

**FCC PART 95 TEST REPORT**

**for**

**GP LCM**

**Model No.: A02994**

**FCC ID: IPH-02994**

of

Applicant: **Garmin International Inc**

Address: 1200 E. 151st. Street Olathe Kansas 66062 United States

Tested and Prepared

by

**Worldwide Testing Services (Taiwan) Co., Ltd.**

**FCC Registration No.: 930600**

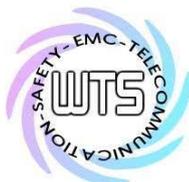
**Industry Canada filed test laboratory Reg. No. IC 5679A-1, IC 5107A-1**

**A2LA Accredited No.: 2732.01**



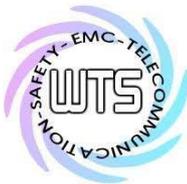
**Report No.: W6M21603-15738-C-95**

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](mailto:wts@wts-lab.com)



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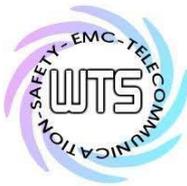
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**1. General Information**

**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.

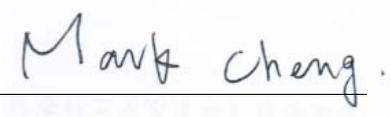
Neither is there any guarantee that such a test sample will interwork with other genuinely open systems. The existence of the tests nevertheless provides the confidence that the test sample possesses the qualities as maintained and that its performance generally conforms to representative cases of communications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

The test results of this test report relate exclusively to the item tested as specified in 1.5.

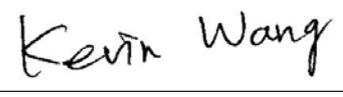
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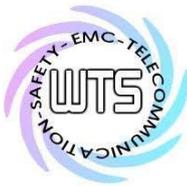
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**Tester:**

May 17, 2016	Mark Cheng	
Date	WTS-Lab. Name	Signature

**Technical responsibility for area of testing:**

May 17, 2016	Kevin Wang	
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, IC 5107A-1

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

Name: ./.

Accredited number: ./.

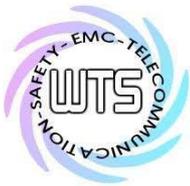
Street: ./.

Town: ./.

Country: ./.

Telephone: ./.

Fax: ./.



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**1.3 Details of approval holder**

Name: Garmin International Inc  
Street: 1200 E. 151st. Street  
City: Olathe Kansas 66062  
Country: United States  
Telephone: (913) 397-8448  
Fax: (913) 397-8282

**1.4 Application details**

Date of receipt of test item: April 01, 2016  
Date of test: from April 04, 2016 to May 17, 2016

**1.5 General information of Test item**

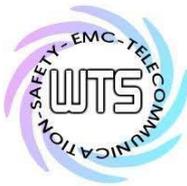
Type of test item: GP LCM  
Model Number: A02994  
Multi-listing model number: ./.  
Brand Name: Garmin  
Photos: See appendix

**Technical data**

Operating frequency band:

Frequency(MHz)	Used Band
151.820 MHz (RX)	<input checked="" type="checkbox"/>
151.880 MHz (RX)	<input checked="" type="checkbox"/>
151.940 MHz (RX)	<input checked="" type="checkbox"/>
154.570 MHz (TX+RX)	<input checked="" type="checkbox"/>
154.600 MHz (RX)	<input checked="" type="checkbox"/>

Sample tested frequency: 154.57 MHz  
Number of RF-channels: TX: 1 Ch / RX: 5 Ch  
Type of modulation: GFSK  
Designation of emission: 7K45F1D



# Worldwide Testing Services(Taiwan) Co., Ltd.

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Channel spacing: 25 kHz

Antenna Type: rigid monopole antenna / [Short] gain: -5 dBi,  
[Long] gain: -5 dBi, [Mag Mount] gain: 5 dBi,  
[Super Long] gain: -5 dBi

Connection of Antenna:  detachable  not detachable

Power supply Adaptor: (I/P:100-240V~0.3A, 50-60Hz, 10-20VA ;  
O/P: 5V, 1.0A MAX.)  
Battery: 1.2VDC x 2, 2000mAh, 4.8Wh  
DC: 12-24V

End point of Battery voltage: nom: 2.4V / min: 2.04V / max: 2.4V

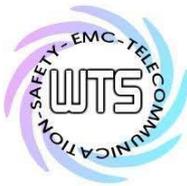
Operation modes: Half-duplex

## Manufacturer: (if applicable)

Name: Garmin Corporation  
Street: No.68, Zhangshu 2nd Rd., Xizhi Dist.,  
Town: New Taipei City 221,  
Country: Taiwan (R.O.C.)

## 1.6 Test standards

Technical standard:  
FCC RULES PART 95 - Personal Radio Service  
(2015-10) Subpart J - Multi-Use Radio Service (MURS)  
Subpart E - Technical Regulations  
FCC RULES PART 2 - Frequency Allocations General Rules and Regulations  
(2015-10)



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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 3 were ascertained in the course of the tests performed.

**2.2 Test environment**

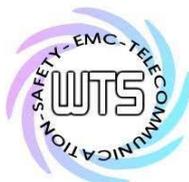
Temperature: 23 °C  
Relative humidity content: 20 ... 75 %  
Air pressure: 86-103 KPa

**2.3 Description of Tested System**

The EUT was tested with the Accessories or Peripherals Listed below:

Equipment	Model No.	Series No.	Software	Cable information	Note
--	--	--	--	--	--
--	--	--	--	--	--
--	--	--	--	--	--
--	--	--	--	--	--
--	--	--	--	--	--
--	--	--	--	--	--

Explanation: The EUT was configured as stand alone device, and there are no accessories or peripherals during the test.



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## 2.4 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	2015/9/4	2016/9/3
ETSTW-CE 003	AC POWER SOURCE	APS-9102	D161137	GW	Function Test	
ETSTW-CE 008	HF-EICHLEITUNG 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	2015/7/13	2016/7/12
ETSTW-CE 016	TWO-LINE V-NETWORK	ENV216	100050	R&S	2015/9/7	2016/9/6
ETSTW-RE 003	EMI TEST RECEIVER	ESI 26	831438/001	R&S	2015/8/14	2016/8/13
ETSTW-RE 004	EMI TEST RECEIVER	ESI 40	832427/004	R&S	2015/9/4	2016/9/3
ETSTW-RE 005	EMI TEST RECEIVER	ESVS10	843207/020	R&S	2015/8/14	2016/8/13
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	2015/6/22	2016/6/21
ETSTW-RE 027	Passive Loop Antenna	6512	00034563	ETS-Lindgren	2015/6/16	2016/6/15
ETSTW-RE 030	Double-Ridged Guide Horn Antenna	3117	00035224	ETS-Lindgren	2016/3/23	2017/3/22
ETSTW-RE 042	Biconical Antenna	HK116	100172	R&S	2016/1/25	2017/1/24
ETSTW-RE 043	Log-Periodic Dipole Antenna	HL223	100166	R&S	2016/3/28	2017/3/27
ETSTW-RE 044	Log-Periodic Antenna	HL050	100094	R&S	2016/4/14	2017/4/13
ETSTW-RE 045	ESA-E SERIES SPECTRUM ANALYZER	E4404B	MY45111242	Agilent	Pre-test Use	
ETSTW-RE 050	Attenuator 10dB	50HF-010-1	None	JFW	2016/2/25	2017/2/24
ETSTW-RE 051	Attenuator 6dB	50HF-006-1	None	JFW	2016/2/25	2017/2/24
ETSTW-RE 053	Attenuator 3dB	50HF-003-1	None	JFW	2016/2/25	2017/2/24
ETSTW-RE 055	SPECTRUM ANALYZER	FSU 26	200074	R&S	2016/2/27	2017/2/26
ETSTW-RE 060	Attenuator 30dB	5015-30	F651012z-01	ATM	2016/2/25	2017/2/24
ETSTW-RE 062	Amplifier Module	CHC 2	None	KMIC	2016/4/13	2017/4/12
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	2015/9/6	2016/9/5
ETSTW-RE 088	SOLID STATE AMPLIFIER	KMA180265A01	99057	KMIC	2015/9/21	2016/9/20
ETSTW-RE 099	DC Block	50DB-007-1	None	JFW	2016/2/25	2017/2/24
ETSTW-RE 112	AC POWER SOURCE	TFC-1005	T-0A023536	T-Power	Function test	
ETSTW-RE 115	2.4GHz Notch Filter	N0124411	473874	MICROWAVE CIRCUITS	2016/1/13	2017/1/12
ETSTW-RE 120	RF Player	MP9200	MP9210-111022	ADIVIC	Function test	
ETSTW-RE 122	SIGNAL GENERATOR	SMF100A	102149	R&S	2015/6/8	2016/6/7
ETSTW-RE 125	5GHz Notch filter	5NSL11-5200/E221.3-O/O	1	K&L Microwave	2015/8/11	2016/8/10



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ETSTW-RE 126	5GHz Notch filter	5NSL11-5800/E221.3-O/O	1	K&L Microwave	2015/8/11	2016/8/10
ETSTW-RE 127	RF Switch Box	RFS-01	None	WTS	2016/2/25	2017/2/24
ETSTW-RE 128	5.3GHz Notch filter	N0153001	SN487233	Microwave Circuits	2015/8/11	2016/8/10
ETSTW-RE 129	5.5GHz Notch filter	N0555984	SN487234	Microwave Circuits	2015/8/11	2016/8/10
ETSTW-RE 130	Handheld RF Spectrum Analyzer	N9340A	CN0147000204	Agilent	Pre-test Use	
ETSTW-RE 142	Amplifier	8447D	2805A03378	Agilent	2016/4/13	2017/4/12
ETSTW-RE 143	Humidity Temperature Meter	TES-1260	110104623	TES	2015/9/9	2016/9/8
ETSTW-RE 147	Bi-log Hybrid Antenna	MCTD 2786B	BLB16M04005	ETC	2016/3/31	2017/3/30
ETSTW-EMI 011	USB Compact Modulator	SFC-U	101689	R&S	2016/5/4	2017/5/3
ETSTW-GSM 002	Universal Radio Communication Tester	CMU 200	109439	R&S	2016/3/4	2017/3/3
ETSTW-GSM 003	Radio Communication Analyzer	MT8820C	6201342073	Anritsu	2016/2/3	2017/2/2
ETSTW-GSM 019	Band Reject Filter	WRCTF824/849-822/851-40 /12+9SS	3	WI	2016/1/13	2017/1/12
ETSTW-GSM 020	Band Reject Filter	WRCD1747/1748-1743/1752-32/5SS	1	WI	2016/1/13	2017/1/12
ETSTW-GSM 021	Band Reject Filter	WRCD1879.5/1880.5-1875.5/1884.5-32/5SS	3	WI	2016/1/13	2017/1/12
ETSTW-GSM 022	Band Reject Filter	WRCT901.9/903.1-904.25-50/8SS	1	WI	2016/1/13	2017/1/12
ETSTW-GSM 023	Power Divider	4901.19.A	None	SUHNER	2015/9/16	2016/9/15
ETSTW-Cable 010	BNC Cable	5 M BNC Cable	None	JYE BAO CO.,LTD.	2015/9/11	2016/9/10
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.	2015/9/11	2016/9/10
ETSTW-Cable 016	BNC Cable	Switch Box	B Cable 1	Schwarz beck	2016/2/24	2017/2/23
ETSTW-Cable 017	BNC Cable	X Cable	B Cable 2	Schwarz beck	2016/2/24	2017/2/23
ETSTW-Cable 018	BNC Cable	Y Cable	B Cable 3	Schwarz beck	2016/2/24	2017/2/23
ETSTW-Cable 019	BNC Cable	Z Cable	B Cable 4	Schwarz beck	2016/2/24	2017/2/23
ETSTW-Cable 020	N TYPE Cable	OATS Cable 1	N30N30-L335-15M	JYE BAO CO.,LTD.	2016/4/22	2017/4/21
ETSTW-Cable 022	N TYPE Cable	5006	0002	JYE BAO CO.,LTD.	2016/4/7	2017/4/6
ETSTW-Cable 026	Microwave Cable	SUCOFLEX 104	279075	HUBER+SUHNER	2016/2/25	2017/2/24
ETSTW-Cable 027	Microwave Cable	SUCOFLEX 104	279083	HUBER+SUHNER	2016/5/13	2017/5/12
ETSTW-Cable 028	Microwave Cable	FA147A0015M2020	30064-2	UTIFLEX	2015/9/21	2016/9/20
ETSTW-Cable 029	Microwave Cable	FA147A0015M2020	30064-3	UTIFLEX	2015/9/21	2016/9/20
ETSTW-Cable 030	Microwave Cable	SUCOFLEX 104 (S Cable 9)	279067	HUBER+SUHNER	2016/2/25	2017/2/24
ETSTW-Cable 031	Microwave Cable	SUCOFLEX 104 (S Cable 10)	238092	HUBER+SUHNER	2016/4/13	2017/4/12
ETSTW-Cable 043	Microwave Cable	SUCOFLEX 104	317576	HUBER+SUHNER	2016/4/13	2017/4/12
ETSTW-Cable 048	Microwave Cable	SUCOFLEX 104	325518	HUBER+SUHNER	2016/4/13	2017/4/12
ETSTW-Cable 058	Microwave Cable	SUCOFLEX 104	none	HUBER+SUHNER	2016/4/7	2017/4/6
ETSTW-Cable 064	Microwave Cable	SUCOFLEX 104	MY28891	HUBER+SUHNER	2016/4/13	2017/4/12
WTSTW-SW 002	EMI TEST SOFTWARE	EZ EMC	None	Farad	Version ETS-03A1	



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## **2.5 General Test Procedure**

**POWER LINE CONDUCTED INTERFERENCE:** The procedure used was ANSI STANDARD C63.4-2009 5.2 using a 50 $\mu$ 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 %.

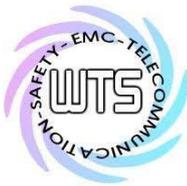
The table used for radiated measurements is capable of continuous rotation. The spectrum was scanned from 30 MHz to the frequency specified as follows:

- (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, an exploratory test was performed with three (3) orthogonal planes to determine the highest emissions.

Measurements were made by at the registered open field test site located at 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.

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.

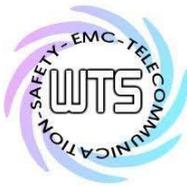


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**3. Test results (enclosure)**

TEST CASE	Para. Number	Required	Test passed	Test failed
RF Power Output	2.1046; 95.639 (h)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Modulation Deviation	2.1047 (b) 95.631 (j)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Audio Frequency Response	2.1047 (a) 95.631 (j)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Occupied Bandwidth / Emission Mask	2.1049 (c)(1); 95.633 (f) 95.635 (e)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Radiated Spurious Emission Transmitter	2.1053 95.635 (e)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Radiated Spurious Emission Receiver	Part 15B	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Frequency Stability vs. Temperature	2.1055 (b); 95.632(c)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Frequency Stability vs. Voltage	2.1055 (a)(1); 95.632(c)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The following is intentionally left blank.



Registration number: W6M21603-15738-C-95  
FCC ID: IPH-02994

## 4. RF Power Output (conducted), FCC 2.1046; 95.639

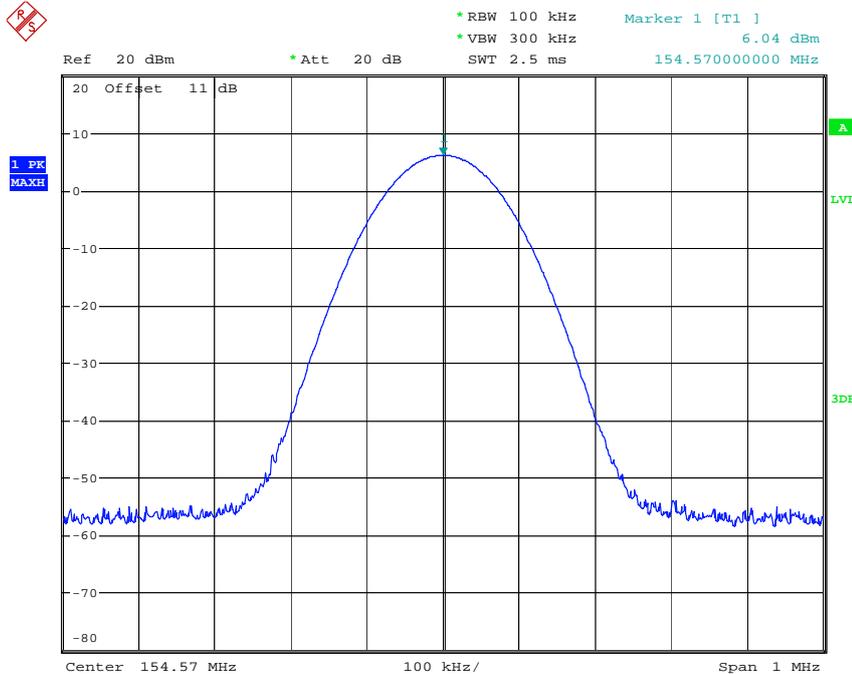
### 4.1 Test procedure

This transmitter output was connected to a calibrated coaxial attenuator, the other end of which was connected to a spectrum analyzer. Transmitter output was derived with the spectrum analyzer in dBm. The power output at the transmitter antenna port was determined by assign the value of the attenuator to the spectrum analyzer reading.

An HP power meter was also used to measure the RF power.

Tests were performed with an un-modulated carrier at three frequencies (low, middle and high channels) and on all power levels, which can be set-up on the transmitters, if applicable.

### 4.2 Test Results



MAX OUTPUT POWER 154.57MHZ  
Date: 6.APR.2016 14:02:36

### 4.3 Limits:

No MURS unit, under any condition of modulation, shall exceed 2 Watts transmitter power output.

Test equipment used: ETSTW-RE 060, ETSTW-RE 055

Registration number: W6M21603-15738-C-95

FCC ID: IPH-02994

## 5. Radiated Power

### 5.1 Test Procedure

The EUT was positioned on a non-conductive turntable, 0.8m above the ground on an open test site. The radiated emission at the fundamental frequency was measured at 3m distance with a test antenna and spectrum analyzer.

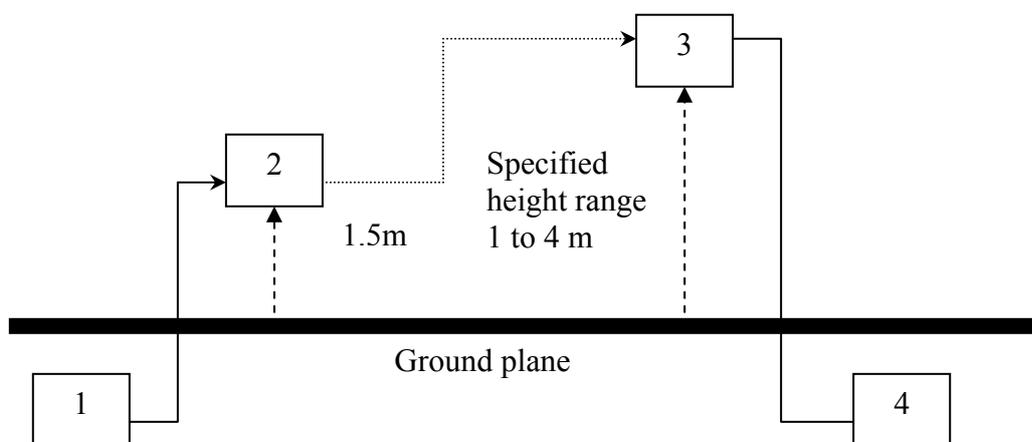
Worst case emission was recorded with the rotation of the turntable and the rising and lowering of the test antenna.

### Substitution RF power Measurement at WTS

General:

The applied substitution method follows ANSI/TIA/EIA-603, ANSI/TIA/EIA-102.CAAA or the appropriate ETSI rules respectively.

The actual signal generated by the EUT can be determined by means of a substitution measurement in which a known signal source replaces the device to be measured.



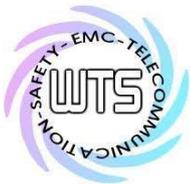
- 1) Signal generator ;
- 2) Substitution antenna ;
- 3) Test antenna ;
- 4) Spectrum analyzer or selective voltmeter.

The substitution antenna replaces the transmitter antenna at the same position and in vertical polarization. The frequency of the signal generator shall be adjusted to the measurement frequency.

The test antenna shall be raised or lowered, if necessary, to ensure that the maximum signal is still received. The input signal to the substitution antenna shall be adjusted in level until an equal or a known related level to that detected from the transmitter is obtained in the measurement receiver.

If a fully anechoic chamber is used as test site in order to provide free space conditions there is no need to change the height of the antenna.

The measurement will be repeated in horizontal position.



Registration number: W6M21603-15738-C-95  
 FCC ID: IPH-02994

### Calibration:

In order to make this kind of measurement more effective and to avoid subjective measurement faults ETS has installed automatic computer controlled measurement procedures.

With the above described substitution method a test site is calibrated over the full frequency range which is used in suitable frequency steps. For a certain power level on the substitution antenna the received power over the whole frequency range is documented. All necessary antenna gains, cable losses, filter losses and amplifications of preamplifiers are taken in consideration. The summary of this calibration measurement performs a transducer factor that is related to the considered test site and a certain measurement distance. Differences of the radiated power levels of different test samples are determined by internal attenuation of measurement receiver. The proper function of such test site will be maintained by short term plausibility checks and periodical re-calibration.

### Testing:

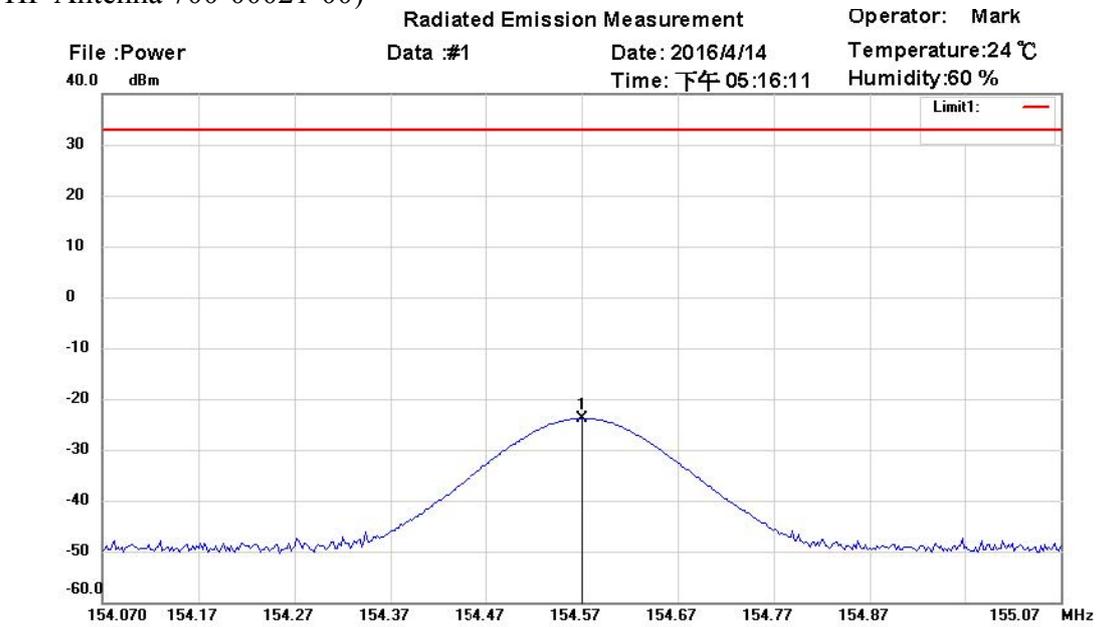
Now the test sample will be putted on the table at the defined position and the radiated power will be receiver and documented by the measurement receiver.

On test sites with ground plane the measurement antenna will be lowered and raised to maximum values at significant frequencies.

For peak power measurements the sample is turned by the turntable over 360 degree in order to find the direction with the maximum radiation or to document the max reading with the MAXHOLD function during the rotation.

## 5.2 Test results

Short (VHF Antenna 700-00021-00)



Site : Chamber

Condition : FCC\_part 95 MURS Power

EUT : W6M21603-15738

M/N:

Test Mode : Ch4 154.57MHz

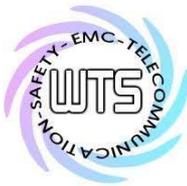
Note :

Polarization: *Horizontal*

Power : 2.4 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	154.5710	-44.72	peak	20.96	-23.76	33.00	150	140	-56.76	



# Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21603-15738-C-95  
 FCC ID: IPH-02994

## Radiated Emission Measurement

Operator: Mark

File :Power  
 40.0 dBm

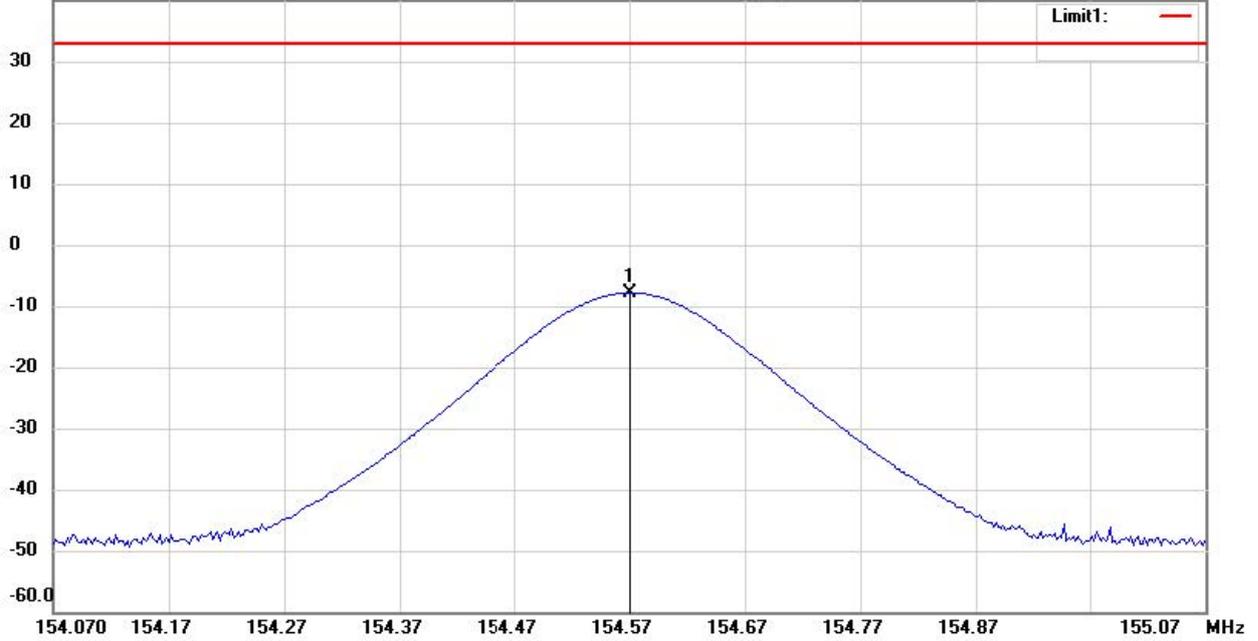
Data :#2

Date: 2016/4/14

Temperature:24 °C

Time: 下午 04:59:57

Humidity:60 %



Site : Chamber

Condition : FCC\_part 95 MURS Power

Polarization: *Vertical*

EUT : W6M21603-15738

Power : 2.4 Vd.c.

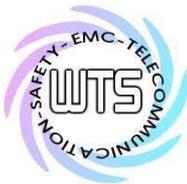
M/N:

Distance: 3m

Test Mode : Ch4 154.57MHz

Note :

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	154.5710	-29.46	peak	21.67	-7.79	33.00	150	10	-40.79	



# Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21603-15738-C-95  
 FCC ID: IPH-02994

Long (VHF Antenna 700-00042-00)

### Radiated Emission Measurement

Operator: Mark

File :Power  
 40.0 dBm

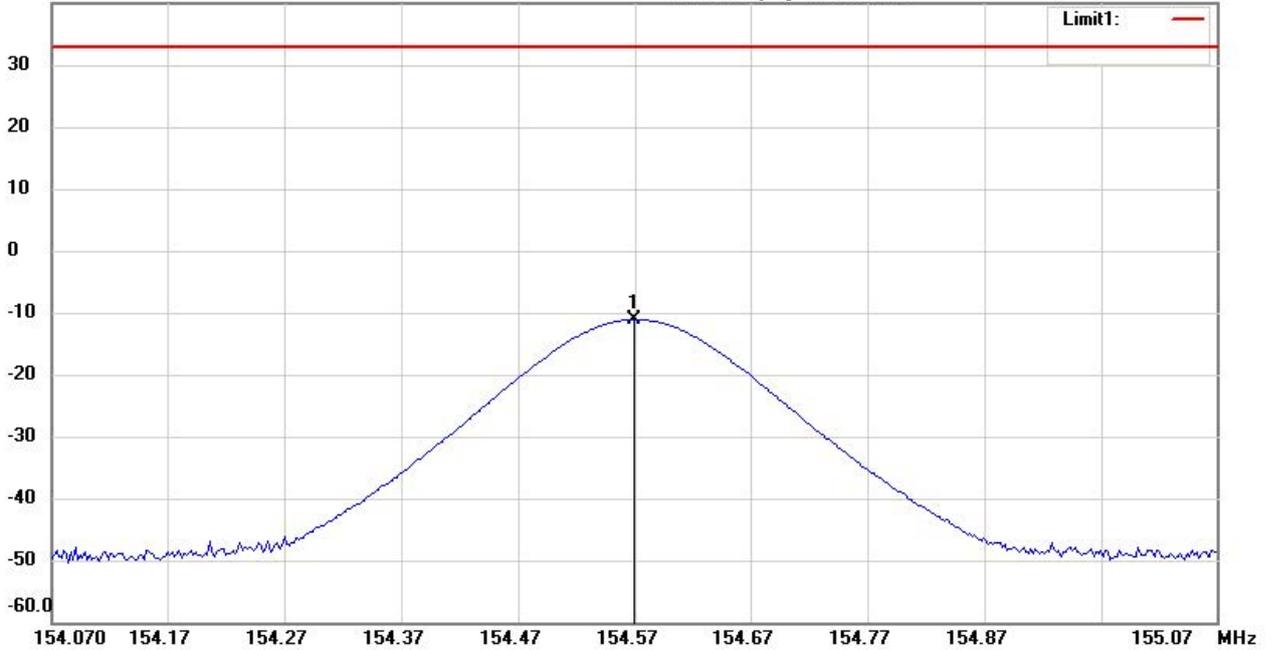
Data :#1

Date: 2016/4/14

Temperature:24 °C

Time: 下午 05:17:35

Humidity:60 %



Site : Chamber

Condition : FCC\_part 95 MURS Power

Polarization: *Horizontal*

EUT : W6M21603-15738

Power : 2A Vd.c.

M/N:

Distance: 3m

Test Mode : Ch4 154.57MHz

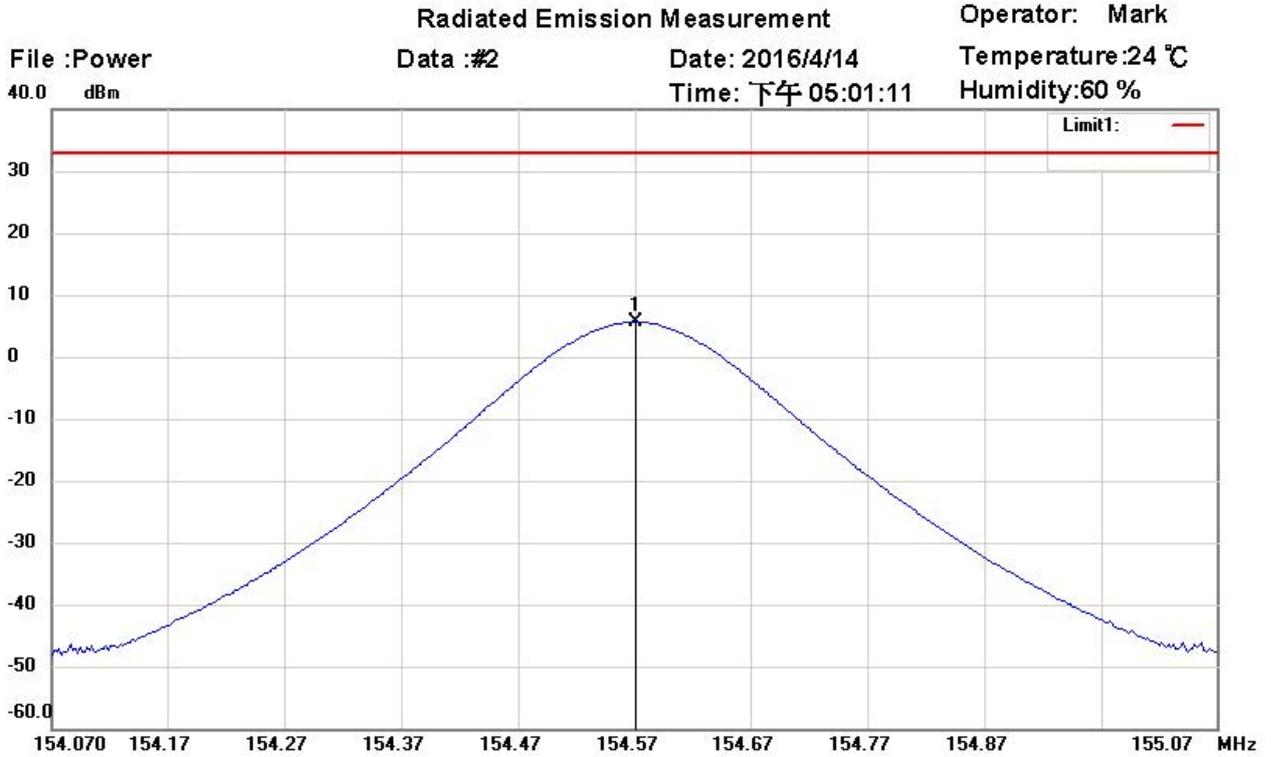
Note :

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	154.5690	-32.00	peak	20.96	-11.04	33.00	150	270	-44.04	



# Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21603-15738-C-95  
 FCC ID: IPH-02994



Site : Chamber  
 Condition : FCC\_part 95 MURS Power      Polarization: *Vertical*  
 EUT : W6M21603-15738      Power : 2.4 Vd.c.  
 M/N:      Distance: 3m  
 Test Mode : Ch4 154.57MHz  
 Note :

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	154.5710	-16.03	peak	21.67	5.64	33.00	150	280	-27.36	



# Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21603-15738-C-95  
 FCC ID: IPH-02994

Spiral (Mag Mount Antenna 013-00240-00)

## Radiated Emission Measurement

Operator: Mark

File :Power  
 40.0 dBm

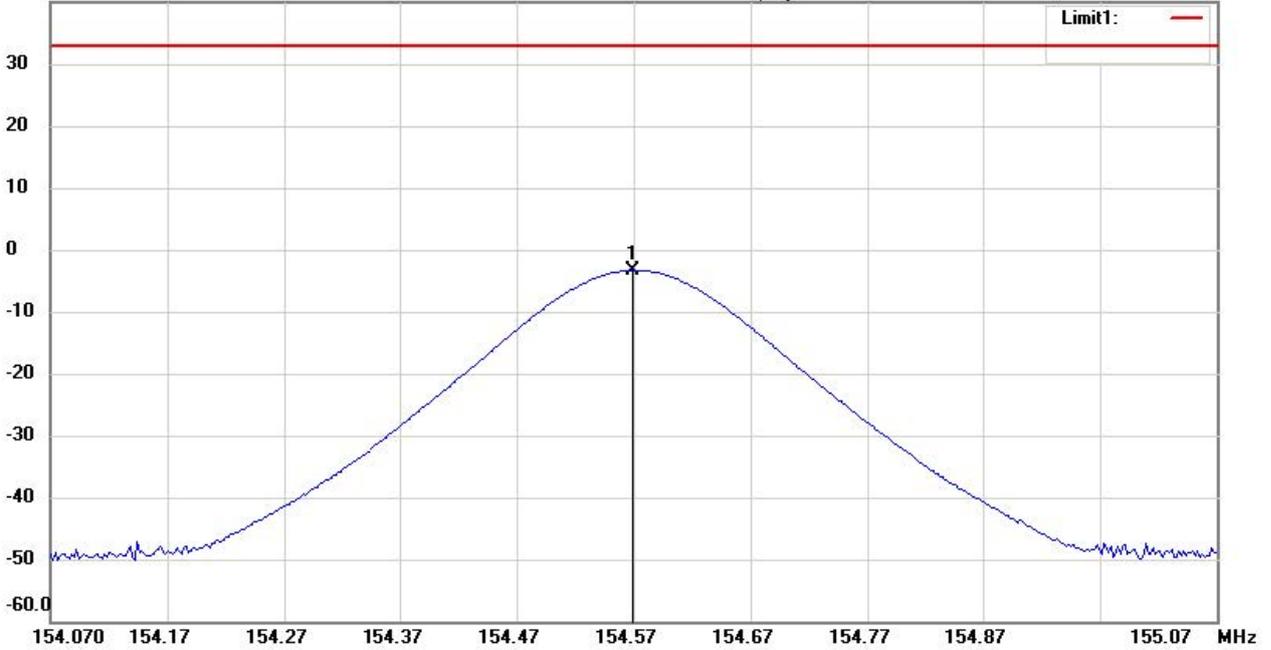
Data :#1

Date: 2016/4/14

Temperature:24 °C

Time: 下午 05:21:07

Humidity:60 %



Site : Chamber

Condition : FCC\_part 95 MURS Power

Polarization: *Horizontal*

EUT : W6M21603-15738

Power : 2.4 Vd.c.

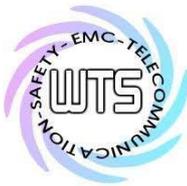
M/N:

Distance: 3m

Test Mode : Ch4 154.57MHz

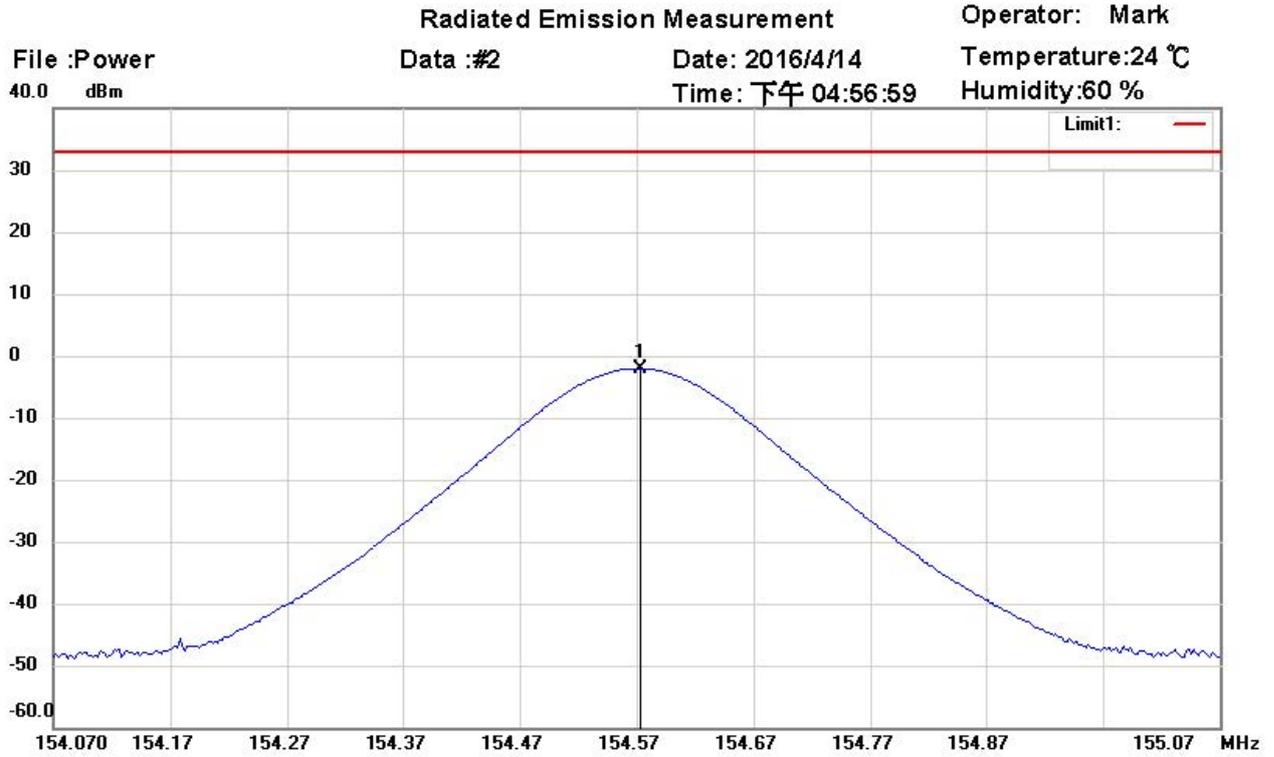
Note :

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	154.5690	-24.24	peak	20.96	-3.28	33.00	150	150	-36.28	



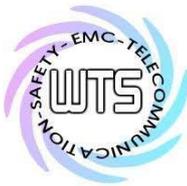
# Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21603-15738-C-95  
 FCC ID: IPH-02994



Site : Chamber  
 Condition : FCC\_part 95 MURS Power      Polarization: *Vertical*  
 EUT : W6M21603-15738      Power : 2.4 Vd.c.  
 M/N:  
 Test Mode : Ch4 154.57MHz      Distance: 3m  
 Note :

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	154.5730	-23.69	peak	21.67	-2.02	33.00	150	200	-35.02	



# Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21603-15738-C-95  
 FCC ID: IPH-02994

Super Long (Portable Telescoping Antenna 013-00277-00)

### Radiated Emission Measurement

Operator: Mark

File :Power  
 40.0 dBm

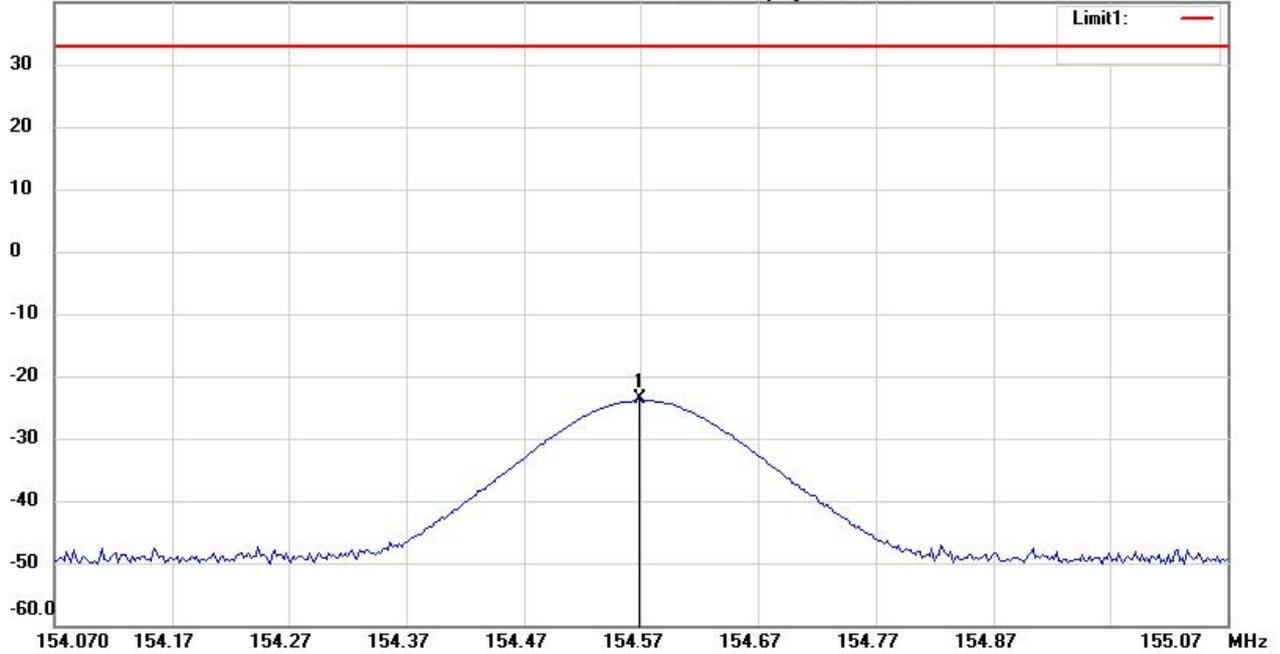
Data :#1

Date: 2016/4/14

Temperature:24 °C

Time: 下午 05:19:32

Humidity:60 %



Site : Chamber

Condition : FCC\_part 95 MURS Power

Polarization: *Horizontal*

EUT : W6M21603-15738

Power : 2.4 Vd.c.

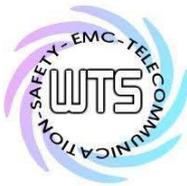
M/N:

Distance: 3m

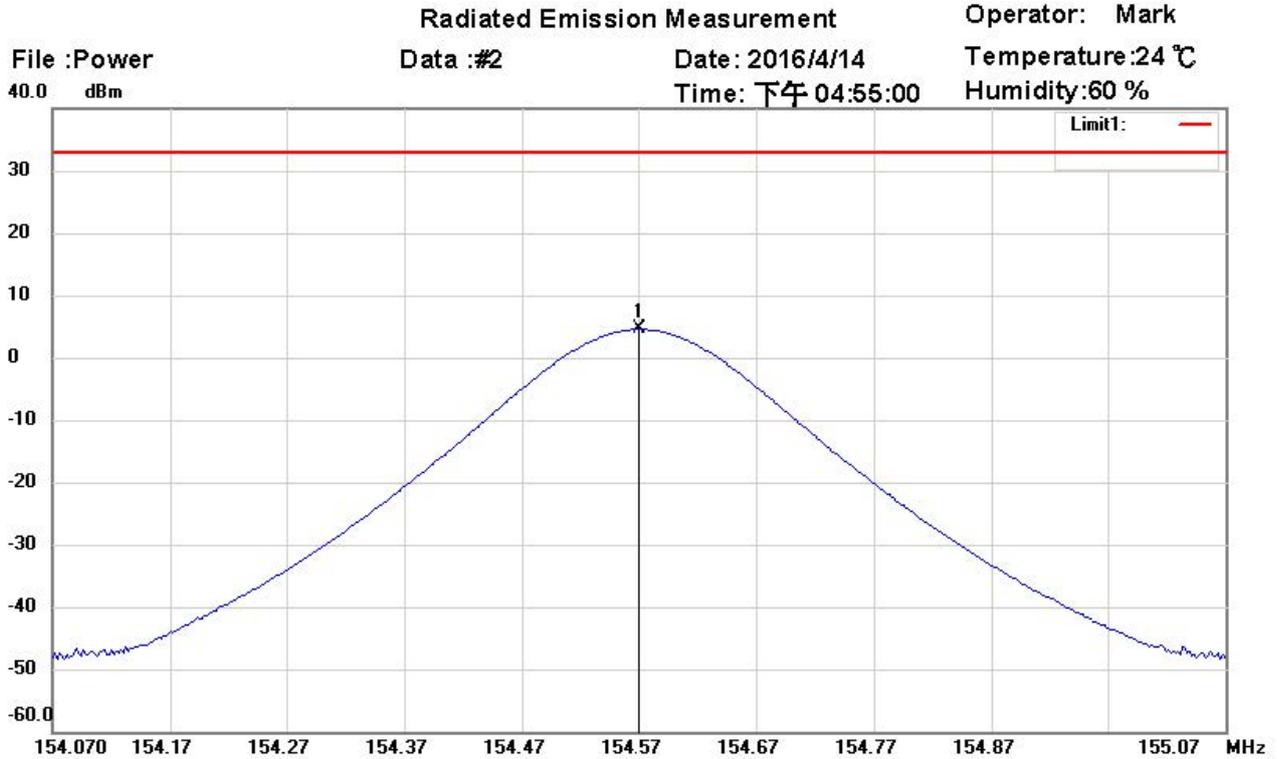
Test Mode : Ch4 154.57MHz

Note :

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	154.5690	-44.70	peak	20.96	-23.74	33.00	150	240	-56.74	



Registration number: W6M21603-15738-C-95  
 FCC ID: IPH-02994



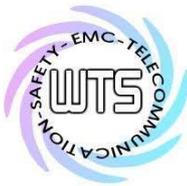
Site : Chamber  
 Condition : FCC\_part 95 MURS Power      Polarization: **Vertical**  
 EUT : W6M21603-15738      Power : 2.4 Vd.c.  
 M/N:      Distance: 3m  
 Test Mode : Ch4 154.57MHz  
 Note :

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	154.5710	-17.08	peak	21.67	4.59	33.00	150	260	-28.41	

Test equipment used: ETSTW-RE 004, ETSTW-RE 122, ETSTW-RE 030,  
 ETSTW-RE 042, ETSTW-RE 043, ETSTW-RE 044

### 5.3 Limits:

No MURS unit, under any condition of modulation, shall exceed 2 Watts transmitter power output.



Registration number: W6M21603-15738-C-95  
FCC ID: IPH-02994

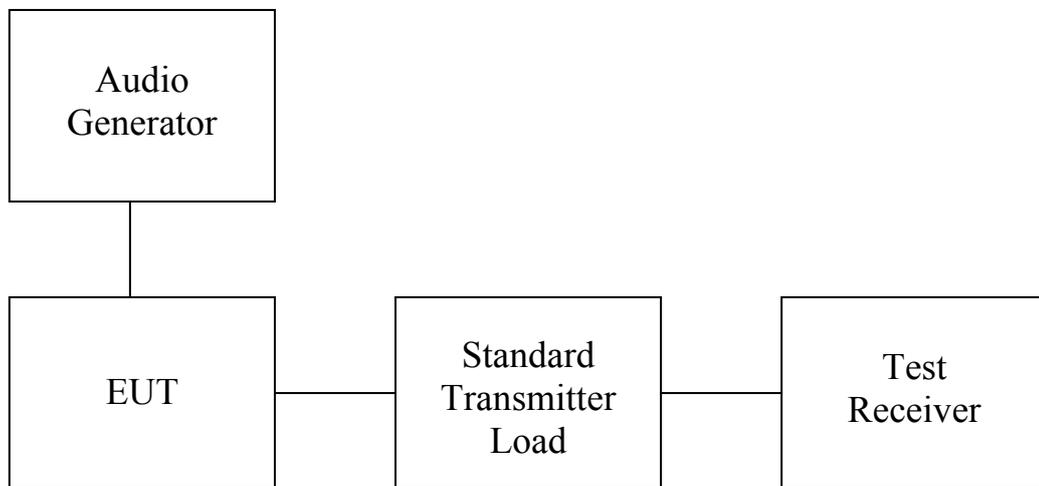
**6. Modulation Deviation, FCC 2.1047 (b), 95.631(j)**

**6.1 Test procedure**

Modulation limiting is the transmitter circuit's ability to limit the transmitter from producing deviations in excess of rated system deviation.

The audio signal generator is connected to the audio input of the EUT with its full rating.

The modulation response is measured at certain modulation frequencies, related to 1000Hz reference signal. Tests are performed for positive and negative modulation.



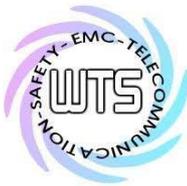
**6.2 Test results:**

Explanation: This test is not required because the EUT belongs to digital modulation.

**6.3 Limits:**

A MURS transmitter must transmit only emission types A1D, A2B, A2D, A3E, F2B, F1D, F2D, F3E, G3E. Emission types A3E, F3E and G3E include selective calling or tone-operated squelch tones to establish or continue voice communications. MURS transmitters are prohibited from transmitting in the continuous carrier mode.

Test equipment used: ETSTW-RE 055, ETSTW-RE 060



Registration number: W6M21603-15738-C-95  
FCC ID: IPH-02994

**7. Audio frequency response, FCC 2.1047 (a)**

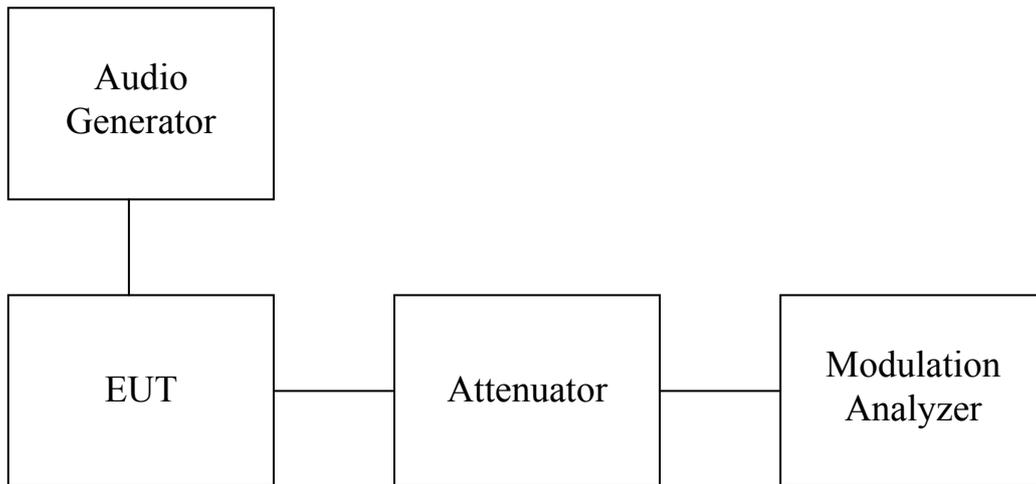
**7.1 Test procedure**

The audio frequency response is the degree of closeness to which the frequency deviation of the transmitter follows a prescribed characteristic.  
The frequency response of the audio modulation part is measured over a frequency range of 100 Hz to 5000Hz.

For 1000Hz tone reference signal the audio generator level is adjusted to get 20% of the rated system deviation.

The deviations obtained over the frequency range from 100Hz to 5000Hz are recorded and compared with the reference deviation as follows:

$$\text{Audio Frequency Response} = 20 \log [ \text{DEV}_{\text{Freq}} / \text{DEV}_{\text{ref}} ].$$



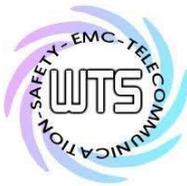
**7.2 Test results:**

Explanation: This test is not required because the EUT belongs to digital modulation.

**7.3 Limits:**

A MURS transmitter must transmit only emission types A1D, A2B, A2D, A3E, F2B, F1D, F2D, F3E, G3E. Emission types A3E, F3E and G3E include selective calling or tone-operated squelch tones to establish or continue voice communications. MURS transmitters are prohibited from transmitting in the continuous carrier mode.

Test equipment used: ETSTW-RE 072, ETSTW-RE 055

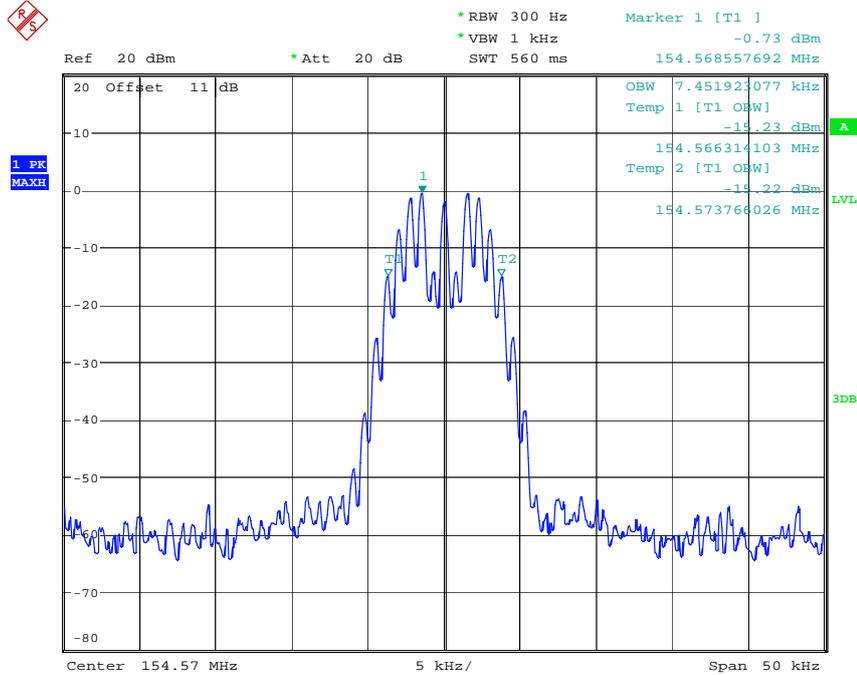


Registration number: W6M21603-15738-C-95  
FCC ID: IPH-02994

## 8. Occupied Bandwidth/Emission Mask, FCC 2.1049 (c) ; 95.632

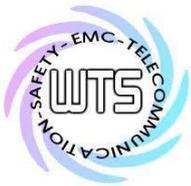
The authorized bandwidth is 11.25 kHz on frequencies 151.820 MHz, 151.880 MHz and 151.940 MHz.  
The authorized bandwidth is 20.0 kHz on frequencies 154.570 and 154.600 MHz.

### 8.1 Test Results



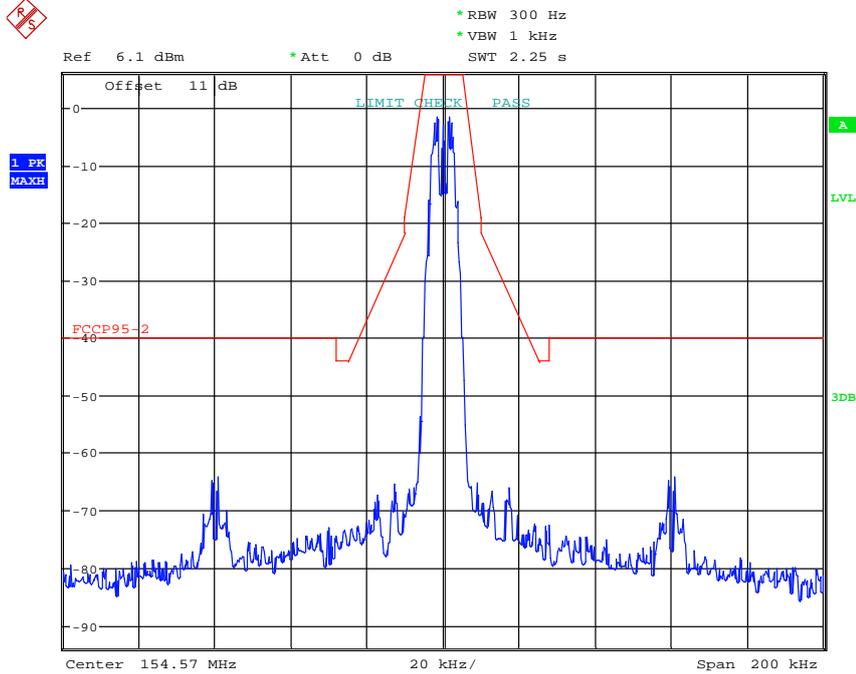
OCCUPIED BANDWIDTH 154.57MHZ

Date: 6.APR.2016 14:08:03



Registration number: W6M21603-15738-C-95  
 FCC ID: IPH-02994

## Emission Mask

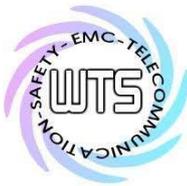


EMISSION MASK 154.57MHZ  
 Date: 8.APR.2016 15:44:30

## 8.2 Limit

Frequencies	Authorized bandwidth
151.820 MHz 151.880 MHz 151.940 MHz	11.25 kHz
154.570 and 154.60 MHz	20.0 kHz

Test equipment used: ETSTW-RE 055, ETSTW-RE 060



Registration number: W6M21603-15738-C-95  
 FCC ID: IPH-02994

**9. Radiated Spurious Emission, FCC 2.1053; 95.635**

**9.1 Test procedure**

The EUT was positioned on a non-conductive turntable, 0.8m above the ground plane. The radiated emission at the fundamental frequency was measured at 3 m distance with a test antenna and spectrum analyzer. Worst case emission was recorded with the rotation of the turntable and the raising and lowering of the test antenna. ERP was measured using a substitution method. The EUT was replaced by reference antenna connected to a signal generator. The test of spurious radiated emission has been carried out with the validated test software. The measurements below 1GHz were performed with a measurement bandwidth of 100 kHz, above 1GHz with a bandwidth of 1MHz. Spurious emission limits near the carrier are defined by a emission mask.

**9.2 Test Results**

The measurements of the spurious emission at the upper, center and lower channel, if applicable. The measurement diagrams show that all significant spurious emissions are well below the limit line.

**9.2.1 Spurious emission near the carrier:**

The Results of Emission Mask:  PASSED       NOT PASSED

**9.2.2 Spurious emission not near the carrier:**

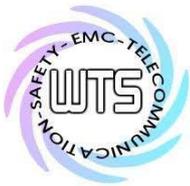
Model:                    A02994                    Date:                    --  
 Mode:                    --                    Temperature:            --                    °C    Engineer:            --  
 Polarization:            --                    Humidity:                --                    %

Frequency (MHz)	Reading (dBm) Peak	Factor (dB) Corr.	Result (dBm)	Limit (dBm)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--

**Note:**

- Correction Factor = Antenna Gain + Cable Loss + Amplifier Gain**
- The formula of measured value as: Test Result = Reading + Correction Factor**
- Detector function in the form : PK = Peak, AV = Average**
- All not in the table noted test results are more than 20 dB below the relevant limits.**
- Measurement uncertainty: 30-200MHz : ±2.04 dB, 200-1000MHz : ±2.04 dB, 1-18GHz : ±2.66 dB**  
**Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.**
- See the attached diagram as appendix.**

Test equipment used: ETSTW-RE 004, ETSTW-RE 122, ETSTW-RE 030,  
 ETSTW-RE 042, ETSTW-RE 043, ETSTW-RE 044



Registration number: W6M21603-15738-C-95  
FCC ID: IPH-02994

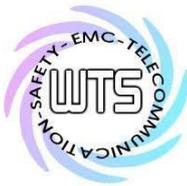
### **9.3 Explanation of test result**

The measurements of the spurious emissions at the equipment output terminals were performed pursuant to the test procedure above in order to verify that any emissions are below the limits given by § 95.635(e).

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.

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



Registration number: W6M21603-15738-C-95  
 FCC ID: IPH-02994

**9.4 Limits**

For transmitters designed to operate in the MURS, transmitters shall comply with the following:

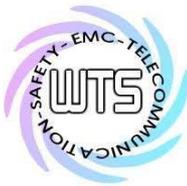
Frequency	Mask with audio low pass filter	Mask without audio low pass filter
151.820 MHz, 151.880 MHz and 151.940 MHz.....	(1)	(1)
154.570 MHz and 154.600 MHz	(2)	(3)

(1) Emission Mask 1—For transmitters designed to operate with a 12.5 kHz channel bandwidth, any emission must be attenuated below the power (P) of the highest emission contained within the authorized bandwidth as follows: (i) On any frequency from the center of the authorized bandwidth to 5.625 kHz removed from  $f_0$ : Zero dB. (ii) On any frequency removed from the center of the authorized bandwidth by a displacement frequency ( $f_d$  in kHz) of more than 5.625 kHz but no more than 12.5 kHz: at least  $7.27(f_d - 2.88)$  dB. (iii) On any frequency removed from the center of the authorized bandwidth by a displacement frequency ( $f_d$  in kHz) of more than 12.5 kHz: at least  $50 + 10 \log(P)$  dB or 70 dB, whichever is the lesser attenuation. (2) Emission Mask 2—For transmitters designed to operate with a 25 kHz channel bandwidth that are equipped with an audio low-pass filter, the power of any emission must be below the unmodulated carrier power (P) as follows: (i) On any frequency removed from the assigned frequency by more than 50 percent, but not more than 100 percent of the authorized bandwidth: at least 25 dB. (ii) On any frequency removed from the assigned frequency by more than 100 percent, but not more than 250 percent of the authorized bandwidth: at least 35 dB. (iii) On any frequency removed from the assigned frequency by more than 250 percent of the authorized bandwidth: at least  $43 + 10 \log(P)$  dB. (3) Emission Mask 3—For transmitters designed to operate with a 25 kHz channel bandwidth that are not equipped with an audio low-pass filter, the power of any emission must be attenuated below the unmodulated carrier output power (P) as follows: (i) On any frequency removed from the center of the authorized bandwidth by a displacement frequency ( $f_d$  in kHz) of more than 5 kHz, but not more than 10 kHz: at least  $83 \log(f_d/5)$  dB. (ii) On any frequency removed from the center of the authorized bandwidth by a displacement frequency ( $f_d$  in kHz) of more than 10 kHz, but not more than 250 percent of the authorized bandwidth: at least  $29 \log(f_d^2/11)$  dB or 50 dB, whichever is the lesser attenuation. (iii) On any frequency removed from the center of the authorized bandwidth by more than 250 percent of the authorized bandwidth: at least  $43 + 10 \log(P)$  dB.

The compliance limit was calculated as the following table:

154.57 MHz

Maximum transmitter output power	6.04 dBm
Required attenuation	$43 + 10 \times \text{Log}(0.0040) = 19.04$ dBm
Maximum transmitter output power	6.04 dBm
Required attenuation	19.04 dB
Compliance limit	-13 dBm



Registration number: W6M21603-15738-C-95  
FCC ID: IPH-02994

**10. Frequency Stability vs. Temperature, FCC 2.1055, 95.632**

**10.1 Test procedure**

The equipment under test was connected to an external DC power supply and the RF output was connected to a frequency counter via feed through attenuators. The EUT was placed inside the temperature chamber. The DC leads and RF output cable, exited the chamber through an opening made for that purpose.

After the temperature stabilized the frequency output was recorded from the counter.

**10.2 Test Results**

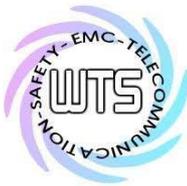
**154.57 MHz**

Temperature V.S Frequency Stability	
Temperature (°C)	Measurement Frequency (MHz)
-20	154.569983
-10	154.570016
0	154.570016
10	154.570016
20	154.570023
30	154.570032
40	154.570048
50	154.570064
60	154.570078
Max Deviation (MHz)	0.000078
Max Deviation (ppm)	0.504599

**10.3 Limits:**

According to FCC 95.632(c), MURS transmitters must maintain a frequency stability of 5.0 ppm, or 2.0 ppm if designed to operate with a 6.25 kHz bandwidth.

Test equipment used: ETSTW-RE 055, ETSTW-CE 009



Registration number: W6M21603-15738-C-95  
FCC ID: IPH-02994

**11. Frequency Stability vs. Voltage, FCC 2.1055 (d) ; 95.632**

**11.1 Test procedure**

An external variable DC power supply was connected to the battery terminals of the equipment under test.

For hand carried, battery powered equipment primary supply voltage was reduced to the battery operating end point as specified by the manufacturer. The output frequency was recorded for each battery voltage.

**11.2 Test Results**

**154.57 MHz**

Voltage V.S Frequency Stability	
Voltage (VDC)	Measurement Frequency (MHz)
nom / 2.4	154.570016
min / 2.04	154.570016
max / 2.4	154.570016
Max Deviation (MHz)	0.000016
Max Deviation (ppm)	0.103507

**11.3 Limits:**

According to FCC 95.632(c), MURS transmitters must maintain a frequency stability of 5.0 ppm, or 2.0 ppm if designed to operate with a 6.25 kHz bandwidth.

Test equipment used: ETSTW-RE 055

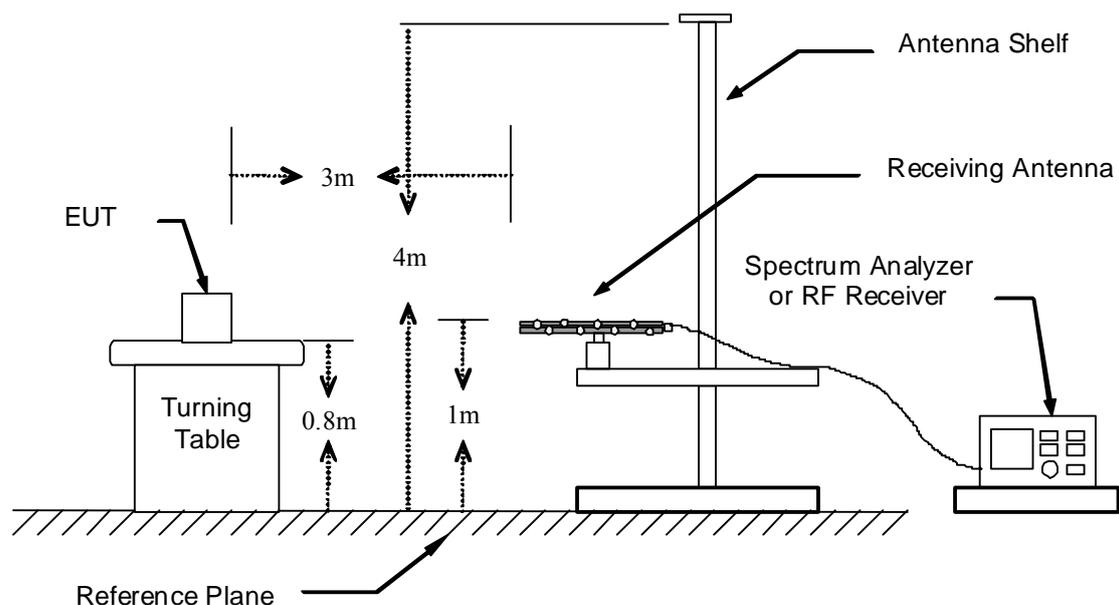
Registration number: W6M21603-15738-C-95  
 FCC ID: IPH-02994

## 12. Receiver Radiated Spurious Emission

### 12.1 Test Procedures

1. Configure the EUT according to ANSI C63.4.
2. The EUT was placed on the top of the turn table 0.8 meter above ground.
3. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turn table.
4. Power on the EUT and all the supporting units.
5. The turn table was rotated 360 degrees to determine the position of the highest radiation.
6. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emission field strength of both horizontal and vertical polarization.
7. For each suspected emission, the antenna tower was scan (from 1 M to 4 M) and then the turn table was rotated (from 0 degree to 360 degrees) to find the maximum reading.
8. Adjust the spectrum analyzer for the following settings:
  - Resolution Bandwidth = 100 kHz for spurious emissions below 1 GHz and 1 MHz for spurious emissions above 1GHz.
  - Video Bandwidth = 100 kHz for spurious emissions below 1 GHz, and 1 MHz for spurious emissions above 1 GHz.
  - Sweep Speed slow enough to maintain measurement calibration.
  - Detector Mode = Positive Peak.

### 12.2 Test Setup





Registration number: W6M21603-15738-C-95  
 FCC ID: IPH-02994

**12.3 Test Result**

Model: A02994 Date: --  
 Mode: -- Temperature: -- °C Engineer: --  
 Polarization: -- Humidity: -- %

Frequency (MHz)	Reading (dBm) Peak	Factor (dB) Corr.	Result (dBm)	Limit (dBm)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--

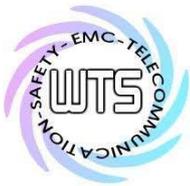
**Note**

- Correction Factor = Antenna factor + Cable loss - Preamplifier**
- The formula of measured value as: Test Result = Reading + Correction Factor**
- Detector function in the form: PK = Peak, QP = Quasi Peak, AV = Average**
- All not in the table noted test results are more than 20 dB below the relevant limits.**  
 Measurement uncertainty for 3m measurement: 30-1000 MHz = ± 4.69 dB, 1-18 GHz = ± 4.78 dB, 18-40 GHz = ± 2.44 dB ; Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.
- See the attached diagram as appendix.**

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 004, ETSTW-RE 030, ETSTW-RE 042,  
 ETSTW-RE 043, ETSTW-RE 044, ETSTW-RE 122



Registration number: W6M21603-15738-C-95  
 FCC ID: IPH-02994

**13. Maximum Permissible Exposure**

Test exclusion = max. conducted output power  
 Test exclusion = 6.04 dBm

**RESULT:**

Test standard : FCC KDB Publication  
 447498 D01 General RF Exposure Guidance v06

According to 447498 D01 General RF Exposure Guidance v06:  
 SAR evaluation, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

The enclosure of the device provides  $\geq 0.5$  cm separation from the antenna elements to significant metal parts of the enclosure to minimize potential perturbations.

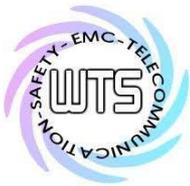
Frequency Band: 151.820-154.6 MHz  
 Maximum Power fed to Antenna: 4.0179 mW

Separation distances:  
 Radiator to user: > 5 mm  
 Distance prescribed in user manual: > 5 mm

MHz	5	10	15	20	25	mm
150	39	77	116	155	194	SAR Test Exclusion Threshold (mW)

MHz	30	35	40	45	50	mm
150	232	271	310	349	387	SAR Test Exclusion Threshold (mW)

MHz	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	mm
150	387	397	407	417	427	437	447	457	467	477	487	497	507	517	527	mW

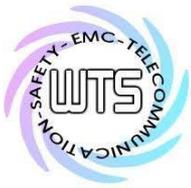


Registration number: W6M21603-15738-C-95  
FCC ID: IPH-02994

## **Appendix**

### **Measurement diagrams**

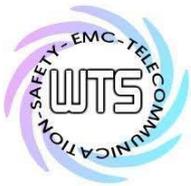
Radiation Spurious Emission



Registration number: W6M21603-15738-C-95  
FCC ID: IPH-02994

## **Appendix**

Short (VHF Antenna700-00021-00)

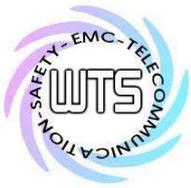


# *Worldwide Testing Services(Taiwan) Co., Ltd.*

Registration number: W6M21603-15738-C-95  
FCC ID: IPH-02994

## **Appendix**

Long (VHF Antenna700-00042-00)

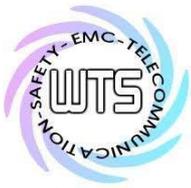


# **Worldwide Testing Services(Taiwan) Co., Ltd.**

Registration number: W6M21603-15738-C-95  
FCC ID: IPH-02994

## **Appendix**

Spiral (Mag Mount Antenna013-00240-00)

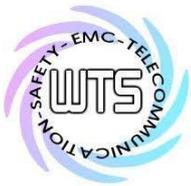


# *Worldwide Testing Services(Taiwan) Co., Ltd.*

Registration number: W6M21603-15738-C-95  
FCC ID: IPH-02994

## **Appendix**

SuperLong (Portable Telescoping Antenna013-00277-00)

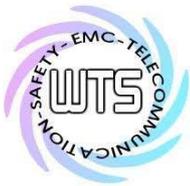


Registration number: W6M21603-15738-C-95  
FCC ID: IPH-02994

## **Appendix**

### **Measurement diagrams**

Radiation Spurious Emission



# **Worldwide Testing Services(Taiwan) Co., Ltd.**

Registration number: W6M21603-15738-C-95  
FCC ID: IPH-02994

## **Appendix**

**TX\_Short (VHF Antenna 700-00021-00)**



Radiated Emission Measurement

Operator: Mark

File :1

Data :#1

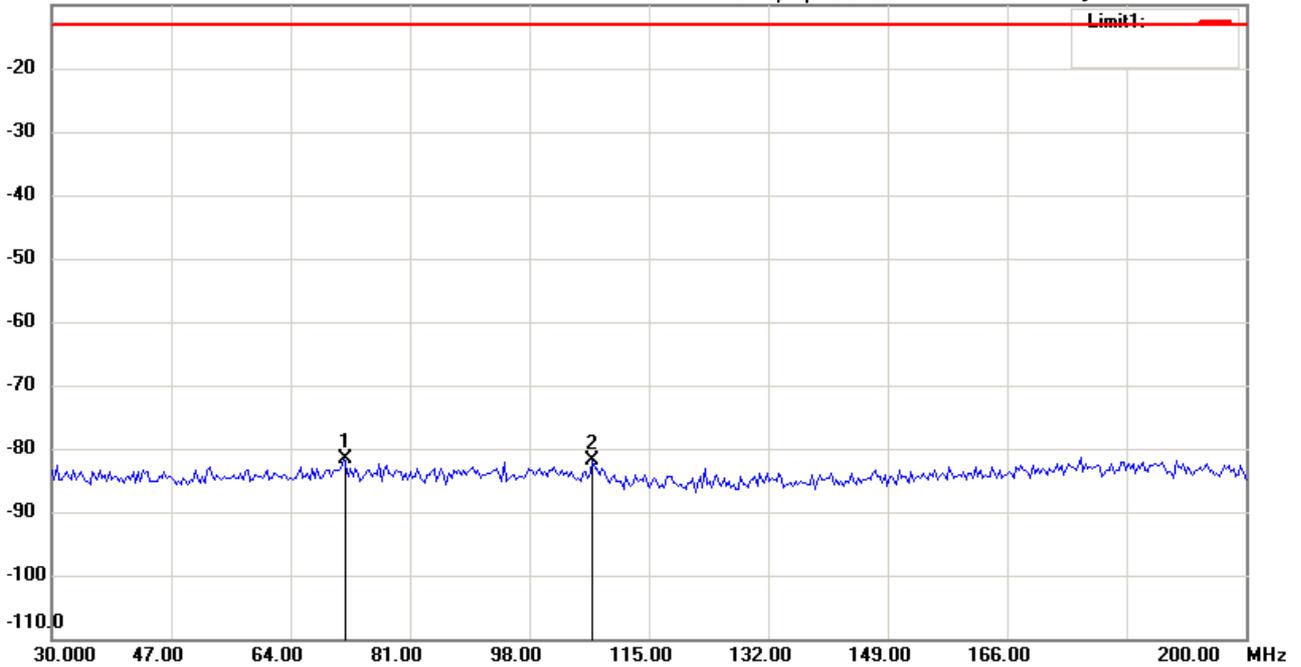
Date: 2016/4/14

Temperature:24 °C

-10.0 dBm

Time: 下午 05:36:15

Humidity:60 %



Site : Chamber

Condition : FCC\_part 95 MURS

EUT : W6M21603-15738

M/N:

Test Mode : Ch4 154.57MHz

Note :

Polarization: *Horizontal*

Power : 2.4 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	71.5632	-103.41	peak	21.82	-81.59	-13.00	150	180	-68.59	
	106.9940	-103.00	peak	21.04	-81.96	-13.00	150	200	-68.96	



Radiated Emission Measurement

Operator: Mark

File :1

Data :#2

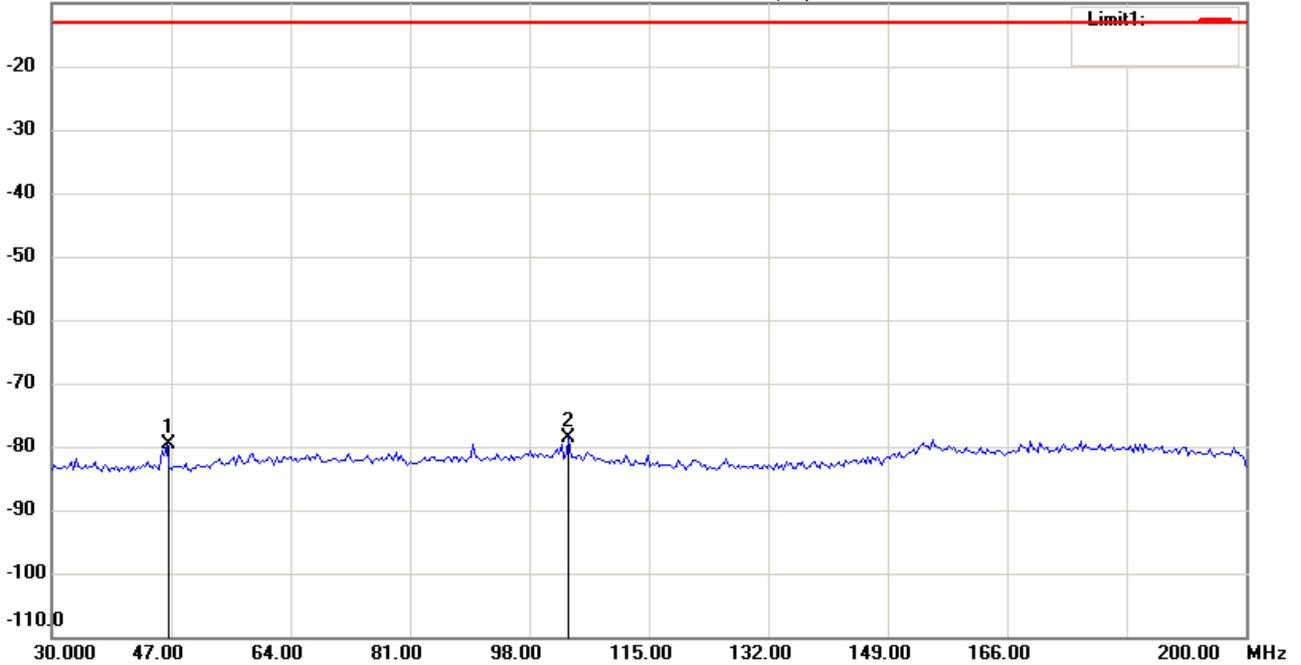
Date: 2016/4/14

Temperature:24 °C

-10.0 dBm

Time: 下午 06:00:02

Humidity:60 %



Site : Chamber

Condition : FCC\_part 95 MURS

EUT : W6M21603-15738

M/N:

Test Mode : Ch4 154.57MHz

Note :

Polarization: *Vertical*

Power : 2.4 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	46.3528	-100.89	peak	21.27	-79.62	-13.00	150	140	-66.62	
*	103.5872	-100.36	peak	21.85	-78.51	-13.00	150	210	-65.51	



Radiated Emission Measurement

Operator: Mark

File :2

Data :#1

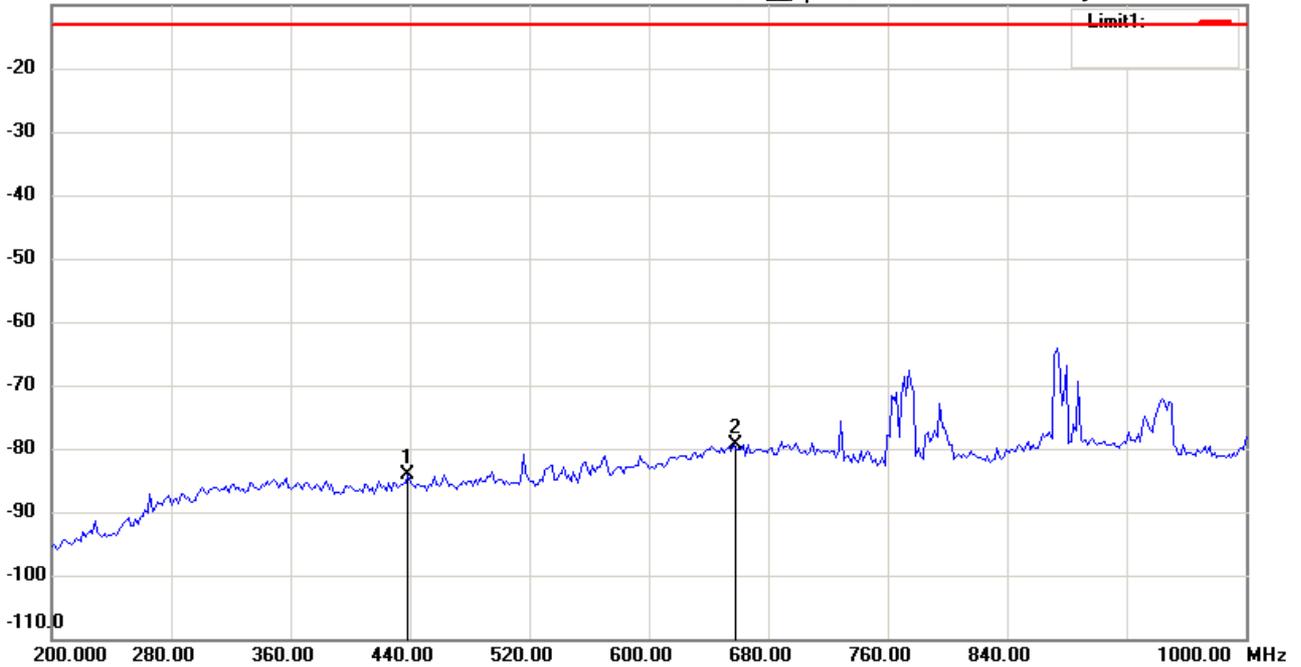
Date: 2016/4/15

Temperature:24 °C

-10.0 dBm

Time: 上午 10:15:04

Humidity:60 %



Site : Chamber

Condition : FCC\_part 95 MURS

EUT : W6M21603-15738

M/N:

Test Mode : Ch4 154.57MHz

Note :

Polarization: *Horizontal*

Power : 2.4 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	438.8778	-74.31	peak	-9.78	-84.09	-13.00	150	100	-71.09	
*	656.9140	-76.32	peak	-3.02	-79.34	-13.00	150	150	-66.34	



Radiated Emission Measurement

Operator: Mark

File :2

Data :#2

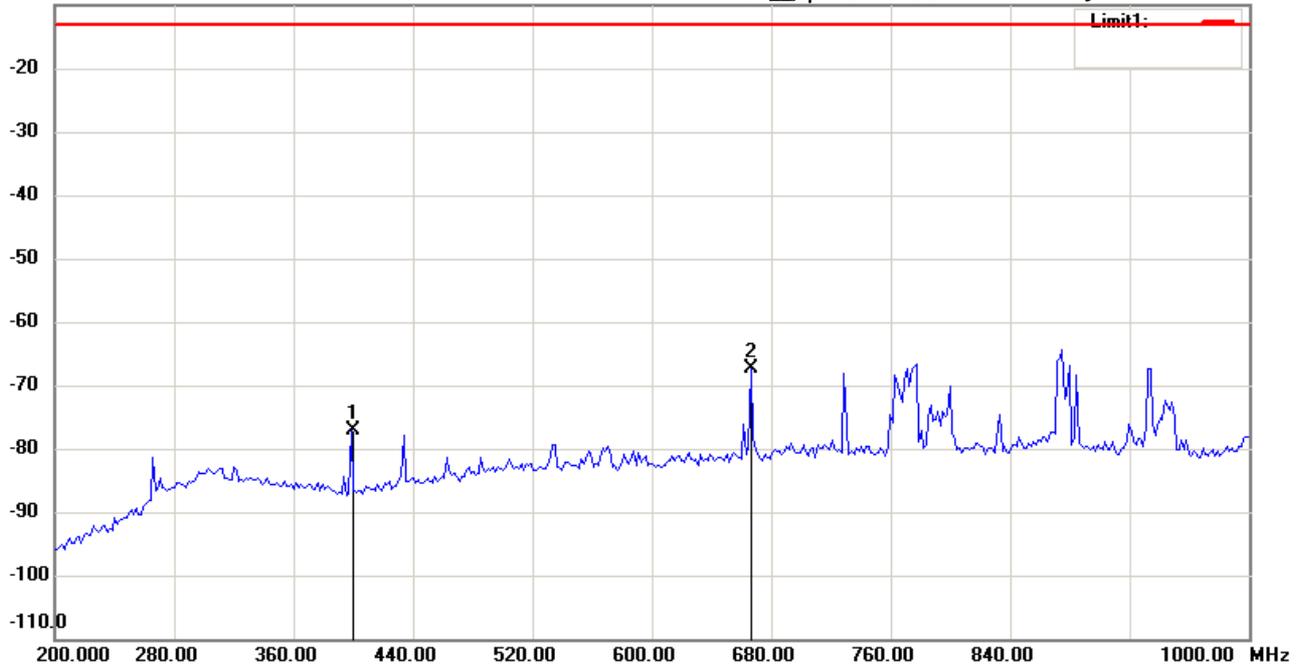
Date: 2016/4/15

Temperature:24 °C

-10.0 dBm

Time: 上午 10:13:35

Humidity:60 %



Site : Chamber

Condition : FCC\_part 95 MURS

EUT : W6M21603-15738

M/N:

Test Mode : Ch4 154.57MHz

Note :

Polarization: *Vertical*

Power : 2.4 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	398.7977	-66.23	peak	-10.88	-77.11	-13.00	150	180	-64.11	
*	666.5331	-63.29	peak	-4.18	-67.47	-13.00	150	240	-54.47	



Radiated Emission Measurement

Operator: Mark

File :3

Data :#1

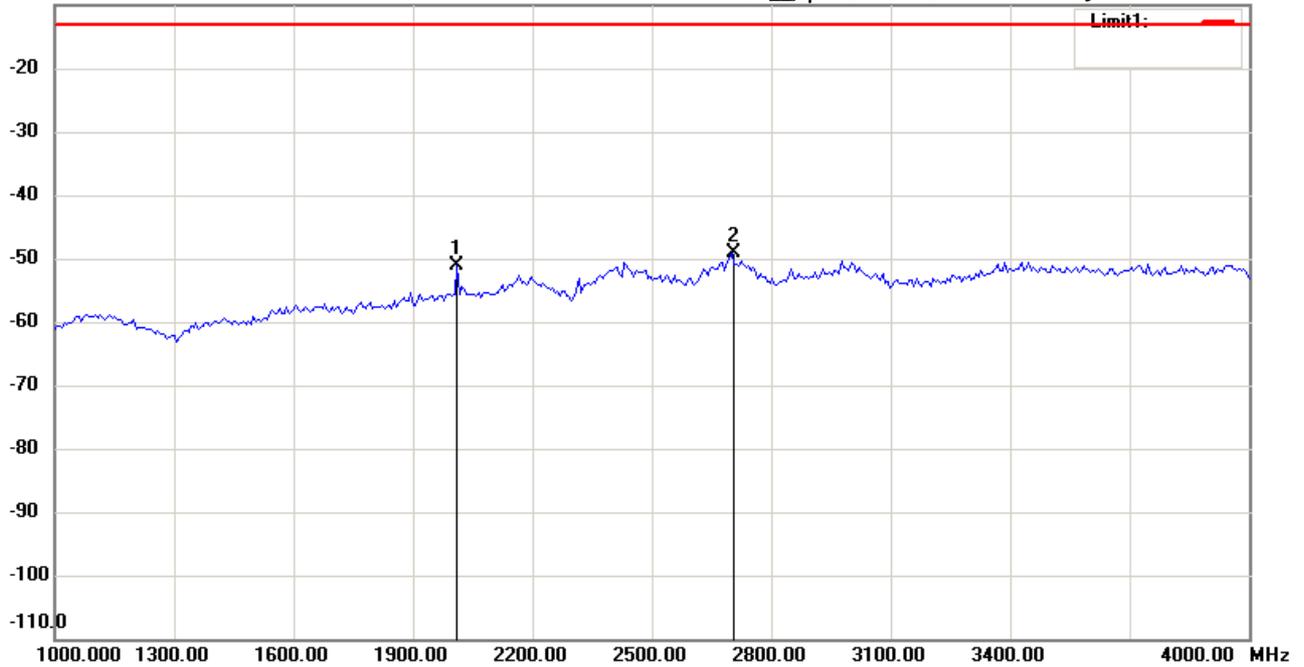
Date: 2016/4/15

Temperature:24 °C

-10.0 dBm

Time: 上午 10:48:13

Humidity:60 %



Site : Chamber

Condition : FCC\_part 95 MURS

EUT : W6M21603-15738

M/N:

Test Mode : Ch4 154.57MHz

Note :

Polarization: *Horizontal*

Power : 2.4 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	2010.020	-56.41	peak	5.18	-51.23	-13.00	150	100	-38.23	
*	2701.403	-60.66	peak	11.44	-49.22	-13.00	150	200	-36.22	



Radiated Emission Measurement

Operator: Mark

File :3

Data :#2

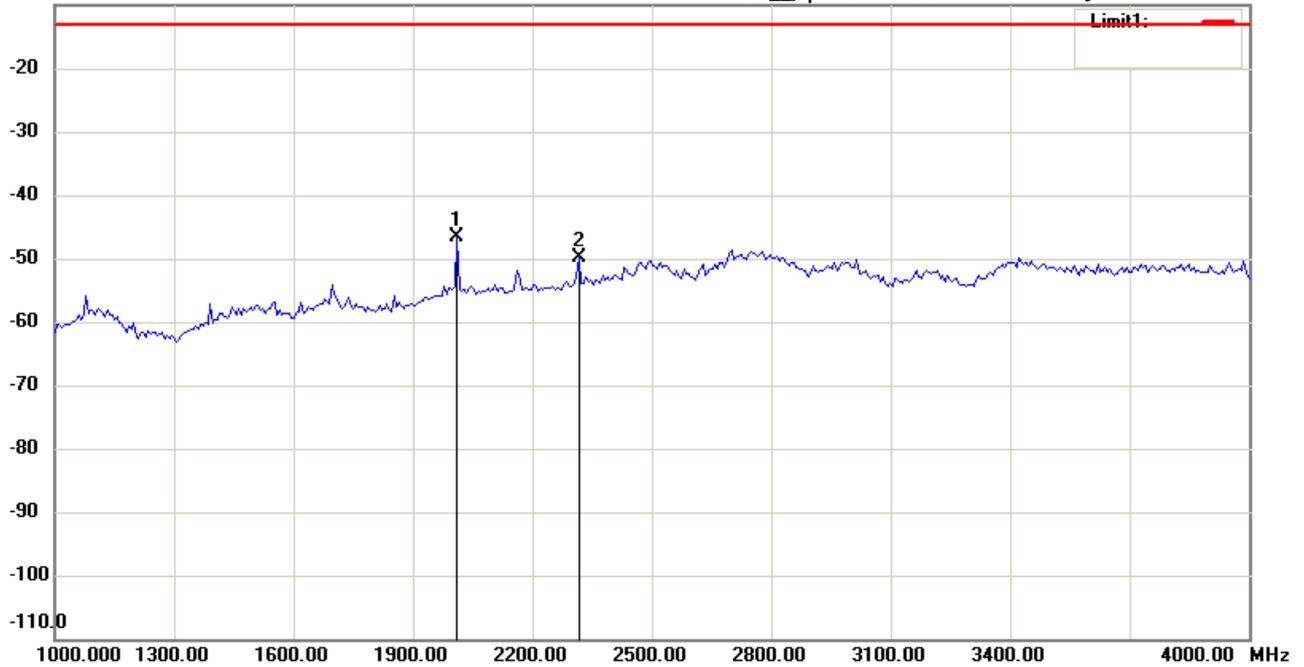
Date: 2016/4/15

Temperature:24 °C

-10.0 dBm

Time: 上午 10:45:09

Humidity:60 %



Site : Chamber

Condition : FCC\_part 95 MURS

EUT : W6M21603-15738

M/N:

Test Mode : Ch4 154.57MHz

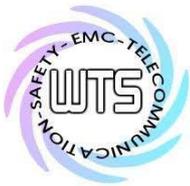
Note :

Polarization: *Vertical*

Power : 2.4 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	2010.020	-52.67	peak	6.14	-46.53	-13.00	150	140	-33.53	
	2316.633	-56.64	peak	6.89	-49.75	-13.00	150	200	-36.75	



# **Worldwide Testing Services(Taiwan) Co., Ltd.**

Registration number: W6M21603-15738-C-95  
FCC ID: IPH-02994

## **Appendix**

**TX\_Long (VHF Antenna 700-00042-00)**



Radiated Emission Measurement

Operator: Mark

File :1

Data :#1

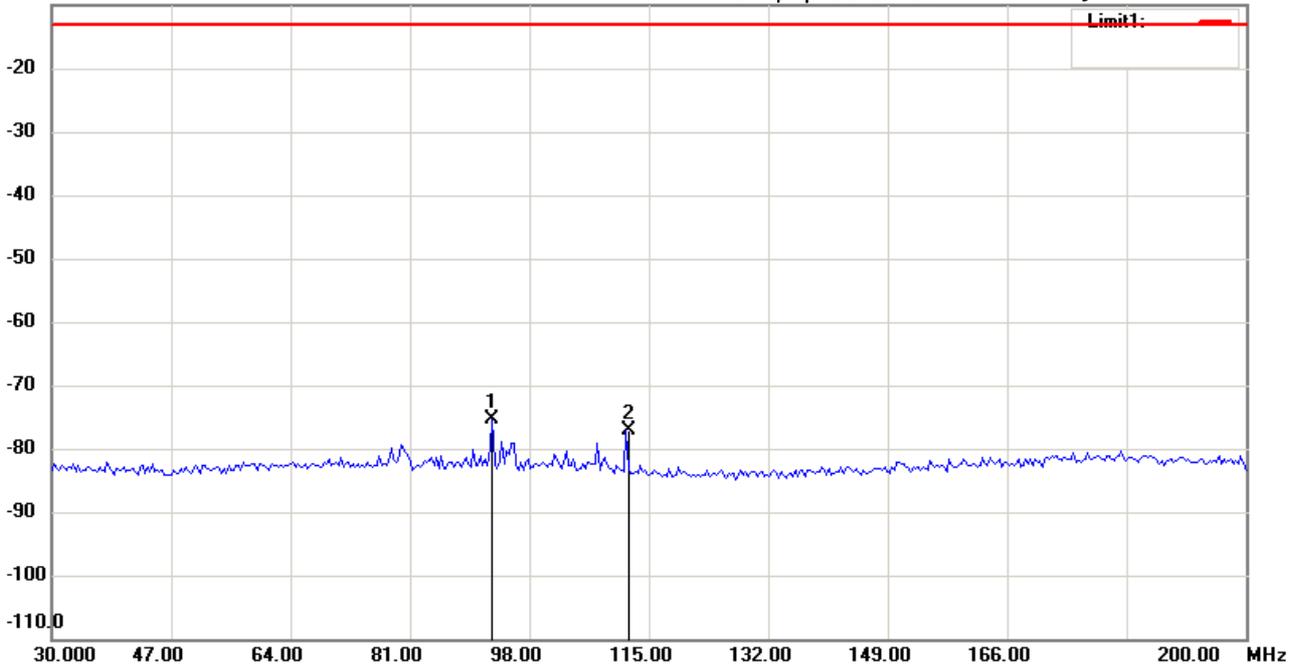
Date: 2016/4/14

Temperature:24 °C

-10.0 dBm

Time: 下午 05:34:35

Humidity:60 %



Site : Chamber

Condition : FCC\_part 95 MURS

EUT : W6M21603-15738

M/N:

Test Mode : Ch4 154.57MHz

Note :

Polarization: *Horizontal*

Power : 2.4 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	92.6854	-96.80	peak	21.45	-75.35	-13.00	150	180	-62.35	
	111.7636	-97.90	peak	20.73	-77.17	-13.00	150	20	-64.17	



Radiated Emission Measurement

Operator: Mark

File :1

Data :#2

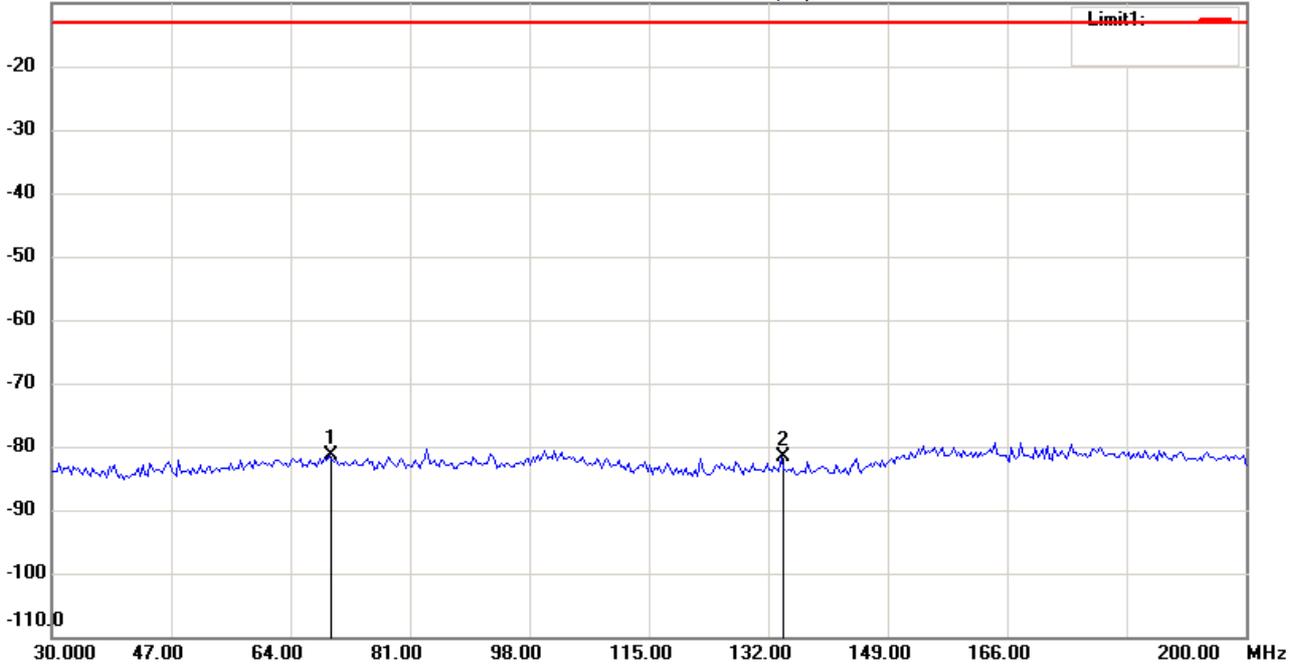
Date: 2016/4/14

Temperature:24 °C

-10.0 dBm

Time: 下午 06:01:06

Humidity:60 %



Site : Chamber

Condition : FCC\_part 95 MURS

EUT : W6M21603-15738

M/N:

Test Mode : Ch4 154.57MHz

Note :

Polarization: *Vertical*

Power : 2.4 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	69.5191	-103.28	peak	21.82	-81.46	-13.00	150	240	-68.46	
	133.9080	-102.07	peak	20.41	-81.66	-13.00	150	210	-68.66	



Radiated Emission Measurement

Operator: Mark

File :2

Data :#1

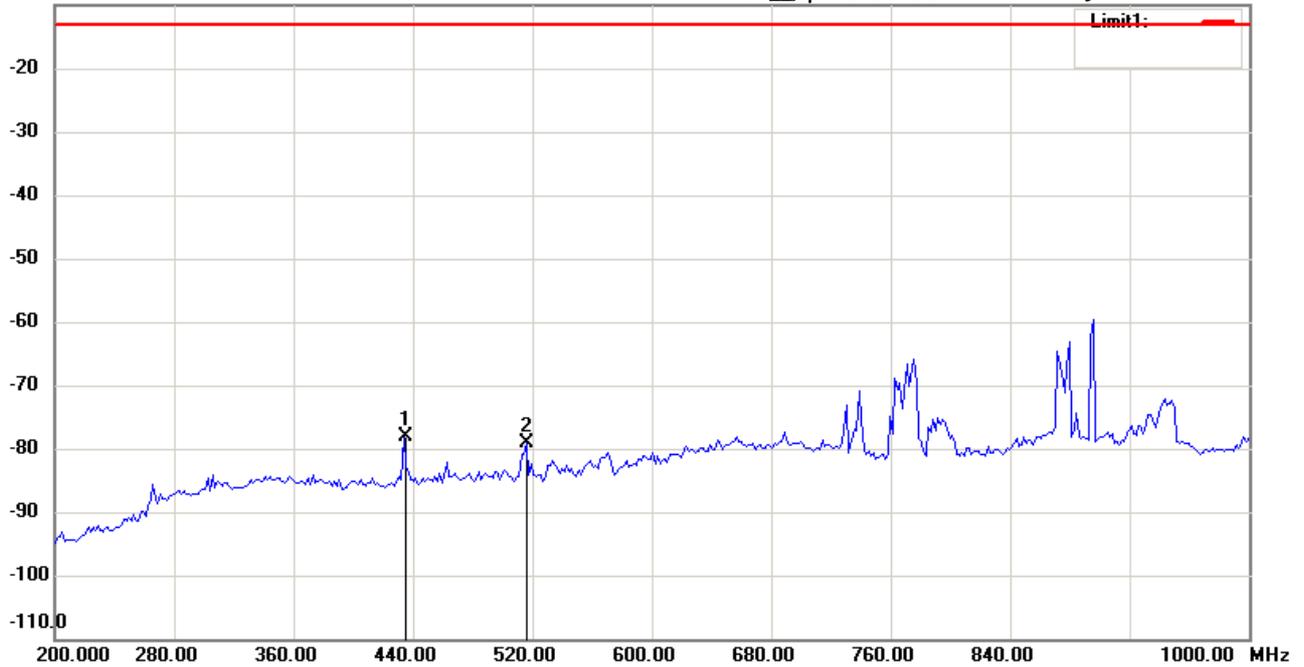
Date: 2016/4/15

Temperature:24 °C

-10.0 dBm

Time: 上午 10:09:06

Humidity:60 %



Site : Chamber

Condition : FCC\_part 95 MURS

EUT : W6M21603-15738

M/N:

Test Mode : Ch4 154.57MHz

Note :

Polarization: *Horizontal*

Power : 2.4 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	434.0682	-68.14	peak	-9.88	-78.02	-13.00	150	180	-65.02	
	515.8317	-70.53	peak	-8.57	-79.10	-13.00	150	240	-66.10	



Radiated Emission Measurement

Operator: Mark

File :2

Data :#2

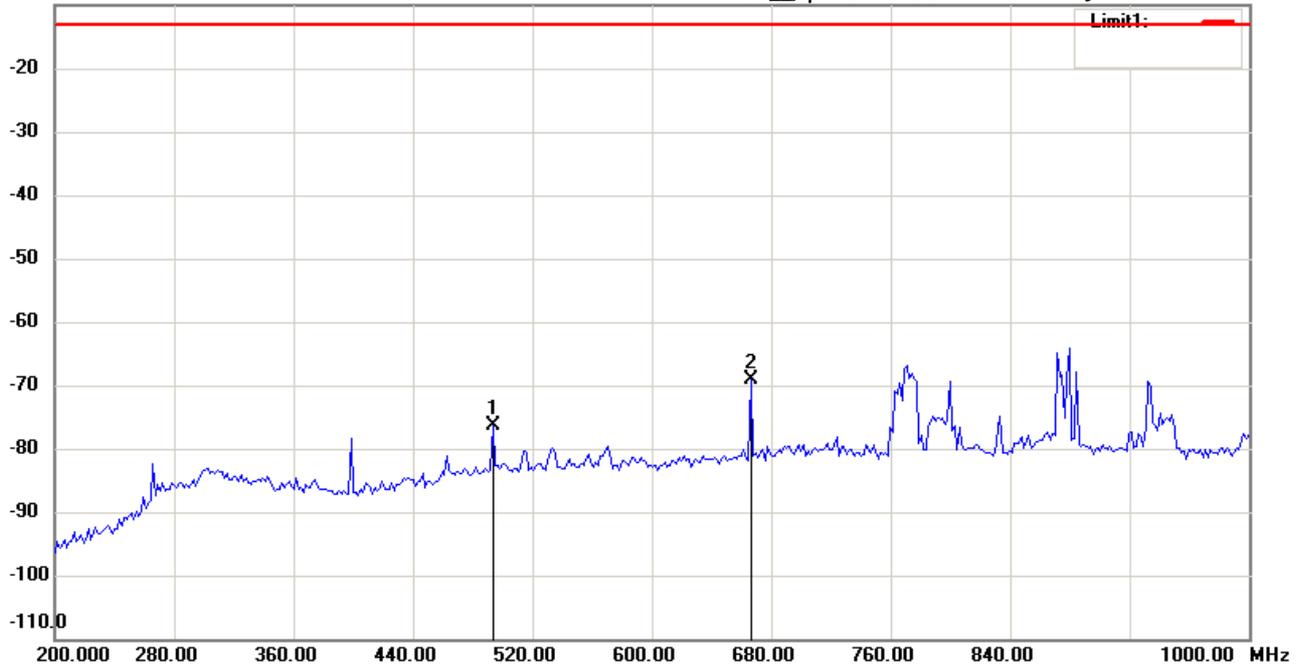
Date: 2016/4/15

Temperature:24 °C

-10.0 dBm

Time: 上午 10:11:30

Humidity:60 %



Site : Chamber

Condition : FCC\_part 95 MURS

EUT : W6M21603-15738

M/N:

Test Mode : Ch4 154.57MHz

Note :

Polarization: *Vertical*

Power : 2.4 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	493.3868	-69.22	peak	-7.15	-76.37	-13.00	150	180	-63.37	
*	666.5331	-64.97	peak	-4.18	-69.15	-13.00	150	240	-56.15	



Radiated Emission Measurement

Operator: Mark

File :3

Data :#1

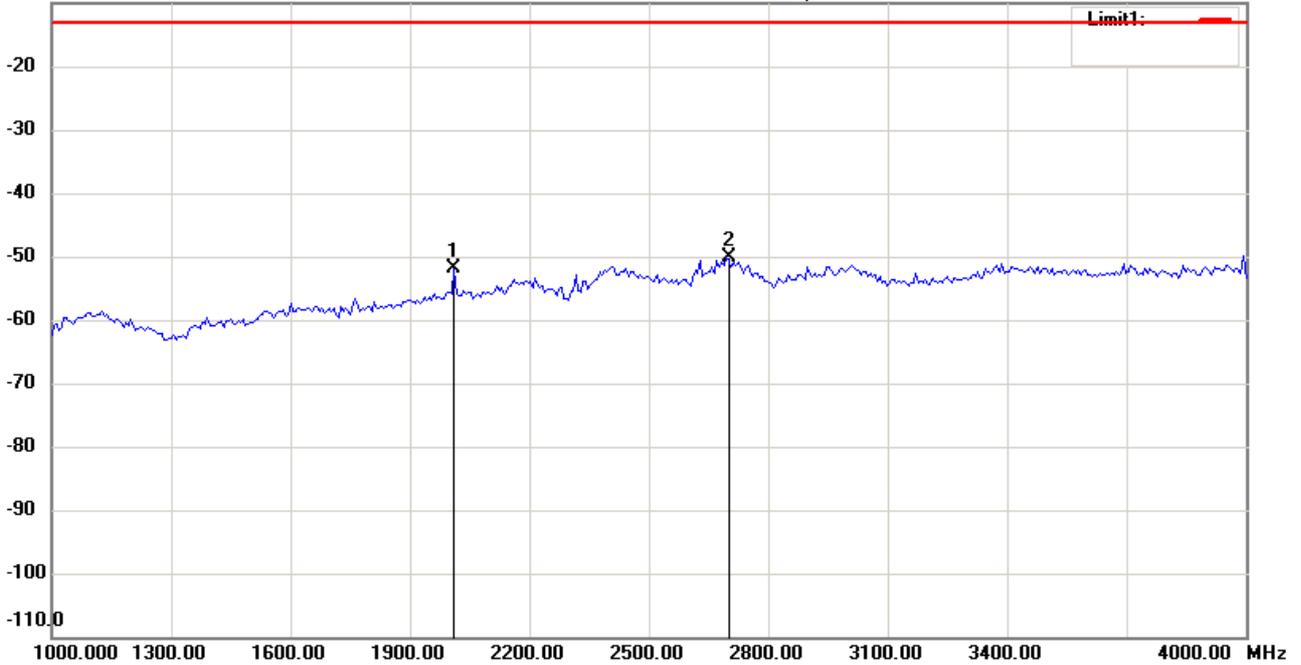
Date: 2016/4/15

Temperature:24 °C

-10.0 dBm

Time: 上午 10:41:00

Humidity:60 %



Site : Chamber

Condition : FCC\_part 95 MURS

EUT : W6M21603-15738

M/N:

Test Mode : Ch4 154.57MHz

Note :

Polarization: *Horizontal*

Power : 2.4 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	2010.020	-57.08	peak	5.18	-51.90	-13.00	150	20	-38.90	
*	2695.391	-61.38	peak	11.32	-50.06	-13.00	150	140	-37.06	



Radiated Emission Measurement

Operator: Mark

File :3

Data :#2

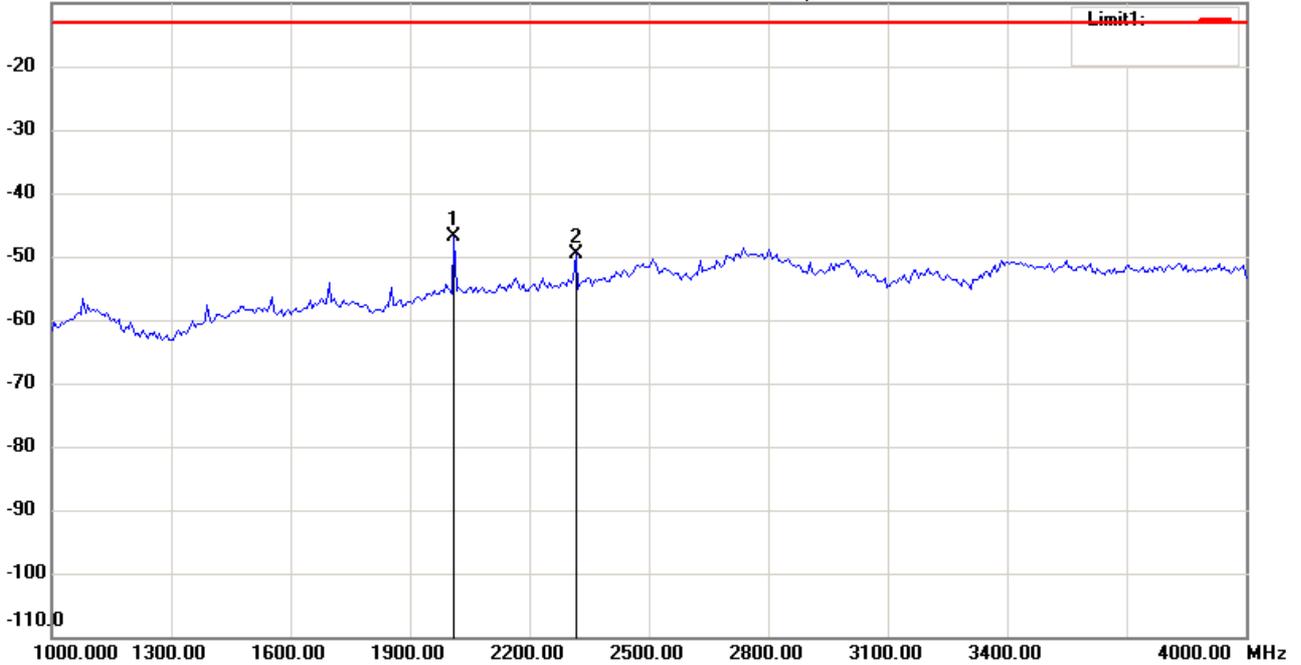
Date: 2016/4/15

Temperature:24 °C

-10.0 dBm

Time: 上午 10:42:24

Humidity:60 %



Site : Chamber

Condition : FCC\_part 95 MURS

EUT : W6M21603-15738

M/N:

Test Mode : Ch4 154.57MHz

Note :

Polarization: *Vertical*

Power : 2.4 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	2010.020	-52.96	peak	6.14	-46.82	-13.00	150	140	-33.82	
	2316.633	-56.58	peak	6.89	-49.69	-13.00	150	210	-36.69	



# Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21603-15738-C-95  
FCC ID: IPH-02994

## Appendix

**TX\_Spiral (Mag Mount Antenna 013-00240-00)**



Radiated Emission Measurement

Operator: Mark

File :1

Data :#1

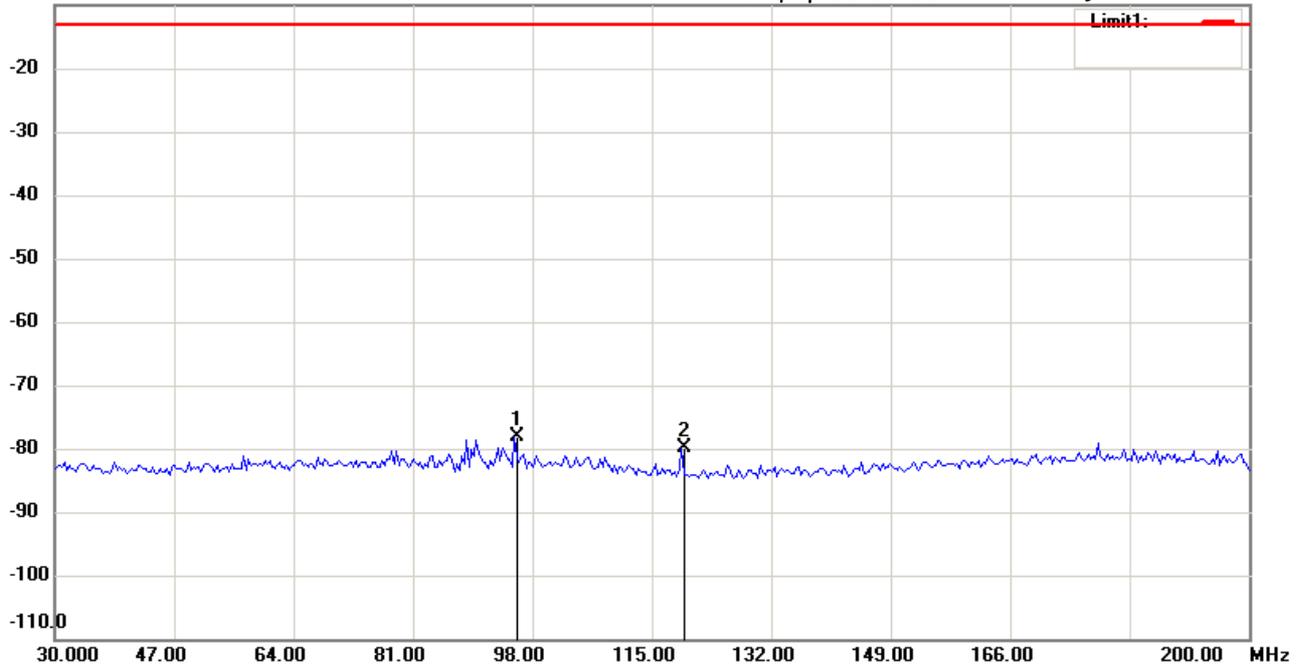
Date: 2016/4/14

Temperature:24 °C

-10.0 dBm

Time: 下午 05:37:55

Humidity:60 %



Site : Chamber

Condition : FCC\_part 95 MURS

EUT : W6M21603-15738

M/N:

Test Mode : Ch4 154.57MHz

Note :

Polarization: *Horizontal*

Power : 2.4 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	95.4110	-99.63	peak	21.47	-78.16	-13.00	150	180	-65.16	
	119.2586	-100.04	peak	20.23	-79.81	-13.00	150	240	-66.81	



Radiated Emission Measurement

Operator: Mark

File :1

Data :#2

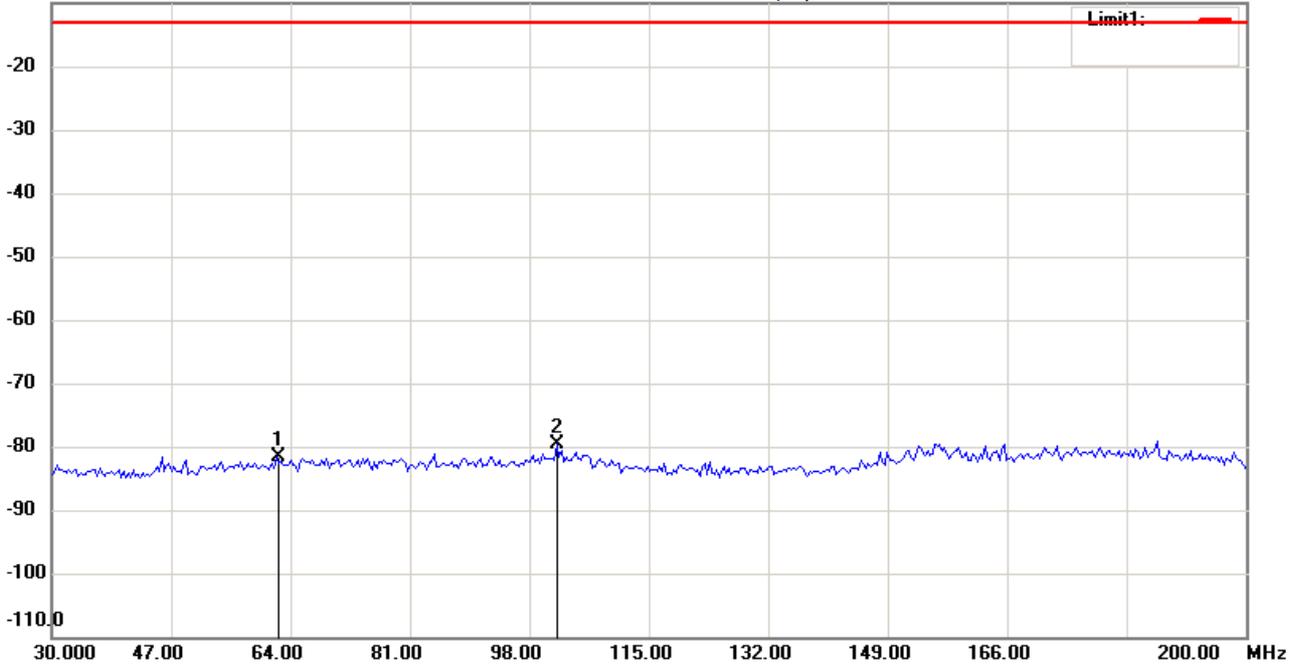
Date: 2016/4/14

Temperature:24 °C

-10.0 dBm

Time: 下午 05:54:47

Humidity:60 %



Site : Chamber

Condition : FCC\_part 95 MURS

EUT : W6M21603-15738

M/N:

Test Mode : Ch4 154.57MHz

Note :

Polarization: *Vertical*

Power : 2.4 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	62.0241	-103.44	peak	21.90	-81.54	-13.00	150	180	-68.54	
*	101.8838	-101.62	peak	21.98	-79.64	-13.00	150	240	-66.64	



Radiated Emission Measurement

Operator: Mark

File :2

Data :#1

Date: 2016/4/15

Temperature:24 °C

-10.0 dBm

Time: 上午 10:25:11

Humidity:60 %



Site : Chamber

Condition : FCC\_part 95 MURS

EUT : W6M21603-15738

M/N:

Test Mode : Ch4 154.57MHz

Note :

Polarization: *Horizontal*

Power : 2.4 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	398.7977	-67.86	peak	-10.54	-78.40	-13.00	150	180	-65.40	
*	666.5331	-69.68	peak	-3.00	-72.68	-13.00	150	150	-59.68	



Radiated Emission Measurement

Operator: Mark

File :2

Data :#2

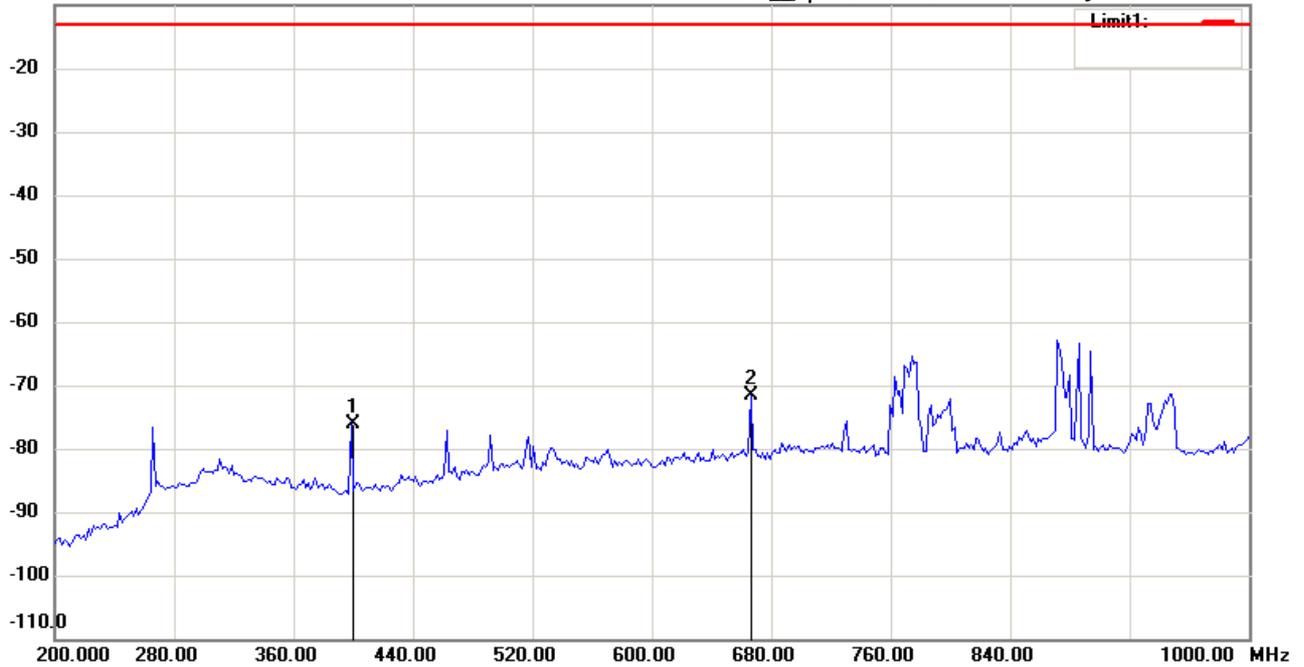
Date: 2016/4/15

Temperature:24 °C

-10.0 dBm

Time: 上午 10:23:45

Humidity:60 %



Site : Chamber

Condition : FCC\_part 95 MURS

EUT : W6M21603-15738

M/N:

Test Mode : Ch4 154.57MHz

Note :

Polarization: *Vertical*

Power : 2.4 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	398.7977	-65.26	peak	-10.88	-76.14	-13.00	150	180	-63.14	
*	666.5331	-67.35	peak	-4.18	-71.53	-13.00	150	250	-58.53	



Radiated Emission Measurement

Operator: Mark

File :3

Data :#1

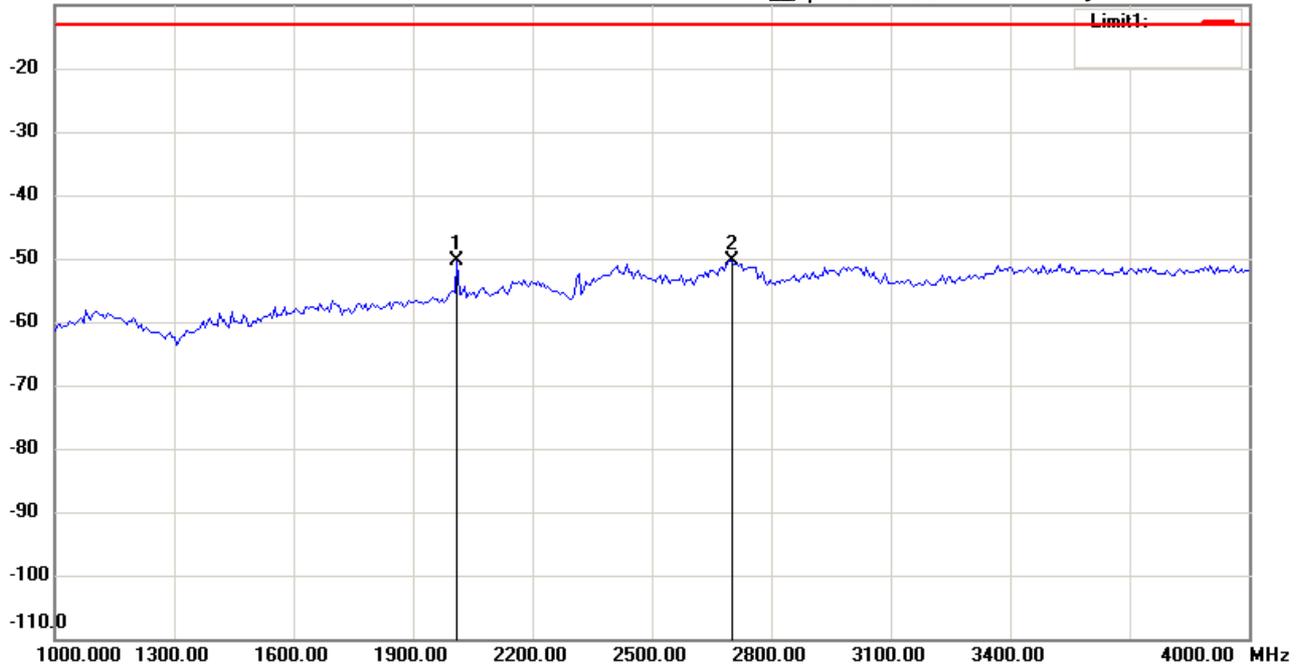
Date: 2016/4/15

Temperature:24 °C

-10.0 dBm

Time: 上午 10:32:55

Humidity:60 %



Site : Chamber

Condition : FCC\_part 95 MURS

EUT : W6M21603-15738

M/N:

Test Mode : Ch4 154.57MHz

Note :

Polarization: *Horizontal*

Power : 2.4 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	2010.020	-55.60	peak	5.18	-50.42	-13.00	150	210	-37.42	
*	2695.391	-61.67	peak	11.32	-50.35	-13.00	150	140	-37.35	



Radiated Emission Measurement

Operator: Mark

File :3

Data :#2

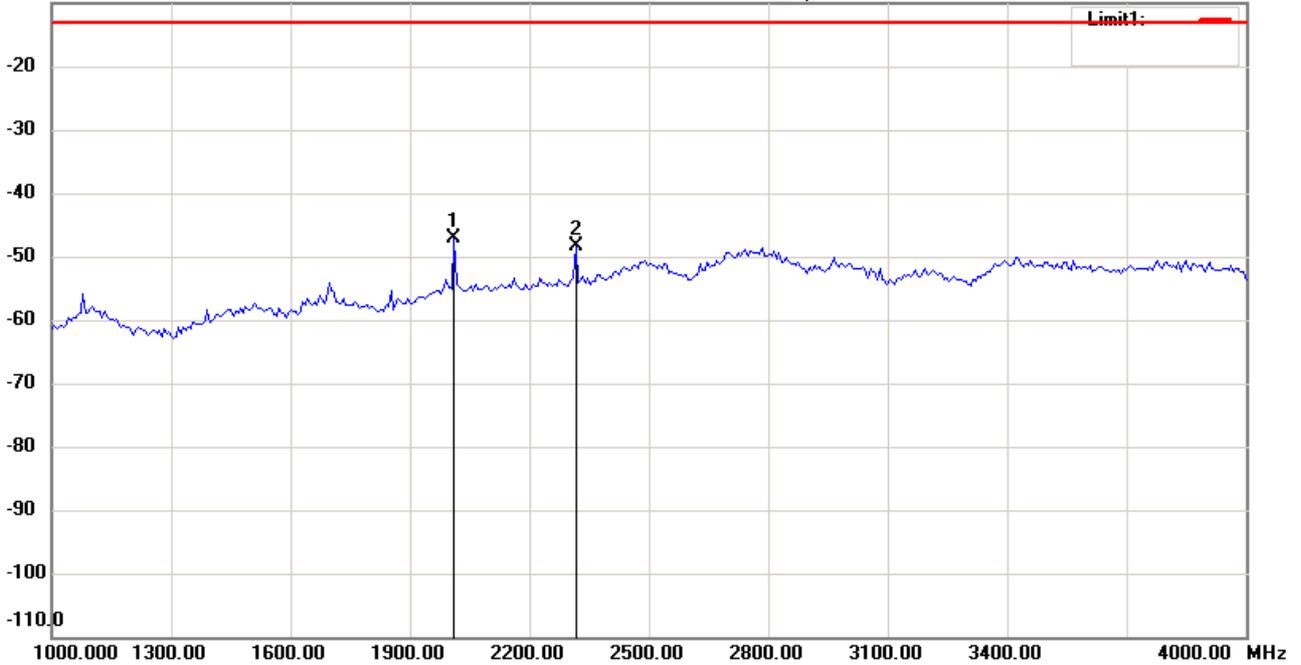
Date: 2016/4/15

Temperature:24 °C

-10.0 dBm

Time: 上午 10:34:48

Humidity:60 %



Site : Chamber

Condition : FCC\_part 95 MURS

EUT : W6M21603-15738

M/N:

Test Mode : Ch4 154.57MHz

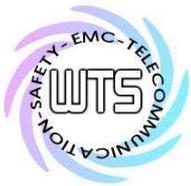
Note :

Polarization: *Vertical*

Power : 2.4 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	2010.020	-53.19	peak	6.14	-47.05	-13.00	150	280	-34.05	
	2316.633	-55.21	peak	6.89	-48.32	-13.00	150	200	-35.32	



# **Worldwide Testing Services(Taiwan) Co., Ltd.**

Registration number: W6M21603-15738-C-95  
FCC ID: IPH-02994

## **Appendix**

**TX\_SuperLong (Portable Telescoping Antenna 013-00277-00)**



Radiated Emission Measurement

Operator: Mark

File :1

Data :#1

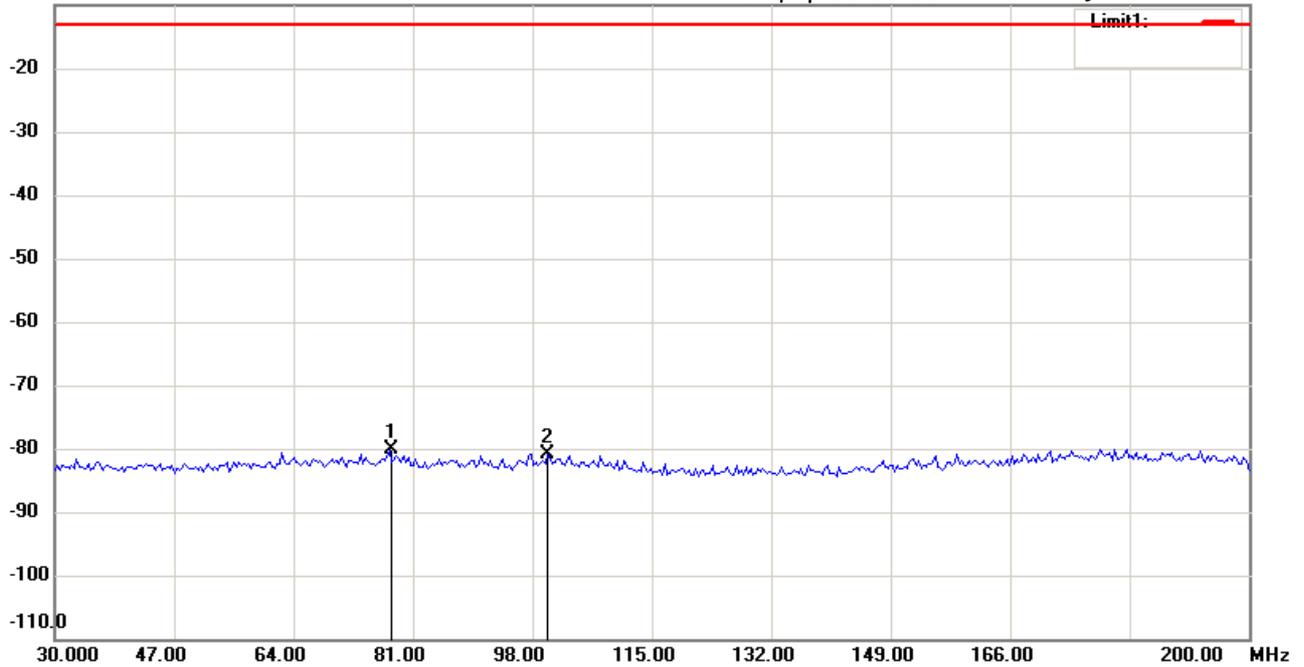
Date: 2016/4/14

Temperature:24 °C

-10.0 dBm

Time: 下午 05:50:00

Humidity:60 %



Site : Chamber

Condition : FCC\_part 95 MURS

EUT : W6M21603-15738

M/N:

Test Mode : Ch4 154.57MHz

Note :

Polarization: *Horizontal*

Power : 2.4 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	77.6955	-101.96	peak	21.72	-80.24	-13.00	150	170	-67.24	
	100.1804	-102.48	peak	21.50	-80.98	-13.00	150	210	-67.98	



Radiated Emission Measurement

Operator: Mark

File :1

Data :#2

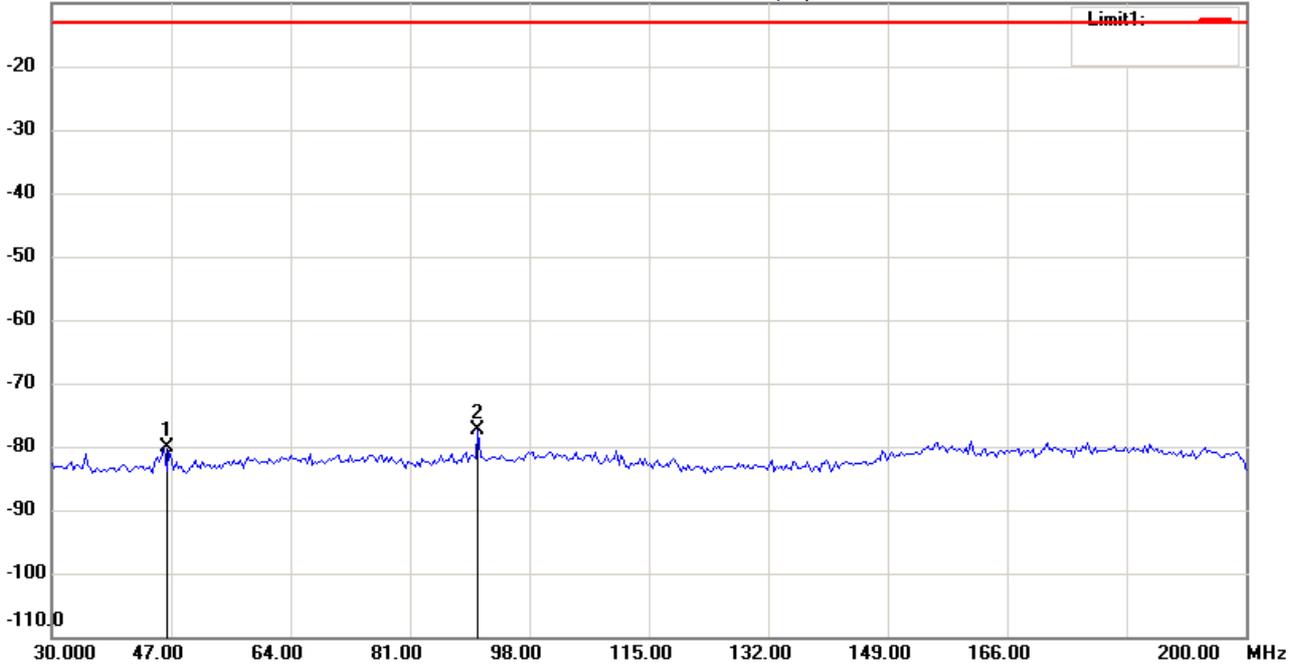
Date: 2016/4/14

Temperature:24 °C

-10.0 dBm

Time: 下午 05:53:49

Humidity:60 %



Site : Chamber

Condition : FCC\_part 95 MURS

EUT : W6M21603-15738

M/N:

Test Mode : Ch4 154.57MHz

Note :

Polarization: *Vertical*

Power : 2.4 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	46.0121	-101.51	peak	21.27	-80.24	-13.00	150	150	-67.24	
*	90.6413	-99.05	peak	21.78	-77.27	-13.00	150	210	-64.27	



Radiated Emission Measurement

Operator: Mark

File :2

Data :#1

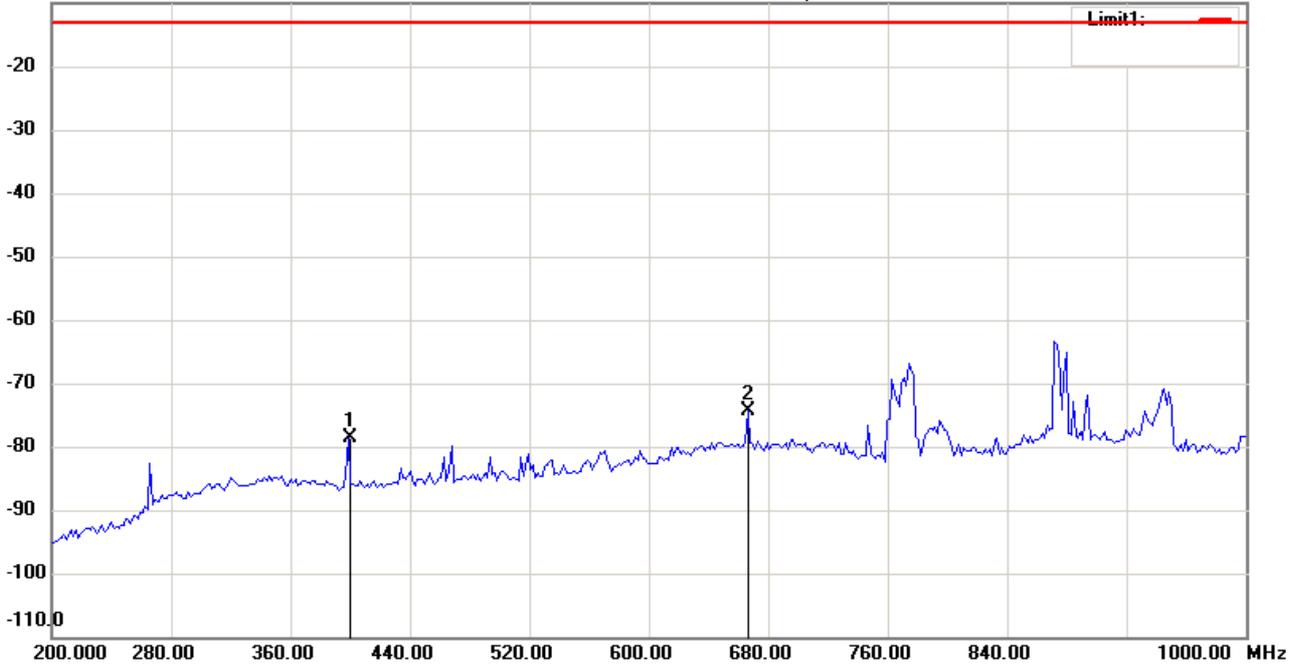
Date: 2016/4/15

Temperature:24 °C

-10.0 dBm

Time: 上午 10:18:25

Humidity:60 %



Site : Chamber

Condition : FCC\_part 95 MURS

EUT : W6M21603-15738

M/N:

Test Mode : Ch4 154.57MHz

Note :

Polarization: *Horizontal*

Power : 2.4 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	398.7977	-68.16	peak	-10.54	-78.70	-13.00	150	240	-65.70	
*	666.5331	-71.49	peak	-3.00	-74.49	-13.00	150	170	-61.49	



Radiated Emission Measurement

Operator: Mark

File :2

Data :#2

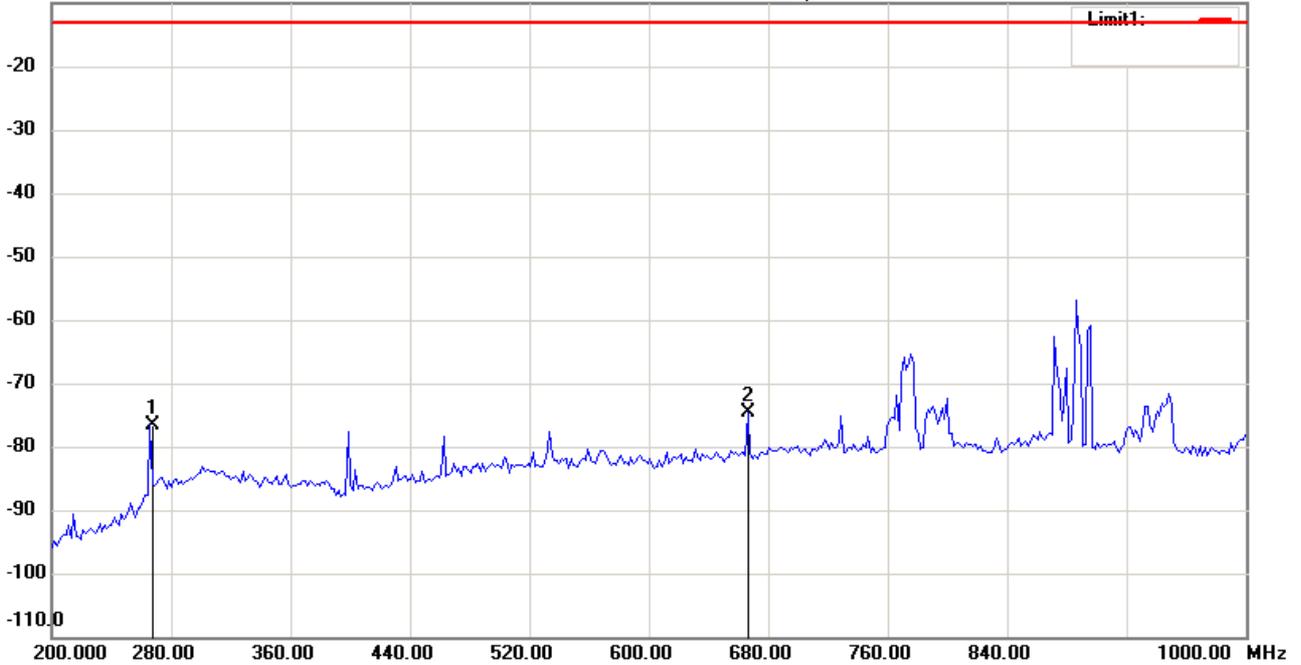
Date: 2016/4/15

Temperature:24 °C

-10.0 dBm

Time: 上午 10:20:30

Humidity:60 %



Site : Chamber

Condition : FCC\_part 95 MURS

EUT : W6M21603-15738

M/N:

Test Mode : Ch4 154.57MHz

Note :

Polarization: *Vertical*

Power : 2.4 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	265.7316	-66.06	peak	-10.47	-76.53	-13.00	150	280	-63.53	
*	666.5331	-70.37	peak	-4.18	-74.55	-13.00	150	210	-61.55	



Radiated Emission Measurement

Operator: Mark

File :3

Data :#1

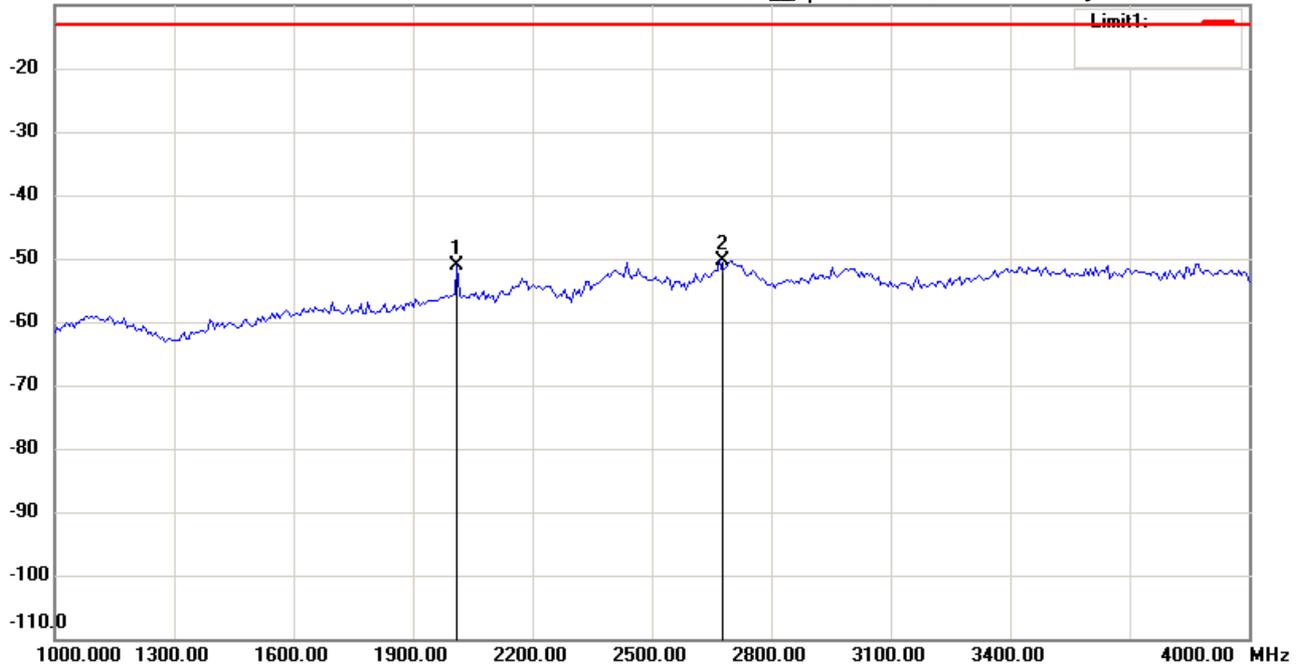
Date: 2016/4/15

Temperature:24 °C

-10.0 dBm

Time: 上午 10:38:45

Humidity:60 %



Site : Chamber

Condition : FCC\_part 95 MURS

EUT : W6M21603-15738

M/N:

Test Mode : Ch4 154.57MHz

Note :

Polarization: *Horizontal*

Power : 2.4 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	2010.020	-56.25	peak	5.18	-51.07	-13.00	150	170	-38.07	
*	2671.343	-60.67	peak	10.40	-50.27	-13.00	150	210	-37.27	



Radiated Emission Measurement

Operator: Mark

File :3

Data :#2

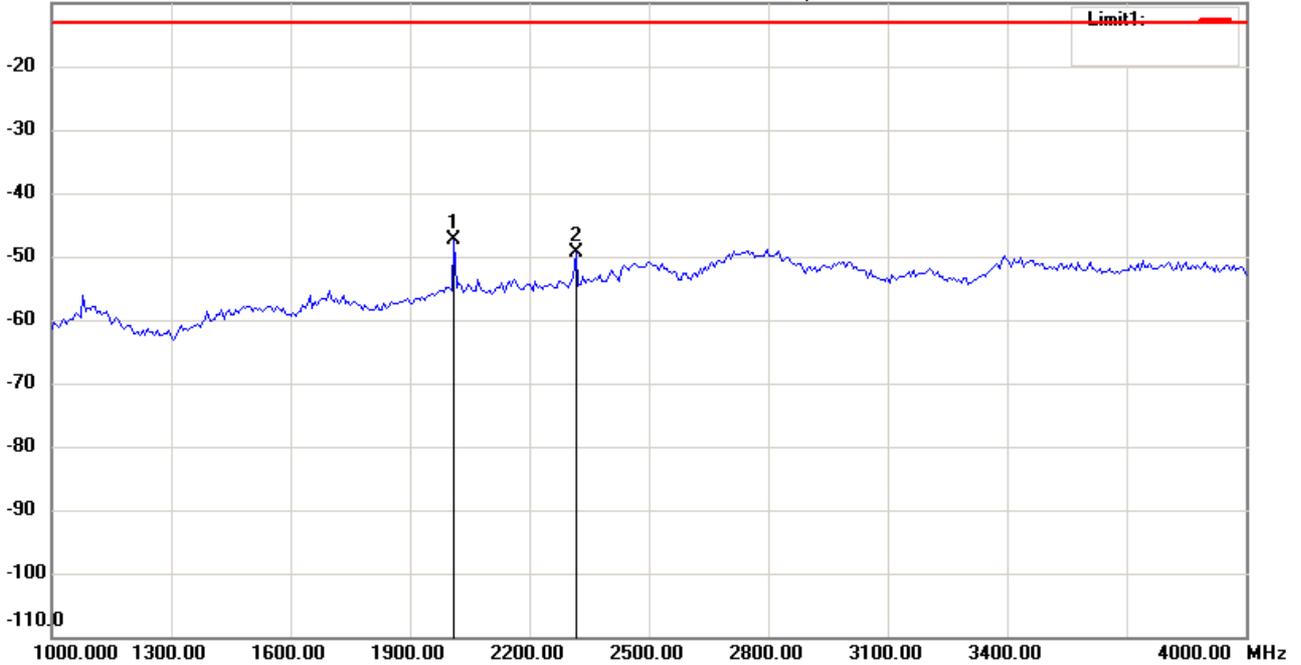
Date: 2016/4/15

Temperature:24 °C

-10.0 dBm

Time: 上午 10:37:15

Humidity:60 %



Site : Chamber

Condition : FCC\_part 95 MURS

EUT : W6M21603-15738

M/N:

Test Mode : Ch4 154.57MHz

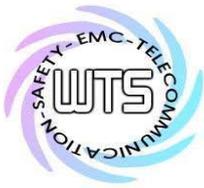
Note :

Polarization: *Vertical*

Power : 2.4 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	2010.020	-53.56	peak	6.14	-47.42	-13.00	150	140	-34.42	
	2316.633	-56.17	peak	6.89	-49.28	-13.00	150	50	-36.28	



Registration number: W6M21603-15738-P-15B

## **Appendix**

**RX\_Short (VHF Antenna 700-00021-00)**



Radiated Emission Measurement

Operator: Roy

File :1

Data :#1

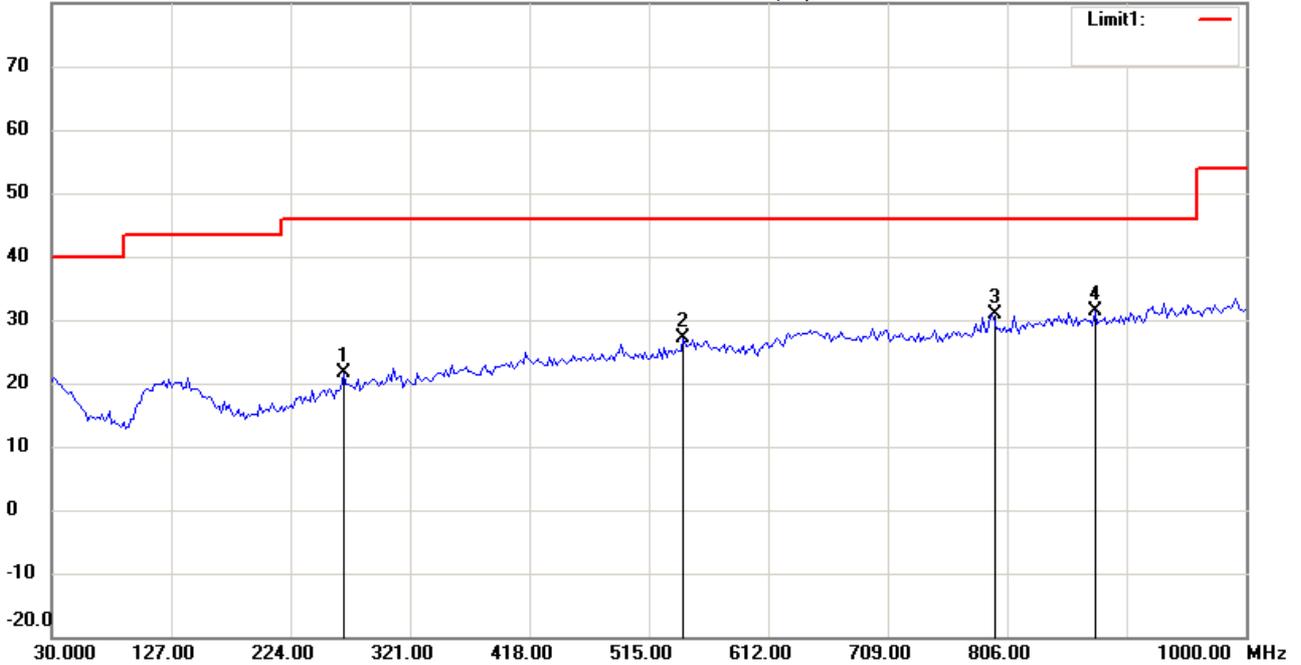
Date: 2016/5/16

Temperature:24 °C

80.0 dBuV/m

Time: 下午 07:49:30

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_30-1000MHz

Polarization: *Horizontal*

EUT : W6M21603-15738

Power : 2.4 Vd.c.

M/N:

Distance: 3m

Test Mode : RX 151.82MHz

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
	267.1542	27.95	peak	-6.41	21.54	46.00	100	325	-24.46	
	543.1864	28.34	peak	-1.33	27.01	46.00	100	140	-18.99	
	793.9480	29.18	peak	1.70	30.88	46.00	100	275	-15.12	
*	877.5351	27.51	peak	3.81	31.32	46.00	100	60	-14.68	



Radiated Emission Measurement

Operator: Roy

File :1

Data :#2

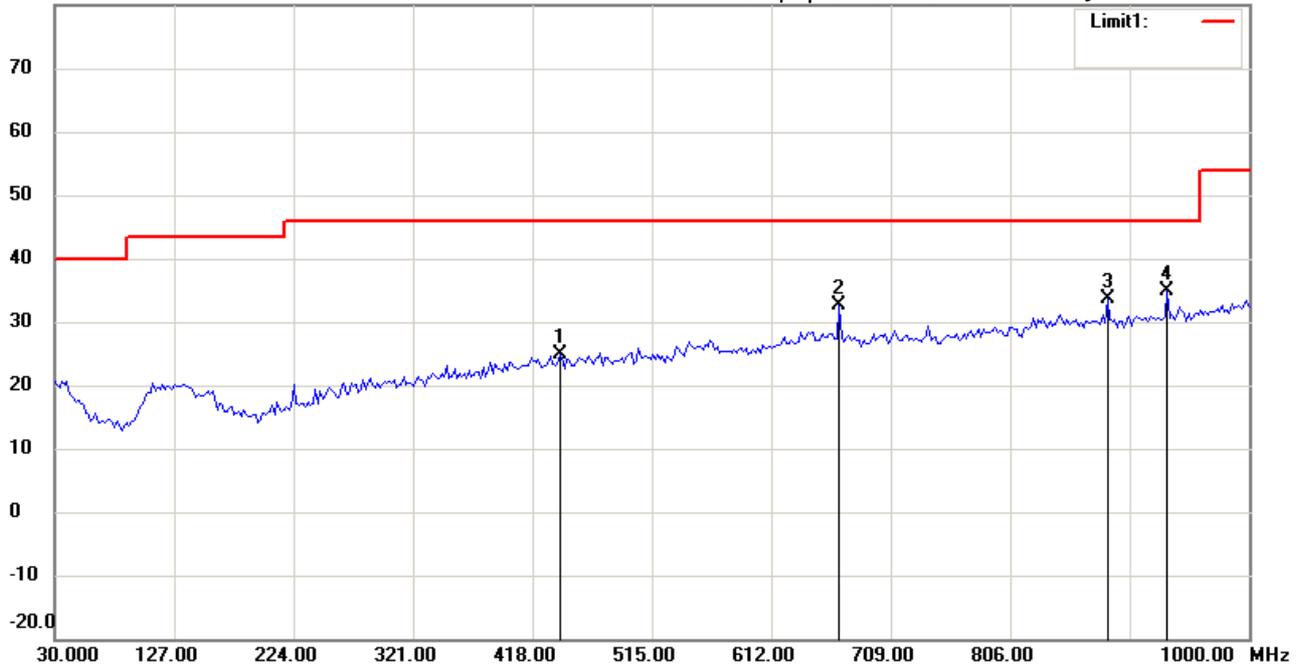
Date: 2016/5/16

Temperature:24 °C

80.0 dBuV/m

Time: 下午 07:50:16

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_30-1000MHz

Polarization: *Vertical*

EUT : W6M21603-15738

Power : 2.4 Vd.c.

M/N:

Distance: 3m

Test Mode : RX 151.82MHz

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
	440.1603	27.76	peak	-2.95	24.81	46.00	100	220	-21.19	
	667.5952	31.82	peak	0.90	32.72	46.00	100	135	-13.28	
	885.3106	29.91	peak	3.84	33.75	46.00	100	100	-12.25	
*	933.9078	29.83	peak	5.01	34.84	46.00	100	285	-11.16	



Radiated Emission Measurement

Operator: Roy

File :3

Data :#2

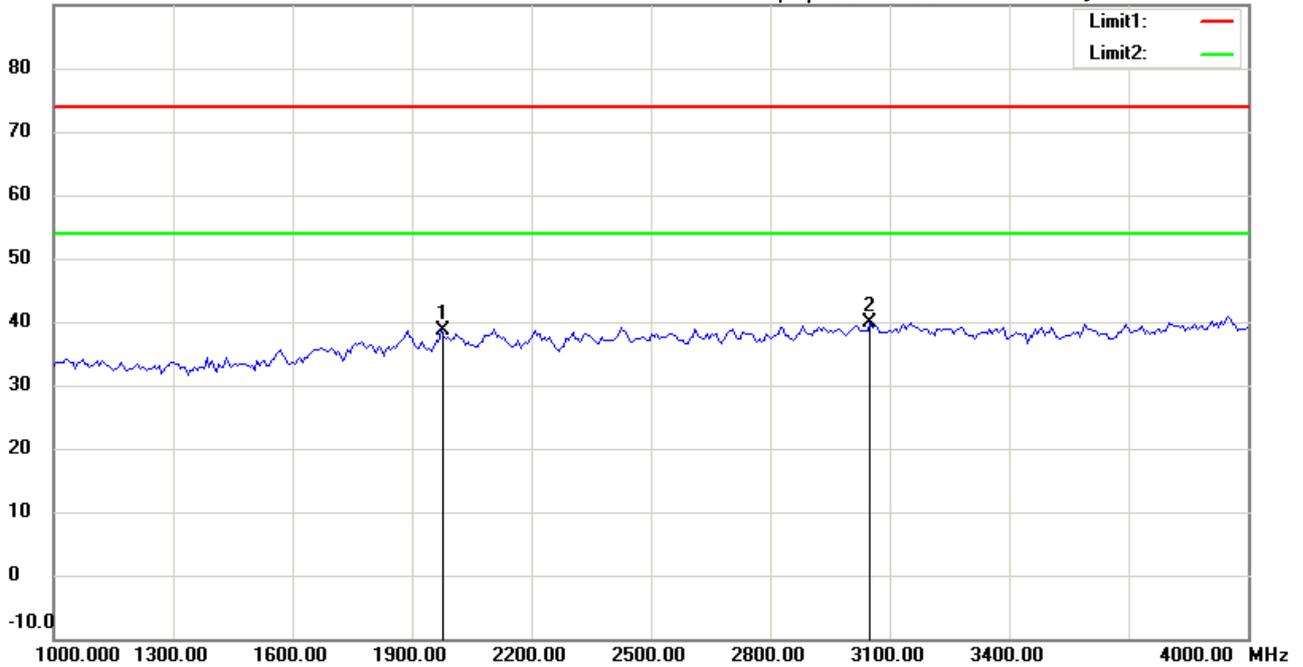
Date: 2016/5/16

Temperature:24 °C

90.0 dBuV/m

Time: 下午 08:24:35

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_Above 1GHz\_PK

Polarization: *Horizontal*

EUT : W6M21603-15738

Power : 2.4 Vd.c.

M/N:

Distance: 3m

Test Mode : RX 151.82MHz

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
	1973.948	44.30	peak	-5.62	38.68	74.00	100	210	-35.32	
*	3050.100	42.77	peak	-2.97	39.80	74.00	100	130	-34.20	



Radiated Emission Measurement

Operator: Roy

File :3

Data :#3

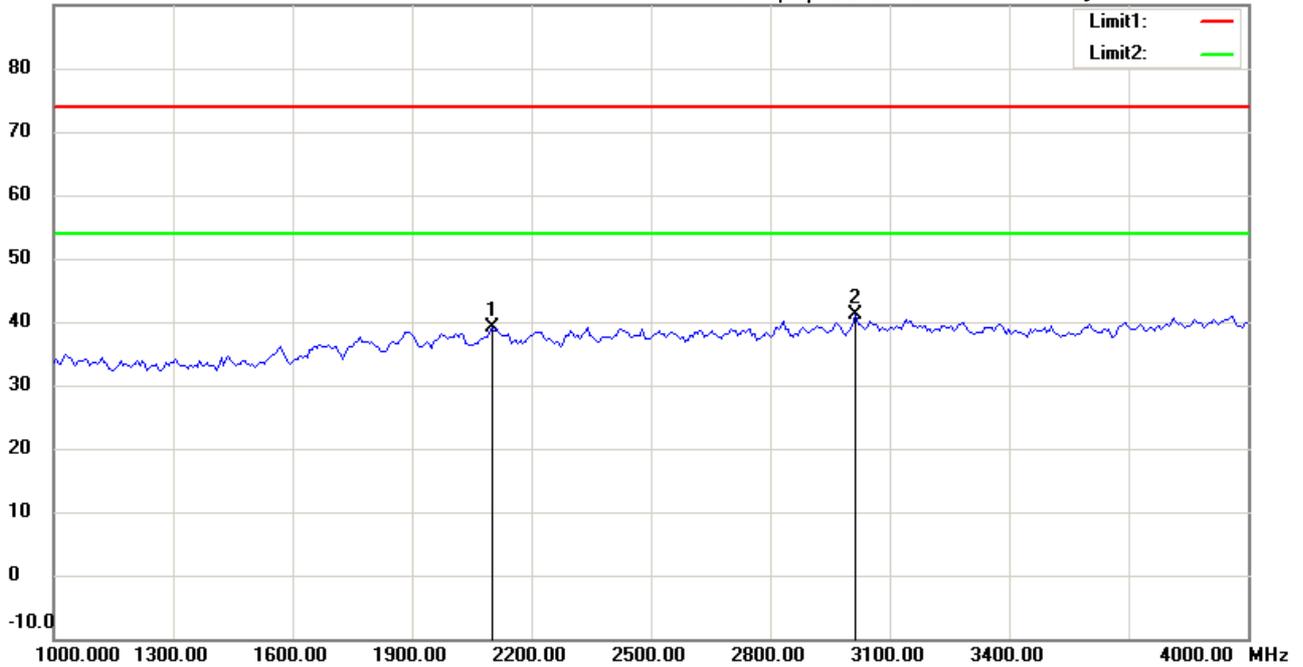
Date: 2016/5/16

Temperature:24 °C

90.0 dBuV/m

Time: 下午 08:34:52

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_Above 1GHz\_PK

Polarization: *Vertical*

EUT : W6M21603-15738

Power : 2.4 Vd.c.

M/N:

Distance: 3m

Test Mode : RX 151.82MHz

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
	2100.200	44.51	peak	-5.46	39.05	74.00	100	55	-34.95	
*	3014.028	44.10	peak	-3.05	41.05	74.00	100	215	-32.95	



Radiated Emission Measurement

Operator: Roy

File :1

Data :#1

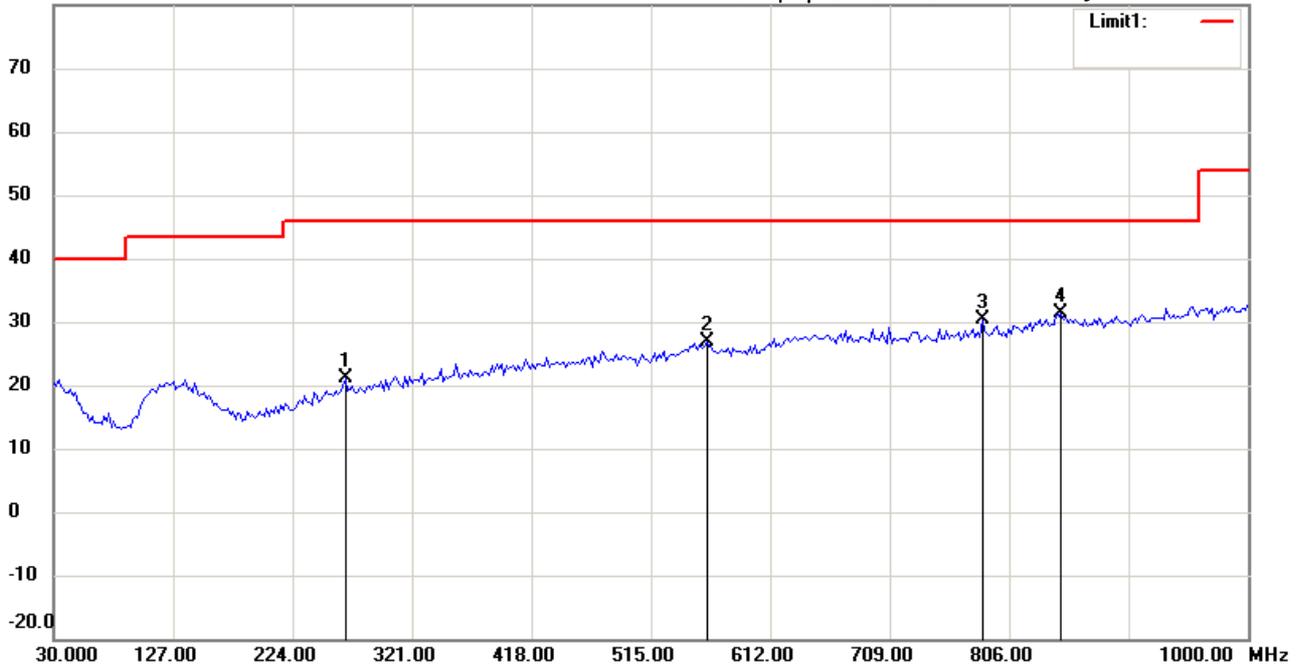
Date: 2016/5/16

Temperature:24 °C

80.0 dBuV/m

Time: 下午 07:54:26

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_30-1000MHz

EUT : W6M21603-15738

M/N:

Test Mode : RX 154.57MHz

Note :

Polarization: *Horizontal*

Power : 2.4 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
	267.1542	27.65	peak	-6.41	21.24	46.00	100	125	-24.76	
	560.6814	28.13	peak	-1.16	26.97	46.00	100	305	-19.03	
	784.2285	28.93	peak	1.54	30.47	46.00	100	170	-15.53	
*	848.3768	27.75	peak	3.65	31.40	46.00	100	260	-14.60	



Radiated Emission Measurement

Operator: Roy

File :1

Data :#2

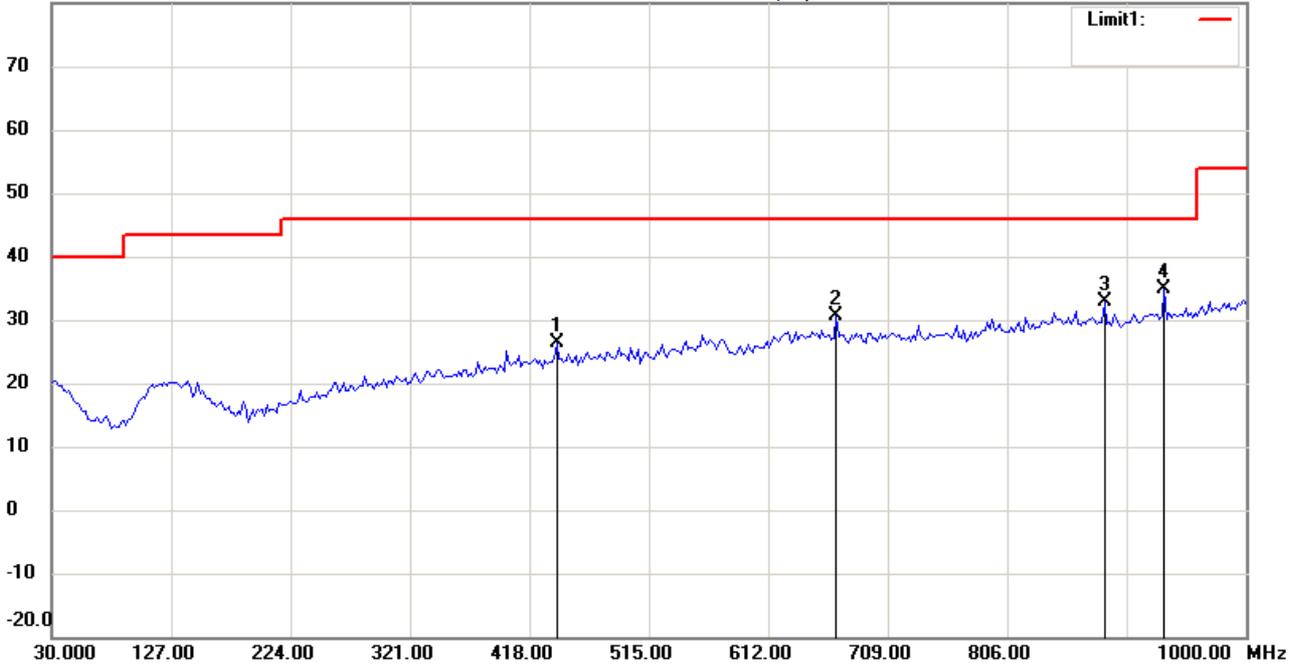
Date: 2016/5/16

Temperature:24 °C

80.0 dBuV/m

Time: 下午 07:55:11

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_30-1000MHz

Polarization: *Vertical*

EUT : W6M21603-15738

Power : 2.4 Vd.c.

M/N:

Distance: 3m

Test Mode : RX 154.57MHz

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
	440.1603	29.33	peak	-2.95	26.38	46.00	100	285	-19.62	
	667.5952	29.85	peak	0.90	30.75	46.00	100	90	-15.25	
	885.3106	28.96	peak	3.84	32.80	46.00	100	220	-13.20	
*	933.9078	29.94	peak	5.01	34.95	46.00	100	340	-11.05	



Radiated Emission Measurement

Operator: Roy

File :3

Data :#1

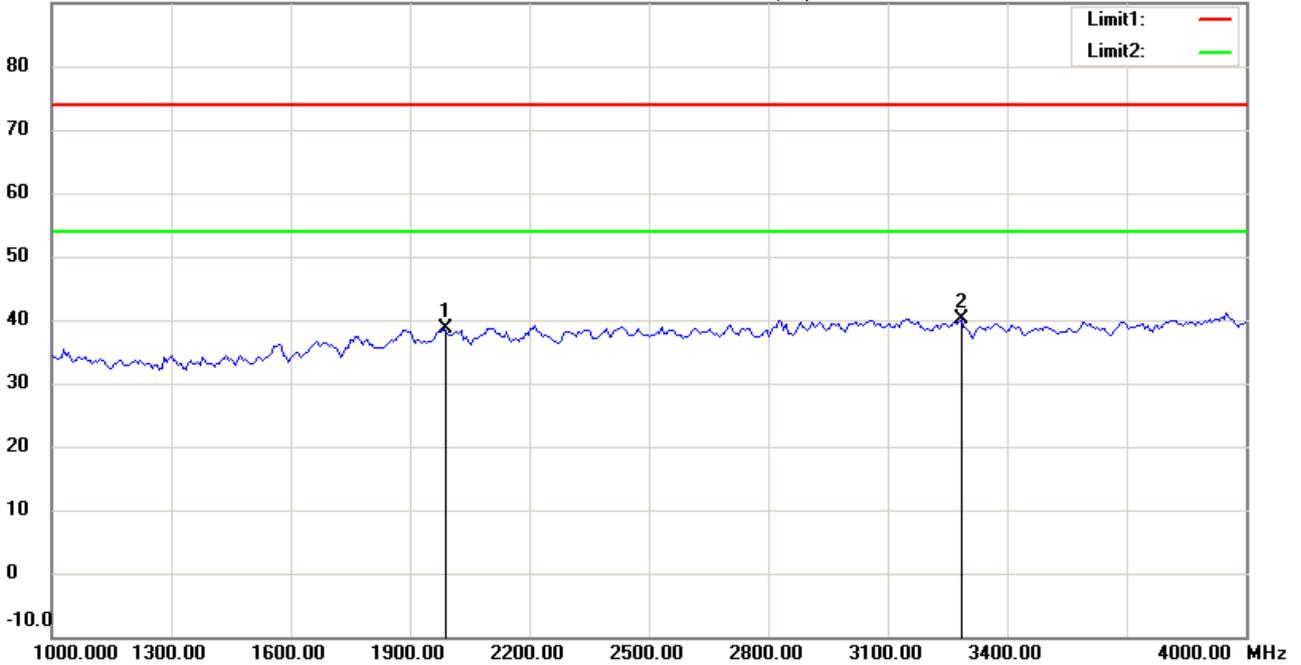
Date: 2016/5/16

Temperature:24 °C

90.0 dBuV/m

Time: 下午 08:18:54

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_Above 1GHz\_PK

Polarization: *Horizontal*

EUT : W6M21603-15738

Power : 2.4 Vd.c.

M/N:

Distance: 3m

Test Mode : RX 154.57MHz

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
	1985.972	44.33	peak	-5.58	38.75	74.00	100	240	-35.25	
*	3284.569	42.89	peak	-2.87	40.02	74.00	100	85	-33.98	



Radiated Emission Measurement

Operator: Roy

File :3

Data :#2

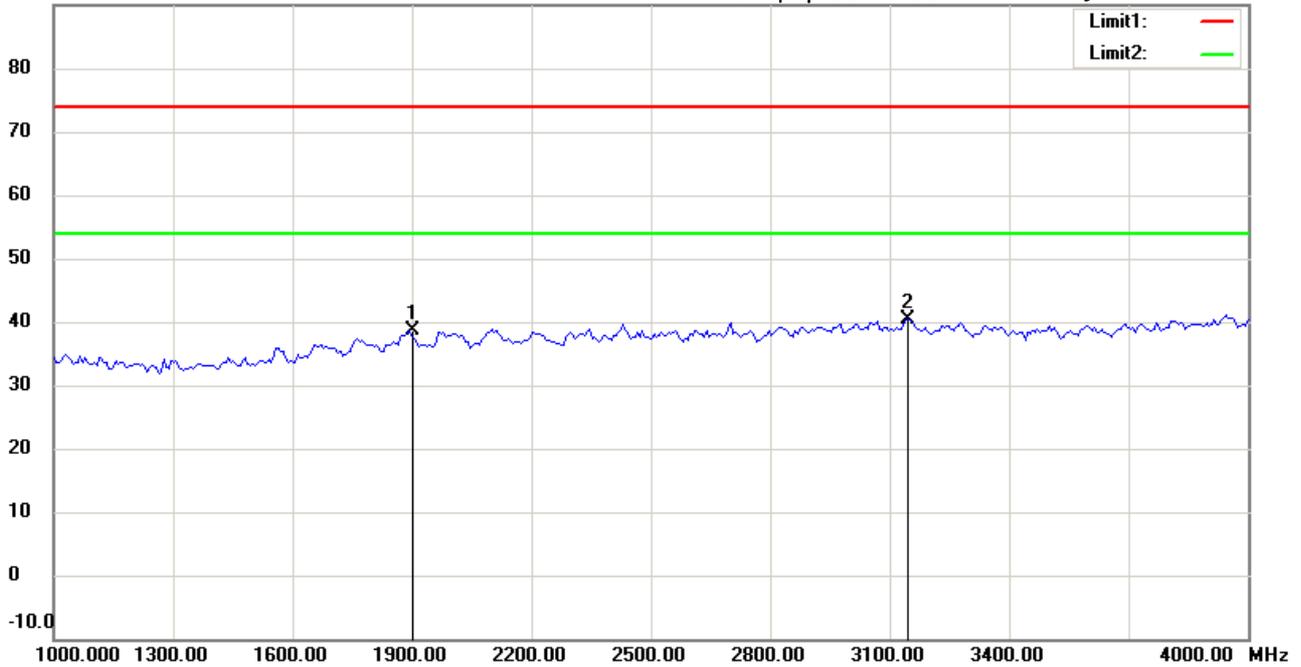
Date: 2016/5/16

Temperature:24 °C

90.0 dBuV/m

Time: 下午 08:19:58

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_Above 1GHz\_PK

Polarization: *Vertical*

EUT : W6M21603-15738

Power : 2.4 Vd.c.

M/N:

Distance: 3m

Test Mode : RX 154.57MHz

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
	1895.792	44.49	peak	-5.92	38.57	74.00	100	130	-35.43	
*	3140.281	43.22	peak	-2.82	40.40	74.00	100	245	-33.60	



Radiated Emission Measurement

Operator: Roy

File :1

Data :#1

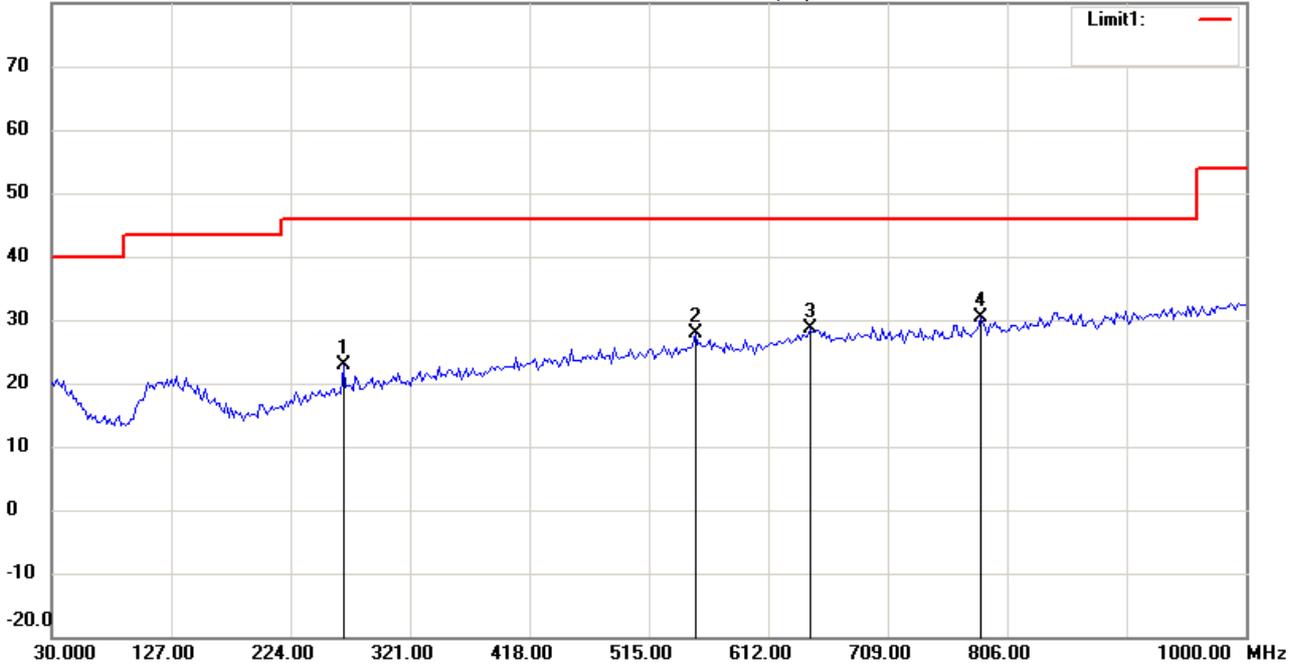
Date: 2016/5/16

Temperature:24 °C

80.0 dBuV/m

Time: 下午 07:52:07

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_30-1000MHz

EUT : W6M21603-15738

M/N:

Test Mode : RX 154.6MHz

Note :

Polarization: *Horizontal*

Power : 2.4 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
	267.1542	29.40	peak	-6.41	22.99	46.00	100	245	-23.01	
	552.9057	28.89	peak	-1.13	27.76	46.00	100	155	-18.24	
	646.2124	27.82	peak	0.91	28.73	46.00	100	110	-17.27	
*	784.2285	28.86	peak	1.54	30.40	46.00	100	300	-15.60	



Radiated Emission Measurement

Operator: Roy

File :1

Data :#2

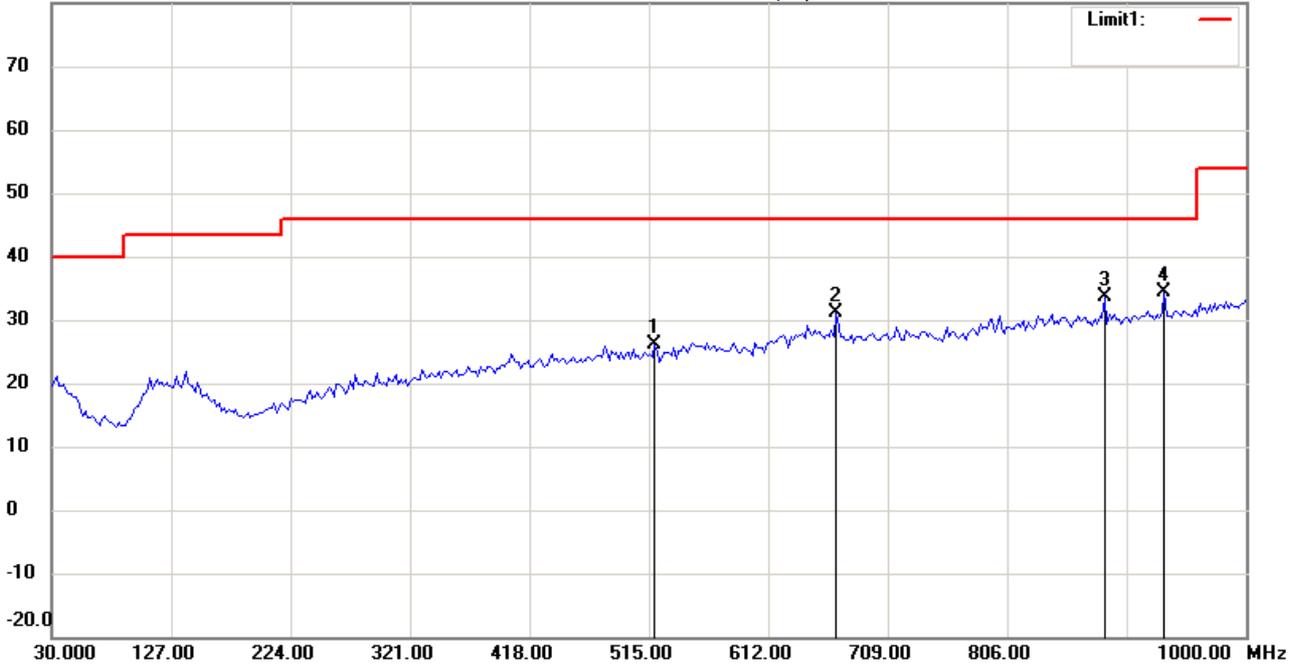
Date: 2016/5/16

Temperature:24 °C

80.0 dBuV/m

Time: 下午 07:52:53

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_30-1000MHz

Polarization: *Vertical*

EUT : W6M21603-15738

Power : 2.4 Vd.c.

M/N:

Distance: 3m

Test Mode : RX 154.6MHz

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
	519.8597	28.16	peak	-2.04	26.12	46.00	100	230	-19.88	
	667.5952	30.33	peak	0.90	31.23	46.00	100	220	-14.77	
	885.3106	29.74	peak	3.84	33.58	46.00	100	80	-12.42	
*	933.9078	29.31	peak	5.01	34.32	46.00	100	315	-11.68	



Radiated Emission Measurement

Operator: Roy

File :3

Data :#1

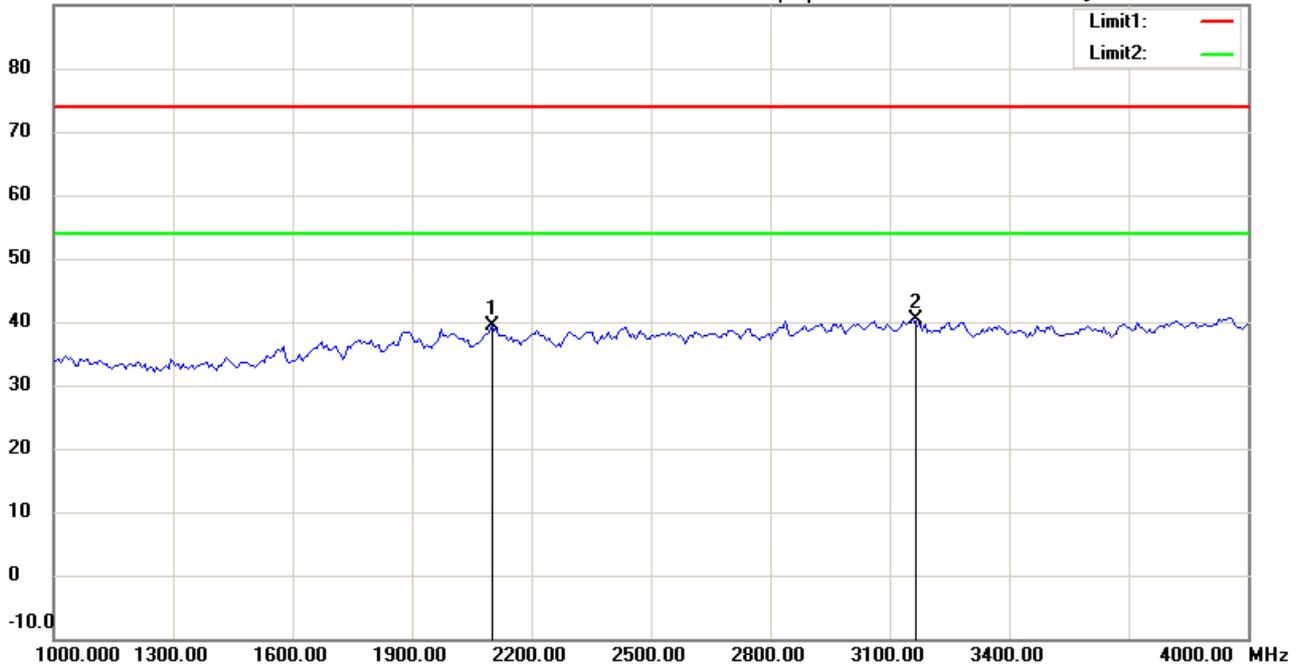
Date: 2016/5/16

Temperature:24 °C

90.0 dBuV/m

Time: 下午 08:21:24

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_Above 1GHz\_PK

Polarization: *Horizontal*

EUT : W6M21603-15738

Power : 2.4 Vd.c.

M/N:

Distance: 3m

Test Mode : RX 154.6MHz

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
	2100.200	44.80	peak	-5.46	39.34	74.00	100	120	-34.66	
*	3158.317	43.10	peak	-2.79	40.31	74.00	100	95	-33.69	



Radiated Emission Measurement

Operator: Roy

File :3

Data :#2

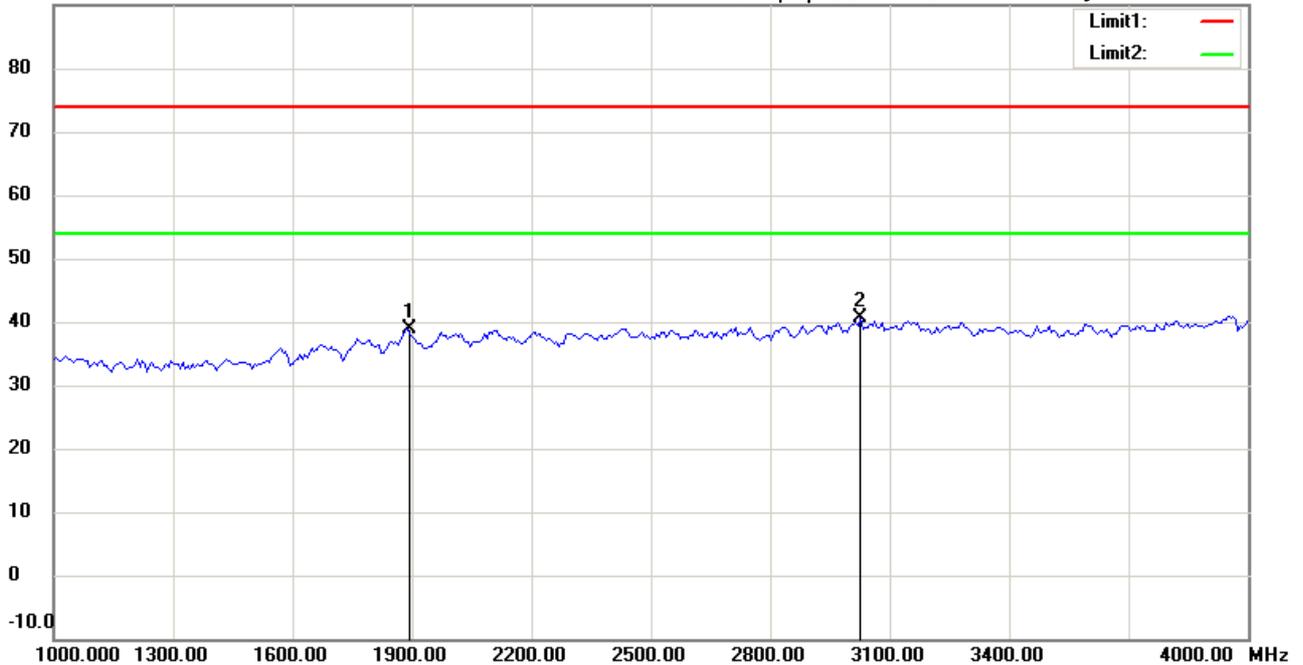
Date: 2016/5/16

Temperature:24 °C

90.0 dBuV/m

Time: 下午 08:22:13

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_Above 1GHz\_PK

Polarization: *Vertical*

EUT : W6M21603-15738

Power : 2.4 Vd.c.

M/N:

Distance: 3m

Test Mode : RX 154.6MHz

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
	1889.780	44.91	peak	-5.98	38.93	74.00	100	140	-35.07	
*	3026.052	43.55	peak	-3.03	40.52	74.00	100	35	-33.48	



Registration number: W6M21603-15738-P-15B

## **Appendix**

**RX\_Long (VHF Antenna 700-00042-00)**



Radiated Emission Measurement

Operator: Roy

File :1

Data :#1

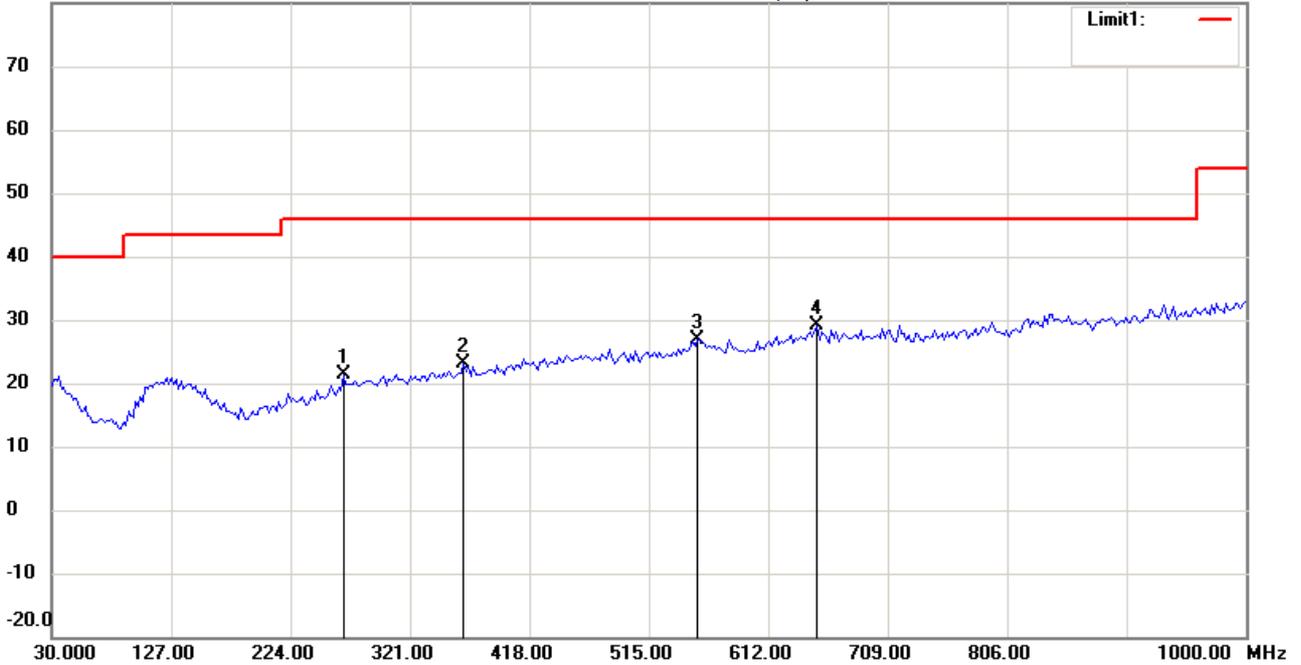
Date: 2016/5/16

Temperature:24 °C

80.0 dBuV/m

Time: 下午 07:46:45

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_30-1000MHz

Polarization: *Horizontal*

EUT : W6M21603-15738

Power : 2.4 Vd.c.

M/N:

Distance: 3m

Test Mode : RX 151.82MHz

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
	267.1542	27.85	peak	-6.41	21.44	46.00	100	230	-24.56	
	364.3487	27.32	peak	-4.31	23.01	46.00	100	305	-22.99	
	554.8496	27.93	peak	-1.14	26.79	46.00	100	150	-19.21	
*	652.0440	28.16	peak	1.07	29.23	46.00	100	280	-16.77	



Radiated Emission Measurement

Operator: Roy

File :1

Data :#2

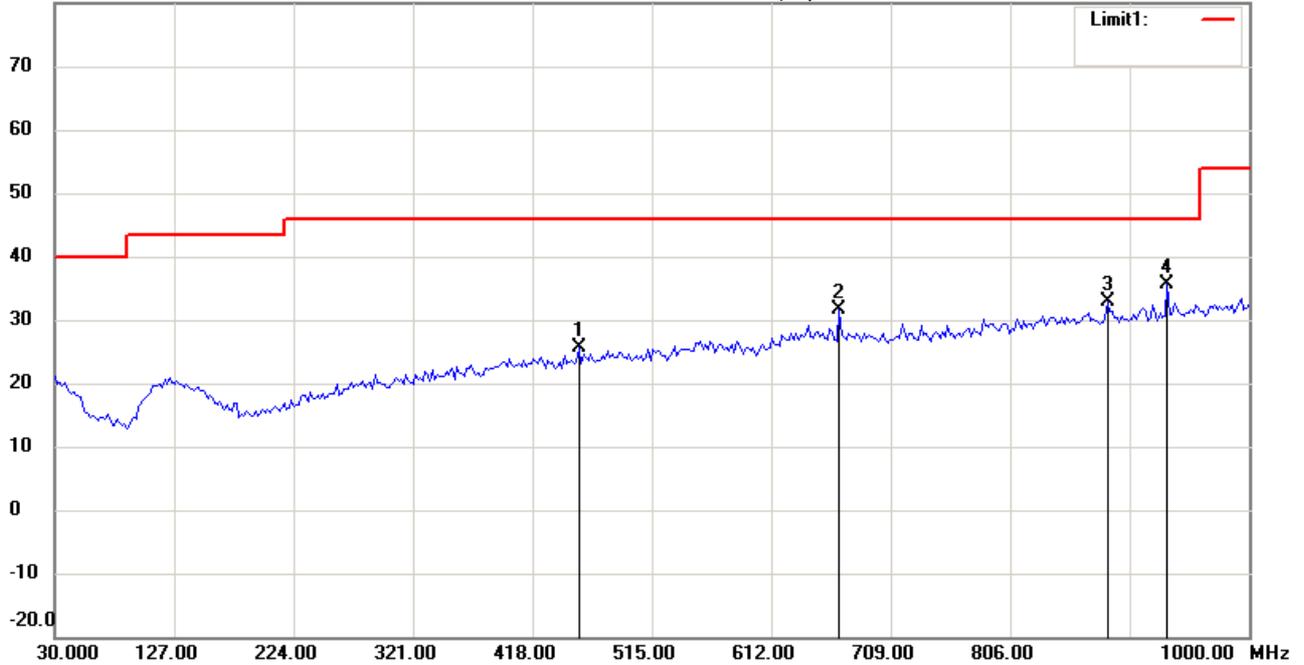
Date: 2016/5/16

Temperature:24 °C

80.0 dBuV/m

Time: 下午 07:47:31

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_30-1000MHz

Polarization: *Vertical*

EUT : W6M21603-15738

Power : 2.4 Vd.c.

M/N:

Distance: 3m

Test Mode : RX 151.82MHz

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
	455.7114	28.27	peak	-2.75	25.52	46.00	100	265	-20.48	
	667.5952	30.70	peak	0.90	31.60	46.00	100	125	-14.40	
	885.3106	29.09	peak	3.84	32.93	46.00	100	50	-13.07	
*	933.9078	30.69	peak	5.01	35.70	46.00	100	170	-10.30	



Radiated Emission Measurement

Operator: Roy

File :3

Data :#1

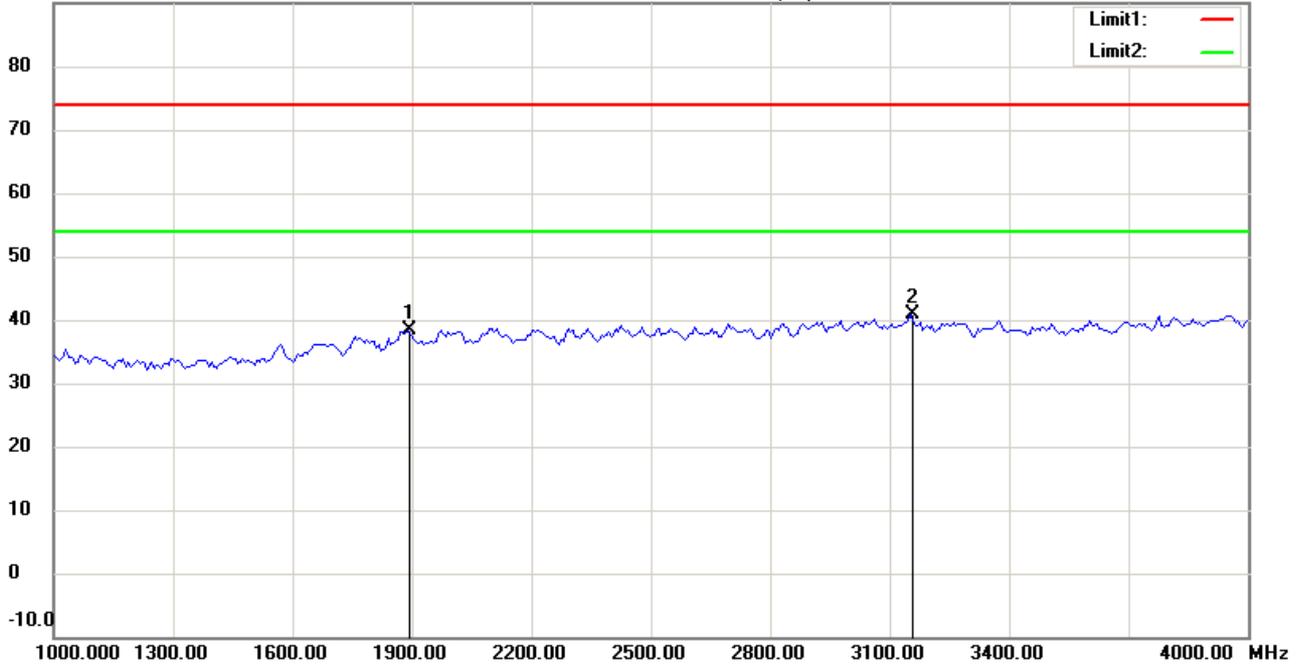
Date: 2016/5/16

Temperature:24 °C

90.0 dBuV/m

Time: 下午 08:10:47

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_Above 1GHz\_PK

Polarization: *Horizontal*

EUT : W6M21603-15738

Power : 2.4 Vd.c.

M/N:

Distance: 3m

Test Mode : RX 151.82MHz

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
	1889.780	44.46	peak	-5.98	38.48	74.00	100	120	-35.52	
*	3152.305	43.71	peak	-2.80	40.91	74.00	100	175	-33.09	



Radiated Emission Measurement

Operator: Roy

File :3

Data :#2

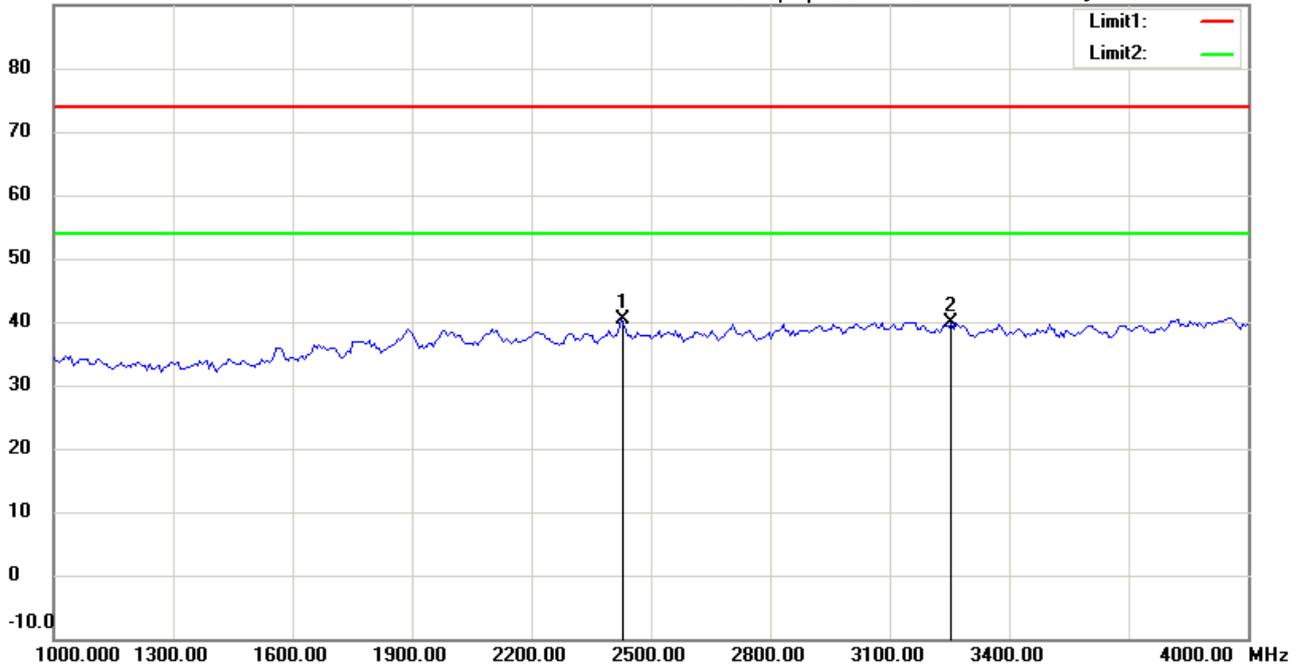
Date: 2016/5/16

Temperature:24 °C

90.0 dBuV/m

Time: 下午 08:11:54

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_Above 1GHz\_PK

Polarization: *Vertical*

EUT : W6M21603-15738

Power : 2.4 Vd.c.

M/N:

Distance: 3m

Test Mode : RX 151.82MHz

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
*	2424.850	45.12	peak	-4.73	40.39	74.00	100	220	-33.61	
	3254.509	42.80	peak	-2.82	39.98	74.00	100	85	-34.02	



Radiated Emission Measurement

Operator: Roy

File :1

Data :#1

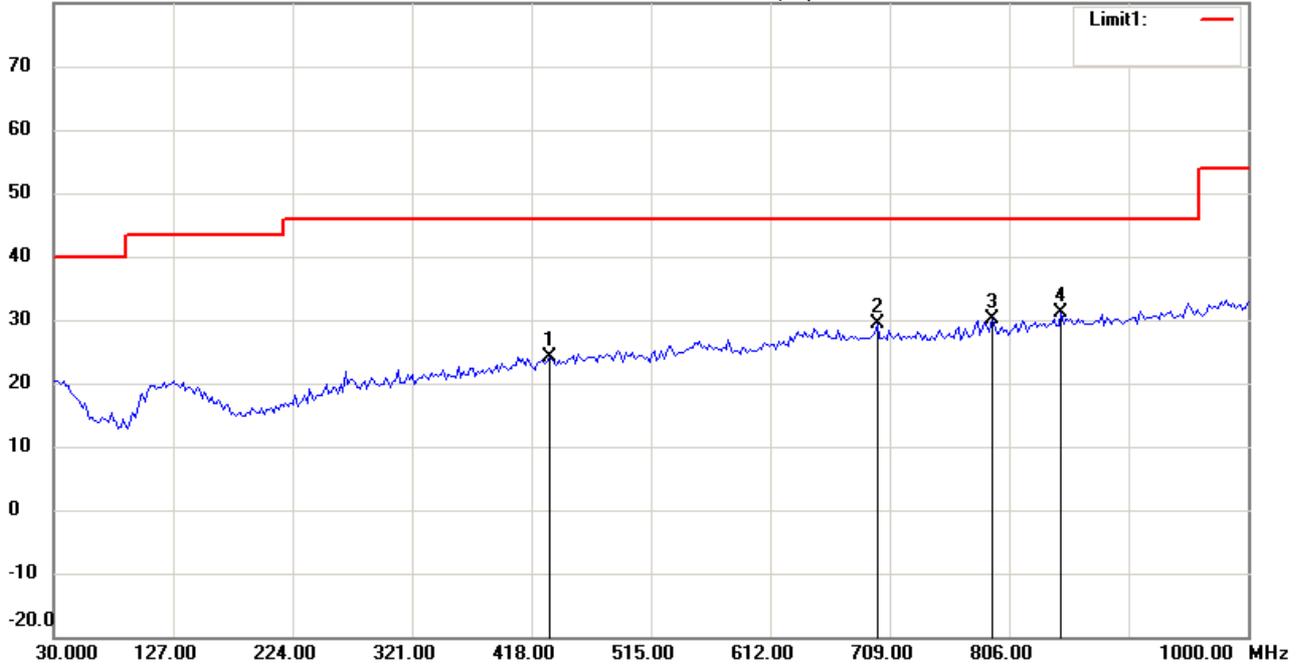
Date: 2016/5/16

Temperature:24 °C

80.0 dBuV/m

Time: 下午 07:44:26

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_30-1000MHz

Polarization: *Horizontal*

EUT : W6M21603-15738

Power : 2.4 Vd.c.

M/N:

Distance: 3m

Test Mode : RX 154.57MHz

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
	432.3847	27.24	peak	-3.09	24.15	46.00	100	120	-21.85	
	698.6974	28.77	peak	0.55	29.32	46.00	100	330	-16.68	
	792.0040	28.54	peak	1.67	30.21	46.00	100	155	-15.79	
*	848.3768	27.45	peak	3.65	31.10	46.00	100	40	-14.90	



Radiated Emission Measurement

Operator: Roy

File :1

Data :#2

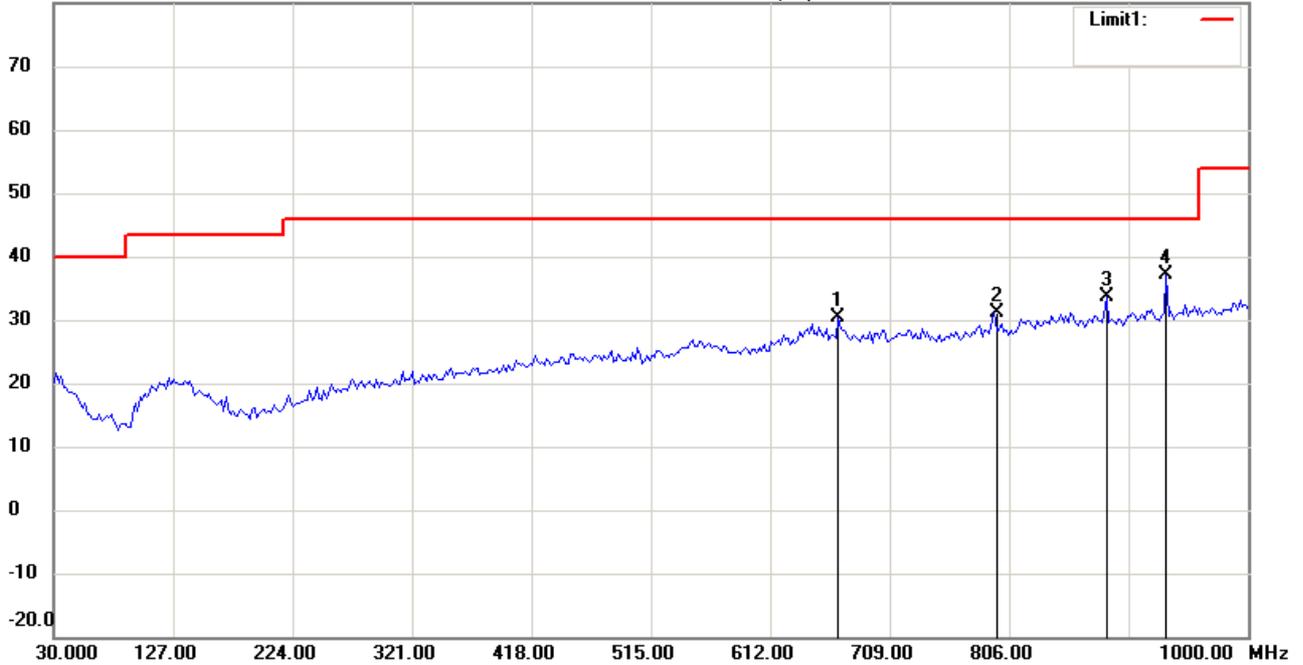
Date: 2016/5/16

Temperature:24 °C

80.0 dBuV/m

Time: 下午 07:45:11

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_30-1000MHz

EUT : W6M21603-15738

M/N:

Test Mode : RX 154.57MHz

Note :

Polarization: *Vertical*

Power : 2.4 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
	667.5952	29.49	peak	0.90	30.39	46.00	100	280	-15.61	
	793.9480	29.45	peak	1.70	31.15	46.00	100	35	-14.85	
	885.3106	29.86	peak	3.84	33.70	46.00	100	170	-12.30	
*	933.9078	32.22	peak	5.01	37.23	46.00	100	140	-8.77	



Radiated Emission Measurement

Operator: Roy

File :3

Data :#1

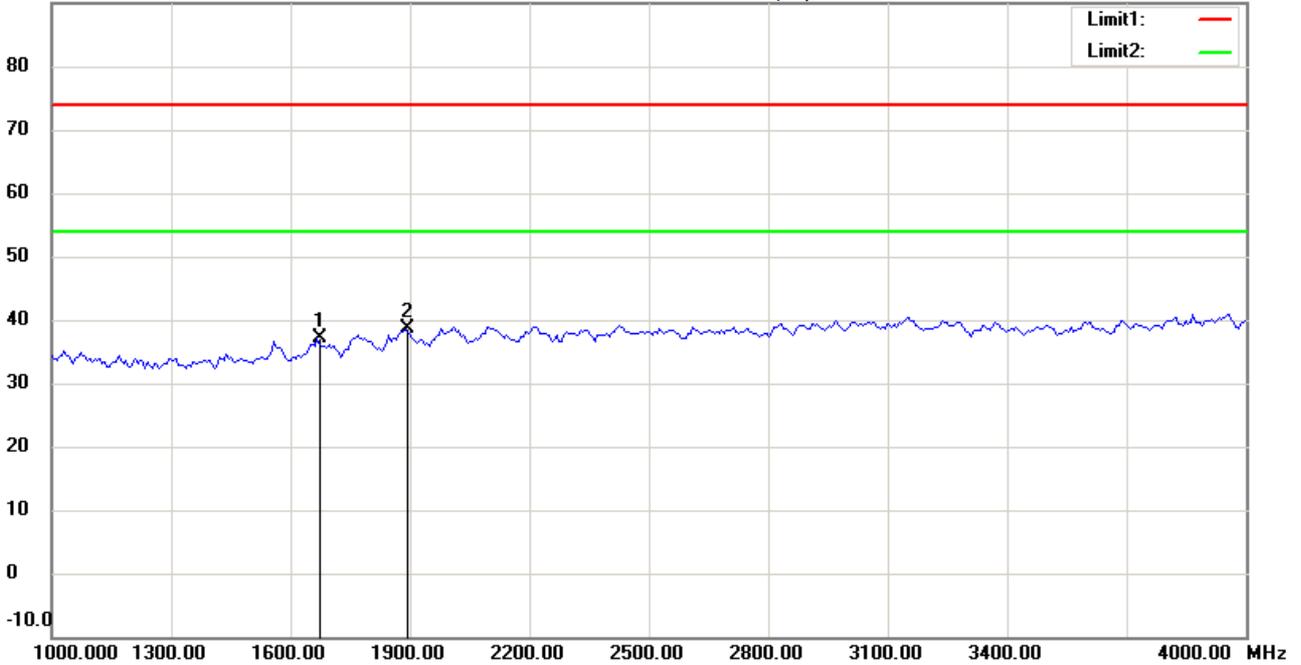
Date: 2016/5/16

Temperature:24 °C

90.0 dBuV/m

Time: 下午 08:16:04

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_Above 1GHz\_PK

Polarization: *Horizontal*

EUT : W6M21603-15738

Power : 2.4 Vd.c.

M/N:

Distance: 3m

Test Mode : RX 154.57MHz

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
	1667.335	44.56	peak	-7.49	37.07	74.00	100	80	-36.93	
*	1889.780	44.64	peak	-5.98	38.66	74.00	100	260	-35.34	



Radiated Emission Measurement

Operator: Roy

File :3

Data :#2

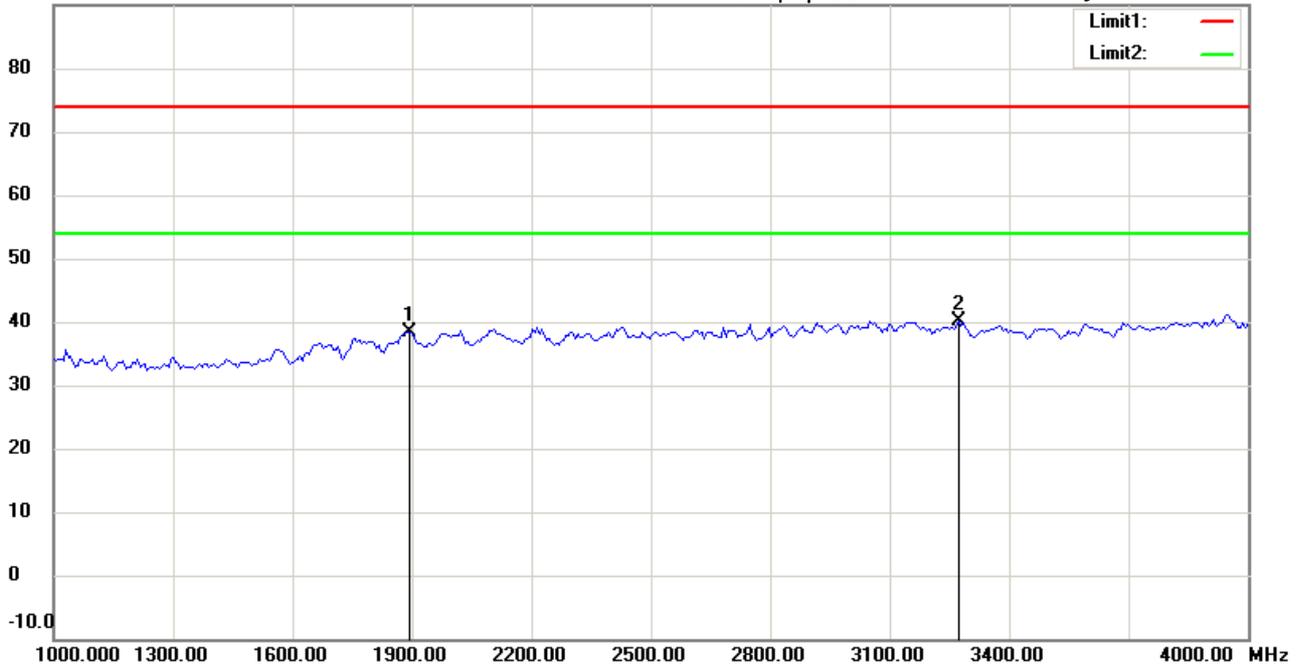
Date: 2016/5/16

Temperature:24 °C

90.0 dBuV/m

Time: 下午 08:17:11

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_Above 1GHz\_PK

Polarization: *Vertical*

EUT : W6M21603-15738

Power : 2.4 Vd.c.

M/N:

Distance: 3m

Test Mode : RX 154.57MHz

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
	1889.780	44.35	peak	-5.98	38.37	74.00	100	315	-35.63	
*	3272.545	42.96	peak	-2.85	40.11	74.00	100	150	-33.89	



Radiated Emission Measurement

Operator: Roy

File :1

Data :#1

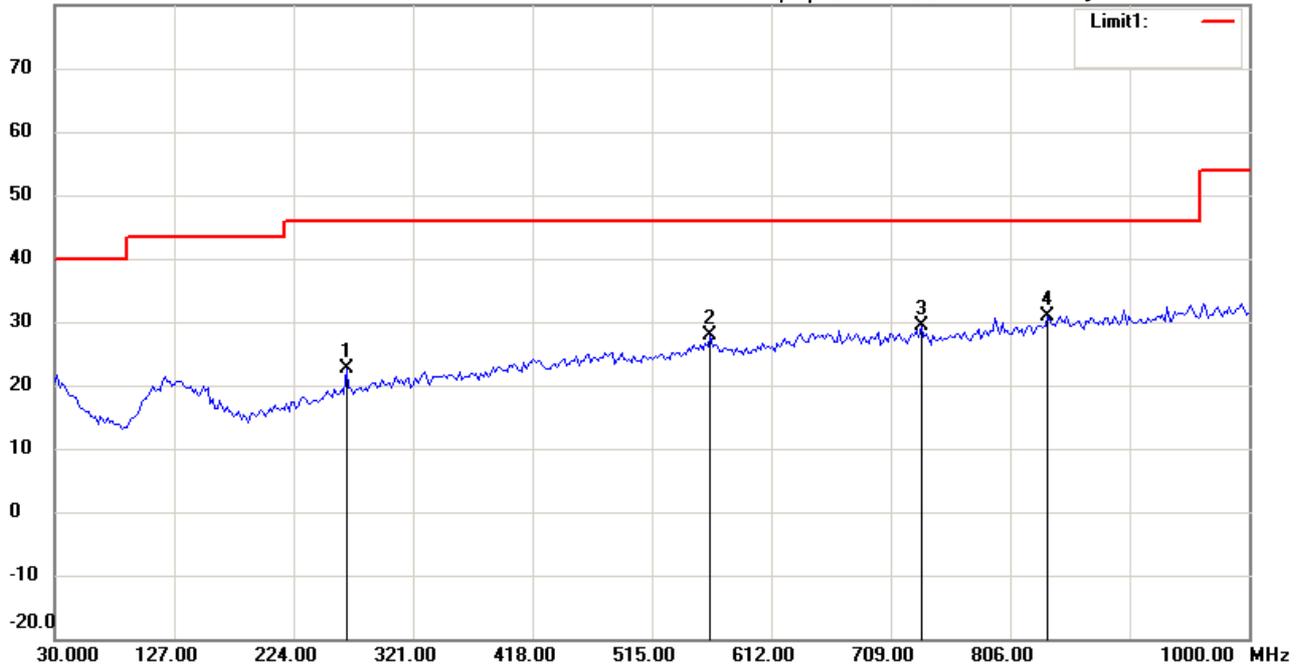
Date: 2016/5/16

Temperature:24 °C

80.0 dBuV/m

Time: 下午 07:41:33

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_30-1000MHz

EUT : W6M21603-15738

M/N:

Test Mode : RX 154.6MHz

Note :

Polarization: *Horizontal*

Power : 2.4 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
	267.1542	29.06	peak	-6.41	22.65	46.00	100	215	-23.35	
	562.6253	29.03	peak	-1.17	27.86	46.00	100	270	-18.14	
	733.6874	28.44	peak	0.83	29.27	46.00	100	80	-16.73	
*	836.7133	27.80	peak	3.20	31.00	46.00	100	315	-15.00	



Radiated Emission Measurement

Operator: Roy

File :1

Data :#2

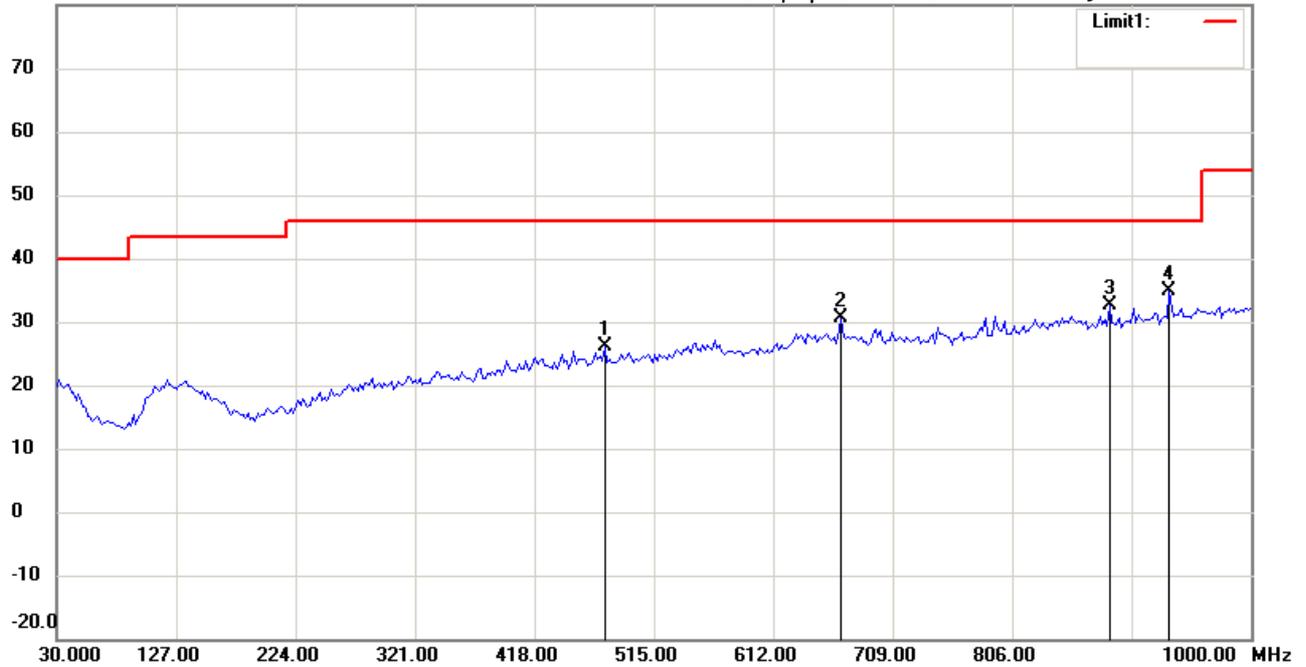
Date: 2016/5/16

Temperature:24 °C

80.0 dBuV/m

Time: 下午 07:42:19

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_30-1000MHz

EUT : W6M21603-15738

M/N:

Test Mode : RX 154.6MHz

Note :

Polarization: *Vertical*

Power : 2.4 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
	475.1503	28.73	peak	-2.70	26.03	46.00	100	240	-19.97	
	667.5952	29.84	peak	0.90	30.74	46.00	100	100	-15.26	
	885.3106	28.70	peak	3.84	32.54	46.00	100	320	-13.46	
*	933.9078	29.97	peak	5.01	34.98	46.00	100	160	-11.02	



Radiated Emission Measurement

Operator: Roy

File :3

Data :#1

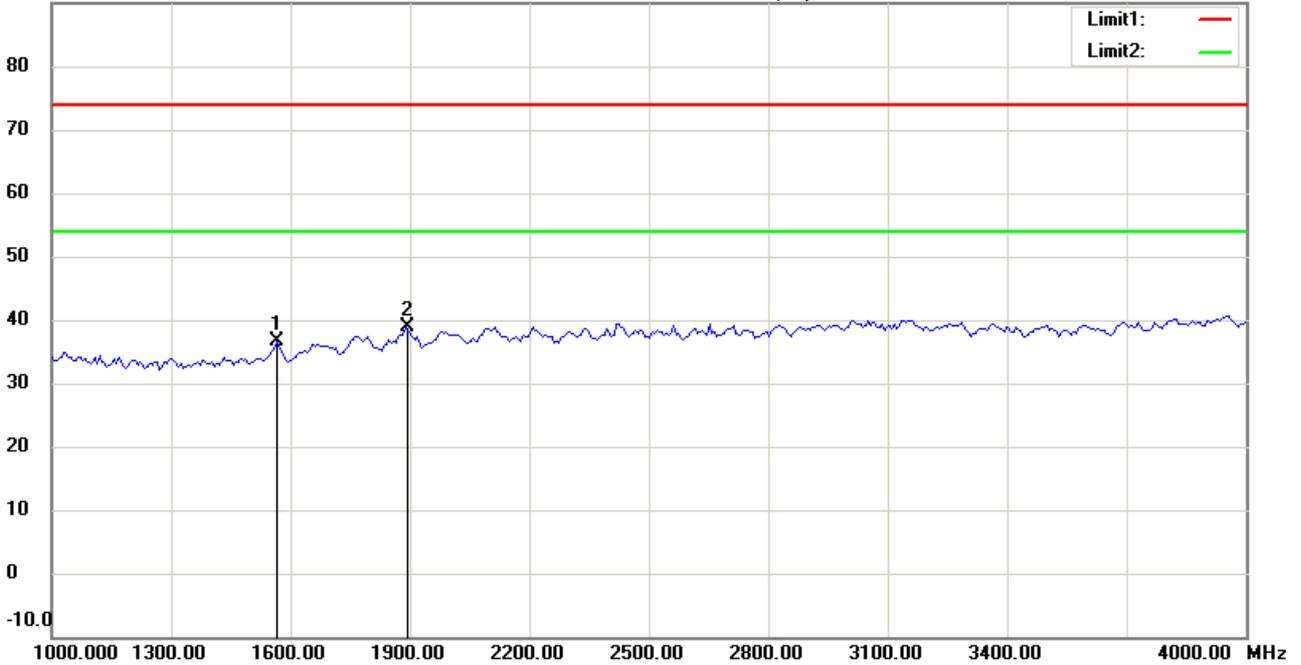
Date: 2016/5/16

Temperature:24 °C

90.0 dBuV/m

Time: 下午 08:13:14

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_Above 1GHz\_PK

Polarization: *Horizontal*

EUT : W6M21603-15738

Power : 2.4 Vd.c.

M/N:

Distance: 3m

Test Mode : RX 154.6MHz

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
	1565.130	45.07	peak	-8.52	36.55	74.00	100	110	-37.45	
*	1889.780	44.75	peak	-5.98	38.77	74.00	100	40	-35.23	



Radiated Emission Measurement

Operator: Roy

File :3

Data :#2

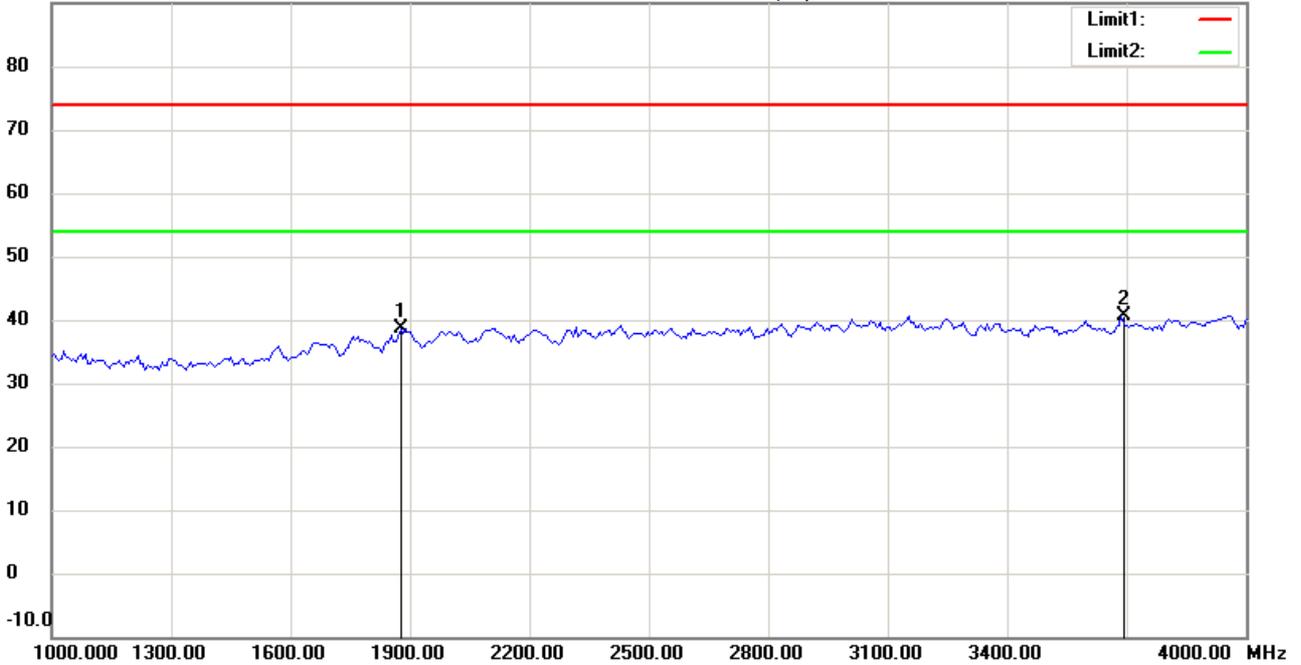
Date: 2016/5/16

Temperature:24 °C

90.0 dBuV/m

Time: 下午 08:14:18

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_Above 1GHz\_PK

Polarization: *Vertical*

EUT : W6M21603-15738

Power : 2.4 Vd.c.

M/N:

Distance: 3m

Test Mode : RX 154.6MHz

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
	1877.755	44.66	peak	-6.10	38.56	74.00	100	235	-35.44	
*	3687.375	42.93	peak	-2.41	40.52	74.00	100	50	-33.48	



Registration number: W6M21603-15738-P-15B

## **Appendix**

**RX\_Spiral (Mag Mount Antenna 013-00240-00)**



Radiated Emission Measurement

Operator: Roy

File :1

Data :#1

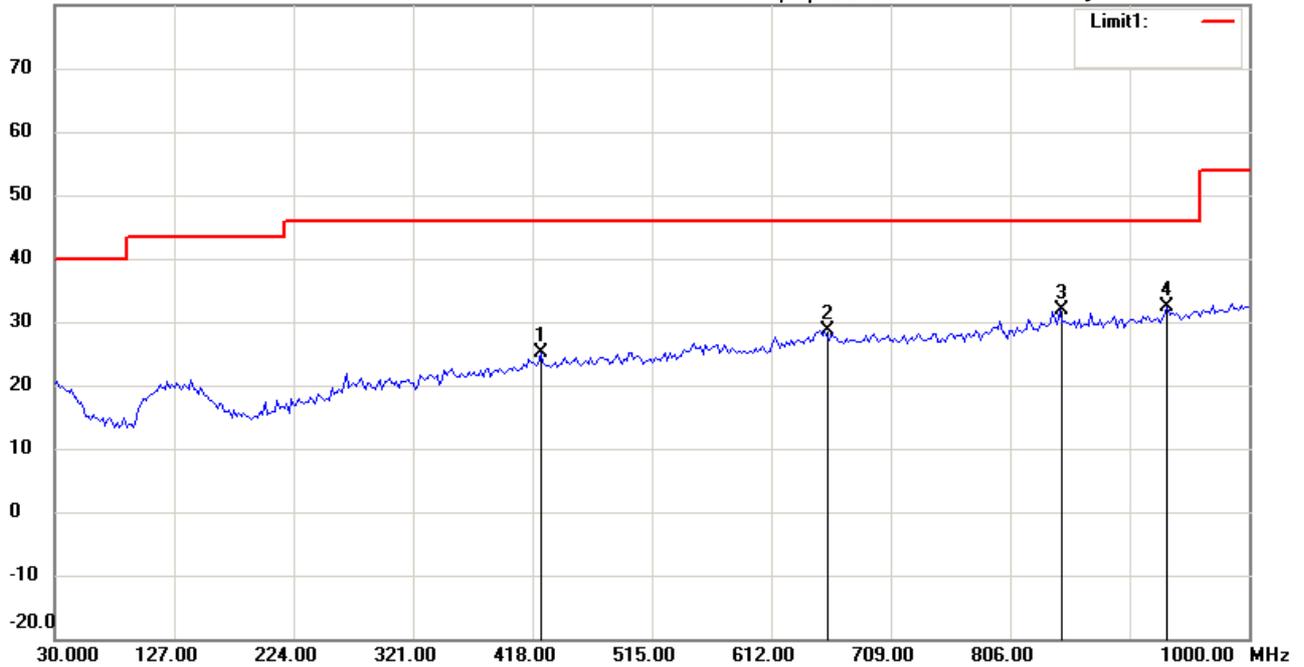
Date: 2016/5/16

Temperature:24 °C

80.0 dBuV/m

Time: 下午 08:03:41

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_30-1000MHz

EUT : W6M21603-15738

M/N:

Test Mode : RX 151.82MHz

Note :

Polarization: *Horizontal*

Power : 2.4 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
	424.6091	28.34	peak	-3.23	25.11	46.00	100	340	-20.89	
	655.9320	27.59	peak	1.02	28.61	46.00	100	270	-17.39	
	846.4330	28.23	peak	3.57	31.80	46.00	100	95	-14.20	
*	933.9077	27.26	peak	5.01	32.27	46.00	100	225	-13.73	



Radiated Emission Measurement

Operator: Roy

File :1

Data :#2

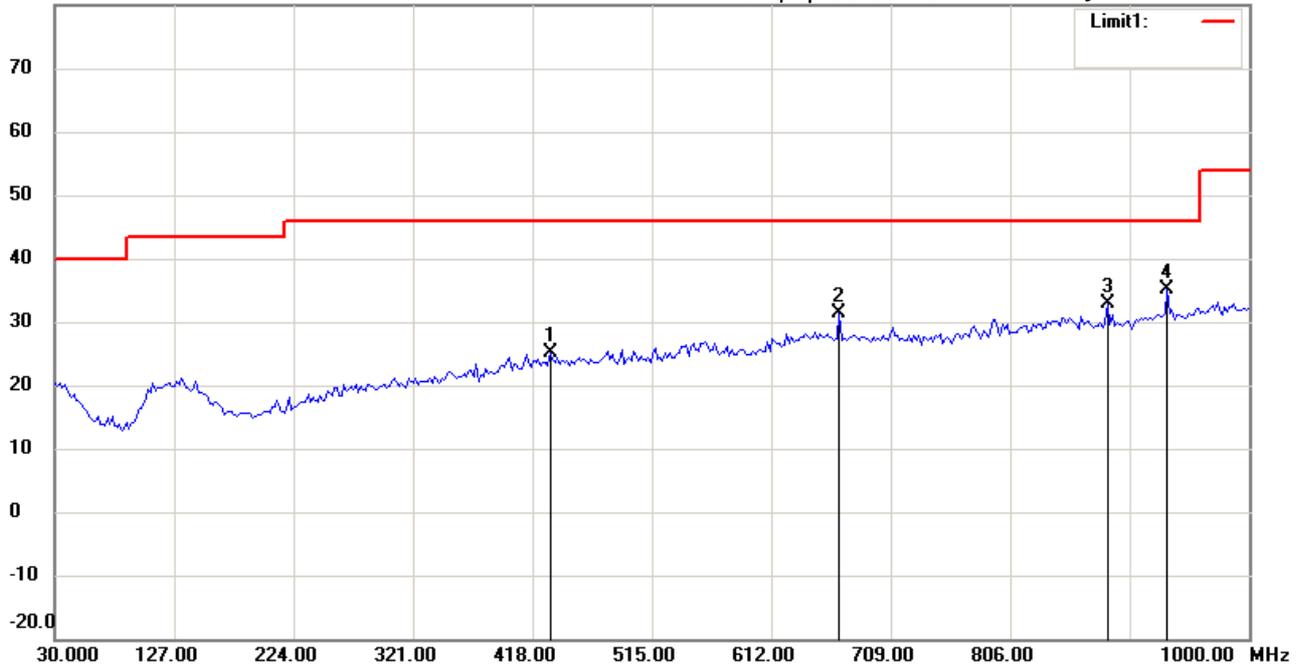
Date: 2016/5/16

Temperature:24 °C

80.0 dBuV/m

Time: 下午 08:04:26

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_30-1000MHz

EUT : W6M21603-15738

M/N:

Test Mode : RX 151.82MHz

Note :

Polarization: *Vertical*

Power : 2.4 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
	432.3848	28.14	peak	-3.09	25.05	46.00	100	255	-20.95	
	667.5952	30.42	peak	0.90	31.32	46.00	100	125	-14.68	
	885.3106	29.14	peak	3.84	32.98	46.00	100	170	-13.02	
*	933.9078	30.05	peak	5.01	35.06	46.00	100	320	-10.94	



Radiated Emission Measurement

Operator: Roy

File :3

Data :#1

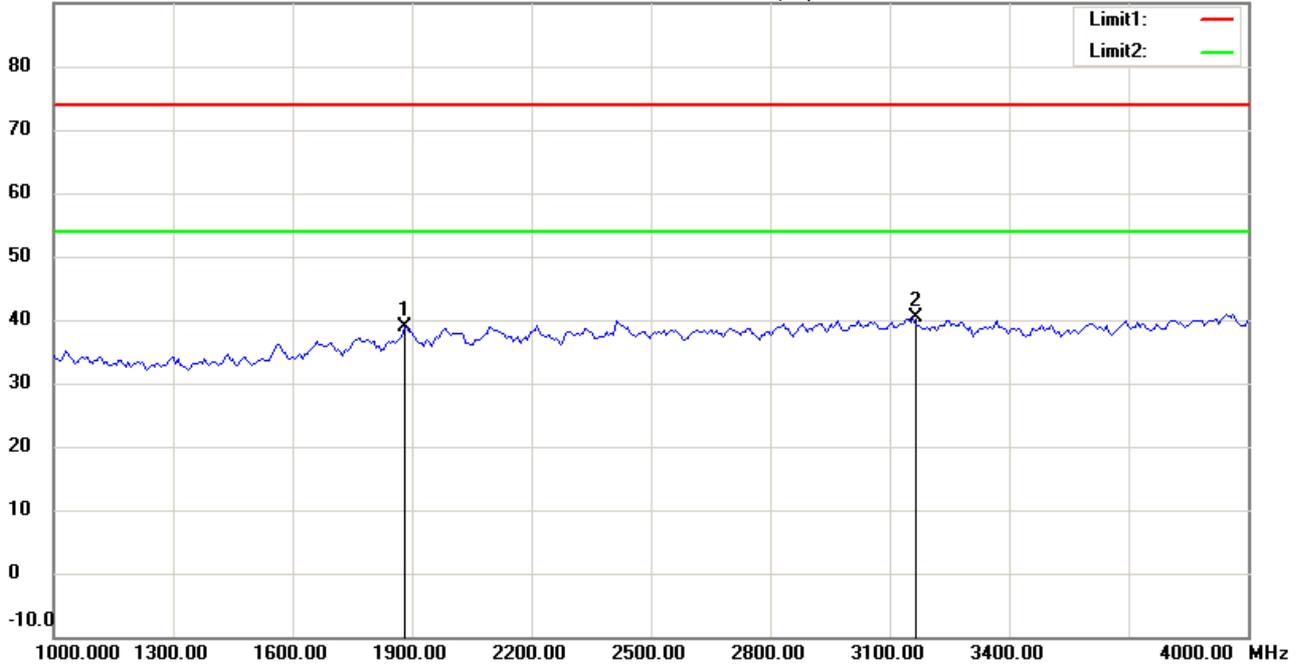
Date: 2016/5/16

Temperature:24 °C

90.0 dBuV/m

Time: 下午 08:36:24

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_Above 1GHz\_PK

Polarization: *Horizontal*

EUT : W6M21603-15738

Power : 2.4 Vd.c.

M/N:

Distance: 3m

Test Mode : RX 151.82MHz

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
	1883.767	44.96	peak	-6.04	38.92	74.00	100	100	-35.08	
*	3158.317	43.22	peak	-2.79	40.43	74.00	100	35	-33.57	



Radiated Emission Measurement

Operator: Roy

File :3

Data :#2

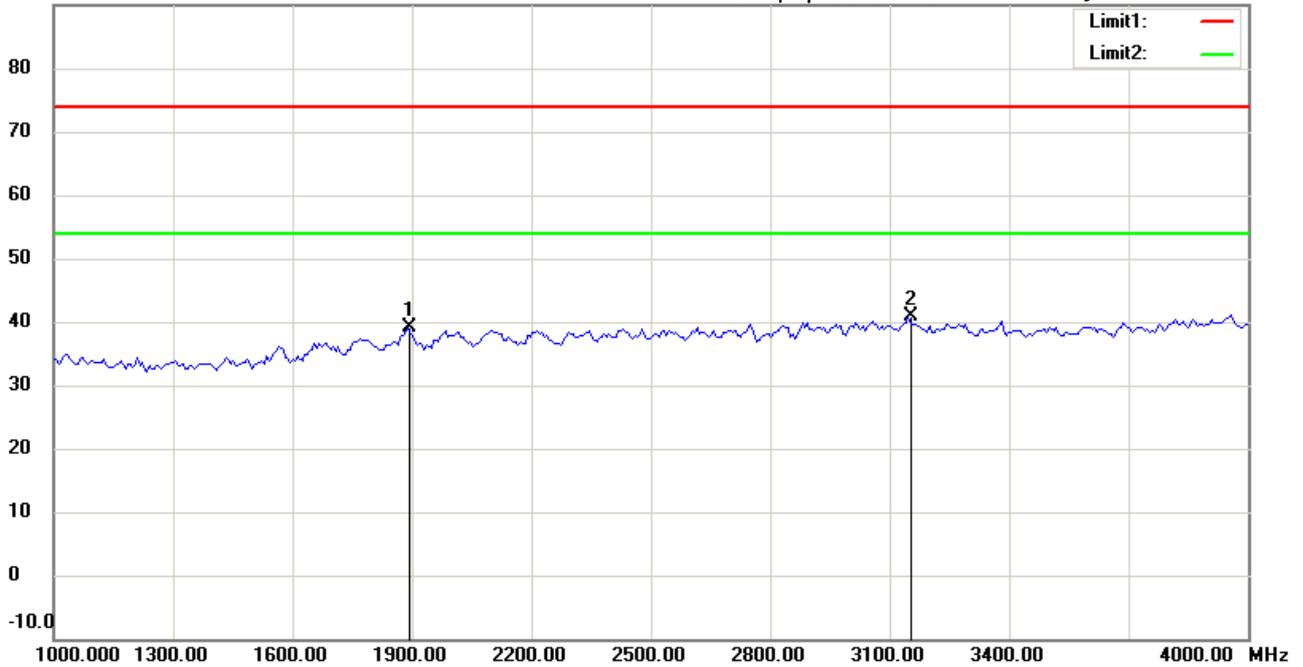
Date: 2016/5/16

Temperature:24 °C

90.0 dBuV/m

Time: 下午 08:37:19

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_Above 1GHz\_PK

Polarization: *Vertical*

EUT : W6M21603-15738

Power : 2.4 Vd.c.

M/N:

Distance: 3m

Test Mode : RX 151.82MHz

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
	1889.780	45.01	peak	-5.98	39.03	74.00	100	290	-34.97	
*	3146.293	43.71	peak	-2.81	40.90	74.00	100	145	-33.10	



Radiated Emission Measurement

Operator: Roy

File :1

Data :#1

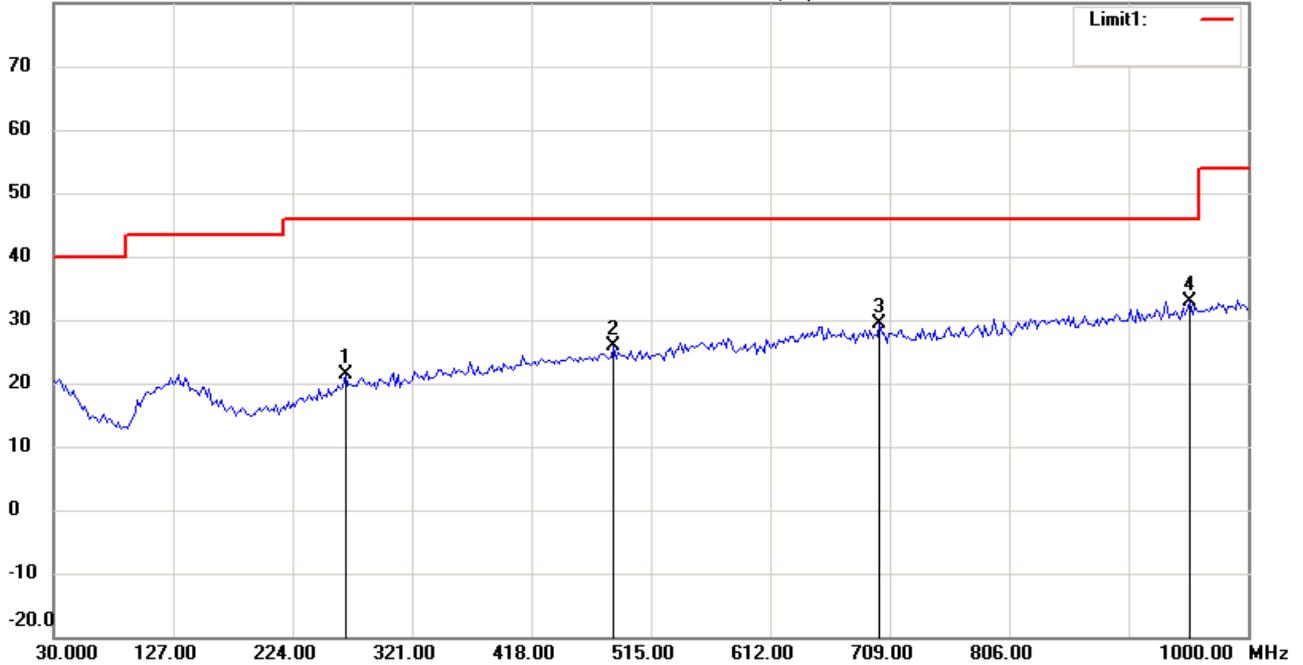
Date: 2016/5/16

Temperature:24 °C

80.0 dBuV/m

Time: 下午 07:58:18

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_30-1000MHz

Polarization: *Horizontal*

EUT : W6M21603-15738

Power : 2.4 Vd.c.

M/N:

Distance: 3m

Test Mode : RX 154.57MHz

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
	267.1542	27.72	peak	-6.41	21.31	46.00	100	100	-24.69	
	484.8697	28.66	peak	-2.68	25.98	46.00	100	165	-20.02	
	700.6413	28.83	peak	0.55	29.38	46.00	100	250	-16.62	
*	953.3467	27.36	peak	5.59	32.95	46.00	100	325	-13.05	



Radiated Emission Measurement

Operator: Roy

File :1

Data :#2

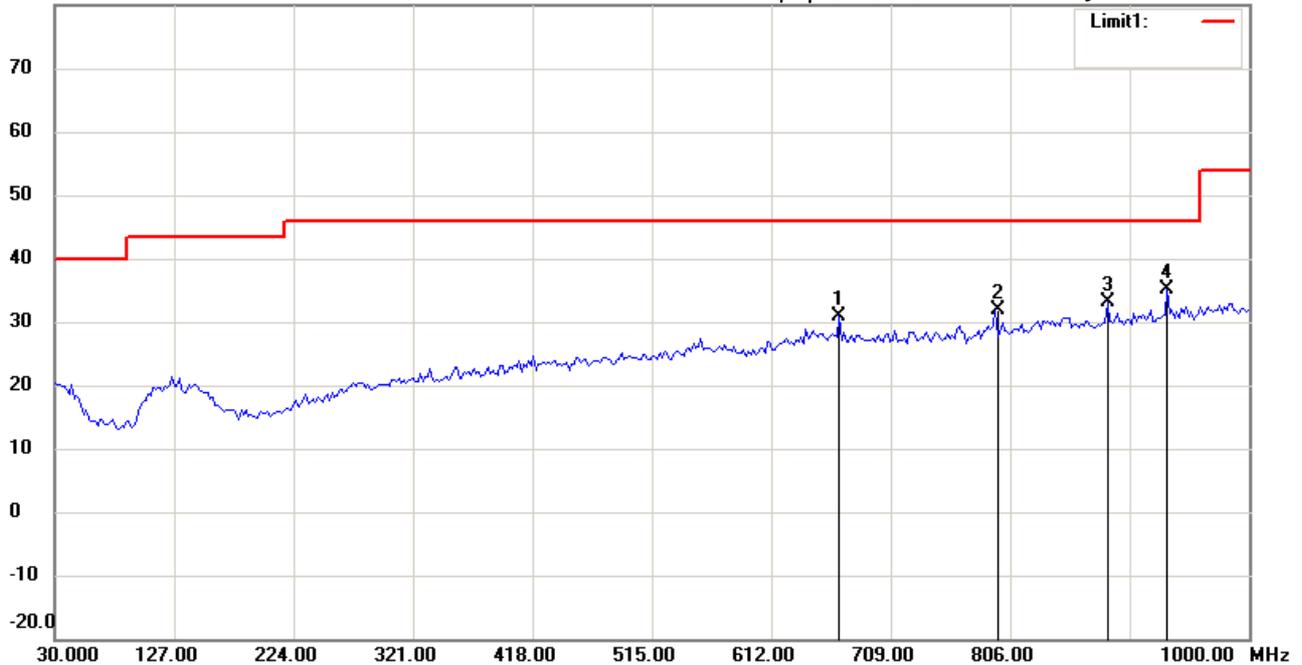
Date: 2016/5/16

Temperature:24 °C

80.0 dBuV/m

Time: 下午 07:59:04

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_30-1000MHz

Polarization: *Vertical*

EUT : W6M21603-15738

Power : 2.4 Vd.c.

M/N:

Distance: 3m

Test Mode : RX 154.57MHz

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
	667.5952	30.04	peak	0.90	30.94	46.00	100	130	-15.06	
	793.9480	30.15	peak	1.70	31.85	46.00	100	240	-14.15	
	885.3106	29.39	peak	3.84	33.23	46.00	100	85	-12.77	
*	933.9078	30.21	peak	5.01	35.22	46.00	100	95	-10.78	



Radiated Emission Measurement

Operator: Roy

File :3

Data :#1

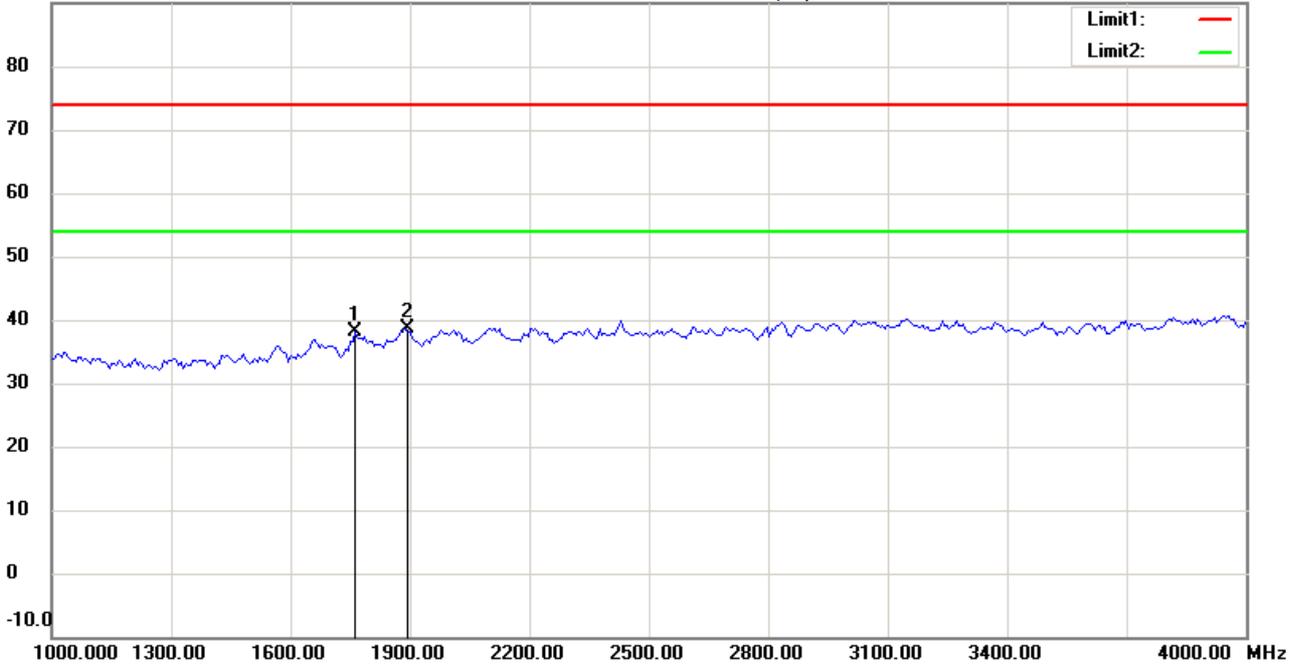
Date: 2016/5/16

Temperature:24 °C

90.0 dBuV/m

Time: 下午 08:41:31

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_Above 1GHz\_PK

Polarization: *Horizontal*

EUT : W6M21603-15738

Power : 2.4 Vd.c.

M/N:

Distance: 3m

Test Mode : RX 154.57MHz

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
	1763.527	45.19	peak	-6.98	38.21	74.00	100	235	-35.79	
*	1889.780	44.54	peak	-5.98	38.56	74.00	100	310	-35.44	



Radiated Emission Measurement

Operator: Roy

File :3

Data :#2

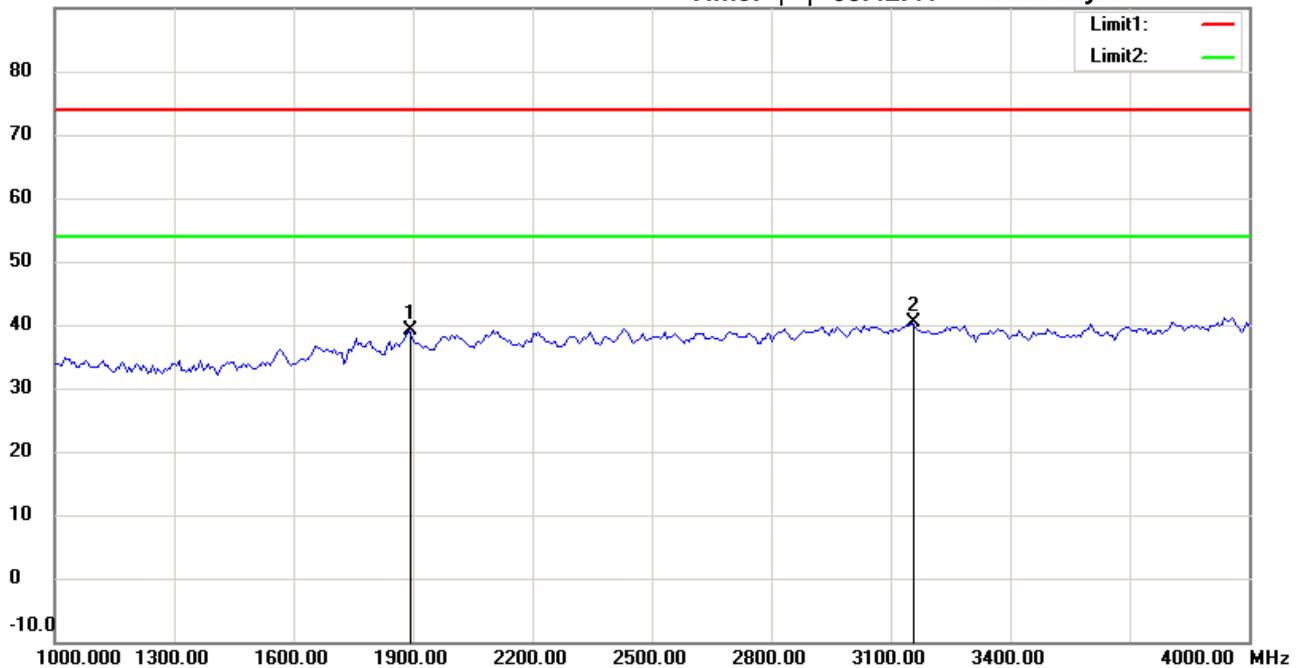
Date: 2016/5/16

Temperature:24 °C

90.0 dBuV/m

Time: 下午 08:42:41

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_Above 1GHz\_PK

Polarization: *Vertical*

EUT : W6M21603-15738

Power : 2.4 Vd.c.

M/N:

Distance: 3m

Test Mode : RX 154.57MHz

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
	1889.780	45.04	peak	-5.98	39.06	74.00	100	195	-34.94	
*	3152.305	43.09	peak	-2.80	40.29	74.00	100	100	-33.71	



Radiated Emission Measurement

Operator: Roy

File :1

Data :#1

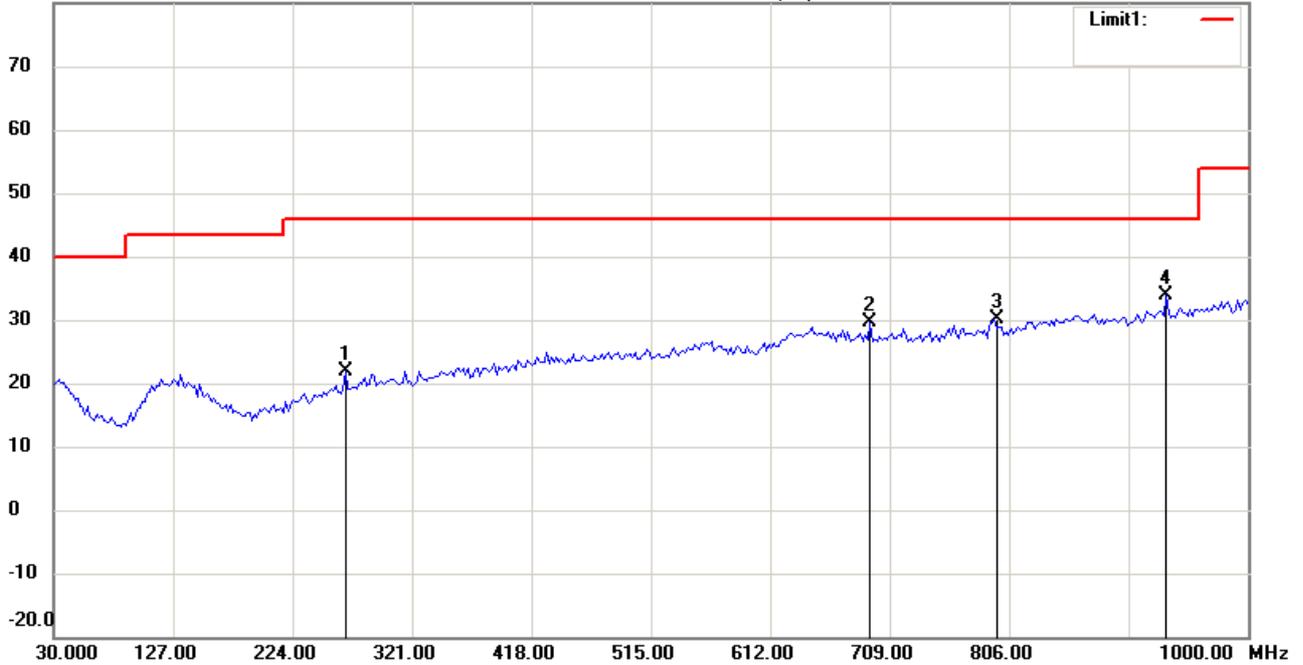
Date: 2016/5/16

Temperature:24 °C

80.0 dBuV/m

Time: 下午 08:01:00

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_30-1000MHz

EUT : W6M21603-15738

M/N:

Test Mode : RX 154.6MHz

Note :

Polarization: *Horizontal*

Power : 2.4 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
	267.1542	28.23	peak	-6.41	21.82	46.00	100	105	-24.18	
	692.8656	29.01	peak	0.62	29.63	46.00	100	45	-16.37	
	793.9480	28.41	peak	1.70	30.11	46.00	100	220	-15.89	
*	933.9077	28.77	peak	5.01	33.78	46.00	100	190	-12.22	



Radiated Emission Measurement

Operator: Roy

File :1

Data :#2

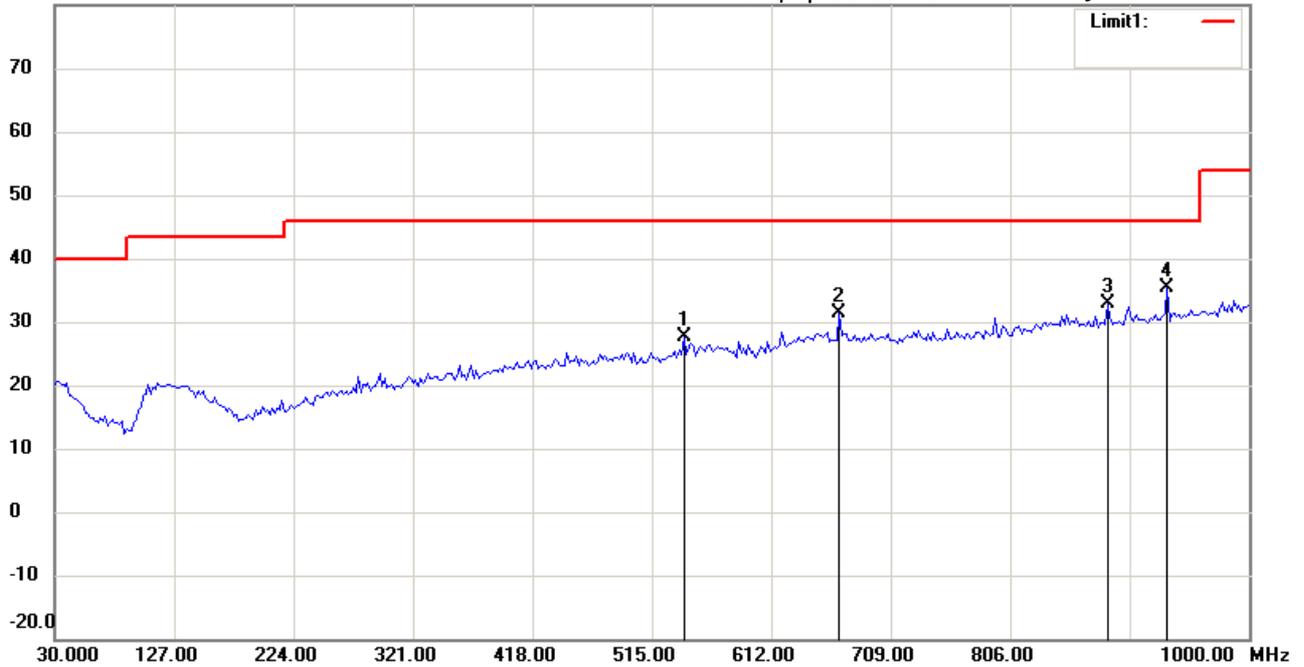
Date: 2016/5/16

Temperature:24 °C

80.0 dBuV/m

Time: 下午 08:01:45

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_30-1000MHz

EUT : W6M21603-15738

M/N:

Test Mode : RX 154.6MHz

Note :

Polarization: *Vertical*

Power : 2.4 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
	541.2425	29.01	peak	-1.39	27.62	46.00	100	280	-18.38	
	667.5952	30.48	peak	0.90	31.38	46.00	100	215	-14.62	
	885.3106	28.98	peak	3.84	32.82	46.00	100	60	-13.18	
*	933.9078	30.49	peak	5.01	35.50	46.00	100	70	-10.50	



Radiated Emission Measurement

Operator: Roy

File :3

Data :#1

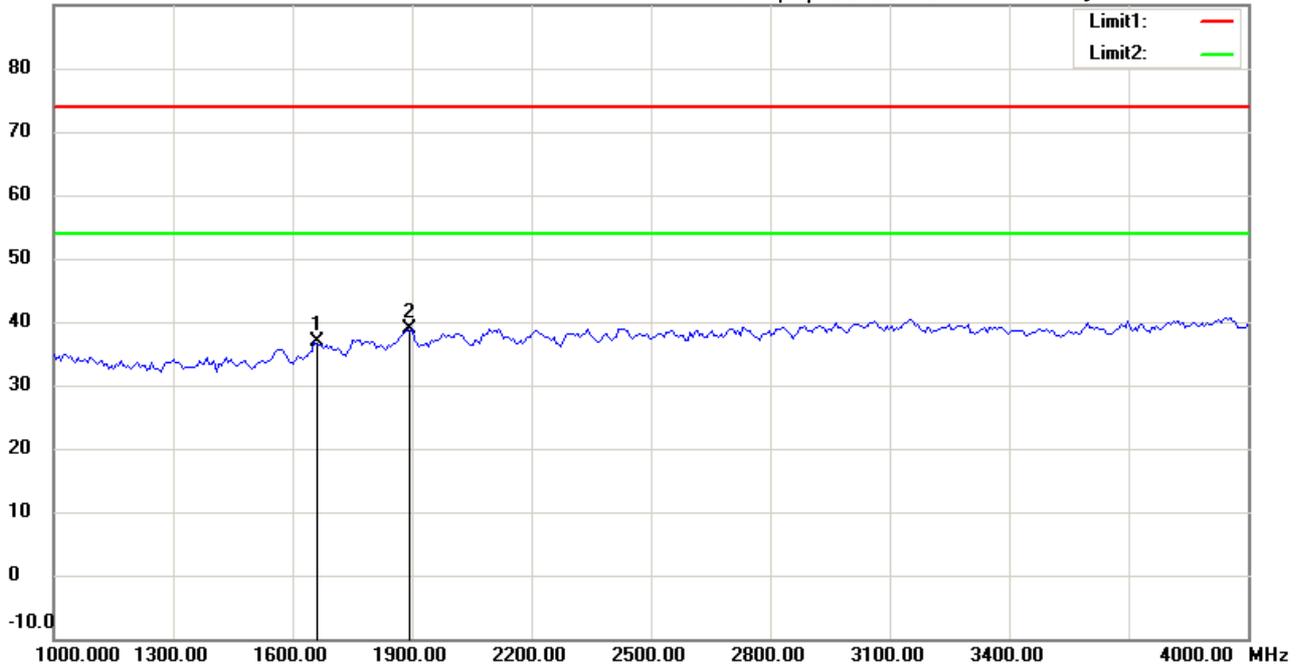
Date: 2016/5/16

Temperature:24 °C

90.0 dBuV/m

Time: 下午 08:38:49

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_Above 1GHz\_PK

Polarization: *Horizontal*

EUT : W6M21603-15738

Power : 2.4 Vd.c.

M/N:

Distance: 3m

Test Mode : RX 154.6MHz

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
	1655.311	44.41	peak	-7.61	36.80	74.00	100	225	-37.20	
*	1889.780	44.82	peak	-5.98	38.84	74.00	100	280	-35.16	



Radiated Emission Measurement

Operator: Roy

File :3

Data :#2

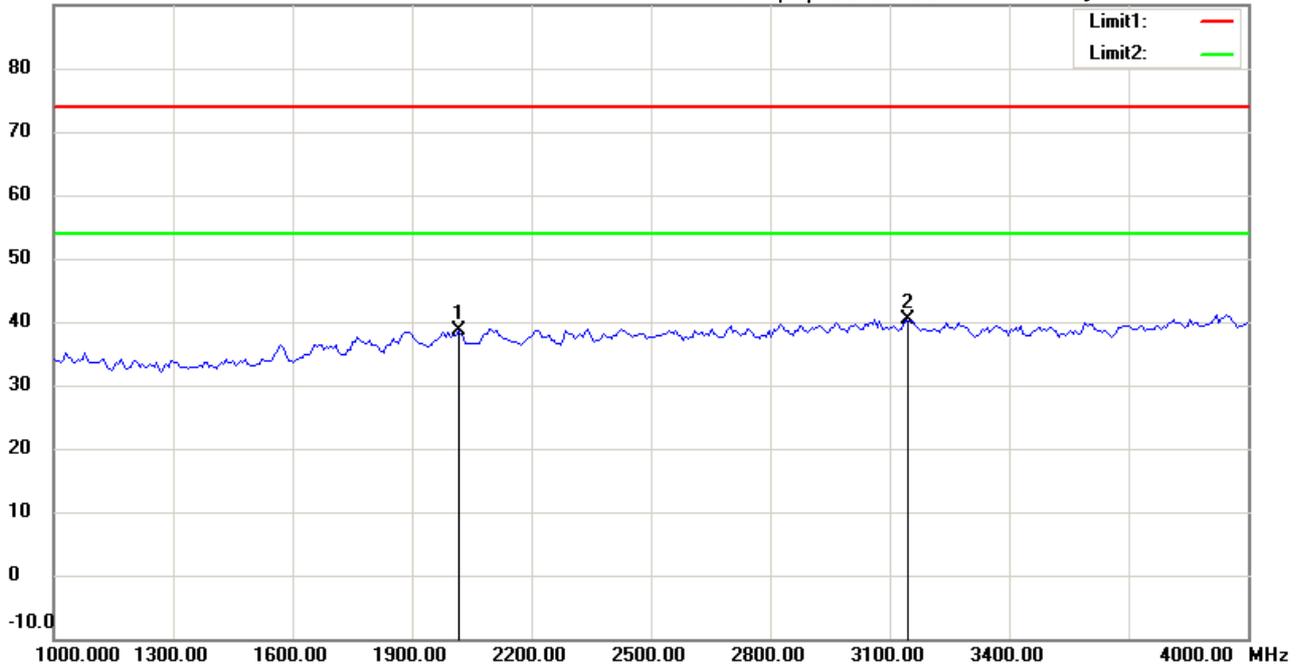
Date: 2016/5/16

Temperature:24 °C

90.0 dBuV/m

Time: 下午 08:39:59

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_Above 1GHz\_PK

Polarization: *Vertical*

EUT : W6M21603-15738

Power : 2.4 Vd.c.

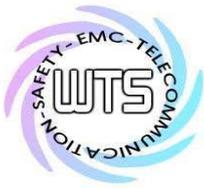
M/N:

Distance: 3m

Test Mode : RX 154.6MHz

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
	2016.032	44.12	peak	-5.52	38.60	74.00	100	115	-35.40	
*	3140.281	43.12	peak	-2.82	40.30	74.00	100	60	-33.70	



Registration number: W6M21603-15738-P-15B

## **Appendix**

**RX\_SuperLong (Portable Telescoping Antenna 013-00277-00)**



Radiated Emission Measurement

Operator: Roy

File :1

Data :#2

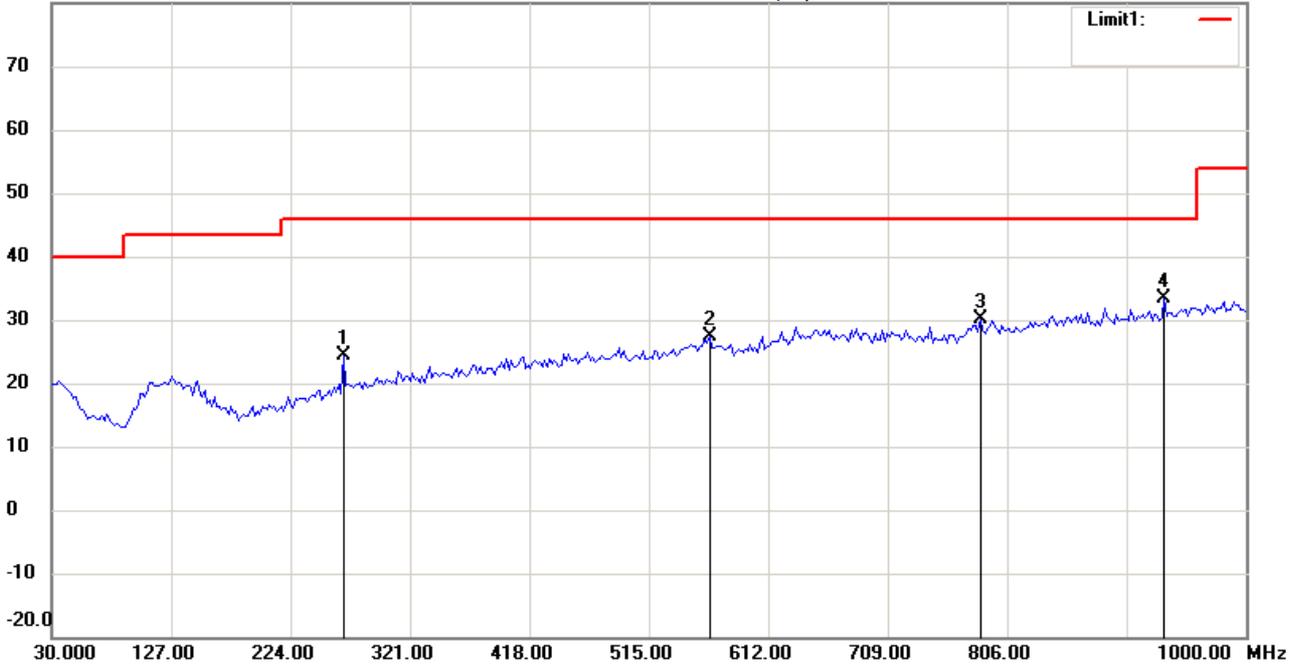
Date: 2016/5/16

Temperature:24 °C

80.0 dBuV/m

Time: 下午 07:24:24

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_30-1000MHz

Polarization: *Horizontal*

EUT : W6M21603-15738

Power : 2.4 Vd.c.

M/N:

Distance: 3m

Test Mode : RX 151.82MHz

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
	267.1542	30.80	peak	-6.41	24.39	46.00	100	170	-21.61	
	564.5691	28.60	peak	-1.18	27.42	46.00	100	295	-18.58	
	784.2285	28.56	peak	1.54	30.10	46.00	100	135	-15.90	
*	933.9077	28.48	peak	5.01	33.49	46.00	100	220	-12.51	



Radiated Emission Measurement

Operator: Roy

File :1

Data :#3

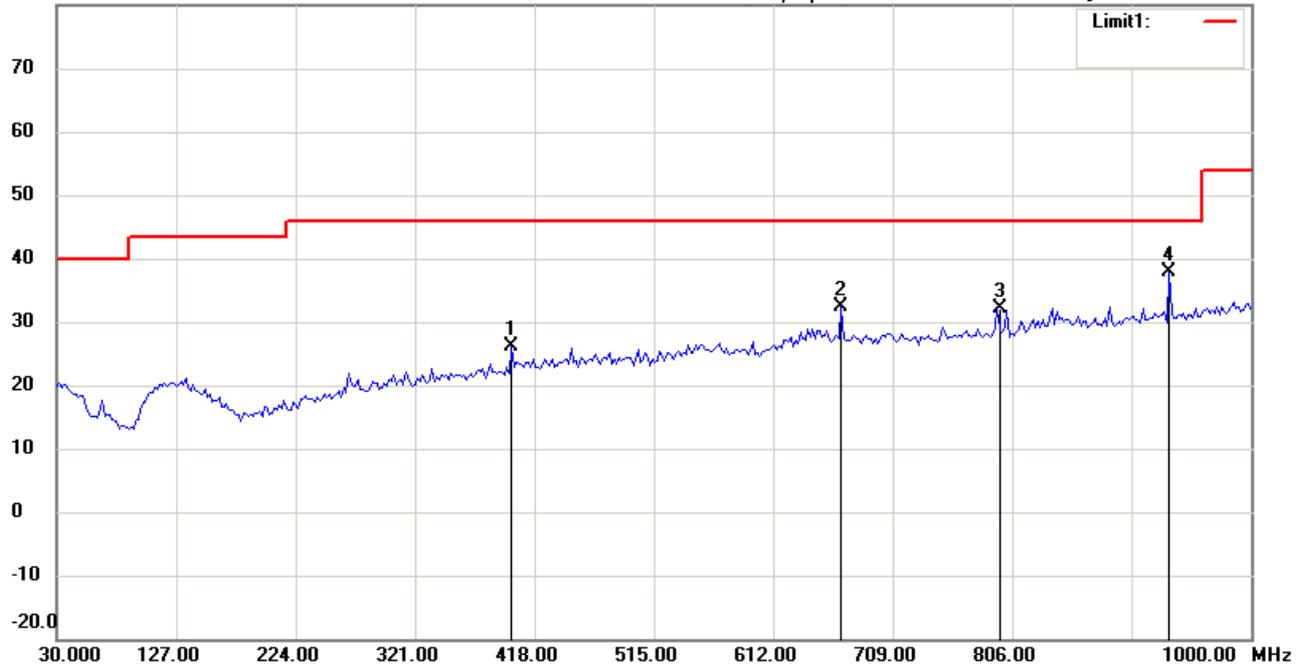
Date: 2016/5/16

Temperature:24 °C

80.0 dBuV/m

Time: 下午 07:25:17

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_30-1000MHz

EUT : W6M21603-15738

M/N:

Test Mode : RX 151.82MHz

Note :

Polarization: *Vertical*

Power : 2.4 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
	399.3387	29.73	peak	-3.69	26.04	46.00	100	190	-19.96	
	667.5951	31.42	peak	0.90	32.32	46.00	100	40	-13.68	
	793.9480	30.36	peak	1.70	32.06	46.00	100	110	-13.94	
*	933.9077	32.89	peak	5.01	37.90	46.00	100	335	-8.10	



Radiated Emission Measurement

Operator: Roy

File :3

Data :#1

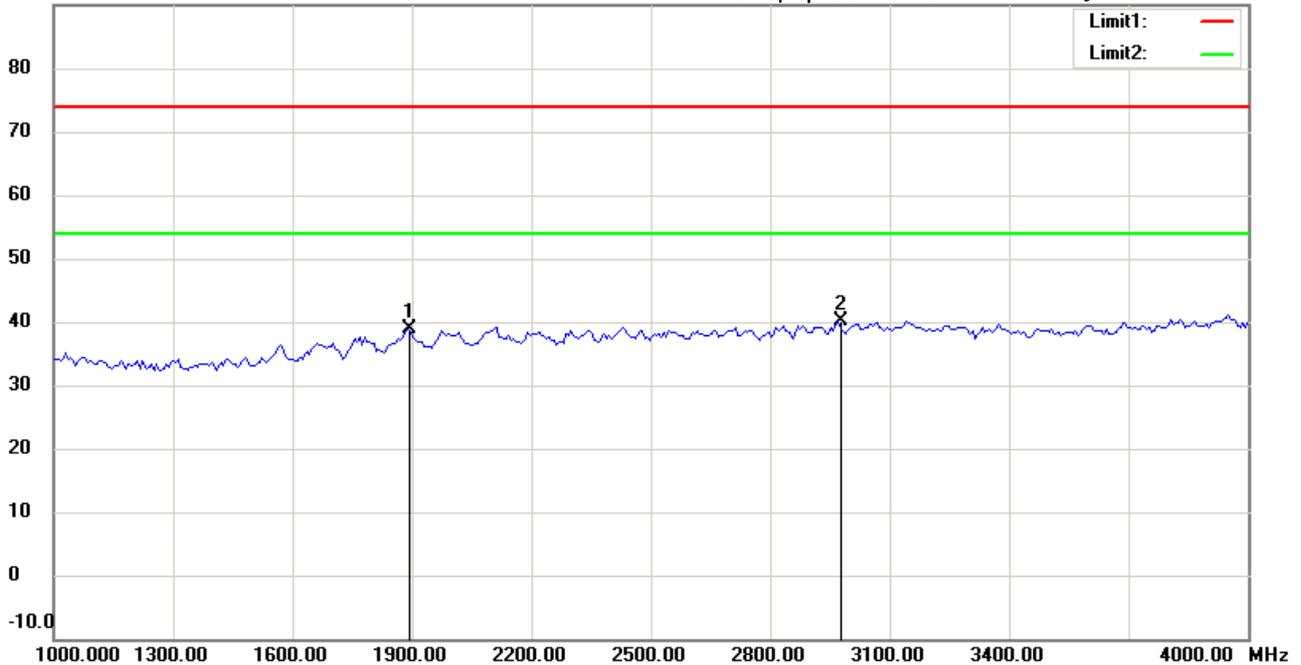
Date: 2016/5/16

Temperature:24 °C

90.0 dBuV/m

Time: 下午 08:49:23

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_Above 1GHz\_PK

Polarization: *Horizontal*

EUT : W6M21603-15738

Power : 2.4 Vd.c.

M/N:

Distance: 3m

Test Mode : RX 151.82MHz

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
	1889.780	44.97	peak	-5.98	38.99	74.00	100	155	-35.01	
*	2971.944	43.21	peak	-3.19	40.02	74.00	100	75	-33.98	



Radiated Emission Measurement

Operator: Roy

File :3

Data :#2

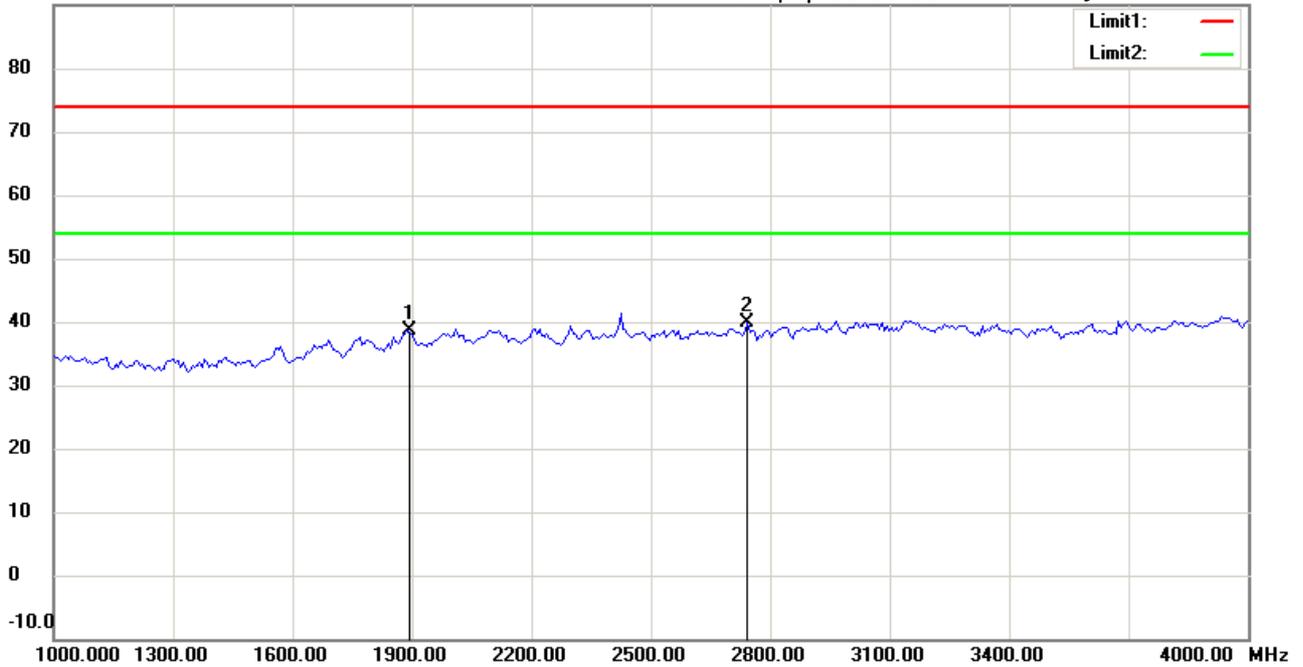
Date: 2016/5/16

Temperature:24 °C

90.0 dBuV/m

Time: 下午 08:50:36

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_Above 1GHz\_PK

Polarization: *Vertical*

EUT : W6M21603-15738

Power : 2.4 Vd.c.

M/N:

Distance: 3m

Test Mode : RX 151.82MHz

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
	1889.780	44.58	peak	-5.98	38.60	74.00	100	305	-35.40	
*	2743.487	43.82	peak	-4.05	39.77	74.00	100	60	-34.23	



Radiated Emission Measurement

Operator: Roy

File :1

Data :#1

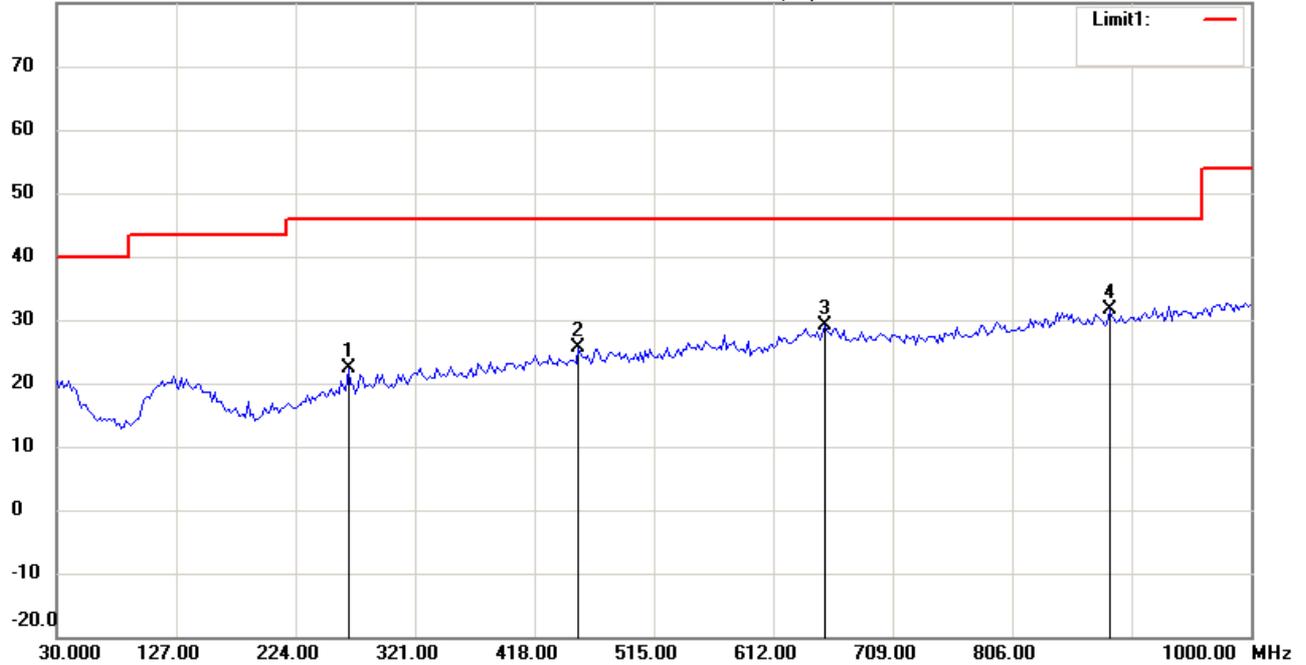
Date: 2016/5/16

Temperature:24 °C

80.0 dBuV/m

Time: 下午 07:34:55

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_30-1000MHz

Polarization: *Horizontal*

EUT : W6M21603-15738

Power : 2.4 Vd.c.

M/N:

Distance: 3m

Test Mode : RX 154.57MHz

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
	267.1542	28.83	peak	-6.41	22.42	46.00	100	260	-23.58	
	453.7674	28.39	peak	-2.75	25.64	46.00	100	305	-20.36	
	653.9880	27.97	peak	1.05	29.02	46.00	100	240	-16.98	
*	885.3106	27.70	peak	3.84	31.54	46.00	100	150	-14.46	



Radiated Emission Measurement

Operator: Roy

File :1

Data :#2

Date: 2016/5/16

Temperature:24 °C

80.0 dBuV/m

Time: 下午 07:35:40

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_30-1000MHz

EUT : W6M21603-15738

M/N:

Test Mode : RX 154.57MHz

Note :

Polarization: *Vertical*

Power : 2.4 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
	399.3387	29.39	peak	-3.69	25.70	46.00	100	180	-20.30	
	667.5952	30.86	peak	0.90	31.76	46.00	100	45	-14.24	
	786.1723	29.14	peak	1.57	30.71	46.00	100	305	-15.29	
*	933.9078	33.50	peak	5.01	38.51	46.00	100	120	-7.49	



Radiated Emission Measurement

Operator: Roy

File :3

Data :#1

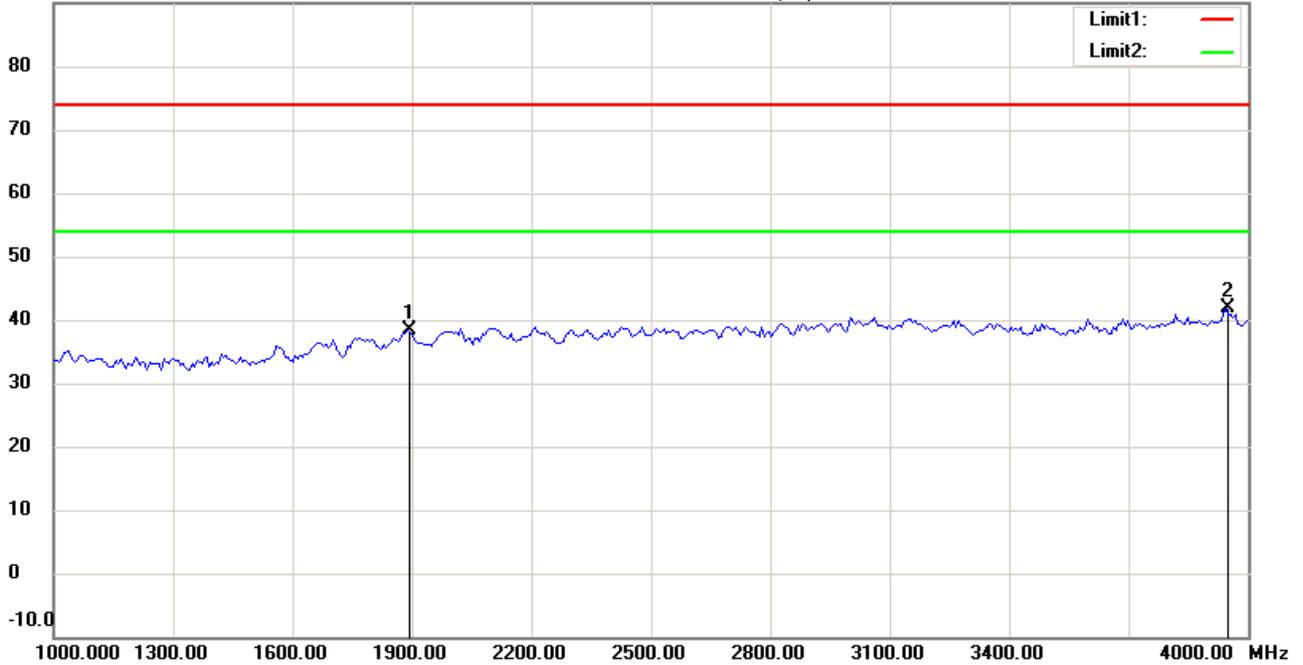
Date: 2016/5/16

Temperature:24 °C

90.0 dBuV/m

Time: 下午 08:44:21

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_Above 1GHz\_PK

Polarization: *Horizontal*

EUT : W6M21603-15738

Power : 2.4 Vd.c.

M/N:

Distance: 3m

Test Mode : RX 154.57MHz

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
	1889.780	44.41	peak	-5.98	38.43	74.00	100	85	-35.57	
*	3945.892	43.21	peak	-1.24	41.97	74.00	100	240	-32.03	



Radiated Emission Measurement

Operator: Roy

File :3

Data :#2

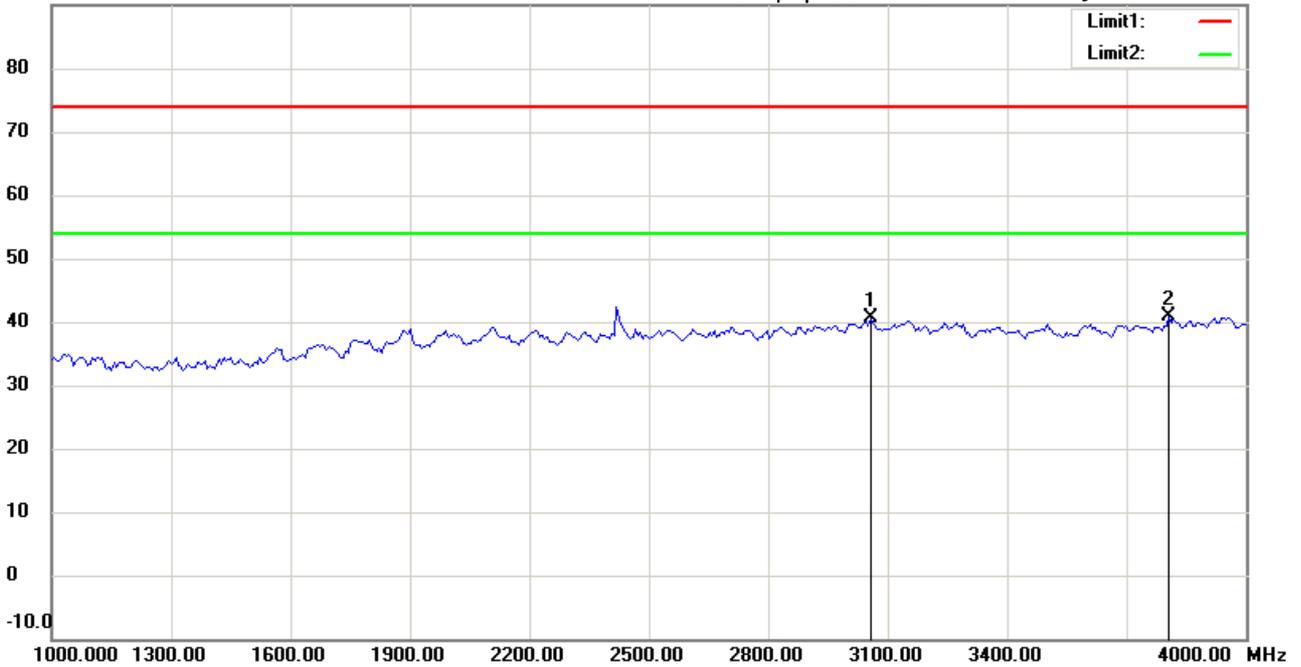
Date: 2016/5/16

Temperature:24 °C

90.0 dBuV/m

Time: 下午 08:45:18

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_Above 1GHz\_PK

Polarization: *Vertical*

EUT : W6M21603-15738

Power : 2.4 Vd.c.

M/N:

Distance: 3m

Test Mode : RX 154.57MHz

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
	3056.112	43.71	peak	-2.96	40.75	74.00	100	35	-33.25	
*	3807.615	43.23	peak	-2.24	40.99	74.00	100	110	-33.01	



Radiated Emission Measurement

Operator: Roy

File :1

Data :#1

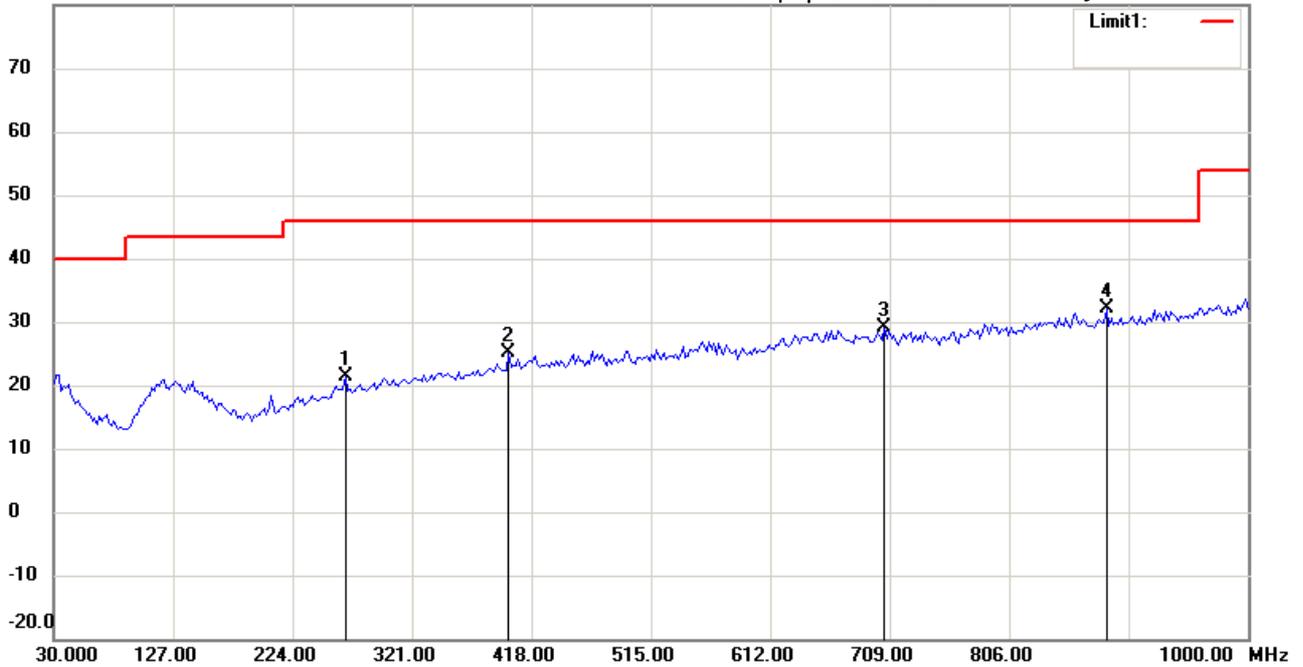
Date: 2016/5/16

Temperature:24 °C

80.0 dBuV/m

Time: 下午 07:37:16

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_30-1000MHz

Polarization: *Horizontal*

EUT : W6M21603-15738

Power : 2.4 Vd.c.

M/N:

Distance: 3m

Test Mode : RX 154.6MHz

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
	267.1542	27.73	peak	-6.41	21.32	46.00	100	245	-24.68	
	399.3387	28.72	peak	-3.69	25.03	46.00	100	105	-20.97	
	704.5290	28.60	peak	0.58	29.18	46.00	100	140	-16.82	
*	885.3106	28.20	peak	3.84	32.04	46.00	100	300	-13.96	



Radiated Emission Measurement

Operator: Roy

File :1

Data :#2

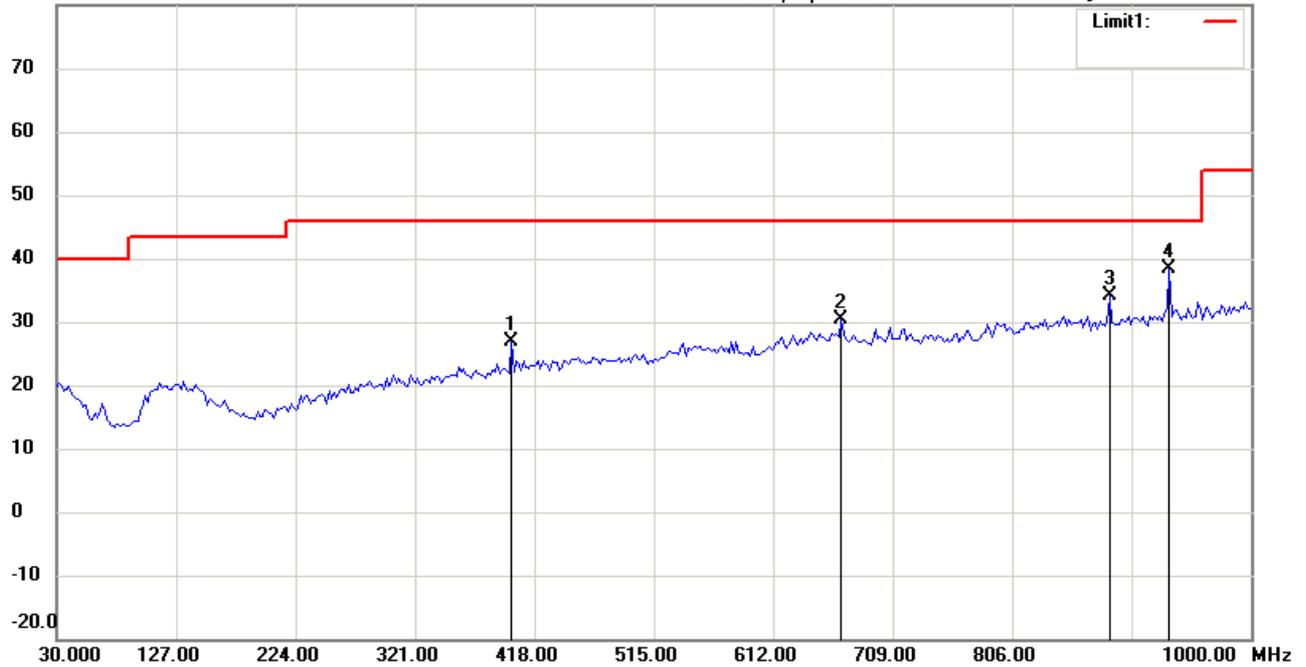
Date: 2016/5/16

Temperature:24 °C

80.0 dBuV/m

Time: 下午 07:38:02

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_30-1000MHz

EUT : W6M21603-15738

M/N:

Test Mode : RX 154.6MHz

Note :

Polarization: *Vertical*

Power : 2.4 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
	399.3387	30.54	peak	-3.69	26.85	46.00	100	270	-19.15	
	667.5952	29.60	peak	0.90	30.50	46.00	100	90	-15.50	
	885.3106	30.17	peak	3.84	34.01	46.00	100	220	-11.99	
*	933.9078	33.32	peak	5.01	38.33	46.00	100	305	-7.67	



Radiated Emission Measurement

Operator: Roy

File :3

Data :#1

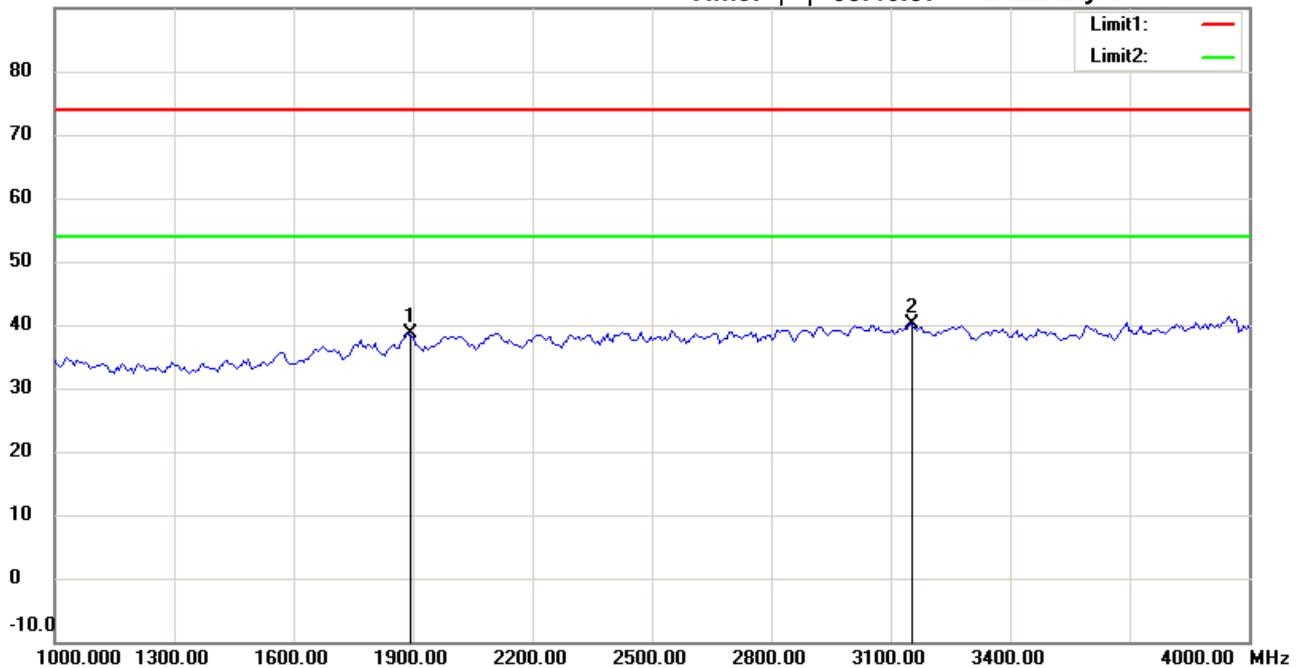
Date: 2016/5/16

Temperature:24 °C

90.0 dBuV/m

Time: 下午 08:46:57

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_Above 1GHz\_PK

Polarization: *Horizontal*

EUT : W6M21603-15738

Power : 2.4 Vd.c.

M/N:

Distance: 3m

Test Mode : RX 154.6MHz

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
	1889.780	44.72	peak	-5.98	38.74	74.00	100	190	-35.26	
*	3146.293	43.06	peak	-2.81	40.25	74.00	100	100	-33.75	



Radiated Emission Measurement

Operator: Roy

File :3

Data :#2

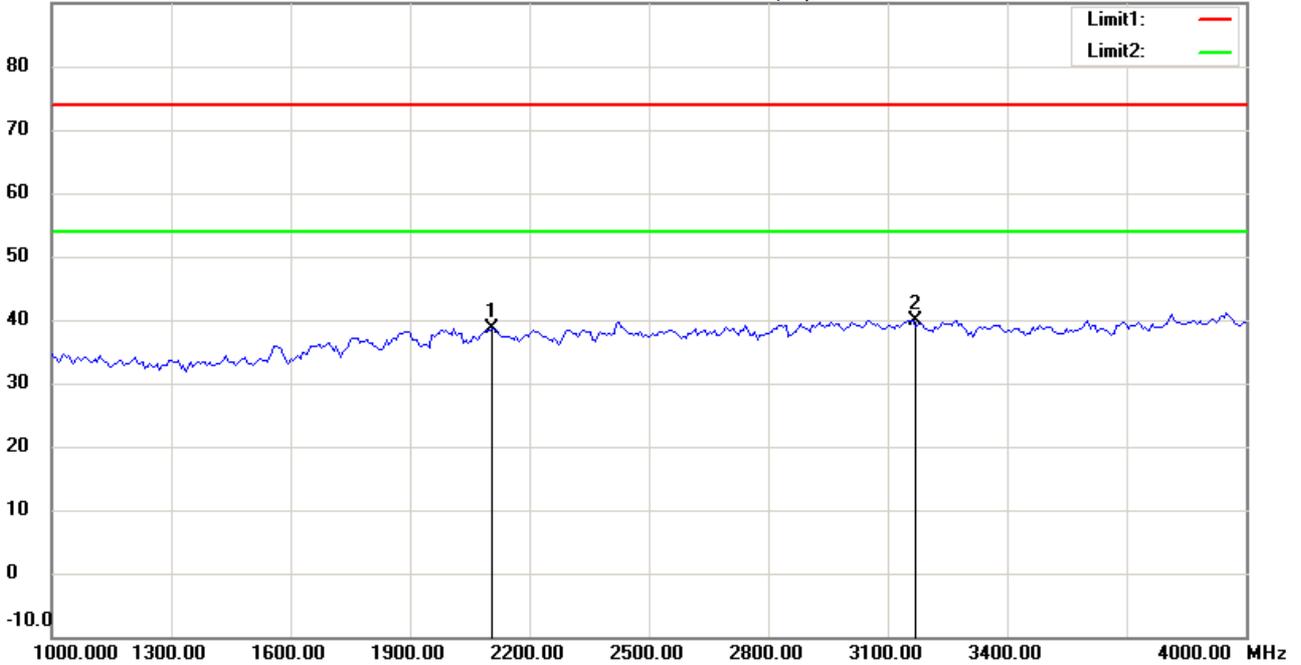
Date: 2016/5/16

Temperature:24 °C

90.0 dBuV/m

Time: 下午 08:47:51

Humidity:60 %



Site : Chamber

Condition : FCC\_part 15 RE-Class B\_Above 1GHz\_PK

Polarization: *Vertical*

EUT : W6M21603-15738

Power : 2.4 Vd.c.

M/N:

Distance: 3m

Test Mode : RX 154.6MHz

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
	2106.212	44.02	peak	-5.45	38.57	74.00	100	225	-35.43	
*	3164.329	42.79	peak	-2.79	40.00	74.00	100	70	-34.00	