### FCC PART 15 SUBPART C TEST REPORT

for

**Video Baby Monitor** 

**Model No.: 55976T** 

FCC ID: 2AAGOMNB976TX

of

Applicant: iMODESTY TECHNOLOGY CORP.

Address: 3F-1, No.76, Sec. 2, Jiafeng S. Rd., Zhubei City,

Hsinchu County 302, Taiwan

Tested and Prepared

by

Worldwide Testing Services (Taiwan) Co., Ltd.

FCC Registration No.: TW1477, TW0020, TW1072

Industry Canada filed test laboratory Reg. No. 20037

A2LA Accredited No.: 2732.01





Report No.: W6M21912-19586-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: W6M21912-19586-C-1 FCC ID: 2AAGOMNB976TX

### TABLE OF CONTENTS

1	General Information	2
1.1	Notes	2
1.2	Testing laboratory	3
	1.2.1 Location	
	1.2.2 Details of accreditation status	
1.3	*	
1.4	Application details	3
1.5	General information of Test item	4
1.6	Test standards	4
2	Technical test	5
2.1	Summary of test results	5
2.2	Test environment.	5
2.3	Test Equipment List	6
2.4	General Test Procedure	9
3	Test results (enclosure)	11
3.1	Peak Output Power (transmitter)	12
3.2	RF Exposure Compliance Requirements	15
3.3	Exemption Limits for Routine Evaluation	15
3.4	Out of Band Radiated Emissions	17
3.5	Transmitter Radiated Emissions in restricted Bands	18
3.6	Spurious emissions (tx)	19
3.6	Carrier Frequency Separation	21
3.7	Number of Hopping Frequencies	24
	3.7.1 Pseudorandom Frequency Hopping Sequence	25
3.8	Time of Occupancy (Dwell Time)	26
3.9	20dB Bandwidth	30
3.10		
3.11		
3.12	Power Line Conducted Emission	37

Appendix: Pictures & Diagrams

FCC ID: 2AAGOMNB976TX

#### 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.

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

#### **Tester:**

February 4, 2020 Rick Chen Rick Chen.

Date WTS-Lab. Name Signature

#### Technical responsibility for area of testing:

February 4, 2020 Kevin Wang

Date WTS Name Signature



Registration number: W6M21912-19586-C-1

FCC ID: 2AAGOMNB976TX 1.2 **Testing laboratory** 

#### Location 1.2.1

**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 886-2-66068879 Fax

#### 1.2.2 **Details of accreditation status**

Accredited testing laboratory

A2LA accredited number: 2732.01 FCC filed test laboratory Reg. No. TW1477, TW0020, TW1072

Industry Canada filed test laboratory Reg. No. 20037

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

Name: ./. Accredited number: Street: ./. Town: ./. Country: Telephone: Fax:

#### 1.3 **Details of approval holder**

iMODESTY TECHNOLOGY CORP. Name: Street: 3F-1, No.76, Sec. 2, Jiafeng S. Rd., Zhubei City, Hsinchu County 302, Town:

Country: Taiwan

Telephone: +886-3-668-2169 Fax: +886-3-668-2269

#### 1.4 **Application details**

December 31, 2019 Date of receipt of test item:

Date of test: from January 2, 2020 to February 3, 2020



Registration number: W6M21912-19586-C-1

FCC ID: 2AAGOMNB976TX

#### 1.5 General information of Test item

Type of test item : Video Baby Monitor

Model Number : 55976T Multi-listing model number : ./.

Photos : see Appendix

Technical data

Frequency band : 2410 – 2477 MHz

Frequency ( ch 1) : 2410 MHz
Frequency ( ch 10) : 2441.5 MHz
Frequency ( ch 20) : 2477 MHz

<u>Transmitter</u> <u>Unom</u>

Power ( ch 1) : Conducted: 17.46 dBm Power ( ch 10) : Conducted: 18.46 dBm Power ( ch 20) : Conducted: 17.94 dBm

Power supply : Adaptor (I/P: 100-240V~50/60Hz, 0.2A

O/P: 5V, 1000mA)

Operation modes : Duplex

Modulation Type : FSK

Antenna Type : Copper Pipe Antenna

Antenna gain : 2 dBi

Host device : none

Classification:

Fixed Device	
Mobile Device (Human Body distance > 20cm)	
Portable Device (Human Body distance < 20cm)	

#### Manufacturer:

(if applicable)

 Name
 : /.

 Street
 : /.

 Town
 : /.

 Country
 : /.

#### 1.6 Test standards

Technical standard: FCC RULES PART 15 SUBPART C § 15.247 (2018-10)

FCC ID: 2AAGOMNB976TX **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 were ascertained in the course of the tests performed.  $\Box$ 

#### 2.2 Test environment

Relative humidity content : 20 ... 75 %

Air pressure : 86 ... 103 kPa

Details of power supply : Adaptor (I/P: 100-240V~50/60Hz, 0.2A

O/P: 5V, 1000mA)

Extreme conditions parameters : test voltage : -- extreme

min :-- V max :-- V

Description of Tested System : ./.

Test item Name	Uncertainty
Estimation Result of Uncertainty of Conducted Emission	Expanded Uncertainty: AMN: 1.30 dB Voltage probe: 1.36 dB
Estimation Result of Uncertainty of Radiated Emission(3M)	Expanded Uncertainty: 0.009-30 MHz: 2.02 dB 30-1000 MHz: 3.49 dB 1-18 GHz: 3.01 dB 18-40 GHz: 2.43 dB
Estimation Result of Uncertainty of Bandwidth Measurement 20 dB Bandwidth, Occupied bandwidth, Channel bandwidth, Necessary Bandwidth	Expanded Uncertainty: 0.45 kHz
Estimation Result of Uncertainty of Conducted Output Power Measurement Output power	Expanded Uncertainty: 1.72 dB
Estimation Result of Uncertainty of Band Edge Measurement	Expanded Uncertainty: 0.98 dBc
Estimation Result of Uncertainty of Frequency Separation Measurement Hopping channel separation	Expanded Uncertainty: 554.14 Hz
Estimation Result of Uncertainty of Duty Cycle Measurement Dwell time	Expanded Uncertainty: 0.1 ms

The decision rule is: Measurement uncertainty is not taken into account.



Registration number: W6M21912-19586-C-1

FCC ID: 2AAGOMNB976TX **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	2019/6/4	2020/6/3
ETSTW-CE 003	AC POWER SOURCE	APS-9102	D161137	GW	Function	on Test
ETSTW-CE 004	ZWEILEITER-V- NETZNACHBILDUNG TWO-LINE V-NETWORK	ESH3-Z5	840731/011	R&S	2019/11/1	2020/10/31
ETSTW-CE 006	IMPULSBEGRENZER PULSE LIMITER	ESH3-Z2	100226	R&S	2019/9/24	2020/9/23
ETSTW-CE 008	HF-EICHLEITUNG RF STEP ATTENUATOR 139dB DPSP	334.6010.02	844581/024	R&S	Function	on Test
ETSTW-CE 009	TEMP.&HUMIDITY CHAMBER	GTH-225-40-1P-U	MAA0305-009	GIANT FORCE	2019/7/23	2020/7/22
ETSTW-CE 016	TWO-LINE V-NETWORK	ENV216	100050	R&S	2019/10/3	2020/10/2
ETSTW-CE 028	MXE EMI Receiver	N9038A	MY53220110	Agilent	2019/7/18	2020/7/17
ETSTW-RE 003	EMI TEST RECEIVER	ESI 26	831438/001	R&S	2019/6/4	2020/6/3
ETSTW-RE 004	EMI TEST RECEIVER	ESI 40	832427/004	R&S	2019/5/29	2020/5/28
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	Function	on Test
ETSTW-RE 018	MICROWAVE HORN ANTENNA	AT4560	27212	AR	2019/7/25	2020/7/24
ETSTW-RE 027	Passive Loop Antenna	6512	00034563	ETS-Lindgren	2019/7/22	2020/7/21
ETSTW-RE 030	Double-Ridged Guide Horn Antenna	3117	00035224	ETS-Lindgren	2019/4/2	2020/4/1
ETSTW-RE 042	Biconical Antenna	HK116	100172	R&S	2020/1/23	2021/1/22
ETSTW-RE 043	Log-Periodic Dipole Antenna	HL223	100166	R&S	2019/4/23	2020/4/22
ETSTW-RE 044	Log-Periodic Antenna	HL050	100094	R&S	2019/5/13	2020/5/12
ETSTW-RE 045	ESA-E SERIES SPECTRUM ANALYZER	E4404B	MY45111242	Agilent	Pre-te	st Use
ETSTW-RE 050	Attenuator 10dB	50HF-010-1	None	JFW	2019/2/27	2020/2/26
ETSTW-RE 051	Attenuator 6dB	50HF-006-1	None	JFW	2019/2/27	2020/2/26
ETSTW-RE 053	Attenuator 3dB	50HF-003-1	None	JFW	2019/2/27	2020/2/26
ETSTW-RE 055	SPECTRUM ANALYZER	FSU 26	200074	R&S	2019/3/5	2020/3/4
ETSTW-RE 060	Attenuator 30dB	5015-30	F651012z-01	ATM	2019/2/27	2020/2/26
ETSTW-RE 062	Amplifier Module	CHC 2	None	KMIC	2019/5/16	2020/5/15
ETSTW-RE 064	Bluetooth Test Set	MT8852B-042	6K00005709	Anritsu	Function	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	НР	2019/9/23	2020/9/22
ETSTW-RE 088	SOLID STATE AMPLIFIER	KMA180265A01	99057	KMIC	2019/9/18	2020/9/17
ETSTW-RE 091	Match Pad	MDCS1500	None	WOKEN	2019/5/9	2020/5/8
ETSTW-RE 099	DC Block	50DB-007-1	None	JFW	2019/2/22	2020/2/21
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	2020/1/13	2021/1/12



Registration number: W6M21912-19586-C-1 FCC ID: 2AAGOMNB976TX

FCC ID: ZAA	GOMNB976TX		1			
ETSTW-RE 120	RF Player	MP9200	MP9210-111022	ADIVIC	Functi	on test
ETSTW-RE 122	SIGNAL GENERATOR	SMF100A	102149	R&S	2019/6/3	2020/6/2
ETSTW-RE 125	5GHz Notch filter	5NSL11- 5200/E221.3-O/O	1	K&L Microwave	2019/8/8	2020/8/7
ETSTW-RE 126	5GHz Notch filter	5NSL12- 5800/E221.3-O/O	1	K&L Microwave	2019/8/8	2020/8/7
ETSTW-RE 127	RF Switch Box	RFS-01	None	WTS	2019/2/26	2020/2/25
ETSTW-RE 128	5.3GHz Notch filter	N0153001	SN487233	Microwave Circuits	2019/8/8	2020/8/7
ETSTW-RE 129	5.5GHz Notch filter	N0555984	SN487234	Microwave Circuits	2019/8/8	2020/8/7
ETSTW-RE 130	Handheld RF Spectrum Analyzer	N9340A	CN0147000204	Agilent	Pre-te	st Use
ETSTW-RE 142	Amplifier	8447D	2805A03378	Agilent	2019/5/16	2020/5/15
ETSTW-RE 147	Bi-log Hybrid Antenna	MCTD 2786B	BLB16M04005	ETC	2019/4/2	2020/4/1
ETSTW-RF 002	Electromagnetic field probe	LF-30	K-0007	STT	2019/5/27	2020/5/26
ETSTW-EMI 011	USB Compact Modulator	SFC-U	101689	R&S	2019/5/16	2020/5/15
ETSTW-GSM 002	Universal Radio Communication Tester	CMU 200	109439	R&S	2019/3/5	2020/3/4
ETSTW-GSM 003	Radio Communication Analyzer	MT8820C	6201342073	Anritsu	2019/3/26	2020/3/25
ETSTW-GSM 004	Wideband Radio Communication Tester	CMW500	128092	R&S	2019/10/25	2020/10/24
ETSTW-GSM 019	Band Reject Filter	WRCTF824/849- 822/851-40 /12+9SS	3	WI	2020/1/13	2021/1/12
ETSTW-GSM 020	Band Reject Filter	WRCD1747/1748- 1743/1752-32/5SS	1	WI	2020/1/13	2021/1/12
ETSTW-GSM 021	Band Reject Filter	WRCD1879.5/1880.5 -1875.5/1884.5- 32/5SS	3	WI	2020/1/13	2021/1/12
ETSTW-GSM 022	Band Reject Filter	WRCT901.9/903.1- 904.25-50/8SS	1	WI	2020/1/13	2021/1/12
ETSTW-GSM 023	Power Divider	4901.19.A	None	SUHNER	2019/9/12	2020/9/11
ETSTW-GSM 024	Radio Communication Analyzer	MT8821C	None	Anritsu	2019/3/5	2020/3/4
ETSTW-GSM 025	Band Reject Filter	BRM19835	001	Micro-Tronics	2019/8/9	2020/8/8
ETSTW-Cable 011	SMA to N type Cable	RGU-400	None	THERMAX	Pre-test U	Jse NCR
ETSTW-Cable 016	BNC Cable	Switch Box	B Cable 1	Schwarz beck	2019/2/21	2020/2/20
ETSTW-Cable 017	BNC Cable	X Cable	B Cable 2	Schwarz beck	2019/2/21	2020/2/20
ETSTW-Cable 018	BNC Cable	Y Cable	B Cable 3	Schwarz beck	2019/2/21	2020/2/20
ETSTW-Cable 019	BNC Cable	Z Cable	B Cable 4	Schwarz beck	2019/2/21	2020/2/20
ETSTW-Cable 020	N TYPE Cable	OATS Cable 1	N30N30-L335-15M	JYE BAO CO.,LTD.	2019/7/2	2020/7/1
ETSTW-Cable 026	Microwave Cable	SUCOFLEX 104	279075	HUBER+SUHNER	2019/2/25	2020/2/24
ETSTW-Cable 027	Microwave Cable	SUCOFLEX 104	279083	HUBER+SUHNER	2019/5/14	2020/5/13
ETSTW-Cable 028	Microwave Cable	FA147A0015M2020	30064-2	UTIFLEX	2019/9/18	2020/9/17
ETSTW-Cable 029	Microwave Cable	FA147A0015M2020	30064-3	UTIFLEX	2019/9/18	2020/9/17
ETSTW-Cable 030	Microwave Cable	SUCOFLEX 104 (S_Cable 9)	279067	HUBER+SUHNER	2019/2/25	2020/2/24
ETSTW-Cable 043	Microwave Cable	SUCOFLEX 104	317576	HUBER+SUHNER	2019/5/16	2020/5/15
ETSTW-Cable 058	Microwave Cable	SUCOFLEX 104	none	HUBER+SUHNER	2019/6/6	2020/6/5
ETSTW-Cable 064	Microwave Cable	SUCOFLEX 104	MY28891	HUBER+SUHNER	2019/5/16	2020/5/15
ETSTW-Cable 066	SMA type cable	32022	None	ASTROLAB	2019/9/24	2020/9/23



Registration number: W6M21912-19586-C-1 FCC ID: 2AAGOMNB976TX

ETSTW-Cable 071	N TYPE CABLE	EMCCFD400-NM- NM-25000	170239	EMCI	2019/6/6	2020/6/5
ETSTW-Cable 072	SMA type cable (8m)	SUCOFLEX 104	805800/4	HUBER+SUHNER	2019/5/16	2020/5/15
ETSTW-Cable 074	SMA type cable (2m)	SUCOFLEX 104	802563/4	HUBER+SUHNER	2019/5/16	2020/5/15
WTSTW-SW 002	EMI TEST SOFTWARE	EZ_EMC	None	Farad	Version E	TS-03A1
WTSTW-SW 006	EMI TEST SOFTWARE	e3	None	AUDIX	Version	9.161014
WTSTW-SW 008	Signal studio	Agilent	None	AUDIX	Version	2.0.0.1
ETSTW-TH 001	Thermohygrometer	608-H1	45204316	Testo	2019/9/9	2020/9/8
ETSTW-TH 002	Thermohygrometer	608-H1	45204317	Testo	2019/9/9	2020/9/8

FCC ID: 2AAGOMNB976TX

#### 2.4 General Test Procedure

POWER LINE CONDUCTED INTERFERENCE: The procedure used was ANSI STANDARD C63.10-2013 6.2 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 C63.10-2013 6.3 employing a spectrum analyzer. For investigated frequency is equal to or below 1GHz, the RBW and VBW of the spectrum analyzer was 100 kHz and 100kHz respectively with an appropriate sweep speed. For investigated frequency is above 1GHz, both of RBW and VBW of the spectrum analyzer were 1 MHz with an appropriate sweep speed. The analyzer was calibrated in dB above a microvolt at the output of the antenna. The ambient, temperature of the UUT was 23°C with a humidity of 40 %.

FORMULA OF CONVERSION FACTORS: The Field Strength at 3m was established by adding the meter reading of the spectrum analyzer (which is set to read in units of  $dB\mu V$ ) 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

33  $20 \text{ dB}\mu\text{V} + 10.36 \text{ dB} + 6 \text{ dB} = 36.36 \text{ dB}\mu\text{V/m} \text{ (a)3m}$ 

The EUT was placed on a table 80 cm high and with dimensions of 1m by 1.5m (non metallic table) and arranged according to ANSI C63.10-2013 6.2.2. The table used for radiated measurements is capable of continuous rotation. The spectrum was scanned from 30 MHz to the frequency specified as follows:

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

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

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.



FCC ID: 2AAGOMNB976TX

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

The formula is as follows:

Average = Peak + Duty Factor

Duty Factor = 20 log (dwell time/T)

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

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

ANSI STANDARD C63.10-2013 B.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.

Registration number: W6M21912-19586-C-1 FCC ID: 2AAGOMNB976TX

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

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

FCC ID: 2AAGOMNB976TX

### 3.1 Peak Output Power (transmitter)

FCC Rule: 15.247

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

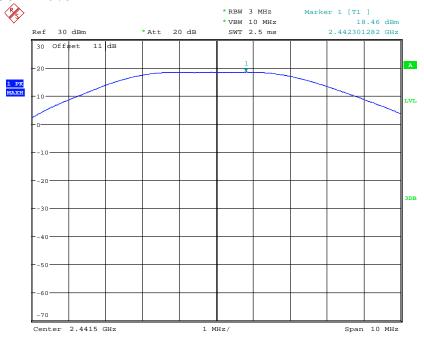
The power was measured with modulation (declared by the applicant).



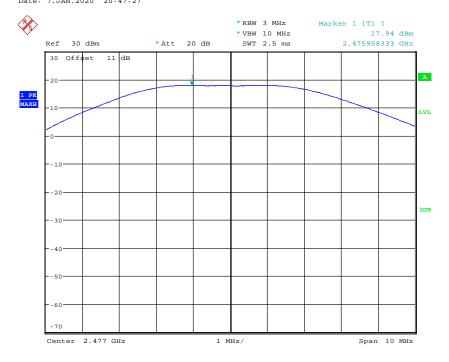
MAX OUTPUT POWER 2410MHz
Date: 7.JAN.2020 20:54:21

Registration number: W6M21912-19586-C-1

FCC ID: 2AAGOMNB976TX



MAX OUTPUT POWER 2441.5MHz
Date: 7.JAN.2020 20:47:27



MAX OUTPUT POWER 2477MHz
Date: 7.JAN.2020 20:55:21

FCC ID: 2AAGOMNB976TX

### **Maximum Peak Output Power**

Limits:

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

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

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



Registration number: W6M21912-19586-C-1

FCC ID: 2AAGOMNB976TX

#### 3.2 RF Exposure Compliance Requirements

FCC Rule: 15.247(b)(3)

EIRP = max. conducted output power + antenna gain

2.4GHz (2410-2477 MHz)

EIRP = 18.46 dBm+ (2 dBi [antenna gain claimed by manufacturer]) = 20.46 dBm = 111.1732 mW

## 3.3 Exemption Limits for Routine Evaluation according to 47 CFR FCC Part 2 Subpart J, section 2.1091

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

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

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined

as a mobile device whereby a distance of 20 cm normally can be maintained between the user and the device.

#### **MPE Calculation Method**

#### (A) Limits for Occupational/Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time $ E ^2$ , $ H ^2$ or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	$(900/f^2)*$	6
30-300	61.4	0.163	1.0	6
300-1500			f/300	6
1500-100,000			5	6

#### (B) Limits for General Population/Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time $ E ^2$ , $ H ^2$ or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	$(180/f^2)*$	30
30-300	27.5	0.073	0.2	30
300-1500			f/1500	30
1500-100,000			1.0	30

f = frequency in MHz

<sup>\*</sup>Plane-wave equivalent power density



Registration number: W6M21912-19586-C-1

FCC ID: 2AAGOMNB976TX

E = Electric field (V/m) P = output power (W) G = EUT Antenna numeric gain (numeric)

d = Separation distance between radiator and human body (m)

The formula can be changed to 
$$Pd = \frac{30 \times P \times G}{377 \times d^2}$$
 (mW/cm<sup>2</sup>)

#### **2.4GHz**

Established separation distance is 20 cm.

Operating frequency band: 2410-2477 MHz

The product meets RF exposure requirement.

Because the power density of 0.0221 mW/cm<sup>2</sup> at 2441.5 MHz is below the power density limit of 1 mW/cm<sup>2</sup>.

#### Limits:

Limit for General Population / Uncontrolled Exposure					
Frequency (MHz)	Power Density (mW/cm <sup>2</sup> )				
1500 – 100.000	1				

FCC ID: 2AAGOMNB976TX

#### 3.4 Out of Band Radiated Emissions

FCC Rule: 15.247(c), 15.35

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

For frequencies below 1GHz:

Max. reading – 20 dB

Guidance on Measurement of FHSS Systems:

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

Duty Cycle correction = 20 log (dwell time/100ms)
For frequencies above 1GHz (Peak measurements).
Limit = max. aver. reading-20dB +20dB(because Peak detector is used)

For frequencies above 1GHz (Average measurements). Max. reading – 20 dB - duty cycle correction:

No duty cycle correction was added to the reading

Test equipment used: ETSTW-RE 003, ETSTW-RE 004, ETSTW-RE 030, ETSTW-RE 042, ETSTW-RE 043, ETSTW-RE 044, ETSTW-RE 064



FCC ID: 2AAGOMNB976TX

#### 3.5 Transmitter Radiated Emissions in restricted Bands

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

Radiated emission measurements were performed from 30 MHz to 26000 MHz.

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

**RES BW VID BW** 

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

1 MHz 1 MHz (Average measurements)

Limits:

For frequencies below 1GHz:

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

For frequencies above 1GHz (Average measurements).

Guidance on Measurement of FHSS Systems:

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

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

For frequencies above 1GHz (Average measurements).

Limit – duty cycle correction

No duty cycle correction was added to the reading.

 $54.0dB\mu V/m$ 

For frequencies above 1GHz (Peak measurements).

Limit + 20dB

 $54.0 dB \mu V/m + 20 dB = 74 dB \mu V/m$ 

Note: See attached diagrams.

Test equipment used: ETSTW-RE 004, ETSTW-RE 030, ETSTW-RE 042,

ETSTW-RE 043, ETSTW-RE 044, ETSTW-RE 064



Registration number: W6M21912-19586-C-1

FCC ID: 2AAGOMNB976TX

#### 3.6 Spurious emissions (tx)

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

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

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

Calculation of test results:

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

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

--

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

If in the column's correction factor states a value then the max. Field strength in the same row is corrected by a value gained from the "Marker-Delta-Method" or the "Duty-Cycle Correction Factor".

Model: 55976T Date: Mode: °C Engineer: Temperature: Polarization: Horizontal Humidity: % Table Ant. Frequency Factor Result Limit Margin Reading Detector Degree High (MHz) (dBuV) (dB) (dBuV/m)(dBuV/m) (dB) (Deg.) (cm)

Frequency	Reading		Factor	Result	@3m	Limit @3m		Margin	Table	Ant.
	(dB	uV)	(dB)	(dBuV	//m)	(dBu	V/m)		Degree	High
(MHz)	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)
	-	-		-		-				

Polarization: Vertical

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

Frequency	Reading		Factor	Result	@3m	Limit	@3m	Margin	Table	Ant.
	(dB	uV)	(dB)	(dBuV	//m)	(dBu	V/m)		Degree	High
(MHz)	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)



FCC ID: 2AAGOMNB976TX

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. Up Line: PK Limit Line, Down Line: Ave Limit Line.
- 6. After evaluated, the test result in this report adopt the worst case to measure, please see attached diagrams in appendix.

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

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

Test equipment used: ETSTW-RE 004, ETSTW-RE 030, ETSTW-RE 042, ETSTW-RE 043, ETSTW-RE 044, ETSTW-RE 064

FCC ID: 2AAGOMNB976TX

### 3.6 Carrier Frequency Separation

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

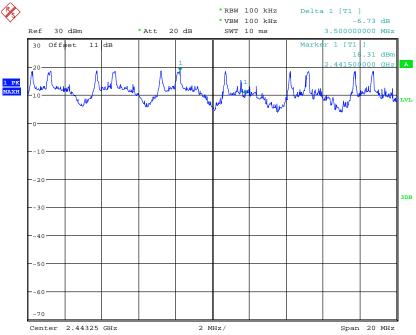
According to FCC rules part 15 subpart C §15.247 frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or 20 dB bandwidth of the hopping channel, whichever is greater.



FREQUENCY SEPARATION 2410MHz Date: 7.JAN.2020 19:48:13

Registration number: W6M21912-19586-C-1

FCC ID: 2AAGOMNB976TX



FREQUENCY SEPARATION 2441.5MHz Date: 7.JAN.2020 19:58:24



FREQUENCY SEPARATION 2477MHz Date: 7.JAN.2020 20:01:25



Registration number: W6M21912-19586-C-1 FCC ID: 2AAGOMNB976TX

Limits:

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

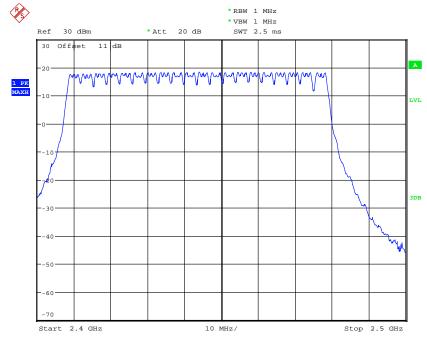
Test equipment used: ETSTW-RE 055, ETSTW-RE 064

FCC ID: 2AAGOMNB976TX

### 3.7 Number of Hopping Frequencies

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

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



NUMBER OF HOPPING
Date: 7.JAN.2020 17:30:54

Number of Hopping: 24 channels

#### Limits:

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

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



FCC ID: 2AAGOMNB976TX

#### 3.7.1 Pseudorandom Frequency Hopping Sequence

This FSK transmitter is controlled by a microchip to generate the Pseudorandom Frequency Hopping Sequence. There is one hopping sequence listed below:

#### Sequence:

2410, 2413.5, 2417, 2420.5, 2424, 2427.5, 2431, 2434.5, 2438, 2441.5, 2445, 2448.5, 2452, 2455.5, 2459, 2462.5, 2466, 2469.5, 2473, 2477



Registration number: W6M21912-19586-C-1

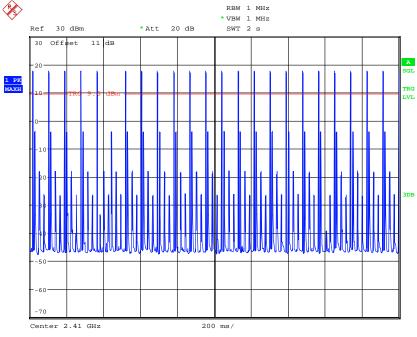
FCC ID: 2AAGOMNB976TX

#### 3.8 Time of Occupancy (Dwell Time)

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

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

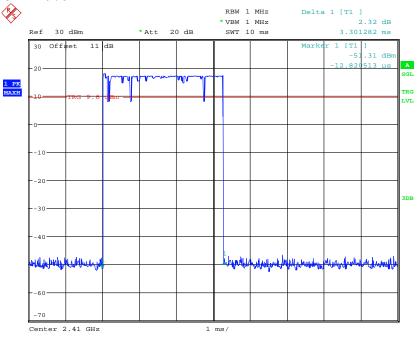
For frequency hopping systems operating in the 902-928 MHz band: if the 20dB bandwidth of the hopping channel is less than 250 kHz, the average time of occupancy on any frequency shall not greater than 0.4 seconds within a 20 second period; if the 20dB bandwidth of the hopping channel is 250 kHz or greater,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



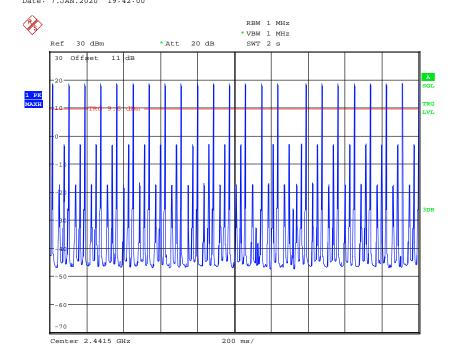
DWELL TIME 2410MHz
Date: 7.JAN.2020 19:34:14

Registration number: W6M21912-19586-C-1

FCC ID: 2AAGOMNB976TX



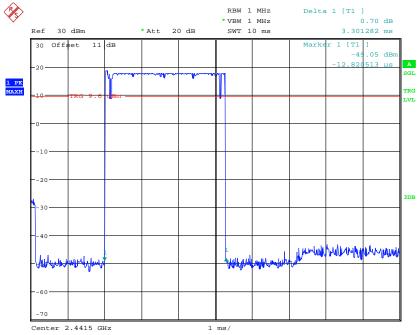
DWELL TIME 2410MHz(3.301ms \* 88events = 290.488ms)
Date: 7.JAN.2020 19:42:00



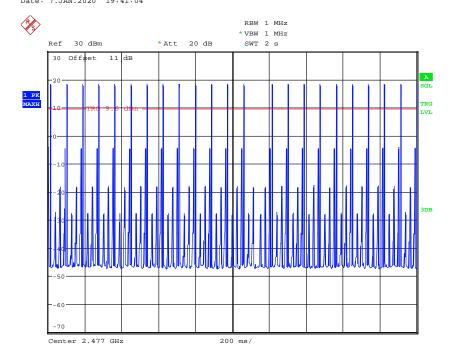
DWELL TIME 2441.5MHz
Date: 7.JAN.2020 19:35:14

Registration number: W6M21912-19586-C-1

FCC ID: 2AAGOMNB976TX



DWELL TIME 2441.5MHz(3.301ms \* 88events = 290.488ms)
Date: 7.JAN.2020 19:41:04



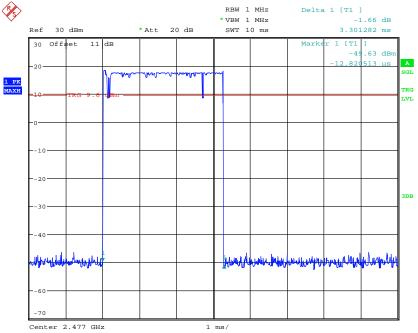
DWELL TIME 2477MHz

Date: 7.JAN.2020 19:35:53



Registration number: W6M21912-19586-C-1

FCC ID: 2AAGOMNB976TX



DWELL TIME 2477MHz(3.301ms \* 88events = 290.488ms)
Date: 7.JAN.2020 19:41:35

Limits and measurement periods:

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

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



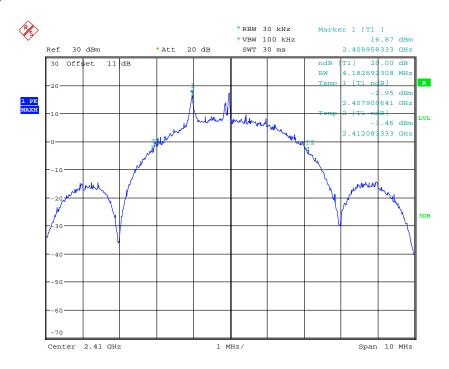
Registration number: W6M21912-19586-C-1

FCC ID: 2AAGOMNB976TX **3.9 20dB Bandwidth** 

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

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

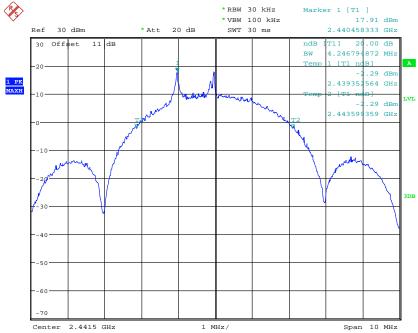
For frequency hopping systems operating in the 902-928 MHz band the maximum 20dB bandwidth of the hopping channel is 500 kHz.



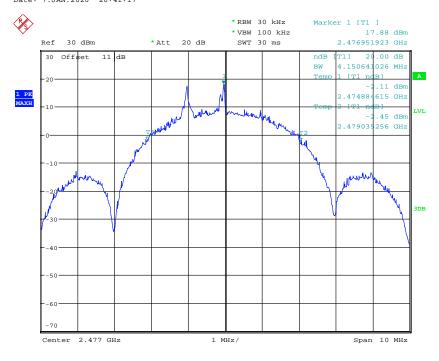
20DB BANDWIDTH 2410MHz Date: 7.JAN.2020 17:23:15

Registration number: W6M21912-19586-C-1

FCC ID: 2AAGOMNB976TX



20DB BANDWIDTH 2441.5MHz Date: 7.JAN.2020 20:41:17



20DB BANDWIDTH 2477MHz
Date: 7.JAN.2020 17:20:22



Registration number: W6M21912-19586-C-1 FCC ID: 2AAGOMNB976TX

Limits:

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

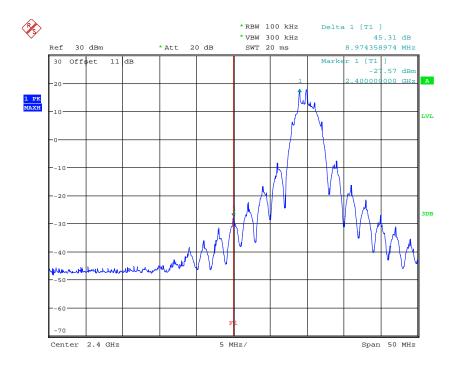
Test equipment used: ETSTW-RE 055, ETSTW-RE 064

FCC ID: 2AAGOMNB976TX

#### 3.10 Band-edge Compliance of RF Emissions

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

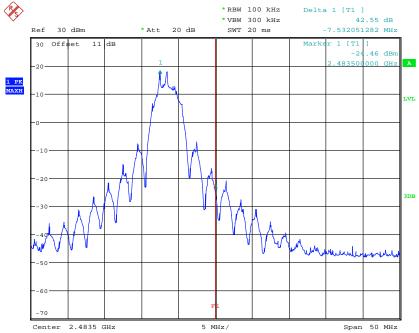
In addition radiated emission which fall in the restricted bands, as defined in section 15.205(a), must also with the radiated emission limits.



BANDEDGE 2410MHz
Date: 7.JAN.2020 17:05:07

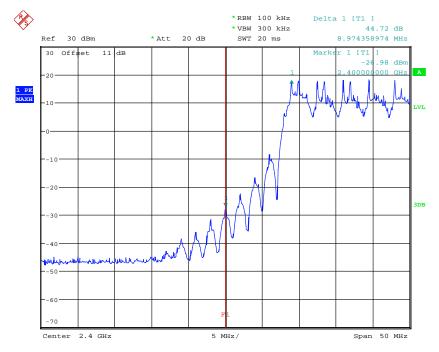
Registration number: W6M21912-19586-C-1

FCC ID: 2AAGOMNB976TX



BANDEDGE 2477MHz

Date: 7.JAN.2020 17:19:07

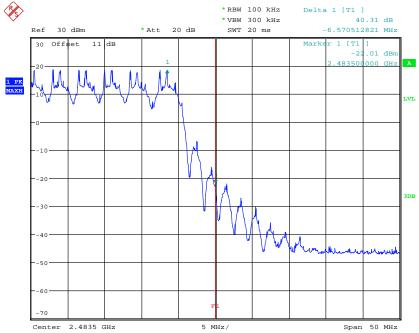


BANDEDGE HOPPING MODE 2410MHz Date: 7.JAN.2020 17:07:19



Registration number: W6M21912-19586-C-1

FCC ID: 2AAGOMNB976TX



BANDEDGE HOPPING MODE 2477MHz Date: 7.JAN.2020 17:17:30

#### **Limits:**

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

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



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

Registration number: W6M21912-19586-C-1

FCC ID: 2AAGOMNB976TX

3.11 Radiated Emissions from Receiver Section of Transceiver

FCC Rule: 15.109

Model: 55976T Date: --

Mode: -- Temperature: -- °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	Rea	Reading		Resul	Result @3m		Limit @3m		Table	Ant.
	(dBuV)		(dB)	(dBuV/m)		(dBuV/m)			Degree	High
(MHz)	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)
	-			-	I	ŀ				

Polarization: Vertical

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

Frequency	Reading		Factor	Result @3m		Limit @3m		Margin	Table	Ant.
	(dBuV)		(dB)	(dBuV/m)		(dBuV/m)			Degree	High
(MHz)	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)
	-						-			-

#### Note

- 1. Correction Factor = Antenna factor + Cable loss Preamplifier
- 2. The formula of measured value as: Test Result = Reading + Correction Factor
- 3. Detector function in the form: PK = Peak, QP = Quasi Peak, AV = Average
- 4. All not in the table noted test results are more than 20 dB below the relevant limits.
- 5. Up Line: QP Limit Line, Down Line: Ave Limit Line.
- 6. The test results are listed in the separated test report no.: W6M21912-19586-P-15B.

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

Test equipment used: ETSTW-RE 004, ETSTW-RE 030, ETSTW-RE 042, ETSTW-RE 043, ETSTW-RE 044, ETSTW-RE 064



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

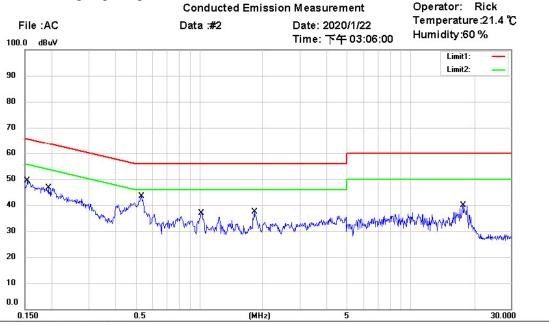
Registration number: W6M21912-19586-C-1

FCC ID: 2AAGOMNB976TX

#### 3.12 Power Line Conducted Emission

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

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



Site: Chamber\_03

Condition: FCC Part 15 Class B Conduction (QP)

Phase: Power: 120Va.c.

EUT: W6M21912-19586

M/N:

Test Mode: Charge

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Comment
	0.1538	31.62	QP	9.75	41.37	65.79	-24.42	
*	0.1538	25.79	AVG	9.75	35.54	55.79	-20.25	
	0.1930	27.73	QP	9.73	37.46	63.91	-26.45	
	0.1930	10.84	AVG	9.73	20.57	53.91	-33.34	
4 9	0.5315	25.12	QP	9.68	34.80	56.00	-21.20	
	0.5315	14.70	AVG	9.68	24.38	46.00	-21.62	
2 8	1.0196	22.34	QP	9.63	31.97	56.00	-24.03	
	1.0196	14.14	AVG	9.63	23.77	46.00	-22.23	
	1.8275	21.25	QP	9.56	30.81	56.00	-25.19	
× ×	1.8275	11.59	AVG	9.56	21.15	46.00	-24.85	
	17.6375	21.17	QP	10.48	31.65	60.00	-28.35	
	17.6375	7.27	AVG	10.48	17.75	50.00	-32.25	



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

Registration number: W6M21912-19586-C-1

FCC ID: 2AAGOMNB976TX



L1

Phase:

Site: Chamber\_03

Condition: FCC Part 15 Class B Conduction (QP)

EUT: W6M21912-19586 Power: 120Va.c.

M/N:

Test Mode: Charge

Note:

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Comment
	0.2037	29.92	QP	9.75	39.67	63.46	-23.79	
	0.2037	24.55	AVG	9.75	34.30	53.46	-19.16	
	0.4088	27.17	QP	9.71	36.88	57.67	-20.79	
	0.4088	22.60	AVG	9.71	32.31	47.67	-15.36	
	0.5315	30.09	QP	9.70	39.79	56.00	-16.21	
*	0.5315	24.06	AVG	9.70	33.76	46.00	-12.24	
×	1.0085	24.39	QP	9.65	34.04	56.00	-21.96	
	1.0085	17.89	AVG	9.65	27.54	46.00	-18.46	
	1.8073	21.45	QP	9.58	31.03	56.00	-24.97	
× ×	1.8073	14.40	AVG	9.58	23.98	46.00	-22.02	
	18.0625	15.17	QP	10.37	25.54	60.00	-34.46	
w w	18.0625	5.84	AVG	10.37	16.21	50.00	-33.79	

#### Note

- 1. The formula of measured value as: Test Result = Reading + Correction Factor
- 2. The Correction Factor = Cable Loss + LISN Insertion Loss + Pulse Limit Loss
- 3. Detector function in the form: PK = Peak, QP = Quasi Peak, AV = Average
- 4. All not in the table noted test results are more than 20 dB below the relevant limits.
- 5. Up Line: QP Limit Line, Down Line: Ave Limit Line.

#### **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

Registration number: W6M21912-19586-C-1

FCC ID: 2AAGOMNB976TX

### **Appendix**

### A Photos

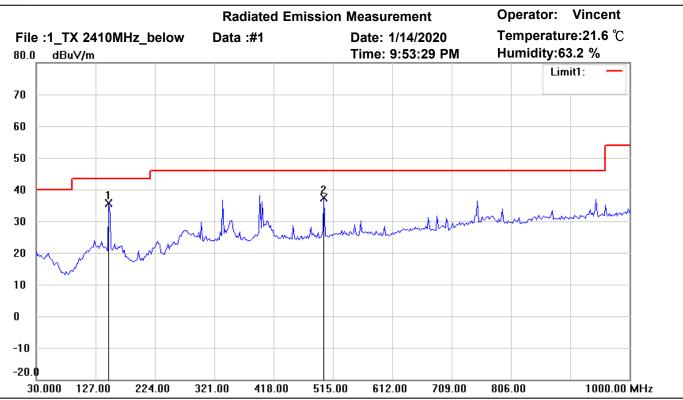
- 1. External Photos
- 2. Internal Photos
- 3. Set Up Photo of Radiated Emission
- 4. Set Up Photo of Conducted Emission

### B Measurement diagrams

Spurious Emissions radiated



Tel:+886-2-6606-8877 Fax:+886-2-6606-8879



Site: Chamber

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

EUT: W6M21912-19586 Power: 120 Va.c.

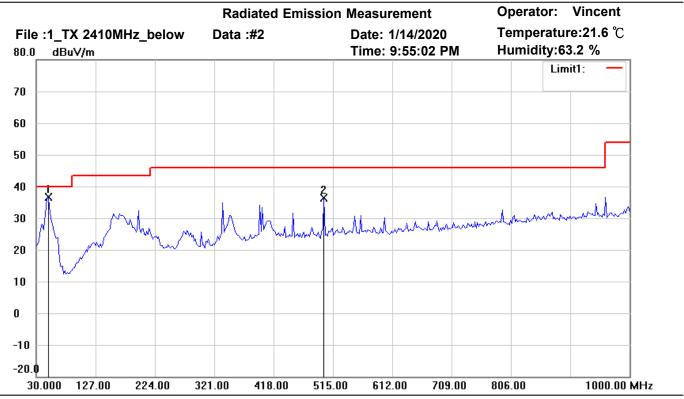
M/N: Distance: 3m

Test Mode: TX 2410MHz

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
*	148.5772	42.78	peak	-7.22	35.56	43.50	100	220	-7.94	
	500.4208	40.27	peak	-2.96	37.31	46.00	100	135	-8.69	



Tel:+886-2-6606-8877 Fax:+886-2-6606-8879



Site: Chamber

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

EUT: W6M21912-19586 Power: 120 Va.c.

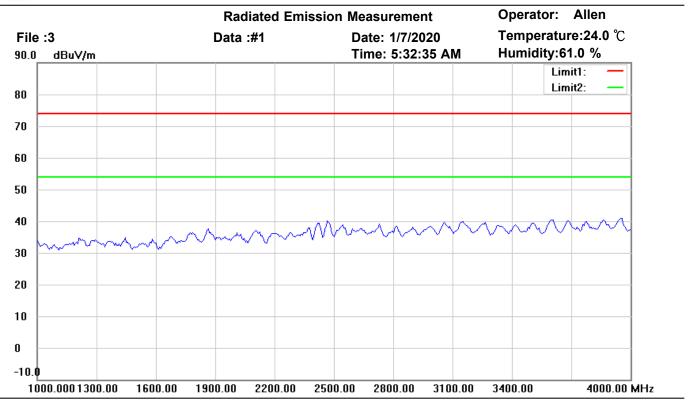
M/N: Distance: 3m

Test Mode: TX 2410MHz

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
*	49.4388	46.72	peak	-10.07	36.65	40.00	100	250	-3.35	
	500.4208	39.40	peak	-2.96	36.44	46.00	100	130	-9.56	



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Site: Chamber

Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

EUT: W6M21912-19586 Power: 120 Va.c.

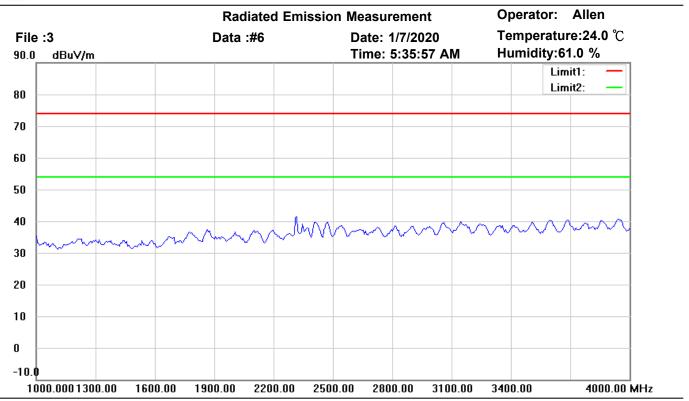
M/N: Distance: 3m

Test Mode: TX 2410MHz

	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\_Above 1GHz\_PK Polarization: Vertical

EUT: W6M21912-19586 Power: 120 Va.c.

Test Mode: TX 2410MHz

Note:

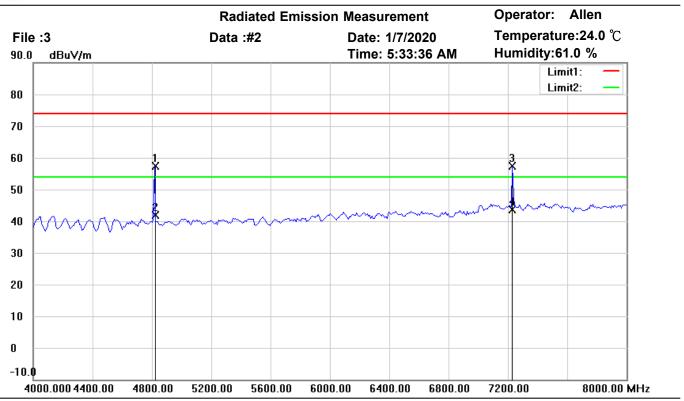
M/N:

	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)	

Distance: 3m



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Site: Chamber

Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

EUT: W6M21912-19586 Power: 120 Va.c.

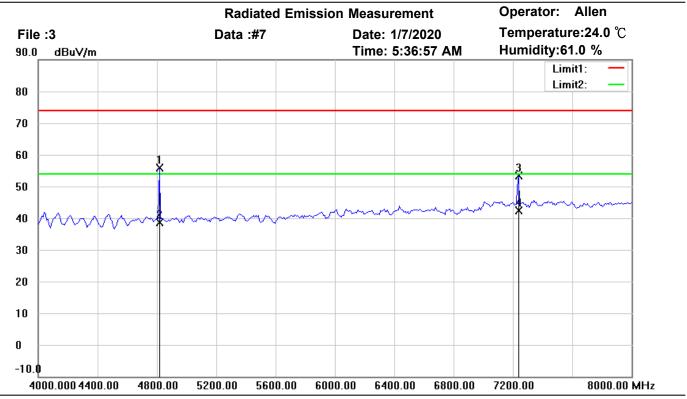
M/N: Distance: 3m

Test Mode: TX 2410MHz

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
	4819.819	59.17	peak	-1.89	57.28	74.00	177	360	-16.72	
	4819.819	43.75	AVG	-1.89	41.86	54.00	177	360	-12.14	
	7229.920	54.18	peak	3.27	57.45	74.00	150	70	-16.55	
*	7229.920	40.42	AVG	3.27	43.69	54.00	150	70	-10.31	



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Site: Chamber

Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

EUT: W6M21912-19586 Power: 120 Va.c.

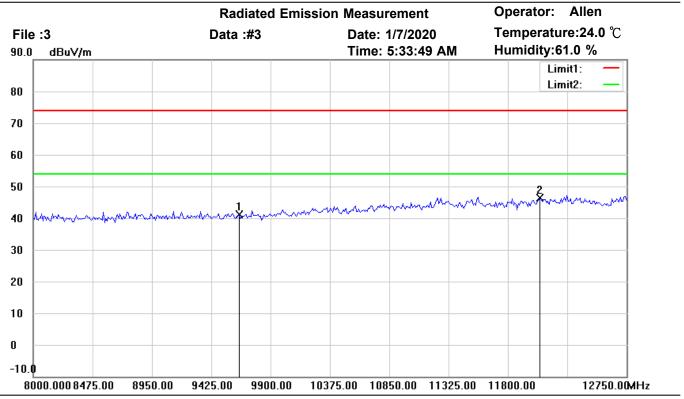
M/N: Distance: 3m

Test Mode: TX 2410MHz

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	57.86	peak	-1.90	55.96	74.00	150	200	-18.04	
	4817.635	40.42	AVG	-1.90	38.52	54.00	150	200	-15.48	
	7230.461	50.19	peak	3.27	53.46	74.00	150	175	-20.54	
*	7230.461	39.20	AVG	3.27	42.47	54.00	150	175	-11.53	



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Site: Chamber

Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

EUT: W6M21912-19586 Power: 120 Va.c.

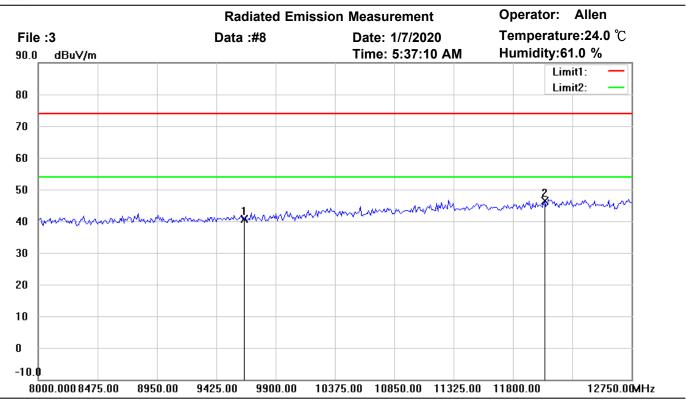
M/N: Distance: 3m

Test Mode: TX 2410MHz

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
	9640.000	34.49	peak	6.59	41.08	74.00	150	245	-32.92	
*	12050.000	34.28	peak	12.09	46.37	74.00	150	110	-27.63	



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Site: Chamber

Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

EUT: W6M21912-19586 Power: 120 Va.c.

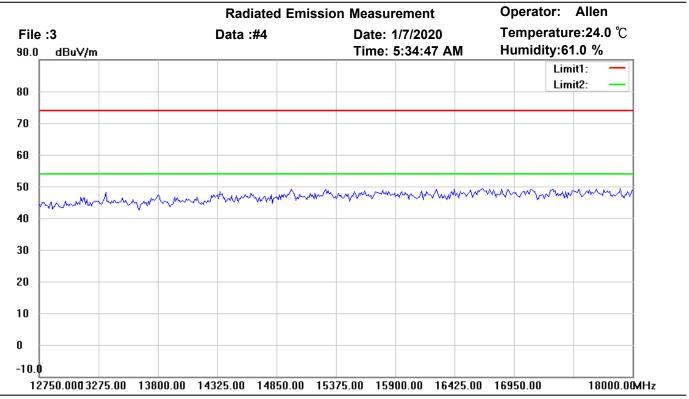
M/N: Distance: 3m

Test Mode: TX 2410MHz

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
	9640.000	34.05	peak	6.59	40.64	74.00	150	70	-33.36	
*	12050.000	34.35	peak	12.09	46.44	74.00	150	325	-27.56	



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Site: Chamber

Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

EUT: W6M21912-19586 Power: 120 Va.c.

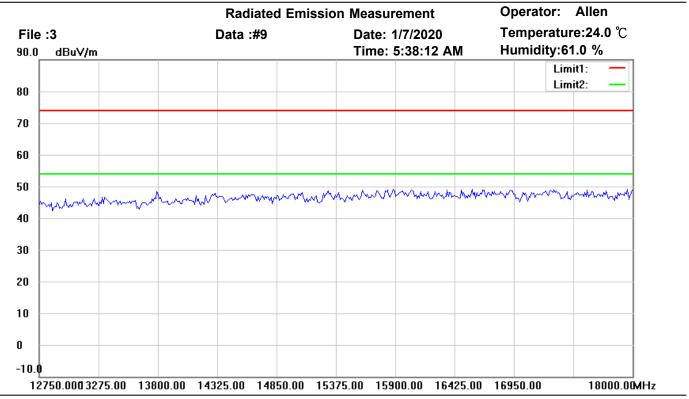
M/N: Distance: 3m

Test Mode: TX 2410MHz

	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

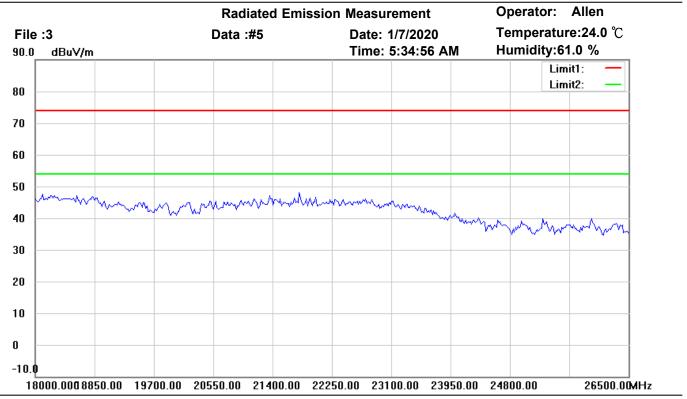
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2410MHz

	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\_Above 1GHz\_PK Polarization: Horizontal

EUT: W6M21912-19586 Power: 120 Va.c.

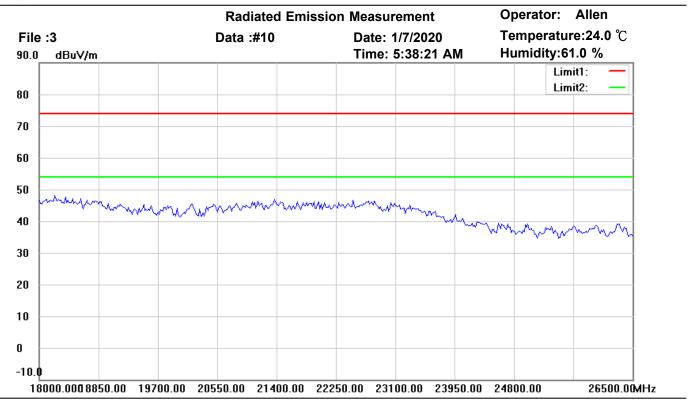
M/N: Distance: 3m

Test Mode: TX 2410MHz

	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

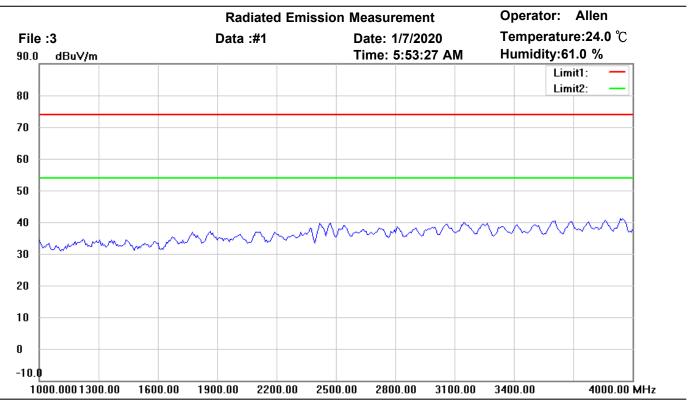
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2410MHz

	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\_Above 1GHz\_PK Polarization: Horizontal

EUT: W6M21912-19586 Power: 120 Va.c.

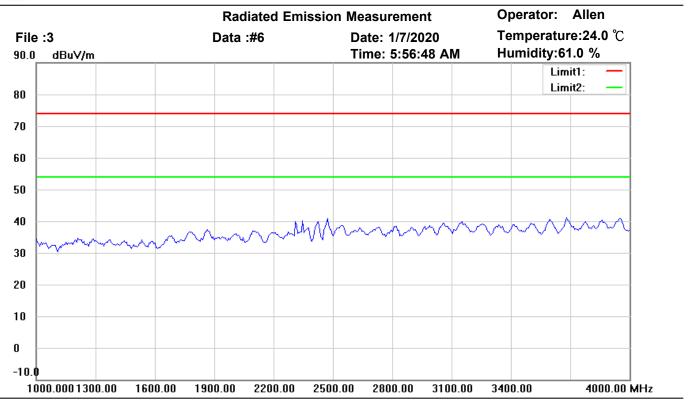
M/N: Distance: 3m

Test Mode: TX 2441.5MHz

	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\_Above 1GHz\_PK Polarization: Vertical

EUT: W6M21912-19586 Power: 120 Va.c.

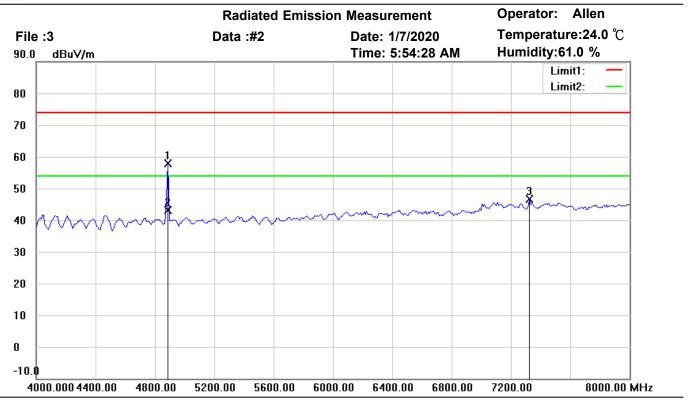
M/N: Distance: 3m

Test Mode: TX 2441.5MHz

	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\_Above 1GHz\_PK Polarization: Horizontal

EUT: W6M21912-19586 Power: 120 Va.c.

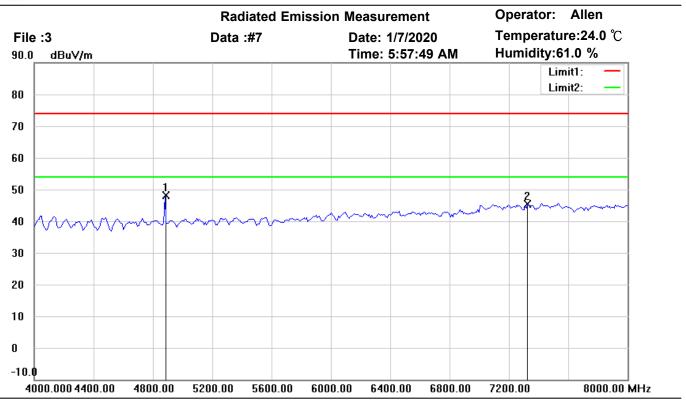
M/N: Distance: 3m

Test Mode: TX 2441.5MHz

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
	4882.946	59.54	peak	-1.67	57.87	74.00	175	90	-16.13	
*	4882.946	44.77	AVG	-1.67	43.10	54.00	175	90	-10.90	
	7323.000	43.20	peak	3.46	46.66	74.00	150	225	-27.34	



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Site: Chamber

Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

EUT: W6M21912-19586 Power: 120 Va.c.

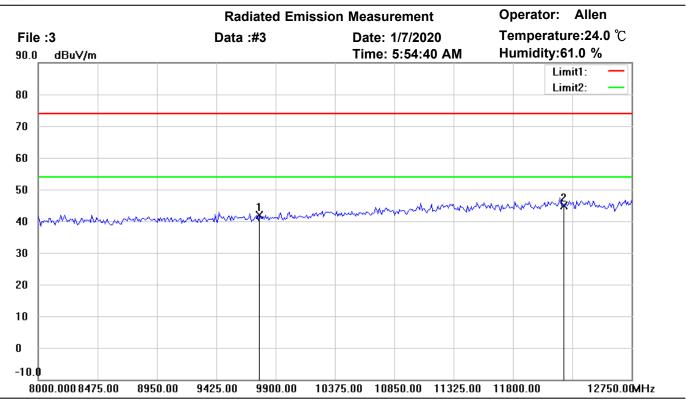
M/N: Distance: 3m

Test Mode: TX 2441.5MHz

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	49.84	peak	-1.67	48.17	74.00	150	200	-25.83	
	7323.000	41.94	peak	3.46	45.40	74.00	150	125	-28.60	



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Site: Chamber

Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

EUT: W6M21912-19586 Power: 120 Va.c.

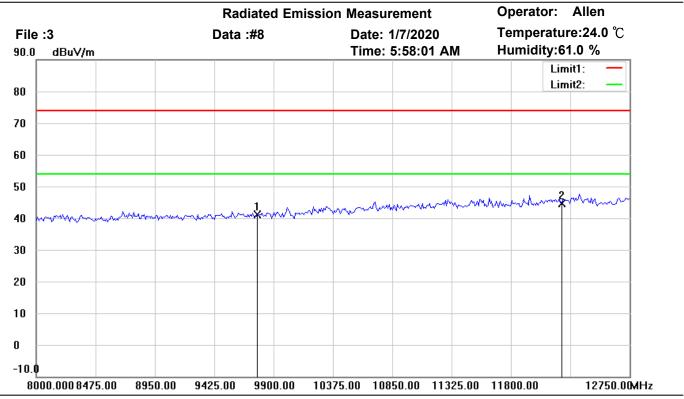
M/N: Distance: 3m

Test Mode: TX 2441.5MHz

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
	9764.000	35.16	peak	6.77	41.93	74.00	150	70	-32.07	
*	12205.000	32.00	peak	12.81	44.81	74.00	150	45	-29.19	



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Site: Chamber

Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

EUT: W6M21912-19586 Power: 120 Va.c.

Test Mode: TX 2441.5MHz

Note:

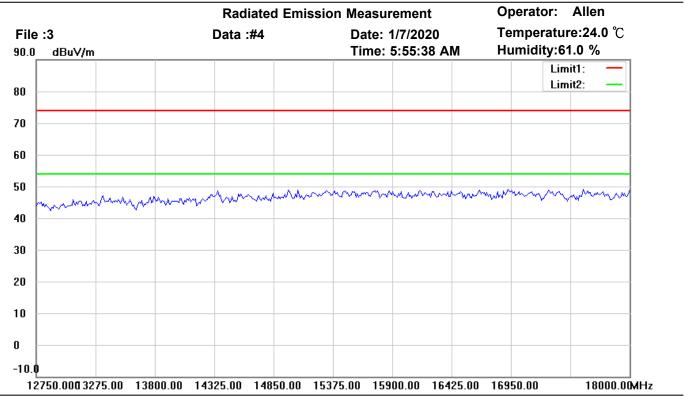
M/N:

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
	9764.000	34.27	peak	6.77	41.04	74.00	150	20	-32.96	
*	12205.000	31.91	peak	12.81	44.72	74.00	150	285	-29.28	

Distance: 3m



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Site: Chamber

Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

EUT: W6M21912-19586 Power: 120 Va.c.

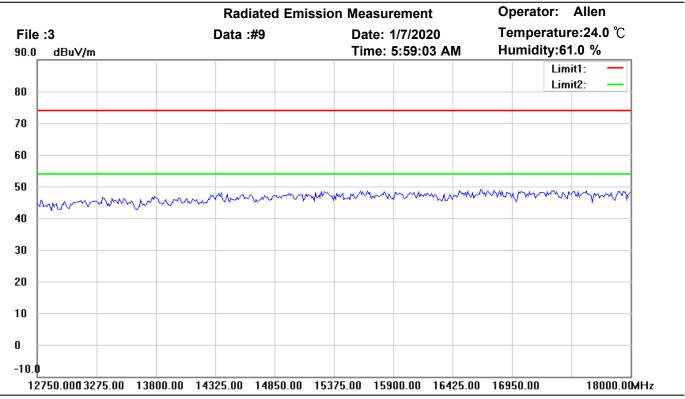
M/N: Distance: 3m

Test Mode: TX 2441.5MHz

	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

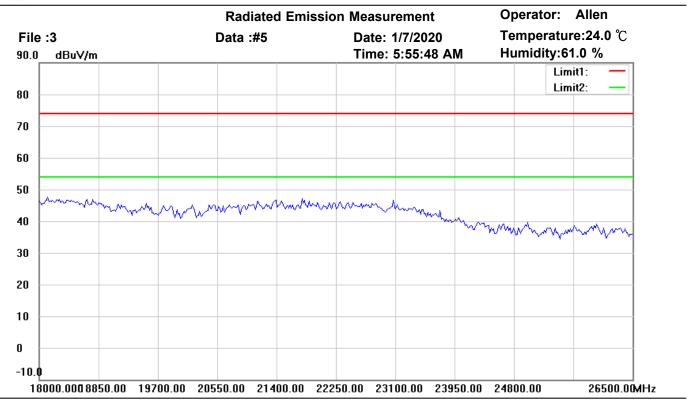
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2441.5MHz

	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\_Above 1GHz\_PK Polarization: Horizontal

EUT: W6M21912-19586 Power: 120 Va.c.

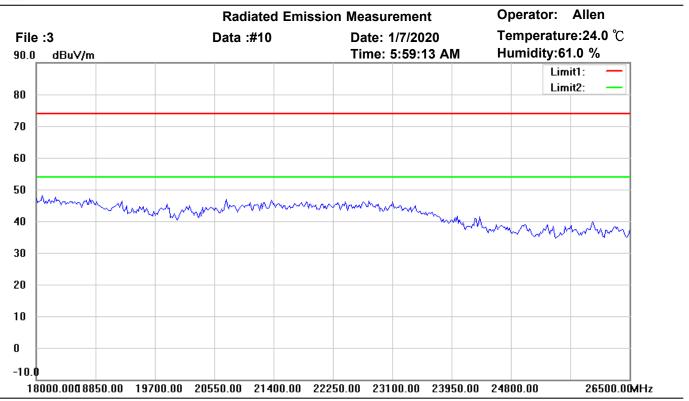
M/N: Distance: 3m

Test Mode: TX 2441.5MHz

	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

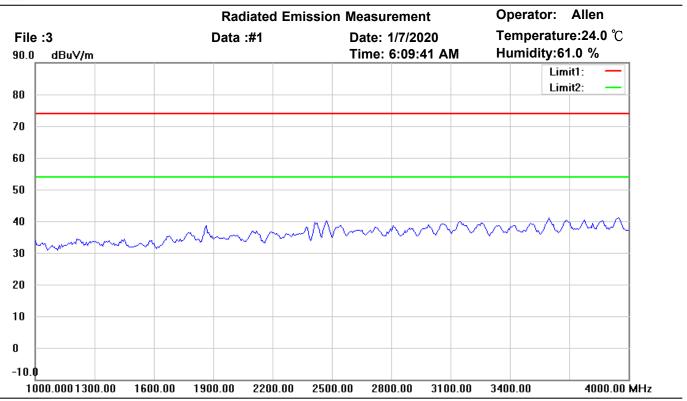
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2441.5MHz

	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\_Above 1GHz\_PK Polarization: Horizontal

EUT: W6M21912-19586 Power: 120 Va.c.

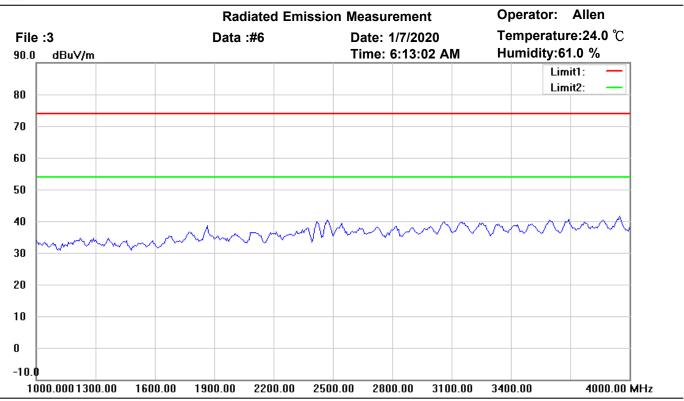
M/N: Distance: 3m

Test Mode: TX 2477MHz

	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\_Above 1GHz\_PK Polarization: Vertical

EUT: W6M21912-19586 Power: 120 Va.c.

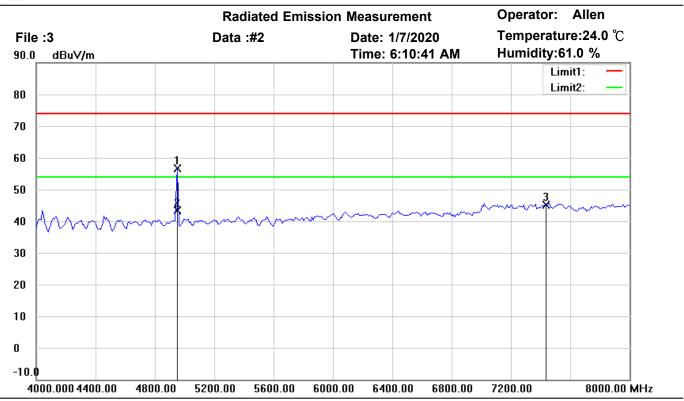
M/N: Distance: 3m

Test Mode: TX 2477MHz

	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\_Above 1GHz\_PK Polarization: Horizontal

EUT: W6M21912-19586 Power: 120 Va.c.

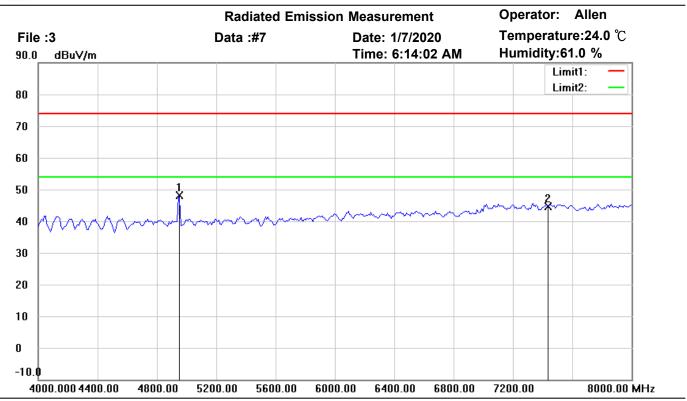
M/N: Distance: 3m

Test Mode: TX 2477MHz

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
	4951.884	58.12	peak	-1.39	56.73	74.00	155	120	-17.27	
*	4951.884	44.66	AVG	-1.39	43.27	54.00	155	120	-10.73	
	7431.000	41.40	peak	3.74	45.14	74.00	150	265	-28.86	



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Site: Chamber

Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

EUT: W6M21912-19586 Power: 120 Va.c.

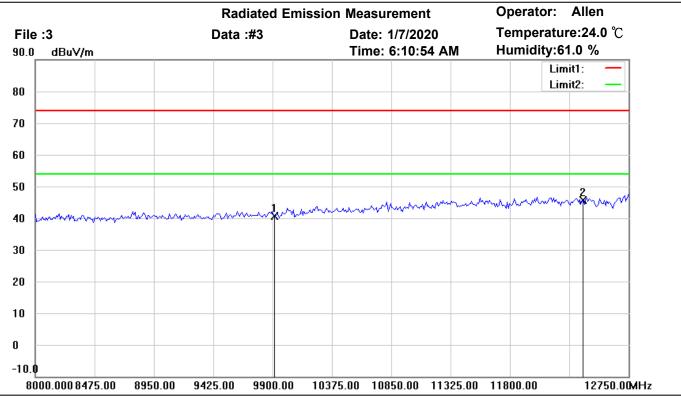
M/N: Distance: 3m

Test Mode: TX 2477MHz

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	49.61	peak	-1.41	48.20	74.00	150	15	-25.80	
	7431.000	41.01	peak	3.74	44.75	74.00	150	80	-29.25	



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Site: Chamber

Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

EUT: W6M21912-19586 Power: 120 Va.c.

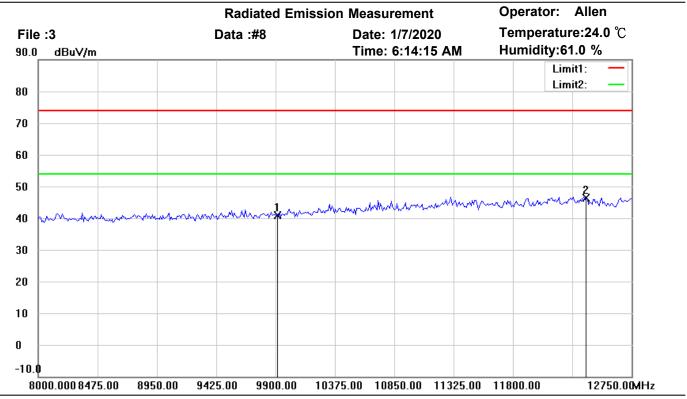
M/N: Distance: 3m

Test Mode: TX 2477MHz

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
	9908.000	33.44	peak	7.14	40.58	74.00	150	80	-33.42	
*	12385.000	32.88	peak	12.66	45.54	74.00	150	250	-28.46	



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Site: Chamber

Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

EUT: W6M21912-19586 Power: 120 Va.c.

Test Mode: TX 2477MHz

Note:

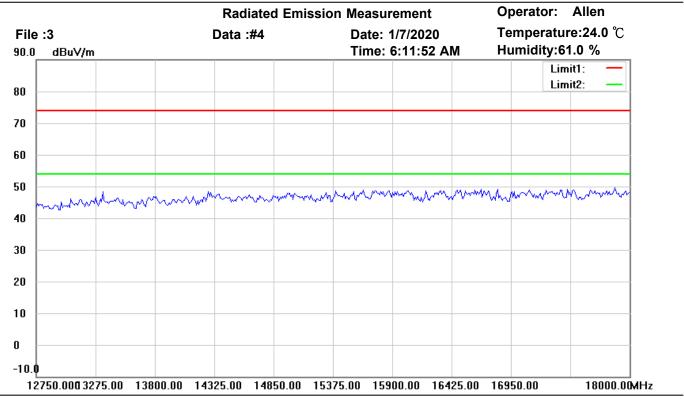
M/N:

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
	9908.000	33.66	peak	7.14	40.80	74.00	150	270	-33.20	
*	12385.000	33.81	peak	12.66	46.47	74.00	150	100	-27.53	

Distance: 3m



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Site: Chamber

Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

EUT: W6M21912-19586 Power: 120 Va.c.

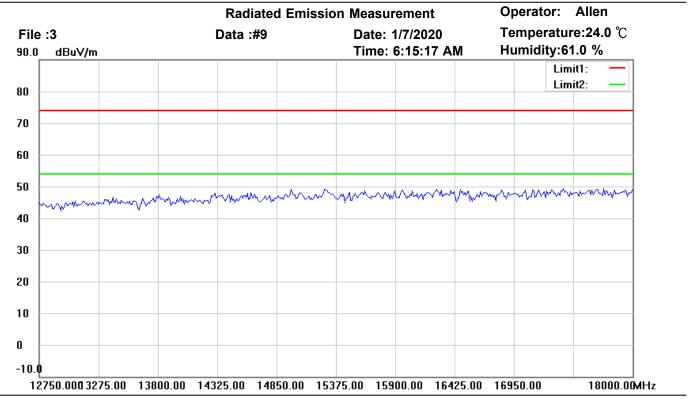
M/N: Distance: 3m

Test Mode: TX 2477MHz

	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

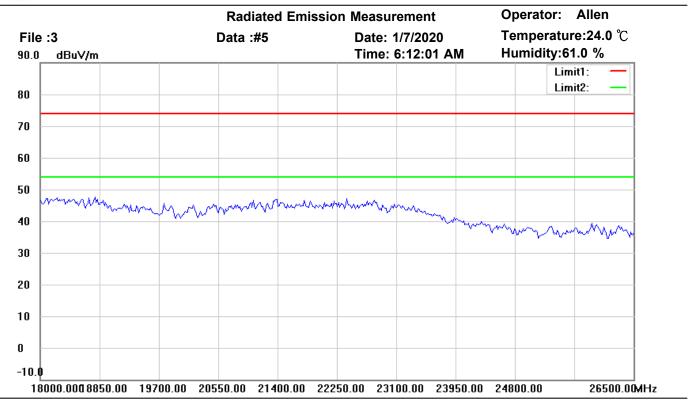
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2477MHz

	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\_Above 1GHz\_PK Polarization: Horizontal

EUT: W6M21912-19586 Power: 120 Va.c.

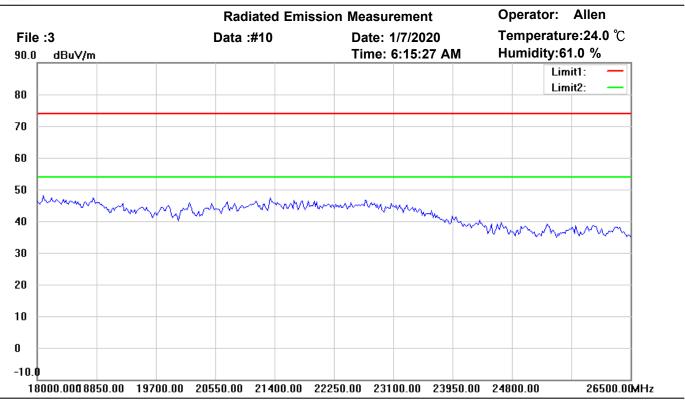
M/N: Distance: 3m

Test Mode: TX 2477MHz

	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)	



Tel:+886-2-6606-8877 Fax:+886-2-6606-8879



Site: Chamber

Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2477MHz

	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)	