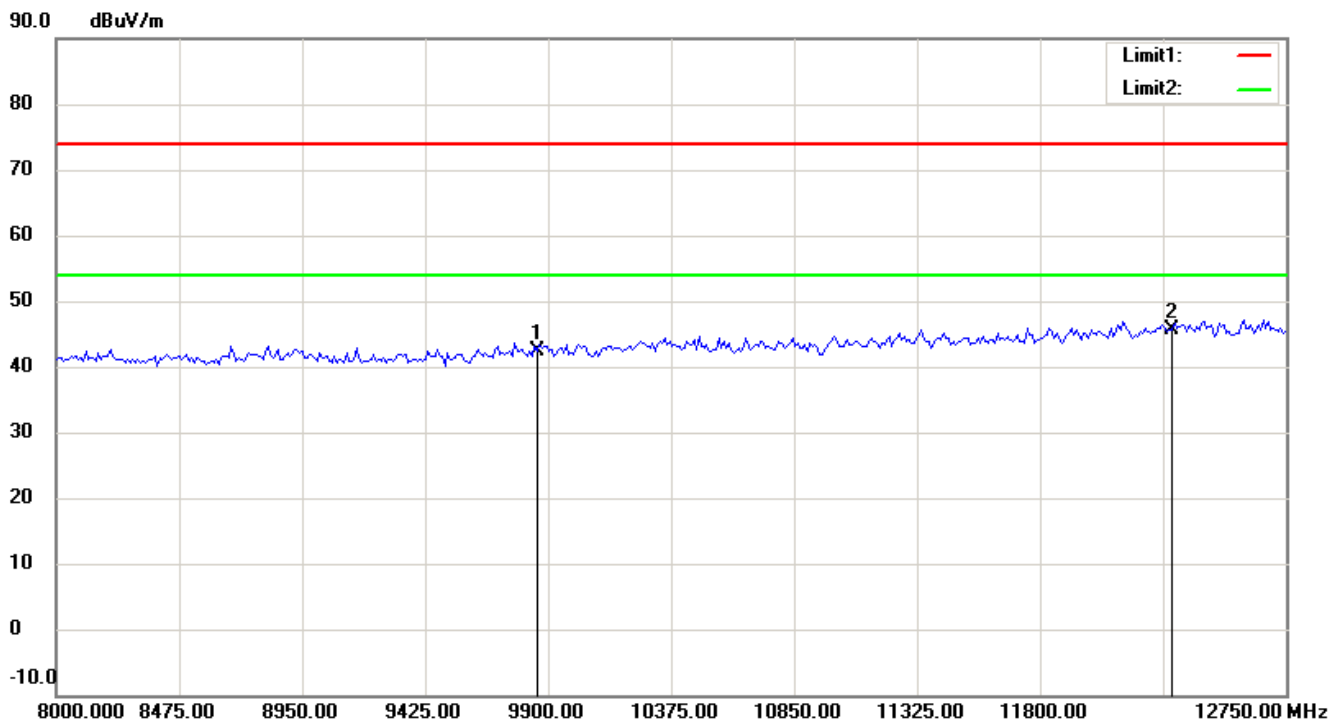
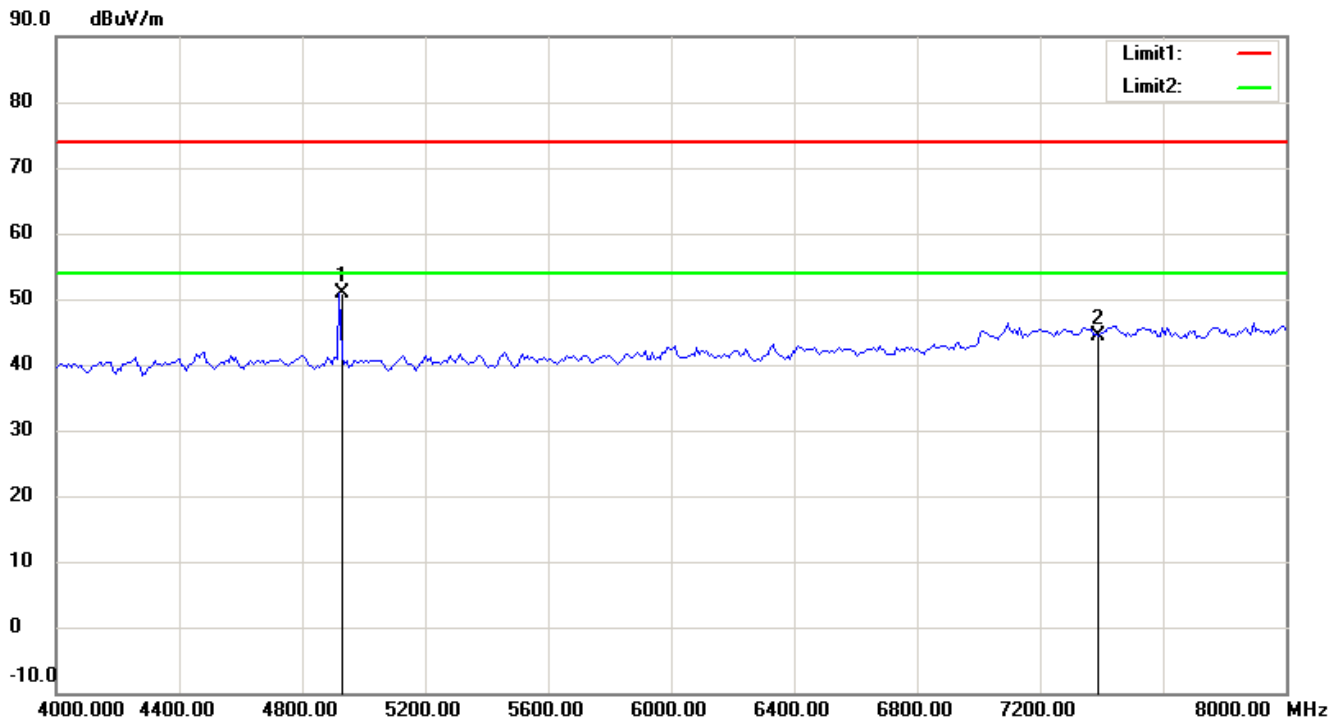
1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
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Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

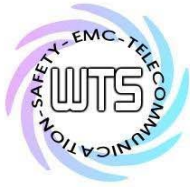
FCC ID: WKP-CSAW-02IP



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

Note:

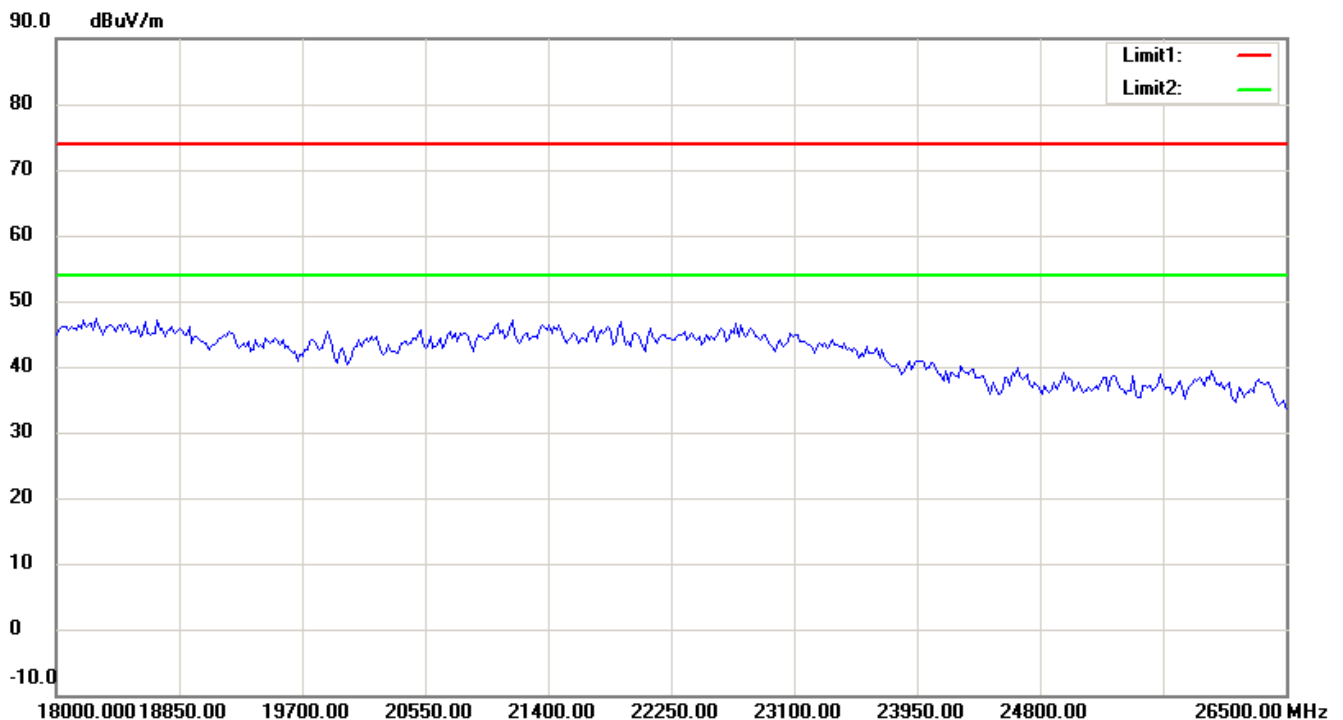
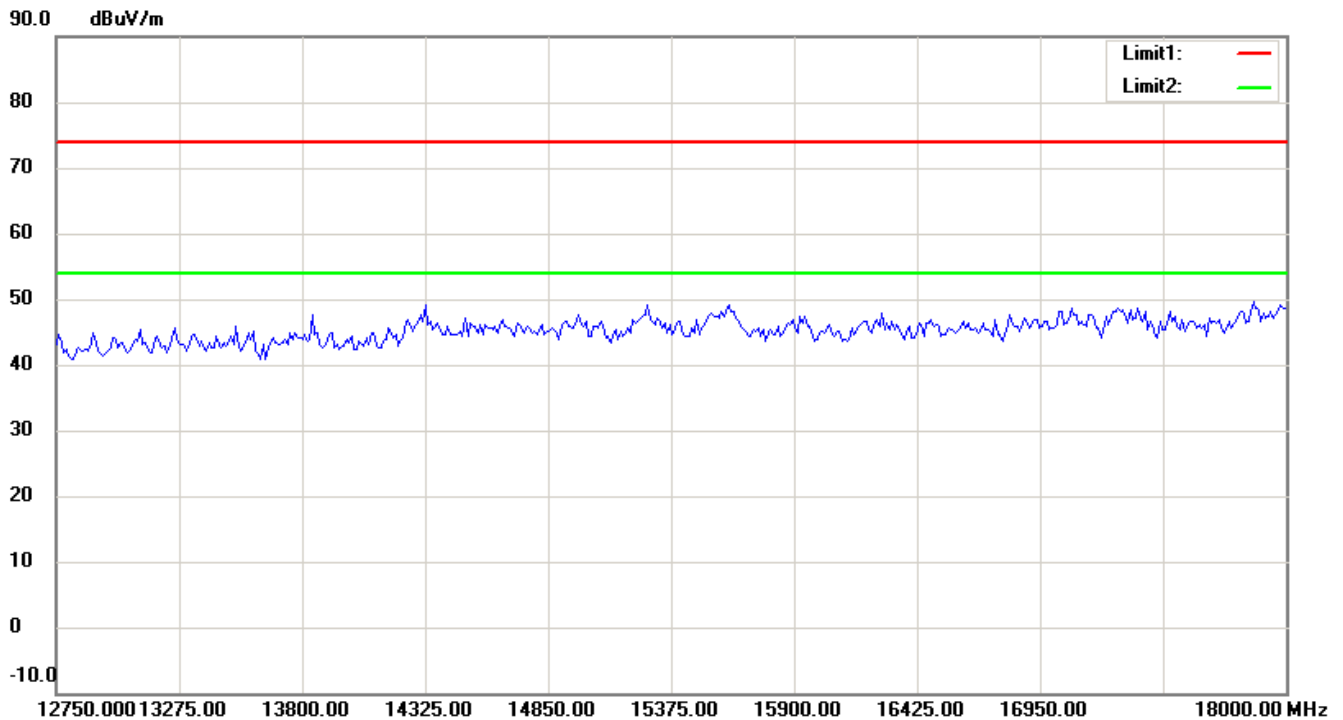
1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
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Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

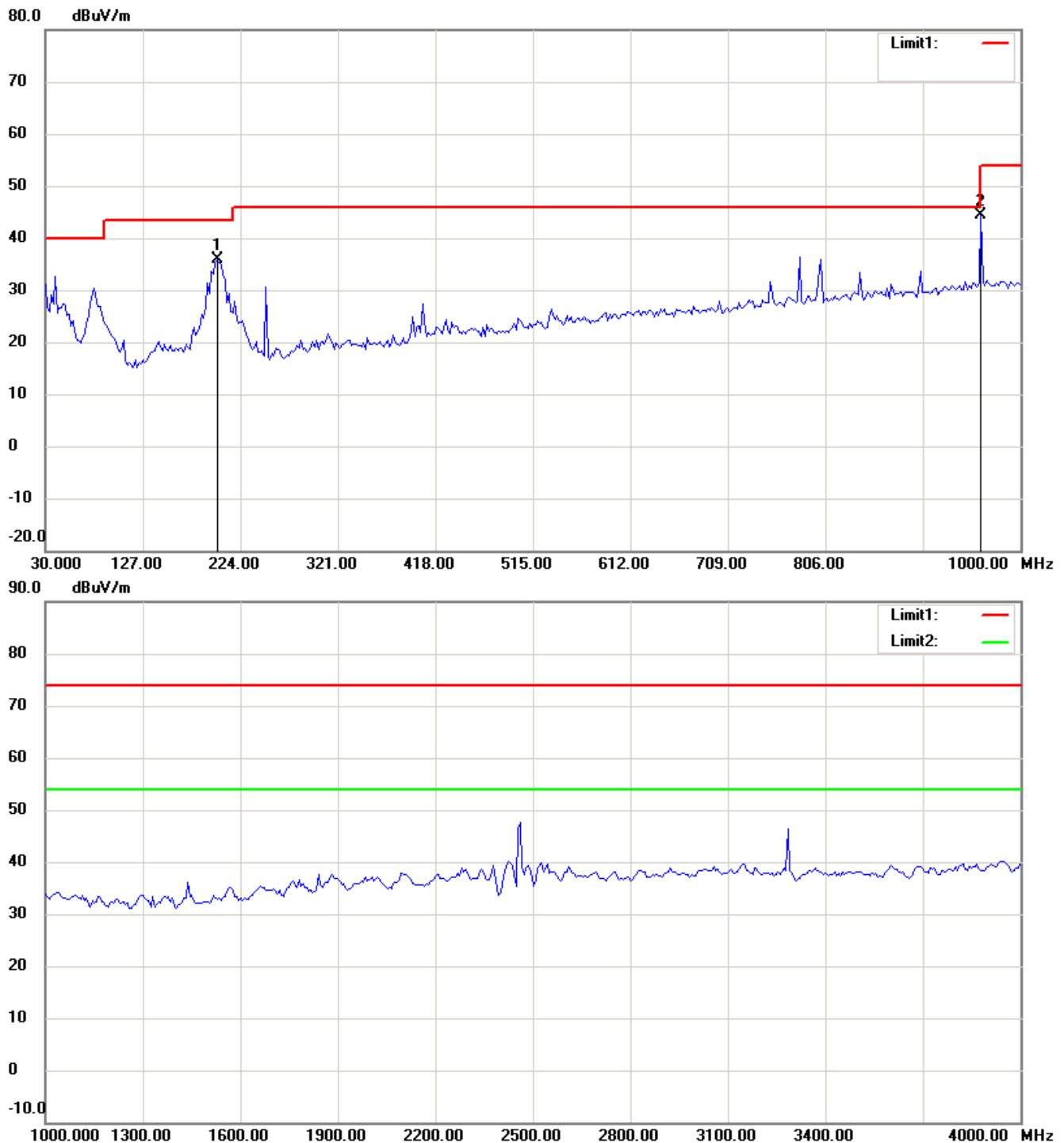
1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
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Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

Antenna Polarization V



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

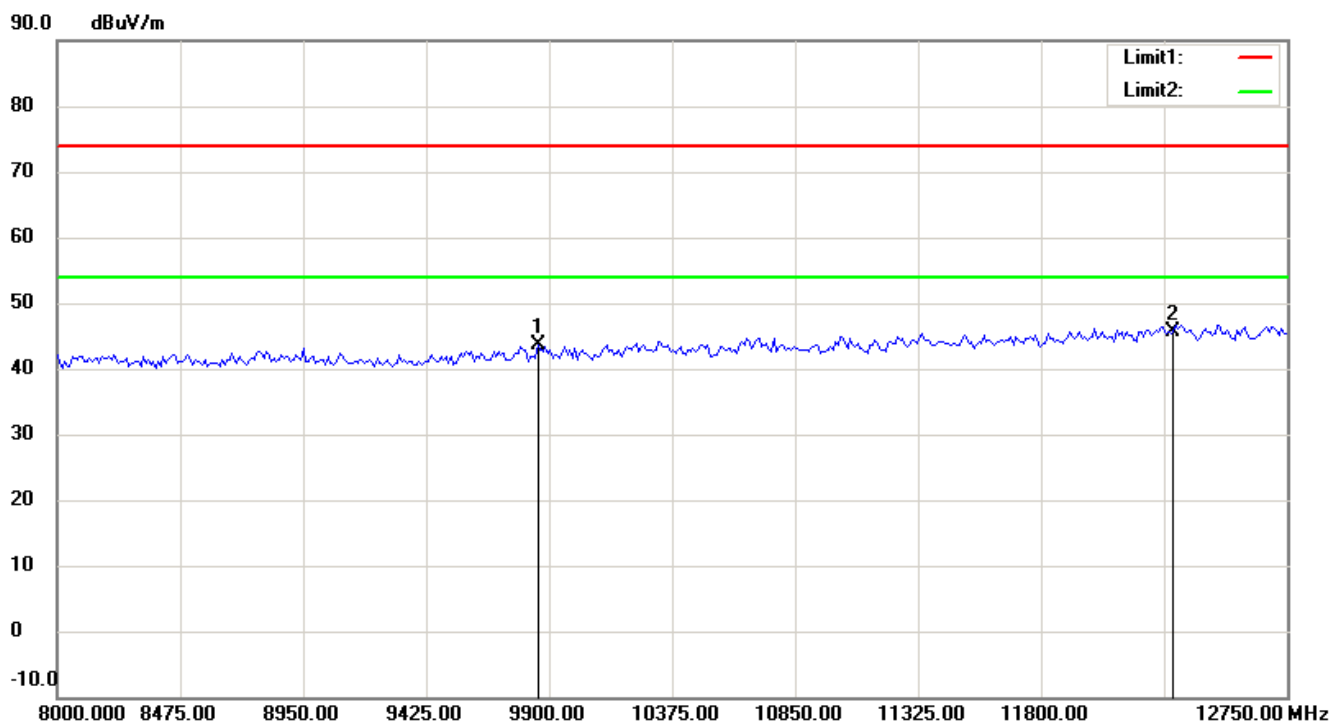
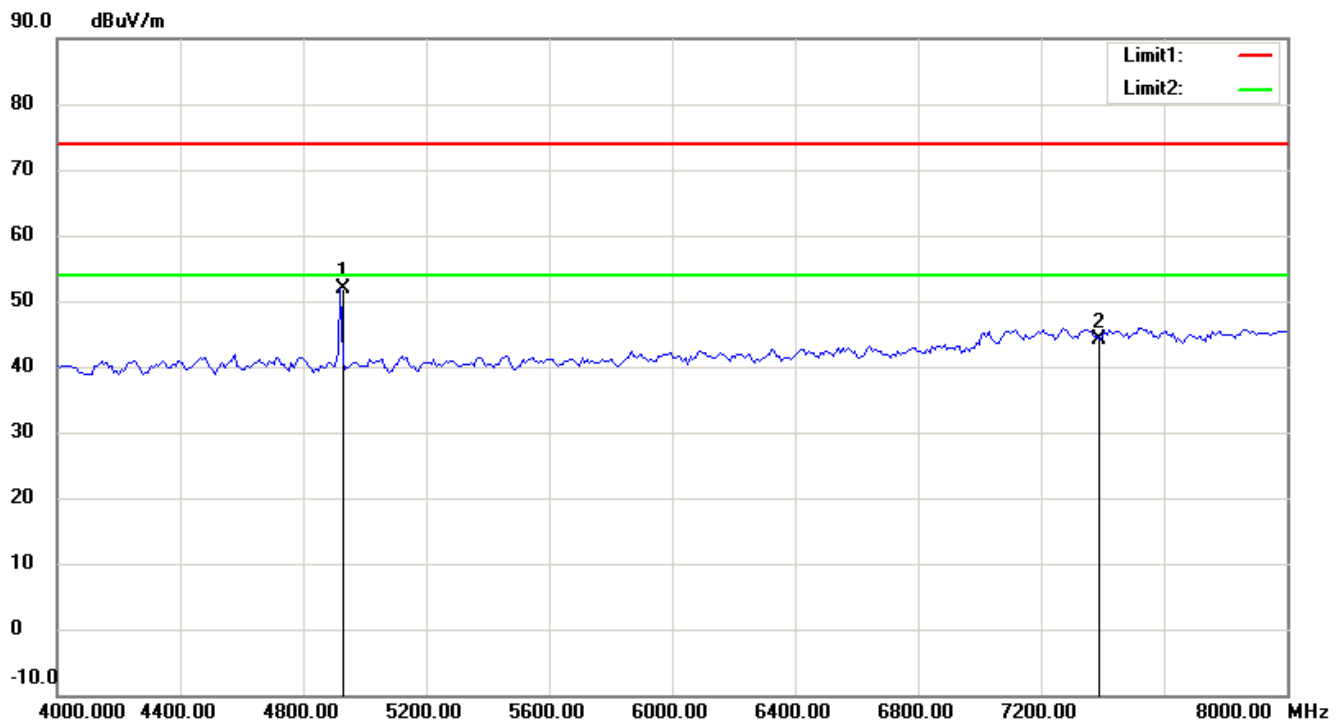
Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
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Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

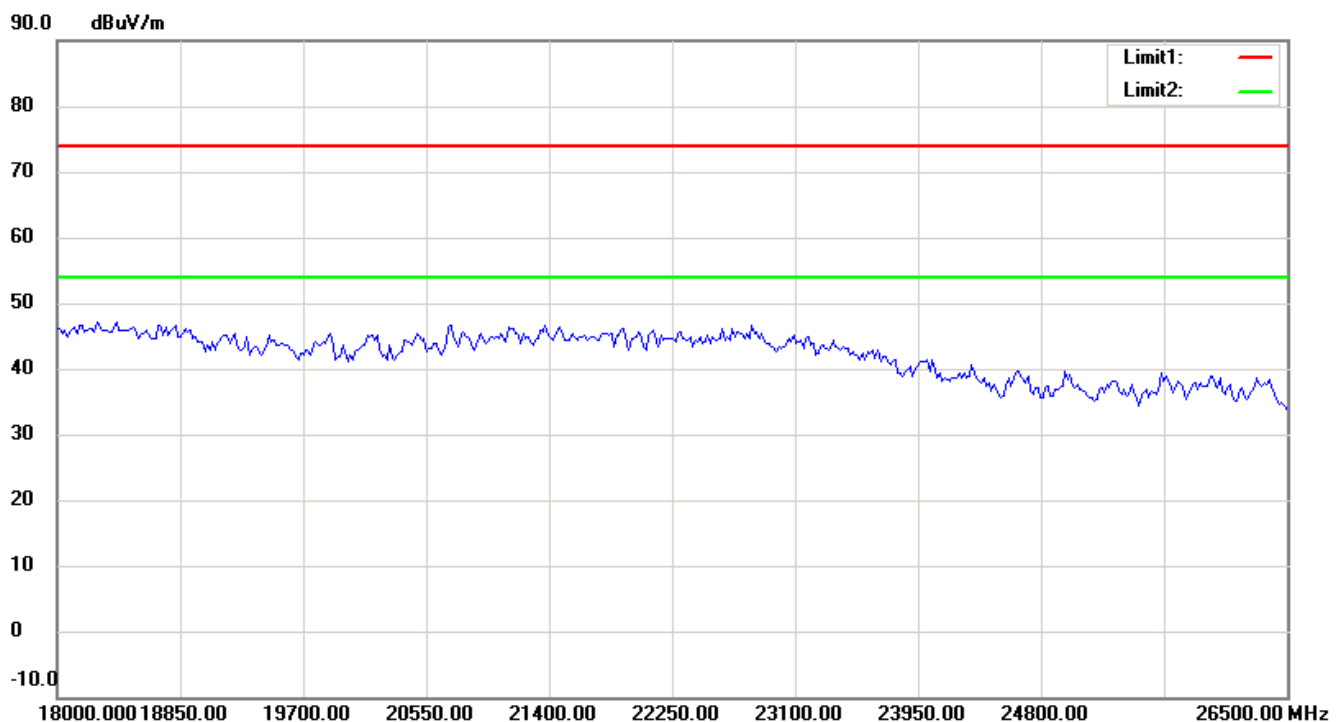
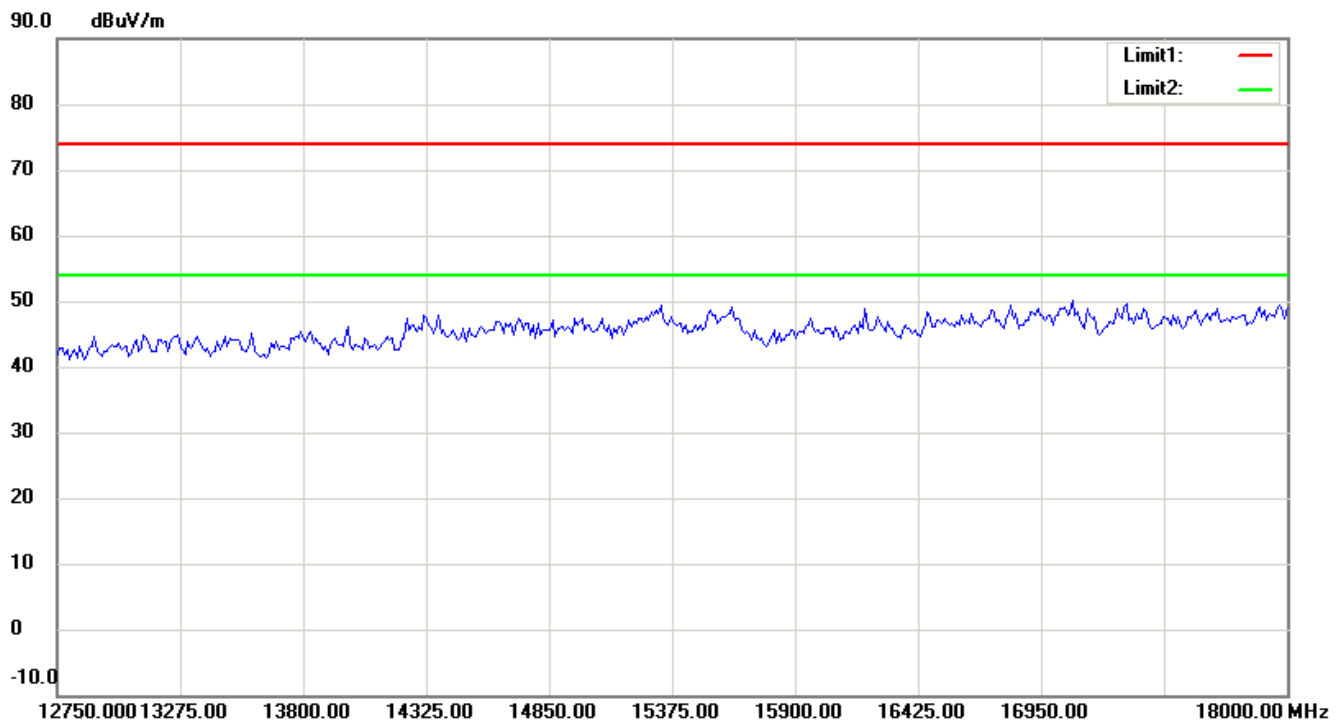
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Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

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3. For corrected test results are listed in the relevant table of radiated test data of this test report.



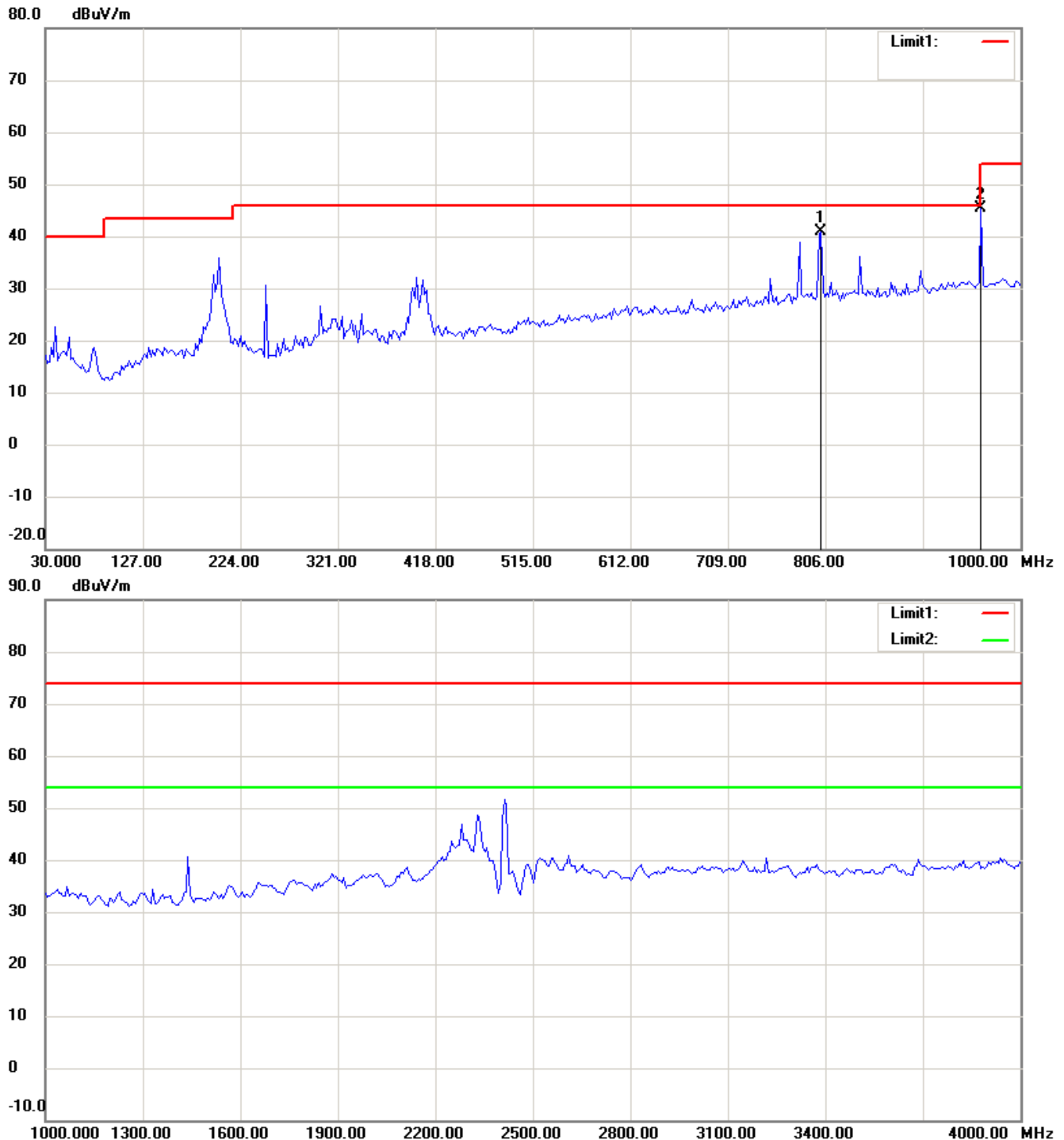
Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

802.11n 20MHz_CH1

Antenna Polarization H



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

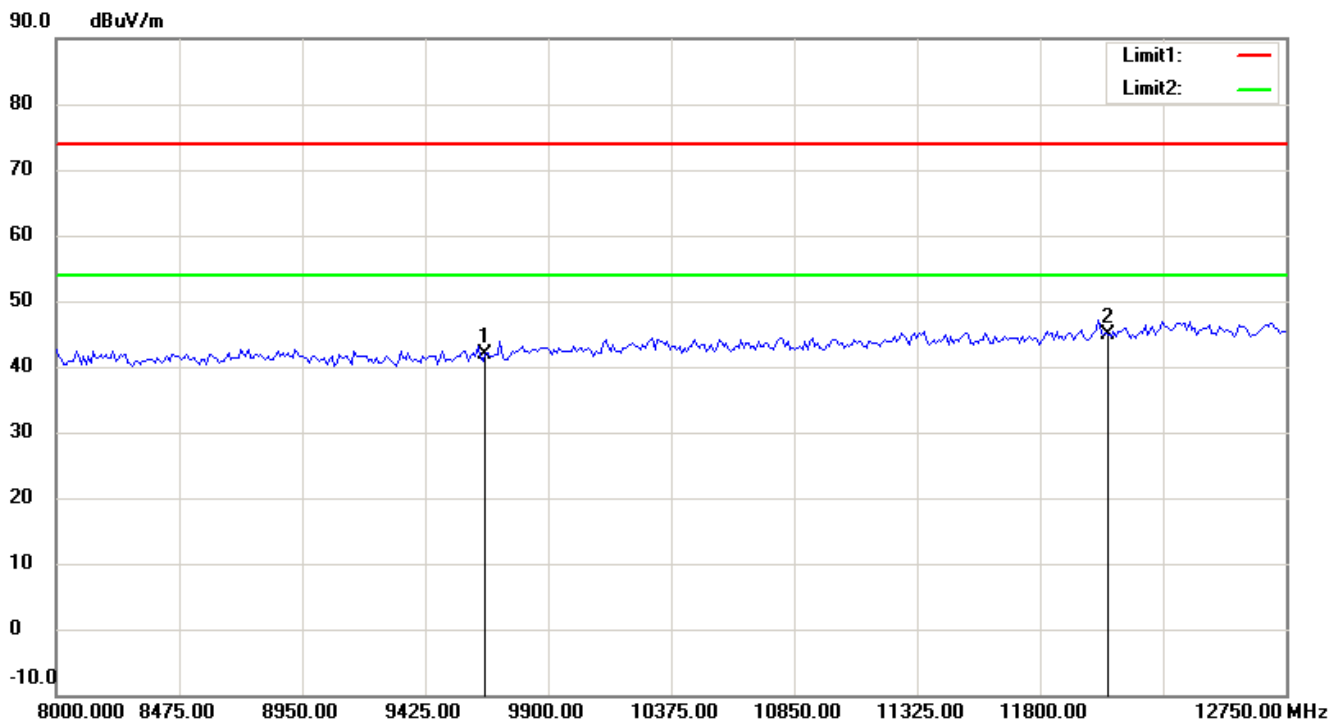
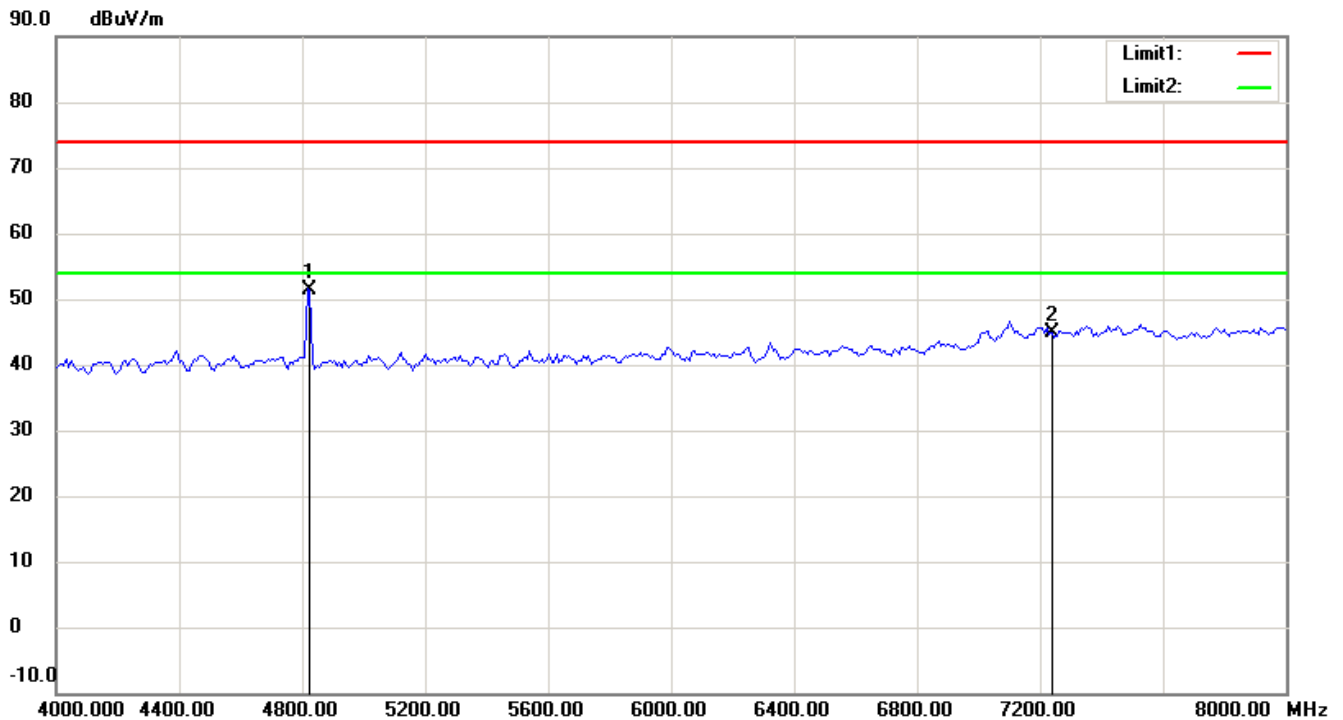
Note:

1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
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Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

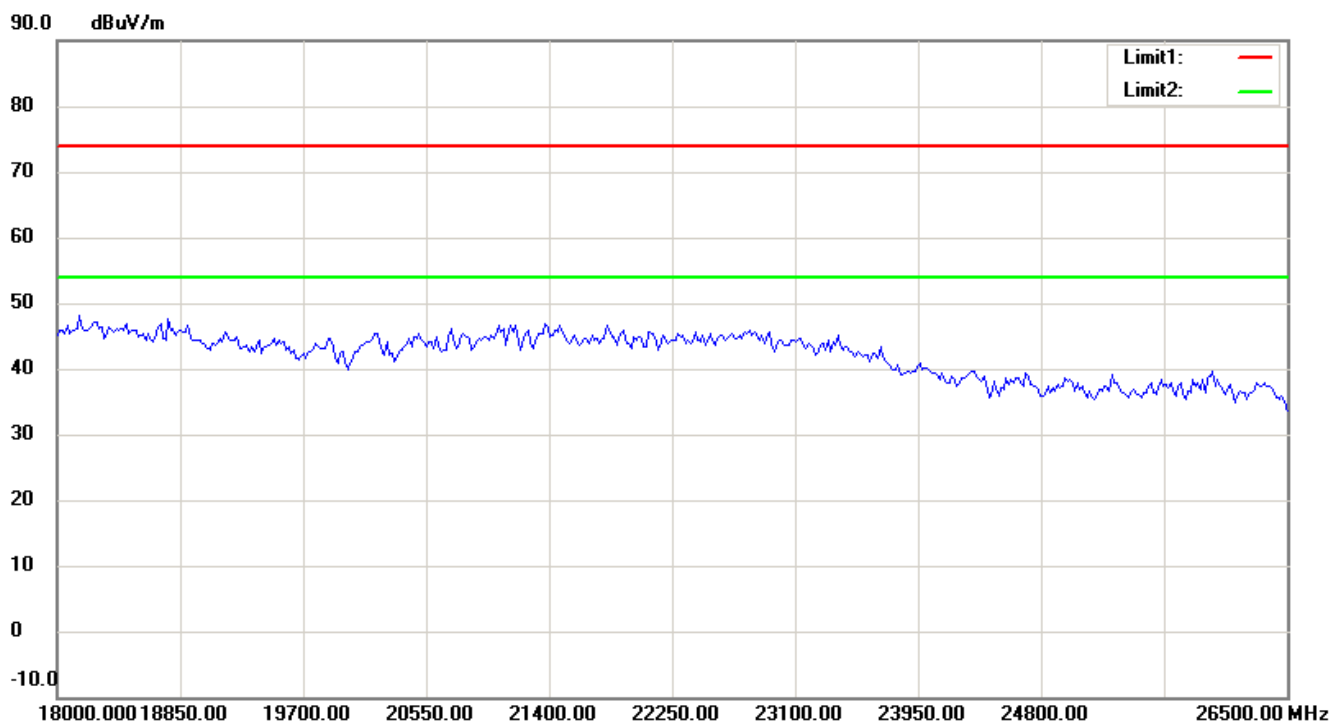
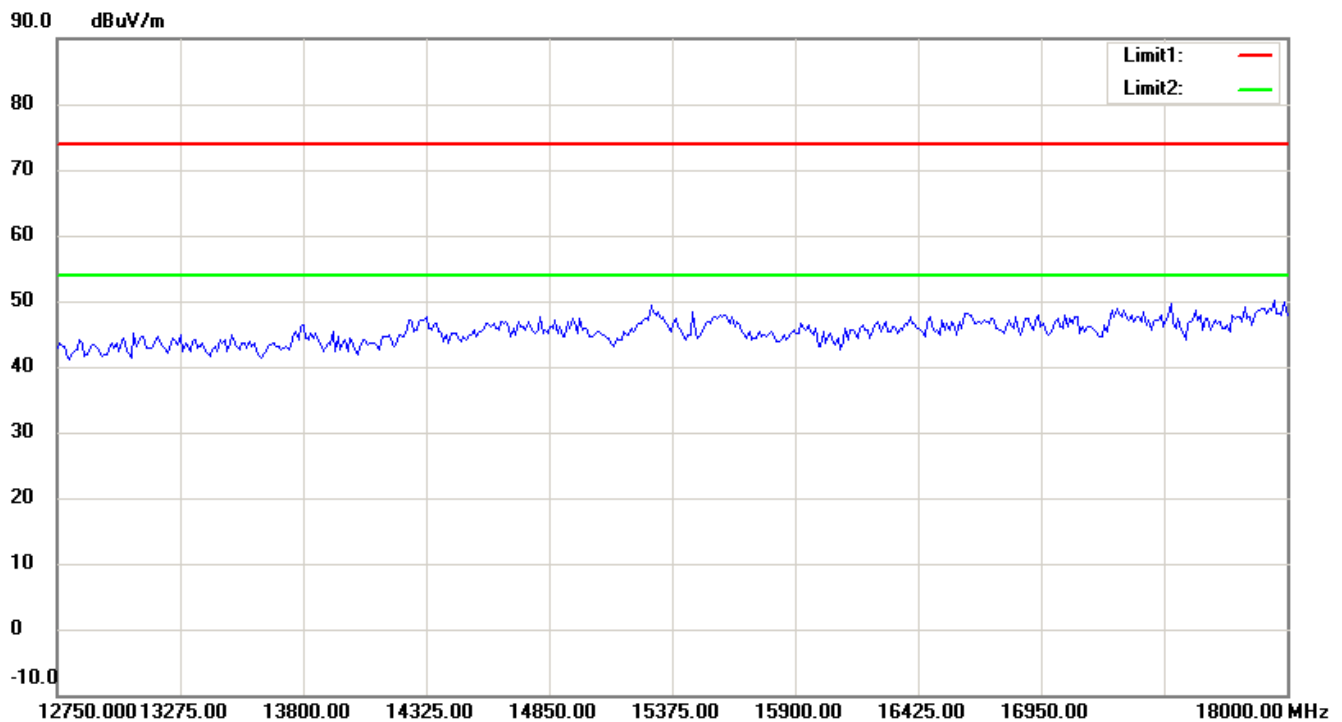
1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
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Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

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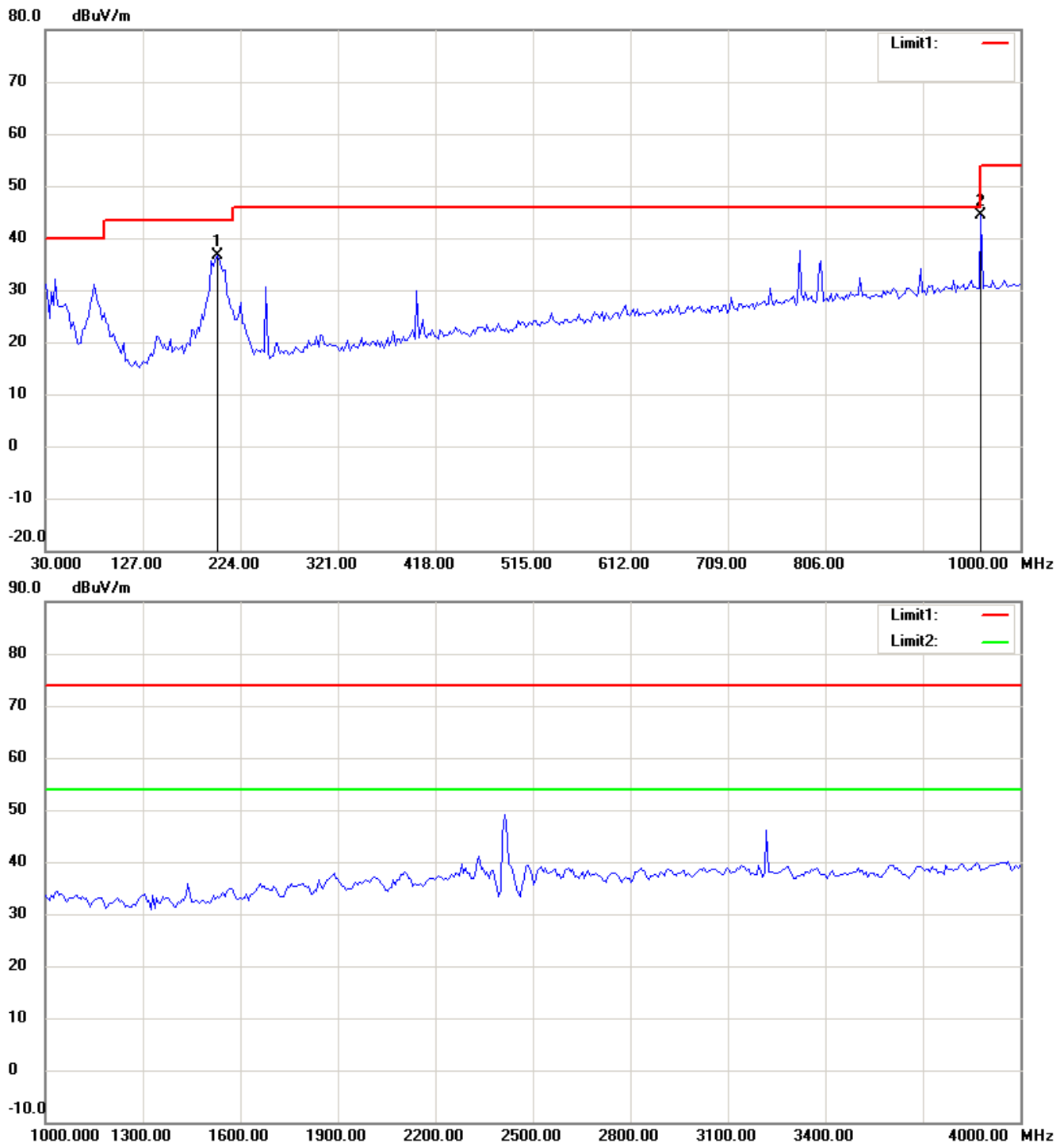


Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

Antenna Polarization V



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

Note:

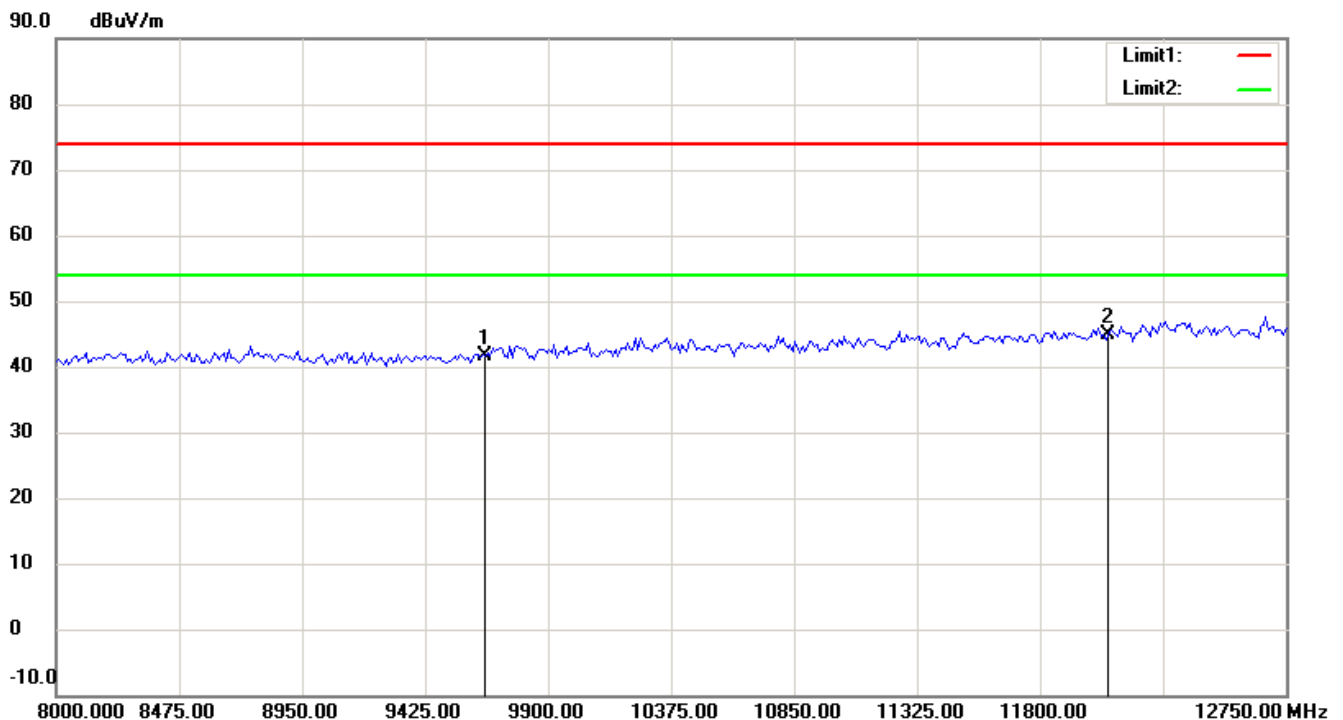
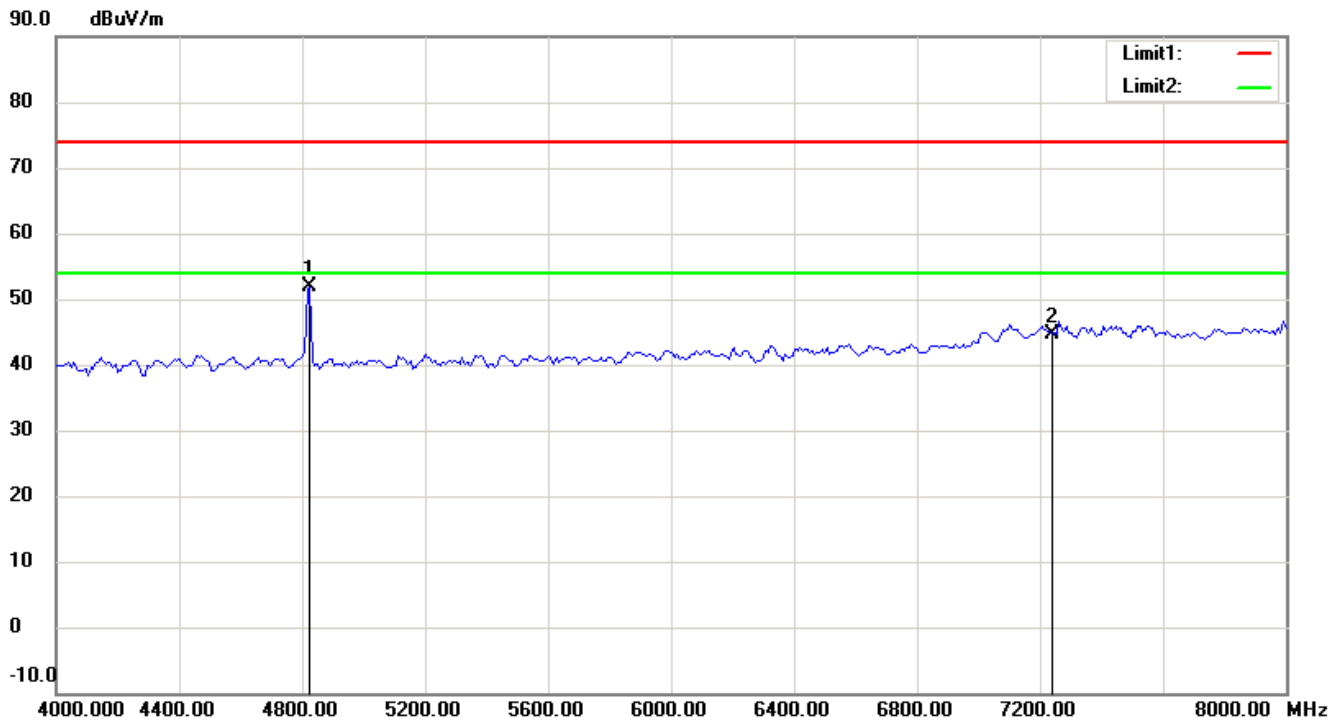
1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
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Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

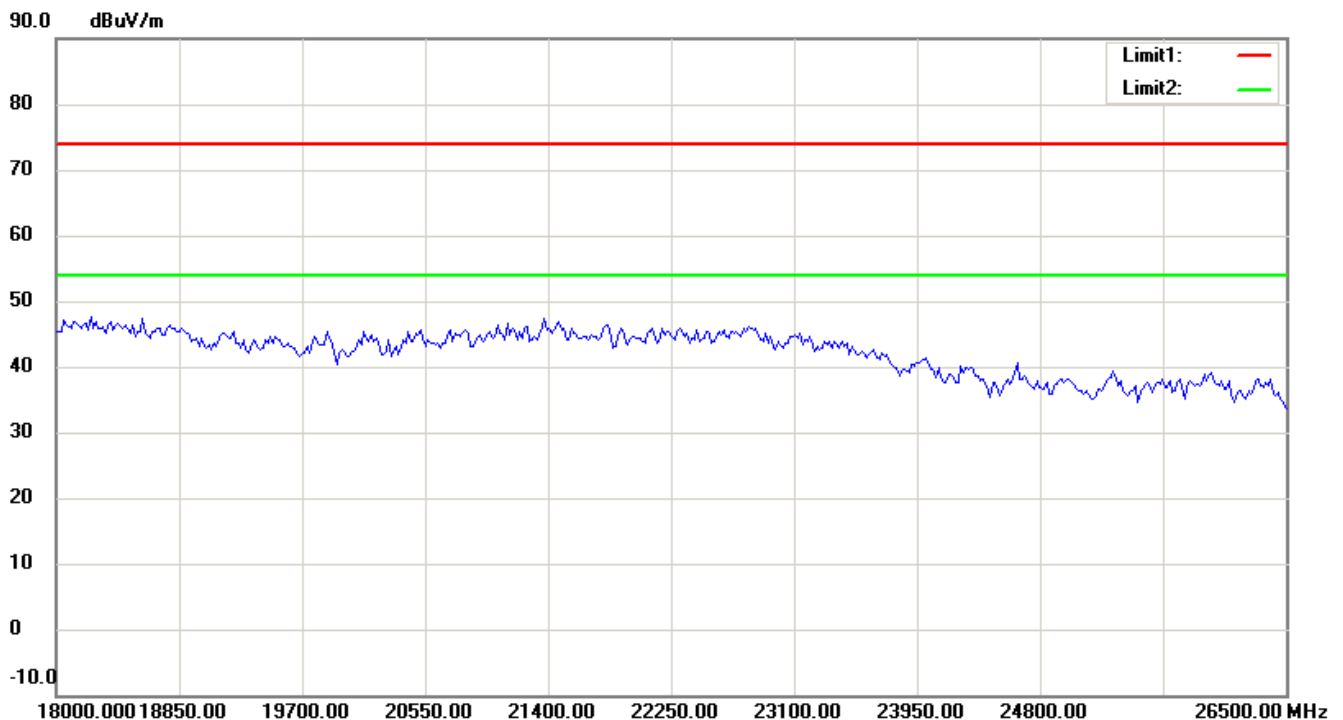
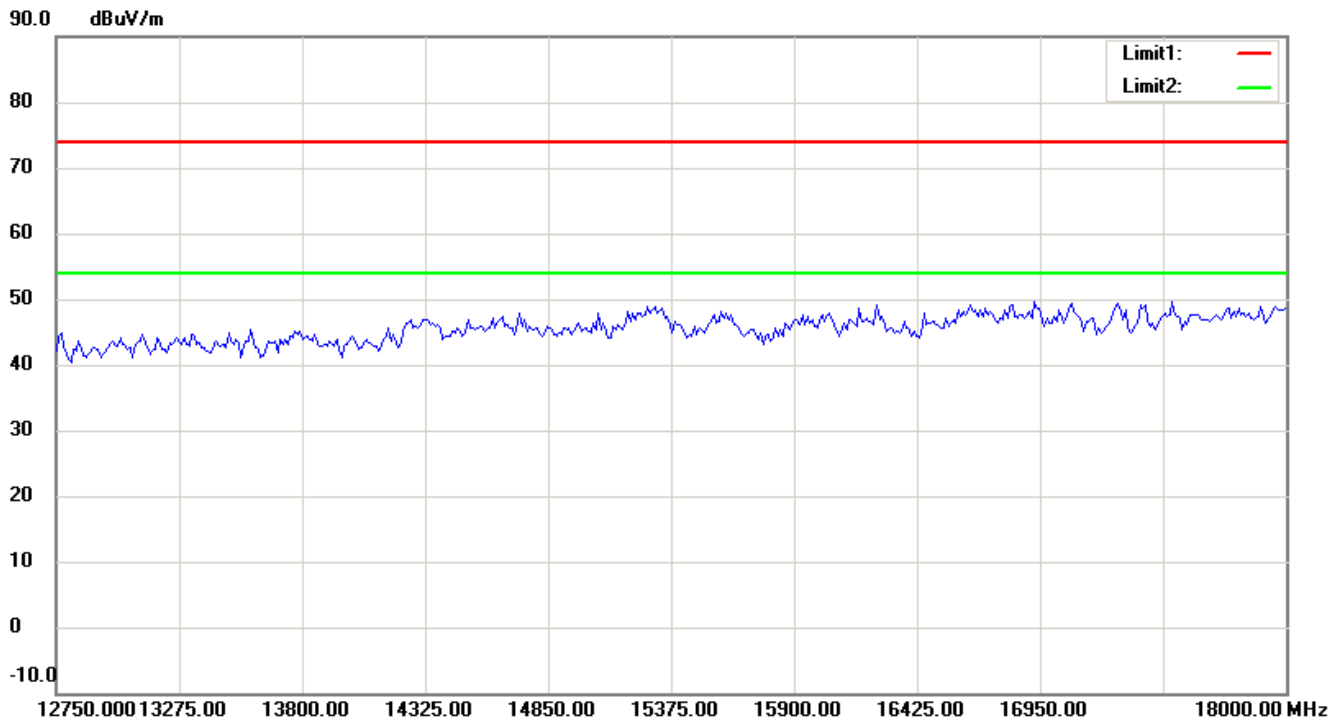
1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
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Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

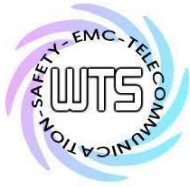
FCC ID: WKP-CSAW-02IP



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

Note:

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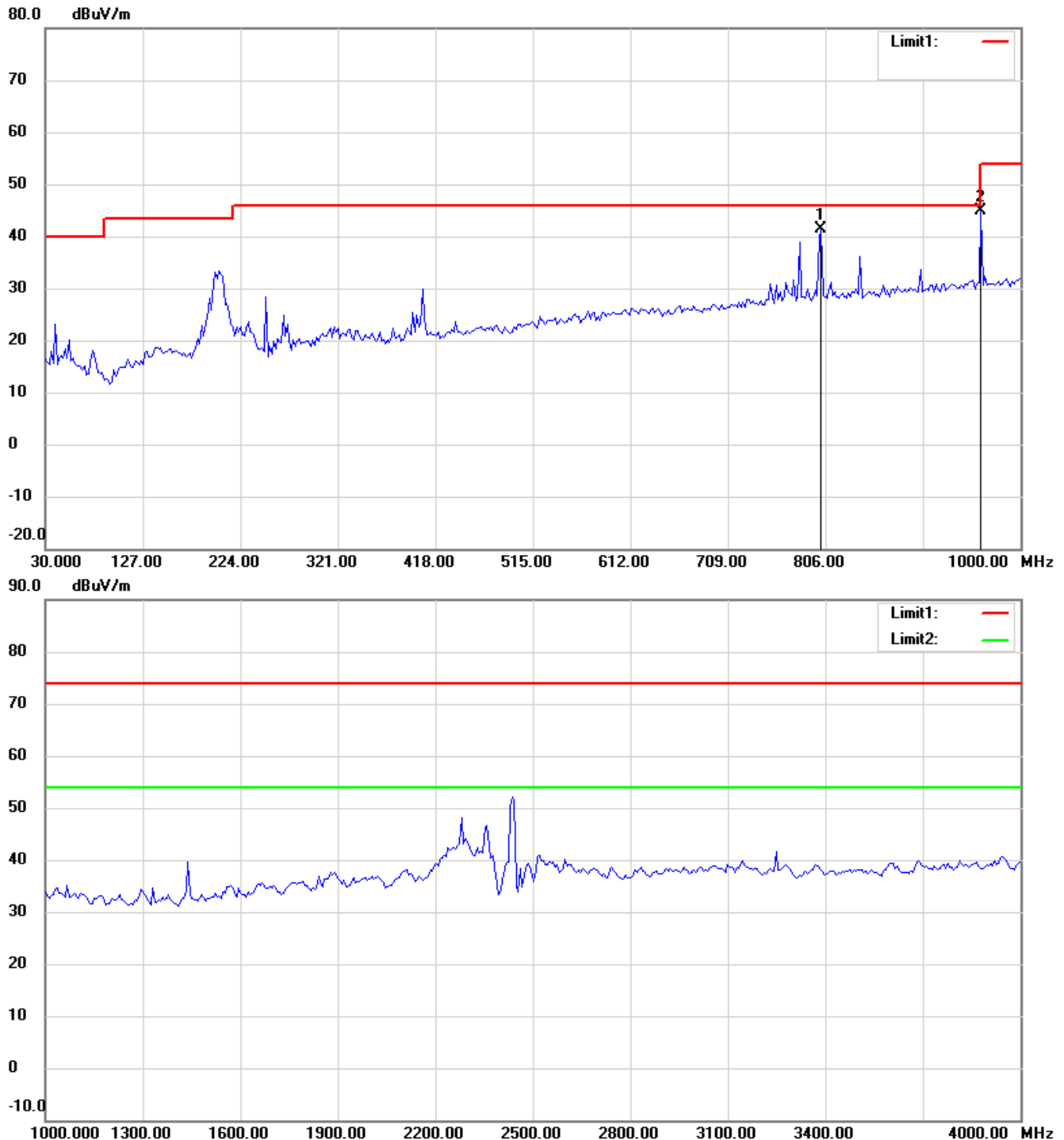


Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

CH6

Antenna Polarization H



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

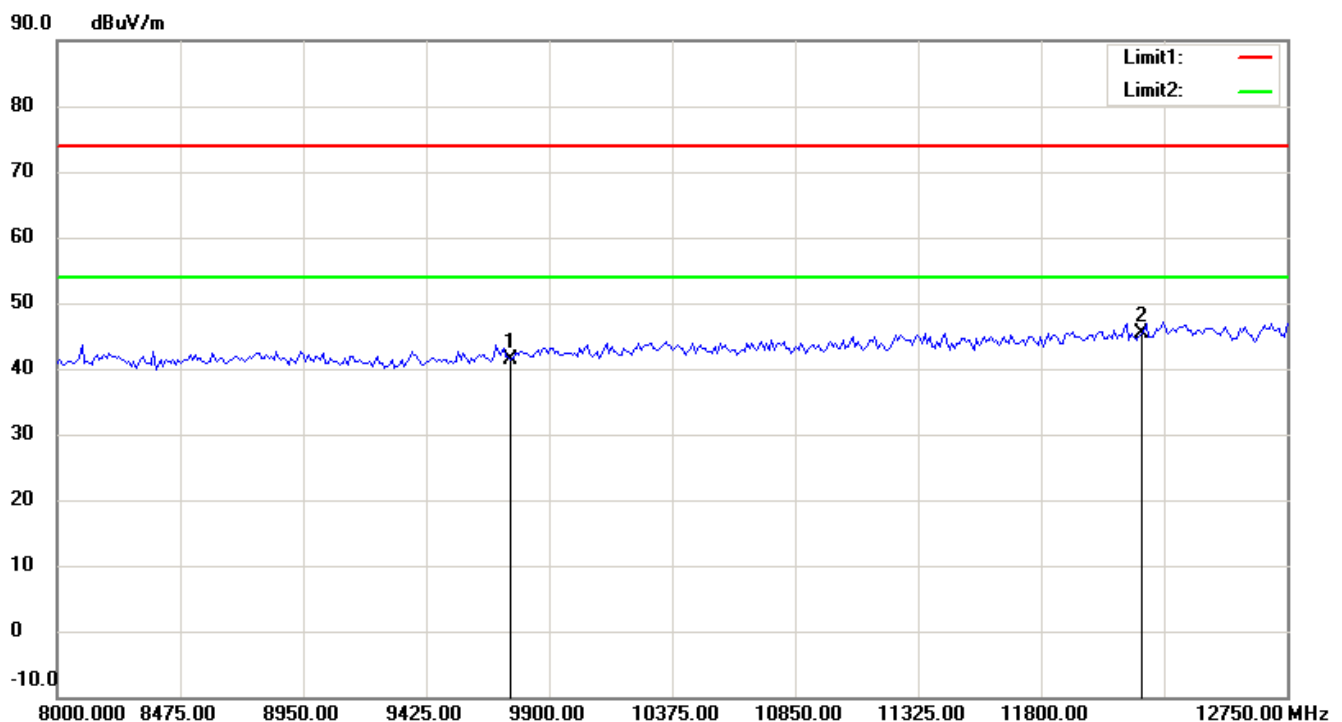
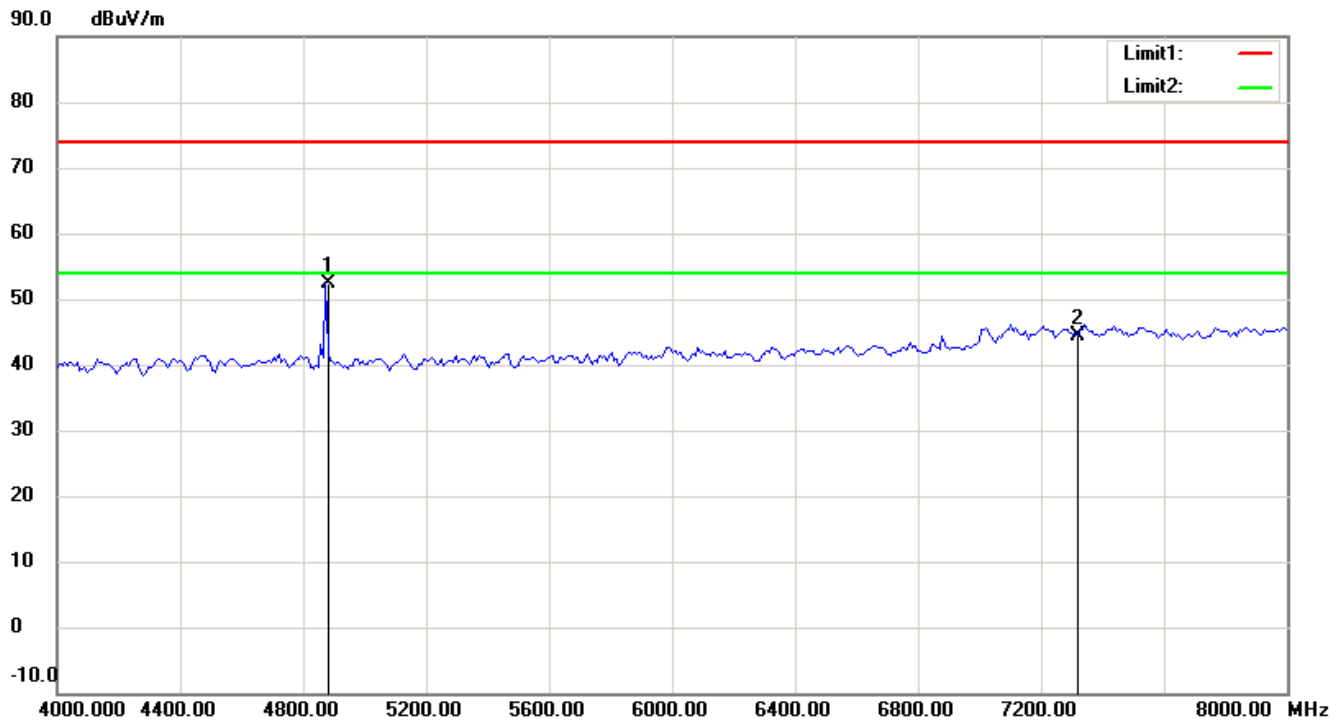
Note:

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Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

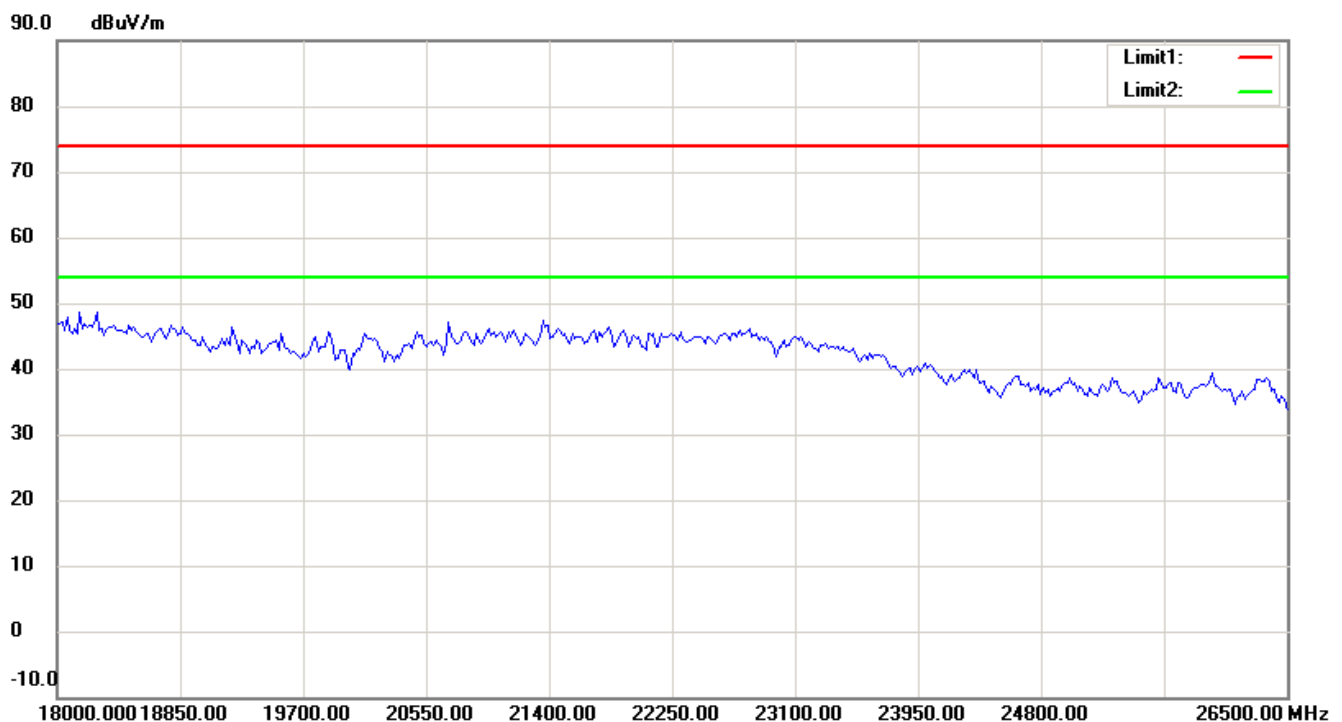
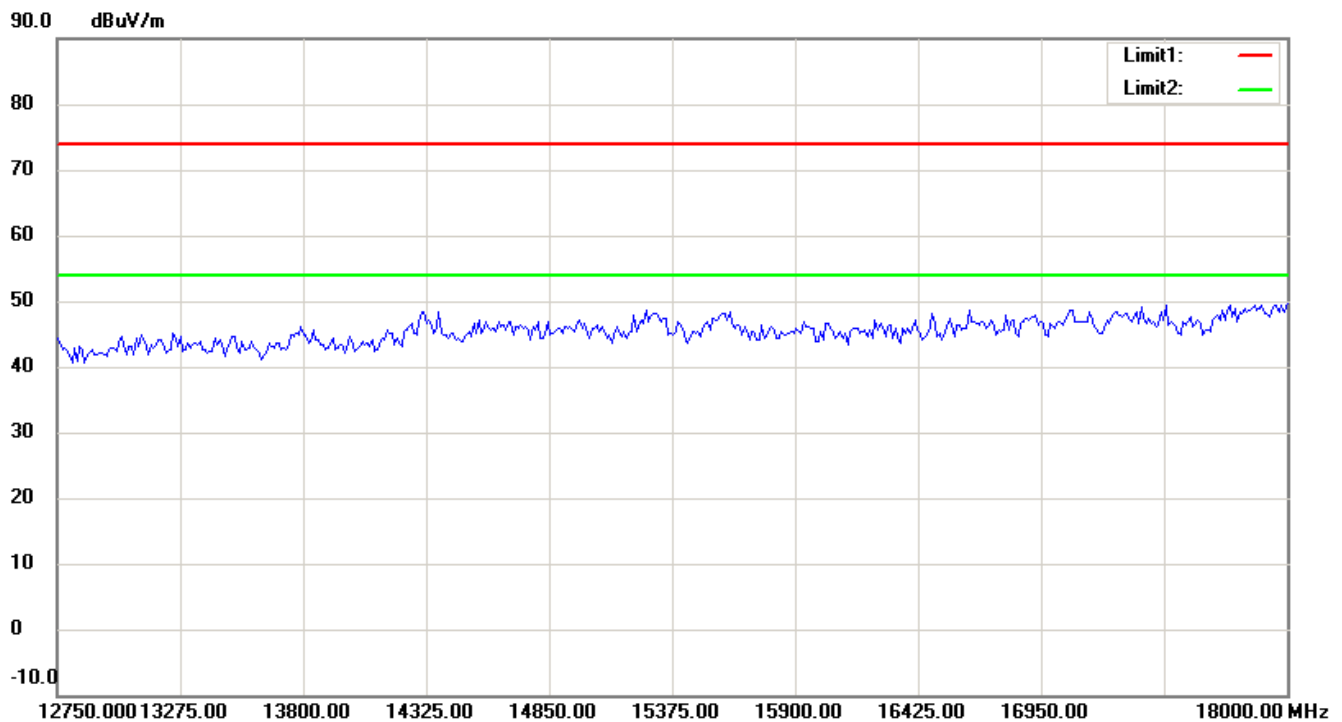
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Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

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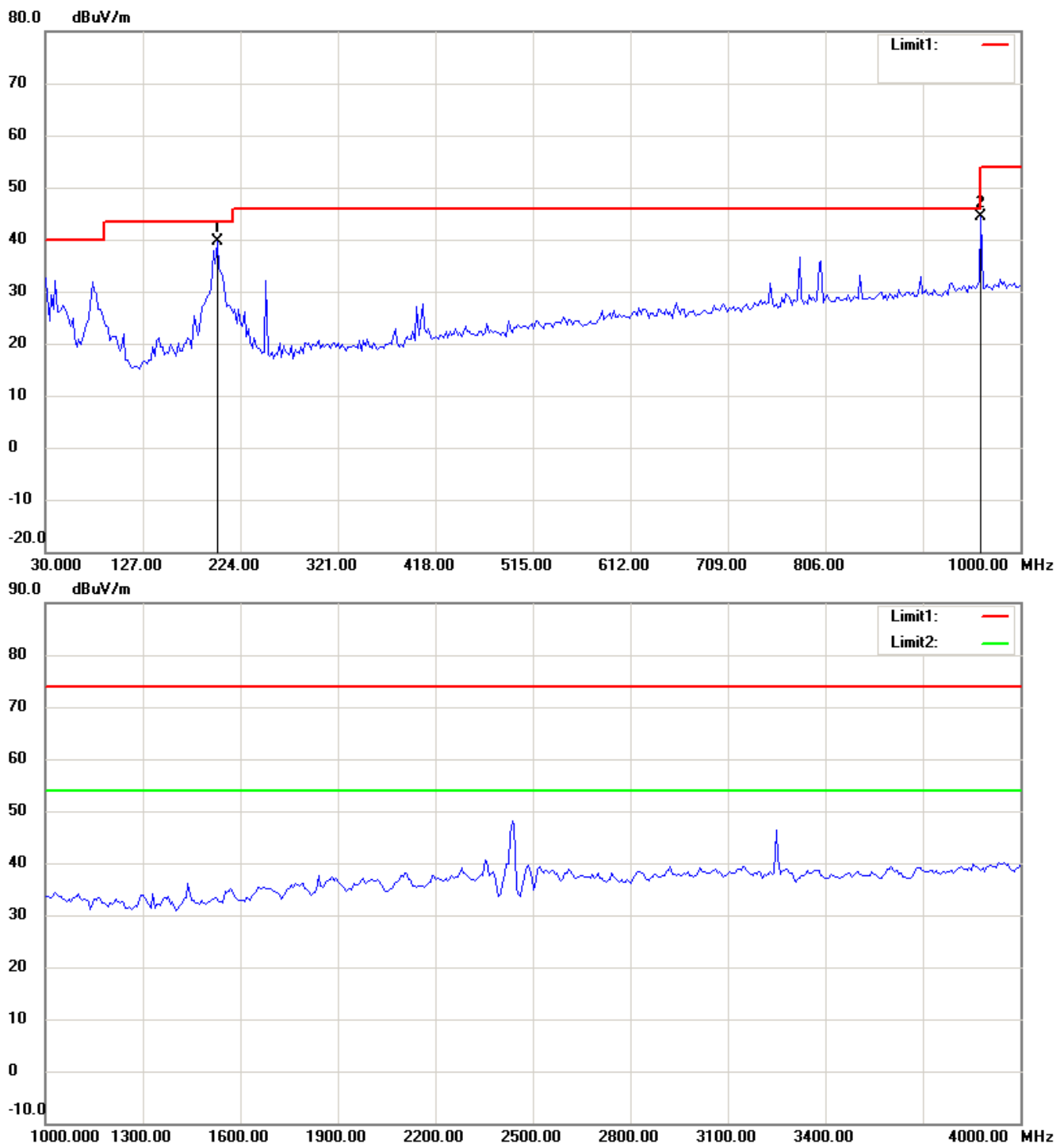


Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

Antenna Polarization V



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

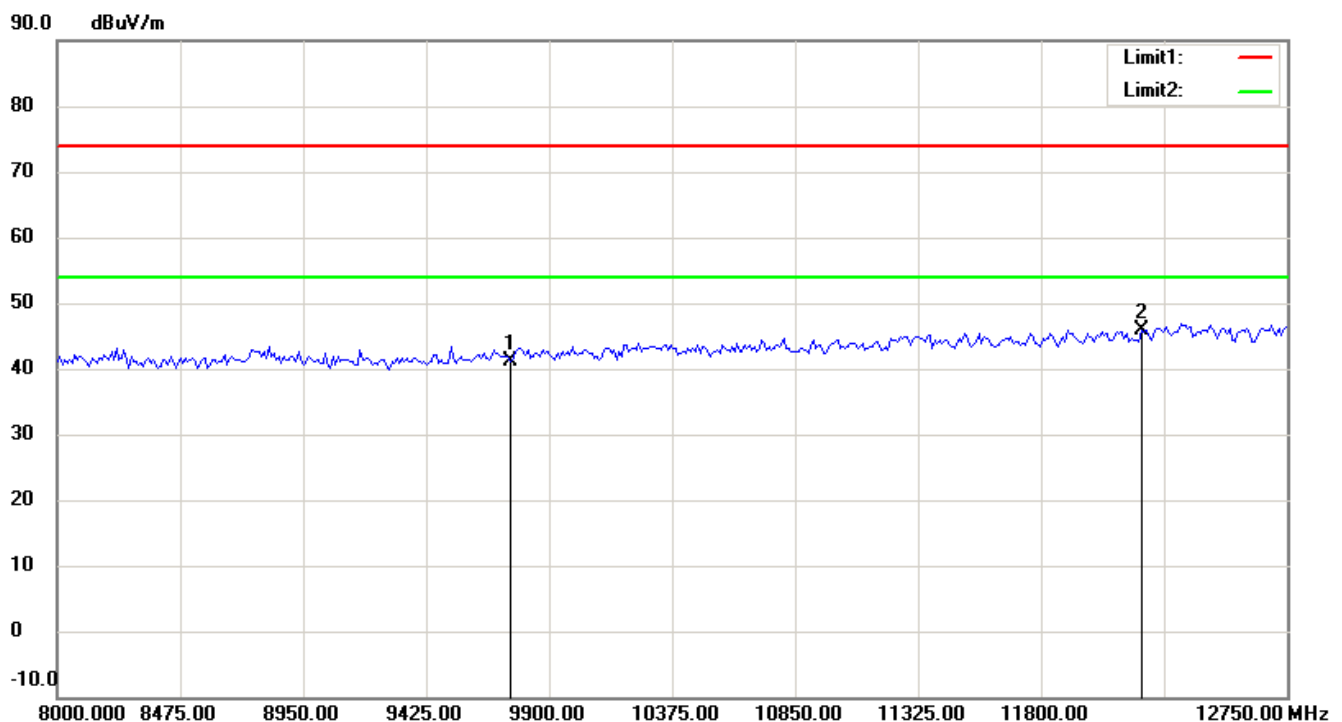
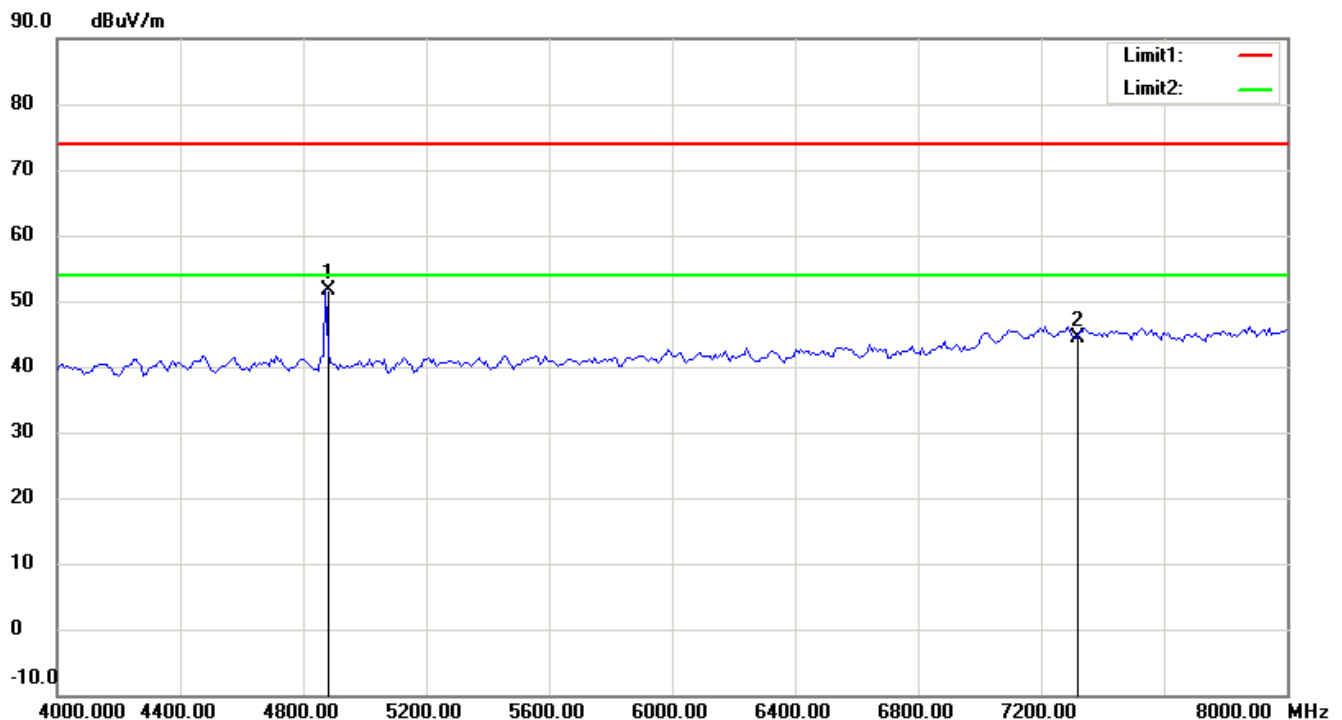
Note:

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Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

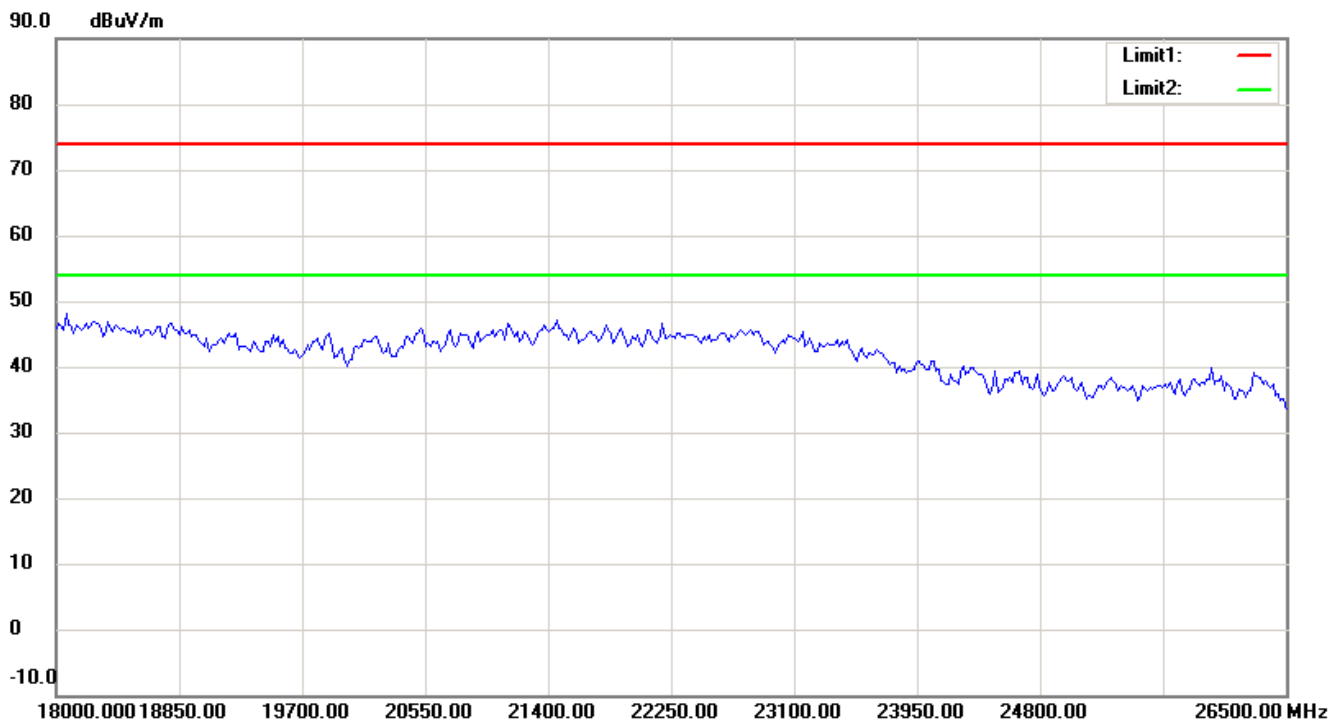
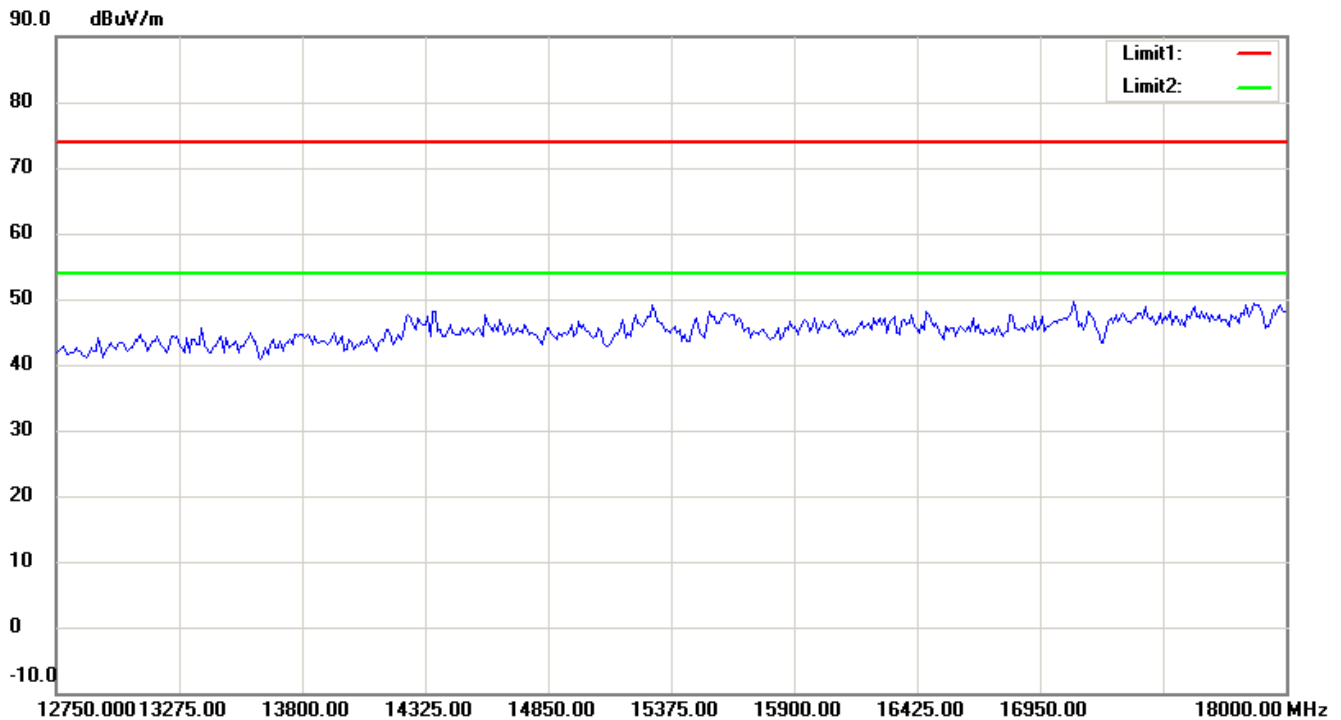
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Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

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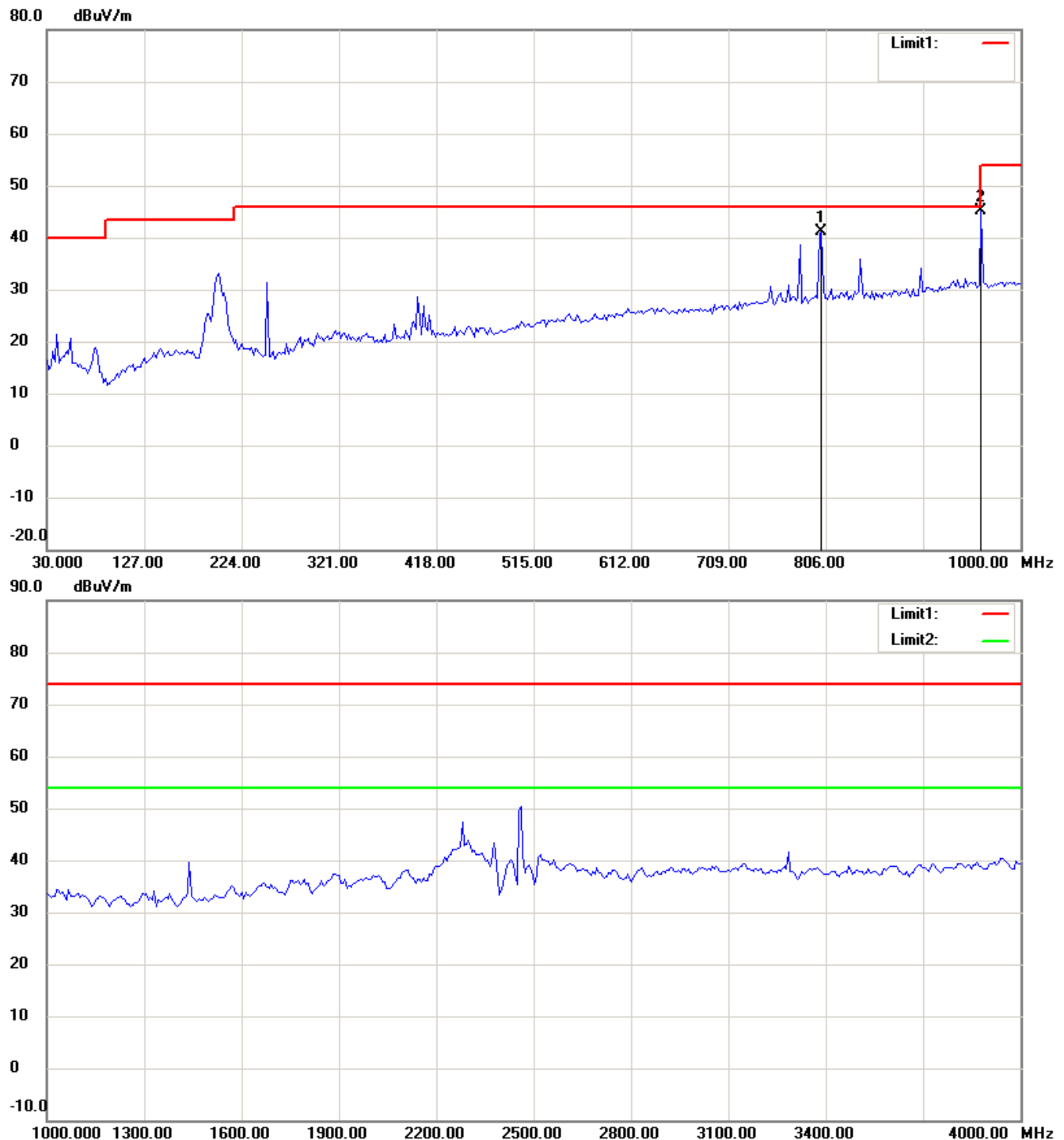


Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

CH11

Antenna Polarization H



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

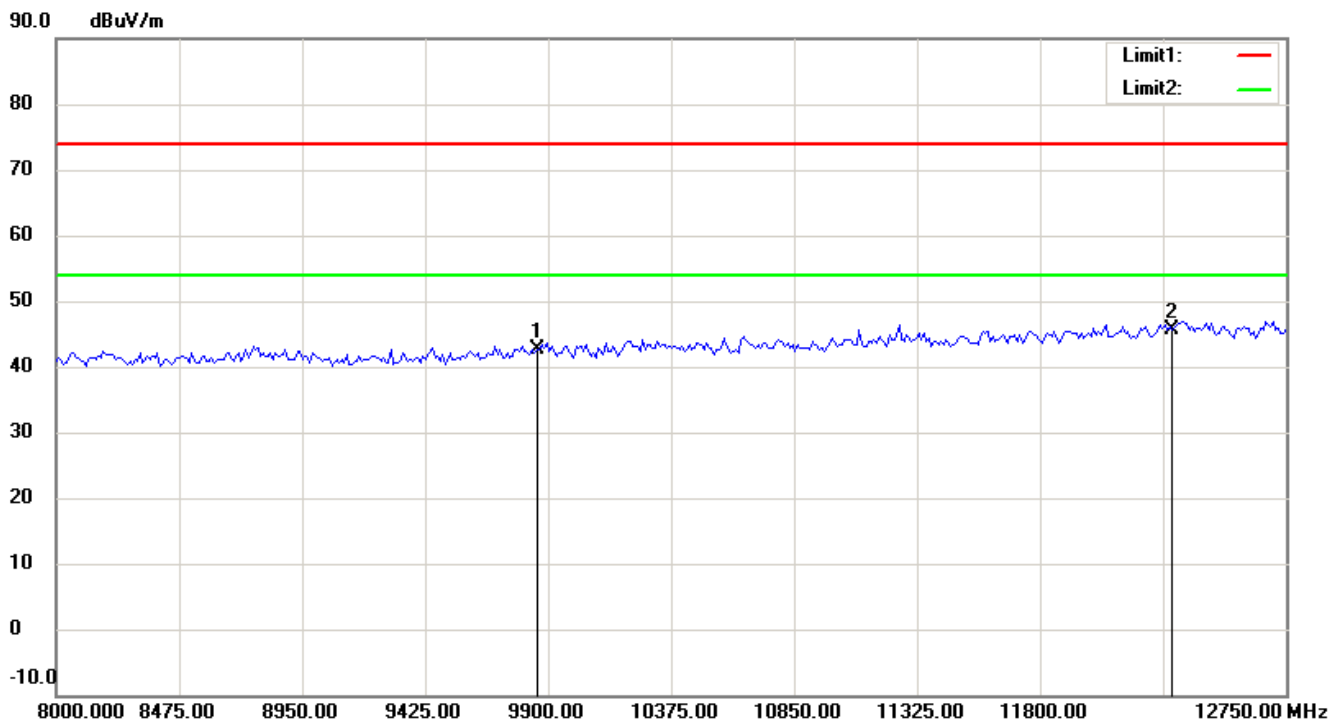
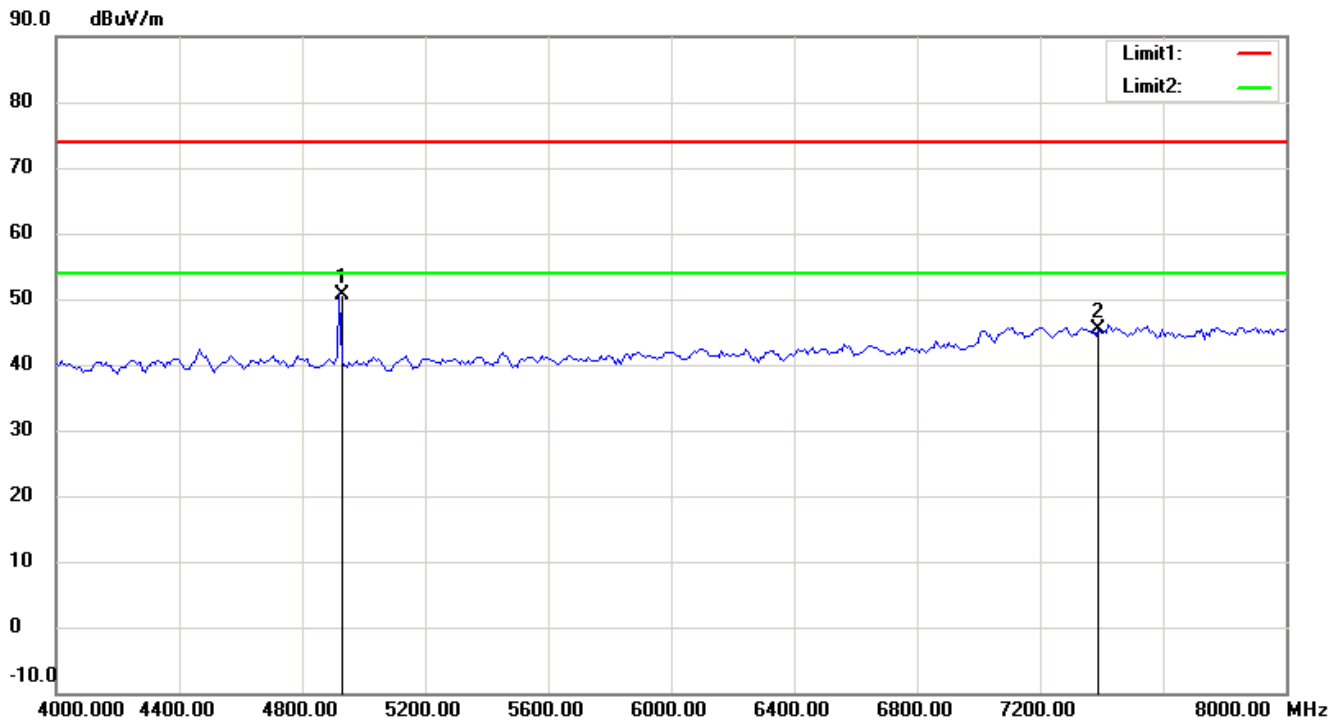
Note:

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Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

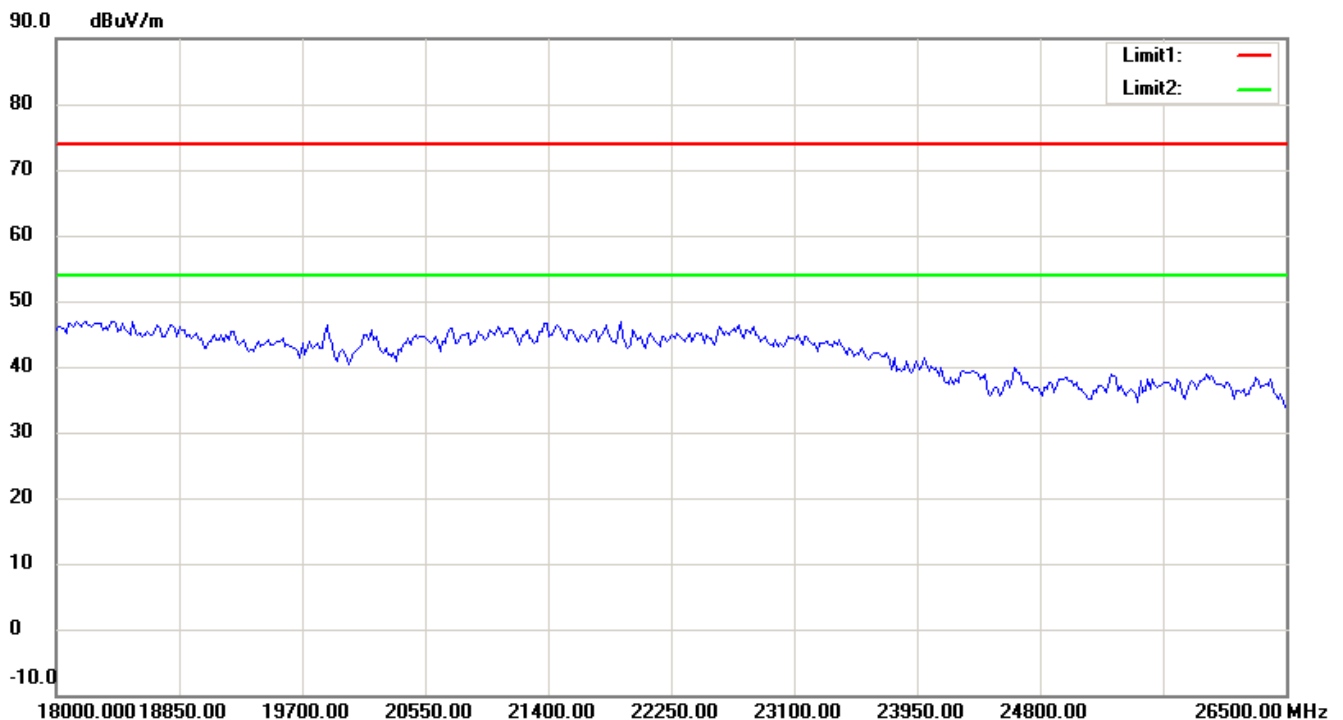
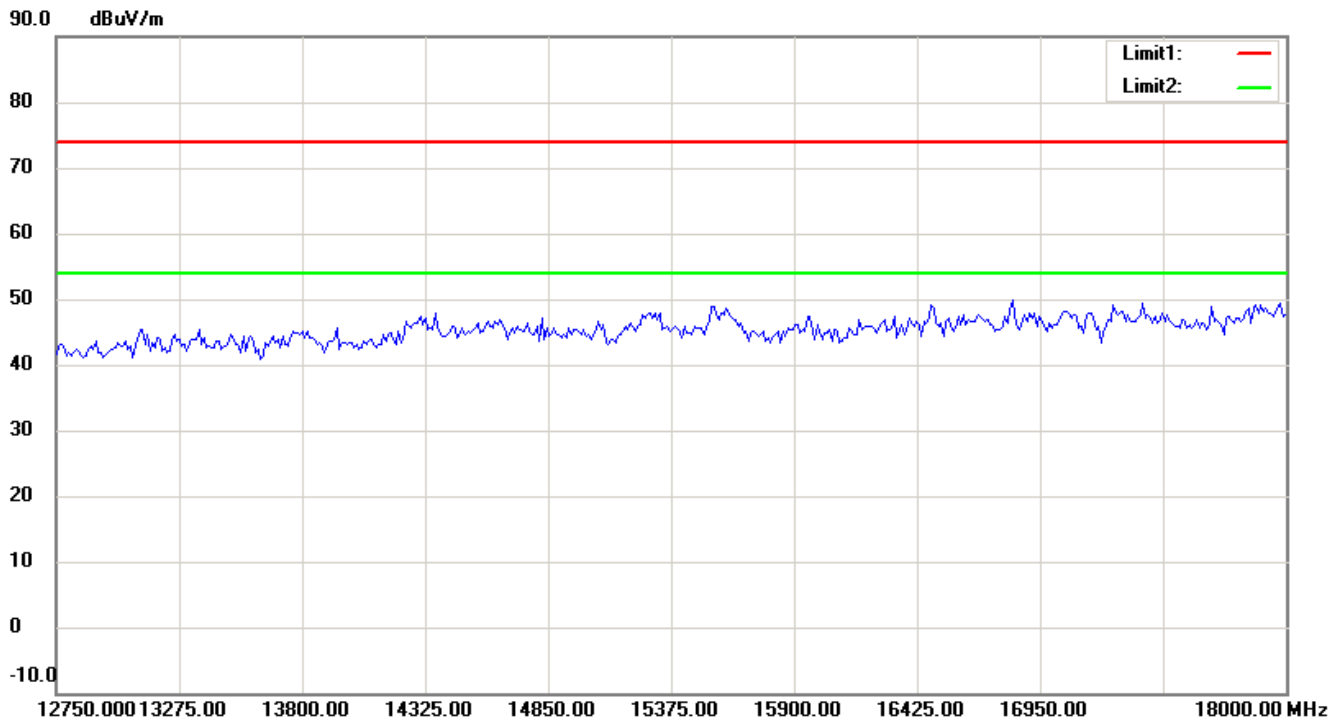
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Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

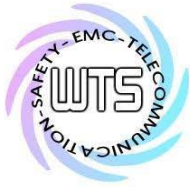
FCC ID: WKP-CSAW-02IP



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.
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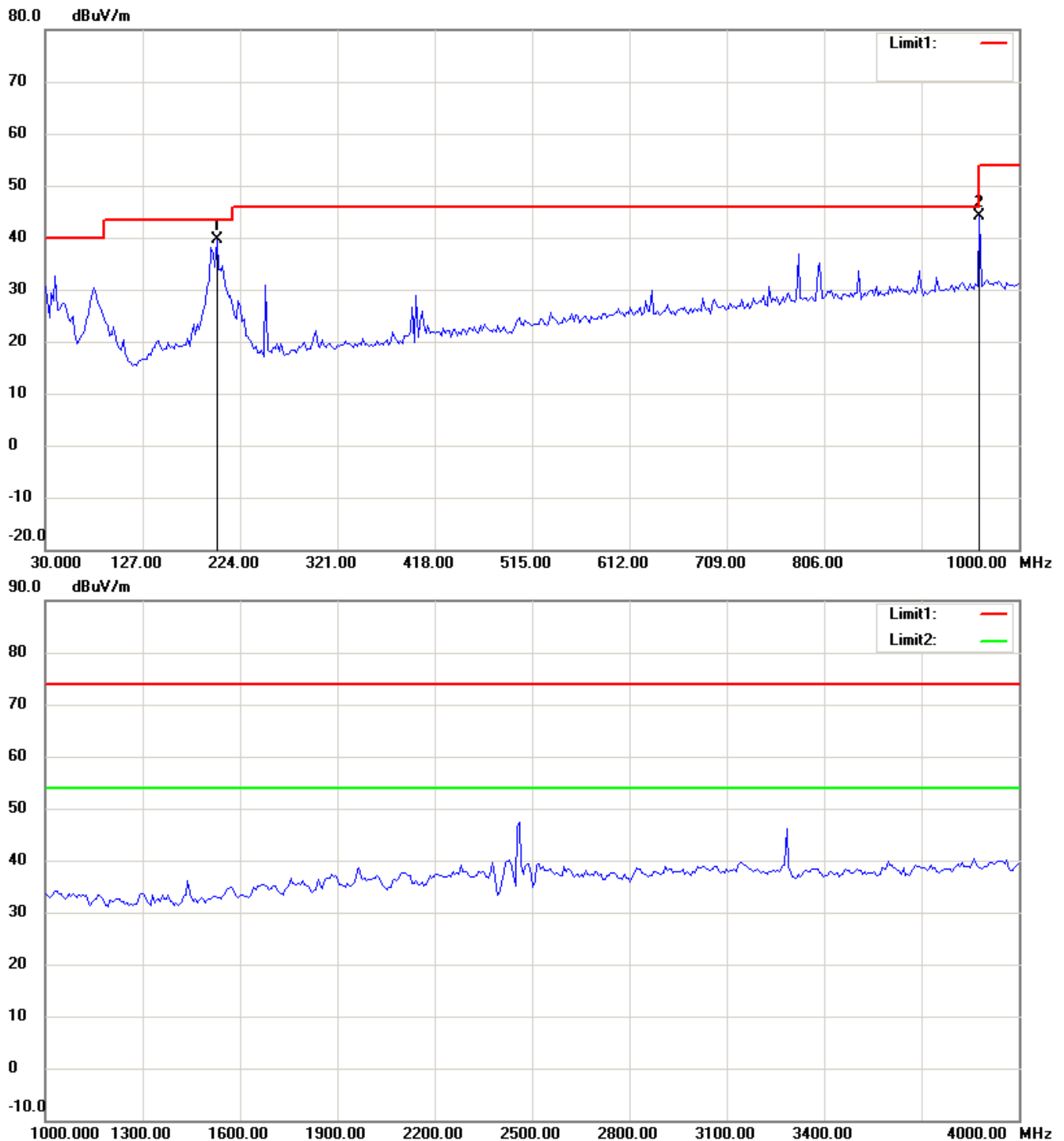


Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

Antenna Polarization V



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

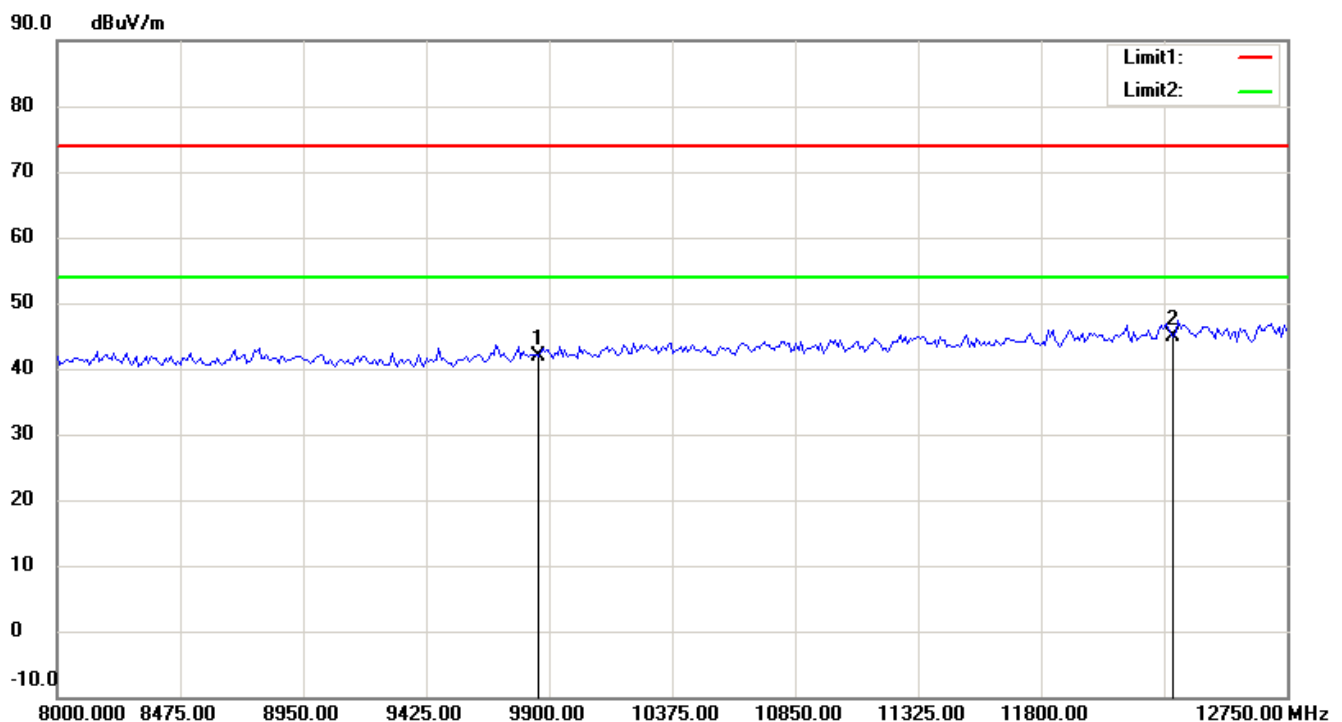
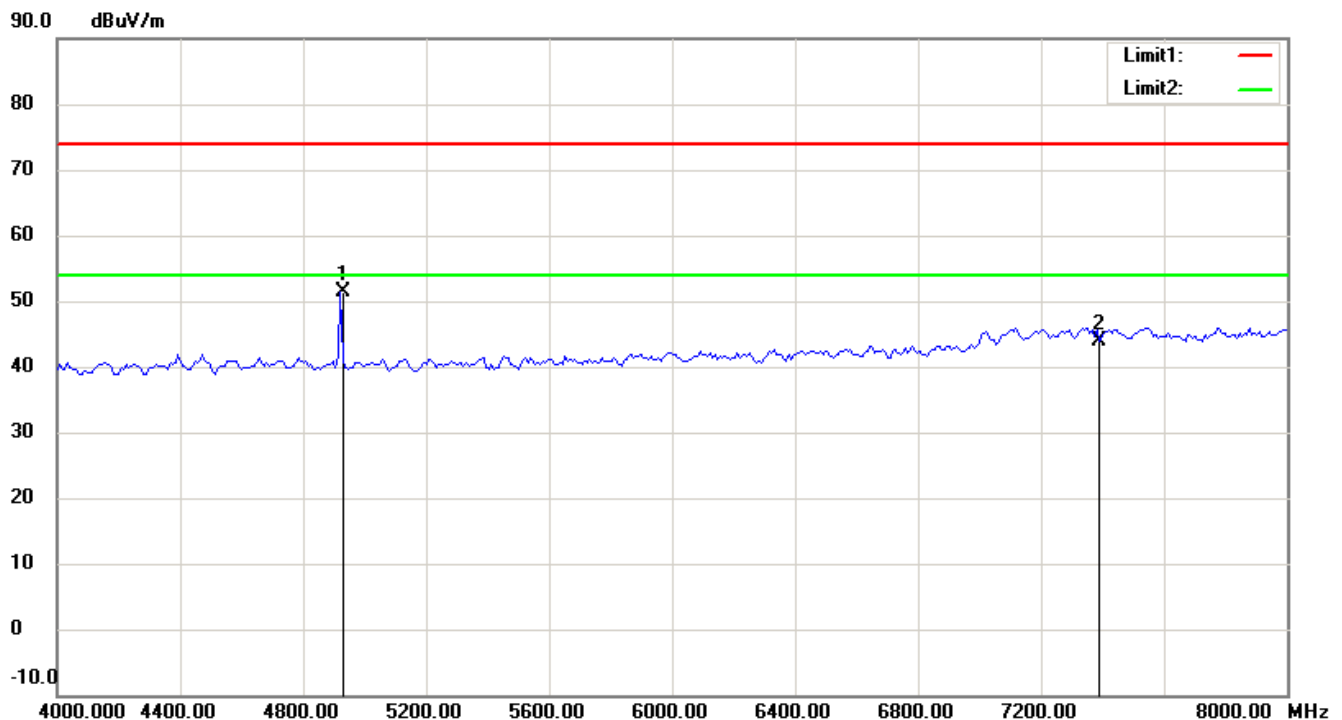
Note:

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Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

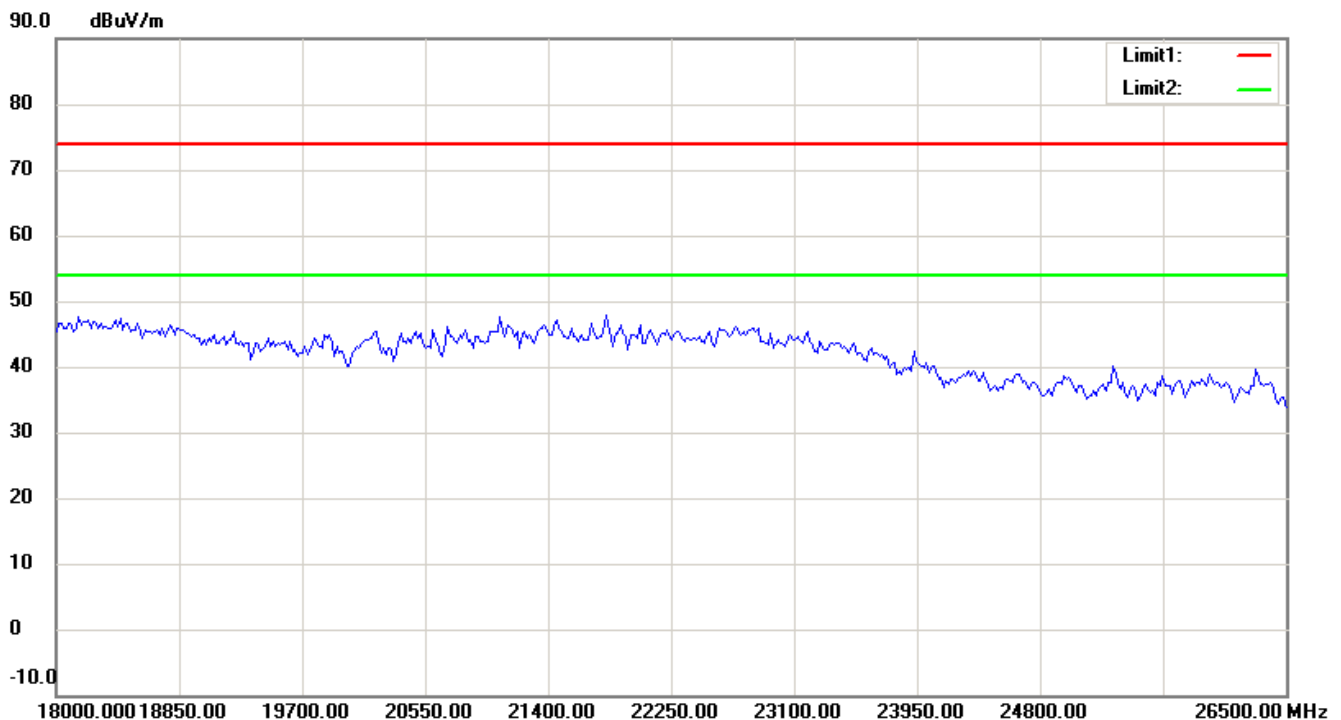
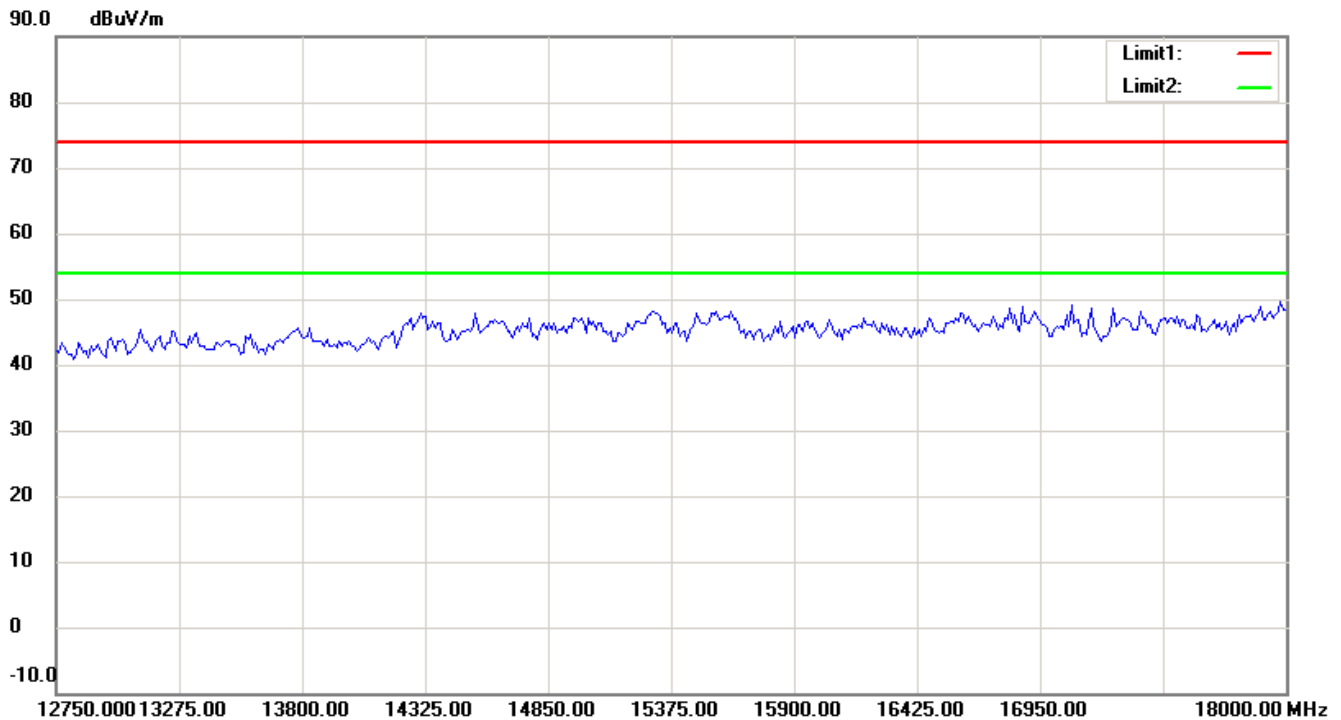
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Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

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Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

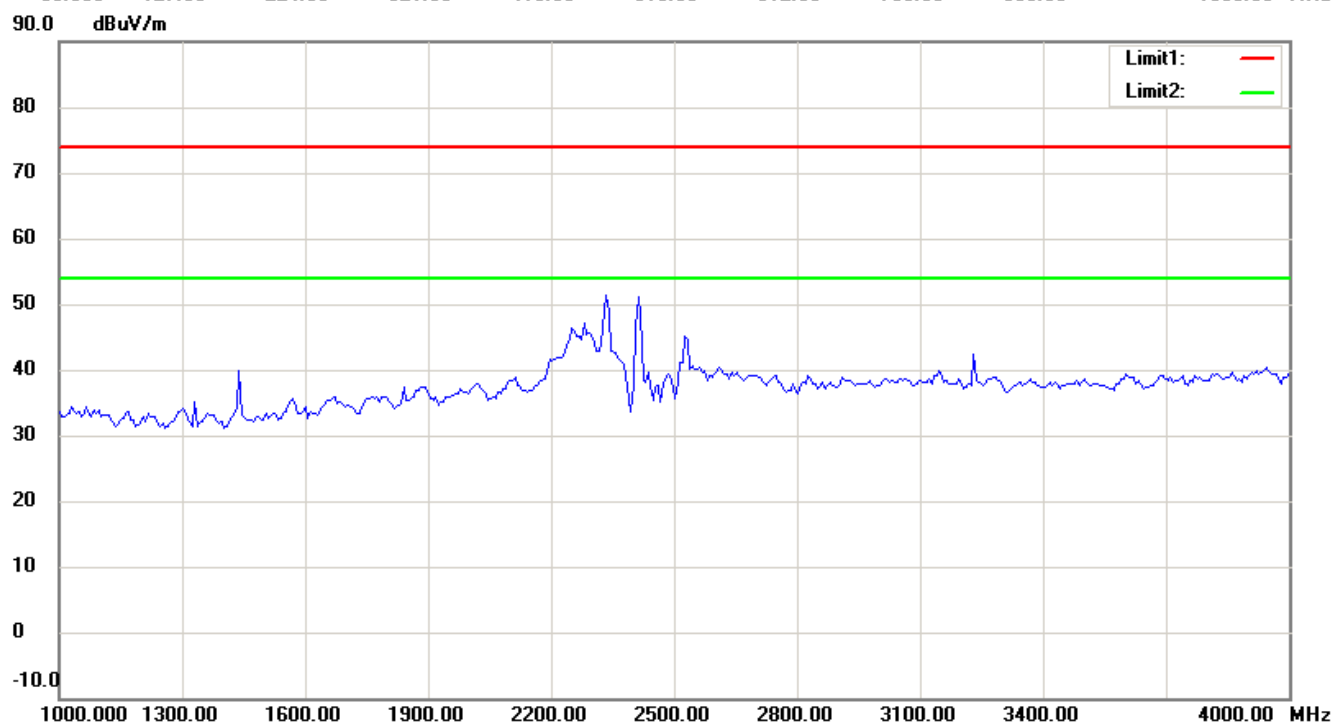
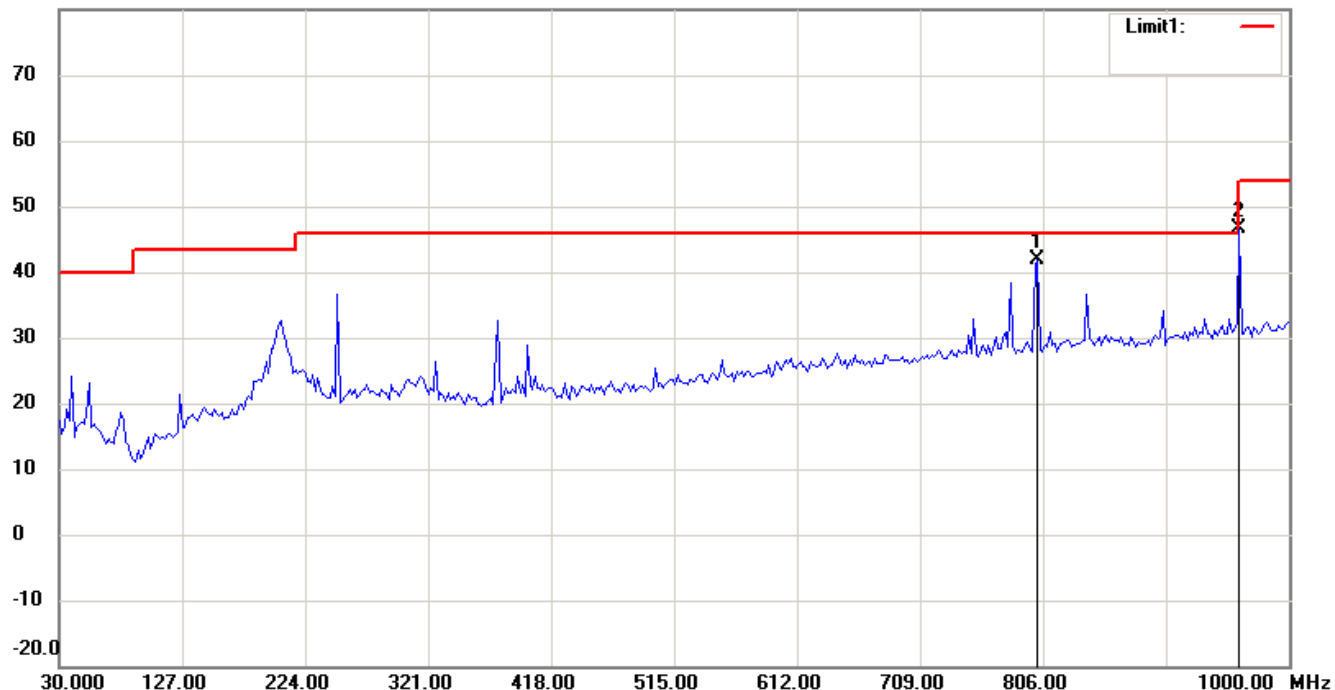
FCC ID: WKP-CSAW-02IP

ANT 1 + ANT 2

802.11n 40MHz_CH1

Antenna Polarization H

80.0 dBuV/m



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

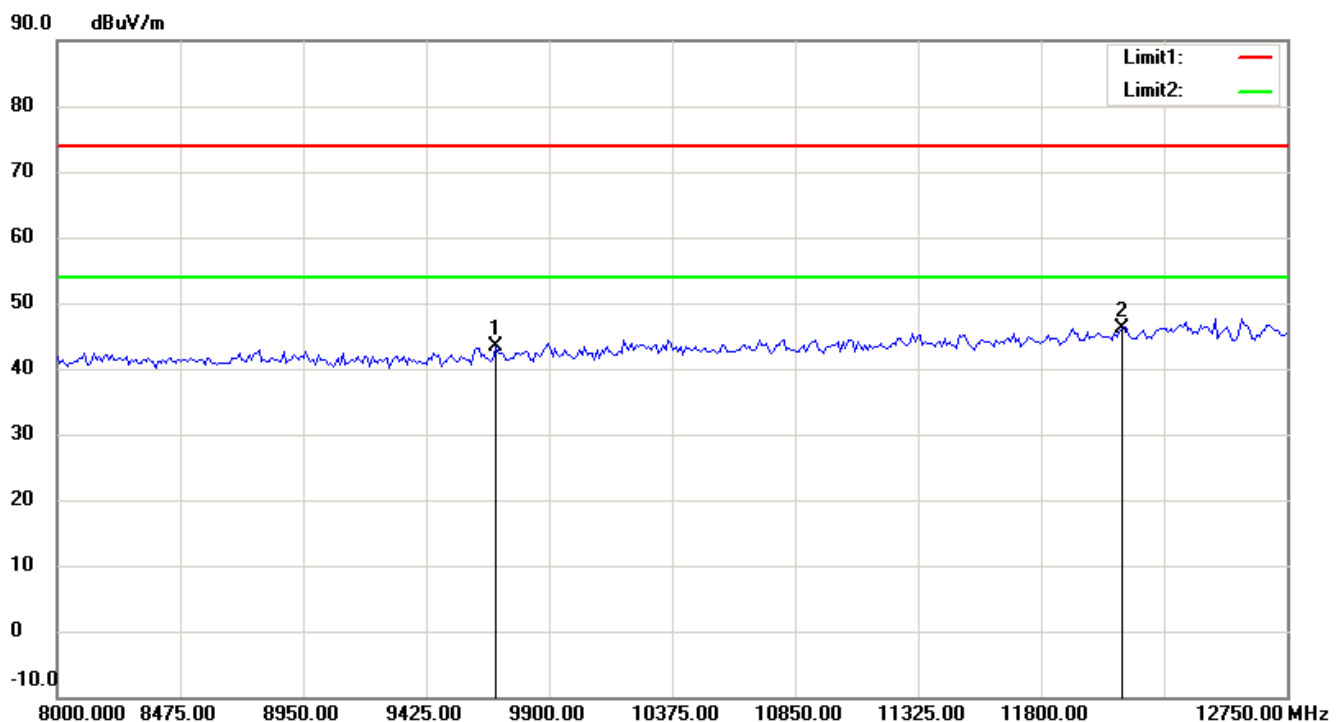
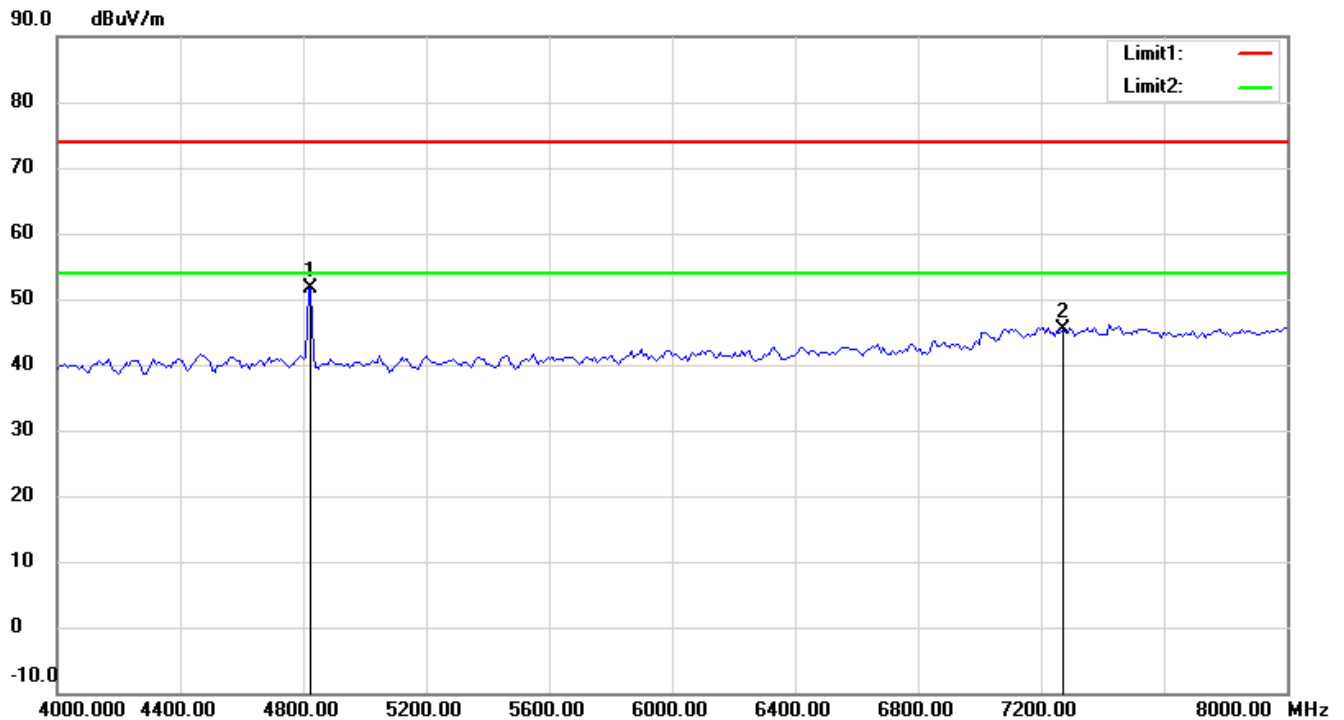
Note:

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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: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

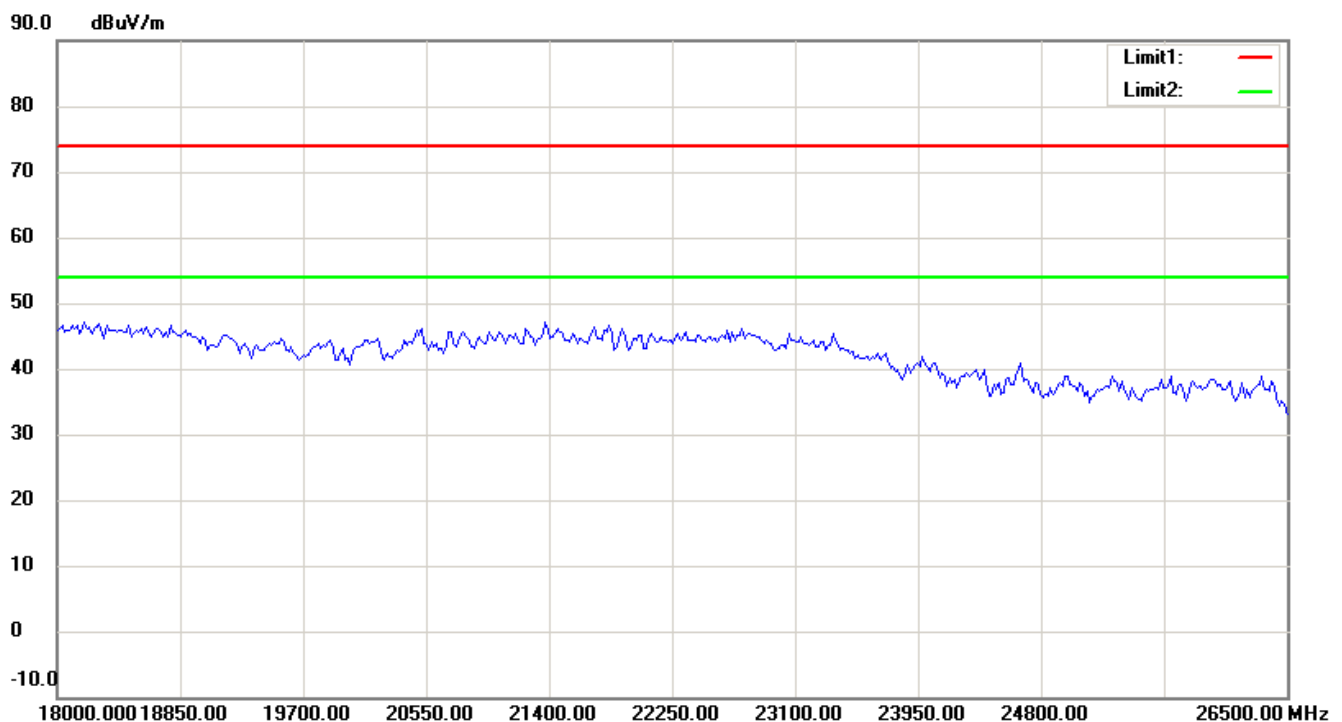
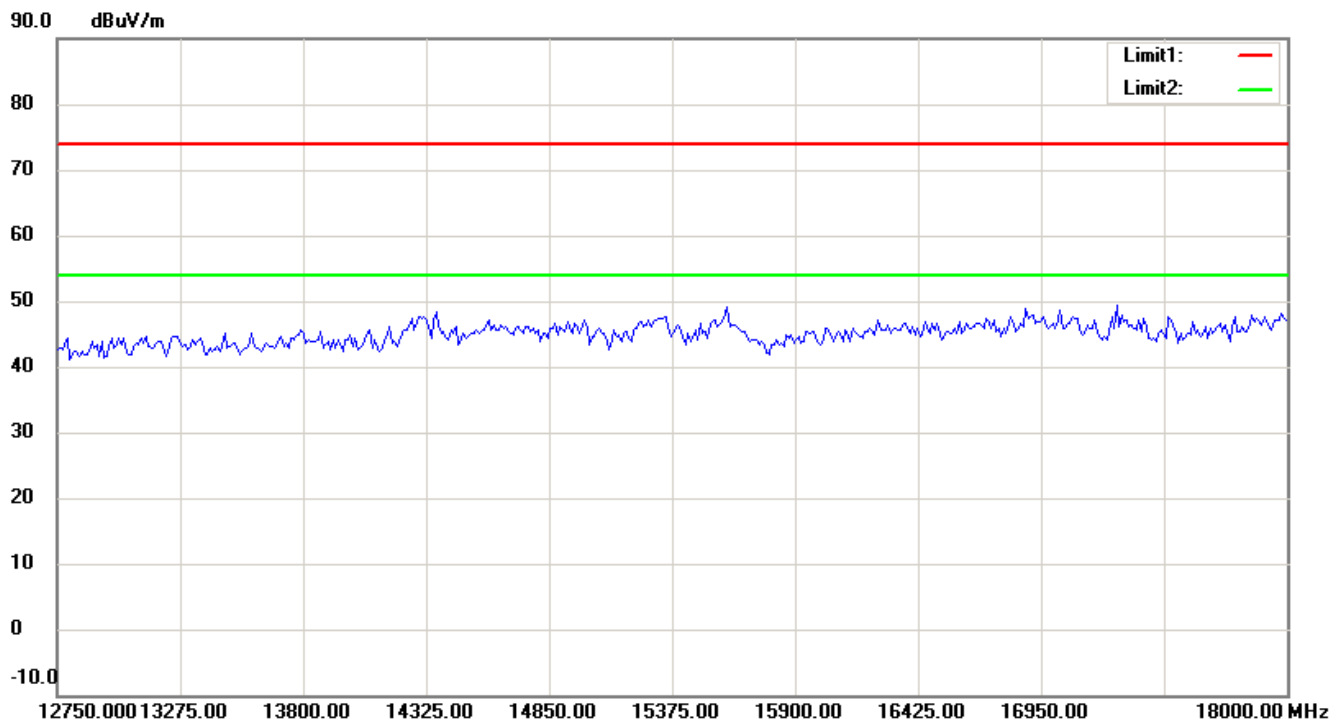
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Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

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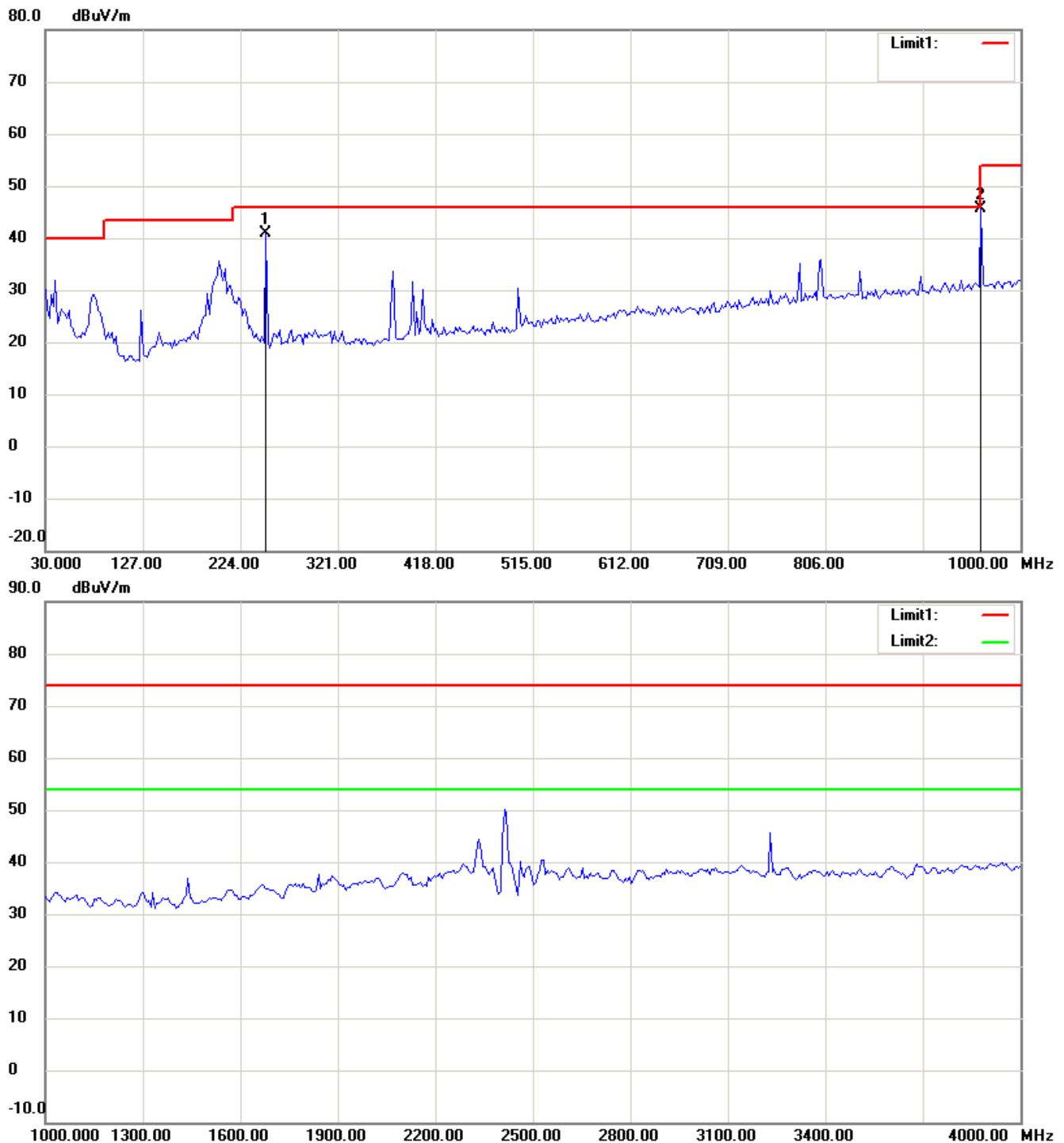


Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

Antenna Polarization V



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

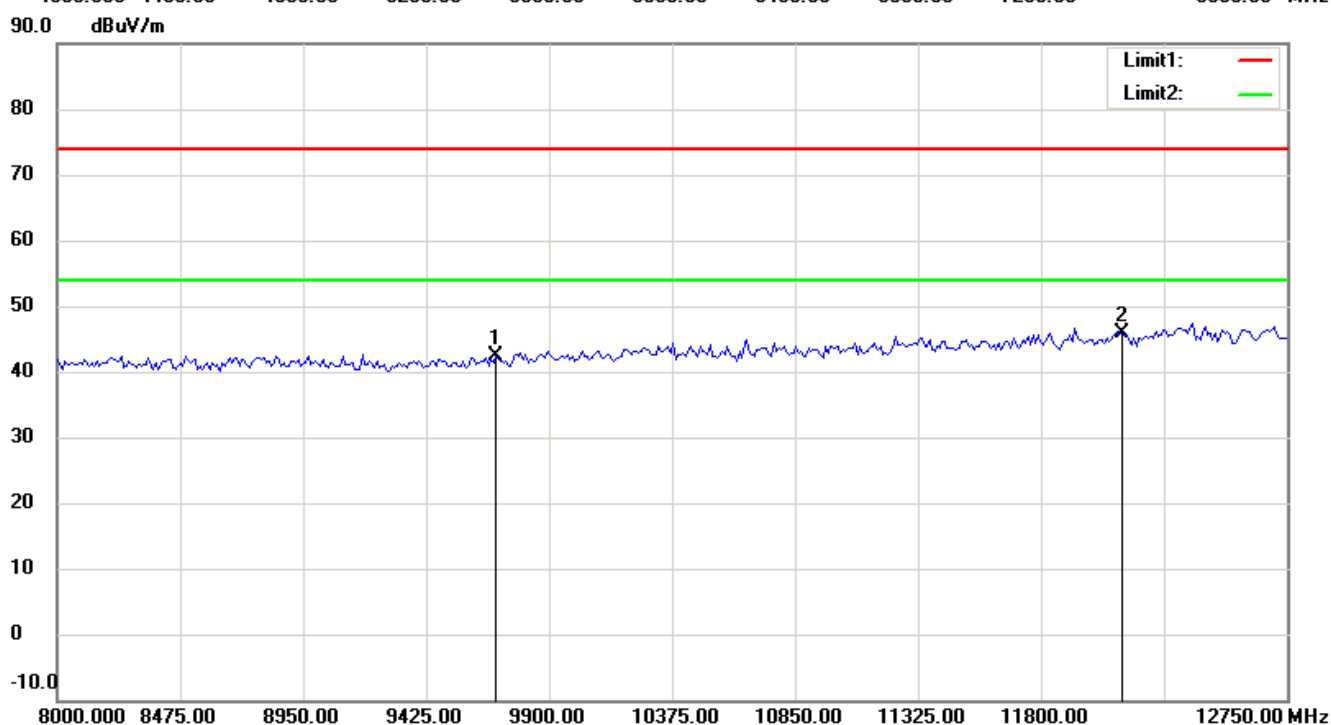
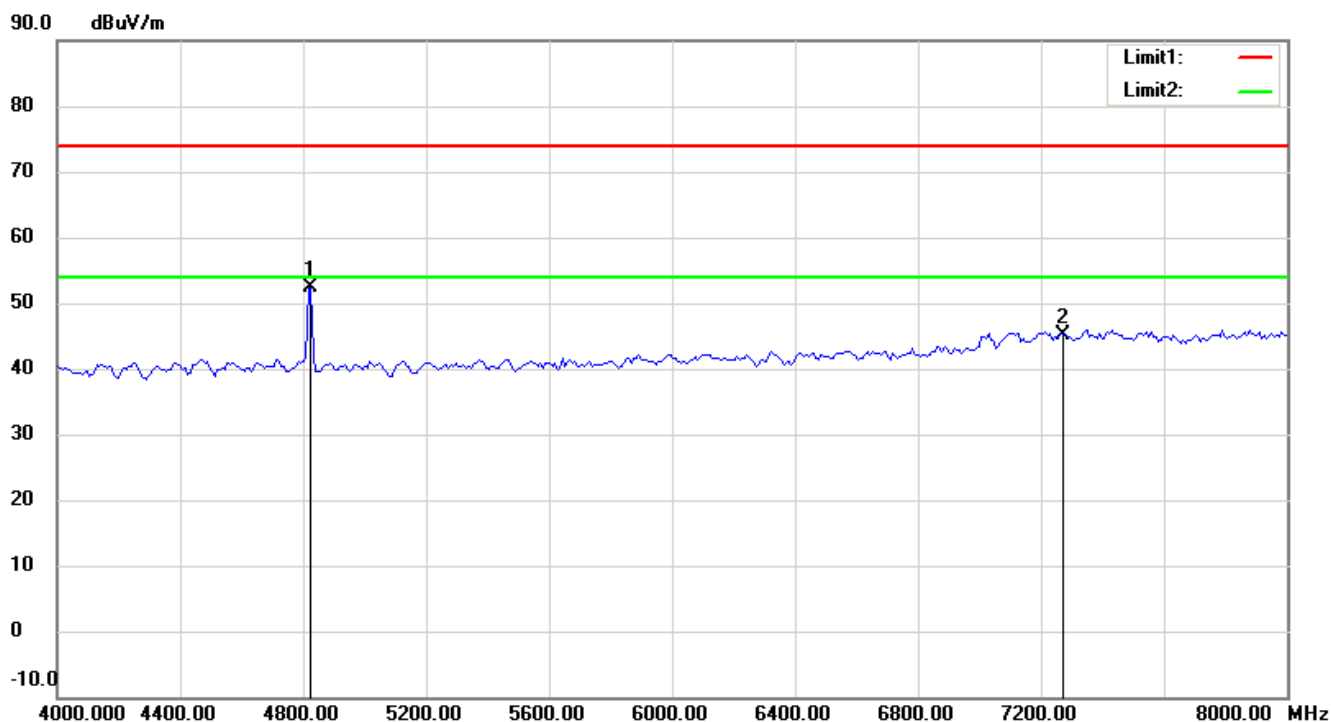
Note:

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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: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

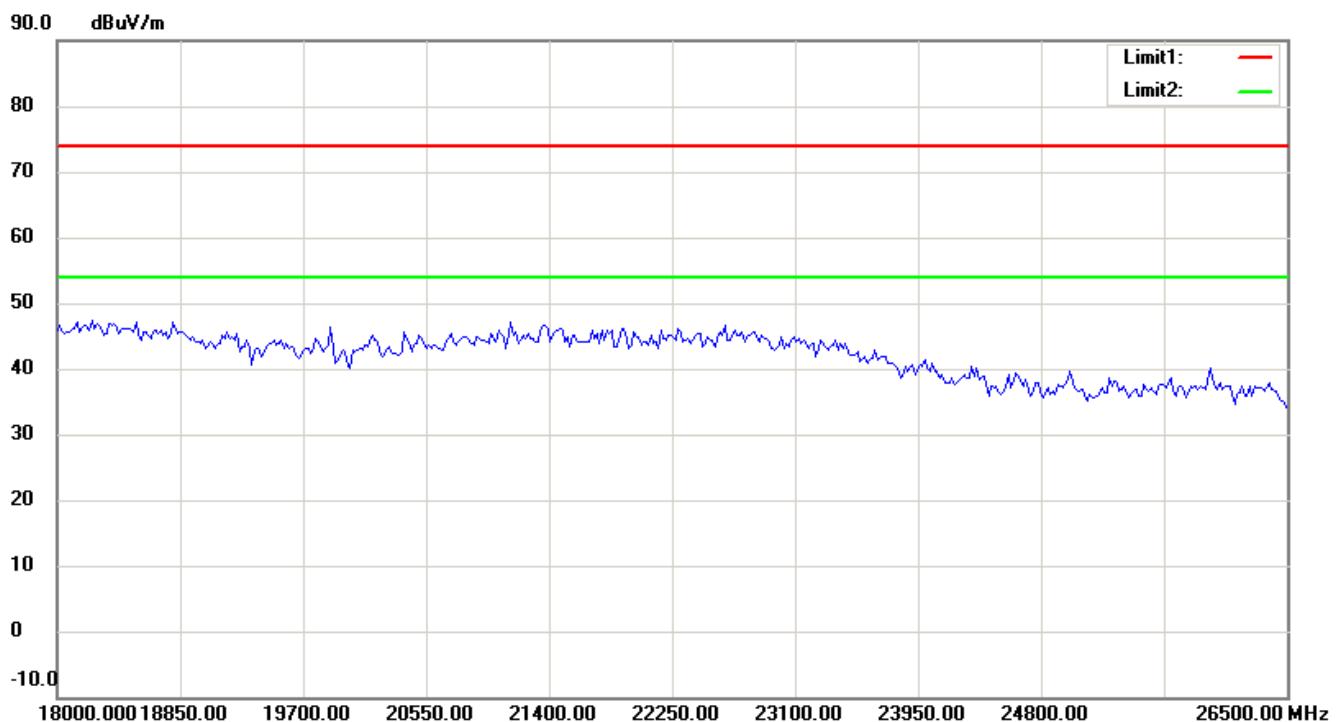
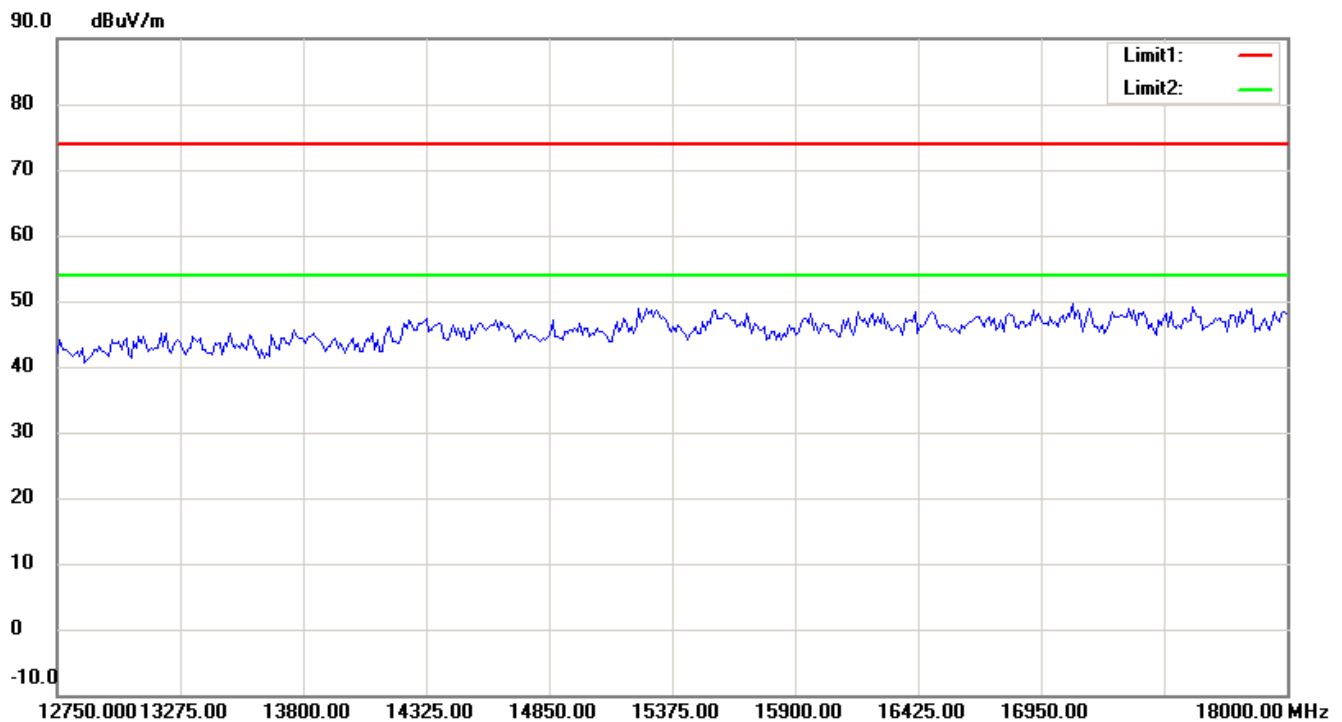
1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
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Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

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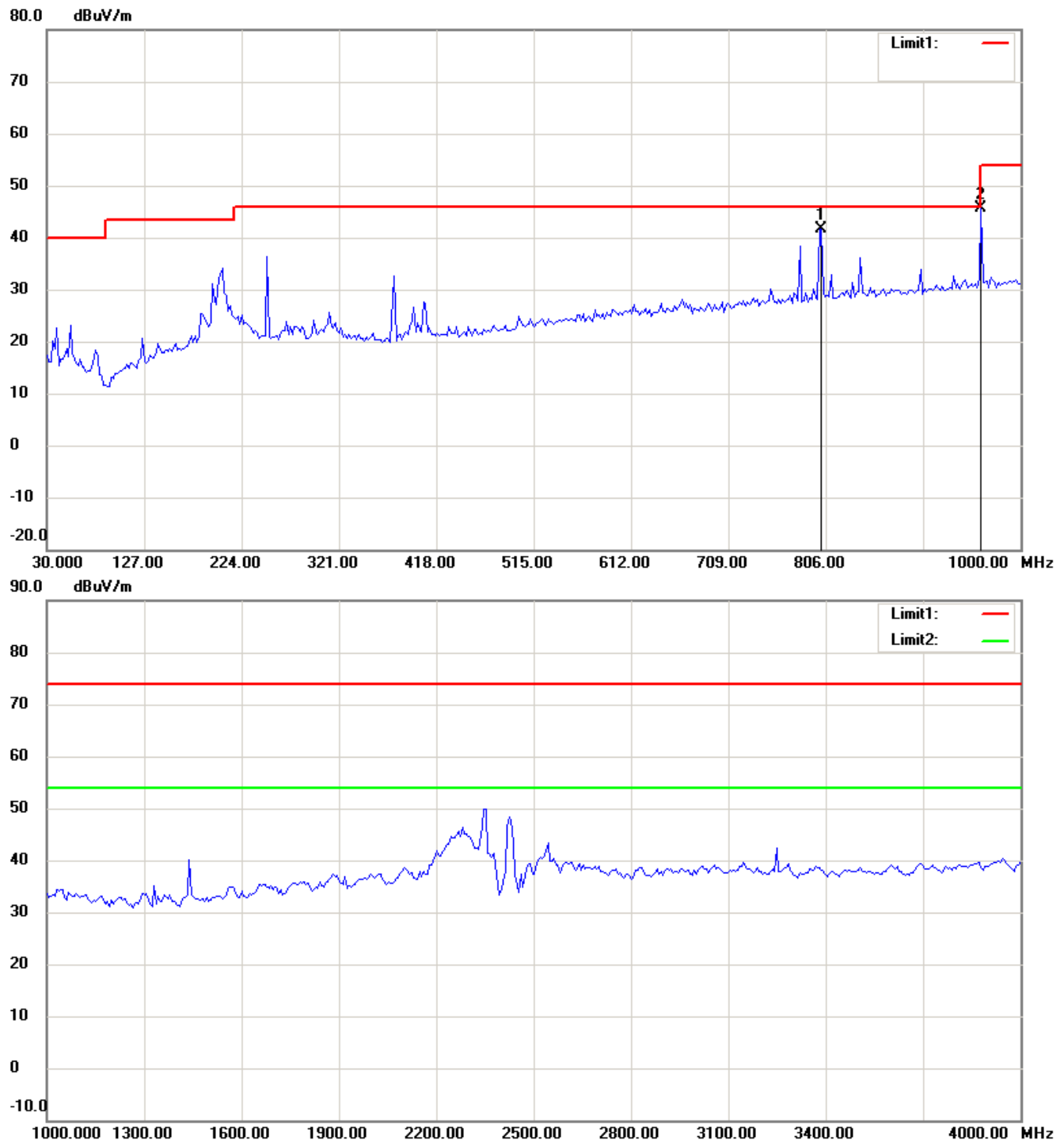
Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

CH4

Antenna Polarization H



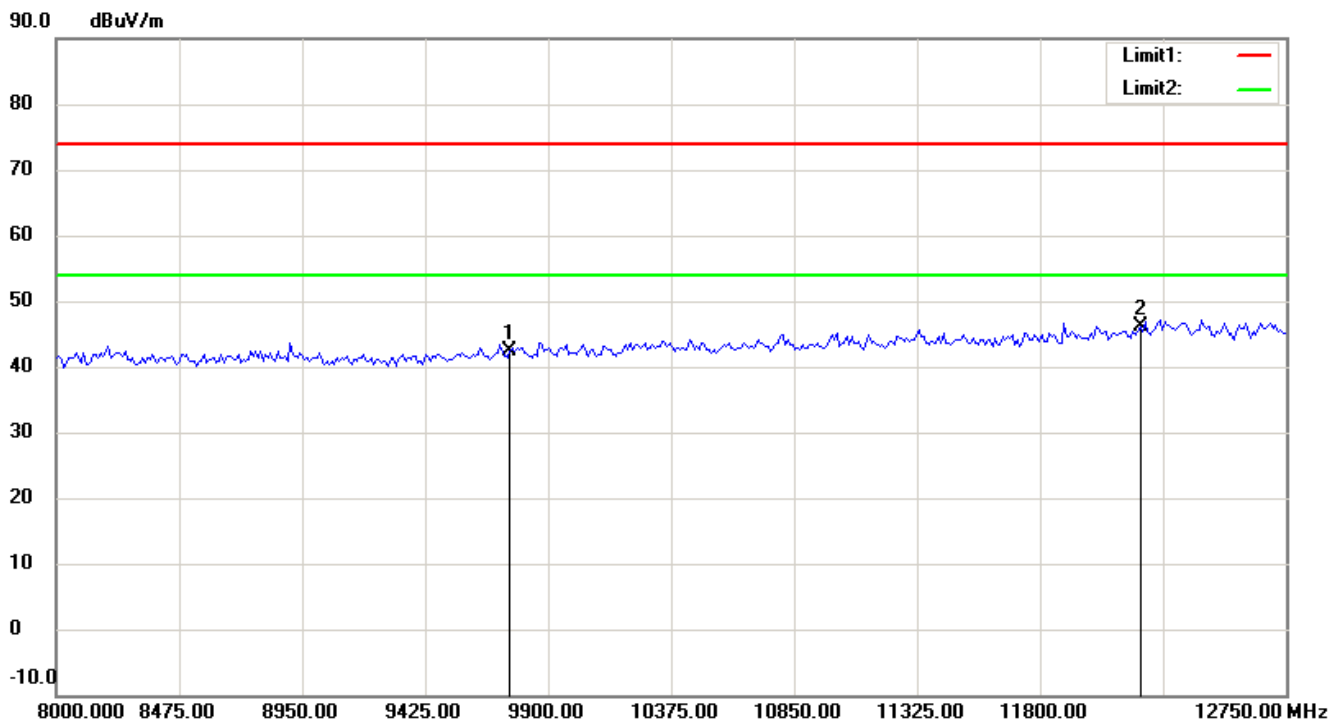
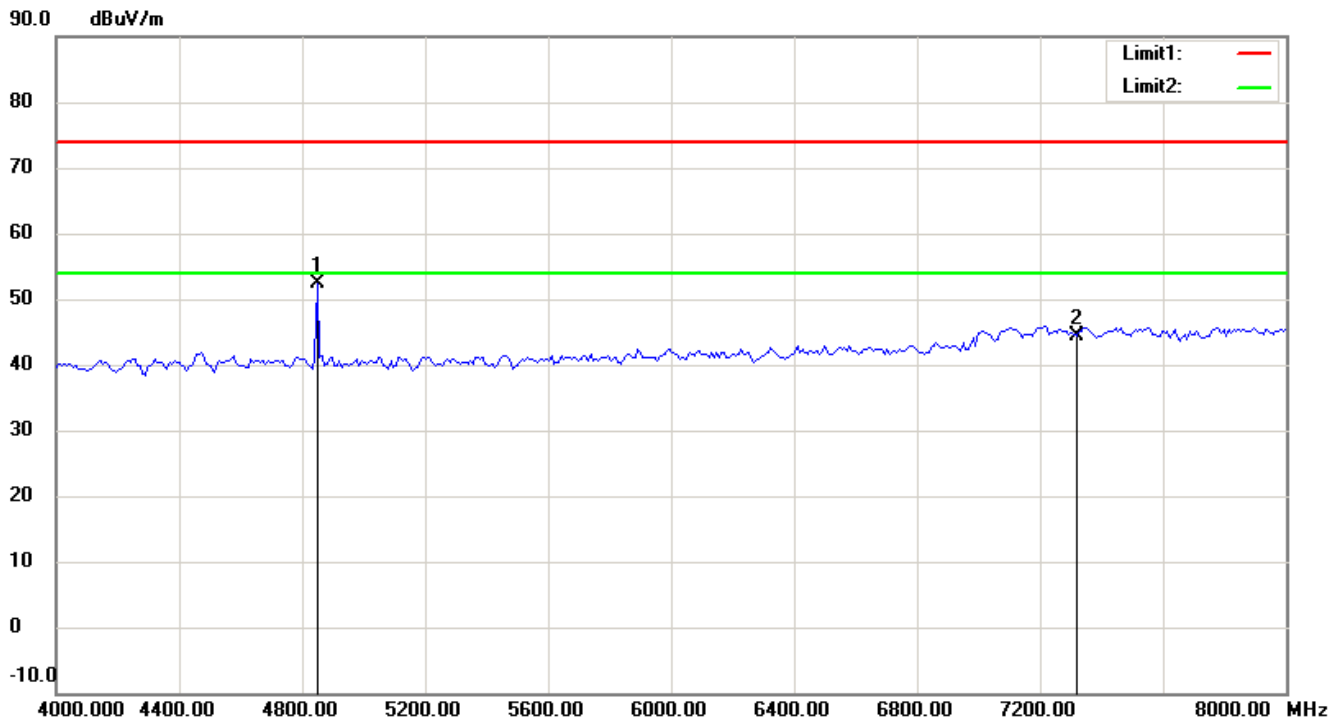
Up Line: Peak Limit Line Down Line: Ave Limit Line

Note:

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Registration number: W6D21301-12971-C-1
FCC ID: WKP-CSAW-02IP



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

Note:

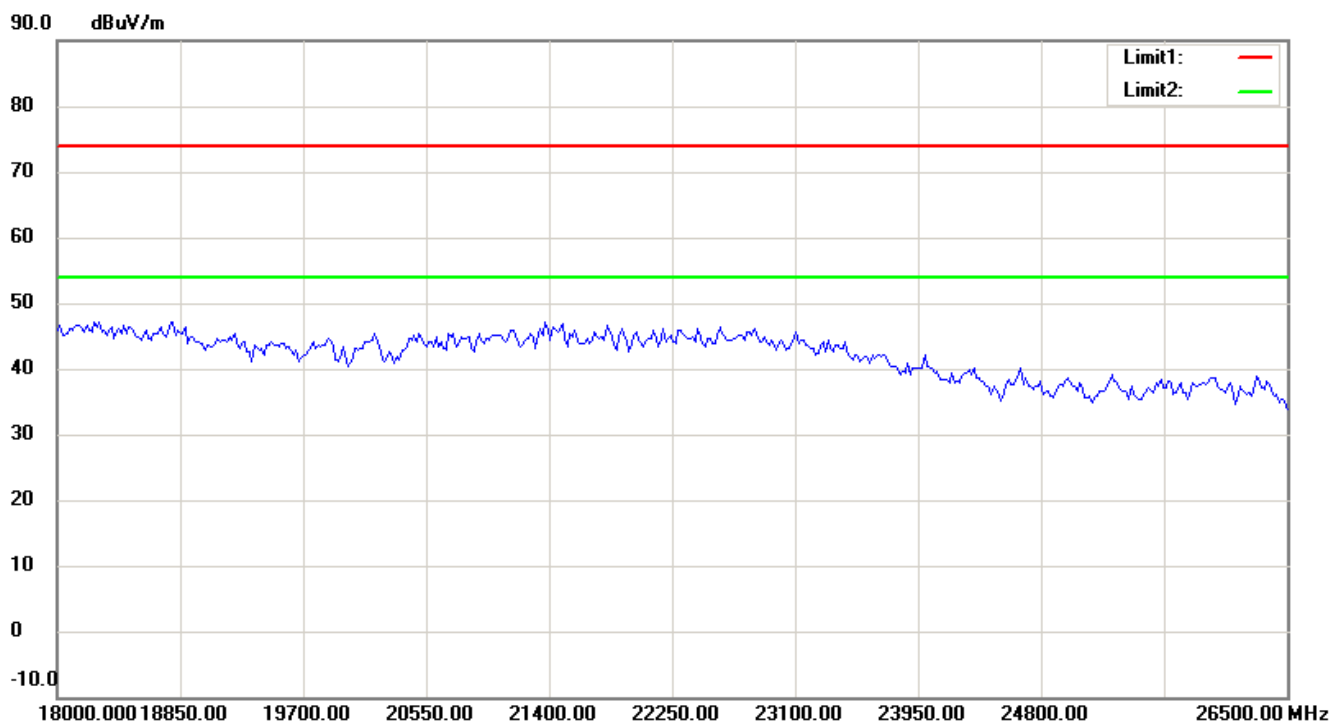
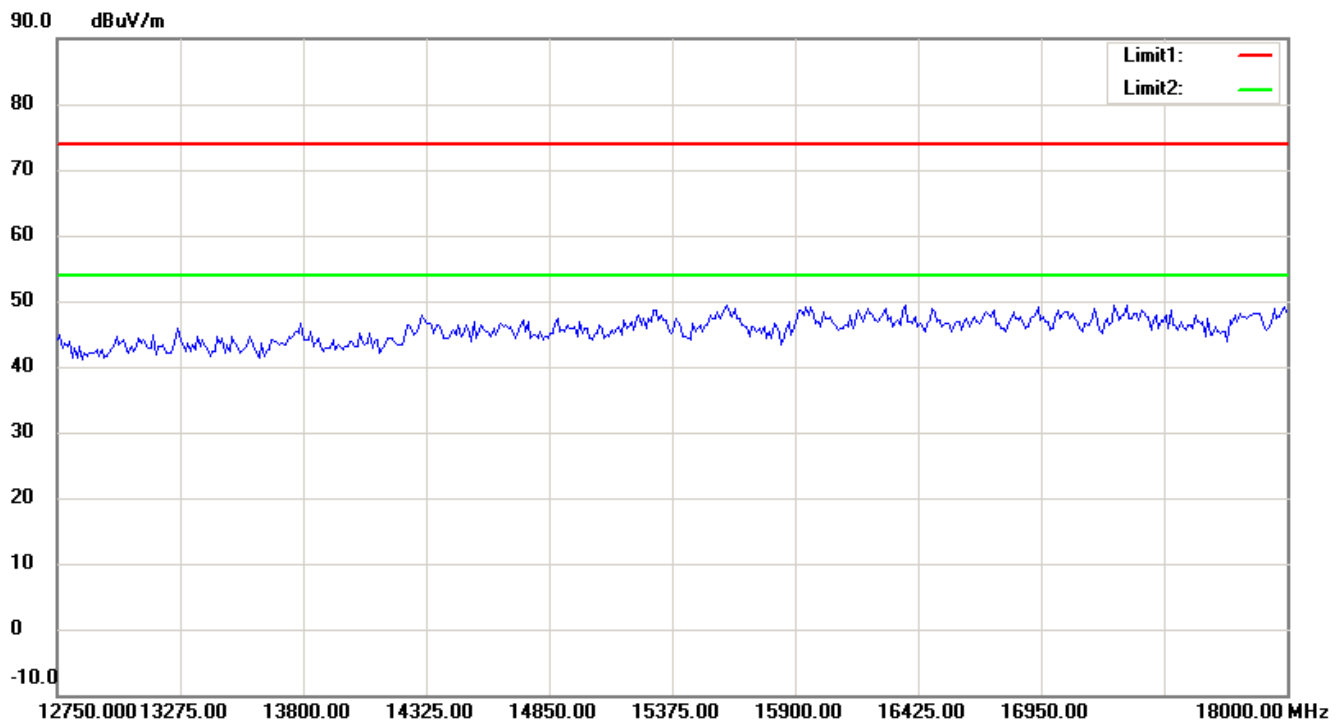
1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
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Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

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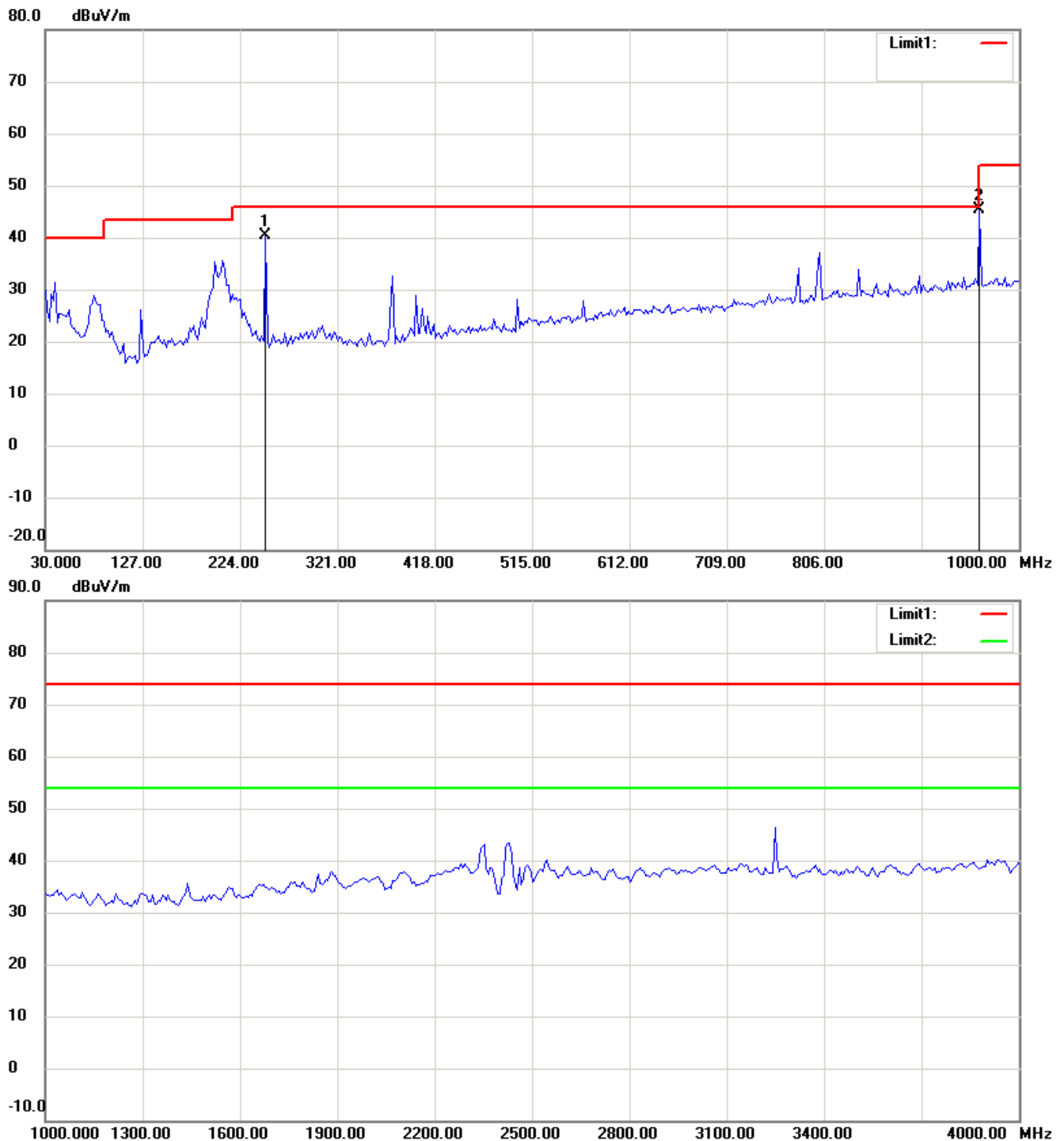


Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

Antenna Polarization V



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

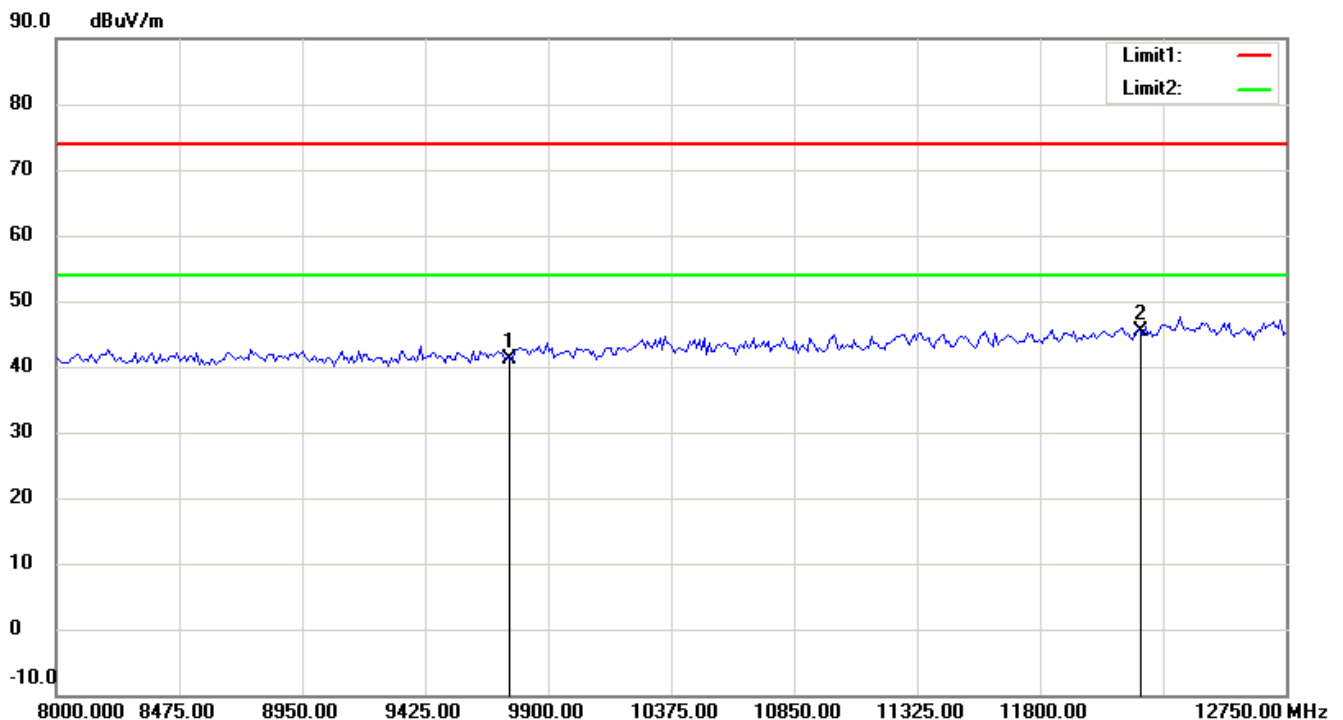
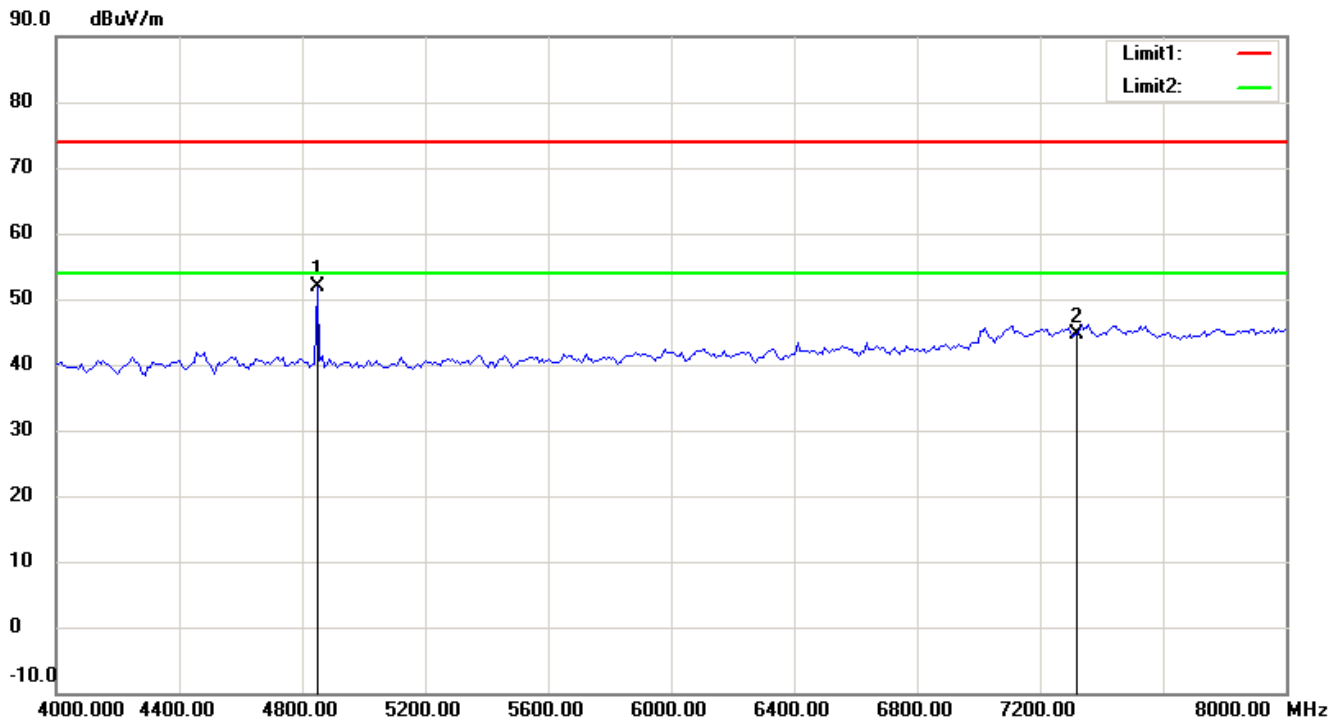
Note:

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Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

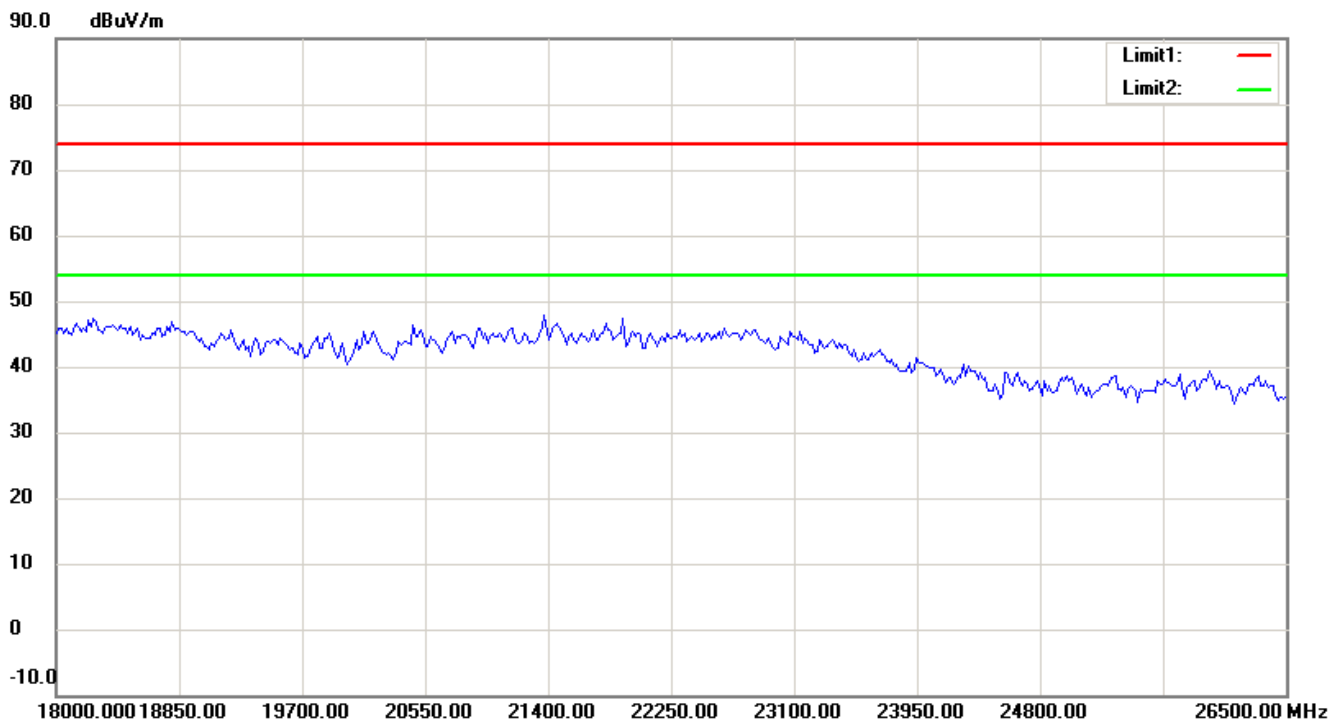
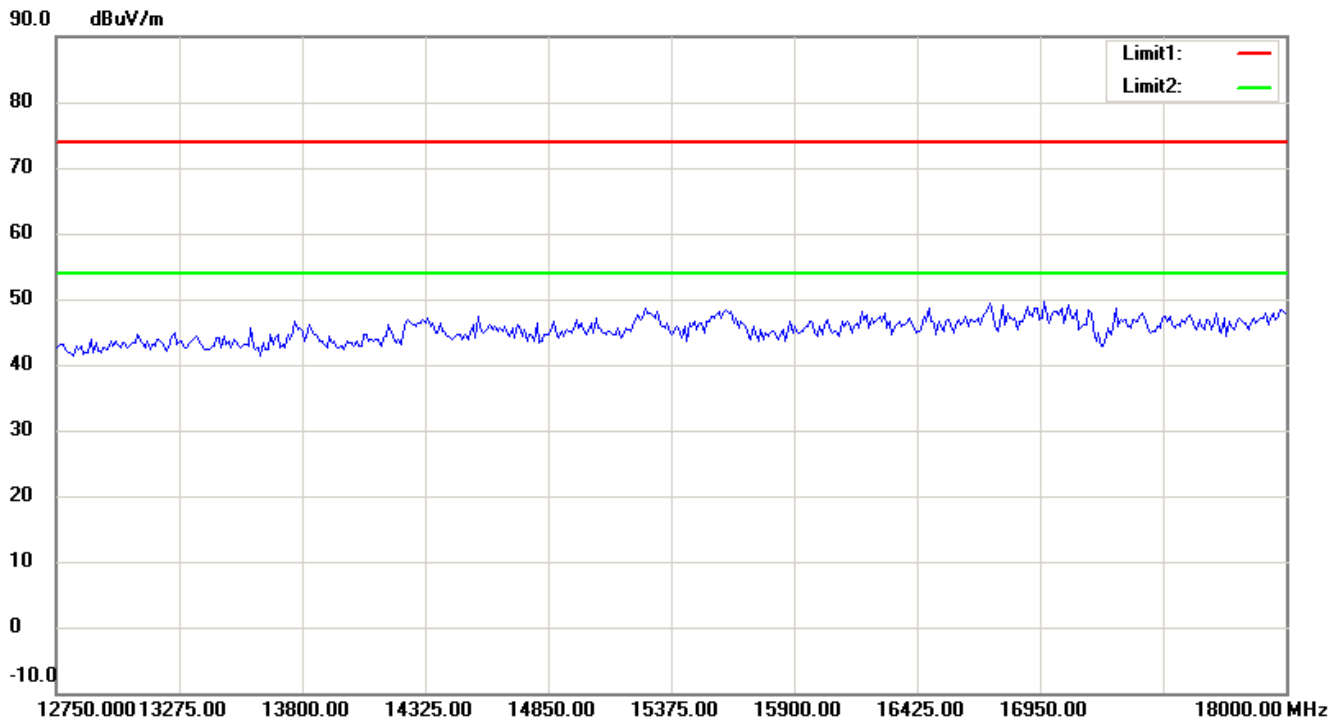
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Up Line: Peak Limit Line Down Line: Ave Limit Line

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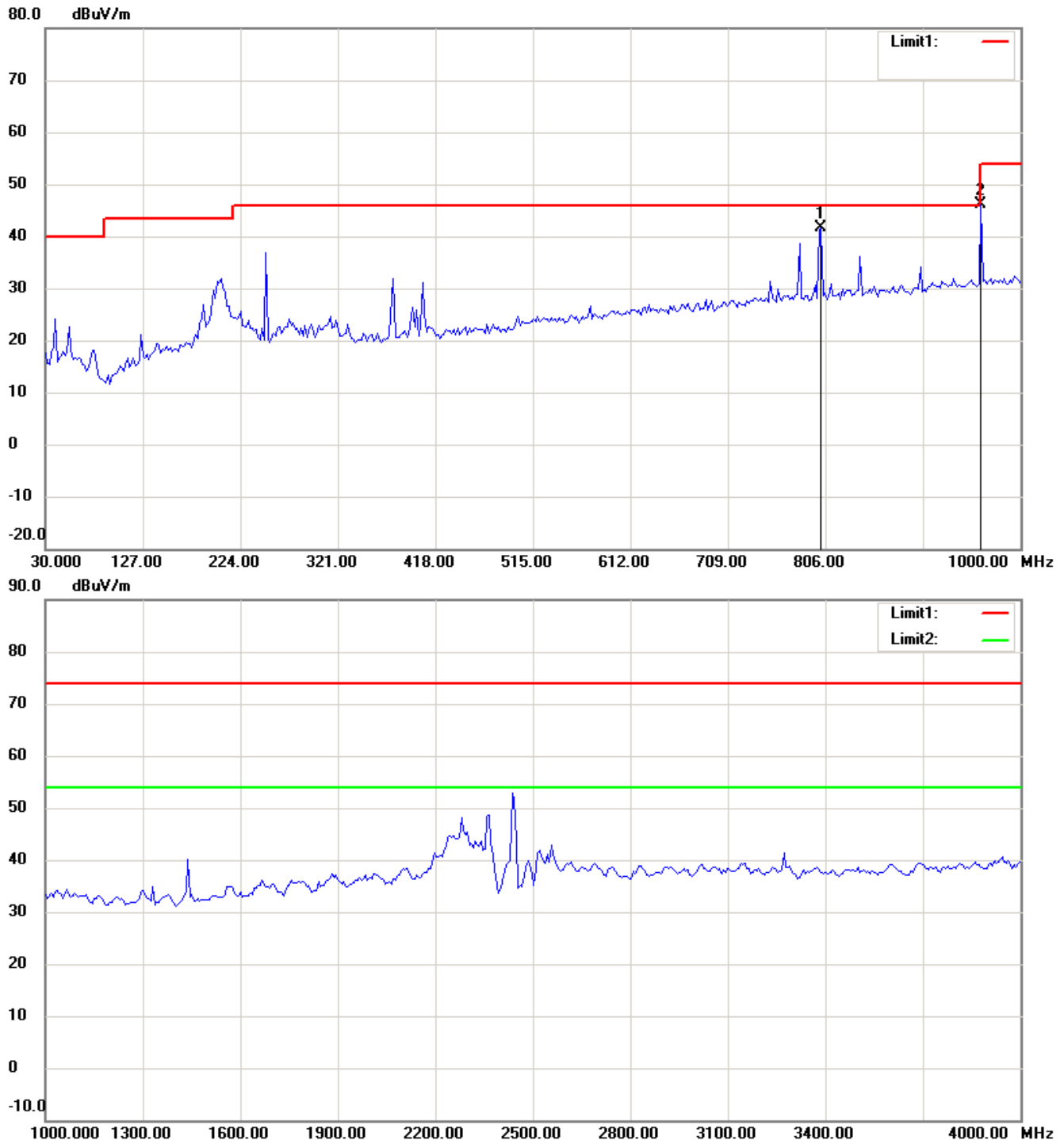


Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

CH7

Antenna Polarization H



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

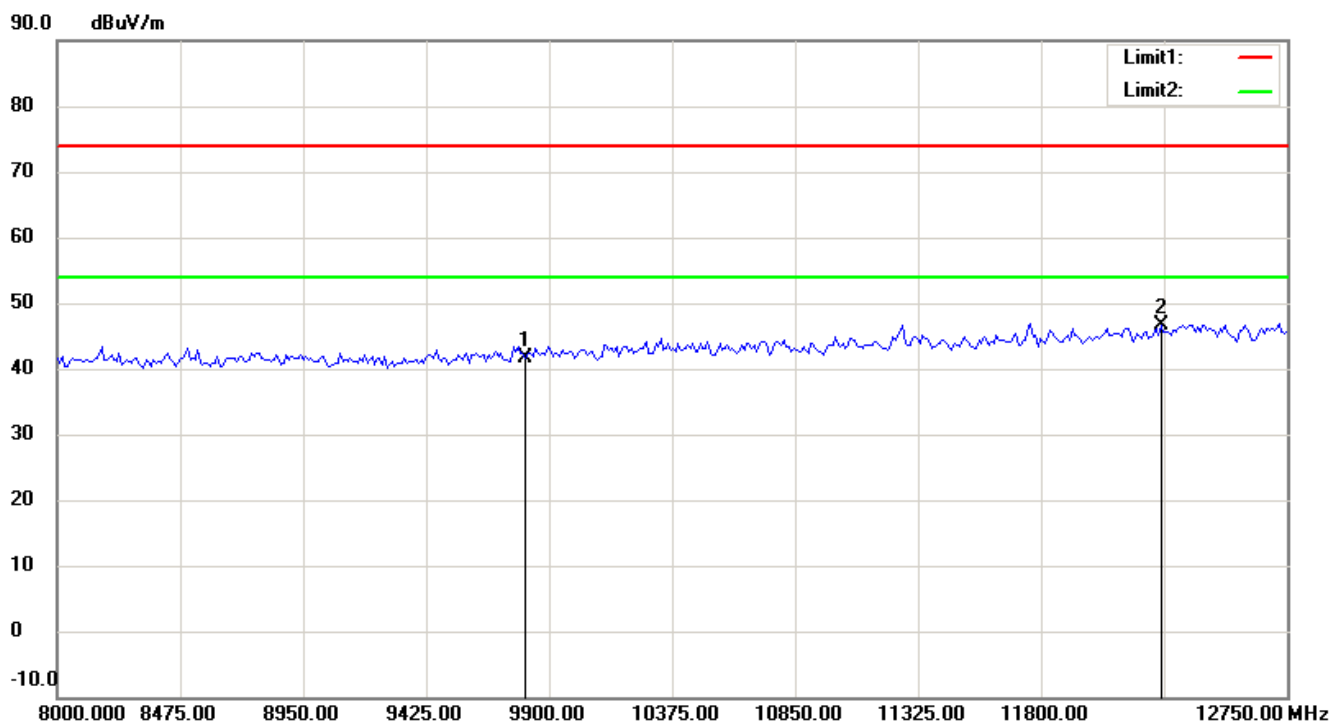
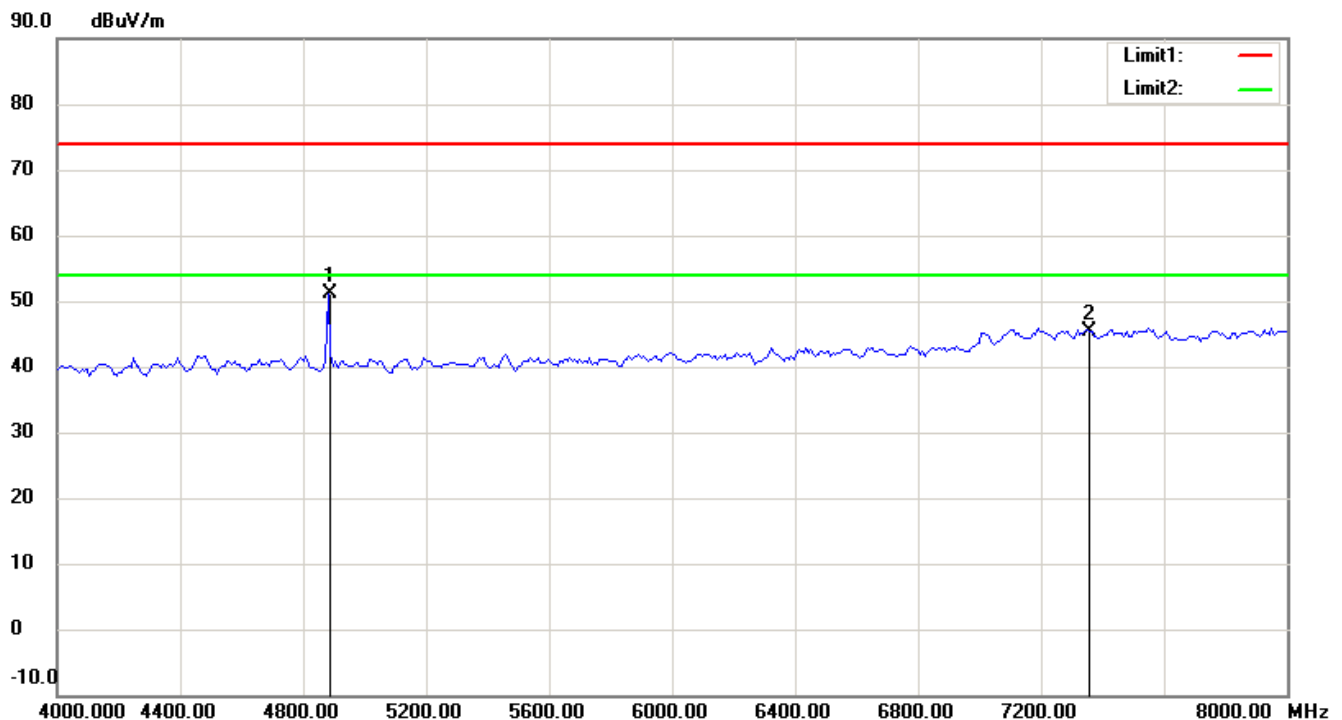
Note:

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Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP



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

Note:

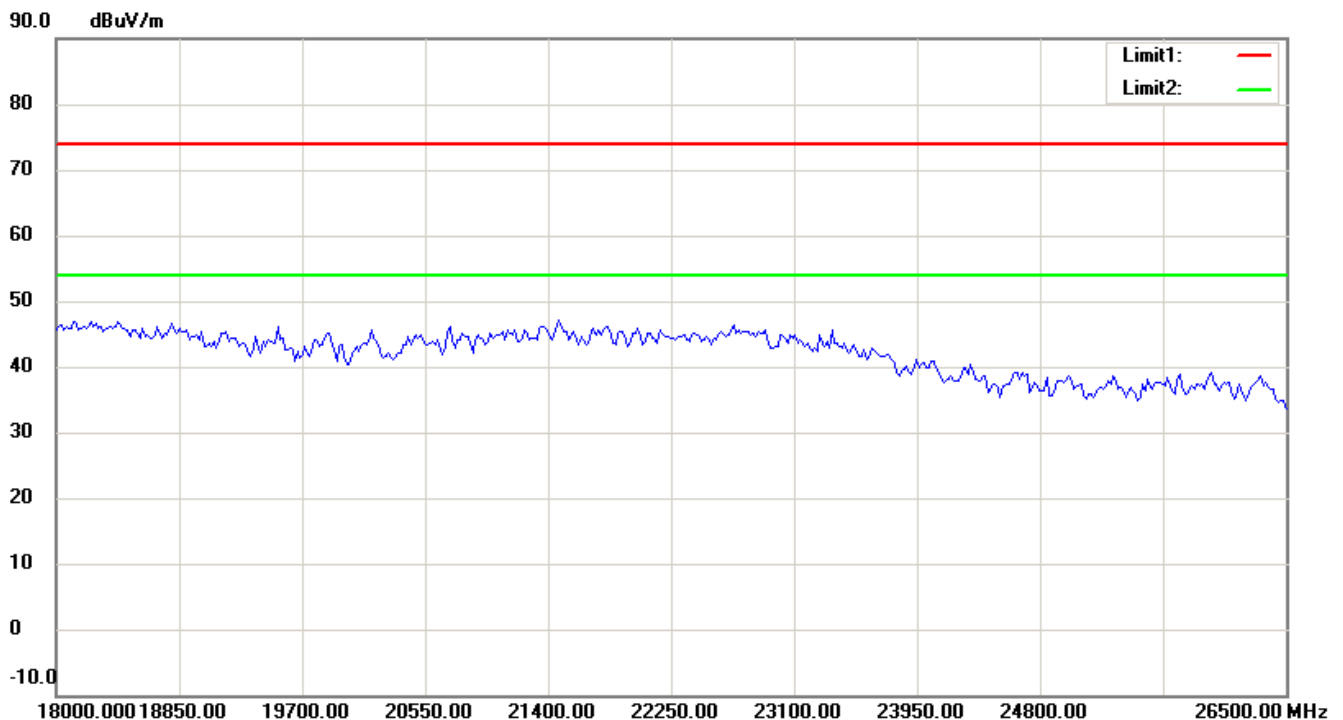
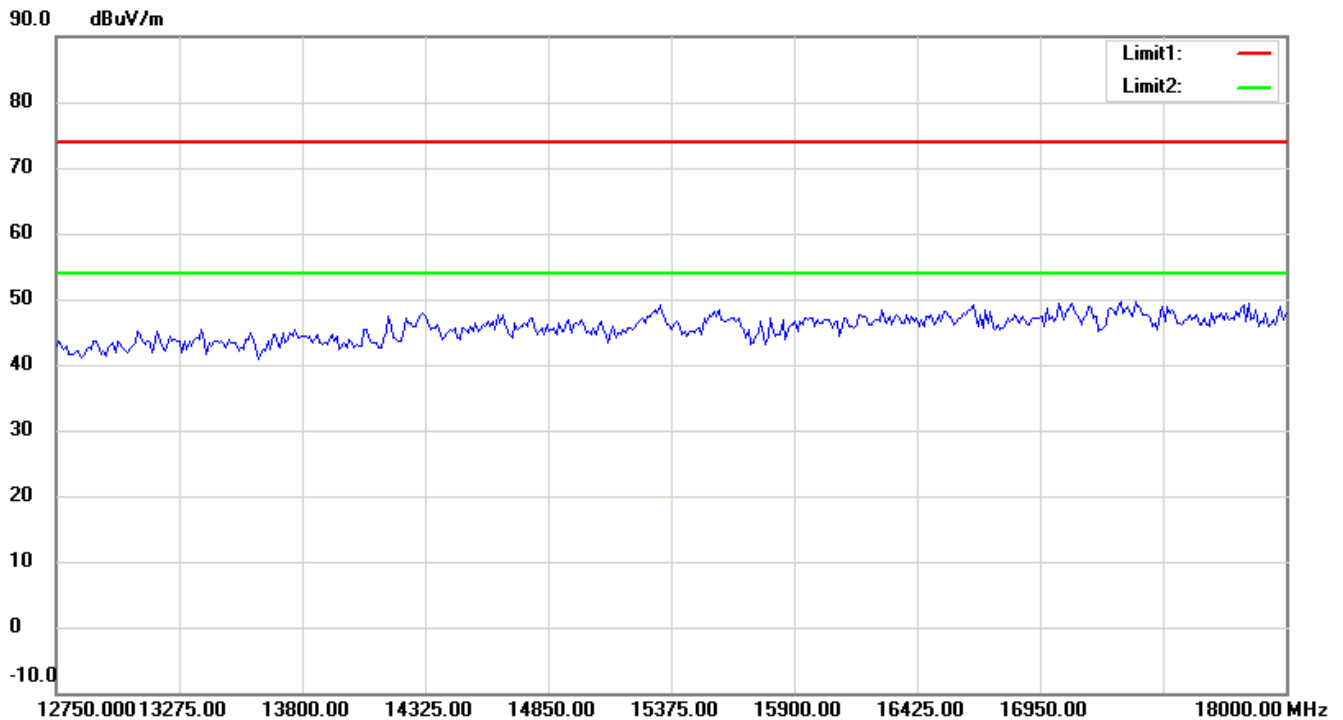
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FCC ID: WKP-CSAW-02IP



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

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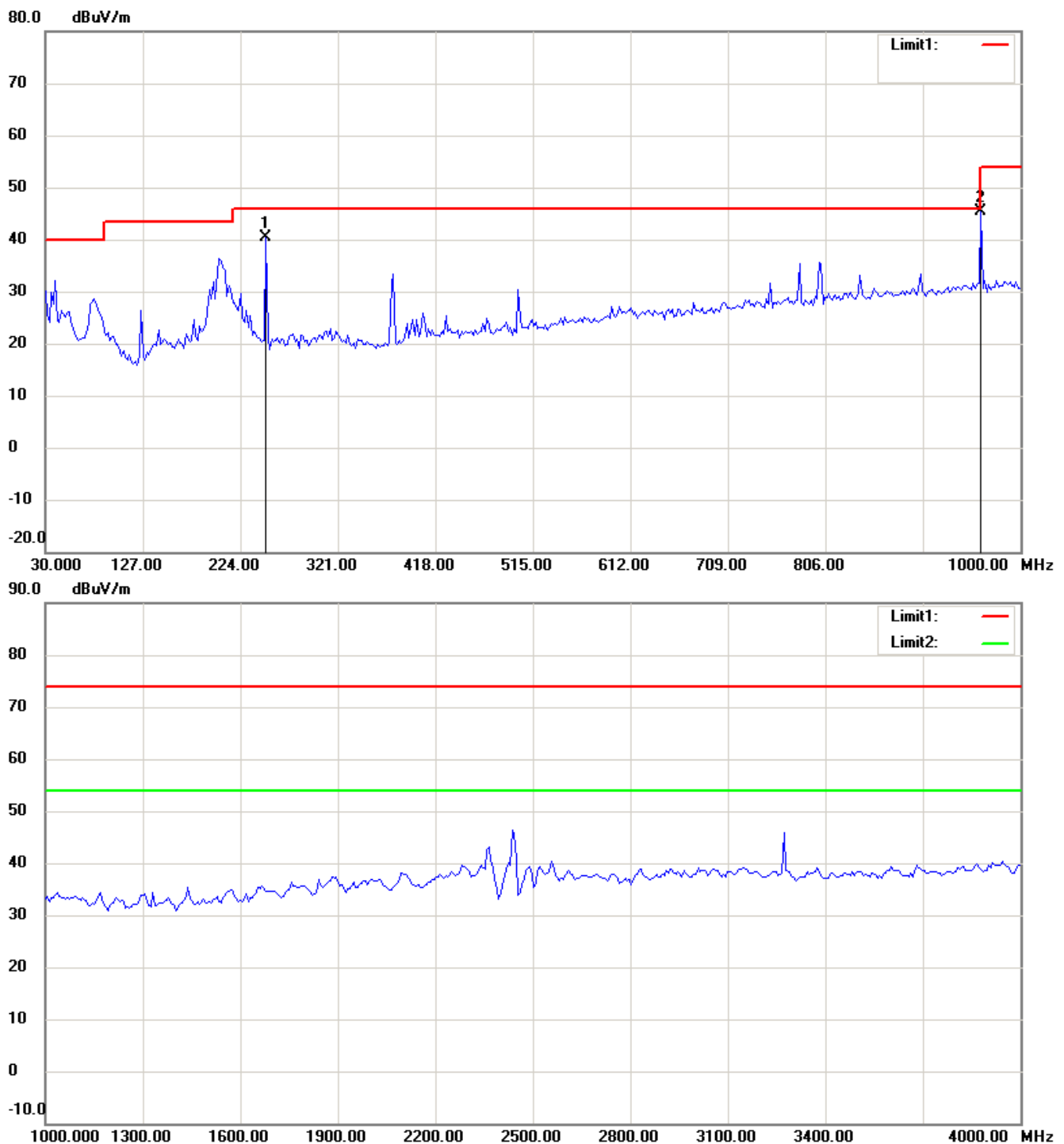


Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6D21301-12971-C-1

FCC ID: WKP-CSAW-02IP

Antenna Polarization V



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

Note:

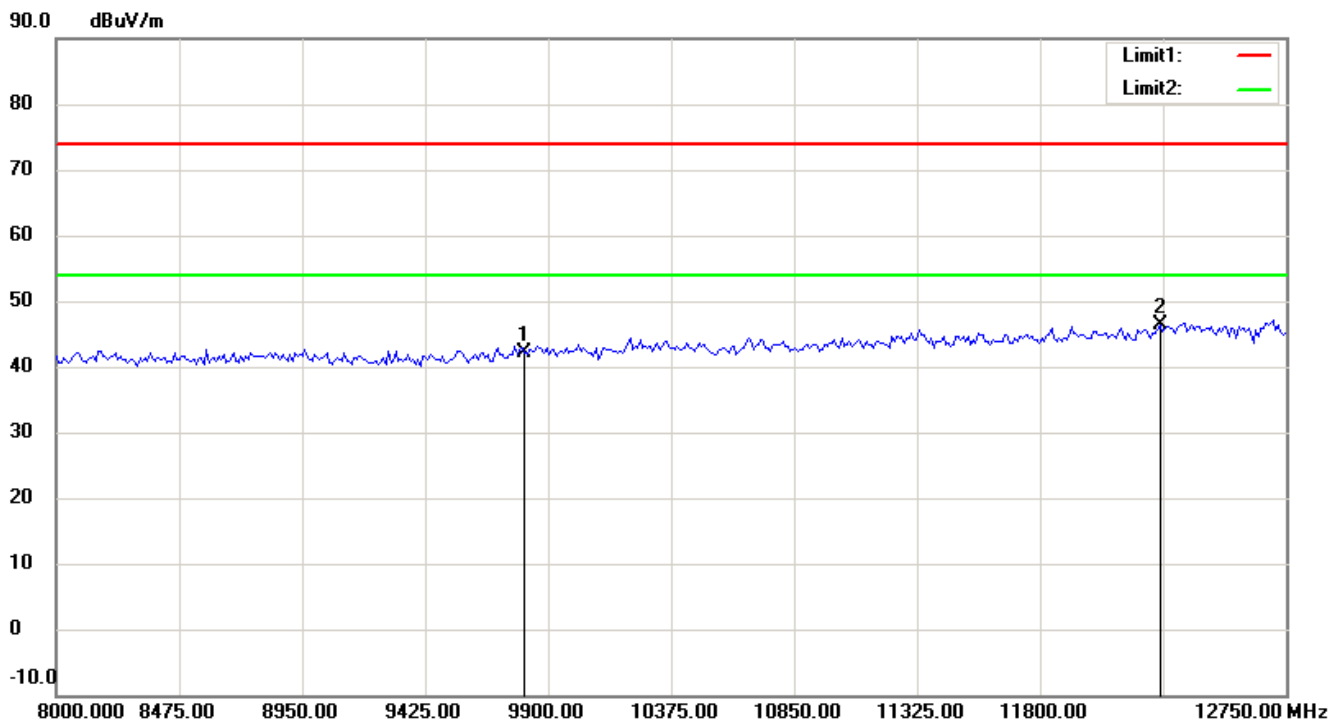
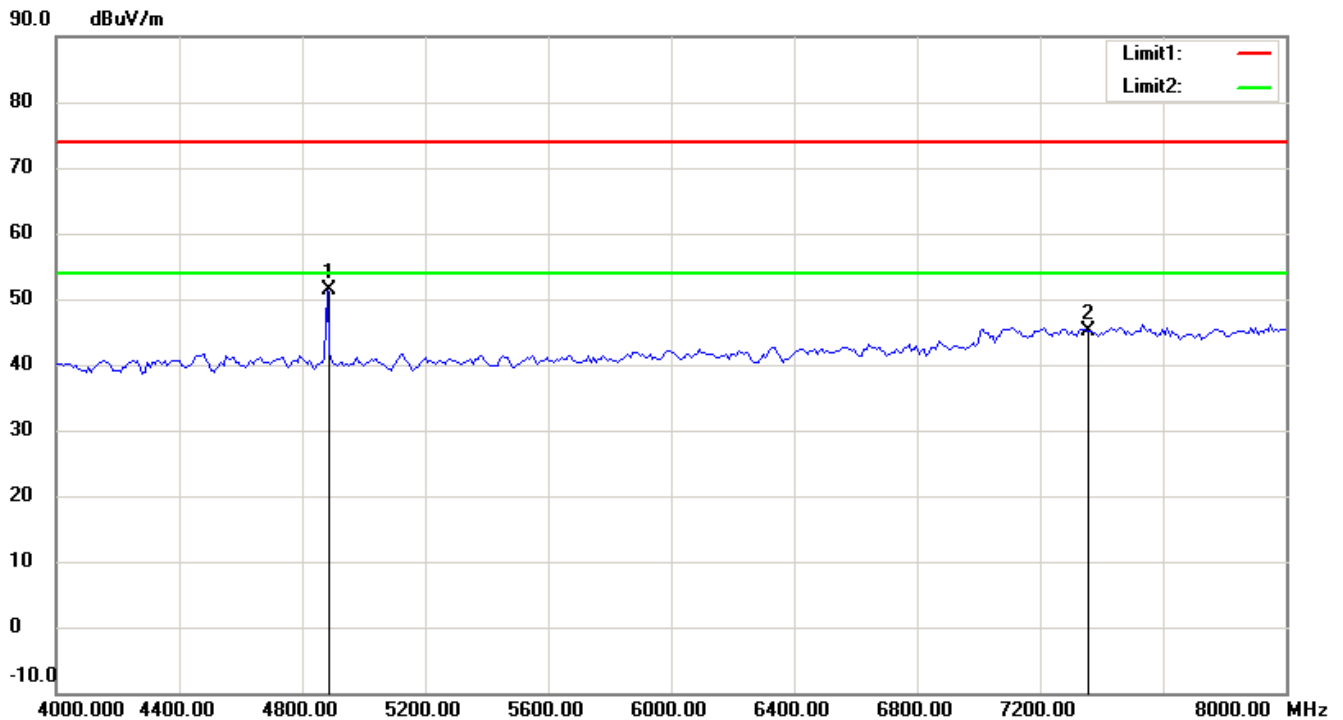
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FCC ID: WKP-CSAW-02IP



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

Note:

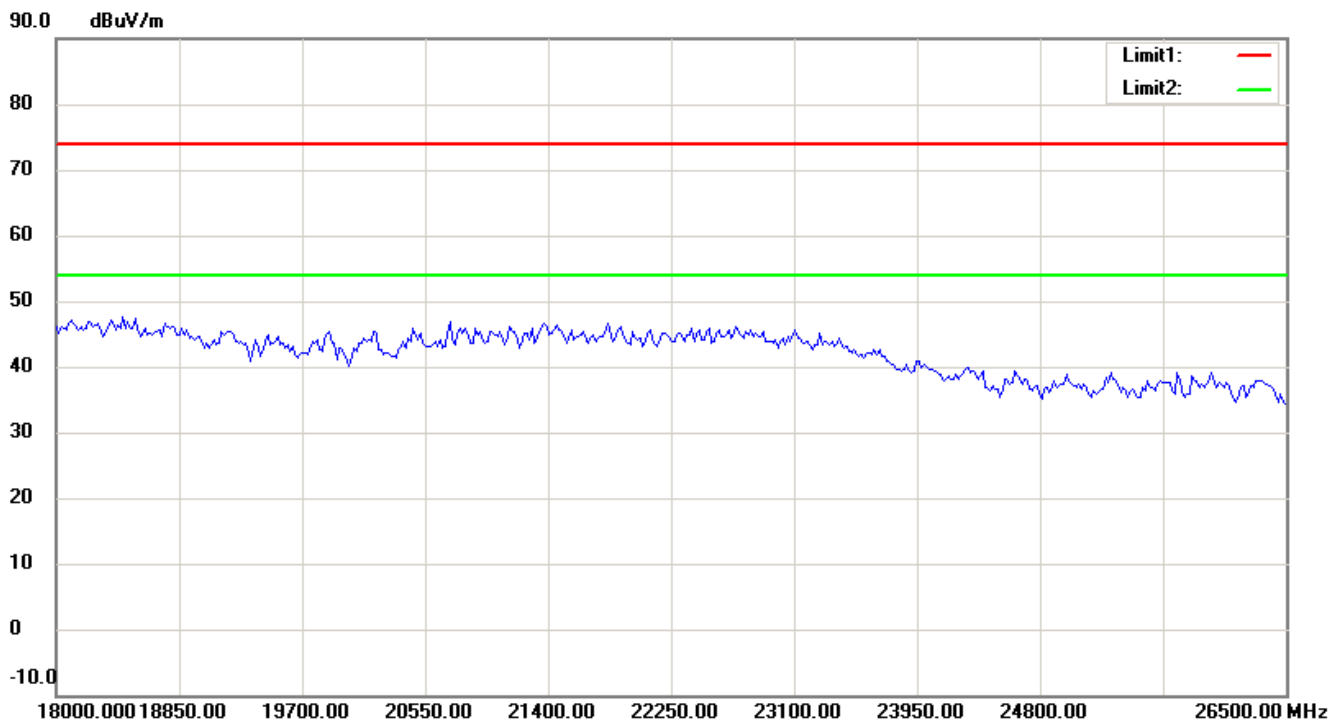
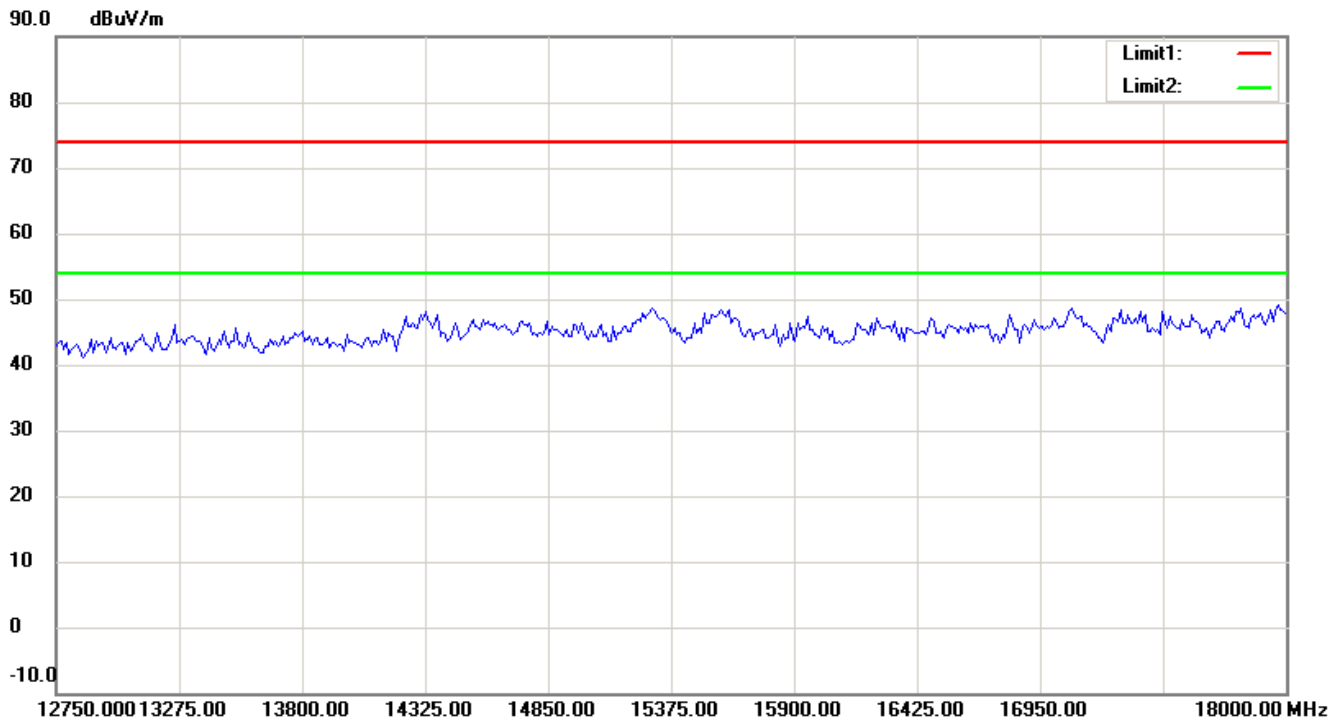
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