

47 CFR PART 15 SUBPART E TEST REPORT
for
Digital Handheld Transmitter
Model No.: ACT-580H
FCC ID: M5X-ACT580H

of

Applicant: MIPRO Electronics Co., Ltd.
Address: 814, Beigang Rd., Chiayi City 600079, Taiwan, R.O.C.

Tested and Prepared

by

Worldwide Testing Services (Taiwan) Co., Ltd.

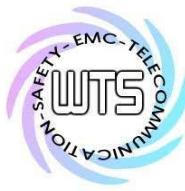
FCC Registration No.: TW1477, TW0020, TW1072

Industry Canada filed test laboratory Reg. No. 20037



Report No.: W6M22103-20783-C-54

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

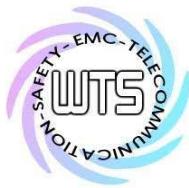


Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M22103-20783-C-54
FCC ID: M5X-ACT580H

TABLE OF CONTENTS

1 GENERAL INFORMATION	2
1.1 NOTES.....	2
1.2 TESTING LABORATORY	3
1.2.1 <i>Location</i>	3
1.2.2 <i>Details of accreditation status</i>	3
1.3 DETAILS OF APPROVAL HOLDER.....	3
1.4 APPLICATION DETAILS	3
1.5 GENERAL INFORMATION OF TEST ITEM	4
1.6 TEST STANDARDS.....	5
2 TECHNICAL TEST	6
2.1 SUMMARY OF TEST RESULTS	6
2.2 TEST ENVIRONMENT	6
2.3 TEST EQUIPMENT LIST	7
2.4 TEST PROCEDURE	10
3 TEST RESULTS (ENCLOSURE)	13
3.1 PEAK TRANSMIT POWER, FCC 15.407 (A)	14
3.2 26dB EMISSION BANDWIDTH, 99% OCCUPIED BANDWIDTH, FCC 15.407 (A)	16
3.3 6dB EMISSION BANDWIDTH, 99% OCCUPIED BANDWIDTH, FCC 15.407 (A)	17
3.4 PEAK POWER SPECTRAL DENSITY, FCC 15.407 (A)	19
3.5 UNDESIRABLE EMISSION LIMITS, FCC 15.407 (B)	21
3.6 AUTOMATIC DISCONTINUATION OF TRANSMISSION, FCC 15.407 (C).....	23
3.7 RESERVED, FCC 15.407 (D).....	23
3.8 INDOOR OPERATION RESTRICTION, FCC 15.407 (E)	23
3.9 EQUIVALENT ISOTROPIC RADIATED POWER (EIRP), FCC 15.407 (F)	23
3.10 EXEMPTION LIMITS FOR ROUTINE EVALUATION ACCORDING TO 47 CFR FCC PART 2 SUBPART J, SECTION 2.1091	24
3.11 TRANSMIT POWER CONTROL (TPC)	25
3.12 DYNAMIC FREQUENCY SELECTION (DFS)	26
3.12.1 <i>DFS Detection Threshold</i>	26
3.12.2 <i>Channel move time plot of Type1 radar waveform on 5270MHz</i>	26
3.12.3 <i>30Minutes Non-Occupancy Time</i>	26
3.13 CHANNEL MOVE TIME, CHANNEL CLOSING TRANSMISSION TIME.....	27
3.14 RADIATED EMISSIONS FROM RECEIVER PART	28
3.15 POWER LINE CONDUCTED EMISSION	29



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M22103-20783-C-54
FCC ID: M5X-ACT580H

1 General Information

1.1 Notes

The purpose of conformity testing is to increase the probability of adherence to the essential requirements or conformity specifications, as appropriate.

The complexity of the technical specifications, however, means that full and thorough testing is impractical for both technical and economic reasons.

Furthermore, there is no guarantee that a test sample which has passed all the relevant tests conforms to a specification.

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

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

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

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

Specific Conditions:

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

Tester:

June 23, 2021

Robert Ren

Date

WTS-Lab.

Name

Signature

Technical responsibility for area of testing:

June 23, 2021

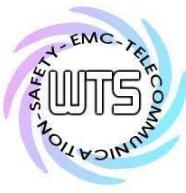
Kevin Wang

Date

WTS

Name

Signature



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M22103-20783-C-54
FCC ID: M5X-ACT580H

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

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

Name: MIPRO Electronics Co., Ltd.

Street: 814, Beigang Rd.,

Town: Chiayi City 600079,

Country: Taiwan, R.O.C.

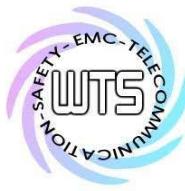
Telephone: +886-5-238-0809

Fax: +886-5-238-0803

1.4 Application details

Date of receipt of test item: May 10, 2021

Date of test: from May 11, 2021 to June 18, 2021



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M22103-20783-C-54
FCC ID: M5X-ACT580H

1.5 General information of Test item

Type of test item: Digital Handheld Transmitter
Model Number: ACT-580H
Brand Name: MIPRO
Multi-listing model number: ACT-5XXXXX (X=0~9,a~z,A~Z or Blank)
Photos: see Appendix

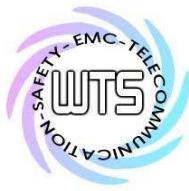
Technical data

Frequency band: 5.725GHz ~ 5.85GHz
Low Channel: 5735 MHz
Middle Channel: 5787 MHz
High Channel: 5839 MHz

Operating modes: Simplex
Type of modulation: GFSK
Fixed point to point operation: Yes / No
Antenna: 1/4 λ Monopole Antenna
Antenna gain: 0 dBi
(Testing laboratory assumes no responsibility for
affecting any validity of the result while the information which is
provided by clients.)
Power supply: Battery: 3.7 Vd.c., 130mA
USB 5 Vd.c.
Emission designator: 2M50G1D
Classification:

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

Note: This device was functioned as a Master Slave device during the DFS



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M22103-20783-C-54

FCC ID: M5X-ACT580H

Manufacturer: (if applicable)

Name: ./.

Street: ./.

Town: ./.

Country: ./.

Transmitter

Unom

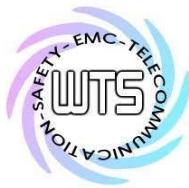
Power (A): Conducted: 6.48 dBm

Power (B): Conducted: 6.51 dBm

Power (C): Conducted: 4.82 dBm

1.6 Test standards

Technical standard : 47 CFR Part 15 Subpart E § 15.407 (2019-10)



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M22103-20783-C-54

FCC ID: M5X-ACT580H

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.

2.2 Test environment

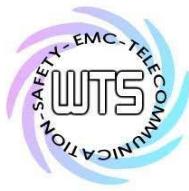
Relative humidity content: 20 ... 75 %

Air pressure: 86 ... 103 kPa

Details of power supply: Battery: 3.7 Vd.c., 130mA
USB 5 Vd.c.

Test item Name	Uncertainty
Estimation Result of Uncertainty of Conducted Emission	Expanded Uncertainty: AMN: 1.05 dB Voltage probe: 1.05 dB
Estimation Result of Uncertainty of Radiated Emission(3M)	Expanded Uncertainty: 0.009-30 MHz: 2.13 dB 30-1000 MHz: 3.53 dB 1-18 GHz: 4.19 dB 18-40 GHz: 4.09 dB
Estimation Result of Uncertainty of Bandwidth Measurement 20 dB Bandwidth, Occupied bandwidth, Channel bandwidth, Necessary Bandwidth	Expanded Uncertainty: 0.41 kHz
Estimation Result of Uncertainty of Conducted Output Power Measurement Output power	Expanded Uncertainty: 1.61 dB
Estimation Result of Uncertainty of Power Density Measurement Power density	Expanded Uncertainty: 1.68 dB
Estimation Result of Uncertainty of Band Edge Measurement	Expanded Uncertainty: 1.33 dBc
Estimation Result of Uncertainty of Conducted Spurious Emission Measurement Conducted spurious emission	Expanded Uncertainty: 1.74 dB
Estimation Result of Uncertainty of EIRP Measurement EIRP、ERP、Output power(dBm)、Radiated spurious emission(dBm), Receiver spurious radiations (≥ 30 MHz)	Expanded Uncertainty: 30-200MHz: 2.14dB 200-1000MHz: 2.4 dB 1-18GHz: 4.84 dB 18-40GHz: 4.31 dB

The decision rule is: Measurement uncertainty is not included in the calculation of test results.

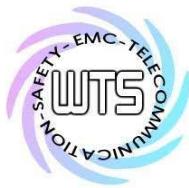


Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M22103-20783-C-54
FCC ID: M5X-ACT580H

2.3 Test Equipment List

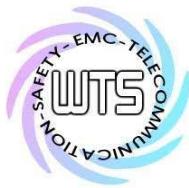
No.	Test equipment	Type	Serial No.	Manufacturer	Cal. Date	Next Cal. Date
ETSTW-CE 001	EMI TEST RECEIVER	ESHS10	842121/013	R&S	2021/6/4	2022/6/3
ETSTW-CE 003	AC POWER SOURCE	APS-9102	D161137	GW	Function Test	
ETSTW-CE 004	ZWEILEITER-V-NETZNACHBILDUNG TWO-LINE V-NETWORK	ESH3-Z5	840731/011	R&S	2020/11/6	2021/11/5
ETSTW-CE 006	IMPULSBEGRENZER PULSE LIMITER	ESH3-Z2	100226	R&S	2020/9/22	2021/9/21
ETSTW-CE 008	HF-EICHLEITUNG RF STEP ATTENUATOR 139dB DPSP	334.6010.02	844581/024	R&S	Function Test	
ETSTW-CE 009	TEMP.&HUMIDITY CHAMBER	GTH-225-40-1P-U	MAA0305-009	GIANT FORCE	2020/7/22	2021/7/21
ETSTW-CE 016	TWO-LINE V-NETWORK	ENV216	100050	R&S	2020/10/26	2021/10/25
ETSTW-CE 028	MXE EMI Receiver	N9038A	MY53220110	Agilent	2020/7/29	2021/7/28
ETSTW-RE 003	EMI TEST RECEIVER	ESI 26	831438/001	R&S	2021/6/4	2022/6/3
ETSTW-RE 004	EMI TEST RECEIVER	ESI 40	832427/004	R&S	2020/9/14	2021/9/13
ETSTW-RE 012	TUNABLE BANDREJECT FILTER	D.C 0309	146	K&L	Function Test	
ETSTW-RE 013	TUNABLE BANDREJECT FILTER	D.C 0336	397	K&L	Function Test	
ETSTW-RE 018	MICROWAVE HORN ANTENNA	AT4560	27212	AR	2020/7/30	2021/7/29
ETSTW-RE 019	MICROWAVE HORN ANTENNA	22240-25	121074	FM	2021/5/31	2022/5/30
ETSTW-RE 027	Passive Loop Antenna	6512	00034563	ETS-Lindgren	2020/7/8	2021/7/7
ETSTW-RE 030	Double-Ridged Guide Horn Antenna	3117	00035224	ETS-Lindgren	2021/5/5	2022/5/4
ETSTW-RE 042	Biconical Antenna	HK116	100172	R&S	2021/3/18	2022/3/17
ETSTW-RE 043	Log-Periodic Dipole Antenna	HL223	100166	R&S	2021/5/21	2022/5/20
ETSTW-RE 044	Log-Periodic Antenna	HL050	100094	R&S	2020/8/3	2021/8/2
ETSTW-RE 045	ESA-E SERIES SPECTRUM ANALYZER	E4404B	MY45111242	Agilent	Pre-test Use	
ETSTW-RE 050	Attenuator 10dB	50HF-010-1	None	JFW	2021/2/19	2022/2/18
ETSTW-RE 051	Attenuator 6dB	50HF-006-1	None	JFW	2021/2/19	2022/2/18
ETSTW-RE 053	Attenuator 3dB	50HF-003-1	None	JFW	2021/2/19	2022/2/18
ETSTW-RE 055	SPECTRUM ANALYZER	FSU 26	200074	R&S	2021/3/16	2022/3/15
ETSTW-RE 060	Attenuator 30dB	5015-30	F651012z-01	ATM	2021/2/19	2022/2/18
ETSTW-RE 062	Amplifier Module	CHC 2	None	KMIC	2021/5/5	2022/5/4
ETSTW-RE 064	Bluetooth Test Set	MT8852B-042	6K00005709	Anritsu	Function Test	
ETSTW-RE 069	Double-Ridged Guide Horn Antenna	3117	00069377	ETS-Lindgren	Function Test	
ETSTW-RE 072	CELL SITE TEST SET	8921A	3339A00375	HP	2020/10/15	2021/10/14
ETSTW-RE 088	SOLID STATE AMPLIFIER	KMA180265A01	99057	KMIC	2020/9/17	2021/9/16
ETSTW-RE 091	Match Pad	MDCS1500	None	WOKEN	2021/5/27	2022/5/26
ETSTW-RE 099	DC Block	50DB-007-1	None	JFW	2021/2/19	2022/2/18
ETSTW-RE 112	AC POWER SOURCE	TFC-1005	T-0A023536	T-Power	Function test	



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M22103-20783-C-54
FCC ID: M5X-ACT580H

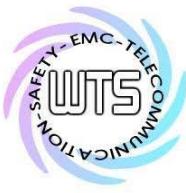
ETSTW-RE 115	2.4GHz Notch Filter	N0124411	473874	MICROWAVE CIRCUITS	2021/1/6	2022/1/5
ETSTW-RE 120	RF Player	MP9200	MP9210-111022	ADIVIC	2020/12/25	2021/12/24
ETSTW-RE 122	SIGNAL GENERATOR	SMF100A	102149	R&S	2021/6/4	2022/6/3
ETSTW-RE 125	5GHz Notch filter	5NSL11-5200/E221.3-O/O	1	K&L Microwave	2020/8/7	2021/8/6
ETSTW-RE 126	5GHz Notch filter	5NSL12-5800/E221.3-O/O	1	K&L Microwave	2020/8/7	2021/8/6
ETSTW-RE 127	RF Switch Box	RFS-01	None	WTS	2021/2/19	2022/2/18
ETSTW-RE 128	5.3GHz Notch filter	N0153001	SN487233	Microwave Circuits	2020/8/7	2021/8/6
ETSTW-RE 129	5.5GHz Notch filter	N0555984	SN487234	Microwave Circuits	2020/8/7	2021/8/6
ETSTW-RE 130	Handheld RF Spectrum Analyzer	N9340A	CN0147000204	Agilent	Pre-test Use	
ETSTW-RE 142	Amplifier	8447D	2805A03378	Agilent	2021/5/5	2022/5/4
ETSTW-RE 146	Preamplifier	JPA-10M1G	15090004	JPT	2021/6/4	2022/6/3
ETSTW-RE 147	Bi-log Hybrid Antenna	MCTD 2786B	BLB16M04005	ETC	2021/4/7	2022/4/6
ETSTW-RE 148	Bi-log Hybrid Antenna	MCTD 2786B	BLB16M04006	ETC	2020/7/9	2021/7/8
ETSTW-RE 153	Signal Analyzer	FSV40	101929	R&S	2020/10/1	2021/9/30
ETSTW-RF 002	Electromagnetic field probe	LF-30	K-0007	STT	2021/6/4	2022/6/3
ETSTW-EMI 011	USB Compact Modulator	SFC-U	101689	R&S	2021/6/2	2022/6/1
ETSTW-GSM 002	Universal Radio Communication Tester	CMU 200	109439	R&S	2021/3/16	2022/3/15
ETSTW-GSM 003	Radio Communication Analyzer	MT8820C	6201342073	Anritsu	2021/4/27	2022/4/26
ETSTW-GSM 004	Wideband Radio Communication Tester	CMW500	128092	R&S	2020/11/10	2021/11/9
ETSTW-GSM 019	Band Reject Filter	WRCTF824/849-822/851-40 /12+9SS	3	WI	2021/1/6	2022/1/5
ETSTW-GSM 020	Band Reject Filter	WRCD1747/1748-1743/1752-32/5SS	1	WI	2021/1/6	2022/1/5
ETSTW-GSM 021	Band Reject Filter	WRCD1879.5/1880.5 -1875.5/1884.5-32/5SS	3	WI	2021/1/6	2022/1/5
ETSTW-GSM 022	Band Reject Filter	WRCT901.9/903.1-904.25-50/8SS	1	WI	2021/1/6	2022/1/5
ETSTW-GSM 023	Power Divider	4901.19.A	None	SUHNER	2020/9/8	2021/9/7
ETSTW-GSM 024	Radio Communication Analyzer	MT8821C	None	Anritsu	2021/4/1	2022/3/31
ETSTW-GSM 025	Band Reject Filter	BRM19835	001	Micro-Tronics	2020/8/7	2021/8/6
ETSTW-Cable 011	SMA to N type Cable	RGU-400	None	THERMAX	Pre-test Use NCR	
ETSTW-Cable 016	BNC Cable	Switch Box	B Cable 1	Schwarz beck	2021/2/19	2022/2/18
ETSTW-Cable 017	BNC Cable	X Cable	B Cable 2	Schwarz beck	2021/2/19	2022/2/18
ETSTW-Cable 018	BNC Cable	Y Cable	B Cable 3	Schwarz beck	2021/2/19	2022/2/18
ETSTW-Cable 019	BNC Cable	Z Cable	B Cable 4	Schwarz beck	2021/2/19	2022/2/18
ETSTW-Cable 020	N TYPE Cable	OATS Cable 1	N30N30-L335-15M	JYE BAO CO.,LTD.	2021/6/22	2022/6/21
ETSTW-Cable 027	Microwave Cable	SUCOFLEX 104	279083	HUBER+SUHNER	2021/5/5	2022/5/4
ETSTW-Cable 028	Microwave Cable	FA147A0015M2020	30064-2	UTIFLEX	2020/9/17	2021/9/16
ETSTW-Cable 029	Microwave Cable	FA147A0015M2020	30064-3	UTIFLEX	2020/9/17	2021/9/16
ETSTW-Cable 030	Microwave Cable	SUCOFLEX 104 (S Cable 9)	279067	HUBER+SUHNER	2021/2/19	2022/2/18



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M22103-20783-C-54
FCC ID: M5X-ACT580H

ETSTW-Cable 043	Microwave Cable	SUCOFLEX 104	317576	HUBER+SUHNER	2021/5/5	2022/5/4
ETSTW-Cable 047	Microwave Cable	SUCOFLEX 104	325518	HUBER+SUHNER	2020/7/3	2021/7/2
ETSTW-Cable 058	Microwave Cable	SUCOFLEX 104	none	HUBER+SUHNER	2021/6/4	2022/6/3
ETSTW-Cable 064	Microwave Cable	SUCOFLEX 104	MY28891	HUBER+SUHNER	2021/5/5	2022/5/4
ETSTW-Cable 071	N TYPE CABLE	EMCCFD400-NM-NM-25000	170239	EMCI	2021/6/4	2022/6/3
ETSTW-Cable 072	SMA type cable (8m)	SUCOFLEX 104	805800/4	HUBER+SUHNER	2021/5/5	2022/5/4
ETSTW-Cable 074	SMA type cable (2m)	SUCOFLEX 104	802563/4	HUBER+SUHNER	2021/5/5	2022/5/4
WTSTW-SW 002	EMI TEST SOFTWARE	EZ_EMCA	None	Farad	Version ETS-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 002	Thermohygrometer	608-H1	45204317	Testo	2020/9/23	2021/9/22
ETSTW-TH 003	Wireless weather station	GAIA	N/A	TFA	2020/12/3	2021/12/2



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M22103-20783-C-54
FCC ID: M5X-ACT580H

2.4 Test Procedure

The test procedures are performed following the test stands ANSI STANDARD C63.10 and FCC 789033 D02 General UNII Test Procedures New Rules v01r04.

■ Minimum Emission Bandwidth for the band 5.150-5.250 GHz, 5.725-5.850 GHz

Section 15.407(e) specifies the minimum 6 dB emission bandwidth of at least 500 KHz for the band 5.715-5.85 GHz. The following procedure shall be used for measuring this bandwidth:

- a) Set RBW = 100 kHz.
- b) Set the video bandwidth (VBW) $\geq 3 \times$ RBW.
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Sweep = auto couple.
- f) Allow the trace to stabilize.
- g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

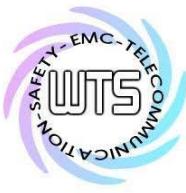
Note: The automatic bandwidth measurement capability of a spectrum analyzer or EMI receiver may be employed if it implements the functionality described above.

■ 99 Percent Occupied Bandwidth

The 99-percent occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5 % of the total mean power of the given emission. Measurement of the 99-percent occupied bandwidth is required only as a condition for using the optional band-edge measurement techniques described in section H3)d). Measurements of 99-percent occupied bandwidth may also optionally be used in lieu of the 6-dB emission bandwidth to define the minimum frequency range over which the spectrum is integrated when measuring maximum conducted output power as described in section E). However, the 6-dB bandwidth must be measured to determine bandwidth dependent limits on maximum conducted output power in accordance with 15.407(a).

The following procedure shall be used for measuring (99 %) power bandwidth.

1. Set center frequency to the nominal EUT channel center frequency.
2. Set span = 1.5 times to 5.0 times the OBW.
3. Set RBW = 1 % to 5 % of the OBW
4. Set VBW $\geq 3 \cdot$ RBW
5. Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
6. Use the 99 % power bandwidth function of the instrument (if available).
7. If the instrument does not have a 99 % power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M22103-20783-C-54

FCC ID: M5X-ACT580H

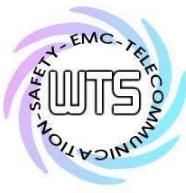
■ Maximum conducted output power

- (i) Set span to encompass the entire emission bandwidth (EBW) (or, alternatively, the entire 99% occupied bandwidth) of the signal.
- (ii) Set RBW = 1 MHz.
- (iii) Set VBW \geq 3 MHz.
- (iv) Number of points in sweep \geq 2 Span / RBW. (This ensures that bin-to-bin spacing is \leq RBW/2, so that narrowband signals are not lost between frequency bins.)
- (v) Sweep time = auto.
- (vi) Detector = RMS (i.e., power averaging), if available. Otherwise, use sample detector mode.
- (vii) If transmit duty cycle $<$ 98 percent, use a video trigger with the trigger level set to enable triggering only on full power pulses. Transmitter must operate at maximum power control level for the entire duration of every sweep. If the EUT transmits continuously (i.e., with no off intervals) or at duty cycle \geq 98 percent, and if each transmission is entirely at the maximum power control level, then the trigger shall be set to “free run”.
- (viii) Trace average at least 100 traces in power averaging (i.e., RMS) mode.
- (ix) Compute power by integrating the spectrum across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal using the instrument’s band power measurement function with band limits set equal to the EBW (or occupied bandwidth) band edges. If the instrument does not have a band power function, sum the spectrum levels (in power units) at 1 MHz intervals extending across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the spectrum.

■ Power Density

The rules requires “maximum power spectral density” measurements where the intent is to measure the maximum value of the time average of the power spectral density measured during a period of continuous transmission.

1. Create an average power spectrum for the EUT operating mode being tested by following the instructions in section II.E.2. for measuring maximum conducted output power using a spectrum analyzer or EMI receiver: select the appropriate test method (SA-1, SA-2, SA-3, or alternatives to each) and apply it up to, but not including, the step labeled, “Compute power...”. (This procedure is required even if the maximum conducted output power measurement was performed using a power meter, method PM.)
2. Use the peak search function on the instrument to find the peak of the spectrum and record its value.
3. Make the following adjustments to the peak value of the spectrum, if applicable:
 - a) If Method SA-2 or SA-2 Alternative was used, add $10 \log(1/x)$, where x is the duty cycle, to the peak of the spectrum.
 - b) If Method SA-3 Alternative was used and the linear mode was used in step II.E.2.g)(viii), add 1 dB to the final result to compensate for the difference between linear averaging and power averaging.
4. The result is the Maximum PSD over 1 MHz reference bandwidth.
5. For devices operating in the bands 5.15-5.25 GHz, 5.25-5.35 GHz, and 5.47-5.725 GHz, the above procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in § 15.407(a)(5). For devices operating in the band 5.725-5.85 GHz, the rules specify a measurement bandwidth of 500 kHz. Many spectrum analyzers do not have 500 kHz RBW, thus



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M22103-20783-C-54

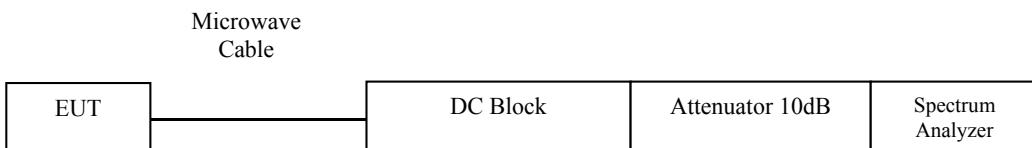
FCC ID: M5X-ACT580H

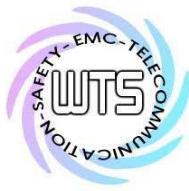
a narrower RBW may need to be used. The rules permit the use of a RBWs less than 1 MHz, or 500 kHz, “provided that the measured power is integrated over the full reference bandwidth” to show the total power over the specified measurement bandwidth (i.e., 1 MHz, or 500 kHz). If measurements are performed using a reduced resolution bandwidth (< 1 MHz, or < 500 kHz) and integrated over 1 MHz, or 500 KHz bandwidth, the following adjustments to the procedures apply:

- a) Set RBW $\geq 1/T$, where T is defined in section II.B.1.a).
- b) Set VBW ≥ 3 RBW.
- c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add $10\log(500\text{kHz}/\text{RBW})$ to the measured result, whereas RBW (< 500 kHz) is the reduced resolution bandwidth of the spectrum analyzer set during measurement.
- d) If measurement bandwidth of Maximum PSD is specified in 1 MHz, add $10\log(1\text{MHz}/\text{RBW})$ to the measured result, whereas RBW (< 1 MHz) is the reduced resolution bandwidth of spectrum analyzer set during measurement.
- e) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

Note: As a practical matter, it is recommended to use reduced RBW of 100 kHz for the sections 5.c) and 5.d) above, since RBW=100 kHz is available on nearly all spectrum analyzers.

Conducted measurement test setup





Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M22103-20783-C-54
FCC ID: M5X-ACT580H

3 Test results (enclosure)

Test case	Para. Number	Required	Test passed	Test failed
Peak Transmit Power	15.407(a)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6-dB emission bandwidth	15.407(a)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
26-dB emission bandwidth	15.407(a)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
99 % Occupied Bandwidth	789033 D02 General UNII Test Procedures New Rules v01	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Peak Power Spectral Density	15.407(a)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Undesirable emission limits	15.407(b)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Radio Frequency Exposure	15.407(f)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Transmit Power Control	15.407(h)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dynamic Frequency Selection (DFS)	15.407(h)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Channel Move Time, Channel Closing Transmission Time	15.407(i)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Radiated Emission from Receiver Part	15.109	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AC Conducted Emissions	15.207	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The following is intentionally left blank.



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M22103-20783-C-54
FCC ID: M5X-ACT580H

3.1 Peak Transmit Power, FCC 15.407 (a)

According to §15.407(a)

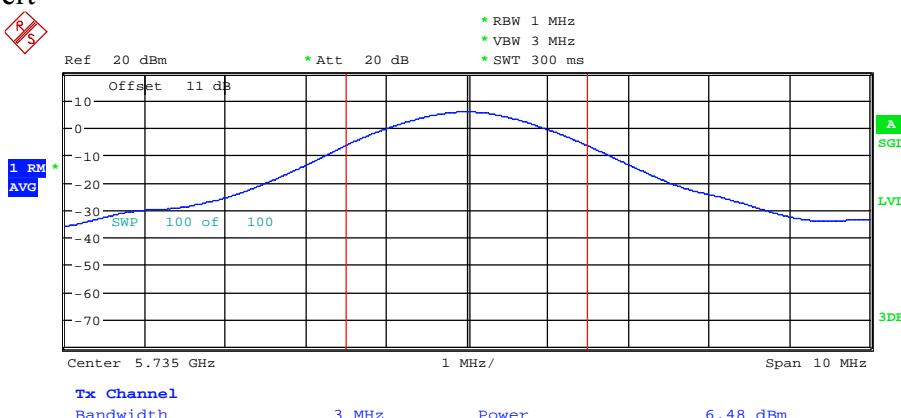
1. For the band 5.15-5.25 GHz, the maximum conducted power over the frequency of operation shall not exceed the lesser of 30 dBm (1 W) for master device and 24 dBm (250 mW) for mobile/portable client device.
2. For the band 5.25-5.35 GHz and 5.47-5.725 GHz, the maximum conducted power over the frequency of operation shall not exceed the lesser of 24 dBm (250 mW) or $11\text{dBm} + 10 \log B$, whichever is lower ($B= 26\text{-dB emission BW}$).
3. For the band 5.725-5.850 GHz, the maximum conducted power over the frequency of operation shall not exceed the lesser of 30 dBm (1 W).

Test date: June 18, 2021

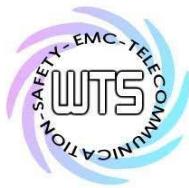
Temperature: 25.2 °C

Humidity: 49.0 %

Tester: Robert



MAX OUTPUT POWER
Date: 18.JUN.2021 14:35:14



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M22103-20783-C-54
FCC ID: M5X-ACT580H

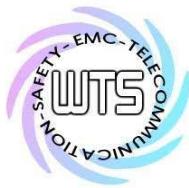


MAX OUTPUT POWER
Date: 18.JUN.2021 14:36:12



MAX OUTPUT POWER
Date: 18.JUN.2021 14:37:19

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



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M22103-20783-C-54
FCC ID: M5X-ACT580H

3.2 26dB emission bandwidth, 99% Occupied Bandwidth, FCC 15.407 (a)

According to §15.407(a). No Limit required.

Result:

Test date: --

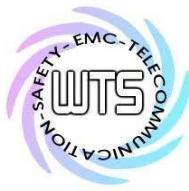
Temperature: -- °C

Humidity: -- %

Tester: --

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

Explanation: The test is not required.



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M22103-20783-C-54
FCC ID: M5X-ACT580H

3.3 6dB emission bandwidth, 99% Occupied Bandwidth, FCC 15.407 (a)

According to §15.407(a). No Limit required.

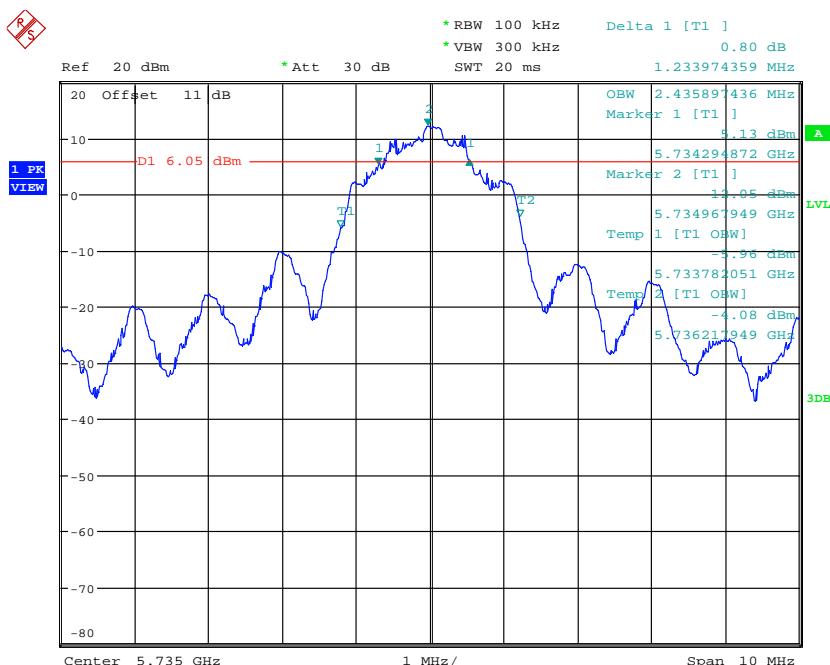
Result:

Test date: May 28, 2021

Temperature: 23.4 °C

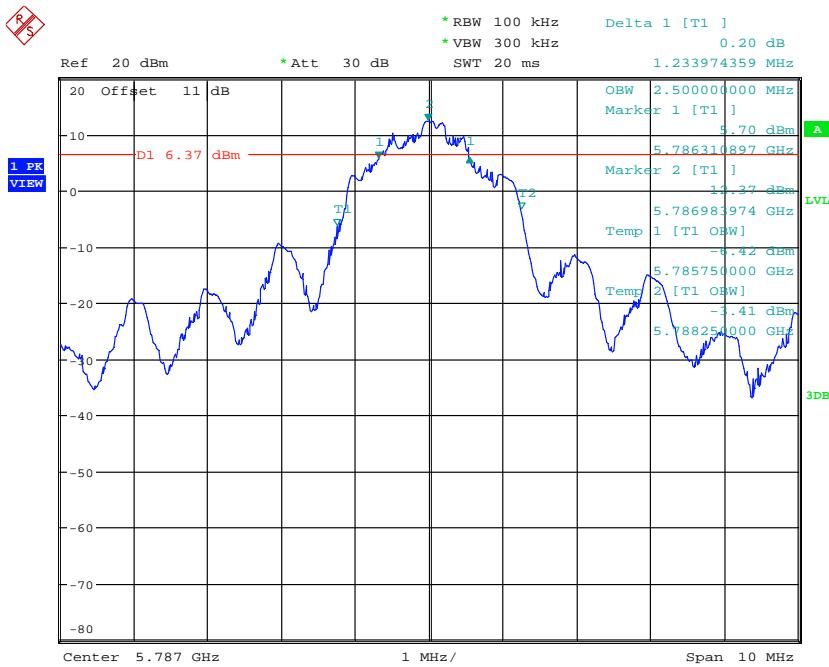
Humidity: 48.0 %

Tester: Robert

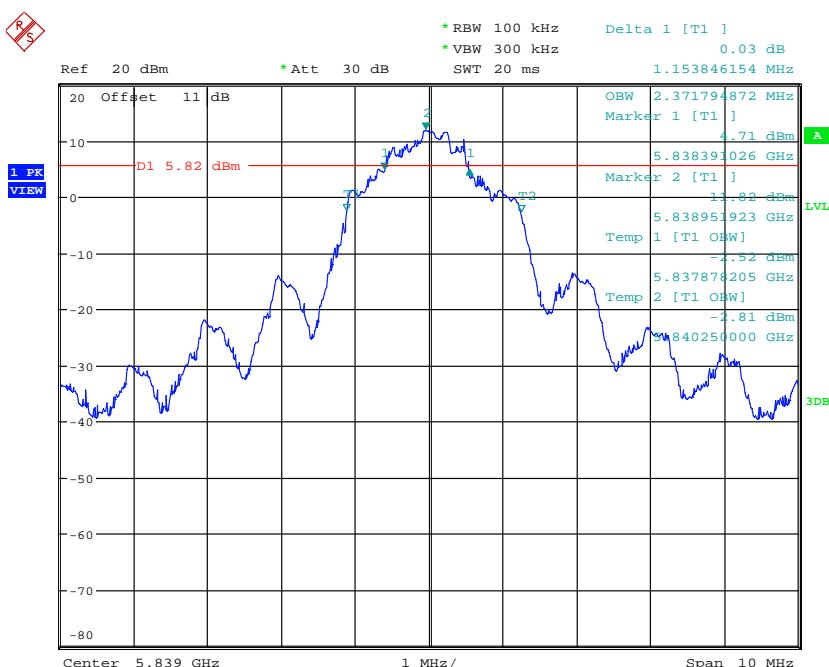


6DB BANDWIDTH
Date: 28.MAY.2021 15:04:10

Registration number: W6M22103-20783-C-54
FCC ID: M5X-ACT580H



6DB BANDWIDTH
Date: 28.MAY.2021 15:05:39



6DB BANDWIDTH
Date: 28.MAY.2021 15:06:48

Registration number: W6M22103-20783-C-54
 FCC ID: M5X-ACT580H

3.4 Peak Power Spectral Density, FCC 15.407 (a)

According to §15.407(a)

For the band 5.15-5.25 GHz, the peak power spectral density shall not exceed 17 dBm/MHz for master device and 11 dBm/MHz for mobile/portable client device.

For the band 5.25-5.35 GHz and 5.47-5.725 GHz, the peak power spectral density shall not exceed 11 dBm/MHz.

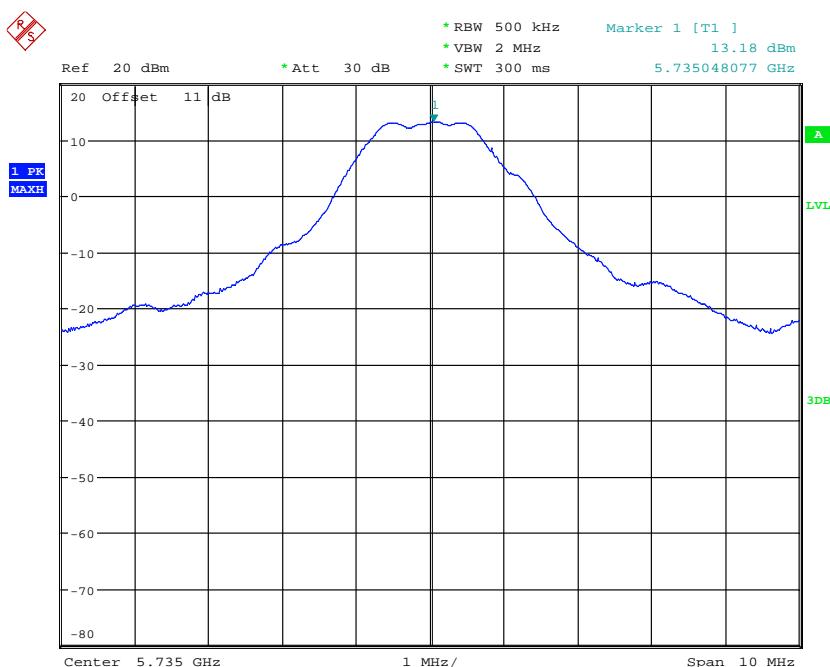
For the band 5.725-5.850 GHz, the peak power spectral density shall not exceed 30 dBm/500kHz.

Test date: May 28, 2021

Temperature: 23.4 °C

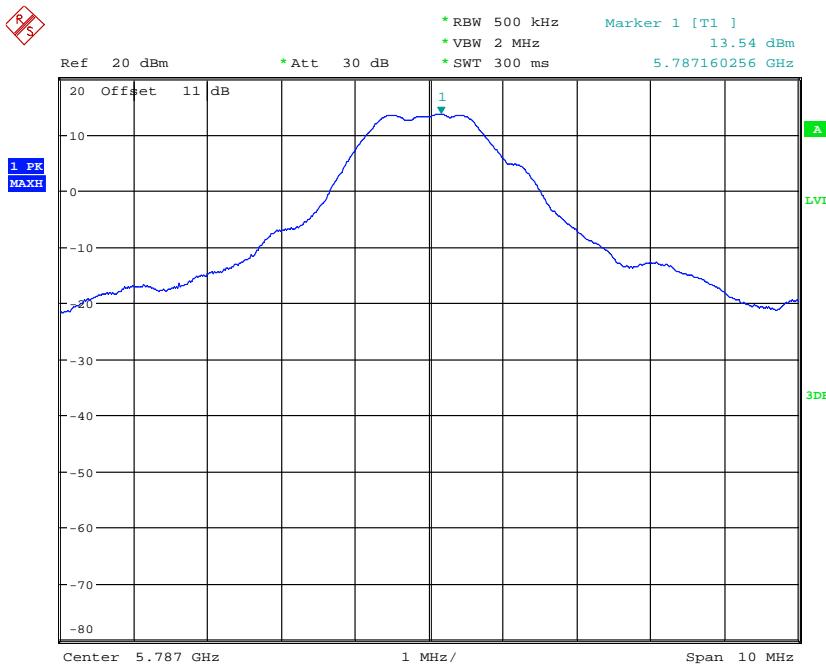
Humidity: 48.0 %

Tester: Robert

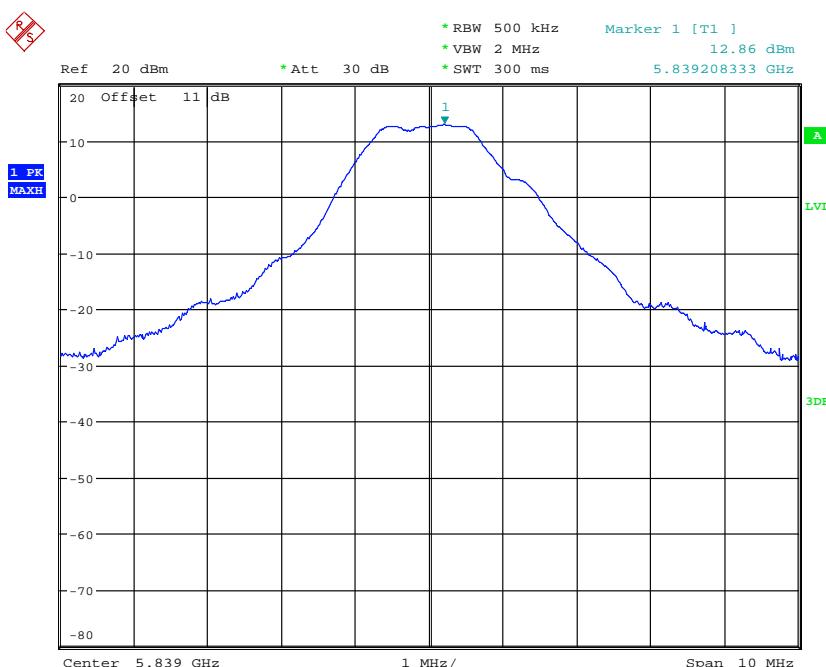


POWER DENSITY
 Date: 28.MAY.2021 15:00:28

Registration number: W6M22103-20783-C-54
FCC ID: M5X-ACT580H

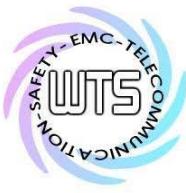


POWER DENSITY
Date: 28.MAY.2021 14:59:51



POWER DENSITY
Date: 28.MAY.2021 14:59:20

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



Worldwide Testing Services(Taiwan) Co., Ltd.

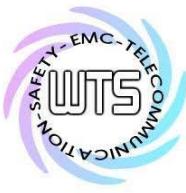
Registration number: W6M22103-20783-C-54

FCC ID: M5X-ACT580H

3.5 Undesirable emission limits, FCC 15.407 (b)

1. For transmitters operating in the 5.15–5.25 GHz band: all emissions out-side of the 5.15–5.35 GHz band shall not exceed an EIRP of –27 dBm/MHz.
2. For transmitters operating in the 5.25–5.35 GHz band: all emissions out-side of the 5.15–5.35 GHz band shall not exceed an EIRP of –27 dBm/MHz. De-vices operating in the 5.25–5.35 GHz band that generate emissions in the 5.15–5.25 GHz band must meet all appli-cable technical requirements for operation in the 5.15–5.25 GHz band (including indoor use) or alternatively meet an out-of-band emission EIRP limit of -27 dBm/MHz in the 5.15–5.25 GHz band.
3. For transmitters operating in the 5.47–5.725 GHz band: all emissions out-side of the 5.47–5.725 GHz band shall not exceed an EIRP of -27 dBm/MHz.
4. For transmitters operating in the 5.725–5.850 GHz band: All emissions shall be limited to a level of –27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.
5. The emission measurements shall be performed using a minimum resolution bandwidth of 1 MHz. A lower resolution bandwidth may be employed near the band edge, when necessary, provided the measured energy is integrated to show the total power over 1 MHz.
6. Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in § 15.209.
7. According to According to KDB 789033 D02 General UNII Test Procedures v01, as specified in 15.407(b), emissions above 1000 MHz that are outside of the restricted bands are subject to a peak emission limit of -27 dBm/MHz (or -17 dBm/MHz as specified in 15.407(b)(4)). However, an out-of-band emission that complies with both the average and peak limits of 15.209 is not required to satisfy the -27 dBm/MHz or -17 dBm/MHz peak emission limit.
8. If radiated measurements are performed, field strength is then converted to EIRP as follows:
 - (i) $EIRP = ((E^*d)^2) / 30$, where: E is the field strength in V/m; d is the measurement distance in meters. EIRP is the equivalent isotropically radiated power in watts.
 - (ii) Working in dB units, the above equation is equivalent to: $EIRP[\text{dBm}] = E[\text{dB}\mu\text{V}/\text{m}] + 20 \log(d[\text{meters}]) - 104.77$.
 - (iii) Or, if d is 3 meters: $EIRP[\text{dBm}] = E[\text{dB}\mu\text{V}/\text{m}] - 95.2$.

Applicable to	Limit	
<input checked="" type="checkbox"/>	FIELD STRENGTH at 3m (dB μ V/m)	
	PK	AV
	74	54
<input type="checkbox"/>	EIRP LIMIT (dBm)	EQUIVALENT FIELD STRENGTH at 3m (dB μ V/m)
	PK	PK
	-27	68.3



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M22103-20783-C-54
FCC ID: M5X-ACT580H

Model: ACT-580H 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 (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--

Polarization: Vertical

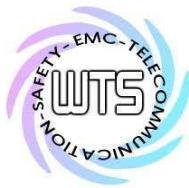
Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--

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

Test equipment used: ETSTW-RE 004, ETSTW-RE 030, ETSTW-RE 147,
ETSTW-RE 088, ETSTW-RE 018

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. After evaluated, the test result in this report adopt the worst case to measure, please see attached diagrams in appendix.



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M22103-20783-C-54
FCC ID: M5X-ACT580H

3.6 Automatic Discontinuation of transmission, FCC 15.407 (c)

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure.

This function will be declared by manufacturer.

3.7 Reserved, FCC 15.407 (d)

3.8 Indoor Operation Restriction, FCC 15.407 (e)

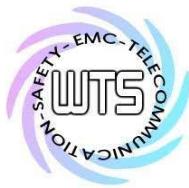
Within the 5.15–5.25 GHz band, U- NII devices will be restricted to indoor operations to reduce any potential for harmful interference to co-channel MSS operations. This equipment has to be declared by manufacturer of the final product as content of the user manual.

3.9 Equivalent Isotropic Radiated Power (EIRP), FCC 15.407 (f)

EIRP = max. conducted output power + antenna gain

EIRP = 6.51 dBm + 0 dBi [antenna gain claimed by manufacturer] = 6.51 dBm = 4.48 mW

Test equipment used: ETSTW-RE 055



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M22103-20783-C-54
FCC ID: M5X-ACT580H

3.10 Exemption Limits for Routine Evaluation according to FCC KDB Publication

RESULT:

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

According to 447498 D01 General RF Exposure Guidance v06:

SAR evaluation, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

3.10.1 Exemption Limits for Routine Evaluation – SAR Evaluation

SAR evaluation is required if the separation distance between the user and/or bystander and the antenna and/or radiating element of the device is less than or equal to 20 cm, except when the device operates at or below the applicable output power level (adjusted for tune-up tolerance) for the specified separation distance defined in Table .

Table: SAR evaluation — Exemption limits for routine evaluation based on frequency and separation distance

MHz	5	10	15	20	25	mm
5787	6	12.03	19	25.03	31.03	SAR Test Exclusion Threshold (mW)

MHz	30	35	40	45	50	mm
5787	37.03	44.03	50.07	56.07	62.10	SAR Test Exclusion Threshold (mW)

Output power level shall be the higher of the maximum conducted or equivalent isotropically radiated power (e.i.r.p.) source-based, time-averaged output power.

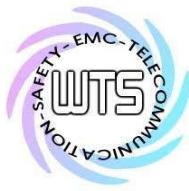
Established separation distance is 5 mm.

BLE

Operating frequency band : 5735-5839 MHz

Max. output power level at 5 mm separation distance at 5787 MHz according to table is: 6 mW

The product is exempt from SAR Evaluation/Testing because the output power of 4.48 mW is below the exemption limit of 6 mW.



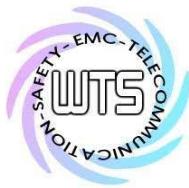
Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M22103-20783-C-54
FCC ID: M5X-ACT580H

3.11 Transmit Power Control (TPC)

Transmit power control (TPC). U-NII devices operating in the 5.25-5.35 GHz band and the 5.47-5.725 GHz band shall employ a TPC mechanism. The U-NII device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm. A TPC mechanism is not required for systems with an e.i.r.p. of less than 500 mW.

Explanation: Max put power of the EUT is less than 500 mW (27dBm) so this test item is not required.



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M22103-20783-C-54
FCC ID: M5X-ACT580H

3.12 Dynamic Frequency Selection (DFS)

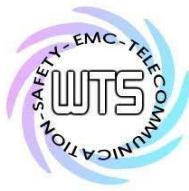
3.12.1 DFS Detection Threshold

3.12.2 Channel move time plot of Type1 radar waveform on 5270MHz

3.12.3 30Minutes Non-Occupancy Time

Test equipment used: ETSTW-RE 133, ETSTW-RE 134

Explanation: The test is not required because the EUT only has ISM Band.



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M22103-20783-C-54
FCC ID: M5X-ACT580H

3.13 Channel Move Time, Channel Closing Transmission Time

FCC Rule: 15.407(i)

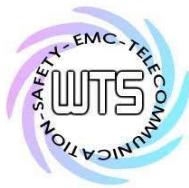
Result :

Parameter (at 5290MHz)	Test Result	Limit
	Type0	
Channel Move Time (ms)	--	<10s
Channel Close Transmission Time (ms)	--	< 60ms
Parameter (at 5530MHz)	Test Result	Limit
	Type0	
Channel Move Time (ms)	--	<10s
Channel Close Transmission Time (ms)	--	< 60ms

Note: The Channel Close Transmission Time is compromised 200 milliseconds starting at the beginning of the Channel Move Time plus the additional intermittent control signal required to facilitate channel-move operation (an aggregate of 60milliseconds) during the remainder of the 10seconds period.

Test equipment used: ETSTW-RE 133, ETSTW-RE 134

Explanation: The test is not required.



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M22103-20783-C-54
FCC ID: M5X-ACT580H

3.14 Radiated Emissions from Receiver Part

FCC Rule: 15.109

Model: ACT-580H 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 (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--

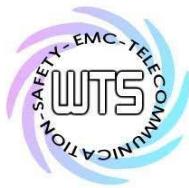
Polarization: Vertical

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

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

Test equipment used: ETSTW-RE 004, ETSTW-RE 030, ETSTW-RE 147, ETSTW-RE 088,
ETSTW-RE 018

Explanation: The test is not required because the EUT is a transmitter only.



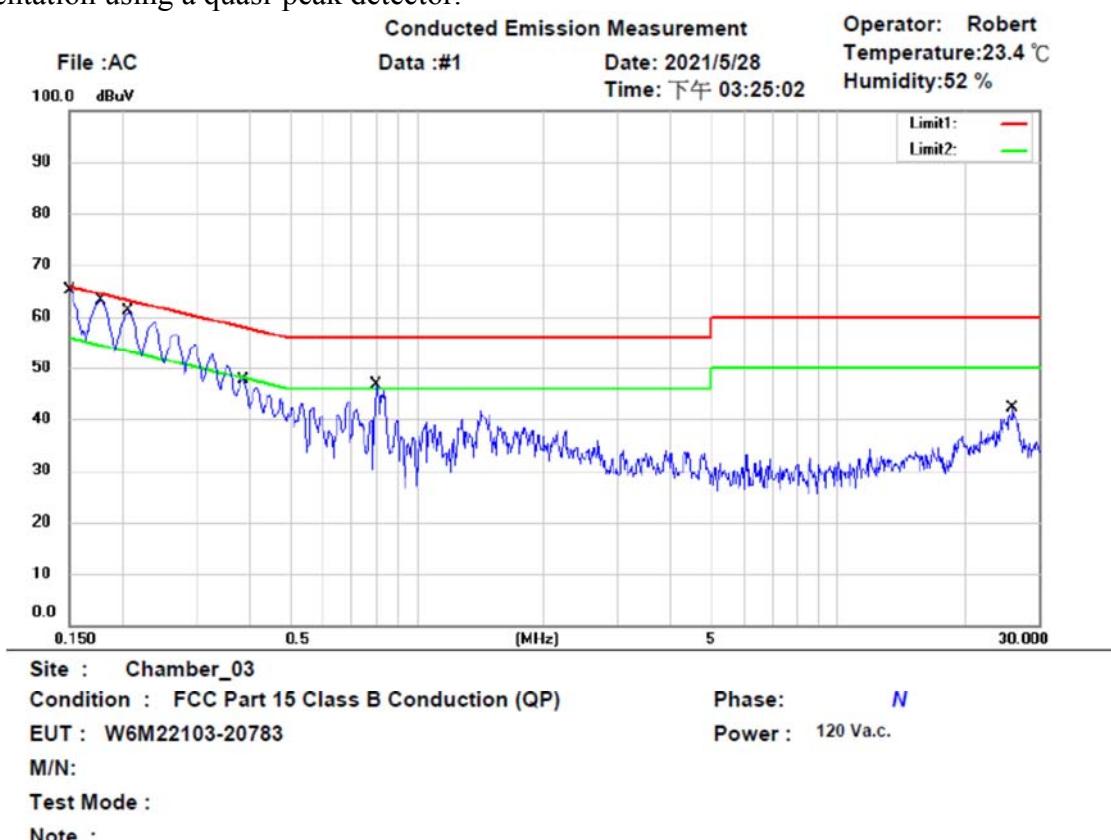
Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M22103-20783-C-54
FCC ID: M5X-ACT580H

3.15 Power Line Conducted Emission

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

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

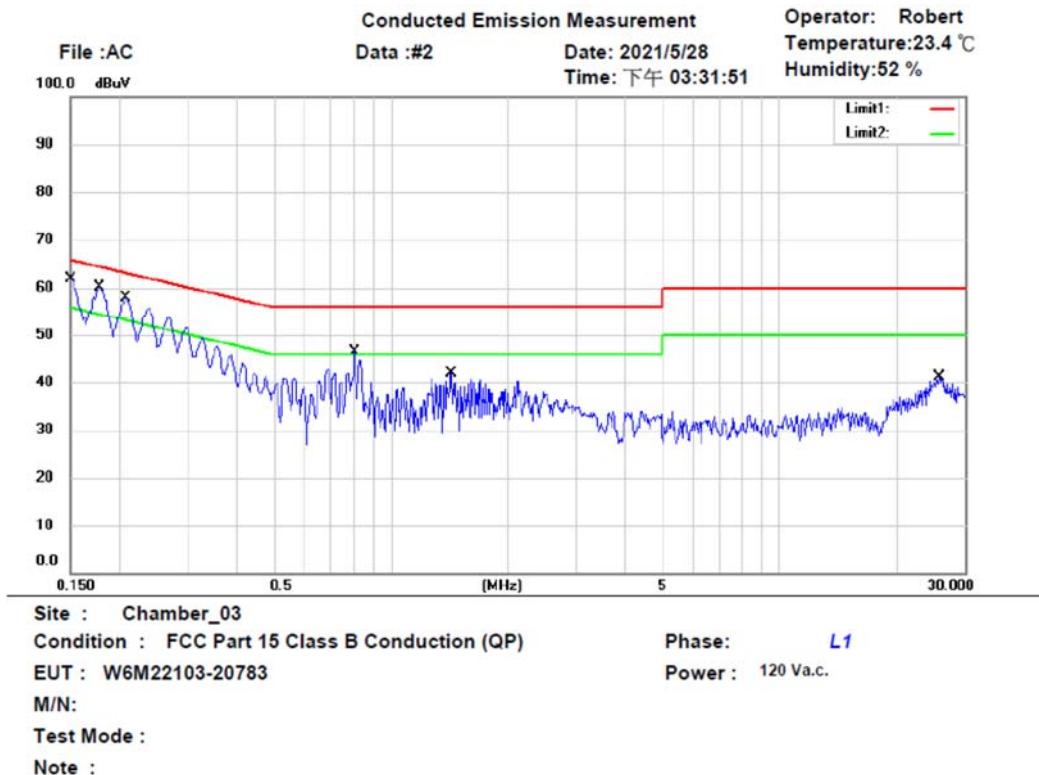


Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Comment
*	0.1500	52.07	QP	9.66	61.73	66.00	-4.27	
	0.1500	34.07	AVG	9.66	43.73	56.00	-12.27	
	0.1785	50.08	QP	9.65	59.73	64.56	-4.83	
	0.1785	32.50	AVG	9.65	42.15	54.56	-12.41	
	0.2071	47.26	QP	9.64	56.90	63.32	-6.42	
	0.2071	29.61	AVG	9.64	39.25	53.32	-14.07	
	0.3865	34.68	QP	9.62	44.30	58.14	-13.84	
	0.3865	17.28	AVG	9.62	26.90	48.14	-21.24	
	0.8015	29.96	QP	9.57	39.53	56.00	-16.47	
	0.8015	20.28	AVG	9.57	29.85	46.00	-16.15	
	25.9375	22.76	QP	10.35	33.11	60.00	-26.89	
	25.9375	6.67	AVG	10.35	17.02	50.00	-32.98	



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M22103-20783-C-54
FCC ID: M5X-ACT580H



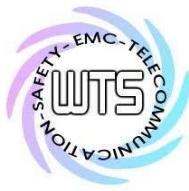
MK.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Comment
*	0.1505	50.80	QP	9.67	60.47	65.97	-5.50	
	0.1505	33.19	AVG	9.67	42.86	55.97	-13.11	
	0.1784	49.13	QP	9.66	58.79	64.56	-5.77	
	0.1784	31.92	AVG	9.66	41.58	54.56	-12.98	
	0.2081	46.84	QP	9.65	56.49	63.28	-6.79	
	0.2081	29.91	AVG	9.65	39.56	53.28	-13.72	
	0.8060	31.84	QP	9.58	41.42	56.00	-14.58	
	0.8060	22.33	AVG	9.58	31.91	46.00	-14.09	
	1.4270	29.19	QP	9.52	38.71	56.00	-17.29	
	1.4270	19.67	AVG	9.52	29.19	46.00	-16.81	
	25.7250	23.93	QP	10.15	34.08	60.00	-25.92	
	25.7250	11.06	AVG	10.15	21.21	50.00	-28.79	

- 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.



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M22103-20783-C-54
FCC ID: M5X-ACT580H

Appendix

Photos

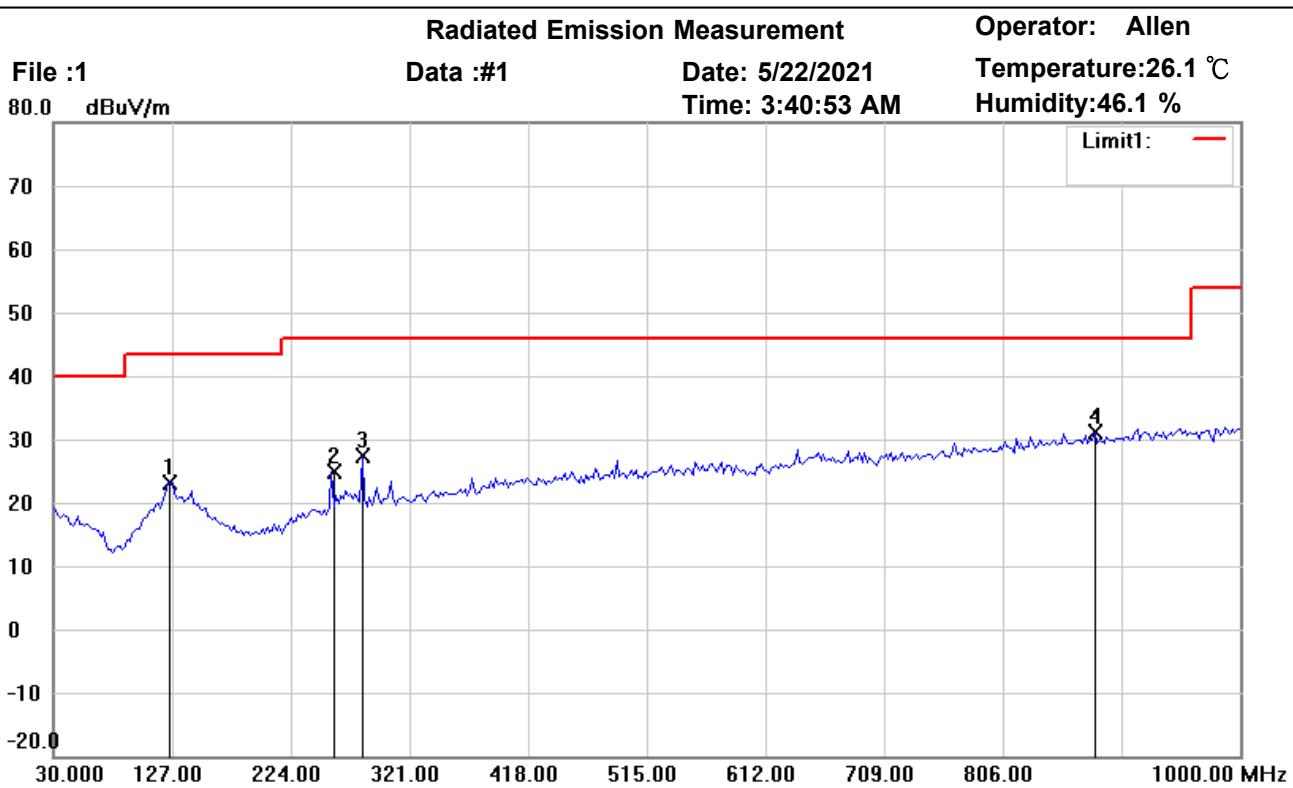
1. External Photos
2. Internal Photos
3. Set Up Photo of Radiated Emission
4. Set Up Photo of Conducted Emission

Measurement diagrams

Spurious Emissions radiated



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8879



Site : Chamber

Condition : FCC_part 15 RE-Class E_30-1000MHz

Polarization: *Horizontal*

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

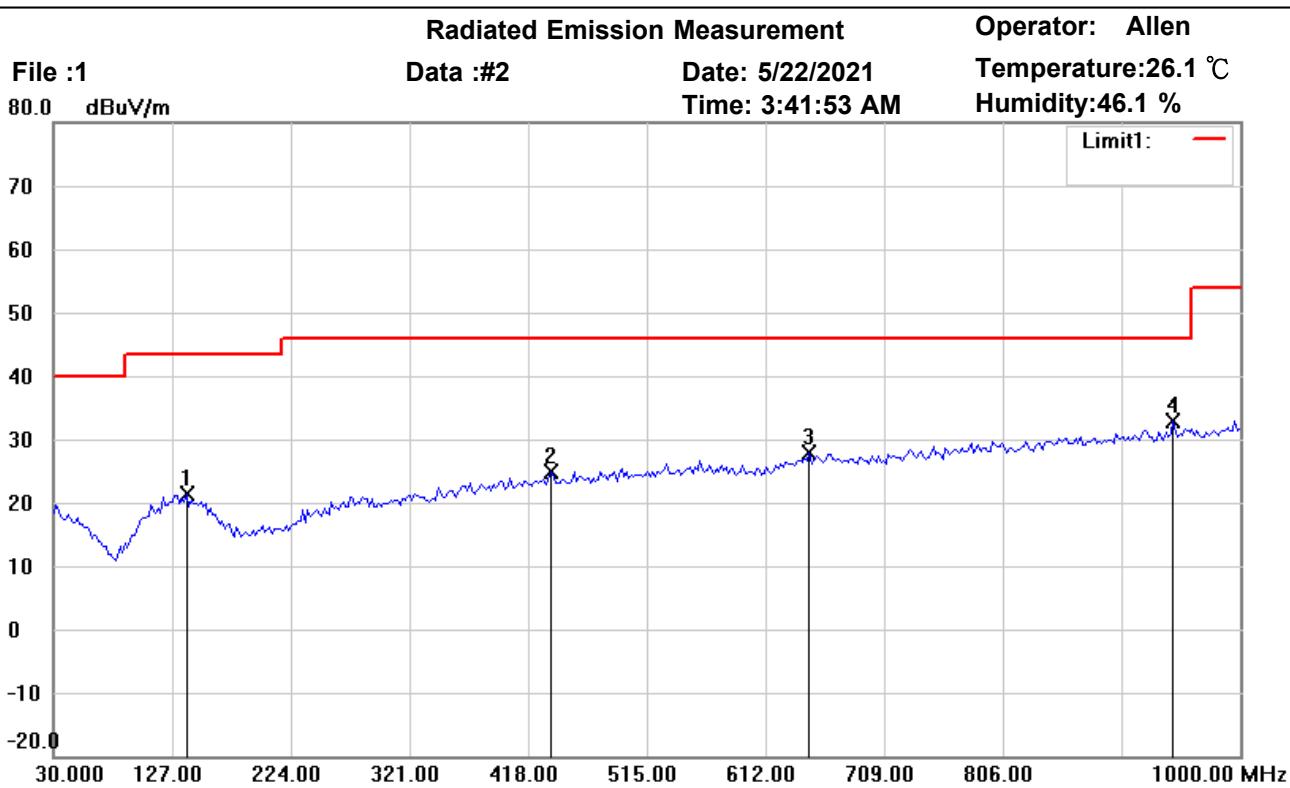
Test Mode : TX 5735MHz

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
	125.2505	30.30	peak	-7.05	23.25	43.50	110	135	-20.25	
	257.4350	32.40	peak	-7.41	24.99	46.00	135	80	-21.01	
	282.7053	33.51	peak	-6.17	27.34	46.00	140	221	-18.66	
*	881.4228	27.72	peak	3.31	31.03	46.00	100	345	-14.97	



Address: 6F., No.58, Ln 188, Ruey Kuang Rd, Neihu, Taipei
Tel: +886-2-6606-8877
Fax: +886-2-6606-8879



Site : Chamber

Condition : FCC_part 15 RE-Class E_30-1000MHz

Polarization: Vertical

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

Test Mode : TX 5735MHz

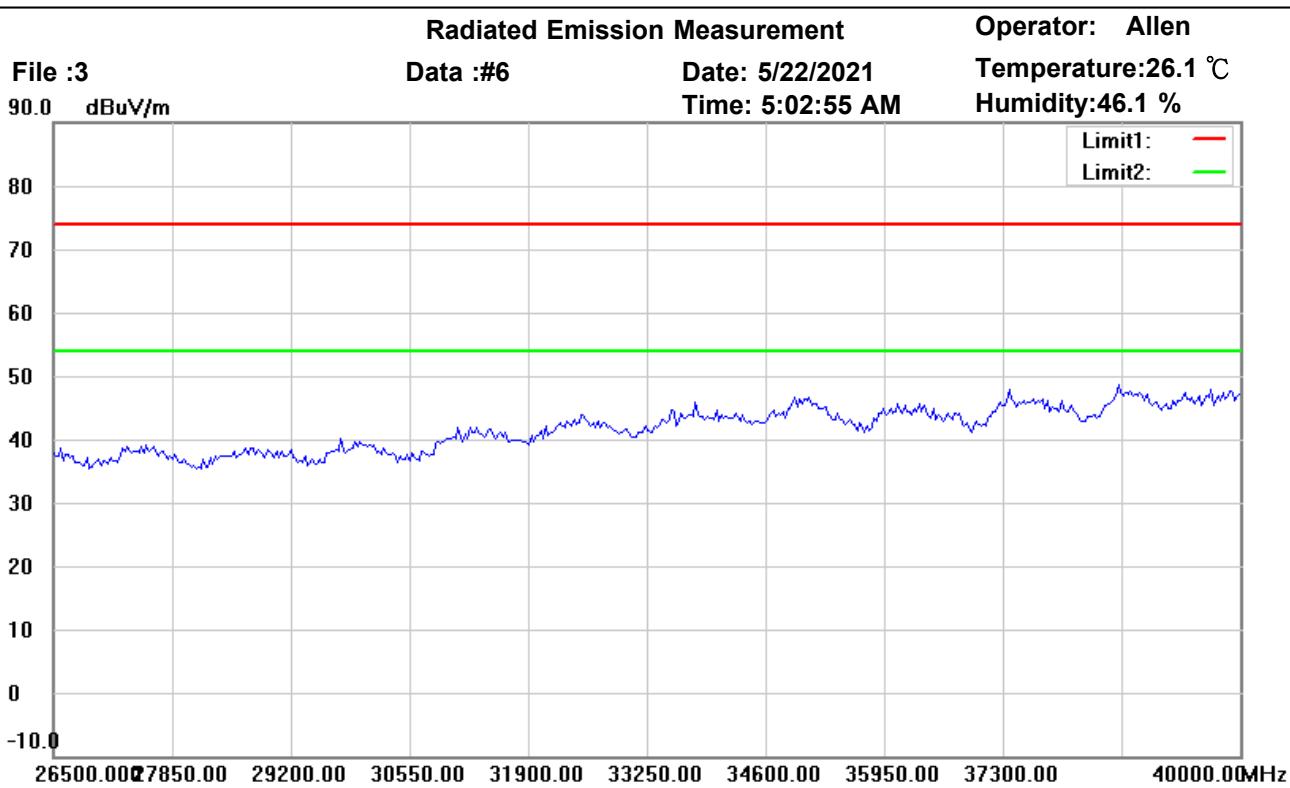
Note :

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
	138.8577	27.98	peak	-6.65	21.33	43.50	110	32	-22.17	
	436.2725	28.15	peak	-3.31	24.84	46.00	100	290	-21.16	
	648.1563	28.31	peak	-0.33	27.98	46.00	120	117	-18.02	
*	945.5711	28.51	peak	4.42	32.93	46.00	125	202	-13.07	

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



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8879



Site : Chamber

Condition : FCC_part 15E RE_Above 1GHz_PK

Polarization: *Horizontal*

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

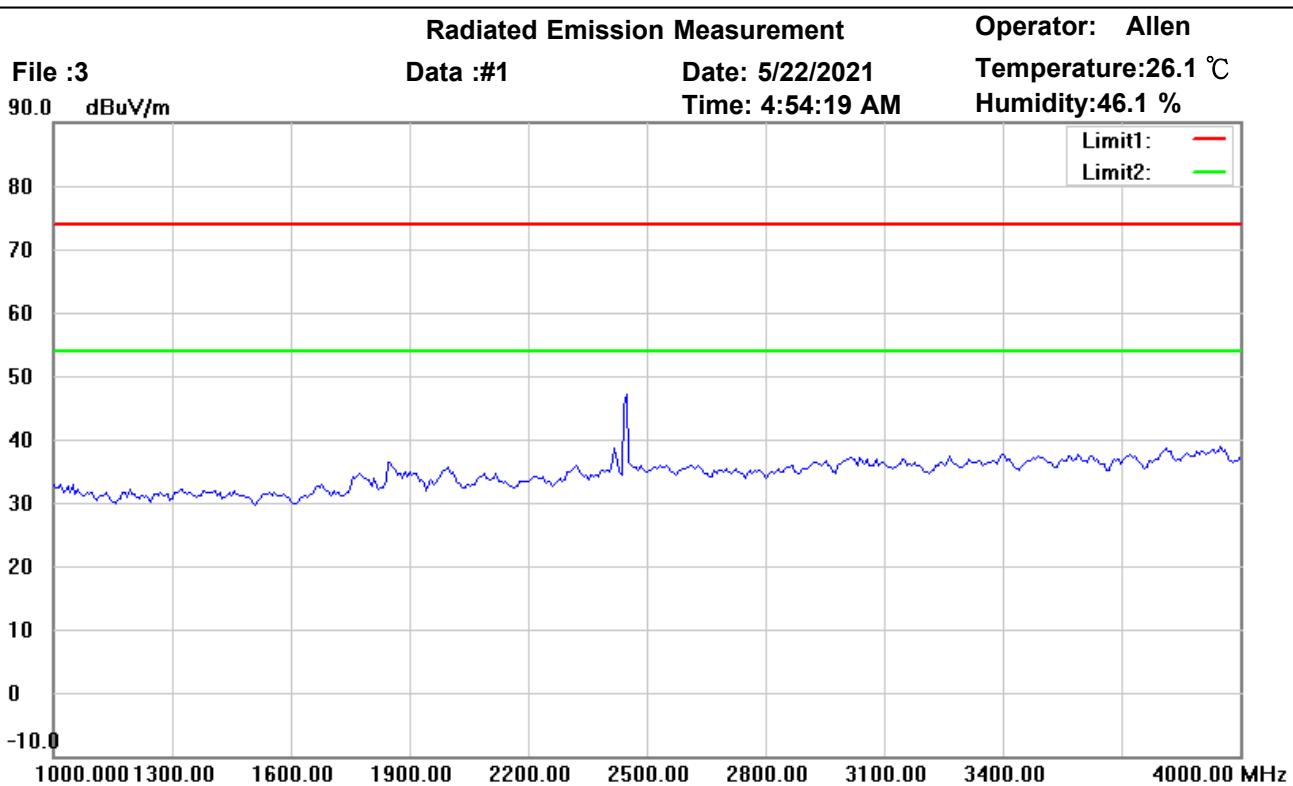
Test Mode : TX 5735MHz

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
-----	-----------------	----------------	----------	---------------------	-----------------	----------------	--------------	----------------	-------------	---------



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8879



Site : Chamber

Condition : FCC_part 15E RE_Above 1GHz_PK

Polarization: *Horizontal*

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

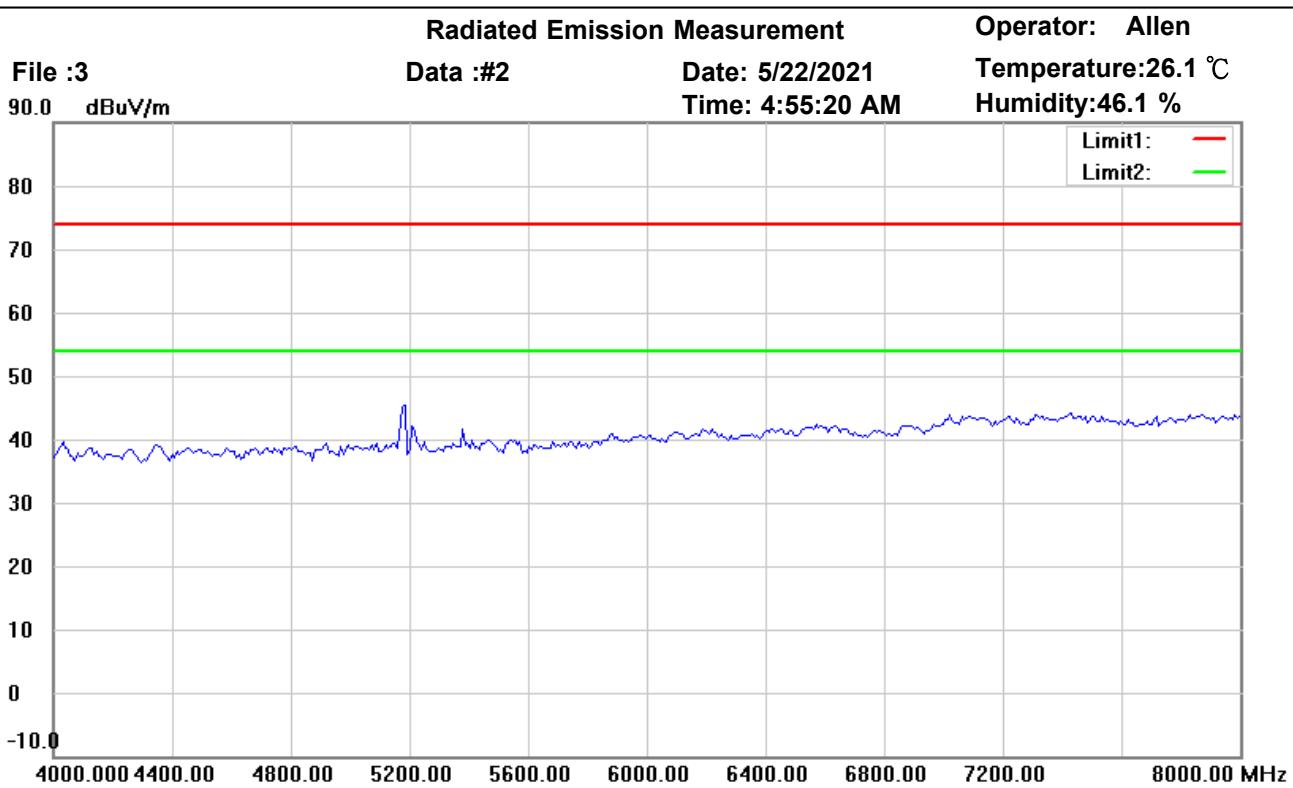
Test Mode : TX 5735MHz

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
-----	-----------------	----------------	----------	---------------------	-----------------	----------------	--------------	----------------	-------------	---------



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8879



Site : Chamber

Condition : FCC_part 15E RE_Above 1GHz_PK

Polarization: *Horizontal*

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

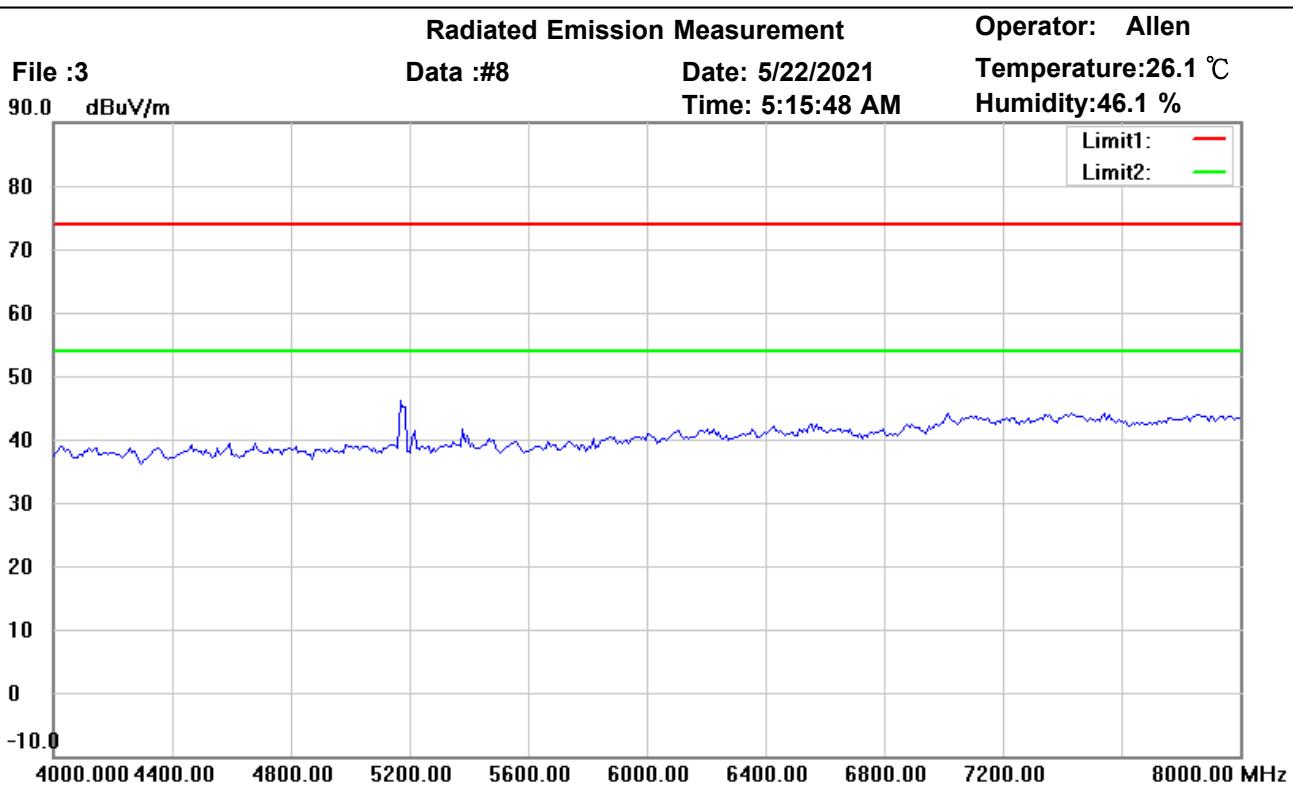
Test Mode : TX 5735MHz

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
-----	-----------------	----------------	----------	---------------------	-----------------	----------------	--------------	----------------	-------------	---------



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8879



Site : Chamber

Condition : FCC_part 15E RE_Above 1GHz_PK

Polarization: *Vertical*

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

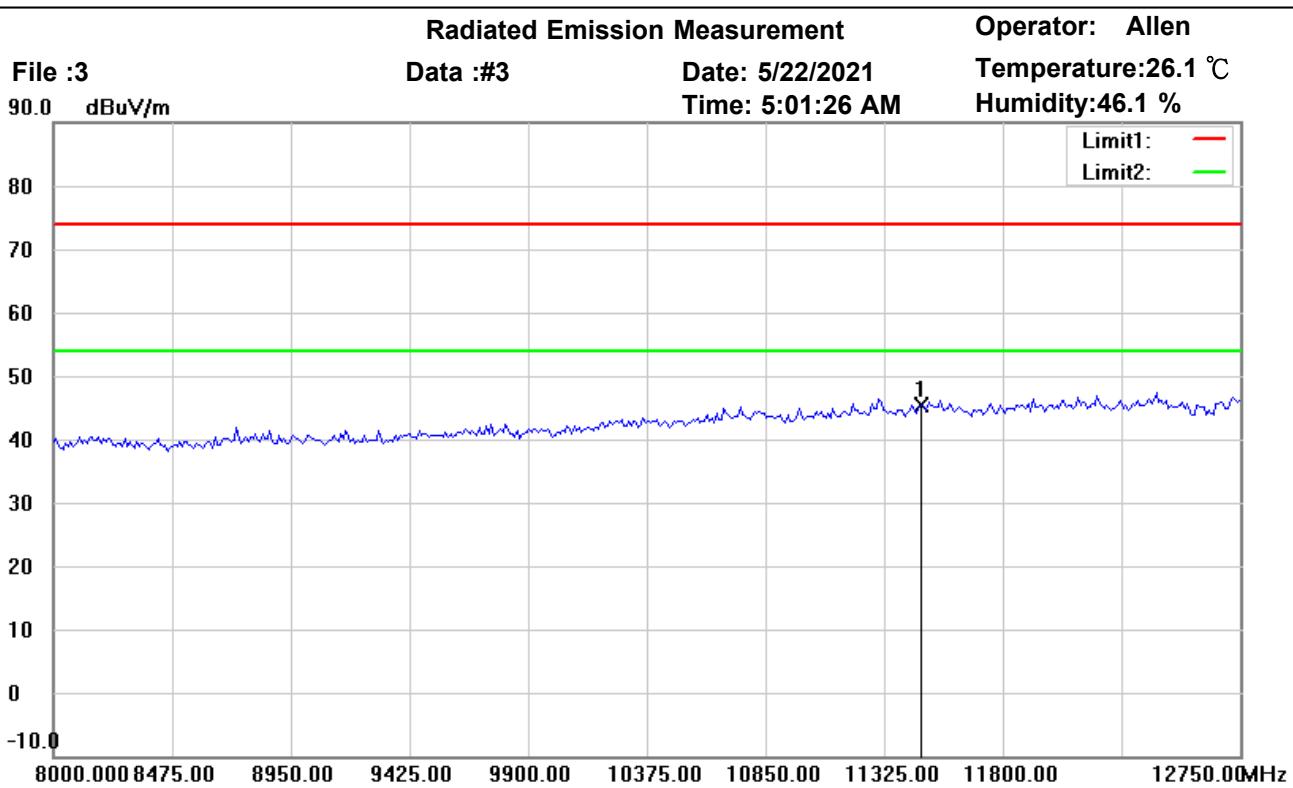
Test Mode : TX 5735MHz

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
-----	-----------------	----------------	----------	---------------------	-----------------	----------------	--------------	----------------	-------------	---------



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8879



Site : Chamber

Condition : FCC_part 15E RE_Above 1GHz_PK

Polarization: *Horizontal*

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

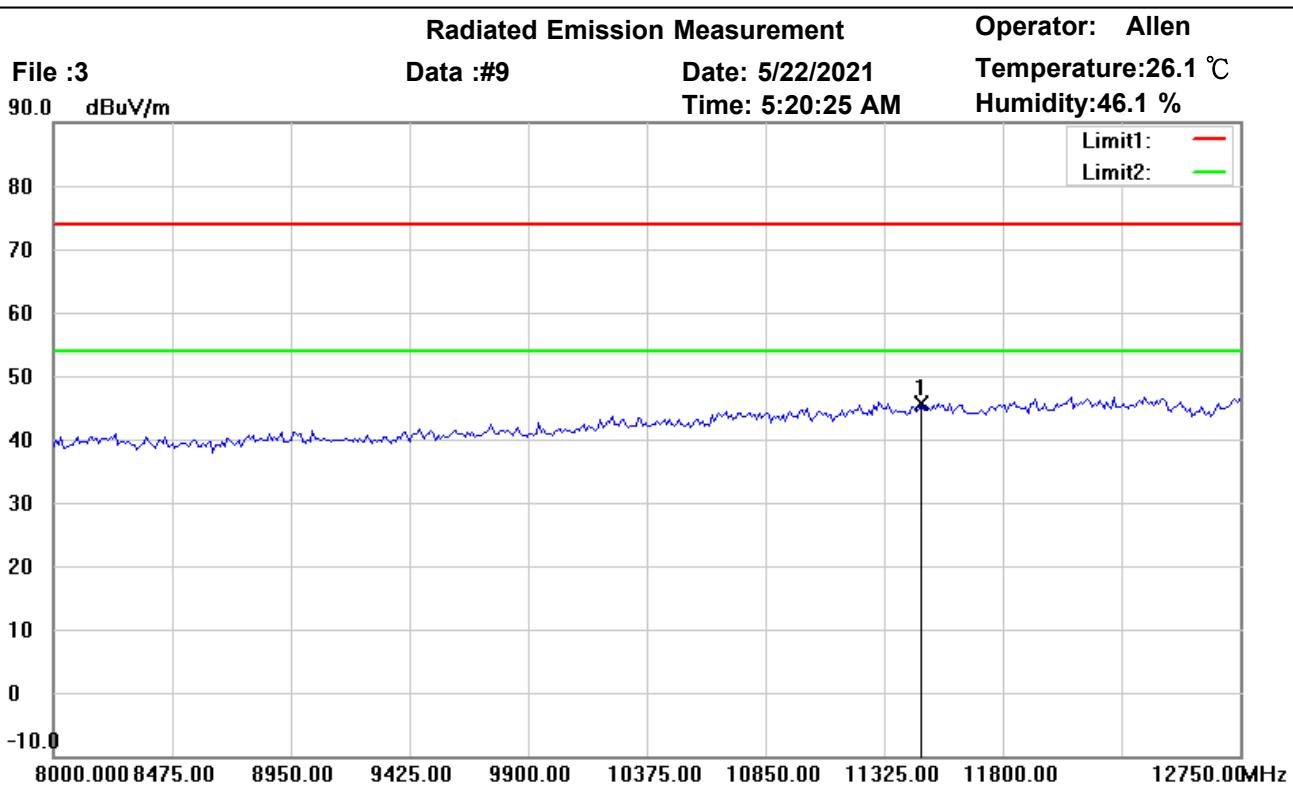
Test Mode : TX 5735MHz

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
*	11470.000	34.15	peak	11.33	45.48	74.00	150	260	-28.52	



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8879



Site : Chamber

Condition : FCC_part 15E RE_Above 1GHz_PK

Polarization: *Vertical*

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

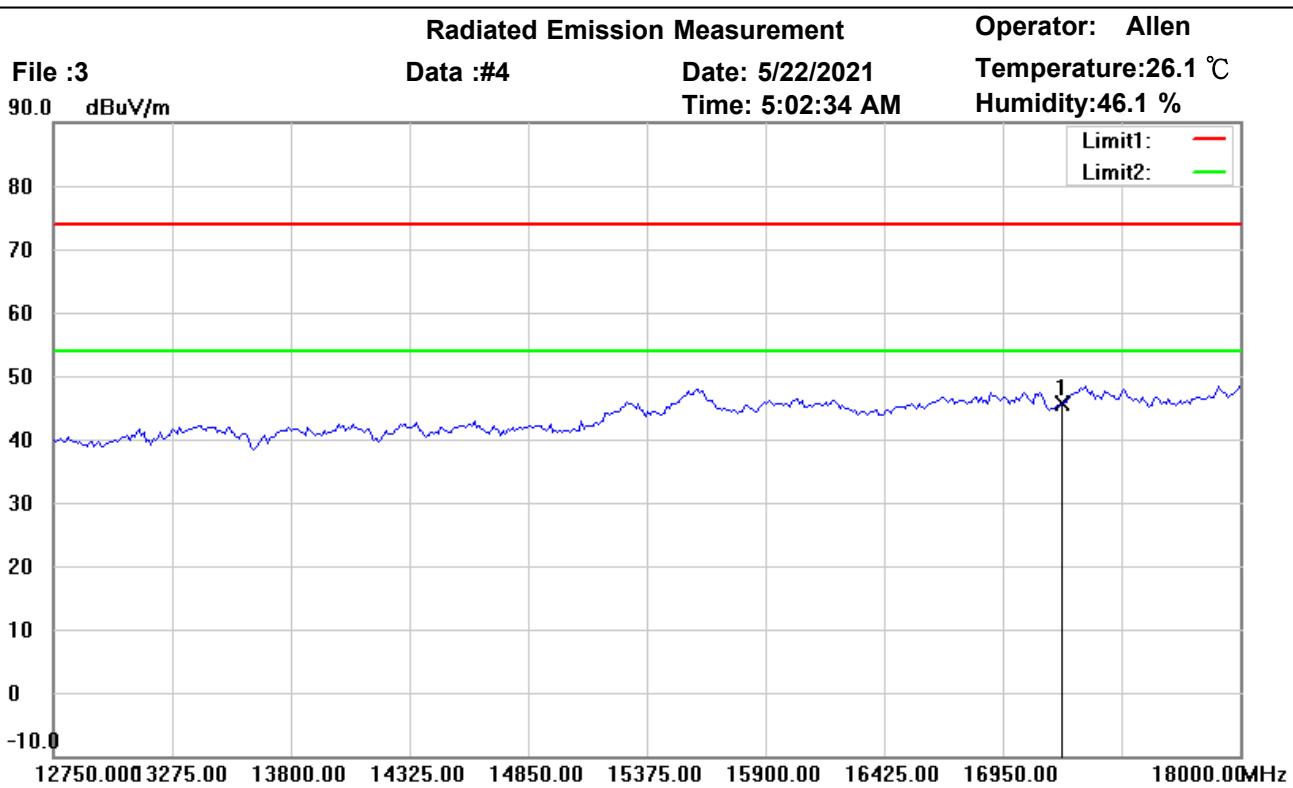
Test Mode : TX 5735MHz

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
*	11470.000	34.30	peak	11.33	45.63	74.00	150	30	-28.37	



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8879



Site : Chamber

Condition : FCC_part 15E RE_Above 1GHz_PK

Polarization: *Horizontal*

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

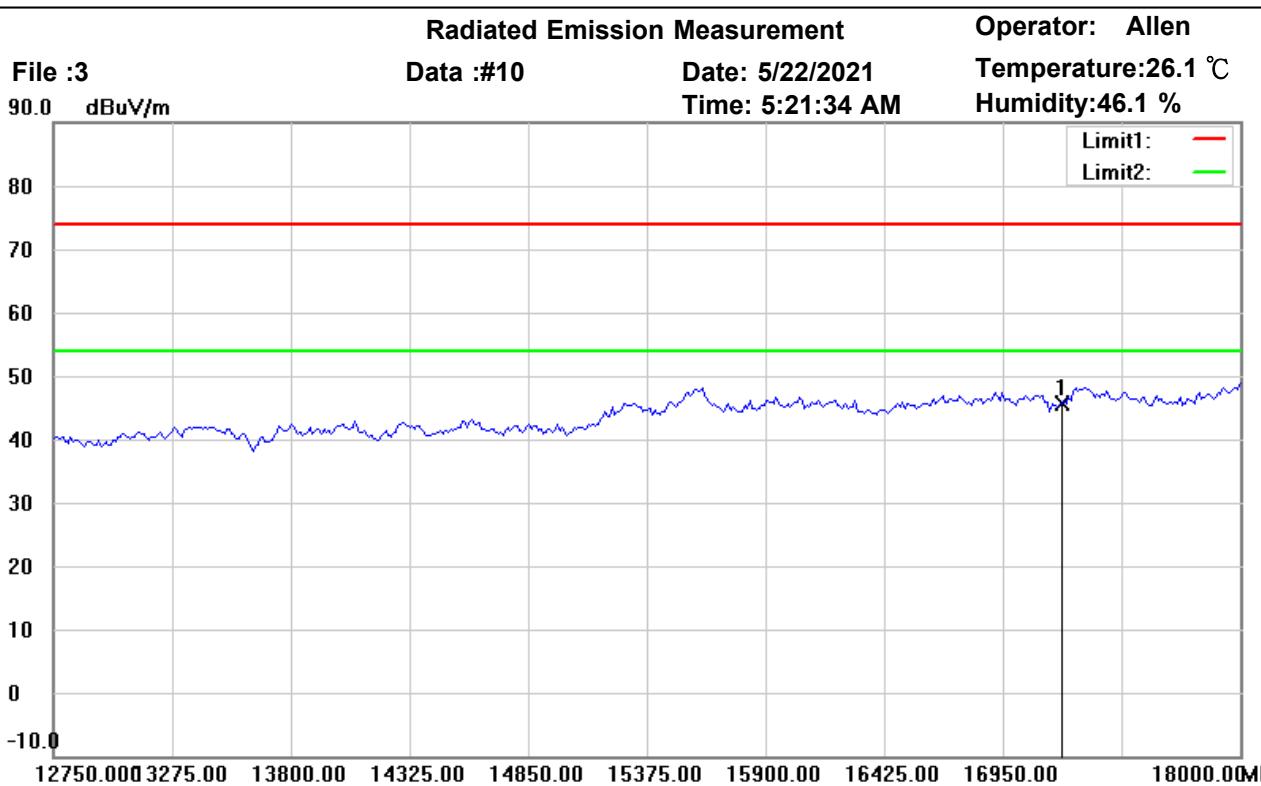
Test Mode : TX 5735MHz

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
*	17205.000	27.00	peak	18.53	45.53	74.00	150	147	-28.47	



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8879



Site : Chamber

Condition : FCC_part 15E RE_Above 1GHz_PK

Polarization: *Vertical*

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

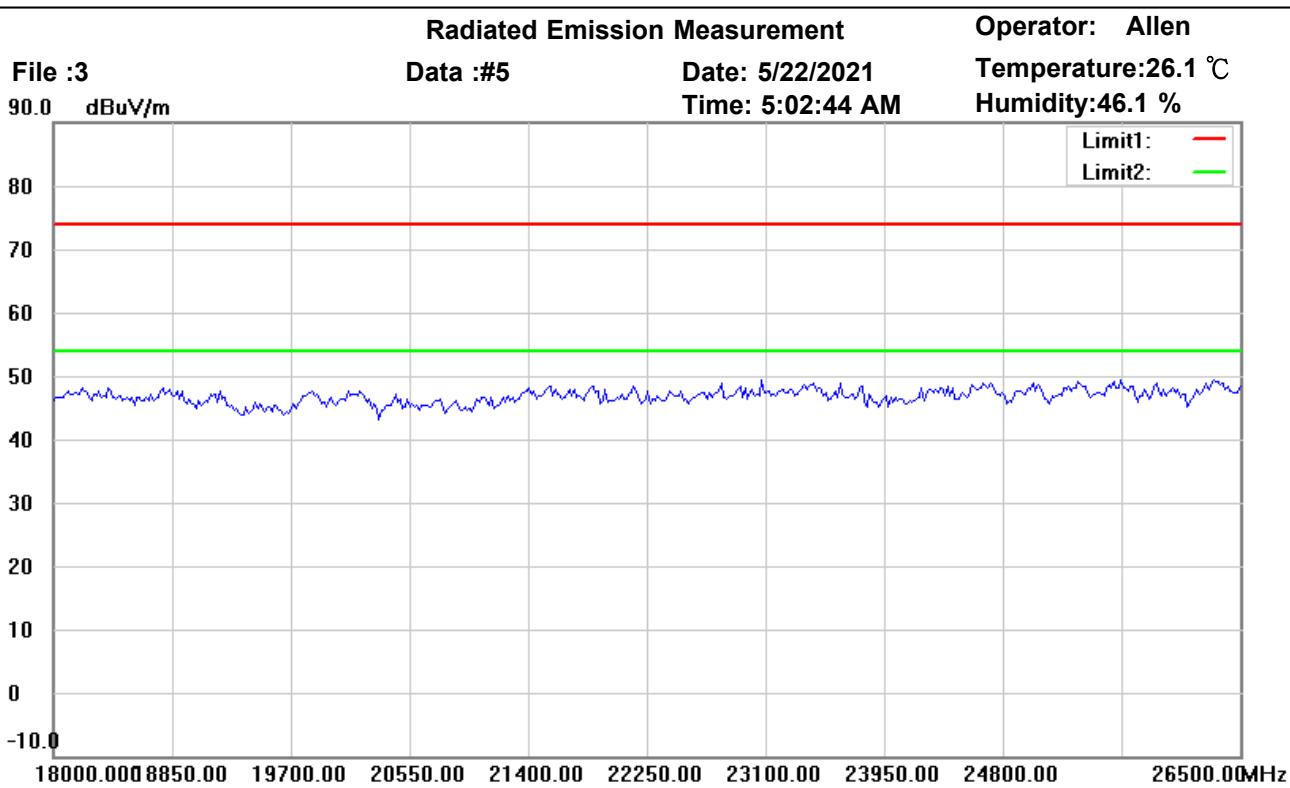
Test Mode : TX 5735MHz

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
*	17205.000	27.19	peak	18.53	45.72	74.00	150	332	-28.28	



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8879



Site : Chamber

Condition : FCC_part 15E RE_Above 1GHz_PK

Polarization: *Horizontal*

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

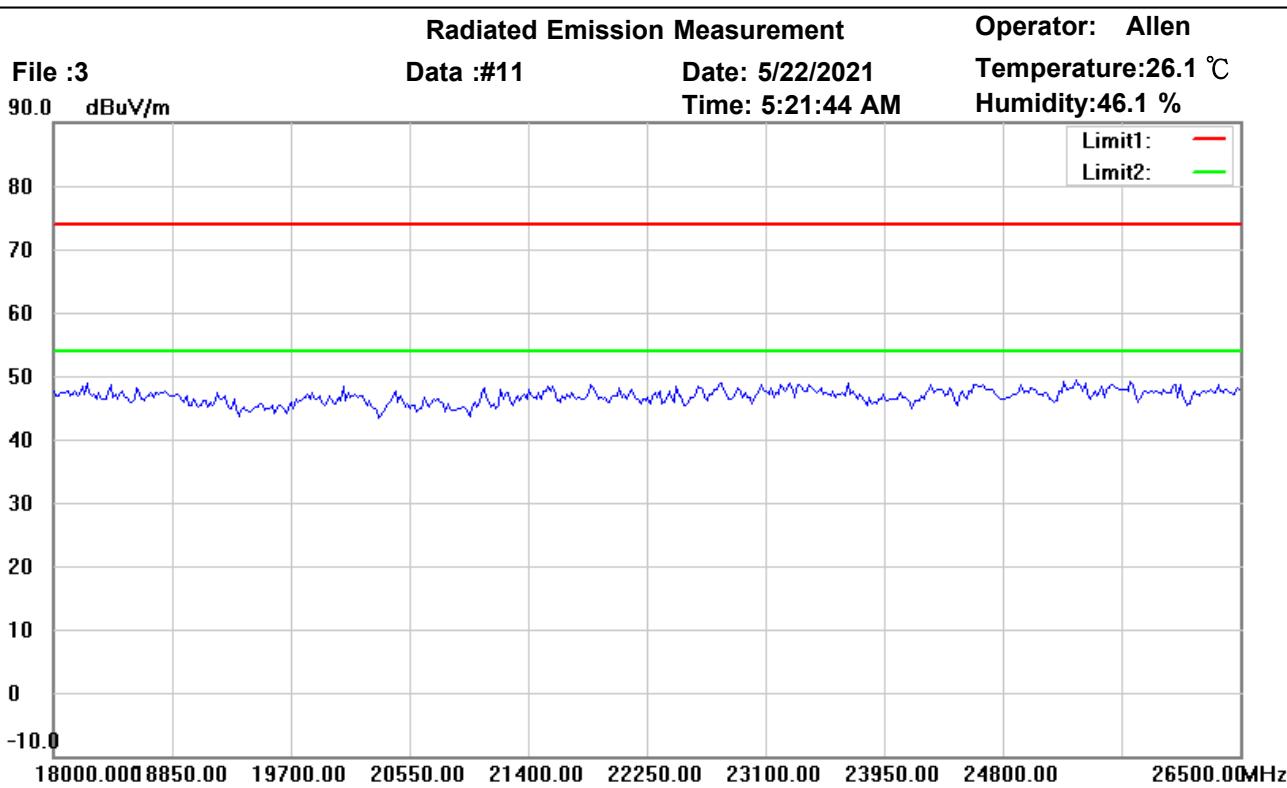
Test Mode : TX 5735MHz

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
-----	-----------------	----------------	----------	---------------------	-----------------	----------------	--------------	----------------	-------------	---------



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8879



Site : Chamber

Condition : FCC_part 15E RE_Above 1GHz_PK

Polarization: *Vertical*

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

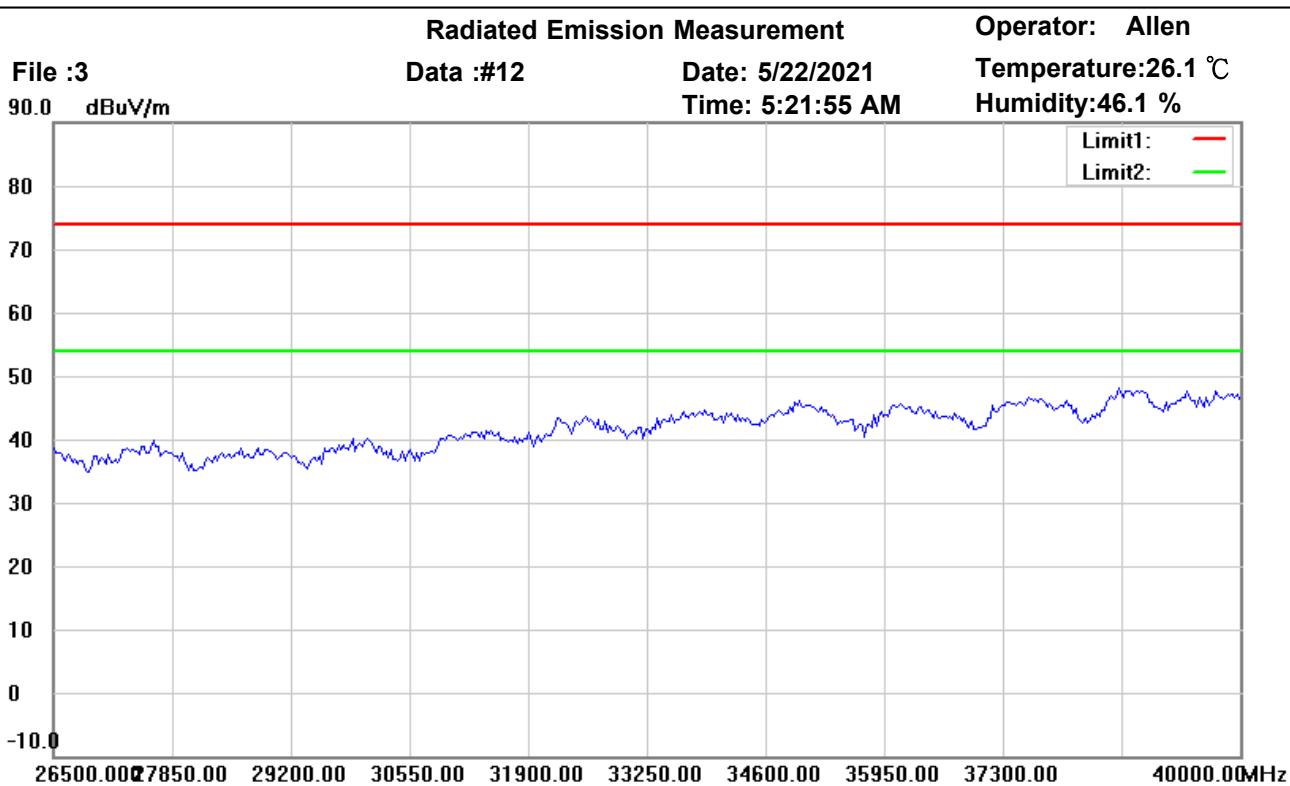
Test Mode : TX 5735MHz

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
-----	-----------------	----------------	----------	---------------------	-----------------	----------------	--------------	----------------	-------------	---------



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8879



Site : Chamber

Condition : FCC_part 15E RE_Above 1GHz_PK

Polarization: *Vertical*

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

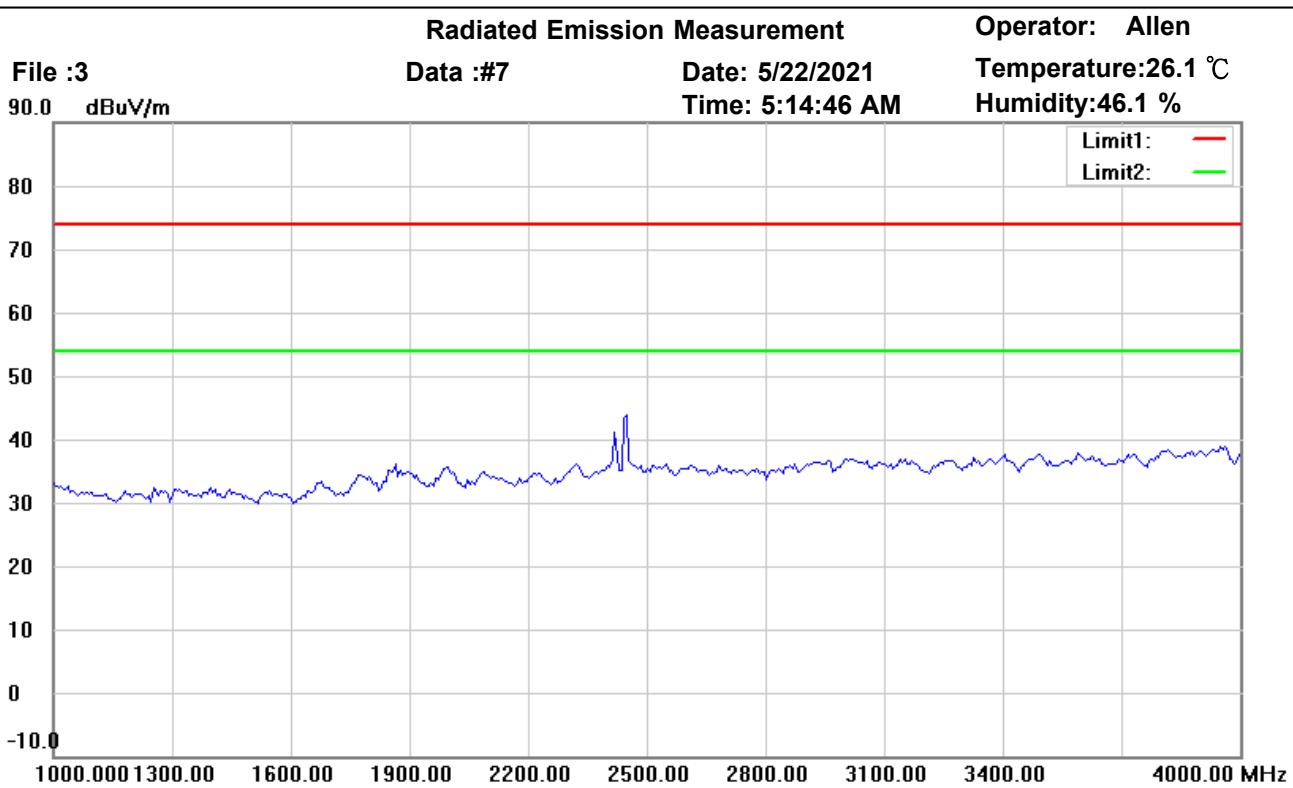
Test Mode : TX 5735MHz

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
-----	-----------------	----------------	----------	---------------------	-----------------	----------------	--------------	----------------	-------------	---------



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8879



Site : Chamber

Condition : FCC_part 15E RE_Above 1GHz_PK

Polarization: *Vertical*

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

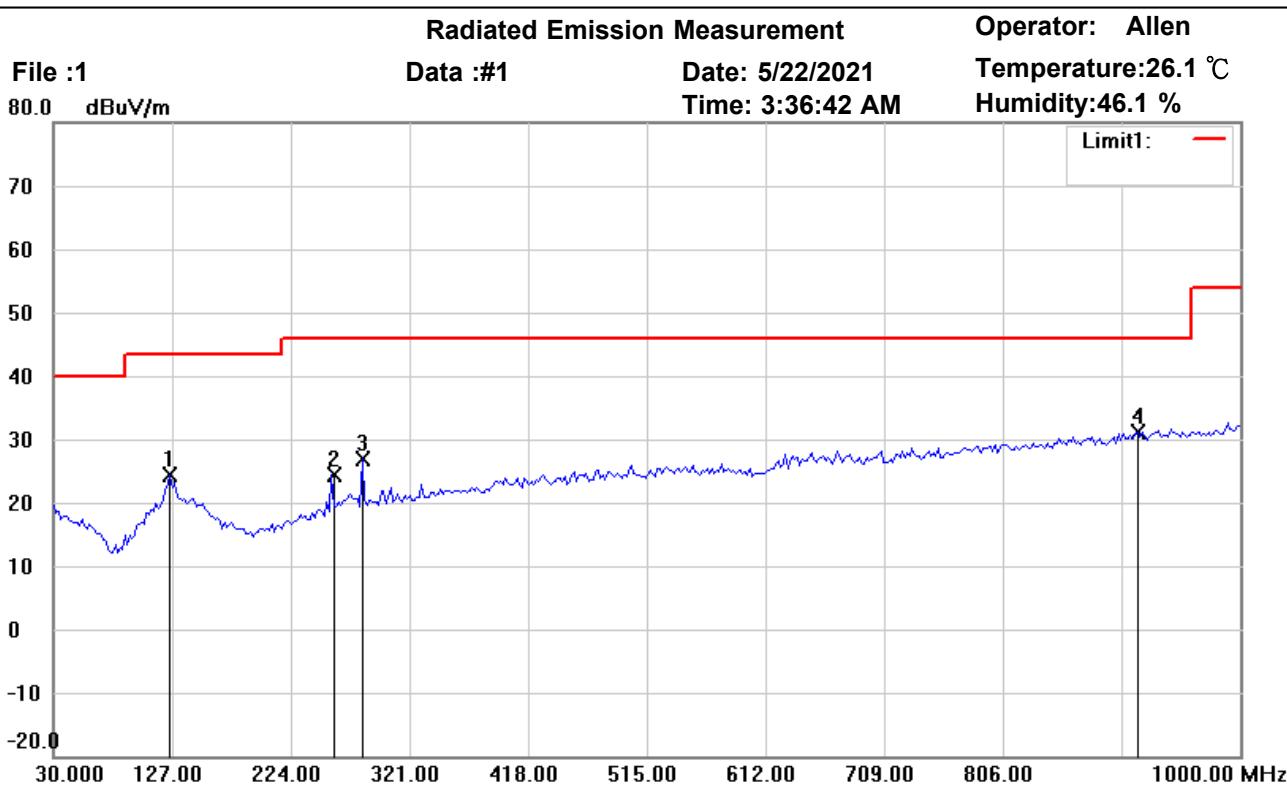
Test Mode : TX 5735MHz

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
-----	-----------------	----------------	----------	---------------------	-----------------	----------------	--------------	----------------	-------------	---------



Address: 6F., No.58, Ln 188, Ruey Kuang Rd, Neihu, Taipei
Tel: +886-2-6606-8877
Fax: +886-2-6606-8879



Site : Chamber

Condition : FCC_part 15 RE-Class E_30-1000MHz

Polarization: *Horizontal*

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

Test Mode : TX 5787MHz

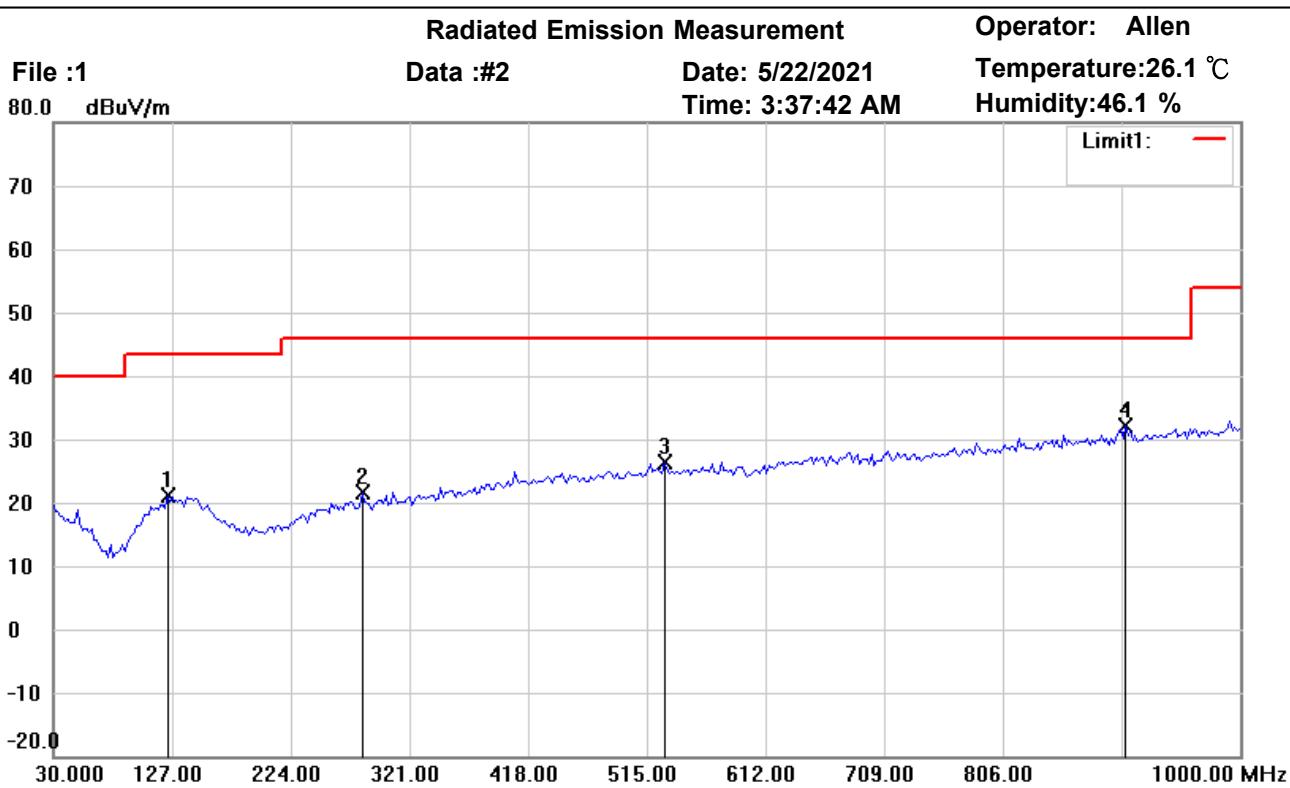
Note :

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
	125.2505	31.48	peak	-7.05	24.43	43.50	105	200	-19.07	
	257.4350	31.85	peak	-7.41	24.44	46.00	130	182	-21.56	
	282.7053	33.15	peak	-6.17	26.98	46.00	120	90	-19.02	
*	916.4127	27.36	peak	3.89	31.25	46.00	145	133	-14.75	

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



Address: 6F., No.58, Ln 188, Ruey Kuang Rd, Neihu, Taipei
Tel: +886-2-6606-8877
Fax: +886-2-6606-8879



Site : Chamber

Condition : FCC_part 15 RE-Class E_30-1000MHz

Polarization: Vertical

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

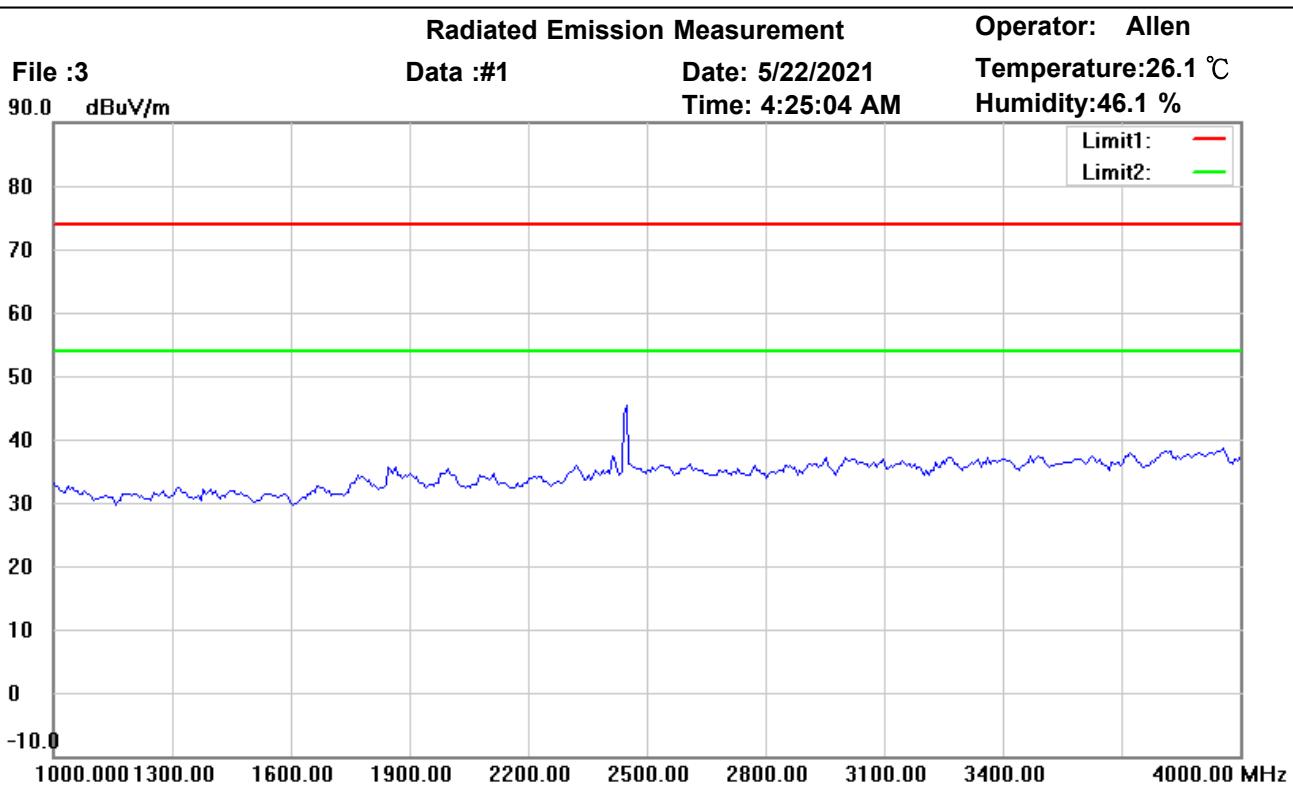
Test Mode : TX 5787MHz

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
	123.3066	28.25	peak	-7.15	21.10	43.50	110	53	-22.40	
	282.7054	27.91	peak	-6.17	21.74	46.00	100	285	-24.26	
	529.5792	28.53	peak	-2.18	26.35	46.00	105	336	-19.65	
*	906.6934	28.32	peak	3.71	32.03	46.00	120	110	-13.97	



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8879



Site : Chamber

Condition : FCC_part 15E RE_Above 1GHz_PK

Polarization: *Horizontal*

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

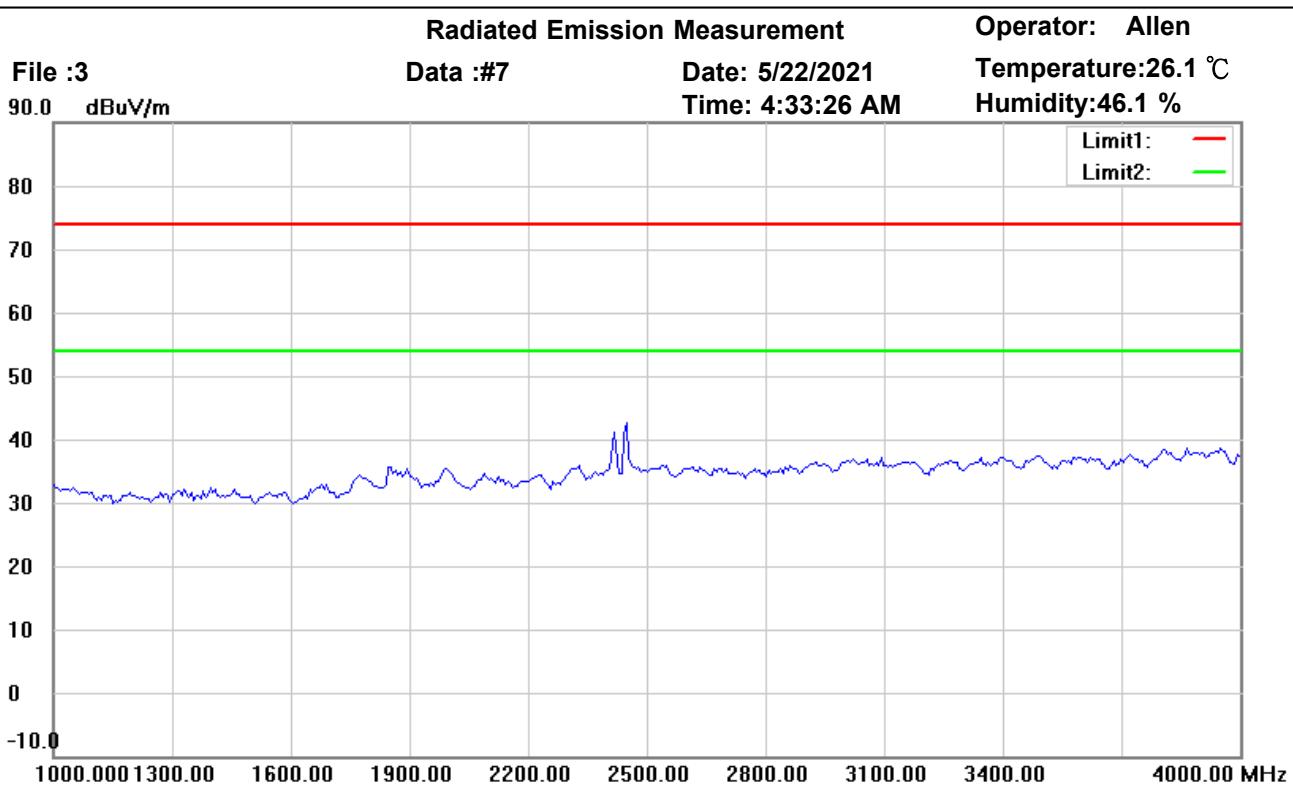
Test Mode : TX 5787MHz

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
-----	-----------------	----------------	----------	---------------------	-----------------	----------------	--------------	----------------	-------------	---------



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8879



Site : Chamber

Condition : FCC_part 15E RE_Above 1GHz_PK

Polarization: *Vertical*

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

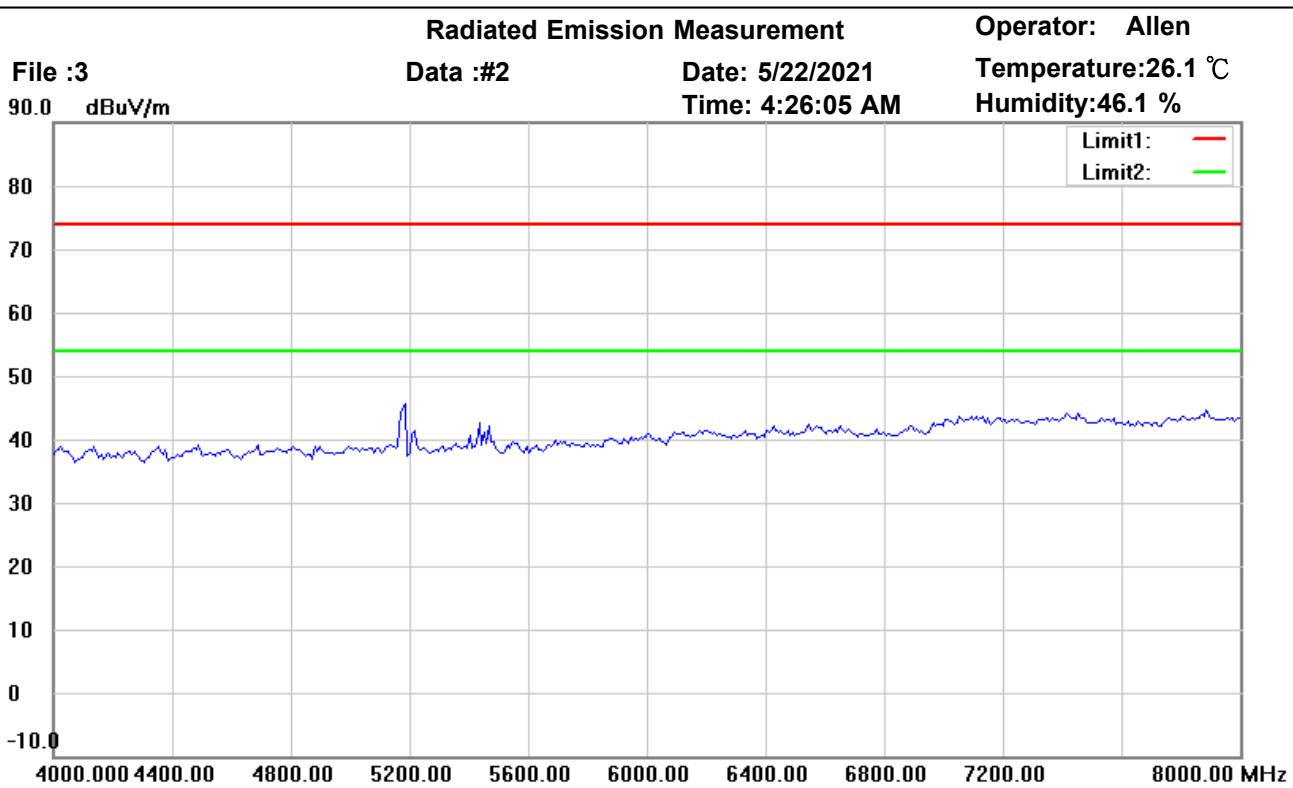
Test Mode : TX 5787MHz

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



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8879



Site : Chamber

Condition : FCC_part 15E RE_Above 1GHz_PK

Polarization: *Horizontal*

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

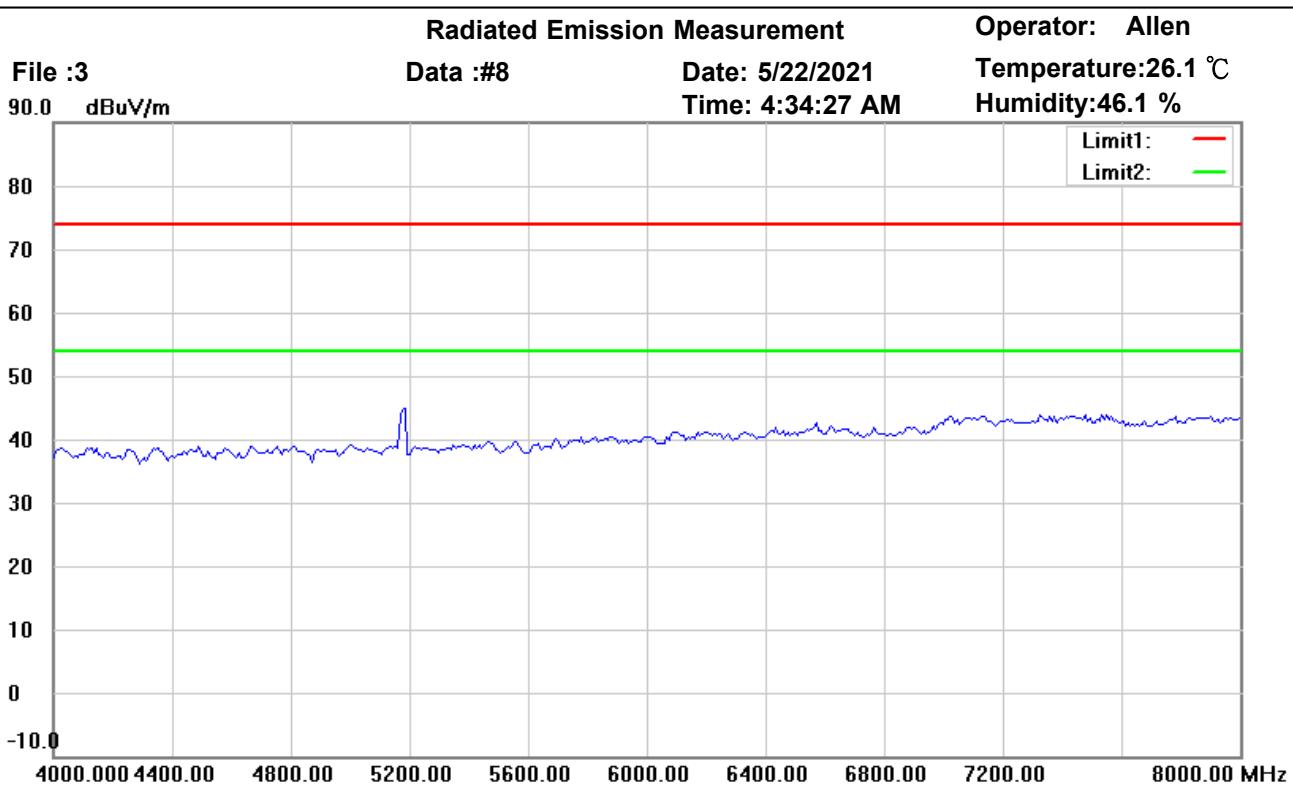
Test Mode : TX 5787MHz

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
-----	-----------------	----------------	----------	---------------------	-----------------	----------------	--------------	----------------	-------------	---------



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8879



Site : Chamber

Condition : FCC_part 15E RE_Above 1GHz_PK

Polarization: *Vertical*

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

Test Mode : TX 5787MHz

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
-----	-----------------	----------------	----------	---------------------	-----------------	----------------	--------------	----------------	-------------	---------



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei

Tel:+886-2-6606-8877

Fax:+886-2-6606-8879

Radiated Emission Measurement

Operator: Allen

File :3

Data :#3

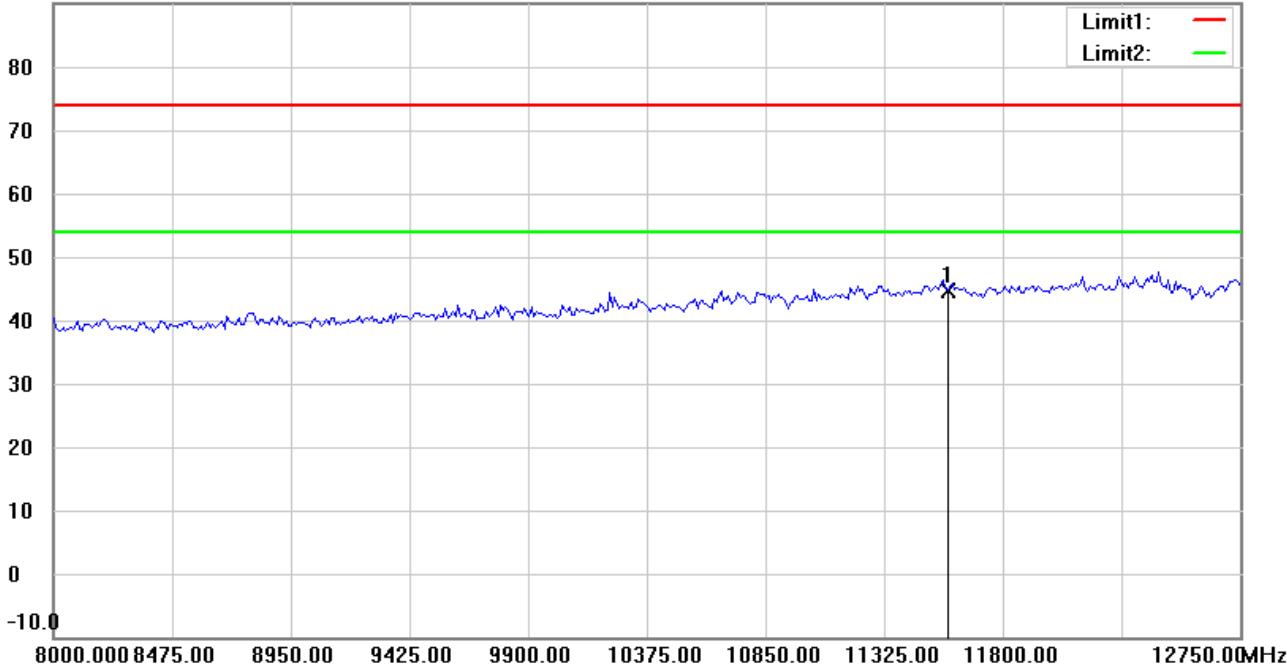
Date: 5/22/2021

Temperature:26.1 °C

90.0 dBuV/m

Time: 4:27:26 AM

Humidity:46.1 %



Site : Chamber

Condition : FCC_part 15E RE_Above 1GHz_PK

Polarization: *Horizontal*

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

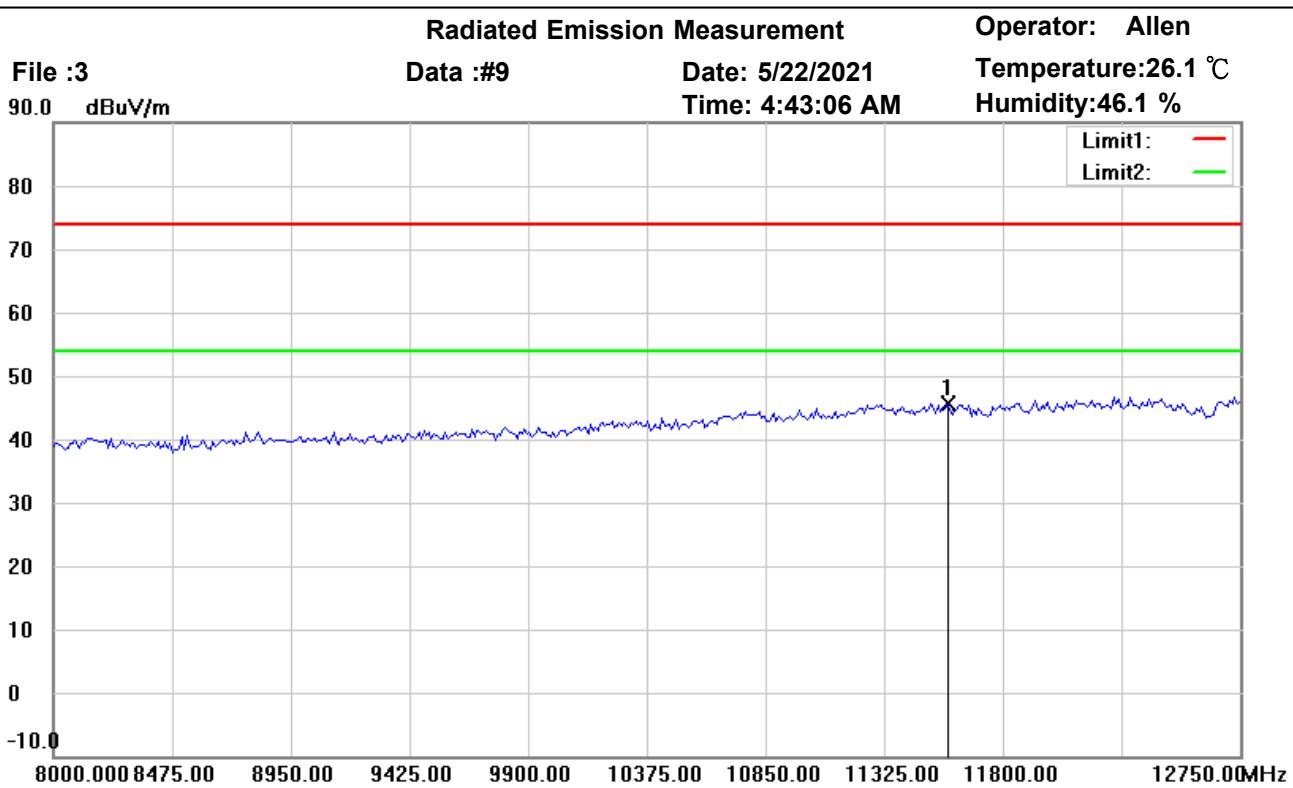
Test Mode : TX 5787MHz

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
*	11574.000	33.45	peak	11.20	44.65	74.00	150	240	-29.35	



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8879



Site : Chamber

Condition : FCC_part 15E RE_Above 1GHz_PK

Polarization: *Vertical*

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

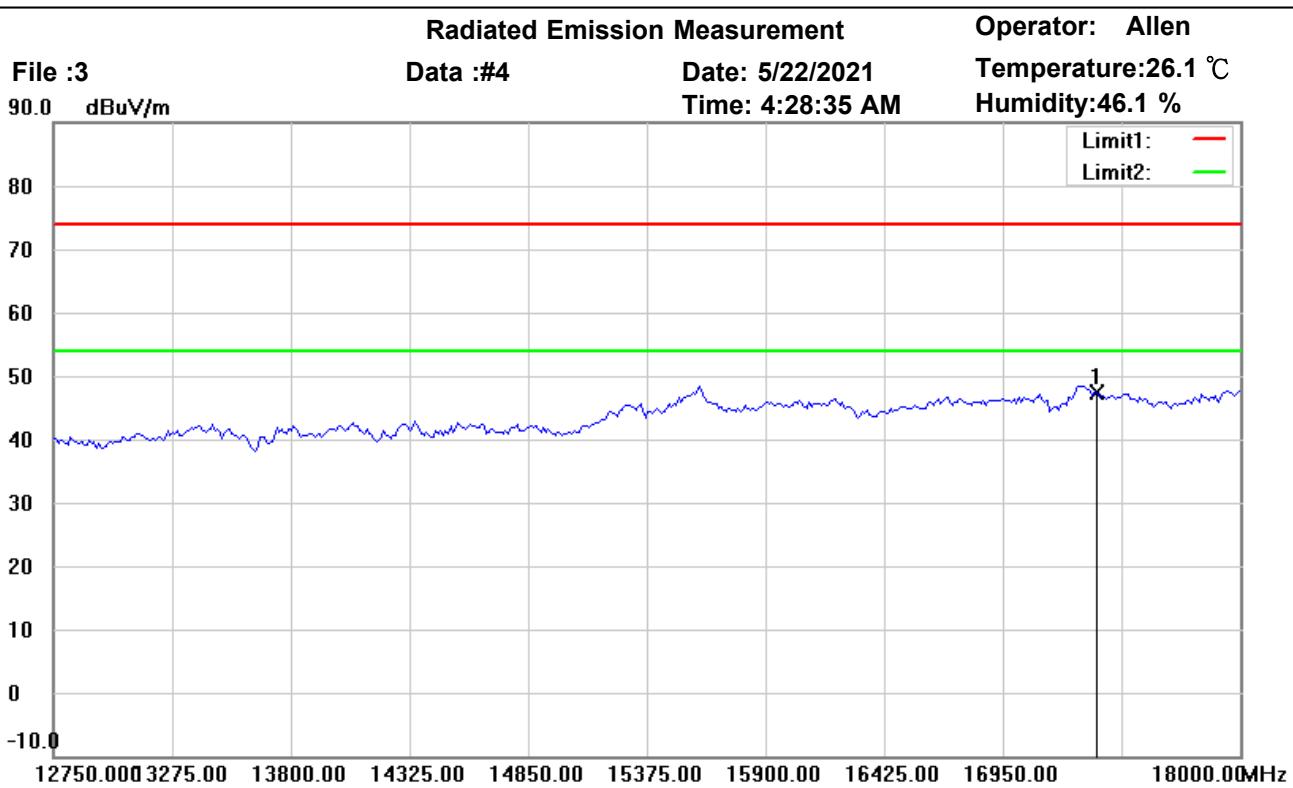
Test Mode : TX 5787MHz

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
*	11574.000	34.36	peak	11.20	45.56	74.00	150	86	-28.44	



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8879



Site : Chamber

Condition : FCC_part 15E RE_Above 1GHz_PK

Polarization: *Horizontal*

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

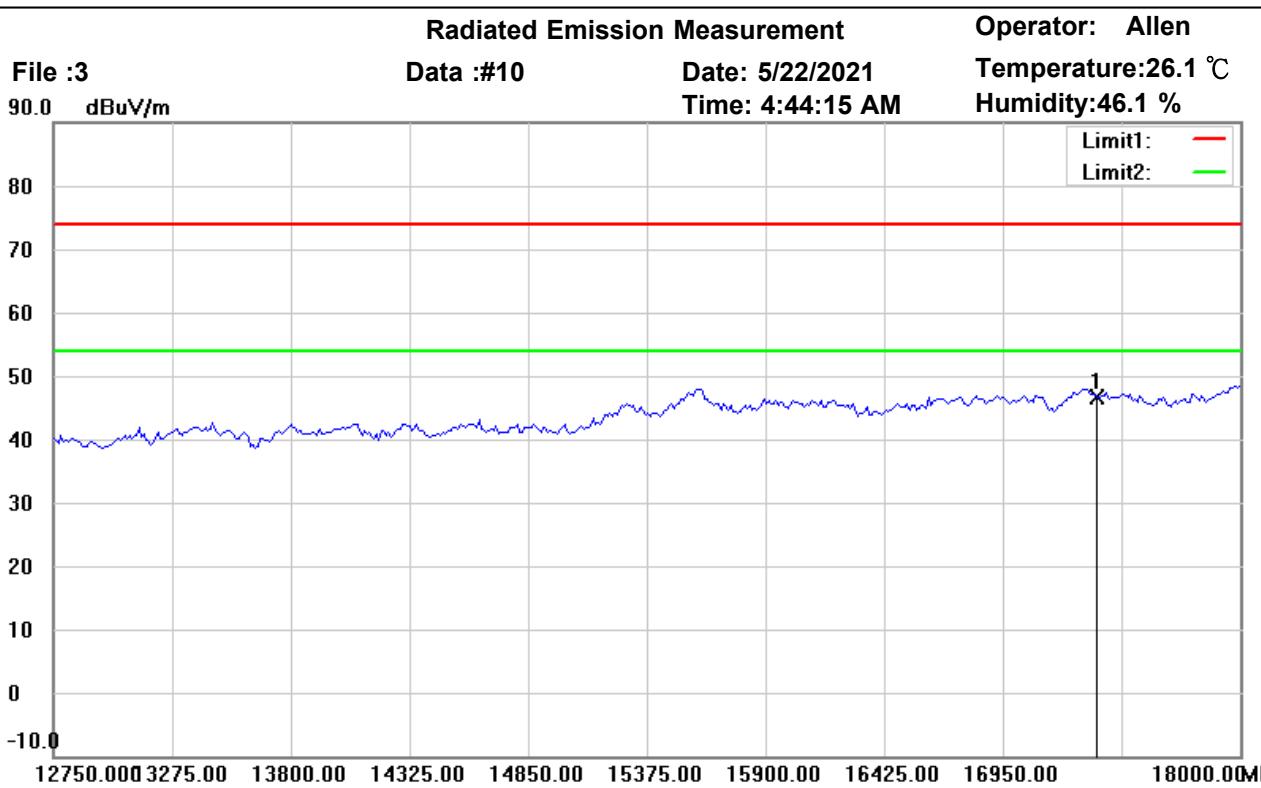
Test Mode : TX 5787MHz

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
*	17361.000	26.89	peak	20.41	47.30	74.00	150	55	-26.70	



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8879



Site : Chamber

Condition : FCC_part 15E RE_Above 1GHz_PK

Polarization: *Vertical*

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

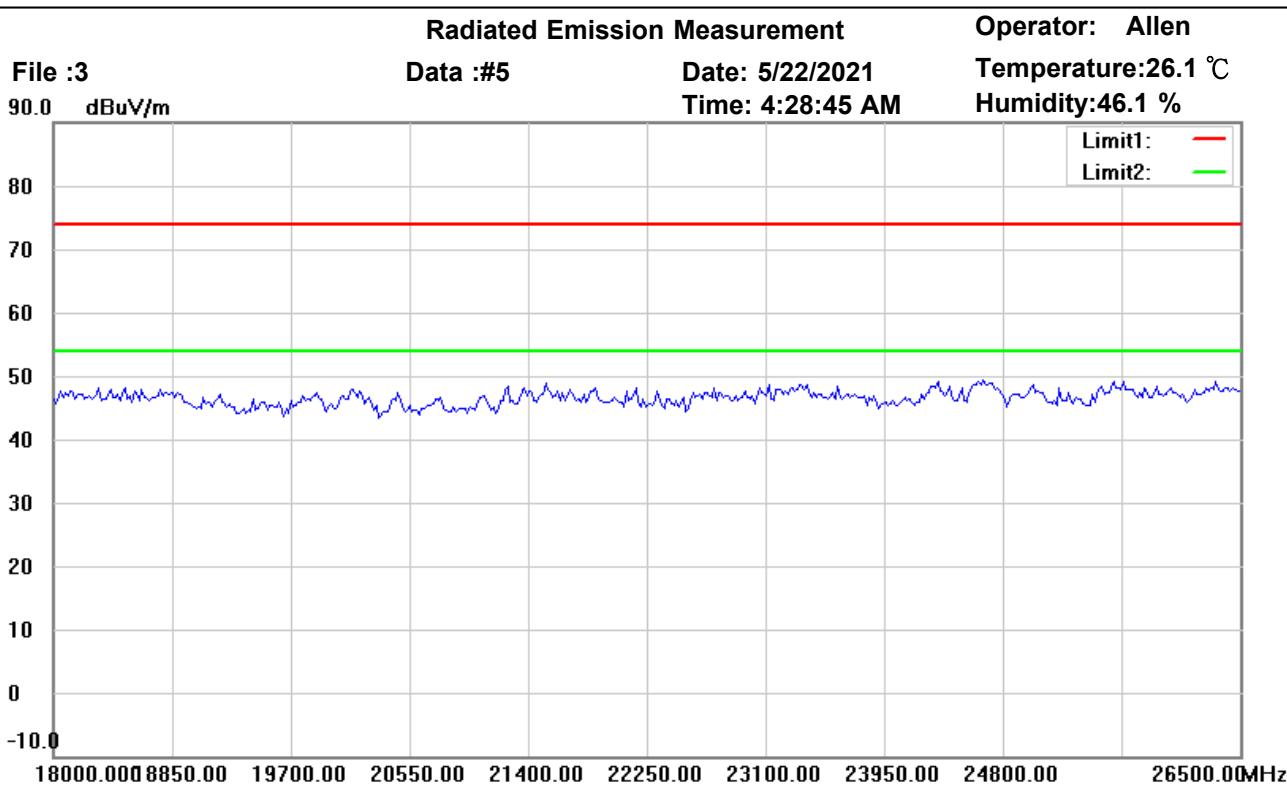
Test Mode : TX 5787MHz

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
*	17361.000	26.32	peak	20.41	46.73	74.00	150	319	-27.27	



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8879



Site : Chamber

Condition : FCC_part 15E RE_Above 1GHz_PK

Polarization: *Horizontal*

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

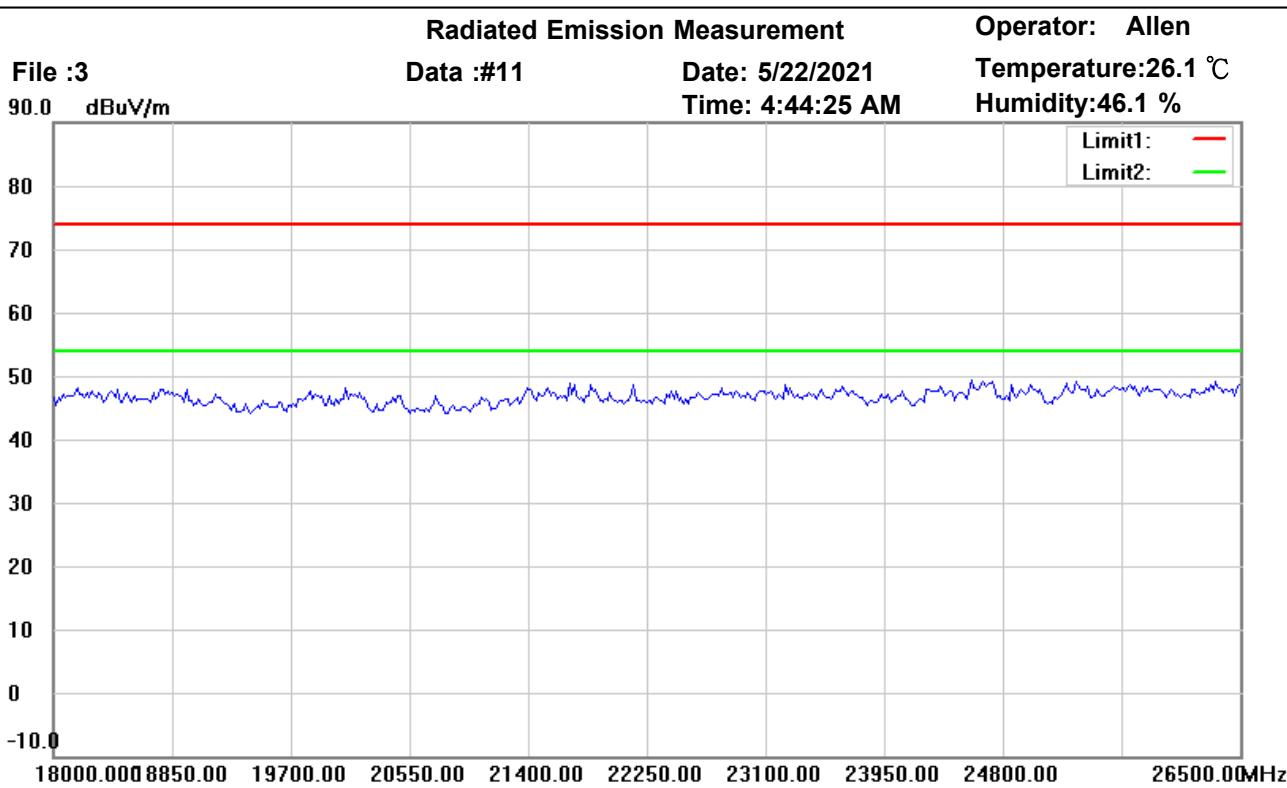
Test Mode : TX 5787MHz

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



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8879



Site : Chamber

Condition : FCC_part 15E RE_Above 1GHz_PK

Polarization: *Vertical*

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

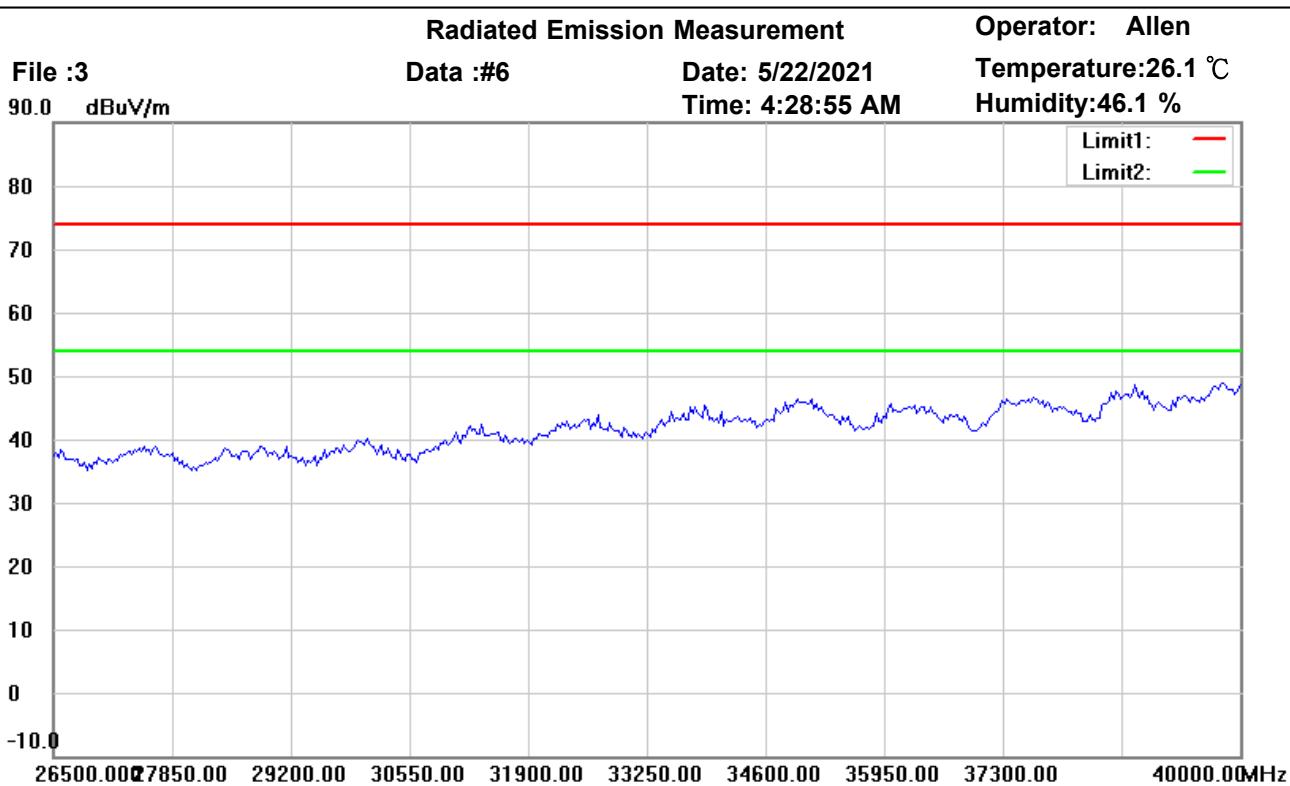
Test Mode : TX 5787MHz

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
-----	-----------------	----------------	----------	---------------------	-----------------	----------------	--------------	----------------	-------------	---------



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8879



Site : Chamber

Condition : FCC_part 15E RE_Above 1GHz_PK

Polarization: *Horizontal*

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

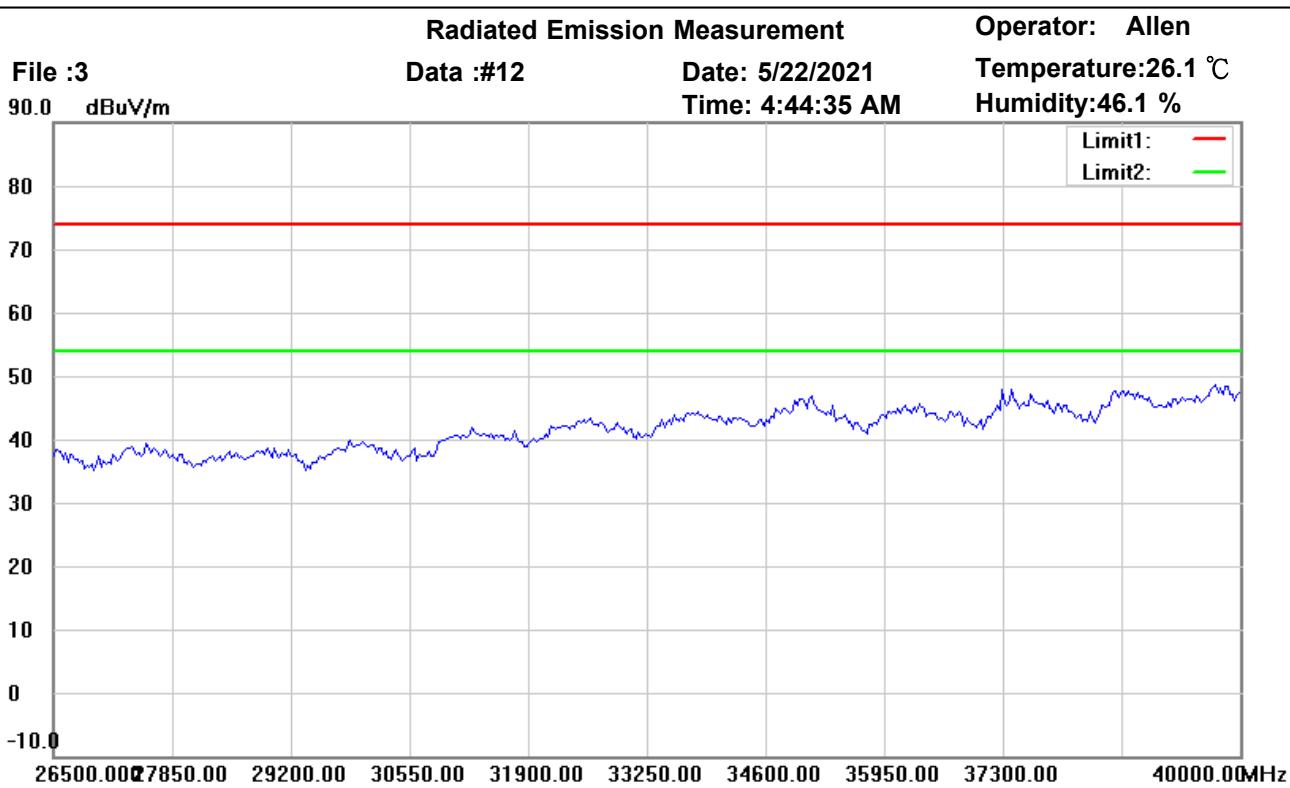
Test Mode : TX 5787MHz

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
-----	-----------------	----------------	----------	---------------------	-----------------	----------------	--------------	----------------	-------------	---------



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8879



Site : Chamber

Condition : FCC_part 15E RE_Above 1GHz_PK

Polarization: *Vertical*

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

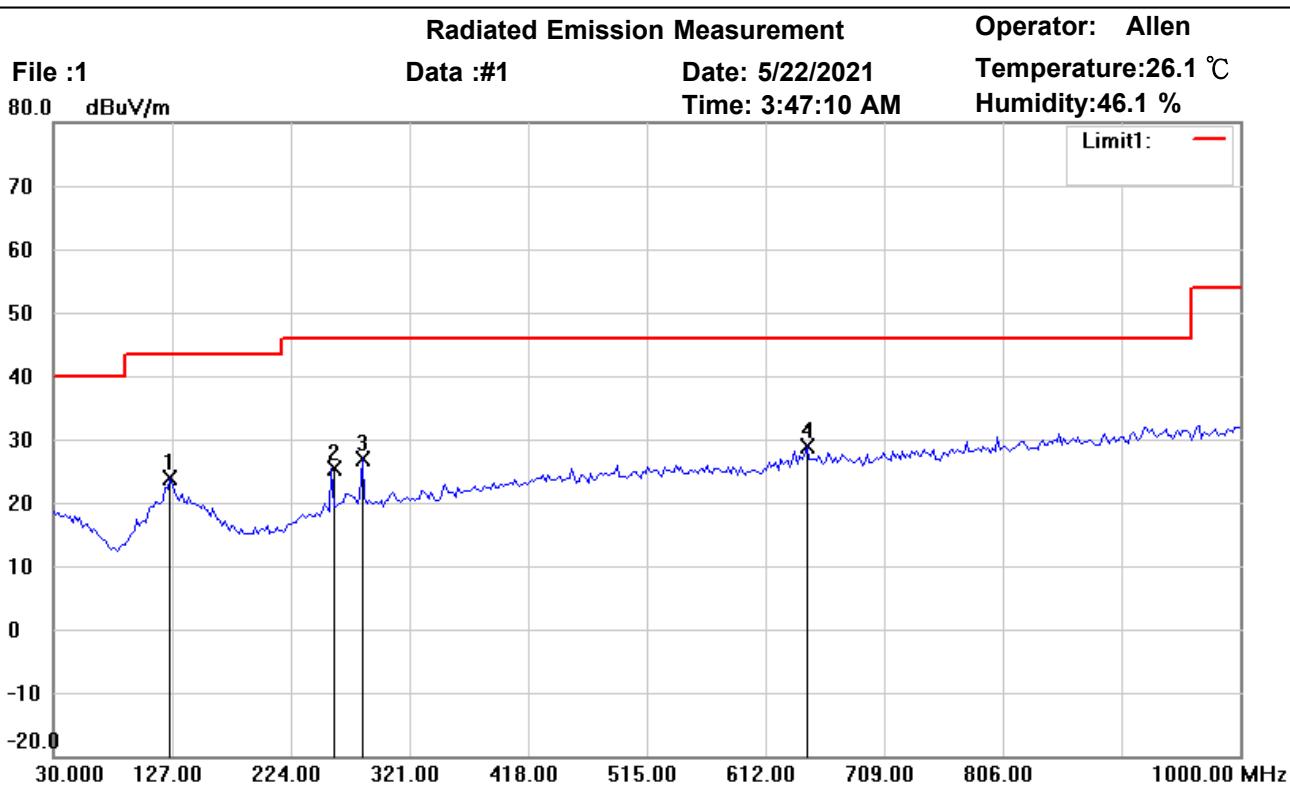
Test Mode : TX 5787MHz

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
-----	-----------------	----------------	----------	---------------------	-----------------	----------------	--------------	----------------	-------------	---------



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8879



Site : Chamber

Condition : FCC_part 15 RE-Class E_30-1000MHz

Polarization: *Horizontal*

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

Test Mode : TX 5839MHz

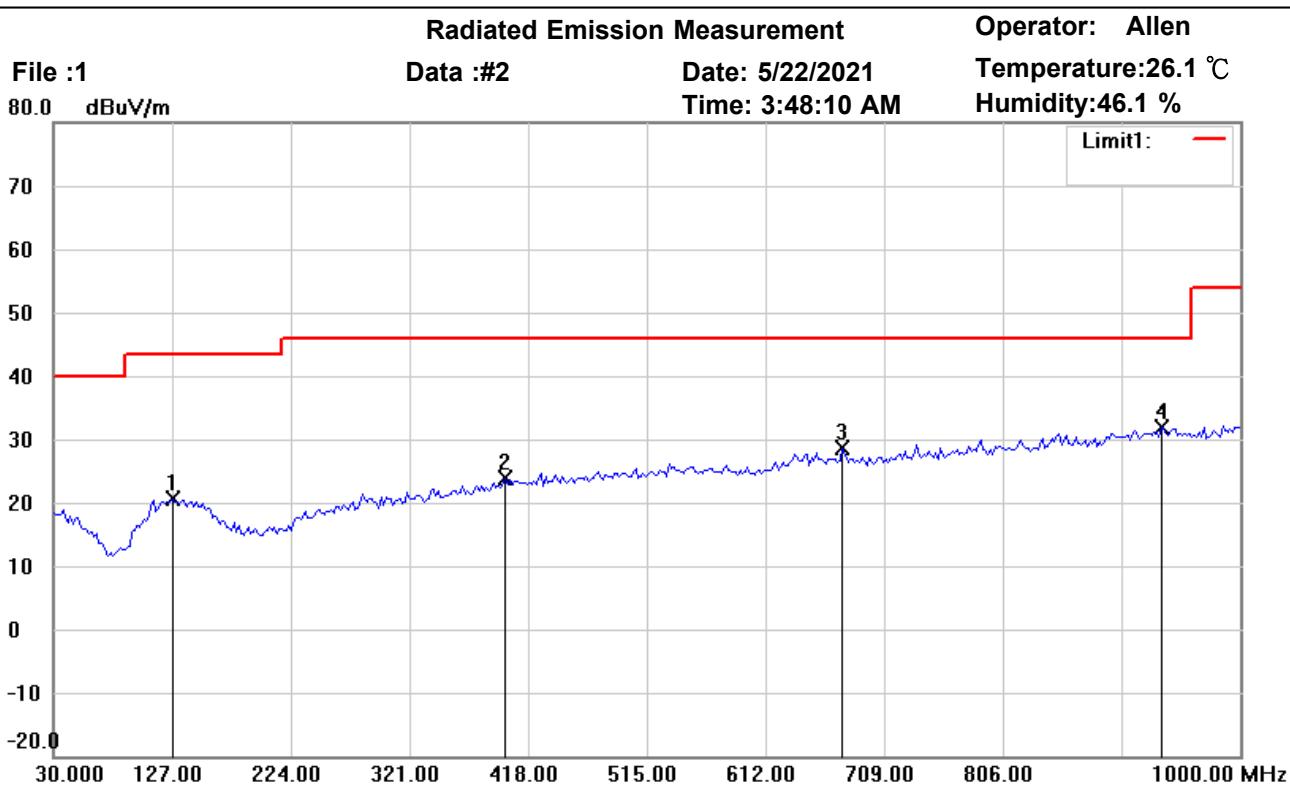
Note :

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
	125.2505	30.94	peak	-7.05	23.89	43.50	135	70	-19.61	
	257.4350	32.76	peak	-7.41	25.35	46.00	100	154	-20.65	
	282.7053	32.97	peak	-6.17	26.80	46.00	110	323	-19.20	
*	646.2124	29.37	peak	-0.40	28.97	46.00	120	166	-17.03	

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



Address: 6F., No.58, Ln 188, Ruey Kuang Rd, Neihu, Taipei
Tel: +886-2-6606-8877
Fax: +886-2-6606-8879



Site : Chamber

Condition : FCC_part 15 RE-Class E_30-1000MHz

Polarization: Vertical

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

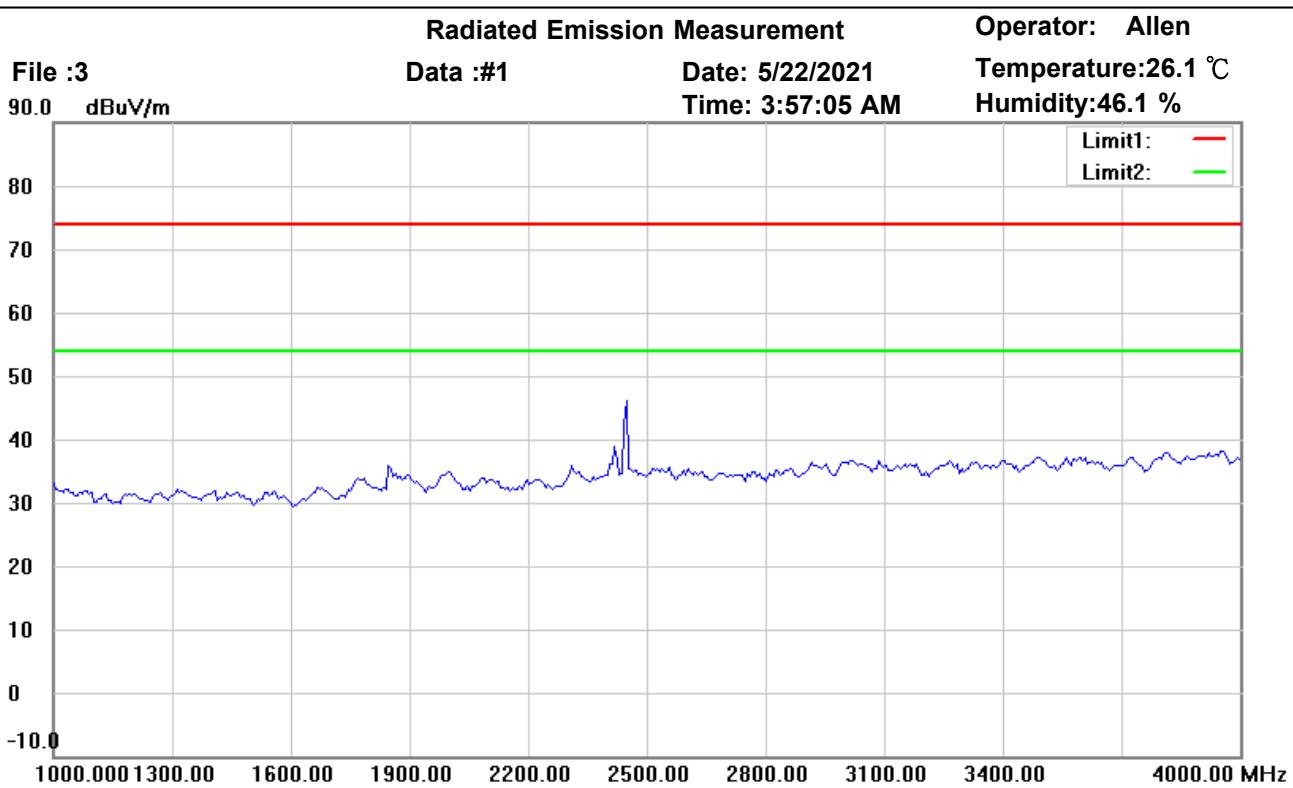
Test Mode : TX 5839MHz

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
	127.1944	27.49	peak	-6.96	20.53	43.50	120	39	-22.97	
	399.3387	27.58	peak	-3.67	23.91	46.00	145	220	-22.09	
	675.3706	28.84	peak	-0.18	28.66	46.00	130	107	-17.34	
*	935.8517	27.58	peak	4.24	31.82	46.00	105	90	-14.18	



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8879



Site : Chamber

Condition : FCC_part 15E RE_Above 1GHz_PK

Polarization: *Horizontal*

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

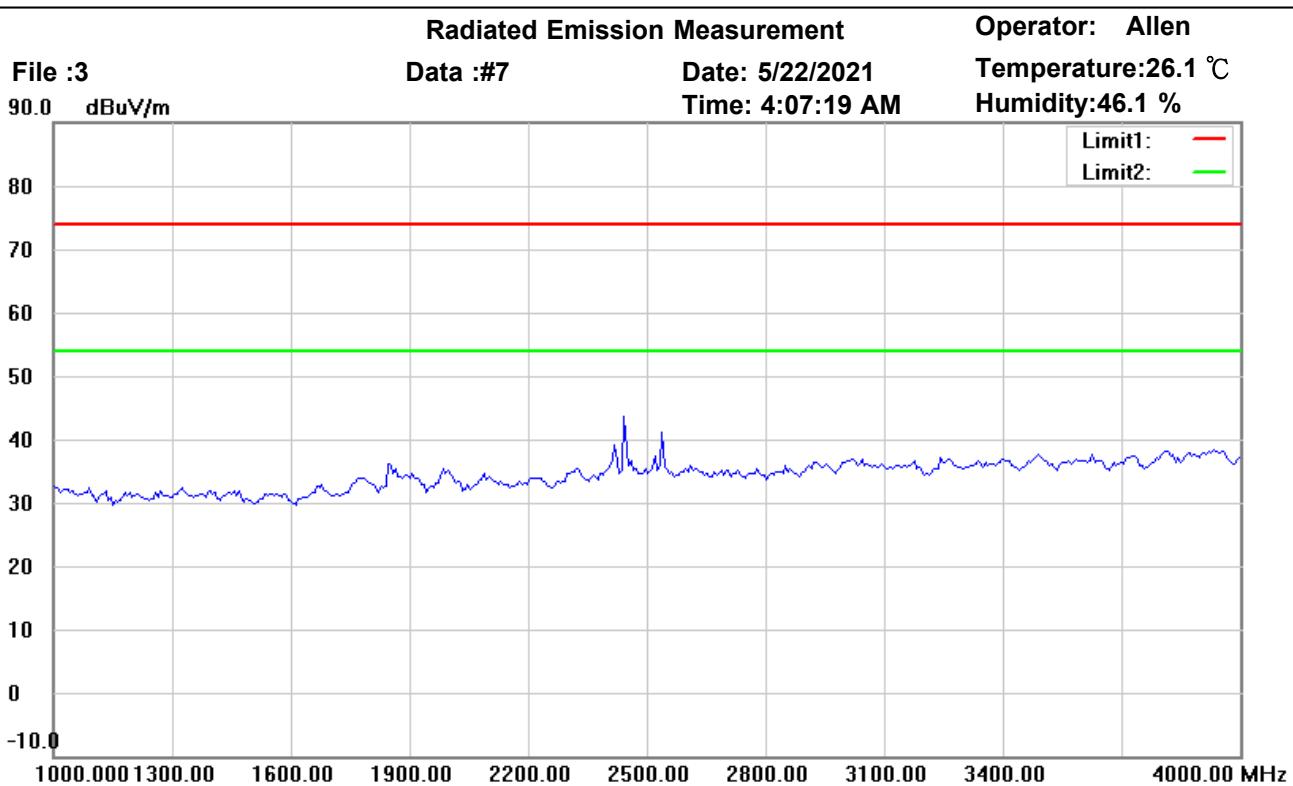
Test Mode : TX 5839MHz

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
-----	-----------------	----------------	----------	---------------------	-----------------	----------------	--------------	----------------	-------------	---------



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8879



Site : Chamber

Condition : FCC_part 15E RE_Above 1GHz_PK

Polarization: *Vertical*

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

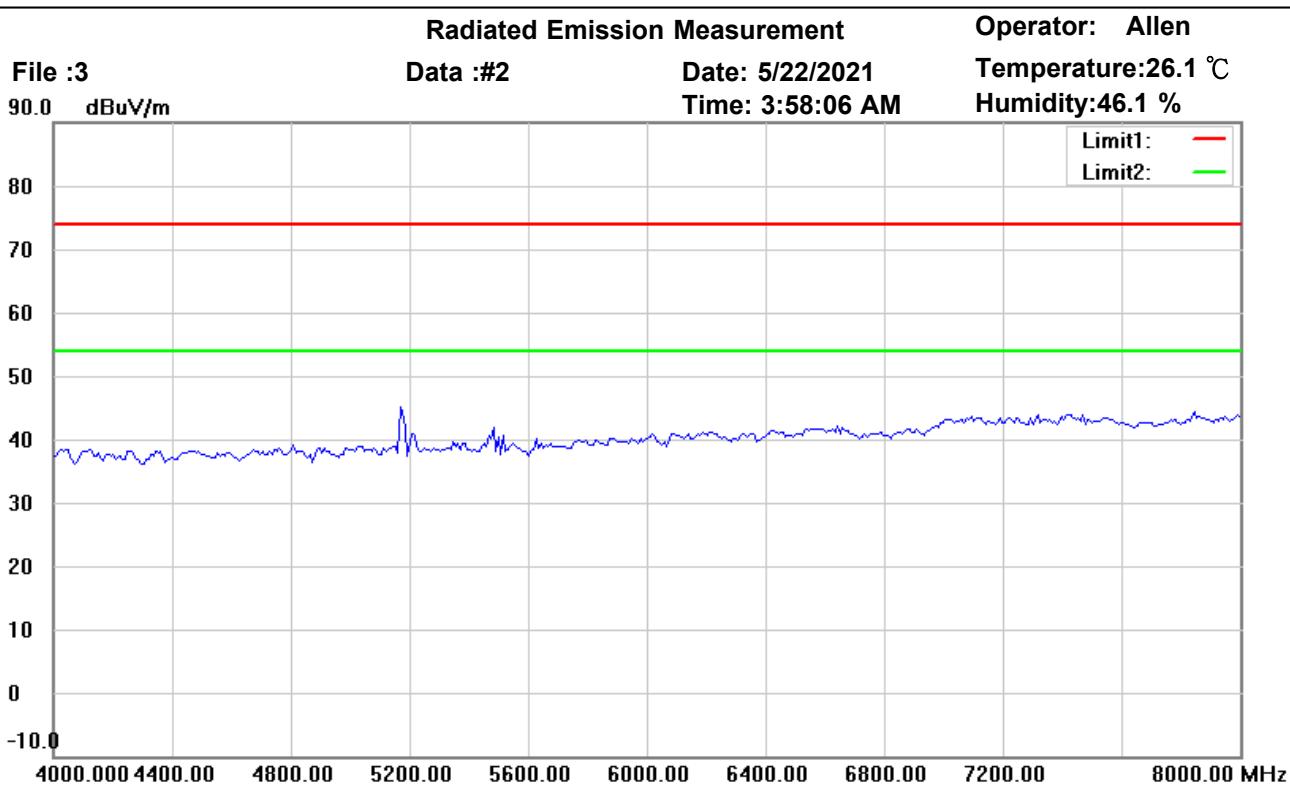
Test Mode : TX 5839MHz

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
-----	-----------------	----------------	----------	---------------------	-----------------	----------------	--------------	----------------	-------------	---------



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8879



Site : Chamber

Condition : FCC_part 15E RE_Above 1GHz_PK

Polarization: *Horizontal*

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

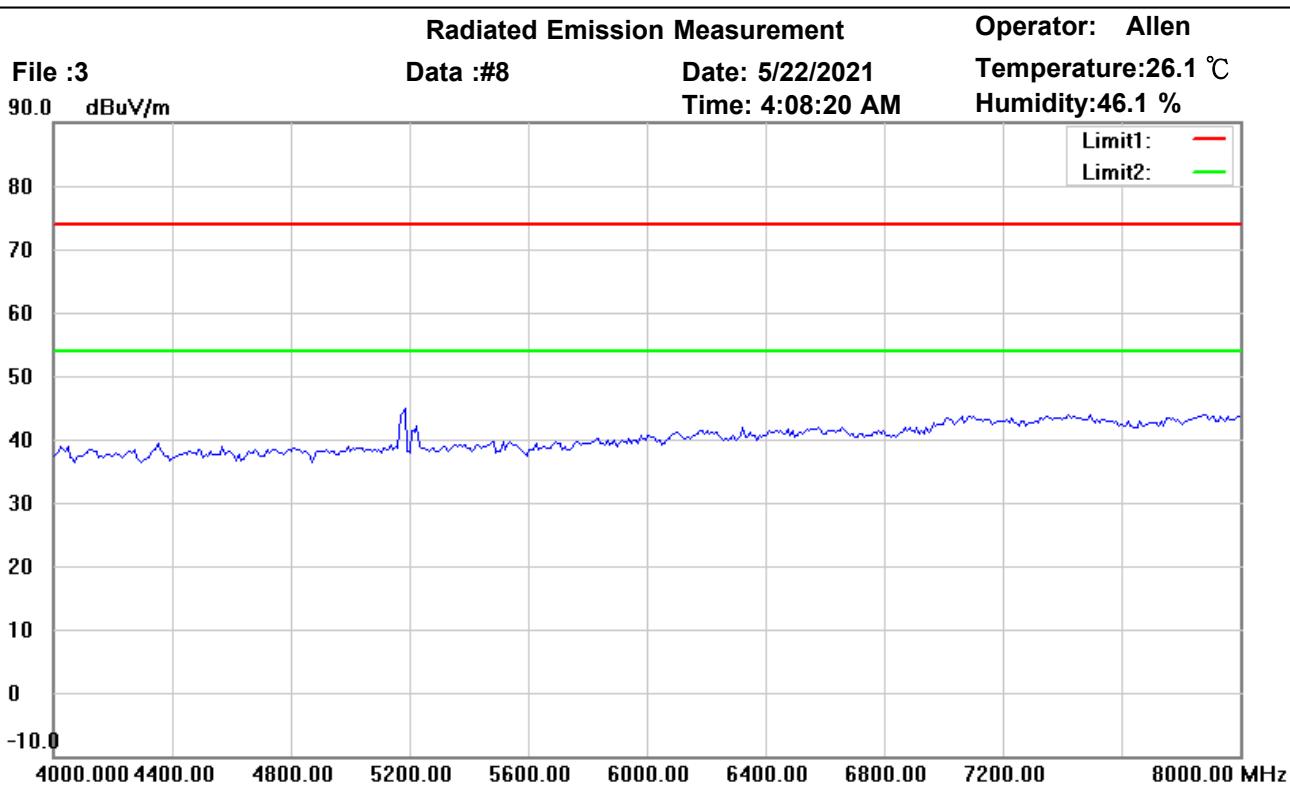
Test Mode : TX 5839MHz

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
-----	-----------------	----------------	----------	---------------------	-----------------	----------------	--------------	----------------	-------------	---------



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8879



Site : Chamber

Condition : FCC_part 15E RE_Above 1GHz_PK

Polarization: *Vertical*

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

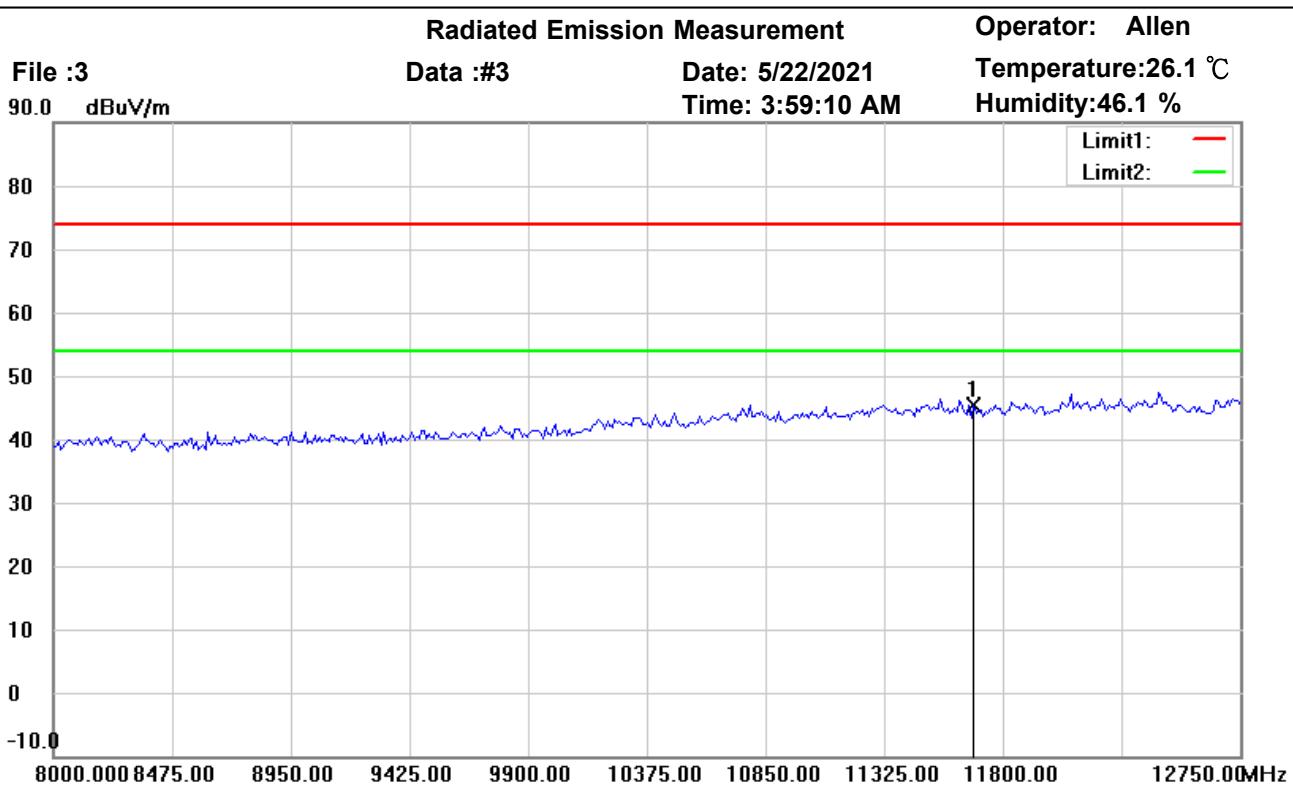
Test Mode : TX 5839MHz

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
-----	-----------------	----------------	----------	---------------------	-----------------	----------------	--------------	----------------	-------------	---------



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8879



Site : Chamber

Condition : FCC_part 15E RE_Above 1GHz_PK

Polarization: *Horizontal*

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

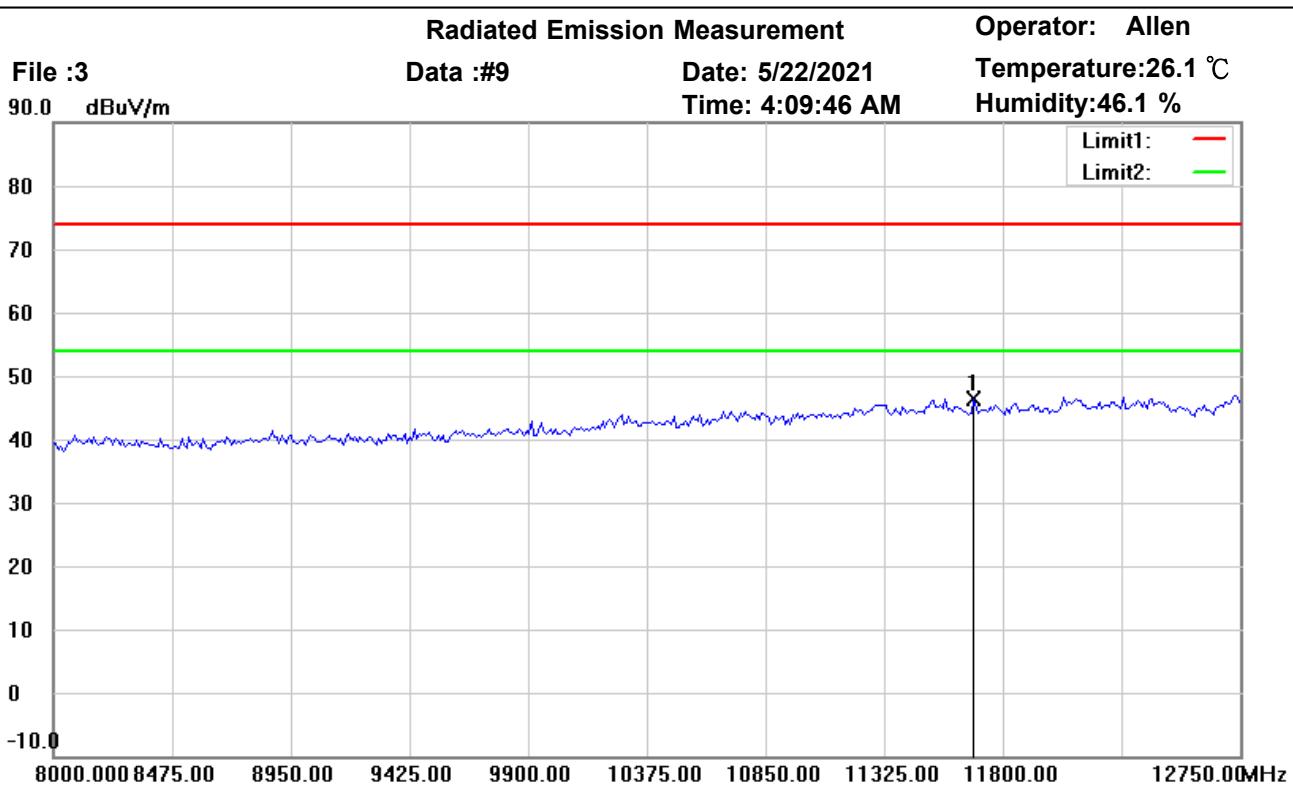
Test Mode : TX 5839MHz

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
*	11678.000	34.44	peak	11.04	45.48	74.00	150	34	-28.52	



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8879



Site : Chamber

Condition : FCC_part 15E RE_Above 1GHz_PK

Polarization: *Vertical*

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

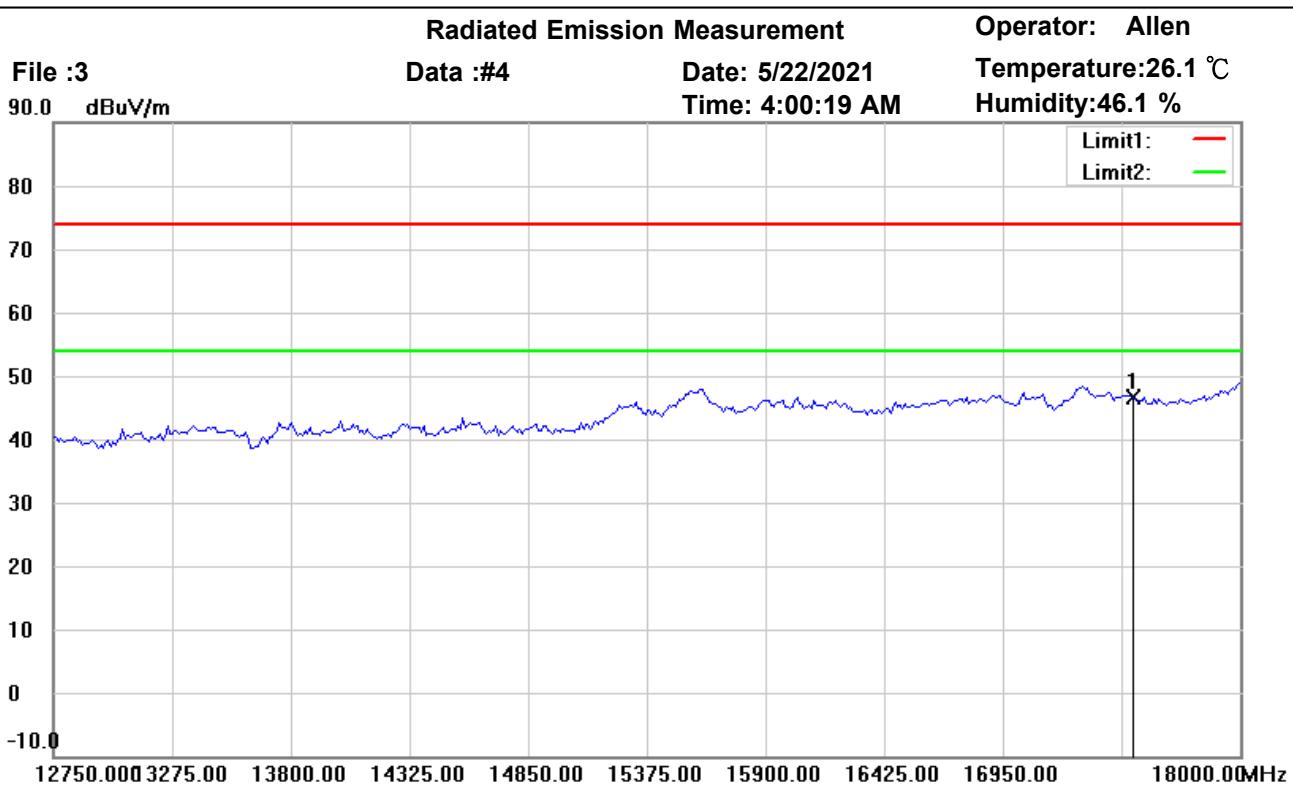
Test Mode : TX 5839MHz

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
*	11678.000	35.35	peak	11.04	46.39	74.00	150	59	-27.61	



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8879



Site : Chamber

Condition : FCC_part 15E RE_Above 1GHz_PK

Polarization: *Horizontal*

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

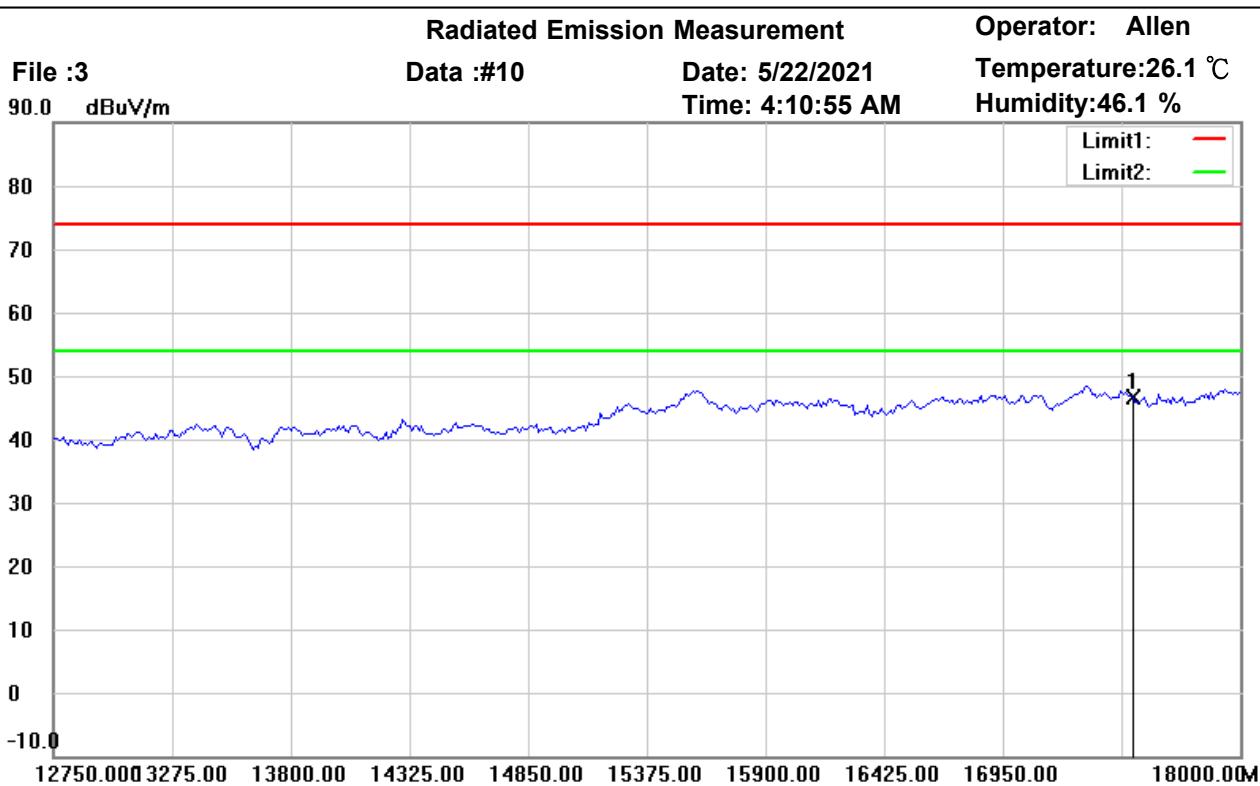
Test Mode : TX 5839MHz

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
*	17517.000	26.56	peak	20.08	46.64	74.00	150	193	-27.36	



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8879



Site : Chamber

Condition : FCC_part 15E RE_Above 1GHz_PK

Polarization: *Vertical*

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

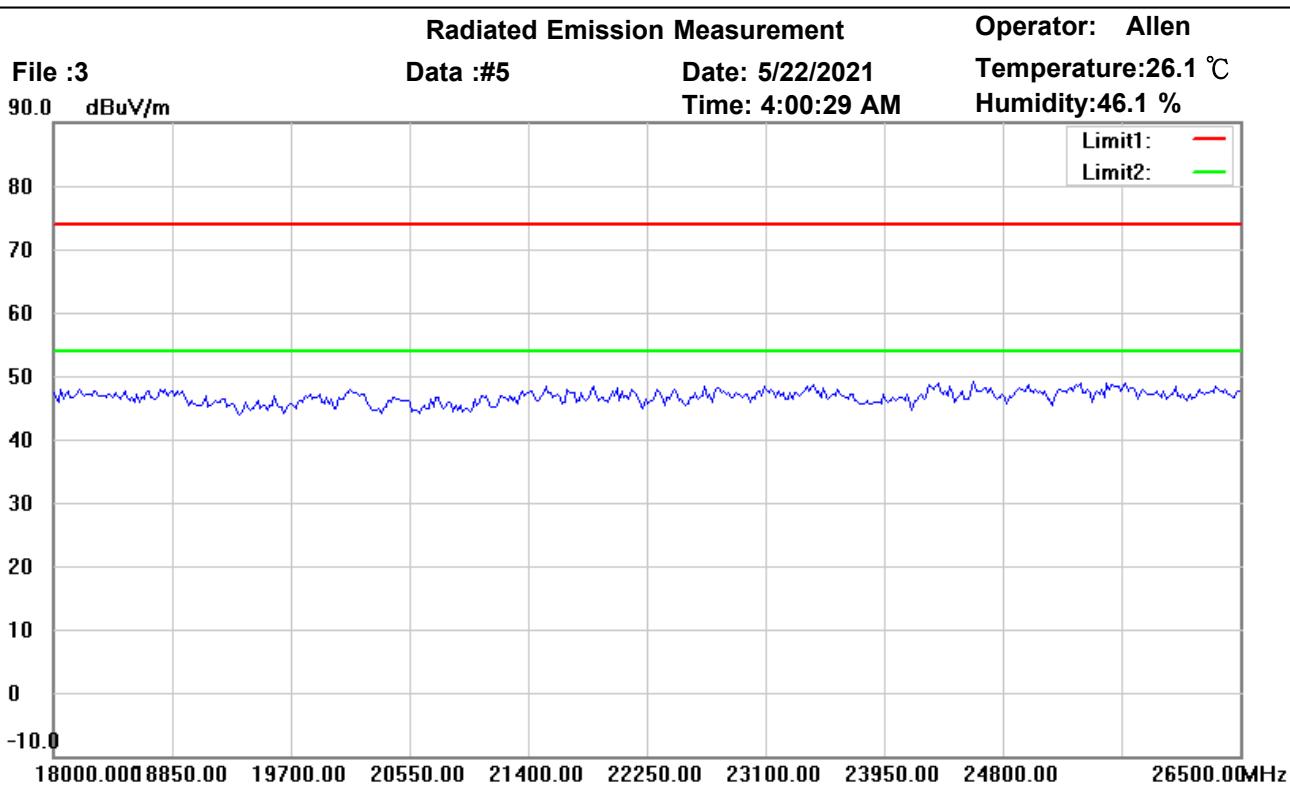
Test Mode : TX 5839MHz

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
*	17517.000	26.45	peak	20.08	46.53	74.00	150	320	-27.47	



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8879



Site : Chamber

Condition : FCC_part 15E RE_Above 1GHz_PK

Polarization: *Horizontal*

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

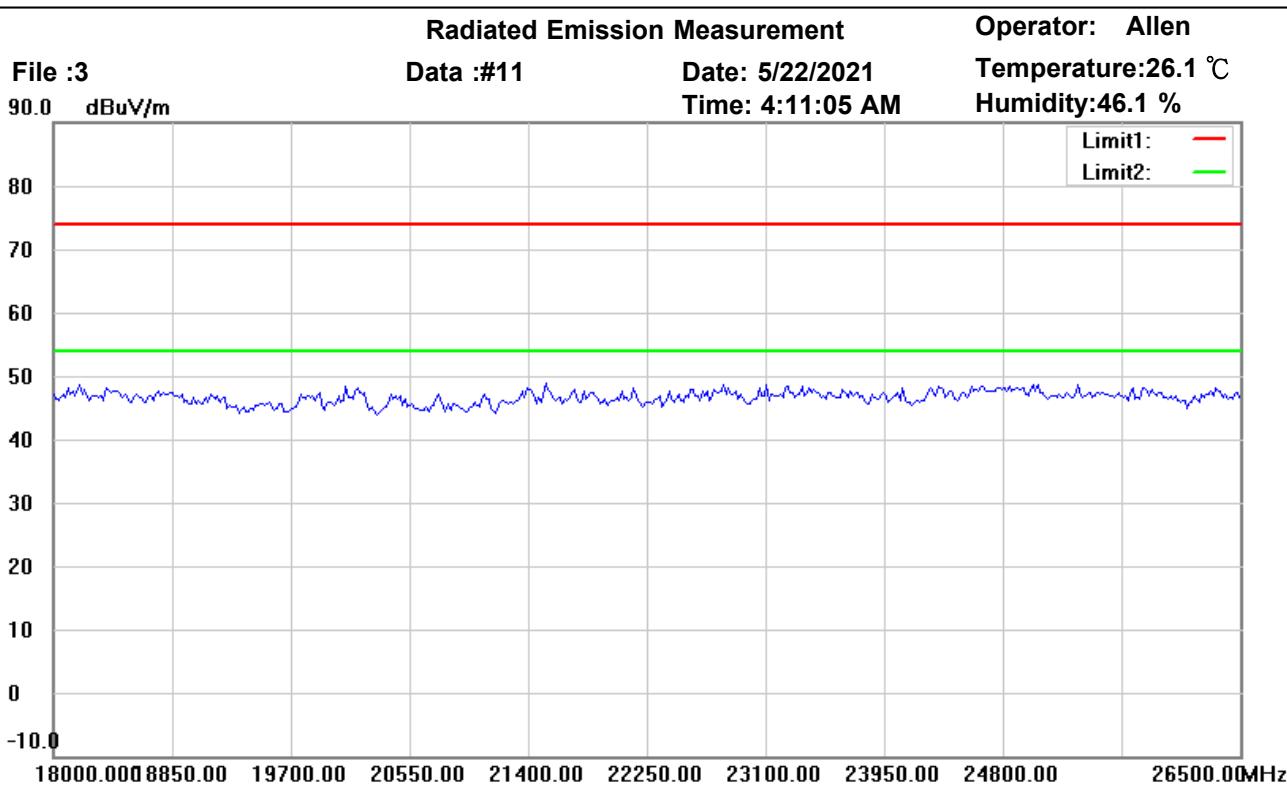
Test Mode : TX 5839MHz

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
-----	-----------------	----------------	----------	---------------------	-----------------	----------------	--------------	----------------	-------------	---------



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8879



Site : Chamber

Condition : FCC_part 15E RE_Above 1GHz_PK

Polarization: *Vertical*

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

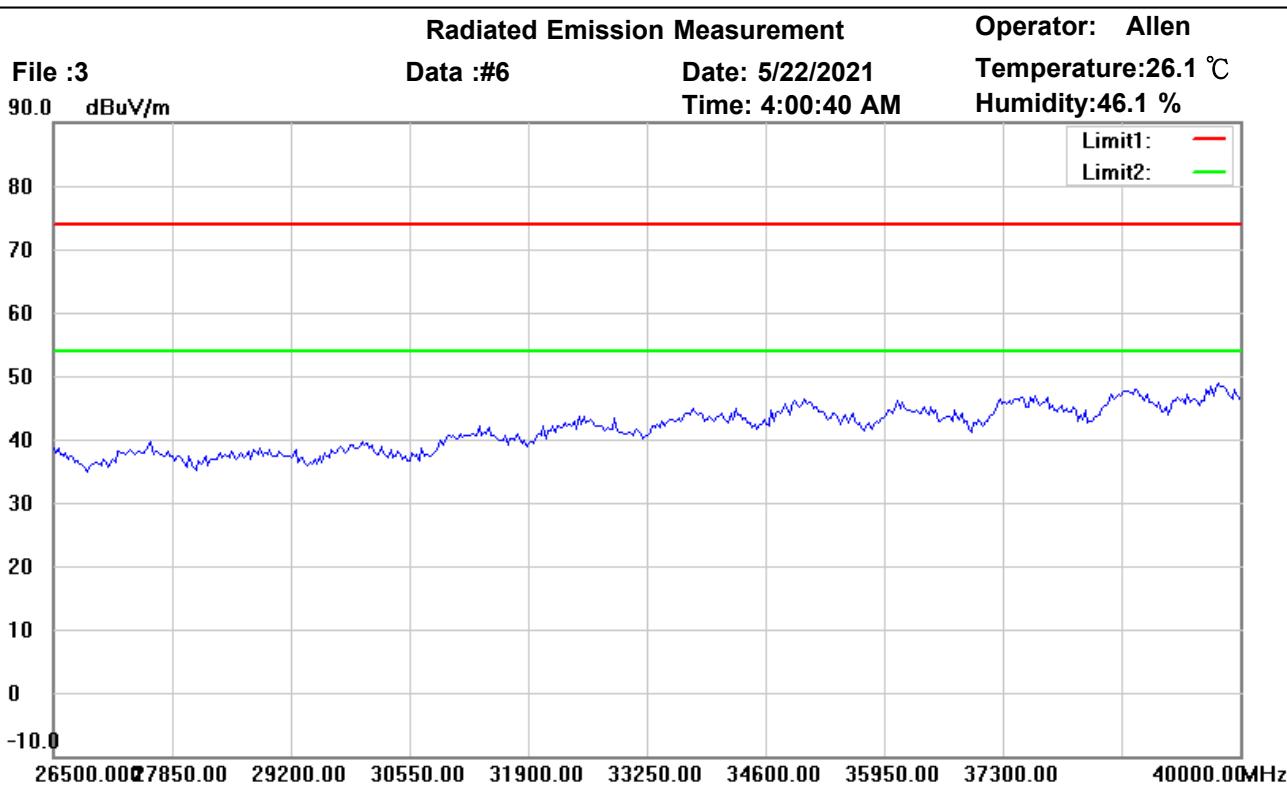
Test Mode : TX 5839MHz

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
-----	-----------------	----------------	----------	---------------------	-----------------	----------------	--------------	----------------	-------------	---------



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8879



Site : Chamber

Condition : FCC_part 15E RE_Above 1GHz_PK

Polarization: *Horizontal*

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

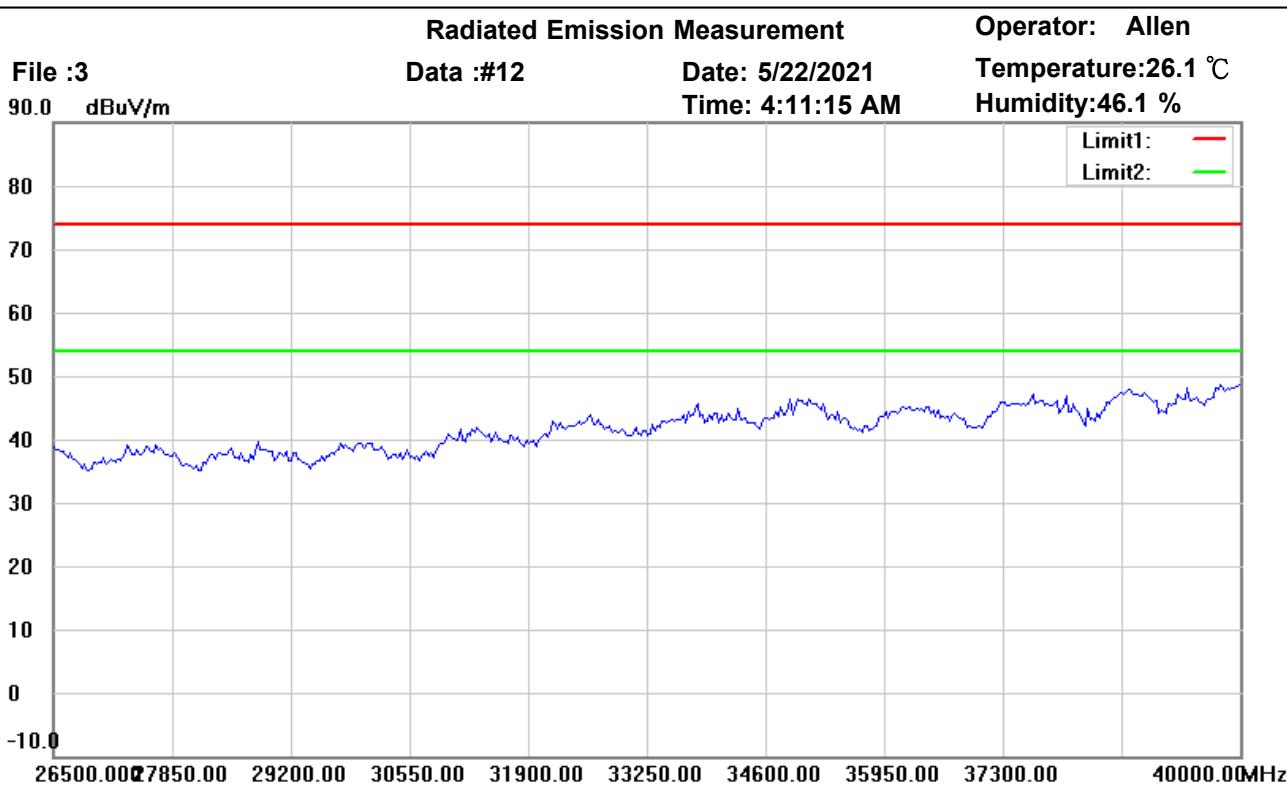
Test Mode : TX 5839MHz

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
-----	-----------------	----------------	----------	---------------------	-----------------	----------------	--------------	----------------	-------------	---------



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8879



Site : Chamber

Condition : FCC_part 15E RE_Above 1GHz_PK

Polarization: *Vertical*

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

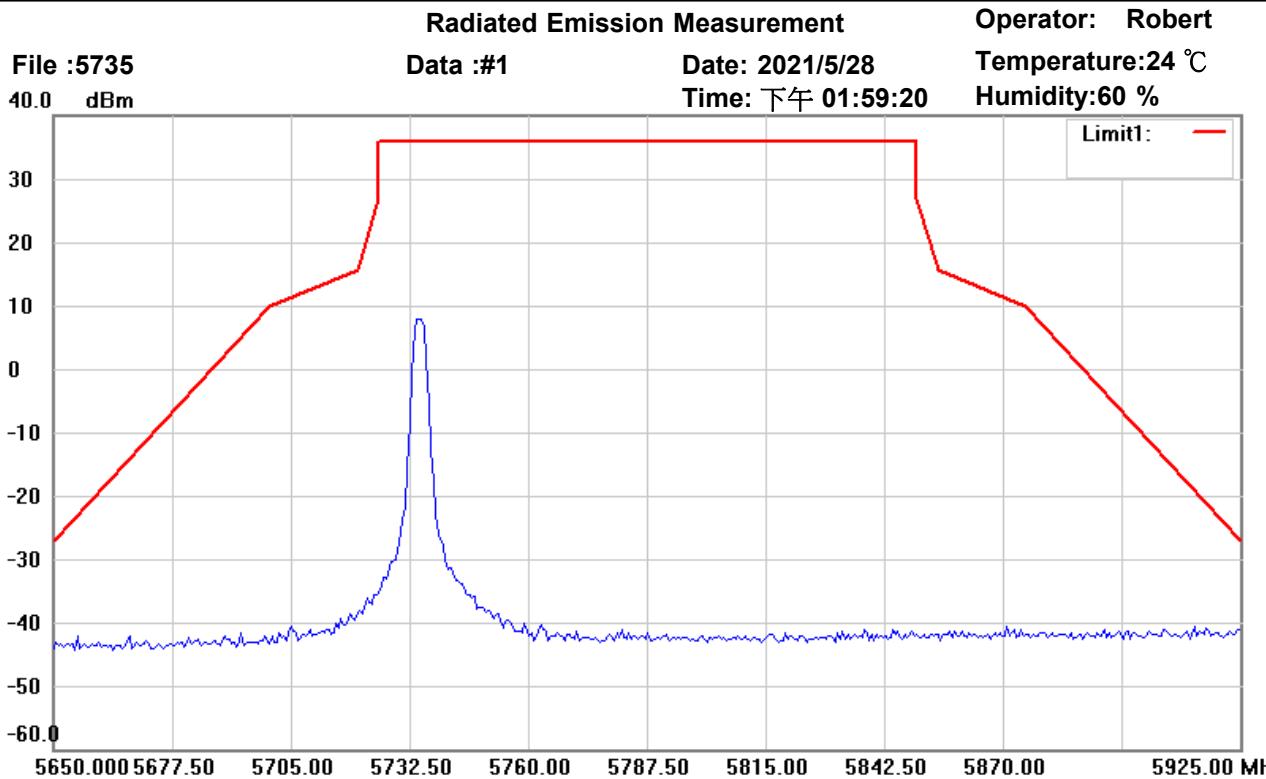
Test Mode : TX 5839MHz

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
-----	-----------------	----------------	----------	---------------------	-----------------	----------------	--------------	----------------	-------------	---------



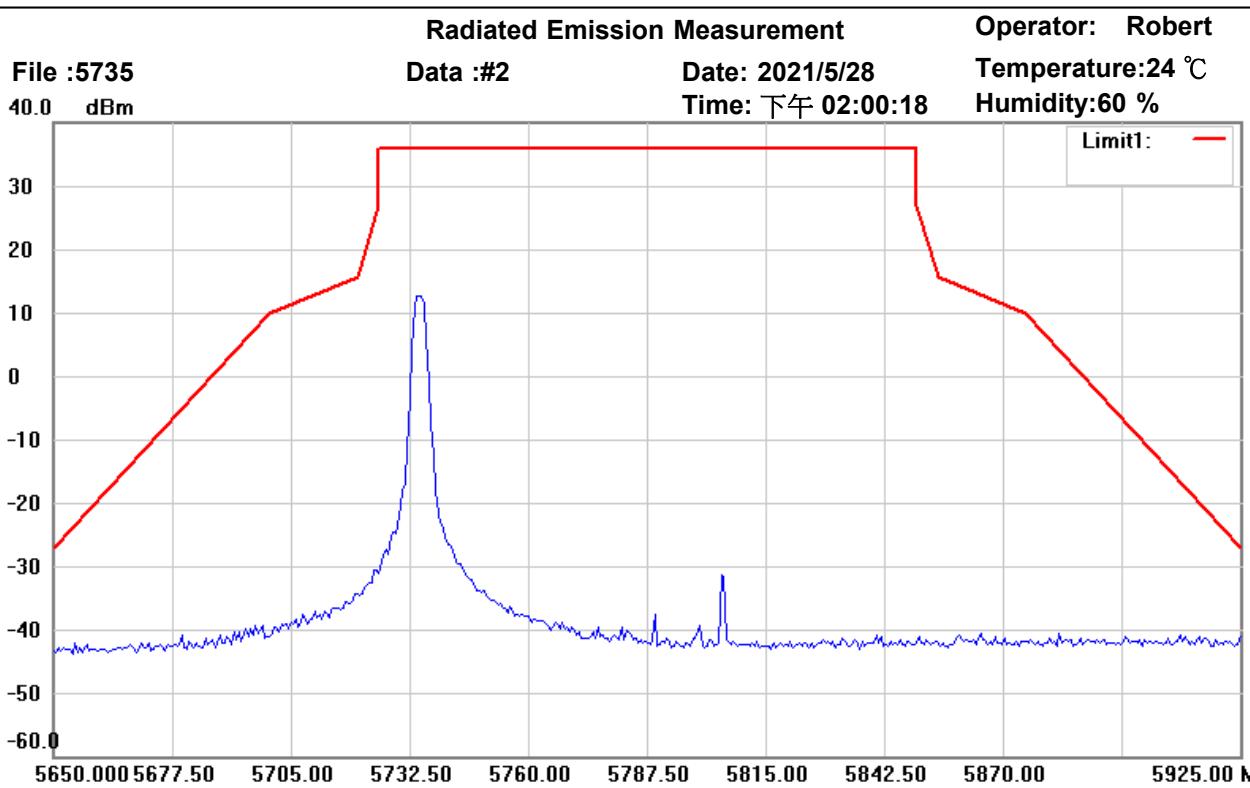
Address: 6F., No.58, Ln 188, Ruey Kuang Rd, Neihu, Taipei
Tel: +886-2-6606-8877
Fax: +886-2-6606-8879

**Site :** Chamber**Condition :** FCC_5G Band4 Mask**Polarization:** *Horizontal***EUT :** W6M22103-20783**Power :** 3.7 Vd.c.**M/N:****Distance:** 3m**Test Mode :** TX 5735MHz**Note :**

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



Address: 6F., No.58, Ln 188, Ruey Kuang Rd, Neihu, Taipei
Tel: +886-2-6606-8877
Fax: +886-2-6606-8879



Site : Chamber

Condition : FCC_5G Band4 Mask

Polarization: *Vertical*

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

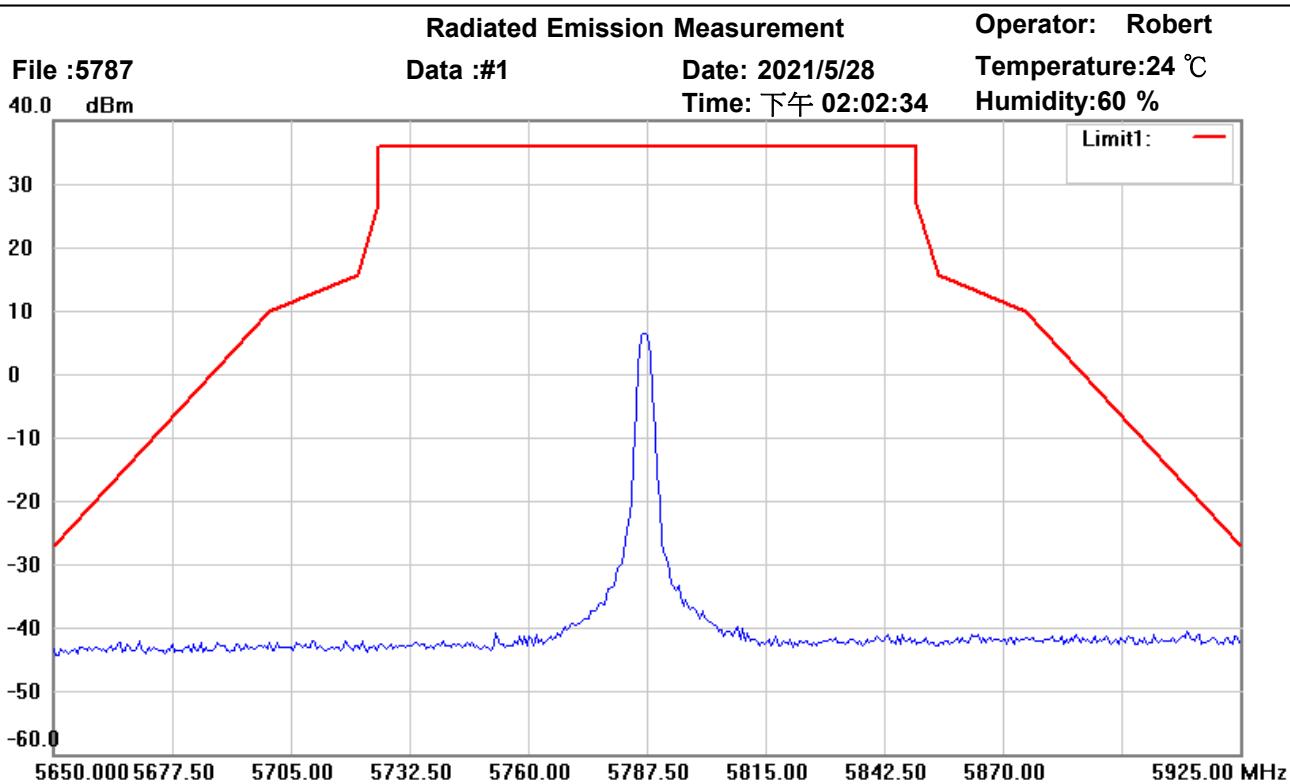
Test Mode : TX 5735MHz

Note :

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



Address: 6F., No.58, Ln 188, Ruey Kuang Rd, Neihu, Taipei
Tel: +886-2-6606-8877
Fax: +886-2-6606-8879



Site : Chamber

Condition : FCC_5G Band4 Mask

Polarization: *Horizontal*

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

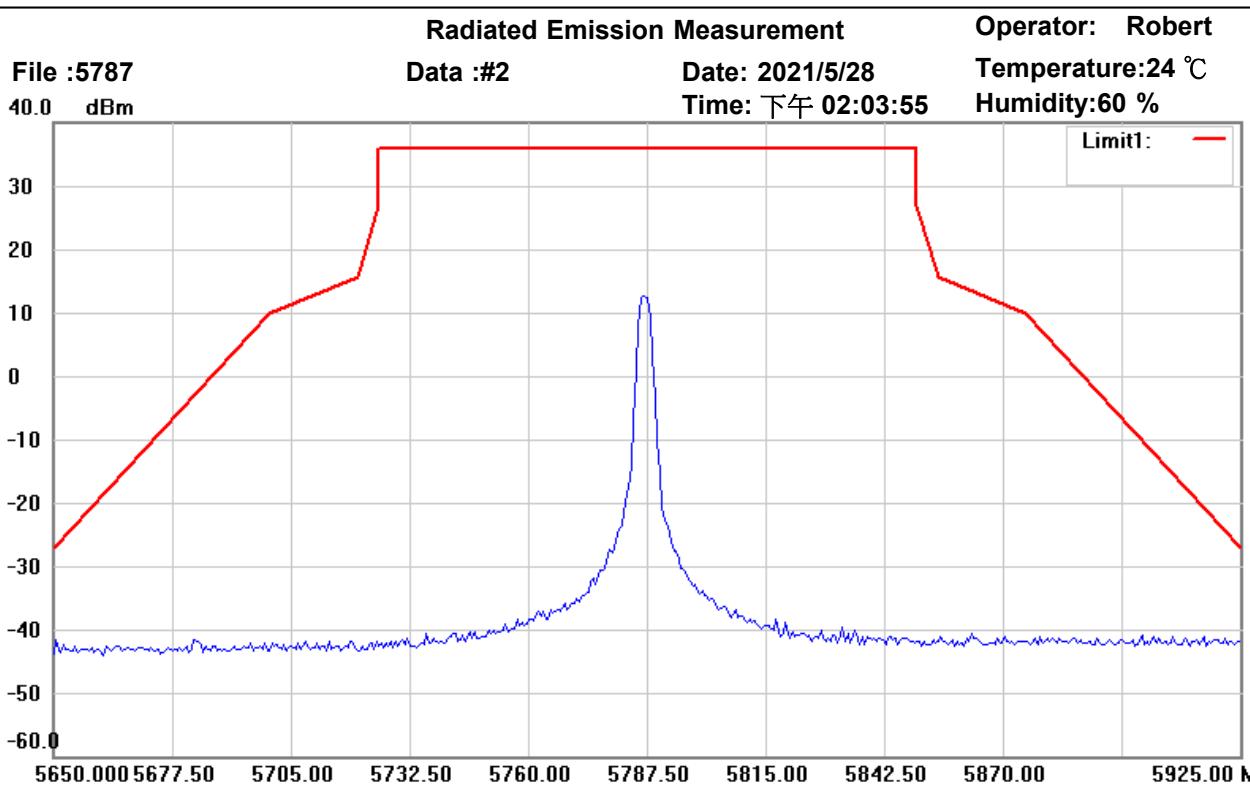
Test Mode : TX 5787MHz

Note :

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



Address: 6F., No.58, Ln 188, Ruey Kuang Rd, Neihu, Taipei
Tel: +886-2-6606-8877
Fax: +886-2-6606-8879



Site : Chamber

Condition : FCC_5G Band4 Mask

Polarization: *Vertical*

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

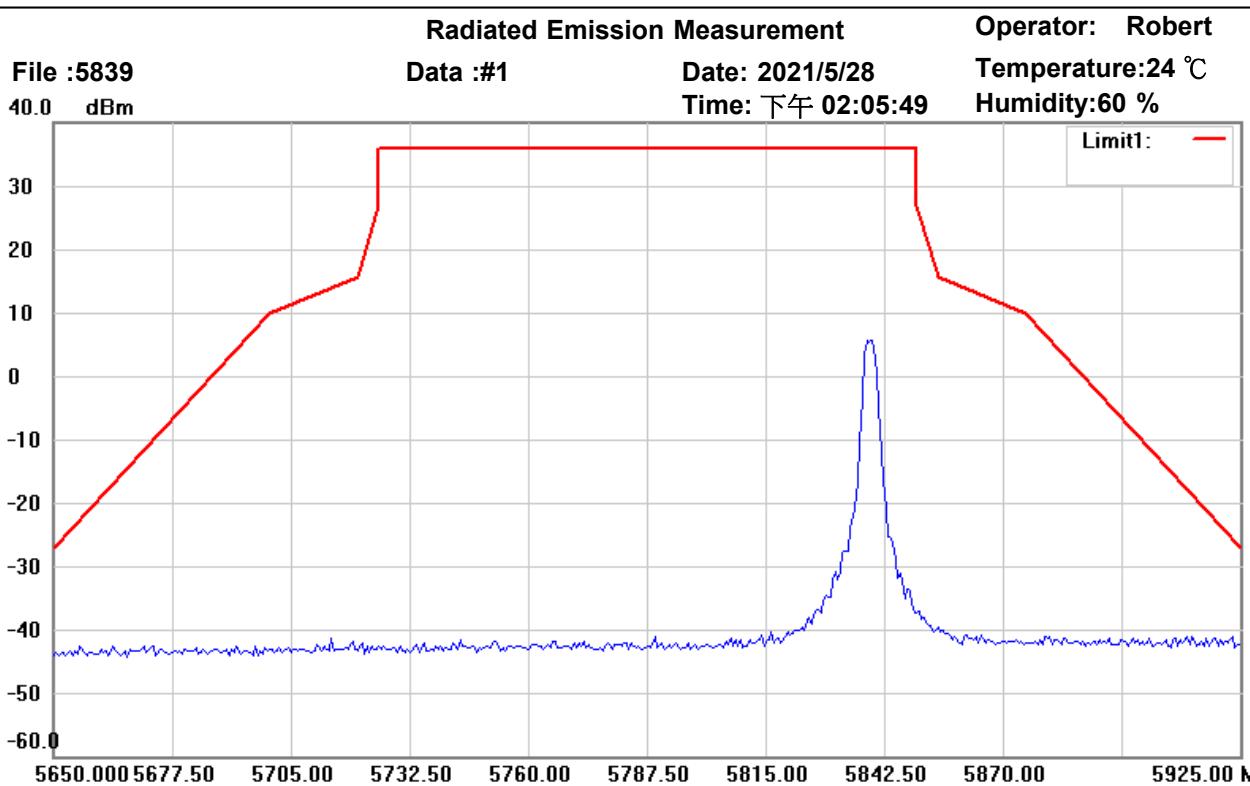
Test Mode : TX 5787MHz

Note :

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



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei
Tel:+886-2-6606-8877
Fax:+886-2-6606-8879



Site : Chamber

Condition : FCC_5G Band4 Mask

Polarization: *Horizontal*

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

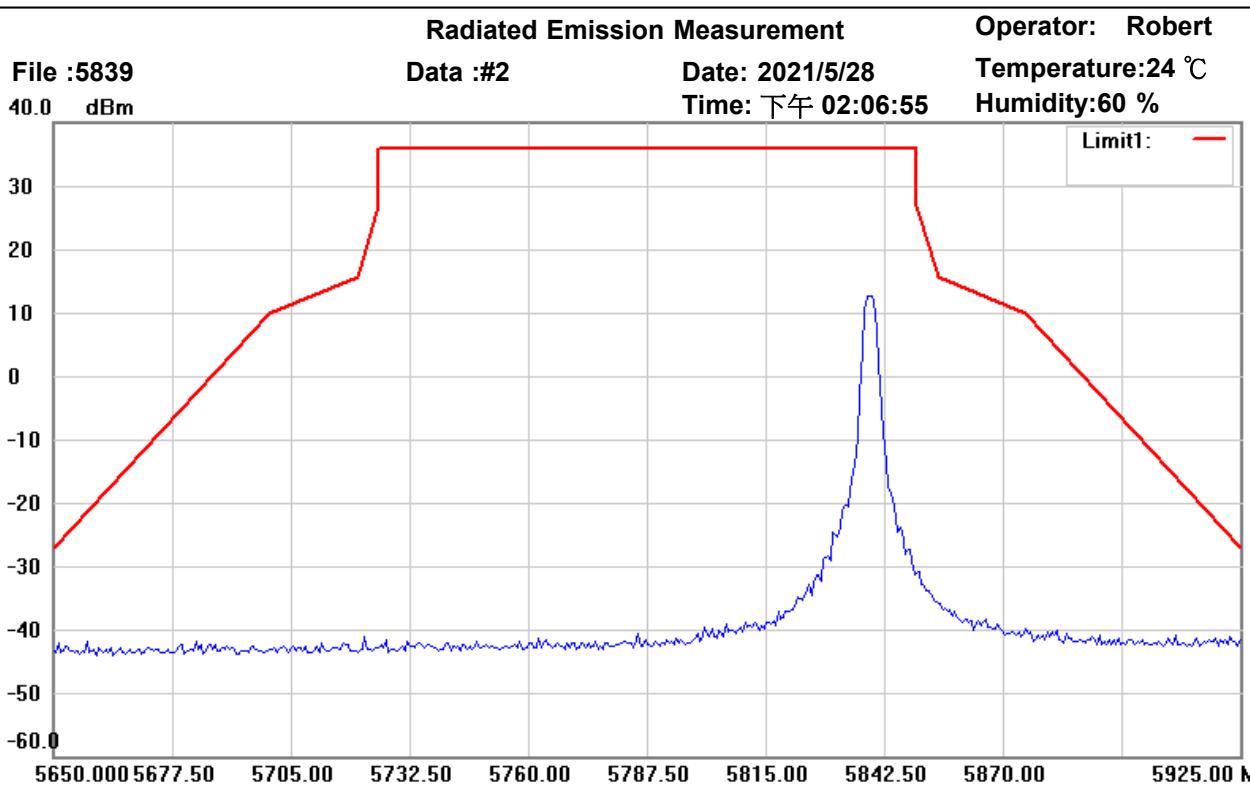
Test Mode : TX 5839MHz

Note :

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



Address: 6F., No.58, Ln 188, Ruey Kuang Rd, Neihu, Taipei
Tel: +886-2-6606-8877
Fax: +886-2-6606-8879



Site : Chamber

Condition : FCC_5G Band4 Mask

Polarization: *Vertical*

EUT : W6M22103-20783

Power : 3.7 Vd.c.

M/N:

Distance: 3m

Test Mode : TX 5839MHz

Note :

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