

FCC PART 15 SUBPART C TEST REPORT

for

UHF RFID Reader

Model No.: UE600

FCC ID: WXAUE600

of

Applicant: GIGA-TMS INC.

Address: 8F, NO.31, LANE 169, KANG-NING ST.,HSI-CHIH,
NEW TAIPEI CITY, 22180 TAIWAN

Tested and Prepared

by

Worldwide Testing Services (Taiwan) Co., Ltd.

FCC Registration No.: 930600

Industry Canada filed test laboratory Reg. No. IC 5679A-1, IC 5107A-1

A2LA Accredited No.: 2732.01



Report No.: W6M21503-14919-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: wts@wts-lab.com



TABLE OF CONTENTS

1	GENERAL INFORMATION	2
1.1	Notes	2
1.2	Testing laboratory	3
1.2.1	Location	3
1.2.2	Details of accreditation status	3
1.3	Details of approval holder	3
1.4	Application details	4
1.5	General information of Test item.....	4
1.6	Test standards	5
2	TECHNICAL TEST	6
2.1	Summary of test results	6
2.2	Test environment	6
2.3	Test Equipment List	7
2.4	General Test Procedure	9
3	TEST RESULTS (ENCLOSURE)	11
3.1	Peak Output Power (transmitter)	12
3.2	RF Exposure Compliance Requirements	15
3.3	Out of Band Radiated Emissions	16
3.4	Transmitter Radiated Emissions in restricted Bands	17
3.5	Spurious emissions (tx)	18
3.6	Carrier Frequency Separation	19
3.7	Number of Hopping Frequencies.....	22
3.7.1	Pseudorandom Frequency Hopping Sequence.....	23
3.7.2	Coordination of hopping sequences to other transmitters	23
3.7.3	System Receiver Hopping Capability	23
3.8	Time of Occupancy (Dwell Time).....	23
3.9	20dB Bandwidth	28
3.10	Band-edge Compliance of RF Emissions	31
3.11	Radiated Emissions from Receiver Section of Transceiver.....	34
3.12	Power Line Conducted Emission.....	35
	Appendix.....	48



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21503-14919-C-1

FCC ID: WXAUE600

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.

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

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

Tester:

April 22, 2015

Kent Lin

Date

WTS-Lab.

Name

Signature

Technical responsibility for area of testing:

April 22, 2015

Kevin Wang

Date

WTS

Name

Signature



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21503-14919-C-1

FCC ID: WXAUE600

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, IC 5107A-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: GIGA-TMS INC.

Street: 8F, NO.31, LANE 169, KANG-NING ST.,HSI-CHIH,

Town: NEW TAIPEI CITY, 22180

Country: TAIWAN

Telephone: 02-2695-4214

Fax: 02-2695-4213



Registration number: W6M21503-14919-C-1

FCC ID: WXAUE600

1.4 Application details

Date of receipt of test item: March 26, 2015

Date of test: from March 27, 2015 to April 22, 2015

1.5 General information of Test item

Type of test item: UHF RFID Reader

Model Number: UE600

Multi-listing model number: TA500

Photos: see Annex

Technical data

Frequency band: 902-928 MHz

Frequency (ch A): 902.75 MHz

Frequency (ch B): 915.25 MHz

Frequency (ch C): 927.25 MHz

Transmitter

Unom

Normal Mode

Power (ch 1): Conducted: 17.07 dBm

Power (ch 25): Conducted: 16.44 dBm

Power (ch 50): Conducted: 14.53 dBm

Power supply: USB 5VDC (Power from PC)

Operation modes: Half-duplex

Modulation Type: PRSK

Antenna Type: Patch antenna

Antenna gain: 5 dBi



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21503-14919-C-1

FCC ID: WXAUE600

Host device: none

Classification:

Fixed Device	☒
Mobile Device (Human Body distance > 20cm)	☐
Portable Device (Human Body distance < 20cm)	☐
Modular Radio Device	☐

Manufacturer: (if applicable)

Name: GIGATEK INC.
Street: No. 47, Hsiang Ho Road, Tantz District,
Town: Taichung City 42741,
Country: Taiwan, R.O.C.

Additional information: ./.

1.6 Test standards

Technical standard : FCC RULES PART 15 SUBPART C § 15.247 (2013-10)



Registration number: W6M21503-14919-C-1

FCC ID: WXAUE600

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 3 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

Details of power supply USB 5VDC (Power from PC)

Extreme conditions parameters: test voltage : -- extreme
min : -- V
max : -- V



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21503-14919-C-1

FCC ID: WXAUE600

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	2014/9/2	2015/9/1
ETSTW-CE 003	AC POWER SOURCE	APS-9102	D161137	GW	Function Test	
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	2014/7/8	2015/7/7
ETSTW-CE 016	TWO-LINE V-NETWORK	ENV216	100050	R&S	2014/10/13	2015/10/12
ETSTW-RE 004	EMI TEST RECEIVER	ESI 40	832427/004	R&S	2014/9/2	2015/9/1
ETSTW-RE 005	EMI TEST RECEIVER	ESVS10	843207/020	R&S	2014/9/2	2015/9/1
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	2014/10/15	2015/10/14
ETSTW-RE 027	Passive Loop Antenna	6512	00034563	ETS-Lindgren	2014/7/01	2015/6/30
ETSTW-RE 030	Double-Ridged Guide Horn Antenna	3117	00035224	ETS-Lindgren	2015/3/17	2016/3/16
ETSTW-RE 045	ESA-E SERIES SPECTRUM ANALYZER	E4404B	MY45111242	Agilent	Pre-test Use	
ETSTW-RE 049	TRILOG Super Broadband test Antenna	VULB 9160	9160-3185	Schwarzbeck	2015/3/19	2016/3/18
ETSTW-RE 050	Attenuator 10dB	50HF-010-1	None	JFW	2015/3/2	2016/3/1
ETSTW-RE 051	Attenuator 6dB	50HF-006-1	None	JFW	2015/3/2	2016/3/1
ETSTW-RE 053	Attenuator 3dB	50HF-003-1	None	JFW	2015/3/2	2016/3/1
ETSTW-RE 055	SPECTRUM ANALYZER	FSU 26	200074	R&S	2014/6/05	2015/6/04
ETSTW-RE 060	Attenuator 30dB	5015-30	F651012z-01	ATM	2015/3/2	2016/3/1
ETSTW-RE 062	Amplifier Module	CHC 2	None	KMIC	2014/11/26	2015/11/25
ETSTW-RE 064	Bluetooth Test Set	MT8852B-042	6K00005709	Anritsu	Function Test	
ETSTW-RE 069	Double-Ridged Guide Horn Antenna	3117	00069377	ETS-Lindgren	Function Test	
ETSTW-RE 072	CELL SITE TEST SET	8921A	3339A00375	HP	2014/10/9	2015/10/8
ETSTW-RE 088	SOLID STATE AMPLIFIER	KMA180265A01	99057	KMIC	2014/9/22	2015/9/21
ETSTW-RE 099	DC Block	50DB-007-1	None	JFW	2015/3/2	2016/3/1
ETSTW-RE 106	Humidity Temperature Meter	TES-1366	091011113	TES	2014/11/7	2015/11/6
ETSTW-RE 111	TRILOG Super Broadband test Antenna	VULB 9160	9160-3309	Schwarz beck	2014/12/5	2015/12/4
ETSTW-RE 112	AC POWER SOURCE	TFC-1005	None	T-Power	Function test	
ETSTW-RE 115	2.4GHz Notch Filter	N0124411	473874	MICROWAVE CIRCUITS	2015/1/7	2016/1/6
ETSTW-RE 120	RF Player	MP9200	MP9210-111022	ADIVIC	Function test	
ETSTW-RE 122	SIGNAL GENERATOR	SMF100A	102149	R&S	2014/6/11	2015/6/10
ETSTW-RE 125	5GHz Notch filter	5NSL11-5200/E221.3-O/O	1	K&L Microwave	2014/8/12	2015/8/11



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21503-14919-C-1

FCC ID: WXAUE600

ETSTW-RE 126	5GHz Notch filter	5NSL11-5800/E221.3-O/O	1	K&L Microwave	2014/8/12	2015/8/11
ETSTW-RE 127	RF Switch Box	RFS-01	None	WTS	2015/3/2	2016/3/1
ETSTW-RE 128	5.3GHz Notch filter	N0153001	SN487233	Microwave Circuits	2014/8/12	2015/8/11
ETSTW-RE 129	5.5GHz Notch filter	N0555984	SN487234	Microwave Circuits	2014/8/12	2015/8/11
ETSTW-RE 130	Handheld RF Spectrum Analyzer	N9340A	CN0147000204	Agilent	Pre-test Use	
ETSTW-GSM 002	Universal Radio Communication Tester	CMU 200	109439	R&S	2014/10/20	2015/10/19
ETSTW-GSM 003	Radio Communication Analyzer	MT8820C	6201342073	Anritsu	2015/3/5	2016/3/4
ETSTW-GSM 019	Band Reject Filter	WRCTF824/849-822/851-40 /12+9SS	3	WI	2015/1/7	2016/1/6
ETSTW-GSM 020	Band Reject Filter	WRCD1747/1748-1743/1752-32/5SS	1	WI	2015/1/7	2016/1/6
ETSTW-GSM 021	Band Reject Filter	WRCD1879.5/1880.5-1875.5/1884.5-32/5SS	3	WI	2015/1/7	2016/1/6
ETSTW-GSM 022	Band Reject Filter	WRCT901.9/903.1-904.25-50/8SS	1	WI	2015/1/7	2016/1/6
ETSTW-GSM 023	Power Divider	4901.19.A	None	SUHNER	2014/9/17	2015/9/16
ETSTW-Cable 010	BNC Cable	5 M BNC Cable	None	JYE BAO CO.,LTD.	2014/10/15	2015/10/14
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.	2014/10/15	2015/10/14
ETSTW-Cable 016	BNC Cable	Switch Box	B Cable 1	Schwarz beck	2015/2/25	2016/2/24
ETSTW-Cable 017	BNC Cable	X Cable	B Cable 2	Schwarz beck	2015/2/25	2016/2/24
ETSTW-Cable 018	BNC Cable	Y Cable	B Cable 3	Schwarz beck	2015/2/25	2016/2/24
ETSTW-Cable 019	BNC Cable	Z Cable	B Cable 4	Schwarz beck	2015/2/25	2016/2/24
ETSTW-Cable 022	N TYPE Cable	5006	0002	JYE BAO CO.,LTD.	2015/3/19	2016/3/18
ETSTW-Cable 026	Microwave Cable	SUCOFLEX 104	279075	HUBER+SUHNER	2015/3/2	2016/3/1
ETSTW-Cable 027	Microwave Cable	SUCOFLEX 104	279083	HUBER+SUHNER	2015/3/2	2016/3/1
ETSTW-Cable 028	Microwave Cable	FA147A0015M2020	30064-2	UTIFLEX	2015/1/16	2016/1/15
ETSTW-Cable 029	Microwave Cable	FA147A0015M2020	30064-3	UTIFLEX	2014/9/22	2015/9/21
ETSTW-Cable 030	Microwave Cable	SUCOFLEX 104 (S Cable 9)	279067	HUBER+SUHNER	2015/3/2	2016/3/1
ETSTW-Cable 031	Microwave Cable	SUCOFLEX 104 (S Cable 10)	238092	HUBER+SUHNER	2014/11/26	2015/11/25
ETSTW-Cable 043	Microwave Cable	SUCOFLEX 104	317576	HUBER+SUHNER	2014/11/26	2015/11/25
ETSTW-Cable 048	Microwave Cable	SUCOFLEX 104	325518	HUBER+SUHNER	2014/11/26	2015/11/25
ETSTW-Cable 053	N TYPE To SMA Cable	RG142	None	JYE BAO CO.,LTD.	2015/3/19	2016/3/18
ETSTW-Cable 058	Microwave Cable	SUCOFLEX 104	none	HUBER+SUHNER	2015/3/19	2016/3/18
WTSTW-SW 002	EMI TEST SOFTWARE	EZ EMC	None	Farad	Version ETS-03A1	



Registration number: W6M21503-14919-C-1

FCC ID: WXAUE600

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. The ambient temperature of the UUT was 23°C with a humidity of 40 %.

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

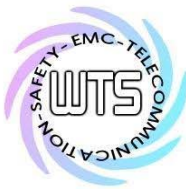
The EUT was placed on a table 80 cm high and with dimensions of 1m by 1.5m (non metallic table) and arranged according to ANSI C63.4-2009 6.3.1. The table used for radiated measurements is capable of continuous rotation. The spectrum was scanned from 30 MHz to the frequency specified as follows:

- (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 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.



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21503-14919-C-1

FCC ID: WXAUE600

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

$T = 100\text{ms}$ 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.



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21503-14919-C-1

FCC ID: WXAUE600

3 Test results (enclosure)

TEST CASE	Para. Number	Required	Test passed	Test failed
Peak Output Power	15.247(b)	☒	☒	☐
Equivalent radiated Power	15.247(b)	☒	☒	☐
Spurious Emissions radiated – Transmitter operating	15.247(c)	☒	☒	☐
Spurious Emissions conducted – Transmitter operating	15.247	☐	☐	☐
Carrier Frequency Separation	15.247(a) (1)	☒	☒	☐
Number of Hopping Frequencies	15.247(a) (1)(i)	☒	☒	☐
Time of Occupancy (Dwell Time)	15.247(a) (1)(i)	☒	☒	☐
20 dB Bandwidth	15.247(a) (1)(i)	☒	☒	☐
Band-edge Compliance of RF Emission	15.247(c)	☒	☒	☐
Radiated Emission from Digital Part	15.109	☐	☐	☐
Power Line Conducted Emission	15.207(a)	☒	☒	☐

The follows is intended to leave blank.



Registration number: W6M21503-14919-C-1

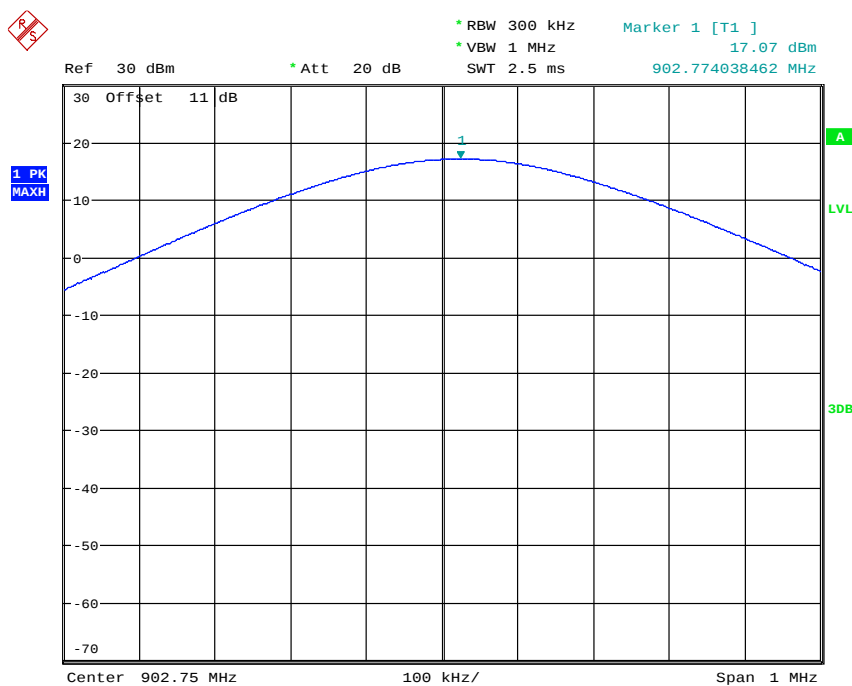
FCC ID: WXAUE600

3.1 Peak Output Power (transmitter)

FCC Rule: 15.247

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).



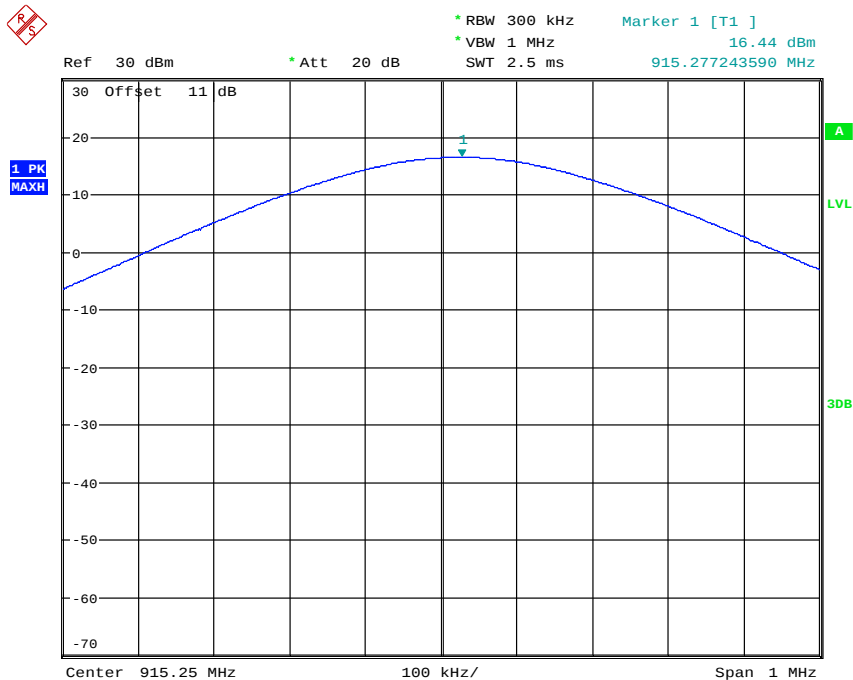
MAX OUTPUT POWER 902.75MHZ

Date: 28.MAR.2015 15:27:24

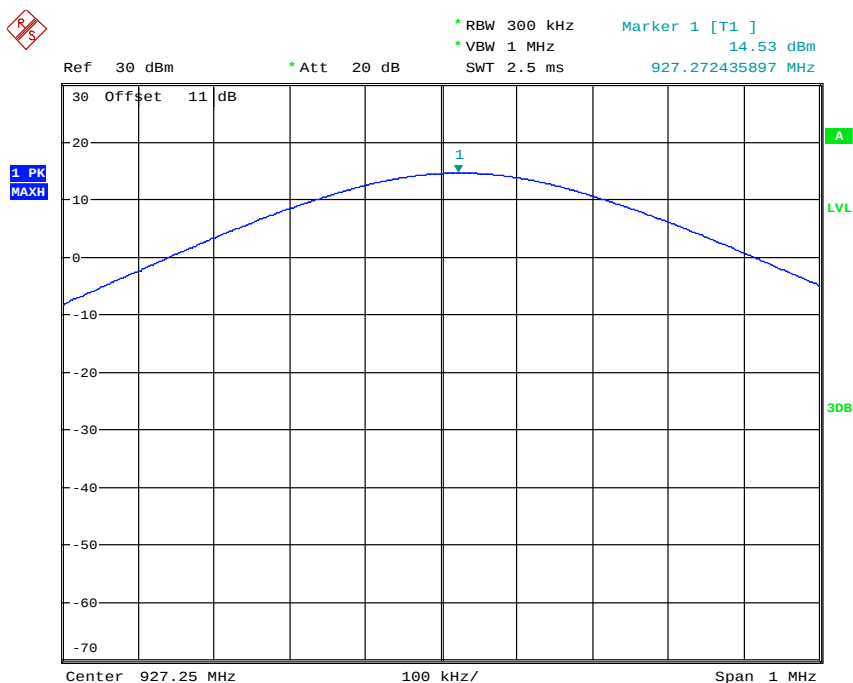


Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21503-14919-C-1
FCC ID: WXAUE600



MAX OUTPUT POWER 915.25MHZ
Date: 28.MAR.2015 15:28:18



MAX OUTPUT POWER 927.25MHZ
Date: 28.MAR.2015 15:29:03



Registration number: W6M21503-14919-C-1

FCC ID: WXAUE600

Maximum Peak Output Power

Limits:

Frequency MHz	Number of hopping channels			
	≥ 75	≥ 50	$49 \geq 25$	$74 \geq 15$
902-928	--	30 dBm	24 dBm	--
2400-2483.5 MHz	30 dBm	--	--	21 dBm
5725-5850 MHz	30 dBm	--	--	--

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

Test equipment used: ETSTW-RE 055, ETSTW-RE 050, ETSTW-RE 064



Registration number: W6M21503-14919-C-1

FCC ID: WXAUE600

3.2 RF Exposure Compliance Requirements

According to Supplement C, Edition 01-01 to OET Bulletin 65, Edition 97-01 this spread spectrum transmitter is categorically excluded from routine environmental evaluation because of the low power level, where there is a high likelihood of compliance with RF exposure standards.

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

S – Power Density

P – Output power ERP

R – Distance

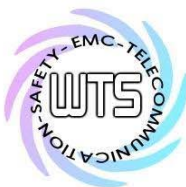
D – Cable Loss

AG – Antenna Gain

Item	Unit	Value	Remarks
P	mW	50.93	Peak value
D	dB	--	--
AG	dBi	5	--
G	--	3.1623	Calculated Value
R	cm	20	Assumed value
S	mW/cm ²	0.0320	Calculated value

Limits:

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



Registration number: W6M21503-14919-C-1
FCC ID: WXAUE600

3.3 Out of Band Radiated Emissions

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 below 1GHz :

Max. reading – 20 dB

Guidance on Measurement of FHSS 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.” Here the correction was added to the limit instead subtracted from the reading.

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

For frequencies above 1GHz (Peak measurements).

Limit = max. aver. reading-20dB +20dB(because Peak detector is used)

For frequencies above 1GHz (Average measurements).

Max. reading – 20 dB - duty cycle correction:

No duty cycle correction was added to the reading

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

Explanation: See attached diagrams in appendix.



Registration number: W6M21503-14919-C-1

FCC ID: WXAUE600

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 26000 MHz.

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

RES BW VID BW

Frequency <1 GHz 100 kHz 100 kHz (Peak measurements)

Frequency >1 GHz 1 MHz 1 MHz (Peak measurements)

1 MHz 1 MHz (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 960	500	54.0

For frequencies above 1GHz (Average measurements).

Guidance on Measurement of FHSS Systems:

“If the emission is pulsed, modify the unit for continues operation , use the settings shown above, then correct the reading by subtracting the peak-average correction factor, derived from the appropriate duty cycle calculation.” Here the correction was added to the limit instead subtracted from the reading.

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

For frequencies above 1GHz (Average measurements).

Limit – duty cycle correction

No duty cycle correction was added to the reading.

54.0dB μ V/m

For frequencies above 1GHz (Peak measurements).

Limit + 20dB

54.0dB μ V/m + 20 dB= 74 dB μ V/m

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

Explanation: See attached diagrams in appendix.



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21503-14919-C-1

FCC ID: WXAUE600

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))

SAMPLE CALCULATION OF LIMIT. All results will be updated by an automatic measuring system in accordance to 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 an 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 "Marker-Delta-Method" or the „Duty-Cycle Correction Factor“.

Summary table with radiated data of the test plots

Model:	UE600	Date:	--					
Mode:	--	Temperature:	--	°C	Engineer:	--		
Polarization:	--	Humidity:	--	%				
Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--

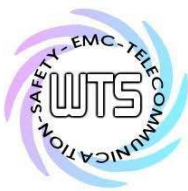
Note

- 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 above 1GHz: 30-1000 MHz = ± 4.32 dB, 1-18 GHz = ± 4.95 dB, 18-40 GHz = ± 2.94 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.**

All other not noted test plots do not contain significant test results in relation to the limits.

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 064
ETSTW-RE 088, ETSTW-RE 018

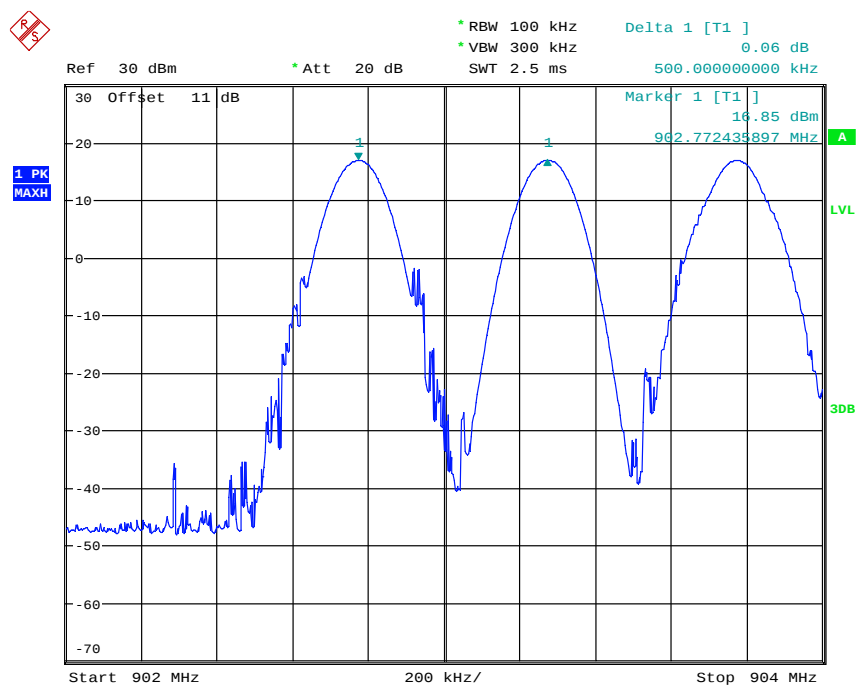


Registration number: W6M21503-14919-C-1
FCC ID: WXAUE600

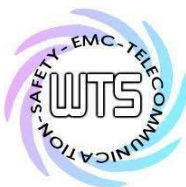
3.6 Carrier Frequency Separation

Carrier Frequency Separation was measured with modulation (declared by manufacturer).

According to FCC rules part 15 subpart C §15.247 frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or 20 dB bandwidth of the hopping channel, whichever is greater.



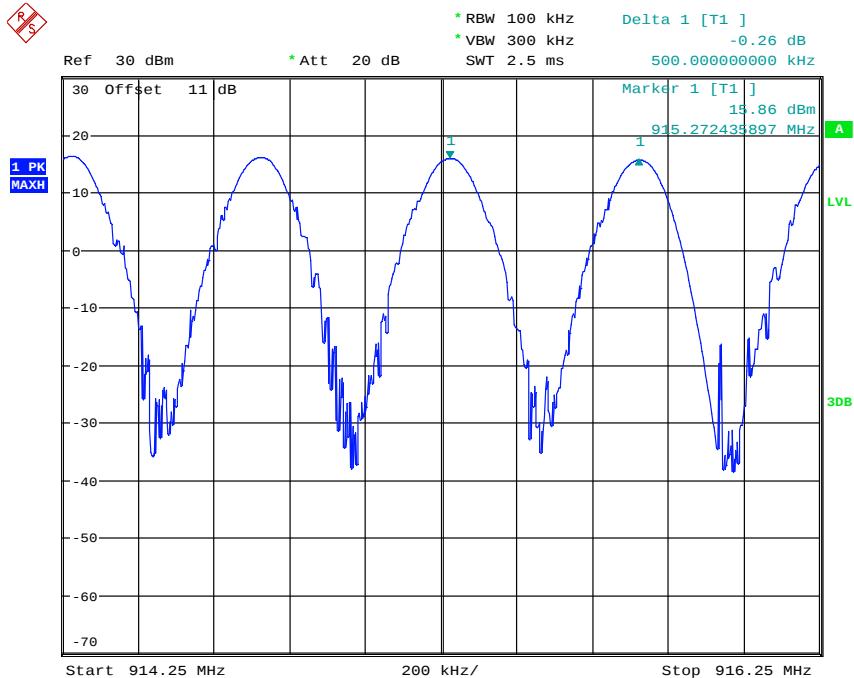
FREQUENCY SEPARATION
Date: 28.MAR.2015 15:46:45



Worldwide Testing Services(Taiwan) Co., Ltd.

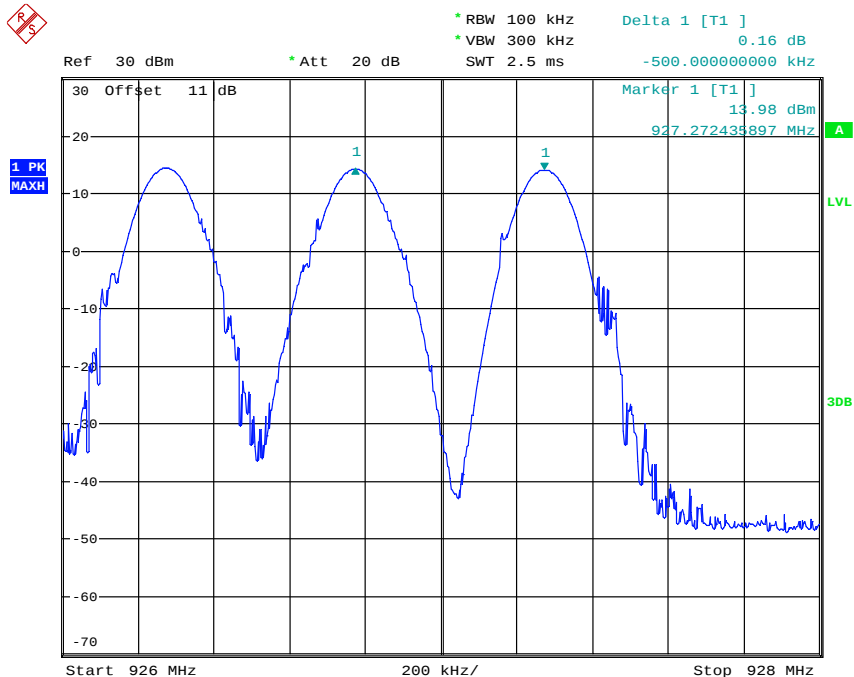
Registration number: W6M21503-14919-C-1

FCC ID: WXAUE600



FREQUENCY SEPARATION

Date: 28.MAR.2015 15:48:08



FREQUENCY SEPARATION

Date: 28.MAR.2015 15:49:54



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21503-14919-C-1

FCC ID: WXAUE600

Limits:

Frequency Range MHz	Limits	
	20 dB bandwidth < 25 kHz	20 dB bandwidth > 25 kHz
902-928	25 kHz	20 dB bandwidth
2400-2483.5 5725-5850.0	25 kHz	20 dB bandwidth

Test equipment used: ETSTW-RE 055, ETSTW-RE 064



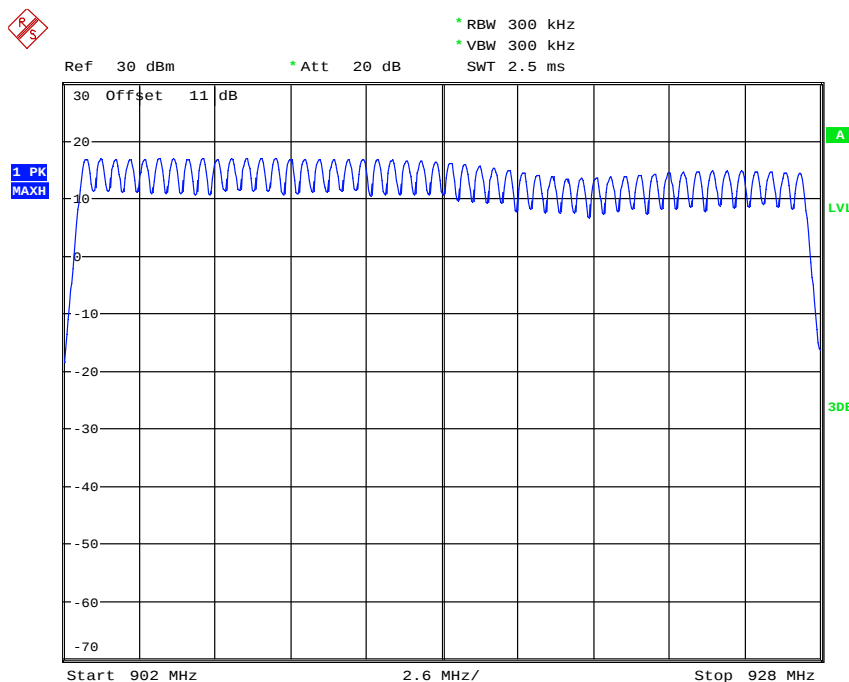
Registration number: W6M21503-14919-C-1

FCC ID: WXAUE600

3.7 Number of Hopping Frequencies

According to FCC rules part 15 subpart C §15.247 frequency hopping systems operating in the 2400-2483.5 MHz band shall use at least 15 hopping frequencies. Frequency hopping systems in 5725-5850 MHz bands shall use least 75 hopping frequencies.

For frequency hopping systems operating in the 902-928 MHz band: if the 20dB bandwidth of the hopping channel is less than 250 kHz, the system shall use at least 50 hopping frequencies; if the 20dB bandwidth of the hopping channel 250 kHz or greater, the system shall use at least 25 hopping frequencies.



NUMBER OF HOPPING
Date: 28.MAR.2015 15:42:19

Limits:

Frequency Range MHz	Limit	
	20dB Bandwidth	Number of Channels
902-928 MHz	Bandwidth < 250 kHz	≥ 50
	Bandwidth ≥ 250 kHz	≥ 25
2400-2483.5	not defined	15
5725-5850.0 MHz	1 MHz	75

Test equipment used: ETSTW-RE 055, ETSTW-RE 064



Registration number: W6M21503-14919-C-1
FCC ID: WXAUE600

3.7.1 Pseudorandom Frequency Hopping Sequence

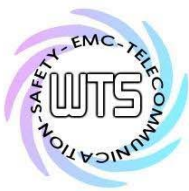
Channel	MHz	Channel	MHz
Ch1	902.75	Ch26	915.25
Ch2	903.25	Ch27	915.75
Ch3	903.75	Ch28	916.25
Ch4	904.25	Ch29	916.75
Ch5	904.75	Ch30	917.25
Ch6	905.25	Ch31	917.75
Ch7	905.75	Ch32	918.25
Ch8	906.25	Ch33	918.75
Ch9	906.75	Ch34	919.25
Ch10	907.25	Ch35	919.75
Ch11	907.75	Ch36	920.25
Ch12	908.25	Ch37	920.75
Ch13	908.75	Ch38	921.25
Ch14	909.25	Ch39	921.75
Ch15	909.75	Ch40	922.25
Ch16	910.25	Ch41	922.75
Ch17	910.75	Ch42	923.25
Ch18	911.25	Ch43	923.75
Ch19	911.75	Ch44	924.25
Ch20	912.25	Ch45	924.75
Ch21	912.75	Ch46	925.25
Ch22	913.25	Ch47	925.75
Ch23	913.75	Ch48	926.25
Ch24	914.25	Ch49	926.75
Ch25	914.75	Ch50	927.25

3.7.2 Coordination of hopping sequences to other transmitters

This transmitter does not have the ability of being coordinated with other FHSS system for as soon as the transmitter is in operation, the hopping frequency will follow the selected hopping sequence to transmit independently and no coordination is possible. Especially, this transmitter is used as a UHF RFID READER, so no coordination of hopping frequency is required.

3.7.3 System Receiver Hopping Capability

Due to each hopping frequency will be transmitted in accordance to the frequency tables described above, there is no any frequency will be able to hop more times than others. Therefore each frequency will be used equally.



Registration number: W6M21503-14919-C-1

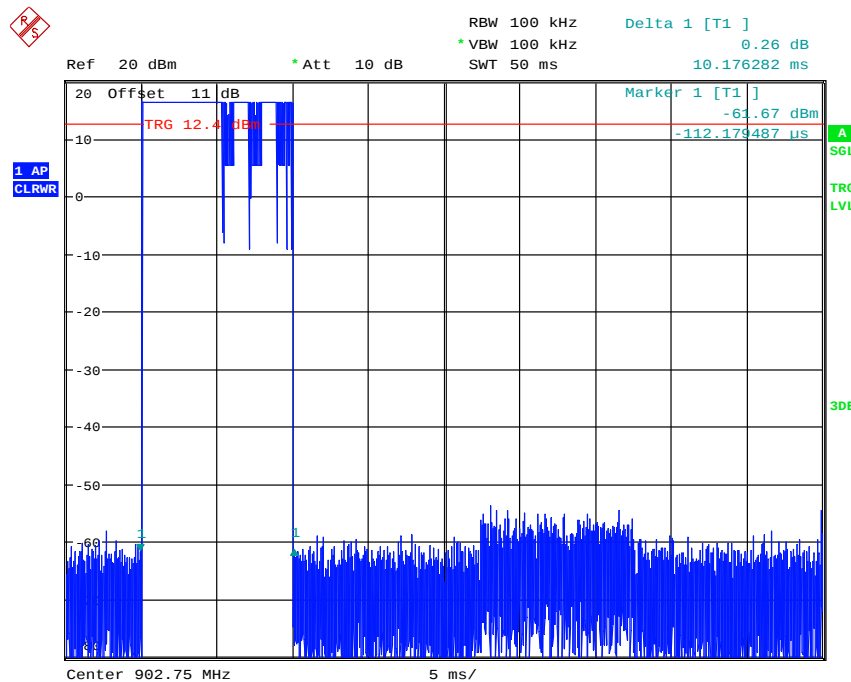
FCC ID: WXAUE600

3.8 Time of Occupancy (Dwell Time)

Frequency hopping systems operating in the 5725-5850 MHz band shall use an average time of occupancy on any frequency not greater than 0.4 seconds within a 30 second period.

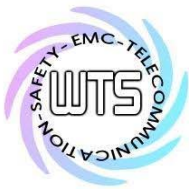
In 2400-2483.5 MHz band the average time of occupancy on any channel shall not be greater than 0.4 seconds multiplied by the number of hopping channels employed.

For frequency hopping systems operating in the 902-928 MHz band: if the 20dB bandwidth of the hopping channel is less than 250 kHz, the average time of occupancy on any frequency shall not greater than 0.4 seconds within a 20 second period; if the 20dB bandwidth of the hopping channel is 250 kHz or greater, the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 10 second period.



DWELL TIME 902.75MHZ(10.176ms * 13 = 132.288ms)

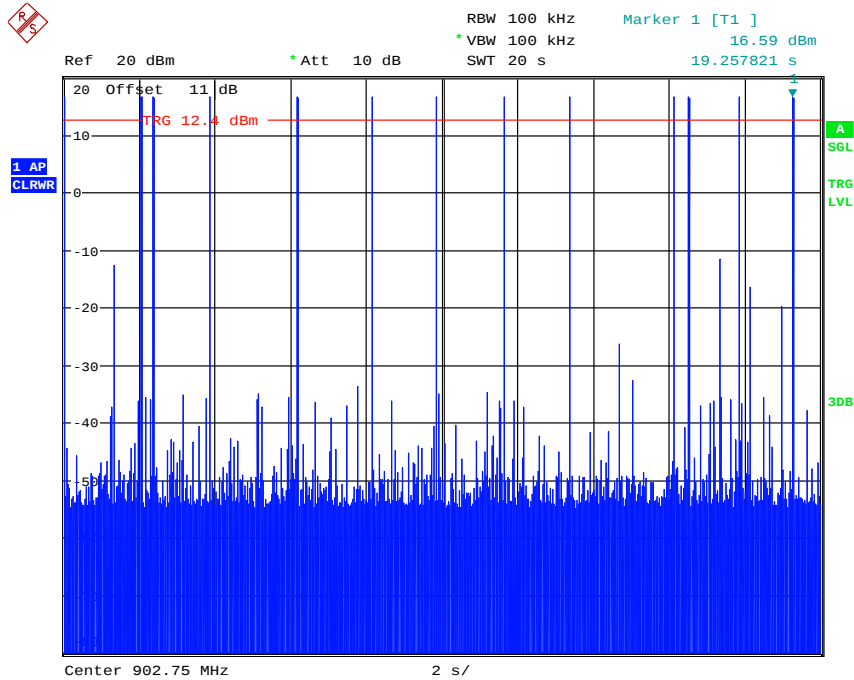
Date: 31.MAR.2015 09:27:10



Worldwide Testing Services(Taiwan) Co., Ltd.

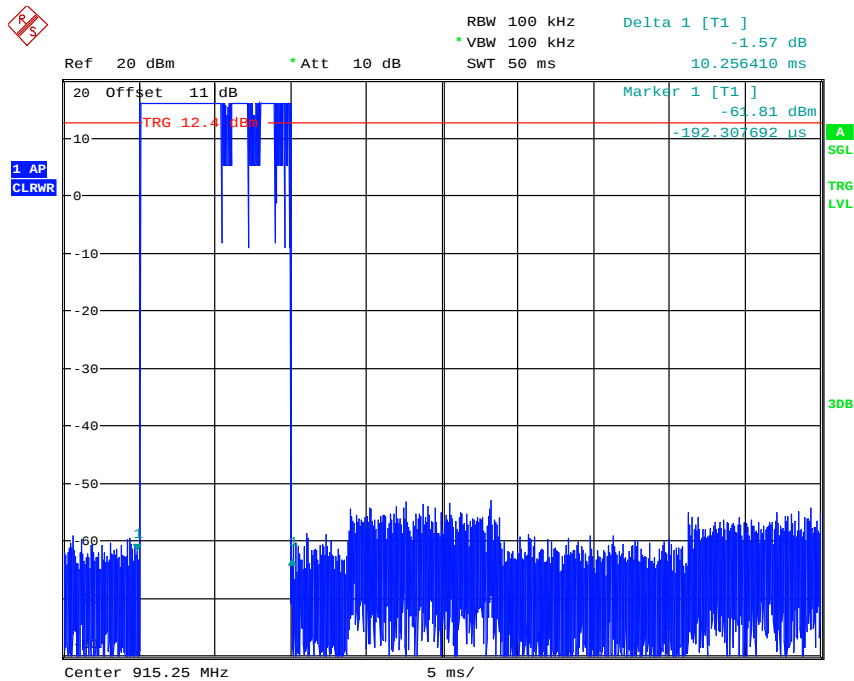
Registration number: W6M21503-14919-C-1

FCC ID: WXAUE600



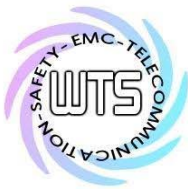
DWELL TIME 902.75MHZ

Date: 31.MAR.2015 09:25:57



DWELL TIME 915.25MHZ(10.256ms * 18 = 184.608ms)

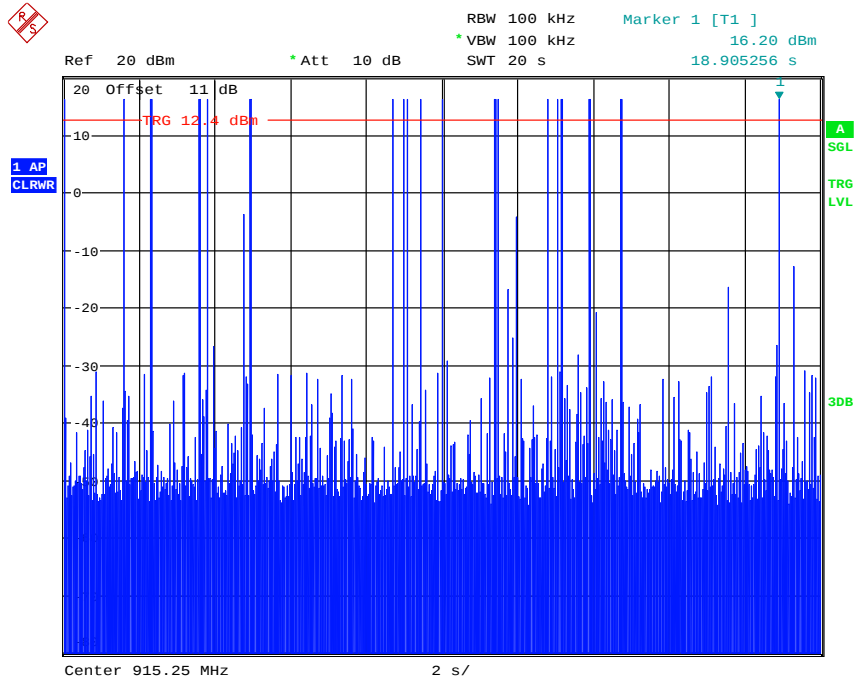
Date: 31.MAR.2015 09:37:14



Worldwide Testing Services(Taiwan) Co., Ltd.

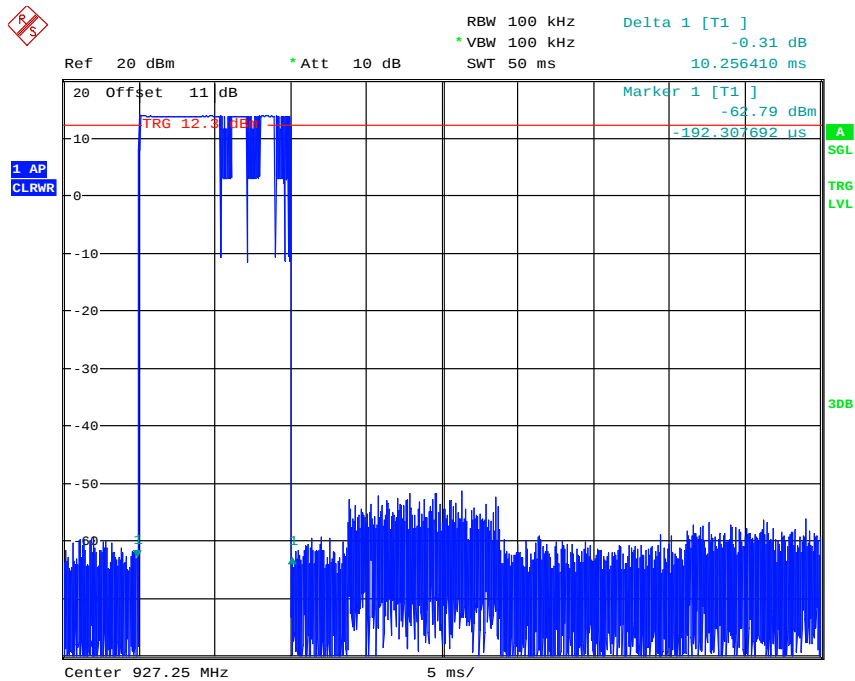
Registration number: W6M21503-14919-C-1

FCC ID: WXAUE600



DWELL TIME 915.25MHZ

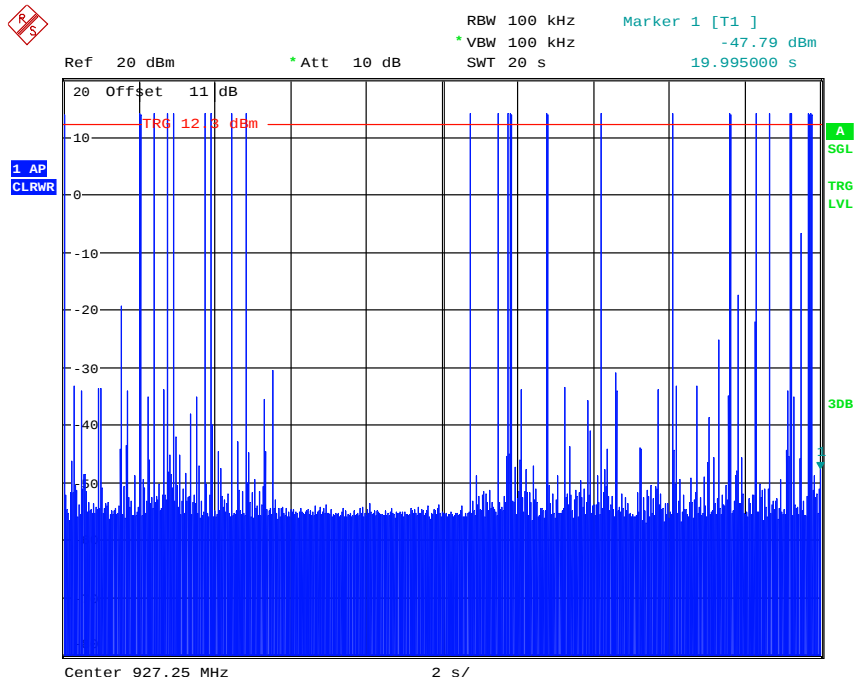
Date: 31.MAR.2015 09:32:31



DWELL TIME 927.25MHZ(10.256ms * 21 = 215.376ms)

Date: 31.MAR.2015 09:41:10

Registration number: W6M21503-14919-C-1
FCC ID: WXAUE600



DWELL TIME 927.25MHZ
Date: 31.MAR.2015 09:40:11

Limits and measurement periods:

Frequency MHz	Number of channels	Measurement Period	Limit
902 – 928	≥ 50	20 s	0.4 s
	$49 \geq 25$	10 s	0.4 s
2400 – 2483.5	≥ 15	0.4 s * number of used channels	0.4 s
5725- 5850	≥ 75	30 s	0.4s

Test equipment used: ETSTW-RE 055, ETSTW-RE 064



Registration number: W6M21503-14919-C-1

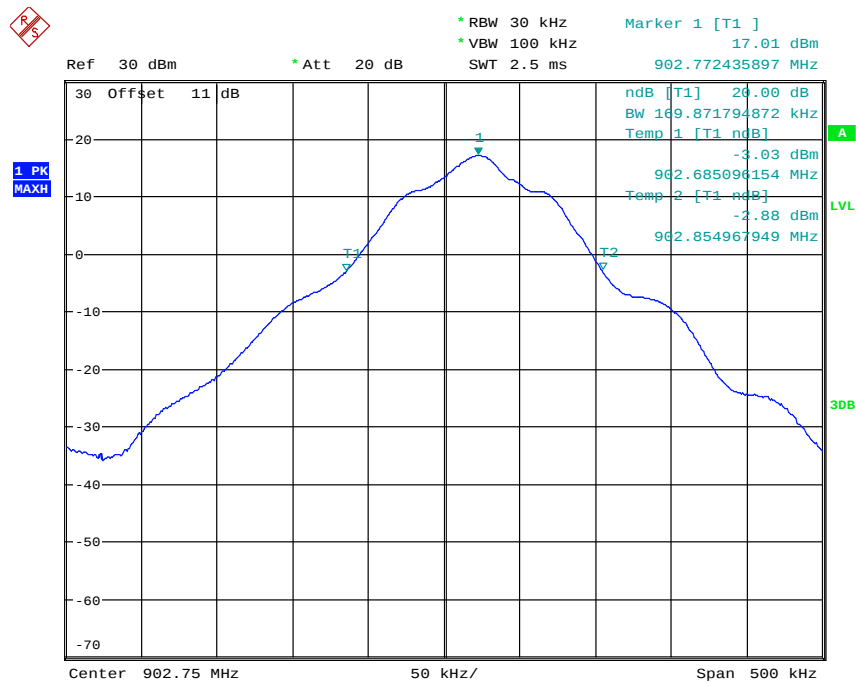
FCC ID: WXAUE600

3.9 20dB Bandwidth

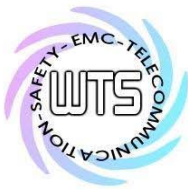
Frequency hopping systems operating in the 5725-5850 MHz bands shall use a maximum 20dB bandwidth of 1 MHz.

The 20dB bandwidth is measured on the lowest, middle and highest hopping channel.

For frequency hopping systems operating in the 902-928 MHz band the maximum 20dB bandwidth of the hopping channel is 500 kHz.



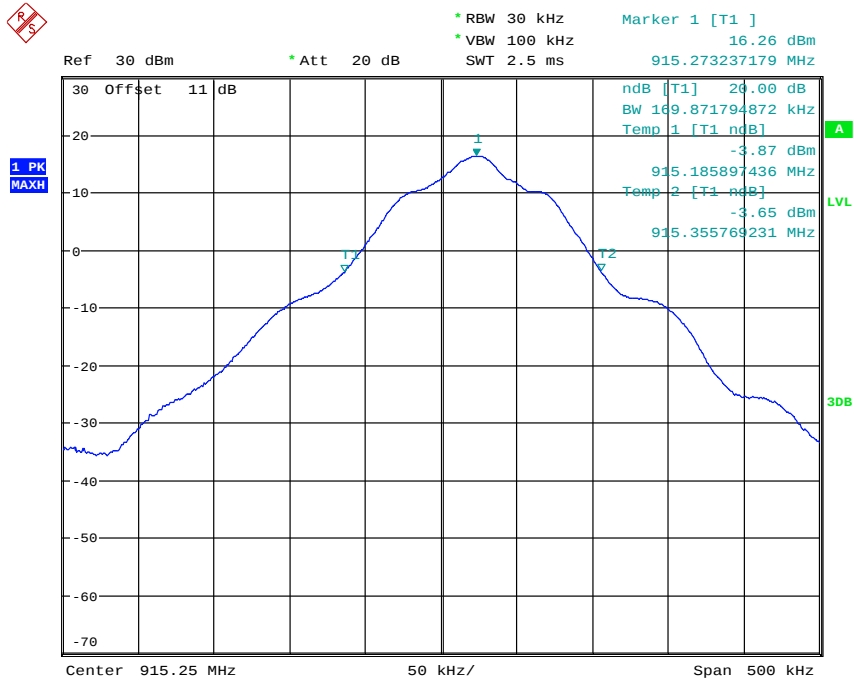
20DB BANDWIDTH 902.75MHZ
Date: 28.MAR.2015 15:31:30



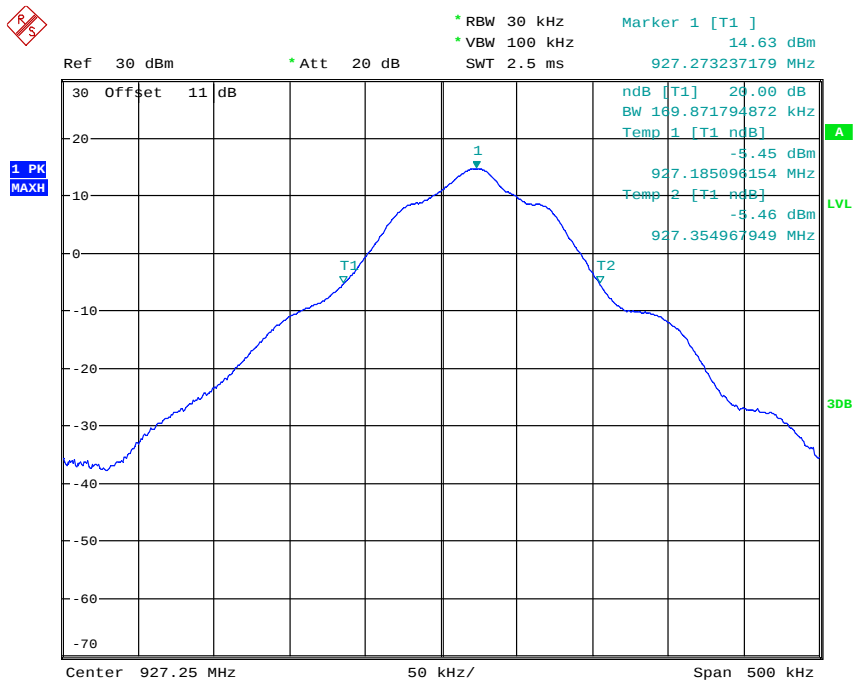
Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21503-14919-C-1

FCC ID: WXAUE600



20DB BANDWIDTH 915.25MHZ
Date: 28.MAR.2015 15:32:41



20DB BANDWIDTH 927.25MHZ
Date: 28.MAR.2015 15:33:17



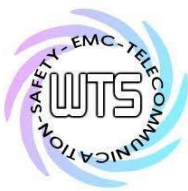
Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21503-14919-C-1
FCC ID: WXAUE600

Limits:

Frequency Range / MHz	Limit
902-928	≤ 500 kHz
2400-2483.5	not defined
5725-5850	≤ 1 MHz

Test equipment used: ETSTW-RE 055, ETSTW-RE 064



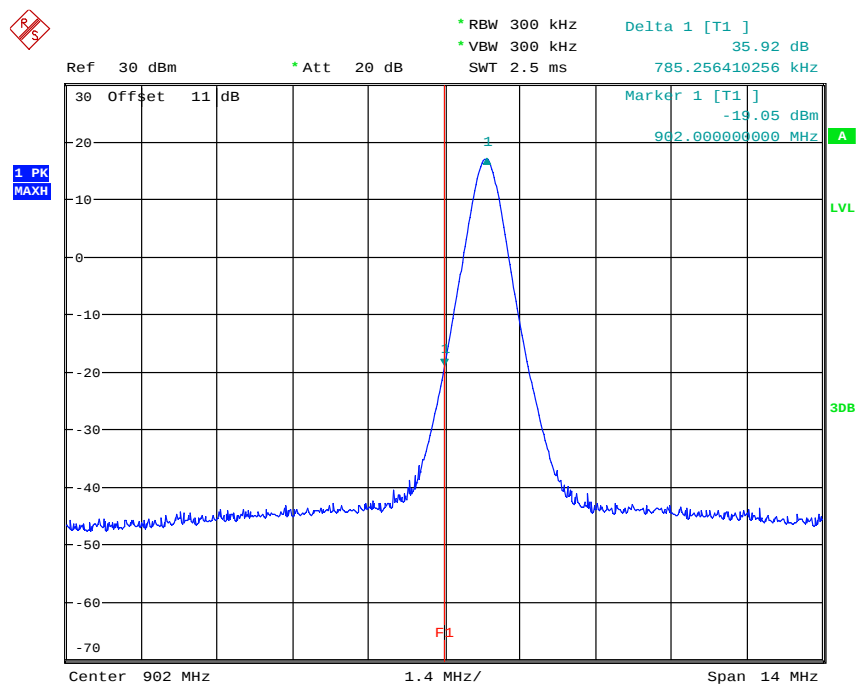
Registration number: W6M21503-14919-C-1

FCC ID: WXAUE600

3.10 Band-edge Compliance of RF Emissions

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.



BANDEDGE 902.75MHZ

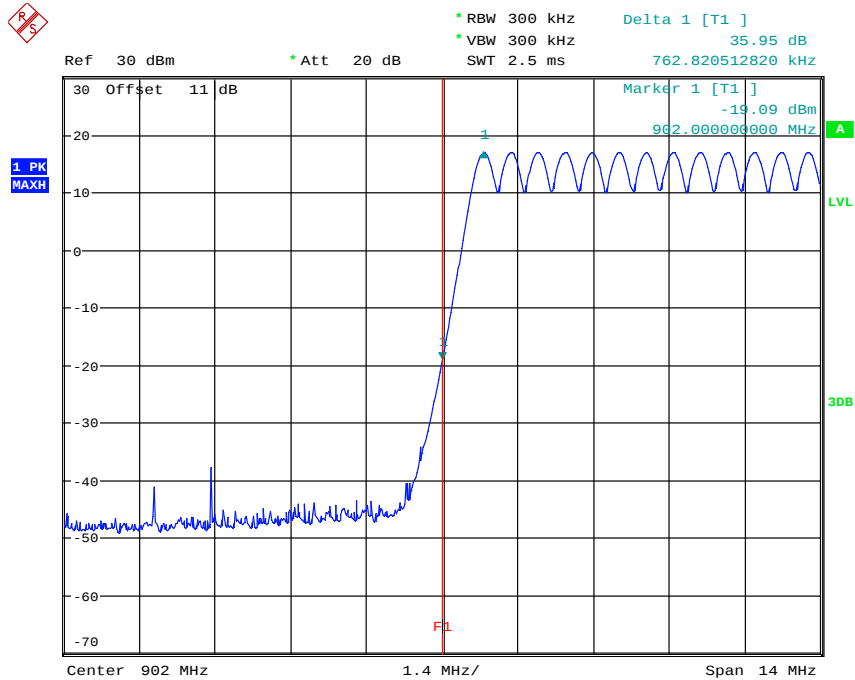
Date: 28.MAR.2015 15:40:40



Worldwide Testing Services(Taiwan) Co., Ltd.

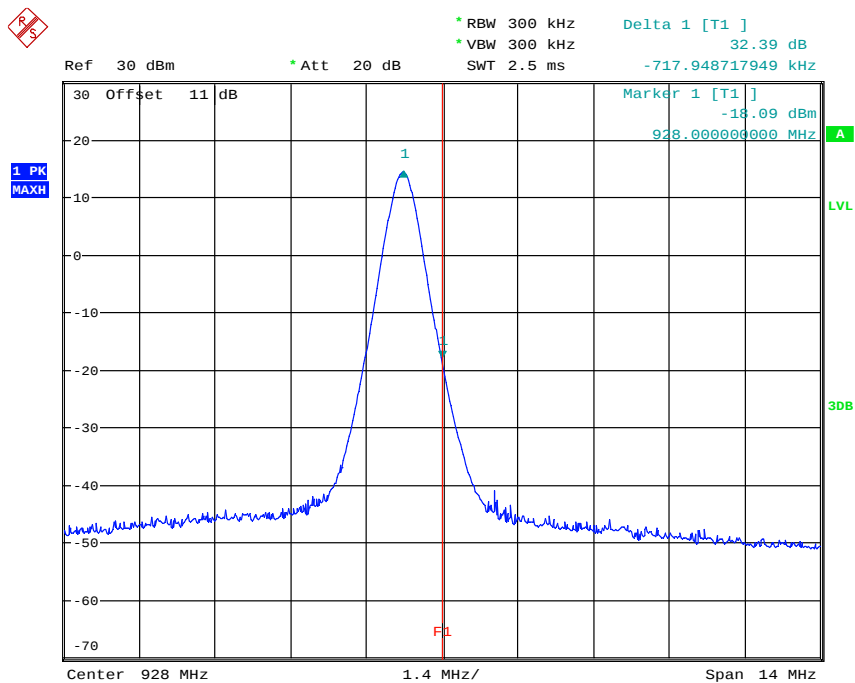
Registration number: W6M21503-14919-C-1

FCC ID: WXAUE600



BANDEDGE 902.75MHZ HOPPING MODE

Date: 28.MAR.2015 15:38:13



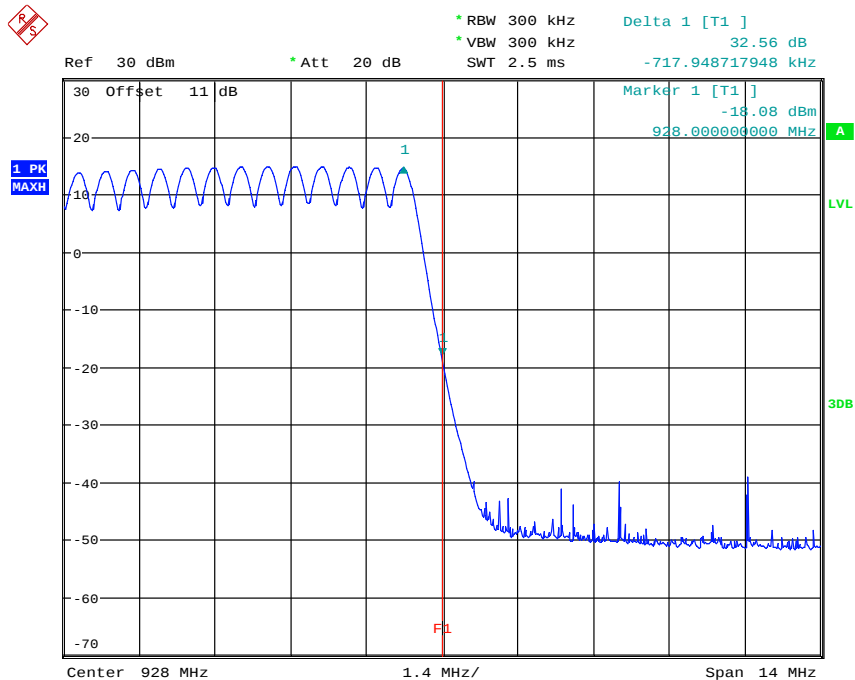
BANDEDGE 927.25MHZ

Date: 28.MAR.2015 15:40:02



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21503-14919-C-1
FCC ID: WXAUE600



BANDEDGE 927.25MHZ HOPPING MODE
Date: 28.MAR.2015 15:37:26

Limits:

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

Test equipment used: ETSTW-RE 055, ETSTW-RE 064



Registration number: W6M21503-14919-C-1

FCC ID: WXAUE600

3.11 Radiated Emissions from Digital Part

FCC Rule: 15.109

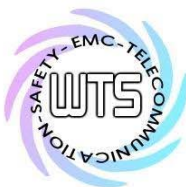
Summary table with radiated data of the test plots

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

Explanation: The test results are listed in the separated test report no.: W6M21503-14919-P-15B.

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



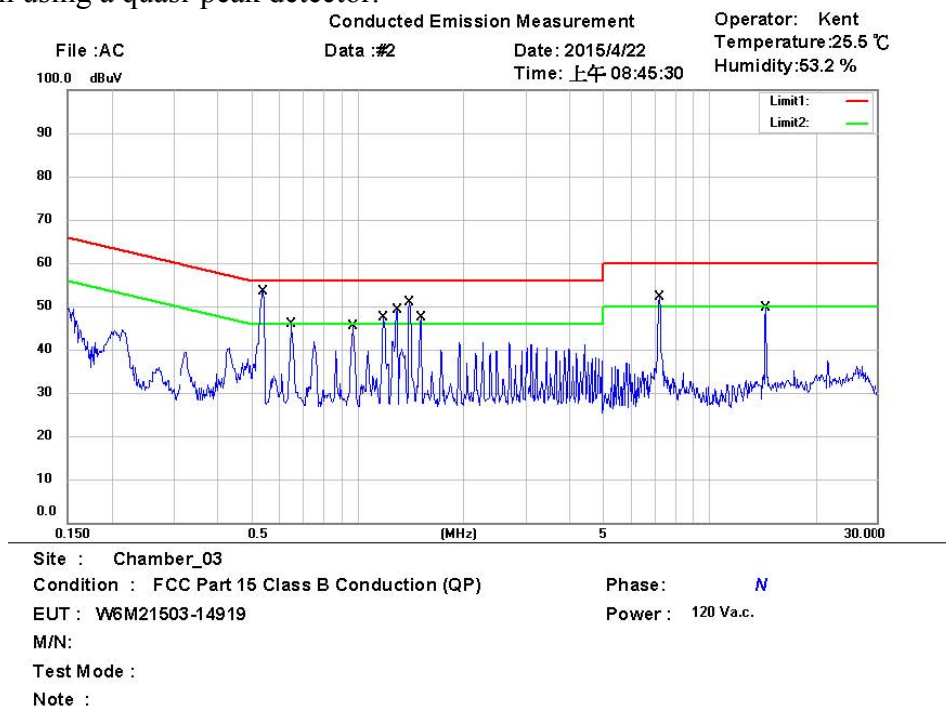
Registration number: W6M21503-14919-C-1

FCC ID: WXAUE600

3.12 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.



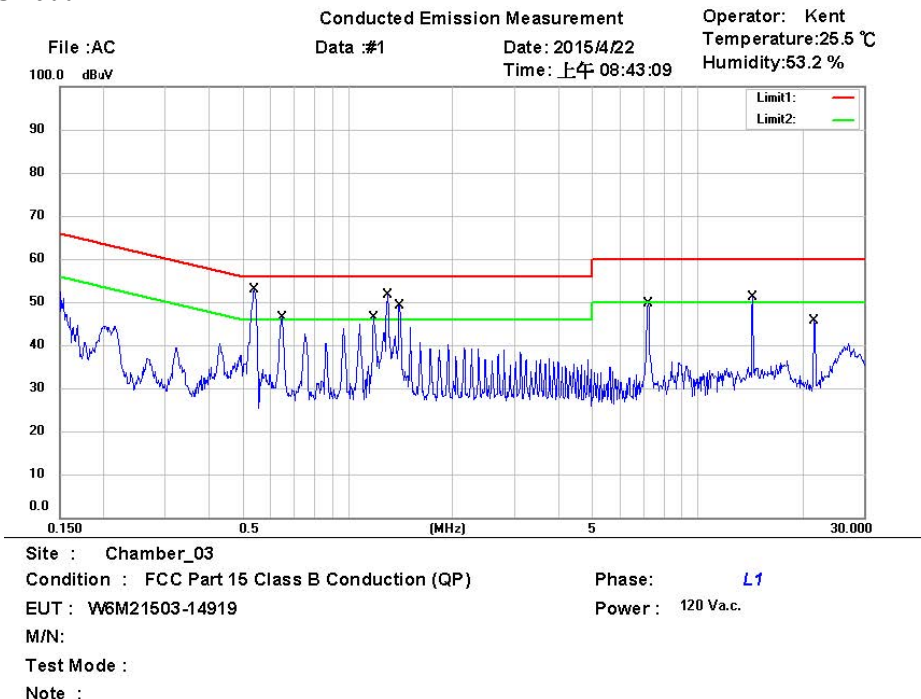
Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Comment
*	0.5383	42.14	QP	9.77	51.91	56.00	-4.09	
	0.5383	24.94	AVG	9.77	34.71	46.00	-11.29	
	0.6485	33.84	QP	9.78	43.62	56.00	-12.38	
	0.6485	18.64	AVG	9.78	28.42	46.00	-17.58	
	0.9680	32.80	QP	9.80	42.60	56.00	-13.40	
	0.9680	19.34	AVG	9.80	29.14	46.00	-16.86	
	1.1840	33.61	QP	9.80	43.41	56.00	-12.59	
	1.1840	19.35	AVG	9.80	29.15	46.00	-16.85	
	1.2920	37.74	QP	9.81	47.55	56.00	-8.45	
	1.2920	19.28	AVG	9.81	29.09	46.00	-16.91	
	1.4000	38.64	QP	9.81	48.45	56.00	-7.55	
	1.4000	23.49	AVG	9.81	33.30	46.00	-12.70	
	1.5057	34.56	QP	9.81	44.37	56.00	-11.63	
	1.5057	20.34	AVG	9.81	30.15	46.00	-15.85	
	7.2125	36.83	QP	10.07	46.90	60.00	-13.10	
	7.2125	29.75	AVG	10.07	39.82	50.00	-10.18	

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Comment
	14.4125	35.93	QP	10.16	46.09	60.00	-13.91	
	14.4125	31.39	AVG	10.16	41.55	50.00	-8.45	



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21503-14919-C-1
FCC ID: WXAUE600



Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Comment
*	0.5404	41.26	QP	9.70	50.96	56.00	-5.04	
	0.5404	24.02	AVG	9.70	33.72	46.00	-12.28	
	0.6485	33.66	QP	9.71	43.37	56.00	-12.63	
	0.6485	16.15	AVG	9.71	25.86	46.00	-20.14	
	1.1840	33.33	QP	9.73	43.06	56.00	-12.94	
	1.1840	17.69	AVG	9.73	27.42	46.00	-18.58	
	1.2920	37.76	QP	9.73	47.49	56.00	-8.51	
	1.2920	19.28	AVG	9.73	29.01	46.00	-16.99	
	1.3977	37.68	QP	9.73	47.41	56.00	-8.59	
	1.3977	21.86	AVG	9.73	31.59	46.00	-14.41	
	7.2125	36.85	QP	9.98	46.83	60.00	-13.17	
	7.2125	29.83	AVG	9.98	39.81	50.00	-10.19	
	14.4250	24.04	QP	10.02	34.06	60.00	-25.94	
	14.4250	19.59	AVG	10.02	29.61	50.00	-20.39	
	21.6000	23.07	QP	10.09	33.16	60.00	-26.84	
	21.6000	18.02	AVG	10.09	28.11	50.00	-21.89	

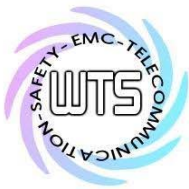
Limits:

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

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 = ± 1.67 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.

Test equipment used: ETSTW-CE 001, ETSTW-CE 016, ETSTW-CE 006, ETSTW-RE 064



Appendix

Measurement diagrams

Spurious Emissions radiated



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8875

Radiated Emission Measurement

Operator: Roy

File :1

Data :#1

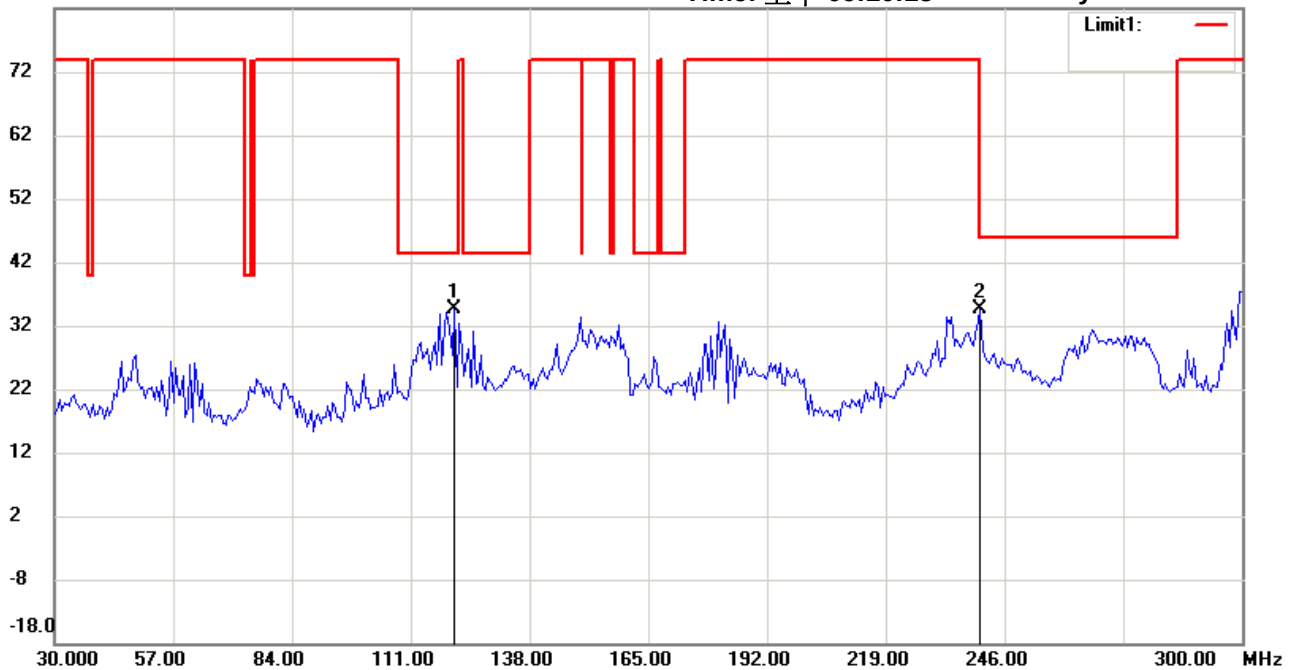
Date: 2015/4/16

Temperature:24 °C

82.0 dBuV/m

Time: 上午 09:10:15

Humidity:60 %



Site : Chamber

Condition : FCC Restriction Band 30-300

EUT : W6M21503-14919

M/N:

Test Mode : TX 902.75MHz

Note :

Polarization: *Horizontal*

Power : 5 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	120.9018	20.51	peak	14.05	34.56	43.50	100	30	-8.94	
	240.4810	20.32	peak	14.21	34.53	46.00	100	125	-11.47	

*:Maximum data x:Over limit !:over margin



Radiated Emission Measurement

Operator: Roy

File :1

Data :#2

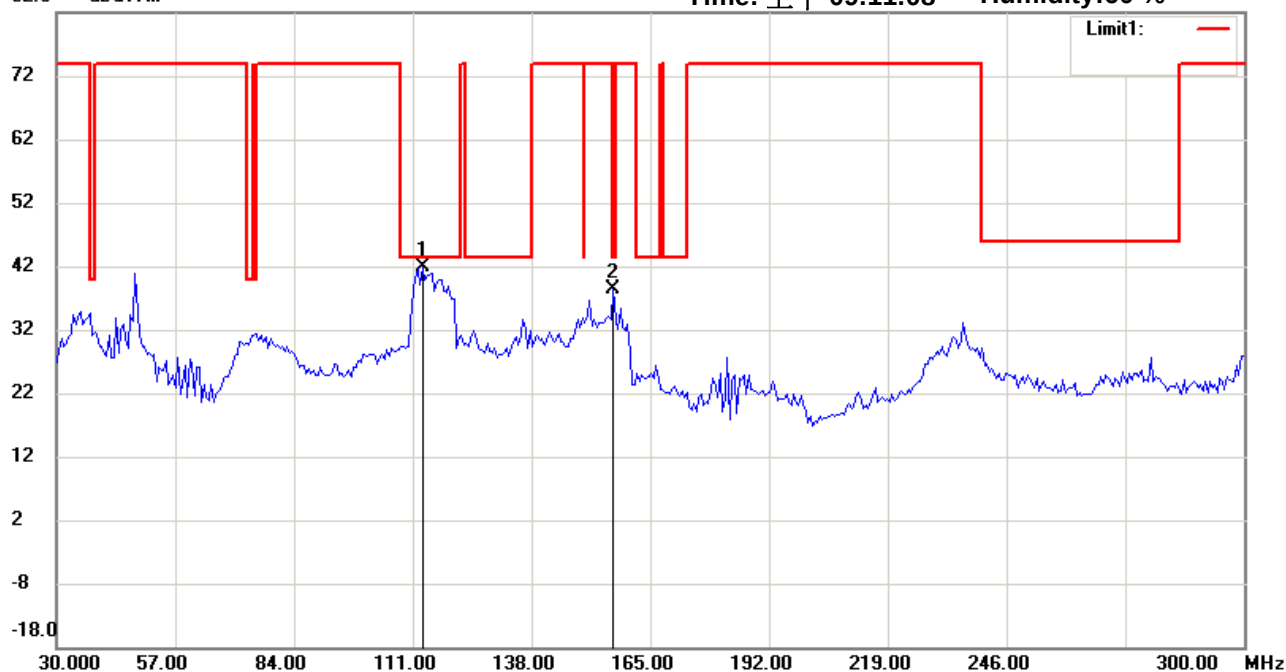
Date: 2015/4/16

Temperature:24 °C

82.0 dBuV/m

Time: 上午 09:11:08

Humidity:60 %



Site : Chamber

Condition : FCC Restriction Band 30-300

EUT : W6M21503-14919

M/N:

Test Mode : TX 902.75MHz

Note :

Polarization: **Vertical**

Power : 5 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	113.3267	28.36	peak	13.50	41.86	43.50	100	115	-1.64	
	156.6132	22.87	peak	15.49	38.36	74.00	100	40	-35.64	



Address: 6F., No. 58, Ln 188, Ruey Kuang Rd, Neihu, Taipei
Tel: +886-2-6606-8877
Fax: +886-2-6606-8875

Radiated Emission Measurement

Operator: Roy

File : 2

Data : #1

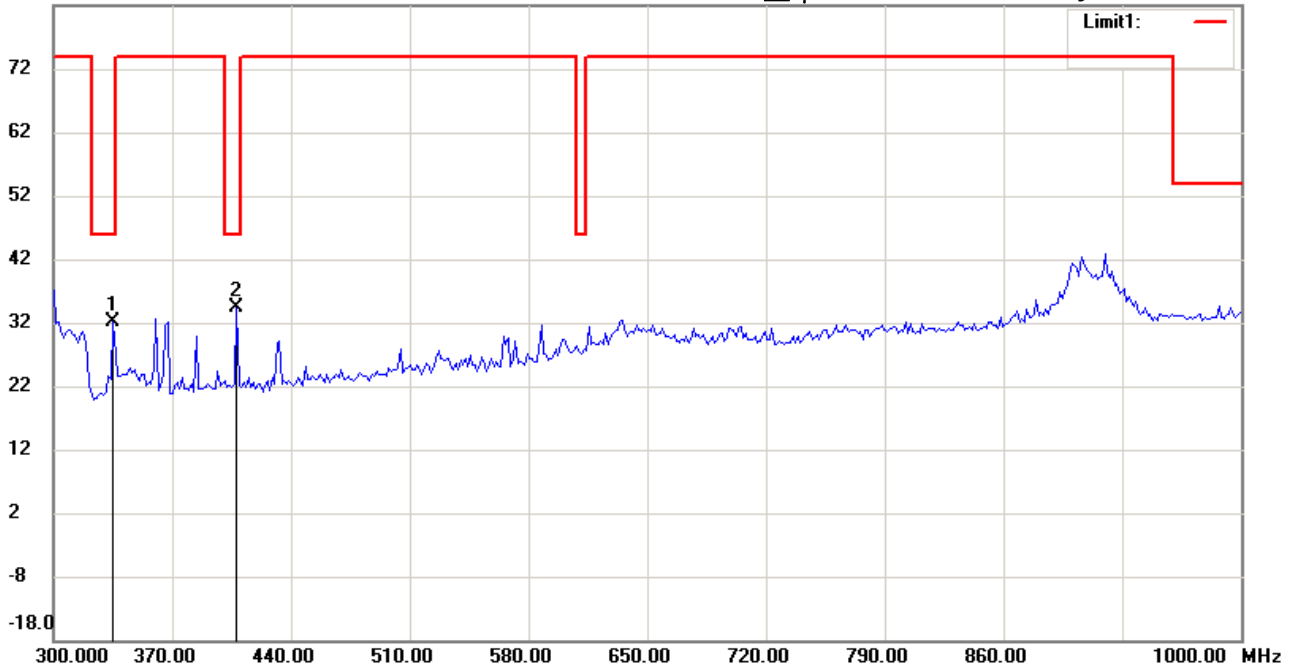
Date: 2015/4/16

Temperature: 24 °C

82.0 dBuV/m

Time: 上午 10:30:09

Humidity: 60 %



Site : Chamber

Condition : FCC Restriction Band 300-1000

EUT : W6M21503-14919

M/N:

Test Mode : TX 902.75MHz

Note :

Polarization: *Horizontal*

Power : 5 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	335.0701	15.10	peak	16.99	32.09	46.00	100	280	-13.91	
*	408.0160	15.38	peak	19.00	34.38	46.00	100	130	-11.62	

*:Maximum data x:Over limit !:over margin



Radiated Emission Measurement

Operator: Roy

File :2

Data :#2

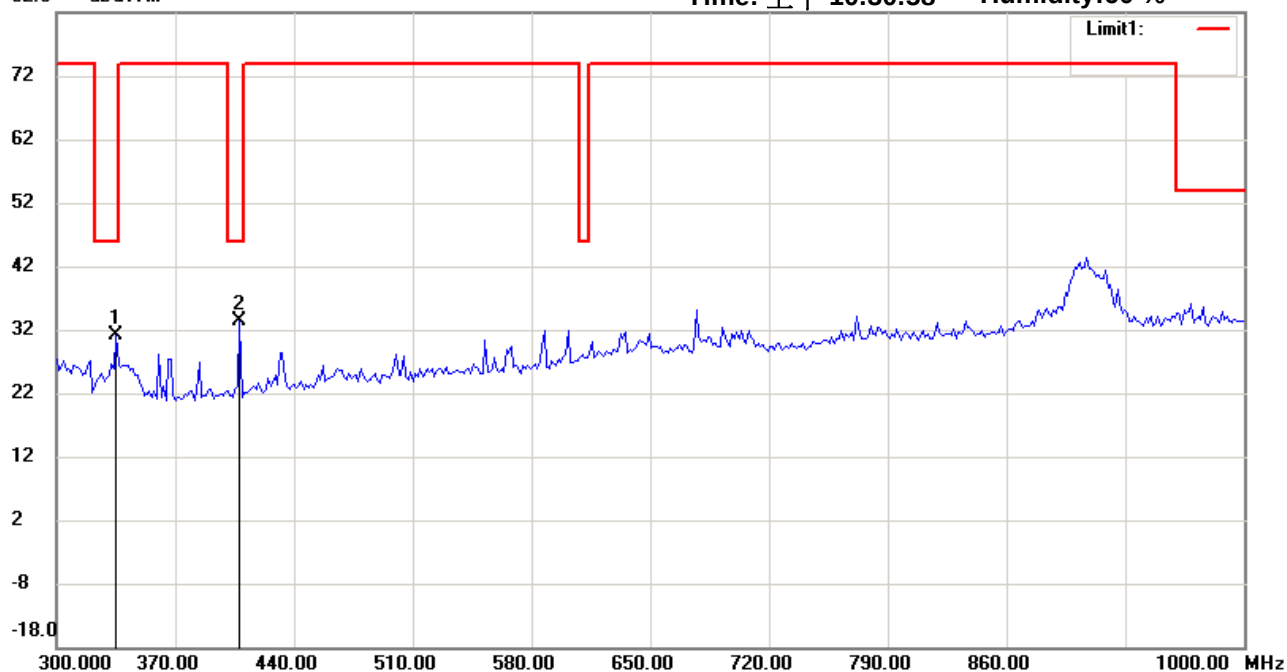
Date: 2015/4/16

Temperature:24 °C

82.0 dBuV/m

Time: 上午 10:30:58

Humidity:60 %



Site : Chamber

Condition : FCC Restriction Band 300-1000

EUT : W6M21503-14919

M/N:

Test Mode : TX 902.75MHz

Note :

Polarization: **Vertical**

Power : 5 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	335.0701	14.26	peak	16.99	31.25	46.00	100	70	-14.75	
*	408.0160	14.44	peak	19.00	33.44	46.00	100	235	-12.56	



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8875

Radiated Emission Measurement

Operator: Roy

File :3

Data :#1

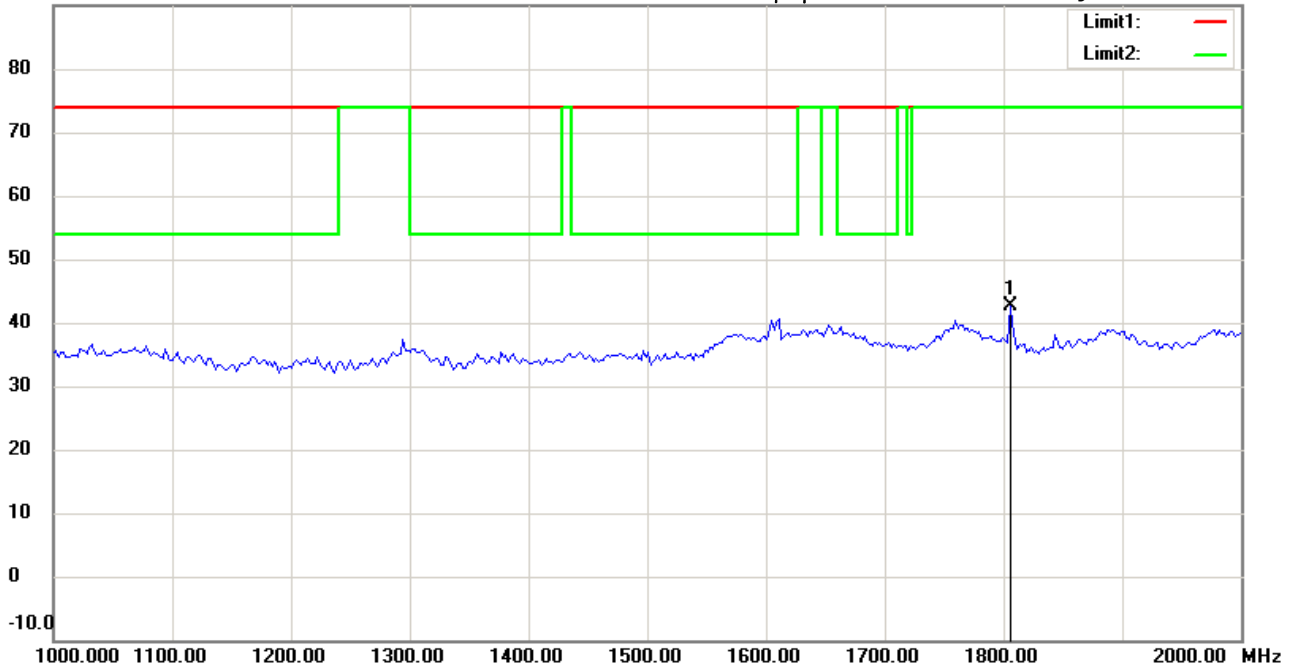
Date: 2015/4/14

Temperature:24 °C

90.0 dBuV/m

Time: 下午 02:25:36

Humidity:60 %



Site : Chamber

Condition : FCC Restriction Band_Above 1GHz_PK

EUT : W6M21503-14919

M/N:

Test Mode : TX 902.75MHz

Note :

Polarization: *Horizontal*

Power : 5 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	1805.611	49.92	peak	-7.20	42.72	74.00	100	150	-31.28	

*:Maximum data x:Over limit !:over margin



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8875

Radiated Emission Measurement

Operator: Roy

File :3

Data :#5

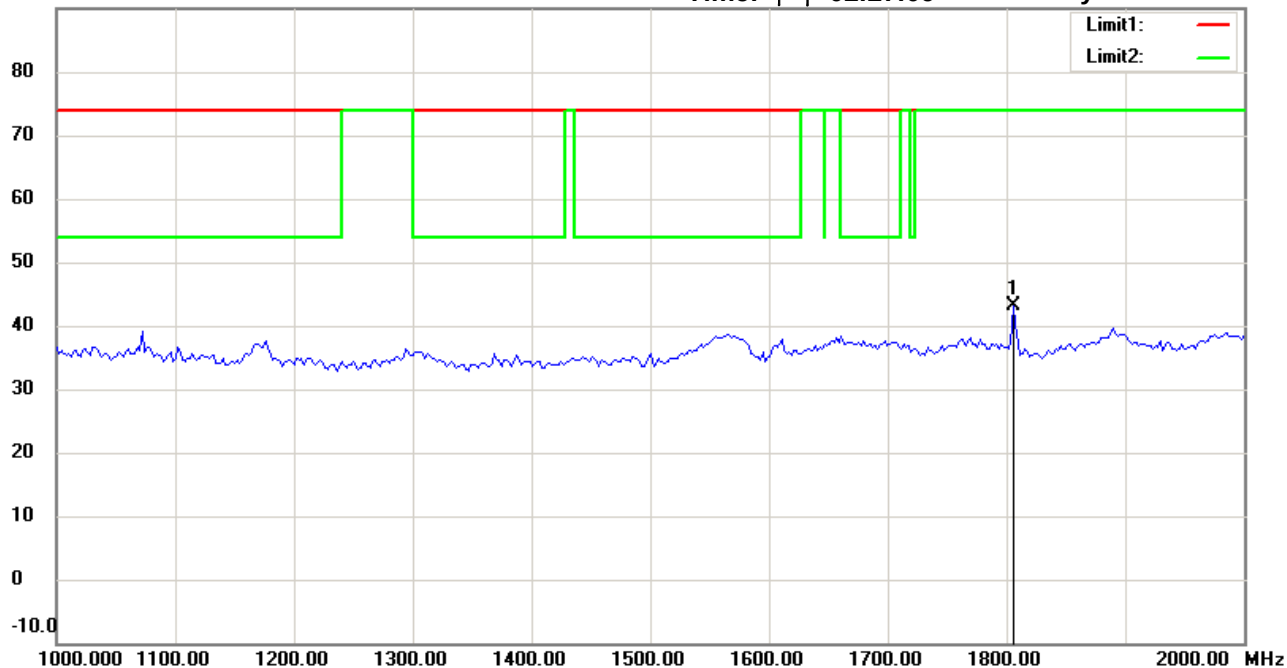
Date: 2015/4/14

Temperature:24 °C

90.0 dBuV/m

Time: 下午 02:27:09

Humidity:60 %



Site : Chamber

Condition : FCC Restriction Band_Above 1GHz_PK

EUT : W6M21503-14919

M/N:

Test Mode : TX 902.75MHz

Note :

Polarization: **Vertical**

Power : 5 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	1805.611	50.27	peak	-7.20	43.07	74.00	100	35	-30.93	

*:Maximum data x:Over limit !:over margin



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8875

Radiated Emission Measurement

Operator: Roy

File :3

Data :#2

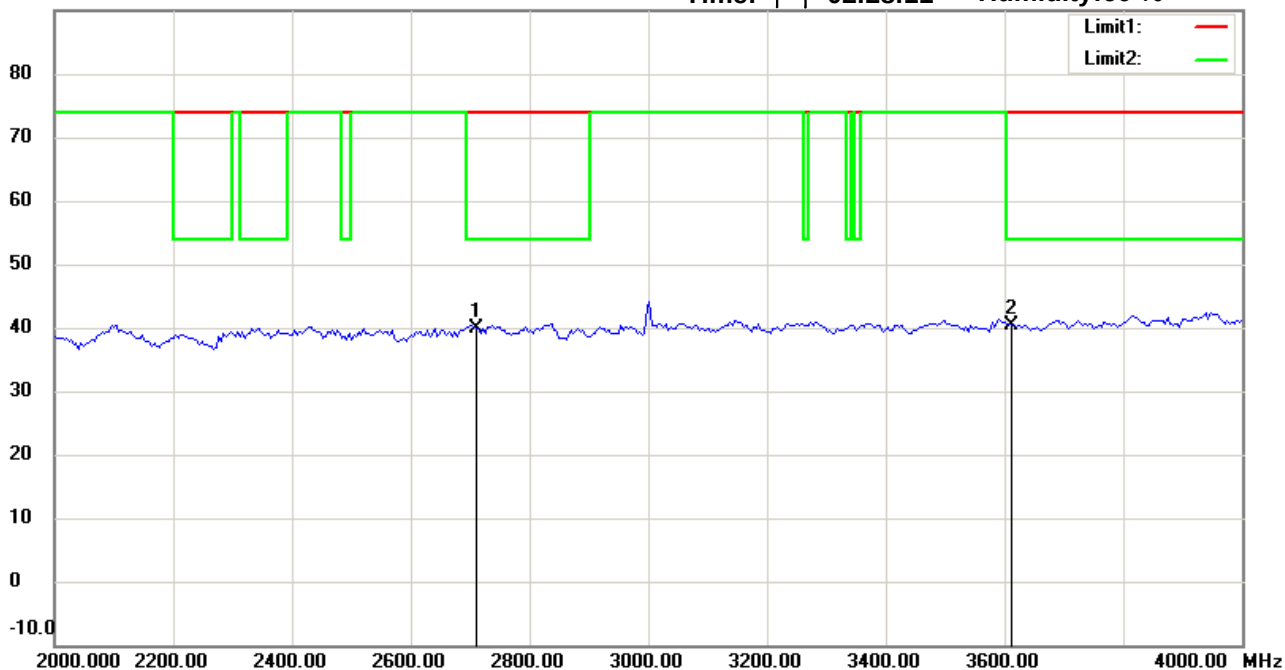
Date: 2015/4/14

Temperature:24 °C

90.0 dBuV/m

Time: 下午 02:28:11

Humidity:60 %



Site : Chamber

Condition : FCC Restriction Band_Above 1GHz_PK

EUT : W6M21503-14919

M/N:

Test Mode : TX 902.75MHz

Note :

Polarization: *Horizontal*

Power : 5 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	2708.250	42.85	peak	-3.08	39.77	74.00	100	215	-34.23	
*	3611.000	41.68	peak	-1.18	40.50	74.00	100	80	-33.50	

*:Maximum data x:Over limit !:over margin



Radiated Emission Measurement

Operator: Roy

File :3

Data :#6

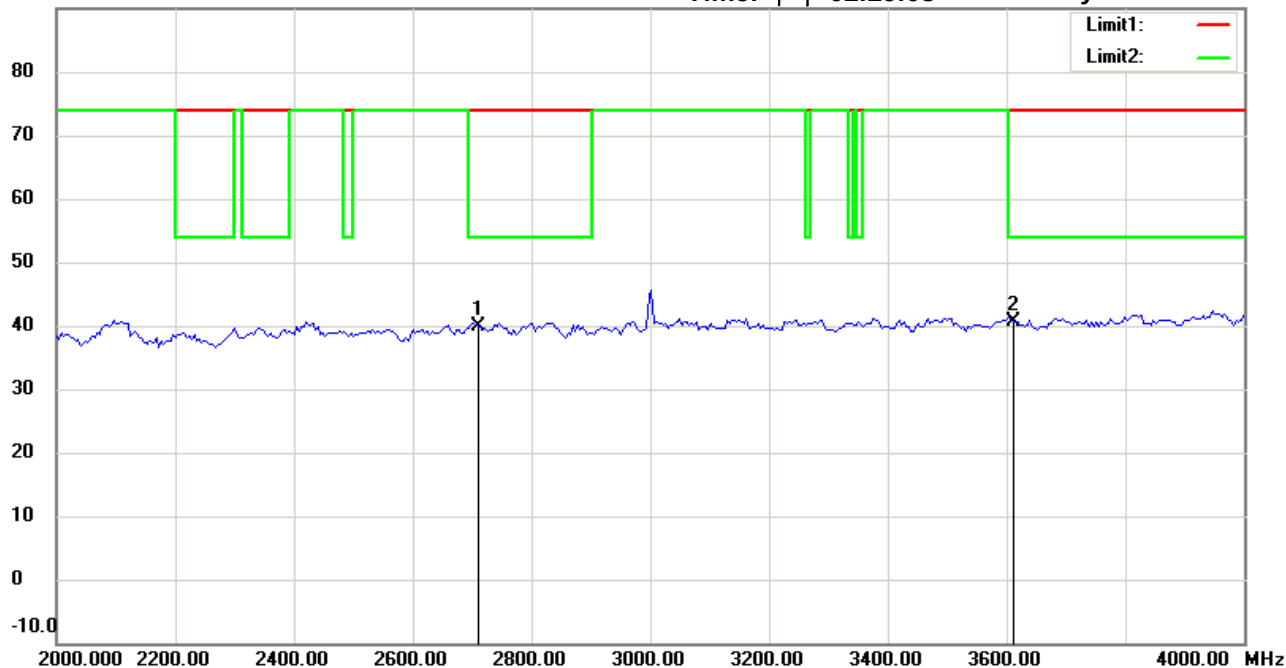
Date: 2015/4/14

Temperature:24 °C

90.0 dBuV/m

Time: 下午 02:29:03

Humidity:60 %



Site : Chamber

Condition : FCC Restriction Band_Above 1GHz_PK

EUT : W6M21503-14919

M/N:

Test Mode : TX 902.75MHz

Note :

Polarization: **Vertical**

Power : 5 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	2708.250	42.93	peak	-3.08	39.85	74.00	100	170	-34.15	
*	3611.000	41.87	peak	-1.18	40.69	74.00	100	105	-33.31	



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8875

Radiated Emission Measurement

Operator: Roy

File :3

Data :#3

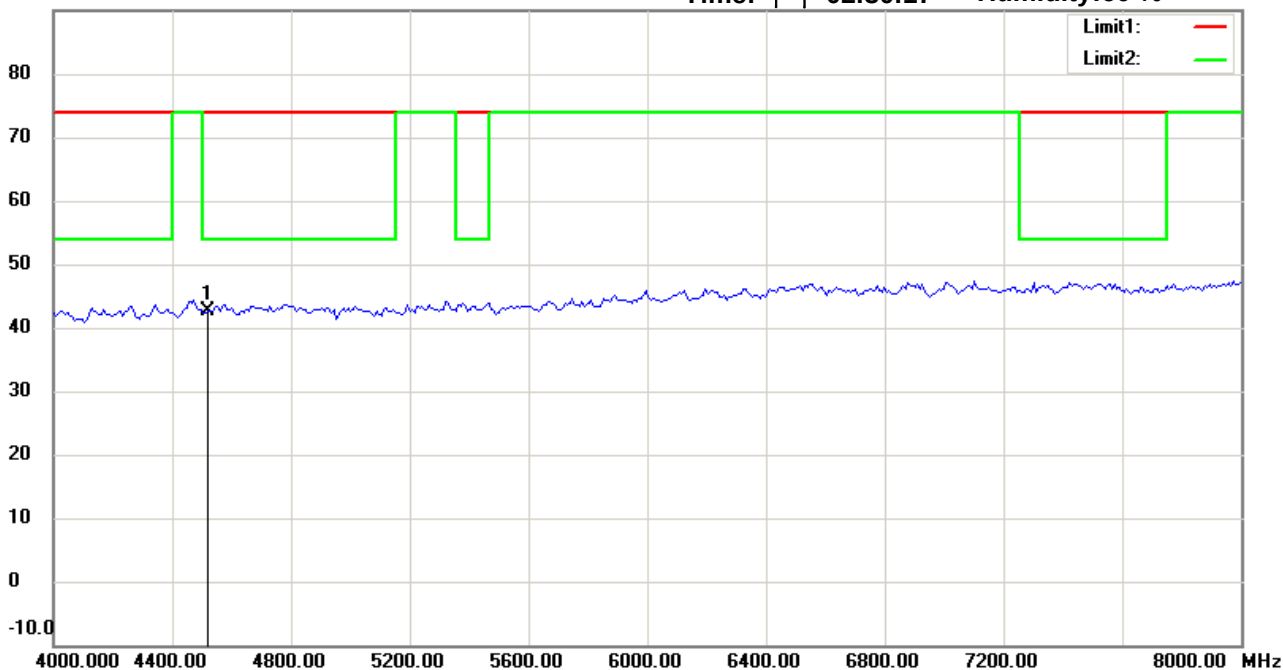
Date: 2015/4/14

Temperature:24 °C

90.0 dBuV/m

Time: 下午 02:30:17

Humidity:60 %



Site : Chamber

Condition : FCC Restriction Band_Above 1GHz_PK

EUT : W6M21503-14919

M/N:

Test Mode : TX 902.75MHz

Note :

Polarization: *Horizontal*

Power : 5 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	4513.750	41.63	peak	1.11	42.74	74.00	100	85	-31.26	

*:Maximum data x:Over limit !:over margin



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8875

Radiated Emission Measurement

Operator: Roy

File :3

Data :#7

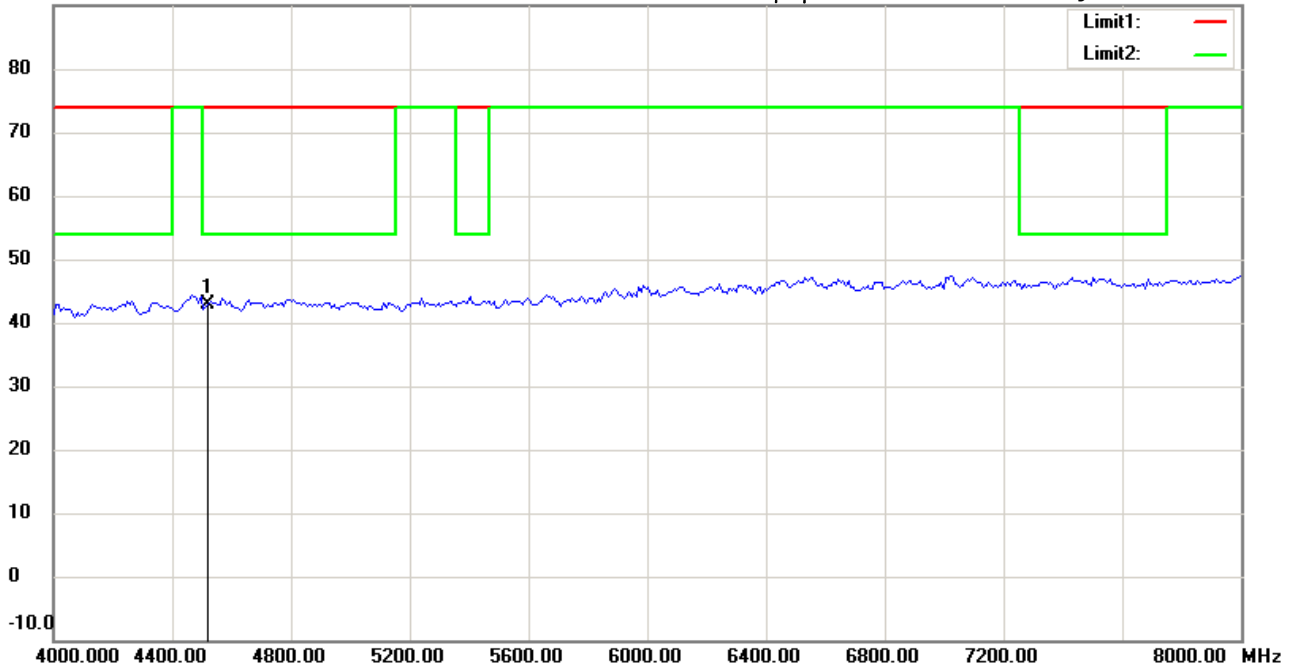
Date: 2015/4/14

Temperature:24 °C

90.0 dBuV/m

Time: 下午 02:31:15

Humidity:60 %



Site : Chamber

Condition : FCC Restriction Band_Above 1GHz_PK

EUT : W6M21503-14919

M/N:

Test Mode : TX 902.75MHz

Note :

Polarization: **Vertical**

Power : 5 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	4513.750	41.89	peak	1.11	43.00	74.00	100	40	-31.00	

*:Maximum data x:Over limit !:over margin



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8875

Radiated Emission Measurement

Operator: Roy

File :3

Data :#4

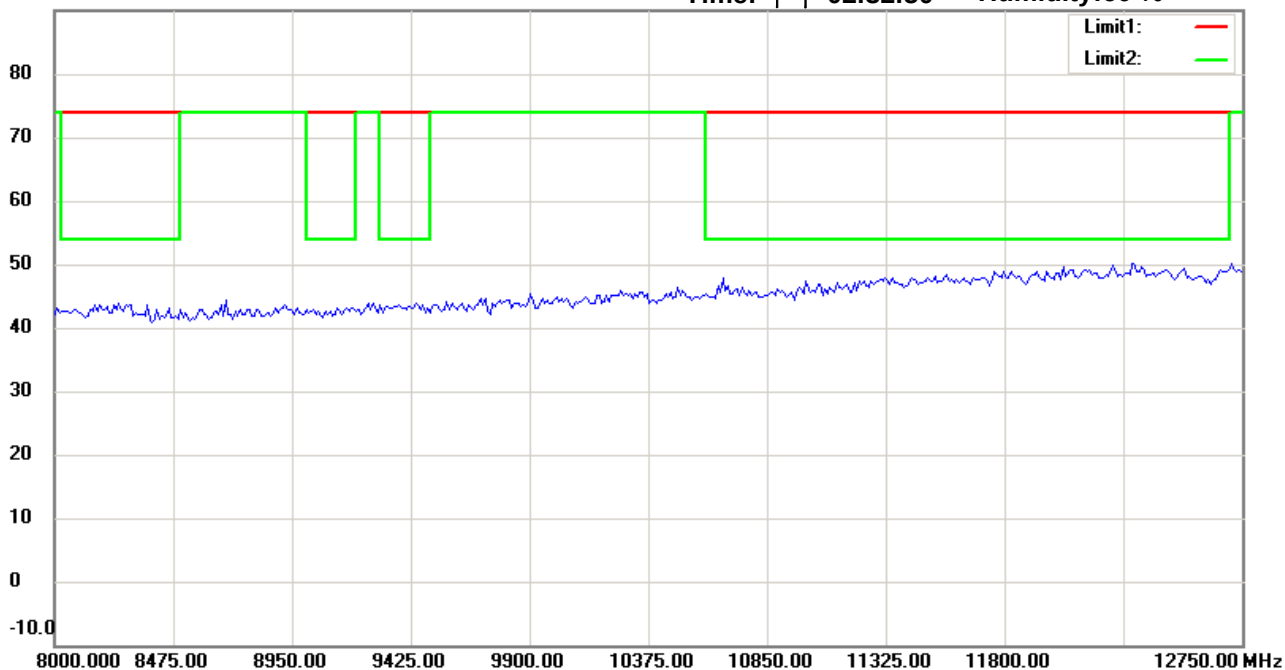
Date: 2015/4/14

Temperature:24 °C

90.0 dBuV/m

Time: 下午 02:32:50

Humidity:60 %



Site : Chamber

Condition : FCC Restriction Band_Above 1GHz_PK

EUT : W6M21503-14919

M/N:

Test Mode : TX 902.75MHz

Note :

Polarization: *Horizontal*

Power : 5 Vd.c.

Distance: 3m

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

*:Maximum data x:Over limit !:over margin



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8875

Radiated Emission Measurement

Operator: Roy

File :3

Data :#8

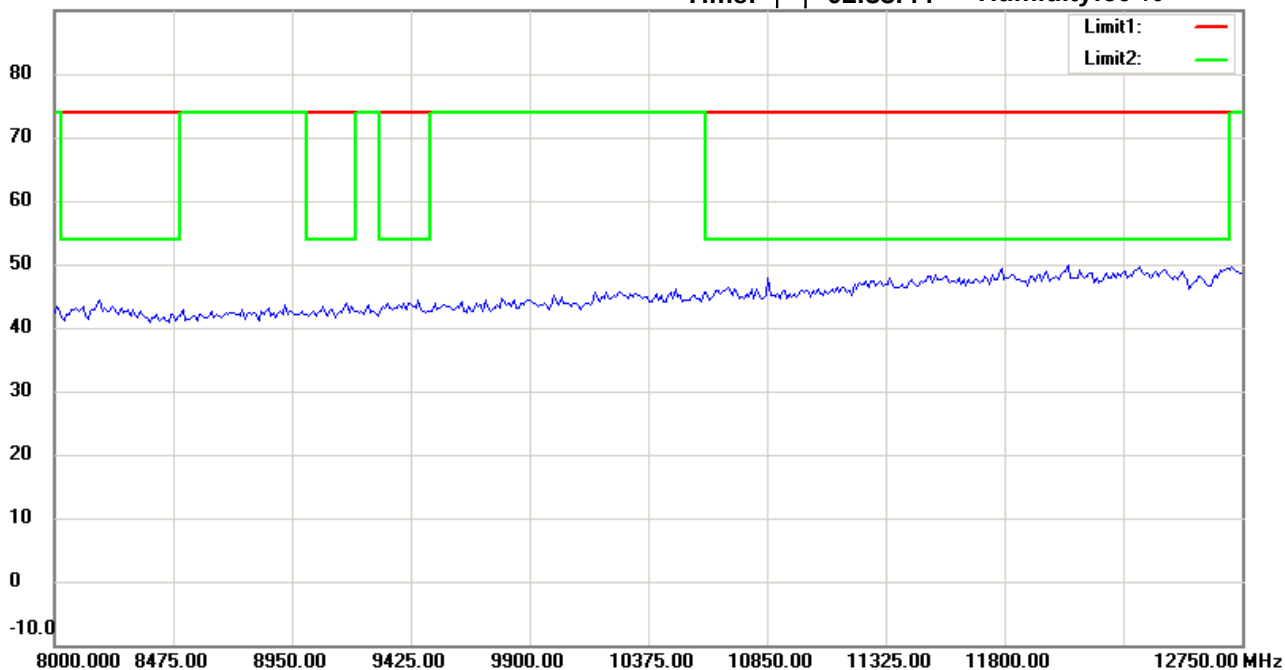
Date: 2015/4/14

Temperature:24 °C

90.0 dBuV/m

Time: 下午 02:33:44

Humidity:60 %



Site : Chamber

Condition : FCC Restriction Band_Above 1GHz_PK

Polarization: Vertical

EUT : W6M21503-14919

Power : 5 Vd.c.

M/N:

Distance: 3m

Test Mode : TX 902.75MHz

Note :

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

*:Maximum data x:Over limit !:over margin



Radiated Emission Measurement

Operator: Roy

File :1

Data :#1

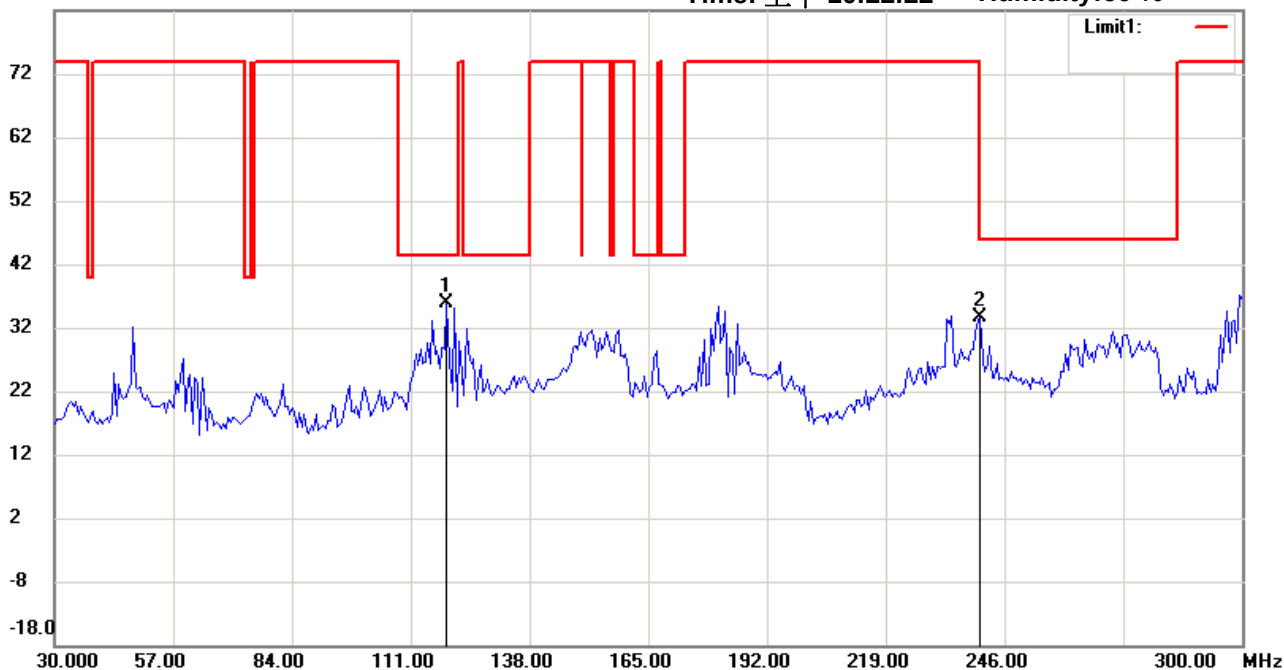
Date: 2015/4/16

Temperature:24 °C

82.0 dBuV/m

Time: 上午 10:22:22

Humidity:60 %



Site : Chamber

Condition : FCC Restriction Band 30-300

EUT : W6M21503-14919

M/N:

Test Mode : TX 915.25MHz

Note :

Polarization: *Horizontal*

Power : 5 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	119.2786	21.87	peak	13.93	35.80	43.50	100	165	-7.70	
	240.4810	19.46	peak	14.21	33.67	46.00	100	100	-12.33	



Radiated Emission Measurement

Operator: Roy

File :1

Data :#2

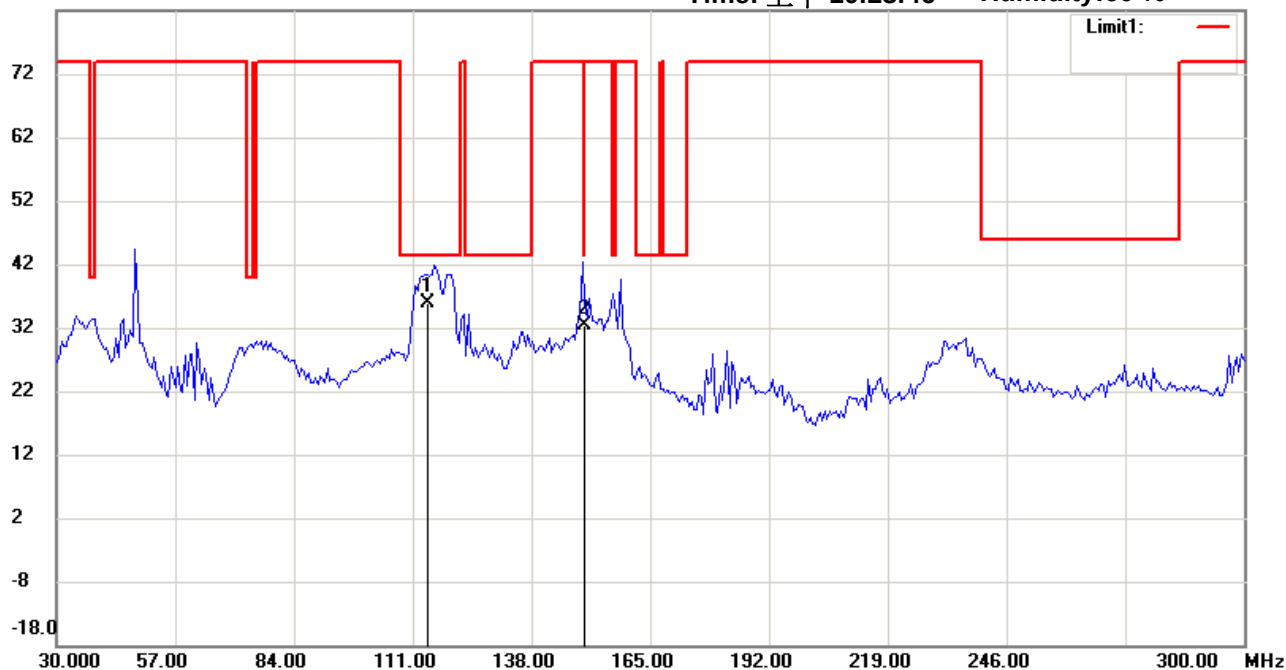
Date: 2015/4/16

Temperature:24 °C

82.0 dBuV/m

Time: 上午 10:23:46

Humidity:60 %



Site : Chamber

Condition : FCC Restriction Band 30-300

EUT : W6M21503-14919

M/N:

Test Mode : TX 915.25MHz

Note :

Polarization: **Vertical**

Power : 5 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	114.0481	22.35	QP	13.55	35.90	43.50	100	240	-7.60	
	149.9990	16.84	peak	15.50	32.34	43.50	100	25	-11.16	



Address: 6F., No. 58, Ln 188, Ruey Kuang Rd, Neihu, Taipei
Tel: +886-2-6606-8877
Fax: +886-2-6606-8875

Radiated Emission Measurement

Operator: Roy

File : 2

Data : #1

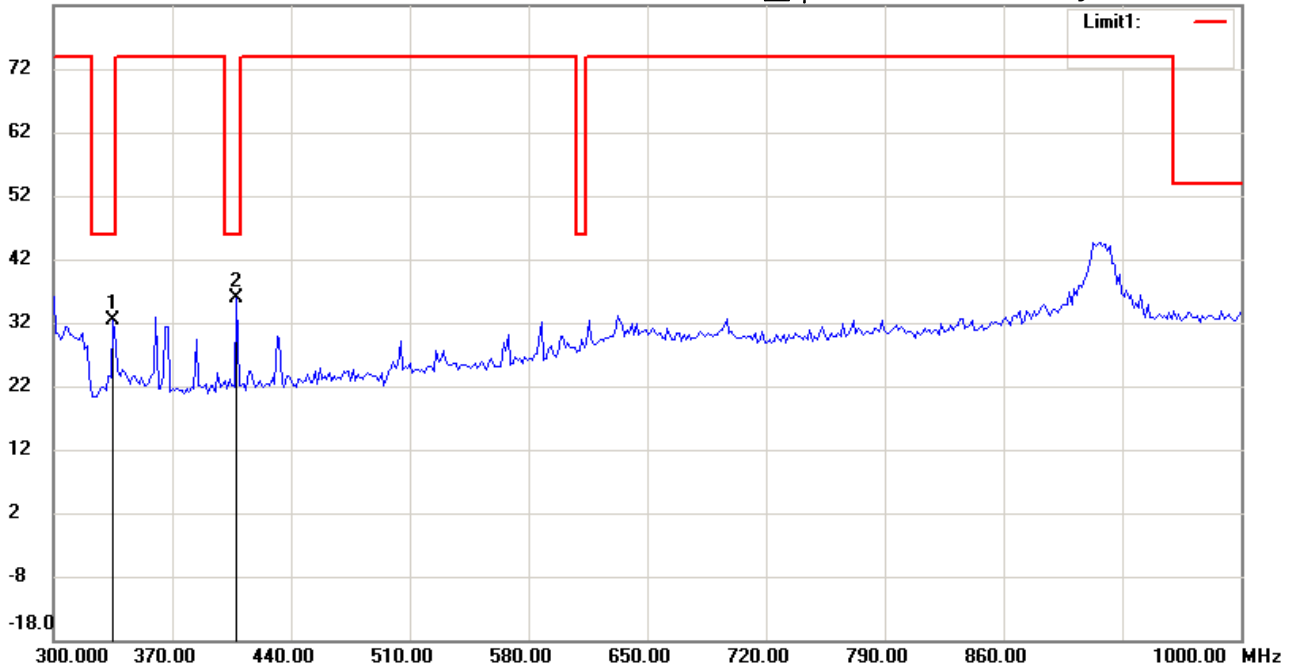
Date: 2015/4/16

Temperature: 24 °C

82.0 dBuV/m

Time: 上午 10:18:26

Humidity: 60 %



Site : Chamber

Condition : FCC Restriction Band 300-1000

EUT : W6M21503-14919

M/N:

Test Mode : TX 915.25MHz

Note :

Polarization: *Horizontal*

Power : 5 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	335.0701	15.51	peak	16.99	32.50	46.00	100	150	-13.50	
*	408.0160	16.85	peak	19.00	35.85	46.00	100	195	-10.15	

*:Maximum data x:Over limit !:over margin



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8875

Radiated Emission Measurement

Operator: Roy

File :2

Data :#2

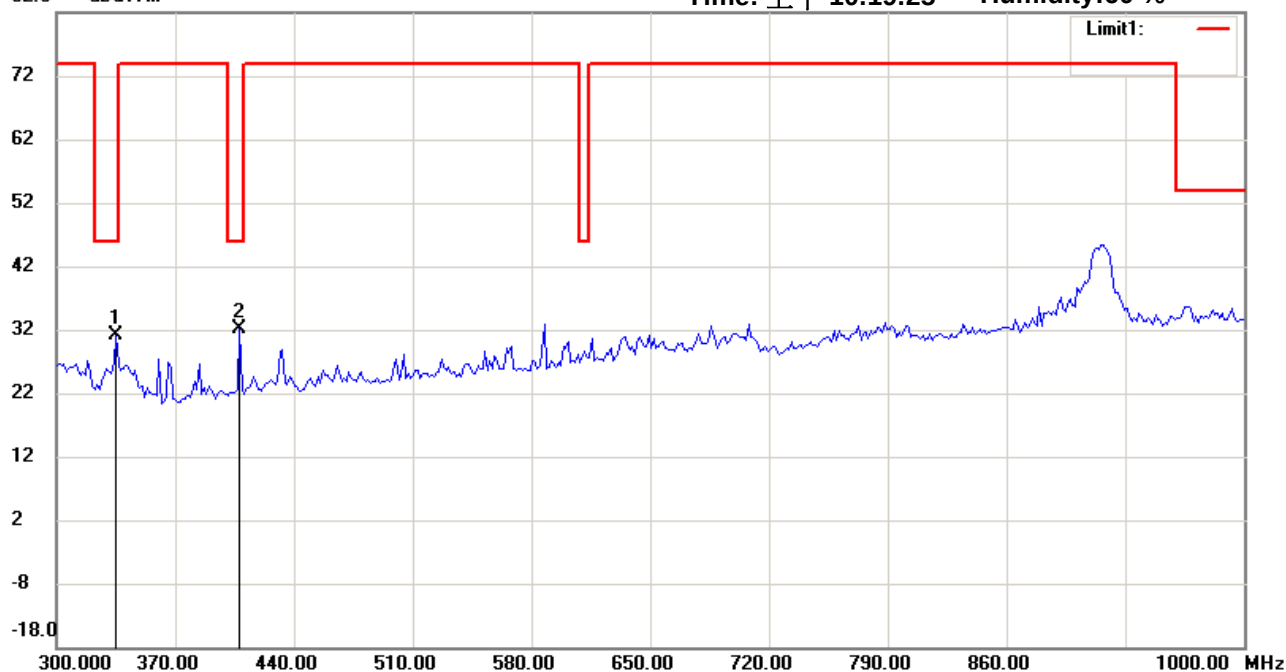
Date: 2015/4/16

Temperature:24 °C

82.0 dBuV/m

Time: 上午 10:19:25

Humidity:60 %



Site : Chamber

Condition : FCC Restriction Band 300-1000

EUT : W6M21503-14919

M/N:

Test Mode : TX 915.25MHz

Note :

Polarization: **Vertical**

Power : 5 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	335.0701	14.08	peak	16.99	31.07	46.00	100	80	-14.93	
*	408.0160	13.04	peak	19.00	32.04	46.00	100	215	-13.96	

*:Maximum data x:Over limit !:over margin



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8875

Radiated Emission Measurement

Operator: Roy

File :3

Data :#1

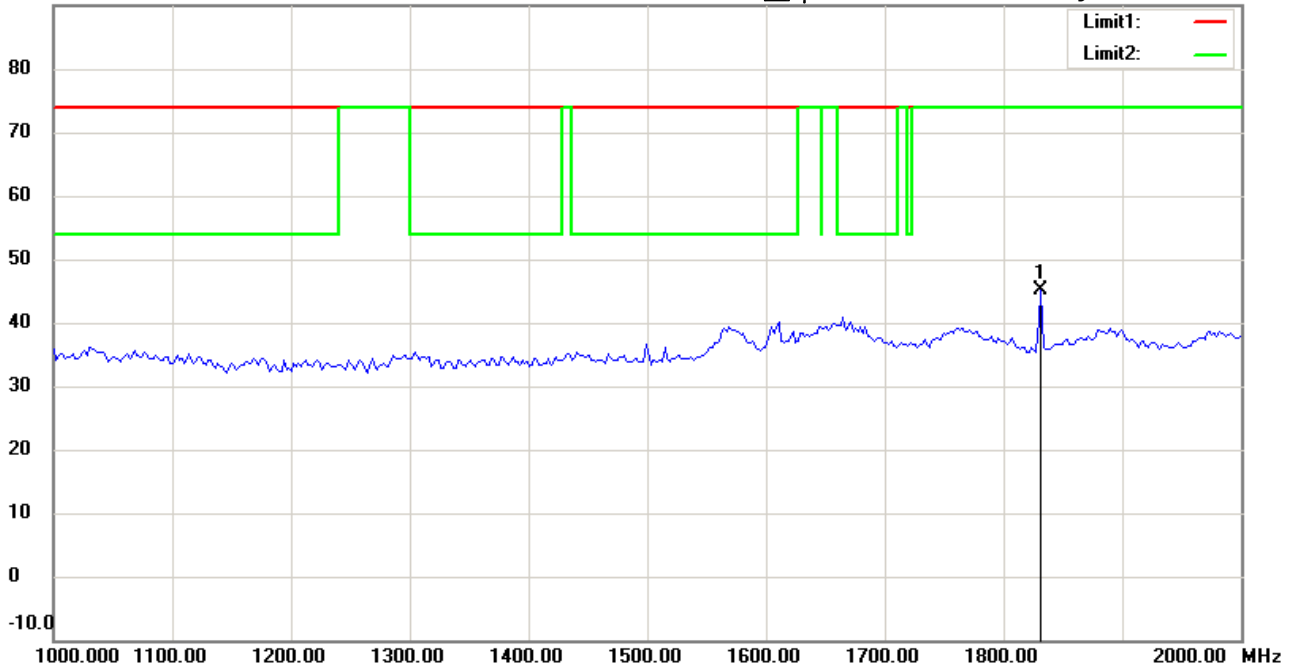
Date: 2015/4/16

Temperature:24 °C

90.0 dBuV/m

Time: 上午 10:52:09

Humidity:60 %



Site : Chamber

Condition : FCC Restriction Band_Above 1GHz_PK

EUT : W6M21503-14919

M/N:

Test Mode : TX 915.25MHz

Note :

Polarization: *Horizontal*

Power : 5 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	1831.663	51.97	peak	-6.86	45.11	74.00	100	170	-28.89	

*:Maximum data x:Over limit !:over margin



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8875

Radiated Emission Measurement

Operator: Roy

File :3

Data :#5

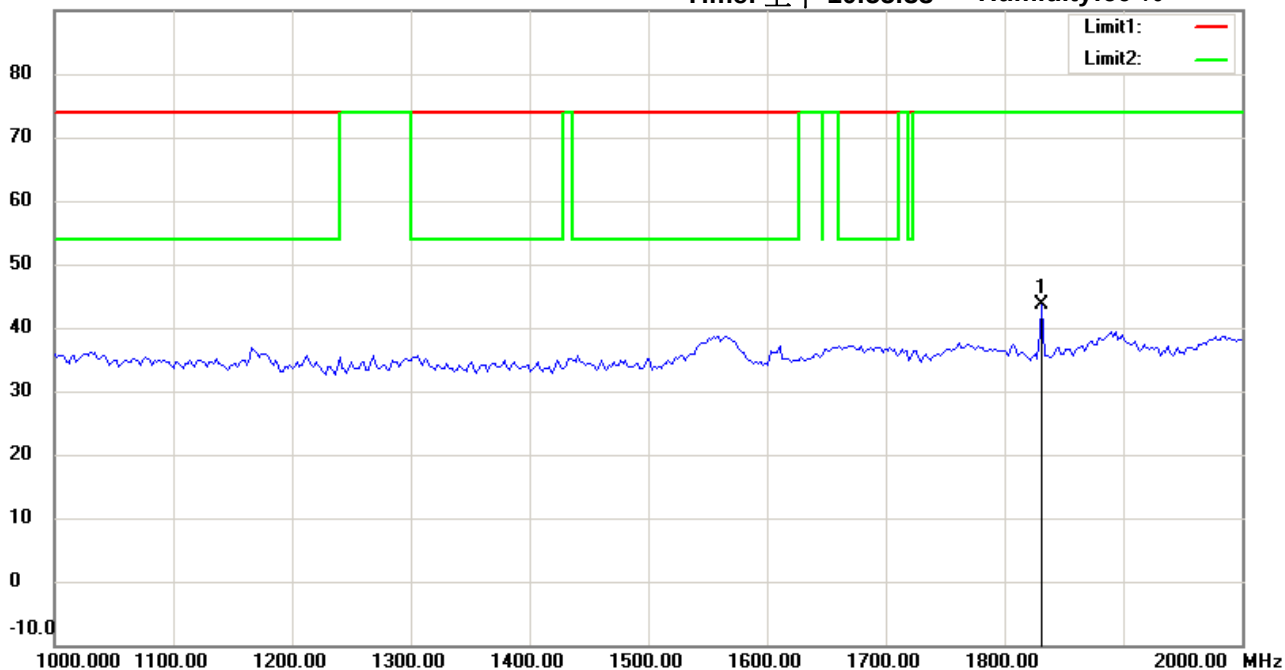
Date: 2015/4/16

Temperature:24 °C

90.0 dBuV/m

Time: 上午 10:55:33

Humidity:60 %



Site : Chamber

Condition : FCC Restriction Band_Above 1GHz_PK

EUT : W6M21503-14919

M/N:

Test Mode : TX 915.25MHz

Note :

Polarization: **Vertical**

Power : 5 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	1831.663	50.54	peak	-6.86	43.68	74.00	100	250	-30.32	

*:Maximum data x:Over limit !:over margin



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8875

Radiated Emission Measurement

Operator: Roy

File :3

Data :#2

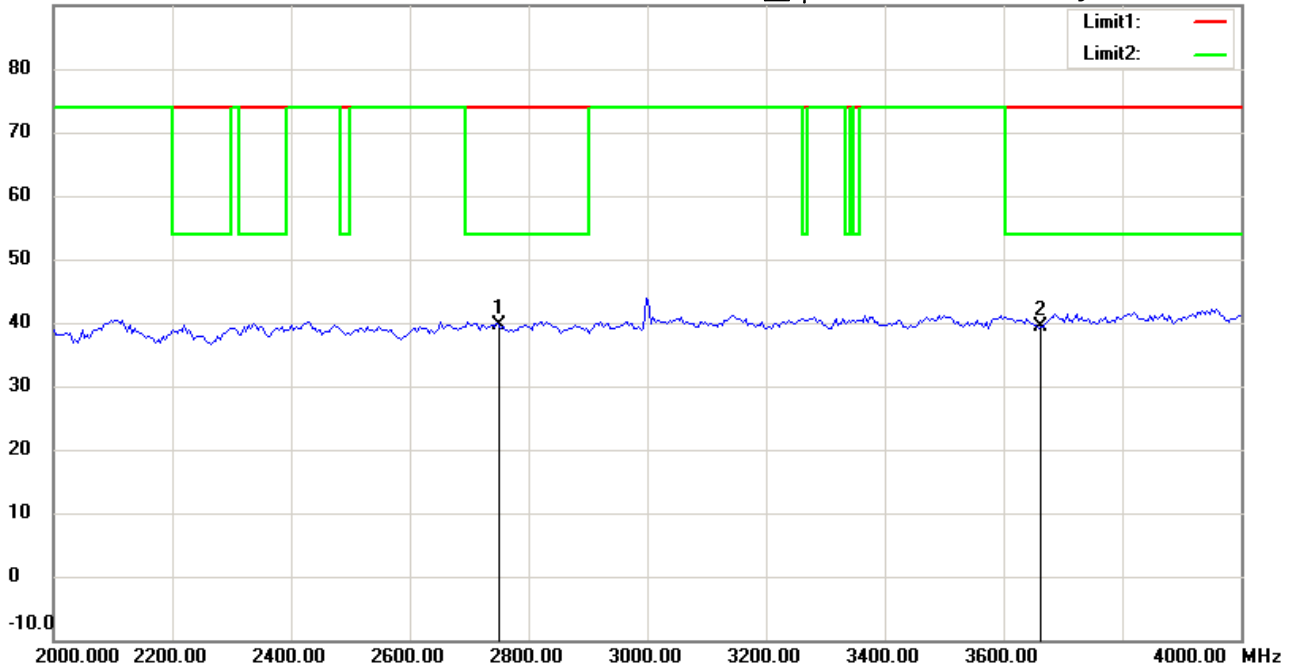
Date: 2015/4/16

Temperature:24 °C

90.0 dBuV/m

Time: 上午 10:52:55

Humidity:60 %



Site : Chamber

Condition : FCC Restriction Band_Above 1GHz_PK

EUT : W6M21503-14919

M/N:

Test Mode : TX 915.25MHz

Note :

Polarization: *Horizontal*

Power : 5 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	2745.750	42.65	peak	-2.97	39.68	74.00	100	225	-34.32	
	3661.000	40.61	peak	-1.16	39.45	74.00	100	140	-34.55	

*:Maximum data x:Over limit !:over margin



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8875

Radiated Emission Measurement

Operator: Roy

File :3

Data :#6

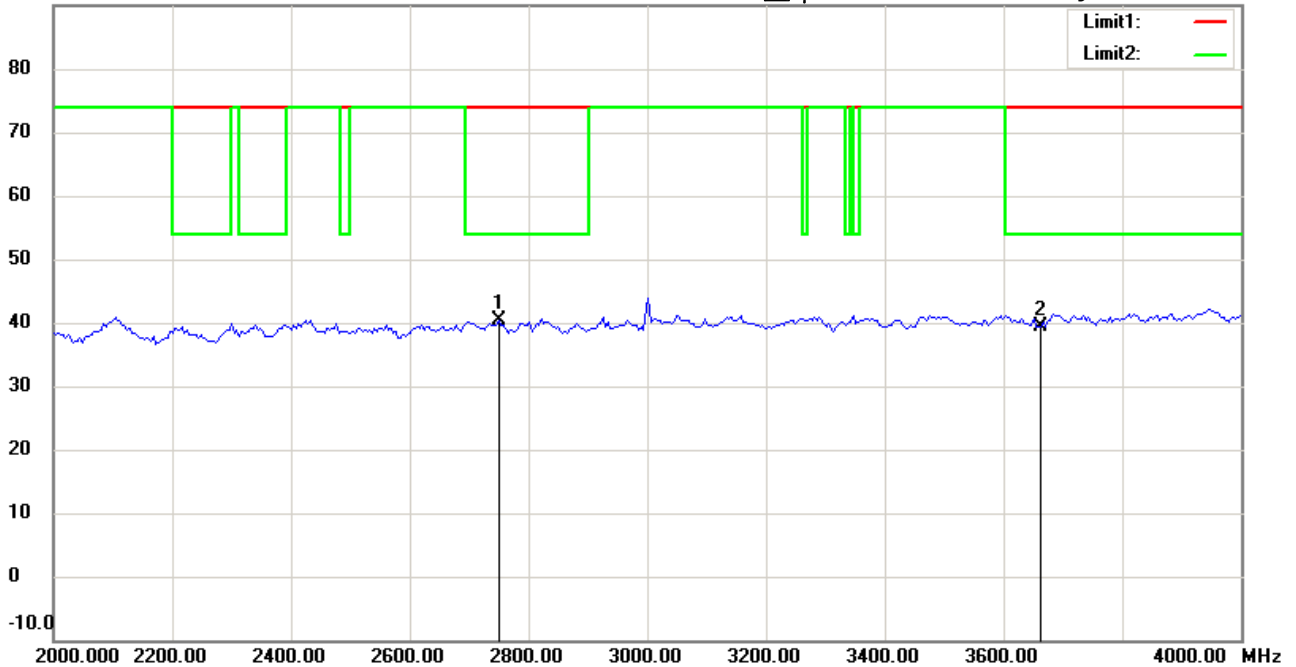
Date: 2015/4/16

Temperature:24 °C

90.0 dBuV/m

Time: 上午 10:56:19

Humidity:60 %



Site : Chamber

Condition : FCC Restriction Band_Above 1GHz_PK

EUT : W6M21503-14919

M/N:

Test Mode : TX 915.25MHz

Note :

Polarization: **Vertical**

Power : 5 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	2745.750	43.24	peak	-2.97	40.27	74.00	100	80	-33.73	
	3661.000	40.62	peak	-1.16	39.46	74.00	100	225	-34.54	

*:Maximum data x:Over limit !:over margin



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8875

Radiated Emission Measurement

Operator: Roy

File :3

Data :#3

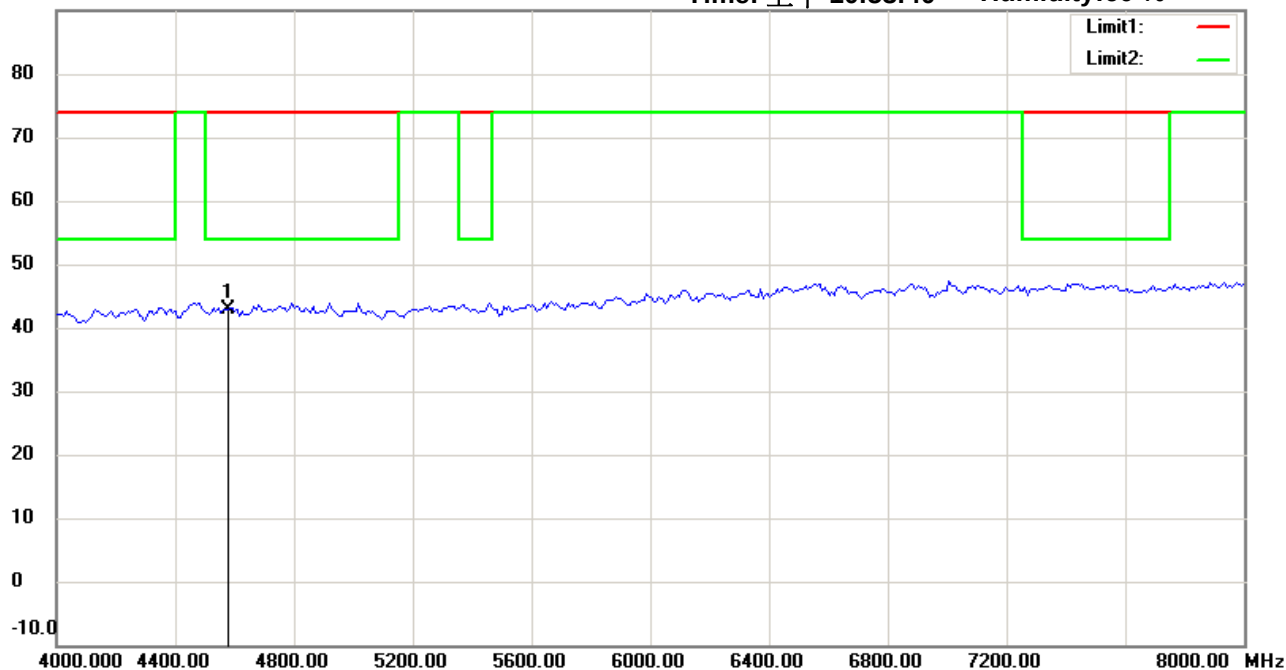
Date: 2015/4/16

Temperature:24 °C

90.0 dBuV/m

Time: 上午 10:53:40

Humidity:60 %



Site : Chamber

Condition : FCC Restriction Band_Above 1GHz_PK

EUT : W6M21503-14919

M/N:

Test Mode : TX 915.25MHz

Note :

Polarization: *Horizontal*

Power : 5 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	4576.250	41.94	peak	0.82	42.76	74.00	100	90	-31.24	

*:Maximum data x:Over limit !:over margin



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8875

Radiated Emission Measurement

Operator: Roy

File :3

Data :#7

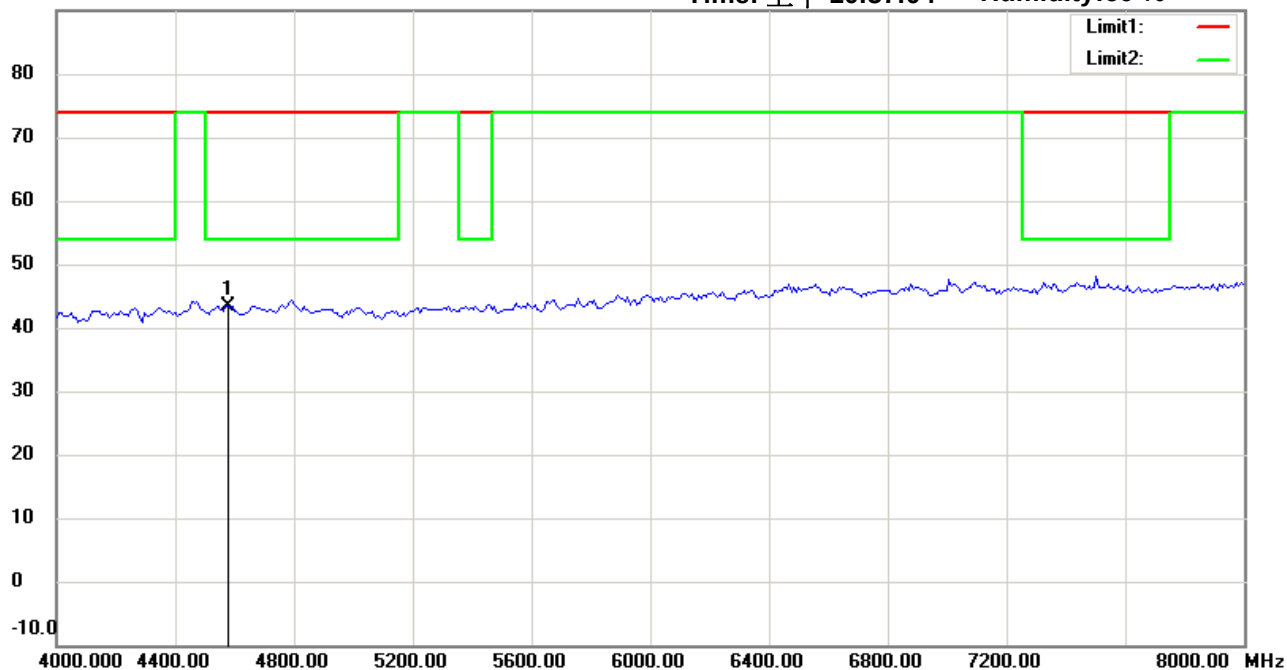
Date: 2015/4/16

Temperature:24 °C

90.0 dBuV/m

Time: 上午 10:57:04

Humidity:60 %



Site : Chamber

Condition : FCC Restriction Band_Above 1GHz_PK

EUT : W6M21503-14919

M/N:

Test Mode : TX 915.25MHz

Note :

Polarization: **Vertical**

Power : 5 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	4576.250	42.58	peak	0.82	43.40	74.00	100	100	-30.60	

*:Maximum data x:Over limit !:over margin



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8875

Radiated Emission Measurement

Operator: Roy

File :3

Data :#4

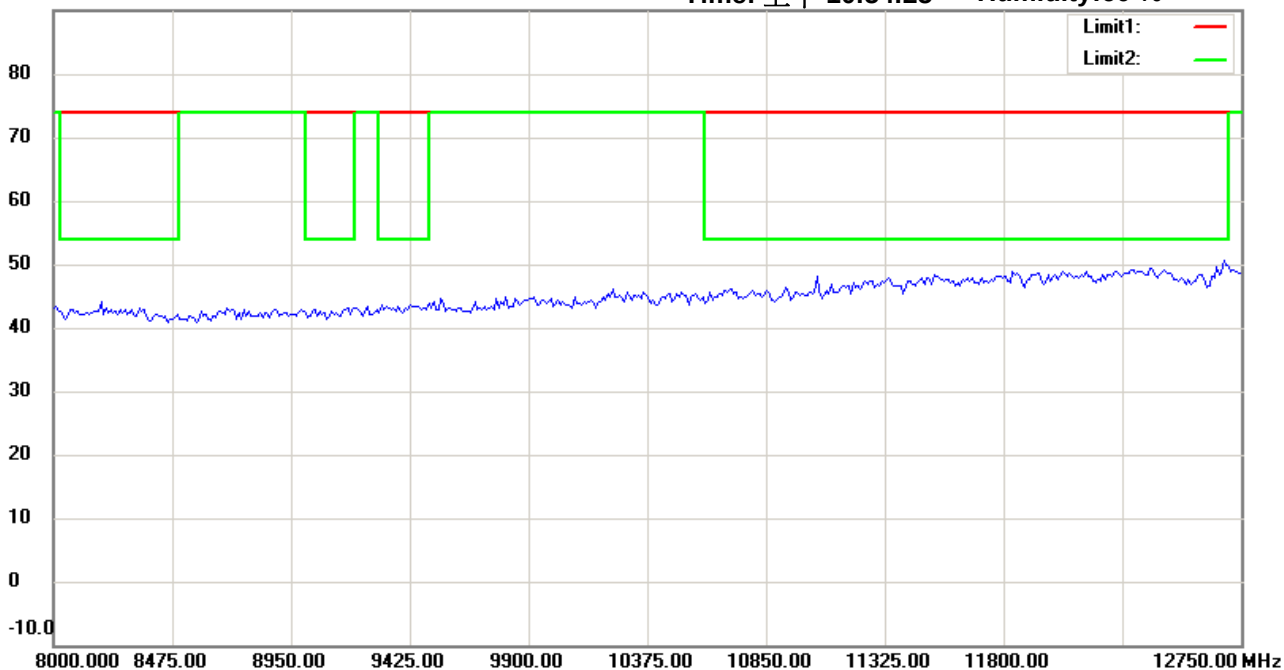
Date: 2015/4/16

Temperature:24 °C

90.0 dBuV/m

Time: 上午 10:54:25

Humidity:60 %



Site : Chamber

Condition : FCC Restriction Band_Above 1GHz_PK

Polarization: *Horizontal*

EUT : W6M21503-14919

Power : 5 Vd.c.

M/N:

Distance: 3m

Test Mode : TX 915.25MHz

Note :

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

*:Maximum data x:Over limit !:over margin



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8875

Radiated Emission Measurement

Operator: Roy

File :3

Data :#8

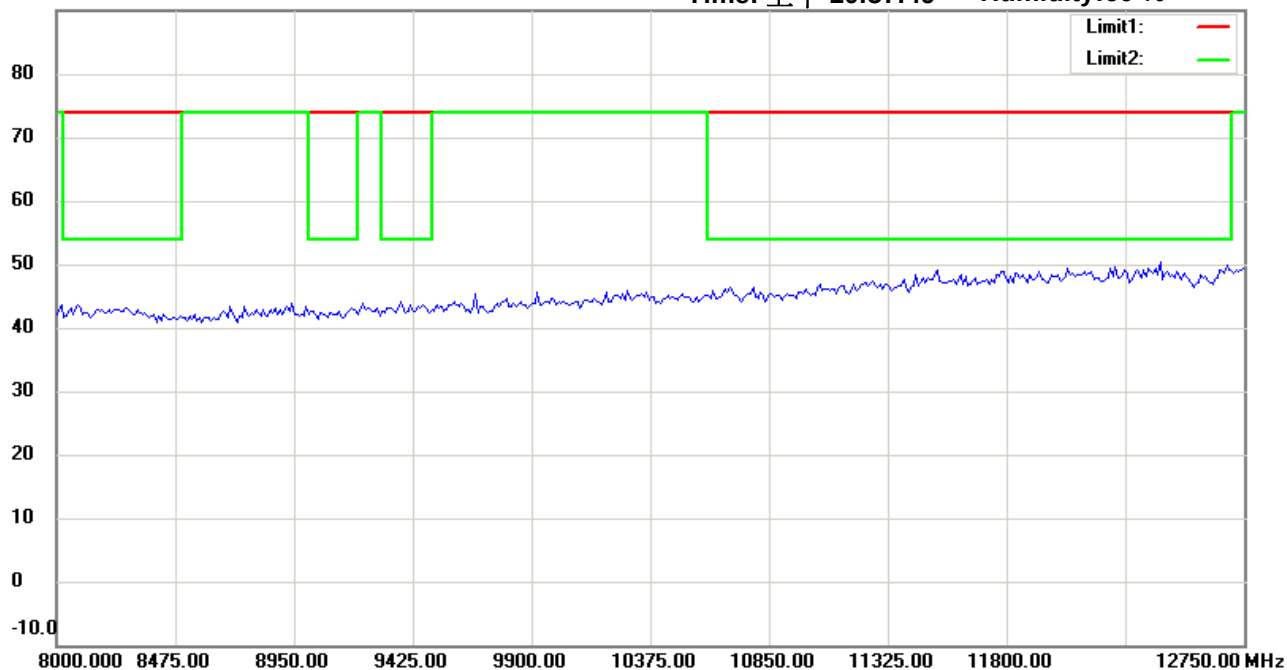
Date: 2015/4/16

Temperature:24 °C

90.0 dBuV/m

Time: 上午 10:57:49

Humidity:60 %



Site : Chamber

Condition : FCC Restriction Band_Above 1GHz_PK

EUT : W6M21503-14919

M/N:

Test Mode : TX 915.25MHz

Note :

Polarization: **Vertical**

Power : 5 Vd.c.

Distance: 3m

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

*:Maximum data x:Over limit !:over margin



Radiated Emission Measurement

Operator: Roy

File :1

Data :#1

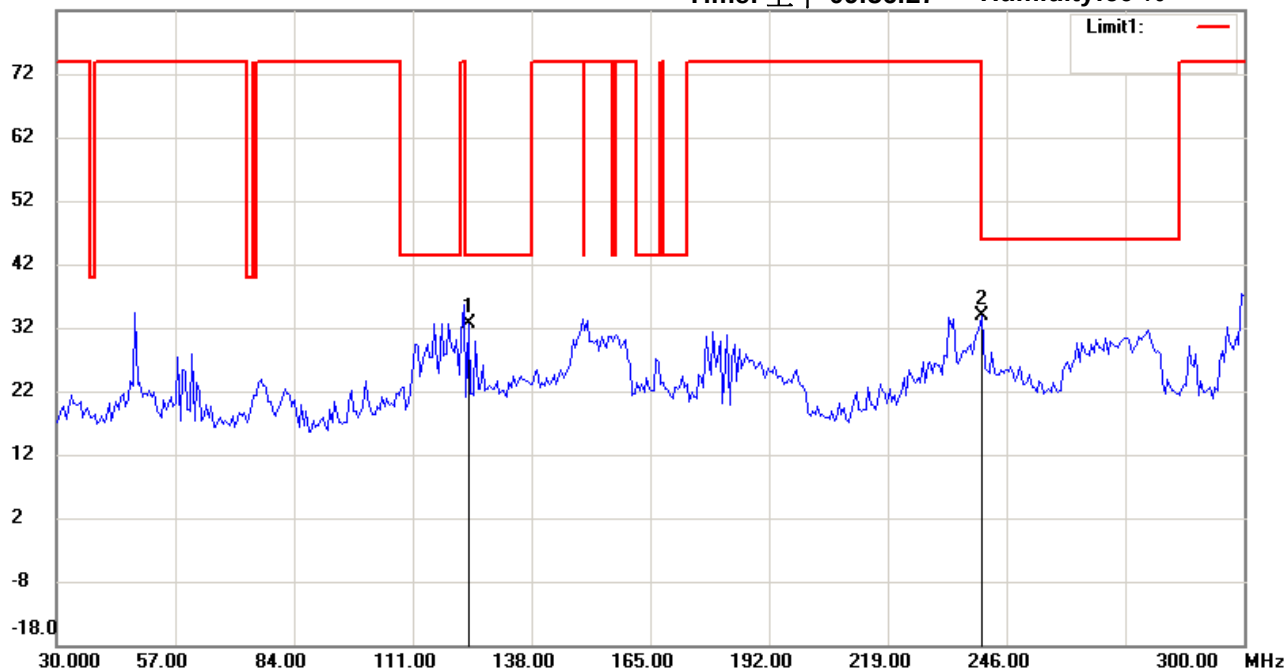
Date: 2015/4/16

Temperature:24 °C

82.0 dBuV/m

Time: 上午 09:56:27

Humidity:60 %



Site : Chamber

Condition : FCC Restriction Band 30-300

EUT : W6M21503-14919

M/N:

Test Mode : TX 927.25MHz

Note :

Polarization: *Horizontal*

Power : 5 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	123.6072	18.37	peak	14.27	32.64	43.50	100	230	-10.86	
	240.4810	19.75	peak	14.21	33.96	46.00	100	55	-12.04	



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8875

Radiated Emission Measurement

Operator: Roy

File :1

Data :#2

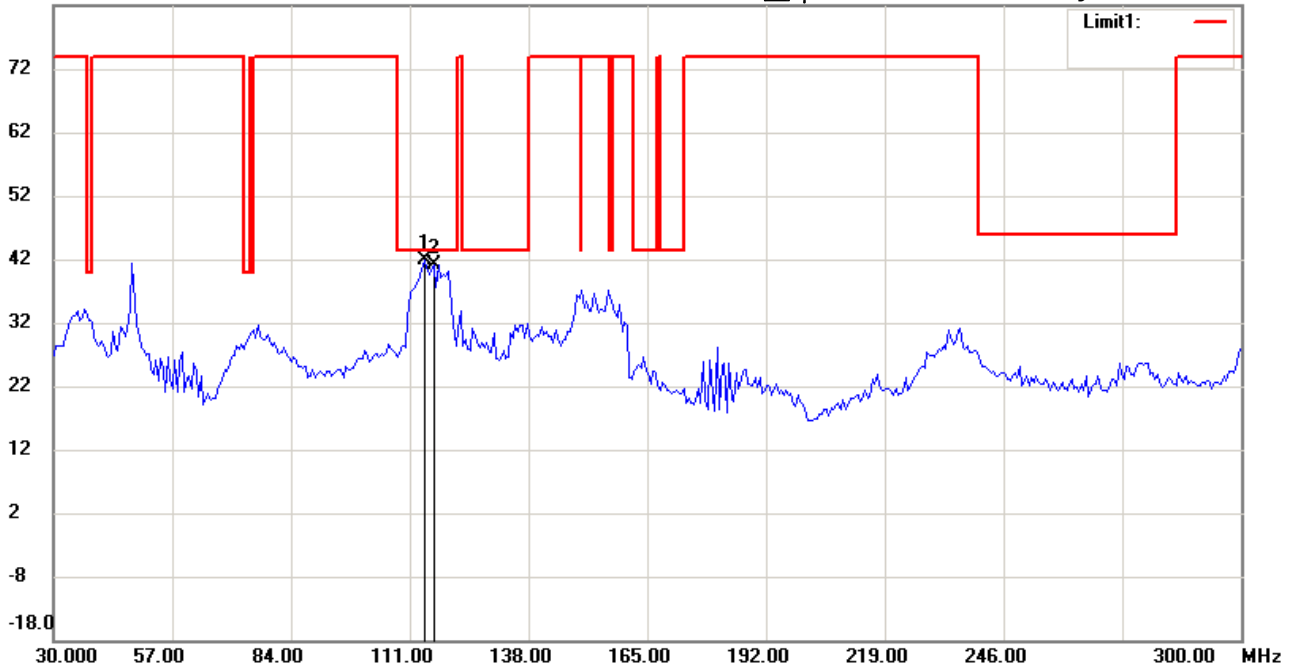
Date: 2015/4/16

Temperature:24 °C

82.0 dBuV/m

Time: 上午 09:57:23

Humidity:60 %



Site : Chamber

Condition : FCC Restriction Band 30-300

EUT : W6M21503-14919

M/N:

Test Mode : TX 927.25MHz

Note :

Polarization: **Vertical**

Power : 5 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	114.4088	28.28	peak	13.58	41.86	43.50	100	235	-1.64	
	116.5731	27.34	peak	13.73	41.07	43.50	100	90	-2.43	

*:Maximum data x:Over limit !:over margin



Radiated Emission Measurement

Operator: Roy

File :2

Data :#1

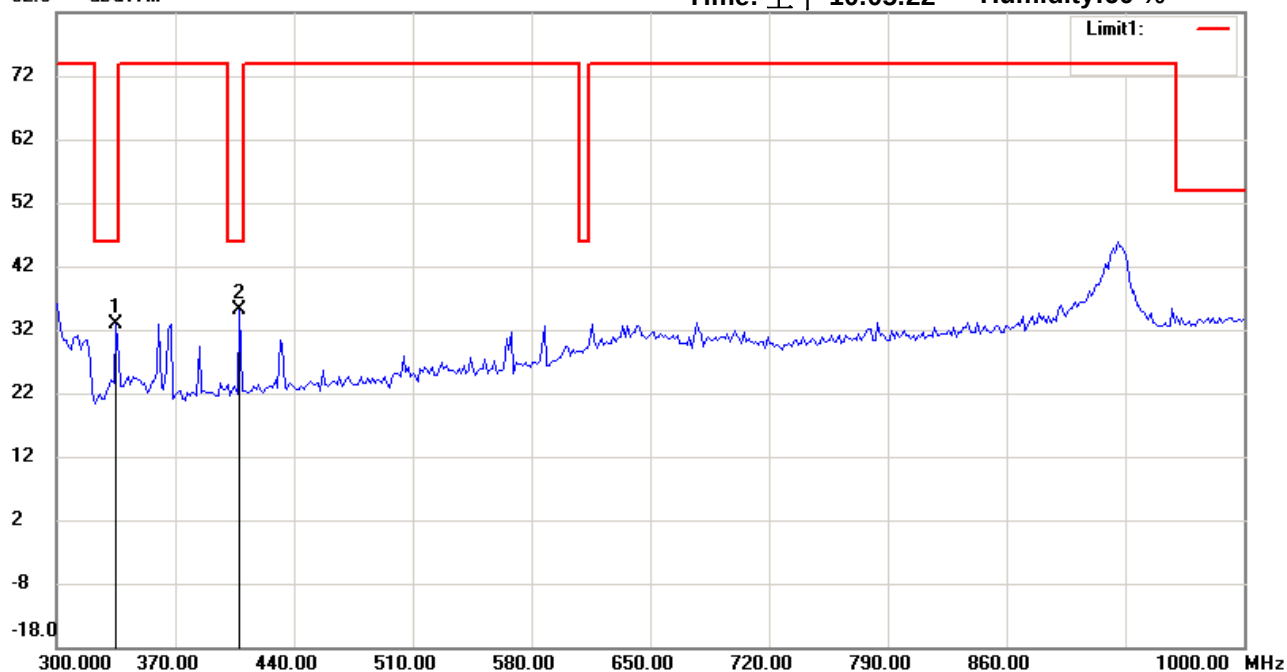
Date: 2015/4/16

Temperature:24 °C

82.0 dBuV/m

Time: 上午 10:05:22

Humidity:60 %



Site : Chamber

Condition : FCC Restriction Band 300-1000

EUT : W6M21503-14919

M/N:

Test Mode : TX 927.25MHz

Note :

Polarization: *Horizontal*

Power : 5 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	335.0701	15.98	peak	16.99	32.97	46.00	100	210	-13.03	
*	408.0160	16.18	peak	19.00	35.18	46.00	100	75	-10.82	



Radiated Emission Measurement

Operator: Roy

File :2

Data :#2

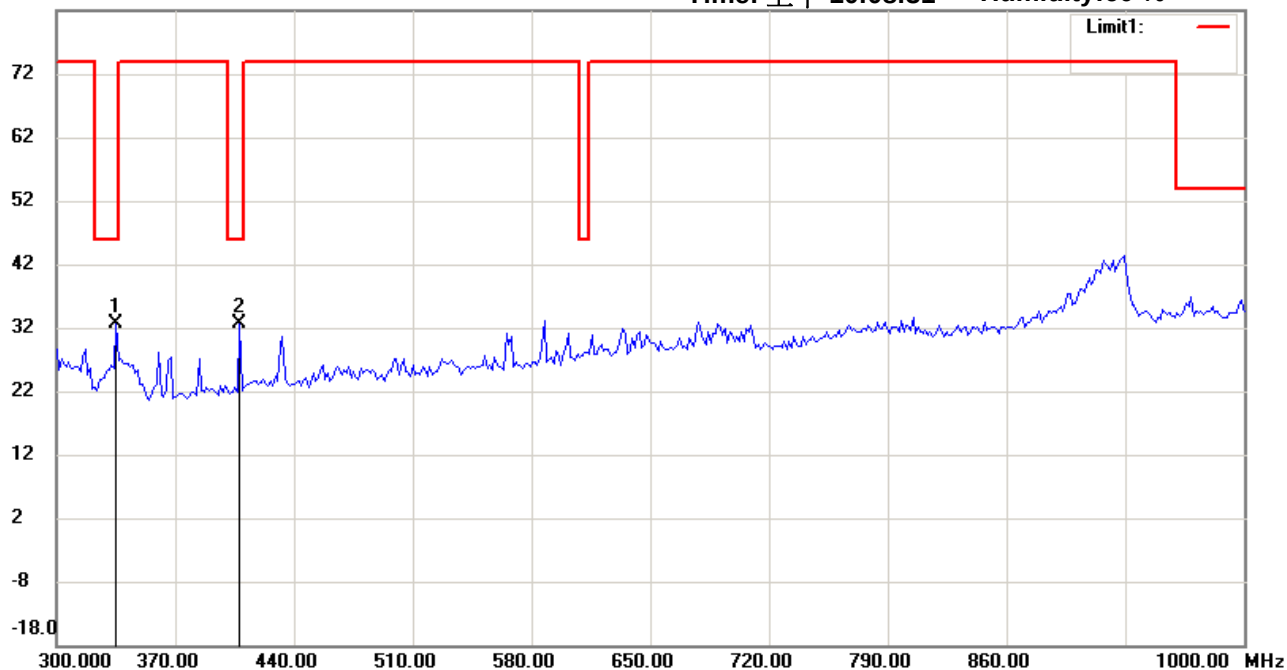
Date: 2015/4/16

Temperature:24 °C

82.0 dBuV/m

Time: 上午 10:08:31

Humidity:60 %



Site : Chamber

Condition : FCC Restriction Band 300-1000

EUT : W6M21503-14919

M/N:

Test Mode : TX 927.25MHz

Note :

Polarization: **Vertical**

Power : 5 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	335.0701	15.54	peak	16.99	32.53	46.00	100	165	-13.47	
*	408.0160	13.59	peak	19.00	32.59	46.00	100	110	-13.41	



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8875

Radiated Emission Measurement

Operator: Roy

File :3

Data :#1

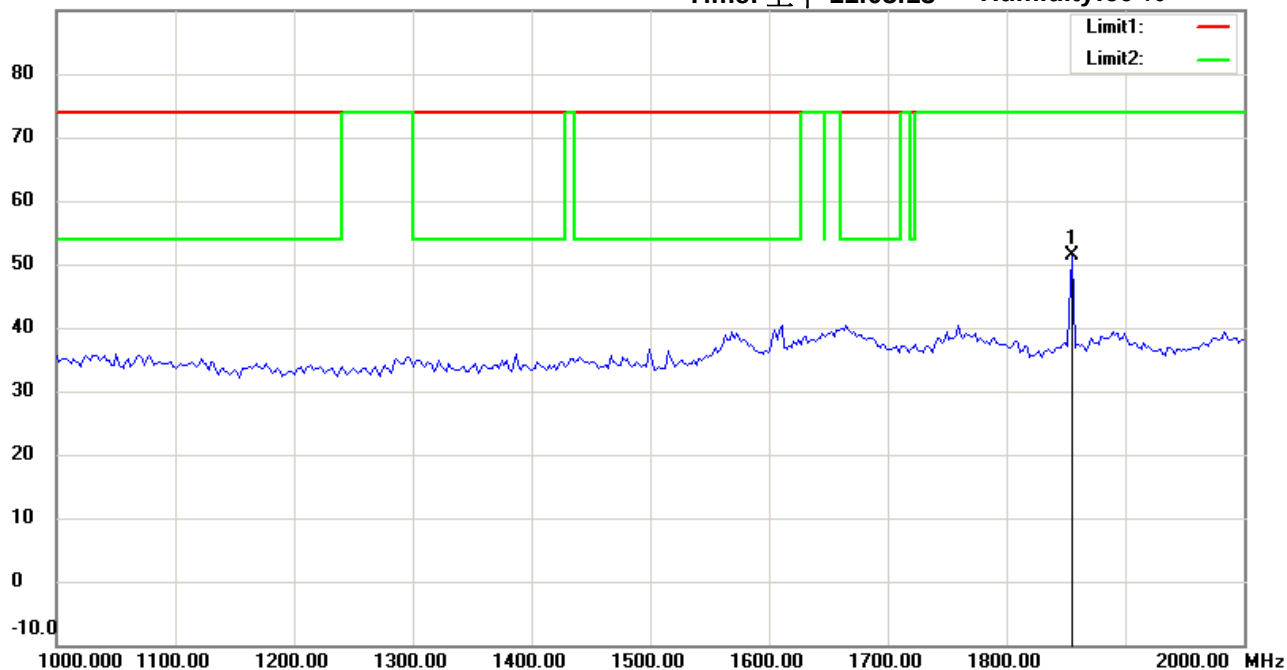
Date: 2015/4/16

Temperature:24 °C

90.0 dBuV/m

Time: 上午 11:03:13

Humidity:60 %



Site : Chamber

Condition : FCC Restriction Band_Above 1GHz_PK

EUT : W6M21503-14919

M/N:

Test Mode : TX 927.25MHz

Note :

Polarization: **Horizontal**

Power : 5 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	1855.711	57.99	peak	-6.56	51.43	74.00	100	30	-22.57	

*:Maximum data x:Over limit !:over margin



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8875

Radiated Emission Measurement

Operator: Roy

File :3

Data :#5

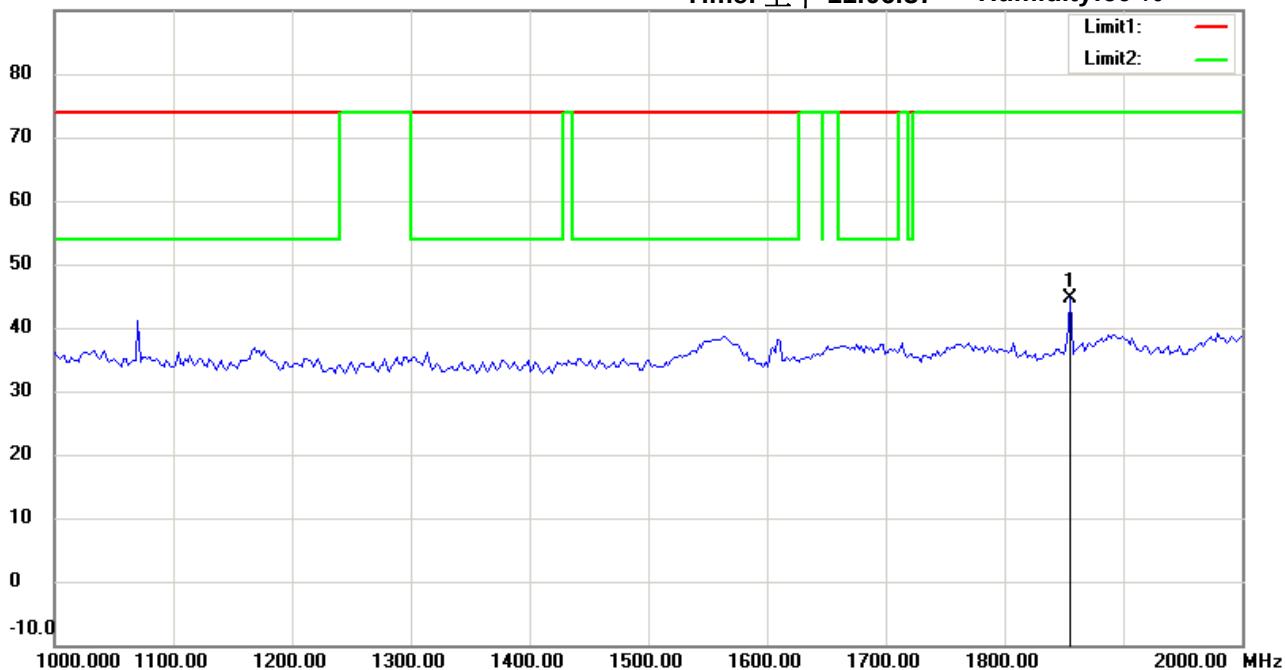
Date: 2015/4/16

Temperature:24 °C

90.0 dBuV/m

Time: 上午 11:06:37

Humidity:60 %



Site : Chamber

Condition : FCC Restriction Band_Above 1GHz_PK

EUT : W6M21503-14919

M/N:

Test Mode : TX 927.25MHz

Note :

Polarization: Vertical

Power : 5 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	1855.711	51.18	peak	-6.56	44.62	74.00	100	45	-29.38	

*:Maximum data x:Over limit !:over margin



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8875

Radiated Emission Measurement

Operator: Roy

File :3

Data :#2

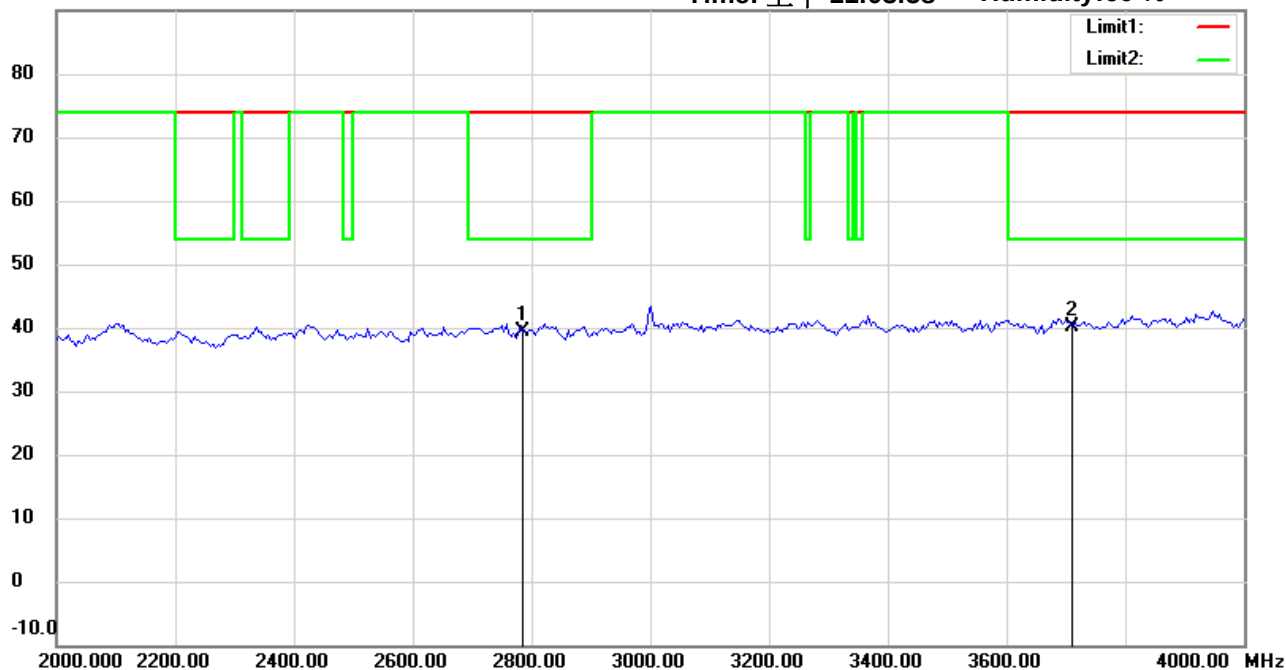
Date: 2015/4/16

Temperature:24 °C

90.0 dBuV/m

Time: 上午 11:03:58

Humidity:60 %



Site : Chamber

Condition : FCC Restriction Band_Above 1GHz_PK

EUT : W6M21503-14919

M/N:

Test Mode : TX 927.25MHz

Note :

Polarization: **Horizontal**

Power : 5 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	2781.750	42.36	peak	-2.86	39.50	74.00	100	145	-34.50	
*	3709.000	41.16	peak	-1.13	40.03	74.00	100	50	-33.97	

*:Maximum data x:Over limit !:over margin



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8875

Radiated Emission Measurement

Operator: Roy

File :3

Data :#6

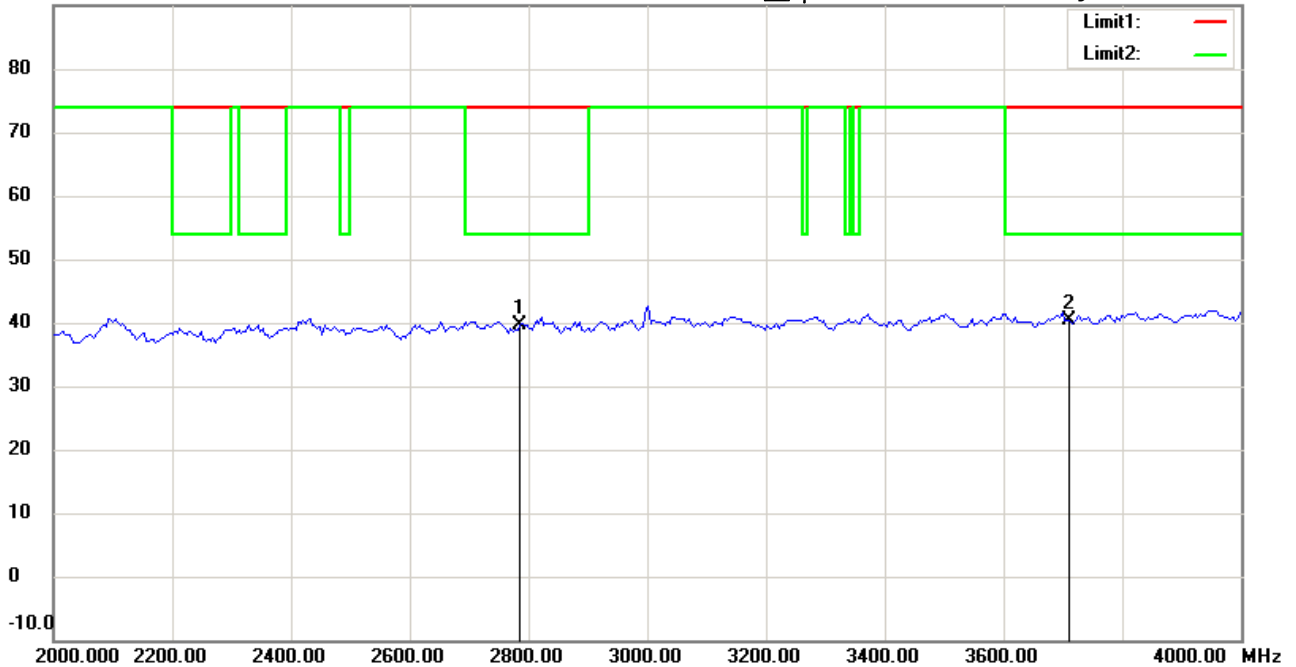
Date: 2015/4/16

Temperature:24 °C

90.0 dBuV/m

Time: 上午 11:07:22

Humidity:60 %



Site : Chamber

Condition : FCC Restriction Band_Above 1GHz_PK

EUT : W6M21503-14919

M/N:

Test Mode : TX 927.25MHz

Note :

Polarization: **Vertical**

Power : 5 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	2781.750	42.41	peak	-2.86	39.55	74.00	100	200	-34.45	
*	3709.000	41.52	peak	-1.13	40.39	74.00	100	165	-33.61	

*:Maximum data x:Over limit !:over margin



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8875

Radiated Emission Measurement

Operator: Roy

File :3

Data :#3

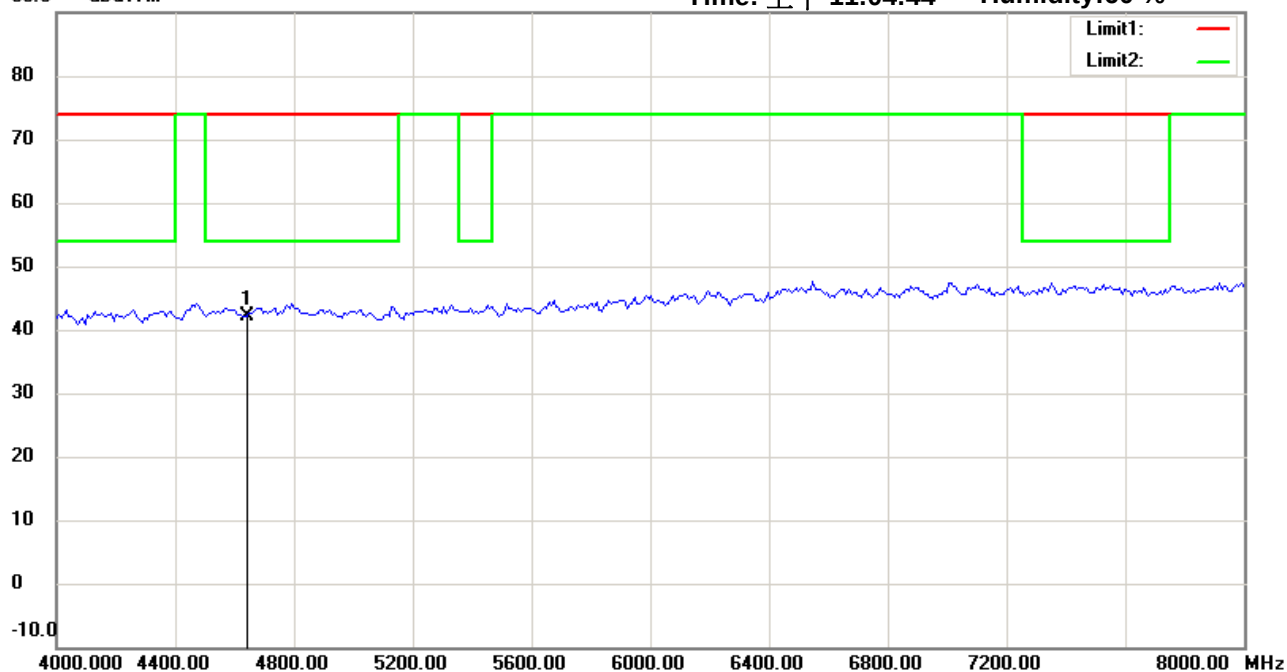
Date: 2015/4/16

Temperature:24 °C

90.0 dBuV/m

Time: 上午 11:04:44

Humidity:60 %



Site : Chamber

Condition : FCC Restriction Band_Above 1GHz_PK

EUT : W6M21503-14919

M/N:

Test Mode : TX 927.25MHz

Note :

Polarization: *Horizontal*

Power : 5 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	4636.250	41.60	peak	0.60	42.20	74.00	100	125	-31.80	

*:Maximum data x:Over limit !:over margin



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8875

Radiated Emission Measurement

Operator: Roy

File :3

Data :#7

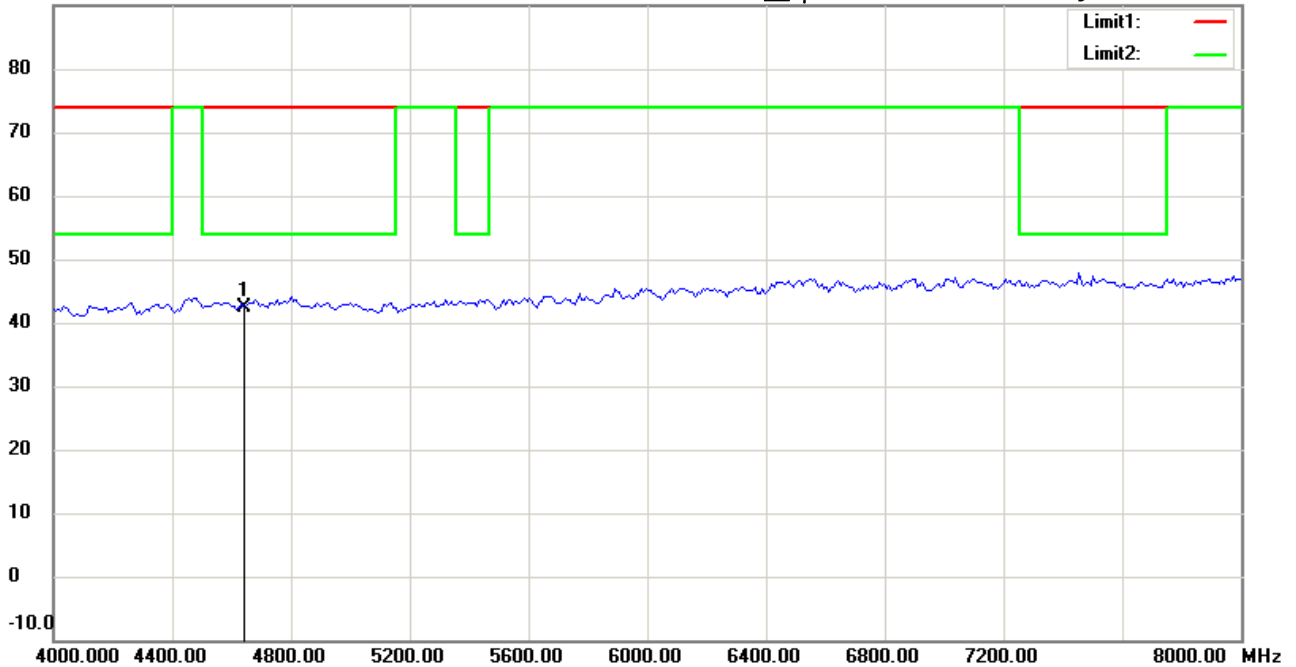
Date: 2015/4/16

Temperature:24 °C

90.0 dBuV/m

Time: 上午 11:08:08

Humidity:60 %



Site : Chamber

Condition : FCC Restriction Band_Above 1GHz_PK

EUT : W6M21503-14919

M/N:

Test Mode : TX 927.25MHz

Note :

Polarization: **Vertical**

Power : 5 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	4636.250	41.87	peak	0.60	42.47	74.00	100	75	-31.53	

*:Maximum data x:Over limit !:over margin



Address: 6F., No. 58, Ln 188, Ruey Kuang Rd, Neihu, Taipei
Tel: +886-2-6606-8877
Fax: +886-2-6606-8875

Radiated Emission Measurement

Operator: Roy

File : 3

Data : #4

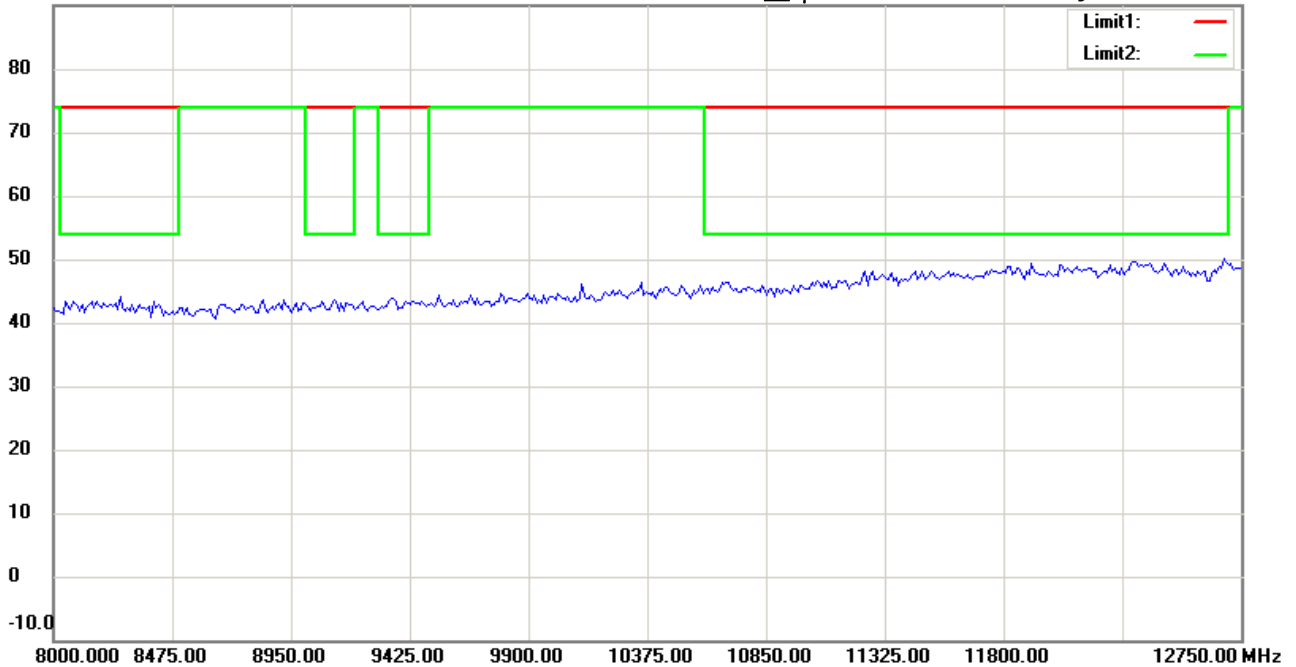
Date: 2015/4/16

Temperature: 24 °C

90.0 dBuV/m

Time: 上午 11:05:29

Humidity: 60 %



Site : Chamber

Condition : FCC Restriction Band_Above 1GHz_PK

Polarization: *Horizontal*

EUT : W6M21503-14919

Power : 5 Vd.c.

M/N:

Distance: 3m

Test Mode : TX 927.25MHz

Note :

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

*:Maximum data x:Over limit !:over margin



Address: 6F., No. 58, Ln 188, Ruey Kuang Rd, Neihu, Taipei
Tel: +886-2-6606-8877
Fax: +886-2-6606-8875

Radiated Emission Measurement

Operator: Roy

File : 3

Data : #8

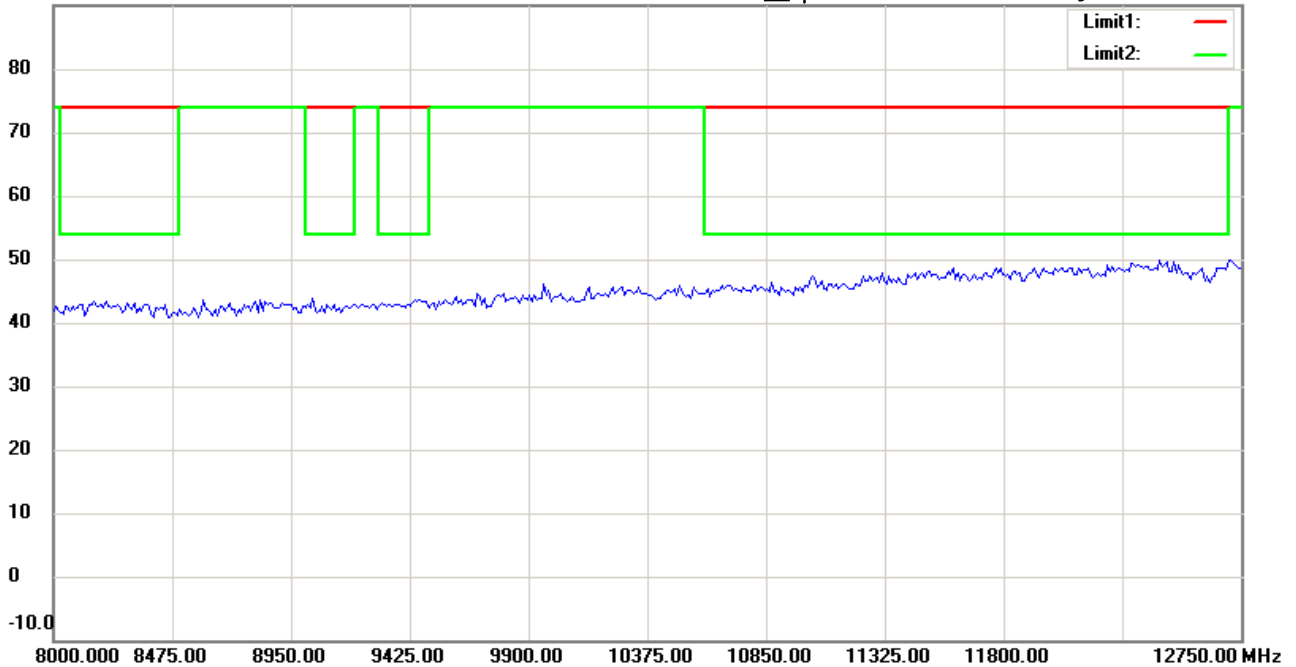
Date: 2015/4/16

Temperature: 24 °C

90.0 dBuV/m

Time: 上午 11:08:52

Humidity: 60 %



Site : Chamber

Condition : FCC Restriction Band_Above 1GHz_PK

Polarization: **Vertical**

EUT : W6M21503-14919

Power : 5 Vd.c.

M/N:

Distance: 3m

Test Mode : TX 927.25MHz

Note :

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

*:Maximum data x:Over limit !:over margin