### FCC PART 15 SUBPART C TEST REPORT

for

Wireless Keyboard

Model No.: MD-5110

FCC ID: 2AAIL-MD5110

of

Applicant: Mae Tay Precision Co.,Ltd.

Address: 6F.,No.99, Ruihu St., Neihu Dist., Taipei City 114, Taiwan, R.O.C.

Tested and Prepared

by

Worldwide Testing Services (Taiwan) Co., Ltd.

FCC Registration No.: 930600

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

A2LA Accredited No.: 2732.01





Report No.: W6M21508-15245-C-1

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



Registration number: W6M21508-15245-C-1 FCC ID: 2AAIL-MD5110

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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 is performance generally conforms to representative cases of communications equipment.

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

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

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. 1

#### **Tester:**

August 27, 2015		Mark Cheng	Mark Cheng.
Date	WTS-Lab.	Name	Signature

#### **Technical responsibility for area of testing:**

August 27, 2015		Kevin Wang	Kevin Wong
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: 2730.01

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: Mae Tay Precision Co.,Ltd.

Street: 6F., No. 99, Ruihu St., Neihu Dist.,

Town: Taipei City 114,
Country: Taiwan, R.O.C.
Telephone: 886-2-7720-0000
Fax: 886-2-7720-0700

Teletex: ./.

#### 1.4 Application details

Date of receipt of test item: August 22, 2015

Date of test: from August 22, 2015 to August 27, 2015

### 1.5 General information of Test item

Type of test item: Wireless Keyboard

Model Number: MD-5110

Multi-listing model number: ./.
Brand Name: ASUS
Photos: see Annex

#### **Technical data**

Frequency band: 2.400-2.4835 GHz Operation Frequency: 2.408-2.474 GHz

Frequency 1: 2.408 GHz
Frequency 2: 2.440 GHz
Frequency 3: 2.474 GHz
Operation modes: duplex
Modulation Type: FSK

Antenna type: PCB Antenna
Power supply: Battery 1.5Vdc\*2

#### **Manufacturer:** (if different from applicant)

 Name:
 ./.

 Street:
 ./.

 Town:
 ./.

 Country:
 ./.

Additional information: ./.

#### 1.6 Test standards

Technical standard: FCC RULES PART 15 SUBPART C § 15.249 (2014-10)

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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 2.5 were ascertained in the course of the tests performed.	

### 2.2 Test environment

Temperature: 23 °C

Relative humidity content: 20 ... 75 %

Air pressure: 86 ... 103 kPa

Details Power supply: Battery 1.5Vdc\*2

Extreme conditions parameters: Not required



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#### 2.3 **Test Equipment List**

No.	Test equipment	Туре	Serial No.	Manufacturer	Cal. Date	Next Cal. Date
ETSTW-CE 001	EMI TEST RECEIVER	ESHS10	842121/013	R&S	2015/8/25	2016/8/24
ETSTW-CE 003	AC POWER SOURCE	APS-9102	D161137	GW	Functio	on Test
ETSTW-CE 008	HF-EICHLEITUNG RF STEP ATTENUATOR 139dB DPSP	334.6010.02	844581/024	R&S	Functio	on 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	2014/10/13	2015/10/12
ETSTW-RE 004	EMI TEST RECEIVER	ESI 40	832427/004	R&S	2015/8/25	2016/8/24
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	on Test
ETSTW-RE 013	TUNABLE BANDREJECT FILTER	D.C 0336	397	K&L	Functio	on 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	2015/3/17	2016/3/16
ETSTW-RE 045	ESA-E SERIES SPECTRUM ANALYZER	E4404B	MY45111242	Agilent	Pre-te	st Use
ETSTW-RE 049	TRILOG Super Broadband test Antenna	VULB 9160	9160-3185	Schwarzbeck	2015/3/19	2016/3/18
ETSTW-RE 050	Attenuator 10dB	50HF-010-1	None	JFW	2015/3/2	2016/3/1
ETSTW-RE 051	Attenuator 6dB	50HF-006-1	None	JFW	2015/3/2	2016/3/1
ETSTW-RE 053	Attenuator 3dB	50HF-003-1	None	JFW	2015/3/2	2016/3/1
ETSTW-RE 055	SPECTRUM ANALYZER	FSU 26	200074	R&S	2015/6/8	2016/6/7
ETSTW-RE 060	Attenuator 30dB	5015-30	F651012z-01	ATM	2015/3/2	2016/3/1
ETSTW-RE 062	Amplifier Module	CHC 2	None	KMIC	2014/11/26	2015/11/25
ETSTW-RE 064	Bluetooth Test Set	MT8852B-042	6K00005709	Anritsu	Functio	on Test
ETSTW-RE 069	Double-Ridged Guide Horn Antenna	3117	00069377	ETS-Lindgren	Function	on Test
ETSTW-RE 072	CELL SITE TEST SET	8921A	3339A00375	HP	2014/10/9	2015/10/8
ETSTW-RE 088	SOLID STATE AMPLIFIER	KMA180265A01	99057	KMIC	2014/9/22	2015/9/21
ETSTW-RE 099	DC Block	50DB-007-1	None	JFW	2015/3/2	2016/3/1
ETSTW-RE 106	Humidity Temperature Meter	TES-1366	091011113	TES	2015/8/14	2016/8/13
ETSTW-RE 111	TRILOG Super Broadband test Antenna	VULB 9160	9160-3309	Schwarz beck	2014/12/5	2015/12/4
ETSTW-RE 112	AC POWER SOURCE	TFC-1005	T-0A023536	T-Power	Functi	on test
ETSTW-RE 115	2.4GHz Notch Filter	N0124411	473874	MICROWAVE CIRCUITS	2015/1/7	2016/1/6
ETSTW-RE 120	RF Player	MP9200	MP9210-111022	ADIVIC	Functi	on 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	2015/8/12	2016/8/11
ETSTW-RE 126	5GHz Notch filter	5NSL11- 5800/E221.3-O/O	1	K&L Microwave	2015/8/12	2016/8/11



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ETSTW-RE 127	RF Switch Box	RFS-01	None	WTS	2015/3/2	2016/3/1
ETSTW-RE 128	5.3GHz Notch filter	N0153001	SN487233	Microwave Circits	2015/8/12	2016/8/11
ETSTW-RE 129	5.5GHz Notch filter	N0555984	SN487234	Microwave Circits	2015/8/12	2016/8/11
ETSTW-RE 130	Handheld RF Spectrum Analyzer	N9340A	CN0147000204	Agilent	Pre-te	st Use
ETSTW-GSM 002	Universal Radio Communication Tester	CMU 200	109439	R&S	2015/8/14	2016/8/13
ETSTW-GSM 003	Radio Communication Analyzer	MT8820C	6201342073	Anritsu	2015/3/5	2016/3/4
ETSTW-GSM 019	Band Reject Filter	WRCTF824/849- 822/851-40 /12+9SS	3	WI	2015/1/7	2016/1/6
ETSTW-GSM 020	Band Reject Filter	WRCD1747/1748- 1743/1752-32/5SS	1	WI	2015/1/7	2016/1/6
ETSTW-GSM 021	Band Reject Filter	WRCD1879.5/1880.5 -1875.5/1884.5- 32/5SS	3	WI	2015/1/7	2016/1/6
ETSTW-GSM 022	Band Reject Filter	WRCT901.9/903.1- 904.25-50/8SS	1	WI	2015/1/7	2016/1/6
ETSTW-GSM 023	Power Divider	4901.19.A	None	SUHNER	2014/9/17	2015/9/16
ETSTW-Cable 010	BNC Cable	5 M BNC Cable	None	JYE BAO CO.,LTD.	2014/10/15	2015/10/14
ETSTW-Cable 011	BNC Cable	BNC Cable 1	None	JYE BAO CO.,LTD.	Pre-test I	Use NCR
ETSTW-Cable 012	N TYPE To SMA Cable	Cable 012	None	JYE BAO CO.,LTD.	2014/10/15	2015/10/14
ETSTW-Cable 016	BNC Cable	Switch Box	B Cable 1	Schwarz beck	2015/2/25	2016/2/24
ETSTW-Cable 017	BNC Cable	X Cable	B Cable 2	Schwarz beck	2015/2/25	2016/2/24
ETSTW-Cable 018	BNC Cable	Y Cable	B Cable 3	Schwarz beck	2015/2/25	2016/2/24
ETSTW-Cable 019	BNC Cable	Z Cable	B Cable 4	Schwarz beck	2015/2/25	2016/2/24
ETSTW-Cable 020	N TYPE Cable	OATS Cable 1	N30N30-L335-15M	JYE BAO CO.,LTD.	2015/4/23	2016/4/22
ETSTW-Cable 022	N TYPE Cable	5006	0002	JYE BAO CO.,LTD.	2015/3/19	2016/3/18
ETSTW-Cable 026	Microwave Cable	SUCOFLEX 104	279075	HUBER+SUHNER	2015/3/2	2016/3/1
ETSTW-Cable 027	Microwave Cable	SUCOFLEX 104	279083	HUBER+SUHNER	2015/5/14	2016/5/13
ETSTW-Cable 028	Microwave Cable	FA147A0015M2020	30064-2	UTIFLEX	2015/1/16	2016/1/15
ETSTW-Cable 029	Microwave Cable	FA147A0015M2020	30064-3	UTIFLEX	2014/9/22	2015/9/21
ETSTW-Cable 030	Microwave Cable	SUCOFLEX 104 (S_Cable 9)	279067	HUBER+SUHNER	2015/3/2	2016/3/1
ETSTW-Cable 031	Microwave Cable	SUCOFLEX 104 (S_Cable 10)	238092	HUBER+SUHNER	2014/11/26	2015/11/25
ETSTW-Cable 043	Microwave Cable	SUCOFLEX 104	317576	HUBER+SUHNER	2014/11/26	2015/11/25
ETSTW-Cable 048	Microwave Cable	SUCOFLEX 104	325518	HUBER+SUHNER	2014/11/26	2015/11/25
ETSTW-Cable 053	N TYPE To SMA Cable	RG142	None	JYE BAO CO.,LTD.	2015/3/19	2016/3/18
ETSTW-Cable 058	Microwave Cable	SUCOFLEX 104	none	HUBER+SUHNER	2015/3/19	2016/3/18
WTSTW-SW 002	EMI TEST SOFTWARE	EZ_EMC	None	Farad	Version E	ETS-03A1

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#### 2.4 General Test Procedure

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

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

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

Example:

Freq (MHz) METER READING + ACF + CABLE LOSS (to the receiver) = FS

 $20 \text{ dB}\mu\text{V} + 10.36 \text{ dB} + 6 \text{ dB} = 36.36 \text{ dB}\mu\text{V/m} \text{ @3m}$ 

ANSI STANDARD C63.4-2009 6.3.1 MEASUREMENT PROCEDURES: The EUT was placed on a table 80 cm height and with dimensions of 1m by 1.5m (non metallic table). The EUT was placed in the centre of the table. The table used for radiated measurements is capable of continuous rotation. The spectrum was scanned from 30 MHz to 10<sup>th</sup> harmonic of the fundamental.

Peak readings were taken in three (3) orthogonal planes and the highest readings.

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

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

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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#### **Test results (enclosure)** <u>3</u>

Test case	Para. Number	Required	Test passed	Test failed
Peak Output Power	15.249 (a)	×	×	
Spurious Emissions radiated – Transmitter operating	15.249 (e)	×	×	
Spurious Emissions conducted – Transmitter operating	15.249 (e)			
Radiated Emission from Digital Part	15.109			
Out of Band Spurious Emission, Band edge-Transmitter operating	15.249 (e)	×	×	
Power Line Conducted Emission	15.207			

The following is intentionally left blank.



Registration number: W6M21508-15245-C-1

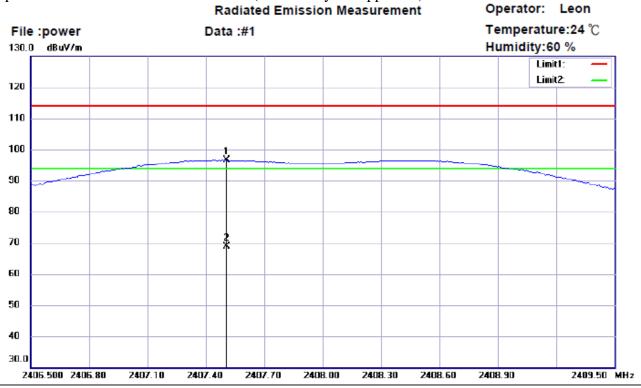
FCC ID: 2AAIL-MD5110

### 3.1 Peak Output Power (transmitter)

FCC Rule: 15.249 (b)

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

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



Site: Chamber

Condition: FCC 15.249 power\_PK Polarization: Horizontal

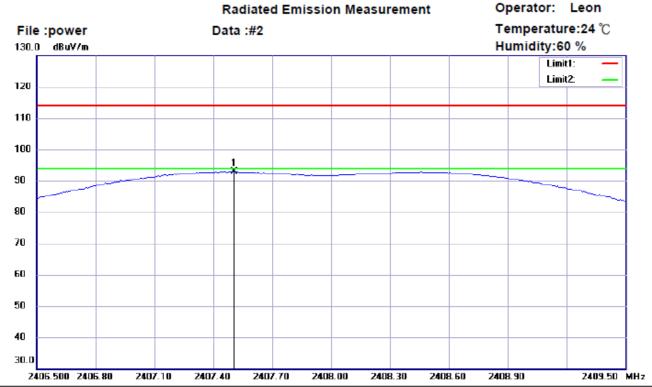
Test Mode: TX 2408MHz

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
*	2407.504	58.43	peak	38.16	96.59	114.00	105	215	-17.41	
	2407.504	30.67	AVG	38.16	68.83	94.00	105	215	-25.17	



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Site: Chamber

Condition: FCC 15.249 power\_PK Polarization: Vertical

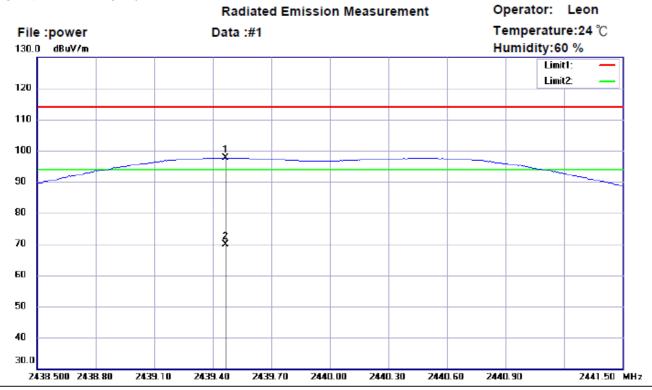
Test Mode: TX 2408MHz

	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
Γ	*	2407.504	54.75	peak	38.16	92.91	114.00	100	90	-21.09	



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Site: Chamber

Condition: FCC 15.249 power\_PK Polarization: Horizontal

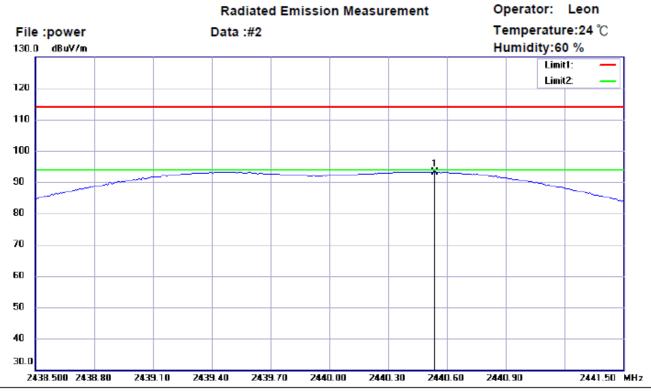
Test Mode: TX 2440MHz

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
*	2439.462	59.42	peak	38.22	97.64	114.00	105	215	-16.36	
	2439.462	31.66	AVG	38.22	69.88	94.00	105	215	-24.12	



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Site: Chamber

Condition: FCC 15.249 power\_PK Polarization: Vertical

EUT: W6M21508-15245 Power: 3 Vd.c.

M/N: Distance: 3m

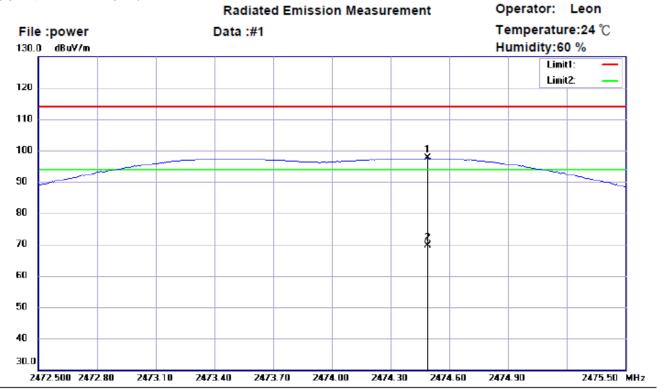
Test Mode: TX 2440MHz

N	۱k.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)		Tab.Pos (deg.)	Margin (dB)	Comment
	*	2440.538	55.00	peak	38.23	93.23	114.00	100	85	-20.77	



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Site: Chamber

Condition: FCC 15.249 power\_PK Polarization: Horizontal

EUT: W6M21508-15245 Power: 3 Vd.c.

M/N: Distance: 3m

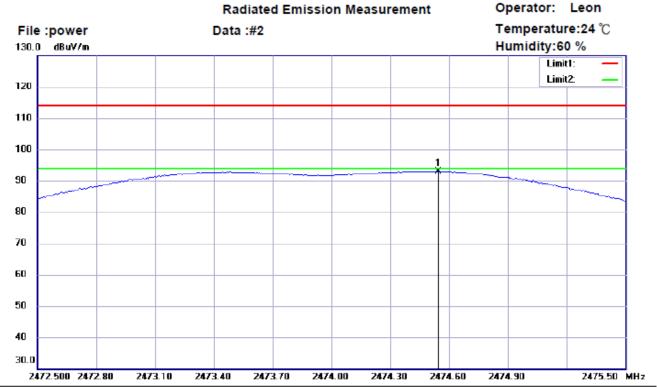
Test Mode: TX 2474MHz

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
*	2474.490	59.21	peak	38.30	97.51	114.00	105	215	-16.49	
	2474.490	31.45	AVG	38.30	69.75	94.00	105	215	-24.25	



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Site: Chamber

Condition: FCC 15.249 power\_PK Polarization: Vertical

Test Mode: TX 2474MHz

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
*	2474.544	54.69	peak	38.30	92.99	114.00	100	85	-21.01	

Test equipment used: ETSTW-RE 004, ETSTW-RE 030, ETSTW-RE 044

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### 3.2 Equivalent isotropic radiated power

Because using an permanent antenna there are no deviations from the radiated test results according 3.1.

### 3.3 RF Exposure Compliance Requirements

Not applicable for this EUT for the low power level.

### 3.4 Out of Band Radiated Emissions

FCC Rule: 15.249 (d)(e), 15.35(b)

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.

For frequency above 1000 MHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For point-to-point operation, the peak field strength shall not exceed 2500 millivolts/meter at 3 meters along the antenna azimuth.

#### Limits:

Frequency of Emission	Field strength	Field Strength
(MHz)	(microvolts/meter)	(dB microvolts/meter)
30 - 88	100	40.0
88 – 216	150	43.5
216 – 960	200	46.5
Above 960	500	54.0

For frequencies above 1 GHz (Peak measurements).

Limit + 20 dB  $54.0 \text{ dB}\mu\text{V/m} + 20 \text{ dB} = 74 \text{dB}\mu\text{V/m}$ 

Or

Must be attenuated at least 50dB below the level of fundament

Test equipment used: ETSTW-RE 004, ETSTW-RE 111, ETSTW-RE 030, ETSTW-RE 044

Explanation: Please see attached diagram as appendix.

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### 3.5 Spurious emission (tx)

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

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.

For frequencies above 1000 MHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For point-to-point operation, the peak field strength shall not exceed 2500 millivolts/meter at 3 meters along the antenna azimuth.

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

The peak and average spurious emission plots was measured with the average limits. The critical peak value listed in the table agree with the above calculated limits.

### Summary table with radiated data of the test plots

Model: MD-5110 Date: -- C Engineer:

Polarization: Horizontal Humidity: -- %

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)

Frequency		Reading (dBuV)		Result		Limit		Margin	Table	Ant.
	(dB	uV)	(dB)	(dBu	V/m)	(dBu	V/m)		Degree	High
(MHz)	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)
			1	1	1					



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FCC ID: 2AAIL-MD5110
Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)

Frequency	y Reading (dBuV)		Factor (dB)		: @3m V/m)		@3m V/m)	Margin	Table Degree	Ant. High
(MHz)	Peak	Äve.	Corr.	Peak	Ave.	Peak	Äve.	(dB)	(Deg.)	(cm)
	1	1		-						

Note 1. Correction Factor = Antenna factor + Cable loss - Preamplifier

- 2. The formula of measured value as: Test Result = Reading + Correction Factor
- 3. Detector function in the form: PK = Peak, QP = Quasi Peak, AV = Average
- 4. All not in the table noted test results are more than 20 dB below the relevant limits.
- 5. Measurement uncertainty for 3m measurement: 30-1000 MHz =  $\pm$  4.32 dB, 1-18 GHz =  $\pm$  4.95 dB, 18-40 GHz=  $\pm$  2.94 dB; Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.
- 6. Up Line: PK Limit Line, Down Line: Ave Limit Line.
- 7. See attached diagrams in appendix.

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

Test equipment used: ETSTW-RE 004, ETSTW-RE 111, ETSTW-RE 030, ETSTW-RE 044, ETSTW-RE 088, ETSTW-RE 018

FCC ID: 2AAIL-MD5110

### 3.6 Radiated Emissions from Digital Part

### Summary table with radiated data of the test plots

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

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

#### Note

- 1. Correction Factor = Antenna factor + Cable loss Preamplifier
- 2. The formula of measured value as: Test Result = Reading + Correction Factor
- 3. Detector function in the form: PK = Peak, QP = Quasi Peak, AV = Average
- 4. All not in the table noted test results are more than 20 dB below the relevant limits.
- 5. Measurement uncertainty for 3m measurement :  $30-1000 \text{ MHz} = \pm 4.32 \text{ dB}$ ,  $1-18 \text{ GHz} = \pm 4.95 \text{ dB}$ ,  $18-40 \text{ GHz} = \pm 2.94 \text{ dB}$  ; Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k=2.

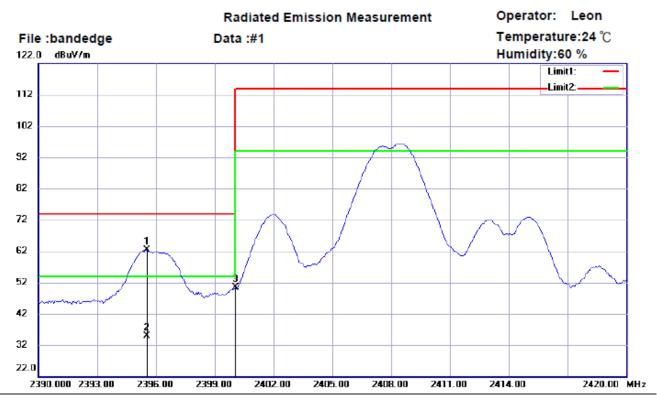
Test equipment used: ETSTW-RE 004, ETSTW-RE 111, ETSTW-RE 030, ETSTW-RE 044

Explanation: The test results are listed in the separated test report no.: W6M21508-15245-P-15B.

FCC ID: 2AAIL-MD5110

### 3.7 Radiated Emission on the band edge

From the following plots, they show that the fundamental emissions are confined in the specified band and hey at least 50 dB below the carrier level at band edge (2400 and 2483.5 MHz). It meets the requirement of section 15.249(d).



Site: Chamber

Condition: FCC 15.249 PK (Bandedge) Polarization: Horizontal

EUT: W6M21508-15245 Power: 3 Vd.c.

M/N: Distance: 3m

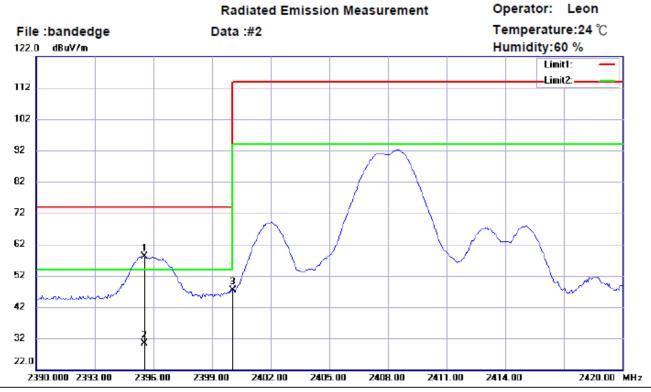
Test Mode: TX 2408MHz

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
*	2395.531	24.28	peak	38.13	62.41	74.00	105	215	-11.59	
	2395.531	-3.28	AVG	38.13	34.85	54.00	105	215	-19.15	
	2400.000	12.28	peak	38.14	50.42	74.00	105	215	-23.58	



Registration number: W6M21508-15245-C-1

FCC ID: 2AAIL-MD5110



Site: Chamber

Condition: FCC 15.249 PK (Bandedge) Polarization: Vertical

EUT: W6M21508-15245 Power: 3 Vd.c.

M/N: Distance: 3m

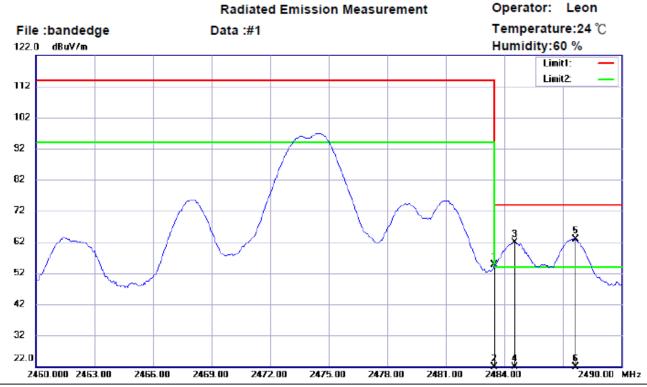
Test Mode: TX 2408MHz

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
*	2395.471	19.97	peak	38.13	58.10	74.00	100	90	-15.90	
	2395.471	-7.79	AVG	38.13	30.34	54.00	100	90	-23.66	
	2400.000	9.19	peak	38.14	47.33	74.00	100	90	-26.67	



Registration number: W6M21508-15245-C-1

FCC ID: 2AAIL-MD5110



Site: Chamber

Condition: FCC 15.249 PK (Bandedge) Polarization: Horizontal

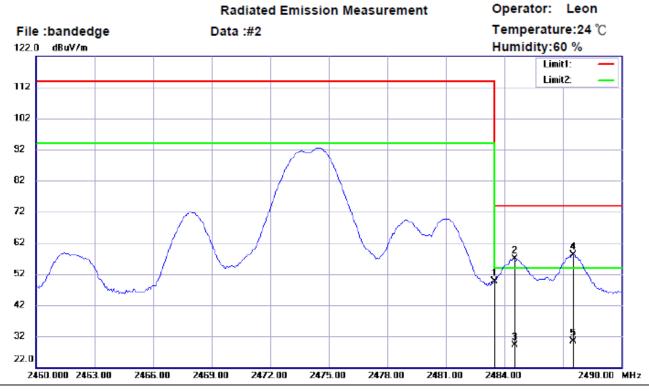
Test Mode: TX 2474MHz

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
	2483.500	16.31	peak	38.32	54.63	74.00	105	215	-19.37	
	2483.500	-41.45	AVG	38.32	-3.13	54.00	105	215	-57.13	
	2484.469	23.67	peak	38.32	61.99	74.00	105	215	-12.01	
	2484.469	-34.09	AVG	38.32	4.23	54.00	105	215	-49.77	
*	2487.655	24.55	peak	38.32	62.87	74.00	105	215	-11.13	
	2487.655	-33.21	AVG	38.32	5.11	54.00	105	215	-48.89	



Registration number: W6M21508-15245-C-1

FCC ID: 2AAIL-MD5110



Site: Chamber

Condition: FCC 15.249 PK (Bandedge) Polarization: Vertical

Test Mode: TX 2474MHz

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
	2483.500	11.33	peak	38.32	49.65	74.00	100	85	-24.35	
	2484.469	18.53	peak	38.32	56.85	74.00	100	85	-17.15	
	2484.469	-9.23	AVG	38.32	29.09	54.00	100	85	-24.91	
*	2487.475	19.75	peak	38.32	58.07	74.00	100	85	-15.93	
	2487.475	-8.01	AVG	38.32	30.31	54.00	100	85	-23.69	

#### Limit:

Frequency Range (MHz)	Limit (d	BμV/m)
Trequency Range (MITZ)	Peak	Average
902 – 928	114	94
2400 – 2483.5	74	54
5725 – 5875	74	54

Test equipment used: ETSTW-RE 004, ETSTW-RE 030, ETSTW-RE 044



Registration number: W6M21508-15245-C-1

FCC ID: 2AAIL-MD5110

#### 3.8 Power Line Conducted Emission

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

This measurement was transact first with instrumentation using an average and peak detector and a 10 kHz bandwidth. If the peak detector achieves a calculated level, the measurement is repeated by an instrumentation using a quasi-peak detector.

Model:	MD-51	10	Date:					
Mode:			Temperature: °C			; E	ngineer:	
Polarization:	N	Humid	ity:	'	%			-
Frequency	Rea	ading	Factor	Res	sult	Lir	nit	Margin
		BuV)	(dB)	(dB	uV)	(dB	uV)	J
(MHz)	QP	Ave.	Corr.	QP	Äve.	QP	Äve.	(dB)

Polarization: L1

Frequency		ading BuV)	Factor (dB)		sult uV)		mit uV)	Margin
(MHz)	QP	Áve.	Corr.	QΡ	Áve.	QP Ave.		(dB)

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

- 2. The Correction Factor = Cable Loss + LISN Insertion Loss
- 3. Detector function in the form: PK = Peak, QP = Qusai Peak, AV = Average
- 4. All not in the table noted test results are more than 20 dB below the relevant limits.
- 5. Measurement uncertainty =  $\pm 1.67$  dB; Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.
- 6. The EUT is battery-used, so this test is not required.

#### **Limits:**

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

Test equipment used: ETSTW-CE 001, ETSTW-CE 016, ETSTW-RE 045

FCC ID: 2AAIL-MD5110

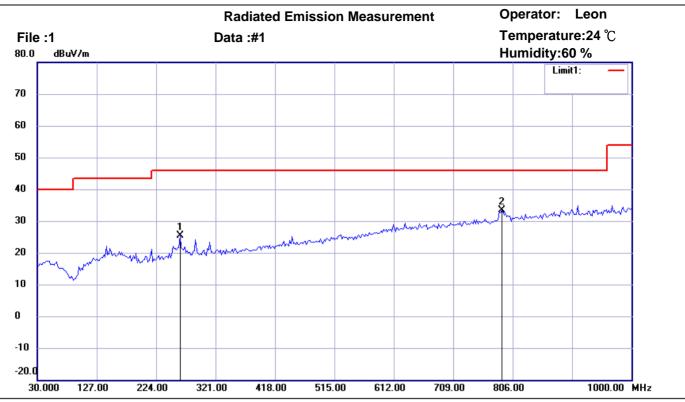
### **Appendix**

### **Measurement diagrams**

Spurious Emissions radiated



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Site: Chamber

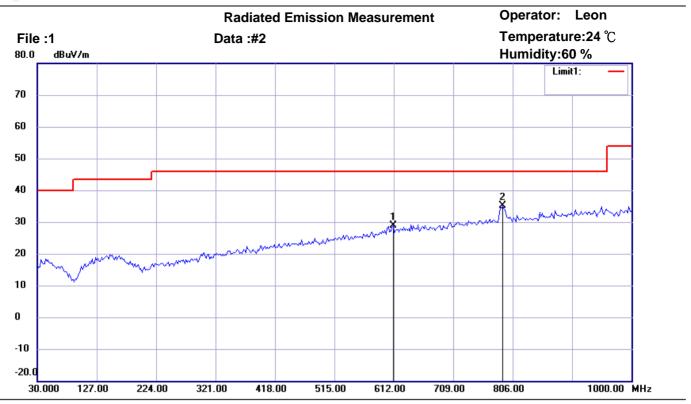
Condition: FCC\_part 15 RE-Class C\_30-1000MHz Polarization: Horizontal

Test Mode: TX 2408MHz

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
	263.2664	10.58	peak	14.75	25.33	46.00	100	90	-20.67	
*	788.1162	7.05	peak	26.44	33.49	46.00	100	35	-12.51	



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Site: Chamber

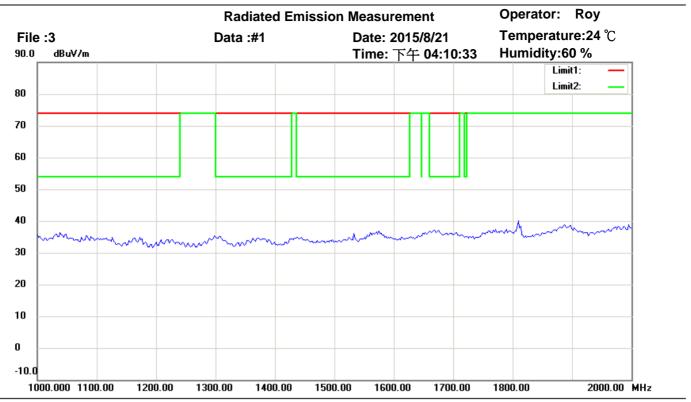
Condition: FCC\_part 15 RE-Class C\_30-1000MHz Polarization: Vertical

Test Mode: TX 2408MHz

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
	611.2224	5.18	peak	23.66	28.84	46.00	100	30	-17.16	
*	790.0601	8.69	peak	26.47	35.16	46.00	100	25	-10.84	



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Site: Chamber

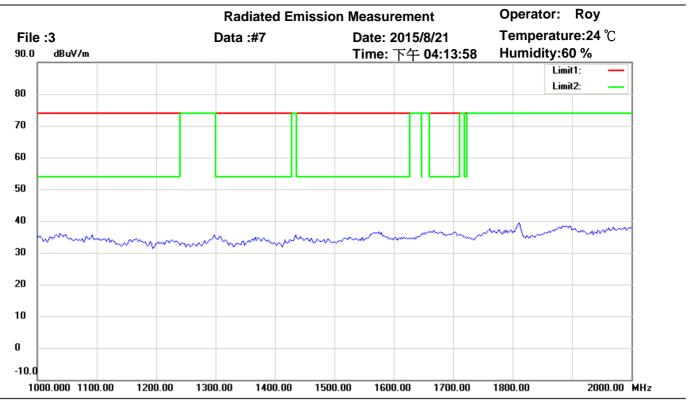
Condition: FCC Restriction Band\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2408MHz

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



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Site: Chamber

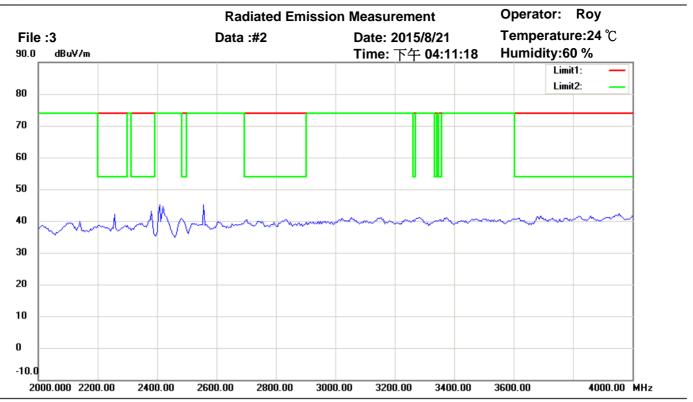
Condition: FCC Restriction Band\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2408MHz

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



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Site: Chamber

Condition: FCC Restriction Band\_Above 1GHz\_PK Polarization: Horizontal

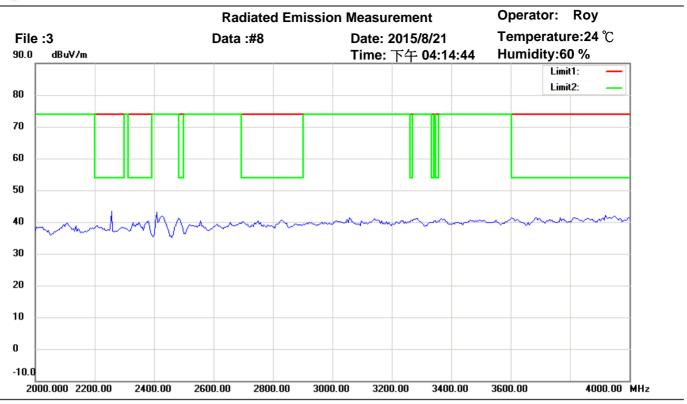
EUT: W6M21508-15245 Power: <sup>3 Vd.c.</sup>
M/N: Distance: <sup>3m</sup>

Test Mode: TX 2408MHz

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



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Site: Chamber

Condition: FCC Restriction Band\_Above 1GHz\_PK Polarization: Vertical

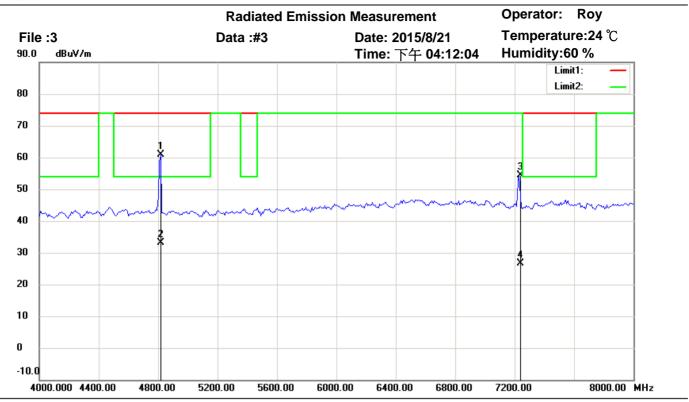
EUT: W6M21508-15245 Power: <sup>3 Vd.c.</sup>
M/N: Distance: <sup>3m</sup>

Test Mode: TX 2408MHz

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



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Site: Chamber

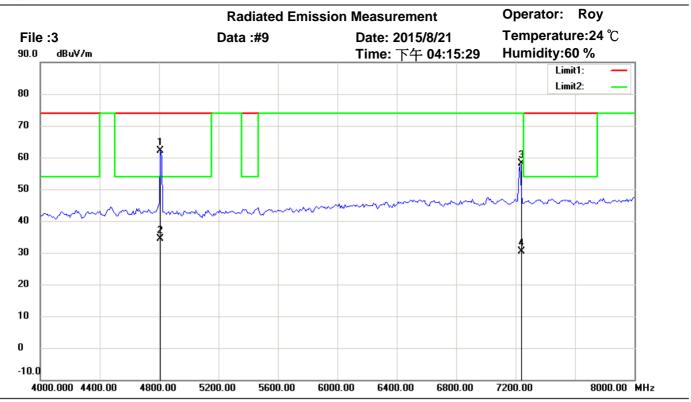
Condition: FCC Restriction Band\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2408MHz

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
*	4817.635	59.78	peak	1.15	60.93	74.00	120	200	-13.07	
	4817.635	32.02	AVG	1.15	33.17	54.00	120	200	-20.83	
	7230.461	49.55	peak	4.77	54.32	74.00	110	180	-19.68	
	7230.461	21.79	AVG	4.77	26.56	74.00	110	180	-47.44	



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Site: Chamber

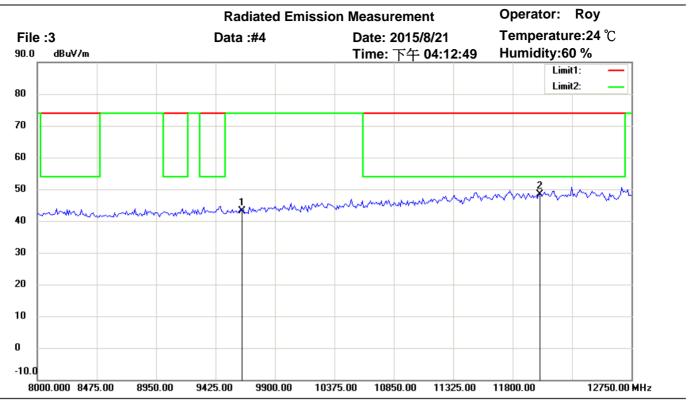
Condition: FCC Restriction Band\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2408MHz

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
*	4809.619	61.09	peak	1.15	62.24	74.00	100	150	-11.76	
	4809.619	33.33	AVG	1.15	34.48	54.00	100	150	-19.52	
	7230.461	53.44	peak	4.77	58.21	74.00	100	180	-15.79	
	7230.461	25.68	AVG	4.77	30.45	74.00	100	180	-43.55	



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Site: Chamber

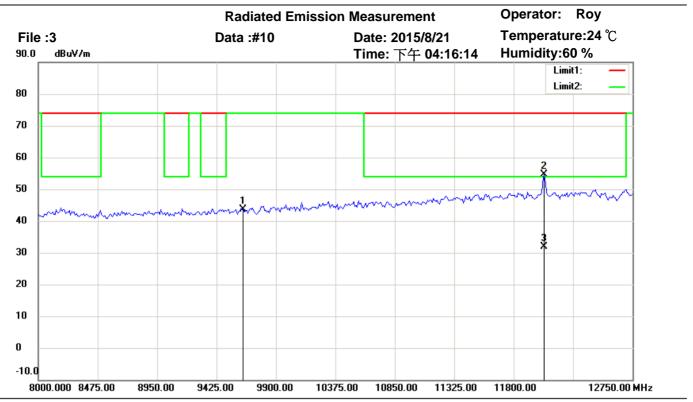
Condition: FCC Restriction Band\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2408MHz

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
	9632.000	35.50	peak	7.74	43.24	74.00	110	140	-30.76	
*	12010.000	34.75	peak	13.58	48.33	74.00	110	160	-25.67	



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Site: Chamber

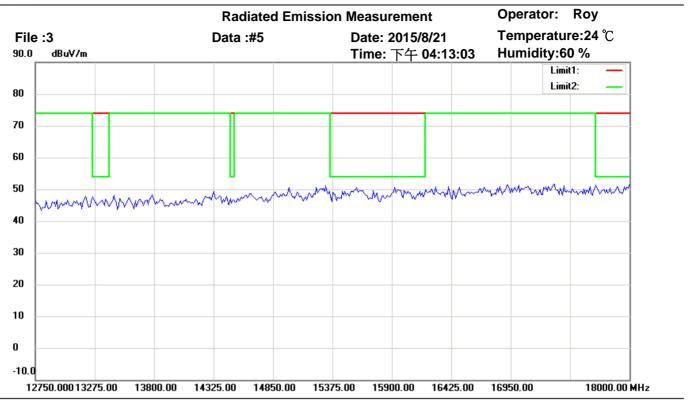
Condition: FCC Restriction Band\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2408MHz

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
	9632.000	35.98	peak	7.74	43.72	74.00	100	150	-30.28	
*	12045.591	40.81	peak	13.79	54.60	74.00	100	180	-19.40	
	12045.591	18.00	peak	13.79	31.79	74.00	100	200	-42.21	



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Site: Chamber

Condition: FCC Restriction Band\_Above 1GHz\_PK Polarization: Horizontal

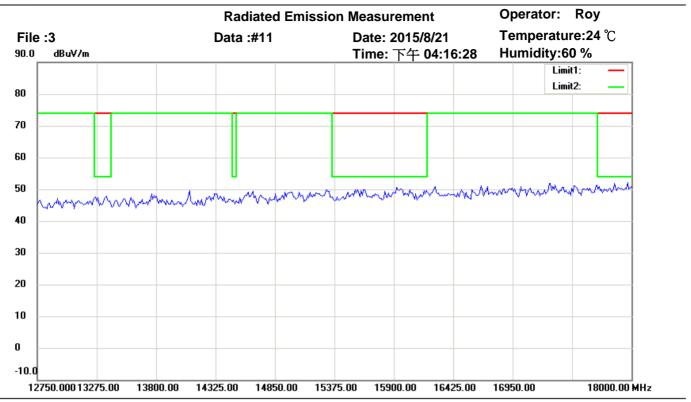
EUT: W6M21508-15245 Power: <sup>3 Vd.c.</sup>
M/N: Distance: <sup>3m</sup>

Test Mode: TX 2408MHz

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



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Site: Chamber

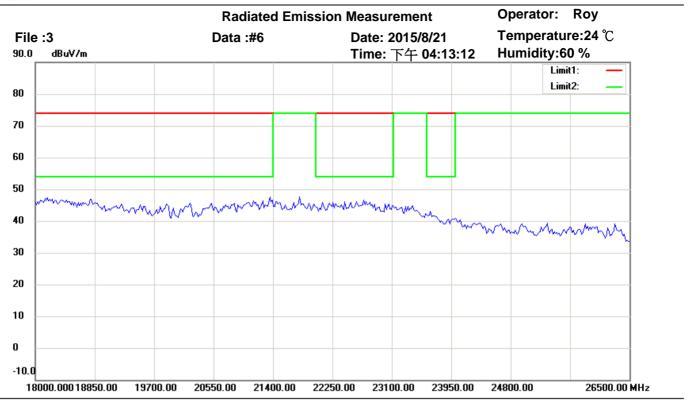
Condition: FCC Restriction Band\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2408MHz

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



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Site: Chamber

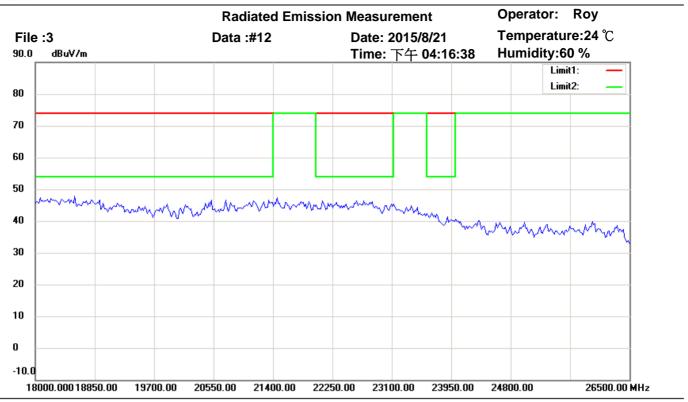
Condition: FCC Restriction Band\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2408MHz

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



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Site: Chamber

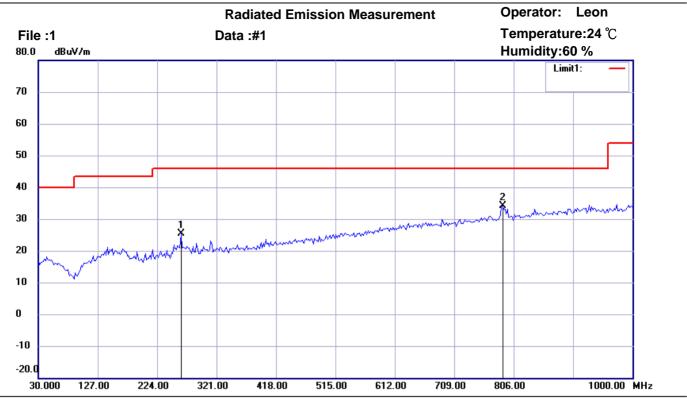
Condition: FCC Restriction Band\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2408MHz

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



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Site: Chamber

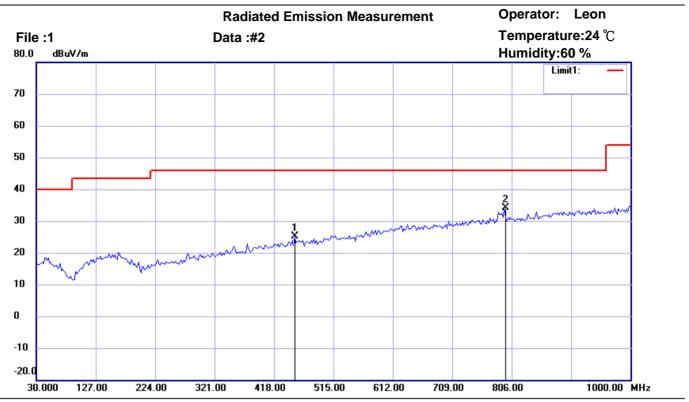
Condition: FCC\_part 15 RE-Class C\_30-1000MHz Polarization: Horizontal

Test Mode: TX 2440MHz

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
	263.2664	10.66	peak	14.75	25.41	46.00	100	60	-20.59	
*	788.1162	7.60	peak	26.44	34.04	46.00	100	35	-11.96	



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Site: Chamber

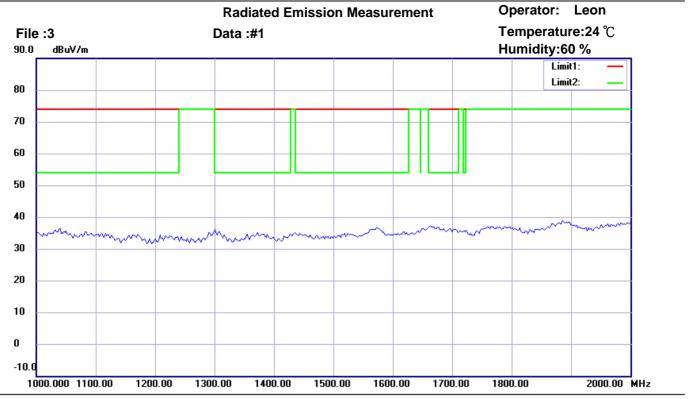
Condition: FCC\_part 15 RE-Class C\_30-1000MHz Polarization: Vertical

Test Mode: TX 2440MHz

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
	451.8236	4.98	peak	20.05	25.03	46.00	100	70	-20.97	
*	793.9480	7.62	peak	26.52	34.14	46.00	100	125	-11.86	



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Site: Chamber

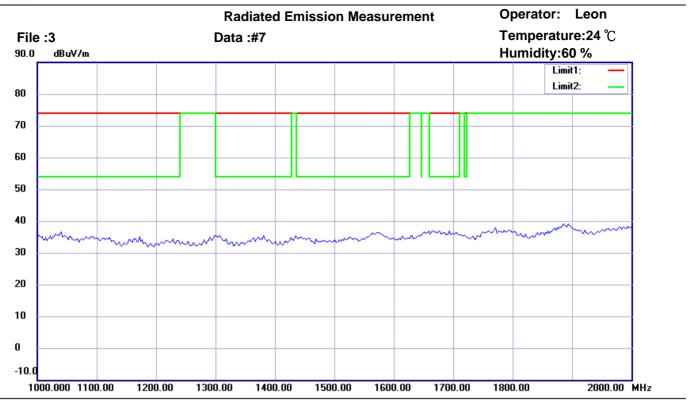
Condition: FCC Restriction Band\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2440MHz

	Frequency	Reading	Detector	Corr. factor	Result	Limit	Ant.Pos	Tab.Pos	Margin	Comment	1
Mk.	(MHz)	(dBuV)		(dB/m)	(dBuV/m)	(dBuV/m)	(cm)	(deg.)	(dB)		



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Site: Chamber

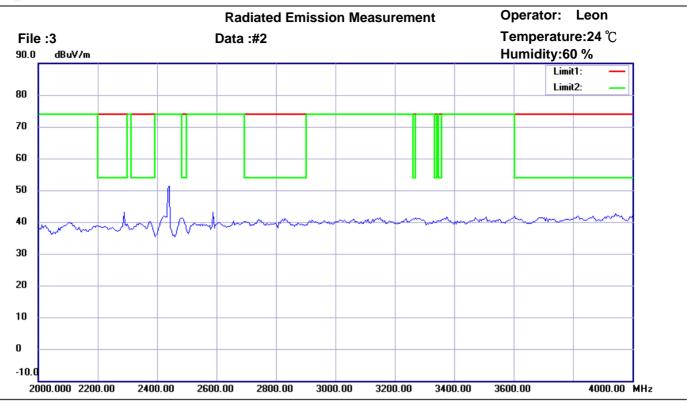
Condition: FCC Restriction Band\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2440MHz

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



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Site: Chamber

Condition: FCC Restriction Band\_Above 1GHz\_PK Polarization: Horizontal

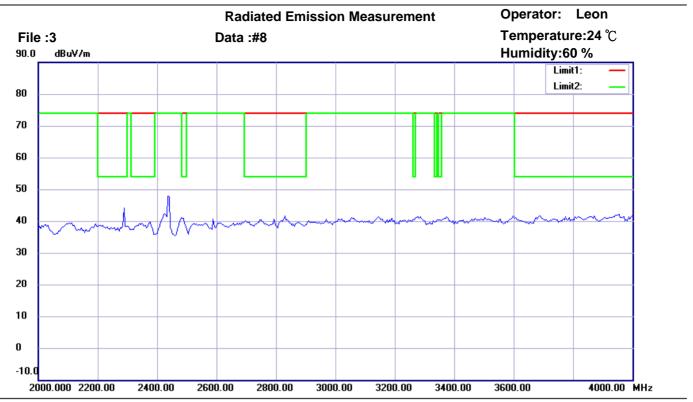
EUT: W6M21508-15245 Power: <sup>3 Vd.c.</sup>
M/N: Distance: <sup>3m</sup>

Test Mode: TX 2440MHz

	Frequency	Reading	Detector	Corr. factor	Result	Limit	Ant.Pos	Tab.Pos	Margin	Comment	1
Mk.	(MHz)	(dBuV)		(dB/m)	(dBuV/m)	(dBuV/m)	(cm)	(deg.)	(dB)		



Tel:+886-2-6606-8877 Fax:+886-2-6606-8875



Site: Chamber

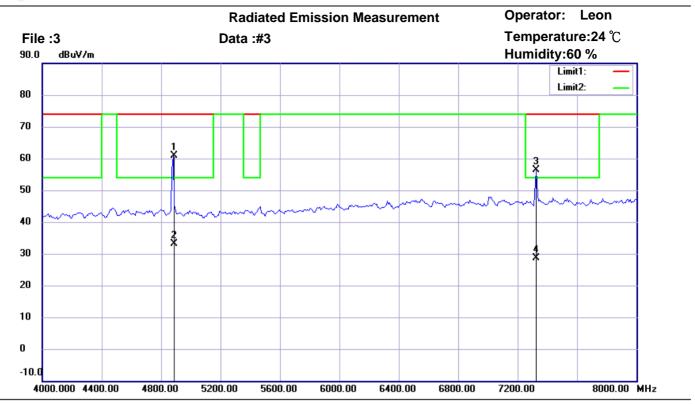
Condition: FCC Restriction Band\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2440MHz

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



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Site: Chamber

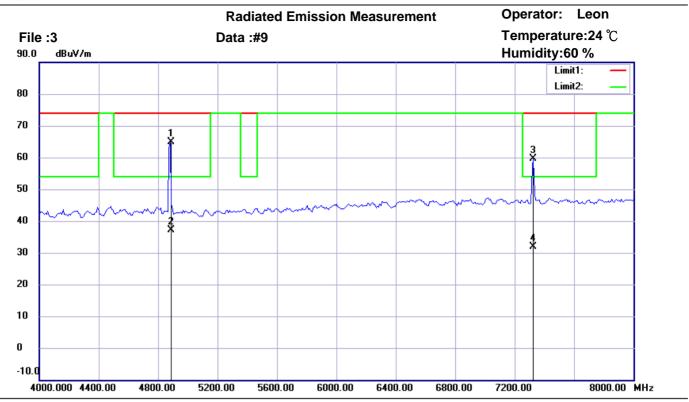
Condition: FCC Restriction Band\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2440MHz

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
*	4881.764	59.73	peak	1.19	60.92	74.00	120	160	-13.08	
	4881.764	31.97	AVG	1.19	33.16	54.00	120	160	-20.84	
	7326.653	51.40	peak	5.06	56.46	74.00	140	180	-17.54	
	7326.653	23.64	AVG	5.06	28.70	54.00	140	180	-25.30	



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Site: Chamber

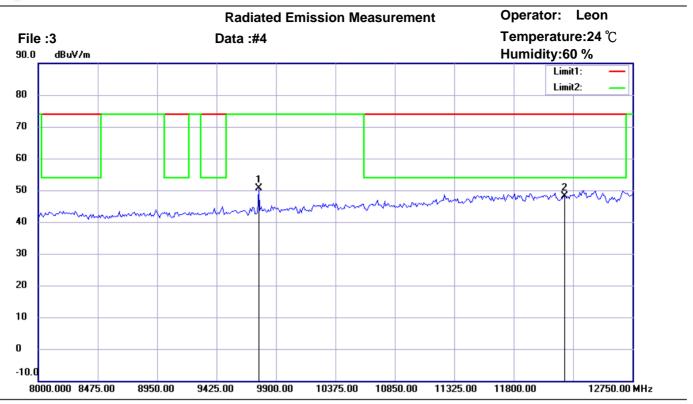
Condition: FCC Restriction Band\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2440MHz

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
*	4881.764	63.71	peak	1.19	64.90	74.00	110	200	-9.10	
	4881.764	35.95	AVG	1.19	37.14	54.00	110	200	-16.86	
	7326.653	54.51	peak	5.06	59.57	74.00	120	180	-14.43	
	7326.653	26.75	AVG	5.06	31.81	54.00	120	180	-22.19	



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Site: Chamber

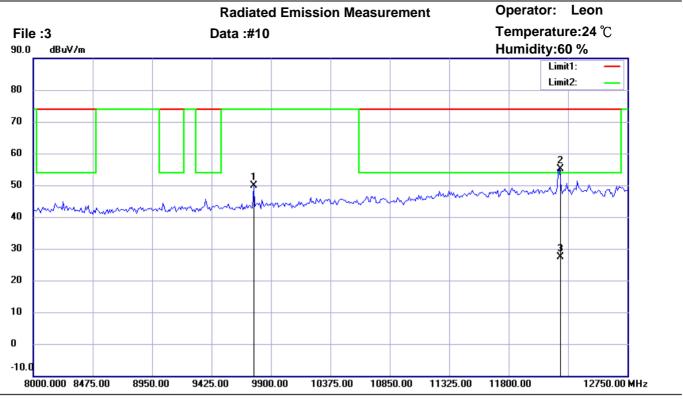
Condition: FCC Restriction Band\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2440MHz

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
*	9761.022	42.57	peak	8.01	50.58	74.00	100	130	-23.42	
	12200.000	33.61	peak	14.44	48.05	74.00	100	150	-25.95	



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Site: Chamber

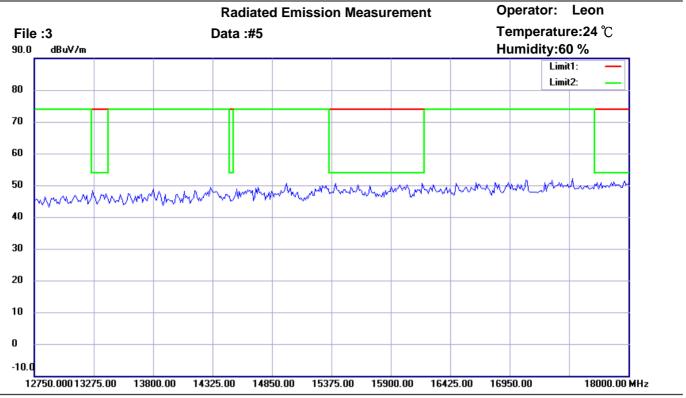
Condition: FCC Restriction Band\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2440MHz

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
	9761.022	41.78	peak	8.01	49.79	74.00	130	160	-24.21	
*	12207.415	40.65	peak	14.42	55.07	74.00	130	180	-18.93	
	12207.415	12.89	AVG	14.42	27.31	54.00	130	180	-26.69	



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Site: Chamber

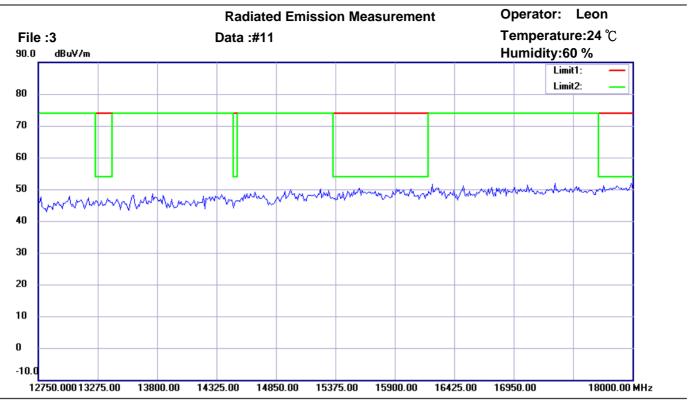
Condition: FCC Restriction Band\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2440MHz

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



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Site: Chamber

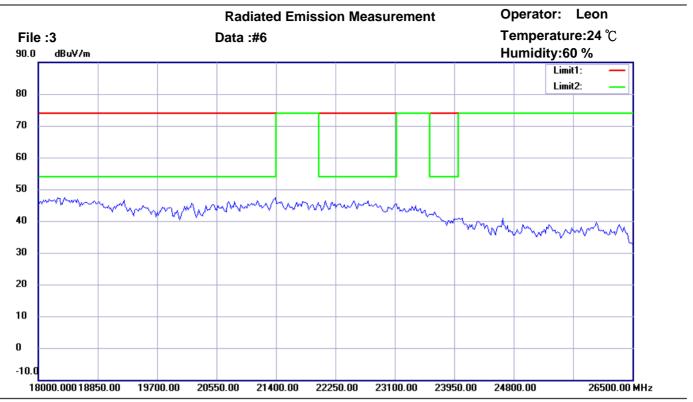
Condition: FCC Restriction Band\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2440MHz

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



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Site: Chamber

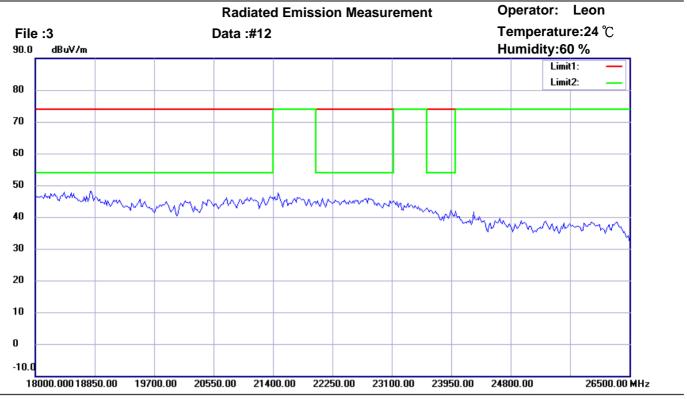
Condition: FCC Restriction Band\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2440MHz

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



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Site: Chamber

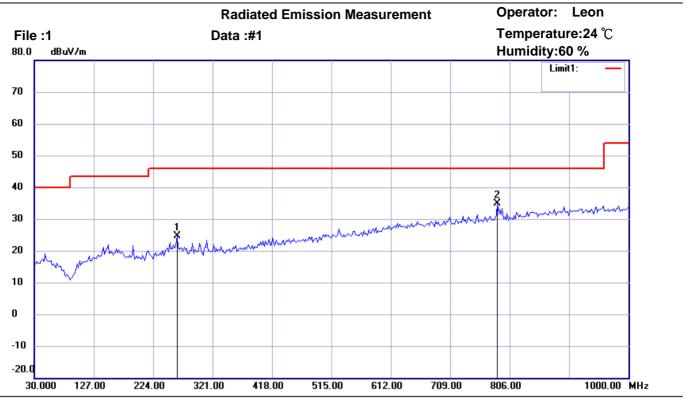
Condition: FCC Restriction Band\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2440MHz

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



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Site: Chamber

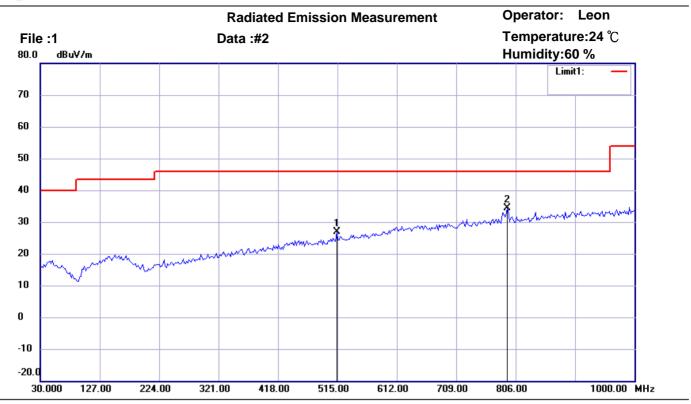
Condition: FCC\_part 15 RE-Class C\_30-1000MHz Polarization: Horizontal

Test Mode: TX 2474MHz

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
	263.2664	9.92	peak	14.75	24.67	46.00	100	35	-21.33	
*	786.1722	8.56	peak	26.41	34.97	46.00	100	50	-11.03	



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Site: Chamber

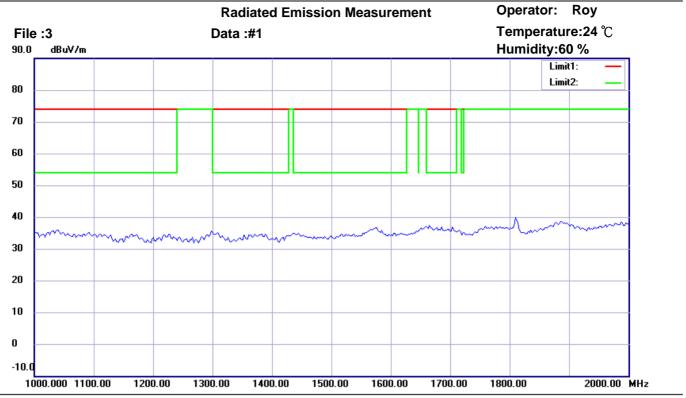
Condition: FCC\_part 15 RE-Class C\_30-1000MHz Polarization: Vertical

Test Mode: TX 2474MHz

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
	514.0281	5.60	peak	21.16	26.76	46.00	100	60	-19.24	
*	792.0040	7.83	peak	26.49	34.32	46.00	100	135	-11.68	



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Site: Chamber

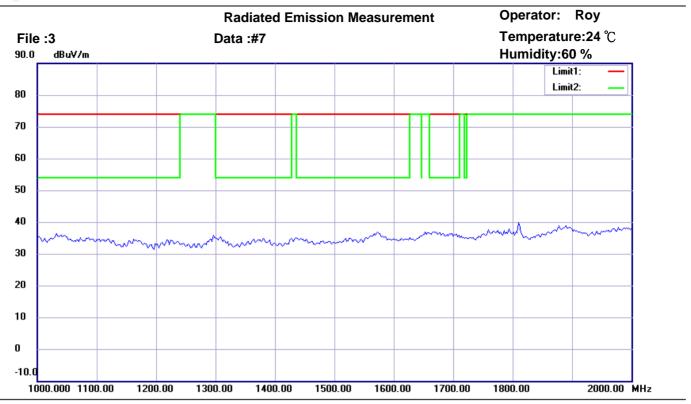
Condition: FCC Restriction Band\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2474MHz

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



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Site: Chamber

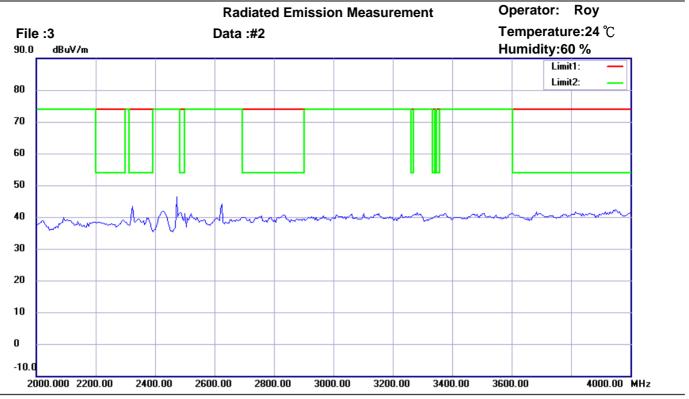
Condition: FCC Restriction Band\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2474MHz

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



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Site: Chamber

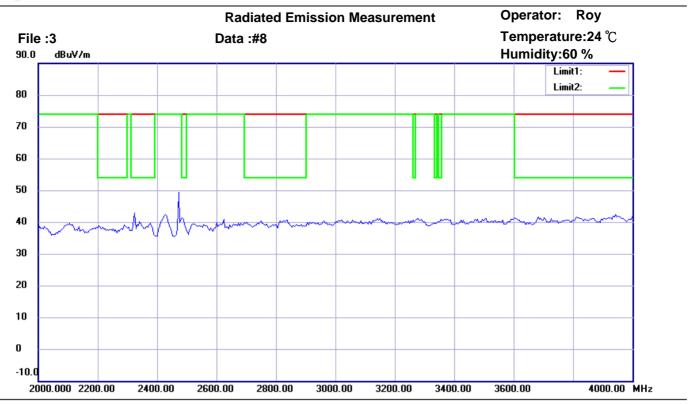
Condition: FCC Restriction Band\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2474MHz

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



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Site: Chamber

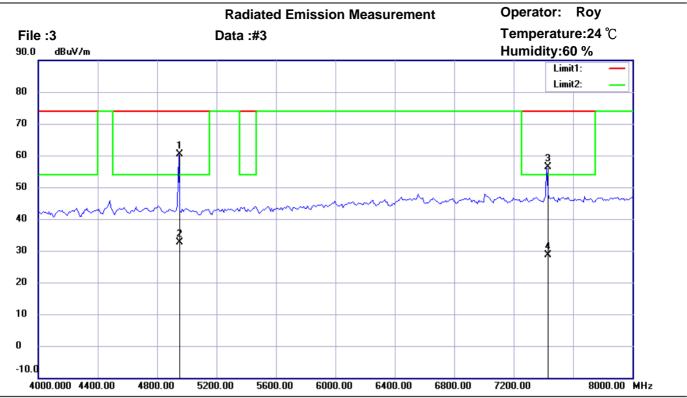
Condition: FCC Restriction Band\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2474MHz

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



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Site: Chamber

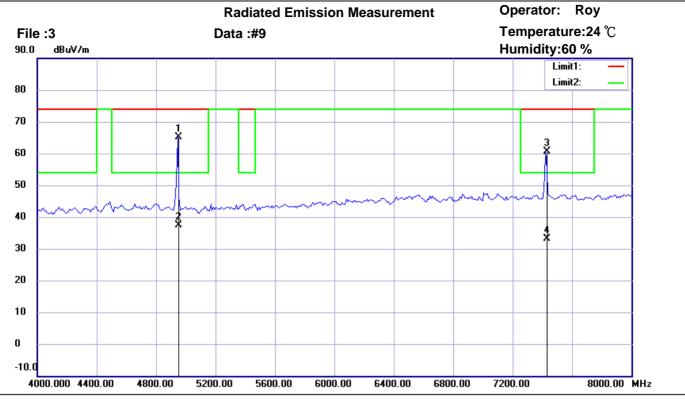
Condition: FCC Restriction Band\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2474MHz

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
*	4945.892	59.16	peak	1.27	60.43	74.00	100	90	-13.57	
	4945.892	31.40	AVG	1.27	32.67	54.00	100	90	-21.33	
	7422.846	50.98	peak	5.47	56.45	74.00	120	110	-17.55	
	7422.846	23.22	AVG	5.47	28.69	54.00	120	110	-25.31	



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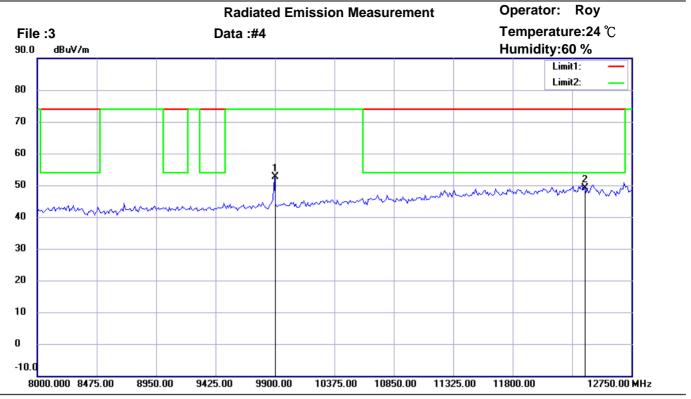
Condition: FCC Restriction Band\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2474MHz

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
*	4945.892	63.98	peak	1.27	65.25	74.00	100	215	-8.75	
	4945.892	36.22	AVG	1.27	37.49	54.00	100	215	-16.51	
	7422.846	55.07	peak	5.47	60.54	74.00	110	200	-13.46	
	7422.846	27.71	AVG	5.47	33.18	54.00	110	200	-20.82	



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Site: Chamber

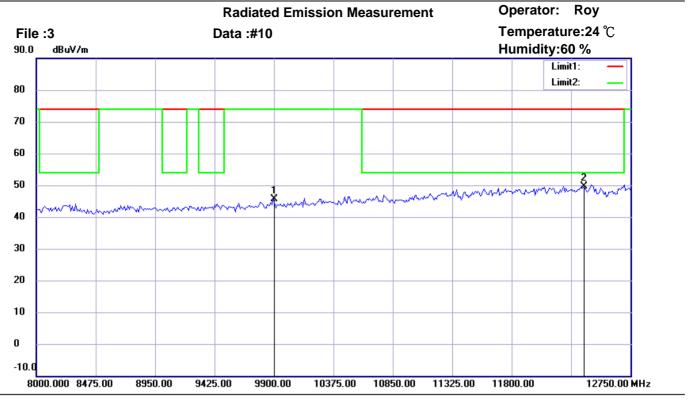
Condition: FCC Restriction Band\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2474MHz

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
*	9894.289	44.10	peak	8.43	52.53	74.00	100	130	-21.47	
	12370.000	34.57	peak	14.62	49.19	74.00	120	150	-24.81	



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Site: Chamber

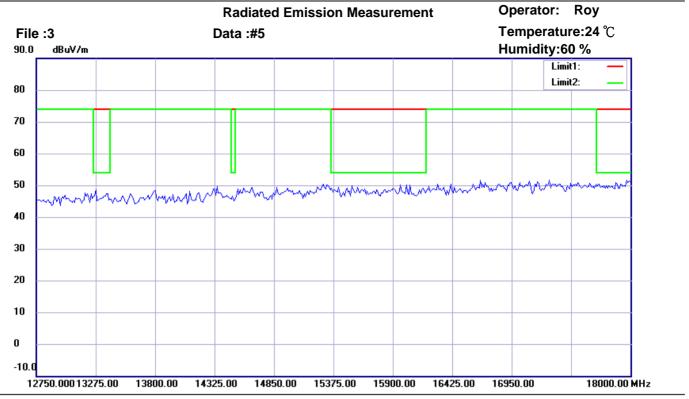
Condition: FCC Restriction Band\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2474MHz

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
	9894.289	37.23	peak	8.43	45.66	74.00	100	85	-28.34	
*	12378.757	34.94	peak	14.68	49.62	74.00	100	85	-24.38	



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Site: Chamber

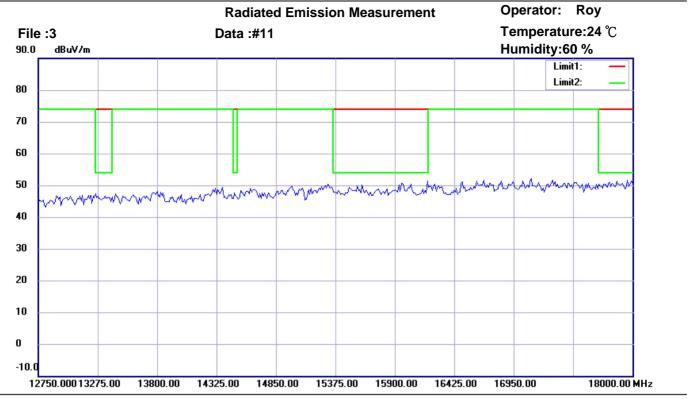
Condition: FCC Restriction Band\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2474MHz

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



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Site: Chamber

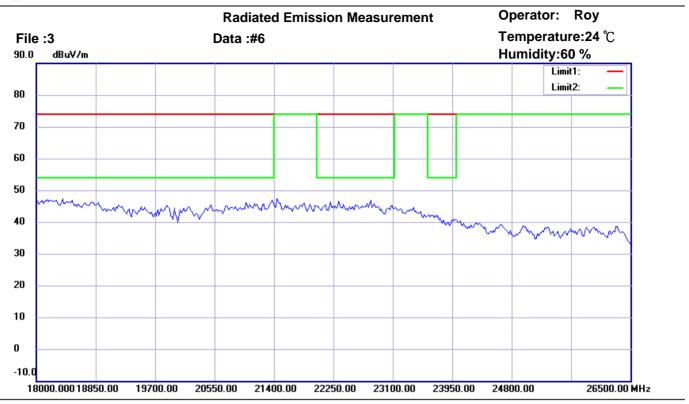
Condition: FCC Restriction Band\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2474MHz

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



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Site: Chamber

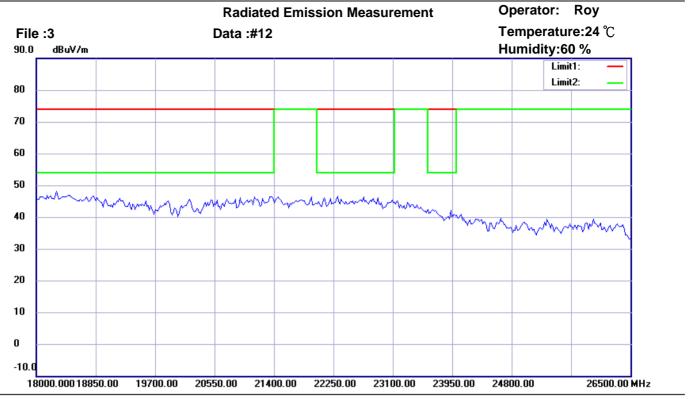
Condition: FCC Restriction Band\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2474MHz

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



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Site: Chamber

Condition: FCC Restriction Band\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2474MHz

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